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**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

**FINAL REPORT
VOLUME II: SUPPLEMENTARY TABLES AND GRAPHS**

prepared by
Aware, Inc.
124 Mt. Auburn Street, Suite 310
Cambridge, MA 02138
(617) 354-3311

with the assistance of
Atlantic Aerospace Electronics Corporation
6404 Ivy Lane, Suite 300
Greenbelt, MD 20770
(301) 982-5275

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**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

VOLUME II: SUPPLEMENTARY TABLES AND GRAPHS

Contents:

- Exhibit II-1 Graph: Value of Correlation at Correct Location vs. Compression ,
[One graph per (reference image, test patch) pair]
- Exhibit II-2 Graph: Value of Max Laplacian vs. Compression ,
[One graph per (reference image, test patch) pair]
- Exhibit II-3 Graph: Value of Max Smoothed Laplacian vs. Compression ,
[One graph per (reference image, test patch) pair]
- Exhibit II-4 Graph: Ratio of Peak Correlation to that of Largest and Nearest Side Lobes
vs. Compression.
[One graph each per (reference image, test patch) pair for largest
and for nearest]
- Exhibit II-5 Graph: Ratio of Peak Laplacian to that of Largest and Nearest Side Lobes
vs. Compression ,
[One graph each per (reference image, test patch) pair for largest
and for nearest]
- Exhibit II-6 Graph: Correlation Side Lobe to Peak Ratio vs. Radial Distance ,
[1 graph per (reference image, test patch) pair; 7 compressions per graph]
- Exhibit II-7 Graph: Laplacian Sidelobe to Peak Ratio vs. Radial Distance ,
[1 graph per (reference image, test patch) pair; 7 compressions per graph]
- Exhibit II-8 Graph: Laplacian vs. Radial Distance ;
[1 graph per (reference image, test patch) pair; 7 compressions per graph]
- Exhibit II-9 > Experimental Data ; and
- Exhibit II-10 Graph: Laplacian of correlation of A1 W1 (at various scalings)
with A1 (at a given compression) vs. Radial Distance , (SDW)
[Two graphs per compression; seven scalings per graph]



**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-1

Graph: Value of Correlation at Correct Location vs. Compression
[one graph per (reference image, test patch) pair]

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Exhibit II-1-a

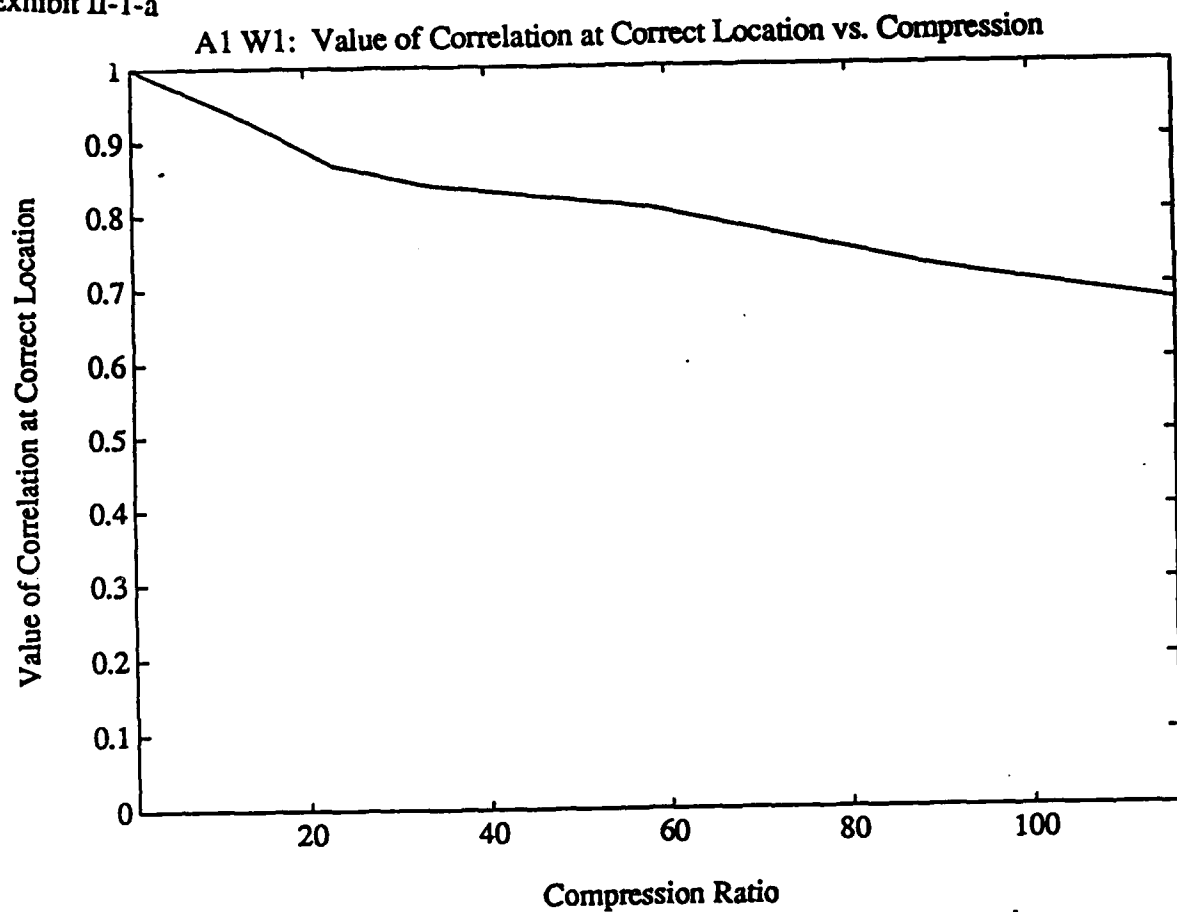


Exhibit II-1-b

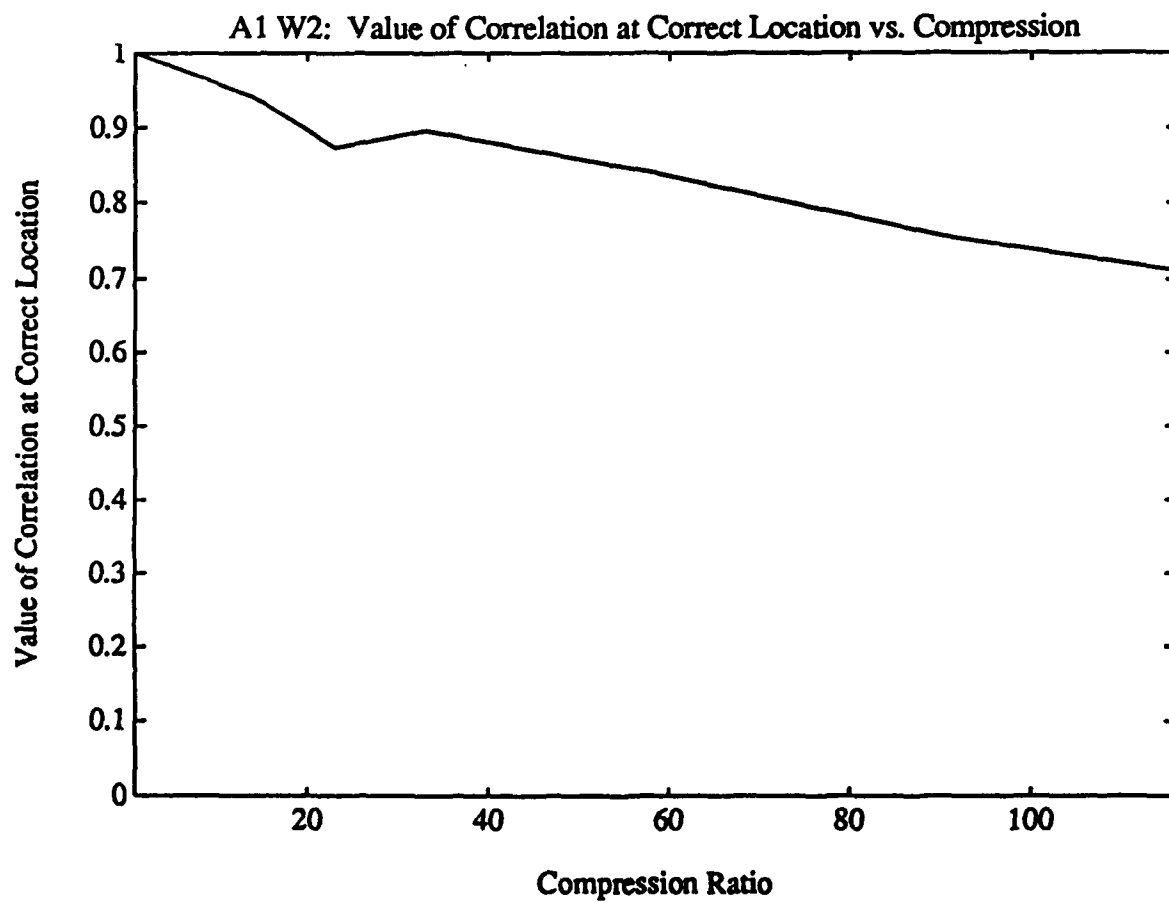


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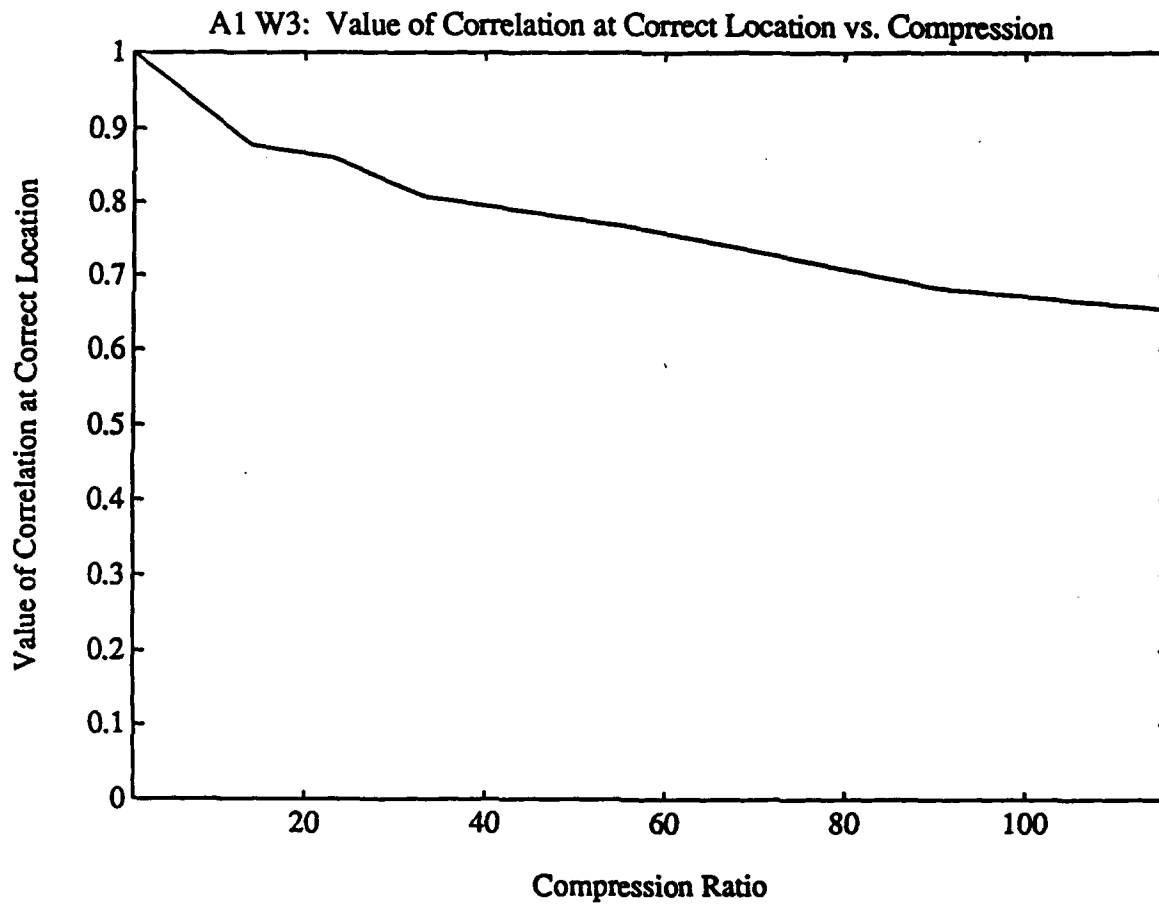


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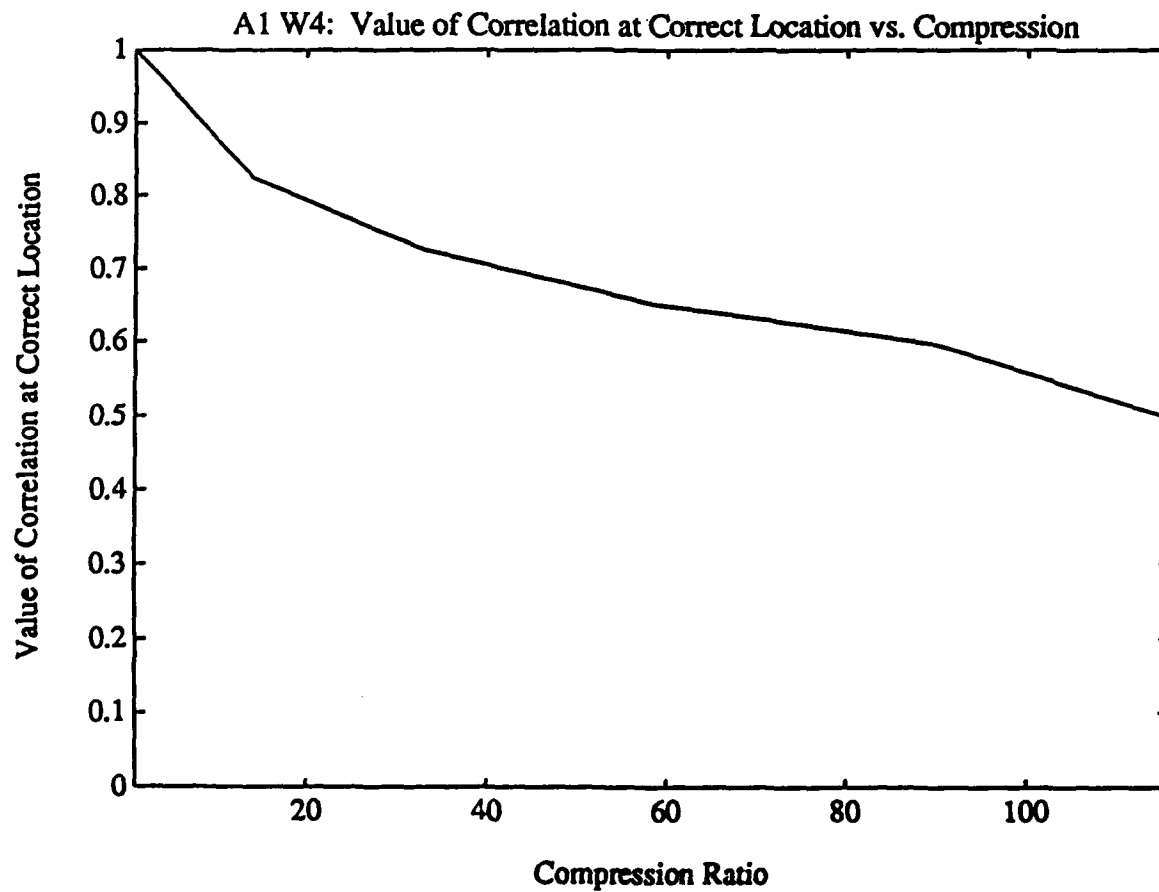


Exhibit II-1-e

A2 W1: Value of Correlation at Correct Location vs. Compression

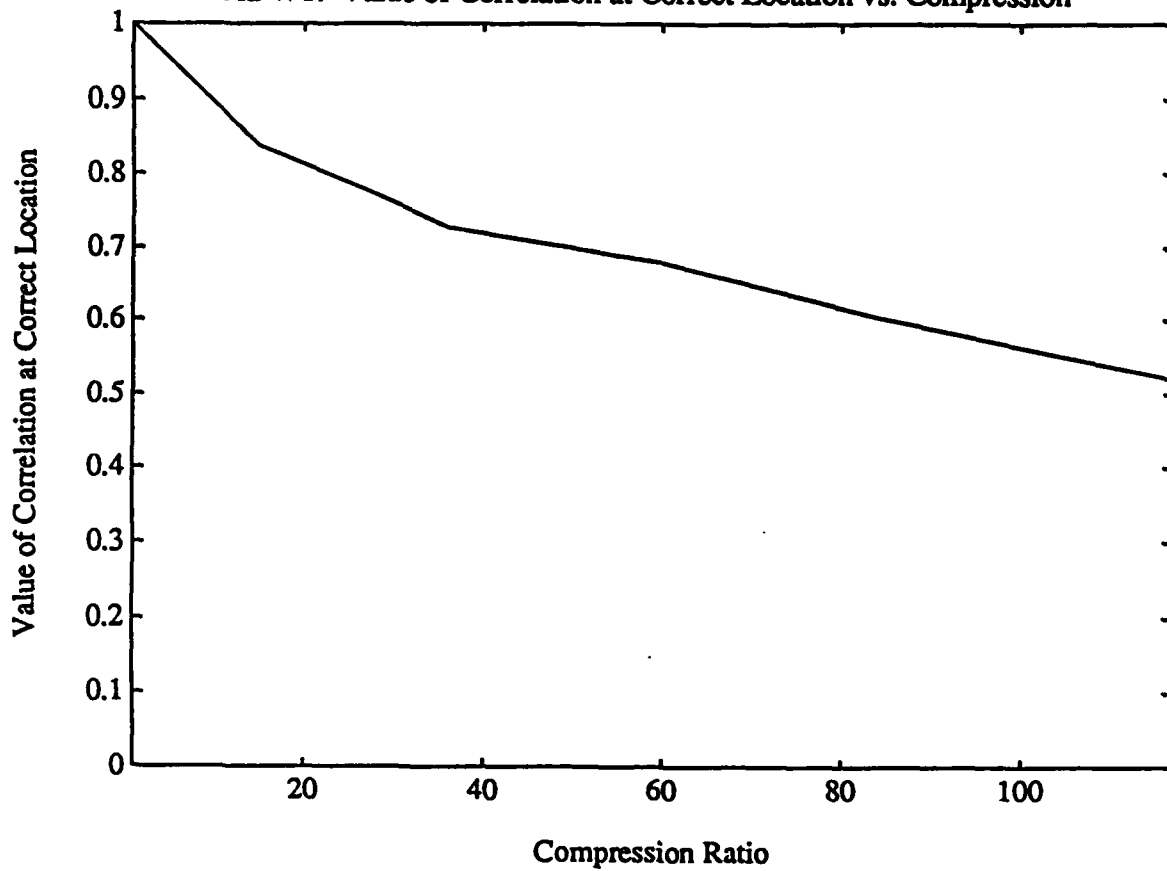


Exhibit II-1-f

A2 W2: Value of Correlation at Correct Location vs. Compression

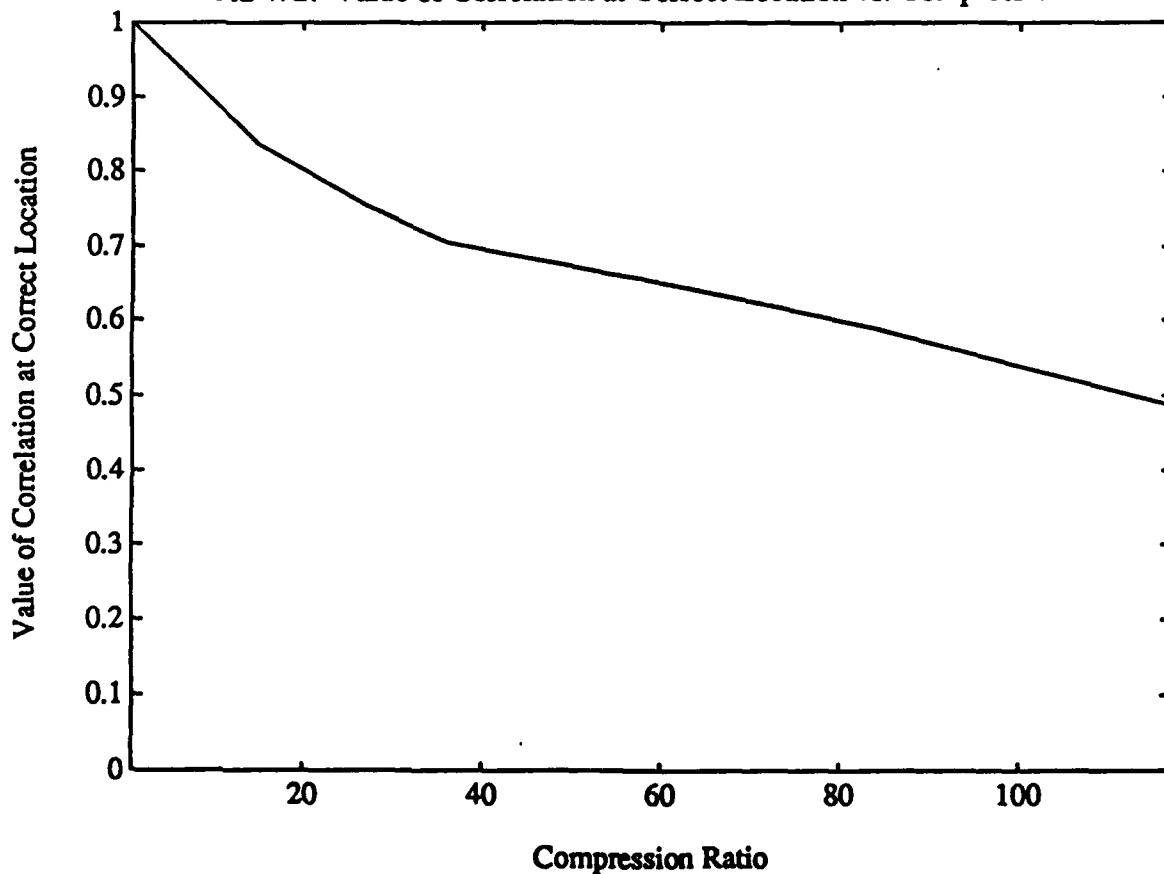


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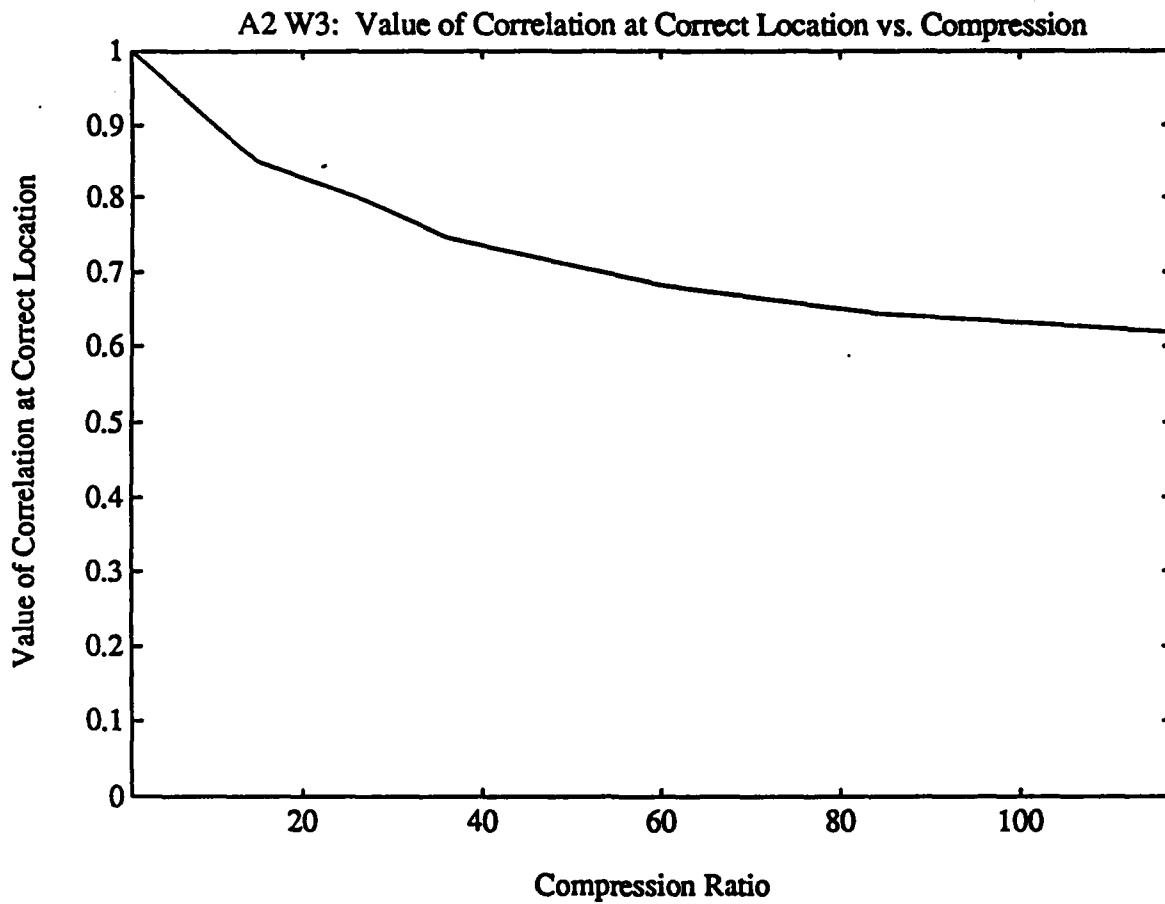
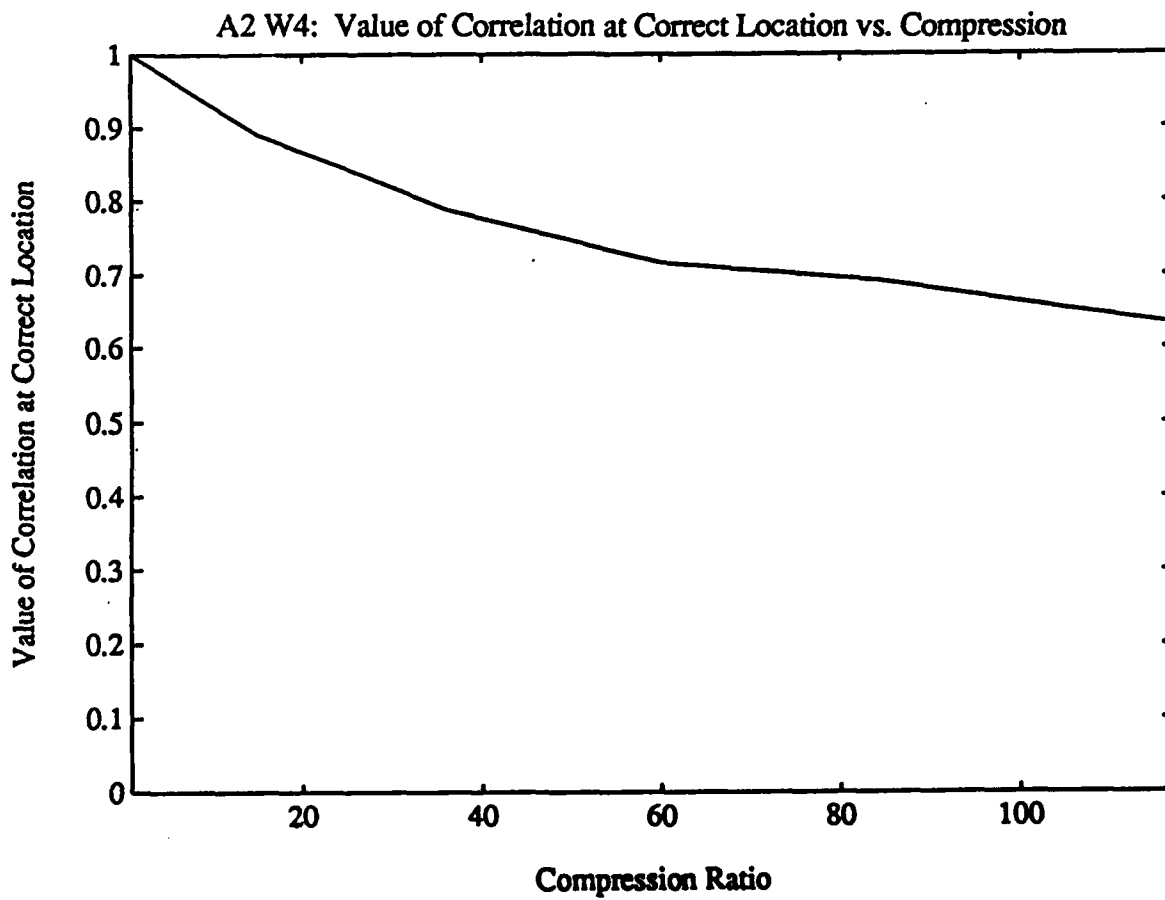


Exhibit II-1-h





**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-2

**Graph: Value of Max Laplacian vs. Compression
[One graph per (reference image, test patch) pair]**

Exhibit II-2-a

A1 W1: Value of Max Laplacian vs. Compression

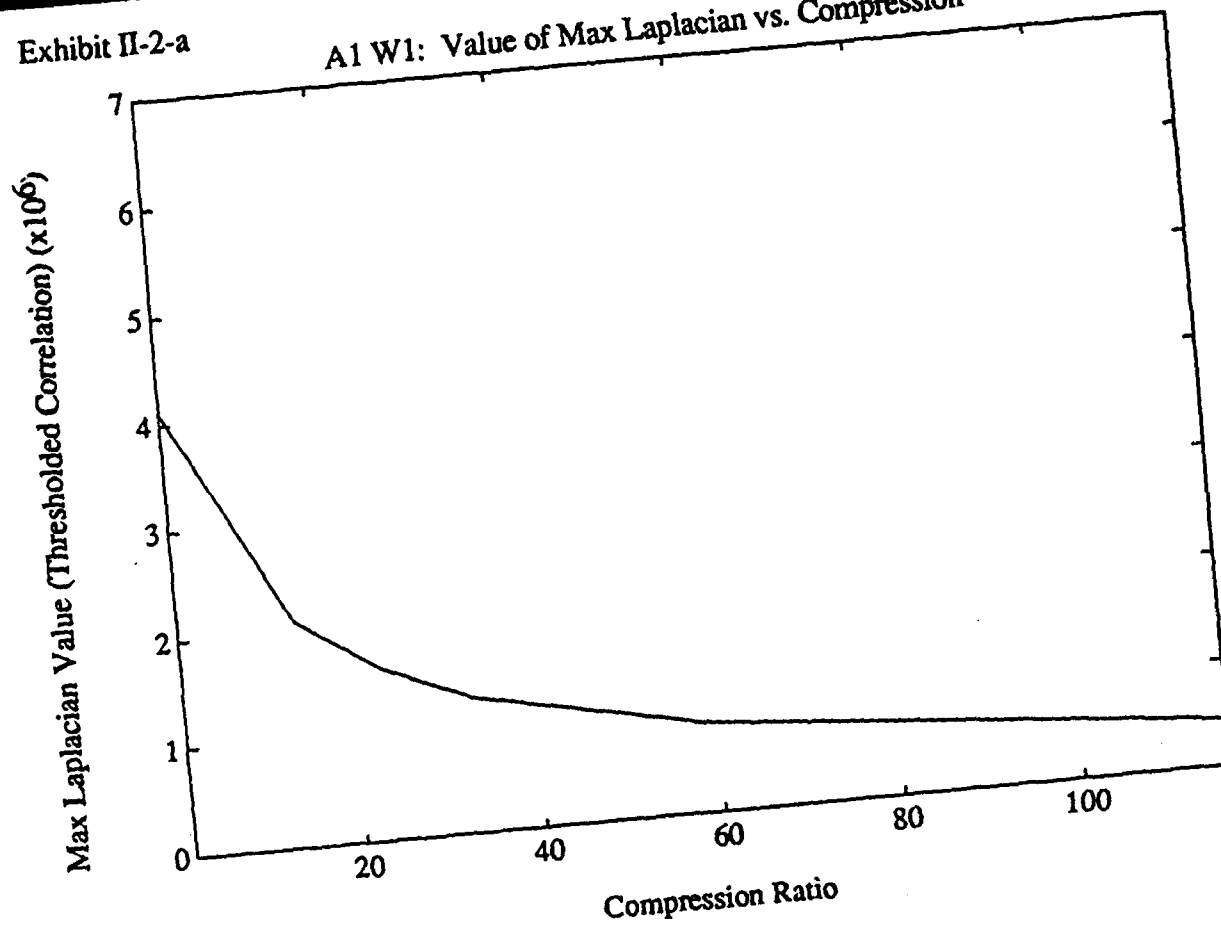


Exhibit II-2-b

A1 W2: Value of Max Laplacian vs. Compression

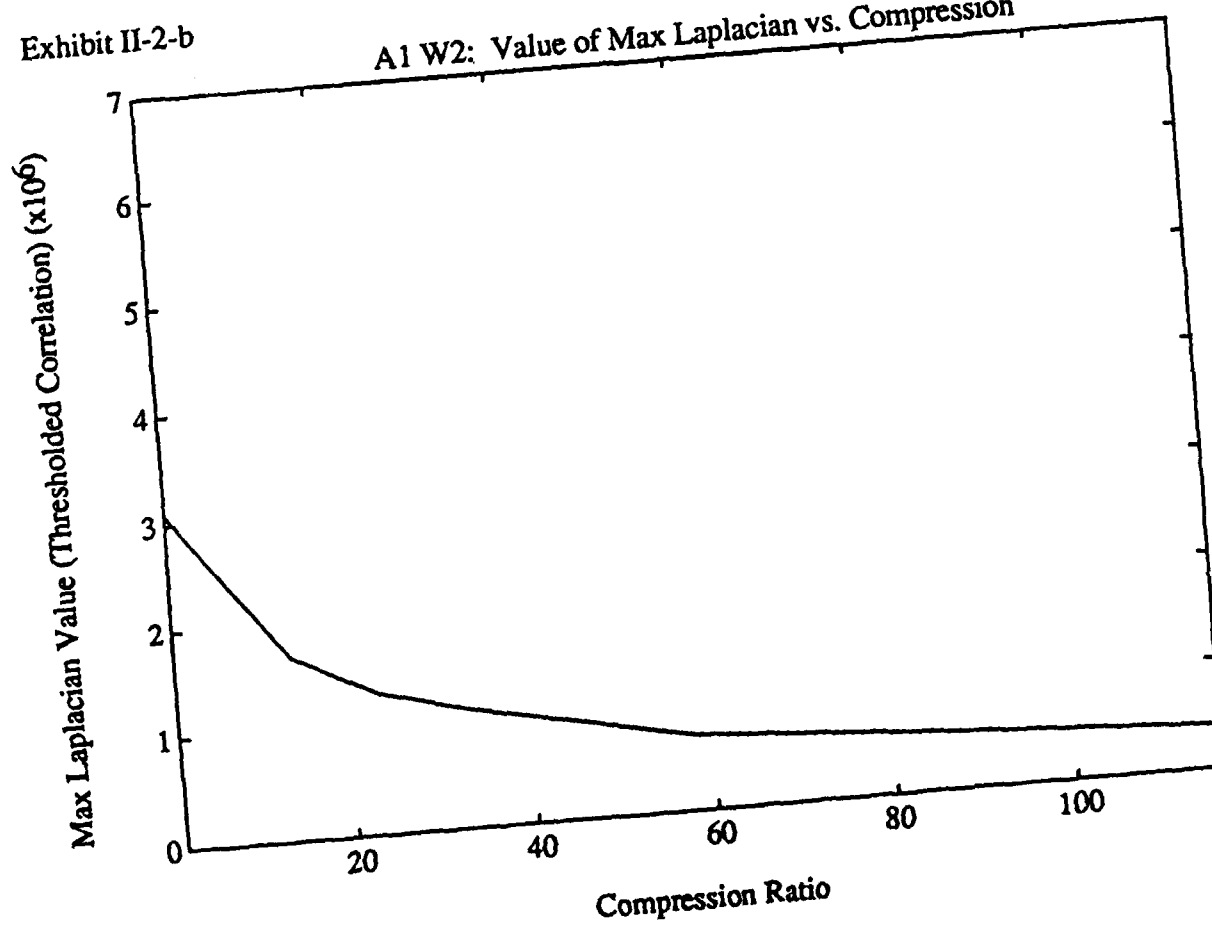


Exhibit II-2-c

A1 W3: Value of Max Laplacian vs. Compression

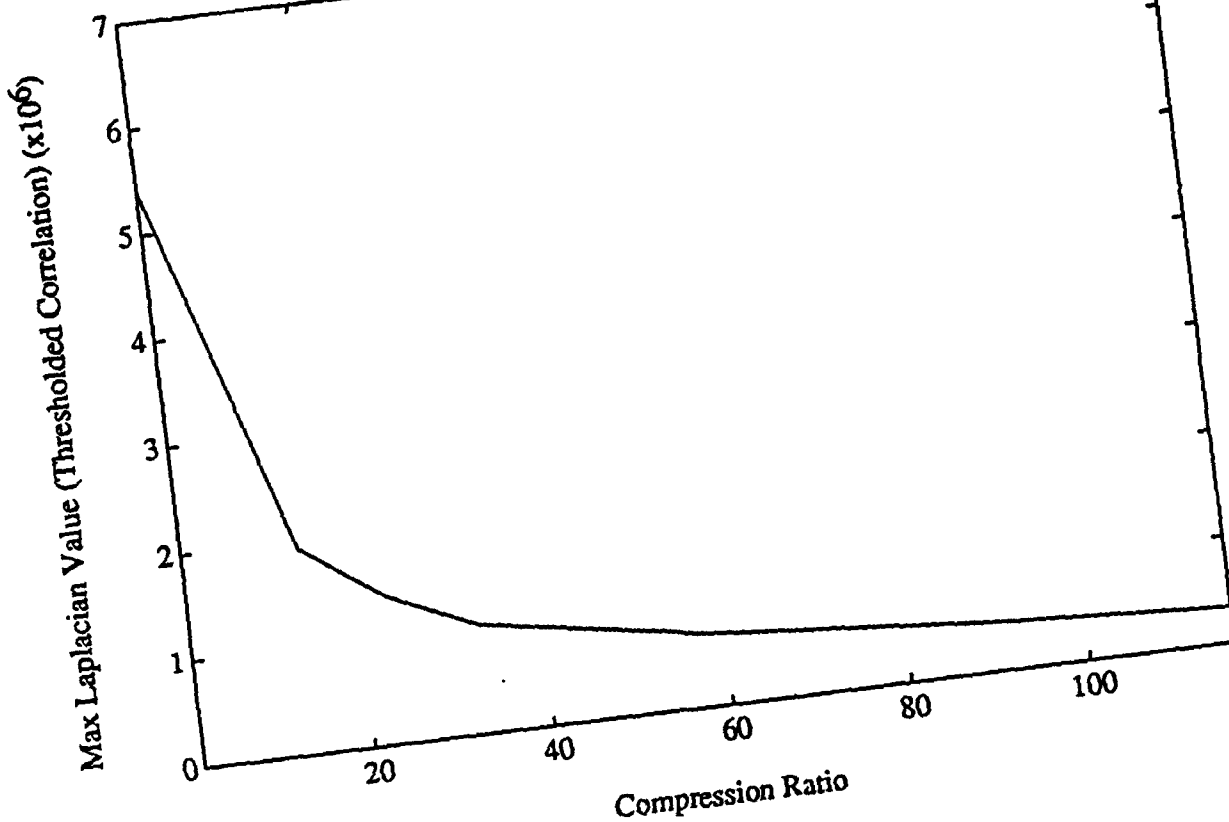


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A1 W4: Value of Max Laplacian vs. Compression

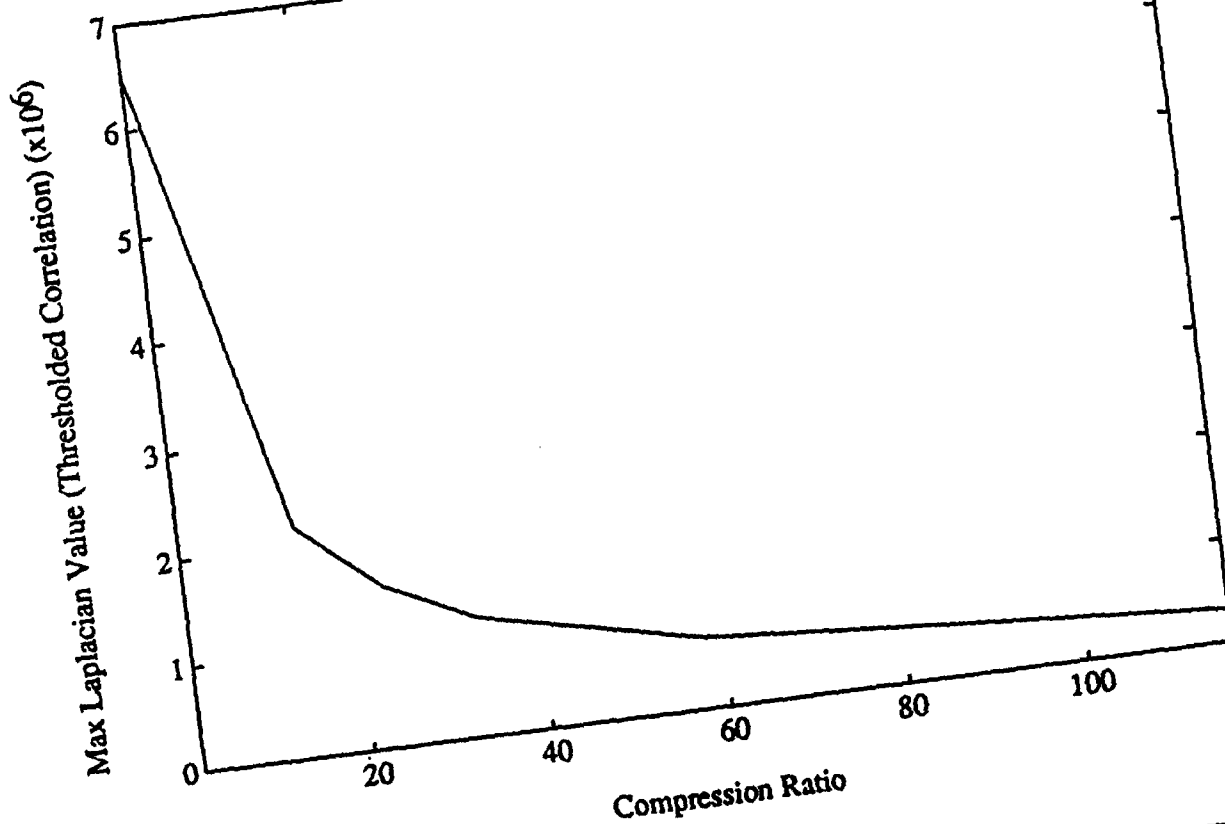


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A2 W1: Value of Max Laplacian vs. Compression

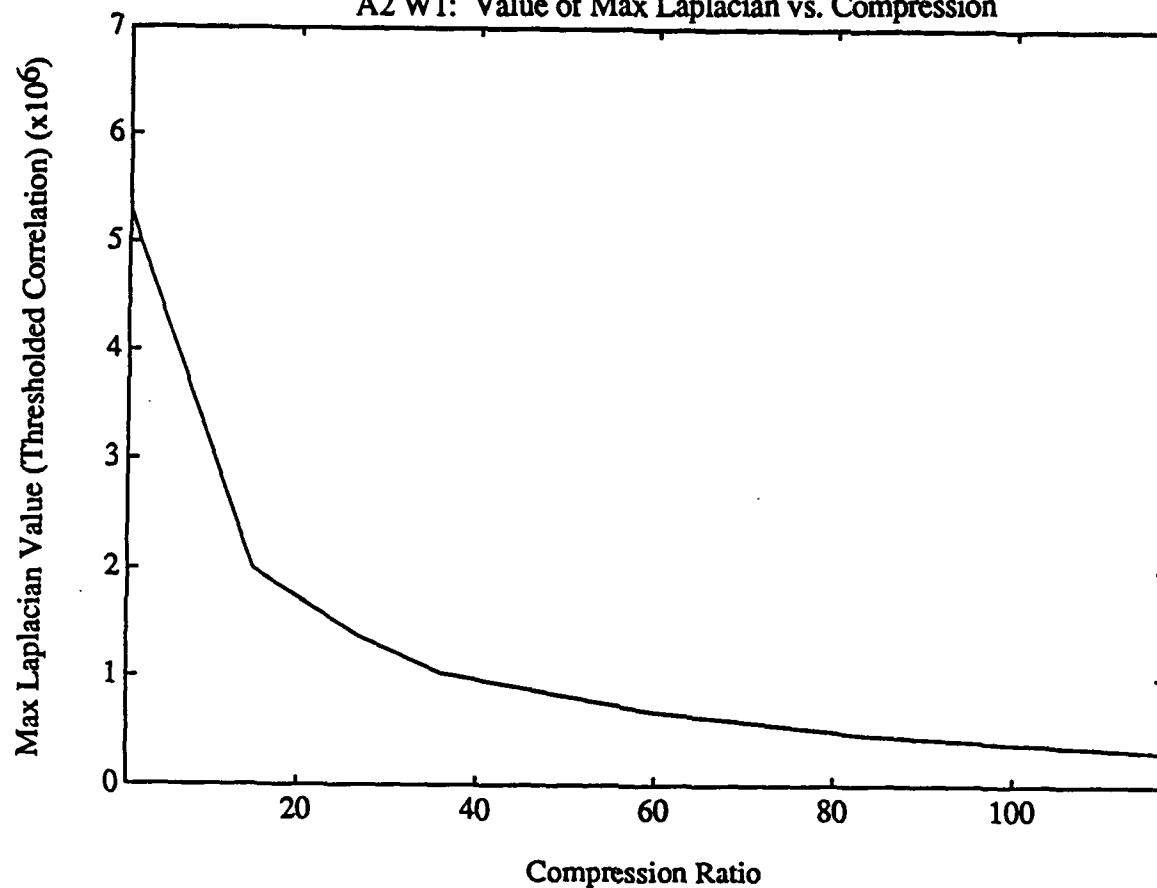


Exhibit II-2-f

A2 W2: Value of Max Laplacian vs. Compression

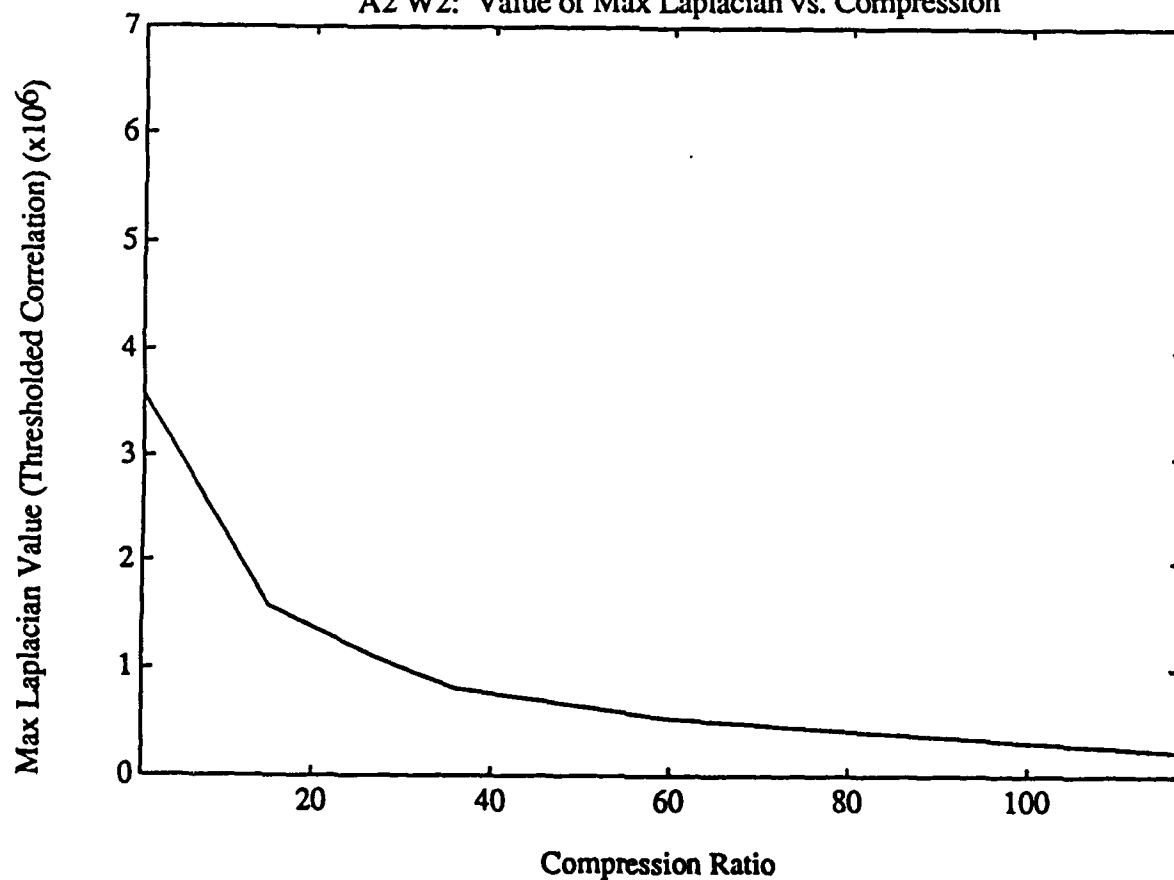


Exhibit II-2-g

A2 W3: Value of Max Laplacian vs. Compression

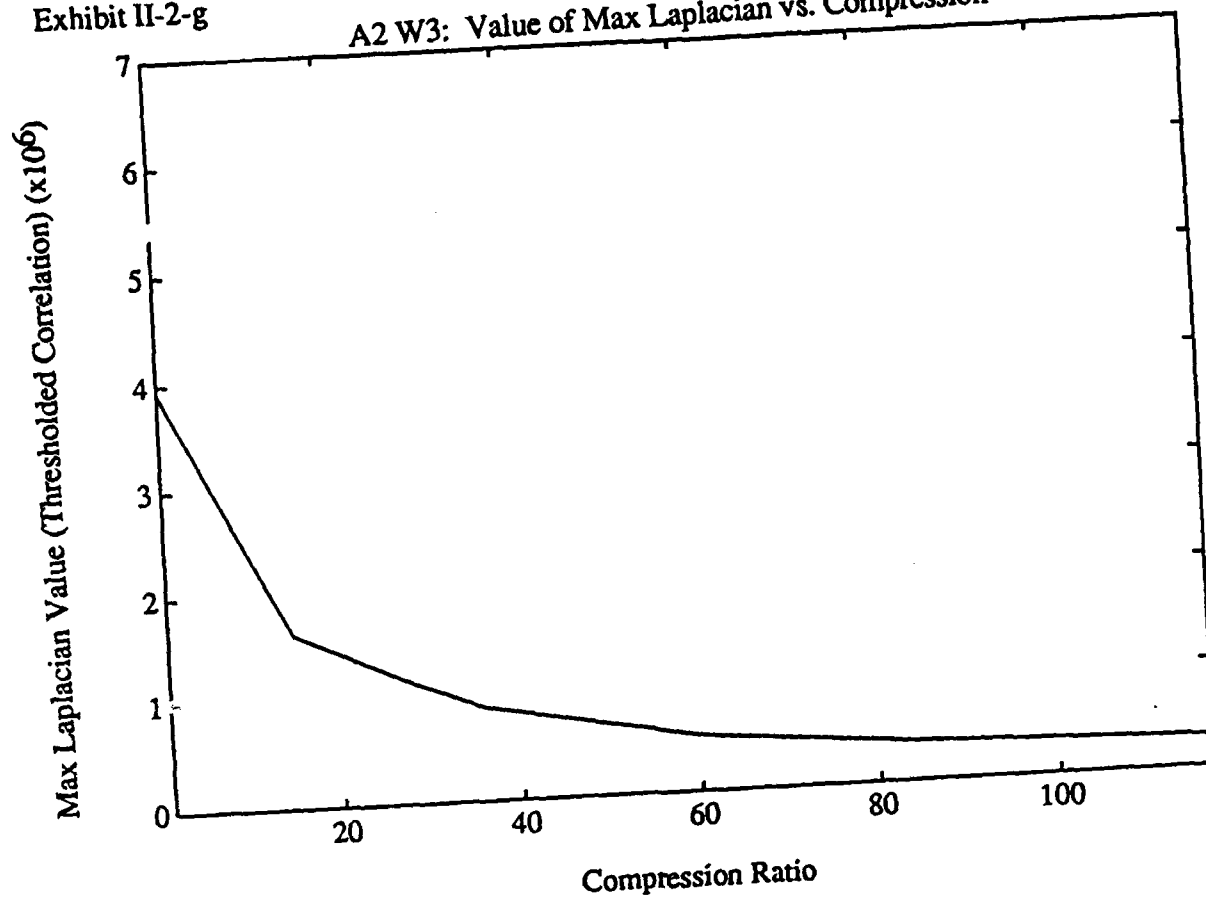
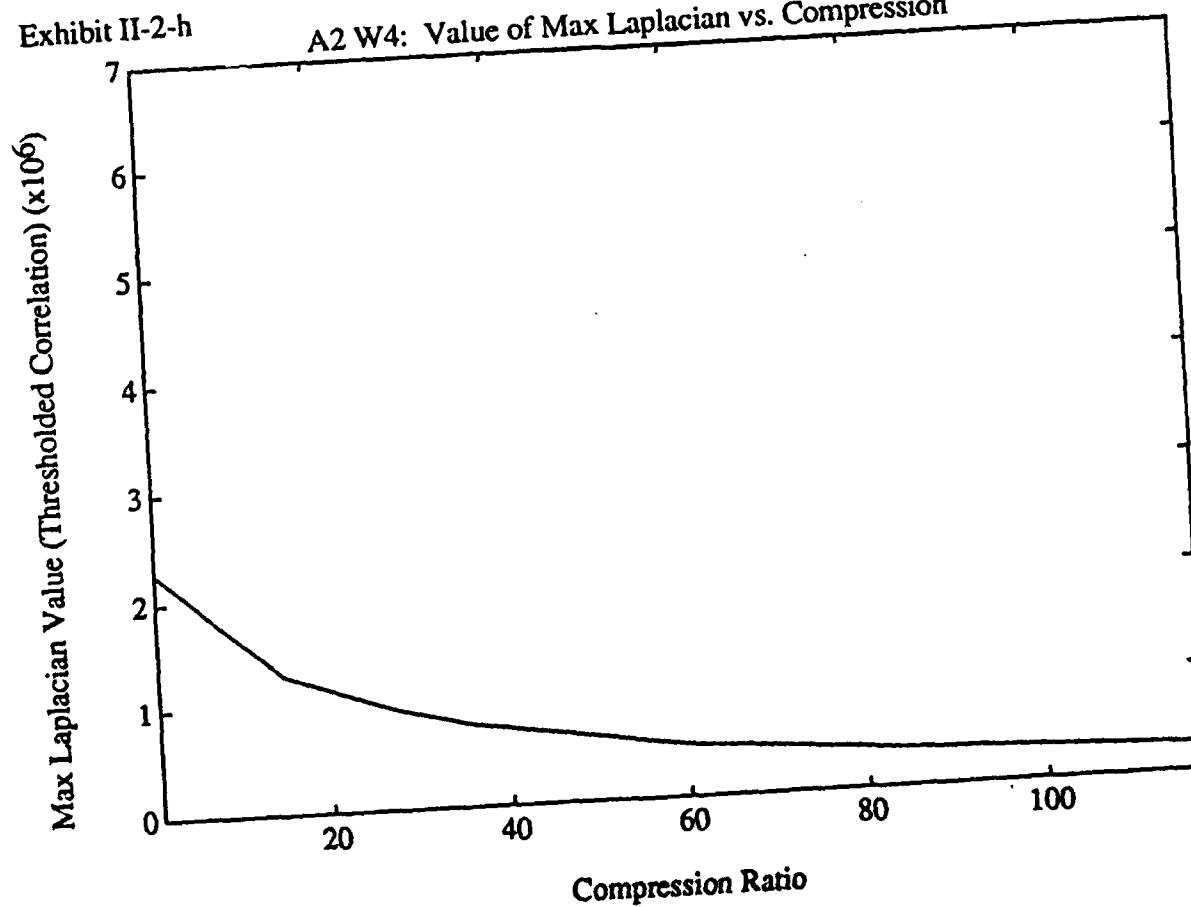


Exhibit II-2-h

A2 W4: Value of Max Laplacian vs. Compression





**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-3

**Graph: Value of Max Smoothed Laplacian vs. Compression
[One graph per (reference image, test patch) pair]**

Exhibit II-3-a

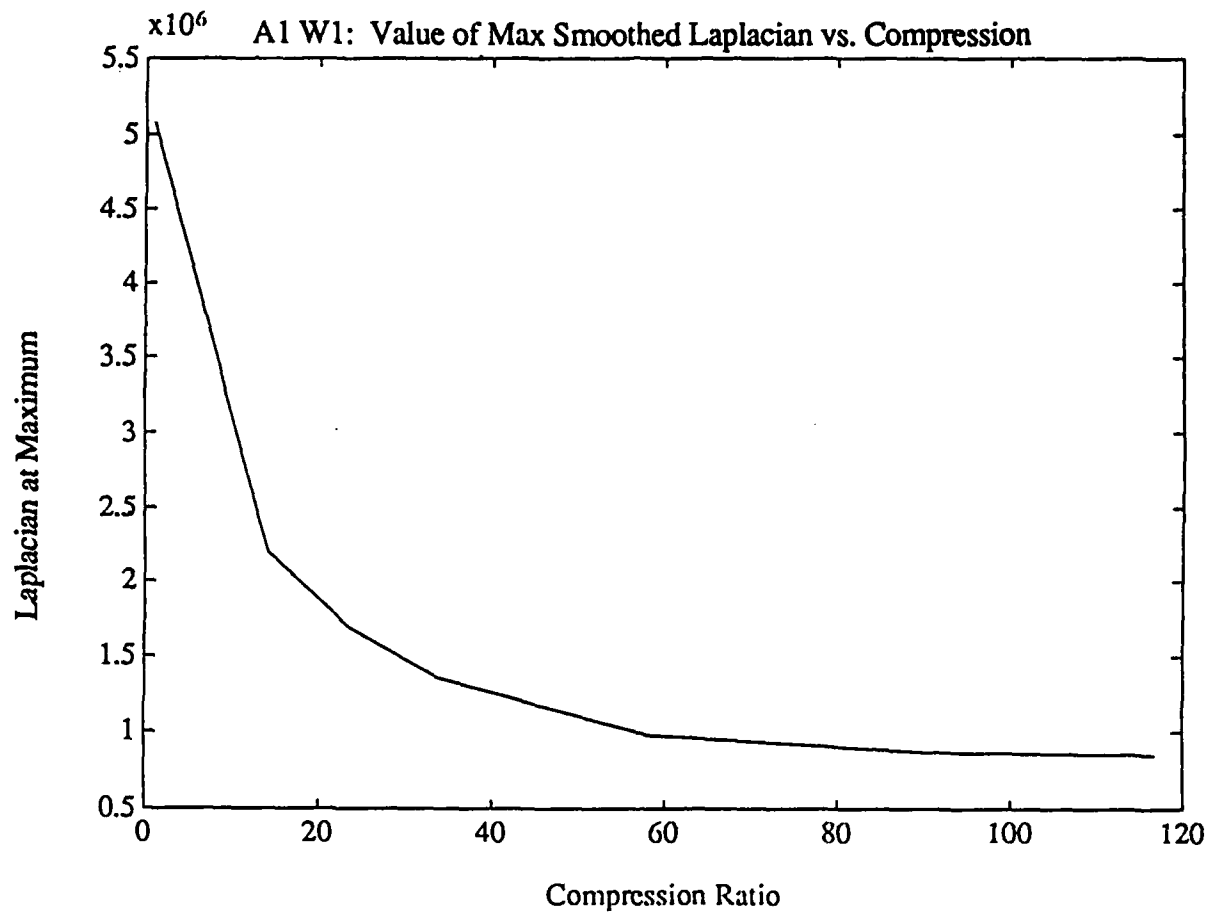


Exhibit II-3-b

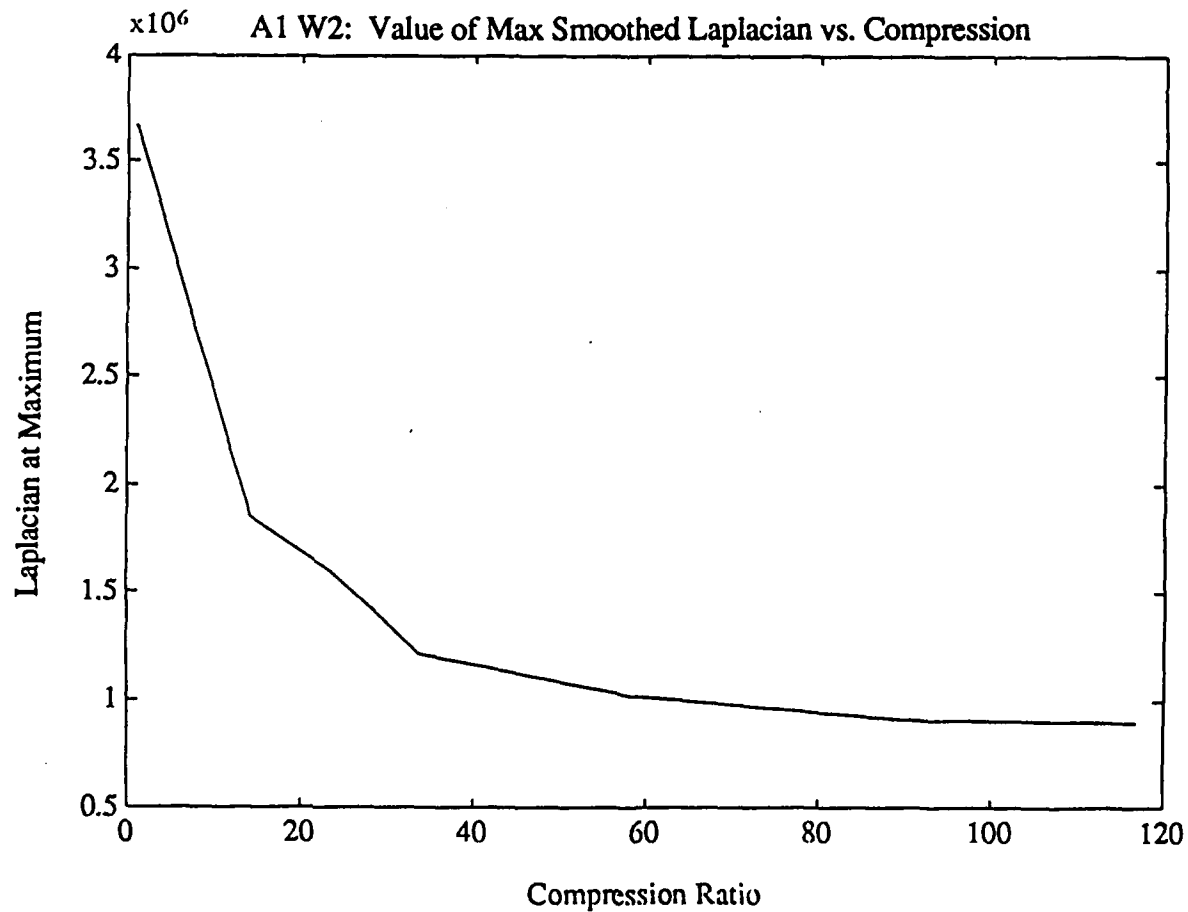


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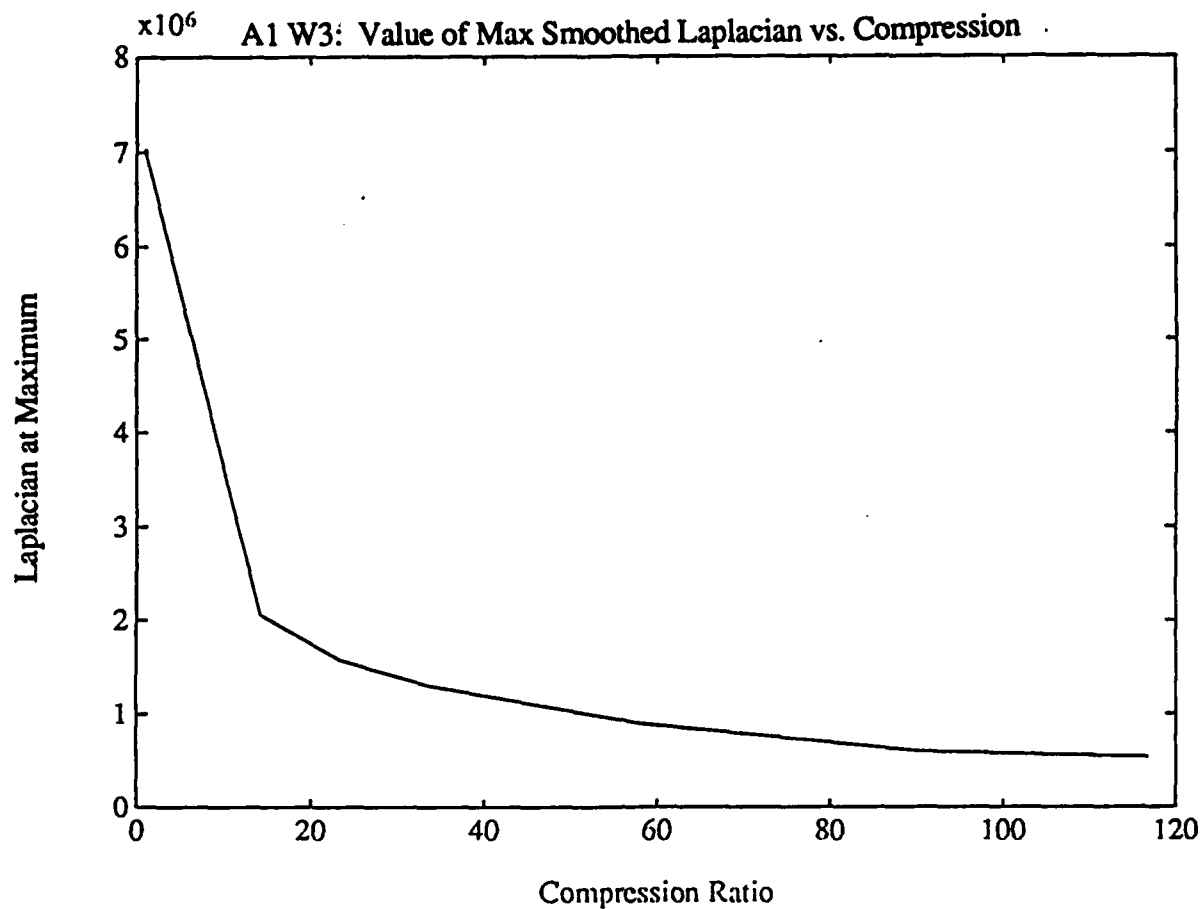


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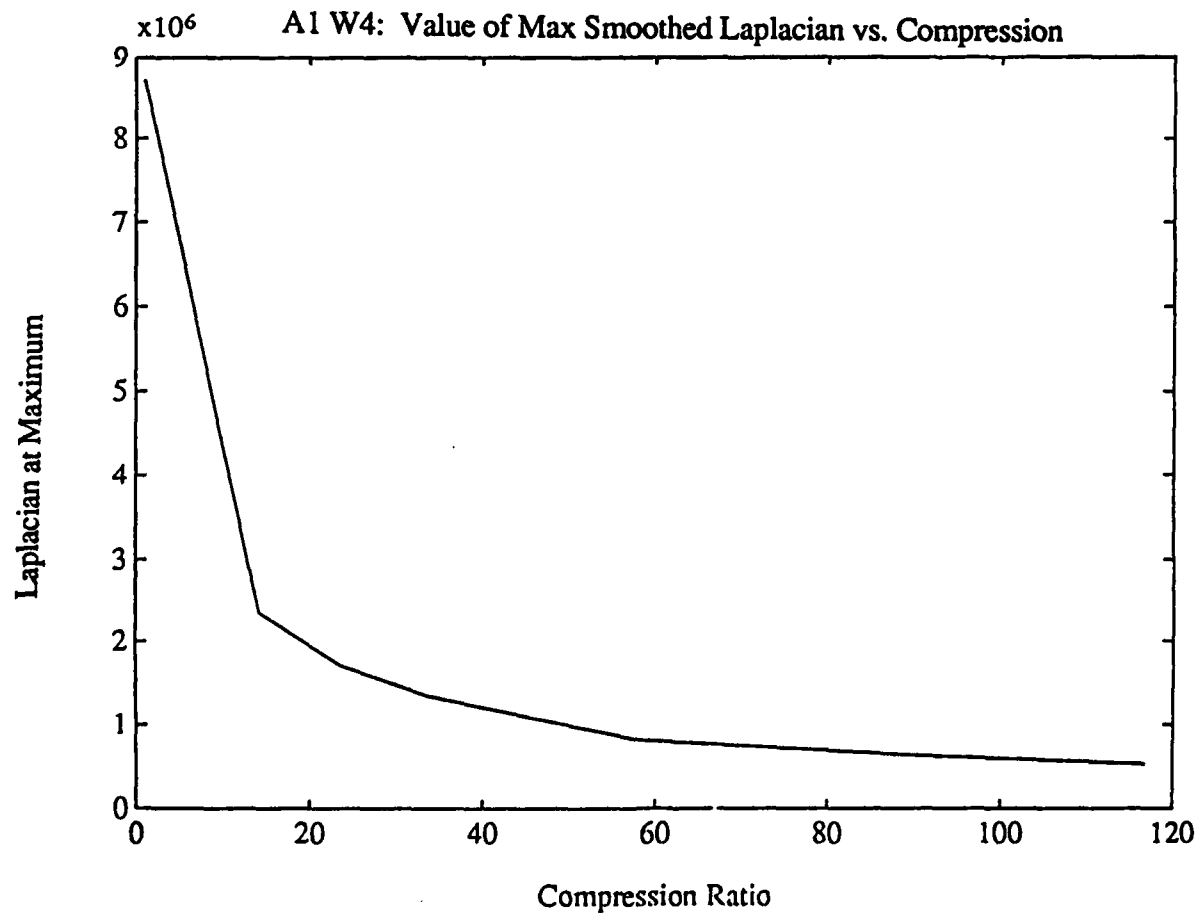


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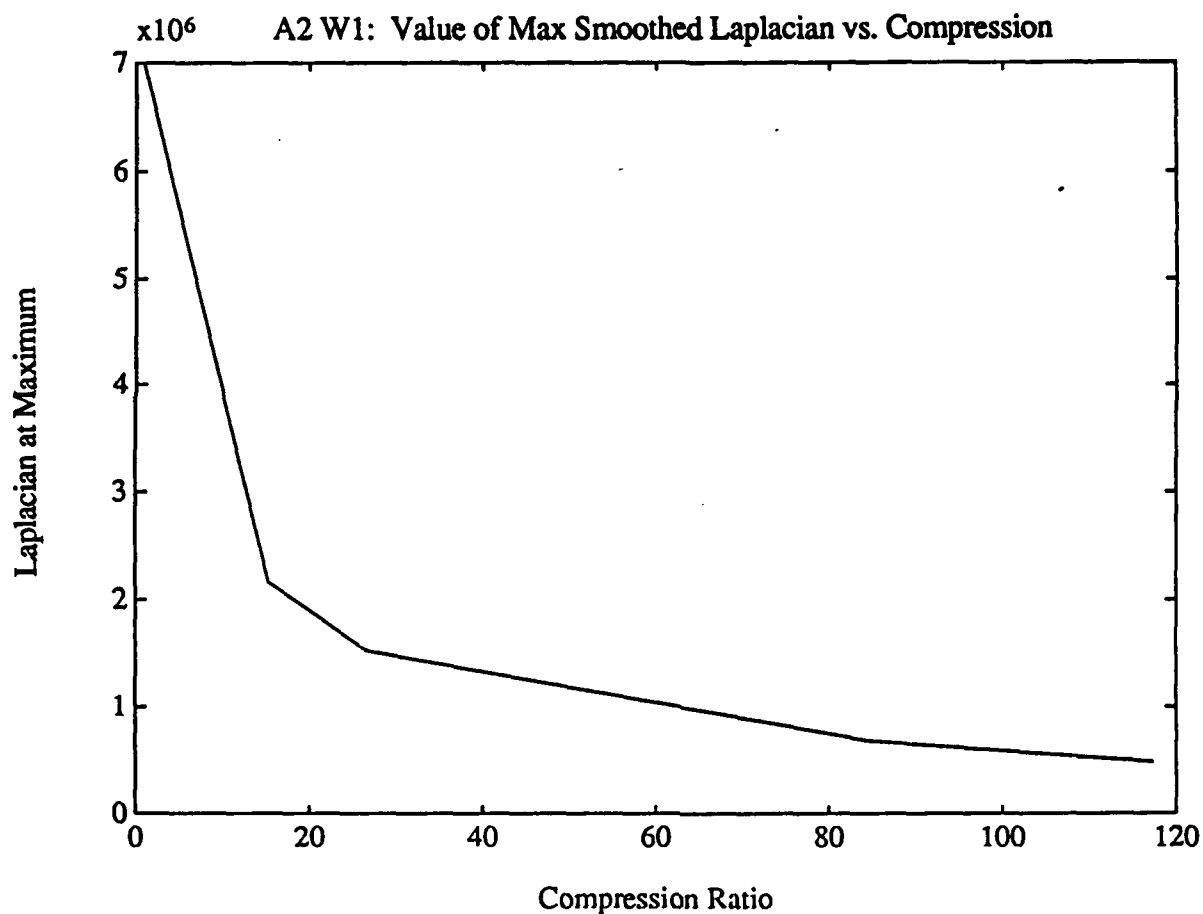


Exhibit II-3-f

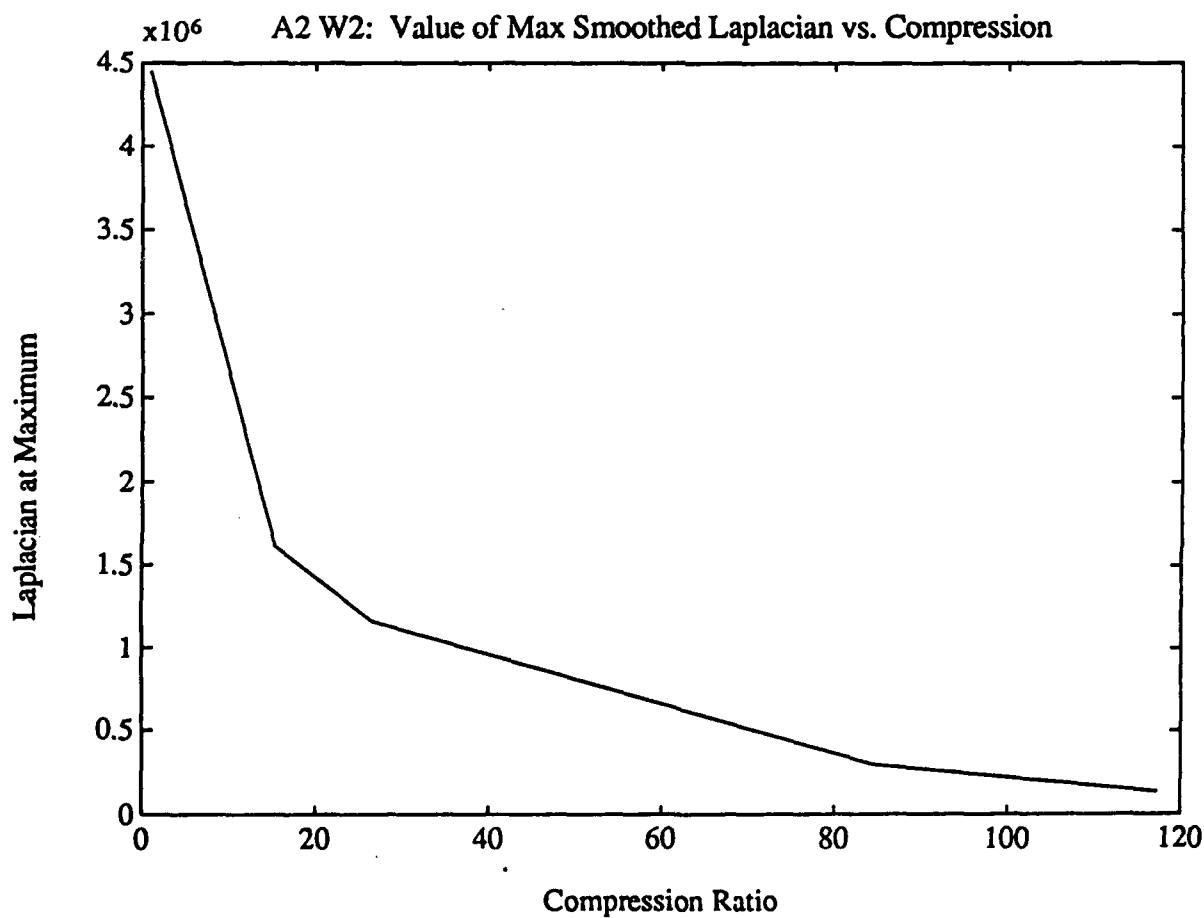


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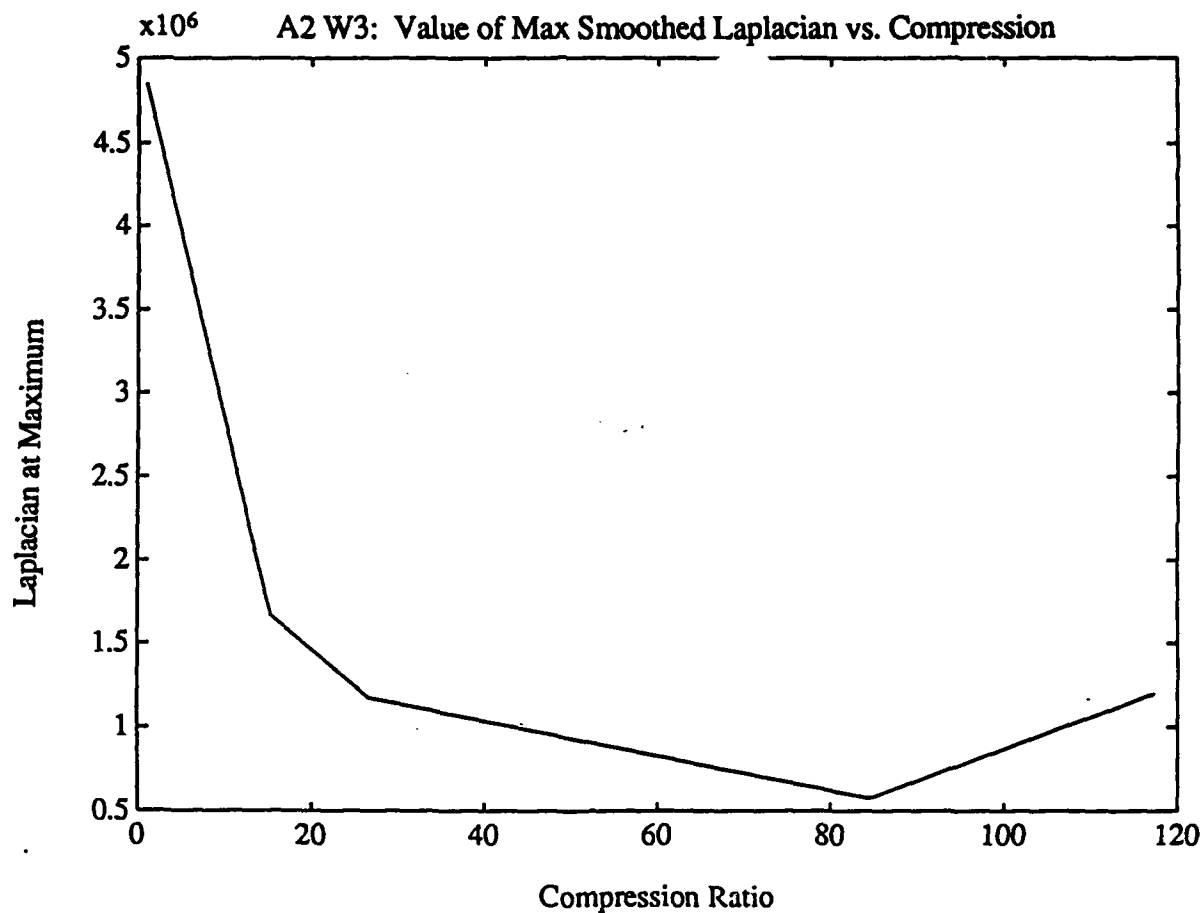
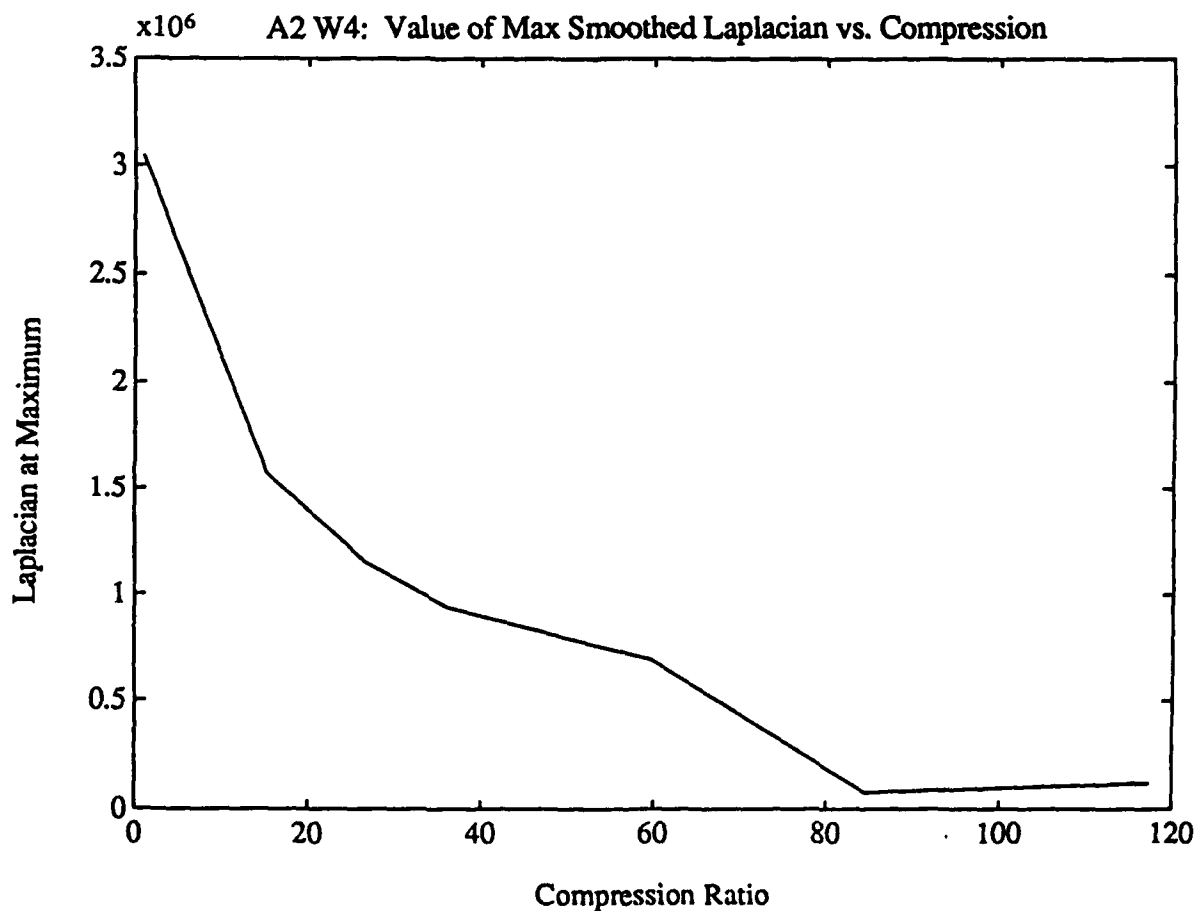


Exhibit II-3-h





**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-4

**Graph: Ratio of Peak Correlation to that of Largest and Nearest Side Lobes
vs. Compression**

**[One graph per (reference image, test patch) pair for largest and for
nearest]**

Exhibit-II-4-a-1

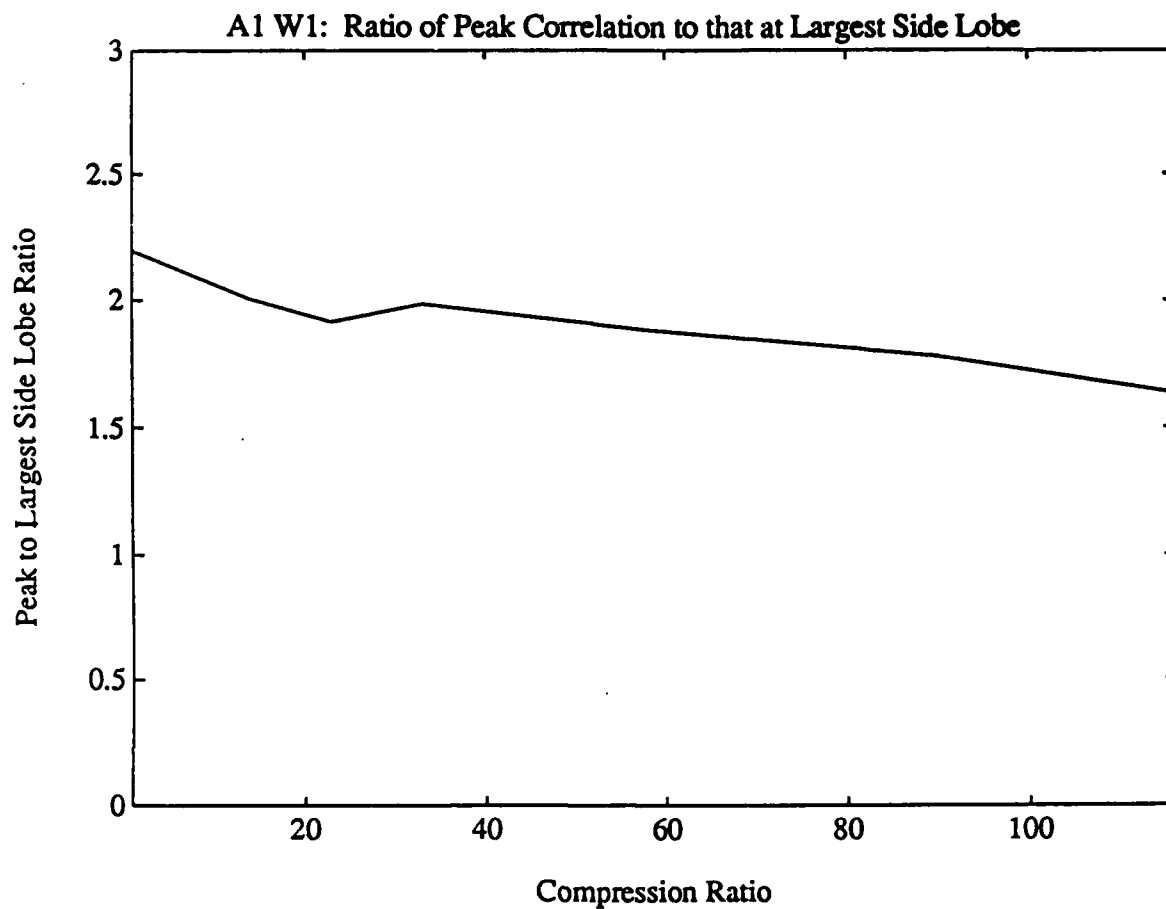


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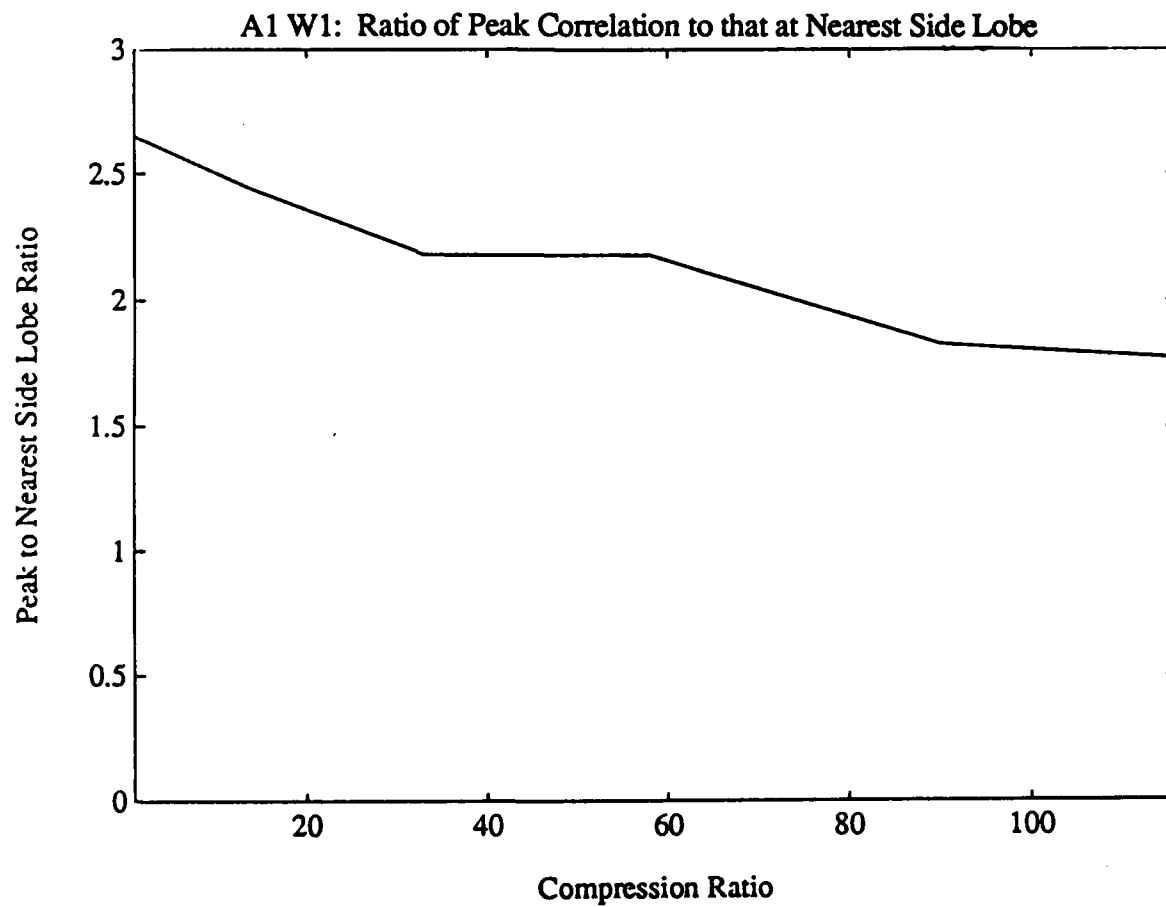


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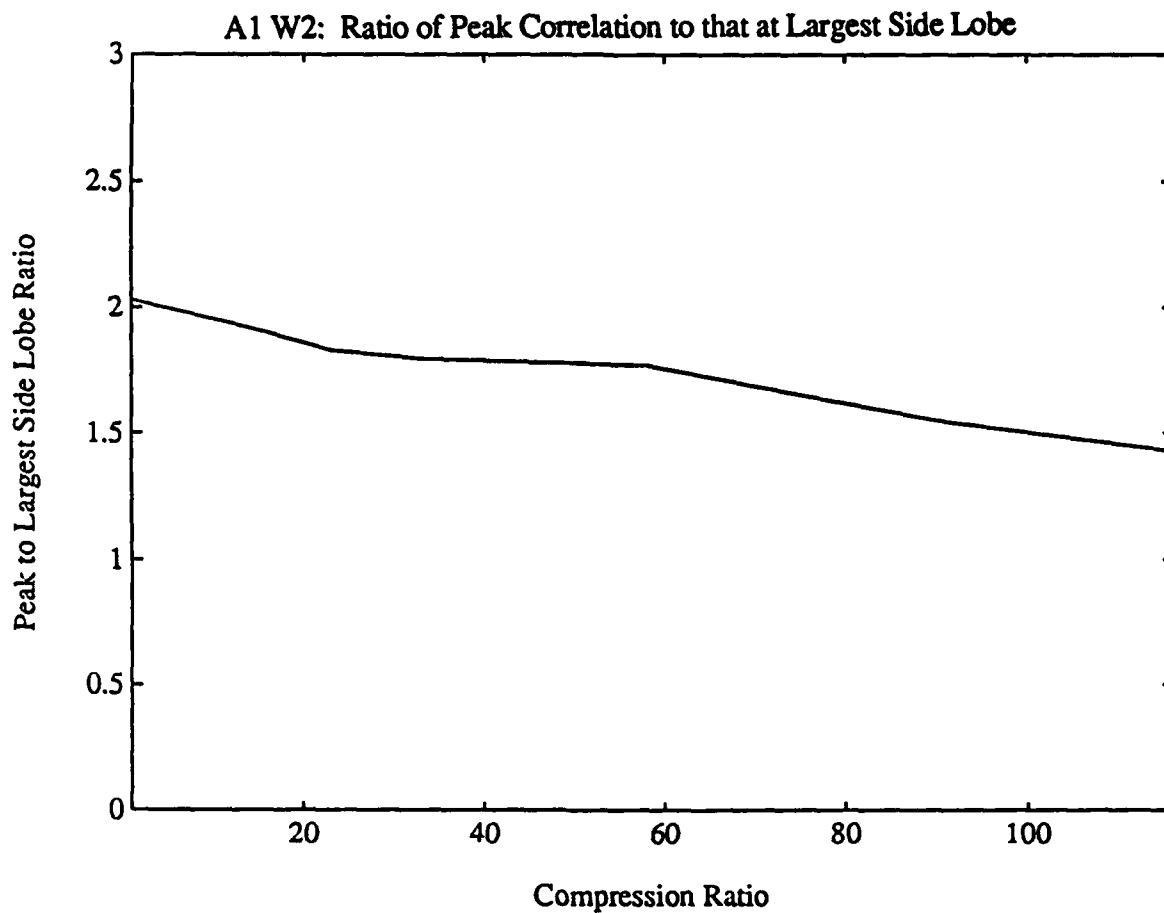


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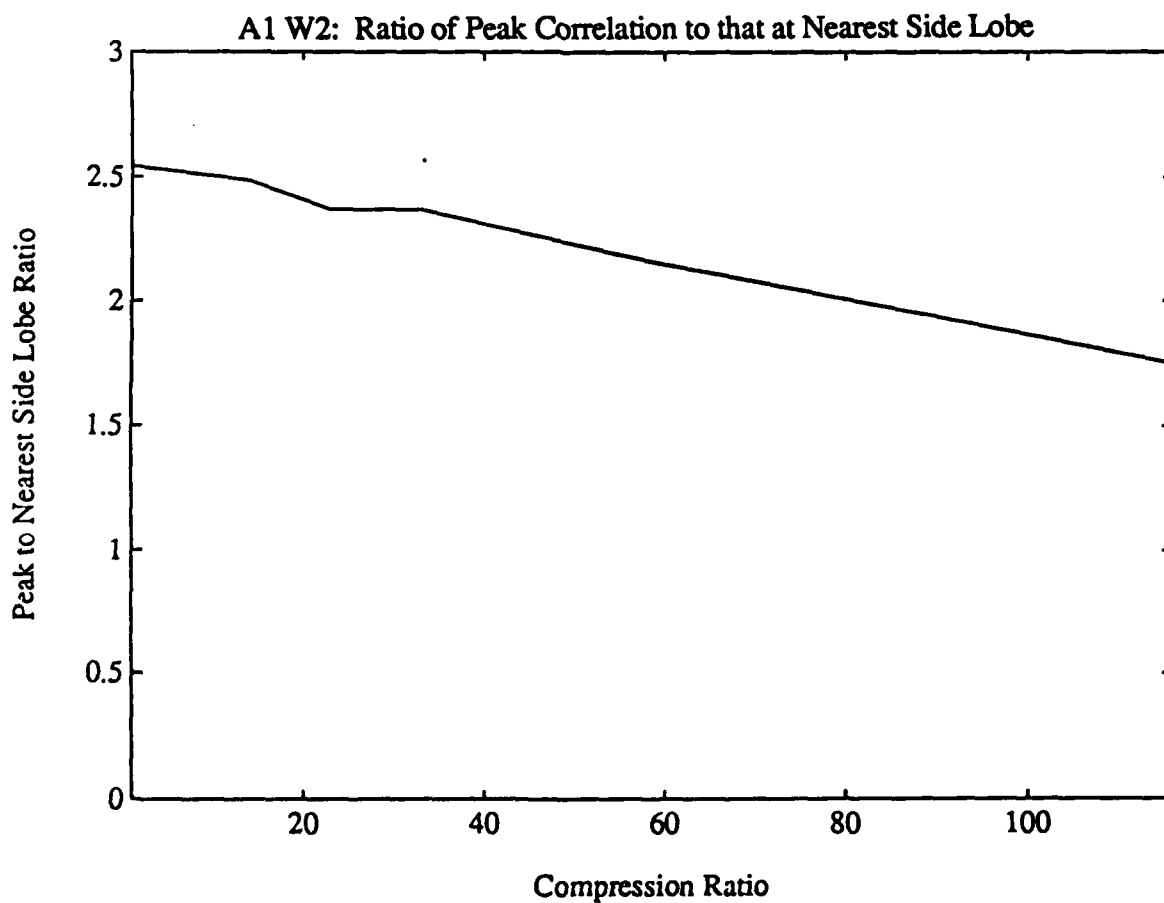


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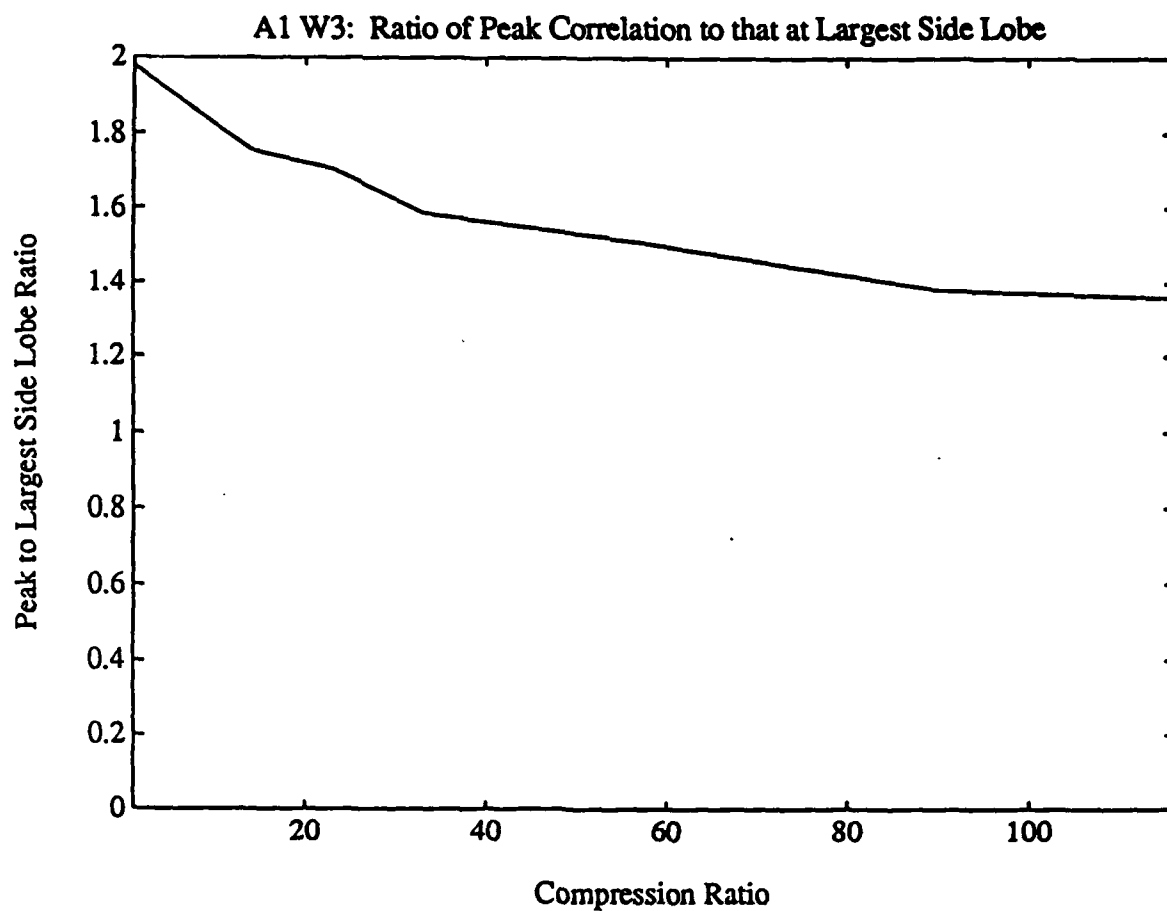


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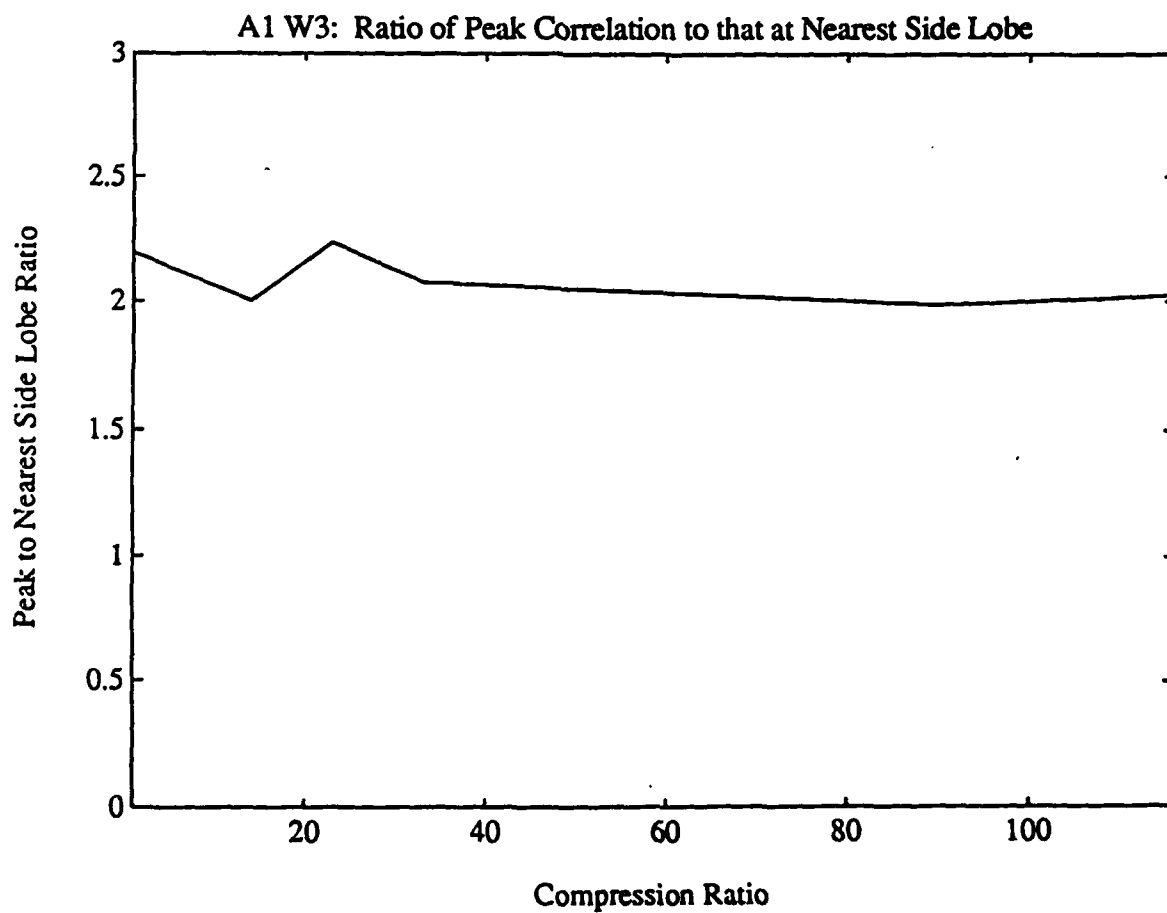


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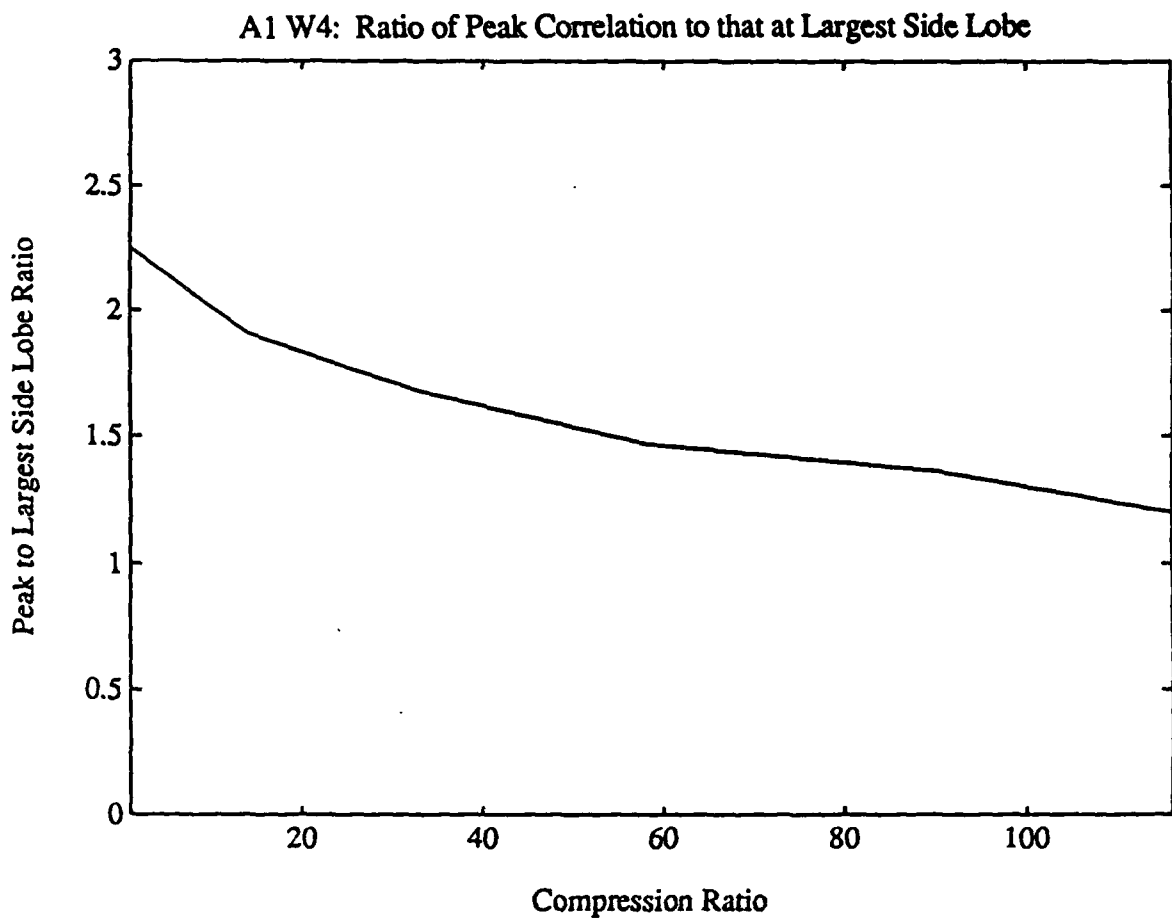


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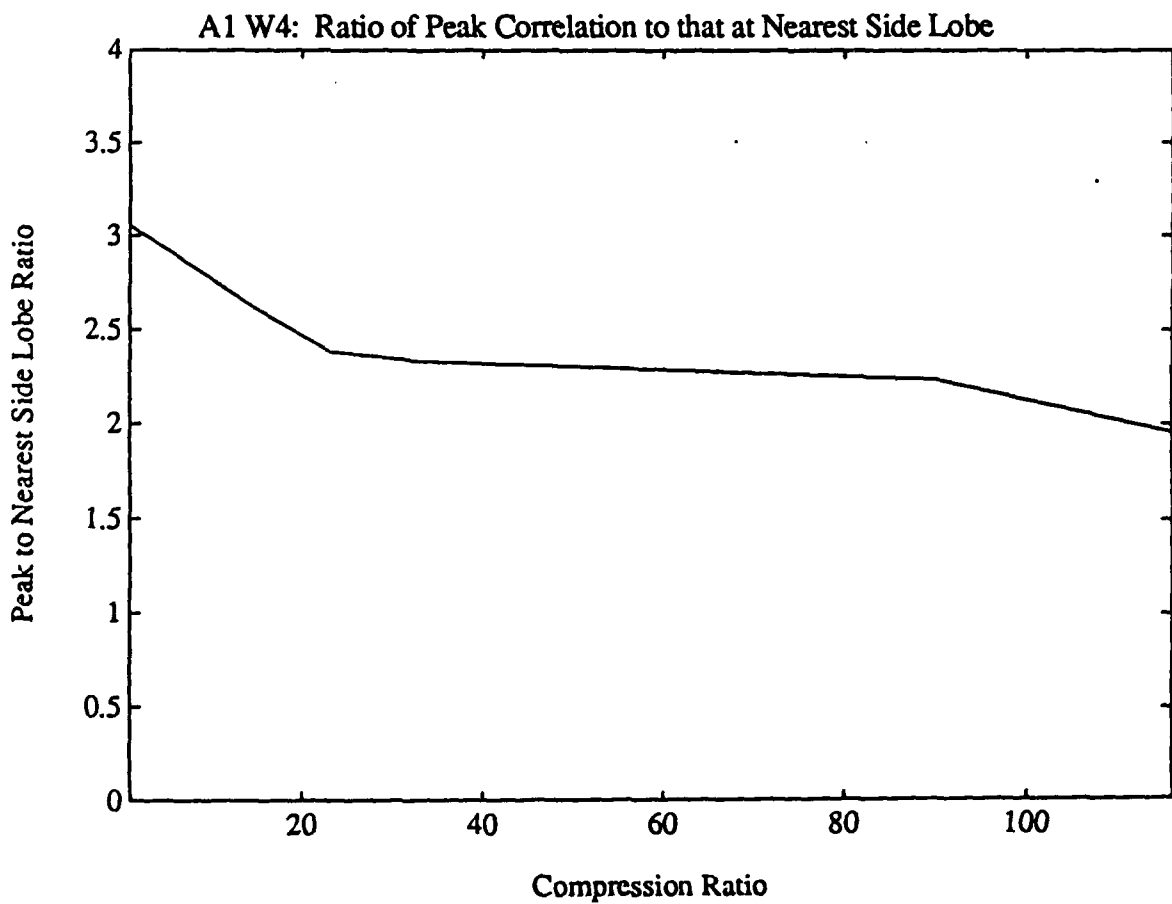


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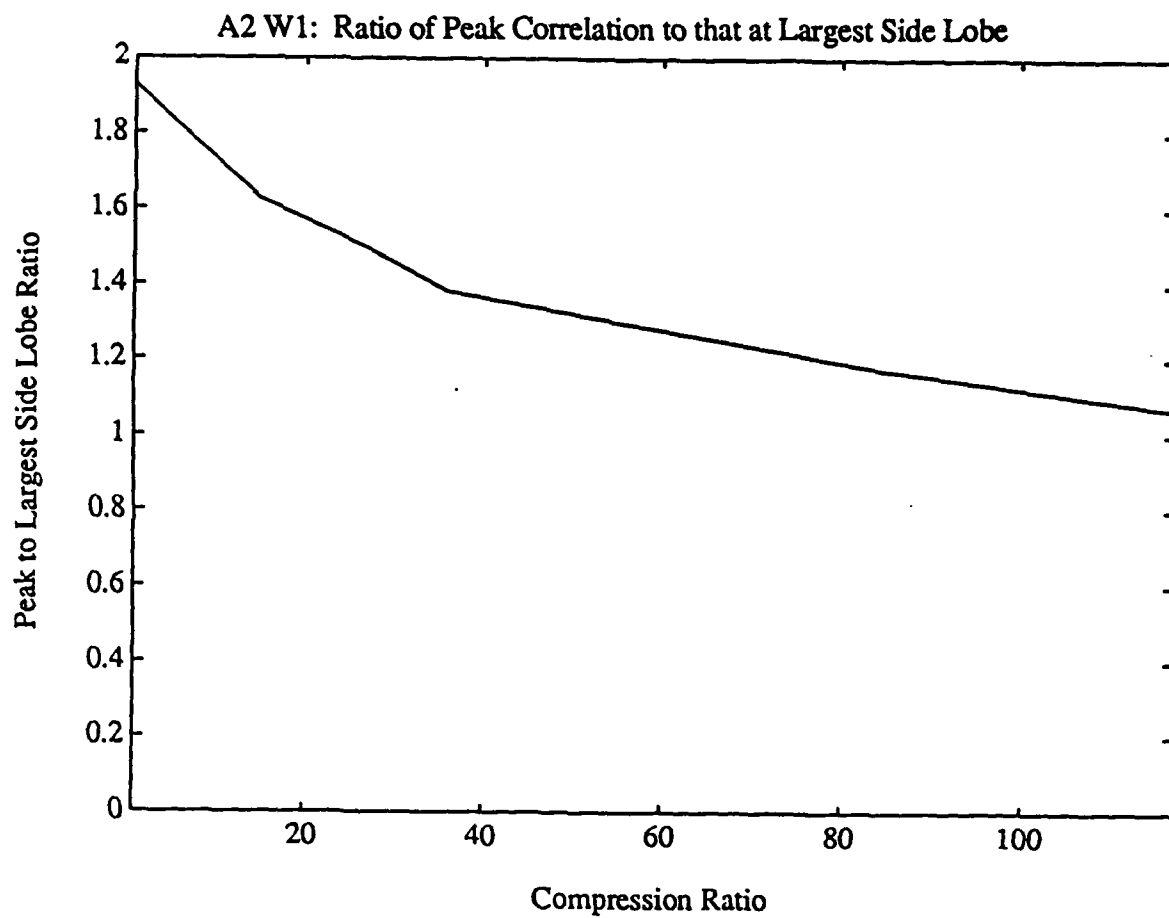


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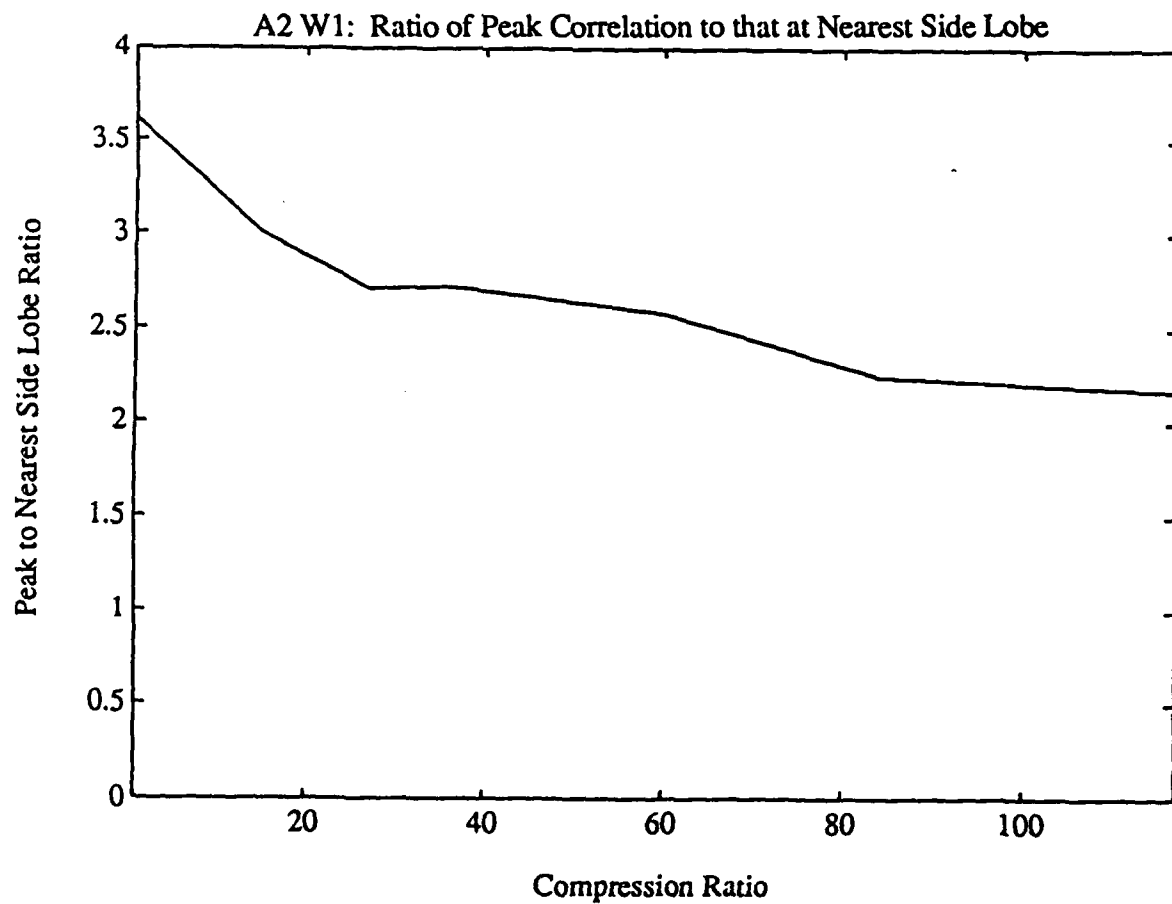


Exhibit-II-4-a-6

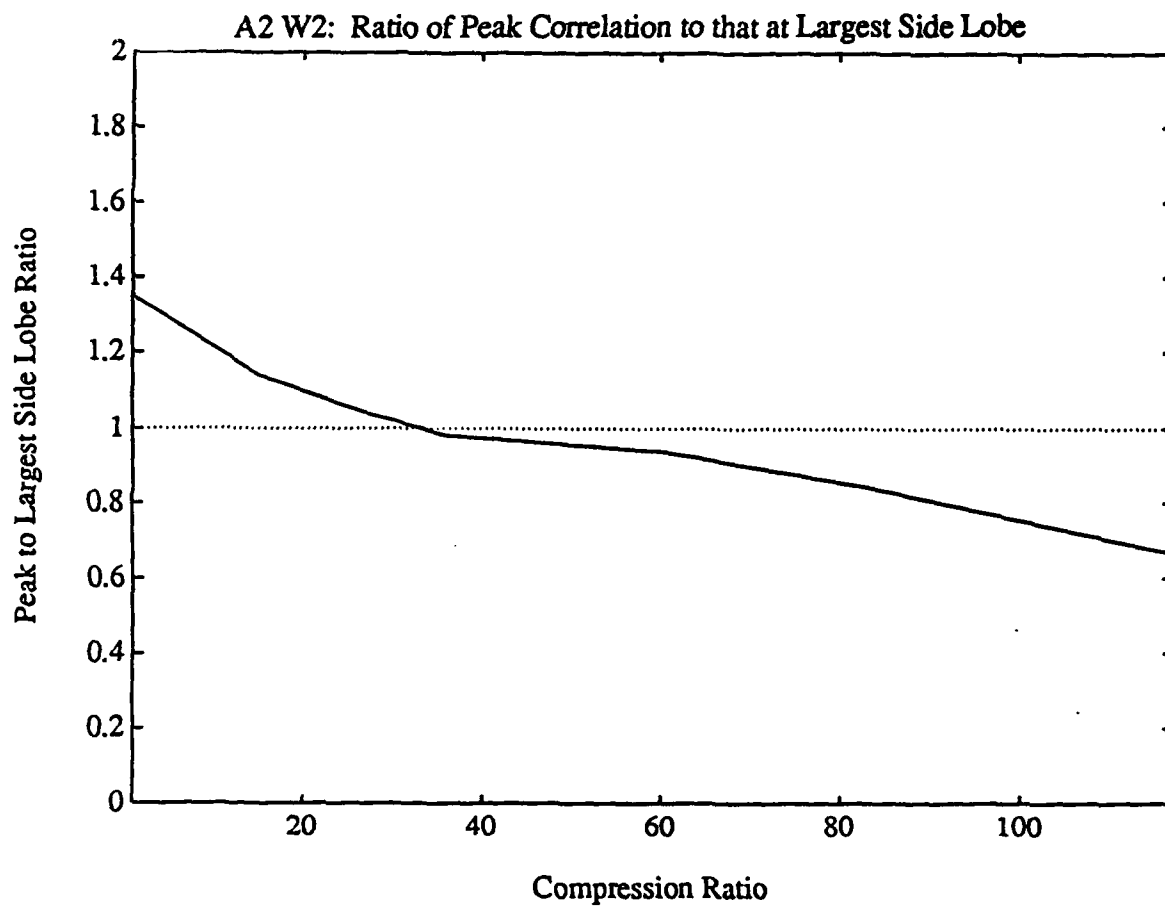


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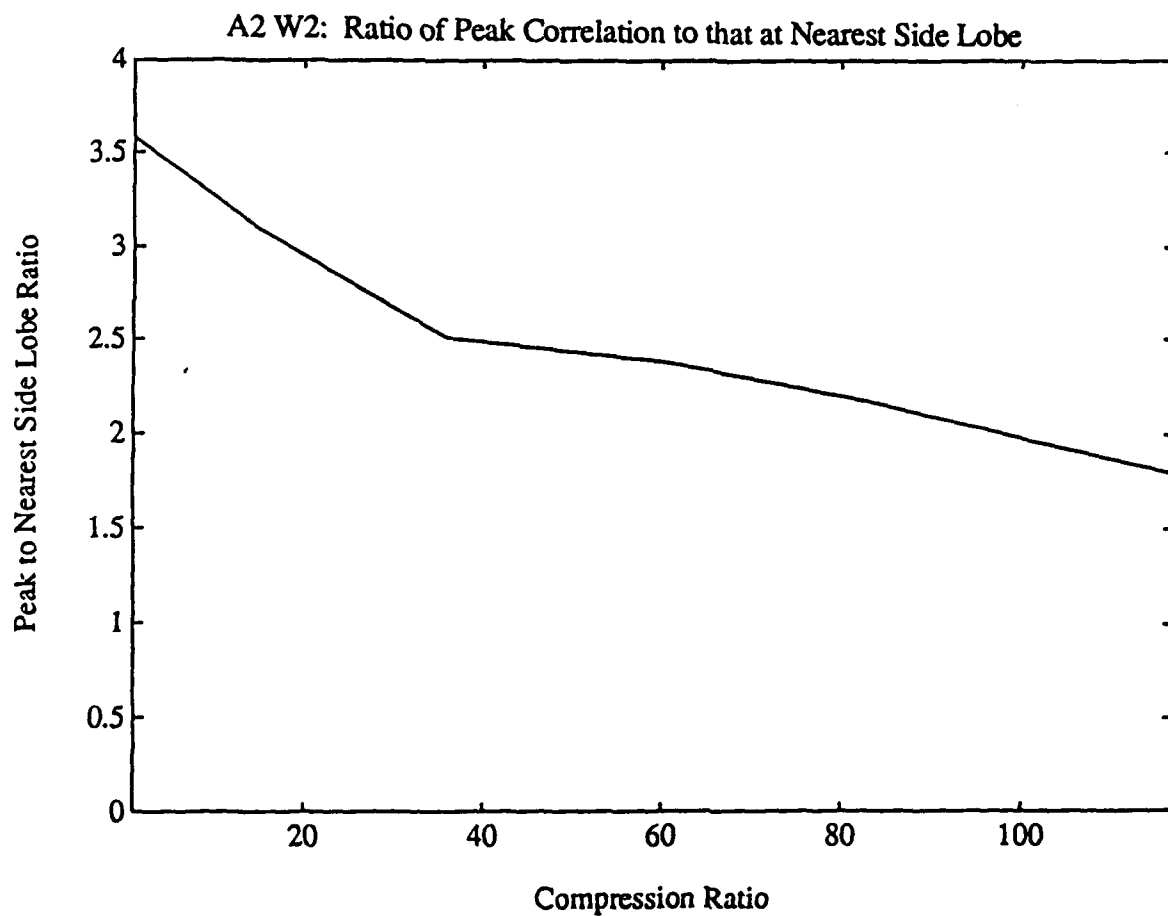


Exhibit-II-4-a-7

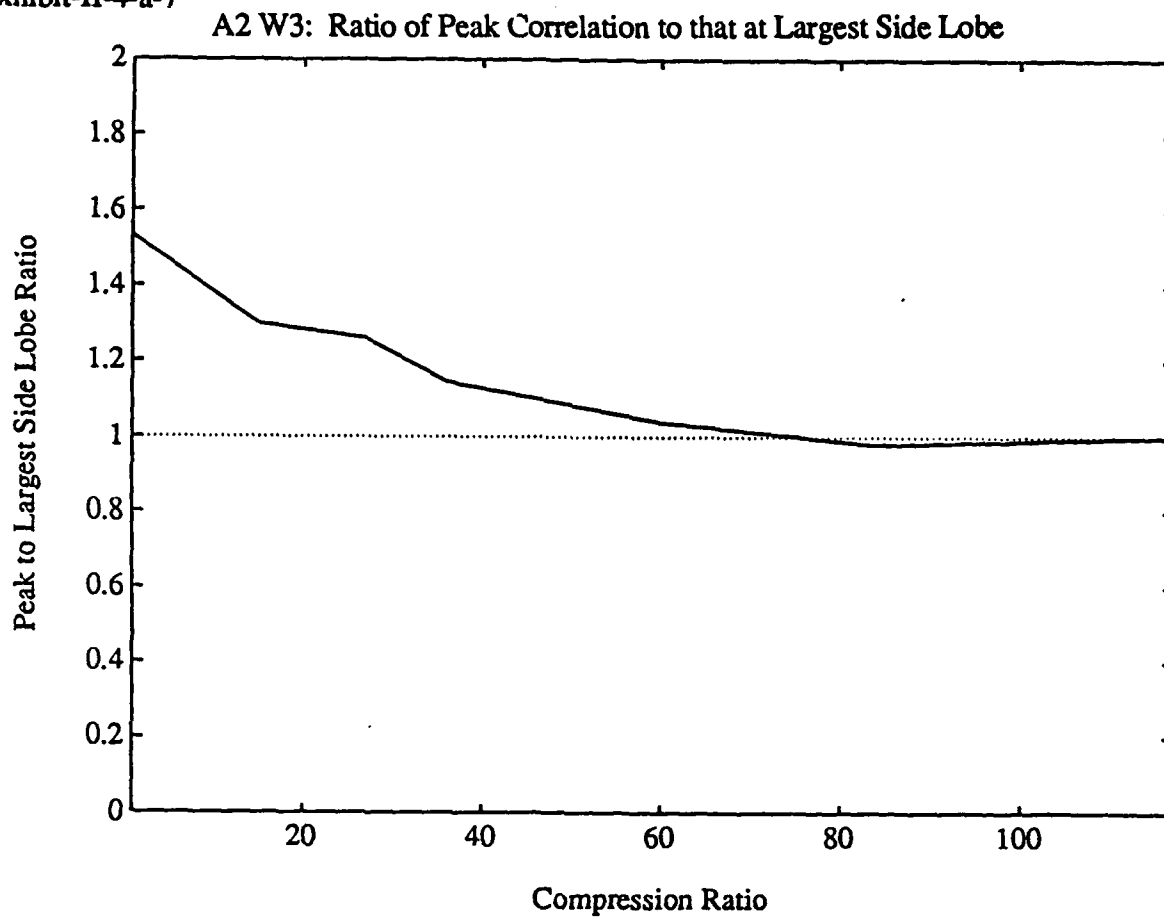


Exhibit-II-4-b-7

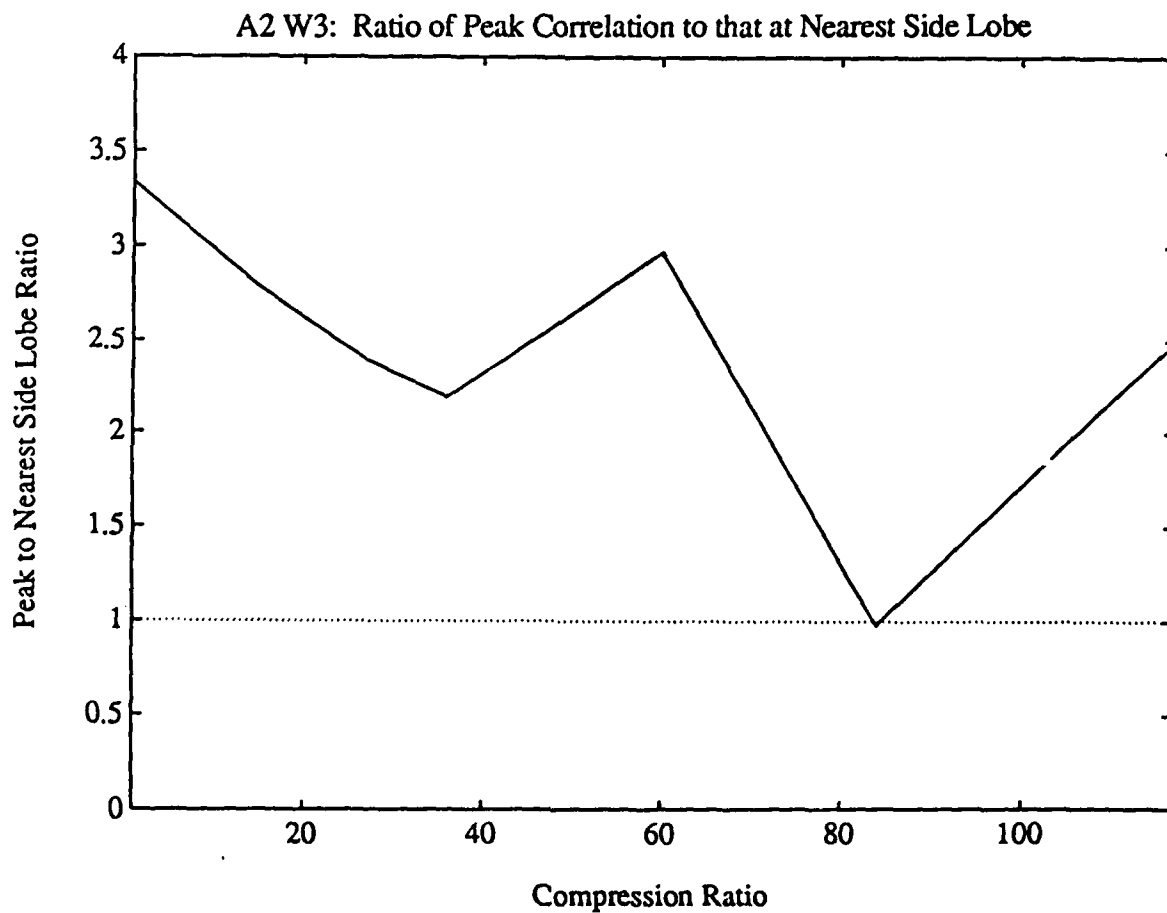


Exhibit-II-4-a-8

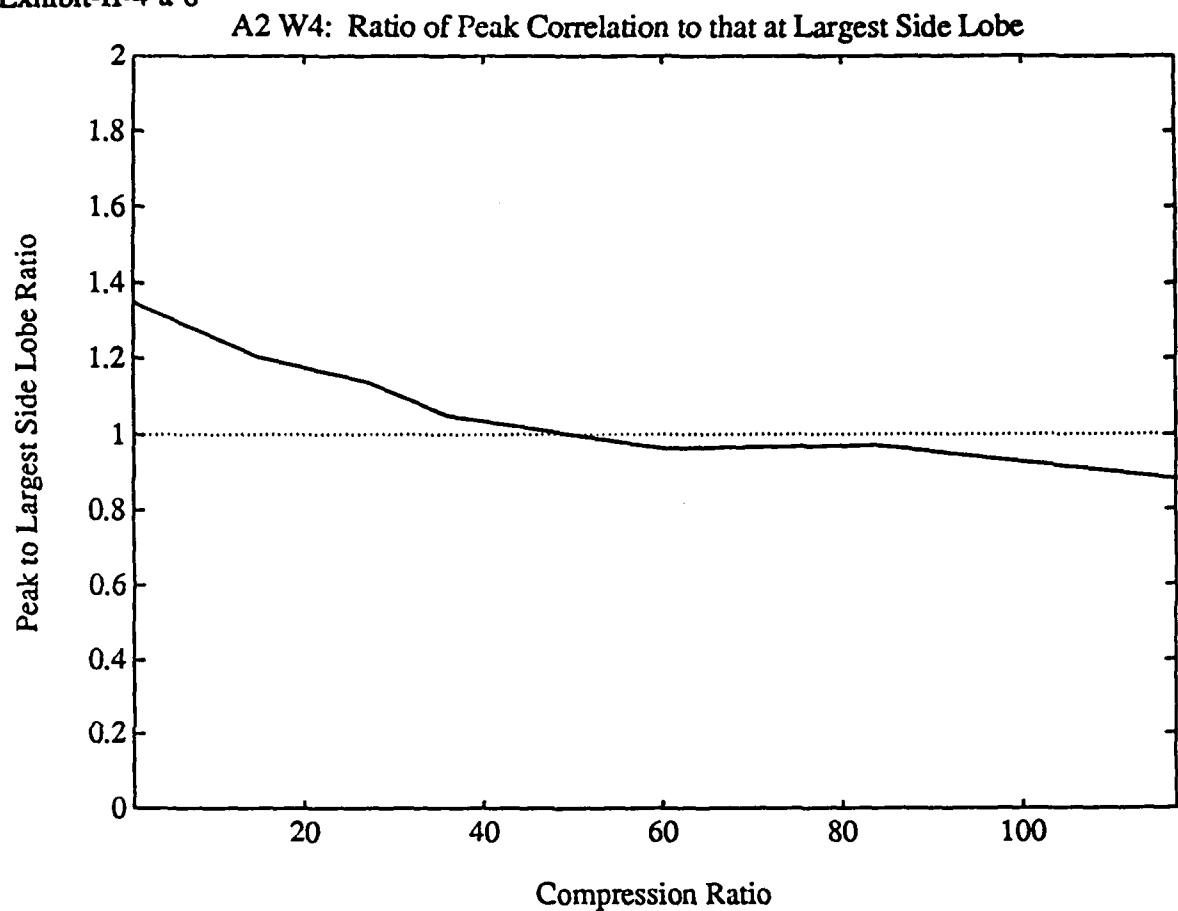
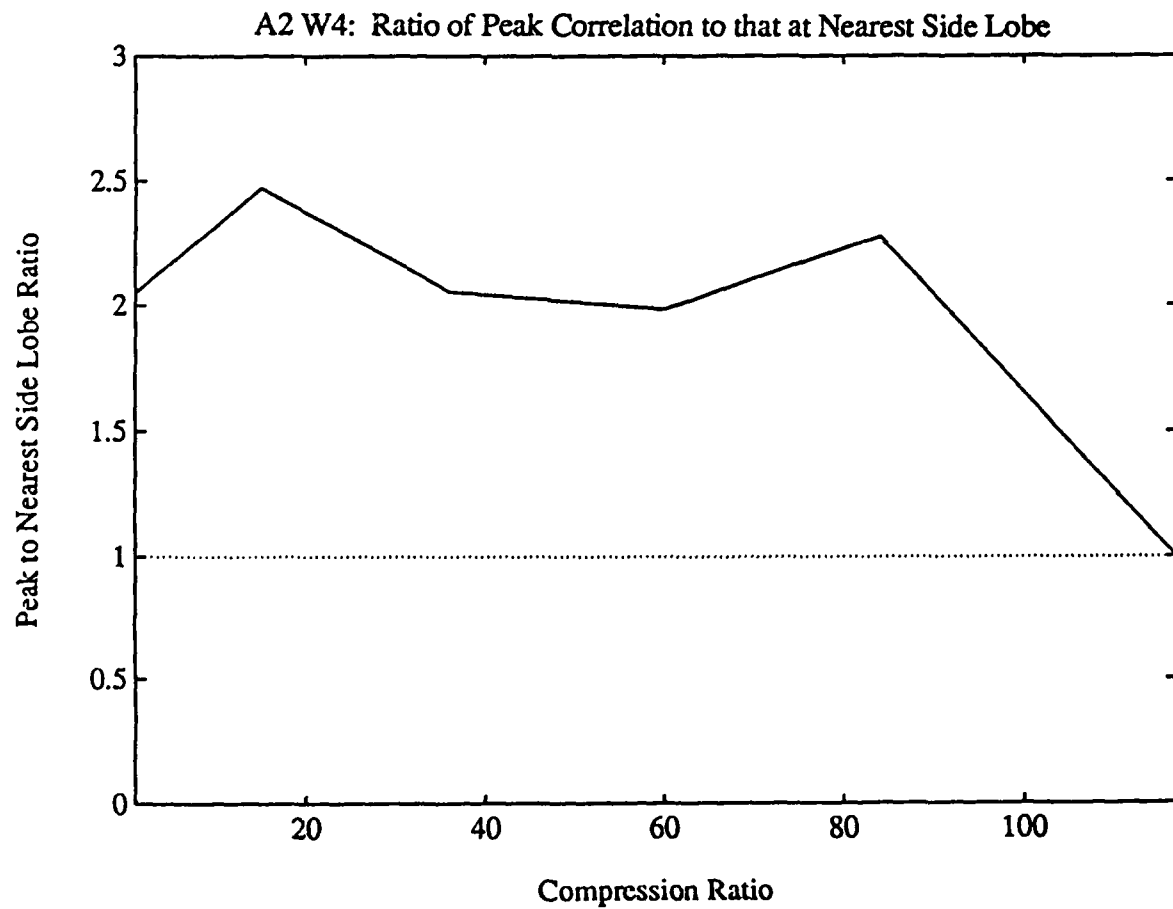


Exhibit-II-4-b-8





**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-5

**Graph: Ratio of Peak Laplacian to that of Largest and Nearest Side Lobes
vs. Compression**

**[One graph per (reference image, test patch) pair for largest and for
nearest]**

Exhibit-II-5-a-1

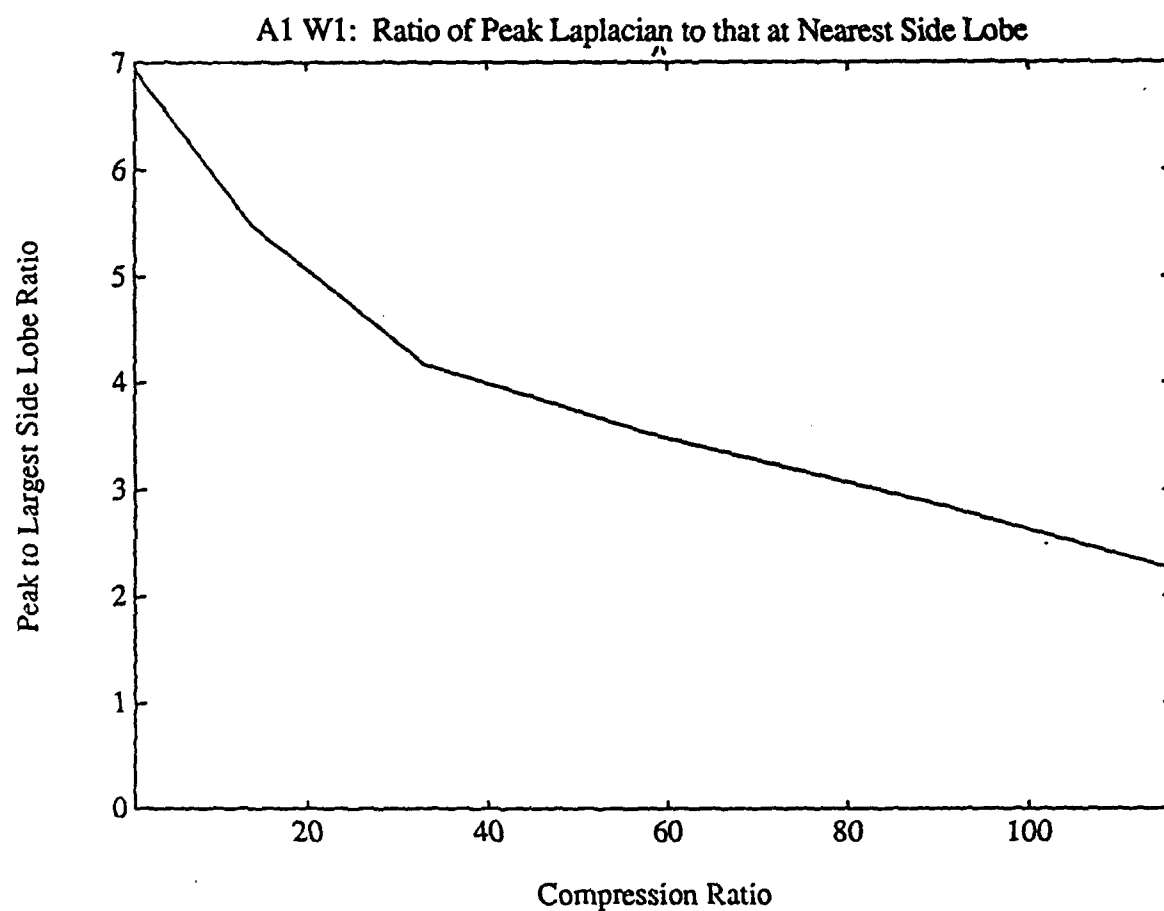
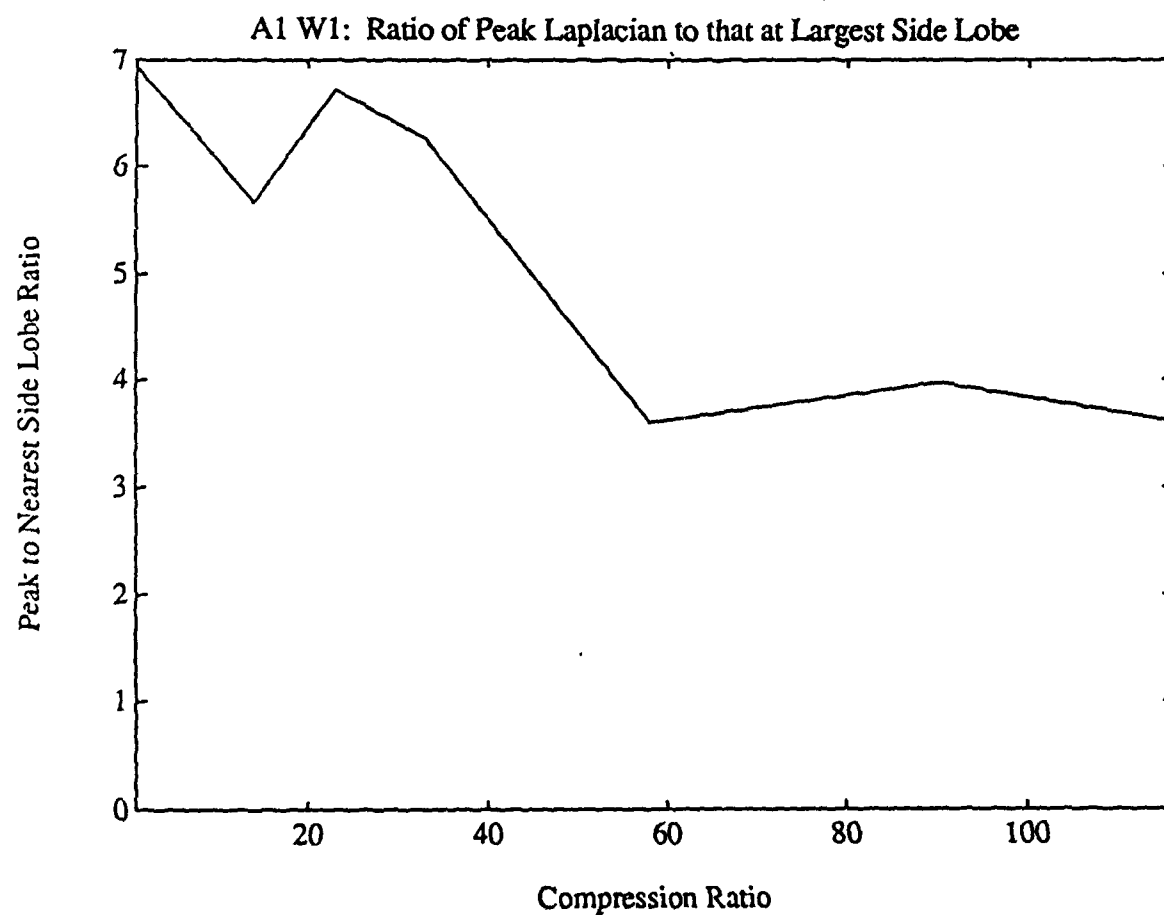


Exhibit-II-5-b-1



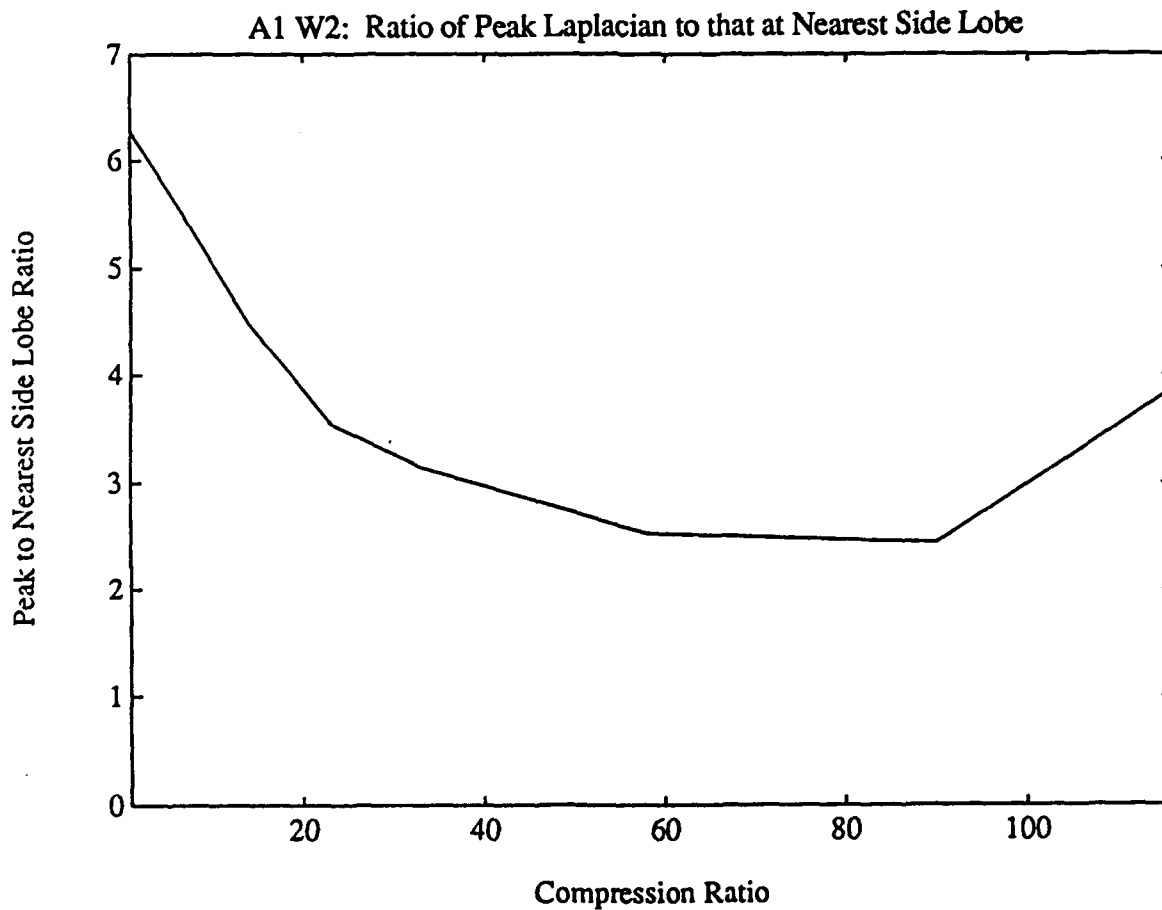
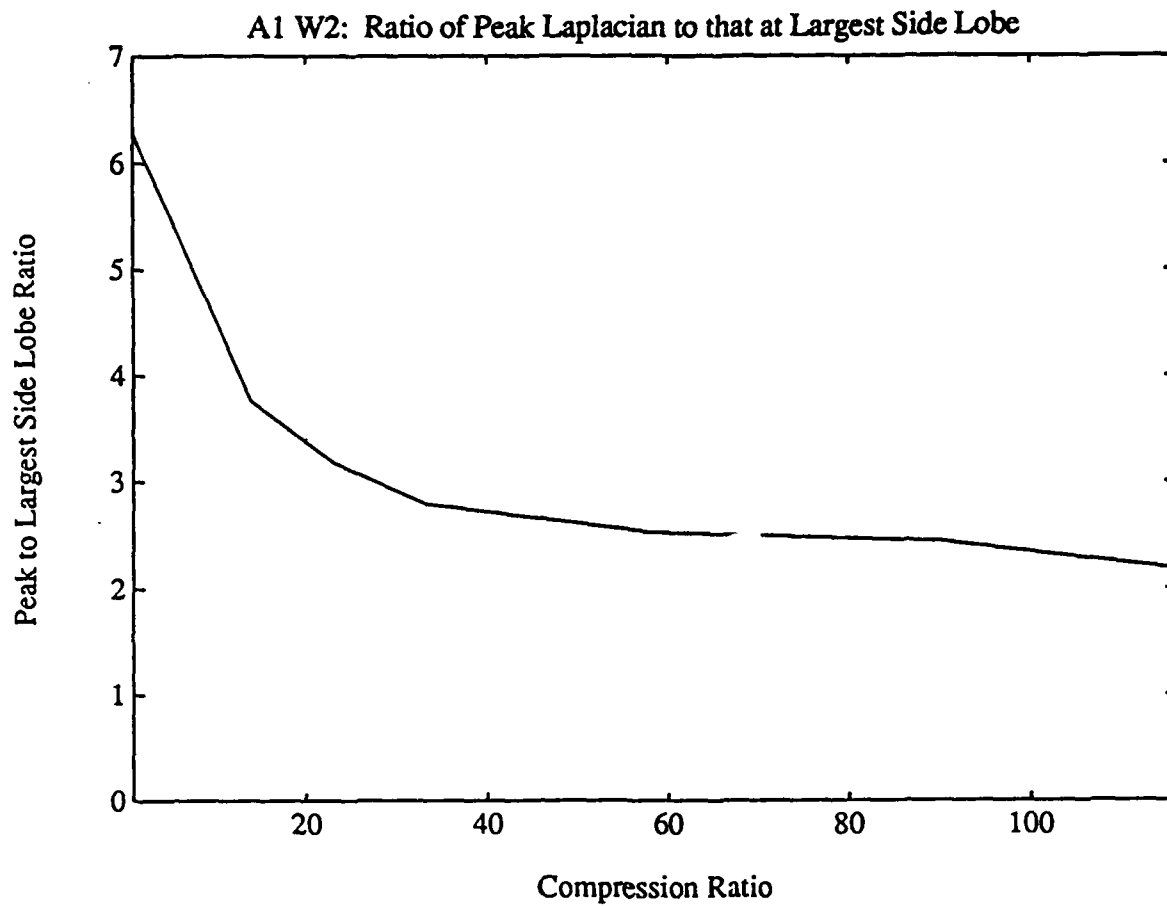


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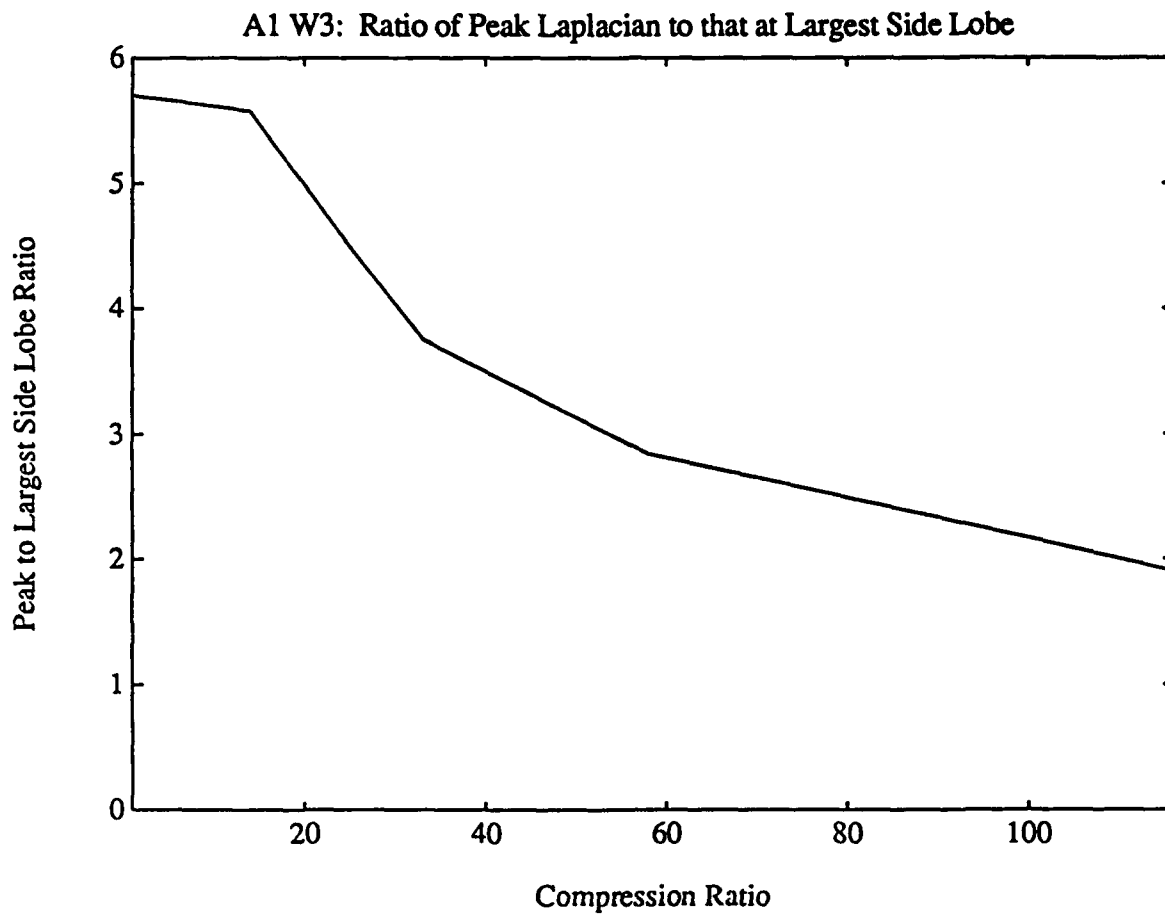


Exhibit-II-5-b-3

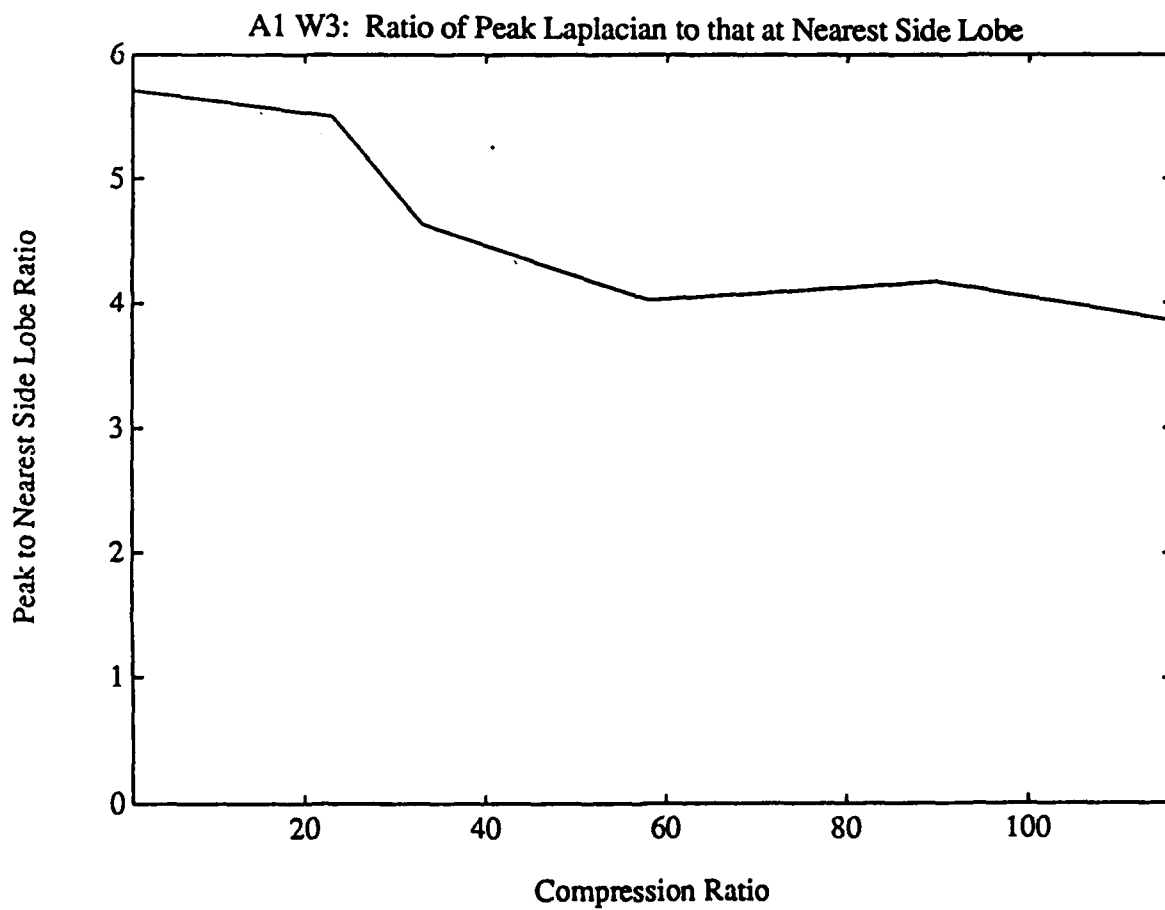


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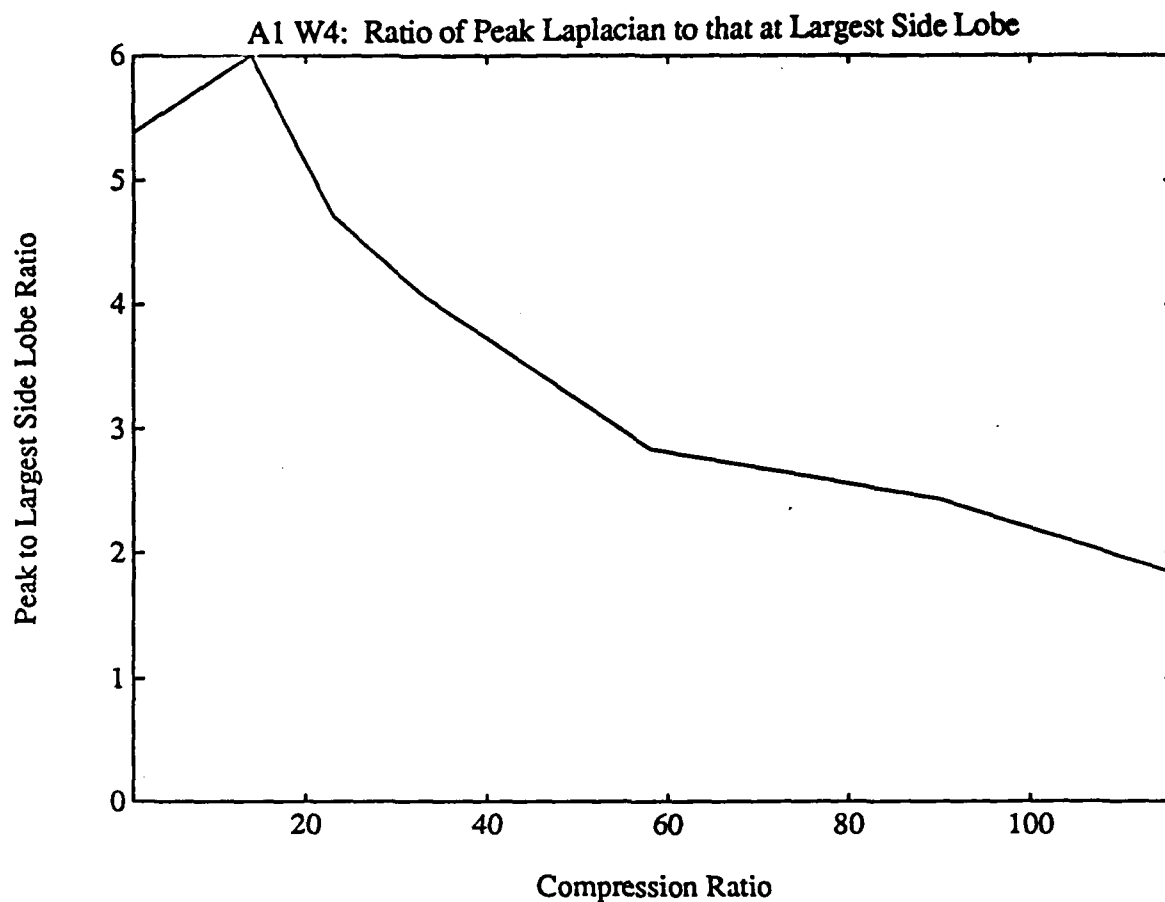


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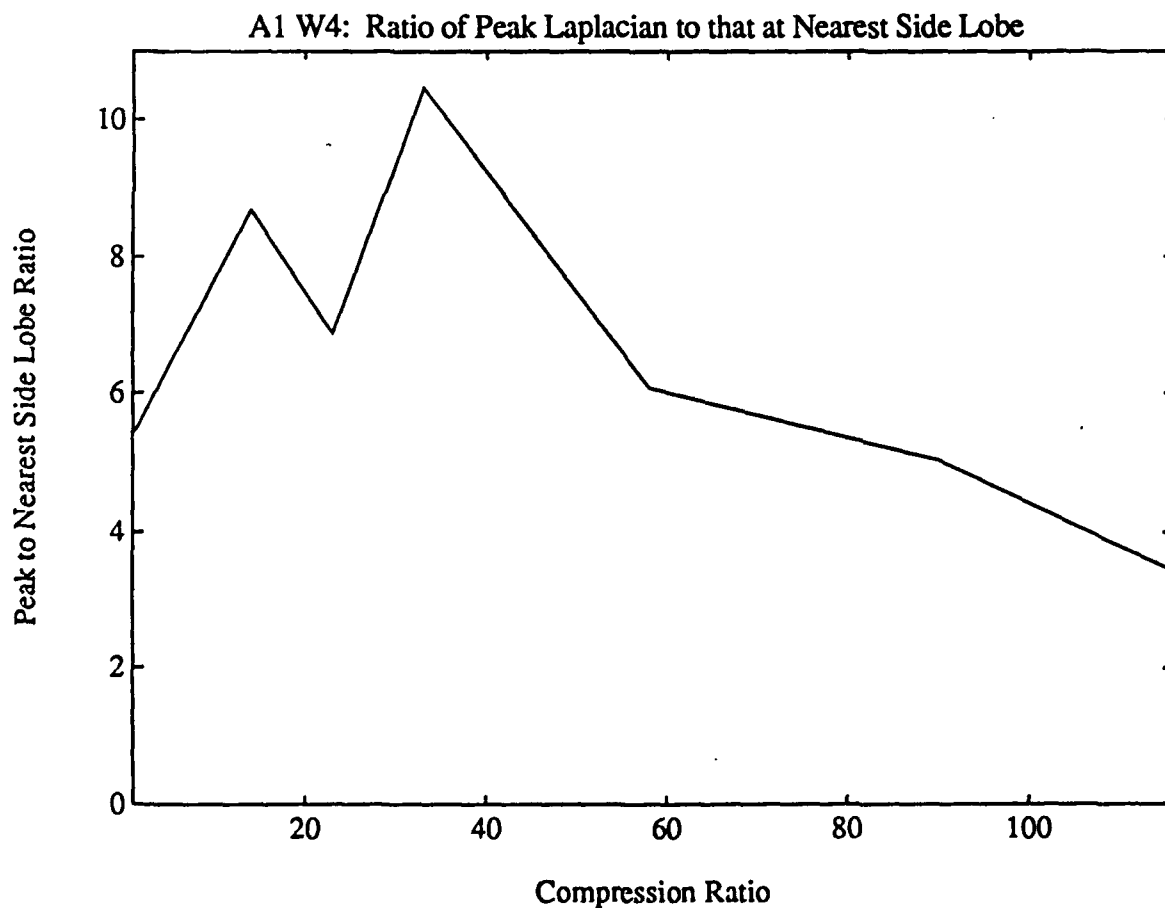


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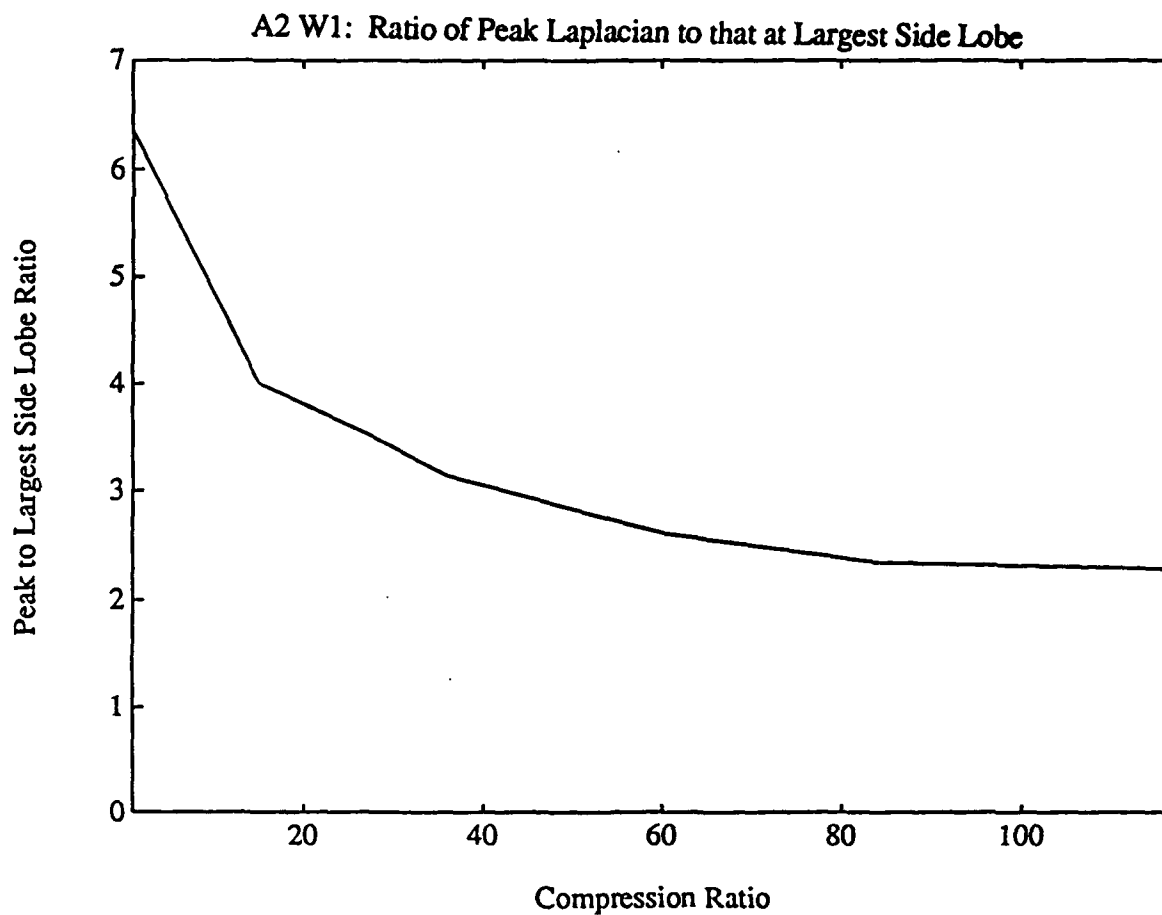


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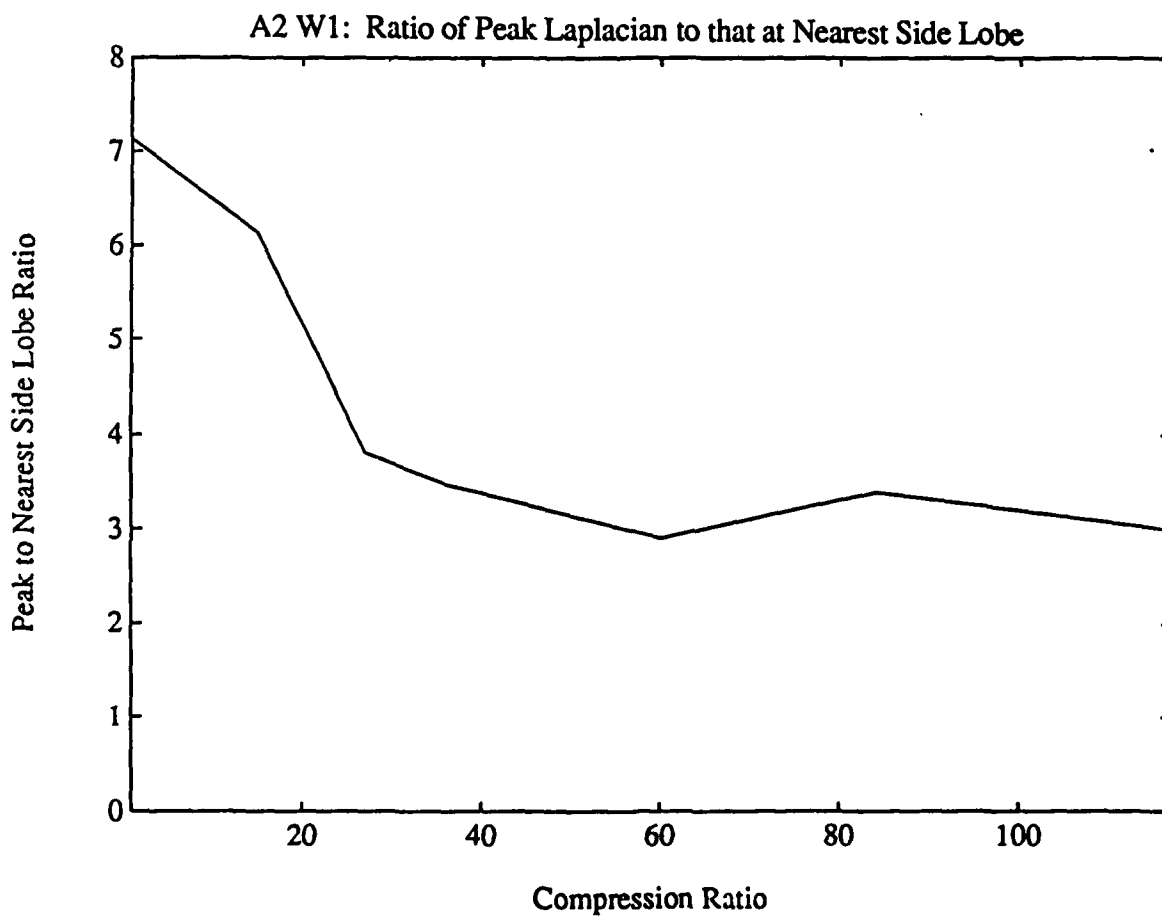


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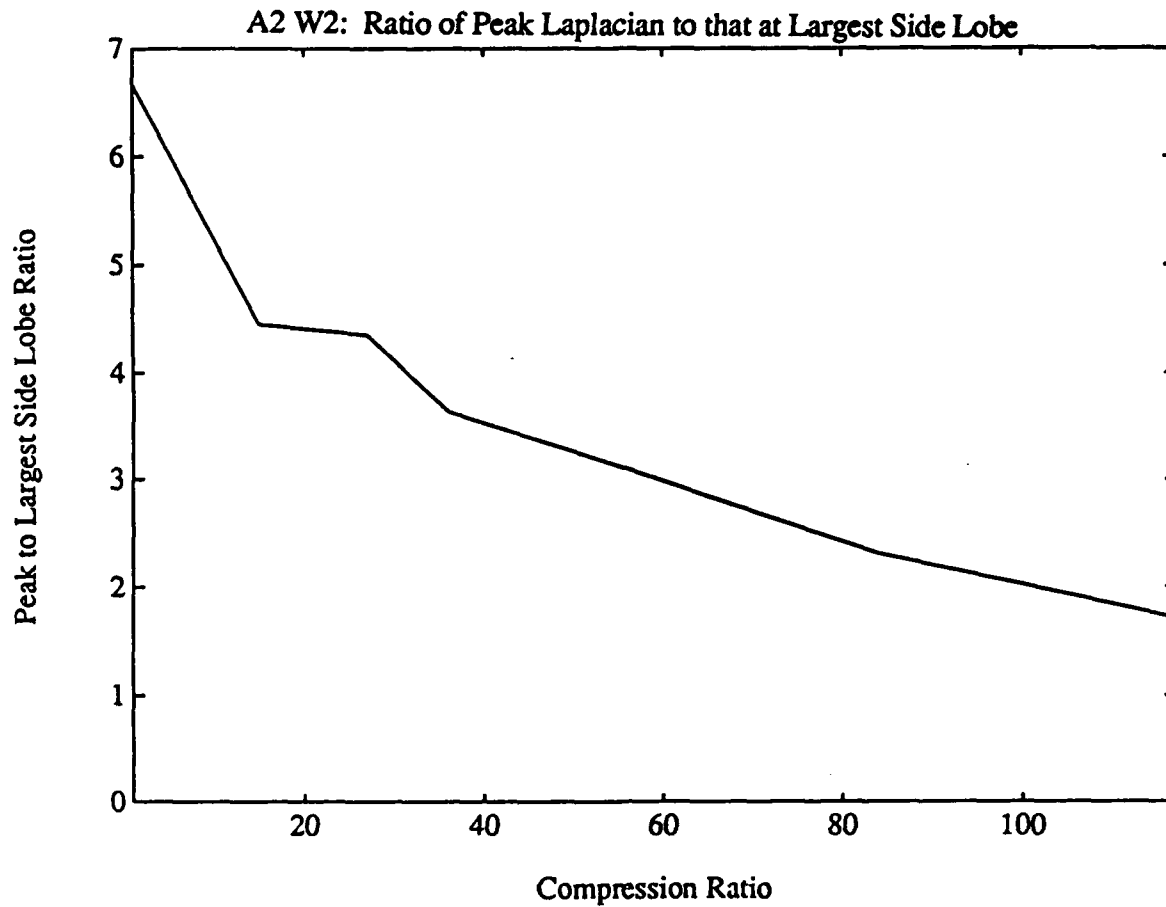


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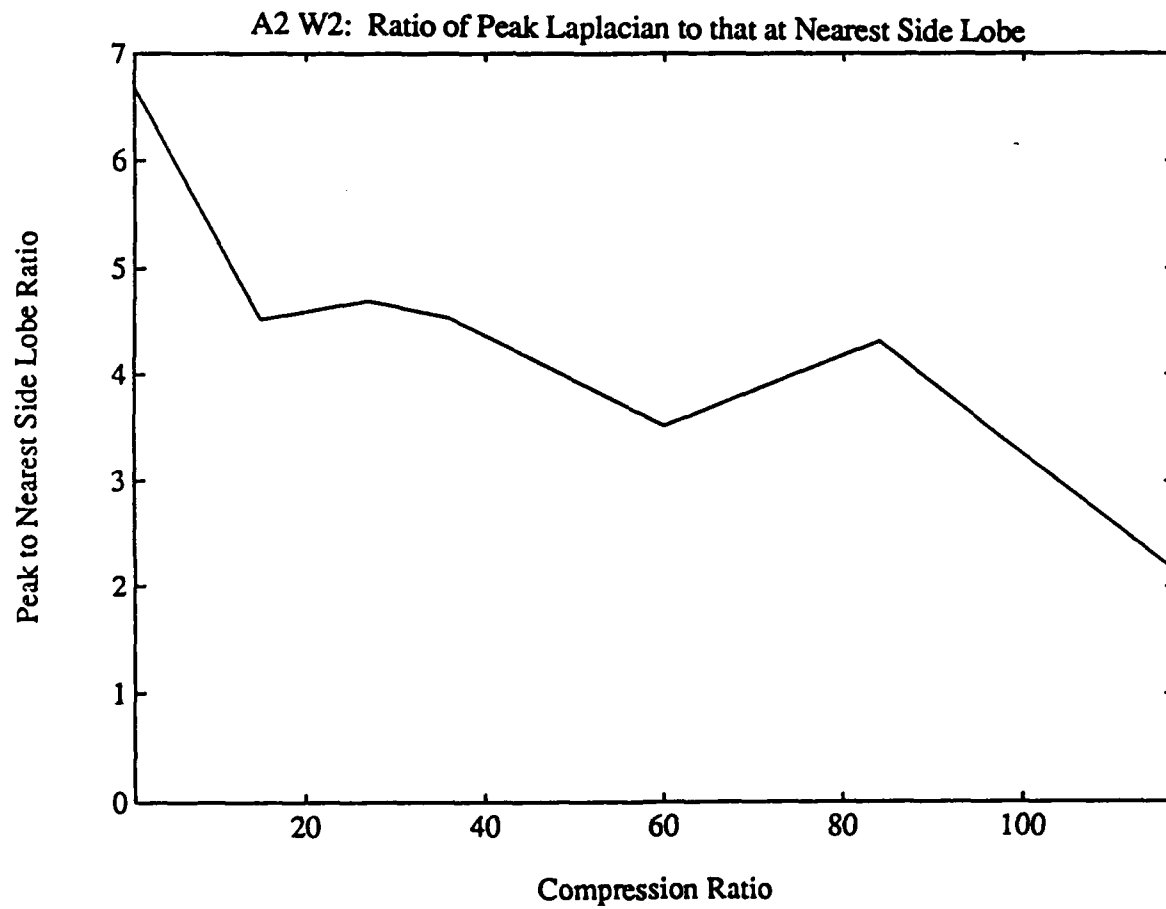


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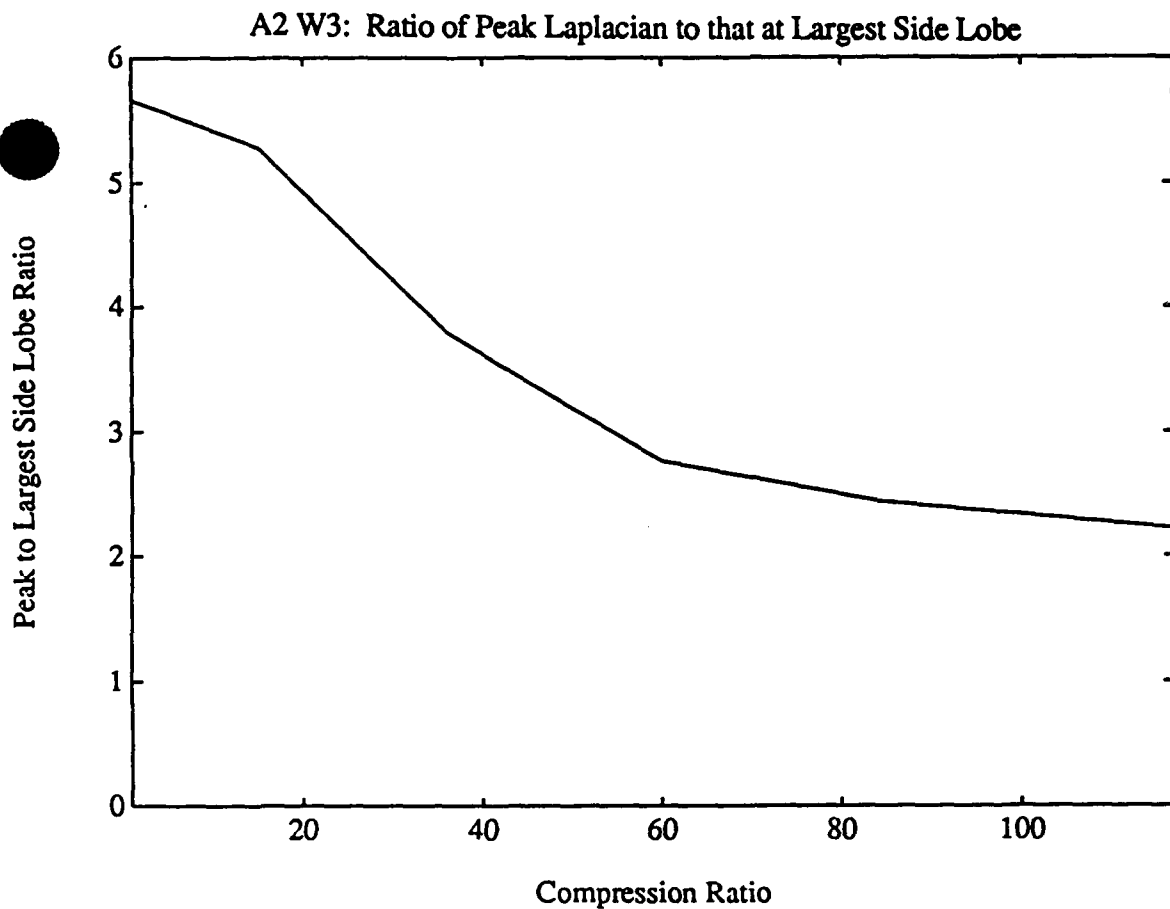


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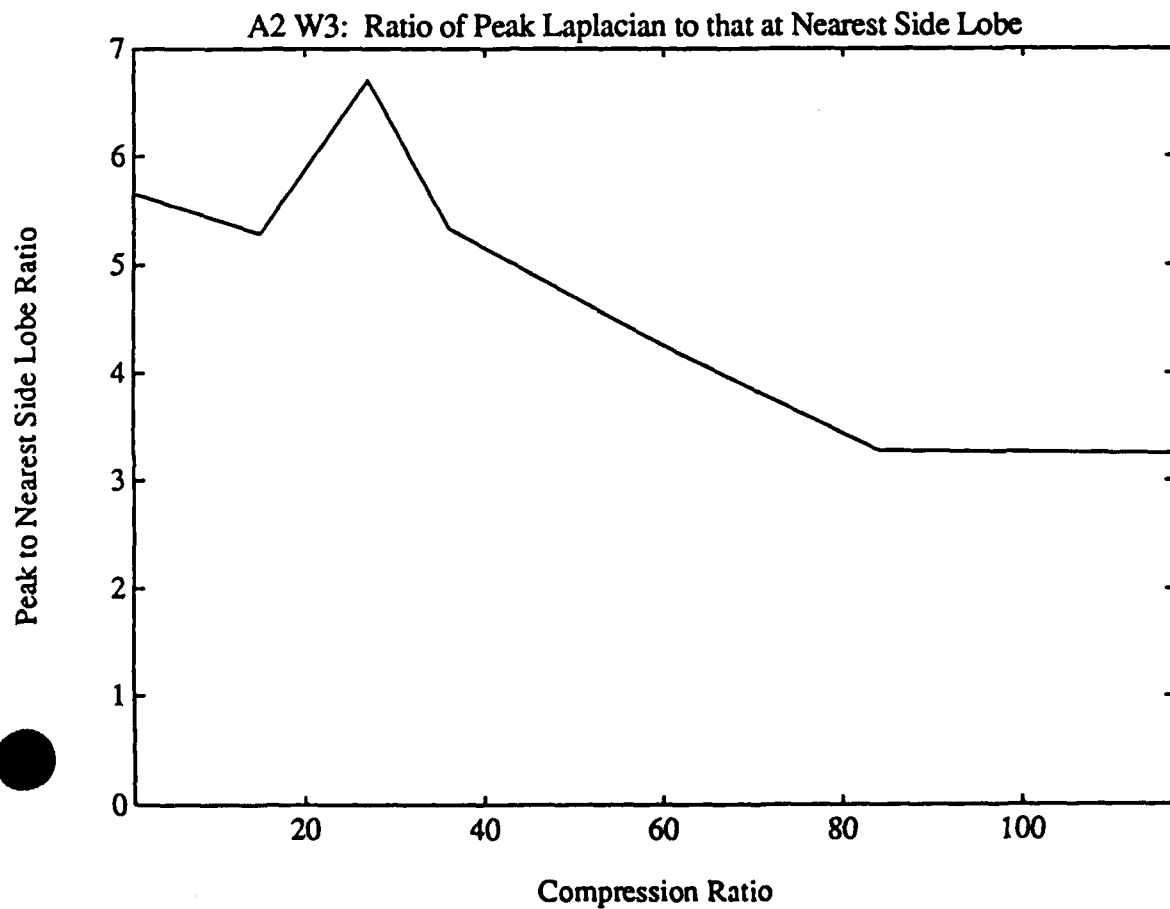


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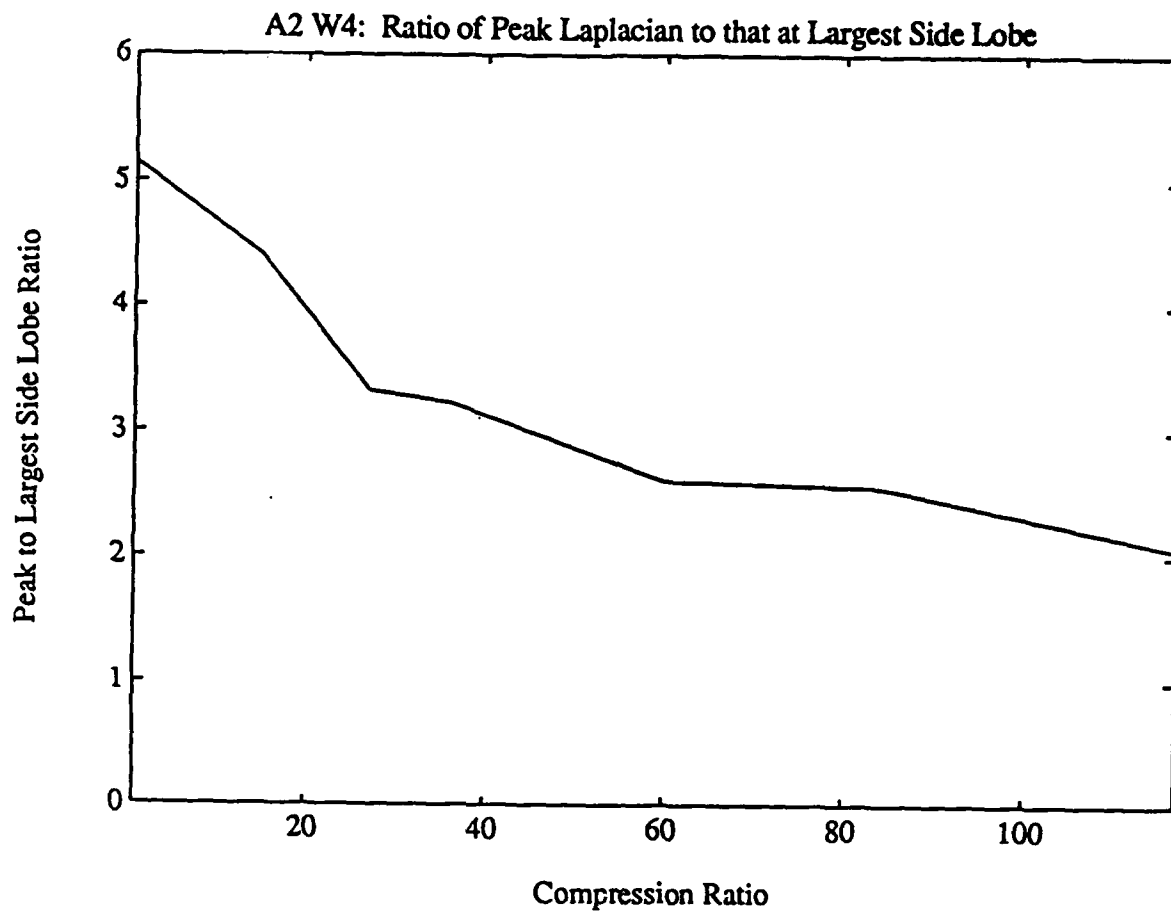
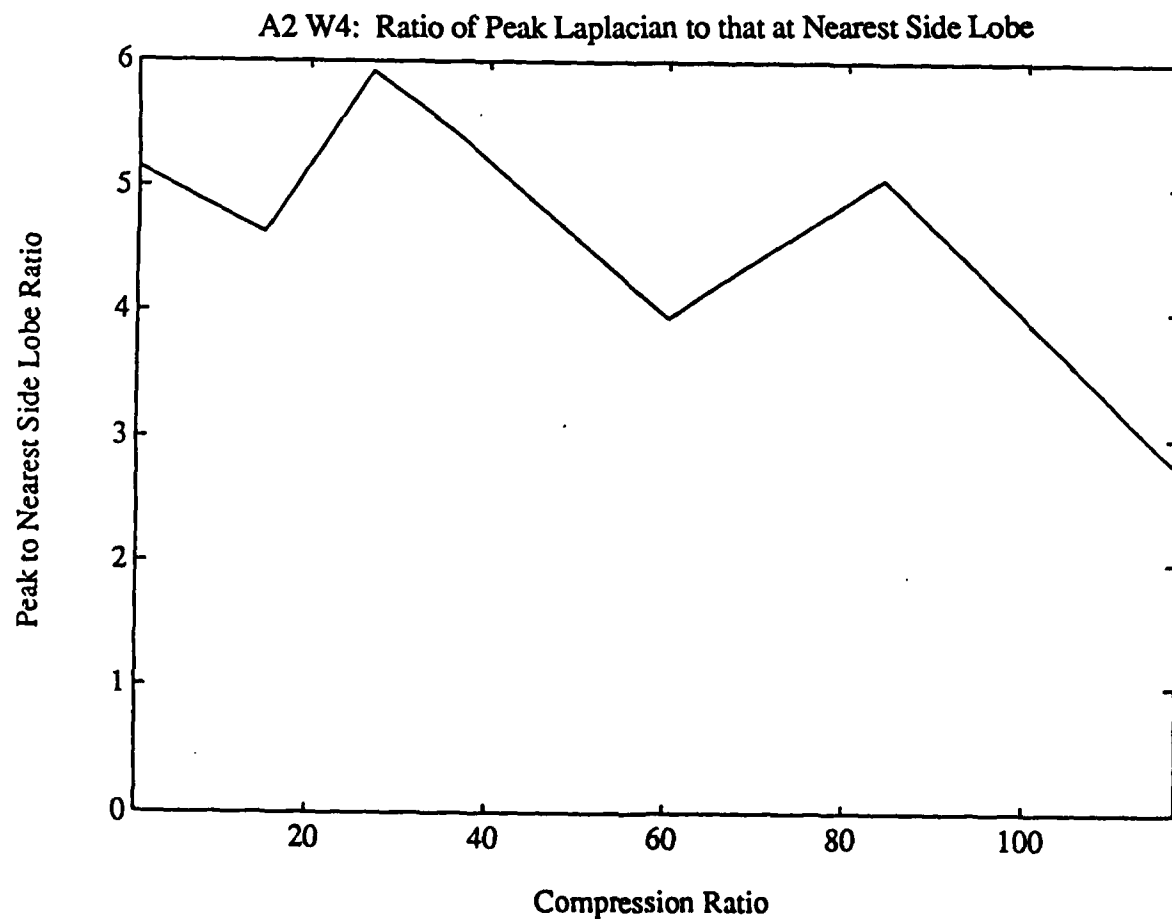


Exhibit-II-5-b-8





**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-6

Graph: Correlation Side Lobe to Peak Ratio vs. Radial Distance
[One graph per (reference image, test patch) pair; 7 compressions per graph]

Exhibit-II-6-a

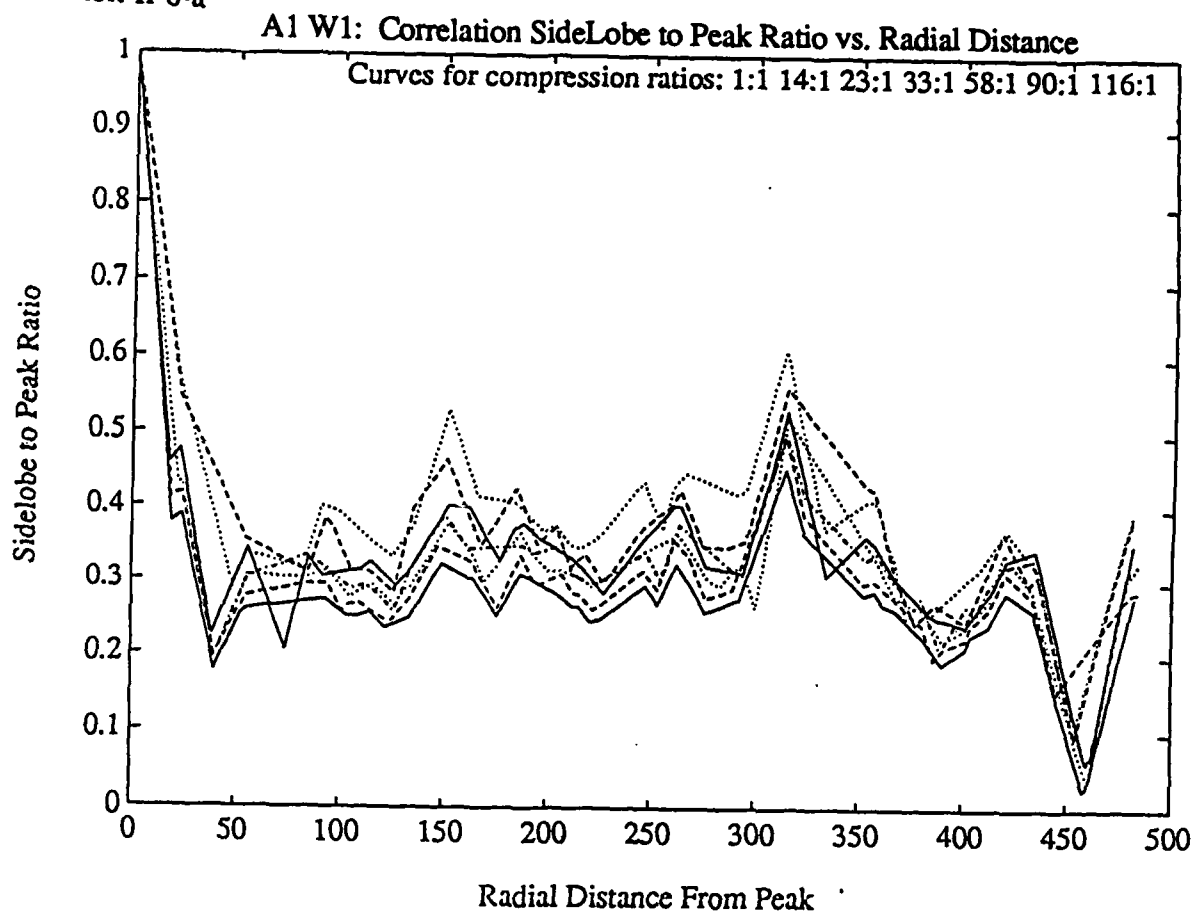


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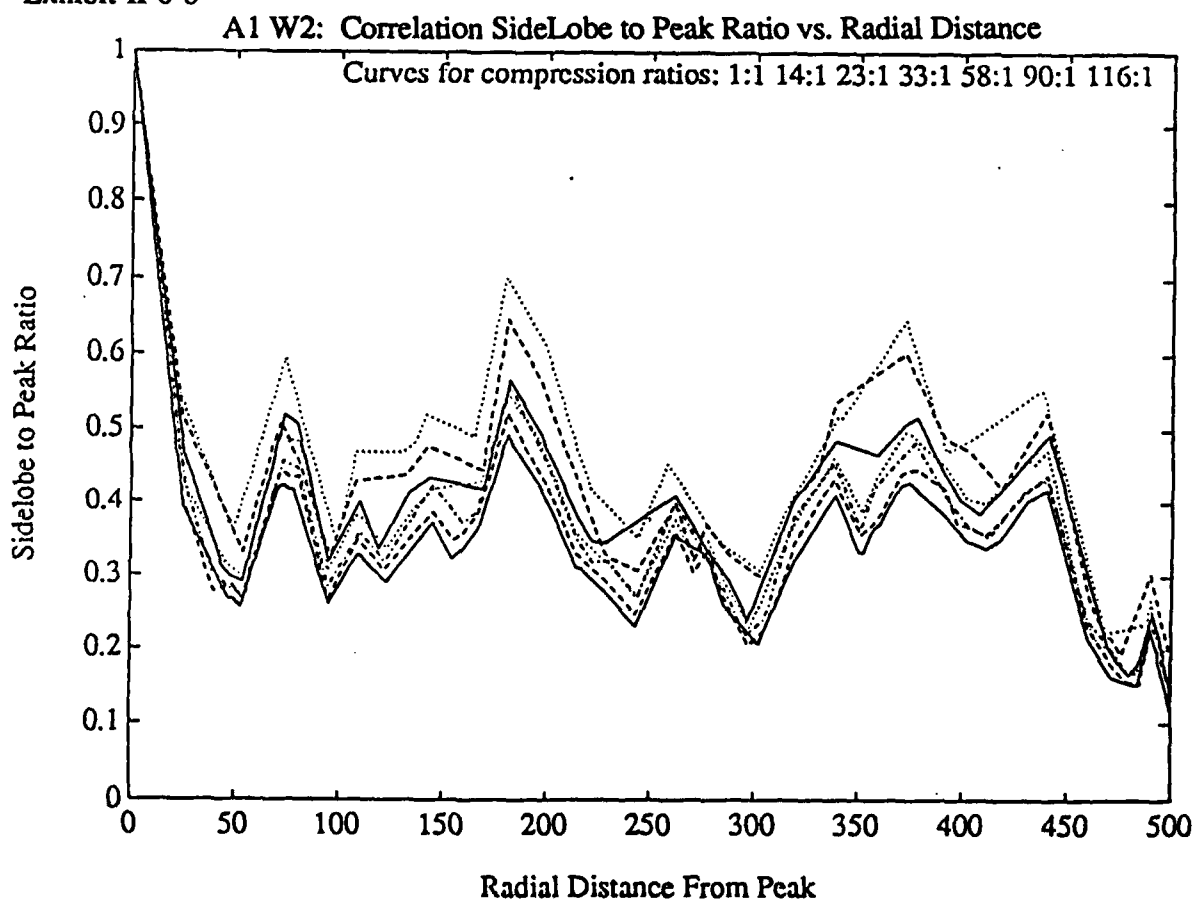


Exhibit-II-6-c

A1 W3: Correlation SideLobe to Peak Ratio vs. Radial Distance

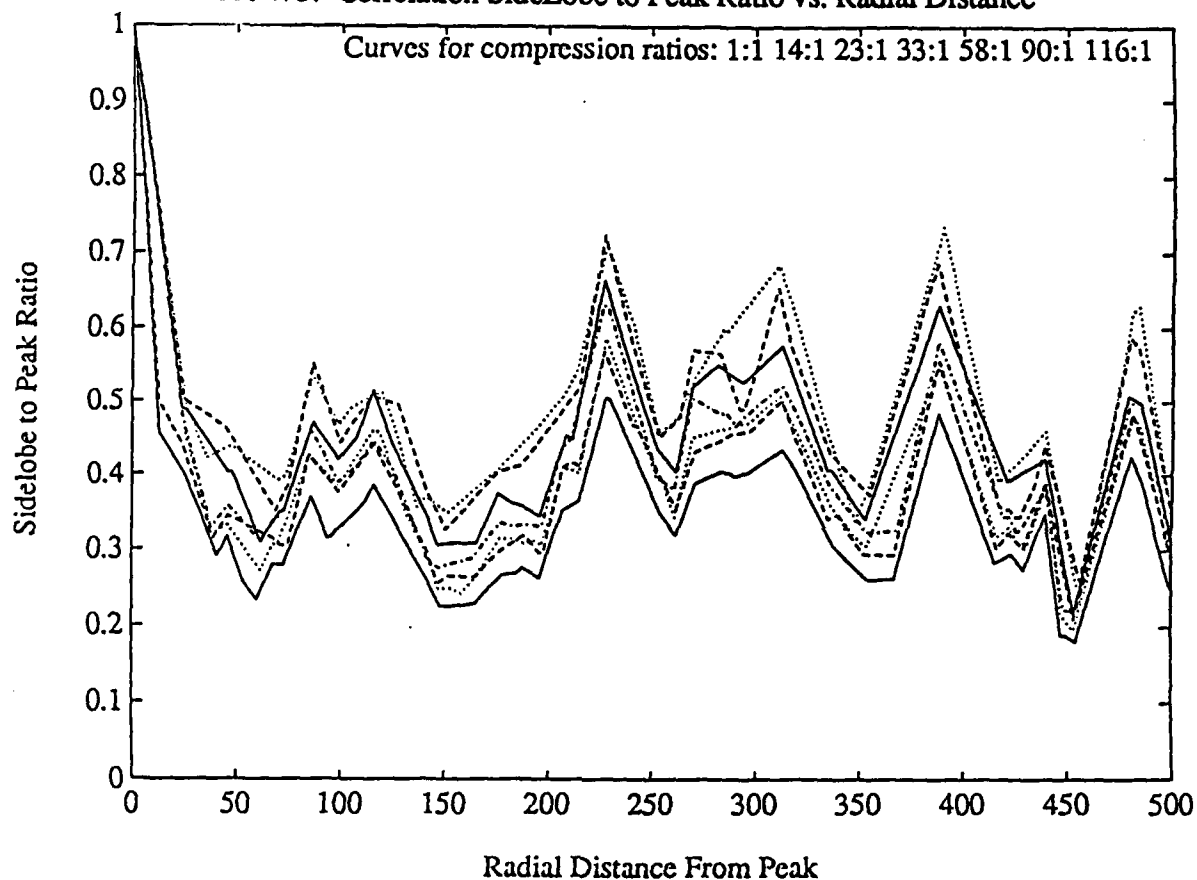


Exhibit-II-6-d

A1 W4: Correlation SideLobe to Peak Ratio vs. Radial Distance

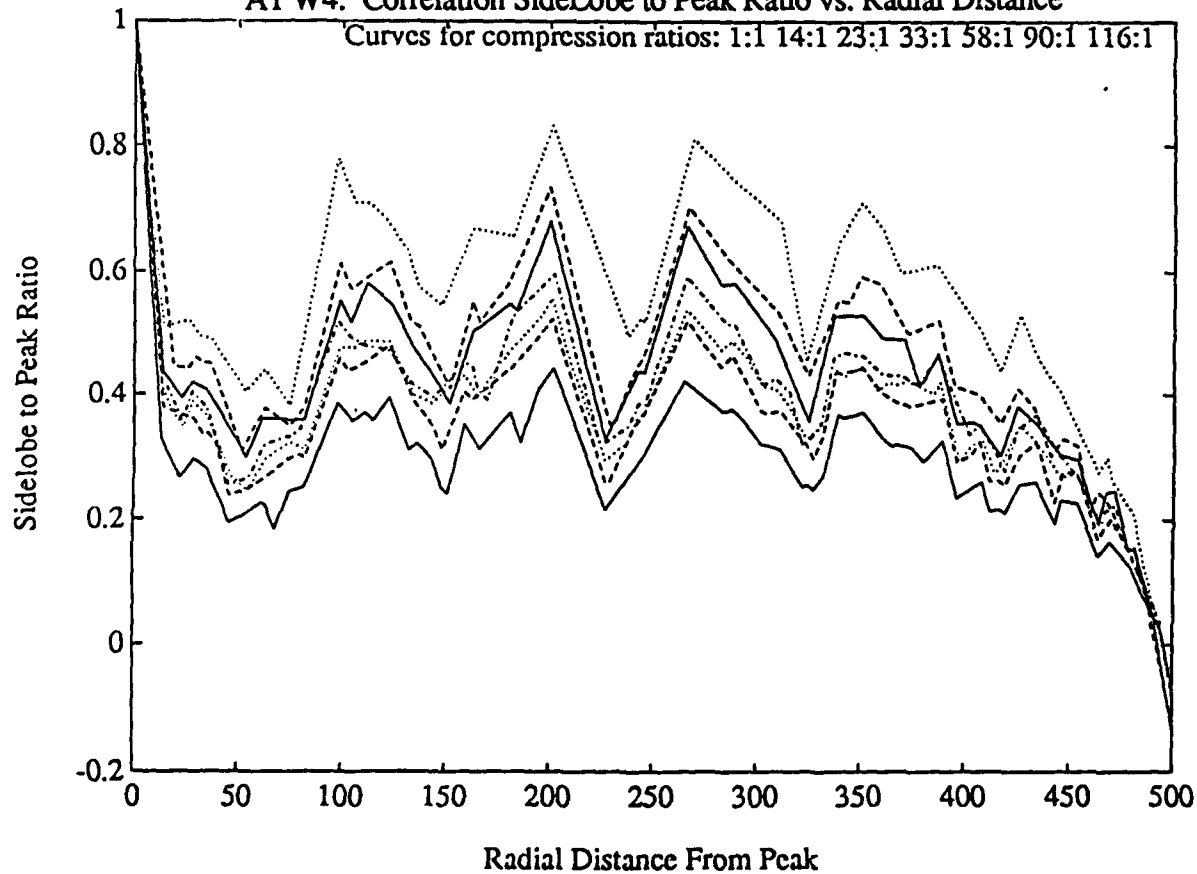


Exhibit-II-6-e

A2 W1: Correlation SideLobe to Peak Ratio vs. Radial Distance

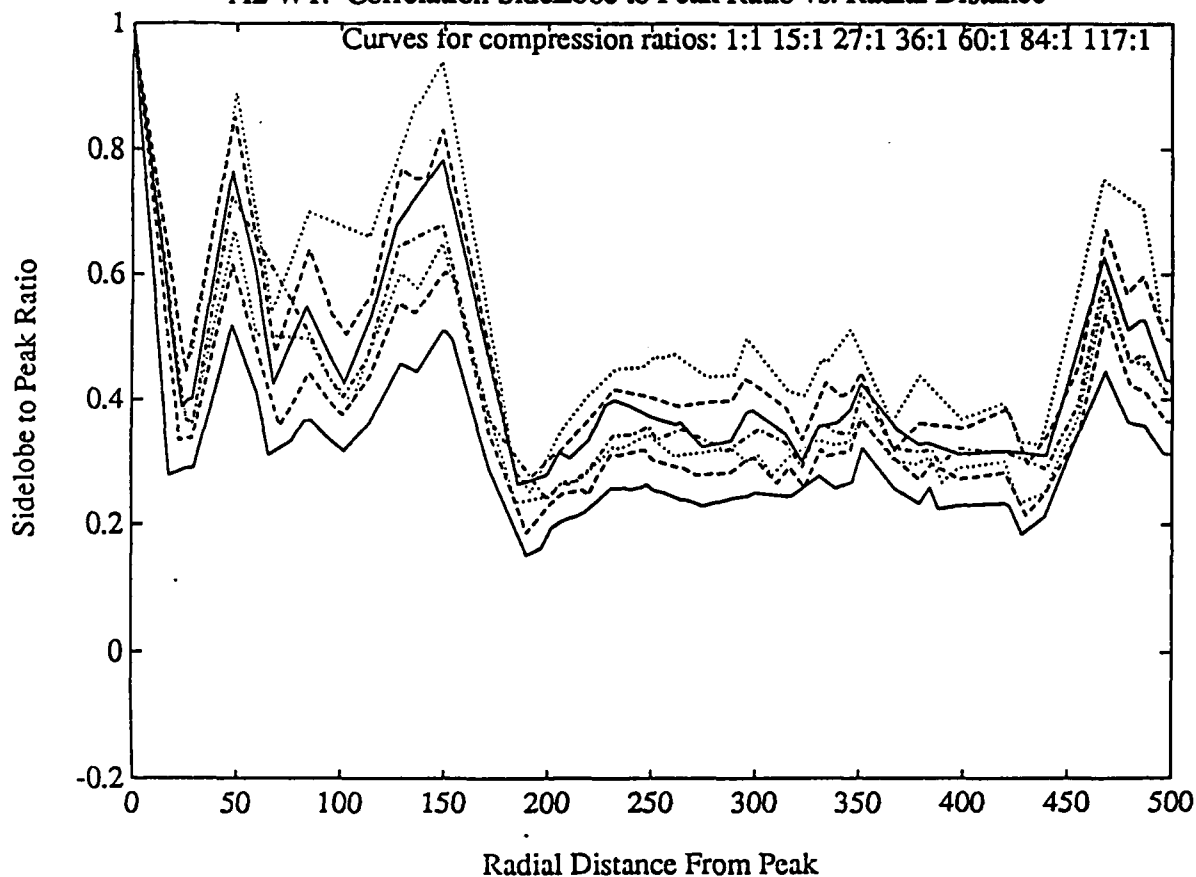


Exhibit-II-6-f

A2 W2: Correlation SideLobe to Peak Ratio vs. Radial Distance

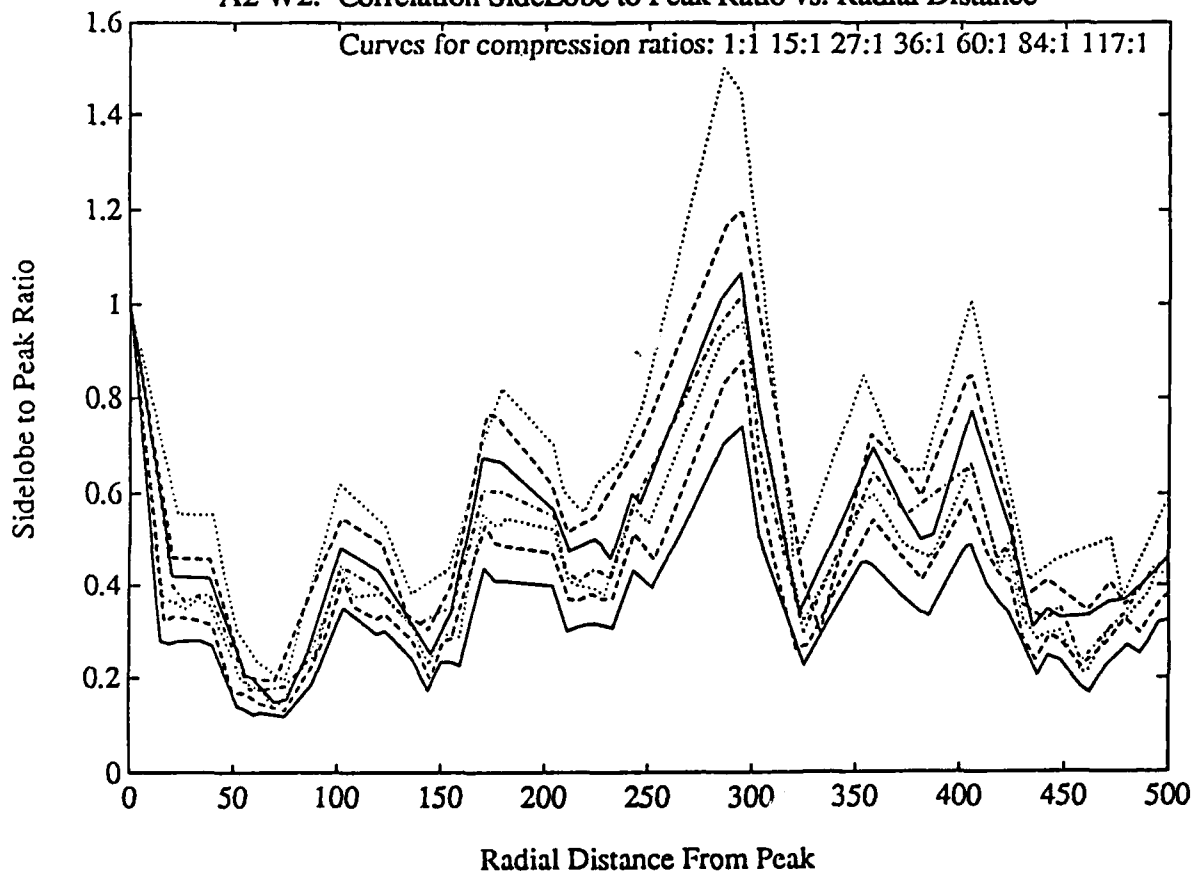


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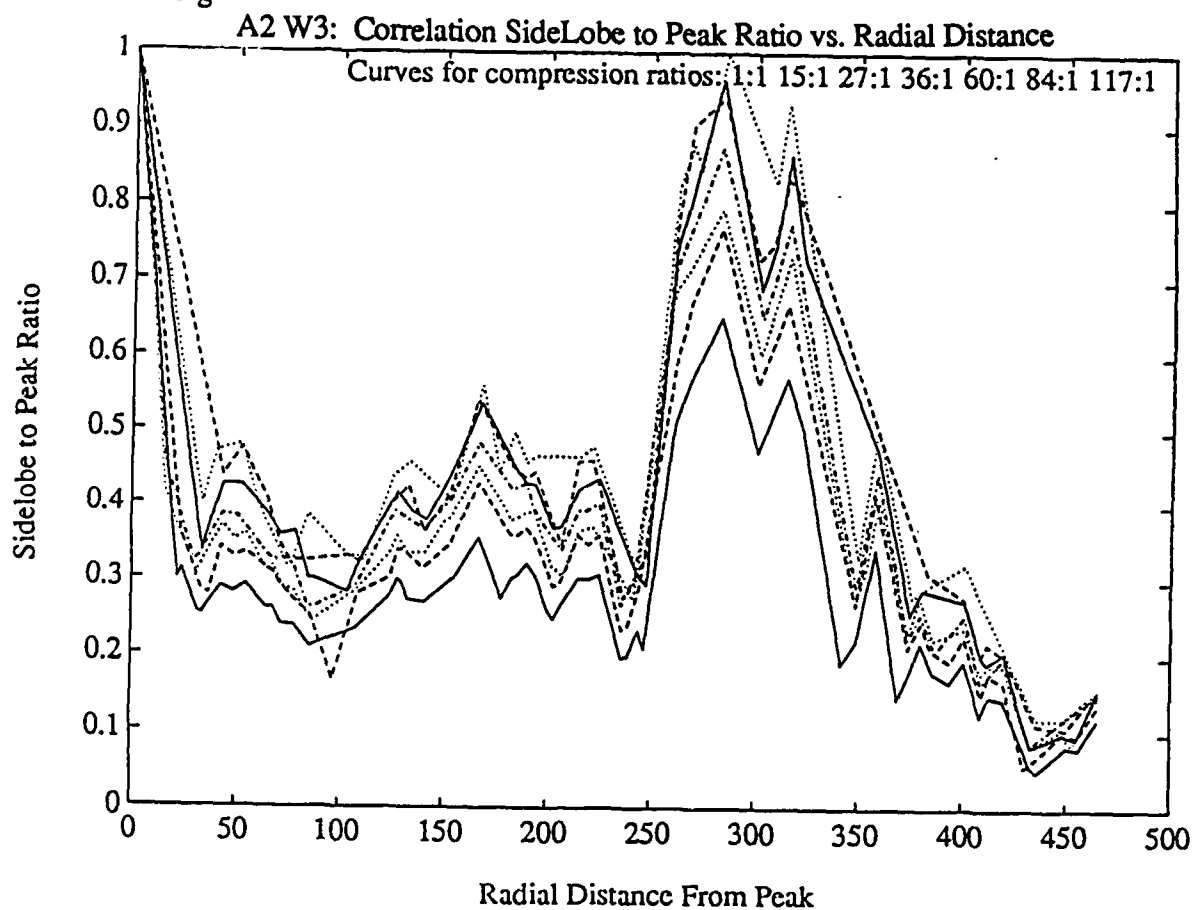
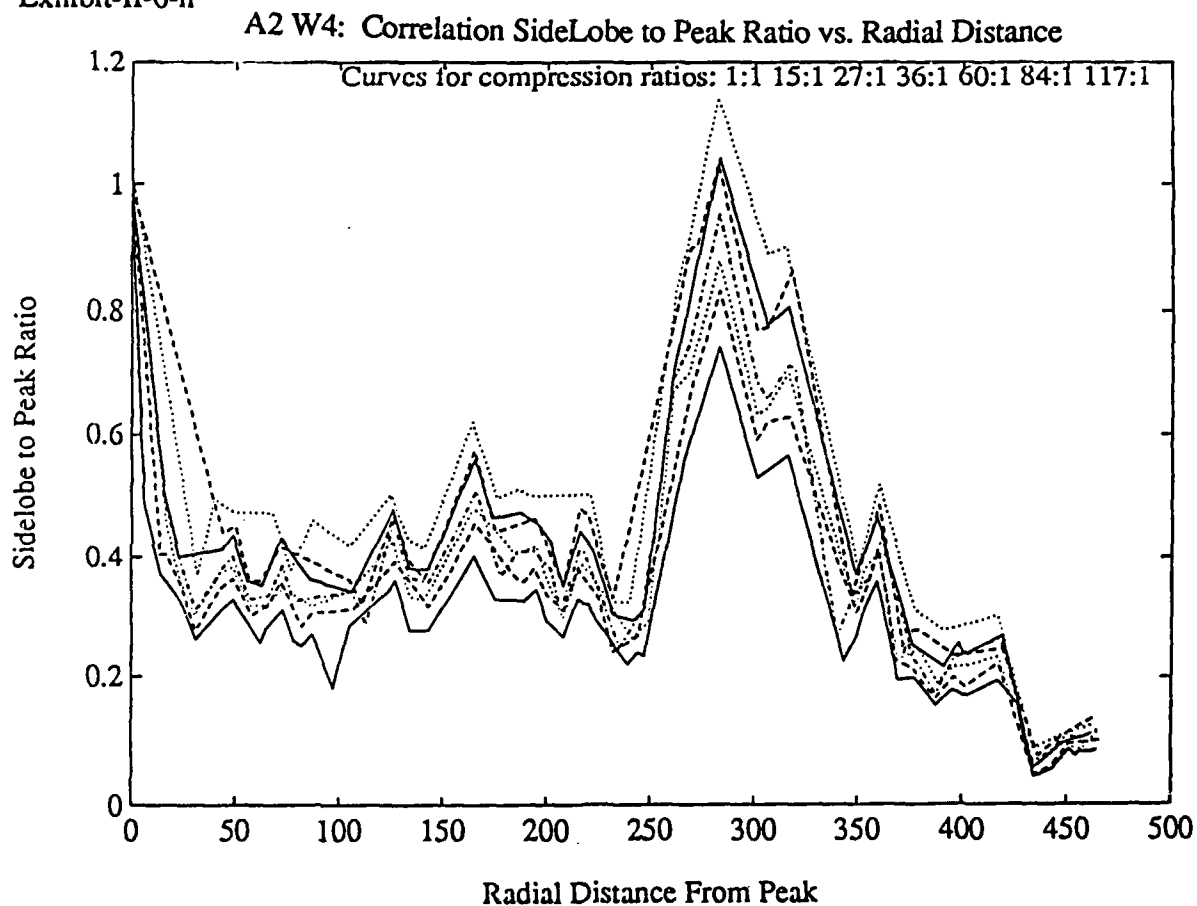


Exhibit-II-6-h





**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-7

Graph: Laplacian Side Lobe to Peak Ratio vs. Radial Distance
[One graph per (reference image, test patch) pair; 7 compressions per graph]

Exhibit-II-7-a

A1 W1: Correlation SideLobe to Peak Ratio vs. Radial Distance

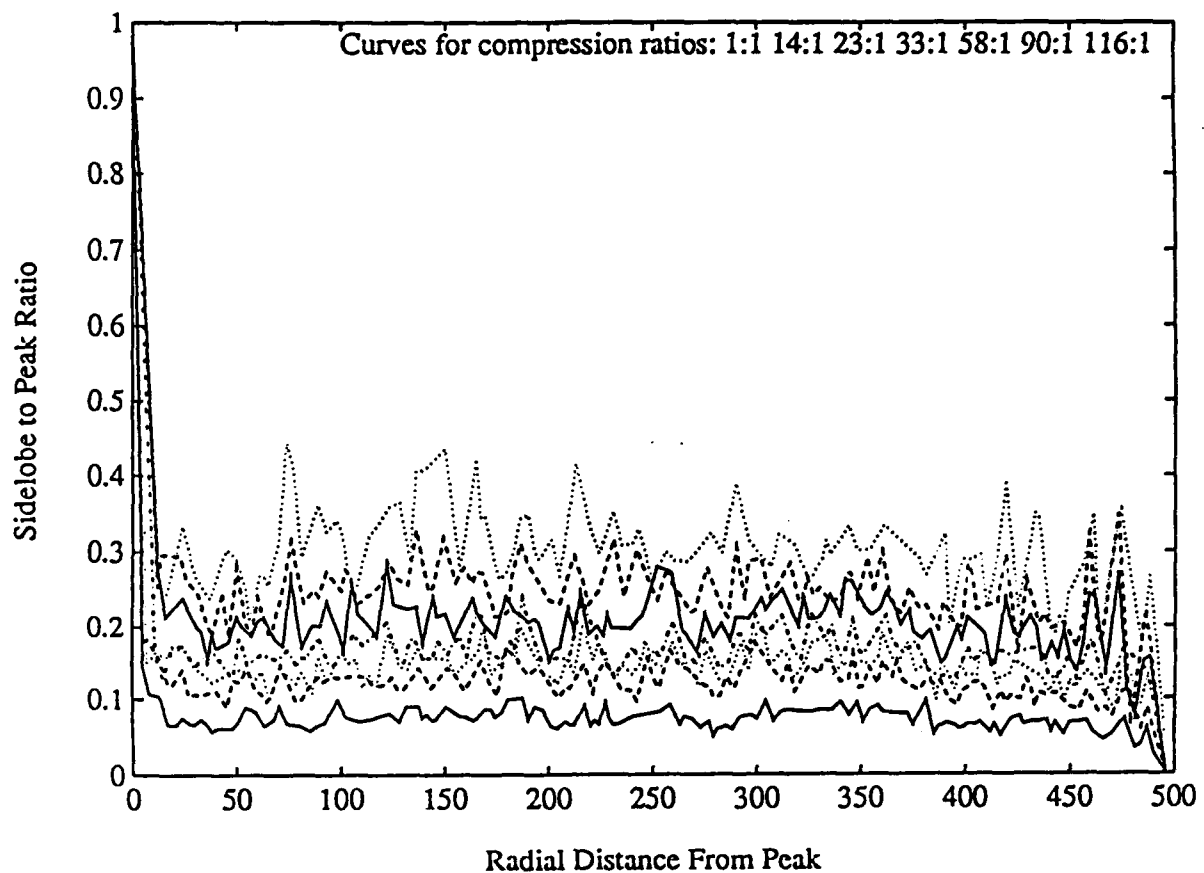


Exhibit-II-7-b

A1 W2: Correlation SideLobe to Peak Ratio vs. Radial Distance

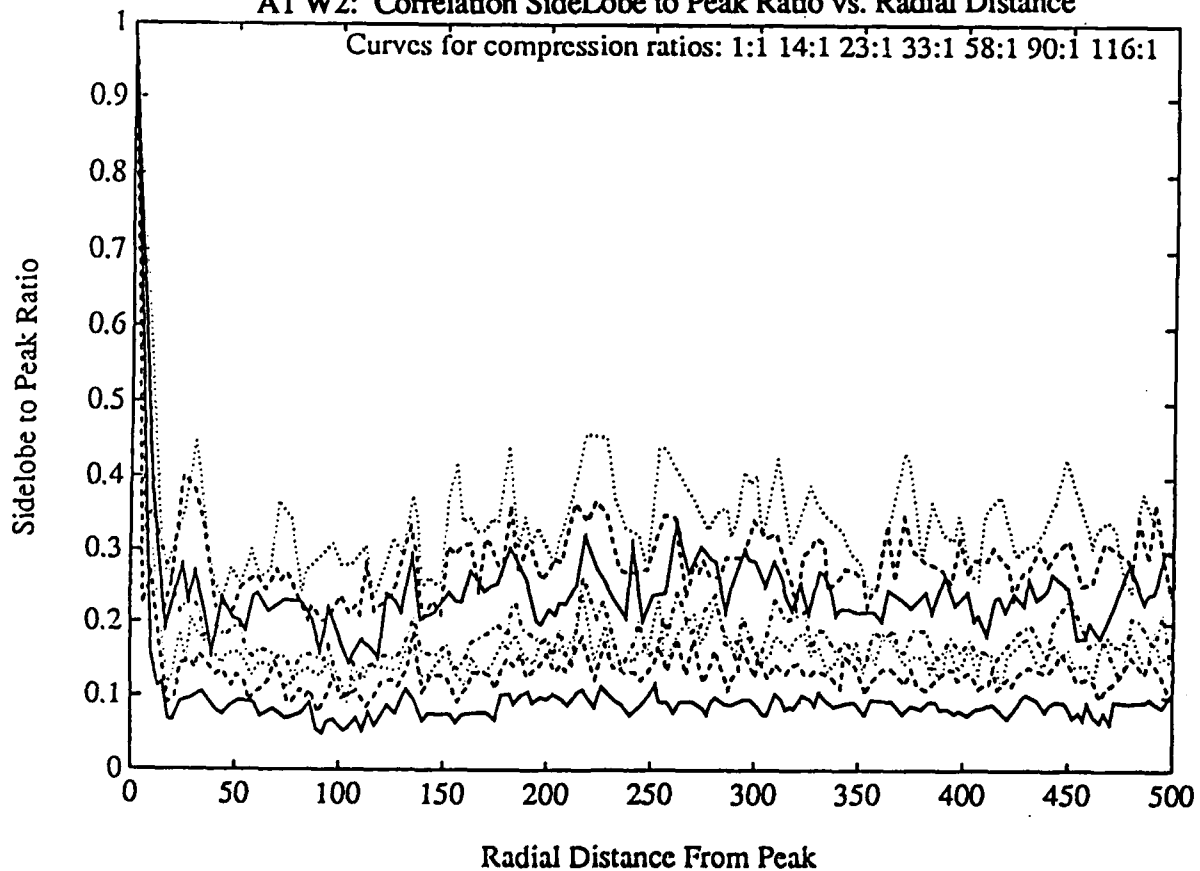


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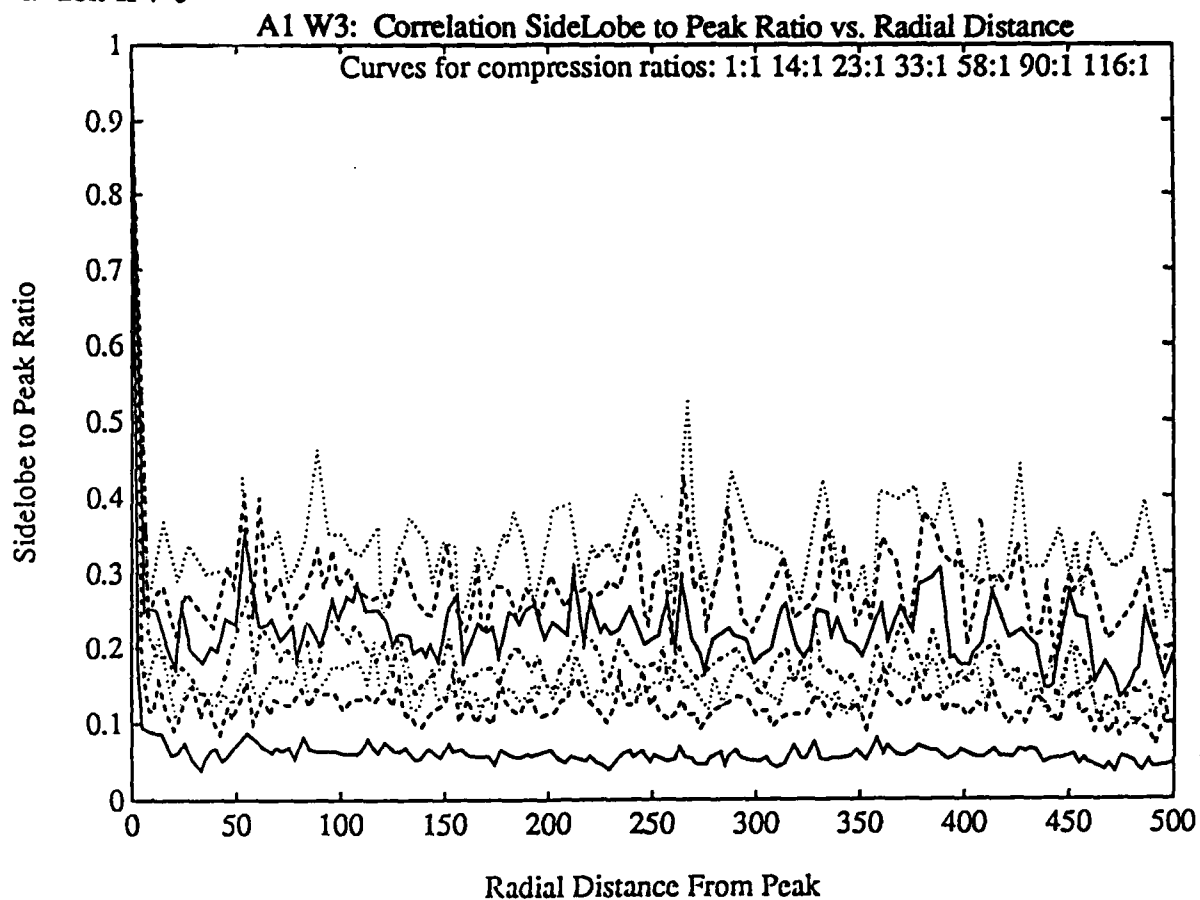


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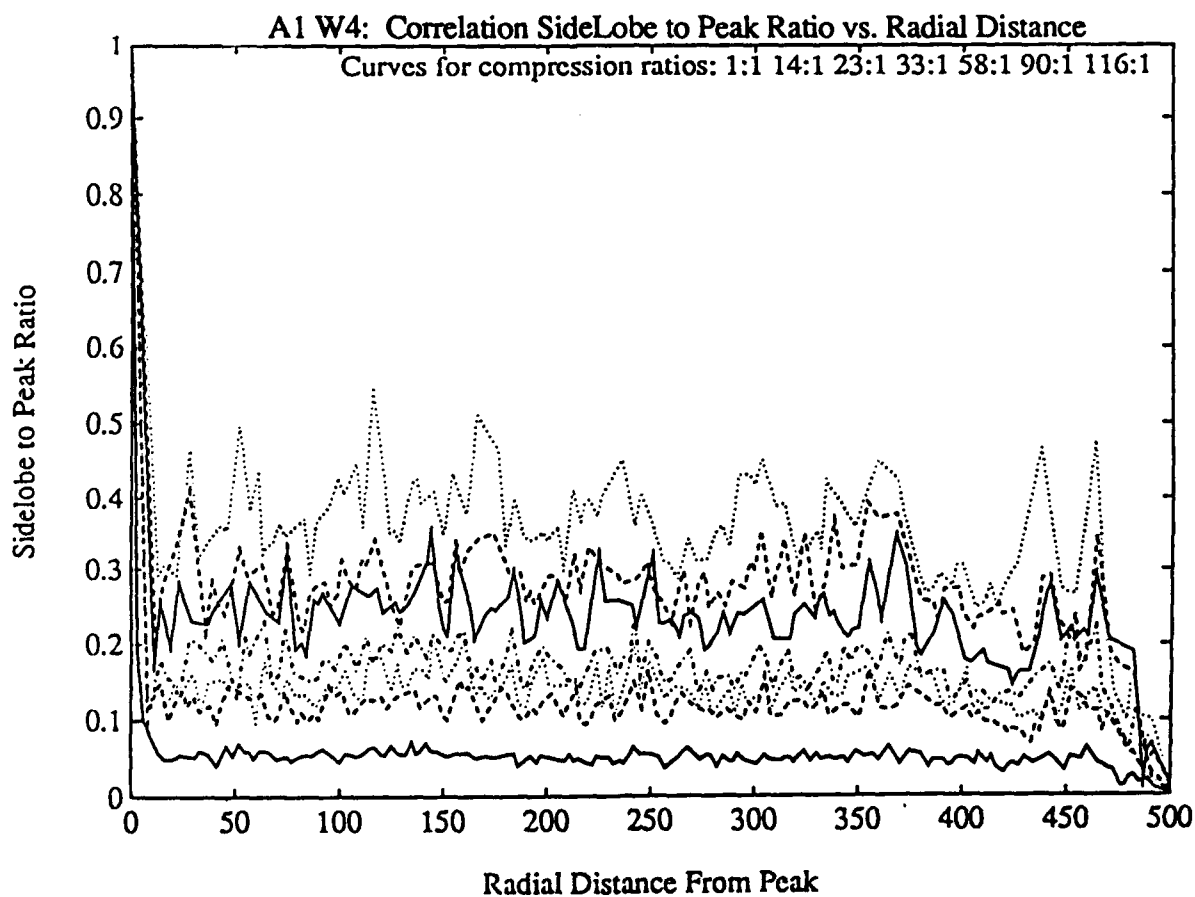


Exhibit-II-7-e

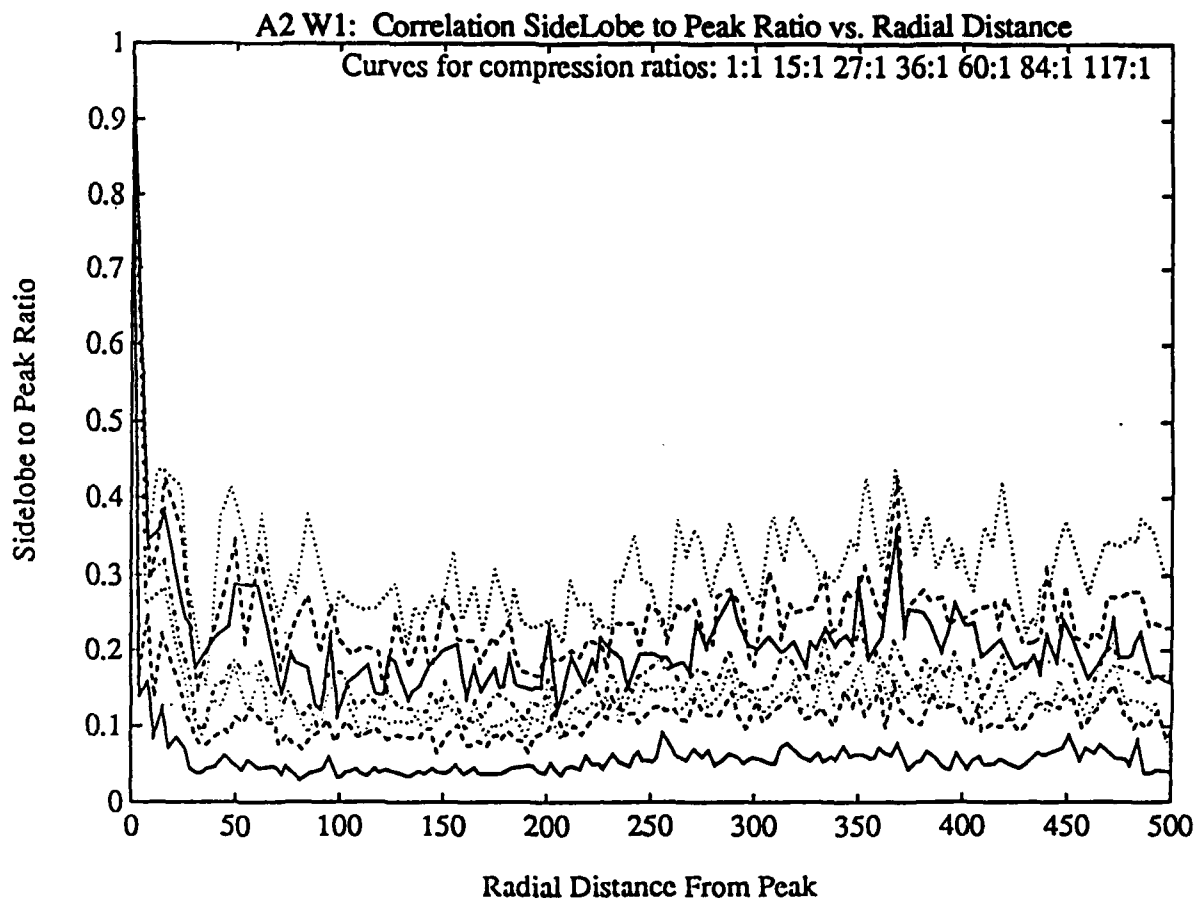


Exhibit-II-7-f

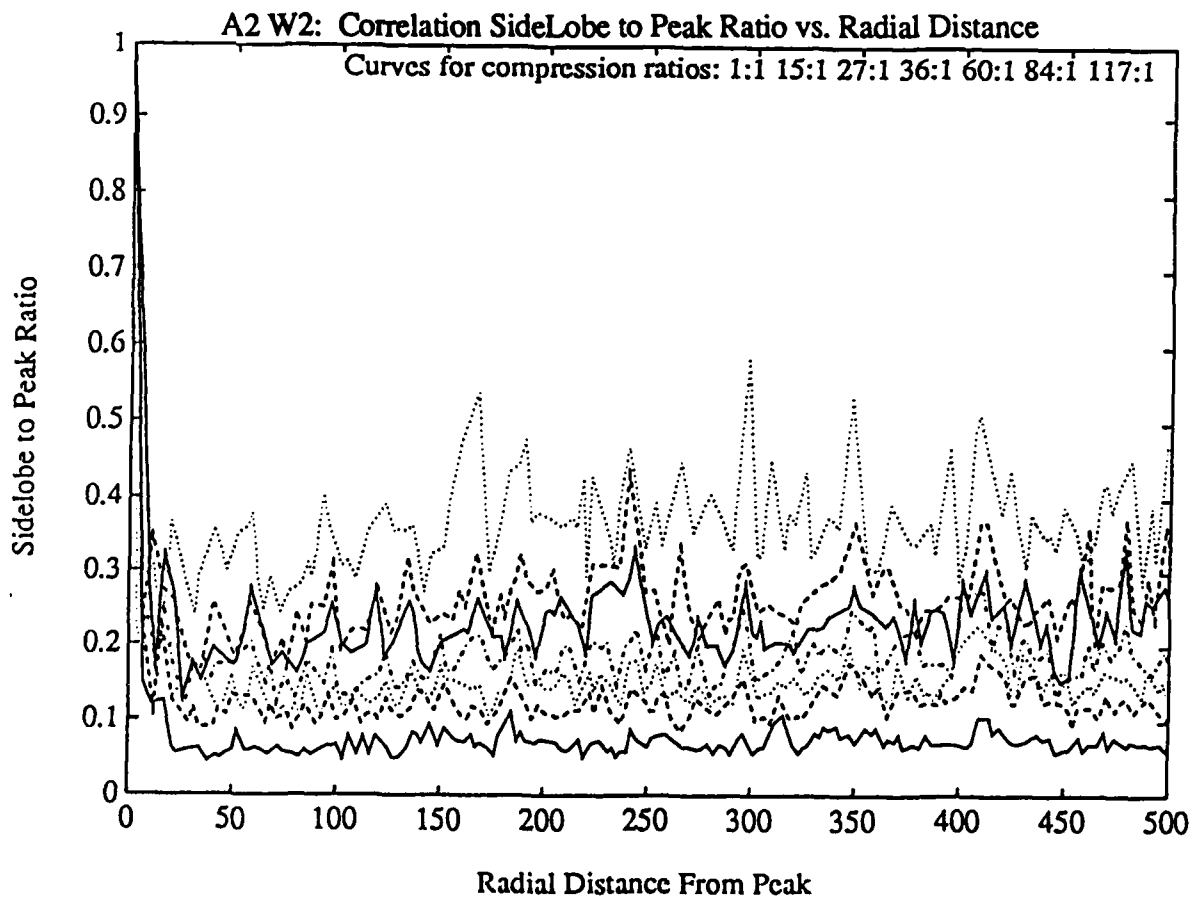


Exhibit-II-7-g

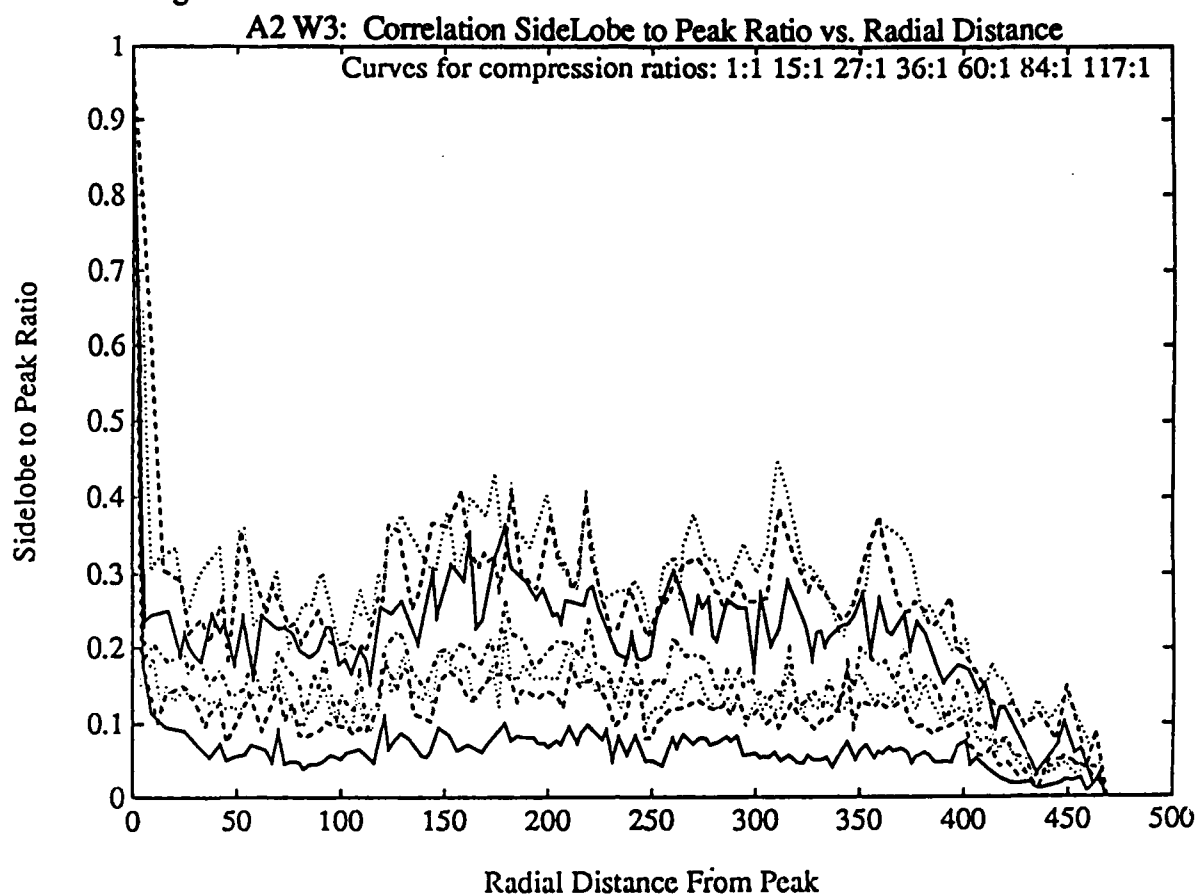
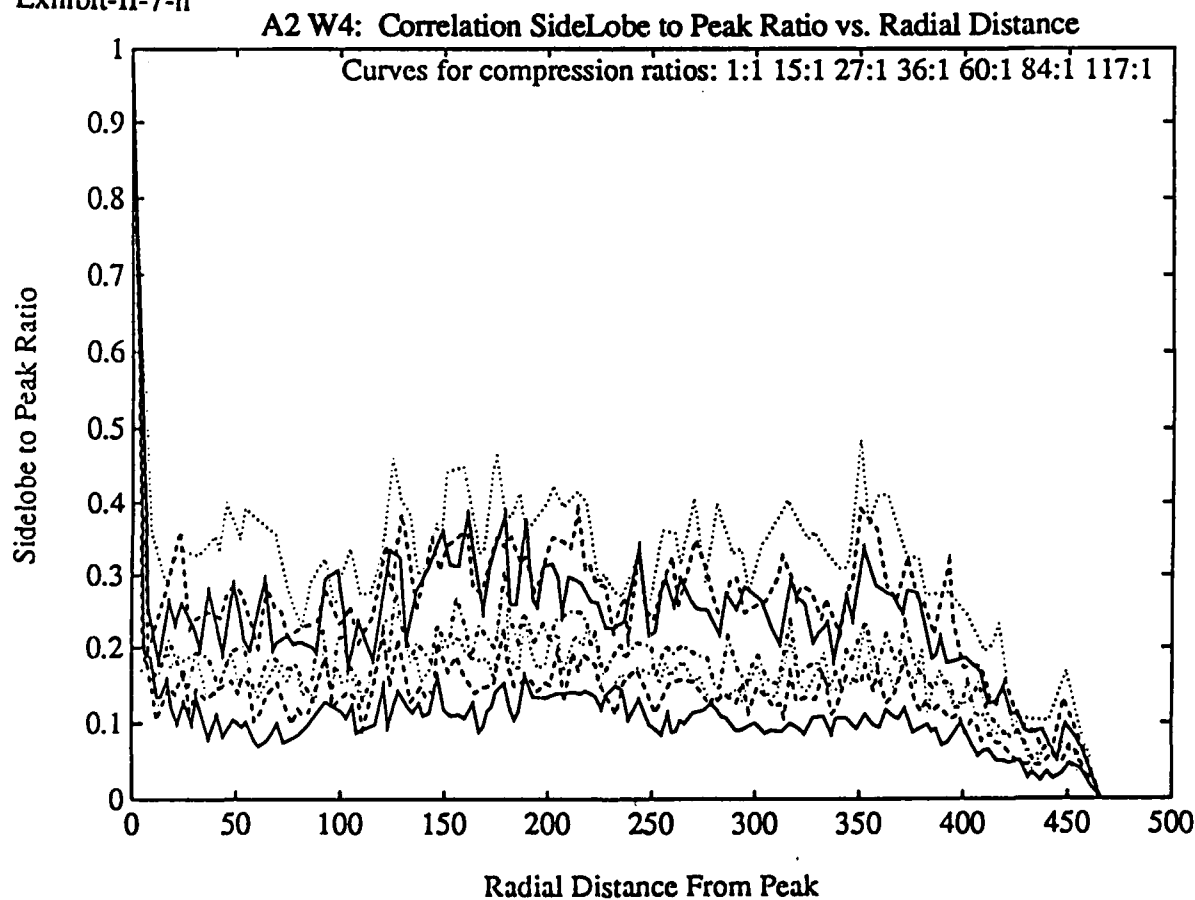


Exhibit-II-7-h





**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-8

Graph: Laplacian vs. Radial Distance

[One graph per (reference image, test patch) pair; 7 compressions per graph]

Exhibit-II-8-a

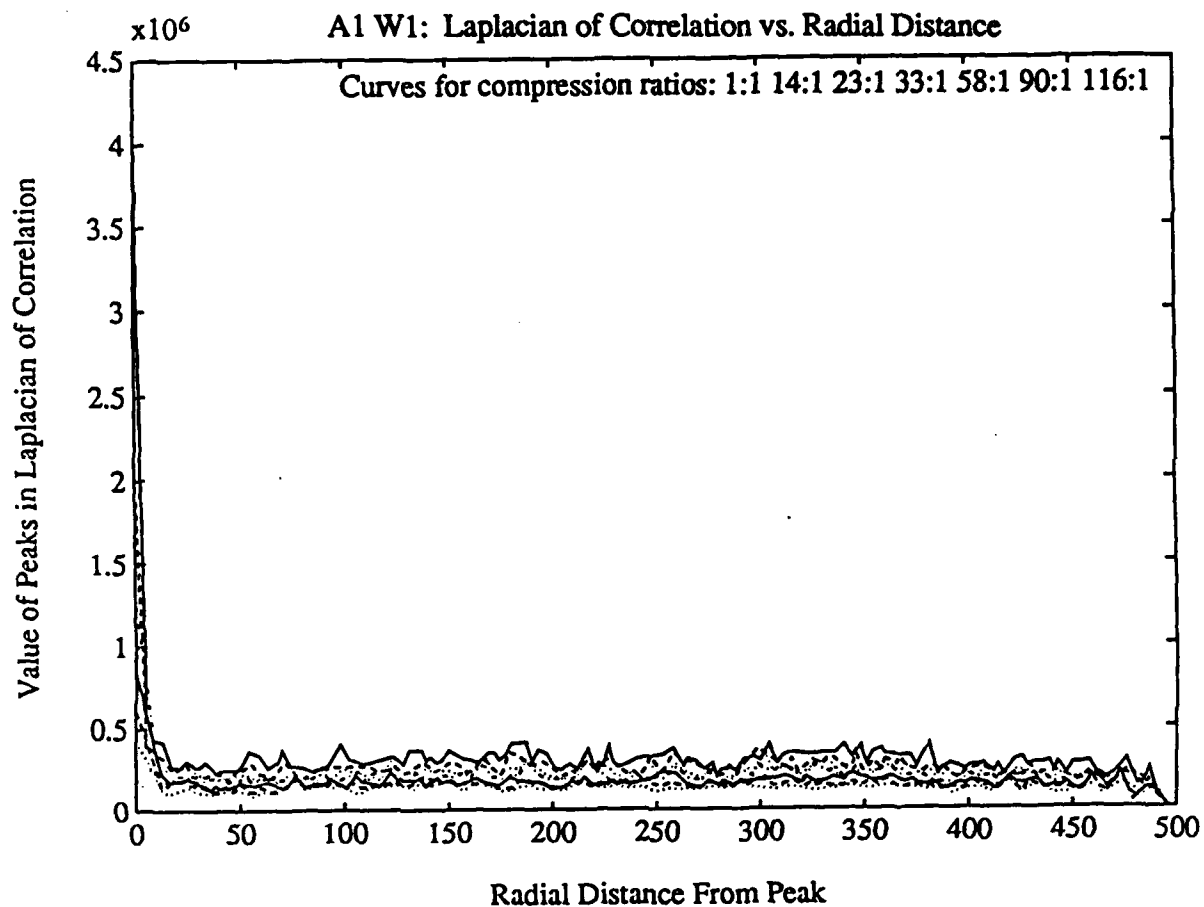


Exhibit-II-8-b

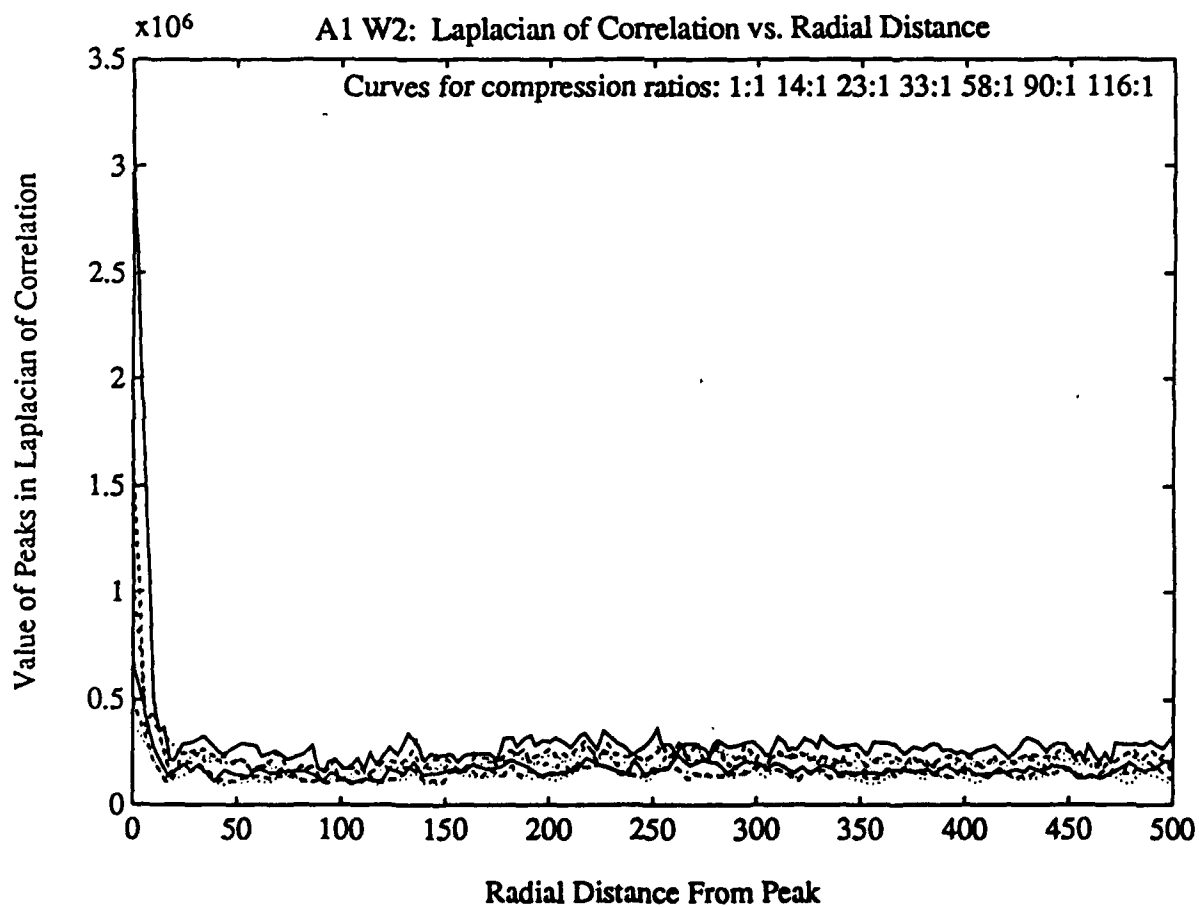


Exhibit-II-8-c

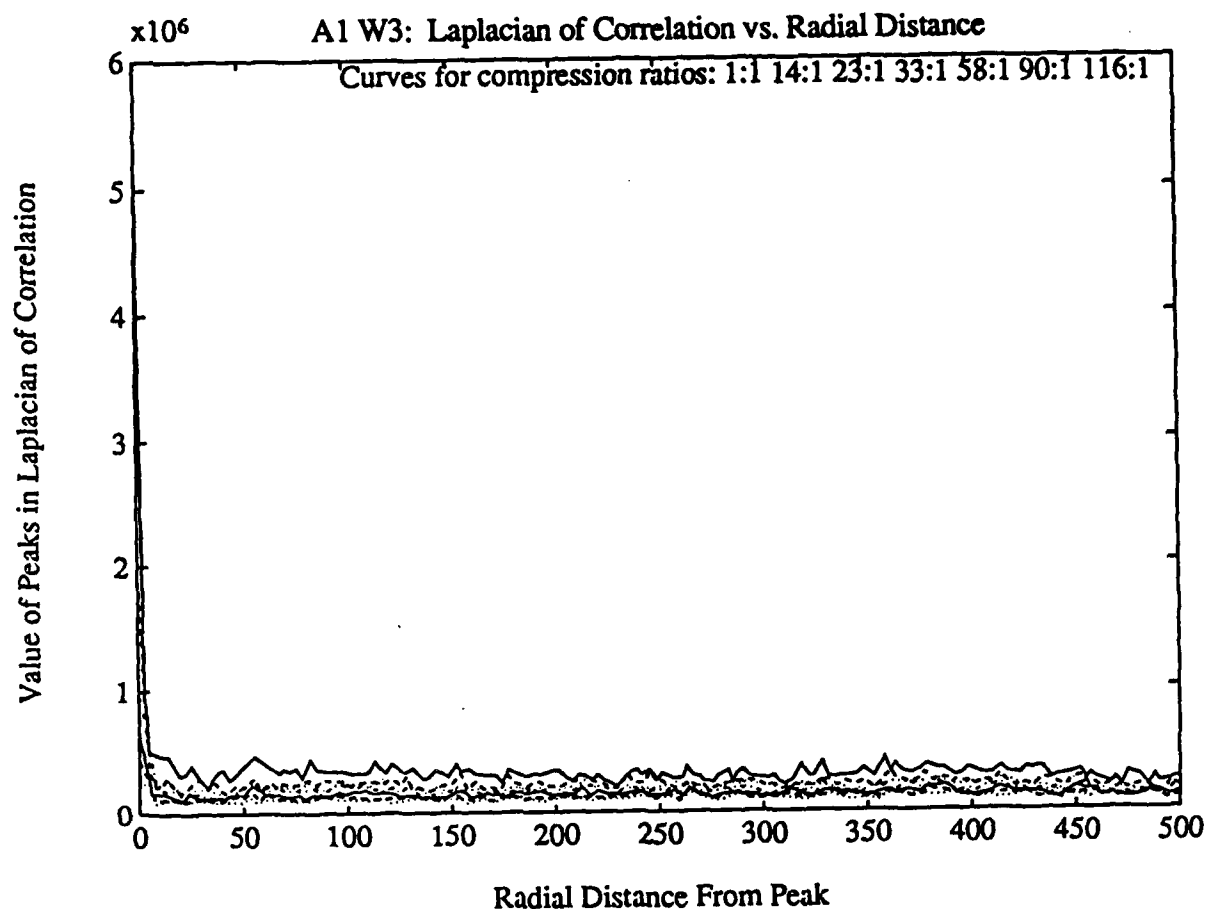


Exhibit-II-8-d

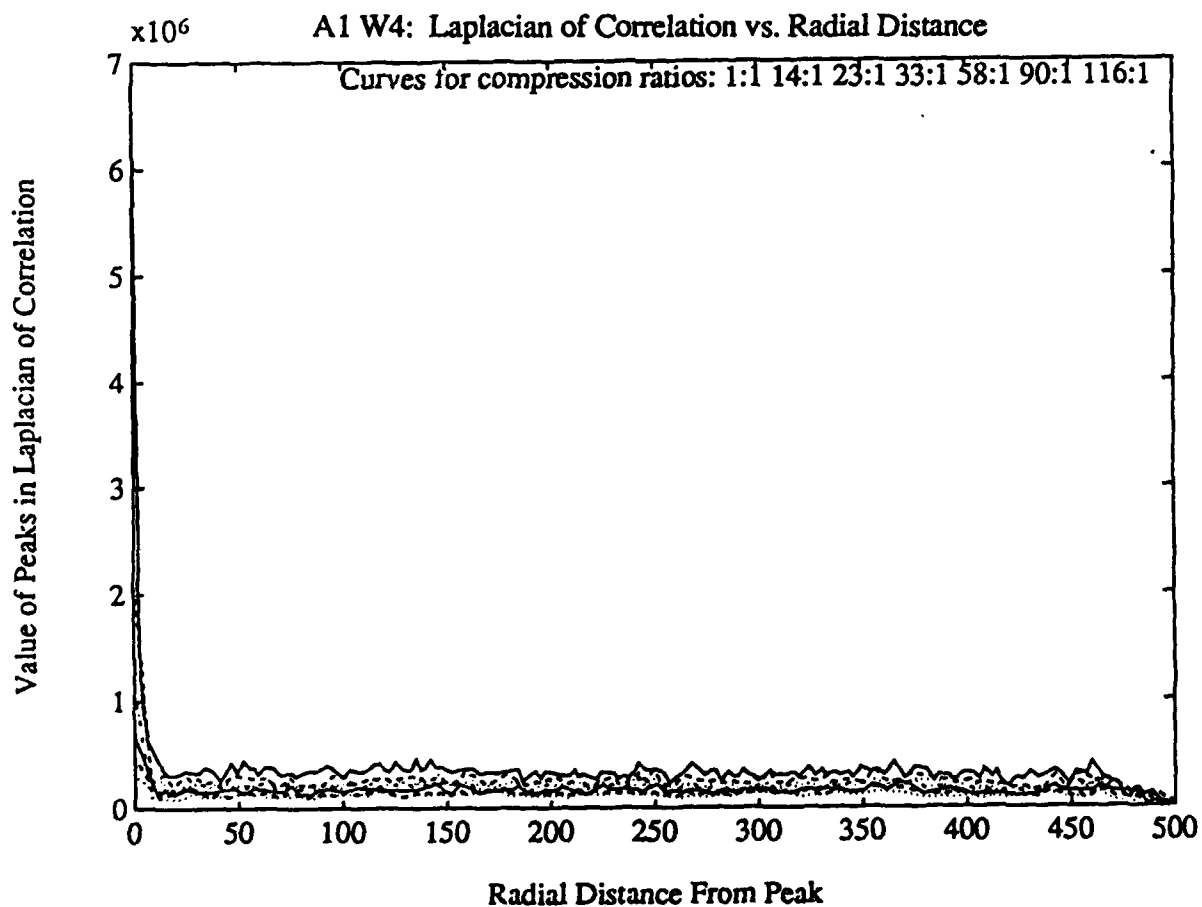


Exhibit-II-8-e

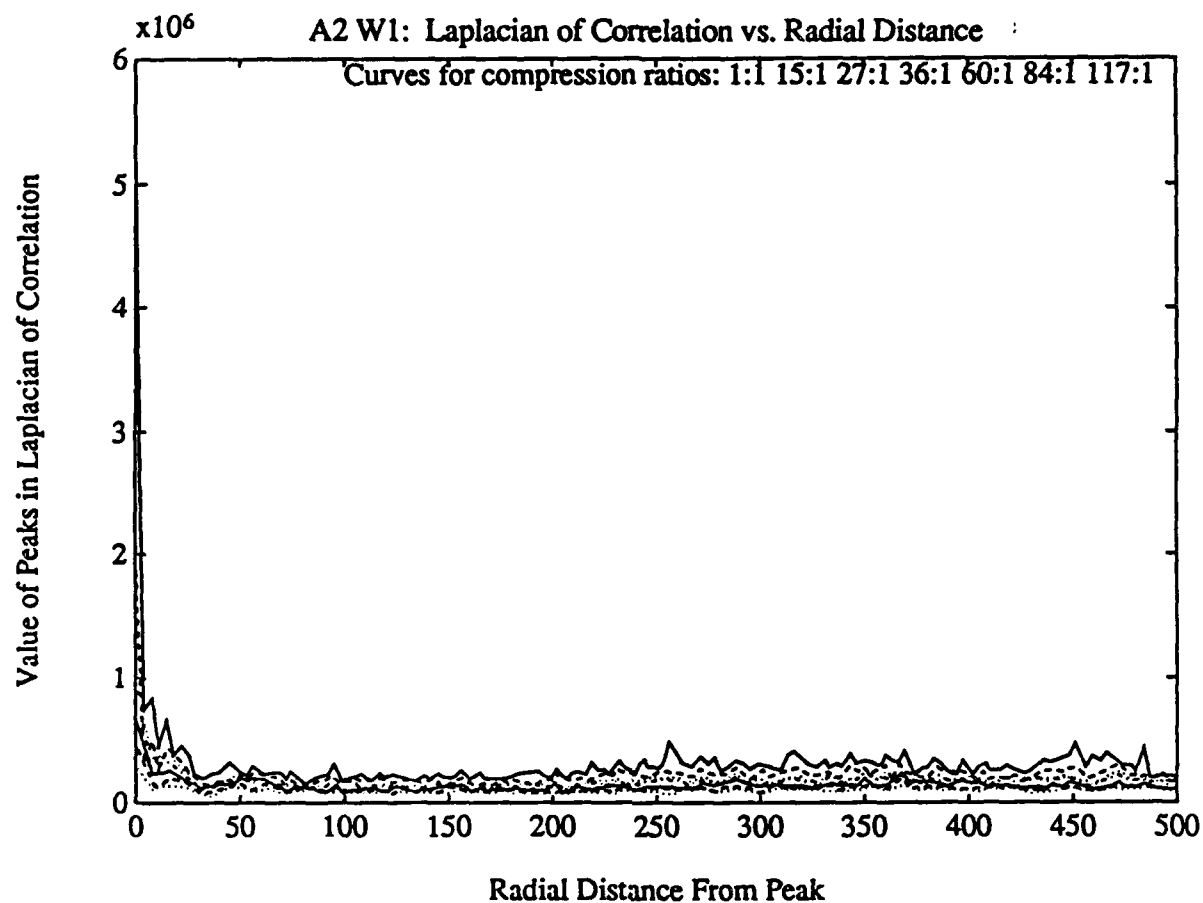


Exhibit-II-8-f

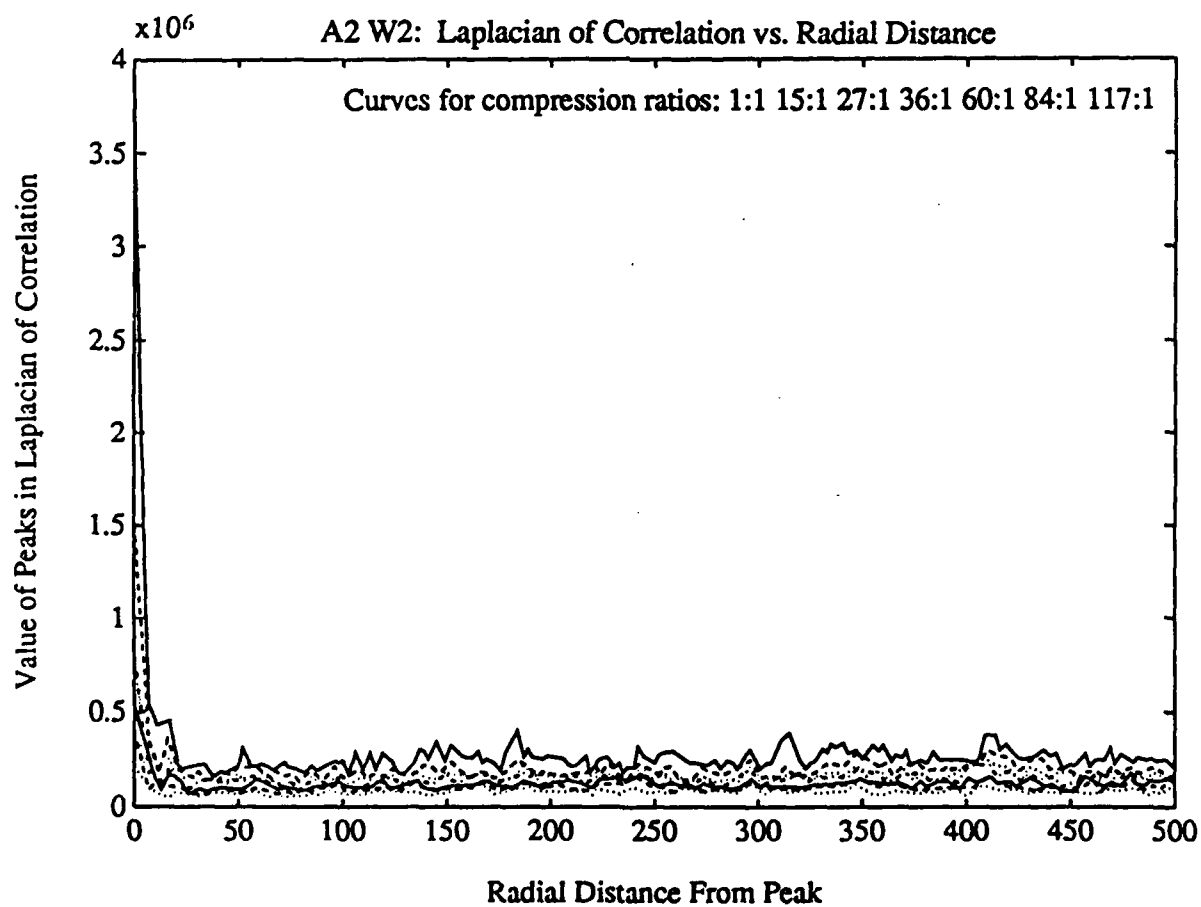


Exhibit-II-8-g

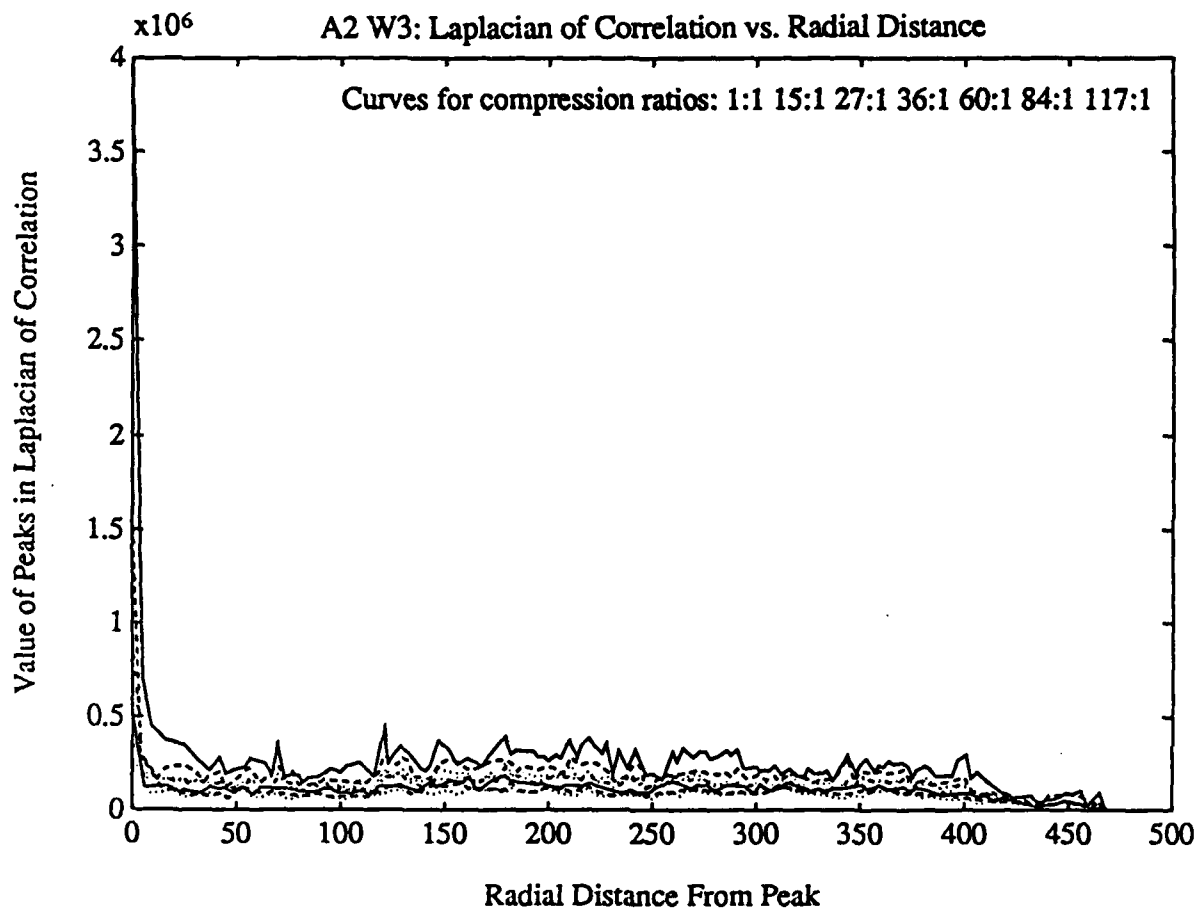
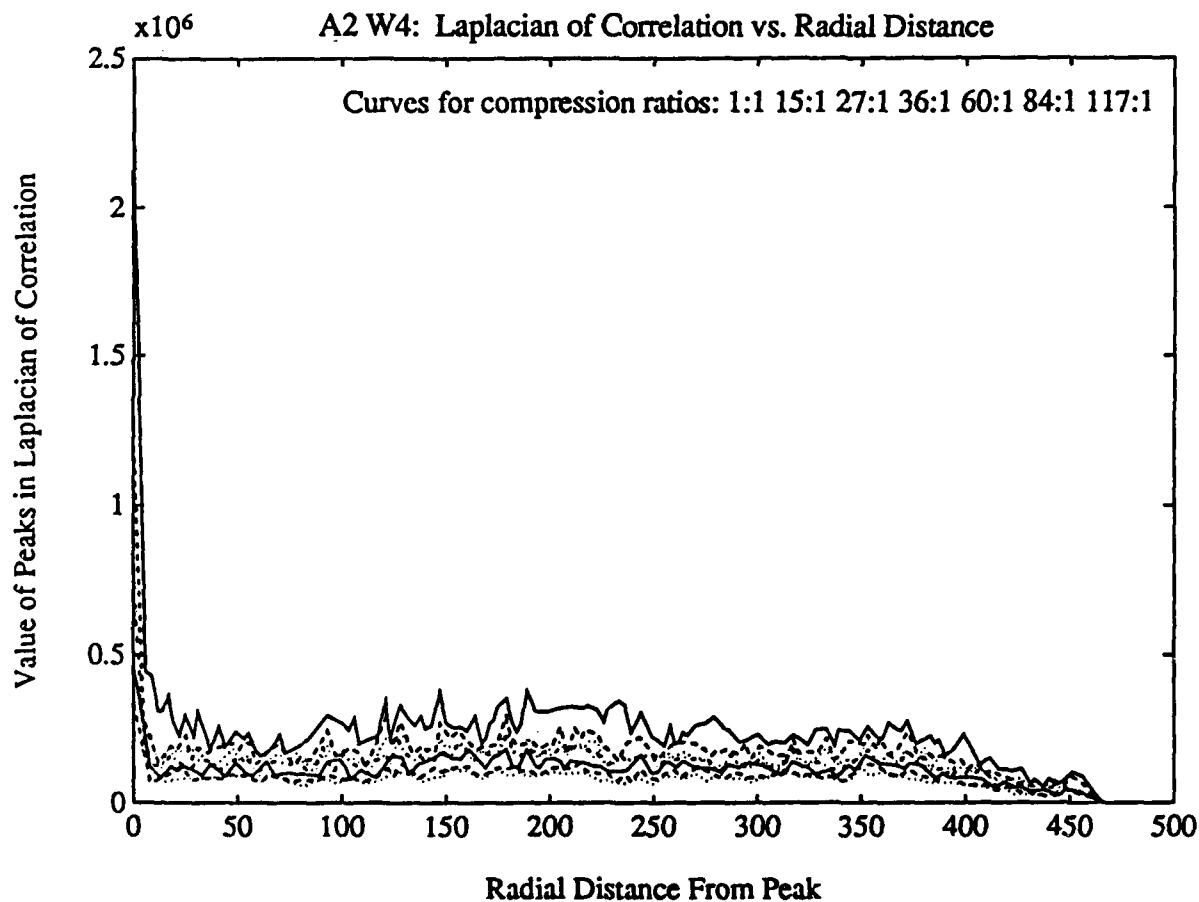


Exhibit-II-8-h





**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-9

Experimental Data

9001116
12:34:43

Exhibit II-9-a

alw1_001.rep

Image AQVIRI at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.000,359.000)
Max Laplacian Value is 4.11831e+06 at location (169,359)
Smoothed (FFT) Maximum Laplacian Value is 5076224.00 at (169.000,359.000)

Correlation Side Lobe Information, Maximum Value is 1.02405e+07

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	4.11831e+06	(169,359)
0.377852	4.226781	19	165128	(184,348)
0.385347	4.141481	22	160848	(187,346)
0.388681	4.104062	24	307951	(188,345)
0.178127	7.492702	40	250355	(179,320)
0.233640	5.957830	53	208389	(222,365)
0.259972	5.850739	56	187901	(225,361)
0.270012	5.683167	85	206256	(154,443)
0.273150	5.635995	93	158109	(164,452)
0.249566	6.028149	104	207102	(265,400)
0.250494	6.012030	109	152948	(267,407)
0.255310	5.929317	115	217860	(270,413)
0.234012	6.307614	122	220762	(274,422)
0.236570	6.260405	124	193855	(55,311)
0.248530	6.046218	134	157159	(276,279)
0.323290	4.904082	149	155617	(243,488)
0.301894	5.201460	162	166037	(247,501)
0.302156	5.197689	164	131689	(247,503)
0.251226	5.999357	176	239794	(271,503)
0.309171	5.098015	187	121613	(132,176)
0.305305	5.152660	190	174942	(132,173)
0.278000	5.539551	206	94362.5	(36,202)
0.264591	5.774248	212	199351	(0,226)
0.264842	5.770133	215	0	(0,226)
0.243060	6.142866	221	119364	(100,149)
0.248047	6.054668	226	94804.5	(97,145)
0.293277	5.327218	247	155580	(414,331)
0.267343	5.729311	253	159502	(419,322)
0.324073	4.893576	262	114653	(184,97)
0.298381	5.252291	268	193747	(191,92)
0.257044	5.899927	276	248925	(389,193)
0.273768	5.626176	290	178830	(29,105)
0.274212	5.619141	292	155406	(28,103)
0.455162	3.418339	314	295491	(278,64)
0.367797	4.343918	323	160098	(270,52)
0.281944	5.498377	352	180444	(487,510)
0.287207	5.418044	357	0	(492,511)
0.269470	5.694896	361	175797	(498,508)
0.262408	5.810234	367	0	(511,226)
0.223058	6.515826	381	0	(296,0)
0.190427	7.202716	390	216699	(447,85)
0.211013	6.756901	401	175848	(505,140)
0.227589	6.428496	403	273513	(509,142)
0.240778	6.183838	412	147754	(404,21)
0.286902	5.422667	420	163478	(410,15)
0.261674	5.822397	433	257441	(472,49)
0.146642	8.337406	445	208683	(498,59)
0.026955	15.693627	458	106918	(497,39)
0.031307	15.043620	460	212152	(497,36)
0.280966	5.513457	482	0	(491,0)

Nearest Corr sidelobe: ratio 0.377852, dBdown 4.226781 at distance 19
Largest Corr sidelobe: ratio 0.455162, dBdown 3.418339 at distance 314

Laplacian Side Lobe Information, Maximum Value is 4.11831e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance Location

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	4.11831e+06	(169,359)
0.144250	8.408843	5	170,354	(170,354)
0.106749	9.716365	8	176,355	(176,355)
0.102605	9.888294	13	180,352	(180,352)
0.065881	11.812371	17	184,350	(184,350)
0.065184	11.858612	21	187,348	(187,348)
0.074776	11.262374	24	188,345	(188,345)
0.066259	11.787536	28	193,344	(193,344)
0.065933	11.808955	30	191,338	(191,338)
0.073284	11.349922	33	193,336	(193,336)
0.065418	11.843002	36	199,339	(199,339)
0.056883	12.450189	38	179,320	(179,320)
0.060791	12.161640	40	179,320	(179,320)
0.061602	12.104064	42	204,336	(204,336)
0.061321	12.123923	48	143,399	(143,399)
0.070565	11.514112	51	123,381	(123,381)
0.089063	10.503013	54	182,307	(182,307)
0.082847	10.817251	59	183,302	(183,302)
0.064329	11.915947	63	184,298	(184,298)
0.073395	11.343356	68	177,427	(177,427)
0.090621	10.427706	70	102,378	(102,378)
0.067149	11.729625	74	176,433	(176,433)
0.064884	11.878638	80	187,276	(187,276)
0.057929	12.371044	85	187,276	(187,276)
0.065778	11.819175	89	188,272	(188,272)
0.068312	11.655012	92	187,317	(187,317)
0.098542	10.063799	98	173,339	(173,339)
0.076261	11.176963	102	168,461	(168,461)
0.071749	11.441866	107	160,466	(160,466)
0.070482	11.519214	109	189,252	(189,252)
0.071958	11.429186	112	229,265	(229,265)
0.074344	11.287515	115	188,246	(188,246)
0.080891	10.921014	123	212,244	(212,244)
0.069379	11.587690	128	46,325	(46,325)
0.089761	10.469115	131	38,366	(38,366)
0.089682	10.472927	137	186,223	(186,223)
0.074263	11.292281	139	110,485	(110,485)
0.079679	10.986575	141	133,495	(133,495)
0.070986	11.488283	144	274,260	(274,260)
0.073669	11.327164	146	177,213	(177,213)
0.089555	10.479101	150	77,240	(77,240)
0.076960	11.137366	157	101,501	(101,501)
0.076192	11.180887	160	84,494	(84,494)
0.071836	11.436555	163	9,330	(9,330)
0.073779	11.326662	165	241,507	(241,507)
0.080064	10.965618	167	8,402	(8,402)
0.086537	10.627996	169	92,509	(92,509)
0.085903	10.659936	172	72,501	(72,501)
0.075193	11.238199	174	137,188	(137,188)
0.081969	10.863495	177	104,194	(104,194)
0.099131	10.037914	180	14,267	(14,267)
0.099933	10.002893	184	2,281	(2,281)
0.101238	9.946569	187	57,509	(57,509)
0.072134	11.418622	190	4,264	(4,264)
0.089662	10.473894	193	18,239	(18,239)
0.084577	10.727475	197	331,471	(331,471)
0.073593	11.331647	199	321,487	(321,487)
0.063664	11.961068	201	252,176	(252,176)
0.060939	12.151043	204	128,159	(128,159)
0.070136	11.540559	208	269,177	(269,177)
0.065745	11.821397	210	289,187	(289,187)
0.064333	11.915655	212	336,490	(336,490)
0.090749	10.421597	217	3,498	(3,498)
0.064282	11.919113	220	177,139	(177,139)

0.071274 11.470686 222 (247,151)
0.066460 11.774417 224 (128,139)
0.094618 10.240269 227 (200,134)
0.073155 11.357534 229 (291,165)
0.065359 11.846939 231 (241,140)
0.066317 11.783747 233 (60,153)
0.069751 11.564502 236 (247,136)
0.078374 11.170545 240 (109,127)
0.078987 11.024469 245 (232,122)
0.082521 10.834352 253 (236,115)
0.091857 10.368893 258 (270,122)
0.065715 11.823339 263 (20,142)
0.076613 11.156950 265 (120,99)
0.073479 11.338386 269 (250,103)
0.061642 12.101223 273 (251,99)
0.066143 11.795133 275 (347,150)
0.064350 11.914495 283 (323,121)
0.059953 12.294693 288 (429,482)
0.076266 11.176715 292 (459,396)
0.078766 11.036608 297 (466,344)
0.073361 11.345338 300 (80,73)
0.096855 10.138779 304 (314,92)
0.070025 11.547463 308 (133,53)
0.085012 10.705223 314 (448,497)
0.084981 10.706764 316 (278,65)
0.082295 10.846269 325 (126,39)
0.085007 10.705440 330 (55,55)
0.084784 10.716840 333 (466,503)
0.084445 10.734251 336 (498,410)
0.096707 10.145429 340 (505,353)
0.078192 11.068357 344 (50,36)
0.086964 10.606581 346 (85,23)
0.095099 10.218227 348 (67,26)
0.068988 11.612284 351 (105,14)
0.085710 10.669708 354 (101,12)
0.091106 10.404546 358 (132,3)
0.082226 10.849897 360 (255,9)
0.080340 10.950687 369 (363,45)
0.080609 10.936175 372 (18,19)
0.064922 11.876093 375 (413,74)
0.076898 11.140853 377 (46,3)
0.097339 10.117141 381 (373,37)
0.052987 12.063019 387 (473,122)
0.064948 11.874323 389 (10,6)
0.068430 11.647566 391 (445,85)
0.064771 11.886184 395 (448,85)
0.060756 12.164126 397 (506,152)
0.061548 12.107832 399 (434,63)
0.066212 11.790656 401 (494,127)
0.066414 11.777422 403 (424,49)
0.065648 11.827757 405 (509,142)
0.069007 11.611044 407 (363,4)
0.054900 12.604259 412 (479,95)
0.066574 11.766942 414 (418,31)
0.051102 12.915655 417 (481,87)
0.060922 12.152248 419 (468,69)
0.073262 11.351207 422 (465,58)

0.077190 11.124366 426 (506,99)
0.066218 11.790269 428 (498,86)
0.069298 11.592815 432 (435,18)
0.068773 11.625789 435 (505,82)
0.071700 11.444818 439 (481,50)
0.056548 12.475846 441 (498,65)
0.068561 11.639230 443 (443,11)
0.052878 12.767254 447 (458,18)
0.068254 11.658747 450 (447,5)
0.068466 11.645223 454 (466,15)
0.070693 11.506220 458 (498,40)
0.054876 12.606149 461 (462,3)
0.046352 13.339317 466 (490,21)
0.073397 12.759099 470 (490,16)
0.073397 11.343230 476 (491,8)
0.034558 14.614538 481 (495,6)
0.039460 14.038421 484 (500,6)
0.061225 12.130744 487 (501,3)
0.027587 15.592995 490 (504,2)
0.000000 0.000000 496 (511,0)

Nearest Laplacian sidelobe: ratio 0.144250, dBdown 8.408843 at distance 5
Largest Laplacian sidelobe: ratio 0.144250, dBdown 8.408843 at distance 5

Image AQVIRI at compression 14.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.125,359.000)
Max Laplacian Value is 2.1031e+06 at location (169,359)
Smoothed (FFT) Maximum Laplacian Value is 2212160.00 at (169.500,359.125)

Correlation Side Lobe Information, Maximum Value is 9.49651e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	2.1031e+06	(169,359)
0.410019	3.871962	19	137084	(184,348)
0.417079	3.797813	22	174482	(187,346)
0.417111	3.797488	24	193115	(188,345)
0.196760	7.060634	40	167410	(179,320)
0.276892	5.576894	55	122011	(224,360)
0.293710	5.320817	84	242067	(154,442)
0.294398	5.310649	94	215490	(164,453)
0.255861	5.919965	101	68940.8	(264,394)
0.264793	5.770931	104	144931	(265,400)
0.268541	5.709888	109	126947	(267,406)
0.259620	5.856610	114	160737	(270,412)
0.244963	6.108998	122	178668	(274,422)
0.243219	6.140024	125	136085	(54,311)
0.275609	5.597070	134	232986	(276,279)
0.346948	4.597351	147	119866	(242,487)
0.325883	4.869377	163	99946	(247,502)
0.261023	5.833210	176	161416	(271,503)
0.335585	4.741968	187	130870	(132,176)
0.300031	5.228342	193	131414	(351,296)
0.294523	5.308806	196	114321	(354,294)
0.308580	5.106323	207	154243	(36,201)
0.282968	5.482630	212	163811	(364,277)
0.280679	5.517900	215	0	(0,226)
0.259975	5.850683	222	103057	(99,148)
0.267759	5.722553	226	125826	(97,145)
0.314420	5.024901	246	102533	(413,328)
0.287465	5.414150	253	120872	(419,323)
0.357094	4.472171	261	215284	(183,98)
0.334616	4.754530	268	289767	(191,92)
0.275417	5.600098	276	195261	(389,192)
0.289548	5.382787	289	135840	(30,106)
0.498705	3.021559	314	277414	(279,65)
0.391371	4.074115	323	92517.3	(270,52)
0.297177	5.261960	352	128379	(488,507)
0.302008	5.199821	357	115058	(492,510)
0.291174	5.358474	361	131026	(500,503)
0.276655	5.580609	367	0	(511,226)
0.241876	6.164075	380	105248	(296,1)
0.196803	7.059687	386	77714.3	(444,88)
0.210130	6.775128	390	184326	(447,85)
0.223144	6.514150	401	242312	(496,127)
0.239337	6.209895	403	209119	(509,142)
0.264303	5.778980	412	173710	(404,21)
0.314108	5.029209	420	195839	(410,15)
0.277749	5.563467	433	180056	(472,49)
0.155276	8.089859	445	55350.6	(498,60)
0.285808	5.439259	480	0	(487,0)
0.287991	5.406207	483	0	(492,0)

Nearest Corr sidelobe: ratio 0.410019, dBdown 3.871962 at distance 19
Largest Corr sidelobe: ratio 0.498705, dBdown 3.021559 at distance 314

Laplacian Side Lobe Information, Maximum Value is 2.1031e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(169,359)

0.176574	7.530726	5	(168,364)
0.182859	7.378847	7	(175,356)
0.153599	8.136112	13	(180,352)
0.120457	9.191690	17	(184,350)
0.118205	9.273658	19	(185,349)
0.138553	8.583833	24	(189,346)
0.103348	9.856974	27	(192,345)
0.106110	9.742431	30	(194,343)
0.103312	9.858512	33	(193,336)
0.106910	9.709806	35	(198,340)
0.110750	9.556553	40	(199,332)
0.089008	10.505715	45	(201,391)
0.125798	9.003265	48	(205,328)
0.122427	9.121219	51	(180,309)
0.140511	8.522895	55	(182,306)
0.109740	9.596352	59	(215,322)
0.108361	9.651288	61	(189,301)
0.096938	10.135061	64	(153,422)
0.182847	9.878065	66	(177,425)
0.145640	8.367207	71	(101,378)
0.096497	10.154878	78	(190,284)
0.099712	10.012506	81	(111,416)
0.115100	9.389248	84	(154,442)
0.130526	8.843020	89	(187,272)
0.123431	9.085775	91	(129,441)
0.129793	8.867490	95	(77,335)
0.128542	8.909566	100	(70,374)
0.130845	8.832424	104	(69,387)
0.129741	8.869211	112	(229,265)
0.118939	9.246771	115	(187,245)
0.118335	9.268861	119	(169,478)
0.122682	9.112198	122	(71,287)
0.129545	8.875778	124	(58,304)
0.112072	9.505022	127	(121,477)
0.113766	9.439876	130	(39,365)
0.128650	8.905887	134	(187,226)
0.141533	8.491416	137	(185,223)
0.131083	8.824551	140	(109,486)
0.115246	9.383732	143	(182,217)
0.121320	9.160690	145	(145,216)
0.142600	8.458797	151	(72,243)
0.136030	8.663658	154	(60,250)
0.111684	9.520072	159	(84,493)
0.129184	8.887901	163	(12,315)
0.151633	8.192062	167	(200,195)
0.123322	9.089609	171	(11,294)
0.104302	9.817080	175	(137,187)
0.169480	7.708809	179	(15,267)
0.156813	8.046175	184	(2,281)
0.145294	8.377512	186	(57,508)
0.132634	8.773446	190	(5,264)
0.139778	8.545616	193	(18,239)
0.124542	8.460560	195	(257,185)
0.135566	8.678491	197	(331,471)
0.106798	9.714379	203	(127,160)
0.102010	9.913572	205	(26,506)
0.117026	9.317167	208	(163,151)
0.114708	9.404063	210	(208,153)
0.147318	8.317437	217	(3,498)
0.108635	9.640302	221	(3,213)
0.132833	8.766947	223	(231,145)
0.150701	8.218842	227	(200,134)
0.110285	9.574830	235	(352,507)
0.112007	9.507531	239	(152,121)

0.097348	10.116738	242	(63,141)
0.129937	8.862685	245	(232,122)
0.155554	8.081199	247	(258,129)
0.121775	9.144404	251	(171,108)
0.115200	9.385476	253	(236,115)
0.165923	7.800924	258	(270,122)
0.147911	8.299996	262	(21,143)
0.137781	8.608106	268	(191,92)
0.123986	9.066268	272	(212,90)
0.117420	9.302570	275	(347,150)
0.116341	9.342688	277	(324,130)
0.102042	9.912197	279	(322,126)
0.102913	9.875295	282	(46,105)
0.128617	8.907007	285	(357,145)
0.114260	9.421055	289	(401,186)
0.136100	8.661404	292	(460,380)
0.177633	7.504770	299	(81,73)
0.158260	8.006296	303	(315,93)
0.134445	8.714552	309	(73,65)
0.124137	9.060998	312	(60,67)
0.148798	8.274019	315	(277,63)
0.110243	9.576484	318	(107,47)
0.118805	9.251653	320	(11,81)
0.144399	8.404352	325	(54,55)
0.132977	8.762233	330	(466,503)
0.151838	8.186181	332	(258,39)
0.150873	8.213897	335	(499,418)
0.123438	9.085506	340	(114,23)
0.126726	8.971354	344	(504,436)
0.161796	7.910314	346	(85,23)
0.114796	9.400733	349	(506,268)
0.116556	9.334650	351	(417,111)
0.141762	8.484409	354	(101,12)
0.119566	9.223910	358	(132,3)
0.148657	8.278145	360	(255,9)
0.130042	8.859176	365	(91,2)
0.124288	9.055704	370	(362,47)
0.113482	9.450719	376	(13,23)
0.111657	9.521156	378	(47,3)
0.124598	9.044872	381	(380,45)
0.124169	9.059882	383	(373,37)
0.118210	9.273450	385	(374,36)
0.124180	9.059491	388	(472,122)
0.098471	10.066935	392	(9,5)
0.091313	10.394667	396	(449,85)
0.109101	9.621725	398	(495,134)
0.115217	9.384846	401	(483,115)
0.120858	9.177235	403	(496,127)
0.123245	9.092298	407	(509,143)
0.114563	9.409540	409	(479,95)
0.086224	10.643742	413	(463,74)
0.109722	9.597074	417	(453,59)
0.094739	10.234731	419	(411,19)
0.104465	9.810287	422	(409,15)
0.098538	10.063982	426	(465,58)
0.126601	8.975619	429	(506,99)
0.116464	9.338069	431	(505,92)
0.087260	10.591861	433	(473,54)
0.107622	9.680991	435	(436,18)
0.104457	9.810643	438	(505,82)
0.107705	9.677641	443	(479,49)
0.088135	10.548507	450	(443,11)
0.084044	10.754910	454	(499,53)
			(466,15)

0.109823 9.593063 458 (498,41)
0.082694 10.825263 463 (470,7)
0.087715 10.569275 467 (499,29)
0.076525 11.161946 470 (490,16)
0.109045 9.623943 475 (485,4)
0.112979 9.470005 478 (492,7)
0.060431 12.187428 484 (509,14)
0.087607 10.574589 487 (502,4)
0.000000 0.000000 496 (511,0)

Nearest Laplacian sidelobe: ratio 0.176574, dBdown 7.530726 at distance 5
Largest Laplacian sidelobe: ratio 0.182859, dBdown 7.378847 at distance 7

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17:38:00

alw1_023.rep

Image AQVIRI at compression 23.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.125,359.000)
Max Laplacian Value is 1.60638e+06 at location (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1800576.00 at (168.500,358.500)

Correlation Side Lobe Information, Maximum Value is 8.89327e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location
1.000000 0.000000 0 1.60638e+06 (169,359)
0.431255 3.652655 22 117983 (187,346)
0.431683 3.648354 24 132499 (188,345)
0.194079 7.120221 40 177155 (179,320)
0.306172 5.140343 56 182734 (225,359)
0.301593 5.205788 84 182839 (155,442)
0.313656 5.035464 94 205096 (164,453)
0.274274 5.618149 105 122233 (265,401)
0.283477 5.474827 109 137430 (267,406)
0.293601 5.322425 116 153796 (271,414)
0.286433 5.429766 118 121274 (272,416)
0.265519 5.759039 126 160897 (31,314)
0.287989 5.406246 132 226095 (275,280)
0.289928 5.377097 134 207122 (276,279)
0.377960 4.225546 152 95291.8 (244,491)
0.338818 4.700340 163 116224 (246,503)
0.299015 5.243070 170 123822 (269,496)
0.366444 4.359921 187 132229 (132,176)
0.335698 4.740515 193 140000 (351,296)
0.312661 5.049265 201 136687 (41,204)
0.314998 5.016916 206 101194 (36,202)
0.309829 5.088776 212 155442 (364,276)
0.302264 5.196134 217 188187 (366,268)
0.289809 5.378884 222 91849.5 (100,148)
0.300990 5.214480 226 175983 (96,145)
0.341235 4.669467 247 161681 (414,331)
0.365517 4.370923 263 92650.3 (184,96)
0.344735 4.621550 268 176991 (191,92)
0.303445 5.179200 277 107138 (192,83)
0.292713 5.335577 283 134654 (34,110)
0.315651 5.007933 289 160606 (29,106)
0.311739 5.062082 291 102043 (28,105)
0.308596 5.106103 295 146204 (26,101)
0.263274 5.795928 300 111982 (21,98)
0.522192 2.821702 315 149674 (278,63)
0.336574 4.729195 357 0 (492,511)
0.279676 5.533448 367 0 (511,227)
0.260552 5.841060 381 0 (296,0)
0.219508 6.585499 390 229918 (447,85)
0.238094 6.232511 401 199919 (497,128)
0.250480 6.012268 404 246458 (510,142)
0.275298 5.601971 412 121957 (403,20)
0.343541 4.640218 419 133198 (410,16)
0.286886 5.422910 433 172282 (473,51)
0.163463 7.865811 446 135435 (498,58)
0.097725 10.099928 453 163903 (447,1)
0.036786 14.343124 460 175906 (497,37)
0.298311 5.253311 477 92902.8 (486,2)
0.326428 4.862129 483 0 (492,0)
Nearest Corr sidelobe: ratio 0.431255, dBdown 3.652655 at distance 22
Largest Corr sidelobe: ratio 0.522192, dBdown 2.821702 at distance 315

Laplacian Side Lobe Information, Maximum Value is 1.60638e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance Location
1.000000 0.000000 0 (169,359)

0.148876 7 8.271744 (175,356)
0.162555 11 7.889990 (178,353)
0.157129 17 8.037448 (184,350)
0.169993 19 7.695687 (185,349)
0.165721 25 7.806235 (190,346)
0.143199 30 8.440597 (191,338)
0.122326 38 9.124827 (135,376)
0.137649 48 8.612270 (205,328)
0.141145 53 8.503346 (181,307)
0.128615 55 8.907090 (182,306)
0.130672 57 8.838169 (226,357)
0.126770 59 8.969832 (215,322)
0.137464 62 8.618097 (109,342)
0.101604 65 9.930882 (157,423)
0.120052 68 9.206320 (103,344)
0.136126 71 8.660600 (101,378)
0.134492 74 8.713028 (151,431)
0.121226 78 9.164054 (151,435)
0.136281 81 8.655660 (88,355)
0.117880 84 9.285604 (154,442)
0.107220 86 9.697257 (103,304)
0.131357 89 7.975900 (94,311)
0.127676 92 8.815455 (112,431)
0.148121 94 8.938908 (164,453)
0.162902 97 8.293825 (74,338)
0.148729 99 7.880734 (71,374)
0.154530 104 8.276038 (65,363)
0.115345 107 8.109860 (160,466)
0.133796 110 9.380015 (63,328)
0.17805 113 8.735583 (281,343)
0.191636 117 9.288365 (67,417)
0.140748 122 7.175228 (59,307)
0.155565 128 8.401691 (69,439)
0.169722 132 8.515565 (275,280)
0.154473 136 7.702613 (186,224)
0.156522 140 8.111473 (109,486)
0.156339 144 8.054232 (274,260)
0.154133 147 8.059325 (59,262)
0.153694 149 8.121051 (61,256)
0.136751 151 8.133418 (175,208)
0.137402 154 8.620078 (60,250)
0.147088 156 8.640693 (143,205)
0.151555 159 8.324221 (84,493)
0.169453 162 8.194294 (9,332)
0.205519 166 7.709498 (93,507)
0.132924 168 6.871487 (7,403)
0.164989 172 8.763974 (67,498)
0.157522 180 7.825463 (15,266)
0.200583 184 8.026588 (2,281)
0.162550 186 6.977055 (57,508)
0.148917 192 7.890129 (19,239)
0.132733 195 8.270548 (314,490)
0.130132 197 8.770217 (331,471)
0.120772 201 8.856146 (252,176)
0.130173 204 9.180322 (20,220)
0.156076 206 8.854776 (24,505)
0.131453 209 8.066638 (209,154)
0.203840 212 8.812306 (209,151)
0.152750 216 8.907104 (3,497)
0.174274 221 8.160187 (282,169)
0.161604 223 7.587680 (231,145)
0.133053 227 7.915483 (200,134)
0.130360 230 8.759751 (292,165)
0.130360 233 8.848559 (286,158)

0.145313	8.376943	235	(352,507)	0.126041	8.994885	462	(496,33)
0.133037	8.760264	240	(109,127)	0.111317	9.534373	465	(497,29)
0.147135	8.322841	244	(214,119)	0.084207	10.746524	471	(486,10)
0.180246	7.441342	246	(258,130)	0.148995	8.268294	475	(485,4)
0.148444	8.284365	250	(293,142)	0.145654	8.366782	478	(492,7)
0.143385	8.434949	255	(406,264)	0.083149	10.801430	483	(500,7)
0.178175	7.491537	259	(270,120)	0.129458	8.878710	487	(501,3)
0.151845	8.186000	263	(192,97)	0.000000	0.000000	496	(511,0)
0.140445	8.524942	266	(95,103)	Nearest Laplacian sidelobe: ratio 0.148876, dBdown 8.271744 at distance 7			
0.132568	8.775619	269	(427,283)	Largest Laplacian sidelobe: ratio 0.205519, dBdown 6.871487 at distance 168			
0.117279	9.307805	272	(45,117)				
0.165539	7.811001	275	(347,149)				
0.124201	9.058763	282	(34,111)				
0.124513	9.047849	286	(357,144)				
0.150381	8.228065	289	(451,424)				
0.177512	7.507716	292	(460,380)				
0.137618	8.613245	296	(445,465)				
0.186736	7.287722	299	(81,73)				
0.200394	6.981163	303	(314,93)				
0.144251	8.408802	306	(125,56)				
0.164627	7.834987	312	(60,67)				
0.157267	8.033625	315	(472,272)				
0.128059	8.925889	318	(12,82)				
0.136791	8.639433	320	(11,81)				
0.150421	8.226920	323	(490,394)				
0.176625	7.529476	326	(83,45)				
0.185105	7.325812	332	(258,39)				
0.171306	7.662274	335	(499,419)				
0.129269	8.885049	337	(187,22)				
0.150807	8.215794	341	(113,23)				
0.143250	8.439056	343	(90,25)				
0.145584	8.368858	347	(475,196)				
0.151271	8.202455	351	(504,465)				
0.142571	8.459685	354	(367,66)				
0.155799	8.074362	358	(133,3)				
0.191339	7.181961	360	(255,9)				
0.166150	7.795008	363	(46,17)				
0.143888	8.419757	367	(363,47)				
0.176631	7.529337	372	(18,19)				
0.137435	8.619017	376	(477,143)				
0.143430	8.433595	380	(467,123)				
0.142498	8.461907	382	(373,36)				
0.097410	10.113966	386	(3,11)				
0.140141	8.534359	388	(9,5)				
0.143128	8.442747	390	(447,85)				
0.112011	9.507380	395	(459,91)				
0.148315	8.288139	398	(454,81)				
0.131736	8.802969	400	(502,138)				
0.131795	8.801012	403	(379,15)				
0.119820	9.214691	405	(364,4)				
0.165215	7.819505	407	(479,95)				
0.154356	8.114768	412	(401,19)				
0.118912	9.247738	415	(402,16)				
0.129788	8.867661	417	(469,69)				
0.130956	8.828734	421	(411,15)				
0.151190	8.204784	423	(500,95)				
0.137542	8.615638	431	(473,53)				
0.129116	8.890209	436	(505,81)				
0.108771	9.634884	440	(498,67)				
0.131695	8.804312	444	(444,11)				
0.096029	10.175977	447	(498,56)				
0.125646	9.008510	450	(447,5)				
0.114150	9.425254	452	(469,21)				
0.137096	8.629759	458	(498,41)				

Image AQVIR1 at compression 33.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.125,359.000)
Max Laplacian Value is 1.26488e+06 at location (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1524512.00 at (168.500,358.500)

Correlation Side Lobe Information, Maximum Value is 8.60016e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0	0.000000	1.26488e+06	(169,359)
0.458094	3	3.90458	125069	(182,348)
0.460220	3	3.70343	72485.5	(186,346)
0.461284	3	3.60313	133602	(188,345)
0.193921	7	7.123762	101990	(134,339)
0.303706	5	5.175462	138013	(225,360)
0.333348	4	4.771028	195414	(154,442)
0.315584	5	5.008553	164108	(164,453)
0.287807	5	5.008987	105351	(265,401)
0.291943	5	5.347016	162797	(268,409)
0.288464	5	5.399081	105064	(269,411)
0.288998	5	5.391047	112440	(270,413)
0.256729	5	5.905259	129748	(51,314)
0.313838	5	5.032938	233986	(276,279)
0.389098	4	4.099412	136373	(243,490)
0.343839	4	4.636450	100202	(246,502)
0.348309	4	4.580347	108537	(331,175)
0.338488	4	4.704570	86008.3	(352,295)
0.348197	4	4.581748	162562	(36,201)
0.308800	5	5.103222	146103	(364,276)
0.304708	5	5.161165	0	(0,226)
0.293709	5	5.320833	86298.8	(100,149)
0.299618	5	5.234317	169472	(96,145)
0.341013	4	4.672285	105537	(414,330)
0.303001	5	5.185553	119922	(420,322)
0.378195	4	4.222842	121857	(184,96)
0.316780	4	4.992417	120986	(29,106)
0.324977	4	4.881478	115179	(26,101)
0.503824	2	2.977214	160259	(278,64)
0.418491	3	3.783134	66297.8	(270,52)
0.331956	4	4.789189	353	(488,511)
0.340180	4	4.682917	358	(499,497)
0.298155	5	5.255582	367	(511,225)
0.266376	5	5.712562	381	(297,0)
0.213292	6	7.10262	388	(446,87)
0.214351	6	6.888742	390	(447,86)
0.267802	5	5.721870	401	(199408)
0.255738	5	5.922044	405	(510,140)
0.291212	5	5.357903	411	(403,21)
0.324447	4	4.888565	420	(410,15)
0.332987	4	4.775725	433	(472,49)
0.175256	7	7.563278	447	(499,57)
0.113853	9	9.436545	454	(447,0)
0.061742	12	12.094211	460	(497,37)
0.062384	12	12.049274	462	(496,32)
0.328426	4	4.835624	480	(487,0)

Nearest Corr sidelobe: ratio 0.458094, dBdown 3.390458 at distance 17
Largest Corr sidelobe: ratio 0.503824, dBdown 2.977214 at distance 314

Laplacian Side Lobe Information, Maximum Value is 1.26488e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0	0.000000	(169,359)
0.159941	7	7.960395	11
0.142195	8	8.471152	13
0.125235	9	9.022732	15

0.172770	7.625313	19	(185,349)
0.172590	7.629841	24	(189,346)
0.141608	8.489112	30	(191,338)
0.150775	8.216712	32	(192,337)
0.167230	7.766854	38	(135,377)
0.135778	8.671699	46	(201,392)
0.125368	9.018143	48	(205,327)
0.186730	7.287869	51	(181,309)
0.146516	8.341150	55	(182,306)
0.162380	7.894662	62	(109,342)
0.153000	8.153087	69	(135,419)
0.166914	7.775073	74	(177,433)
0.143759	8.423656	79	(190,283)
0.157200	8.035469	81	(88,354)
0.155272	8.089073	83	(154,441)
0.186041	7.303912	89	(95,309)
0.152717	8.161121	93	(87,315)
0.145442	8.373116	95	(257,322)
0.147387	8.315410	97	(161,456)
0.159303	7.977769	99	(78,320)
0.189624	7.221063	106	(160,465)
0.174039	7.593537	110	(63,328)
0.206354	6.853879	122	(59,307)
0.185139	7.325032	124	(77,276)
0.151861	8.185543	128	(122,478)
0.149836	8.243842	130	(69,442)
0.173028	7.618829	132	(275,280)
0.184987	7.328595	134	(276,279)
0.176759	7.526174	136	(187,224)
0.152838	8.157686	139	(75,462)
0.159675	7.967638	144	(299,296)
0.180503	7.435162	146	(59,263)
0.161214	7.925983	151	(175,208)
0.174690	7.577317	153	(60,251)
0.187135	7.278924	157	(143,204)
0.154747	8.103790	160	(83,224)
0.189001	7.235351	162	(9,331)
0.217819	6.619042	165	(93,506)
0.214212	6.691566	168	(7,404)
0.166159	7.794771	170	(298,470)
0.153266	8.145532	177	(84,204)
0.183173	7.371395	181	(203,181)
0.164143	7.847771	183	(201,179)
0.239693	6.203452	187	(57,509)
0.188093	7.256266	192	(19,239)
0.153976	8.168296	196	(314,491)
0.155864	8.072530	204	(20,220)
0.155138	8.092811	207	(363,286)
0.160929	7.933669	210	(209,153)
0.237838	6.237197	216	(3,497)
0.182969	7.376217	223	(231,145)
0.147974	8.298136	227	(200,134)
0.141755	8.484629	229	(371,467)
0.132695	8.771464	232	(175,127)
0.155191	8.091326	237	(353,509)
0.171099	7.667529	240	(109,127)
0.155133	8.092969	243	(217,121)
0.154040	8.123665	247	(382,485)
0.166947	7.774226	251	(294,141)
0.154098	8.122029	253	(295,140)
0.206054	6.860198	259	(270,121)
0.186354	7.296609	262	(20,144)
0.148353	8.287042	266	(95,103)

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0.152556	8.165714	269	(427, 283)
0.144576	8.399044	271	(159, 88)
0.169834	7.699741	273	(212, 89)
0.183473	7.364281	275	(347, 149)
0.140886	8.511318	282	(354, 146)
0.148032	8.296439	286	(357, 144)
0.189232	7.230049	290	(451, 425)
0.189354	7.227246	292	(460, 379)
0.162875	7.881452	296	(445, 465)
0.218905	6.597441	299	(81, 73)
0.201543	6.956329	301	(314, 95)
0.187481	7.270436	304	(283, 77)
0.214083	6.694180	312	(60, 67)
0.163367	7.868366	318	(485, 323)
0.153898	8.127658	321	(122, 41)
0.194306	7.115139	324	(55, 56)
0.217987	6.615690	326	(83, 45)
0.183857	7.355188	333	(258, 38)
0.201475	6.957779	336	(499, 420)
0.172099	7.642217	338	(497, 277)
0.158376	8.003097	340	(507, 320)
0.163172	7.873538	342	(502, 436)
0.208629	6.806259	346	(90, 22)
0.163791	7.857108	349	(506, 267)
0.160002	7.958745	351	(504, 465)
0.175950	7.546095	354	(403, 94)
0.214178	6.692260	362	(255, 7)
0.179411	7.461498	365	(91, 2)
0.164581	7.836192	369	(362, 45)
0.166027	7.798202	372	(13, 21)
0.178244	7.489839	376	(477, 143)
0.138696	8.579365	382	(373, 36)
0.132247	8.786139	385	(375, 34)
0.129001	8.894061	388	(9, 5)
0.131287	8.817773	390	(447, 85)
0.126935	8.964170	395	(502, 146)
0.169564	7.706656	401	(497, 129)
0.150049	8.237679	403	(379, 15)
0.163867	7.855077	410	(425, 39)
0.143499	8.431526	412	(468, 76)
0.164737	7.832099	415	(402, 16)
0.163188	7.873128	418	(435, 36)
0.158516	7.999268	421	(411, 15)
0.161560	7.916657	424	(500, 94)
0.168076	7.744955	432	(436, 19)
0.168182	7.742201	436	(506, 83)
0.147043	8.325557	438	(437, 13)
0.129582	8.874563	440	(479, 47)
0.127222	8.954391	442	(469, 34)
0.138159	8.596193	447	(498, 56)
0.161326	7.922962	449	(499, 54)
0.126676	8.973062	453	(469, 19)
0.180647	7.431703	460	(497, 37)
0.160886	7.934828	462	(496, 32)
0.104752	9.798371	467	(497, 27)
0.145147	8.381919	473	(482, 4)
0.169382	7.711335	475	(485, 4)
0.136574	8.646330	487	(501, 3)
0.000000	0.000000	496	(511, 0)

Nearest Laplacian sidelobe: ratio 0.159941, dBdown 7.960395 at distance 11
 Largest Laplacian sidelobe: ratio 0.239693, dBdown 6.203452 at distance 187

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Image AQVIRI at compression 58.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.250,358.875)
Max Laplacian Value is 842939 at location (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1161216.00 at (168.500,358.500)

Correlation Side Lobe Information, Maximum Value is 8.27317e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	842939	(169,359)
0.458783	3.383924	18	95413	(183,347)
0.476796	3.216673	23	106297	(187,344)
0.223459	6.508020	39	125794	(179,321)
0.343553	4.640068	56	147982	(225,360)
0.204748	6.887798	74	65529.4	(158,432)
0.330136	4.813070	85	160134	(155,443)
0.305092	5.155698	92	99722.8	(244,305)
0.314752	5.020318	110	147144	(268,408)
0.326020	4.867563	115	154863	(270,413)
0.291389	5.352622	127	97827.8	(51,313)
0.310358	5.081365	133	116120	(302,360)
0.402339	3.954083	152	111046	(244,491)
0.400294	3.976212	162	129314	(245,502)
0.327505	4.847818	177	133782	(272,503)
0.371491	4.300513	184	163876	(349,319)
0.378969	4.213961	188	74528.8	(132,175)
0.358736	4.452248	196	128263	(354,294)
0.342202	4.651776	205	136025	(38,201)
0.333204	4.772896	211	71985.3	(363,276)
0.316908	4.990674	217	86757.3	(366,269)
0.281947	5.498326	227	133536	(95,144)
0.356623	4.477906	246	114811	(413,329)
0.404054	3.935606	261	127560	(182,98)
0.403347	3.943213	264	97688.8	(187,96)
0.321090	4.933728	276	87905.8	(192,84)
0.315042	5.016315	290	98812.3	(29,105)
0.311881	5.060106	294	76146	(27,101)
0.31605	2.744113	315	118253	(279,64)
0.308145	5.112456	334	164577	(498,414)
0.364157	4.387109	353	89678.8	(488,509)
0.353563	4.515331	357	67380	(496,503)
0.305005	5.156931	367	0	(511,226)
0.262885	5.802349	381	0	(296,0)
0.257628	5.890077	383	72656.5	(442,91)
0.249795	6.024170	388	80515.6	(446,87)
0.239914	6.030891	390	124717	(447,86)
0.292980	6.199437	401	144132	(497,128)
0.332735	5.331623	414	82031.3	(405,19)
0.345876	4.779016	420	195553	(411,16)
0.063660	4.610793	434	150845	(471,48)
0.069434	11.961361	459	149774	(497,38)
0.353993	11.584258	462	199431	(496,32)
	4.510051	481	0	(489,0)
Nearest Corr sidelobe:	ratio 0.458783,	dBdown 3.383924	at distance 18	
Largest Corr sidelobe:	ratio 0.531605,	dBdown 2.744113	at distance 315	
Laplacian Side Lobe Information, Maximum Value is 842939				
Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location	
1.000000	0.000000	0	(169,359)	
0.278360	5.553936	12	(159,365)	
0.212750	6.721305	16	(182,350)	
0.238270	6.229308	24	(189,346)	
0.198415	7.024248	31	(191,337)	
0.193271	7.138337	33	(193,336)	

0.151013	8.209869	36	(205,358)
0.190982	7.190071	38	(136,377)
0.168923	7.723121	40	(197,331)
0.179204	7.466529	46	(201,392)
0.213850	6.989913	50	(125,383)
0.201964	6.947256	52	(180,308)
0.187514	7.269673	57	(226,357)
0.207364	6.832660	60	(109,352)
0.213837	6.699166	63	(109,341)
0.183619	7.360827	68	(113,397)
0.172094	7.642350	72	(97,360)
0.265587	5.757937	76	(187,285)
0.171668	7.653094	81	(92,385)
0.202067	6.945056	86	(155,444)
0.201705	6.952824	90	(79,351)
0.234377	6.300858	93	(87,315)
0.188796	7.240066	99	(71,373)
0.164216	7.845847	101	(270,349)
0.259384	5.860566	105	(100,438)
0.217684	6.621741	108	(183,252)
0.195850	7.080760	115	(270,414)
0.185702	7.311826	117	(271,416)
0.283943	5.467686	122	(59,307)
0.229791	6.386664	125	(77,275)
0.227471	6.430746	128	(276,429)
0.224291	6.491880	132	(179,227)
0.227750	6.425418	136	(186,224)
0.175466	7.558079	139	(75,461)
0.203936	6.905067	141	(34,400)
0.240064	6.196733	144	(26,341)
0.214244	6.690919	146	(126,499)
0.218439	6.606707	150	(175,209)
0.185552	7.315345	154	(33,287)
0.238819	6.219309	163	(15,413)
0.220990	6.556270	165	(93,505)
0.205635	6.869025	168	(201,194)
0.185561	7.315124	174	(245,203)
0.241336	6.173783	179	(17,265)
0.221993	6.536598	183	(201,179)
0.214241	6.690982	187	(57,509)
0.206158	6.857995	190	(27,233)
0.210918	6.758862	193	(15,243)
0.205145	6.879381	195	(314,490)
0.151805	8.187126	200	(41,205)
0.166874	7.776101	202	(333,477)
0.170077	7.693541	205	(189,155)
0.224527	6.487323	209	(163,150)
0.193930	7.123558	212	(209,151)
0.246627	6.079585	215	(251,160)
0.189563	7.222471	219	(280,170)
0.201189	6.963965	223	(232,145)
0.187695	7.265464	226	(95,145)
0.216938	6.636642	228	(201,133)
0.198067	7.031873	230	(291,164)
0.196879	7.057996	239	(398,289)
0.207630	6.827107	242	(215,121)
0.215538	6.664769	245	(215,118)
0.280103	5.526819	252	(295,141)
0.219790	5.654789	259	(270,121)
0.195465	7.089312	264	(429,314)
0.188556	7.245587	266	(95,104)
0.178282	7.488928	268	(429,294)
0.162904	7.880675	271	(159,88)
0.217536	6.624689	275	(439,309)

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0.185877	7.307736	279	(321,125)
0.204095	6.901686	283	(355,146)
0.179615	7.456567	287	(358,143)
0.213210	6.711922	290	(417,208)
0.211076	6.755613	296	(319,104)
0.237911	6.235847	302	(315,95)
0.222395	6.528754	304	(283,77)
0.230936	6.365090	306	(475,343)
0.249392	6.031167	312	(60,67)
0.236767	6.256780	314	(276,64)
0.199838	6.993219	320	(264,53)
0.240471	6.189378	322	(491,350)
0.208906	6.800497	325	(55,55)
0.209623	6.785611	327	(110,37)
0.212241	6.731714	330	(498,387)
0.220783	6.560334	332	(498,405)
0.242269	6.157016	335	(498,420)
0.214945	6.676732	340	(497,448)
0.260119	5.848205	342	(482,497)
0.261709	5.821818	345	(88,24)
0.223944	6.498609	352	(315,39)
0.215164	6.672311	355	(195,5)
0.224186	6.493915	359	(132,2)
0.245921	6.092035	362	(19,29)
0.225309	6.472211	366	(46,14)
0.202239	6.941361	369	(442,110)
0.222411	6.528445	373	(19,18)
0.191905	7.169129	375	(292,5)
0.182204	7.394420	379	(466,124)
0.195432	7.090038	383	(373,35)
0.147986	8.297790	388	(9,5)
0.153535	8.137922	390	(447,85)
0.199375	7.003297	396	(507,152)
0.181613	7.408536	398	(503,142)
0.212010	6.736430	401	(509,146)
0.189395	7.226305	409	(481,95)
0.144048	8.414920	412	(401,19)
0.147068	8.324826	414	(403,17)
0.236654	6.258865	419	(411,17)
0.189213	7.230501	423	(404,7)
0.185106	7.325795	425	(501,94)
0.213633	6.703311	431	(437,21)
0.197757	7.038670	434	(470,47)
0.150388	8.227856	436	(506,83)
0.152557	8.165671	438	(437,13)
0.175730	7.551546	441	(499,67)
0.156098	8.066013	444	(443,9)
0.195111	7.097184	447	(498,56)
0.150776	8.216681	450	(448,6)
0.136793	8.639348	453	(492,41)
0.173075	7.617668	456	(469,15)
0.243449	6.135911	459	(498,39)
0.236590	6.260033	462	(496,32)
0.137732	8.609660	467	(482,13)
0.272384	5.648176	473	(482,5)
0.114592	9.408460	477	(492,8)
0.073528	11.335454	481	(495,5)
0.150431	8.226619	485	(501,5)
0.156400	8.057625	488	(501,2)
0.000000	0.000000	496	(511,0)

Nearest Laplacian sidelobe: ratio 0.278360, dbdown 5.553936 at distance 12
Largest Laplacian sidelobe: ratio 0.283943, dbdown 5.467686 at distance 122

.Image AQVIRI at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.375,358.875)
Max Laplacian Value is 624299 at location (169,359)
Smoothed (FFT) Maximum Laplacian Value is 936384.00 at (169.875,358.500)

Correlation Side Lobe Information, Maximum Value is 7.42262e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	624299	(169,359)
0.547623	2.615187	23	145227	(187,345)
0.355735	4.488738	55	111775	(224,362)
0.309568	5.092438	85	119028	(155,443)
0.384898	4.146538	93	129188	(164,452)
0.370683	4.309977	97	91336.5	(167,456)
0.315198	5.014159	105	63470	(265,402)
0.311007	5.072298	115	152485	(270,413)
0.281435	5.506217	126	92054.1	(52,312)
0.397280	4.009029	135	128007	(304,359)
0.465021	3.325278	151	140882	(244,490)
0.379384	4.209206	163	100875	(246,503)
0.348544	4.577421	168	73865.8	(297,468)
0.426045	3.705442	185	183195	(134,177)
0.350203	4.556796	195	84147.5	(353,295)
0.374330	4.267450	204	72752	(38,202)
0.319630	4.953530	211	61739.5	(363,277)
0.374777	4.717561	218	80698	(103,151)
0.297150	5.270250	227	99912.8	(96,144)
0.374381	4.266857	246	91750.5	(413,329)
0.405054	3.924871	264	94682.5	(180,99)
0.425160	3.714476	264	105824	(188,96)
0.348091	4.583070	275	104523	(385,189)
0.348790	4.574357	287	130063	(31,107)
0.356550	4.478793	295	123189	(25,101)
0.562078	2.502035	315	121698	(278,63)
0.340888	3.624218	352	148814	(488,508)
0.424767	3.718492	357	99298.8	(495,504)
0.307202	5.125762	367	0	(92,0)
0.242677	6.149709	377	133535	(293,3)
0.271273	5.665933	386	90264.8	(444,88)
0.244830	6.111356	401	72552	(504,139)
0.370237	4.315197	419	169891	(410,16)
0.297463	5.265671	431	129255	(467,48)
0.310257	5.082789	435	79096.8	(473,48)
0.093469	10.293343	454	72055.8	(448,1)
0.387016	4.122713	480	0	(488,0)

Nearest Corr sidelobe: ratio 0.547623, dBdown 2.615187 at distance 23
Largest Corr sidelobe: ratio 0.562078, dBdown 2.502035 at distance 315

Laplacian Side Lobe Information, Maximum Value is 624299

Side-Lobe-To-Peak-Ratio DBs-Down Distance	Location
1.000000	0.000000 0 (169,359)
0.251811	5.989256 12 (159,365)
0.255490	5.294571 14 (181,351)
0.293636	5.321901 23 (188,346)
0.260988	5.833799 26 (190,344)
0.246385	6.083866 31 (191,337)
0.185460	7.317503 38 (135,377)
0.247497	6.064301 43 (129,344)
0.186576	7.291442 46 (203,328)
0.279438	5.537151 50 (125,383)
0.207208	6.835931 54 (223,362)
0.189338	7.227620 57 (136,405)
0.239906	6.199590 60 (109,353)

7.199032	65	(141,418)
7.117410	67	(125,409)
5.792656	73	(187,288)
5.028507	76	(117,285)
6.321632	82	(115,421)
6.028069	87	(185,273)
6.173646	89	(186,272)
5.635170	93	(79,335)
6.040887	100	(174,459)
5.587881	102	(69,341)
5.707951	104	(69,386)
6.372443	108	(183,252)
6.153249	113	(280,339)
6.094137	115	(271,413)
5.943015	118	(170,477)
5.420528	123	(129,475)
5.779185	127	(74,275)
5.911576	132	(275,280)
4.831776	136	(186,224)
6.069388	142	(158,217)
5.976002	144	(147,217)
4.978271	149	(302,426)
5.849590	155	(22,407)
5.542002	159	(45,259)
5.881306	163	(15,413)
5.624539	165	(333,344)
5.651247	168	(201,194)
6.704536	174	(341,382)
6.640207	178	(274,503)
5.734730	182	(297,229)
6.574283	186	(23,464)
5.490070	190	(27,233)
5.078207	186	(133,177)
5.861109	195	(315,489)
6.286527	200	(251,177)
6.354253	205	(361,288)
5.324951	212	(209,151)
5.805152	216	(3,497)
6.377965	219	(131,143)
6.037029	224	(131,138)
4.999958	231	(177,128)
6.202275	236	(351,509)
5.188693	242	(63,141)
5.960723	249	(302,148)
6.266724	252	(259,124)
5.554300	257	(407,263)
5.904611	259	(270,121)
6.234627	264	(429,314)
6.583942	268	(429,295)
5.552465	276	(353,153)
6.489030	283	(451,386)
6.719605	286	(31,108)
5.147552	290	(457,394)
6.286871	294	(305,98)
5.417600	296	(360,133)
5.374173	302	(315,95)
6.224174	306	(475,343)
5.760511	312	(60,67)
5.462165	316	(472,211)
6.336007	320	(427,170)
6.321381	322	(491,349)
5.753763	324	(474,249)
6.167272	327	(110,37)

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0.251483	5.994916	330	(259,41)
0.231946	6.346136	335	(9,65)
0.23806	6.232486	340	(113,24)
0.27113	5.668168	343	(483,498)
0.270534	5.677819	345	(90,23)
0.237737	6.239025	348	(498,473)
0.256975	5.901097	350	(505,260)
0.291541	5.353005	353	(493,218)
0.244548	6.116363	356	(358,57)
0.298855	5.245394	360	(504,491)
0.237268	6.247606	364	(48,16)
0.217639	6.622639	369	(442,110)
0.251624	5.992471	373	(19,18)
0.230947	6.364884	376	(292,4)
0.224110	6.495396	378	(381,46)
0.227836	6.423768	381	(372,37)
0.195487	7.088612	387	(443,86)
0.232003	6.345058	389	(473,116)
0.219602	6.583638	392	(379,28)
0.198702	7.017969	395	(507,154)
0.200063	6.988342	398	(398,34)
0.282629	5.487839	401	(351,2)
0.268654	5.708065	403	(491,117)
0.222419	6.528280	405	(479,98)
0.231899	6.347002	415	(435,41)
0.294152	5.314279	419	(411,17)
0.164980	7.825698	425	(407,7)
0.262855	5.802834	429	(466,49)
0.203089	6.923126	435	(437,16)
0.215595	6.663609	438	(437,13)
0.196870	7.058205	441	(484,51)
0.205007	6.882320	447	(469,27)
0.169990	7.695775	453	(491,41)
0.205139	6.879510	456	(469,15)
0.324962	4.881680	459	(498,39)
0.186232	7.299448	463	(497,32)
0.176007	7.544707	465	(475,9)
0.270057	5.685440	469	(489,16)
0.349389	4.566913	473	(483,5)
0.063670	11.960661	479	(488,2)
0.221428	6.547683	486	(509,12)
0.000000	0.000000	496	(511,0)

Nearest Laplacian sidelobe: ratio 0.251811, dBdown 5.989256 at distance 12
 Largest Laplacian sidelobe: ratio 0.349389, dBdown 4.566913 at distance 473

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12:42:32

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Image AQVIRL at compression 116.0:1 against window W1.
Window contains 0.0% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.500,359.375)
Max Laplacian Value is 446963 at location (169,360)
Laplacian pixel error is (0,1).
Smoothed (FFT) Maximum Laplacian Value is 801248.00 at (169.750,359.875)

Correlation Side Lobe Information, Maximum Value is 6.93581e+06

Side-Lobe-To-Peak-Ratio DBS-Down Distance Laplacian Location

1.000000	0.000000	0	43910	(169,359)
0.565147	2.78384	23	91632	(186,344)
0.289153	5.388720	49	75453.4	(136,323)
0.336405	4.731382	55	89308.8	(224,362)
0.317199	4.986681	83	72733.3	(155,441)
0.401374	3.964513	91	146749	(163,450)
0.393973	4.045334	99	152689	(168,458)
0.361503	4.418883	112	113203	(269,410)
0.332005	4.788556	125	97526.3	(52,314)
0.372457	4.289237	135	80297.5	(304,360)
0.530617	2.752188	152	131731	(244,491)
0.415335	3.816016	166	97792.3	(247,506)
0.405292	3.922325	185	146562	(349,316)
0.368182	4.339375	198	53269.5	(356,293)
0.374084	4.270311	204	58393.3	(359,291)
0.375221	4.257126	204	59548.5	(38,202)
0.350285	4.555791	211	51006.5	(363,277)
0.345154	4.619876	216	39598.8	(366,271)
0.356969	4.473698	223	48651	(99,147)
0.365944	4.365857	226	122176	(97,145)
0.436885	3.598313	246	93044.8	(413,330)
0.371420	4.013520	255	102658	(421,320)
0.433323	3.631880	261	85524	(180,98)
0.448278	3.484526	266	80887.3	(188,94)
0.420382	3.733557	291	73342.8	(28,104)
0.425306	3.712985	295	98069.8	(25,102)
0.612113	2.131682	314	109447	(278,64)
0.371791	4.297016	333	117456	(497,414)
0.411029	3.861276	353	104659	(488,509)
0.413034	3.840147	357	56414.5	(496,501)
0.324707	4.885083	367	0	(247,0)
0.248539	6.046054	372	75267.3	(440,104)
0.279128	5.541973	379	84016.3	(298,3)
0.255062	5.93537	384	59698.9	(443,90)
0.322919	4.909071	408	90048.5	(405,26)
0.374280	4.268033	420	120117	(410,15)
0.318524	4.968581	435	102889	(476,51)
0.107900	9.669804	454	67492.9	(448,1)
0.391954	4.067651	480	0	(487,0)

Nearest Corr sidelobe: ratio 0.565147, dBdown 2.478384 at distance 23
Largest Corr sidelobe: ratio 0.612113, dBdown 2.131682 at distance 314

Laplacian Side Lobe Information, Maximum Value is 446963

Side-Lobe-To-Peak-Ratio DBS-Down Distance Laplacian Location

1.000000	0.000000	0	(169,360)
0.277185	5.572305	13	(162,349)
0.237177	6.249273	16	(181,350)
0.333465	4.769500	24	(188,345)
0.267575	5.725544	30	(191,339)
0.237202	6.248815	37	(173,323)
0.302664	5.190391	45	(141,325)
0.290169	5.373487	50	(179,311)
0.254105	5.949874	54	(223,363)
0.207441	6.831059	56	(225,362)

5.712674	61	(109,352)
5.737611	63	(159,422)
5.927179	65	(159,424)
5.072918	70	(165,430)
3.537281	74	(187,288)
3.848901	77	(187,285)
5.335638	81	(113,419)
4.411805	89	(163,449)
4.868745	93	(186,269)
4.664641	98	(168,460)
4.830173	100	(63,366)
6.306787	106	(270,411)
4.970517	113	(129,473)
4.622086	120	(59,305)
4.452973	123	(219,242)
4.368646	128	(275,280)
5.408419	133	(187,225)
3.927011	136	(302,429)
3.907348	140	(21,411)
3.618726	150	(333,345)
5.612661	157	(201,196)
3.749977	165	(201,194)
4.613218	167	(341,380)
4.579532	169	(338,409)
5.312054	173	(194,183)
5.783638	176	(307,480)
5.682358	179	(349,315)
5.179438	183	(27,234)
4.639407	186	(16,243)
3.43605	190	(251,177)
4.570932	193	(361,293)
5.244931	195	(214,170)
5.381780	201	(361,289)
5.005662	203	(209,151)
5.334832	205	(131,143)
5.727060	213	(289,163)
3.829832	213	(351,509)
4.843470	224	(393,273)
5.262807	224	(215,121)
4.525740	231	(258,126)
5.118582	235	(148,105)
5.093649	240	(235,109)
4.819322	243	(383,201)
5.851561	250	(353,152)
5.224749	256	(451,377)
5.414457	260	(457,393)
5.429373	267	(360,134)
4.888881	278	(314,96)
5.260606	283	(305,85)
4.100108	290	(61,69)
5.032057	296	(276,65)
5.284544	301	(277,61)
5.544214	307	(54,57)
4.930187	310	(127,37)
4.989020	314	(497,417)
5.118176	318	(9,66)
5.752100	324	(483,501)
5.780653	326	(498,474)
5.393987	331	(493,218)
5.028614	333	(254,9)
5.303450	335	
5.294887	335	
5.314151	344	
4.763880	344	
0.333897	354	
0.300963	354	
5.214862	354	
5.202179	354	
4.762302	361	

0.312768	5.047775	369	(445,115)
0.291760	5.349739	377	(299,6)
0.268359	5.712835	381	(299,2)
0.323036	4.907494	390	(473,116)
0.203272	6.919220	392	(379,29)
0.274821	5.609503	397	(507,152)
0.289732	5.380038	399	(503,142)
0.287810	5.408938	402	(491,120)
0.295009	5.301649	407	(479,96)
0.225595	6.466708	410	(470,81)
0.274874	5.608659	414	(439,46)
0.388447	4.106679	419	(435,36)
0.225527	6.468008	425	(413,12)
0.315031	5.016472	431	(466,48)
0.350710	4.550521	433	(437,20)
0.343352	4.642600	435	(437,17)
0.214353	6.688710	440	(498,68)
0.190086	7.210510	443	(467,32)
0.212327	6.729954	445	(447,12)
0.204904	6.884502	447	(469,28)
0.241811	6.165235	449	(497,53)
0.282109	5.495827	456	(469,17)
0.348919	4.572751	461	(498,37)
0.190575	7.199347	464	(475,11)
0.289356	5.385668	470	(483,10)
0.356886	4.474709	474	(483,5)
0.173865	7.597872	484	(495,2)
0.266721	5.739435	488	(509,10)
--0.000000	0.000000	497	(511,0)

Nearest Laplacian sidelobe: ratio 0.277185, dBdown 5.572305 at distance 13
Largest Laplacian sidelobe: ratio 0.442866, dBdown 3.537281 at distance 74

Image AOI/VI at compression 1.0:1 against window #2.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (334,442)
Location of max in compression is (334,442), sub-pixel is (334.000,442.000)
Max Laplacian Value is 3.09646e+06 at location (334,442)
Smoothed (FFT) Maximum Laplacian Value is 3667328.00 at (334.000,442.000)

Correlation Side Lobe Information, Maximum Value is 8.64767e+06		
Side-Lobe-To-Peak-Ratio	DBs-Down Distance	Laplacian Location
1.000000	0	3.09646e+06 (334,442)
0.393289	4.052879	203492 (345,465)
0.267094	5.733365	72906.5 (379,427)
0.267801	5.721879	151130 (380,426)
0.256016	5.917324	223592 (380,416)
0.420313	3.764269	95437 (263,434)
0.423623	3.730206	106482 (262,432)
0.416257	3.806383	76 (260,427)
0.416826	3.800447	114945 (258,423)
0.260703	5.838543	95 (268,511)
0.327926	4.842233	109 155372 (347,334)
0.290335	5.371006	123 60479 (359,322)
0.371385	4.301751	145 223031 (378,304)
0.321817	4.923308	154 125566 (383,296)
0.333546	4.768446	159 135016 (384,291)
0.363346	4.396733	167 97216.5 (389,284)
0.492144	3.079081	181 153902 (164,379)
0.418059	3.787625	197 216747 (403,257)
0.388999	4.100517	202 62339 (405,253)
0.310786	5.075381	214 86936.8 (400,238)
0.308140	5.112525	217 340987 (414,227)
0.275119	5.604787	229 91679 (424,496)
0.230152	6.379854	243 103214 (407,210)
0.353720	4.513398	262 182426 (176,233)
0.324155	4.892467	278 231883 (62,387)
0.260713	5.838368	285 231314 (57,373)
0.260780	6.844908	302 223468 (34,405)
0.292161	5.343784	315 174517 (475,160)
0.319085	4.960935	319 253096 (113,212)
0.411254	3.858894	339 162959 (104,193)
0.332721	4.779196	350 109433 (96,185)
0.331201	4.799079	352 91454.8 (94,184)
0.365008	4.376973	357 142963 (464,110)
0.371513	4.300258	360 107768 (467,107)
0.424796	3.718200	370 227429 (464,96)
0.429077	3.674652	374 121606 (463,91)
0.380758	4.193504	392 160586 (251,59)
0.348247	4.581123	402 155799 (239,51)
0.344599	4.626855	406 178611 (238,47)
0.337412	4.718393	411 115279 (241,21)
0.350995	4.546997	418 110125 (241,34)
0.403080	3.946087	431 285772 (241,21)
0.419598	3.771663	440 220723 (238,13)
0.214730	6.681078	460 195106 (498,12)
0.163538	7.863825	471 137612 (85,42)
0.153372	8.142532	480 193900 (44,60)
0.151205	8.204327	484 268971 (91,23)
0.227648	6.427364	490 0 (122,0)
0.170322	7.687293	495 131263 (89,12)
0.079263	11.009279	503 278763 (48,28)
0.035809	14.460051	517 273151 (57,6)
0.077655	11.098301	523 0 (55,0)
0.009885	20.050072	536 0 (0,23)
0.065444	11.841307	542 269938 (9,8)
0.045738	13.397227	552 0 (3,0)

Nearest Corr sidelobe: ratio 0.393289, dBdown 4.052879 at distance 25
Largest Cor sidelobe: ratio 0.492144, dBdown 3.079081 at distance 181

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Laplacian Side Lobe Information, Maximum Value is 3.09646e+06

Side-Lobe-To-Peak-Ratio	DBs-Down Distance	Location
1.000000	0	3.09646e+06 (334,442)
0.159192	7.980777	10 (331,432)
0.113394	9.454091	13 (337,455)
0.119312	9.233161	15 (330,428)
0.068293	11.656230	18 (329,425)
0.067202	11.726196	20 (349,455)
0.092848	10.322285	24 (327,419)
0.096708	10.145380	29 (307,452)
0.105743	9.757488	34 (311,467)
0.080753	10.928409	41 (298,422)
0.075359	11.228669	44 (316,482)
0.085118	10.699779	47 (296,415)
0.094314	10.254232	52 (302,483)
0.090460	10.435455	59 (305,493)
0.072782	11.379734	62 (284,406)
0.082376	10.841971	68 (308,505)
0.077159	11.126122	71 (311,509)
0.069244	11.596174	74 (402,471)
0.071618	11.449776	77 (376,506)
0.076830	11.144701	82 (404,485)
0.091131	10.403317	86 (271,501)
0.054707	12.619574	89 (262,494)
0.049181	13.082035	92 (361,354)
0.065157	11.860416	94 (257,496)
0.088226	11.660504	97 (256,499)
0.052977	12.759105	102 (374,348)
0.056520	12.477944	104 (399,361)
0.070318	11.529309	108 (403,359)
0.052292	12.815685	111 (232,486)
0.078556	11.048179	114 (428,506)
0.060304	12.196524	117 (234,502)
0.077476	11.108345	121 (386,333)
0.087518	10.579037	123 (229,506)
0.076309	11.174262	127 (455,480)
0.109751	9.595916	132 (455,495)
0.094255	10.256936	136 (467,471)
0.066671	11.760636	140 (469,479)
0.076830	11.144690	143 (466,498)
0.075989	11.192520	145 (465,503)
0.074670	11.268528	147 (471,494)
0.076272	11.176356	153 (484,414)
0.064106	11.931047	156 (484,401)
0.074420	11.283120	159 (275,294)
0.077660	11.098027	164 (485,507)
0.077772	11.091775	171 (193,346)
0.073325	11.347501	173 (450,313)
0.067490	11.707632	175 (499,500)
0.101730	9.925504	178 (260,479)
0.103252	9.860999	182 (152,451)
0.088654	10.523011	184 (162,376)
0.102771	9.881286	188 (147,464)
0.106767	9.715613	191 (143,452)
0.090491	10.433926	193 (505,353)
0.099049	10.041483	197 (506,346)
0.095841	10.184486	200 (134,441)
0.103099	9.867458	203 (137,492)
0.096326	10.162567	207 (152,344)
0.087118	10.598909	210 (124,448)
0.107113	9.701575	215 (125,492)

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0.110121	9.581281	217	(124, 496)
0.092893	10.320174	221	(499, 295)
0.084576	10.727542	223	(281, 225)
0.113753	9.440383	226	(246, 234)
0.093862	10.275117	233	(101, 455)
0.088819	10.514945	236	(244, 224)
0.074870	11.256908	240	(95, 464)
0.087394	10.585175	245	(91, 474)
0.100799	9.965443	249	(448, 221)
0.116997	9.318235	252	(212, 221)
0.092654	10.331352	254	(211, 220)
0.092176	10.353816	258	(448, 211)
0.077434	11.110690	261	(175, 235)
0.087390	10.317511	264	(174, 232)
0.092950	10.279554	270	(177, 222)
0.093766	10.477044	272	(63, 459)
0.089597	10.477044	272	(149, 239)
0.084691	11.721621	275	(72, 351)
0.075318	11.231037	277	(71, 349)
0.092260	10.319844	279	(147, 232)
0.098867	10.049482	281	(57, 372)
0.089046	10.503861	286	(221, 176)
0.089211	10.475804	289	(188, 186)
0.096363	10.160910	295	(210, 171)
0.096359	10.161074	298	(34, 404)
0.084148	10.749583	302	(242, 152)
0.075774	11.204781	304	(256, 146)
0.074914	11.254373	306	(137, 202)
0.103911	9.833397	310	(42, 329)
0.096316	10.163005	313	(133, 200)
0.082189	10.851853	315	(97, 232)
0.086352	10.637254	317	(384, 127)
0.083648	10.775419	319	(124, 196)
0.102178	9.906423	323	(115, 199)
0.095922	10.180796	327	(229, 130)
0.087358	10.586991	329	(24, 325)
0.105874	9.752088	331	(397, 114)
0.095278	10.210075	334	(32, 290)
0.086593	10.625156	338	(328, 98)
0.091273	10.396598	344	(150, 147)
0.092696	10.329410	348	(50, 232)
0.074675	11.268271	353	(15, 283)
0.095960	10.179100	356	(41, 230)
0.094421	10.249324	362	(19, 255)
0.093993	10.269057	366	(7, 267)
0.076346	11.172147	371	(5, 263)
0.088102	10.550133	375	(131, 121)
0.083148	10.801474	380	(333, 58)
0.093571	10.288608	384	(317, 55)
0.092540	10.336720	387	(139, 105)
0.082440	10.838633	389	(484, 81)
0.083901	10.762350	391	(325, 46)
0.083406	10.788002	393	(127, 102)
0.077094	11.129799	396	(10, 204)
0.081612	10.882446	398	(114, 101)
0.074611	11.271969	402	(109, 100)
0.083672	10.774203	406	(311, 29)
0.084821	10.714991	409	(32, 149)
0.090807	10.418787	414	(202, 37)
0.070468	11.520097	421	(248, 23)
0.098503	10.530431	426	(242, 22)
0.098886	10.048661	428	(311, 4)
0.103502	9.850498	430	
0.095871	10.183128	435	
0.080181	10.959274	439	

0.089077	10.502334	441	(311, 2)
0.094137	10.262412	444	(113, 57)
0.092994	10.315433	448	(228, 7)
0.084482	10.732347	450	(97, 59)
0.071747	11.441938	452	(509, 25)
0.079214	11.011973	455	(109, 47)
0.068976	11.612994	457	(57, 78)
0.091164	10.401769	459	(56, 77)
0.073252	11.351823	462	(109, 38)
0.065983	11.805676	465	(80, 53)
0.078412	11.056170	467	(78, 51)
0.064131	11.929323	470	(105, 32)
0.094046	10.266597	472	(157, 4)
0.091283	10.396097	479	(43, 61)
0.092953	10.317356	483	(81, 30)
0.092158	10.354686	486	(40, 55)
0.097979	10.088684	489	(21, 66)
0.092386	10.343928	491	(93, 14)
0.085407	10.685081	495	(88, 12)
0.102796	9.880219	499	(97, 3)
0.067420	11.712114	503	(48, 28)
0.063361	11.981814	505	(56, 21)
0.051802	12.856571	508	(61, 13)
0.100962	9.958411	515	(57, 8)
0.088214	10.544628	517	(57, 6)
0.072376	11.404075	520	(56, 2)
0.017820	17.490952	523	(52, 2)
0.087176	10.596021	542	(9, 8)
0.035505	14.497126	546	(17, 5)
0.013859	18.582562	549	(4, 3)
0.040360	13.940496	551	(3, 2)
0.000000	0.000000	554	(0, 0)

Nearest Laplacian sidelobe: ratio 0.159192, dBdown 7.980777 at distance 10
Largest Laplacian sidelobe: ratio 0.159192, dBdown 7.980777 at distance 10

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alw2_014.rep

1

Image AQVIRL at compression 14.0:1 against window W2.
-Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (334,442)
Location of max in compression is (334,442), sub-pixel is (334.125,442.000)
Max Laplacian Value is 1.67792e+06 at location (334,442)
Smoothed (FFT) Maximum Laplacian Value is 2014592.00 at (334.625,442.625)

Correlation Side Lobe Information, Maximum Value is 8.13935e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	1.67792e+06	(334, 442)
0.402183	3.955765	25	44738.3	(345, 464)
0.276680	5.580227	40	93472	(359, 473)
0.286476	5.429120	49	138217	(380, 426)
0.269248	5.698473	53	185267	(380, 416)
0.268143	5.716332	55	106406	(379, 411)
0.438742	3.577905	71	106933	(263, 434)
0.441927	3.546490	73	88282.3	(262, 432)
0.433750	3.627608	76	90346.5	(260, 427)
0.433266	3.632452	78	55575.8	(258, 423)
0.435521	3.609907	80	102163	(257, 421)
0.267253	5.730776	95	0	(268, 511)
0.347167	4.594621	109	144911	(347, 334)
0.306278	5.138845	122	80299.5	(359, 323)
0.352440	4.529149	135	246890	(468, 462)
0.385644	4.138140	145	145996	(378, 304)
0.347268	4.593346	155	77370.5	(383, 295)
0.354185	4.507697	159	61792	(384, 291)
0.385548	4.139213	167	96017	(389, 284)
0.521451	2.827868	181	152026	(164, 379)
0.436317	3.601983	197	159386	(403, 257)
0.410606	3.865744	202	75134.8	(406, 253)
0.328571	4.333711	214	36599.3	(402, 239)
0.291557	5.352759	229	58785	(414, 227)
0.246597	6.080125	243	126889	(407, 210)
0.359998	4.436997	262	180216	(176, 233)
0.303760	5.174696	271	300139	(175, 223)
0.336627	4.728511	278	153392	(62, 387)
0.272653	5.643892	285	148516	(57, 373)
0.204861	6.885400	297	61490.5	(430, 161)
0.226391	6.451410	305	133974	(44, 349)
0.300030	5.228356	315	123858	(475, 160)
0.343072	4.646148	319	214976	(112, 213)
0.433805	3.627054	338	160464	(105, 194)
0.355792	4.488037	351	76846.8	(96, 184)
0.372623	4.287300	357	105690	(464, 110)
0.387186	4.120807	361	81945.8	(467, 106)
0.440764	3.557936	370	186566	(464, 96)
0.446257	3.504153	374	127906	(463, 91)
0.467629	3.490822	378	91935.8	(463, 87)
0.416622	3.802581	392	230467	(251, 59)
0.372624	4.287287	397	101246	(246, 55)
0.368179	4.339410	402	87033.3	(240, 51)
0.356291	4.481948	411	81527.5	(241, 42)
0.376751	4.239454	418	111729	(241, 34)
0.420834	3.758887	432	162448	(240, 20)
0.439595	3.569472	440	222726	(238, 13)
0.230407	6.375040	460	176502	(498, 12)
0.181266	7.416828	471	136999	(85, 42)
0.158178	8.008552	478	154136	(45, 61)
0.152763	8.152763	485	178991	(91, 22)
0.223428	6.508622	490	0	(122, 0)
0.186278	7.298385	495	136959	(90, 11)
0.031060	15.077989	516	196746	(57, 7)
0.069131	11.603279	523	0	(55, 0)

0.007424 21.293527 536 0 (0.23)
0.071532 11.454976 542 190852 (9.8)
0.048621 13.131725 551 154329 (3.1)
Nearest Corr sidelobe: ratio 0.402183, dBdown 3.955765 at distance 25
Largest Corr sidelobe: ratio 0.521451, dBdown 2.827868 at distance 181

Laplacian Side Lobe Information, Maximum Value is 1.67792e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(334, 442)
0.222978	6.517380	6	(336, 448)
0.265974	5.751615	10	(331, 432)
0.171642	7.653752	14	(338, 455)
0.090682	10.424770	18	(339, 459)
0.095376	10.205601	21	(328, 422)
0.144823	8.391623	24	(328, 419)
0.148402	8.285604	29	(307, 452)
0.137411	8.619791	31	(309, 460)
0.157999	8.013451	33	(312, 467)
0.129908	8.863643	41	(298, 422)
0.135855	8.669232	44	(316, 482)
0.114484	9.412563	48	(320, 488)
0.129410	8.880328	51	(301, 481)
0.120294	9.197569	54	(362, 488)
0.091228	10.398719	57	(316, 388)
0.104523	9.807897	59	(307, 495)
0.106215	9.738124	61	(284, 407)
0.121581	9.151338	66	(269, 451)
0.146554	8.340030	69	(265, 435)
0.137037	8.631634	71	(264, 431)
0.092659	10.331122	75	(261, 425)
0.089738	10.470223	77	(377, 506)
0.108658	9.639365	81	(294, 372)
0.098854	10.050051	84	(264, 489)
0.107836	9.672355	86	(271, 500)
0.076867	11.142585	90	(271, 506)
0.099199	10.034906	94	(257, 496)
0.127077	8.959316	97	(395, 366)
0.096862	10.138462	101	(348, 342)
0.099925	10.003244	104	(316, 340)
0.107926	9.668747	108	(403, 359)
0.085355	10.687734	113	(427, 506)
0.100047	9.997978	117	(394, 342)
0.118676	9.256375	120	(225, 493)
0.122757	9.109524	125	(455, 475)
0.113588	9.446663	128	(451, 495)
0.137784	8.608004	133	(466, 454)
0.188059	7.257067	136	(469, 461)
0.106223	9.737813	140	(469, 478)
0.128905	8.897294	144	(467, 498)
0.128128	8.923575	151	(429, 324)
0.115826	9.361937	153	(181, 449)
0.092496	10.338790	157	(486, 403)
0.115856	9.360821	162	(495, 463)
0.133259	8.753027	164	(191, 361)
0.130294	8.850760	172	(260, 287)
0.109717	9.597262	175	(411, 285)
0.129144	8.889250	177	(163, 396)
0.152402	8.170107	181	(154, 458)
0.141809	8.482965	184	(162, 376)
0.158506	7.999549	188	(147, 463)
0.126852	8.967013	190	(144, 434)
0.136900	8.635981	194	(463, 297)
0.139993	8.538924	196	(505, 346)
0.157625	8.023743	200	(134, 441)

a1w2_014.rep

0.133480	8.745834	204	(460,281)	0.125858	9.001181	421	(32,149)
0.144100	8.413356	207	(128,462)	0.116162	9.349364	423	(229,32)
0.134857	8.701249	209	(437,260)	0.131190	8.820989	426	(202,37)
0.181047	7.422080	217	(124,496)	0.141076	8.505457	431	(29,137)
0.124368	9.052901	223	(247,237)	0.136941	8.634678	434	(267,13)
0.172183	7.640097	228	(245,232)	0.132739	8.770004	440	(238,13)
0.139086	8.567179	232	(102,456)	0.145775	8.363172	444	(439,11)
0.141662	8.487471	234	(100,454)	0.160386	7.948333	447	(229,7)
0.133034	8.760387	237	(186,257)	0.146513	8.341245	450	(97,59)
0.133938	8.730948	242	(175,259)	0.120637	9.185212	454	(109,48)
0.122605	9.114936	245	(91,474)	0.125670	9.007693	459	(56,77)
0.135739	8.672950	249	(115,323)	0.120527	9.189157	462	(499,11)
0.16769	8.333642	252	(212,221)	0.103849	9.835993	464	(108,37)
0.170331	7.687076	254	(211,220)	0.098152	10.081001	466	(79,52)
0.134957	8.698044	258	(81,493)	0.114660	9.405887	468	(48,71)
0.180131	7.444112	263	(175,232)	0.115641	9.368895	470	(105,32)
0.130441	8.845861	267	(175,228)	0.122532	9.117498	473	(156,4)
0.178876	7.474479	271	(175,223)	0.154773	8.103039	480	(43,60)
0.119056	9.242493	275	(66,382)	0.131567	8.808543	486	(40,55)
0.163892	8.434637	279	(71,349)	0.153402	8.141701	489	(21,66)
0.143396	7.854430	281	(147,232)	0.129754	8.868804	494	(38,47)
0.138427	8.587779	284	(59,372)	0.108767	9.635037	497	(98,5)
0.110033	9.584771	287	(168,208)	0.115578	9.371238	499	(85,10)
0.126667	8.973355	289	(52,504)	0.141175	8.502424	502	(86,5)
0.135280	8.687670	292	(57,349)	0.120267	9.198520	504	(57,21)
0.168690	7.729119	294	(47,507)	0.091401	10.390499	508	(61,14)
0.142494	8.462042	298	(260,153)	0.117256	9.308642	516	(57,7)
0.126470	8.980122	300	(48,352)	0.077690	11.096341	520	(56,2)
0.154535	8.109733	302	(34,404)	0.113744	9.440732	542	(9,8)
0.125910	9.002855	306	(256,146)	0.059572	12.249566	551	(3,2)
0.145016	8.385848	310	(493,176)	0.000000	0.000000	554	(0,0)
0.135438	8.682609	313	(42,329)				
0.131788	8.601243	315	(60,287)				
0.141114	8.504288	317	(158,178)				
0.145	8.365168	321	(198,151)				
0.1301	8.856475	324	(292,121)				
0.130849	8.832295	327	(115,199)				
0.136457	8.650042	329	(6,423)				
0.132401	8.781079	333	(380,112)				
0.125983	8.996889	337	(217,126)				
0.112517	9.487830	341	(210,124)				
0.156847	8.045237	343	(328,99)				
0.143183	8.441083	348	(279,98)				
0.106368	9.731901	353	(35,255)				
0.121454	9.155875	356	(15,283)				
0.137197	8.626541	361	(250,91)				
0.139773	8.545755	365	(317,77)				
0.133792	8.735702	367	(499,114)				
0.117225	9.309814	372	(34,222)				
0.137632	8.612799	375	(5,262)				
0.114590	9.408542	378	(207,86)				
0.109375	9.610803	382	(2,254)				
0.120390	9.194099	386	(305,57)				
0.127032	8.960884	388	(298,56)				
0.137353	8.621621	392	(251,59)				
0.138033	8.600167	395	(451,65)				
0.123178	9.094660	397	(281,49)				
0.133480	8.745837	402	(10,204)				
0.129682	8.871204	404	(279,42)				
0.111618	9.522662	407	(323,35)				
0.117441	9.301799	410	(249,41)				
0.117616	9.295330	412	(454,48)				
0.139615	8.550681	414	(311,29)				
0.111030	9.545609	416	(497,59)				

Nearest Laplacian sidelobe: ratio 0.222978, dbdown 6.517380 at distance 6
Largest Laplacian sidelobe: ratio 0.265974, dbdown 5.751615 at distance 10

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Image AQVIR1 at compression 23.0:1 against window W2.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (334,442)
Location of max in compression is (334,442), sub-pixel is (334.250,442.000)
Max Laplacian Value is 1.29869e+06 at location (334,442)
Smoothed (FFT) Maximum Laplacian Value is 1786464.00 at (334.750,442.625)

Correlation Side Lobe Information, Maximum Value is 7.5386e+06	Side-Lobe-To-Peak-Ratio	DBS-Down Distance	Laplacian Location
1.000000	0.000000	0	(334,442)
0.422201	3.744809	26	63452.3 (347,464)
0.315713	5.007074	46	89590.8 (378,427)
0.299993	5.228887	53	145834 (380,416)
0.296531	5.279292	55	79806.3 (379,411)
0.489884	3.099068	71	142762 (263,434)
0.491522	3.084574	73	136339 (262,434)
0.484827	3.144133	76	108110 (260,427)
0.484901	3.143467	78	79764.8 (258,423)
0.481930	3.170164	81	72059.5 (256,419)
0.304938	5.157883	95	0 (269,511)
0.379936	4.202897	108	144517 (347,335)
0.376433	4.243122	111	62426 (346,332)
0.335593	4.741877	123	80017 (359,322)
0.387287	4.119672	135	136057 (369,312)
0.417594	3.792458	145	142932 (378,304)
0.429159	3.673823	168	93098.8 (390,284)
0.547579	2.615535	181	129655 (164,379)
0.483119	3.159456	197	225390 (403,257)
0.357826	4.463276	214	52708.8 (400,238)
0.318003	4.975690	228	69418.3 (414,228)
0.319608	4.953822	230	135892 (429,232)
0.269937	5.687374	243	172392 (407,210)
0.375837	4.250007	262	186810 (176,233)
0.323293	4.904043	271	235622 (175,223)
0.347166	4.594630	278	178846 (62,387)
0.291915	5.347430	286	238849 (57,372)
0.229039	6.400906	298	79045.1 (432,161)
0.344295	4.630691	315	162830 (475,160)
0.370412	4.313153	319	209420 (112,213)
0.462478	3.349089	338	135808 (105,193)
0.386230	4.131539	352	38039.5 (95,184)
0.434745	3.617657	358	52234 (465,109)
0.497427	3.032706	372	107392 (462,93)
0.495291	3.051399	375	107061 (463,90)
0.452794	3.440394	391	138955 (251,60)
0.407135	3.902620	402	98761 (240,51)
0.399474	3.985117	411	81263.3 (240,42)
0.421728	3.749676	417	146046 (242,35)
0.460962	3.363346	431	153759 (240,21)
0.455552	3.414624	434	102425 (239,19)
0.473818	3.243882	440	154066 (238,13)
0.246350	6.084470	459	158004 (498,13)
0.207023	6.839805	465	129338 (91,46)
0.203491	6.914556	470	109453 (86,43)
0.168886	7.724055	478	197167 (45,61)
0.171822	7.649207	485	244421 (44,60)
0.173052	7.618238	480	166422 (91,22)
0.267392	5.728513	490	0 (122,0)
0.203337	6.917829	494	128222 (90,12)
0.024059	16.187280	514	151211 (58,8)
0.025331	15.963507	516	142419 (57,7)
0.074077	11.303148	522	0 (56,0)
0.067905	11.680968	543	0 (0,14)
0.071702	11.444661	553	0 (2,0)

Nearest Corr sidelobe: ratio 0.422201, dBdown 3.744809 at distance 26
Largest Corr sidelobe: ratio 0.547579, dBdown 2.615535 at distance 181

Laplacian Side Lobe Information, Maximum Value is 1.29869e+06

Side-Lobe-To-Peak-Ratio	DBS-Down Distance	Location
1.000000	0	(334,442)
0.281864	5.499598	7 (336,449)
0.314778	5.019951	10 (331,432)
0.117097	9.314537	18 (329,425)
0.128620	8.968121	20 (349,455)
0.186966	7.282373	24 (327,419)
0.145963	8.357559	27 (352,422)
0.207219	6.835701	29 (307,453)
0.185964	7.305708	32 (311,464)
0.159481	7.972899	40 (299,422)
0.144386	8.404764	44 (316,482)
0.156499	8.054883	46 (290,430)
0.160474	7.945944	52 (301,482)
0.152684	8.162057	54 (362,488)
0.128006	8.927691	58 (304,492)
0.145815	8.361982	62 (301,390)
0.141246	8.500239	67 (339,509)
0.135629	8.676488	69 (265,435)
0.136930	8.635020	71 (374,501)
0.112127	9.502895	75 (373,506)
0.121070	9.169620	78 (408,467)
0.132101	8.790946	81 (293,372)
0.137113	8.629209	85 (263,489)
0.127722	8.937335	91 (269,506)
0.145102	8.383276	95 (256,496)
0.099793	10.008993	102 (366,345)
0.123242	9.092422	108 (403,359)
0.125166	9.025150	112 (339,330)
0.141906	8.479990	115 (419,364)
0.138182	8.595488	123 (229,506)
0.136148	8.659885	126 (455,476)
0.137191	8.626743	129 (452,495)
0.161611	7.915286	132 (455,494)
0.173312	7.611708	135 (468,461)
0.127773	8.935624	139 (468,479)
0.130422	8.846496	144 (467,498)
0.144700	8.395307	147 (471,495)
0.159825	7.963551	152 (484,415)
0.14579	9.408938	160 (175,428)
0.154156	8.120405	164 (496,415)
0.131916	8.797010	168 (495,491)
0.139837	8.543765	173 (260,286)
0.175525	7.556607	179 (158,475)
0.164005	7.851428	181 (154,458)
0.184594	7.337824	185 (162,375)
0.162503	7.891390	188 (147,464)
0.151255	8.202902	191 (147,479)
0.145607	8.368186	194 (463,297)
0.173552	7.605692	197 (403,257)
0.178779	7.476837	199 (468,295)
0.165484	7.812434	206 (129,461)
0.155351	8.086868	209 (125,449)
0.201560	6.955956	215 (275,235)
0.242085	6.160315	217 (124,496)
0.148578	8.280444	223 (247,237)
0.196504	7.066290	228 (245,232)
0.146617	8.338163	232 (102,456)
0.153466	8.139885	239 (283,208)

a1w2_023.rep

0.148200	9.291527	242	(96,487)	0.182646	7.383894	468	(48,71)
0.160732	7.938981	244	(92,473)	0.166754	7.779233	474	(156,3)
0.164346	7.842413	249	(91,495)	0.188206	7.253658	480	(44,60)
0.210950	6.758201	252	(212,221)	0.158193	8.008138	484	(91,23)
0.233027	6.325939	254	(211,220)	0.134308	8.718997	487	(43,51)
0.145445	8.373011	257	(177,239)	0.190661	7.197377	491	(64,32)
0.186629	7.290214	263	(175,232)	0.150110	8.235906	494	(38,47)
0.212943	6.717362	271	(176,222)	0.154598	8.107950	496	(90,10)
0.172840	7.623547	274	(174,220)	0.138045	8.599808	502	(86,5)
0.183846	7.355448	276	(64,497)	0.141632	8.488390	504	(47,28)
0.226425	6.450761	281	(148,232)	0.086141	10.647922	507	(54,19)
0.183915	7.353818	286	(57,372)	0.116434	9.339206	514	(58,8)
0.174105	7.591887	289	(169,205)	0.109664	9.599352	516	(57,7)
0.179577	7.457504	295	(46,507)	0.119936	9.210511	520	(56,2)
0.181291	7.416226	297	(289,148)	0.114561	9.409645	542	(9,8)
0.143403	8.434416	303	(46,348)	0.074694	11.267155	551	(3,2)
0.161332	7.922789	308	(41,346)	0.000000	0.000000	554	(0,0)
0.182645	7.383922	310	(493,176)	Nearest Laplacian sidelobe: ratio 0.281864, dBdown 5.499598 at distance 7			
0.176205	7.539812	313	(136,200)	Largest Laplacian sidelobe: ratio 0.314778, dBdown 5.019951 at distance 10			
0.185046	7.823948	317	(158,178)				
0.180010	7.447028	320	(157,176)				
0.188364	7.250020	324	(292,121)				
0.156652	8.050637	327	(115,199)				
0.168124	7.743714	331	(24,325)				
0.134938	8.698666	335	(130,176)				
0.144593	8.398515	338	(279,109)				
0.157792	8.019148	341	(47,257)				
0.156861	8.044837	344	(2,352)				
0.145253	8.378746	346	(197,124)				
0.177339	7.511967	349	(432,107)				
0.133270	8.752681	352	(34,258)				
0.170605	7.680071	355	(462,111)				
0.145230	8.379441	358	(48,227)				
0.188518	7.246466	362	(41,229)				
0.176825	7.524561	366	(18,257)				
0.144647	8.396894	372	(34,222)				
0.156333	8.059491	376	(48,198)				
0.153758	8.131637	379	(3,257)				
0.157330	8.031882	382	(2,254)				
0.132642	8.773190	384	(440,73)				
0.147528	8.311246	386	(117,123)				
0.126079	8.993567	388	(7,234)				
0.129477	8.878078	390	(2,238)				
0.176956	7.521338	393	(451,67)				
0.137416	8.619630	397	(7,216)				
0.147266	8.318978	400	(497,77)				
0.169174	7.716666	403	(10,203)				
0.130971	8.828249	407	(322,35)				
0.161844	7.909042	409	(109,101)				
0.159614	7.969295	412	(108,98)				
0.137539	8.615749	416	(243,36)				
0.114030	9.429823	418	(496,57)				
0.155008	8.096458	421	(32,149)				
0.169269	7.714223	426	(201,37)				
0.182278	7.392653	430	(241,22)				
0.148902	8.270998	435	(267,12)				
0.142503	8.461745	438	(184,30)				
0.173767	7.600320	443	(114,57)				
0.155925	8.070831	447	(229,7)				
0.166441	7.787395	450	(437,4)				
0.141841	8.481989	453	(187,13)				
0.145002	8.386275	458	(498,14)				
0.126054	8.994450	462	(495,10)				
0.163381	7.867994	465	(9,109)				

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12:47:14

alw2_033.rep

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Image AQVIR1 at compression 33.0:1 against Window W2.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (334,442)

Location of max in compression is (334,442), sub-pixel is (334.125,442.125)

Max Laplacian Value is 1.08216e+06 at location (334,442)

Smoothed (FFT) Maximum Laplacian Value is 1699376.00 at (334,750,442,750)

Correlation Side Lobe Information, Maximum Value is 7.74966e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000 0.000000 0 1.08216e+06 (334,442)

0.422198 3.744843 26 95999.8 (347,465)

0.303532 5.177955 39 87015.5 (358,473)

0.304114 5.169630 41 98661.3 (359,474)

0.285404 5.445401 46 82802.3 (378,428)

0.271241 5.666445 54 140714 (380,414)

0.457111 3.399785 73 108180 (262,433)

0.448478 3.482591 78 73854.5 (258,423)

0.446833 3.498552 80 51697.3 (257,422)

0.284057 5.465951 95 0 (269,511)

0.357476 4.467537 110 93622.8 (346,333)

0.317740 4.979282 122 54007.5 (359,323)

0.372172 4.292560 134 130522 (369,313)

0.424332 3.722937 145 160494 (378,304)

0.371022 4.305999 159 75252.8 (384,291)

0.385645 4.138123 166 80443.5 (388,285)

0.558070 2.533110 182 169996 (164,378)

0.473749 3.244515 197 188184 (403,258)

0.345934 4.610068 215 82112.3 (400,237)

0.317813 4.978285 222 89800.3 (414,235)

0.319942 4.949284 229 130819 (413,227)

0.271918 5.65614 244 131003 (407,209)

0.399626 3.983463 262 222695 (176,233)

0.319843 4.950632 278 113946 (62,381)

0.285639 5.41825 285 169837 (57,373)

0.218837 6.598794 296 82678.6 (431,162)

0.241234 6.175607 305 134331 (44,348)

0.340343 4.680837 315 138707 (475,160)

0.379863 4.203734 319 195251 (112,213)

0.456432 3.406240 338 105873 (105,193)

0.363855 4.390719 351 29697 (96,184)

0.425219 3.713875 358 86608.8 (465,109)

0.484967 3.142876 377 101352 (463,88)

0.412694 3.843716 391 114459 (251,60)

0.370211 4.315512 402 63783 (239,51)

0.352927 4.523149 412 55794 (240,41)

0.419492 3.772765 430 203054 (241,22)

0.433902 3.626079 440 152374 (238,13)

0.241353 6.173479 460 183706 (498,12)

0.204959 6.883332 470 111427 (86,43)

0.169189 7.716269 480 224740 (44,60)

0.168415 7.736192 484 219432 (91,23)

0.238222 6.230178 490 0 (122,0)

0.211241 6.752211 494 178903 (90,12)

0.088658 10.522822 503 89419.8 (49,28)

0.035433 14.505900 516 154336 (57,7)

0.077820 11.089096 523 0 (55,0)

0.083906 10.762089 543 0 (0,14)

0.066560 11.767864 552 104908 (2,1)

Nearest Corr sidelobe: ratio 0.422198, dBdown 3.744843 at distance 26

Largest Corr sidelobe: ratio 0.558070, dBdown 2.533110 at distance 182

Laplacian Side Lobe Information, Maximum Value is 1.08216e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Location

1.000000 0.000000 0 (334,442)

4.972219 7 (336,449)

4.461742 10 (331,432)

6.696683 24 (327,419)

6.249161 29 (307,453)

6.645667 33 (311,465)

7.429681 35 (312,469)

7.101474 41 (299,421)

7.405339 45 (290,431)

7.023564 52 (301,482)

7.992021 56 (304,489)

8.139041 59 (284,411)

7.841552 62 (301,390)

7.949071 67 (339,509)

8.210908 70 (272,474)

8.066951 72 (309,509)

8.241030 75 (373,506)

9.091935 78 (408,466)

8.150580 81 (261,478)

8.039095 86 (263,491)

8.276065 93 (269,509)

7.740754 95 (256,497)

8.880400 99 (250,390)

9.303692 101 (259,509)

10.413011 104 (274,357)

8.407898 107 (414,371)

9.028234 110 (271,352)

8.572209 112 (339,330)

8.437181 116 (419,363)

8.077453 122 (229,504)

8.199167 127 (451,491)

7.843724 131 (455,493)

6.835978 136 (469,462)

7.971927 140 (468,482)

8.044373 147 (471,495)

7.653702 152 (484,416)

8.516093 155 (179,441)

8.604321 157 (486,403)

8.161637 161 (275,292)

7.627929 163 (495,414)

7.277868 172 (260,287)

7.043250 176 (379,272)

7.385998 181 (154,458)

6.547285 183 (163,377)

6.450504 185 (162,375)

7.151372 188 (147,465)

7.597074 197 (403,258)

7.483768 200 (134,441)

8.206960 203 (137,491)

7.146496 206 (129,461)

7.970122 209 (437,260)

8.491111 212 (213,268)

5.782640 217 (124,496)

6.840525 224 (247,236)

6.392622 227 (246,233)

7.728434 233 (101,455)

8.590280 236 (185,259)

7.865208 240 (96,475)

7.621442 242 (96,486)

6.926802 244 (92,473)

8.123335 249 (90,492)

7.644021 254 (212,219)

6.812875 256 (211,218)

7.333169 258 (81,491)

6.126191 263 (175,233)

0.187585	7.268010	269	(176, 224)
0.192132	7.164014	271	(176, 222)
0.186630	7.290174	273	(67, 384)
0.218598	6.603542	276	(64, 497)
0.237011	6.252319	281	(148, 232)
0.172780	7.625065	286	(57, 371)
0.170562	7.681190	289	(169, 205)
0.155190	8.091364	291	(322, 151)
0.209445	6.789291	294	(47, 507)
0.168126	7.743646	300	(48, 353)
0.151454	8.197182	303	(369, 141)
0.234686	6.295134	310	(254, 143)
0.203383	6.916858	315	(293, 130)
0.206724	6.846086	318	(157, 178)
0.216308	6.649274	324	(292, 121)
0.162617	7.888342	328	(81, 234)
0.190928	7.191293	330	(438, 129)
0.189773	7.217654	333	(381, 112)
0.160463	7.946250	340	(435, 117)
0.177828	7.499998	344	(329, 98)
0.158118	8.010183	348	(368, 96)
0.144702	8.395260	354	(436, 103)
0.189943	7.213759	357	(48, 228)
0.179253	7.465340	362	(41, 229)
0.192785	7.149266	367	(18, 256)
0.163128	7.874704	369	(498, 112)
0.161309	7.923426	372	(7, 265)
0.191342	7.181905	376	(49, 197)
0.190363	7.204165	382	(2, 254)
0.160855	7.935651	386	(117, 123)
0.153616	8.135622	388	(7, 234)
0.158397	8.002543	390	(329, 52)
0.181241	7.417426	394	(451, 66)
0.160888	7.934767	399	(496, 77)
0.177665	7.503980	403	(10, 202)
0.157925	8.015493	407	(322, 35)
0.162746	7.884902	409	(109, 101)
0.158155	8.009183	414	(405, 34)
0.151769	8.188179	416	(497, 59)
0.187494	7.270126	426	(201, 37)
0.198001	7.033318	432	(241, 20)
0.165374	7.815325	438	(184, 31)
0.155909	8.071290	440	(311, 3)
0.202183	6.942564	443	(114, 57)
0.235196	6.285694	451	(437, 3)
0.169759	7.701673	460	(498, 12)
0.176392	7.535203	462	(499, 11)
0.173129	7.616309	468	(48, 71)
0.127440	8.946937	474	(75, 45)
0.131854	8.799063	476	(123, 15)
0.207678	6.826100	480	(44, 60)
0.202773	6.929894	484	(91, 23)
0.169182	7.716461	491	(65, 31)
0.214738	6.680907	495	(90, 11)
0.124737	9.040038	500	(97, 2)
0.149153	8.263684	502	(86, 5)
0.168133	7.743465	505	(56, 21)
0.114427	9.414708	507	(46, 25)
0.142619	8.458233	516	(57, 7)
0.161665	7.913835	520	(56, 2)
0.131324	8.816553	541	(13, 6)
0.110545	9.564610	551	(3, 2)
0.000000	0.000000	554	(0, 0)

Nearest Laplacian sidelobe: ratio 0.318257, dBdown 4.972219 at distance 7

9/30/16
12:48:11

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alw2_058.rep

Image AQVIR1 at compression 58.0:1 against window W2.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (334,442)

Location of max in compression is (334,442), sub-pixel is (334.250,442.250)

Max Laplacian Value is 685433 at location (334,442)

Smoothed (FFT) Maximum Laplacian Value is 1377088.00 at (334.750,442.875)

Correlation Side Lobe Information, Maximum Value is 7.27037e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	685433	(334,442)
0.462309	3.350675	26	78312.8	(347,465)
0.311752	5.061911	44	95447.8	(368,414)
0.298389	5.252178	48	72256.5	(379,426)
0.290618	5.366770	54	90610.3	(379,412)
0.518710	2.850755	74	145646	(261,431)
0.505953	2.958901	80	107103	(257,421)
0.317152	4.987330	95	0	(268,511)
0.392533	3.987522	110	103868	(346,333)
0.334269	4.759034	119	74422.5	(357,325)
0.413753	3.832591	134	56966.3	(371,313)
0.434256	3.625542	143	105006	(377,306)
0.417699	3.791371	169	67941	(391,283)
0.565733	2.473882	182	198124	(164,378)
0.493659	3.065734	197	113828	(403,258)
0.377391	4.232080	215	109012	(400,237)
0.345785	4.611937	222	93267.3	(415,235)
0.343780	4.637195	228	91508.5	(413,228)
0.409294	3.879642	262	233166	(176,233)
0.334953	4.750163	277	119525	(63,387)
0.294724	5.303850	288	67414.8	(55,372)
0.239687	6.203551	297	75355.9	(431,161)
0.403552	3.941004	319	134835	(112,213)
0.486290	3.131049	339	107408	(104,193)
0.467467	3.302491	359	83990.8	(465,108)
0.507537	2.945326	372	91357.3	(462,93)
0.518267	2.854461	378	38329.5	(464,87)
0.440820	3.557386	391	164202	(252,60)
0.405151	3.923829	399	42600.5	(247,53)
0.384919	4.146301	408	37049.8	(243,44)
0.495088	3.053180	441	141442	(238,12)
0.199565	6.999149	470	138449	(85,43)
0.178972	7.822783	480	184790	(44,60)
0.248290	7.472147	484	165810	(92,23)
0.221329	6.050408	491	0	(121,0)
0.094292	6.549618	494	165258	(90,12)
0.010386	10.255229	503	81471.8	(49,28)
0.062578	19.835631	515	122428	(58,7)
0.098960	12.035802	523	0	(55,0)
0.053594	10.045409	542	0	(0,15)
Nearest Corr sidelobe: ratio 0.462309, dBdown 3.350675 at distance 26	12.549702	552	92613.7	(2,1)
Largest Corr sidelobe: ratio 0.565733, dBdown 2.473882 at distance 182				

Laplacian Side Lobe Information, Maximum Value is 685433

Side-Lobe-To-Peak-Ratio DBs-Down Distance Location

1.000000	0.000000	0	(334,442)
0.395713	4.026197	10	(331,432)
0.192632	7.152707	17	(339,458)
0.277062	5.574226	25	(325,419)
0.228637	6.408534	28	(343,469)
0.268187	5.715625	31	(303,443)
0.220258	6.570674	35	(313,470)
0.157787	8.019296	39	(314,475)
0.233591	6.315440	44	(291,433)

6.875224	49	(288,424)
6.941251	52	(302,483)
7.243729	55	(303,488)
6.278347	59	(284,411)
6.212379	61	(283,408)
6.688669	66	(309,503)
6.381165	74	(370,507)
6.442790	82	(257,414)
6.889778	87	(262,491)
7.969995	91	(332,351)
6.593944	95	(256,497)
7.832187	102	(248,388)
8.396928	105	(343,337)
8.030703	107	(414,371)
7.522731	111	(346,332)
7.673299	113	(427,506)
7.759914	115	(418,364)
8.163500	119	(256,352)
6.214109	123	(456,461)
6.384045	127	(451,491)
6.705708	130	(451,499)
5.356829	135	(468,461)
6.910626	139	(467,483)
6.689688	146	(466,504)
6.179132	153	(484,414)
6.402572	156	(190,382)
6.418272	159	(488,403)
5.680696	163	(496,459)
6.156349	170	(259,289)
6.025383	173	(496,381)
5.967697	176	(164,395)
5.178789	182	(164,376)
5.511562	186	(153,484)
5.896545	190	(145,459)
6.957097	195	(306,351)
7.036621	197	(237,271)
6.604956	201	(134,425)
6.770203	204	(214,277)
6.429730	206	(129,461)
6.472066	209	(438,261)
5.992274	214	(151,332)
4.935158	218	(123,498)
5.638529	224	(246,236)
5.858669	227	(245,233)
6.349672	232	(271,219)
6.844045	238	(96,446)
5.127363	241	(95,475)
6.937816	246	(95,384)
6.235936	251	(106,338)
6.188079	257	(176,239)
4.682995	262	(176,233)
5.711879	268	(177,225)
5.145812	274	(66,499)
5.409309	279	(174,214)
5.454607	281	(148,232)
6.676748	286	(169,208)
5.967545	289	(47,406)
5.187443	295	(210,174)
5.412224	297	(188,183)
5.444285	300	(259,152)
6.024004	305	(44,347)
5.448132	309	(255,143)
5.834418	313	(251,391)
6.265358	315	(491,169)

0.217134	6.632730	318	(226, 143)
0.253915	5.953110	322	(16, 491)
0.212386	6.728738	326	(195, 147)
0.236099	6.269067	328	(11, 383)
0.270211	5.682971	331	(4, 422)
0.267194	5.731740	333	(61, 252)
0.241368	6.173209	337	(280, 109)
0.210637	6.764663	339	(22, 309)
0.219218	6.591236	341	(54, 247)
0.219878	6.578185	345	(47, 250)
0.214658	6.682522	349	(369, 95)
0.216230	6.650841	357	(48, 229)
0.202679	6.931913	361	(279, 85)
0.245542	6.098748	364	(150, 128)
0.231734	6.350096	371	(461, 93)
0.220898	6.558082	375	(49, 198)
0.242056	6.160839	382	(2, 254)
0.213689	6.702178	385	(5, 242)
0.232028	6.344600	387	(5, 239)
0.264384	5.777648	391	(327, 51)
0.224290	6.491902	396	(480, 74)
0.242814	6.147269	402	(496, 74)
0.203400	6.916490	405	(496, 71)
0.210750	6.762325	407	(322, 35)
0.184167	7.347877	411	(109, 98)
0.233984	6.308506	415	(451, 44)
0.236828	6.255667	417	(435, 37)
0.215877	6.657934	420	(435, 34)
0.240974	6.180296	424	(397, 23)
0.223654	6.504239	429	(270, 18)
0.259978	5.850637	431	(29, 137)
0.231763	6.349558	435	(424, 16)
0.245165	6.105423	440	(312, 3)
0.267548	5.725984	442	(373, 2)
0.247344	6.066986	450	(97, 60)
0.180305	7.439932	454	(187, 12)
0.180585	7.433194	458	(54, 79)
0.200852	6.971246	460	(497, 12)
0.180829	7.427313	465	(91, 45)
0.225530	6.467959	472	(84, 42)
0.282672	5.487180	479	(122, 13)
0.241905	6.163549	484	(92, 23)
0.227744	6.425531	486	(22, 70)
0.239633	6.204542	488	(114, 6)
0.241606	6.168926	491	(65, 31)
0.299997	5.228832	496	(90, 10)
0.293777	5.319820	500	(97, 2)
0.190631	7.198068	502	(86, 5)
0.218185	6.611741	505	(46, 27)
0.178615	7.480830	515	(58, 7)
0.041709	13.797730	517	(57, 5)
0.165103	7.822439	520	(56, 2)
0.216443	6.646440	541	(14, 6)
0.090925	10.413146	549	(5, 2)
0.117729	9.291156	551	(2, 2)
0.000000	0.000000	554	(0, 0)

Nearest Laplacian sidelobe: ratio 0.395713, dBdown 4.026197 at distance 10
Largest Laplacian sidelobe: ratio 0.395713, dBdown 4.026197 at distance 10

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12-09-80

alw2_090.rep

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Image AQVIR1 at compression 90.0:1 against window W2.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (334,442)
Location of max in compression is (334,442), sub-pixel is (334.375,442.125)
Max Laplacian Value is 505723 at location (334,442)
Smoothed (FFT) Maximum Laplacian Value is 1086432.00 at (334.750,442.875)

Correlation Side Lobe Information, Maximum Value is 6.54086e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	505723	(334,442)
0.516268	2.871251	25	42606	(347,463)
0.369312	4.326062	48	90780.5	(379,425)
0.329881	4.816421	54	83759.3	(379,412)
0.474657	3.236198	68	84258.3	(266,450)
0.509782	2.926153	72	106444	(262,434)
0.458889	3.382920	80	73615.5	(257,421)
0.325248	4.877859	96	0	(267,511)
0.429384	3.671545	108	92538	(347,335)
0.437849	3.586757	132	75724	(367,314)
0.477757	3.207926	143	96776.3	(377,306)
0.444265	3.523584	169	122076	(259,291)
0.645905	1.898313	181	166433	(164,380)
0.563695	2.489559	197	107940	(403,257)
0.328535	4.834189	228	58281	(413,228)
0.321548	4.927548	232	46789.9	(424,228)
0.311621	5.063730	240	39270.5	(180,258)
0.306492	5.135803	244	77973	(191,462)
0.399040	3.989838	262	169735	(176,233)
0.319781	4.951470	271	60422.1	(146,247)
0.369828	4.319999	277	85266.5	(63,385)
0.327729	4.844855	288	84294.5	(55,372)
0.306171	5.140353	299	72509.6	(431,159)
0.297645	5.263013	305	70816.5	(432,153)
0.348075	4.563269	312	119327	(475,164)
0.406906	3.905055	319	100544	(112,213)
0.442166	3.544148	330	37751.3	(109,200)
0.538027	2.691956	339	100675	(104,193)
0.602785	2.198377	372	157906	(462,93)
0.490998	3.089204	391	96966.5	(251,60)
0.473496	3.246838	403	80865	(240,50)
0.421648	3.750501	418	78038.8	(242,34)
0.524806	2.800015	440	141126	(238,13)
0.267022	5.734531	461	128824	(497,11)
0.217595	6.623507	469	75113.9	(85,44)
0.216645	6.642508	471	111430	(84,43)
0.193460	7.134078	476	124149	(47,62)
0.302653	5.190544	490	0	(122,0)
0.018167	17.407168	514	75739.2	(58,8)
0.060210	12.203332	523	0	(54,0)
0.094001	10.268698	542	0	(0,15)
0.090433	10.436739	544	97536.1	(8,6)
0.070196	11.536901	552	71691.3	(2,1)

Nearest Corr sidelobe: ratio 0.516268, dbdown 2.871251 at distance 25
Largest Corr sidelobe: ratio 0.645905, dbdown 1.898313 at distance 181

Laplacian Side Lobe Information, Maximum Value is 505723

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	(334,442)
0.409226	3.880373	10	(331,432)
0.209733	6.783324	16	(350,441)
0.258909	5.868532	20	(325,424)
0.401565	3.962439	25	(325,419)
0.381095	4.189665	31	(308,459)
0.333123	4.773950	35	(300,433)

6.583929	41	(299,420)
6.449617	43	(294,426)
6.687039	49	(288,425)
6.054732	53	(366,484)
5.791652	60	(284,408)
6.132205	65	(331,377)
5.666995	70	(264,434)
5.902509	72	(263,431)
5.731452	75	(372,507)
6.282946	80	(326,362)
6.932884	85	(276,380)
6.526328	87	(262,490)
6.965459	92	(253,398)
6.883138	95	(256,497)
6.270607	101	(249,387)
6.752561	105	(345,338)
6.538492	108	(271,354)
6.784532	110	(342,332)
5.546385	113	(256,358)
6.674495	117	(238,509)
6.212718	126	(454,481)
4.795043	134	(468,451)
5.305261	137	(469,463)
6.315483	139	(274,317)
6.840583	141	(467,488)
6.389323	145	(466,503)
6.741762	149	(427,325)
5.159009	152	(182,450)
5.313219	156	(178,441)
5.128308	159	(176,429)
5.098837	163	(496,459)
6.098492	167	(495,487)
4.998480	170	(485,363)
5.133396	173	(496,381)
5.412542	175	(168,386)
5.713105	178	(165,386)
4.418979	182	(164,378)
5.732047	186	(153,484)
5.105334	190	(145,461)
5.176678	192	(142,453)
5.881475	197	(237,270)
5.652927	201	(499,327)
5.419223	203	(492,315)
5.468993	207	(127,455)
4.984766	209	(183,297)
4.356849	213	(212,268)
4.679866	219	(125,377)
4.333669	223	(246,237)
5.524421	234	(183,263)
5.686934	236	(183,260)
5.705670	243	(93,475)
5.638467	245	(300,199)
5.646673	248	(504,261)
4.785742	254	(212,219)
4.564533	256	(211,218)
4.612862	261	(177,233)
6.274839	267	(172,230)
5.459866	271	(176,222)
5.691039	273	(74,359)
5.440279	275	(73,354)
5.791440	278	(429,181)
5.822380	283	(139,237)
5.357389	286	(169,208)

0.291220	5.357781	292	(211,177)
0.288288	5.401738	294	(211,175)
0.341860	4.661516	299	(259,153)
0.317868	4.977536	305	(44,347)
0.324637	4.886023	310	(256,142)
0.249508	6.029153	318	(226,143)
0.221250	6.551166	320	(111,213)
0.293355	5.326067	323	(195,150)
0.305281	5.153009	327	(443,134)
0.318708	4.966066	329	(395,119)
0.310517	5.079140	333	(61,252)
0.243739	6.130753	335	(60,249)
0.251171	6.000312	337	(33,290)
0.263253	5.796268	341	(364,102)
0.274944	5.607552	343	(329,99)
0.270561	5.677345	348	(430,108)
0.257510	5.892054	352	(18,287)
0.223005	6.516844	354	(461,93)
0.240317	6.192158	356	(49,198)
0.240363	6.191322	358	(2,253)
0.338133	4.709126	363	(170,95)
0.258764	5.870958	367	(328,53)
0.346132	4.607586	371	(453,66)
0.303155	5.183348	375	(6,217)
0.281792	5.500720	382	(496,74)
0.280762	5.516622	384	(495,71)
0.274846	5.609099	389	(451,48)
0.253775	5.955515	394	(451,45)
0.317675	4.980171	398	(435,37)
0.266277	5.746668	402	(434,33)
0.287282	5.416912	404	(229,31)
0.286033	5.435838	411	(201,37)
0.305067	5.156048	414	(30,139)
0.292141	5.344077	417	(29,138)
0.278671	5.549088	421	(424,15)
0.234432	6.299832	424	(238,13)
0.257066	5.899553	426	(438,9)
0.272681	5.643451	429	(469,13)
0.272526	5.645918	431	(483,11)
0.305522	5.149575	436	(497,11)
0.279058	5.543056	440	(48,73)
0.303185	5.182930	445	(123,13)
0.316144	5.001155	450	(24,76)
0.251137	6.000893	456	(93,23)
0.254733	5.939155	461	(21,68)
0.313107	5.043078	467	(65,31)
0.288296	5.401617	478	(97,5)
0.266155	5.748651	480	(97,3)
0.343627	4.639129	483	(63,18)
0.287168	5.418636	488	(58,8)
0.367569	4.346612	491	(56,2)
0.261181	5.830591	497	(12,16)
0.237263	6.247703	499	(9,6)
0.268789	5.705890	503	(2,2)
0.149764	8.245920	514	(0,0)
0.176323	7.536920	520	
0.193506	7.133066	534	
0.212536	6.725668	544	
0.149359	8.257688	551	
0.000000	0.000000	554	

Nearest Laplacian sidelobe: ratio 0.409226, dBdown 3.880373 at distance 10
Largest Laplacian sidelobe: ratio 0.409226, dBdown 3.880373 at distance 10

Image AQVIR1 at compression 116.0:1 against window W2.

*Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (334,442)

Location of max in compression is (334,442), sub-pixel is (334.375,441.625)

Max Laplacian Value is 395910 at location (334,442)

Smoothed (FFT) Maximum Laplacian Value is 931808.00 at (334.750,443.000)

Correlation Side Lobe Information, Maximum Value is 6.15132e+06

Side-Lobe-To-Peak-Ratio DBS-Down Distance Laplacian Location

1.000000	0.000000	0	395910	(334,442)
0.572543	2.421917	20	58927.3	(343,442)
0.365486	4.371294	48	80691.5	(379,424)
0.365821	4.367312	50	76449.8	(380,423)
0.593967	2.262377	74	125863	(261,432)
0.343001	4.647050	99	107622	(275,362)
0.469421	3.284374	108	85596.3	(346,335)
0.469072	3.287608	131	67857.8	(367,315)
0.480187	3.185897	136	50980	(372,311)
0.519334	2.845335	142	99485.8	(377,307)
0.489938	3.098586	165	128934	(260,294)
0.701916	1.537150	180	160212	(165,381)
0.612075	2.131953	199	98131	(403,255)
0.418595	3.782061	221	46546.8	(415,236)
0.351046	4.546365	244	84256.8	(180,253)
0.454312	3.426460	258	154766	(177,237)
0.369643	4.322174	277	88702.5	(63,383)
0.338799	4.700574	286	77687.6	(56,374)
0.306759	5.132024	303	76098.4	(432,155)
0.375359	4.255533	313	81756	(475,162)
0.405672	3.918250	318	107434	(113,214)
0.516821	2.851526	340	59123.3	(103,192)
0.464623	2.866598	342	40605	(102,191)
0.471459	3.265557	392	71932.3	(250,59)
0.490804	3.090923	405	80217.3	(239,48)
0.552496	2.576706	436	116989	(239,16)
0.551994	2.580660	438	112437	(238,15)
0.222519	6.526334	469	71382	(85,45)
0.236457	6.262476	490	0	(122,0)
0.020987	16.780507	524	0	(52,0)
0.091188	10.400602	544	84302.8	(7,7)
Nearest Corr sidelobe: ratio 0.572543, dBdown 2.421917 at distance 20				
Largest Corr sidelobe: ratio 0.701916, dBdown 1.537150 at distance 180				

Laplacian Side Lobe Information, Maximum Value is 395910

Side-Lobe-To-Peak-Ratio DBS-Down Distance Location

1.000000	0.000000	0	395910	(334,442)
0.258951	5.867820	16	(350,441)	
0.354615	4.502427	26	(325,418)	
0.450030	3.467589	31	(308,459)	
0.356109	4.484169	35	(300,432)	
0.257101	5.898959	40	(315,477)	
0.228629	6.408682	44	(294,423)	
0.273948	5.623325	48	(288,427)	
0.254112	5.949748	52	(291,413)	
0.261952	5.817785	54	(383,464)	
0.300537	5.221016	58	(285,411)	
0.272004	5.654241	67	(331,375)	
0.366960	4.353811	71	(264,432)	
0.342003	4.659698	77	(372,509)	
0.240308	6.192317	82	(257,414)	
0.269647	5.692041	84	(257,409)	
0.308746	5.103981	97	(275,365)	

5.559850	101	(249,387)
5.551996	106	(345,337)
5.149398	113	(258,358)
6.319016	117	(238,509)
5.432427	123	(456,460)
4.992119	126	(454,479)
5.313429	130	(452,497)
4.268353	135	(468,457)
4.613448	137	(469,463)
6.066447	140	(378,309)
5.826786	143	(377,306)
5.924948	145	(466,503)
6.006016	147	(293,301)
5.930165	149	(198,382)
4.334229	152	(182,451)
3.774515	156	(178,441)
4.697427	159	(274,295)
4.621383	163	(496,459)
4.872301	165	(260,294)
4.847196	170	(485,363)
4.633855	173	(496,380)
4.703777	176	(168,385)
3.551079	181	(164,380)
5.177149	186	(153,485)
4.598922	189	(146,462)
5.141162	192	(142,452)
4.790770	195	(461,294)
5.097010	199	(237,268)
5.484918	203	(500,326)
4.954696	206	(129,462)
4.347598	211	(212,270)
3.396019	218	(123,495)
3.437330	228	(185,270)
4.281780	232	(184,265)
4.780448	237	(183,259)
4.934307	244	(92,473)
5.622727	248	(504,261)
3.574617	253	(212,220)
3.571032	256	(211,218)
3.794959	260	(177,235)
4.302121	270	(176,223)
4.820949	277	(149,236)
4.672962	279	(71,348)
4.459825	283	(169,212)
4.455420	286	(169,209)
4.938566	288	(475,191)
4.605243	291	(211,178)
3.885580	294	(210,175)
4.060385	297	(188,183)
3.943651	300	(259,152)
4.950328	303	(45,351)
4.599005	305	(44,347)
3.707702	310	(256,142)
5.102418	317	(251,136)
4.084187	326	(443,135)
4.337048	329	(395,119)
4.568255	333	(61,252)
4.30102	341	(364,102)
5.271203	346	(431,110)
4.546590	350	(9,312)
6.026505	354	(207,112)
6.042890	356	(366,87)
0.244451	358	(471,111)
4.674069	364	(150,128)

alw2_116.rep

0.434841	3.616700	371	(461, 93)
0.419800	3.769571	373	(461, 91)
0.369484	4.324043	376	(460, 88)
0.283831	5.469398	380	(460, 84)
0.367173	4.351290	384	(170, 95)
0.323444	4.902002	390	(329, 52)
0.314657	5.021624	395	(251, 56)
0.349269	4.568399	397	(7, 216)
0.264652	5.773253	404	(495, 71)
0.258471	5.875877	407	(481, 63)
0.340267	4.681798	409	(436, 46)
0.358620	4.453657	411	(437, 44)
0.376768	4.239258	417	(435, 37)
0.291394	5.355193	425	(201, 38)
0.305503	5.149843	429	(467, 34)
0.308830	5.102809	433	(484, 36)
0.313355	5.039640	435	(82, 87)
0.366482	4.359469	443	(438, 11)
0.426460	3.701212	448	(469, 15)
0.329692	4.818910	459	(467, 3)
0.304253	5.167646	461	(62, 70)
0.330206	4.812149	463	(73, 59)
0.342186	4.657380	468	(48, 72)
0.330357	4.810164	472	(47, 67)
0.261237	5.829659	476	(47, 62)
0.242844	6.146725	480	(123, 11)
0.352947	4.522908	483	(93, 23)
0.379619	4.206518	485	(21, 71)
0.341751	4.662899	490	(65, 32)
0.326066	4.866939	493	(65, 29)
0.193196	7.140010	502	(47, 30)
0.211762	6.741515	506	(63, 15)
0.109153	9.619633	521	(55, 2)
0.059773	12.234975	537	(8, 15)
0.263451	5.792996	544	(8, 6)
0.096725	10.144606	551	(2, 2)
0.000000	0.000000	554	(0, 0)

Nearest Laplacian sidelobe: ratio 0.258951, dBdown 5.867820 at distance 16
Largest Laplacian sidelobe: ratio 0.457507, dBdown 3.396019 at distance 218

90/01/16
12:51:18

alw3_001.rep

Image AQVIR1 at compression 1.0:1 against window W3.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (93,130)

Location of max in compression is (93,130), sub-pixel is (93.000,130.000)

Max Laplacian Value is 5.4197e+06 at location (93,130)

Smoothed (FFT) Maximum Laplacian Value is 7034304.00 at (93.000,130.000)

Correlation Side Lobe Information, Maximum Value is 8.6013e+06

Side-Lobe-To-Peak-Ratio	DBs-Down Distance	Laplacian Location
1.000000	0.000000	0 5.4197e+06 (93,130)
0.456064	3.409745	13 306611 (103,138)
0.400533	3.973616	25 398643 (112,146)
0.291276	5.356960	41 259621 (125,156)
0.299550	5.235303	43 276109 (127,157)
0.316937	4.990269	46 246901 (129,159)
0.259835	5.853025	53 439253 (133,165)
0.233285	6.321141	60 320344 (148,90)
0.280047	5.527685	68 219144 (41,86)
0.279459	5.336817	73 271728 (38,82)
0.369698	4.421532	86 182370 (26,76)
0.314590	5.022552	94 213447 (20,71)
0.315972	5.003516	96 267126 (19,69)
0.326503	4.861128	99 193684 (178,79)
0.354100	4.508736	109 196417 (189,78)
0.362940	4.401652	112 169862 (194,81)
0.385491	4.139860	116 159065 (199,82)
0.258712	5.871828	142 216983 (228,87)
0.225380	6.470842	148 149923 (150,267)
0.224823	6.481598	153 138442 (242,97)
0.228573	6.409751	163 178593 (149,283)
0.229296	6.396039	165 83972.6 (149,285)
0.267013	5.734677	178 175604 (146,300)
0.268579	5.709282	185 168226 (143,308)
0.276204	5.587702	188 96085.5 (139,312)
0.262405	5.810276	196 154332 (270,46)
0.352440	4.529150	207 98864 (287,57)
0.359992	4.437066	212 165693 (292,58)
0.364649	4.381253	215 170447 (290,45)
0.505945	2.958971	228 99393 (188,337)
0.503537	2.979685	230 183735 (190,338)
0.349349	4.567411	254 0 (311,0)
0.319073	4.961100	262 220118 (141,388)
0.388538	4.105670	271 102381 (240,358)
0.404835	3.927216	284 187285 (253,365)
0.402885	3.948193	286 119594 (254,366)
0.402478	3.952574	288 227732 (256,368)
0.397445	4.007225	290 227098 (257,369)
0.404170	3.934361	297 281107 (263,374)
0.434405	3.621049	313 178672 (343,318)
0.408628	3.886724	319 307258 (385,258)
0.304679	5.161570	338 152486 (409,9)
0.261095	5.832018	354 151703 (443,181)
0.262334	5.811454	367 0 (0,485)
0.485150	3.141236	388 166741 (253,484)
0.283680	5.471713	415 352697 (292,494)
0.290847	5.363358	420 196471 (296,498)
0.295370	5.296329	423 297083 (298,499)
0.274419	5.615864	429 152229 (309,501)
0.347820	4.586460	439 0 (312,511)
0.188928	7.239328	447 153689 (492,332)
0.189237	7.229930	449 183934 (493,333)
0.180470	7.435939	454 151050 (466,493)
0.425609	3.709892	480 157130 (471,426)
0.392304	4.063777	485 157010 (480,422)

Nearest Corr sidelobe: ratio 0.456064, dBdown 3.409745 at distance 13
 Largest Corr sidelobe: ratio 0.505945, dBdown 2.958971 at distance 228

Laplacian Side Lobe Information, Maximum Value is 5.4197e+06

Side-Lobe-To-Peak-Ratio	DBs-Down Distance	Location
1.000000	0.000000	0 (93,130)
0.175304	7.562075	3 (95,132)
0.093905	10.273114	5 (89,127)
0.088335	10.538676	9 (100,135)
0.086403	10.634712	14 (104,138)
0.058350	12.339616	19 (108,141)
0.061487	12.112179	22 (111,143)
0.073354	11.333914	25 (112,146)
0.052033	12.837224	29 (115,149)
0.039137	14.074167	33 (121,148)
0.053783	12.693536	35 (103,96)
0.065018	11.869665	38 (123,154)
0.066970	11.741222	40 (124,155)
0.050946	12.928940	43 (127,157)
0.058649	12.317364	46 (129,158)
0.072024	11.425214	50 (101,81)
0.081048	10.912600	53 (133,165)
0.087182	10.595752	55 (134,166)
0.067920	11.680019	63 (93,67)
0.065858	11.813890	65 (91,65)
0.061277	12.127059	67 (122,190)
0.068039	11.672436	69 (41,85)
0.063746	11.955477	72 (79,59)
0.068500	11.643071	75 (157,170)
0.054135	12.665219	78 (64,202)
0.081904	10.866956	82 (34,73)
0.066152	11.794560	85 (171,163)
0.064137	11.928898	88 (29,69)
0.063205	11.992485	90 (183,134)
0.063629	11.963478	94 (178,170)
0.064396	11.911388	97 (81,226)
0.059972	12.220535	102 (154,212)
0.060748	12.164697	105 (186,179)
0.059856	12.228905	108 (182,192)
0.063791	11.952432	110 (31,39)
0.079362	11.003874	113 (187,193)
0.069767	11.563492	115 (188,194)
0.060960	12.149548	118 (118,15)
0.074736	11.264681	121 (44,241)
0.062953	12.009842	126 (51,249)
0.062732	12.05076	128 (41,13)
0.068273	11.657501	131 (223,148)
0.058463	12.331153	134 (220,88)
0.051836	12.853644	136 (40,255)
0.053094	12.749574	138 (223,84)
0.065962	11.807041	142 (231,163)
0.063340	11.983206	144 (236,142)
0.055429	12.562655	148 (10,252)
0.073196	11.355118	152 (35,271)
0.063325	11.984234	154 (217,222)
0.066394	11.778684	158 (38,278)

0.058925	12.297028 161	(201, 249)	0.070171	11.538417 378	(98, 508)
0.056834	12.453881 167	(237, 46)	0.063532	11.970069 384	(434, 306)
0.057695	12.388605 171	(63, 298)	0.064454	11.907510 386	(311, 448)
0.045900	13.381870 174	(229, 239)	0.051906	12.847794 392	(262, 484)
0.065202	11.857378 177	(268, 105)	0.054192	12.660629 394	(398, 380)
0.056458	12.482743 183	(14, 295)	0.058188	12.351692 396	(473, 18)
0.055616	12.547990 186	(82, 316)	0.064972	11.872771 398	(490, 109)
0.059703	12.240071 190	(260, 220)	0.055687	12.542442 405	(492, 63)
0.057073	12.435712 192	(284, 114)	0.054752	12.615995 409	(489, 29)
0.062347	12.051864 197	(286, 102)	0.065857	11.814006 414	(292, 493)
0.065251	11.854148 201	(286, 186)	0.056495	12.479938 417	(495, 240)
0.052537	12.795387 205	(287, 64)	0.056892	12.449501 420	(341, 469)
0.048180	13.171294 208	(271, 237)	0.054815	12.610976 423	(299, 499)
0.057029	12.439036 211	(296, 73)	0.065563	11.833424 426	(481, 305)
0.050584	12.959888 218	(169, 334)	0.062625	12.032536 429	(481, 314)
0.057207	12.425537 220	(82, 350)	0.065936	11.808798 431	(502, 267)
0.048391	13.152355 223	(186, 333)	0.064465	11.906779 434	(481, 324)
0.046627	13.313633 225	(296, 33)	0.047834	13.202596 438	(329, 499)
0.039286	14.057601 229	(274, 270)	0.052032	12.837261 441	(475, 350)
0.052308	12.814305 233	(279, 271)	0.054551	12.631940 447	(465, 377)
0.060849	12.157431 236	(101, 366)	0.059315	12.268363 452	(361, 494)
0.063887	11.945848 239	(48, 365)	0.046249	13.349003 455	(486, 359)
0.055878	12.527589 241	(196, 348)	0.053893	12.684693 457	(502, 334)
0.064184	11.925748 245	(308, 247)	0.048396	13.151935 459	(371, 495)
0.049752	13.031901 249	(106, 379)	0.041621	13.806831 465	(475, 395)
0.058728	12.311566 251	(49, 377)	0.038681	14.125050 467	(465, 413)
0.050468	12.969865 257	(349, 113)	0.046373	13.337365 469	(459, 423)
0.053130	12.746607 261	(302, 287)	0.035930	14.445410 472	(483, 395)
0.068750	11.627266 263	(128, 391)	0.056170	12.504934 475	(480, 406)
0.055519	12.555550 266	(305, 290)	0.050728	12.947525 481	(481, 415)
0.054298	12.652191 269	(142, 394)	0.041130	13.856464 483	(482, 416)
0.046543	13.321471 271	(37, 395)	0.037454	14.264768 485	(483, 418)
0.055080	13.391016 276	(369, 120)	0.051356	12.894060 488	(450, 462)
0.062573	12.930030 278	(5, 394)	0.041585	13.810665 490	(410, 504)
0.044924	12.036122 283	(14, 402)	0.044567	13.509832 496	(482, 437)
0.057623	13.475234 285	(20, 405)	0.047215	13.259182 499	(444, 484)
0.064777	12.394031 287	(380, 121)	0.050831	12.938745 502	(444, 489)
0.054280	11.885815 290	(22, 411)	0.052275	12.817020 506	(465, 473)
0.051868	12.653629 293	(5, 409)	0.040940	13.878503 510	(444, 500)
0.050509	12.851037 297	(263, 374)	0.039763	14.005219 512	(477, 468)
0.055363	12.966354 302	(164, 424)	0.051239	12.904035 517	(478, 475)
0.046459	12.567828 305	(394, 182)	0.053912	12.683167 526	(471, 496)
0.041482	13.329304 307	(386, 38)	0.041724	13.796096 530	(482, 490)
0.048250	13.821443 310	(402, 102)	0.062827	14.204164 532	(473, 502)
0.070648	13.165050 314	(344, 318)	0.047724	12.018540 536	(502, 477)
0.053357	11.509021 318	(77, 448)	0.050470	13.212648 540	(502, 483)
0.053838	12.728117 322	(106, 452)	0.047903	12.969631 543	(491, 500)
0.075700	12.689085 324	(399, 22)	0.043557	13.196394 548	(495, 503)
0.052837	11.209051 328	(399, 12)	0.040127	13.609395 551	(509, 492)
0.051421	12.770585 331	(392, 271)	0.041194	13.965637 553	(499, 506)
0.054279	12.888635 334	(398, 265)	0.037668	13.851650 555	(500, 508)
0.054868	12.653699 337	(140, 464)	0.018399	17.352167 558	(505, -77)
0.055953	12.718736 340	(412, 11)	0.041854	14.240225 561	(509, 506)
0.064759	12.606786 343	(137, 470)	0.000000	13.782654 563	(509, 509)
0.051941	12.521734 345	(116, 474)	0.000000	0.000000 566	(511, 511)
0.079275	11.886996 348	(71, 477)			
0.059626	12.844891 353	(430, 24)			
0.070971	11.008664 358	(112, 487)			
0.059653	12.245619 361	(446, 196)			
0.056799	11.489197 363	(128, 491)			
0.060422	12.243656 367	(53, 495)			
	12.456579 371	(463, 159)			
	12.188057 373	(8, 493)			
	12.064050 375	(456, 36)			

Nearest Laplacian sidelobe: ratio 0.175304, dbdown 7.562075 at distance 3
Largest Laplacian sidelobe: ratio 0.175304, dbdown 7.562075 at distance 3

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16:13:56

Image AQVIR1 at compression 14.0:1 against window W3.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (93,130)
Location of max in compression is (93,130), sub-pixel is (93.000,130.125)
Max Laplacian Value is 5.62583e+14 at location (93,130)
Smoothed (FFT) Maximum Laplacian Value is 2058688.00 at (92.750,130.375)

Correlation Side Lobe Information, Maximum Value is 7.5477e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	1.93163e+06	(93,130)
0.499447	3.015105	13	299464	(103,138)
0.440296	3.562553	24	179278	(112,145)
0.313131	5.042741	39	197451	(123,155)
0.343749	4.637590	46	236530	(129,159)
0.341243	4.669366	48	204276	(130,160)
0.313999	5.030712	68	254028	(41,86)
0.307622	5.119830	70	177623	(40,85)
0.304629	5.162292	72	175347	(38,83)
0.304212	5.168243	75	144611	(37,80)
0.426090	3.704983	85	181192	(27,76)
0.375888	4.249420	99	153132	(178,79)
0.412242	3.848474	109	147545	(189,78)
0.441449	3.551190	116	94350	(199,82)
0.296576	5.278643	142	112664	(228,87)
0.255829	5.920498	147	148107	(149,266)
0.264424	5.776987	152	156880	(242,98)
0.263918	5.785311	165	133303	(149,285)
0.298191	5.255053	177	136181	(146,299)
0.318692	4.966288	189	53072	(139,313)
0.295709	5.297719	198	85987.5	(138,321)
0.295276	3.882353	207	122511	(273,48)
0.409039	3.75769	211	105498	(287,57)
0.412757	3.795959	215	175299	(291,57)
0.412430	3.846494	215	172929	(290,45)
0.569676	2.443721	227	121885	(187,337)
0.469104	3.287304	241	136688	(258,306)
0.467534	3.301867	243	180186	(259,307)
0.393628	4.049144	255	0	(312,0)
0.354499	4.503847	262	130209	(141,388)
0.431530	3.649888	271	91764.8	(240,358)
0.447525	3.491825	284	126377	(253,365)
0.455951	3.410822	288	168508	(256,368)
0.460128	4.673619	335	243144	(263,374)
0.502352	2.989923	313	143532	(343,318)
0.452842	3.440532	319	133184	(385,258)
0.340909	4.673619	335	138661	(406,11)
0.346363	4.604683	340	162944	(411,10)
0.294959	5.302388	352	157974	(426,15)
0.293366	5.322946	367	0	(0,485)
0.557010	2.541368	388	160406	(252,484)
0.302145	5.197850	416	126488	(293,495)
0.322987	4.908153	422	154106	(298,499)
0.301883	5.201611	429	115851	(309,501)
0.390039	4.088924	439	0	(312,511)
0.209301	6.792282	453	138844	(366,492)
0.486253	3.131378	481	117145	(472,426)
0.286917	9.056355	500	82457.3	(461,469)
0.278459	5.552387	504	120270	(463,472)
0.101187	9.948768	517	132706	(472,481)
0.098711	10.056355	520	50945.2	(476,482)
0.175046	7.568484	529	145195	(481,490)
0.301798	5.202840	544	124041	(499,492)
0.171505	7.657234	562	198101	(509,508)

Nearest Corr sidelobe: ratio 0.499447, dBdown 3.015105 at distance 13

alw3_014.rep

Largest Corr sidelobe: ratio 0.569676, dBdown 2.443721 at distance 227

Laplacian Side Lobe Information, Maximum Value is 5.62583e+14

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	5.62583e+14	(93,130)
0.179200	7.466632	5	1.00815e+14	(89,127)
0.117842	9.286999	8	6.62959e+13	(99,135)
0.114441	9.414179	10	6.43826e+13	(103,131)
0.155032	8.095785	13	8.72184e+13	(103,138)
0.118759	9.253335	16	6.68118e+13	(106,140)
0.090990	10.410060	20	5.11895e+13	(104,113)
0.100149	9.993550	22	5.63419e+13	(110,144)
0.129923	8.863148	25	7.30923e+13	(112,146)
0.149469	8.254496	29	8.40886e+13	(115,149)
0.107266	9.695379	33	6.0346e+13	(125,139)
0.136431	8.650868	36	7.67538e+13	(103,95)
0.102220	9.904649	39	5.75071e+13	(123,155)
0.085411	10.684859	42	4.80508e+13	(126,156)
0.122451	9.120369	46	6.8889e+13	(129,159)
0.105753	9.757058	48	5.9495e+13	(130,160)
0.120744	9.181362	50	6.79283e+13	(129,165)
0.131073	8.824876	52	7.37393e+13	(154,95)
0.155328	8.087505	55	8.73848e+13	(52,94)
0.099721	10.012132	58	5.61014e+13	(94,72)
0.131255	8.818829	62	7.38421e+13	(37,103)
0.124743	9.039845	64	7.01782e+13	(47,85)
0.111528	9.526150	66	6.27439e+13	(34,100)
0.131510	8.810416	68	7.39852e+13	(41,86)
0.125204	9.023834	72	7.04374e+13	(149,175)
0.124442	9.050341	76	7.00088e+13	(157,171)
0.145539	8.370202	81	8.18778e+13	(34,74)
0.122438	9.120854	85	6.88813e+13	(171,163)
0.145694	8.365577	88	8.19651e+13	(29,69)
0.138819	8.575522	90	7.8097e+13	(28,68)
0.139011	8.569503	94	7.82053e+13	(178,169)
0.140364	8.527448	97	7.89663e+13	(18,69)
0.117035	9.316859	101	6.58417e+13	(18,198)
0.130951	8.828926	105	7.36706e+13	(97,25)
0.132265	8.785567	110	7.44098e+13	(8,200)
0.137562	8.614999	112	7.73903e+13	(24,218)
0.126845	8.967254	116	7.1361e+13	(117,17)
0.134790	8.703411	118	7.58308e+13	(119,15)
0.144154	8.411731	121	8.10986e+13	(63,13)
0.122157	9.130820	125	6.87234e+13	(49,247)
0.159743	7.965789	128	8.9686e+13	(41,13)
0.116106	9.351453	130	6.53193e+13	(222,146)
0.110335	9.572881	132	6.20724e+13	(224,148)
0.110252	9.576116	134	6.20262e+13	(13,237)
0.099108	10.038933	136	5.57562e+13	(8,236)
0.094910	10.226893	139	5.33946e+13	(230,152)
0.116227	9.346925	144	6.53874e+13	(236,142)
0.126412	8.982123	150	7.11172e+13	(8,253)
0.168427	7.735893	154	9.47539e+13	(19,265)
0.101447	9.937599	157	5.70725e+13	(222,219)
0.132465	8.778981	161	7.45227e+13	(217,233)
0.100721	9.968808	165	5.66638e+13	(256,105)
0.110407	9.570024	167	6.21133e+13	(237,45)
0.106657	9.720109	170	6.00034e+13	(244,52)
0.098614	10.060609	173	5.54786e+13	(257,184)
0.137329	8.031910	177	8.85107e+13	(268,105)
0.129915	8.863396	179	7.30882e+13	(264,184)
0.116087	9.352150	183	6.53088e+13	(14,295)
0.112410	9.491956	186	6.32399e+13	(272,182)
0.129613	8.873513	189	7.29181e+13	(260,219)

0.130962	8.928549	192	7.3677e+13	(284,114)	0.108030	9.664543	401	6.0776e+13	(246,501)
0.115391	9.378290	194	6.49169e+13	(287,117)	0.117073	9.315418	404	6.58635e+13	(496,101)
0.109683	9.998596	197	6.17059e+13	(276,203)	0.125911	8.999364	406	7.08334e+13	(494,65)
0.113970	9.432107	201	6.41174e+13	(286,186)	0.115475	9.375108	410	6.49645e+13	(503,120)
0.114809	9.400248	203	6.45895e+13	(139,328)	0.151838	8.186185	413	8.54217e+13	(291,493)
0.130092	8.857484	206	7.31877e+13	(288,65)	0.122041	9.134960	416	6.86579e+13	(509,116)
0.130671	8.838202	209	7.35134e+13	(86,339)	0.097869	10.093568	421	5.50592e+13	(507,209)
0.159619	7.969146	212	8.97991e+13	(297,73)	0.112398	9.492396	424	6.32335e+13	(508,216)
0.158079	8.011258	214	8.89326e+13	(306,145)	0.112505	9.488283	426	6.32934e+13	(481,305)
0.134156	8.723904	217	7.54738e+13	(297,55)	0.099706	10.012789	429	5.60929e+13	(410,419)
0.119278	9.234407	223	6.71036e+13	(311,85)	0.136553	8.646977	434	7.68226e+13	(481,324)
0.109842	9.960154	228	5.67768e+13	(101,358)	0.126399	8.982567	438	7.11099e+13	(329,499)
0.125260	9.021870	232	7.04692e+13	(321,89)	0.107807	9.673334	442	6.06503e+13	(353,487)
0.165096	7.822647	234	9.28799e+13	(280,271)	0.098386	10.070664	445	5.53503e+13	(481,347)
0.125221	9.023238	237	7.04471e+13	(90,367)	0.124545	9.046729	447	7.0067e+13	(465,378)
0.123956	9.067330	242	6.97355e+13	(333,101)	0.142157	8.472331	453	7.99749e+13	(361,495)
0.1169842	7.699551	245	9.55502e+13	(308,247)	0.110409	9.569953	455	6.21143e+13	(409,458)
0.123093	9.097679	249	6.92498e+13	(26,370)	0.114943	9.395177	458	6.46649e+13	(503,335)
0.133359	8.749782	251	7.50254e+13	(48,377)	0.088319	10.539470	462	4.96866e+13	(365,503)
0.116014	9.354900	253	6.52674e+13	(345,110)	0.103500	9.850609	465	5.82272e+13	(475,395)
0.103215	9.862575	258	5.8067e+13	(61,386)	0.084208	10.746453	469	4.73741e+13	(459,423)
0.112634	9.483324	261	6.33657e+13	(354,119)	0.104456	9.810680	472	5.87655e+13	(484,395)
0.130782	8.834519	264	7.35758e+13	(304,289)	0.082785	10.820468	474	4.65736e+13	(469,419)
0.111164	9.540365	267	6.25389e+13	(237,355)	0.096646	10.148172	478	5.43713e+13	(479,412)
0.112145	9.502198	271	6.30909e+13	(363,113)	0.103665	9.843658	481	5.83204e+13	(481,415)
0.091436	10.388811	273	5.14405e+13	(127,401)	0.089380	10.487619	488	5.02834e+13	(450,463)
0.116710	9.328911	279	6.56592e+13	(85,409)	0.069476	11.581625	491	3.90863e+13	(457,460)
0.123587	9.080261	284	6.95281e+13	(78,414)	0.117371	9.304389	496	6.6031e+13	(441,483)
0.130836	8.832724	289	7.16062e+13	(324,304)	0.099783	10.009438	498	5.61362e+13	(504,412)
0.135226	8.889391	291	7.6076e+13	(325,305)	0.095636	10.193803	502	5.3803e+13	(445,488)
0.130636	8.839380	296	7.34935e+13	(36,420)	0.108645	9.639901	506	6.11219e+13	(465,473)
0.110531	9.565151	300	6.2183e+13	(310,337)	0.101274	9.945030	509	5.69749e+13	(460,483)
0.116507	9.336480	303	6.54491e+13	(272,375)	0.090350	10.431133	511	5.09417e+13	(445,501)
0.116283	9.344820	305	6.54191e+13	(393,183)	0.074988	11.250086	518	4.21869e+13	(460,495)
0.093959	10.268749	308	5.28825e+13	(358,287)	0.084853	10.713305	521	4.77371e+13	(462,498)
0.104398	9.813066	311	5.87327e+13	(150,436)	0.120386	9.194222	525	6.77274e+13	(465,500)
0.110322	9.573374	314	6.20654e+13	(403,81)	0.096986	10.132915	530	5.45626e+13	(465,507)
0.111510	9.526845	318	6.27339e+13	(365,235)	0.083414	10.787592	532	4.69275e+13	(474,502)
0.111728	9.518380	324	6.28563e+13	(398,22)	0.095551	10.197628	536	5.37556e+13	(502,477)
0.132499	8.777884	328	7.45415e+13	(399,12)	0.082902	10.814376	540	4.6639e+13	(499,486)
0.133565	8.743082	331	7.51416e+13	(392,271)	0.103436	9.853271	543	5.81915e+13	(491,500)
0.108380	9.609729e+13	335	6.09729e+13	(427,111)	0.133210	8.754622	548	7.49418e+13	(501,493)
0.126763	8.970075	339	7.13147e+13	(158,463)	0.087450	10.582421	551	4.91977e+13	(509,492)
0.120863	9.177060	341	6.79936e+13	(413,11)	0.084528	10.729978	555	4.75542e+13	(500,508)
0.118944	9.246571	343	6.69159e+13	(137,470)	0.042371	13.729310	559	2.38372e+13	(506,507)
0.115538	9.372754	345	6.49997e+13	(430,204)	0.102557	9.890368	562	5.76966e+13	(509,508)
0.127726	8.937215	348	7.18563e+13	(72,477)	0.000000	0.000000	566	0	(511,511)
0.107503	9.685801	351	6.04793e+13	(187,468)	Nearest Laplacian sidelobe: ratio 0.179200, dbdown 7.466632 at distance 5				
0.091871	10.368195	353	5.16853e+13	(89,483)	Largest Laplacian sidelobe: ratio 0.179200, dbdown 7.466632 at distance 5				
0.129583	8.874530	357	7.2901e+13	(111,487)					
0.169362	7.711835	361	9.52803e+13	(72,490)					
0.141636	8.488271	363	7.96819e+13	(128,491)					
0.132500	8.777833	366	7.45424e+13	(53,494)					
0.121403	9.157693	370	6.82959e+13	(462,179)					
0.127152	8.956757	373	7.15337e+13	(66,504)					
0.136551	8.647049	375	7.68213e+13	(435,285)					
0.160678	7.940437	377	9.03947e+13	(14,499)					
0.125231	9.022873	381	7.0453e+13	(441,284)					
0.136518	8.648093	384	7.68028e+13	(307,449)					
0.135410	8.683460	388	7.61796e+13	(479,87)					
0.112322	9.495333	390	6.31907e+13	(426,333)					
0.125272	9.021464	392	7.04758e+13	(261,484)					
0.120787	9.179813	395	6.79525e+13	(488,127)					
0.122209	9.128983	398	6.87525e+13	(490,109)					

Image AQVIR1 at compression 23.0:1 against window W3.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (93,130)
Location of max in compression is (93,130), sub-pixel is (93.000,130.125)
Max Laplacian Value is 1.39379e+06 at location (93,130)
Smoothed (FFT) Maximum Laplacian Value is 1622784.00 at (92.500,130.500)

Correlation Side Lobe Information, Maximum Value is 7.3967e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

Side-Lobe-To-Peak-Ratio DBs-Down Distance	Laplacian Location
1.000000 0.000000 0	1.39379e+06 (93,130)
0.447854 3.488638 26	204076 (113,146)
0.319726 4.952221 39	169198 (123,155)
0.331222 4.798803 46	160685 (129,158)
0.271793 5.657618 62	115796 (47,89)
0.306205 5.139880 68	176346 (41,86)
0.305744 5.146414 70	105832 (40,85)
0.334722 4.753153 74	213517 (37,81)
0.425501 3.710998 85	165051 (27,76)
0.384105 4.155502 99	156971 (178,79)
0.467087 3.362170 116	56678.3 (199,82)
0.457788 3.393359 119	79968.5 (201,81)
0.349399 4.566782 131	147176 (9,230)
0.292014 5.345969 142	96581.3 (228,86)
0.248918 6.039446 147	113296 (150,266)
0.247980 6.055829 154	71500 (243,96)
0.240836 6.182784 158	144731 (249,103)
0.262858 5.802780 165	142265 (148,286)
0.314683 5.021272 177	135911 (146,299)
0.313830 5.033056 184	81259.8 (143,307)
0.307390 5.123098 189	73023.8 (138,314)
0.312174 5.056027 194	131611 (267,45)
0.304947 5.157754 197	121914 (272,48)
0.403362 3.943049 207	60196 (287,57)
0.409220 3.880431 210	111020 (290,57)
0.401643 3.961595 215	109935 (290,45)
0.586567 2.316823 228	112809 (188,337)
0.469092 3.287418 243	161324 (259,307)
0.393499 4.050560 253	200070 (311,1)
0.393935 4.045750 255	0 (312,0)
0.343393 4.642080 261	146185 (140,387)
0.451624 3.452226 270	60144.3 (240,357)
0.462321 3.350565 283	103175 (252,364)
0.464053 3.334326 286	131077 (254,366)
0.472551 3.255516 297	185318 (263,374)
0.507849 2.942651 312	130117 (342,318)
0.469971 3.279293 317	62735.3 (384,259)
0.356222 4.482795 337	78044.5 (408,11)
0.307587 5.120318 352	146391 (4,15)
0.305413 5.151126 354	122737 (443,182)
0.505293 2.594062 388	124927 (252,484)
0.317479 4.982855 416	115097 (293,495)
0.322817 4.910441 419	133942 (295,497)
0.331198 4.799126 422	146759 (298,499)
0.311942 5.059263 426	81001.8 (304,500)
0.308708 5.104526 431	36098.3 (308,503)
0.391797 4.069389 440	0 (313,511)
0.216102 6.653410 447	97403.4 (491,333)
0.194892 7.102068 453	141166 (366,492)
0.479623 3.191004 481	92898 (473,425)
0.470828 3.271381 484	111752 (479,422)
0.285108 5.449907 500	107538 (460,469)
0.112482 9.489159 516	97069.9 (471,481)
0.186522 7.292707 529	218424 (481,490)
0.321269 4.931313 544	123341 (499,492)

0.166928 7.774707 562 120687 (509,508)
Nearest Corr sidelobe: ratio 0.447854, dBdown 3.488638 at distance 26
Largest Corr sidelobe: ratio 0.586567, dBdown 2.316823 at distance 228

Laplacian Side Lobe Information, Maximum Value is 1.39379e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance Location

Side-Lobe-To-Peak-Ratio DBs-Down Distance	Location
1.000000 0.000000 0	(93,130)
0.182157 7.395536 5	(89,127)
0.158993 7.986221 8	(99,135)
0.213090 6.714368 13	(103,138)
0.162150 7.900840 17	(107,140)
0.106267 9.736015 21	(76,117)
0.146419 8.344039 26	(113,146)
0.146081 8.354073 30	(116,150)
0.135858 8.669141 36	(103,95)
0.121538 9.152888 39	(123,155)
0.128417 8.913773 42	(56,110)
0.140102 8.535570 44	(128,157)
0.126532 8.977987 48	(57,99)
0.173424 7.608902 55	(52,94)
0.139768 8.545917 59	(95,71)
0.135768 8.672014 62	(92,68)
0.154037 8.123759 66	(35,98)
0.164906 7.827631 68	(34,97)
0.155850 8.072940 71	(148,175)
0.156557 8.053266 74	(38,81)
0.152946 8.154605 77	(63,201)
0.187319 7.274184 81	(34,74)
0.130755 8.835425 85	(26,77)
0.183798 7.356593 108	(11,60)
0.159026 7.985307 93	(177,169)
0.175535 7.556373 96	(81,225)
0.173234 7.613667 101	(77,217)
0.183798 7.356593 108	(11,60)
0.151857 8.185644 113	(187,193)
0.207996 6.819459 116	(118,17)
0.137708 8.610399 119	(2,207)
0.144958 8.387568 121	(34,24)
0.168133 7.743479 123	(31,24)
0.204350 6.896259 128	(42,13)
0.119314 9.233084 134	(205,56)
0.118228 9.272781 137	(77,266)
0.174102 7.591965 144	(219,199)
0.134637 8.708353 146	(215,211)
0.131336 8.816149 148	(9,252)
0.145252 8.378767 153	(21,265)
0.120185 9.201493 157	(222,219)
0.144357 8.405608 160	(252,151)
0.139559 8.552406 165	(21,278)
0.116354 9.342187 167	(237,46)
0.135790 8.671306 170	(244,51)
0.123718 9.075676 174	(244,43)
0.148502 8.282687 178	(269,105)
0.144126 8.412572 183	(68,311)
0.131836 8.874573 185	(53,311)
0.131836 8.799652 188	(258,220)
0.151274 8.202370 193	(285,114)
0.136993 8.633016 195	(278,192)
0.168280 7.739664 197	(93,327)
0.133325 8.750887 202	(282,60)
0.152819 8.158213 206	(288,65)
0.138397 8.588742 209	(86,339)
0.189395 7.226315 213	(305,145)
0.155900 8.071538 218	(57,345)

alw3_023.rep

0.130445	8.845731	220	(82, 350)
0.132624	8.773787	222	(122, 350)
0.144411	8.403994	224	(37, 347)
0.137043	8.631434	229	(39, 353)
0.139436	8.556241	232	(321, 89)
0.141877	8.480883	234	(284, 265)
0.138757	8.577446	236	(92, 366)
0.143261	8.438727	239	(49, 365)
0.137084	8.630124	245	(337, 106)
0.153327	8.143811	251	(121, 379)
0.152861	8.157046	255	(347, 114)
0.175968	7.545654	257	(299, 283)
0.161256	7.924842	263	(303, 289)
0.144009	8.416103	266	(306, 289)
0.152141	8.177528	269	(362, 114)
0.128726	8.903346	274	(136, 401)
0.117827	9.287570	277	(146, 402)
0.160703	7.939764	280	(4, 395)
0.123750	9.074552	284	(79, 414)
0.175019	7.569154	290	(324, 305)
0.157582	8.024928	299	(264, 375)
0.152602	8.164396	304	(273, 375)
0.134020	8.728299	306	(394, 183)
0.135940	8.666536	308	(358, 287)
0.122860	9.105882	311	(125, 439)
0.156560	8.0531	314	(403, 80)
0.165817	7.803719	319	(78, 449)
0.149972	8.239903	325	(153, 449)
0.147103	8.323773	328	(399, 11)
0.137827	8.606663	333	(420, 69)
0.130161	8.855178	336	(428, 102)
0.142113	8.473653	339	(141, 466)
0.114957	9.394633	341	(11, 461)
0.110984	9.547413	344	(435, 169)
0.130756	8.835380	346	(116, 475)
0.110035	9.584708	350	(122, 479)
0.140738	8.515881	354	(114, 483)
0.149771	8.245722	357	(111, 487)
0.173550	7.605758	363	(129, 491)
0.166494	7.786006	367	(53, 495)
0.154759	8.103436	373	(8, 493)
0.169903	7.697977	376	(435, 287)
0.153470	8.139758	379	(97, 509)
0.156841	8.045402	381	(474, 132)
0.182707	7.382457	384	(307, 449)
0.178950	7.472676	386	(310, 449)
0.137782	8.608086	389	(251, 485)
0.143704	8.425322	391	(471, 31)
0.155816	8.073879	398	(475, 18)
0.171288	7.662734	406	(493, 63)
0.124198	9.058849	410	(327, 467)
0.192675	7.151746	414	(292, 493)
0.159627	7.968936	421	(508, 203)
0.151034	8.209246	424	(495, 266)
0.155189	8.091388	426	(481, 305)
0.136760	8.640403	429	(409, 420)
0.143244	8.439232	434	(481, 324)
0.117638	9.294529	438	(489, 316)
0.105645	9.761512	441	(475, 350)
0.109125	9.620744	443	(325, 507)
0.098154	10.080932	445	(481, 347)
0.183498	7.363693	449	(363, 489)
0.206135	6.858486	451	(360, 494)
0.134785	8.703584	455	(409, 458)

0.154379	8.114110	459	(504, 334)
0.101719	9.925967	464	(367, 504)
0.106458	9.728215	467	(459, 420)
0.116102	9.351596	471	(482, 395)
0.118082	9.278151	476	(481, 405)
0.111911	9.511286	478	(391, 504)
0.093406	10.296256	481	(471, 427)
0.104368	9.814328	484	(459, 447)
0.115015	9.392473	489	(451, 463)
0.121671	9.148130	494	(450, 471)
0.132532	8.776781	497	(487, 433)
0.136462	8.649896	500	(445, 485)
0.133447	8.746922	503	(445, 489)
0.133721	8.737997	505	(446, 491)
0.142694	8.455954	511	(462, 484)
0.077145	11.126947	517	(472, 481)
0.082854	10.816842	520	(461, 498)
0.108885	9.630303	525	(466, 500)
0.156713	8.048957	529	(481, 490)
0.067535	11.704729	533	(475, 502)
0.130551	8.828928	537	(498, 483)
0.104278	9.818069	542	(499, 489)
0.108694	9.637932	545	(499, 493)
0.148534	8.281738	548	(495, 503)
0.112515	9.487881	551	(508, 493)
0.075744	11.206522	556	(504, 505)
0.093582	10.288095	561	(509, 507)
0.000000	0.000000	566	(511, 511)

Nearest Laplacian sidelobe: ratio 0.182157, dBdown 7.395536 at distance 5
 Largest Laplacian sidelobe: ratio 0.213090, dBdown 6.714368 at distance 13

alw3_033.rep

Image AQVIR1 at compression 33.0:1 against window W3.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max. in original is (93,130)

Location of max. in compression is (93,130), sub-pixel is (93.000,130.250)

Max Laplacian Value is 1.02376e+06 at location (93,130)

Smoothed (FFT) Maximum Laplacian Value is 1354784.00 at (92.500,130.625)

Correlation Side Lobe Information, Maximum Value is 6.94392e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	1.02376e+06	(93,130)
0.481572	3.173384	24	123540	(112,145)
0.327531	4.847473	38	143050	(123,154)
0.357513	4.467087	46	147356	(129,159)
0.309992	5.086495	62	127481	(47,89)
0.337404	4.718493	68	156157	(41,86)
0.339399	4.628896	70	136245	(40,85)
0.357989	4.461298	74	185872	(37,81)
0.461923	3.354303	86	101848	(27,75)
0.388542	4.105625	99	93151.8	(178,79)
0.411556	3.855709	108	53976.3	(189,80)
0.446904	3.497856	116	75480.3	(198,81)
0.408113	3.892193	125	83583.3	(13,226)
0.287027	5.420768	142	85818.5	(229,89)
0.275863	5.593059	147	120920	(150,266)
0.288982	5.391298	164	125249	(149,284)
0.335630	4.741397	177	148491	(146,299)
0.330054	4.814147	184	77273	(143,307)
0.333446	4.769743	189	57521	(138,314)
0.331022	4.801427	197	55772	(138,322)
0.438165	3.583622	207	88029.8	(287,57)
0.441967	3.546099	210	121630	(290,56)
0.630667	2.001988	227	116281	(187,337)
0.627783	2.021904	229	86478	(188,338)
0.397312	4.008683	253	147756	(311,1)
0.360262	4.199171	261	103795	(140,387)
0.505501	2.962779	270	110923	(239,357)
0.483408	3.156861	284	89542.5	(253,365)
0.486895	3.125651	286	127867	(254,366)
0.467973	3.297795	291	82046.8	(258,370)
0.480488	3.183173	295	154788	(261,373)
0.522927	2.815591	313	145491	(342,319)
0.490324	3.095171	319	81834.3	(385,258)
0.384934	4.146139	336	104237	(408,12)
0.323595	4.899986	354	110879	(443,181)
0.325848	4.869848	368	0	(0,486)
0.584205	2.334349	388	112574	(252,484)
0.343838	4.636458	419	162544	(295,497)
0.343754	4.637572	422	131050	(298,499)
0.321474	4.928535	426	87849.5	(304,500)
0.382966	4.168393	439	0	(312,511)
0.223345	6.510234	448	57146.9	(493,331)
0.218440	6.06687	453	127305	(366,492)
0.499228	3.017007	480	64228.8	(472,425)
0.499697	3.012931	483	128144	(479,421)
0.499113	3.018014	485	69783	(480,422)
0.291798	5.349179	500	92927.1	(460,469)
0.101708	9.926445	520	88720.4	(476,482)
0.188785	7.240779	529	196995	(481,490)
0.319465	4.955766	543	80255.8	(500,490)
0.313239	5.041237	549	0	(511,486)
0.196307	7.297702	562	137162	(509,508)

Nearest Corr sidelobe: ratio 0.481572, dBdown 3.173384 at distance 24

Largest Corr sidelobe: ratio 0.630667, dBdown 2.001998 at distance 227

Laplacian Side Lobe Information, Maximum Value is 1.02376e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Location

1.000000	0.000000	0	(93,130)
0.215781	6.659866	8	(99,136)
0.187398	7.272357	13	(103,138)
0.189748	7.218231	18	(107,141)
0.154184	8.119607	20	(106,115)
0.173982	7.594946	24	(113,144)
0.160023	7.958186	29	(115,149)
0.139620	8.550535	33	(104,99)
0.140179	8.533168	37	(123,151)
0.137649	8.612258	41	(127,107)
0.155209	8.090832	44	(128,157)
0.180463	7.436113	46	(129,158)
0.266308	5.746163	55	(52,94)
0.173655	7.603124	59	(95,71)
0.229180	6.398230	62	(92,68)
0.207566	6.828437	67	(34,98)
0.183756	7.357575	71	(86,59)
0.200033	6.988988	74	(38,81)
0.185017	7.327877	77	(63,201)
0.288053	6.818259	84	(170,163)
0.163098	7.875513	87	(165,81)
0.168239	7.740736	89	(26,71)
0.227086	6.438065	93	(177,169)
0.236304	6.265292	96	(81,225)
0.207923	6.820972	104	(97,26)
0.233100	6.324570	107	(11,61)
0.200761	6.973197	112	(25,219)
0.190621	7.198295	115	(42,2)
0.181826	7.403432	117	(118,16)
0.206121	6.858780	121	(90,9)
0.180216	7.442063	123	(31,24)
0.165889	7.801825	125	(96,5)
0.219194	6.591712	128	(42,13)
0.169301	7.713397	133	(16,239)
0.135563	8.678601	136	(8,236)
0.151282	8.202132	139	(25,251)
0.175969	7.545637	142	(9,253)
0.212769	6.720920	152	(19,263)
0.145026	8.385542	158	(215,230)
0.162511	7.891173	160	(215,26)
0.165111	7.822253	165	(26,281)
0.171987	7.645055	167	(237,46)
0.172971	7.620271	173	(65,301)
0.151948	8.183038	176	(269,118)
0.167552	7.758512	178	(237,25)
0.202668	6.932158	184	(81,314)
0.179324	7.463604	190	(86,320)
0.168003	7.746817	192	(261,222)
0.190903	7.191884	195	(278,191)
0.154566	8.108852	198	(271,217)
0.146741	8.334485	201	(257,14)
0.147137	8.322781	203	(101,333)
0.174647	7.578391	206	(288,65)
0.179508	7.459161	209	(293,69)
0.215468	6.666176	213	(298,74)
0.212493	6.726549	220	(296,45)
0.188170	7.254506	225	(313,85)
0.149748	8.246384	227	(186,337)
0.166701	7.780613	230	(320,90)
0.209323	6.791827	234	(280,270)
0.181563	7.409715	240	(21,359)
0.171748	7.651091	244	(123,372)

alw3_033.rep

0.178650	7.479971	251	(129,378)
0.165990	7.799182	253	(345,110)
0.202284	6.940378	255	(348,115)
0.140729	8.516159	258	(61,386)
0.185091	7.326144	261	(128,389)
0.199615	6.998063	263	(303,289)
0.176932	7.521928	266	(305,290)
0.156679	8.049889	272	(37,396)
0.181825	7.403461	281	(76,410)
0.192325	7.159634	288	(323,304)
0.198776	7.016359	291	(22,412)
0.163421	7.866931	297	(262,374)
0.136079	8.662094	302	(96,432)
0.157332	8.031842	306	(394,183)
0.174838	7.573654	308	(387,39)
0.200121	6.987069	315	(343,321)
0.153785	8.130862	317	(406,83)
0.159130	7.982478	319	(151,444)
0.185215	7.323246	322	(395,18)
0.138885	8.573436	325	(53,453)
0.245302	6.102980	328	(399,13)
0.176698	7.527680	331	(402,10)
0.163846	7.855654	336	(428,103)
0.166871	7.776198	339	(141,466)
0.150456	8.225918	342	(67,471)
0.162593	7.888974	346	(116,475)
0.136283	8.655595	350	(425,20)
0.128894	8.897679	352	(441,77)
0.142433	8.463905	354	(426,9)
0.203580	6.912647	358	(112,487)
0.159397	7.975204	363	(128,491)
0.233425	6.318523	369	(53,497)
0.178617	7.480778	375	(435,285)
0.189801	7.217023	377	(12,498)
0.179896	7.449780	379	(96,509)
0.164853	7.829035	381	(474,131)
0.224814	6.481776	384	(306,449)
0.188460	7.247800	388	(214,499)
0.170861	7.673574	391	(471,31)
0.151269	8.202494	394	(484,81)
0.169591	7.705968	398	(475,18)
0.150689	8.219178	402	(361,430)
0.190513	7.200759	406	(493,63)
0.190380	7.203793	408	(275,495)
0.207562	6.828529	415	(292,494)
0.177686	7.503466	417	(495,241)
0.158771	7.992279	419	(295,497)
0.171989	7.644983	425	(509,217)
0.139491	8.554549	427	(505,243)
0.163514	7.864440	429	(505,249)
0.161963	7.905845	434	(481,325)
0.139042	8.568553	437	(486,321)
0.181488	7.411530	441	(482,338)
0.126881	8.966032	444	(325,508)
0.187269	7.275343	449	(363,489)
0.193547	7.132142	451	(360,494)
0.197043	7.054399	453	(367,491)
0.168088	7.744641	459	(504,334)
0.124136	9.061022	462	(369,500)
0.100810	9.964955	464	(366,505)
0.136170	8.659199	468	(465,414)
0.122151	9.131036	473	(460,428)
0.123062	9.098743	476	(469,422)
0.147570	8.310031	479	(391,505)

0.136712	8.641928	483	(479,420)
0.151424	8.198063	486	(481,423)
0.141787	8.483632	488	(482,424)
0.108272	9.654858	491	(488,421)
0.131746	8.802616	494	(470,449)
0.172199	7.639705	497	(487,433)
0.181327	7.415378	504	(445,491)
0.178826	7.475704	512	(445,502)
0.102169	9.906811	521	(461,499)
0.135587	8.677819	526	(479,487)
0.192424	7.157415	529	(481,490)
0.130307	8.850315	533	(475,501)
0.158210	8.007658	537	(499,481)
0.129621	8.873261	542	(499,489)
0.111155	9.540691	545	(485,508)
0.154929	8.098673	549	(495,504)
0.110861	9.552194	552	(509,493)
0.084563	10.728219	554	(499,507)
0.115271	9.382782	556	(504,505)
0.133979	8.729633	562	(509,508)
0.000000	0.000000	566	(511,511)

Nearest Laplacian sidelobe: ratio 0.215781, dbdown 6.659866 at distance 8
 Largest Laplacian sidelobe: ratio 0.266308, dbdown 5.746163 at distance 55



Image AQVIR1 at compression 58.0:1 against window W3.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (93,130)
Location of max in compression is (93,130), sub-pixel is (92.875,130.125)
Max Laplacian Value is 680655 at location (93,130)
Smoothed (FFT) Maximum Laplacian Value is 1046240.00 at (93.875,130.750)

Correlation Side Lobe Information, Maximum Value is 6.56167e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	680655	(93,130)
0.490336	3.095062	24	157593	(112,145)
0.489080	3.106198	26	130302	(113,146)
0.403131	3.945537	46	140227	(129,159)
0.402645	3.950781	48	134790	(130,160)
0.308702	5.104605	62	108796	(46,89)
0.350148	4.557478	71	74839	(39,84)
0.350352	4.554955	73	70788	(37,83)
0.471658	3.263729	87	95900.3	(26,75)
0.450516	3.462895	108	30343.8	(188,79)
0.515373	2.878779	116	73609.5	(199,82)
0.440839	3.557205	125	68048.3	(12,225)
0.341755	4.662847	142	106688	(229,89)
0.305668	5.147494	147	100116	(150,266)
0.307073	5.127583	150	79028.8	(151,268)
0.307703	5.118680	153	38389.5	(242,96)
0.308636	5.105535	166	78704.5	(149,286)
0.374695	4.263217	176	110818	(146,298)
0.362592	4.405823	182	73767.3	(144,305)
0.3568.3	4.475715	188	45173.8	(138,313)
0.344090	4.633279	196	51276	(139,321)
0.453949	3.429931	209	73553.3	(289,57)
0.448527	3.482118	212	78882.8	(293,59)
0.663694	1.780321	227	115917	(187,337)
0.539189	2.682591	241	132379	(258,305)
0.435573	3.609389	253	143822	(311,1)
0.403564	3.940881	262	76691	(140,388)
0.521499	2.827463	270	100689	(239,357)
0.551219	2.586755	282	144853	(251,363)
0.526268	2.787929	294	125720	(260,372)
0.577065	2.387752	313	156594	(342,319)
0.530103	2.756395	319	67217.8	(385,258)
0.405995	3.914788	335	84636.5	(407,12)
0.406238	3.912190	337	73038.3	(408,11)
0.339837	4.687296	353	73913.3	(426,14)
0.630741	2.001491	381	127483	(252,484)
0.391730	4.070132	421	144792	(297,498)
0.422121	3.745626	439	0	(312,511)
0.216989	6.635631	453	116468	(408,11)
0.509179	2.931293	479	64674	(471,425)
0.498137	3.026508	485	129138	(480,423)
0.310105	5.084909	500	98975.1	(461,469)
0.205411	6.873771	529	147976	(481,490)
0.348835	4.573797	545	85492.5	(500,492)
0.332481	4.782338	549	0	(511,486)
0.183653	7.360029	562	113377	(509,508)
Nearest Corr sidelobe: ratio 0.490336, dBdown 3.095062 at distance 24				
Largest Corr sidelobe: ratio 0.663694, dBdown 1.780321 at distance 227				

Laplacian Side Lobe Information, Maximum Value is 680655

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(93,130)
0.248225	6.051541	6	(88,126)
0.253153	5.966166	8	(99,135)

6.015033	12	(102,138)
6.974334	17	(106,141)
7.665219	21	(77,117)
5.875841	24	(113,144)
7.038707	28	(113,149)
7.448730	34	(103,97)
6.969425	38	(123,154)
7.101077	41	(125,155)
6.211439	45	(128,158)
6.366341	50	(132,161)
4.531035	54	(53,94)
6.407192	61	(93,69)
6.359775	65	(35,100)
6.225256	67	(34,99)
6.795934	71	(85,59)
6.393673	77	(37,77)
7.368160	79	(25,90)
6.219302	84	(170,163)
6.937791	90	(151,199)
6.446774	93	(177,169)
5.773190	96	(180,171)
6.248123	99	(18,66)
5.714985	103	(97,27)
5.811003	106	(12,61)
5.447975	108	(174,201)
6.030843	112	(31,223)
6.006754	118	(117,14)
6.272345	122	(31,25)
6.954163	125	(109,6)
6.657497	127	(110,4)
6.594691	129	(213,84)
6.655288	133	(5,230)
7.161653	135	(205,205)
6.993386	139	(25,251)
7.251053	141	(222,73)
6.904457	143	(228,84)
7.421137	147	(216,211)
5.956624	152	(19,263)
5.664822	156	(93,286)
7.429813	159	(245,83)
6.330001	166	(201,256)
6.555767	170	(61,297)
6.416465	173	(65,301)
7.271674	176	(68,304)
6.051663	181	(265,185)
6.108797	183	(80,313)
6.355423	186	(20,301)
6.004179	189	(85,319)
5.880726	193	(285,116)
6.729245	198	(289,105)
6.313215	202	(101,332)
6.650761	209	(94,339)
5.185272	212	(297,74)
6.878148	217	(309,150)
5.786987	220	(296,46)
6.565276	225	(297,34)
6.380576	227	(185,377)
6.609090	230	(319,90)
6.492565	234	(280,270)
5.955887	239	(89,369)
6.317437	242	(197,348)
6.900384	246	(177,331)
6.737709	250	(105,380)
6.653542	253	(345,112)

alw3_058.rep

0.264775	5.771	257	(350,115)	0.155828	8.073552	512	(444,503)
0.197271	7.049367	261	(277,315)	0.180243	7.441404	520	(482,475)
0.292248	5.342483	264	(304,289)	0.191753	7.172568	525	(478,487)
0.209301	6.792288	269	(237,357)	0.217402	6.627372	529	(481,490)
0.192192	7.162641	273	(366,129)	0.114773	9.401617	533	(475,501)
0.166231	7.792869	275	(288,324)	0.165218	7.819420	537	(474,509)
0.210749	6.762335	279	(106,409)	0.218651	6.602493	542	(501,487)
0.217108	6.633239	282	(252,363)	0.177349	7.511712	546	(500,494)
0.226038	6.458189	287	(256,366)	0.120439	9.192330	552	(497,506)
0.216191	6.651631	289	(324,303)	0.137076	8.630372	555	(502,505)
0.209809	6.781768	295	(261,373)	0.196488	7.066641	563	(509,509)
0.179293	7.464355	299	(265,375)	9.000000	0.000000	566	(511,511)
0.190287	7.205902	303	(334,313)	Nearest Laplacian sidelobe: ratio 0.248225, dBdown 6.051541 at distance 6			
0.197155	7.051923	307	(357,287)	Largest Laplacian sidelobe: ratio 0.352287, dBdown 4.531035 at distance 54			
0.252282	5.981131	312	(341,320)				
0.258756	5.871098	314	(342,321)				
0.202000	6.946477	319	(329,344)				
0.186206	7.300052	323	(397,22)				
0.200955	6.969021	326	(380,285)				
0.250500	6.011918	329	(400,13)				
0.245938	6.091748	334	(125,462)				
0.213397	6.708117	336	(428,102)				
0.238184	6.230881	339	(140,466)				
0.206977	6.840776	343	(136,470)				
0.202764	6.930082	347	(17,469)				
0.187908	7.260537	351	(122,480)				
0.256261	5.913183	360	(72,489)				
0.208195	6.815304	363	(4,482)				
0.254982	5.934902	369	(97,499)				
0.220731	6.561364	375	(460,53)				
0.284722	5.455797	378	(456,25)				
0.293502	5.323886	384	(309,447)				
0.307145	5.126561	388	(481,143)				
0.185005	7.328169	393	(443,309)				
0.187817	7.262662	395	(313,458)				
0.175606	7.554610	398	(475,18)				
0.176932	7.521933	400	(477,18)				
0.175069	7.567919	402	(289,481)				
0.192358	7.158889	404	(491,62)				
0.204438	6.894380	408	(275,495)				
0.274755	5.610550	413	(314,479)				
0.212724	6.721832	421	(297,498)				
0.223434	6.508499	427	(505,243)				
0.210554	6.766369	431	(348,478)				
0.201870	6.949277	434	(477,333)				
0.146706	8.335529	438	(487,321)				
0.145141	8.382086	440	(481,338)				
0.149388	8.256856	442	(471,360)				
0.213298	6.710131	446	(478,355)				
0.275063	5.605679	450	(365,489)				
0.241161	6.176921	453	(362,495)				
0.237747	6.238848	458	(503,334)				
0.154655	8.106348	462	(374,497)				
0.180104	7.444773	467	(458,421)				
0.161133	7.928159	471	(482,395)				
0.133193	8.755197	474	(463,427)				
0.137725	8.609859	476	(465,427)				
0.152560	8.165592	479	(479,413)				
0.166551	7.784538	481	(465,435)				
0.171212	7.664660	483	(479,421)				
0.249673	6.026289	486	(481,423)				
0.158170	8.008746	495	(441,482)				
0.168029	7.746154	497	(487,433)				
0.249278	6.033156	505	(446,491)				

Image AQVIR1 at compression 90.0:1 against window W3.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (93,130)

Location of max in compression is (93,130), sub-pixel is (93.000,130.125)

Max Laplacian Value is 456405 at location (93,130)

Smoothed (FFT) Maximum Laplacian Value is 820224.00 at (93.875,130.750)

Correlation Side Lobe Information, Maximum Value is 5.87235e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000 0.000000 0 456405 (93,130)

0.502366 2.989801 25 110989 (112,146)

0.463972 3.335081 45 139524 (128,158)

0.350454 4.533684 69 123593 (41,85)

0.384967 4.145764 75 77341.5 (65,200)

0.552254 2.578607 87 131358 (26,74)

0.442676 3.539141 100 66523 (179,79)

0.471992 3.260650 106 65457.8 (187,80)

0.506828 2.951391 116 54359.5 (200,84)

0.494524 3.058127 128 110369 (14,231)

0.379871 4.203633 141 71466.8 (228,89)

0.325769 4.870906 151 71552.5 (241,98)

0.403819 3.938129 176 94015.8 (145,298)

0.412133 3.849622 187 44872.8 (139,311)

0.518115 2.855736 215 100138 (290,45)

0.723366 1.406422 227 107166 (187,337)

0.578262 2.378755 241 142921 (258,305)

0.452009 3.448532 254 120156 (312,1)

0.480370 3.184242 264 144684 (140,390)

0.571418 2.430464 270 125748 (239,357)

0.566395 2.468806 283 126367 (252,364)

0.488775 3.108911 293 70131.3 (260,371)

0.490026 3.097807 295 86369.5 (261,372)

0.653774 1.845725 311 107883 (341,318)

0.579249 2.371344 317 97090 (378,268)

0.430763 3.657612 336 84432.5 (407,11)

0.727370 4.290258 355 40655 (444,181)

0.686631 1.632768 387 126558 (252,483)

0.358996 4.449103 417 91989.5 (292,496)

0.353483 4.516309 420 61127.4 (296,498)

0.354234 4.507096 422 87630 (297,499)

0.343800 4.636947 425 73927.3 (303,500)

0.344112 4.633006 427 64720.5 (304,501)

0.387635 4.115774 434 64903 (482,323)

0.440980 3.555809 439 0 (312,511)

0.259397 5.860349 456 133731 (367,495)

0.587670 2.308664 480 98661.3 (472,424)

0.574797 2.404857 484 95190.3 (479,422)

0.343484 4.640941 500 70188.8 (461,469)

0.194426 7.112453 527 99573.8 (467,501)

0.399415 3.985756 545 125098 (500,492)

0.214015 6.695553 560 81410.5 (507,507)

Nearest Cor sideLobe: ratio 0.502366, dBdown 2.989801 at distance 25

Largest Cor sideLobe: ratio 0.723366, dBdown 1.406422 at distance 227

Laplacian Side Lobe Information, Maximum Value is 456405

Side-Lobe-To-Peak-Ratio DBs-Down Distance Location

1.000000 0.000000 0 (93,130)

0.239422 6.208351 8 (86,126)

0.269558 5.693486 11 (102,136)

0.283033 5.481622 15 (105,139)

0.217091 6.633584 21 (77,117)

0.274075 5.621299 26 (113,147)

0.227580 6.428660 39 (123,155)

0.310371 5.081195 46 (129,158)

0.282085 5.496204 49 (132,159)

0.406815 3.906029 54 (53,94)

0.239693 6.203448 58 (148,111)

0.400032 3.979049 61 (93,69)

0.261867 5.819184 65 (86,65)

0.279075 5.542789 68 (77,64)

0.291565 5.352649 71 (86,59)

0.241189 6.176430 76 (37,79)

0.265313 5.762407 80 (63,56)

0.274855 5.608963 83 (175,117)

0.331586 4.794033 89 (26,72)

0.279783 5.531786 92 (177,92)

0.300105 5.227262 94 (179,169)

0.331878 4.790218 96 (166,193)

0.283219 5.478782 99 (141,43)

0.306738 5.132320 104 (136,35)

0.278934 5.544984 107 (147,222)

0.264727 5.772016 115 (115,17)

0.273338 5.633002 121 (88,9)

0.257137 5.898356 123 (48,245)

0.278084 5.558232 125 (109,6)

0.318124 4.974042 130 (14,233)

0.264605 5.774014 136 (203,210)

0.246334 6.084754 141 (229,92)

0.243370 6.137335 144 (237,141)

0.340051 4.684554 151 (21,263)

0.255292 5.929629 155 (93,285)

0.222924 6.518438 160 (251,107)

0.235526 6.279616 162 (253,107)

0.315221 5.013842 166 (201,256)

0.219407 6.587497 168 (59,295)

0.227928 6.422015 170 (240,45)

0.283021 5.481815 174 (267,119)

0.280487 5.520811 180 (257,205)

0.256280 5.912850 183 (272,169)

0.279977 5.528772 189 (85,319)

0.258605 5.873637 194 (277,191)

0.245277 6.103428 196 (270,215)

0.297253 5.268741 201 (101,331)

0.264097 5.782372 206 (145,329)

0.253436 5.961313 208 (259,5)

0.278791 5.547211 212 (201,313)

0.275061 5.605704 215 (205,313)

0.279784 5.531773 218 (57,345)

0.266123 5.749175 221 (244,292)

0.276321 5.585866 227 (186,337)

0.289021 5.390701 229 (166,347)

0.280063 5.527447 234 (70,363)

0.362755 4.403866 242 (197,349)

0.248451 6.047591 246 (101,376)

0.232240 6.340635 248 (334,190)

0.296300 5.282686 251 (344,129)

0.308026 5.114133 255 (313,2)

0.275576 5.597588 257 (185,370)

0.202650 6.932537 259 (300,285)

0.428920 3.676237 265 (141,391)

0.277709 5.564105 270 (239,357)

0.296230 5.283704 273 (285,324)

0.226611 6.447186 276 (314,296)

0.281176 5.510223 280 (77,410)

0.316835 4.991666 283 (253,363)

0.387380 4.118633 286 (321,303)

0.238752 6.220524 293 (371,37)

0.228676	6.407794	296	(262, 373)
0.221168	6.552785	298	(308, 337)
0.276599	5.581501	307	(395, 75)
0.320267	4.944872	313	(341, 321)
0.239032	6.215082	318	(84, 448)
0.254817	5.937721	325	(153, 449)
0.271727	5.658678	329	(400, 13)
0.371863	4.296167	334	(125, 462)
0.266984	5.735155	338	(426, 73)
0.329330	4.823685	342	(68, 471)
0.231759	6.349633	348	(425, 27)
0.255228	5.930720	351	(122, 480)
0.266141	5.748885	353	(30, 477)
0.323268	6.340115	355	(189, 472)
0.346182	4.606959	360	(365, 366)
0.314900	5.018270	367	(53, 495)
0.248212	6.051775	371	(244, 469)
0.238768	6.220235	374	(454, 33)
0.379943	4.202813	380	(205, 493)
0.358971	4.449406	385	(309, 449)
0.324029	4.894162	389	(253, 485)
0.307901	5.115886	395	(261, 487)
0.334880	4.751111	397	(474, 17)
0.202733	6.930756	401	(324, 458)
0.286228	5.432879	407	(274, 495)
0.295852	5.289253	416	(509, 115)
0.276911	5.576604	420	(505, 209)
0.297643	5.263041	422	(509, 203)
0.338235	4.707815	425	(481, 303)
0.214996	6.675702	432	(346, 480)
0.218292	6.609631	436	(469, 350)
0.280281	5.524060	439	(489, 319)
0.181523	7.410693	443	(361, 483)
0.267207	5.731529	447	(478, 357)
0.298261	5.254040	450	(365, 489)
0.274328	5.617304	452	(368, 489)
0.293009	5.331191	456	(367, 495)
0.308600	5.106039	459	(369, 497)
0.210310	6.771403	468	(459, 421)
0.218553	6.604424	471	(466, 418)
0.256616	5.907170	480	(481, 413)
0.304995	5.157068	486	(481, 423)
0.167090	7.770495	494	(456, 465)
0.196875	7.058101	497	(487, 433)
0.207978	6.819822	499	(494, 427)
0.240942	6.180873	502	(445, 488)
0.198731	7.017354	511	(461, 484)
0.154548	8.103352	516	(471, 481)
0.293212	5.328187	526	(466, 501)
0.256423	5.910434	529	(481, 490)
0.114327	9.418521	533	(484, 492)
0.250354	6.014459	539	(502, 481)
0.323120	4.906359	546	(501, 493)
0.309383	5.095037	548	(496, 501)
0.132791	8.768298	556	(504, 505)
0.239544	6.206148	563	(509, 509)
0.000000	0.000000	566	(511, 511)

Nearest Laplacian sidelobe: ratio 0.239422, dBdown 6.208351 at distance 8
Largest Laplacian sidelobe: ratio 0.428920, dBdown 3.676237 at distance 265

Image AQVIR1 at compression 116.0:1 against window W3.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (93,130)

Location of max in compression is (93,130), sub-pixel is (93.000,130.500)

Max Laplacian Value is 328788 at location (93,130)

Smoothed (FFT) Maximum Laplacian Value is 627904.00 at (93.875,130.750)

Correlation Side Lobe Information, Maximum Value is 5.62381e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	328788	(93,130)
0.433471	3.067381	26	106572	(113,147)
0.420875	3.758474	36	98186	(121,153)
0.436785	3.597324	46	61687	(129,159)
0.437779	3.587447	48	77879.8	(130,160)
0.391800	4.069354	70	65611.5	(40,85)
0.398051	4.00610	74	75058.5	(37,82)
0.533484	2.728783	87	93648.3	(26,75)
0.468922	3.288993	99	42332.5	(178,80)
0.490475	3.093830	105	67364.5	(186,81)
0.513111	2.897884	120	61330.3	(202,81)
0.465638	3.319520	126	84383.8	(14,228)
0.354350	4.505673	137	57495.3	(223,87)
0.368871	4.331260	141	69833.9	(228,90)
0.348634	4.576298	152	75478.6	(241,96)
0.409422	3.878287	177	66458.8	(145,299)
0.448806	3.479415	190	45596.5	(139,314)
0.509311	2.930165	208	55863.8	(289,59)
0.542968	2.632256	214	91285	(201,315)
0.710749	1.482835	228	62825	(188,337)
0.607346	2.165639	241	121459	(258,305)
0.458334	3.388176	254	0	(311,0)
0.41603	3.191178	263	112657	(140,389)
0.534071	2.724010	271	97212	(240,358)
0.599567	2.221624	285	87467	(253,366)
0.597166	2.239048	287	63152.5	(254,367)
0.684249	1.647861	311	61422.8	(342,317)
0.629821	2.007831	318	67593.3	(385,256)
0.460400	3.368647	335	74670	(407,12)
0.338846	4.699971	348	57798.3	(422,17)
0.376219	4.245589	354	48220.8	(443,181)
0.735371	1.334935	390	137024	(253,486)
0.390881	4.079554	417	59080.3	(292,497)
0.429565	3.669715	430	32412.5	(306,504)
0.461363	3.359573	439	90059.5	(312,510)
0.231956	6.345952	456	85336.9	(367,494)
0.622366	2.059539	481	62147.3	(473,425)
0.629322	2.011269	484	89597.8	(479,422)
0.340935	4.673285	500	44203	(461,469)
0.218588	6.603738	529	59479.6	(468,503)
0.366337	4.361192	545	85902.5	(500,492)
0.308021	5.114195	552	0	(511,490)
0.184356	7.343424	562	52158.6	(509,508)

Nearest Corr sidelobe: ratio 0.493471, dBdown 3.067381 at distance 26

Largest Corr sidelobe: ratio 0.735371, dBdown 1.334935 at distance 390

Laplacian Side Lobe Information, Maximum Value is 328788

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	328788	(93,130)
0.259589	5.857143	8	(86,126)	
0.368725	4.332971	15	(105,139)	
0.289014	5.390809	22	(77,115)	
0.337877	4.712413	27	(114,147)	
0.298631	5.248657	36	(121,153)	
0.304863	5.158948	45	(129,157)	

5.407258	49	0.287922	(132,160)
3.699400	53	0.426638	(53,95)
5.785701	57	0.263894	(137,167)
4.720065	60	0.337282	(99,70)
4.728481	67	0.336629	(33,101)
4.479608	70	0.356483	(86,60)
5.408899	75	0.287813	(37,80)
5.064463	79	0.311569	(65,204)
4.645600	83	0.343115	(28,78)
3.340301	89	0.463415	(182,137)
4.527573	94	0.352568	(179,169)
4.549147	101	0.350821	(97,29)
4.807003	105	0.330598	(137,35)
4.884655	108	0.324739	(33,40)
4.895570	110	0.323924	(117,23)
4.404278	118	0.362721	(173,217)
6.215497	120	0.239029	(144,239)
5.831711	122	0.261113	(62,12)
5.477730	125	0.283287	(49,247)
4.856442	127	0.326855	(153,242)
4.642598	130	0.343352	(14,233)
4.267243	133	0.374348	(153,249)
4.661982	141	0.341823	(229,93)
5.421688	144	0.286967	(233,96)
4.666559	149	0.341463	(21,260)
4.733768	155	0.336220	(5,257)
6.271115	157	0.235987	(13,265)
5.804911	161	0.262730	(217,232)
4.714845	166	0.337688	(201,256)
5.336968	172	0.292619	(61,299)
4.537887	178	0.351732	(229,245)
4.643118	180	0.343311	(257,205)
4.187401	183	0.381294	(80,313)
4.552150	187	0.350578	(235,9)
4.886802	189	0.324579	(232,2)
5.952033	193	0.253978	(286,118)
4.860983	198	0.326514	(289,105)
4.163682	202	0.383382	(282,59)
4.083697	210	0.390508	(201,310)
5.471646	216	0.283684	(302,75)
4.732741	221	0.336299	(244,291)
4.963249	223	0.318915	(233,304)
4.684138	229	0.340084	(166,347)
5.001833	233	0.316094	(70,362)
3.950970	242	0.402627	(258,307)
4.588299	254	0.347672	(185,367)
4.360347	257	0.366408	(185,370)
5.683997	259	0.270147	(278,311)
2.791121	267	0.357147	(141,393)
5.641658	277	0.272794	(314,297)
5.729147	279	0.267353	(105,409)
3.637920	288	0.437221	(322,305)
4.646086	298	0.343077	(308,336)
4.733286	307	0.336257	(62,435)
4.855972	312	0.326891	(158,435)
5.172640	315	0.303904	(343,321)
5.826878	321	0.261404	(321,356)
4.332470	328	0.368768	(153,452)
3.748381	332	0.421854	(125,460)
5.586154	341	0.276302	(337,368)
5.561937	344	0.277847	(434,178)
5.588344	348	0.276163	(90,478)
5.075210	351	0.310799	(90,481)

0.237933	6.235455	355	(32,480)
0.407230	3.901598	359	(113,488)
0.396533	4.017206	368	(53,496)
0.412816	3.842431	376	(205,489)
0.364298	4.385428	379	(205,492)
0.374677	4.263425	383	(309,446)
0.357092	4.472195	385	(309,449)
0.416756	3.801179	390	(253,486)
0.343920	4.635420	396	(261,489)
0.306665	5.133363	399	(485,58)
0.286678	5.426052	405	(482,19)
0.354079	4.509003	408	(493,49)
0.267991	5.718790	413	(498,212)
0.292710	5.335619	415	(290,495)
0.304442	5.164959	420	(505,209)
0.442602	3.539863	426	(481,306)
0.307554	5.120793	430	(313,500)
0.308060	5.113654	438	(489,318)
0.357420	4.468216	445	(361,485)
0.294868	5.303717	450	(365,489)
0.340902	4.673709	453	(368,490)
0.266593	5.741516	456	(368,494)
0.353654	4.514213	461	(367,501)
0.305443	5.150702	471	(466,417)
0.322622	4.913064	480	(481,413)
0.394737	4.036925	486	(481,423)
0.237555	6.242365	496	(457,467)
0.296286	5.282889	502	(445,488)
0.199269	7.005613	507	(444,496)
0.258334	5.878178	512	(460,487)
0.274125	5.620514	522	(478,483)
0.356644	4.477652	526	(466,501)
0.349353	4.567356	528	(466,504)
0.146245	8.349203	533	(472,505)
0.247637	6.061842	538	(497,486)
0.256960	5.901344	541	(500,486)
0.281871	5.499492	545	(501,492)
0.285724	5.440538	547	(501,494)
0.278547	5.551016	550	(496,504)
0.136376	8.652630	556	(500,509)
0.166585	7.783651	561	(509,507)
0.202430	6.937261	563	(509,509)
0.000000	0.000000	566	(511,511)

Nearest Laplacian sidelobe: ratio 0.259589, dBdown 5.857143 at distance 8
Largest Laplacian sidelobe: ratio 0.525881, dBdown 2.791121 at distance 267

Image AQVIR1 at compression 1.0:1 against window W4.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (159,153)
Location of max in compression is (159,153), sub-pixel is (159.000,153.000)
Max Laplacian Value is 6.52156e+06 at location (159,153)
Smoothed (FFT) Maximum Laplacian Value is 8710176.00 at (159.000,153.000)

Correlation Side Lobe Information, Maximum Value is 7.76249e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0	6.52156e+06	(159,153)	
0.327403	4	849170	13	343538
0.286059	5	435450	19	314202
0.266936	5	735930	22	192438
0.295740	5	290893	29	165168
0.280363	5	522797	35	169704
0.195050	7	098540	46	158094
0.206062	6	860029	53	269712
0.226719	6	445113	61	313456
0.224407	6	489636	63	171278
0.183913	7	353880	68	224981
0.246018	6	090330	75	341681
0.250067	6	019429	80	274691
0.252537	5	976743	82	255074
0.386170	4	132216	98	246668
0.356362	4	481082	105	153985
0.370724	4	309495	111	218980
0.357359	4	468956	115	120156
0.395898	4	024165	123	299119
0.310207	5	083486	132	217947
0.321953	4	922074	136	295629
0.296443	5	280585	143	126197
0.250331	6	014848	148	211667
0.242996	6	144016	151	138968
0.352329	4	530521	159	367012
0.311656	5	036245	166	250030
0.370635	4	310540	181	349113
0.322667	4	912452	186	92237.8
0.411574	3	855518	195	201359
0.444243	3	523795	202	234740
0.216622	6	642981	227	83807.1
0.286240	5	432701	242	418474
0.299915	5	230014	245	287449
0.422656	3	740213	265	144570
0.371423	4	301313	284	127482
0.377620	4	229446	288	182441
0.359904	4	438138	293	164147
0.319985	4	948698	302	187946
0.319474	4	955643	304	226718
0.313916	5	031872	309	166548
0.311356	5	067421	311	129264
0.253333	5	963075	322	282913
0.256958	5	901377	324	228172
0.248788	6	041707	327	0
0.270070	5	685231	332	185626
0.367550	4	346831	339	291182
0.362746	4	403968	342	307039
0.371828	4	296574	351	229761
0.330894	4	803109	360	201157
0.317018	4	989165	365	134607
0.321050	4	934269	367	180754
0.318272	4	972019	369	141962
0.314734	5	020560	374	156942
0.292751	5	335011	380	130185
0.325186	4	878684	389	254713

Nearest Corr sidelobe: ratio 0.327403, dBdown 4.849170 at distance 13
Largest Corr sidelobe: ratio 0.444243, dBdown 3.523795 at distance 202

Laplacian Side Lobe Information, Maximum Value is 6.52156e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0	0.000000	0
0.185563	7	315096	3
0.099233	10	033434	6
0.057496	12	403622	13
0.048368	13	154453	16
0.048179	13	171424	19
0.050731	12	947264	22
0.054623	12	626217	24
0.052765	12	776531	26
0.051403	12	890124	31
0.059320	12	267966	33
0.055054	12	592085	37
0.040015	13	977789	41
0.049739	13	033035	43
0.065699	11	824414	46
0.052333	12	812278	49
0.068412	11	648653	52
0.057946	12	369736	55
0.058347	12	324926	57
0.048963	13	101281	59
0.059826	12	231088	62
0.058581	12	322403	66
0.048201	13	169415	70
0.052392	12	807310	75
0.046208	13	352832	77
0.050912	12	931816	80
0.053087	12	750101	82
0.054114	12	668882	84
0.053174	12	743028	87
0.062264	12	057623	92
0.056360	12	490310	95
0.044682	13	498646	100
0.055998	12	518304	103
0.052083	12	833042	108
0.055050	12	592448	111
0.059408	12	261515	113
0.063932	11	942812	115
0.064304	11	917603	117
0.054853	12	608028	120
0.053351	12	728590	122
0.066556	11	768140	125

0.056812	12.455628 128	(62,237)	0.043987	13.566799 319	(152,472)
0.054780	12.613778 130	(73,251)	0.050741	12.946415 321	(136,473)
0.054433	12.641376 132	(152,21)	0.058135	12.355646 324	(110,473)
0.071222	11.473833 135	(242,259)	0.045666	13.404088 327	(97,474)
0.055346	12.569155 137	(140,17)	0.055217	12.579272 330	(117,480)
0.058843	12.303038 139	(52,65)	0.047590	13.224878 332	(435,337)
0.070300	11.530452 142	(52,246)	0.050845	12.937560 336	(93,482)
0.059556	12.250760 144	(60,258)	0.047089	13.270804 339	(462,304)
0.058708	12.313054 147	(84,27)	0.050781	12.942948 343	(115,493)
0.052228	12.820954 152	(61,37)	0.043712	13.593958 345	(220,493)
0.055896	12.526230 156	(34,247)	0.058495	12.328779 349	(508,164)
0.056277	12.496709 159	(8,203)	0.051463	12.885012 353	(110,503)
0.056620	12.470338 162	(70,18)	0.053874	12.686187 357	(96,504)
0.049204	13.080036 166	(295,248)	0.047038	13.275482 360	(42,493)
0.051254	12.902737 168	(5,86)	0.065512	11.836778 365	(48,501)
0.052284	12.816316 171	(3,84)	0.041883	13.779623 370	(284,501)
0.050460	12.970494 173	(17,251)	0.058438	12.333078 375	(322,491)
0.052081	12.833184 177	(297,42)	0.055189	12.581490 380	(22,507)
0.054369	12.646468 180	(49,13)	0.046409	13.333960 382	(502,321)
0.055684	12.542729 184	(336,104)	0.037642	14.243322 384	(502,325)
0.039875	13.992997 186	(308,285)	0.046988	13.280112 386	(408,448)
0.043768	13.588407 188	(32,14)	0.046457	13.329517 391	(368,483)
0.052957	12.760783 192	(351,151)	0.040167	13.961346 393	(334,505)
0.043856	13.579675 195	(332,62)	0.040858	13.887229 395	(339,505)
0.053416	12.723282 197	(354,122)	0.048505	13.142155 397	(508,342)
0.051748	12.861082 199	(356,124)	0.050116	13.000206 399	(358,499)
0.050906	12.932324 201	(348,84)	0.048336	13.157291 403	(508,354)
0.046199	13.353631 207	(19,305)	0.041030	13.868951 406	(363,504)
0.047709	13.213970 209	(368,141)	0.055495	12.557489 408	(504,371)
0.054918	12.602828 211	(106,357)	0.043244	13.640765 412	(503,379)
0.046227	13.351006 213	(5,300)	0.051870	12.850848 414	(378,504)
0.049477	13.055991 215	(16,314)	0.037909	14.212611 416	(505,384)
0.043700	13.595174 219	(114,367)	0.033224	14.785522 418	(397,497)
0.041411	13.828877 222	(380,128)	0.030007	15.227810 420	(387,506)
0.052730	12.779411 224	(193,374)	0.038225	14.176537 422	(508,391)
0.051158	12.910879 226	(21,332)	0.042238	13.743003 424	(509,392)
0.050590	12.959344 230	(13,331)	0.039406	14.044323 427	(506,42)
0.042859	13.679593 232	(360,37)	0.050337	12.981153 430	(435,483)
0.046181	13.355400 235	(183,387)	0.042406	13.725765 434	(443,481)
0.042701	13.695626 237	(354,288)	0.045941	13.378012 437	(502,423)
0.053360	12.711574 240	(69,375)	0.053408	12.723908 442	(455,481)
0.064168	11.926824 242	(366,28)	0.046038	13.368825 445	(458,483)
0.054951	12.600235 245	(377,41)	0.032804	14.840775 449	(451,494)
0.055244	12.577123 250	(43,374)	0.051065	12.918746 452	(452,497)
0.050947	12.928855 254	(123,404)	0.046944	13.284197 457	(454,502)
0.036218	14.410778 257	(412,110)	0.063620	11.964031 460	(476,486)
0.046205	13.353069 261	(49,390)	0.042407	13.725645 465	(492,477)
0.049682	13.037970 263	(418,106)	0.040850	13.888063 467	(465,506)
0.063380	11.980487 268	(34,390)	0.034624	14.606172 470	(502,475)
0.046991	13.279898 274	(82,416)	0.033991	14.686414 472	(506,473)
0.054265	12.654804 277	(432,109)	0.012096	19.173622 476	(508,477)
0.053387	12.725623 279	(49,409)	0.012876	18.902330 478	(508,480)
0.038116	14.188917 282	(18,397)	0.024257	16.151675 480	(507,483)
0.052133	12.828904 285	(43,413)	0.026393	15.785064 482	(507,486)
0.044865	13.480971 288	(53,421)	0.016645	17.787276 485	(508,490)
0.045237	13.445107 290	(10,402)	0.020450	16.893044 489	(508,496)
0.055489	12.557922 292	(146,44)	0.010164	19.929415 492	(509,499)
0.047059	13.273568 295	(142,448)	0.000000	0.000000 502	(511,511)
0.041209	13.850056 301	(457,113)			
0.053313	12.731699 305	(438,276)			
0.047390	13.243128 307	(432,294)			
0.046602	13.315958 313	(195,464)			
0.050080	13.003335 315	(466,84)			
0.050171	12.995447 317	(140,469)			

Nearest Laplacian sidelobe: ratio 0.185563, dbdown 7.315096 at distance 3
Largest Laplacian sidelobe: ratio 0.185563, dbdown 7.315096 at distance 3

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17:44:17

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Image AQVIR1 at compression 14.0:1 against window W4.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (159,153)
Location of max in compression is (159,153), sub-pixel is (158.875,153.000)
Max Laplacian Value is 2.17878e+06 at location (159,153)
Smoothed (FFT) Maximum Laplacian Value is 2353184.00 at (158.750,153.375)

Correlation Side Lobe Information, Maximum Value is 6.39686e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	2.17878e+06	(159,153)
0.379018	4.213399	14	326496	(148,144)
0.359080	4.448091	29	189077	(180,173)
0.335289	4.745807	33	98834	(183,176)
0.338391	4.705813	35	104578	(184,177)
0.323063	4.907124	39	183723	(186,181)
0.239149	6.213320	46	197481	(123,124)
0.246682	6.078632	54	164250	(209,173)
0.266815	5.737898	63	136661	(214,183)
0.296805	5.275289	75	166396	(217,200)
0.302525	5.192385	80	213958	(89,114)
0.296879	5.274210	82	163682	(90,198)
0.460330	3.369307	99	182025	(74,103)
0.438829	3.577047	103	11739	(71,100)
0.452466	3.444145	111	110541	(237,74)
0.481826	3.171101	123	227888	(256,78)
0.387318	4.119319	135	159457	(140,19)
0.347071	4.595814	144	150115	(146,10)
0.310268	5.082625	148	97056.4	(196,296)
0.405562	3.919423	159	205304	(7,201)
0.391886	4.068403	163	0	(0,189)
0.445277	3.513693	182	243728	(8,52)
0.492588	3.075162	194	102378	(237,331)
0.524308	2.804134	201	138184	(234,340)
0.261241	5.829592	227	62188.5	(266,353)
0.260793	5.837043	229	115390	(268,354)
0.349711	4.562911	241	225044	(365,27)
0.371685	4.298251	246	117885	(360,12)
0.519957	2.840327	266	130285	(187,418)
0.445809	3.508511	283	120140	(194,434)
0.466561	3.310919	288	213343	(306,401)
0.374188	4.269101	302	177712	(197,453)
0.369941	4.318675	304	134642	(198,454)
0.373847	4.273056	311	143237	(318,420)
0.518499	4.968922	324	201971	(449,9)
0.296722	5.276503	327	0	(0,439)
0.334298	4.758668	332	218404	(458,9)
0.437055	3.594636	338	184126	(496,182)
0.435673	3.608390	341	227334	(499,180)
0.444628	3.520035	351	235634	(284,481)
0.403106	3.945807	360	126357	(464,345)
0.389123	4.099129	367	167979	(467,352)
0.385975	4.134403	369	125445	(467,357)
0.384347	4.152763	371	140824	(468,358)
0.381704	4.182734	373	83368.3	(468,362)
0.393584	4.094631	389	228248	(366,482)
0.291330	5.356143	396	115033	(457,414)
0.304039	5.170708	403	171453	(456,425)
0.323407	4.902507	407	167529	(456,432)
0.262709	5.805247	412	138414	(454,440)
0.263828	5.786798	416	153435	(455,445)
0.256091	5.916054	419	108034	(456,449)
0.302501	5.192737	426	0	(511,393)
0.322616	4.913138	434	0	(511,407)
0.229395	6.394157	443	0	(511,422)

0.276602 5.581446 447 0 (511,428)
0.274488 5.614759 454 0 (511,440)
0.168805 7.726155 464 82821.1 (462,505)
0.201888 6.948887 470 0 (511,465)
0.147364 8.316084 480 0 (511,480)
0.040188 13.959001 491 0 (511,496)
0.035264 14.526729 494 0 (511,500)
0.127795 0.000000 502 0 (511,511)
Nearest Corr sidelobe: ratio 0.379018, dBdown 4.213399 at distance 14
Largest Corr sidelobe: ratio 0.524308, dBdown 2.804134 at distance 201

Laplacian Side Lobe Information, Maximum Value is 2.17878e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance Location

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(159,153)
0.115128	9.388176	8	(164,159)
0.149853	8.243348	14	(148,144)
0.098829	10.051140	18	(171,166)
0.121470	9.155318	21	(160,174)
0.113935	8.558769	25	(182,162)
0.117879	9.285640	27	(184,164)
0.132486	8.778304	30	(186,167)
0.111483	9.527923	33	(159,186)
0.119234	9.236005	38	(147,117)
0.093739	10.280797	41	(170,113)
0.125352	9.018691	44	(180,192)
0.145939	8.358288	47	(165,106)
0.138558	8.583692	52	(207,172)
0.134179	8.723148	63	(222,152)
0.105424	9.770597	66	(217,211)
0.098122	10.082321	69	(217,115)
0.107671	9.679031	71	(136,86)
0.138463	8.586677	74	(197,216)
0.121598	9.150723	76	(217,202)
0.098201	10.078836	80	(89,114)
0.109347	9.611932	82	(112,220)
0.098560	10.062995	85	(204,81)
0.108803	9.633583	88	(195,233)
0.100914	9.960467	90	(132,239)
0.133012	8.761096	98	(257,159)
0.138690	8.579563	101	(235,220)
0.107134	9.700745	105	(80,84)
0.110024	9.585145	107	(115,55)
0.131234	8.819530	113	(268,181)
0.125992	8.996565	116	(81,239)
0.131019	8.826666	120	(40,167)
0.116083	9.352325	123	(257,79)
0.131126	8.823102	127	(60,74)
0.136664	8.643468	132	(253,60)
0.141031	8.506846	136	(272,77)
0.117197	9.310841	139	(23,126)
0.123626	9.078904	141	(292,201)
0.134652	8.707873	145	(116,15)
0.130679	8.837935	147	(82,28)
0.106616	9.721781	150	(10,135)
0.101049	9.954673	152	(122,6)
0.154280	8.116917	158	(33,248)
0.140034	8.537678	160	(2,182)
0.145018	8.385786	162	(23,241)
0.100101	9.995599	169	(4,86)
0.122916	9.103928	174	(289,268)
0.143905	8.419247	178	(297,41)
0.139792	8.545178	180	(49,10)

9001/16
12:58:17

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2

0.123497	9.083444	183	(336, 106)
0.103084	9.868082	187	(309, 264)
0.100972	9.958000	189	(31, 14)
0.116830	9.324460	193	(344, 98)
0.109937	9.588571	195	(41, 308)
0.124728	9.040356	198	(355, 125)
0.135425	8.683023	202	(19, 299)
0.105365	9.773019	208	(342, 55)
0.142141	8.472807	214	(12, 308)
0.098743	10.054920	216	(324, 292)
0.094382	10.251097	219	(36, 334)
0.100622	9.973053	221	(37, 337)
0.121520	9.153310	224	(42, 344)
0.132722	8.770571	230	(13, 331)
0.099720	10.012177	233	(178, 385)
0.109267	9.615101	236	(184, 388)
0.150785	8.216419	242	(366, 28)
0.115695	9.366842	246	(378, 41)
0.166668	7.781489	249	(43, 373)
0.108245	9.655910	253	(242, 392)
0.095262	10.210823	257	(249, 394)
0.105059	9.760922	260	(387, 29)
0.123208	9.093625	262	(54, 393)
0.135957	8.665980	265	(58, 398)
0.123097	9.097532	269	(404, 265)
0.118924	9.247307	271	(140, 423)
0.111992	9.508141	276	(57, 409)
0.115005	9.392851	278	(22, 395)
0.103040	9.869936	282	(430, 76)
0.108275	9.654737	284	(412, 282)
0.114411	9.415335	287	(306, 400)
0.105246	9.777946	291	(439, 73)
0.100507	9.978050	295	(447, 216)
0.123864	9.070559	297	(150, 450)
0.110348	9.572355	301	(434, 276)
0.158551	7.998303	305	(438, 276)
0.105364	9.773070	308	(433, 294)
0.106353	9.732496	313	(313, 426)
0.124553	9.046447	317	(314, 429)
0.114926	9.003951	323	(109, 472)
0.125778	9.395806	326	(158, 479)
0.114430	9.414612	328	(460, 284)
0.137634	8.612757	333	(118, 480)
0.106150	9.740806	336	(119, 484)
0.112196	9.500236	339	(93, 482)
0.119991	9.208527	342	(500, 180)
0.120005	9.208020	345	(81, 489)
0.107108	9.701773	349	(119, 500)
0.108149	9.659756	351	(284, 481)
0.165554	7.810610	355	(227, 501)
0.138359	8.589929	358	(108, 507)
0.116764	9.326926	360	(491, 292)
0.114303	9.419422	364	(18, 489)
0.117157	9.312333	368	(474, 344)
0.145411	8.374016	374	(321, 490)
0.132090	8.791289	381	(22, 508)
0.118520	9.262066	387	(408, 449)
0.119813	9.214969	390	(359, 488)
0.102164	9.907003	394	(482, 378)
0.116857	9.323434	402	(507, 355)
0.101014	9.956180	405	(367, 501)
0.109787	9.594510	408	(504, 371)
0.097565	10.107048	411	(503, 378)

0.097196	10.123514	415	(379, 505)
0.089981	10.458484	418	(489, 409)
0.089841	10.465269	420	(439, 466)
0.081293	10.899448	422	(508, 391)
0.087028	10.603411	424	(509, 392)
0.086450	10.632351	428	(452, 465)
0.076549	11.160603	430	(435, 483)
0.069581	11.575110	433	(456, 468)
0.092125	10.356222	435	(499, 424)
0.083995	10.757470	437	(431, 495)
0.136626	8.644662	442	(456, 481)
0.086142	10.647866	447	(504, 437)
0.091160	10.401968	449	(442, 501)
0.141224	8.500920	452	(452, 497)
0.127158	8.956572	458	(454, 503)
0.113363	9.455294	460	(476, 486)
0.112070	9.505122	465	(506, 462)
0.086428	10.633458	467	(465, 506)
0.106707	9.7118054	470	(503, 473)
0.056666	12.466776	480	(509, 482)
0.056200	12.502627	482	(508, 486)
0.033554	14.742585	486	(508, 491)
0.055128	12.586277	492	(509, 499)
0.000000	0.000000	502	(511, 511)

Nearest Laplacian sidelobe: ratio 0.115128, dbdown 9.388176 at distance 8
Largest Laplacian sidelobe: ratio 0.166668, dbdown 7.781489 at distance 249

9001/16
12:59:07

Image AQVIRI at compression 23.0:1 against window W4.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (159,153)
Location of max in compression is (159,153), sub-pixel is (158.875,153.125)
Max Laplacian Value is 1.53576e+06 at location (159,153)
Smoothed (FFT) Maximum Laplacian Value is 1731680.00 at (158.625,153.500)

Correlation Side Lobe Information, Maximum Value is 6.0252e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	1.53576e+06	(159,153)
0.419366	3.774066	13	276486	(149,144)
0.372137	4.292976	18	189937	(146,141)
0.346224	4.608427	24	63255.8	(143,135)
0.388244	4.108957	28	234690	(179,173)
0.364136	4.387365	35	83489.8	(185,177)
0.268085	5.717269	47	190124	(122,124)
0.248677	6.043647	54	125767	(209,173)
0.253351	5.962781	56	186666	(210,177)
0.294676	5.306545	63	186730	(214,183)
0.321930	4.922385	75	202883	(217,200)
0.310642	5.077404	82	173502	(90,198)
0.477093	3.213966	99	135729	(74,103)
0.477364	3.211502	103	116055	(71,99)
0.474938	3.233628	105	127239	(70,98)
0.488529	3.111097	111	99696	(242,79)
0.486807	3.126432	123	140514	(257,78)
0.399120	3.988966	135	100033	(140,19)
0.386178	4.132130	143	91438.8	(146,11)
0.431980	3.645366	159	253724	(8,203)
0.398412	3.996675	165	144697	(20,64)
0.472335	3.257496	181	187739	(8,53)
0.525291	2.795998	195	90087.3	(237,332)
0.557708	2.35932	201	119955	(241,336)
0.464031	3.334532	209	32942.5	(243,344)
0.294183	5.313826	227	93532.3	(267,353)
0.324718	4.884938	238	122436	(352,13)
0.361877	4.414387	242	310274	(366,27)
0.372615	4.287391	246	163096	(360,12)
0.538897	2.684946	266	107327	(187,418)
0.473619	3.245705	283	64433.3	(195,434)
0.489025	3.106688	288	189881	(306,401)
0.461641	3.356957	295	101646	(197,446)
0.414227	3.827617	303	80692.8	(198,453)
0.410623	3.865565	309	112336	(317,419)
0.384180	4.154650	315	123180	(319,424)
0.328753	4.831297	324	164439	(449,9)
0.350214	4.556663	332	144760	(458,9)
0.442457	3.541289	338	161766	(496,182)
0.430418	3.661101	342	127703	(500,181)
0.448134	3.485917	351	212677	(284,481)
0.406075	3.913937	358	109041	(463,343)
0.421157	3.755557	363	117407	(465,348)
0.417209	3.796466	367	108181	(467,352)
0.424437	3.721869	373	122939	(468,362)
0.401822	3.959667	385	54048.3	(363,480)
0.420903	3.758184	388	146310	(365,482)
0.293805	5.319409	397	137178	(457,415)
0.318358	4.970846	403	172233	(456,425)
0.328809	4.830561	408	151137	(456,433)
0.275324	5.601552	414	40189.8	(454,444)
0.279381	5.538025	416	111025	(455,445)
0.350854	4.548738	426	0	(511,393)
0.328698	4.832031	433	0	(511,406)
0.268264	5.714370	446	0	(511,427)

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0.274107 5.620795 454 0 (511,440)
0.199472 7.001181 464 154499 (462,504)
0.194142 7.118814 472 0 (511,467)
0.153307 8.144367 480 0 (511,480)
0.063252 11.989255 491 0 (511,496)
-0.121483 0.000000 502 0 (511,511)
Nearest Corr sidelobe: ratio 0.419366, dBdown 3.774066 at distance 13
Largest Corr sidelobe: ratio 0.557708, dBdown 2.535932 at distance 201

Laplacian Side Lobe Information, Maximum Value is 1.53576e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(159,153)
0.1145403	8.374256	5	(162,157)
0.113238	9.460074	8	(164,159)
0.180032	7.446513	13	(149,144)
0.116445	9.338786	16	(146,162)
0.123676	9.077161	18	(146,141)
0.1148419	8.285101	21	(160,174)
0.1139876	8.542558	24	(182,161)
0.145201	8.380313	26	(184,160)
0.1159841	7.963123	29	(179,174)
0.1150995	8.210364	31	(157,184)
0.111383	9.531828	34	(161,187)
0.1149224	8.261623	37	(156,116)
0.155715	8.076707	44	(180,192)
0.1139458	8.555570	47	(165,106)
0.1146838	8.331627	54	(211,139)
0.149107	8.265007	57	(215,165)
0.096122	10.171767	60	(206,191)
0.1178287	7.488804	64	(223,151)
0.159277	7.978470	66	(128,211)
0.133461	8.746453	72	(231,160)
0.154907	8.099283	75	(184,224)
0.131896	8.797700	79	(80,156)
0.135008	8.696393	83	(110,220)
0.117762	9.289952	89	(177,66)
0.139725	8.547266	93	(130,65)
0.1149687	8.248157	95	(246,116)
0.141488	8.492805	98	(69,113)
0.165616	7.808987	103	(200,247)
0.133770	8.736411	107	(189,50)
0.125987	8.996727	111	(270,152)
0.182922	7.377346	114	(67,221)
0.182552	7.386144	120	(40,168)
0.139275	8.561262	125	(284,152)
0.175105	7.567020	128	(60,72)
0.145319	8.376775	130	(74,251)
0.147319	8.317419	133	(58,67)
0.167757	7.753200	136	(47,76)
0.165838	7.803166	141	(57,251)
0.155773	8.075087	143	(61,257)
0.212461	6.727202	145	(35,77)
0.150348	8.229028	151	(194,6)
0.175654	7.553409	156	(33,245)
0.205822	6.865077	160	(2,182)
0.154769	8.103163	163	(57,26)
0.136940	8.634697	166	(19,64)
0.147171	8.321789	168	(67,13)
0.130379	8.847907	171	(173,323)
0.129002	8.894041	173	(175,325)
0.140937	8.509738	175	(27,38)
0.152716	8.161142	180	(8,251)
0.173701	7.601973	183	(336,105)
0.122897	9.104588	186	(307,266)

0.117765	9.289832	190	(5, 264)
0.146830	8.331866	192	(41, 2)
0.183742	7.357916	198	(355, 123)
0.147909	8.300066	201	(296, 6)
0.145604	8.368255	204	(37, 316)
0.146573	8.339464	209	(165, 362)
0.155178	8.091687	212	(24, 316)
0.155140	8.092748	214	(12, 308)
0.121716	9.146508	216	(16, 315)
0.123118	9.096789	219	(8, 311)
0.139105	8.565660	221	(38, 338)
0.175702	7.552228	224	(193, 374)
0.117488	9.300060	227	(55, 355)
0.173645	7.603378	230	(13, 331)
0.108635	9.640285	233	(361, 37)
0.152222	8.175227	238	(108, 385)
0.202032	6.945798	242	(366, 27)
0.140602	8.520077	245	(377, 41)
0.178161	7.491866	249	(43, 373)
0.153803	8.130347	253	(241, 392)
0.128914	8.896989	257	(249, 394)
0.143585	8.428907	261	(419, 136)
0.144734	8.394303	264	(58, 397)
0.137799	8.607539	269	(404, 264)
0.126998	8.962040	271	(140, 423)
0.115669	9.367822	273	(173, 426)
0.135243	8.688866	275	(58, 409)
0.141239	8.500460	277	(432, 108)
0.106676	9.719333	280	(434, 101)
0.147877	8.300984	294	(149, 447)
0.124266	9.056490	296	(151, 449)
0.131296	8.817486	302	(455, 94)
0.153599	8.136115	305	(438, 276)
0.107263	9.695489	307	(455, 71)
0.141269	8.499526	312	(471, 137)
0.163494	7.864994	317	(151, 470)
0.136904	8.635836	319	(436, 312)
0.143295	8.437681	322	(203, 472)
0.138800	8.576120	325	(126, 476)
0.134699	8.706364	327	(458, 285)
0.121528	9.153239	330	(489, 136)
0.150756	8.217241	333	(117, 483)
0.142409	8.464624	335	(494, 151)
0.134666	8.707419	337	(495, 182)
0.130828	8.832989	339	(487, 240)
0.132582	8.775144	342	(28, 469)
0.158014	8.013054	345	(81, 489)
0.159387	7.975483	347	(472, 302)
0.168456	7.735127	353	(83, 498)
0.125661	7.882233	357	(84, 502)
0.161414	9.007978	360	(42, 493)
0.128609	8.907302	370	(509, 34)
0.171017	7.669619	374	(321, 490)
0.161101	7.929025	380	(22, 507)
0.158878	7.989353	386	(408, 448)
0.124008	9.065503	390	(366, 483)
0.118986	9.245024	394	(482, 378)
0.122309	9.125417	396	(507, 342)
0.168057	7.745434	402	(507, 355)
0.114151	9.425190	405	(367, 501)

0.124739	9.039970	408	(504, 371)
0.111063	9.544290	412	(503, 379)
0.127090	8.958895	416	(505, 384)
0.118418	9.265832	420	(439, 466)
0.120517	9.189509	423	(456, 454)
0.102139	9.908102	427	(459, 457)
0.110829	9.553471	435	(456, 471)
0.099023	10.042656	437	(460, 470)
0.133810	8.735109	442	(456, 481)
0.092035	10.360450	445	(436, 501)
0.121545	9.152646	448	(467, 478)
0.169222	7.715423	452	(452, 497)
0.111207	9.538687	456	(452, 502)
0.132199	8.787709	460	(476, 486)
0.141520	8.491823	464	(463, 503)
0.110921	9.549866	467	(465, 506)
0.109426	9.608788	470	(502, 475)
0.066862	11.748222	480	(507, 483)
0.055543	12.553711	483	(509, 486)
0.029836	15.252523	486	(508, 491)
0.077722	11.094587	489	(508, 495)
0.010760	19.681690	492	(509, 499)
0.000000	0.000000	502	(511, 511)

Nearest Laplacian sidelobe: ratio 0.145403, dBdown 8.374256 at distance 5
Largest Laplacian sidelobe: ratio 0.212461, dBdown 6.727202 at distance 145

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Image AQVIRI at compression 33.0:1 against window W4.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (159,153)
Location of max in compression is (159,153), sub-pixel is (158.875,153.125)
Max Laplacian Value is 1.14088e+06 at location (159,153)
Smoothed (FFT) Maximum Laplacian Value is 1424608:00 at (158.625,153.625)

Correlation Side Lobe Information, Maximum Value is 5.63622e+06

Laplacian Side Lobe Information, Maximum V8e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location	Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(159,153)	1.000000	0.000000	0	(159,153)
0.428937	3.676066	11	(150,146)	0.095607	10.195103	8	(164,159)
0.436765	3.597526	13	(149,145)	0.179874	7.450305	14	(148,144)
0.356218	4.482841	23	(144,135)	0.167299	7.765066	16	(147,143)
0.403680	3.939624	28	(179,172)	0.154599	8.107930	18	(171,167)
0.377612	4.229547	35	(185,177)	0.153850	8.129031	20	(160,173)
0.254584	5.941697	46	(123,124)	0.136614	8.645062	22	(180,159)
0.264259	5.779696	53	(209,172)	0.145671	8.366276	24	(182,161)
0.265023	5.767165	55	(210,173)	0.205150	6.879280	28	(179,172)
0.319270	4.958426	63	(214,184)	0.204795	6.886809	31	(157,184)
0.331553	4.794472	75	(217,200)	0.179044	7.470412	39	(146,116)
0.343678	4.638483	80	(89,115)	0.190344	7.204610	42	(169,112)
0.319225	2.846443	98	(75,103)	0.207071	6.838810	44	(180,192)
0.493259	3.06950	104	(71,98)	0.128502	8.910911	51	(207,171)
0.479310	3.193835	112	(241,76)	0.210380	6.769951	55	(194,195)
0.472783	3.253380	123	(257,78)	0.188127	7.255481	57	(215,165)
0.415861	3.810515	134	(197,281)	0.229562	6.391004	64	(223,151)
0.396249	4.202031	144	(146,10)	0.150896	8.213219	68	(227,158)
0.452821	3.440736	160	(2,185)	0.159477	7.973006	71	(230,160)
0.445066	3.515754	163	(0,187)	0.221348	6.549241	74	(217,199)
0.410332	3.868647	165	(24,59)	0.164691	7.833310	78	(233,128)
0.392565	4.060881	170	(21,53)	0.160274	7.951365	80	(89,115)
0.528379	2.770548	182	(8,52)	0.153489	8.139238	85	(105,88)
0.596723	2.242273	202	(234,34)	0.152180	8.176422	87	(195,232)
0.324469	4.882666	224	(262,35)	0.157033	8.040092	90	(249,150)
0.322946	4.908706	227	(264,354)	0.179529	7.458660	92	(130,66)
0.347972	4.584563	238	(352,13)	0.178457	7.484674	95	(142,246)
0.386630	4.127039	243	(366,26)	0.167725	7.754034	98	(69,115)
0.383959	4.157149	246	(360,12)	0.201524	6.956740	102	(200,246)
0.592874	2.270378	266	(187,418)	0.185788	7.309813	106	(97,239)
0.516003	2.873478	285	(195,436)	0.166140	7.795247	108	(197,254)
0.515156	2.880616	289	(307,401)	0.211008	6.757013	113	(95,60)
0.417256	3.795977	303	(198,453)	0.177733	7.502328	116	(236,240)
0.426790	3.697853	309	(317,419)	0.183365	7.366827	118	(236,242)
0.403005	3.946891	316	(2,427)	0.200655	6.975500	120	(40,169)
0.317552	4.981854	322	(203,472)	0.191796	7.171600	125	(284,151)
0.325718	4.871584	325	(450,8)	0.223187	6.513311	128	(60,72)
0.354889	4.499070	331	(457,9)	0.185275	7.321821	133	(75,256)
0.463497	3.339530	337	(495,183)	0.212544	6.725511	136	(242,261)
0.470005	3.278975	342	(500,181)	0.183422	7.365480	142	(61,256)
0.464839	3.326973	351	(284,481)	0.213182	6.712500	145	(117,14)
0.434781	3.617292	360	(464,345)	0.192578	7.153926	152	(117,7)
0.433363	3.631478	363	(465,348)	0.192466	7.156451	154	(228,15)
0.432601	3.639123	368	(467,354)	0.208251	6.814130	156	(33,245)
0.429418	3.671195	371	(467,359)	0.217531	6.624781	160	(2,182)
0.415064	3.818845	376	(358,472)	0.154720	8.104529	164	(6,212)
0.462479	3.349077	387	(365,481)	0.169016	7.720727	166	(298,243)
0.335698	4.740512	402	(456,424)	0.152802	8.158723	169	(19,248)
0.351856	4.536349	407	(456,432)	0.177609	7.505355	173	(175,325)
0.278113	5.557789	419	(456,448)	0.154226	8.118434	175	(27,38)
0.344414	4.629197	425	(511,392)	0.160209	7.953129	177	(327,97)
0.367728	4.344737	434	(511,407)	0.183697	7.358983	180	(305,48)
0.302564	5.191834	445	(511,426)	0.217971	6.616004	183	(336,106)
0.270496	5.678398	454	(511,440)	0.145091	8.383583	188	(342,198)
0.202441	6.937008	464	(462,504)	0.142083	8.474572	190	(343,199)

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2

0.177644	7.504500	193	(344, 98)
0.197721	7.039465	198	(355, 122)
0.187330	7.273929	200	(100, 344)
0.178221	7.490414	203	(36, 315)
0.166580	7.373766	208	(343, 56)
0.153237	8.146375	210	(166, 363)
0.154770	8.103127	212	(125, 362)
0.145233	8.379351	216	(324, 292)
0.164678	7.833638	219	(8, 311)
0.190801	7.194183	223	(91, 365)
0.195361	7.091612	229	(351, 28)
0.177912	7.497955	232	(185, 384)
0.161744	7.911708	234	(183, 386)
0.182585	7.385360	237	(92, 380)
0.177534	7.507174	240	(62, 373)
0.245998	6.090679	242	(366, 27)
0.158067	8.011598	245	(401, 118)
0.202496	6.935834	249	(43, 373)
0.182297	7.392216	253	(241, 392)
0.161653	7.914168	255	(405, 84)
0.148979	8.268740	257	(65, 392)
0.154480	8.111266	260	(127, 411)
0.170555	7.681346	263	(53, 394)
0.131308	7.182672	269	(404, 265)
0.163107	7.875283	277	(388, 5)
0.140729	8.516169	280	(432, 108)
0.155967	8.069660	282	(434, 101)
0.158241	8.006819	288	(430, 75)
0.139962	8.539883	290	(12, 401)
0.164211	7.845969	294	(127, 441)
0.159177	7.981186	296	(149, 447)
0.197452	7.045388	302	(151, 449)
0.184814	7.332657	305	(455, 93)
0.142531	8.460905	309	(438, 276)
0.171114	7.667145	312	(455, 64)
0.192031	7.166285	316	(471, 138)
0.152439	8.169026	319	(315, 428)
0.156655	8.050544	322	(436, 312)
0.149622	8.250040	324	(203, 472)
0.142701	8.455738	326	(142, 477)
0.171984	7.645112	332	(126, 477)
0.191258	7.183793	335	(117, 482)
0.149035	8.267111	338	(494, 150)
0.150306	8.230248	340	(484, 245)
0.177697	7.503189	346	(469, 14)
0.197444	7.045557	350	(501, 182)
0.194906	7.101738	353	(80, 490)
0.177444	7.509379	357	(509, 166)
0.164810	7.930175	359	(31, 482)
0.214310	6.689576	364	(504, 60)
0.182872	7.378530	368	(108, 508)
0.204136	6.900803	372	(48, 500)
0.214980	6.676017	375	(281, 499)
0.155709	8.076854	380	(284, 501)
0.164074	7.849604	385	(320, 488)
0.165793	7.804236	387	(358, 471)
0.163794	7.857019	391	(506, 319)
0.126945	8.963844	394	(408, 449)
0.128913	8.897017	396	(487, 365)
0.151381	8.199274	402	(482, 378)
0.131044	8.825845	404	(507, 341)
			(456, 424)
			(467, 415)

0.138103	8.597979	407	(456, 432)
0.137237	8.625290	410	(467, 424)
0.125969	8.997368	413	(489, 401)
0.121920	9.139251	415	(380, 504)
0.132281	8.785013	417	(504, 387)
0.137499	8.617002	423	(456, 454)
0.128884	8.898001	427	(506, 401)
0.157856	8.017393	435	(456, 471)
0.174426	7.583684	442	(456, 481)
0.137220	8.625839	447	(467, 477)
0.222239	6.531788	451	(452, 496)
0.171611	7.654544	458	(456, 501)
0.222714	6.522524	464	(463, 503)
0.141151	8.503174	467	(465, 506)
0.126477	8.979897	470	(502, 475)
0.060187	12.204939	480	(507, 484)
0.110912	9.550201	483	(509, 486)
0.066108	11.797427	488	(508, 494)
0.021061	16.765205	491	(509, 497)
0.000000	0.000000	502	(511, 511)

Nearest Laplacian sidelobe: ratio 0.095607, dbdown 10.195103 at distance 8
Largest Laplacian sidelobe: ratio 0.245998, dbdown 6.090679 at distance 242

9001/1
13:08:04

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Image AQVIR1 at compression 50.0:1 against window W4.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (159,153)
Location of max in compression is (159,153), sub-pixel is (158.750,153.000)
Max Laplacian Value is 689666 at location (159,153)
Smoothed (FFT) Maximum Laplacian Value is 1024928.00 at (159.875,153.750)

Correlation Side Lobe Information, Maximum Value is 5.06363e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	689666	(159,153)
0.436620	3.598964	14	151888	(148,145)
0.393745	4.047845	23	65613.1	(144,135)
0.419705	3.770556	28	134756	(179,173)
0.407752	3.896039	35	79046.3	(185,177)
0.298032	5.257366	54	86988.9	(210,172)
0.361031	4.424558	62	95462.5	(213,184)
0.358008	4.461076	75	219464	(217,200)
0.358355	4.456866	82	65610	(90,198)
0.553659	2.567575	99	108854	(74,103)
0.517072	2.864488	104	99491.8	(71,98)
0.581842	2.351948	112	71650.5	(241,76)
0.546329	2.625457	124	144529	(257,77)
0.484772	3.144625	133	88203.8	(196,281)
0.440811	3.557479	142	81920.5	(147,12)
0.385778	4.136630	152	69072	(196,300)
0.503162	2.982925	163	0	(0,187)
0.548333	2.609554	181	98377.8	(9,52)
0.537189	2.698729	184	75910.8	(228,324)
0.681212	1.667178	200	81972.3	(240,336)
0.326695	4.858576	227	55153.4	(264,354)
0.439008	3.575271	243	92786.3	(364,23)
0.437376	3.591455	246	120672	(360,12)
0.673810	1.714625	266	152637	(187,418)
0.578278	2.378631	283	77452.3	(196,434)
0.582783	2.344935	289	138391	(306,402)
0.490156	3.096660	309	138779	(317,419)
0.356480	4.479645	325	78229.5	(450,8)
0.529112	2.764523	337	150480	(495,183)
0.530816	2.750563	351	99336.5	(284,481)
0.493792	3.064558	360	116245	(464,344)
0.492449	3.076384	367	81970	(467,353)
0.490978	3.089380	371	76991.5	(467,359)
0.417723	3.791113	378	70028.5	(359,474)
0.422643	3.740268	380	59459.1	(360,476)
0.468706	3.290991	387	146293	(365,481)
0.353280	4.518806	396	92046.5	(457,414)
0.356025	4.485200	403	90266.6	(456,425)
0.350179	4.557097	407	75638.9	(455,432)
0.301276	5.210356	417	65607.6	(455,447)
0.381925	4.180215	425	0	(511,391)
0.352982	4.522478	434	0	(511,407)
0.301924	5.201016	446	0	(511,427)
0.296009	5.286948	454	0	(511,440)
0.193902	7.124168	464	191429	(463,504)
0.245483	6.099783	468	0	(511,461)
0.247161	6.070197	472	0	(511,467)
0.149332	8.258467	479	0	(511,478)
0.155952	8.070082	482	0	(511,483)
0.038405	14.150607	491	0	(511,496)
-0.179332	0.000000	502	0	(511,511)

Nearest Corr sidelobe: ratio 0.436620, dBdown 3.598964 at distance 14
Largest Corr sidelobe: ratio 0.681212, dBdown 1.667178 at distance 200

Laplacian Side Lobe Information, Maximum Value is 689666

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(159,153)
0.164723	7.832463	11	(148,154)
0.256923	5.901962	14	(148,144)
0.195489	7.088783	19	(157,134)
0.280847	5.515299	23	(181,159)
0.230479	6.373693	29	(149,180)
0.225896	6.460923	37	(129,132)
0.241242	6.175473	39	(159,192)
0.280564	5.519673	48	(197,124)
0.203272	6.919232	52	(119,120)
0.281969	5.497986	57	(215,165)
0.252970	5.969315	63	(222,152)
0.241860	6.164359	65	(216,184)
0.228869	6.404125	71	(230,160)
0.318218	4.972757	75	(217,200)
0.193251	7.138776	79	(229,117)
0.202050	6.945404	82	(234,121)
0.186161	7.301103	84	(105,89)
0.258724	5.871629	88	(105,83)
0.253005	5.968710	90	(249,150)
0.267907	5.720152	92	(129,66)
0.227383	6.432415	100	(253,186)
0.277613	5.565605	106	(196,232)
0.263701	5.788880	114	(93,60)
0.274310	5.617581	118	(200,264)
0.241208	6.176087	121	(39,168)
0.256311	5.912333	127	(276,103)
0.242434	6.154068	129	(59,72)
0.252207	5.982422	133	(75,256)
0.273923	5.623709	137	(22,145)
0.307899	5.115916	142	(61,256)
0.352573	4.527513	144	(117,15)
0.249786	6.024317	148	(130,8)
0.220420	6.567499	150	(309,142)
0.21628	6.744268	152	(115,7)
0.324077	4.893513	156	(293,233)
0.290416	5.369795	159	(3,182)
0.247781	6.059323	163	(73,291)
0.206475	6.851327	165	(26,55)
0.237482	6.243685	170	(19,250)
0.247710	6.060569	173	(175,325)
0.244307	6.120636	175	(285,275)
0.251156	6.000567	177	(293,37)
0.261145	5.831181	181	(7,54)
0.298190	5.255074	184	(337,105)
0.249623	6.027162	187	(341,197)
0.201990	6.946695	189	(342,199)
0.210873	6.759801	194	(194,344)
0.258619	5.873391	197	(185,348)
0.234318	6.301941	200	(99,344)
0.283794	5.469961	205	(35,316)
0.229738	6.387665	212	(348,248)
0.194447	7.111988	215	(146,368)
0.194537	7.109989	218	(115,367)
0.322303	4.917359	225	(193,375)
0.257399	5.893931	228	(13,328)
0.257720	5.888513	234	(183,386)
0.251336	5.997446	241	(67,376)
0.222078	6.534939	243	(172,396)
0.319596	4.953986	251	(3,349)
0.228083	6.419063	254	(241,393)
0.226869	6.442247	256	(406,84)
0.232087	6.343498	260	(136,412)

900816
13:08:04

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2

0.209814	6.781649	264	(423,150)
0.237359	6.245951	266	(186,418)
0.240625	6.186601	270	(282,393)
0.233215	6.322429	273	(20,388)
0.192982	7.144821	276	(431,108)
0.196849	7.058673	278	(71,417)
0.215408	6.667375	282	(137,434)
0.241290	6.174614	285	(2,391)
0.213877	6.698354	288	(306,401)
0.240973	6.180314	292	(150,445)
0.238924	6.217399	295	(151,448)
0.258226	5.879999	304	(457,93)
0.207594	6.827853	309	(431,300)
0.206226	6.856576	317	(314,429)
0.238234	6.229970	319	(436,312)
0.251693	5.991286	324	(140,476)
0.244417	6.118685	326	(483,192)
0.233785	6.311842	329	(457,14)
0.257640	5.889859	331	(118,481)
0.266420	5.744335	333	(117,483)
0.236923	6.253924	336	(494,184)
0.241743	6.166454	338	(76,481)
0.226978	6.440170	340	(487,241)
0.214068	6.694481	343	(320,456)
0.209272	6.792890	345	(471,301)
0.218904	6.597461	347	(344,447)
0.221086	6.543397	350	(107,499)
0.308316	5.110034	355	(107,504)
0.272757	5.571181	358	(107,507)
0.232349	6.338593	361	(41,494)
0.348361	4.579708	368	(283,499)
0.299915	5.230019	373	(321,489)
0.195952	7.078506	378	(455,388)
0.185839	7.308640	380	(441,408)
0.213843	6.699050	386	(365,479)
0.256643	5.906700	391	(487,365)
0.239064	6.214853	395	(507,340)
0.179745	7.453429	401	(432,447)
0.175541	7.556203	404	(467,415)
0.191647	7.174976	410	(467,424)
0.174934	7.571246	412	(503,380)
0.165199	7.819915	422	(491,414)
0.145813	8.362023	424	(493,414)
0.164561	7.836732	427	(399,506)
0.164267	7.844504	432	(442,480)
0.204151	6.900490	436	(457,471)
0.266237	5.747308	440	(455,479)
0.279312	5.539096	442	(455,481)
0.205029	6.881844	447	(467,477)
0.222195	6.532651	452	(452,497)
0.206136	6.858462	454	(444,506)
0.217673	6.621960	458	(456,501)
0.211062	6.755891	460	(477,486)
0.292696	5.335831	464	(463,503)
0.206106	6.859100	470	(501,476)
0.190121	7.209698	482	(508,486)
0.016556	17.810544	487	(508,493)
0.058749	12.310029	489	(509,494)
0.067694	11.694520	491	(509,497)
0.000000	0.000000	502	(511,511)

Nearest Laplacian sidelobe: ratio 0.164723, dBdown 7.832463 at distance 11
Largest Laplacian sidelobe: ratio 0.352573, dBdown 4.527513 at distance 144

9001/16
13:09:10

Image AQVIR1 at compression 90.0:1 against window W4.

Window contains 0.00% noise and is out of scale by a factor of 1.03

Location of max in original is (159,153)

Location of max in compression is (159,153), sub-pixel is (158.625,153.125)

Max Laplacian Value is 480332 at location (159,153)

Smoothed (FFT) Maximum Laplacian Value is 709632.00 at (160.125,153.750)

Correlation Side Lobe Information, Maximum Value is 4.62631e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0	480332	(159,153)
0.447298	19	89269.5	(170,168)
0.442177	3	71978.6	(141,134)
0.461478	30	83067.8	(181,173)
0.453106	33	41519.6	(183,175)
0.452889	3	75770.8	(184,177)
0.450390	37	56676.6	(186,178)
0.308443	52	157732	(195,191)
0.377371	63	95526.4	(214,184)
0.348242	4	140046	(217,200)
0.379066	4	80633.1	(90,197)
0.613949	2	127991	(74,103)
0.571991	2	92692.3	(71,98)
0.590626	2	78438	(241,76)
0.615901	123	133620	(256,78)
0.518688	2	59272.5	(198,280)
0.511492	2	137105	(140,17)
0.410833	3	37899.4	(197,300)
0.551937	2	0	(0,187)
0.518397	2	121359	(24,57)
0.580237	2	106079	(10,52)
0.734619	1	103866	(240,336)
0.352181	4	64784	(266,355)
0.358080	4	100999	(349,20)
0.415835	3	98808.1	(352,13)
0.478814	3	138021	(361,11)
0.703524	1	62714.8	(189,418)
0.628514	2	41545	(196,435)
0.534966	2	135465	(319,419)
0.431784	3	93750.8	(450,8)
0.554986	2	79564	(497,182)
0.550643	2	101342	(502,182)
0.593007	2	117652	(285,480)
0.580548	2	120008	(464,343)
0.500359	3	76209	(468,360)
0.521447	2	108909	(365,481)
0.413407	3	84542.6	(457,412)
0.399370	3	68349.5	(456,431)
0.353464	4	66253.4	(455,447)
0.410702	3	0	(511,391)
0.379108	4	0	(511,406)
0.301200	5	0	(511,418)
0.328730	4	0	(511,428)
0.317563	4	0	(511,439)
0.210003	6	76397.3	(457,503)
0.244609	6	115275	(462,505)
0.233473	6	317626	(460,511)
0.212593	6	724517	(511,466)
0.154183	8	119644	(511,477)
0.150522	8	223991	(511,482)
-0.156974	0	0	(511,511)

Nearest Corr sidelobe: ratio 0.447298, dBdown 3.494028 at distance 19

Largest Corr sidelobe: ratio 0.734619, dBdown 1.339380 at distance 200

Laplacian Side Lobe Information, Maximum Value is 480332

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Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(159,153)
0.198306	7.026640	12	(147,151)
0.275906	5.592388	15	(147,144)
0.334916	4.750641	22	(180,159)
0.411588	3.655373	28	(149,179)
0.216222	6.651000	36	(156,117)
0.283390	5.476156	39	(162,192)
0.262009	5.816831	41	(170,114)
0.238654	6.222309	45	(167,109)
0.270925	5.671509	48	(204,170)
0.328381	4.836214	52	(195,191)
0.290649	5.366308	56	(196,195)
0.307537	5.121024	63	(222,153)
0.284390	5.460863	65	(172,217)
0.240100	6.196070	68	(227,160)
0.242635	6.150458	70	(229,160)
0.332138	4.786818	75	(217,201)
0.223172	6.513599	81	(234,183)
0.217334	6.628722	83	(110,220)
0.269030	5.701994	86	(217,216)
0.280212	5.525126	90	(249,150)
0.282952	5.482876	93	(105,77)
0.250485	6.012181	96	(196,242)
0.266464	5.743612	99	(74,103)
0.311882	5.060094	101	(84,85)
0.281619	5.503383	105	(116,57)
0.273482	5.630710	108	(176,260)
0.314541	5.023223	111	(265,119)
0.307677	5.119048	113	(267,120)
0.340912	4.673582	117	(200,263)
0.278182	5.556709	123	(236,78)
0.253968	5.952215	125	(266,217)
0.223287	6.511356	129	(166,24)
0.301110	5.212741	135	(47,78)
0.305279	5.153024	137	(46,76)
0.309367	5.095260	145	(35,78)
0.255998	5.917626	150	(309,142)
0.256849	5.903220	152	(115,7)
0.342603	4.652090	156	(293,232)
0.290394	5.370121	158	(11,207)
0.323071	4.907021	161	(66,284)
0.343289	4.643406	167	(296,248)
0.350962	4.547400	174	(176,326)
0.307837	5.116794	180	(14,260)
0.285857	5.438516	183	(199,332)
0.296355	5.281875	187	(297,27)
0.255956	5.918342	190	(349,148)
0.269599	5.692814	192	(125,342)
0.253132	5.966535	194	(125,344)
0.276721	5.578572	198	(355,123)
0.291553	5.352825	201	(99,345)
0.290672	5.365963	203	(295,2)
0.285897	5.437905	205	(9,292)
0.256869	5.902884	209	(312,295)
0.321957	4.922021	213	(105,359)
0.272849	5.640769	216	(374,135)
0.330504	4.808230	220	(320,303)
0.309280	5.096476	225	(12,323)
0.291417	5.354850	234	(183,386)
0.280537	5.520099	236	(183,388)
0.284776	5.454973	242	(16,348)
0.295556	5.293606	246	(173,399)
0.310539	5.078833	248	(362,10)

0.266473	5.743469	252	(318, 348)
0.254582	5.941717	256	(406, 85)
0.226731	6.444883	260	(75, 399)
0.280528	5.520244	264	(423, 150)
0.297102	5.270947	266	(423, 123)
0.227506	6.430079	269	(283, 392)
0.280809	5.515896	273	(17, 380)
0.294678	5.306524	276	(17, 390)
0.247497	6.064303	278	(433, 104)
0.268196	5.715475	282	(409, 283)
0.250403	6.013608	286	(127, 437)
0.282827	5.484787	289	(137, 441)
0.274349	5.616961	295	(187, 447)
0.309993	5.086477	298	(150, 451)
0.300162	5.226448	300	(457, 115)
0.353271	4.518915	303	(456, 93)
0.259939	5.851282	308	(425, 309)
0.290634	5.366530	310	(319, 418)
0.308344	5.109647	312	(111, 461)
0.340824	4.674704	314	(457, 54)
0.263153	5.797916	319	(453, 278)
0.349313	4.567851	324	(141, 476)
0.246462	6.082494	329	(219, 476)
0.281527	5.504803	334	(493, 150)
0.368813	4.331935	338	(77, 481)
0.300462	5.222109	342	(471, 13)
0.304265	5.167481	345	(80, 489)
0.305338	5.152191	349	(346, 448)
0.393443	4.051176	354	(107, 503)
0.371739	4.297619	359	(487, 300)
0.377724	4.228252	368	(284, 499)
0.318567	4.967990	374	(321, 490)
0.258479	5.875747	380	(441, 407)
0.254102	5.949912	386	(407, 449)
0.272820	6.413517	388	(368, 480)
0.228375	5.641233	391	(487, 365)
0.273956	5.623186	398	(369, 491)
0.240438	6.189967	400	(372, 491)
0.220079	6.574220	405	(509, 356)
0.233617	6.314964	407	(462, 424)
0.242693	6.149435	413	(397, 491)
0.253499	5.960234	417	(427, 472)
0.238204	6.230511	419	(384, 506)
0.244416	6.118697	424	(457, 455)
0.187556	7.268698	429	(467, 452)
0.199320	7.004498	434	(501, 421)
0.287549	5.412883	438	(455, 476)
0.291094	5.359674	442	(455, 481)
0.233181	6.323063	446	(456, 486)
0.207161	6.836925	451	(444, 503)
0.239601	6.205108	454	(445, 506)
J.165084	7.822957	456	(455, 500)
0.179154	7.467727	459	(456, 503)
0.346731	4.600078	464	(463, 503)
0.189790	7.217262	471	(502, 476)
0.171558	7.655878	475	(507, 476)
0.163233	7.871926	482	(508, 486)
0.035633	14.481479	489	(509, 494)
0.000000	0.000000	502	(511, 511)

Nearest Laplacian sidelobe: ratio 0.198306, dBdown 7.026640 at distance 12
Largest Laplacian sidelobe: ratio 0.411588, dBdown 3.855373 at distance 28

9001/16
13:09:00

al116.rep

1

Image AQVIRL at compression 116.0:1 against window W4.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (159,153)

Location of max in compression is (159,153), sub-pixel is (158.625,153.375)

Max Laplacian Value is 323227 at location (159,154)

Laplacian pixel error is (0,1).

Smoothed (FFT) Maximum Laplacian Value is 402400.00 at (158.500,154.125)

Correlation Side Lobe Information, Maximum Value is 3.85529e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	321633	(159,153)
0.510845	2.917112	14	72113.5	(148,145)
0.520298	2.837481	26	81152	(141,134)
0.495000	3.053948	32	5897.5	(136,131)
0.491279	3.086717	37	53424.3	(186,179)
0.404422	3.931654	54	144696	(196,192)
0.440966	3.555949	63	39852.5	(213,186)
0.381825	4.181355	75	112038	(217,200)
0.779899	1.079616	98	111467	(74,104)
0.710543	1.484097	106	103632	(70,96)
0.709261	1.491937	113	70457	(242,77)
0.684367	1.647109	121	88327.5	(256,80)
0.634803	1.973612	131	96494	(199,278)
0.574100	2.410122	137	64672.8	(141,17)
0.545373	2.633065	148	85632.4	(196,296)
0.669779	1.740684	163	0	(0,188)
0.656635	1.826759	182	96127.3	(8,51)
0.832832	0.794426	201	71074	(240,337)
0.496345	3.042162	238	56749.4	(351,13)
0.525623	2.793256	244	114032	(365,23)
0.519661	2.842796	246	69983.8	(360,11)
0.811123	0.909133	269	55758.8	(190,420)
0.742997	1.290128	290	39151.5	(197,440)
0.682755	1.657352	311	125679	(319,420)
0.456538	3.405227	324	68304.3	(450,10)
0.647930	1.984721	339	73996.3	(497,182)
0.711354	1.479142	350	106679	(285,480)
0.669430	1.742945	360	50974.5	(464,344)
0.598469	2.229582	369	46625.5	(467,356)
0.812652	2.127858	386	83593	(365,480)
0.506933	2.950492	407	73320.4	(456,432)
0.438362	3.581672	417	72202.3	(455,447)
0.532008	2.740820	426	0	(511,393)
0.459098	3.380950	435	0	(511,408)
0.407726	3.896311	445	0	(511,426)
0.274819	5.609536	464	115936	(462,504)
0.298834	5.245693	468	0	(460,511)
0.261765	5.820891	471	0	(511,466)
0.211121	6.754687	481	0	(511,481)
0.038663	14.127074	492	0	(511,497)

Nearest Corr sidelobe: ratio 0.510845, dBdown 2.917112 at distance 14
Largest Corr sidelobe: ratio 0.832832, dBdown 0.794426 at distance 201

Laplacian Side Lobe Information, Maximum Value is 323227

Side-Lobe-To-Peak-Ratio DBs-Down Distance Location

1.000000	0.000000	0	(159,154)
0.291602	5.352089	13	(147,148)
0.305989	5.142942	16	(147,144)
0.290968	5.361548	22	(180,159)
0.465569	3.320156	28	(149,180)
0.318302	4.971602	33	(149,123)
0.337750	4.714042	37	(160,191)
0.362031	4.412543	43	(166,112)
0.354827	4.499834	46	(167,109)

0.497096	3.035600	52	(195,192)
0.382298	4.175982	57	(215,163)
0.437842	3.586822	61	(171,214)
0.320114	4.946955	63	(222,154)
0.330233	4.811801	65	(224,159)
0.335633	4.741355	68	(131,92)
0.364477	4.383302	71	(230,160)
0.346623	4.601421	74	(217,208)
0.371920	4.295500	83	(196,228)
0.292563	5.337804	86	(209,224)
0.367255	4.350320	89	(228,211)
0.389085	4.095556	95	(196,242)
0.407848	3.895018	97	(74,108)
0.428302	3.682497	99	(199,245)
3.930154	102	(201,247)	
3.496323	108	(70,93)	
4.439244	111	(270,154)	
0.359812	116	(200,262)	
2.610592	122	(58,86)	
3.856643	124	(266,216)	
4.547455	126	(56,82)	
4.489744	129	(283,118)	
4.726451	132	(201,279)	
4.112146	135	(47,78)	
3.750087	137	(22,144)	
3.703369	139	(21,142)	
4.060486	145	(233,279)	
3.882037	150	(305,120)	
4.581940	154	(293,230)	
3.632409	161	(4,196)	
4.222723	166	(296,247)	
2.913589	176	(176,329)	
3.316315	180	(8,56)	
4.788146	184	(7,51)	
3.975668	188	(11,38)	
4.537498	191	(125,342)	
4.694879	195	(348,105)	
4.629284	200	(355,125)	
4.525514	205	(99,345)	
4.687145	208	(319,287)	
4.433197	212	(105,359)	
5.259810	216	(374,132)	
3.848915	218	(377,168)	
4.348783	220	(320,304)	
0.065228	224	(349,272)	
3.997104	226	(12,326)	
4.258051	236	(183,389)	
3.948589	245	(173,399)	
3.456530	251	(319,348)	
4.408458	256	(242,396)	
3.892465	259	(197,410)	
4.357477	263	(417,104)	
5.081600	268	(45,396)	
4.659103	272	(6,379)	
5.130057	281	(409,283)	
5.424066	284	(300,401)	
4.659103	288	(137,441)	
5.080634	292	(128,444)	
5.039382	297	(150,451)	
4.555529	300	(456,112)	
4.555529	303	(456,93)	

0.388826	4.102451	310	(319, 420)
0.392208	4.064840	314	(457, 54)
0.315079	5.015811	320	(134, 473)
0.333485	4.769238	323	(140, 476)
0.331369	4.796876	326	(457, 286)
0.353328	4.518223	330	(162, 484)
0.326707	4.858420	332	(459, 11)
0.425197	3.714096	334	(493, 148)
0.411464	3.856680	336	(316, 451)
0.394220	4.042617	341	(79, 485)
0.368832	4.331715	346	(284, 477)
0.359547	4.442448	348	(285, 478)
0.402184	3.955753	353	(107, 503)
0.449300	3.474637	359	(487, 300)
0.426072	3.705174	368	(284, 500)
0.371581	4.299463	372	(321, 489)
0.294053	5.315737	379	(441, 407)
0.267934	5.719723	382	(3, 503)
0.270782	5.673809	385	(407, 449)
0.280901	5.514462	387	(368, 480)
0.292879	5.333121	389	(406, 455)
0.276862	5.577367	395	(369, 488)
0.305656	5.147671	397	(441, 434)
0.305676	5.147393	400	(432, 446)
0.247352	6.066850	406	(43, 455)
0.251627	5.992435	409	(431, 459)
0.260593	5.840376	411	(503, 378)
0.279690	5.533235	413	(396, 492)
0.249170	6.035041	416	(454, 448)
0.272884	5.640224	419	(456, 449)
0.308439	5.108312	426	(468, 447)
0.466092	3.315284	437	(455, 476)
0.275493	5.598893	447	(467, 478)
0.268289	5.713971	450	(452, 496)
0.266382	5.744953	454	(444, 507)
0.475048	3.232623	463	(463, 503)
0.205141	6.879468	469	(506, 469)
0.134864	8.701045	473	(506, 475)
0.099277	10.031516	479	(509, 481)
0.186996	7.281676	482	(508, 487)
0.104858	9.794001	485	(508, 491)
0.100379	9.983574	491	(509, 498)
0.000000	0.000000	501	(510, 511)

Nearest Laplacian sidelobe: ratio 0.291602, dBdown 5.352089 at distance 13
Largest Laplacian sidelobe: ratio 0.548202, dBdown 2.610592 at distance 116

jddevine@amaterasu

a1w3_116.rep

Tue Jan 16 13:52:51 1990

lw / Sun LaserWriter

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a2w1 001.rep

Image AQVIR2 at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (24,157)
Location of max in compression is (24,157), sub-pixel is (24.000,157.000)
Max Laplacian Value is 5.29247e+06 at location (24,157)
Smoothed (FFT) Maximum Laplacian Value is 6974240.00 at (24.000,157.000)

Correlation Side Lobe Information, Maximum Value is 6.8734e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	5.29247e+06	(24,157)
0.276677	5.580268	18	369072	(10,168)
0.283017	5.481972	23	383480	(6,171)
0.287747	5.409890	26	263762	(3,173)
0.289262	5.402129	30	0	(0,175)
0.519260	2.846151	48	211010	(51,197)
0.410835	3.863321	60	224235	(48,212)
0.309034	5.299932	66	183147	(87,137)
0.332523	4.781779	77	202129	(21,234)
0.365340	4.373027	83	88191.3	(15,240)
0.365881	4.366598	86	203144	(14,242)
0.338511	4.704270	94	188869	(7,249)
0.313651	5.007933	102	157924	(3,257)
0.360675	4.428842	114	115196	(87,62)
0.457998	3.391360	129	71667	(101,53)
0.455535	3.414784	131	73548.5	(102,52)
0.445609	3.510464	137	75622.3	(107,48)
0.508364	2.938251	149	153220	(117,40)
0.508189	2.939750	151	164180	(118,39)
0.494740	3.056226	154	109550	(120,37)
0.285579	5.442738	172	128925	(124,17)
0.150409	9.227261	190	96453.1	(123,140)
0.161578	7.916165	197	162768	(220,137)
0.193897	7.112495	202	116391	(225,133)
0.202702	6.931413	206	91682	(228,128)
0.206058	6.860106	208	169605	(230,127)
0.210837	6.760530	212	233159	(231,109)
0.212589	6.724593	214	172733	(232,108)
0.218391	6.637849	218	168331	(236,108)
0.256440	5.910150	231	64462.6	(248,100)
0.255631	5.922841	235	110959	(251,98)
0.257249	5.896461	237	136063	(253,97)
0.254287	5.946759	240	147434	(256,95)
0.258222	5.875022	246	220914	(259,231)
0.262452	5.809503	248	252042	(261,230)
0.253973	5.952120	251	100465	(266,89)
0.249899	6.222466	256	138691	(270,87)
0.238351	6.233523	265	64141	(279,93)
0.234155	6.304966	271	106173	(280,82)
0.228815	6.405164	275	78451.3	(284,80)
0.238004	6.234153	286	137324	(297,72)
0.240724	6.184600	289	221679	(308,208)
0.244304	6.120693	297	46137.9	(315,216)
0.249726	6.025368	300	121503	(319,212)
0.243952	6.126962	316	301754	(337,203)
0.244753	6.112714	318	350167	(339,202)
0.275687	5.595841	331	172108	(359,459)
0.265588	5.907635	339	122044	(343,41)
0.267711	5.723342	347	154398	(336,485)
0.320634	4.939901	352	333598	(244,432)
0.257118	5.898680	367	283188	(391,164)
0.232891	6.328479	379	188068	(353,345)
0.257561	5.891197	384	287581	(408,151)
0.225521	6.468126	388	140687	(412,148)

Nearest Corr sidelobe: ratio 0.276677, dBdown 5.580268 at distance 18
Largest Corr sidelobe: ratio 0.519260, dBdown 2.846151 at distance 48

Laplacian Side Lobe Information, Maximum Value is 5.29247e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	5.29247e+06	(24,157)
0.140192	8.532763	4	27155	(27,155)
0.157178	8.036087	8	18162	(18,162)
0.086575	10.626059	11	33150	(33,150)
0.123198	9.093970	15	36148	(36,148)
0.071534	11.454888	18	38146	(38,146)
0.085316	10.679535	22	3149	(3,149)
0.069657	11.570362	26	4173	(4,173)
0.044349	13.531155	28	51149	(51,149)
0.037170	14.298106	32	56152	(56,152)
0.038975	14.092169	34	51136	(51,136)
0.043794	13.585821	36	53135	(53,135)
0.045994	13.373001	40	64155	(64,155)
0.061573	12.106130	45	38200	(38,200)
0.049612	13.04120	49	62126	(62,126)
0.042055	13.761781	53	75142	(75,142)
0.055186	12.581699	56	42210	(42,210)
0.044180	13.547744	61	48213	(48,213)
0.046632	13.313192	68	73110	(73,110)
0.043988	13.566635	70	5092	(5,92)
0.035993	14.437795	72	91131	(91,131)
0.047207	13.259930	74	88119	(88,119)
0.039476	14.036690	77	22234	(22,234)
0.028794	15.406965	81	7191	(7,91)
0.032717	14.852309	83	5179	(5,79)
0.038384	14.158544	86	14242	(14,242)
0.043408	13.624324	92	8383	(83,83)
0.058828	12.304176	95	10296	(10,296)
0.031864	14.967016	99	9990	(99,90)
0.033245	14.782770	101	10189	(101,89)
0.039678	14.014448	103	7264	(72,64)
0.039930	13.987013	105	130186	(130,186)
0.043839	13.581426	108	134183	(134,183)
0.038095	14.191354	110	139180	(139,180)
0.033841	14.705613	113	139180	(139,180)
0.043390	13.527136	117	51273	(51,273)
0.038216	14.177585	119		

9001/16
13:10:24

0.062274	12.056939	561	(477,488)
0.065540	11.834912	563	(481,486)
0.046117	13.361409	566	(490,478)
0.041283	13.842317	569	(492,480)
0.035664	14.477729	572	(483,498)
0.023064	16.370740	576	(480,509)
0.031057	15.078472	578	(483,509)
0.025866	15.872697	582	(488,508)
0.000000	0.000000	602	(511,511)

Nearest Laplacian sidelobe: ratio 0.140192, dBdown 8.532763 at distance 4
Largest Laplacian sidelobe: ratio 0.157178, dBdown 8.036087 at distance 8

a2w1_001.rep

9001/16
13:11:26

a2w1_015.rep

Image AQVIR2 at compression 15.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (24,157)
Location of max in compression is (24,157), sub-pixel is (24.000,156.875)
Max Laplacian Value is 1.99103e+06 at location (24,157)
Smoothed (FFT) Maximum Laplacian Value is 2159488.00 at (23.625,156.750)

Correlation Side Lobe Information, Maximum Value is 5.75556e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	1.99103e+06	(24,157)
0.333020	4.775294	23	314248	(6,171)
0.337026	4.723372	27	182236	(2,173)
0.335991	4.736719	29	166209	(1,174)
0.614980	2.111388	48	130173	(52,196)
0.356956	4.473849	71	76695.5	(24,228)
0.391028	4.077917	77	133567	(21,234)
0.443960	3.526564	85	106896	(14,241)
0.397054	4.011507	95	95057	(7,250)
0.374651	4.263731	101	132192	(3,256)
0.436833	3.596845	114	164103	(87,62)
0.554042	2.564572	128	126635	(100,54)
0.539206	2.682453	136	54557.5	(107,49)
0.602525	2.200246	150	112445	(118,40)
0.597873	2.239101	154	128627	(120,37)
0.344405	4.629303	172	100496	(124,17)
0.186042	7.303888	190	83410.9	(213,140)
0.229703	6.388337	201	58907.6	(224,133)
0.246696	6.078383	207	61520.4	(229,129)
0.253915	5.953114	217	90788.6	(235,108)
0.245748	6.095099	220	64723.9	(238,107)
0.273587	5.629050	224	101384	(245,118)
0.309978	5.086689	231	114909	(248,101)
0.308326	5.109899	235	98686.5	(251,98)
0.310844	5.074570	238	118362	(254,96)
0.317248	4.986006	247	218475	(260,230)
0.301338	5.209461	251	61952.1	(266,89)
0.289425	5.384644	263	69826.3	(277,84)
0.289529	5.383082	265	63045.1	(278,83)
0.27285	5.570741	272	35813.9	(285,80)
0.280722	5.517231	287	80060.9	(298,71)
0.282252	5.493630	289	191181	(308,208)
0.301085	5.213110	296	61323.9	(314,216)
0.305184	5.154382	300	78566.3	(319,213)
0.282340	5.492278	306	146687	(326,209)
0.264798	5.770849	311	108909	(319,59)
0.289688	5.380701	317	213259	(338,202)
0.257611	5.890362	324	135642	(173,445)
0.318401	4.970261	332	113259	(166,457)
0.307445	5.123232	335	111160	(155,465)
0.311069	5.071429	339	146329	(343,41)
0.315640	5.008085	346	125771	(136,484)
0.367987	4.341677	351	187880	(244,431)
0.304130	5.169410	367	269959	(391,164)
0.269819	5.689267	379	127640	(353,345)
0.295387	5.296083	385	241911	(409,151)
0.271126	5.668295	398	92262.9	(240,491)
0.281513	5.505017	420	139748	(442,119)
0.214905	6.677545	430	97028.6	(452,113)
0.246642	6.079324	439	152531	(461,115)
0.342334	4.655499	455	134725	(476,208)
0.536184	2.706864	468	124308	(490,195)
0.424229	3.723996	480	116734	(503,180)
0.412670	3.843975	487	68197.5	(497,274)
0.363842	4.390874	497	99298.8	(510,263)

0.357434	4.468042	503	173602	(424,462)
0.356890	4.474661	507	96157.6	(434,456)
0.351061	4.546169	512	156361	(437,460)
0.332601	4.780762	517	84802.6	(447,455)
0.334112	4.761078	519	65616.6	(450,454)
0.096510	10.154283	534	120664	(492,414)
0.128759	8.902231	540	92297.8	(510,393)
0.116884	9.322455	543	0	(511,397)
0.152217	8.175356	553	267852	(455,503)
0.183268	7.369137	561	279265	(478,487)
0.168681	7.729327	570	127370	(478,502)
-0.013009	0.000000	591	0	(497,511)
-0.002665	0.000000	600	0	(509,511)

Nearest Corr sidelobe: ratio 0.333020, dBdown 4.775294 at distance 23
Largest Corr sidelobe: ratio 0.614980, dBdown 2.111388 at distance 48

Laplacian Side Lobe Information, Maximum Value is 1.99103e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(24,157)
0.162991	7.878370	4	(27,155)
0.249522	6.028916	8	(18,162)
0.136686	8.642758	11	(15,164)
0.219862	6.578507	15	(36,148)
0.157832	8.018049	23	(6,171)
0.116290	9.344559	26	(45,141)
0.106430	9.729366	28	(2,174)
0.075403	11.226136	33	(56,149)
0.075180	11.238950	36	(53,135)
0.087703	10.569879	41	(65,152)
0.095855	10.183848	45	(38,200)
0.089679	10.473106	47	(57,191)
0.111976	9.508757	50	(73,145)
0.105120	9.783148	54	(76,143)
0.124819	9.037191	57	(41,211)
0.109723	9.597004	62	(32,218)
0.104887	9.792800	64	(28,221)
0.103978	9.830587	69	(74,110)
0.075268	11.233917	71	(29,228)
0.088950	10.508564	75	(89,119)
0.077925	11.083218	77	(22,234)
0.076163	11.182571	80	(58,85)
0.069032	11.609498	82	(24,239)
0.087235	10.593105	87	(9,243)
0.093496	10.292080	91	(91,96)
0.109411	9.609398	94	(82,83)
0.078598	11.045891	98	(5,253)
0.106489	9.726958	103	(101,89)
0.086166	10.646654	109	(129,186)
0.092632	10.332377	115	(136,182)
0.098283	10.075196	117	(139,180)
0.083067	10.805705	123	(42,279)
0.088573	10.526968	128	(37,284)
0.084549	10.728941	134	(27,291)
0.084538	10.729488	139	(60,291)
0.096432	10.157798	141	(59,294)
0.096803	10.141104	144	(101,35)
0.064811	11.883492	147	(46,302)
0.091208	10.399679	153	(109,30)
0.101581	9.931884	157	(112,27)
0.082080	10.857646	160	(114,25)
0.073654	11.328031	162	(124,30)
0.076207	11.180077	165	(131,31)
0.080467	10.943800	167	(123,23)
0.072424	11.401186	171	(140,31)

0.086127 10.648586 174 (21,331)
0.088739 10.518873 176 (198,129)
0.081016 10.914300 178 (199,126)
0.094128 10.262817 181 (21,338)
0.081237 10.902485 186 (15,343)
0.080530 10.940398 188 (141,304)
0.065420 11.842867 191 (144,8)
0.085990 10.655541 194 (132,318)
0.095894 10.182090 201 (142,320)
0.123188 9.094326 203 (166,302)
0.088986 10.506781 209 (148,325)
0.093192 10.306228 211 (98,355)
0.101095 9.952689 213 (188,293)
0.089209 10.495893 217 (238,122)
0.103074 9.868511 220 (78,370)
0.117893 9.285127 225 (54,380)
0.110423 9.569416 229 (172,332)
0.137639 8.612575 231 (189,319)
0.125904 8.999592 233 (195,315)
0.116394 9.340681 239 (249,237)
0.116948 9.320055 242 (69,395)
0.104538 9.807246 244 (67,397)
0.117674 9.293196 249 (263,228)
0.124352 9.053457 251 (252,262)
0.127124 8.957731 255 (46,411)
0.120631 9.185405 257 (273,221)
0.123251 9.092096 261 (278,217)
0.108494 9.645944 265 (262,274)
0.108442 9.648011 268 (251,299)
0.136525 8.647868 271 (183,377)
0.124649 9.043121 274 (286,237)
0.117293 9.307265 276 (289,235)
0.115095 9.389440 278 (292,232)
0.115197 9.385592 283 (301,214)
0.144324 8.406624 289 (41,445)
0.114007 9.430696 292 (33,449)
0.097596 8.105672 296 (181,408)
0.134475 8.713571 301 (316,228)
0.106330 9.733429 304 (325,118)
0.120214 9.200455 309 (237,381)
0.129381 8.881294 313 (233,390)
0.141984 8.477619 318 (205,419)
0.110006 9.585817 324 (342,217)
0.114312 9.419084 329 (209,429)
0.125709 9.006330 332 (355,134)
0.101005 9.956591 338 (348,62)
0.148196 8.291642 343 (367,153)
0.126567 8.976801 347 (370,180)
0.146662 8.336810 349 (370,108)
0.115244 9.383825 353 (214,455)
0.132837 8.766807 356 (377,111)
0.134418 8.715415 358 (382,171)
0.151804 8.187167 360 (384,170)
0.097687 10.101641 363 (387,165)
0.154672 8.105886 367 (391,165)
0.122264 9.127001 370 (394,163)
0.106468 9.727807 376 (281,431)
0.102450 9.894875 380 (230,476)
0.143974 8.417149 385 (409,152)
0.124406 9.051579 388 (411,128)
0.128553 8.909184 397 (421,143)
0.102095 9.909963 402 (426,152)
0.102633 9.887131 404 (425,111)
0.126503 8.978981 407 (285,469)

10.236416 409 (409,20)
9.818502 414 (436,121)
10.035456 418 (440,118)
9.514078 422 (444,118)
10.130264 426 (424,11)
10.262351 428 (426,10)
9.379258 433 (430,7)
8.910856 435 (329,467)
8.788893 440 (462,117)
9.073411 446 (322,489)
8.616971 448 (347,467)
8.570889 452 (353,467)
10.045614 457 (361,466)
9.806219 459 (363,467)
8.724385 467 (373,467)
9.529692 480 (495,193)
9.605367 478 (502,178)
10.086942 488 (504,154)
9.529692 482 (505,183)
10.070076 482 (508,175)
9.629630 484 (508,175)
10.086942 488 (450,396)
9.221005 493 (457,392)
10.824311 498 (435,439)
10.029402 501 (440,436)
9.486275 505 (435,450)
9.104327 513 (472,406)
9.079993 517 (481,399)
9.220565 522 (457,449)
9.384332 525 (422,500)
11.600516 534 (492,415)
13.257464 538 (509,389)
13.693038 540 (502,408)
12.508122 543 (501,417)
8.801764 549 (446,508)
8.632553 551 (450,506)
8.711829 553 (455,503)
9.832023 567 (491,479)
10.418208 573 (509,463)
13.123114 575 (485,501)
11.226949 578 (483,509)
0.000000 602 (511,511)

Nearest Laplacian sidelobe: ratio 0.162991, dBdown 7.878370 at distance 4
Largest Laplacian sidelobe: ratio 0.249522, dBdown 6.028916 at distance 8

0000116
13-12-16

Image AOIR2 at compression 27.0:1 against window WL.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (24,157)
Location of max in compression is (24,157), sub-pixel is (24.000,156.875)
Max Laplacian Value is 1.36529e+06 at location (24,157)
Smoothed (FFT) Maximum Laplacian Value is 1562592.00 at (23.500,156.625)

a2w1_027.rep

0.194586 7.108892 561 230136 (478,487)
0.166353 7.789683 570 79360.1 (478,501)
-0.012440 0.000000 591 0 (497,511)
0.014116 18.503031 602 0 (511,511)
Nearest Corr sidelobe: ratio 0.368998, dBdown 4.329758 at distance 26
Largest Corr sidelobe: ratio 0.668711, dBdown 1.747613 at distance 49

Correlation Side Lobe Information, Maximum Value is 5.33457e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location
1.000000 0.000000 0 1.36529e+06 (24,157)
0.368998 4.329758 26 202334 (3,172)
0.359913 4.438025 29 146967 (1,174)
0.668711 1.747613 49 139153 (52,197)
0.504134 2.974540 60 114066 (48,212)
0.497338 3.033485 85 114015 (13,241)
0.432850 3.636623 95 104589 (7,250)
0.409334 3.879226 102 151017 (3,257)
0.397198 4.009925 106 0 (0,260)
0.468158 3.296072 113 88138.5 (86,63)
0.602292 2.201929 129 120033 (101,54)
0.577513 2.384382 137 98016.3 (107,48)
0.648222 1.882760 149 113820 (117,40)
0.363873 4.390505 173 118732 (125,17)
0.233545 6.316294 185 150442 (207,133)
0.242367 6.155265 200 89346.8 (223,134)
0.267930 5.719794 208 57326.4 (230,129)
0.264969 5.768057 213 83331.6 (235,126)
0.273019 5.638077 217 78439.4 (235,107)
0.321916 4.922578 232 66543.6 (249,99)
0.318216 4.972782 235 48977.6 (251,98)
0.326433 4.862055 240 83442 (256,94)
0.342014 4.659562 249 197203 (262,229)
0.305486 5.150092 262 44511.9 (276,84)
0.309464 5.093896 265 52654.3 (278,83)
0.319002 4.962070 289 230965 (308,208)
0.299545 5.235376 296 55848.8 (314,217)
0.307893 5.116002 302 101099 (321,212)
0.277482 5.567648 309 114443 (222,394)
0.306579 5.134582 317 163260 (338,202)
0.331845 4.790652 330 107986 (157,459)
0.332410 4.783258 332 101462 (167,457)
0.325126 4.879483 339 117038 (343,41)
0.331334 4.797344 346 64216.9 (137,484)
0.371574 4.299550 351 248678 (243,431)
0.298514 5.235830 367 219869 (391,164)
0.294356 5.311266 378 125672 (352,345)
0.305692 5.147164 384 232283 (408,151)
0.268519 5.742716 390 177880 (414,147)
0.288655 5.396215 398 98147.8 (241,491)
0.298548 5.249856 420 160435 (442,119)
0.233315 6.320580 427 135753 (449,116)
0.249749 6.024965 439 112181 (461,114)
0.371249 4.303349 455 91659.3 (476,207)
0.578744 2.375138 468 85829.8 (491,194)
0.464881 3.326584 479 138938 (502,180)
0.458900 3.401789 487 106142 (497,274)
0.413951 3.830512 497 106737 (510,262)
0.398225 3.998717 503 165093 (425,461)
0.405869 3.916137 507 119855 (433,456)
0.359439 4.43749 520 86954.6 (451,454)
0.086799 10.614846 533 130918 (490,415)
0.142677 8.456475 540 57213.3 (510,392)
0.139363 8.558533 551 240205 (450,506)
0.135916 8.667304 553 191103 (454,504)

Laplacian Side Lobe Information, Maximum Value is 1.36529e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance Location

1.000000 0.000000 0 (24,157)
0.261932 5.818109 7 (30,153)
0.283269 5.478013 16 (36,147)
0.191715 7.173442 23 (2,149)
0.162923 7.880187 26 (4,173)
0.123038 9.099612 28 (51,149)
0.096390 10.159663 33 (56,149)
0.095745 10.188825 36 (60,153)
0.134351 8.717589 39 (55,133)
0.126808 8.968529 43 (58,130)
0.178018 7.495366 50 (73,145)
0.134445 8.714541 54 (76,143)
0.118273 9.271133 56 (53,109)
0.172565 7.630480 62 (48,214)
0.103717 9.841505 66 (88,139)
0.112435 9.490987 68 (88,133)
0.111047 9.544937 72 (91,131)
0.148915 8.270621 75 (89,119)
0.115184 9.386083 80 (70,91)
0.090442 10.436311 85 (12,241)
0.102065 9.911249 87 (19,244)
0.097247 9.121231 91 (91,96)
0.152345 8.171709 95 (83,82)
0.140657 8.518395 102 (100,89)
0.093151 10.308130 110 (79,62)
0.086911 10.609244 112 (91,67)
0.113847 9.436770 115 (136,182)
0.111675 9.520432 117 (139,180)
0.108478 9.646571 119 (52,273)
0.112041 9.506241 121 (145,160)
0.104742 9.798775 123 (42,279)
0.107193 9.698341 128 (37,284)
0.103596 9.846588 134 (111,55)
0.114963 9.394412 137 (63,288)
0.102281 9.902051 139 (61,291)
0.106002 9.746875 142 (20,299)
0.111369 9.532356 144 (52,298)
0.106067 9.744202 148 (46,303)
0.129103 8.890652 151 (20,308)
0.113843 9.436930 157 (112,27)
0.109148 9.619842 162 (173,220)
0.104123 9.824535 165 (130,30)
0.109089 9.622192 167 (138,35)
0.087332 10.588290 171 (177,233)
0.103226 9.862118 174 (20,331)
0.099383 10.026869 176 (198,129)
0.104923 9.791290 180 (32,337)
0.109882 9.590716 182 (206,165)
0.110191 9.578531 185 (207,133)
0.083294 10.793881 190 (184,260)
0.112141 9.502350 193 (134,316)
0.105530 9.766259 198 (3,354)
0.142555 8.460177 201 (142,320)
0.104872 9.793395 203 (166,302)
0.083236 10.796907 207 (230,140)

0.120471	9.191164	212	(176,305)
0.125376	9.017857	214	(91,360)
0.116175	9.348885	217	(223,244)
0.131931	8.796531	222	(163,330)
0.127621	8.940794	224	(177,320)
0.138094	8.598240	232	(194,315)
0.103561	9.848054	235	(206,306)
0.137459	8.618276	239	(249,237)
0.134317	8.718685	242	(69,395)
0.130242	8.852476	244	(66,397)
0.158450	8.001091	248	(262,228)
0.145021	8.385694	251	(266,225)
0.152139	8.177601	257	(273,221)
0.129387	8.256872	261	(278,217)
0.125441	9.015598	263	(271,247)
0.123357	9.088367	265	(174,376)
0.143691	8.425692	271	(184,376)
0.157174	8.036206	273	(289,222)
0.125964	8.997523	277	(294,219)
0.128986	8.894569	279	(292,233)
0.143961	8.417534	284	(141,416)
0.177228	7.514683	288	(41,444)
0.133759	8.736766	292	(33,449)
0.142235	8.469941	295	(132,432)
0.134545	8.711310	297	(133,433)
0.139289	8.560824	302	(197,404)
0.116681	9.329998	304	(23,461)
0.122455	9.120249	306	(329,181)
0.134256	8.720656	309	(237,381)
0.143250	8.439061	312	(332,206)
0.144291	8.407598	317	(338,203)
0.162517	7.891005	319	(340,200)
0.122611	9.114711	323	(344,198)
0.128055	8.926021	325	(157,453)
0.125547	9.011922	329	(209,429)
0.181645	7.407773	333	(355,190)
0.126758	8.970232	338	(342,41)
0.122811	9.107624	341	(141,477)
0.148641	8.278619	344	(368,153)
0.149346	8.258050	346	(369,180)
0.182143	7.395868	351	(243,431)
0.136024	8.663832	354	(215,455)
0.136476	8.649434	357	(381,171)
0.181249	7.417245	360	(384,170)
0.135680	8.674836	364	(385,112)
0.168523	7.733407	367	(391,165)
0.138336	8.590636	372	(380,265)
0.155480	8.083257	377	(401,159)
0.128273	8.918639	381	(379,295)
0.170135	7.692068	384	(408,151)
0.143898	8.419439	388	(412,147)
0.122930	9.103437	392	(395,30)
0.179937	7.448796	397	(421,142)
0.135458	8.681958	402	(426,152)
0.132207	8.787442	404	(425,111)
0.123520	9.082635	407	(285,469)
0.125526	9.012659	409	(432,133)
0.120023	9.207350	411	(411,19)
0.126443	8.981067	414	(436,121)
0.154551	8.109290	418	(440,118)
0.105612	9.762857	424	(422,12)
0.133652	8.740229	428	(426,10)
0.146481	8.342173	433	(327,467)
0.119115	9.240323	440	(336,467)

0.122922	9.103712	442	(438,2)
0.161120	7.928504	446	(322,489)
0.145892	8.359692	448	(347,467)
0.129078	8.891487	452	(331,489)
0.129010	8.893755	456	(477,107)
0.109392	9.610164	459	(363,467)
0.126688	8.972633	462	(353,482)
0.129558	8.875366	465	(370,467)
0.158703	7.994147	467	(373,467)
0.182998	7.375531	473	(496,193)
0.126531	8.978027	478	(502,177)
0.134939	8.698636	480	(504,154)
0.132881	8.765381	485	(509,178)
0.128884	8.897996	487	(447,398)
0.120959	9.173623	490	(453,393)
0.133500	8.745200	492	(411,461)
0.106266	9.736075	495	(508,262)
0.077601	11.101323	498	(462,395)
0.120922	9.174960	503	(425,461)
0.126890	8.965739	506	(448,434)
0.143893	8.419610	508	(462,414)
0.133801	8.735394	513	(472,406)
0.109486	9.606395	515	(478,400)
0.111948	9.509834	517	(481,399)
0.154150	8.120564	523	(414,505)
0.090954	10.411759	529	(508,371)
0.095891	10.182238	533	(490,415)
0.082580	10.831277	538	(500,408)
0.086001	10.654985	544	(504,413)
0.175938	7.546411	551	(450,506)
0.113517	9.449390	556	(465,495)
0.165450	7.317733	561	(477,488)
0.086036	10.653194	567	(491,479)
0.080746	10.928811	572	(483,498)
0.077674	11.097271	577	(481,509)
0.054289	12.652877	582	(489,507)
0.000000	0.000000	602	(511,511)

Nearest Laplacian sidelobe: ratio 0.261932, dBdown 5.818109 at distance 7
Largest Laplacian sidelobe: ratio 0.283269, dBdown 5.478013 at distance 16

9000116
13:13:17

Image AQVIR2 at compression 36.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (24,157)
Location of max in compression is (24,157), sub-pixel is (24.125,156.875)
Max Laplacian Value is 1.03331e+06 at location (24,157)
Smoothed (FFT) Maximum Laplacian Value is 1247328.00 at (23.500,156.625)

Correlation Side Lobe Information, Maximum Value is 4.99605e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	1.03331e+06	(24,157)
0.367488	4.347571	26	173381	(3,172)
0.360708	4.428448	29	125680	(1,174)
0.723736	1.404195	48	108301	(53,197)
0.507002	2.949903	85	127219	(13,241)
0.442401	3.541843	94	146782	(8,250)
0.402777	3.949350	101	130179	(3,256)
0.466745	3.309199	113	86827.8	(87,63)
0.645102	1.903719	128	130085	(101,55)
0.678447	1.684838	149	102218	(117,40)
0.365725	4.368456	172	94747.8	(124,17)
0.237223	6.248434	200	94117.5	(223,134)
0.264603	5.774038	207	57140.3	(229,129)
0.261932	5.818114	211	58738.6	(233,126)
0.284011	5.466650	220	73465	(238,107)
0.340757	4.675552	232	53194.5	(249,100)
0.342455	4.653968	241	88910	(257,94)
0.355522	4.491333	249	166883	(262,229)
0.333904	4.763779	253	43356.9	(267,88)
0.351252	4.543807	265	73502	(278,83)
0.316180	5.000659	287	46653.4	(298,71)
0.350972	4.547278	302	104953	(321,212)
0.329790	4.817628	315	161501	(336,203)
0.289006	5.390933	323	75969.8	(346,131)
0.355932	4.486325	331	153124	(157,460)
0.357807	4.463517	334	132315	(154,465)
0.344676	4.625885	339	128265	(343,41)
0.345757	4.612292	346	61674.9	(137,484)
0.412734	3.843296	351	224523	(244,431)
0.319120	4.960461	367	205173	(391,164)
0.314273	5.026928	379	85066.4	(354,344)
0.317803	4.978421	385	158268	(409,151)
0.294474	5.309534	389	137442	(413,148)
0.319853	4.950499	398	106373	(241,491)
0.314237	5.027428	420	148968	(442,119)
0.286731	5.425252	440	132405	(462,115)
0.391643	4.048976	455	81852.5	(476,206)
0.594894	2.255603	467	81809.3	(490,194)
0.462315	3.350619	480	113575	(503,180)
0.473077	3.250678	486	108537	(496,272)
0.409469	3.877790	497	124097	(510,262)
0.417701	3.791350	503	167028	(425,461)
0.417777	3.790559	506	131955	(432,456)
0.359418	4.443999	519	71734.5	(450,454)
0.117364	9.304636	534	104909	(492,414)
0.150548	8.223250	539	78712.6	(509,393)
0.167355	7.763612	551	205662	(449,507)
0.210791	6.761490	561	252663	(477,488)
0.200169	6.986043	570	78258.1	(478,501)
-0.013125	0.000000	592	0	(498,511)
-0.000844	0.000000	601	0	(510,511)

Nearest Corr sidelobe: ratio 0.367488, dBdown 4.347571 at distance 26
Largest Corr sidelobe: ratio 0.723736, dBdown 1.404195 at distance 48

Laplacian Side Lobe Information, Maximum Value is 1.03331e+06

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Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(24,157)
0.287398	5.415167	7	(30,153)
0.300973	5.214718	9	(31,152)
0.318750	4.965497	16	(37,147)
0.219016	6.595234	23	(2,149)
0.197693	7.040080	25	(4,172)
0.171896	7.647337	28	(2,175)
0.109948	9.588140	31	(54,148)
0.088470	10.532042	34	(47,182)
0.152463	8.168356	40	(56,133)
0.158524	7.999036	45	(60,130)
0.181792	7.404244	48	(58,191)
0.186748	7.287429	50	(73,145)
0.170574	7.680865	54	(76,143)
0.167082	7.770701	56	(53,109)
0.186221	7.299706	62	(48,214)
0.169329	7.712675	64	(29,221)
0.147535	8.311037	68	(73,110)
0.128937	8.896213	72	(47,89)
0.140842	8.512689	76	(60,90)
0.117577	9.296786	80	(70,91)
0.114467	9.413200	83	(14,239)
0.130060	8.858546	85	(12,241)
0.103106	9.867181	89	(90,97)
0.133183	8.755506	91	(91,96)
0.175045	7.568507	96	(84,82)
0.168945	7.722547	102	(100,89)
0.121705	9.146916	108	(128,187)
0.139956	8.540077	114	(135,183)
0.130162	8.855150	117	(139,180)
0.119138	9.239494	121	(145,160)
0.147411	8.314696	123	(42,279)
0.125891	9.000041	128	(101,55)
0.121892	9.140249	136	(62,288)
0.119080	9.241616	139	(61,291)
0.118678	9.256285	142	(19,299)
0.146747	8.334317	144	(101,35)
0.123183	9.094490	148	(46,303)
0.157262	8.033767	151	(20,308)
0.136344	8.653641	154	(161,87)
0.135592	8.677648	156	(111,27)
0.093580	10.288190	161	(172,220)
0.111754	9.517387	163	(45,319)
0.132503	8.777742	165	(42,321)
0.118126	9.276545	167	(163,65)
0.111533	9.525950	169	(177,229)
0.143592	8.428703	175	(20,332)
0.132374	8.781969	182	(206,165)
0.119167	9.238436	186	(208,133)
0.105378	9.772509	190	(184,260)
0.133471	8.746118	192	(198,76)
0.129728	8.869649	194	(133,317)
0.126157	8.990900	198	(176,284)
0.166078	7.796875	201	(140,321)
0.122161	9.130675	204	(62,357)
0.139123	8.566025	212	(182,298)
0.155103	8.093791	219	(79,369)
0.117129	8.189301	217	(223,244)
0.155103	8.093791	219	(79,369)
0.161628	7.914823	222	(163,330)
0.124443	9.050300	227	(52,382)
0.167023	7.772239	230	(175,331)
0.164058	7.850037	233	(195,315)
0.126390	8.982857	235	(206,306)

9001/16
13:13:17

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0.157733	8.020778	239	(249,237)
0.145813	8.362049	241	(220,297)
0.165088	7.822836	244	(66,397)
0.173728	7.601300	249	(130,382)
0.183899	7.354205	253	(268,224)
0.191914	7.168924	255	(270,223)
0.172999	7.619565	257	(273,220)
0.179110	7.468812	261	(278,217)
0.145229	8.379457	265	(283,213)
0.160745	7.938613	268	(262,280)
0.174666	7.577910	272	(176,383)
0.170213	7.690072	277	(294,219)
0.148845	8.272664	280	(298,216)
0.163382	7.867953	283	(282,274)
0.201651	6.954004	288	(41,444)
0.153816	8.129990	293	(313,206)
0.159841	7.963107	295	(132,432)
0.147385	8.315466	297	(182,408)
0.145449	8.372892	300	(101,447)
0.150009	8.238814	302	(197,404)
0.151227	8.203708	308	(220,394)
0.190136	7.209350	313	(333,206)
0.192402	7.157897	316	(336,204)
0.181251	7.417190	319	(340,200)
0.162061	7.903213	322	(343,199)
0.171376	7.660511	325	(157,453)
0.147352	8.316436	328	(31,485)
0.214754	6.680585	334	(356,189)
0.158872	7.989525	338	(342,41)
0.177445	7.509350	341	(142,477)
0.185964	7.305701	344	(368,153)
0.180720	7.429933	346	(369,180)
0.238229	6.230048	351	(243,431)
0.193988	7.122258	354	(215,455)
0.185332	7.320491	357	(381,171)
0.198474	7.022955	359	(383,170)
0.170982	7.670506	364	(371,46)
0.212515	6.726104	367	(391,165)
0.202366	6.938629	369	(393,163)
0.172054	7.643343	373	(381,264)
0.162528	7.890713	376	(400,159)
0.141726	8.485511	379	(386,268)
0.190915	7.191598	381	(405,152)
0.170393	7.685488	386	(409,137)
0.181096	7.420902	389	(413,147)
0.161660	7.913973	392	(395,30)
0.196339	7.069931	396	(420,142)
0.149130	8.264351	402	(426,152)
0.184637	7.336822	405	(426,111)
0.135580	8.678035	409	(432,133)
0.158571	7.997772	413	(413,18)
0.184110	7.349235	417	(439,119)
0.192895	7.146785	419	(441,118)
0.158617	7.996512	421	(299,476)
0.170861	7.673566	428	(426,10)
0.185315	7.320888	433	(326,467)
0.185291	7.321445	441	(337,467)
0.192070	7.165398	446	(322,489)
0.180538	7.434309	452	(331,489)
0.139202	8.563552	456	(477,107)
0.130586	8.841046	459	(341,489)
0.175042	7.568567	465	(370,467)
0.185998	7.304912	467	(373,467)
0.210524	6.766988	472	(495,193)

0.178990	7.471707	475	(499,158)
0.172799	7.624592	480	(504,154)
0.170635	7.679325	485	(509,178)
0.159224	7.979915	487	(447,398)
0.160137	7.955082	491	(454,393)
0.165743	7.805653	493	(412,461)
0.169633	7.704894	502	(424,461)
0.166211	7.793397	506	(448,434)
0.176652	7.528803	508	(462,414)
0.156720	8.048753	514	(475,403)
0.169949	7.696824	518	(482,398)
0.208093	6.817417	523	(414,505)
0.112469	9.489666	529	(508,371)
0.110984	9.547409	531	(488,416)
0.115502	9.374099	533	(490,415)
0.098299	10.074519	538	(500,408)
0.069758	11.564036	543	(501,417)
0.231877	6.347423	550	(449,506)
0.244519	6.116882	561	(477,488)
0.121986	9.136904	569	(493,479)
0.094879	10.228296	572	(483,498)
0.097493	10.110273	578	(482,509)
0.047640	13.220320	582	(489,507)
0.000000	0.000000	602	(511,511)

Nearest Laplacian sidelobe: ratio 0.287398, dBdown 5.415167 at distance 7
Largest Laplacian sidelobe: ratio 0.318750, dBdown 4.965497 at distance 16

900016
1314:05

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1

Image AQVIR2 at compression 60.0:1 against Window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (24,157)
Location of max in compression is (24,157), sub-pixel is (24.000,156.625)
Max Laplacian Value is 680572 at location (24,157)
Smoothed (FFT) Maximum Laplacian Value is 937376.00 at (23.500,156.500)

Correlation Side Lobe Information, Maximum Value is 4.66431e+06			
Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian Location
1.000000	0.000000	0	680572 (24,157)
0.387343	4.119043	24	167927 (4,171)
0.399873	3.980776	27	131577 (2,173)
0.401899	3.958826	29	0 (0,174)
0.764401	1.166789	48	117377 (52,196)
0.610985	2.139693	59	70826.5 (48,211)
0.426242	3.703437	68	42891.6 (27,225)
0.511013	2.915678	79	107853 (19,236)
0.548903	2.605042	84	115165 (14,240)
0.471078	3.269076	95	94014.8 (7,250)
0.427339	3.692279	102	80459.8 (2,257)
0.533983	2.724722	115	76739 (89,62)
0.678745	1.682936	127	119623 (100,55)
0.782407	1.065673	149	121215 (117,40)
0.261618	5.823331	186	97094.9 (208,133)
0.276733	5.579397	200	63939.9 (223,134)
0.313230	5.041365	206	67466.4 (228,130)
0.303698	5.175579	211	75414.8 (233,126)
0.332765	4.778628	220	90484.8 (238,106)
0.391372	4.074106	228	65908.3 (245,101)
0.399285	3.987172	232	84530.5 (249,99)
0.390403	4.084873	239	71186.3 (255,95)
0.371314	4.302583	250	52896.5 (265,89)
0.358597	4.453929	262	39859.4 (276,84)
0.362363	4.408566	264	66794.3 (277,83)
0.322146	4.919471	275	43850.1 (288,79)
0.332213	4.785929	289	121311 (309,207)
0.379566	4.207127	296	79567.6 (314,217)
0.382442	4.174348	299	83325.5 (318,214)
0.343285	4.643457	315	136512 (336,203)
0.297773	5.262143	323	94504.1 (346,131)
0.356732	4.476580	331	70422.4 (161,458)
0.356839	4.475281	333	85067.6 (168,457)
0.362512	4.406778	340	125388 (344,41)
0.385187	4.143279	346	95669.3 (137,484)
0.427404	3.691617	351	184216 (244,431)
0.351991	4.534684	368	242294 (392,163)
0.325712	4.871657	379	78135.1 (354,344)
0.328545	4.834053	383	144438 (407,152)
0.310532	5.078936	398	77780 (241,491)
0.315422	5.011077	421	92243.1 (443,120)
0.307976	5.114832	440	147152 (462,115)
0.627874	2.021273	467	89606.8 (490,194)
0.512098	2.906472	479	95699.8 (502,180)
0.527401	2.778587	485	77029.3 (492,283)
0.526320	2.787503	487	106717 (497,273)
0.432453	3.640612	497	115190 (510,262)
0.426953	3.696202	503	159642 (425,461)
0.413637	3.853805	506	39584.8 (433,455)
0.396196	4.020896	519	65373.9 (450,453)
0.101210	9.947745	533	76668.8 (490,415)
0.160631	7.941707	540	0 (511,391)
0.155308	8.088049	551	183408 (449,507)
0.197590	7.042349	561	165883 (478,487)
0.201855	6.949603	570	96670.8 (479,501)

-0.013419 0.000000 592 0 (498,511)
0.007989 20.974956 602 0 (511,511)
Nearest Corr sidelobe: ratio 0.387343, dBdown 4.119043 at distance 24
Largest Corr sidelobe: ratio 0.782407, dBdown 1.065673 at distance 149

Laplacian Side Lobe Information, Maximum Value is 680572

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(24,157)
0.344009	4.634305	8	(30,152)
0.359839	4.438922	14	(35,149)
0.382463	4.174107	16	(37,147)
0.267546	5.726020	24	(5,171)
0.243475	6.135467	26	(44,141)
0.236452	6.262576	28	(2,174)
0.176079	7.542914	31	(54,148)
0.218962	6.596322	41	(56,131)
0.233056	6.325401	47	(57,191)
0.288382	5.400318	50	(66,185)
0.287136	5.419123	61	(49,213)
0.199646	6.997385	68	(38,224)
0.143174	8.441374	72	(91,131)
0.158431	8.001592	74	(24,231)
0.196187	7.073296	77	(61,90)
0.183815	7.356185	79	(20,236)
0.176066	7.543257	85	(12,241)
0.128601	8.907550	88	(93,102)
0.120874	9.176669	91	(12,247)
0.156159	8.064327	93	(81,83)
0.218354	6.608396	96	(84,82)
0.114315	9.418959	99	(73,71)
0.157144	8.037019	104	(71,250)
0.165286	7.817647	108	(128,186)
0.180588	7.433120	114	(135,182)
0.142175	8.471771	117	(90,60)
0.141514	8.491993	119	(141,178)
0.141073	8.505549	121	(145,160)
0.192008	7.166803	124	(42,280)
0.185350	7.320066	127	(99,54)
0.145798	8.761433	133	(52,287)
0.153755	8.362475	135	(105,49)
0.176984	7.520653	143	(63,290)
0.199491	7.000759	150	(150,90)
0.208474	6.809491	157	(112,27)
0.136553	8.647000	161	(173,219)
0.177978	7.496339	165	(41,321)
0.145526	8.370597	168	(161,255)
0.175754	7.550946	175	(198,172)
0.149876	8.242680	177	(20,334)
0.152150	8.177282	179	(130,13)
0.192517	7.155300	182	(206,164)
0.153838	8.129372	185	(14,342)
0.148007	8.297187	192	(198,76)
0.152215	8.175419	195	(219,156)
0.150305	8.230263	197	(4,353)
0.230641	6.370633	201	(141,320)
0.120487	9.190596	205	(172,15)
0.138516	8.584994	207	(229,132)
0.191856	7.170255	212	(176,305)
0.155528	8.081904	218	(64,371)
0.188253	7.252590	222	(158,334)
0.174573	7.580224	224	(70,376)
0.216804	6.639335	226	(50,382)
0.203841	6.907092	230	(166,338)

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0.189253	7.229578	236	(207,306)
0.150034	8.238116	239	(250,236)
0.195742	7.083168	245	(257,232)
0.195310	7.092748	249	(263,228)
0.195543	7.087570	251	(253,260)
0.190519	7.200618	255	(271,222)
0.190641	7.197826	258	(274,219)
0.178163	7.491816	261	(278,217)
0.183485	7.363983	264	(260,276)
0.183659	7.359873	266	(262,275)
0.170667	7.678516	269	(50,425)
0.238928	6.217323	272	(171,386)
0.204592	6.891108	277	(294,219)
0.239924	6.199259	282	(139,415)
0.276090	5.589490	289	(41,445)
0.239487	6.207174	292	(312,205)
0.207910	6.821251	297	(133,433)
0.203058	6.923806	302	(197,404)
0.219340	6.588812	307	(220,393)
0.197786	7.038048	313	(333,206)
0.200584	6.977033	315	(336,203)
0.212526	6.725872	319	(340,201)
0.177047	7.519118	325	(157,454)
0.211570	6.745460	327	(250,393)
0.202090	6.944547	330	(352,192)
0.231176	6.360567	334	(357,188)
0.206106	6.859095	339	(202,445)
0.214965	6.676323	341	(142,477)
0.221614	6.544019	344	(368,153)
0.209149	6.795443	347	(370,180)
0.291530	5.353173	350	(243,430)
0.189095	7.233206	355	(379,174)
0.204116	6.901234	358	(382,170)
0.217272	6.629971	361	(120,505)
0.356015	4.485319	368	(392,163)
0.224758	6.482849	372	(278,429)
0.257725	5.888441	374	(281,429)
0.251981	5.986327	381	(405,152)
0.238331	6.228202	384	(408,152)
0.197490	7.044540	390	(393,31)
0.227412	6.431863	393	(417,145)
0.264547	5.774979	396	(420,143)
0.234064	6.306663	401	(425,152)
0.191532	7.177594	409	(409,20)
0.204536	6.892310	414	(414,17)
0.215610	6.663304	418	(417,15)
0.175310	7.561936	425	(357,421)
0.183363	7.366873	429	(427,9)
0.181913	7.401370	431	(428,8)
0.194091	7.119947	434	(330,465)
0.169339	7.712427	437	(438,18)
0.221471	6.546837	440	(462,114)
0.184772	7.333648	445	(321,489)
0.241495	6.170927	448	(346,469)
0.212878	6.718701	453	(332,489)
0.162485	7.891872	460	(461,13)
0.178165	7.491771	464	(486,199)
0.200855	6.971167	469	(492,194)
0.241713	6.166996	472	(495,192)
0.191239	7.184230	475	(499,157)
0.191267	7.183611	479	(423,422)
0.193768	7.127190	481	(504,181)
0.214023	6.695405	483	(439,405)

0.225486	6.468799	485	(509,177)
0.191456	7.179305	488	(449,397)
0.163849	7.855571	491	(455,392)
0.167822	7.751509	493	(411,463)
0.161614	7.915199	496	(509,262)
0.157079	8.038827	499	(436,439)
0.243367	6.137377	502	(424,461)
0.236623	6.259426	507	(462,413)
0.234814	6.292759	513	(474,404)
0.183208	7.370564	518	(482,399)
0.248499	6.046756	524	(416,504)
0.159143	7.982122	530	(436,491)
0.148557	8.281075	532	(488,417)
0.131291	8.817639	534	(491,416)
0.121305	9.161208	536	(506,392)
0.062651	12.030753	542	(509,398)
0.282258	5.493535	550	(448,507)
0.257139	5.898328	561	(478,486)
0.157615	8.024015	567	(490,480)
0.142043	8.475790	570	(479,501)
0.150664	8.219908	572	(506,465)
0.126211	8.989027	578	(482,509)
0.000000	0.000000	602	(511,511)

Nearest Laplacian sidelobe: ratio 0.344009, dBdown 4.634305 at distance 8
Largest Laplacian sidelobe: ratio 0.382463, dBdown 4.174107 at distance 16

9060116
13:15:00

Image AQVIR2 at compression 84.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (24,157)
Location of max in compression is (24,157), sub-pixel is (23.875,156.875)
Max Laplacian Value is 467333 at location (24,157)
Smoothed (FFT) Maximum Laplacian Value is 679248.00 at (23.500,156.500)

Correlation Side Lobe Information, Maximum Value is 4.15014e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	467333	(24,157)
0.444968	3.516716	26	138111	(3,172)
0.850919	0.701116	49	95645.8	(58,192)
0.475546	3.228077	69	73692.8	(26,226)
0.639389	1.244351	85	124463	(13,241)
0.537070	2.699692	96	97851.8	(6,251)
0.504930	2.967691	103	79600	(2,258)
0.569667	2.443787	115	50620.5	(89,62)
0.768554	1.143257	129	85664.3	(101,54)
0.757529	1.206007	133	44702.3	(104,51)
0.752582	1.234460	136	67489	(106,49)
0.751356	1.241545	141	51282.8	(111,46)
0.830192	0.808217	149	112813	(117,40)
0.279525	5.535793	185	59969.1	(208,134)
0.264450	5.776569	190	46870.8	(213,141)
0.308333	5.109798	203	40262.5	(226,133)
0.309687	5.090769	205	59511.8	(227,132)
0.362978	4.401192	219	72790.6	(237,107)
0.416500	3.803854	232	83808	(249,99)
0.405479	3.920315	249	70800.9	(262,230)
0.389177	4.098528	263	54595.6	(277,84)
0.396099	4.021963	277	38374.4	(290,78)
0.399089	3.989302	289	105266	(309,207)
0.434209	3.623008	295	88254	(313,217)
0.427854	3.687045	299	75260.6	(318,214)
0.386928	4.123702	315	104779	(336,203)
0.333658	4.766988	323	42976.5	(346,132)
0.428524	3.680245	334	63567.9	(155,464)
0.406673	3.907546	341	97665.8	(345,41)
0.413324	3.837089	346	79599.6	(137,484)
0.445084	3.515579	351	127626	(244,431)
0.315810	5.005735	367	186274	(391,164)
0.360824	4.427041	379	64658.8	(354,344)
0.352521	4.528149	400	65001.8	(241,493)
0.385470	4.140089	421	115887	(443,120)
0.294977	5.302122	431	76156.5	(453,114)
0.338096	4.709606	440	143451	(462,115)
0.460597	3.366792	456	92534.6	(477,206)
0.671281	1.730956	468	98523	(491,193)
0.569279	2.446731	478	97362.5	(501,181)
0.596734	2.242194	486	97239.8	(496,274)
0.498563	3.022796	497	79896.4	(510,261)
0.487276	3.122248	503	86235.3	(426,460)
0.502327	2.990134	507	52413.3	(434,455)
0.201134	6.965151	540	0	(511,391)
0.216179	6.651874	554	96427.6	(457,502)
0.214993	6.675760	556	93727.5	(461,500)
0.198965	7.012240	561	121495	(478,487)
0.253676	5.957208	570	101943	(479,500)
-0.031256	0.000000	591	0	(497,511)
-0.027504	0.000000	597	0	(505,511)
-0.005473	0.000000	602	0	(511,511)

Nearest Corr sidelobe: ratio 0.444968, dBdown 3.516716 at distance 26
Largest Corr sidelobe: ratio 0.850919, dBdown 0.701116 at distance 49

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Laplacian Side Lobe Information, Maximum Value is 467333

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(24,157)
0.294154	5.314254	9	(17,163)
0.341888	4.661167	13	(34,149)
0.424859	3.717552	16	(36,147)
0.359659	4.441085	24	(4,171)
0.150031	8.238176	32	(55,149)
0.250429	6.013149	42	(56,130)
0.278827	5.546652	45	(49,194)
0.305916	5.143972	47	(57,191)
0.341680	4.663798	50	(65,185)
0.213451	6.707014	55	(67,123)
0.330795	4.804413	62	(49,214)
0.232840	6.329432	69	(85,189)
0.175456	7.558309	72	(91,132)
0.241101	6.178001	79	(20,236)
0.273688	5.627446	85	(12,241)
0.195660	7.084976	91	(99,105)
0.261828	5.819837	96	(84,82)
0.215402	6.667509	100	(95,228)
0.194210	7.117281	106	(3,261)
0.205780	6.865979	112	(87,249)
0.198210	7.028749	119	(141,178)
0.152246	8.174551	121	(63,272)
0.151529	8.195056	123	(63,274)
0.246495	6.081917	127	(100,55)
0.176256	7.538558	134	(157,169)
0.231850	6.347930	140	(19,297)
0.182115	7.396546	143	(101,36)
0.178159	7.491911	145	(121,49)
0.270029	5.685901	150	(118,40)
0.242585	6.151355	155	(105,289)
0.214535	6.685018	157	(112,27)
0.212589	6.724592	165	(41,321)
0.183901	7.354157	168	(131,28)
0.217613	6.623145	174	(198,170)
0.209097	6.796522	176	(105,313)
0.240794	6.183538	182	(206,164)
0.204043	6.902776	184	(14,341)
0.172893	7.622229	187	(169,275)
0.166928	7.774704	194	(178,275)
0.166320	7.790560	196	(152,305)
0.193980	7.122428	199	(140,319)
0.185682	7.312297	201	(141,320)
0.189718	7.218910	203	(63,356)
0.184341	7.343785	205	(172,15)
0.200357	6.981944	212	(177,304)
0.191199	7.185137	216	(89,363)
0.215243	6.670719	220	(55,375)
0.205041	6.881593	227	(244,101)
0.174828	7.573902	229	(235,246)
0.237035	6.251868	232	(190,319)
0.236660	6.258759	236	(207,306)
0.202529	6.248489	242	(67,395)
0.260801	6.935130	245	(64,399)
0.249546	6.028498	255	(48,411)
0.211560	6.745655	258	(265,249)
0.260435	5.843011	263	(61,417)
0.253524	5.959812	266	(260,280)
0.268809	5.705558	271	(177,381)
0.254448	5.944014	273	(273,268)
0.201644	6.954140	277	(294,219)

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0.205647	6.868786	280	(285, 258)
0.273195	5.635278	282	(139, 415)
0.282612	5.488101	288	(40, 445)
0.259584	5.857220	294	(312, 218)
0.186742	7.287575	298	(219, 382)
0.180383	7.438048	300	(189, 408)
0.258376	5.877481	304	(21, 461)
0.305340	5.152163	307	(220, 393)
0.271692	5.659229	311	(225, 394)
0.218629	6.602930	313	(242, 181)
0.262695	5.805490	317	(338, 201)
0.252219	5.982229	319	(331, 70)
0.258312	5.878546	328	(208, 428)
0.301673	5.204641	334	(357, 88)
0.225455	6.469396	337	(148, 470)
0.236145	6.268214	341	(141, 477)
0.281906	5.498952	344	(368, 153)
0.274223	5.618957	346	(340, 298)
0.282530	5.489359	350	(243, 430)
0.312087	5.057246	353	(374, 109)
0.268131	5.716527	358	(359, 31)
0.239966	6.1198508	361	(384, 126)
0.426421	3.701612	368	(392, 164)
0.227617	6.427953	372	(392, 105)
0.263969	5.784470	375	(399, 159)
0.281295	5.508376	381	(405, 152)
0.268479	5.710898	384	(408, 152)
0.271736	5.658526	390	(413, 130)
0.234403	6.300376	393	(417, 145)
0.241144	6.177235	396	(420, 142)
0.240631	6.186479	398	(421, 130)
0.245793	6.094314	402	(423, 110)
0.253482	5.960536	405	(284, 468)
0.265221	5.763924	415	(437, 121)
0.232540	6.335023	417	(416, 15)
0.270754	5.674250	420	(442, 120)
0.209014	6.798245	429	(297, 488)
0.211365	6.749663	434	(454, 97)
0.218233	6.610792	437	(455, 85)
0.306958	5.129215	440	(462, 115)
0.229282	6.396296	446	(343, 469)
0.287728	5.410184	449	(327, 489)
0.218184	6.611767	454	(354, 469)
0.205574	6.870325	460	(484, 170)
0.225322	6.471958	462	(484, 199)
0.222297	6.530661	464	(487, 194)
0.218128	6.612896	466	(489, 182)
0.270953	5.671054	469	(493, 161)
0.272078	5.653073	472	(495, 192)
0.274512	5.614393	477	(483, 285)
0.279618	5.534354	480	(503, 181)
0.279522	5.535837	485	(509, 178)
0.234642	6.295948	489	(452, 393)
0.238731	6.220909	491	(493, 304)
0.230641	6.370637	497	(461, 393)
0.231676	6.351191	502	(496, 329)
0.232250	6.340449	504	(426, 461)
0.244131	6.123773	508	(497, 341)
0.199875	6.992416	510	(482, 381)
0.249500	6.029295	515	(477, 401)
0.230940	6.365001	518	(482, 399)
0.223521	6.506817	521	(489, 393)
0.287075	5.420048	525	(417, 505)
0.235127	6.286982	530	(436, 491)

Nearest Laplacian sidelobe: ratio 0.294154, dBdown 5.314254 at distance 9
Largest Laplacian sidelobe: ratio 0.426421, dBdown 3.701612 at distance 368

0.116469	9.337886	534	(500, 399)
0.137463	8.618144	539	(509, 393)
0.116013	9.354932	542	(499, 417)
0.287027	5.420776	553	(455, 503)
0.259975	5.850680	561	(478, 487)
0.181562	7.409741	565	(487, 481)
0.277783	5.562948	571	(481, 499)
0.171172	7.665671	580	(486, 507)
0.000000	0.000000	602	(511, 511)

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13:15:44

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Image AQVIR2 at compression 117.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (24,157)

Location of max in compression is (24,157), sub-pixel is (23.875,156.875)

Max Laplacian Value is 310647 at location (24,157)

Smoothed (FFT) Maximum Laplacian Value is 482784.00 at (23.500,156.500)

Correlation Side Lobe Information, Maximum Value is 3.5748e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	310647	(24,157)
0.460995	3.363033	25	115020	(3,171)
0.474559	3.237097	29	0	(0,174)
0.887752	0.517083	50	53156	(50,200)
0.539803	2.677650	67	56418.4	(28,224)
0.698805	1.556438	85	117472	(13,241)
0.660041	1.804290	114	66989.5	(117,40)
0.869402	0.607794	136	60042.3	(107,49)
0.871744	0.596113	138	52556.5	(108,48)
0.936859	0.283257	149	70803.8	(117,40)
0.283644	5.472271	185	62719.5	(152,291)
0.248822	6.041104	192	37067.9	(215,141)
0.349820	4.561555	207	47953.4	(229,127)
0.404073	3.935401	219	63411.8	(237,107)
0.450327	3.464724	233	60865.5	(250,99)
0.452991	3.439106	246	33400.4	(262,93)
0.470834	3.271323	252	49569.6	(265,229)
0.465960	3.316513	254	37192.5	(269,90)
0.473494	3.246856	261	64530.3	(275,85)
0.436713	3.598041	277	32967.8	(290,78)
0.440681	3.558753	290	106349	(310,207)
0.498857	3.020243	296	82523.8	(314,217)
0.414931	3.820239	316	100640	(337,202)
0.411228	3.859173	319	66699.4	(241,391)
0.407725	3.896331	324	58499.6	(347,131)
0.465366	3.322049	332	60657.5	(164,458)
0.461326	3.359925	335	73748.1	(155,465)
0.512606	2.902167	346	107722	(137,484)
0.363474	4.395262	366	128073	(390,163)
0.439910	3.566363	379	56122.9	(354,344)
0.367605	4.346181	399	49400.3	(240,492)
0.394800	4.036230	419	126301	(441,120)
0.329043	4.827478	428	66953.9	(450,115)
0.329031	4.827632	431	66688.1	(453,114)
0.325081	4.880088	437	80238.9	(459,114)
0.751612	1.240061	467	91565.3	(490,193)
0.705526	1.514868	486	107622	(496,273)
0.521863	2.824439	495	97883.8	(508,261)
0.538998	2.684132	503	76696.3	(426,460)
0.536957	2.700605	509	49953.5	(438,453)
0.246795	6.076629	540	0	(511,391)
0.097091	10.128217	547	0	(511,391)
0.249510	6.029119	554	121716	(457,503)
0.236071	6.269571	561	116876	(478,487)
0.246159	6.087850	571	78388.8	(480,500)
-0.000939	0.000000	588	0	(493,511)
-0.005663	0.000000	602	0	(511,511)

Nearest Corr sidelobe: ratio 0.460995, dBdown 3.363033 at distance 25

Largest Corr sidelobe: ratio 0.936859, dBdown 0.283257 at distance 149

Laplacian Side Lobe Information, Maximum Value is 310647

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	(24,157)
0.333398	4.770370	8	(30,152)
0.430291	3.662381	12	(33,149)

3.594750	14	(35,149)
3.625439	16	(37,147)
3.839737	24	(5,171)
5.472007	28	(46,139)
8.159655	36	(59,163)
6.964298	38	(62,154)
4.244068	43	(41,117)
3.829128	48	(63,185)
4.592887	55	(67,123)
5.516470	58	(70,122)
4.204299	63	(32,219)
5.357328	67	(77,116)
6.105591	71	(91,134)
5.223861	77	(60,89)
5.606869	79	(20,236)
4.223334	85	(13,241)
5.610907	94	(80,82)
5.958812	96	(84,82)
6.093952	98	(4,253)
5.560135	100	(95,228)
5.804945	105	(74,249)
5.872404	109	(82,249)
5.931261	111	(86,249)
5.921596	113	(136,169)
5.884805	118	(61,269)
5.375191	127	(99,55)
6.854596	133	(76,279)
5.839531	136	(68,286)
6.134234	140	(20,297)
5.618839	145	(103,36)
6.221505	149	(93,289)
5.511972	151	(40,307)
1.795543	155	(105,289)
6.158350	159	(38,315)
5.402473	165	(118,21)
6.490157	169	(165,63)
5.108857	175	(199,169)
6.193192	182	(206,164)
5.442028	184	(15,341)
6.233719	188	(212,159)
6.380893	193	(217,155)
6.135168	202	(104,342)
6.412911	204	(172,16)
6.750288	201	(230,126)
5.296430	211	(176,304)
5.798800	215	(88,362)
5.791931	221	(174,319)
6.382057	223	(72,375)
6.089220	225	(242,101)
6.331788	227	(244,101)
6.354878	231	(167,339)
5.325049	233	(184,327)
5.334275	236	(207,306)
4.528957	242	(70,395)
5.346917	246	(64,400)
5.373246	250	(253,257)
6.261983	254	(13,411)
6.491852	258	(135,390)
4.889970	267	(147,389)
4.431661	271	(261,281)
4.672197	274	(182,377)
5.633514	279	(274,268)
4.939345	283	(54,434)
		(141,415)

9001/16
13:15:44

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0.323227	4.904925	285	(4,441)
0.368892	4.331011	288	(37,445)
0.342345	4.653354	290	(310,207)
0.302797	5.188480	294	(312,218)
0.288661	5.396112	296	(314,218)
0.273998	5.622528	298	(61,453)
0.262358	5.811062	302	(324,195)
0.292509	5.338603	304	(8,461)
0.358193	4.458829	307	(220,393)
0.376855	4.238258	309	(223,394)
0.317630	4.980784	314	(322,59)
0.376784	4.239070	318	(339,201)
0.334359	4.757863	325	(306,318)
0.324127	4.892851	329	(340,249)
0.284395	5.460774	332	(354,191)
0.300608	5.219990	335	(358,188)
0.293545	5.323249	338	(342,411)
0.298086	5.256587	340	(204,445)
0.346768	4.599609	346	(137,484)
0.333704	4.766386	349	(370,109)
0.427842	3.687169	353	(374,110)
0.310905	5.073717	361	(384,126)
0.437083	3.594362	367	(391,164)
0.393248	4.053336	372	(278,429)
0.351927	4.535471	375	(395,103)
0.327186	4.852055	377	(374,298)
0.377395	4.232037	383	(404,113)
0.308763	5.103746	387	(411,150)
0.350176	4.557130	393	(417,145)
0.309329	5.095799	397	(420,130)
0.334349	4.757996	399	(277,465)
0.299674	5.233511	402	(423,110)
0.280654	5.518283	405	(283,468)
0.363987	4.389145	410	(295,465)
0.421526	3.751758	418	(436,121)
0.223665	6.504012	430	(440,120)
0.244245	6.121745	433	(320,469)
0.234534	6.297933	435	(454,109)
0.285652	5.441632	437	(305,489)
0.293011	5.331157	440	(438,18)
0.292730	5.335333	442	(462,115)
0.336243	4.733464	445	(466,177)
0.276291	5.586332	460	(467,117)
0.343259	4.643785	468	(326,489)
0.337911	4.711975	475	(424,385)
0.348565	4.577166	480	(492,161)
0.344106	4.633079	483	(481,285)
0.373925	4.272158	485	(503,181)
0.356552	4.478768	491	(506,180)
0.315097	5.015562	495	(495,274)
0.302816	5.188215	497	(455,393)
0.309854	5.088424	503	(508,261)
0.242369	6.155238	509	(461,393)
0.331532	4.794747	512	(425,461)
0.321854	4.973621	516	(439,451)
0.299870	5.230665	519	(472,404)
0.349141	4.569992	526	(452,446)
0.305987	5.142974	530	(486,393)
0.177755	7.501778	536	(418,505)
0.146214	8.350113	539	(436,491)
0.190160	7.208807	544	(505,393)
0.407327	3.900566	550	(509,393)
			(501,419)
			(448,508)

0.430392 3.661354 553 (456,503)
0.376233 4.245431 561 (478,487)
0.330548 4.807652 565 (487,481)
0.314165 5.028429 570 (480,499)
0.308479 5.107744 573 (484,499)
0.217376 6.627879 580 (486,507)
0.000000 0.000000 602 (511,511)

Nearest Laplacian sidelobe: ratio 0.333398, dBdown 4.770370 at distance 8
Largest Laplacian sidelobe: ratio 0.437083, dBdown 3.594362 at distance 367

90/01/16
13:17:43

Exhibit II-9-f

a2w2_001.rep

Image AQWIR2 at compression 1.0:1 against window #2.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (58,415)
Location of max in compression is (58,415), sub-pixel is (58.000,415.000)
Max Laplacian Value is 3.58742e+06 at location (58,415)
Smoothed (FFT) Maximum Laplacian Value is 4450624.00 at (58.000,415.000)

Correlation Side Lobe Information, Maximum Value is 5.07934e+06			
Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian Location
1.000000	0.000000	0	(58,415)
0.279530	5.535118	15	(67,427)
0.272804	5.641498	19	(69,430)
0.278858	5.546166	23	(74,432)
0.280494	5.520761	34	(79,442)
0.269173	5.693691	40	(82,447)
0.133185	8.595394	52	(103,454)
0.133389	8.748826	55	(123,454)
0.120950	9.173937	60	(127,369)
0.125489	9.013940	63	(122,226)
0.117833	9.287326	75	(152,478)
0.185734	7.311079	88	(113,466)
0.351453	4.541331	103	(47,328)
0.294216	5.313333	119	(48,312)
0.301828	5.202406	123	(55,296)
0.240900	6.181603	136	(54,292)
0.171806	7.649622	144	(188,455)
0.234425	6.299359	150	(48,271)
0.233679	6.313796	155	(198,469)
0.225695	6.464774	159	(203,471)
0.439376	3.571635	171	(206,472)
0.410462	3.867275	180	(135,248)
0.399916	3.980316	204	(25,242)
0.301192	5.211570	211	(33,237)
0.311561	5.064568	217	(261,395)
0.317848	4.977805	224	(269,406)
0.308247	5.111015	233	(275,424)
0.433765	3.627454	243	(176,192)
0.396972	4.012396	252	(290,439)
0.703706	1.526090	286	(94,175)
0.740498	1.304762	295	(37,166)
0.513154	2.897522	303	(102,132)
0.226894	6.441763	325	(105,124)
0.452160	3.447080	353	(99,115)
0.452752	3.441396	355	(235,142)
0.458114	3.508463	358	(115,67)
0.377232	4.233920	372	(117,62)
0.341048	4.671845	381	(126,49)
0.339870	4.686873	383	(130,41)
0.333456	4.769617	385	(133,39)
0.489763	3.100137	403	(132,37)
0.491523	3.084559	405	(140,20)
0.400745	3.971316	413	(141,19)
0.361136	4.423290	419	(124,19)
0.342457	4.653945	423	(471,426)
0.203628	6.869174	437	(477,423)
0.247201	6.069499	442	(481,430)
0.237741	6.238954	448	(492,463)
0.180686	7.430751	458	(494,489)
0.167178	7.768212	462	(501,485)
0.226626	6.446910	470	(499,291)
0.269310	5.697472	480	(502,287)
0.252196	5.982627	486	(506,274)
0.278170	5.556895	490	(494,214)
			(494,200)
			(497,198)

0.318985	4.962295	495	239868	(502,196)
0.323549	4.900603	499	205737	(504,192)
0.326617	4.859618	502	239519	(507,191)
0.324297	4.890567	507	0	(511,187)
0.271922	5.655564	514	0	(511,172)
0.134891	8.700180	519	112313	(476,108)
0.136641	8.644183	522	131063	(482,110)
0.136280	8.655687	526	73955.2	(469,87)
0.130720	8.836576	529	214461	(504,130)
0.135098	8.693526	537	189964	(482,86)
0.161022	7.931156	542	185489	(463,55)
0.140116	8.535116	548	118105	(469,53)
0.116875	9.322767	553	91862.9	(475,52)
0.092377	10.344344	560	96094.2	(460,25)
0.121768	9.144661	566	91319.1	(465,21)
0.132889	8.765111	569	106904	(467,19)
0.131255	8.818840	571	106473	(468,18)
0.122190	9.129631	576	116645	(459,1)
0.119968	9.209363	578	0	(460,0)
0.113130	9.464237	581	88895.5	(467,3)
0.105790	9.755562	583	0	(468,0)
0.090566	10.430337	596	118613	(501,16)
0.091092	10.405180	598	49889.4	(502,15)
0.098584	10.061917	606	67542.8	(509,10)
0.099030	10.042331	608	80523.9	(510,9)
Nearest Corr sidelobe: ratio 0.279530, dBdown 5.535718 at distance 15				
Largest Corr sidelobe: ratio 0.740498, dBdown 1.304762 at distance 295				
Laplacian Side Lobe Information, Maximum Value is 3.58742e+06				
Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location	
1.00000	0.000000	0	(58,415)	
0.149953	8.240438	7	(59,422)	
0.119640	9.221221	11	(59,426)	
0.126515	8.978590	17	(57,398)	
0.062992	12.007118	21	(63,395)	
0.055177	12.582402	23	(75,431)	
0.057485	12.404461	25	(82,422)	
0.061372	12.120324	31	(52,385)	
0.062355	12.051282	34	(38,388)	
0.044167	13.549019	38	(26,436)	
0.052548	12.794402	42	(32,448)	
0.048784	13.117185	44	(16,403)	
0.053977	12.677876	46	(95,387)	
0.059585	12.248597	50	(98,385)	
0.086257	10.642045	52	(23,454)	
0.059758	12.236009	56	(103,381)	
0.059473	12.256783	58	(33,467)	
0.063450	11.975650	61	(17,460)	
0.059492	12.255450	64	(14,462)	
0.053894	12.676578	67	(58,348)	
0.065261	11.853467	72	(4,462)	
0.058351	12.339498	74	(132,410)	
0.055359	12.568108	78	(120,368)	
0.050846	12.954572	82	(11,348)	
0.060017	12.217290	85	(142,404)	
0.053376	12.726535	88	(141,386)	
0.059060	12.287073	91	(144,384)	
0.066299	11.784929	96	(37,321)	
0.064902	11.877439	98	(40,319)	
0.068172	11.663933	100	(158,406)	
0.047547	13.228775	103	(50,312)	
0.079248	11.010142	106	(63,309)	
0.054294	12.652448	110	(30,309)	
0.078380	11.057944	113	(168,389)	

90/01/16
13:17:43

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2

0.054382	12.645433 116	(67, 299)	0.067938	11.678857 320	(357, 300)
0.079043	11.021358 119	(174, 388)	0.055824	12.531773 323	(261, 164)
0.065508	11.837085 124	(179, 443)	0.064476	11.906028 325	(367, 315)
0.049196	13.080740 127	(172, 472)	0.066692	11.759251 327	(265, 162)
0.049815	13.026432 130	(186, 437)	0.084770	10.717572 331	(269, 160)
0.056196	12.502949 132	(174, 353)	0.080087	10.964404 333	(271, 159)
0.062986	12.007577 134	(187, 450)	0.092896	10.320011 335	(273, 158)
0.084478	10.732561 137	(167, 332)	0.087762	10.566932 337	(275, 157)
0.081922	10.865992 139	(197, 425)	0.090848	10.416868 339	(277, 156)
0.070166	11.538745 141	(171, 330)	0.093771	10.279300 341	(278, 155)
0.095116	10.217482 145	(193, 362)	0.078529	11.049698 343	(280, 154)
0.066951	11.742401 149	(197, 469)	0.083186	10.799520 347	(344, 218)
0.089629	10.475532 152	(179, 323)	0.070662	11.508137 350	(347, 21)
0.075285	11.232908 157	(210, 453)	0.090897	10.414518 355	(351, 214)
0.072648	11.387747 159	(211, 460)	0.082896	10.814679 358	(353, 213)
0.071821	11.437481 162	(207, 478)	0.091031	10.408126 360	(355, 212)
0.081219	10.903425 165	(222, 432)	0.067146	11.79792 364	(261, 113)
0.064753	11.887407 167	(223, 438)	0.076719	11.150999 366	(355, 201)
0.070303	11.530280 169	(224, 448)	0.072482	11.397715 369	(363, 207)
0.063158	11.995737 173	(195, 310)	0.082362	10.842730 371	(173, 62)
0.032716	12.780597 176	(206, 319)	0.062946	12.010337 373	(361, 197)
0.079108	11.017792 178	(233, 447)	0.069136	11.602987 378	(371, 203)
0.094765	10.233542 181	(238, 429)	0.064754	11.887352 381	(373, 201)
0.111810	9.515178 184	(240, 443)	0.080571	10.916728 384	(362, 180)
0.073141	11.358402 187	(240, 459)	0.068749	11.627321 387	(283, 100)
0.084299	10.741799 189	(246, 394)	0.069461	11.582567 392	(450, 420)
0.072790	11.379275 191	(241, 471)	0.070464	11.520342 394	(386, 196)
0.070056	11.545557 196	(251, 448)	0.069799	11.561495 396	(371, 173)
0.075005	11.249076 198	(256, 427)	0.069600	11.573938 398	(456, 411)
0.071046	11.484615 206	(47, 209)	0.065751	11.820967 404	(378, 169)
0.063092	12.000272 208	(264, 440)	0.071399	11.463108 406	(380, 167)
0.059529	12.252703 210	(268, 402)	0.103442	9.769875 409	(390, 176)
0.060199	12.204110 212	(57, 203)	0.105807	9.754836 414	(379, 154)
0.074724	11.265428 217	(15, 202)	0.083998	10.757295 416	(396, 173)
0.050275	12.986476 219	(277, 427)	0.092329	10.346600 419	(467, 506)
0.069687	11.568498 223	(273, 356)	0.080862	10.922578 422	(470, 504)
0.073697	11.325474 227	(127, 199)	0.071385	11.463902 425	(474, 501)
0.058157	12.353949 231	(280, 350)	0.070244	11.533883 428	(485, 443)
0.063897	11.945227 233	(284, 358)	0.073757	11.321988 432	(402, 153)
0.050973	12.926626 235	(280, 492)	0.083586	10.778655 437	(384, 124)
0.058594	12.321486 237	(2, 185)	0.074969	11.251189 440	(415, 158)
0.058094	12.358711 240	(13, 179)	0.078413	11.056132 443	(428, 172)
0.088274	10.541667 242	(13, 177)	0.056343	12.491590 446	(501, 467)
0.074075	11.303270 245	(15, 174)	0.062254	12.058345 450	(362, 83)
0.065034	11.868623 250	(270, 282)	0.061539	12.108494 452	(509, 449)
0.076797	11.146541 252	(34, 164)	0.078558	11.048078 457	(401, 113)
0.080742	10.929023 255	(36, 161)	0.059805	12.232644 459	(417, 129)
0.082064	10.858459 259	(15, 160)	0.069592	11.574379 462	(418, 125)
0.064409	11.910555 267	(253, 232)	0.068920	11.616574 466	(437, 144)
0.065275	11.852552 269	(254, 231)	0.085950	10.657564 469	(452, 160)
0.061430	12.116211 274	(330, 445)	0.064075	11.933085 471	(388, 79)
0.062701	12.027264 276	(190, 173)	0.077798	11.090309 474	(443, 138)
0.068923	11.616377 279	(335, 449)	0.065786	11.818688 480	(494, 214)
0.056532	12.477035 282	(172, 157)	0.072830	11.376917 482	(463, 154)
0.068360	11.651968 285	(292, 252)	0.068931	11.615863 486	(462, 144)
0.063884	12.946100 288	(294, 250)	0.070920	11.492294 489	(383, 49)
0.055168	11.5483107 290	(296, 249)	0.067308	11.719328 491	(440, 107)
0.076788	11.147042 294	(190, 152)	0.069578	11.575307 496	(474, 145)
0.083515	10.782373 296	(106, 123)	0.059258	12.272514 499	(473, 138)
0.055911	12.525049 301	(280, 212)	0.107084	9.702758 504	(503, 178)
0.064396	11.911411 304	(243, 174)	0.083029	10.807691 509	(507, 175)
0.063784	11.952877 306	(245, 173)	0.059349	12.265891 511	(470, 112)
0.096870	10.138112 311	(183, 130)	0.064179	11.926078 514	(404, 35)
0.108686	9.638268 315	(183, 126)	0.055326	12.570670 516	(498, 145)

900/16
13:17:43

3

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0.075201	11.237739 523	(496,130)
0.069694	11.568074 528	(416,27)
0.079494	10.996680 530	(504,129)
0.066652	11.761875 534	(421,24)
0.069751	11.564477 536	(423,23)
0.052213	12.822232 539	(426,21)
0.073634	11.329236 541	(427,20)
0.072227	11.413009 543	(429,19)
0.064413	11.910277 546	(432,17)
0.071278	11.470461 548	(433,16)
0.064866	11.879846 550	(435,15)
0.059943	12.222607 552	(437,14)
0.060548	12.179027 554	(439,13)
0.036903	14.329417 557	(477,48)
0.035397	14.510376 559	(459,25)
0.062655	12.030422 562	(446,8)
0.074701	11.266710 564	(447,7)
0.062642	12.031315 567	(450,5)
0.054980	12.597939 570	(479,30)
0.054912	12.603363 573	(455,2)
0.036447	14.383324 577	(475,16)
0.032953	14.821064 584	(480,12)
0.028661	15.427040 586	(481,9)
0.022091	16.557942 588	(484,10)
0.024358	16.133604 591	(487,9)
0.030671	15.132749 593	(489,8)
0.033064	14.806505 596	(501,16)
0.020548	16.872383 600	(502,11)
0.018677	17.286918 602	(507,14)
0.025043	16.013141 606	(507,8)
0.025859	15.873830 609	(509,6)
0.018131	17.415734 611	(509,3)
0.000000	0.000000 614	(510,0)

Nearest Laplacian sidelobe: ratio 0.149953, dBdown 8.240438 at distance 7
Largest Laplacian sidelobe: ratio 0.149953, dBdown 8.240438 at distance 7

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13:18:59

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1

Image AQVIR2 at compression 15.0:1 against window W2.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (58,415)
Location of max in compression is (58,415), sub-pixel is (58.000,415.000)
Max Laplacian Value is 1.57575e+06 at location (58,415)
Smoothed (FFT) Maximum Laplacian Value is 1627552.00 at (58.125,415.375)

Correlation Side Lobe Information, Maximum Value is 4.24317e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	1.57575e+06	(58,415)
0.322857	4.909903	17	100503	(68,429)
0.333135	4.773793	22	99436.3	(71,433)
0.323716	4.998353	34	135017	(79,442)
0.314274	5.026921	40	67110.4	(82,447)
0.167000	7.728300	40	37441	(89,454)
0.165789	7.804448	56	6078.6	(26,369)
0.144171	8.411222	63	84561.9	(52,478)
0.129353	8.982223	75	72394.7	(113,466)
0.218118	6.613085	87	173369	(47,329)
0.296505	5.279687	95	141914	(50,320)
0.416698	3.801781	103	161988	(47,313)
0.354032	4.509580	108	137871	(55,307)
0.327420	4.848942	119	122705	(55,296)
0.338124	4.709234	123	111216	(54,292)
0.281478	5.505561	136	184779	(188,455)
0.198167	7.029690	145	80456.8	(49,270)
0.279298	5.539315	151	33790	(198,471)
0.284603	5.457608	155	151219	(203,471)
0.533107	2.731855	171	144353	(23,248)
0.495303	3.051290	176	141298	(23,243)
0.490142	3.096780	180	70558.8	(32,237)
0.473369	3.246714	204	169463	(261,395)
0.369760	4.320796	212	119127	(270,407)
0.369006	4.329664	217	135482	(275,424)
0.382558	4.173027	223	124197	(75,193)
0.370509	4.312014	228	80666	(81,188)
0.517403	2.861713	243	126728	(94,175)
0.460466	3.368026	253	83029.4	(97,165)
0.831187	0.803013	286	76789.5	(102,132)
0.877621	0.566931	295	193989	(105,124)
0.605641	2.177847	303	86024.5	(99,115)
0.261458	5.825976	321	151940	(338,259)
0.270586	5.676940	327	98234.4	(236,141)
0.544846	2.637259	358	110338	(117,62)
0.460349	3.369126	373	106697	(126,48)
0.412448	3.846312	382	90132.6	(132,40)
0.587611	2.309104	403	73159	(140,20)
0.472568	3.255356	413	217584	(471,426)
0.424297	3.723303	419	127126	(477,423)
0.409359	3.878961	424	105511	(482,430)
0.287968	5.406564	430	121502	(317,72)
0.237922	6.235653	436	84241.6	(491,462)
0.291302	5.356564	443	153379	(495,488)
0.280379	5.522548	448	111427	(500,485)
0.224138	6.494838	458	78288.8	(499,291)
0.274105	5.620835	470	108254	(506,274)
0.326790	4.857307	479	207739	(493,214)
0.297115	5.270748	486	92850.8	(494,200)
0.366387	4.360600	496	92947.3	(502,195)
0.378697	4.210779	499	128201	(504,192)
0.385575	4.138915	502	157185	(507,191)
0.370743	4.309270	507	0	(511,187)
0.307209	5.125664	515	0	(511,171)

Nearest Corr sidelobe: ratio 0.322857, dBdown 4.909903 at distance 17
Largest Corr sidelobe: ratio 0.877621, dBdown 0.566931 at distance 295

Laplacian Side Lobe Information, Maximum Value is 1.57575e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(58,415)
0.221262	6.550936	7	(52,419)
0.182851	7.379025	9	(65,410)
0.112734	9.479458	12	(60,427)
0.224878	6.480528	16	(57,399)
0.126264	8.987194	21	(40,404)
0.095842	10.184453	29	(81,398)
0.118028	9.280140	31	(52,385)
0.090020	10.456611	34	(42,385)
0.091125	10.403632	41	(57,374)
0.115304	9.381541	43	(31,449)
0.107300	9.693985	47	(96,387)
0.134253	8.720744	50	(98,385)
0.132109	8.790670	54	(101,383)
0.132707	8.771064	59	(105,380)
0.096647	10.148100	66	(110,375)
0.121329	9.160352	68	(126,414)
0.101637	9.929461	71	(118,377)
0.109500	9.605878	76	(119,369)
0.088214	10.544628	79	(136,424)
0.120740	9.181470	85	(142,403)
0.110023	9.585153	87	(47,329)
0.094940	10.225520	90	(2,485)
0.098647	10.059179	92	(30,327)
0.133637	8.740737	96	(37,321)
0.100503	9.978196	100	(158,417)
0.102800	9.880049	103	(47,313)
0.126317	8.985379	108	(56,307)
0.096278	10.164735	112	(167,390)
0.106565	9.723839	114	(65,301)
0.109295	9.613986	116	(172,439)
0.108447	9.647806	118	(55,297)
0.101567	9.932462	120	(176,393)
0.129185	8.887887	124	(77,292)
0.14205	9.423157	126	(78,291)
0.104083	9.826213	131	(174,354)
0.117264	9.308341	136	(186,455)
0.140648	8.518671	139	(197,425)
0.133960	8.730265	143	(172,328)
0.120008	9.207890	145	(193,362)
0.114349	9.417682	147	(171,321)

0.149183	8.262814	152	(179,323)	0.126367	8.983647	385	(281,101)
0.119163	9.238581	157	(210,453)	0.123514	9.082836	389	(394,218)
0.105410	9.771181	160	(202,345)	0.139216	8.563099	391	(368,176)
0.102732	9.882947	163	(217,453)	0.126649	8.973965	393	(369,175)
0.118869	9.249306	165	(222,432)	0.132289	8.784766	398	(456,411)
0.114511	9.411516	169	(224,448)	0.147533	8.311113	402	(369,161)
0.095478	10.200948	173	(203,321)	0.142574	8.459609	406	(388,178)
0.115365	9.379248	178	(233,446)	0.190086	7.210488	410	(391,176)
0.137074	8.630461	181	(238,429)	0.177462	7.508947	414	(379,154)
0.157140	8.037140	184	(240,444)	0.167587	7.757589	419	(467,506)
0.143397	8.434594	187	(245,424)	0.154908	8.099248	422	(401,170)
0.116475	9.337659	192	(242,470)	0.125921	8.999006	424	(412,182)
0.102697	9.884427	194	(251,431)	0.123841	9.071361	426	(475,500)
0.120883	9.176334	197	(255,427)	0.158813	7.991130	431	(401,154)
0.110449	9.568388	200	(96,219)	0.163068	7.876322	436	(384,125)
0.107545	9.684112	204	(261,395)	0.125149	9.025732	440	(415,158)
0.104797	9.796516	206	(48,209)	0.128657	8.905682	443	(429,172)
0.108213	9.657195	210	(6,212)	0.124633	9.043668	449	(362,84)
0.113508	9.449741	212	(57,203)	0.113445	9.452138	452	(509,449)
0.114515	9.411372	217	(16,202)	0.092246	10.350525	454	(343,61)
0.136966	8.633862	222	(272,357)	0.118435	9.265208	456	(401,114)
0.109719	9.597192	224	(274,355)	0.118964	9.245842	462	(418,125)
0.146610	8.338357	228	(128,198)	0.104556	9.808503	466	(435,141)
0.111968	9.509048	232	(290,402)	0.136390	8.652187	470	(453,160)
0.105979	9.747822	234	(279,491)	0.120322	9.196540	472	(428,122)
0.095969	10.178684	237	(283,342)	0.114214	9.422809	474	(443,139)
0.143389	8.434830	242	(13,177)	0.125095	9.027594	476	(458,157)
0.126029	8.995288	249	(305,449)	0.131836	8.799676	479	(493,214)
0.113778	9.439417	251	(271,282)	0.112331	9.495005	483	(464,153)
0.113904	9.434592	253	(34,163)	0.128582	8.908191	488	(453,129)
0.133721	8.738003	255	(36,161)	0.12974	8.762328	490	(384,49)
0.136813	8.638711	258	(40,158)	0.112305	9.496015	495	(502,196)
0.105885	9.751641	261	(31,155)	0.13366	8.856227	499	(499,181)
0.097143	10.125887	263	(47,152)	0.129849	8.865604	504	(503,178)
0.085605	10.674990	266	(212,198)	0.119893	9.212068	506	(489,150)
0.104925	9.791222	270	(255,231)	0.149920	8.241392	508	(506,176)
0.130864	8.831809	273	(290,271)	0.093310	10.300722	514	(397,28)
0.115679	9.367447	279	(335,449)	0.093040	10.313318	516	(498,145)
0.108583	9.642368	282	(172,157)	0.103116	9.783332	520	(409,32)
0.111131	9.541662	284	(291,253)	0.112790	9.477307	523	(412,30)
0.117739	9.290808	286	(88,131)	0.099189	10.035370	525	(414,29)
0.132714	8.770842	291	(296,248)	0.12262	9.497679	527	(415,28)
0.157654	8.022959	296	(106,123)	0.126685	8.972742	530	(504,129)
0.099737	10.011458	302	(305,241)	0.111515	9.526676	534	(422,24)
0.106303	9.734550	306	(246,173)	0.126851	8.967052	536	(423,23)
0.096952	10.134416	309	(311,238)	0.104447	9.811041	539	(426,21)
0.133544	8.743751	313	(210,141)	0.112667	9.482036	541	(427,20)
0.104411	9.812531	318	(314,227)	0.109793	9.163294	543	(429,19)
0.101772	9.923717	320	(337,259)	0.123044	9.594256	548	(433,16)
0.107939	9.668215	322	(339,257)	0.083619	10.776945	552	(438,14)
0.103481	9.851385	324	(346,267)	0.077950	11.081852	555	(476,50)
0.118331	9.269021	328	(337,242)	0.072046	11.423924	557	(468,38)
0.130153	8.855445	330	(227,131)	0.077091	11.129984	559	(459,25)
0.148876	8.271756	334	(272,159)	0.098133	10.081832	562	(446,8)
0.143827	8.421609	337	(189,104)	0.122290	9.126091	564	(447,7)
0.136396	8.651978	341	(189,100)	0.107149	9.700123	567	(450,6)
0.178696	7.478847	347	(344,215)	0.090518	10.432643	570	(479,30)
0.155352	8.086844	354	(350,215)	0.092652	10.331444	573	(455,2)
0.135484	8.681121	358	(353,213)	0.062013	12.075166	581	(477,13)
0.147064	8.324940	361	(356,211)	0.066698	11.758880	584	(480,12)
0.107053	9.704009	365	(348,193)	0.063917	11.943815	586	(481,10)
0.140644	8.518802	370	(364,207)	0.062940	12.010700	591	(487,8)
0.143296	8.437659	377	(370,203)	0.065792	11.818281	596	(491,6)
0.123038	9.099608	381	(373,201)				

000016
17:18:59

0.054294	12.652447	598	(503, 15)
0.039007	14.088550	603	(498, 2)
0.038344	14.162981	605	(508, 10)
0.033613	14.734988	611	(509, 3)
0.000000	0.000000	614	(510, 0)

Nearest Laplacian sidelobe: ratio 0.221262, dBdown 6.550936 at distance 7
Largest Laplacian sidelobe: ratio 0.224876, dBdown 6.480528 at distance 16

a2w2_03.rep

9000116
13:20:20

a2w2_001.rep

1

Image AQVIR2 at compression 27.0:1 against window W2.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (58,415)
Location of max in compression is (58,415), sub-pixel is (57.875,415.000)
Max Laplacian Value is 1.09843e+06 at location (58,415)
Smoothed (FFT) Maximum Laplacian Value is 1183824.00 at (57.500,414.500)

Correlation Side Lobe Information, Maximum Value is 3.82671e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	1.09843e+06	(58,415)
0.363193	4.398626	17	80102	(68,429)
0.366605	4.358020	21	68313.4	(71,432)
0.348493	4.578062	27	74760.5	(75,436)
0.372563	4.288003	34	120023	(79,442)
0.356141	4.483786	39	50896.8	(81,446)
0.194527	7.110204	54	85330	(30,369)
0.171460	7.658371	64	97582.4	(54,479)
0.150993	8.210445	67	130877	(21,359)
0.133897	8.732277	71	70263.6	(32,349)
0.160870	7.935244	75	108801	(113,466)
0.237954	6.235063	86	177018	(46,330)
0.441136	3.554276	103	81393.8	(48,312)
0.376204	4.245770	108	130628	(55,307)
0.381857	4.180988	120	111647	(55,295)
0.376519	4.242128	123	89412.5	(54,292)
0.310737	5.076066	136	180728	(188,455)
0.228207	6.416714	144	67544.3	(48,271)
0.296098	5.285638	150	129984	(198,470)
0.292551	5.337979	156	120794	(203,472)
0.288656	5.396197	159	63664.5	(206,472)
0.557934	2.534170	170	117238	(22,249)
0.534994	2.716508	175	88526.1	(22,244)
0.532518	2.736654	178	89634	(26,240)
0.548500	2.608230	181	121899	(34,236)
0.524519	2.802391	204	157748	(261,394)
0.410870	3.862951	212	133358	(270,407)
0.399518	3.984631	217	123785	(275,423)
0.395919	4.023936	222	121532	(73,194)
0.394962	4.034449	224	101651	(76,192)
0.379344	4.209662	229	88786	(82,187)
0.577104	2.387459	242	98305	(94,176)
0.538600	2.687338	250	52658.9	(96,168)
0.921335	0.355824	285	87027	(102,133)
0.960402	0.175470	295	118808	(104,124)
0.320133	4.946692	325	124035	(234,142)
0.583906	2.336569	354	115852	(116,66)
0.598332	2.230581	358	143079	(117,62)
0.491701	3.082991	373	63993.4	(127,48)
0.462736	3.346671	386	81669.8	(133,36)
0.661972	1.791604	405	89061.8	(141,19)
0.439162	3.573752	419	89059.5	(477,423)
0.483450	3.156485	423	117350	(481,430)
0.326609	4.859721	430	90323.8	(485,467)
0.283235	5.478527	437	42879.1	(492,464)
0.297109	5.270838	443	88356.1	(498,464)
0.300280	5.224741	448	89036.5	(501,485)
0.211921	6.738254	458	59133.6	(499,290)
0.214157	6.692684	461	74574.4	(501,286)
0.300209	5.225762	471	105892	(507,274)
0.326513	4.860995	479	176359	(493,214)
0.380695	4.194226	490	84740.6	(497,197)
0.426589	3.699902	494	138362	(501,196)
0.427259	3.693086	496	113220	(502,195)
0.424294	3.723328	499	118611	(504,192)

Nearest Corr sidelobe: ratio 0.363193, dBdown 4.398626 at distance 17
Largest Corr sidelobe: ratio 0.960402, dBdown 0.175470 at distance 295

Laplacian Side Lobe Information, Maximum Value is 1.09843e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(58,415)
0.212962	6.716989	4	(55,417)
0.210479	6.767922	7	(52,419)
0.229983	6.383047	17	(57,398)
0.129036	8.892885	21	(40,404)
0.164622	7.835130	30	(53,385)
0.159001	7.986006	34	(37,388)
0.164846	7.829212	36	(36,387)
0.138297	8.591874	39	(26,437)
0.124193	9.059027	41	(58,374)
0.107772	9.674950	44	(16,403)
0.160092	7.956296	50	(98,385)
0.128857	8.898929	52	(24,454)
0.113642	9.444597	55	(4,425)
0.126763	8.970067	57	(33,466)
0.171230	7.664195	60	(17,459)
0.119150	9.239070	67	(21,359)
0.116835	9.324260	69	(126,405)
0.103600	9.846389	71	(34,348)
0.119583	9.223301	74	(130,430)
0.106057	9.744593	76	(76,341)
0.107338	9.692483	78	(136,417)
0.124465	9.049534	80	(137,425)
0.103385	9.855427	82	(40,335)
0.161156	7.927532	86	(46,330)
0.103598	9.846498	92	(118,345)
0.130734	8.836103	95	(51,320)
0.145840	8.361235	100	(158,418)
0.112196	9.500209	103	(50,312)
0.124408	8.464345	106	(63,309)
0.142418	8.464345	109	(30,310)
0.126291	8.986285	114	(102,310)
0.121493	9.154502	116	(102,308)
0.129875	8.864758	120	(176,394)
0.152754	8.160061	124	(77,292)
0.136570	8.646461	126	(170,473)
0.121051	9.170307	128	(183,388)
0.118562	9.260530	130	(173,354)
0.139675	8.548813	133	(188,387)
0.164534	7.837447	136	(188,455)
0.146592	8.338887	139	(197,425)

0.135114	8.692983	143	(198,442)	0.179884	7.450070	370	(364,207)
0.136047	8.663122	147	(205,417)	0.129961	8.861881	375	(362,196)
0.173722	7.601458	150	(197,472)	0.162474	7.892157	379	(372,203)
0.154943	8.098272	152	(175,318)	0.134368	8.717044	383	(410,264)
0.153573	8.136849	155	(212,436)	0.141754	8.484632	385	(281,101)
0.153826	8.129706	157	(207,464)	0.130535	8.842737	387	(379,199)
0.148702	8.276824	161	(200,340)	0.158108	8.010470	394	(378,185)
0.141868	8.481168	165	(218,454)	0.206813	6.844222	401	(369,162)
0.147150	8.322400	169	(22,250)	0.226712	6.445263	408	(390,177)
0.107120	9.701313	173	(203,321)	0.224198	6.493688	410	(391,176)
0.117948	9.283076	176	(231,448)	0.199179	7.007564	415	(380,153)
0.138450	8.587082	178	(207,318)	0.193453	7.134254	419	(467,506)
0.136089	8.661771	181	(238,429)	0.177166	7.516195	422	(401,170)
0.160168	7.954233	184	(240,443)	0.135287	8.687437	425	(396,157)
0.198761	7.016693	187	(245,423)	0.136848	8.637608	427	(419,187)
0.147284	8.318439	192	(242,471)	0.191849	7.170411	430	(400,154)
0.157477	8.027829	196	(252,445)	0.168313	7.738830	436	(384,125)
0.142496	8.461967	201	(257,385)	0.143664	8.426532	440	(415,158)
0.143613	8.428076	204	(261,394)	0.158997	7.986100	442	(344,78)
0.149057	8.266489	206	(103,214)	0.167892	7.749700	450	(362,83)
0.164708	7.832847	209	(6,213)	0.124363	9.053076	454	(420,141)
0.153900	8.127805	212	(57,203)	0.137675	8.611439	457	(401,113)
0.122330	9.124665	215	(22,203)	0.151046	8.208906	462	(418,125)
0.165661	7.807785	222	(272,356)	0.139059	8.568007	464	(435,144)
0.139274	8.561315	224	(128,202)	0.166907	7.775243	469	(452,160)
0.164362	7.841983	227	(128,199)	0.157374	8.030663	477	(486,205)
0.147724	8.305489	232	(281,350)	0.160556	7.943734	479	(493,214)
0.121556	9.152251	237	(280,499)	0.149766	8.245878	483	(464,154)
0.178185	7.491294	241	(13,178)	0.129910	8.863567	487	(503,217)
0.180790	7.428264	245	(16,174)	0.164159	7.847357	489	(384,50)
0.137068	8.630624	248	(22,170)	0.162913	7.880442	491	(471,149)
0.154250	8.117745	252	(29,165)	0.141292	8.498839	495	(502,196)
0.177369	7.511233	254	(36,162)	0.154301	8.116313	497	(497,181)
0.128654	8.905757	259	(15,160)	0.129060	8.891776	499	(504,191)
0.142181	8.471576	263	(22,154)	0.146793	8.332945	503	(508,191)
0.125557	9.011589	270	(324,462)	0.123123	9.096594	506	(466,115)
0.138519	8.584906	272	(101,146)	0.130514	8.843417	508	(506,176)
0.146934	8.328775	274	(266,236)	0.166982	7.773293	510	(479,127)
0.137314	8.622866	277	(190,172)	0.128833	8.899726	514	(490,137)
0.119683	9.219688	280	(272,234)	0.152969	8.153980	521	(496,133)
0.131108	8.823715	283	(172,156)	0.113662	9.443855	525	(455,71)
0.134713	8.705904	287	(293,251)	0.111698	9.519536	527	(415,28)
0.127322	9.082217	291	(271,217)	0.161256	7.924852	530	(504,129)
0.123532	8.950951	289	(190,158)	0.114502	9.411879	533	(470,77)
0.196595	7.064272	296	(106,123)	0.154965	8.097655	536	(454,54)
0.130427	8.846319	303	(243,175)	0.157227	8.034728	540	(462,57)
0.136224	8.657460	305	(332,280)	0.140111	8.535287	543	(429,19)
0.138421	8.587990	309	(104,109)	0.137698	8.610723	547	(433,17)
0.154121	8.121395	313	(210,141)	0.113098	9.465435	550	(460,40)
0.145732	8.364444	316	(346,285)	0.114549	9.410096	554	(470,44)
0.159251	7.979182	320	(330,247)	0.074357	11.286771	556	(490,65)
0.147427	8.314240	323	(345,267)	0.102192	9.905811	561	(460,24)
0.136128	8.660535	326	(265,163)	0.140918	8.510331	564	(448,7)
0.148522	8.282097	330	(268,161)	0.137949	8.602828	567	(450,6)
0.161442	7.919826	332	(229,130)	0.107417	9.689272	572	(455,3)
0.169634	7.704868	337	(336,224)	0.097920	10.091302	574	(467,12)
0.156996	8.041106	342	(240,125)	0.087713	10.569361	579	(484,23)
0.200806	6.972223	347	(344,219)	0.067497	11.707174	583	(480,13)
0.146443	8.343322	352	(385,286)	0.087305	10.589593	588	(484,9)
0.178068	7.494149	355	(351,215)	0.078604	11.045573	590	(502,26)
0.167970	7.747687	358	(354,213)	0.091207	10.399741	596	(501,16)
0.164592	7.835925	360	(355,212)	0.062765	12.022818	605	(508,10)
0.127823	8.933904	363	(386,259)	0.020180	16.950782	611	(509,3)
0.130271	8.851531	367	(370,221)	0.000000	0.000000	614	(510,0)

9001/16
13:20:34

Nearest Laplacian sidelobe: ratio 0.212962, dBdown 6.716989 at distance 4
Largest Laplacian sidelobe: ratio 0.229983, dBdown 6.383047 at distance 17

a2w2_1.rep

9001/16
13:21:39

Image AQVIR2 at compression 36.0:1 against window W2.
Window contains 0.004 noise and is out of scale by a factor of 1.00
Location of max in original is (58,415)
Location of max in compression is (104,124), sub-pixel is (104.375,123.500)
Max Laplacian Value is 814437 at location (58,415)
Smoothed (FFT) Maximum Laplacian Value is 956976.00 at (57.500,414.500)

Correlation Side Lobe Information, Maximum Value is 3.58092e+06

Side-Lobe-To-Peak-Ratio	DBS-Down Distance	Laplacian	Location
1.000000	0.000000	814437	(58,415)
0.398927	3.991065	21	(71,432)
0.364571	4.382174	27	(75,436)
0.379121	4.212225	34	(79,442)
0.381006	4.190681	39	(81,447)
0.174392	7.584733	58	(1,406)
0.174430	7.583797	64	(54,479)
0.180890	7.425855	75	(114,465)
0.243745	6.130649	87	(47,329)
0.243595	6.133318	89	(48,327)
0.445449	3.512023	102	(93476.5
0.393135	4.054580	120	(42447.8
0.309268	5.096644	137	(66408.8
0.344951	4.622428	150	(101480
0.348844	4.573689	156	(134449
0.606860	2.169117	170	(126591
0.602825	2.198089	180	(102578
0.553595	2.564942	204	(133446
0.430422	3.661054	211	(88591.4
0.409988	3.872288	217	(99588.4
0.437118	3.594009	224	(103444
0.431854	3.646635	227	(97992.1
0.416173	3.807256	232	(120828
0.580088	2.365061	243	(56533
0.961169	0.172002	285	(93257
1.019252	-0.082815	295	(143007
0.696615	1.570074	303	(77418.3
0.297421	5.266281	325	(99660
0.642885	1.918664	358	(129744
0.555989	2.549335	374	(77519
0.657449	1.821380	405	(101164
0.456670	3.403972	418	(79745.3
0.502454	2.989041	424	(125783
0.323633	4.453271	430	(104683
0.353982	4.899471	441	(114565
0.234787	4.510183	448	(118462
0.249001	6.037991	461	(106555
0.302101	5.198472	471	(87671.4
0.339089	4.696864	479	(189285
0.440365	3.561873	493	(110615
0.454497	3.424691	501	(94108.3
0.421662	3.750358	508	0
0.209719	6.783624	521	(113138
0.191108	6.475757	525	(64757.9
0.202138	6.943511	537	(107899
0.224682	6.484319	541	(130321
0.210151	6.774682	548	(90415.4
0.127916	8.930752	562	(82632.1
0.173733	7.601168	569	(108734
0.169298	7.713490	573	(102578
0.164531	7.837518	577	(40322
0.138159	8.596206	583	0
0.118535	9.261517	598	(77784.7
0.130494	8.844093	609	0

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Nearest Corr sidelobe: ratio 0.398927, dBdown 3.991065 at distance 21
Largest Corr sidelobe: ratio 1.019252, dBdown -0.082815 at distance 295

Laplacian Side Lobe Information, Maximum Value is 814437

Side-Lobe-To-Peak-Ratio	DBS-Down Distance	Location
0.000000	0.000000	(58,415)
0.220543	6.565066	7 (64,411)
0.242554	6.151924	9 (50,420)
0.150794	8.216157	14 (49,404)
0.254938	5.935647	17 (57,398)
0.119663	7.474353	21 (63,395)
0.166040	9.220404	27 (80,399)
0.182923	7.797870	31 (52,385)
0.157284	7.377317	36 (36,387)
0.173941	8.033154	40 (57,375)
0.173357	7.595968	42 (33,449)
0.179232	7.610584	50 (98,385)
0.204425	7.465844	52 (24,454)
0.176542	6.894660	59 (18,459)
0.149550	7.531522	62 (16,460)
0.177114	8.252132	66 (114,380)
0.122115	7.517479	68 (126,422)
0.158027	9.132306	71 (34,348)
0.130492	8.012697	75 (75,342)
0.160450	8.844167	80 (137,425)
0.179684	7.946592	84 (142,412)
0.148900	7.454910	86 (46,330)
0.192287	8.271052	94 (152,420)
0.132356	7.160496	98 (41,318)
0.134153	8.731013	101 (57,314)
0.130007	8.723992	104 (125,495)
0.140974	8.860329	108 (29,311)
0.150669	8.508614	110 (134,335)
0.163278	8.219754	113 (132,329)
0.194842	7.870726	121 (176,440)
0.147718	7.023981	123 (77,293)
0.136855	8.394777	128 (179,456)
0.177881	8.425878	130 (173,354)
0.154645	8.188481	133 (188,387)
0.153855	7.498709	137 (189,375)
0.187091	8.055840	141 (199,407)
0.214865	8.128870	144 (165,318)
0.166984	7.279468	147 (205,417)
0.165083	6.678341	150 (197,472)
0.202344	7.773248	153 (180,322)
0.210297	7.822986	156 (204,471)
0.212613	6.939094	163 (202,339)
0.168806	6.771660	165 (222,433)
0.177379	6.724100	169 (200,324)
0.191928	7.777877	175 (225,362)
0.223308	7.510978	178 (207,318)
0.193974	7.168608	183 (9,239)
0.203873	6.510960	187 (245,423)
0.150614	7.122565	189 (242,459)
0.169704	6.906403	192 (242,470)
0.159805	8.221358	196 (254,411)
0.169704	7.964109	199 (95,219)
0.164535	7.703089	201 (257,385)
0.171723	7.837428	205 (262,394)
0.198242	7.651716	207 (263,390)
0.200503	7.028054	209 (5,213)
0.153902	6.978790	212 (57,203)
0.205678	8.127548	217 (118,206)
	6.868130	223 (273,356)

0.198282	7.027166	228	(129,198)
0.205476	6.872386	230	(130,197)
0.148002	8.297311	235	(279,334)
0.200229	6.984733	239	(6,182)
0.204475	6.893590	241	(13,178)
0.222185	6.532860	244	(114,175)
0.169222	7.715433	249	(24,168)
0.221287	6.550441	254	(36,162)
0.157751	8.020268	258	(13,161)
0.192106	7.164590	263	(22,154)
0.145830	8.361521	266	(211,198)
0.144979	8.386939	269	(97,149)
0.199342	7.004022	274	(266,236)
0.131044	8.825829	280	(224,189)
0.147274	8.318745	282	(51,133)
0.149237	8.261232	285	(87,131)
0.246866	6.075392	296	(106,123)
0.153464	8.139940	302	(242,175)
0.161830	7.909415	305	(298,227)
0.169327	7.712734	310	(105,109)
0.183232	7.369988	314	(211,141)
0.222121	6.534102	320	(330,247)
0.165343	7.816139	323	(345,267)
0.171341	7.661384	325	(264,163)
0.207279	6.834450	329	(267,161)
0.189266	7.229276	332	(229,130)
0.202870	6.927815	337	(336,224)
0.190681	7.196922	343	(280,154)
0.248944	6.038978	348	(345,218)
0.220312	6.569620	356	(352,214)
0.231198	6.360161	358	(353,213)
0.167686	7.755039	361	(258,114)
0.174808	7.574385	364	(359,210)
0.212533	6.725739	370	(364,207)
0.217094	6.633528	374	(368,205)
0.223879	6.499876	378	(371,203)
0.175746	7.551143	382	(409,265)
0.179569	7.457683	385	(281,101)
0.177472	7.508709	387	(282,100)
0.177566	7.506398	392	(369,176)
0.171459	7.658395	394	(378,185)
0.162588	7.889126	396	(454,412)
0.266334	5.745739	401	(369,162)
0.274630	5.612521	408	(390,177)
0.274818	5.609543	411	(392,176)
0.197167	7.051652	415	(381,154)
0.228716	6.407038	418	(398,172)
0.223200	6.513049	422	(401,170)
0.167547	7.758637	426	(354,109)
0.206459	6.851666	429	(399,154)
0.212530	6.725789	431	(401,154)
0.191122	7.186890	434	(403,151)
0.183874	7.354796	437	(385,125)
0.195376	7.091288	442	(344,78)
0.130902	8.830547	446	(413,145)
0.145452	8.372801	448	(501,485)
0.161471	7.919064	453	(419,141)
0.162668	7.886980	456	(400,113)
0.161220	7.925805	458	(402,112)
0.204925	6.884050	461	(417,125)
0.170067	7.693804	464	(435,145)
0.205816	6.865211	468	(451,160)
0.185158	7.324576	472	(379,69)
0.198903	7.013583	476	(486,206)

6.337403	479	(493,214)
7.183495	482	(450,135)
7.303871	484	(465,153)
7.706452	489	(383,50)
7.839759	492	(385,48)
7.100670	498	(498,181)
8.033792	502	(488,156)
7.016239	506	(504,177)
6.465488	512	(481,127)
8.165198	517	(407,34)
7.258496	521	(496,133)
7.433298	523	(498,132)
8.096849	527	(415,28)
7.448584	531	(419,26)
7.639500	535	(453,54)
7.842361	538	(425,22)
7.588264	540	(462,56)
7.705980	543	(430,19)
7.580582	545	(431,18)
8.139657	550	(461,40)
8.242833	552	(462,39)
9.328957	559	(459,25)
7.741994	564	(448,7)
7.326622	567	(450,6)
7.795224	574	(457,2)
9.842770	580	(485,22)
10.810476	583	(480,13)
10.892126	586	(481,10)
10.439440	588	(483,9)
10.647813	591	(486,8)
10.076145	596	(501,16)
14.016969	601	(504,12)
11.809265	604	(507,11)
16.067775	611	(509,3)
0.000000	614	(510,0)

Nearest Laplacian sidelobe: ratio 0.220543, dbdown 6.565066 at distance 7
Largest Laplacian sidelobe: ratio 0.274818, dbdown 5.609543 at distance 411

9000116
13:22:31

Image AQVIR2 at compression 60.0:1 against window W2.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (59,415)
Location of max in compression is (103,124), sub-pixel is (103.500,124.375)
Max Laplacian Value is 537242 at location (58,415)
Smoothed (FFT) Maximum Laplacian Value is 714944.00 at (57.500,415.750)

Correlation Side Lobe Information, Maximum Value is 3.30035e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0	537242	(58,415)	
0.419927	3.768261	21	76475.4	(71,431)
0.417065	3.797967	39	87015.6	(81,447)
0.205548	6.870870	56	53563.7	(26,369)
0.200711	6.974286	59	148646	(18,459)
0.147092	8.324120	70	90561.1	(30,351)
0.153268	8.145482	76	45808.7	(115,465)
0.257680	5.889200	86	83502.9	(45,330)
0.485644	3.136816	102	108869	(47,314)
0.434721	3.617892	120	86592.3	(54,295)
0.332828	4.777800	134	99258.4	(186,454)
0.251292	5.998211	145	88592.1	(203,417)
0.342092	4.658575	155	83305.3	(203,471)
0.674509	1.710123	170	112344	(22,249)
0.664997	1.771801	179	63521.8	(31,238)
0.566873	2.465139	204	89058.5	(261,395)
0.478503	3.201149	212	69486.4	(68,203)
0.504955	2.967475	224	113638	(76,192)
0.493943	3.063232	227	89192.4	(79,189)
0.461157	3.361516	232	154236	(289,439)
0.600384	2.217883	242	80901.4	(94,176)
0.580531	2.361746	246	90010	(97,172)
1.014197	-0.061225	285	66158.3	(102,133)
1.066938	-0.281393	294	124136	(103,124)
0.778660	1.085406	303	63736.5	(97,115)
0.338638	4.702901	323	42866.5	(343,263)
0.695365	1.577871	358	131094	(118,62)
0.561159	2.509141	373	95195.9	(126,48)
0.503305	2.981685	381	58285.5	(130,41)
0.514227	2.888454	387	47083.3	(133,35)
0.773096	1.117668	405	129913	(141,19)
0.518781	2.850163	424	108858	(482,430)
0.308514	5.107246	435	76198.7	(204,5)
0.347491	4.590560	442	93863.3	(494,489)
0.329864	4.816655	448	55714.1	(501,484)
0.334210	4.759802	461	95720.9	(501,287)
0.363801	4.391358	471	79648.3	(507,274)
0.368767	4.332484	479	164549	(493,214)
0.431402	3.651178	494	83561.3	(500,195)
0.471473	3.265429	501	111049	(506,191)
0.489723	3.100499	508	0	(511,186)
0.209784	6.782286	521	77307.4	(481,110)
0.209161	6.795186	538	61291.6	(469,68)
0.211150	6.754096	541	73134.3	(463,56)
0.217199	6.631420	548	61495.4	(469,53)
0.167773	7.752789	554	41326.3	(475,51)
0.143396	8.434620	560	60000.3	(460,25)
0.141997	8.477221	562	44230.1	(461,24)
0.163615	7.861764	566	73144.5	(465,21)
0.165735	7.805957	568	79189	(466,20)
0.186114	7.302213	576	97414.4	(459,2)
0.141574	8.490162	586	54155.1	(481,10)
0.134627	8.708690	597	62624.9	(502,16)
0.115767	9.364162	603	44341.8	(507,12)
0.115155	9.387156	605	40220.1	(508,11)

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0.115521 9.373383 608 0 (511,9)
Nearest Corr sidelobe: ratio 0.419927, dBDown 3.768261 at distance 21
Largest Corr sidelobe: ratio 1.066938, dBDown -0.281393 at distance 294

Laplacian Side Lobe Information, Maximum Value is 537242

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(58,415)
0.283652	5.472145	10	(50,421)
0.169109	7.718336	13	(50,405)
0.322146	4.919476	17	(57,398)
0.269482	5.694705	22	(63,394)
0.128118	8.923886	26	(42,395)
0.177338	7.511984	31	(52,385)
0.153139	8.149136	35	(35,388)
0.195732	7.083383	41	(58,374)
0.172973	7.620223	50	(18,445)
0.178368	7.486840	52	(25,455)
0.223173	6.513576	56	(3,424)
0.276684	5.580167	59	(18,459)
0.172798	7.624621	69	(31,351)
0.189894	7.214882	74	(75,343)
0.162964	7.879088	81	(40,336)
0.182398	7.389809	84	(44,332)
0.202173	6.942762	86	(139,387)
0.204816	6.886364	88	(146,421)
0.215425	6.667031	94	(152,419)
0.254788	5.938216	98	(41,318)
0.202644	6.932668	102	(47,314)
0.189007	7.235225	107	(29,312)
0.199367	7.003464	114	(102,310)
0.275984	5.591155	119	(176,404)
0.182472	7.388029	123	(76,293)
0.203542	6.913452	127	(81,290)
0.257439	5.893265	135	(190,386)
0.243413	6.136571	137	(189,375)
0.194351	7.114132	139	(191,455)
0.177415	7.510085	141	(198,395)
0.164902	7.827747	145	(203,417)
0.203220	6.920329	150	(197,472)
0.226132	6.739357	155	(177,316)
0.220919	6.557665	161	(201,340)
0.216212	6.651194	163	(49,252)
0.262132	5.814802	168	(22,251)
0.211134	6.754427	175	(225,362)
0.212156	6.733438	179	(225,351)
0.184317	7.344335	181	(73,235)
0.258477	5.875774	187	(245,423)
0.243151	6.141242	189	(242,459)
0.224356	6.490619	192	(242,471)
0.206066	6.859942	194	(170,257)
0.186265	7.298692	196	(248,465)
0.245005	6.108258	201	(98,218)
0.246772	6.077042	203	(99,216)
0.240993	6.179949	205	(101,215)
0.265290	5.762785	208	(265,439)
0.246077	6.089287	212	(58,203)
0.227203	6.435864	216	(274,423)
0.189999	7.212496	220	(146,213)
0.267346	5.729261	223	(273,355)
0.282590	5.488431	230	(130,197)
0.287089	5.419831	232	(289,439)
0.269370	5.696508	238	(13,181)
0.291860	5.348249	241	(13,178)
0.331442	4.795928	243	(14,176)

9001/16
13:22:31

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2

0.249231	6.033981	249	(269, 283)
0.205104	6.880255	252	(271, 281)
0.230630	6.370840	255	(35, 161)
0.238913	6.217607	259	(13, 160)
0.216332	6.648785	263	(22, 154)
0.207833	6.822846	265	(98, 153)
0.187635	7.266864	270	(100, 148)
0.207765	6.824278	272	(325, 469)
0.237822	6.237484	274	(291, 271)
0.200279	6.983641	278	(334, 447)
0.201956	6.947422	283	(298, 265)
0.174905	7.571974	287	(345, 425)
0.194480	7.111241	291	(317, 283)
0.238930	6.217289	294	(102, 124)
0.284443	5.460050	297	(106, 122)
0.217530	6.624815	300	(241, 177)
0.212383	6.728608	302	(242, 176)
0.231359	6.357131	304	(307, 240)
0.197073	7.053728	306	(308, 239)
0.205593	6.869925	311	(303, 224)
0.203723	6.909605	318	(257, 167)
0.191451	7.179412	320	(330, 246)
0.224142	6.494775	327	(327, 229)
0.223370	6.509756	331	(339, 240)
0.225984	6.459220	334	(230, 129)
0.239317	6.206628	337	(189, 105)
0.254375	5.945259	347	(344, 219)
0.280430	5.521763	349	(113, 70)
0.253916	5.953094	352	(113, 67)
0.244013	6.125868	358	(118, 62)
0.226499	6.449345	364	(359, 210)
0.240370	6.191193	368	(213, 81)
0.183564	7.362134	374	(127, 47)
0.260317	5.844969	378	(371, 203)
0.204817	6.886330	381	(276, 103)
0.247917	6.056943	386	(174, 47)
0.249474	6.029755	389	(394, 219)
0.245485	6.099754	392	(369, 176)
0.181065	7.421644	397	(455, 413)
0.288123	5.404226	401	(369, 162)
0.241814	6.165186	405	(141, 19)
0.302742	5.189275	412	(393, 176)
0.238050	6.233324	415	(381, 155)
0.255606	5.924294	421	(401, 171)
0.202624	6.933082	424	(482, 430)
0.289782	5.379284	431	(401, 154)
0.244394	6.119099	435	(404, 152)
0.203142	6.922012	438	(385, 124)
0.229213	6.397601	441	(372, 105)
0.168760	7.727296	445	(490, 307)
0.153179	8.147997	448	(505, 391)
0.160481	7.945750	452	(427, 154)
0.304403	5.165517	457	(401, 113)
0.247104	6.071210	462	(418, 126)
0.202343	6.939124	466	(374, 72)
0.246866	6.075379	470	(416, 111)
0.210932	6.758570	474	(361, 50)
0.334991	4.749664	479	(493, 215)
0.224916	6.479793	482	(450, 135)
0.219185	6.591893	486	(493, 198)
0.262135	5.814750	489	(383, 50)
0.253642	5.957787	492	(385, 48)
0.281286	5.508512	498	(498, 181)

0.235483	6.280396	503	(489, 155)
0.257214	5.897049	507	(449, 93)
0.182001	7.399262	510	(402, 38)
0.193667	7.129441	512	(498, 154)
0.251727	5.990703	517	(407, 33)
0.246517	6.081535	522	(412, 31)
0.188241	7.252857	527	(415, 28)
0.240044	6.197098	531	(419, 26)
0.200926	6.969644	535	(453, 54)
0.200592	6.976861	538	(426, 22)
0.219987	6.576025	545	(432, 18)
0.195809	7.081665	547	(433, 17)
0.197418	7.046143	552	(438, 14)
0.170955	7.671190	555	(440, 13)
0.179843	7.451069	559	(444, 10)
0.213005	6.716107	565	(449, 7)
0.237020	6.252152	567	(450, 6)
0.243301	6.138559	574	(457, 2)
0.113687	9.442887	581	(486, 22)
0.140007	8.538508	588	(484, 9)
0.123779	9.073536	590	(485, 8)
0.158956	7.987222	597	(501, 15)
0.082536	10.833561	603	(507, 12)
0.000000	0.000000	614	(510, 0)

Nearest Laplacian sidelobe: ratio 0.283652, dBdown 5.472145 at distance 10
Largest Laplacian sidelobe: ratio 0.334991, dBdown 4.749664 at distance 479

9001/16
13:23:22

Image AQVIR2 at compression 84.0:1 against window W2.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (58,415)

Location of max in compression is (103,125), sub-pixel is (103.500,124.250)

Max Laplacian Value is 398096 at location (58,415)

Smoothed (FFT) Maximum Laplacian Value is 554224.00 at (57.500,414.500)

Correlation Side Lobe Information, Maximum Value is 2.99015e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000 0.000000 0 398096 (58,415)

0.462532 3.348580 21 73210.1 (71,431)

0.460160 3.370909 39 67470.6 (81,447)

0.202274 6.940592 56 41109.6 (26,369)

0.191992 7.167160 70 67335.1 (31,350)

0.549158 2.603025 102 76889.4 (47,314)

0.492460 3.076289 122 95603.1 (53,293)

0.336819 4.726033 134 67249.6 (186,453)

0.304341 5.166392 144 59761 (51,271)

0.399694 3.982723 155 80429.5 (203,471)

0.767725 1.147941 172 75898 (23,247)

0.764075 1.168638 174 53395.3 (25,244)

0.760209 1.190669 177 48752 (26,241)

0.620148 2.075047 203 95317.1 (260,394)

0.519666 2.842753 211 43205.3 (67,204)

0.551879 2.581562 224 83214.6 (76,192)

0.582626 2.346104 228 48238.4 (82,188)

0.711432 1.478664 246 56432.8 (96,172)

1.164747 -0.662315 287 57016.3 (103,132)

1.194382 -0.771434 293 95384.8 (103,125)

1.193761 -0.769175 295 104091 (104,124)

0.408663 3.886349 325 77318.5 (235,142)

0.297867 5.259780 333 63349.1 (243,138)

0.723940 1.402972 357 106403 (118,63)

0.655274 1.835768 372 94237.8 (126,49)

0.593731 2.264100 381 58182.1 (130,41)

0.842738 0.743076 403 96470.3 (140,20)

0.846927 0.721538 405 105383 (141,19)

0.570552 2.437048 423 96890.4 (481,431)

0.372640 4.287100 431 41488.4 (319,72)

0.411950 3.851558 442 106476 (494,489)

0.344313 4.630471 461 96347.1 (501,289)

0.406916 3.904952 472 50624.4 (508,274)

0.357956 4.461709 479 147252 (493,214)

0.462824 3.345838 500 74477.3 (505,191)

0.493038 3.071197 508 0 (511,186)

0.212743 6.721442 521 83442.1 (412,33)

0.235842 6.273787 524 89099.5 (481,105)

0.215821 6.659055 537 95662.2 (470,71)

0.209865 6.780591 544 62464.3 (478,69)

0.175311 7.561410 553 53309.2 (476,53)

0.176194 7.540084 560 49833.8 (460,25)

0.230345 6.376205 566 66716.6 (465,21)

0.233027 6.325933 568 65394.8 (466,20)

0.257435 5.893319 574 100370 (458,3)

0.120695 9.183125 597 47865.5 (502,16)

0.147900 8.300309 607 38162.5 (510,10)

Nearest Corr sidelobe: ratio 0.462532, dBdown 3.348580 at distance 21

Largest Corr sidelobe: ratio 1.194382, dBdown -0.771434 at distance 293

Laplacian Side Lobe Information, Maximum Value is 398096

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000 0.000000 0 (58,415)

0.231921 6.346591 7 (64,412)

0.347633 4.588794 11 (49,422)

a2w2_34.rep

0.274264	5.618308	17	(49,429)
0.259865	5.852527	22	(63,394)
0.209282	6.792674	26	(42,395)
0.164285	7.844008	31	(52,385)
0.167491	7.760081	35	(35,388)
0.257629	5.890053	41	(58,374)
0.197160	7.051818	49	(98,386)
0.183865	7.355005	51	(99,385)
0.236673	6.258519	57	(2,425)
0.255760	5.921682	59	(18,459)
0.214974	6.676143	64	(92,361)
0.192497	7.155760	67	(22,471)
0.175881	7.547816	69	(31,351)
0.208355	6.811958	74	(74,343)
0.170241	7.689347	76	(124,453)
0.243892	6.128020	81	(57,334)
0.203652	6.911115	85	(142,403)
0.254098	5.949987	88	(146,420)
0.250169	6.017662	94	(152,419)
0.310186	5.083780	98	(40,319)
0.193143	7.141215	102	(47,314)
0.219325	6.589111	107	(29,312)
0.220915	6.557745	112	(138,493)
0.217663	6.622150	114	(102,310)
0.275653	5.596377	120	(53,295)
0.215856	6.658358	126	(175,369)
0.232282	6.339838	129	(173,473)
0.319153	4.960016	134	(189,387)
0.272611	5.644572	137	(189,375)
0.228051	6.419674	145	(203,417)
0.241515	6.170552	151	(198,472)
0.232673	6.332543	156	(204,471)
0.274074	5.621315	159	(210,461)
0.231400	5.996347	162	(216,449)
0.325243	4.877922	167	(22,252)
0.218614	6.603227	175	(70,240)
0.264913	5.768966	179	(238,432)
0.237329	6.246493	181	(79,232)
0.276231	5.587269	184	(79,232)
0.290006	5.375927	186	(79,230)
0.323980	4.894812	188	(241,460)
0.286963	5.421746	192	(242,471)
0.272540	5.645696	197	(170,253)
0.278004	5.559488	201	(98,218)
0.301611	5.205526	204	(45,211)
0.249042	6.037280	208	(265,439)
0.234164	6.304805	210	(69,205)
0.241081	6.178379	213	(13,207)
0.221794	6.540505	218	(15,201)
0.310837	5.074680	223	(124,202)
0.309489	5.093553	229	(130,198)
0.306634	5.133798	236	(5,185)
0.432610	3.639039	240	(13,179)
0.272125	5.652322	249	(25,168)
0.275820	5.593745	253	(41,163)
0.241072	6.178532	256	(311,451)
0.201576	6.955615	260	(318,407)
0.333950	4.763183	265	(98,153)
0.244307	6.120636	270	(98,148)
0.208547	6.807966	274	(326,470)
0.237578	6.241934	279	(335,447)
0.263652	5.789694	284	(197,167)
0.214973	6.676162	287	(345,425)
0.236611	6.259652	289	(18,129)

0.236914	6.254100	291	(18, 127)
0.305984	5.143013	294	(103, 124)
0.313353	5.039664	297	(106, 122)
0.245262	6.103703	303	(306, 241)
0.256002	5.917572	308	(118, 113)
0.247019	6.072698	311	(91, 106)
0.239782	6.201836	317	(257, 168)
0.227434	6.431446	321	(358, 302)
0.258087	5.982343	324	(333, 244)
0.283517	5.474203	333	(341, 239)
0.288045	5.405403	337	(189, 105)
0.302402	5.194149	342	(189, 99)
0.367424	4.348326	349	(113, 70)
0.271238	5.666495	358	(118, 62)
0.306940	5.129459	363	(213, 87)
0.308590	5.106186	365	(213, 85)
0.277007	5.575085	369	(213, 80)
0.255414	5.927557	371	(213, 78)
0.252736	5.973326	374	(198, 68)
0.219541	6.584841	378	(401, 255)
0.248274	6.050694	383	(441, 412)
0.249452	6.030129	387	(174, 46)
0.256584	5.907710	392	(369, 176)
0.267216	5.731378	394	(379, 187)
0.369936	5.758502	404	(140, 19)
0.368393	4.318739	409	(383, 166)
0.329289	4.336883	412	(393, 175)
0.260016	4.874224	415	(381, 155)
0.266410	5.850003	422	(470, 505)
0.242443	5.744490	424	(482, 430)
0.230522	6.153896	428	(186, 71)
0.232309	6.372867	430	(400, 154)
0.247812	6.339341	433	(490, 442)
0.251489	6.058772	436	(404, 150)
0.267464	5.994815	438	(415, 161)
0.213179	5.727345	442	(494, 489)
0.267770	6.712554	446	(490, 305)
0.253618	5.722389	453	(419, 142)
0.361999	5.958207	455	(509, 473)
0.202447	4.412926	461	(418, 127)
0.241940	6.936892	464	(351, 55)
0.285580	6.162929	466	(374, 72)
0.282562	5.442727	468	(436, 141)
0.280702	5.517548	472	(416, 111)
0.285670	5.441352	476	(368, 59)
0.374412	4.266502	479	(493, 215)
0.250247	6.016307	483	(472, 167)
0.230039	6.381987	487	(506, 223)
0.292701	5.335757	490	(385, 50)
0.236924	6.253911	493	(473, 149)
0.364747	4.380085	498	(409, 62)
0.263867	5.786150	503	(396, 43)
0.235052	6.288356	506	(449, 94)
0.224401	6.489754	511	(498, 155)
0.193029	7.143770	514	(438, 69)
0.241755	6.166244	517	(407, 33)
0.215486	6.665806	520	(496, 135)
0.265994	5.751282	523	(412, 30)
0.294211	5.313416	529	(504, 131)
0.240299	6.192475	537	(470, 71)
0.204282	6.897697	545	(432, 18)
0.193691	7.128913	548	(434, 17)
0.162397	7.894231	554	(476, 51)

0.175475	7.557847	559	(459, 26)
0.224129	6.495018	563	(447, 8)
0.255774	5.921428	566	(450, 7)
0.292258	5.342343	574	(457, 2)
0.111180	9.539749	579	(476, 15)
0.141284	8.499082	584	(480, 11)
0.138195	8.595082	586	(481, 10)
0.145611	8.368065	588	(484, 9)
0.151352	8.200128	591	(486, 8)
0.130438	8.845948	596	(501, 17)
0.110905	9.550485	605	(508, 10)
0.000000	0.000000	614	(510, 0)

Nearest Laplacian sidelobe: ratio 0.231921, dbdown 6.346591 at distance 7
Largest Laplacian sidelobe: ratio 0.432610, dbdown 3.639039 at distance 240

90/01/16
13:24:06

Image AQVIR2 at compression 117.0:1 against window W2.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (58,415)

Location of max in compression is (104,133), sub-pixel is (104.500,133.000)

Max Laplacian Value is 221788 at location (58,415)

Smoothed (FFT) Maximum Laplacian Value is 373872.00 at (58.625,415.625)

Correlation Side Lobe Information, Maximum Value is 2.47175e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	221788	(58,415)
0.556931	2.541989	23	52733.1	(72,433)
0.555745	2.551241	40	54804.8	(82,447)
0.301528	5.206726	52	44537.2	(28,372)
0.232916	6.328002	62	50768.8	(53,477)
0.193495	7.133300	75	41747.8	(114,465)
0.620551	2.372224	101	57977.4	(46,315)
0.532508	2.736742	123	71043.4	(56,292)
0.382264	4.176371	136	41418.6	(35,281)
0.438320	3.582087	154	0	(0,272)
0.704196	1.523062	170	80975.8	(23,249)
0.821042	0.856346	179	62453.8	(31,238)
0.702860	1.513134	204	81644	(261,394)
0.604886	2.183267	209	76876.6	(63,206)
0.575631	2.398561	215	39756.9	(69,200)
0.562409	2.499476	219	52786.1	(277,425)
0.622414	2.059204	225	78592.3	(77,191)
0.665763	1.766800	236	0	(0,186)
0.788493	1.032019	247	31160.3	(96,171)
1.499379	-1.759114	286	62532.5	(104,133)
1.448780	-1.610024	294	64971.3	(104,125)
0.466789	3.308798	320	40249.5	(339,261)
0.466662	3.309973	322	18434.4	(340,260)
0.847808	0.717024	353	50631.5	(116,67)
0.649898	1.871547	372	48229	(126,49)
0.648268	1.882455	382	30409.5	(131,40)
1.007910	-0.034216	405	68728.3	(141,19)
0.676910	1.694689	420	33098.9	(478,431)
0.412045	3.850558	433	20913.8	(200,6)
0.444394	3.523220	442	44778.9	(497,465)
0.458495	3.386650	446	59764.3	(501,468)
0.506423	2.954868	472	61674.1	(508,274)
0.373863	4.272873	478	69364.4	(445,135)
0.668561	1.748592	507	0	(511,187)
0.266106	5.749449	528	50255	(472,88)
0.244713	6.113421	536	64055.1	(465,66)
0.214652	6.682645	543	35941.5	(477,70)
0.217690	6.621623	549	29499.6	(483,68)
0.206721	6.846147	555	56567.4	(471,44)
0.199594	6.998526	568	40335.4	(466,20)
0.283367	5.476506	577	54550.9	(461,2)
0.123200	9.093888	590	43874.6	(485,8)
0.183248	7.369603	608	0	(511,9)

Nearest Correlation Side Lobe: ratio 0.556931, dBdown 2.541989 at distance 23

Largest Correlation Side Lobe: ratio 1.499379, dBdown -1.759114 at distance 286

Laplacian Side Lobe Information, Maximum Value is 221788

Side-Lobe-To-Peak-Ratio DBs-Down Distance Location

1.000000	0.000000	0	(58,415)
0.466004	3.316103	7	(64,412)
0.323540	4.900722	11	(49,422)
0.261499	5.825297	14	(70,408)
0.233202	6.322680	17	(53,399)
0.367419	4.348379	20	(42,403)
0.238794	6.219773	32	(72,386)

a2w2_71.rep

5.304758	34	(76,386)
4.796576	38	(26,395)
4.452428	41	(81,449)
5.223231	47	(12,422)
4.545728	52	(7,423)
4.428223	57	(2,425)
4.215402	59	(18,458)
5.360594	62	(15,459)
6.133033	65	(66,347)
5.341216	68	(71,343)
6.139614	73	(121,371)
5.662098	77	(137,389)
5.482428	83	(139,387)
5.055093	86	(146,420)
5.344556	88	(151,419)
4.378843	93	(45,314)
4.215402	96	(153,405)
5.360594	102	(145,356)
6.133033	105	(21,313)
5.341216	109	(130,504)
6.139614	114	(57,292)
5.662098	123	(81,290)
5.482428	127	(106,295)
5.055093	129	(188,387)
5.344556	133	(194,423)
4.378843	136	(200,419)
4.215402	142	(203,405)
5.360594	145	(112,274)
6.133033	151	(201,471)
5.341216	154	(216,436)
6.139614	159	(23,252)
5.662098	167	(239,431)
5.482428	173	(229,443)
5.055093	179	(225,350)
5.344556	182	(83,227)
4.378843	187	(245,366)
4.215402	193	(92,222)
5.360594	196	(260,394)
6.133033	203	(103,214)
5.341216	206	(264,389)
6.139614	208	(271,407)
5.662098	213	(273,409)
5.482428	215	(17,201)
5.055093	218	(270,357)
5.344556	222	(124,203)
4.378843	228	(130,199)
4.215402	231	(274,334)
5.360594	233	(290,439)
6.133033	236	(4,185)
5.341216	239	(12,179)
6.139614	240	(268,283)
5.662098	248	(5,168)
5.482428	253	(311,451)
5.055093	256	(98,153)
5.344556	265	(37,147)
4.378843	271	(335,447)
4.215402	285	(107,134)
5.360594	287	(107,132)
6.133033	290	(303,260)
5.341216	297	(106,122)
6.139614	302	(85,114)
5.662098	304	(297,227)

9001/16
13:24:06

a2w2_17.rep

2

0.453140 (118,113) 3.437677 308
4.799722 315 (255,169)
0.380853 317 (257,168)
4.192426 320 (363,318)
0.366143 325 (59,90)
4.37305 325 (370,314)
0.322165 328 (338,240)
0.331678 330 (335,225)
0.373194 336 (379,309)
0.372458 338 (381,306)
0.360055 341 (344,219)
0.535931 347 (351,214)
0.309412 355 (343,195)
0.301582 360 (97,51)
0.392683 366 (202,69)
0.341821 375 (434,375)
0.339605 378 (371,191)
0.367168 385 (175,46)
0.324782 387 (379,187)
0.470598 394 (400,209)
0.288832 399 (306,99)
0.336616 402 (388,178)
0.489177 406 (390,177)
0.511930 408 (467,507)
0.378264 419 (472,504)
0.440775 423 (368,121)
0.360256 431 (487,371)
0.306564 431 (380,126)
0.380960 433 (382,124)
0.369937 435 (400,138)
0.347235 440 (359,91)
0.352495 442 (472,504)
0.330569 445 (460,223)
0.390112 449 (393,116)
0.353512 455 (479,243)
0.314624 458 (496,282)
0.322234 461 (418,127)
0.345805 464 (490,245)
0.412450 467 (489,236)
0.419774 469 (439,141)
0.380735 472 (368,59)
0.407348 474 (456,157)
0.452753 481 (495,214)
0.284254 487 (454,131)
0.390048 491 (386,50)
0.314867 493 (500,197)
0.471392 498 (409,62)
0.347462 503 (396,43)
0.364720 506 (504,177)
0.294640 510 (403,39)
0.307456 512 (449,85)
0.305938 519 (487,123)
0.311669 521 (461,85)
0.379672 527 (502,132)
0.322165 535 (423,24)
0.323353 538 (426,22)
0.249414 542 (486,83)
0.227245 544 (431,19)
0.264580 546 (433,18)
0.259030 548 (435,17)
0.243201 552 (486,66)
0.255142 555 (471,44)
0.249841 559 (495,67)
0.309894 562 (447,9)
0.448816 566 (450,7)

0.399321 3.986779 574 (457,2)
0.249635 6.026937 584 (480,12)
0.314551 5.023085 591 (487,8)
0.291471 5.354047 593 (489,7)
0.226923 6.441214 598 (502,15)
0.1188500 7.246895 603 (506,11)
0.000000 0.000000 614 (510,0)

Nearest Laplacian sidelobe: ratio 0.466004, dBdown 3.316103 at distance 7
Largest Laplacian sidelobe: ratio 0.584066, dBdown 2.335378 at distance 297

9001/16
13:27:17

Exhibit II-9-g

a2w3_.rep

1

Image AQVIR2 at compression 1.0:1 against window W3.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (367,290)

Location of max in compression is (367,290), sub-pixel is (367.000,290.000)

Max Laplacian Value is 3.92886e+06 at location (367,290)

Smoothed (FFT) Maximum Laplacian Value is 4848576.00 at (367.000,290.000)

Correlation Side Lobe Information, Maximum Value is 6.21276e+06

Slide-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location
1.000000 0 0.000000 0 3.92886e+06 (367,290)

0.293135	5.241327	22	147215	(348,302)
0.311981	5.058124	24	287883	(347,303)
0.254260	5.947215	32	267405	(340,307)
0.252950	5.969658	34	193012	(338,307)
0.289302	5.386438	43	201912	(410,286)
0.281400	5.506762	49	217435	(409,264)
0.291764	5.349679	55	187537	(413,260)
0.259906	5.851843	65	189368	(422,256)
0.261531	5.824772	68	148675	(425,254)
0.239283	6.210878	72	153188	(304,325)
0.238115	6.232141	78	112683	(442,267)
0.209657	6.784896	86	84491.1	(312,356)
0.233951	6.308756	108	124187	(401,188)
0.275351	5.601135	124	221240	(419,177)
0.299712	5.232965	128	251822	(433,180)
0.293974	5.316914	130	177270	(434,179)
0.272573	5.645168	133	95305.4	(436,176)
0.268979	5.702820	141	91445.5	(443,171)
0.301524	5.206786	155	163432	(457,164)
0.354930	4.498579	167	83728	(260,162)
0.273751	5.626443	178	98787.5	(227,180)
0.302113	5.198299	183	151455	(207,201)
0.304056	5.170361	185	161692	(206,199)
0.320781	4.937919	190	214807	(230,159)
0.300444	5.222358	195	133610	(497,145)
0.260439	5.842937	200	191151	(499,140)
0.246465	6.082451	203	158340	(503,139)
0.261102	5.831898	206	185443	(503,135)
0.301202	5.211424	215	186981	(494,463)
0.300540	5.220977	220	202796	(498,467)
0.306076	5.141711	225	151572	(500,471)
0.195874	7.080221	236	89314.5	(224,478)
0.198533	7.021667	239	100816	(229,485)
0.232218	6.341033	244	203621	(206,473)
0.209244	6.793460	247	110404	(221,489)
0.508361	2.938277	261	89340.8	(123,196)
0.564738	2.481530	268	151237	(112,206)
0.652145	1.856561	283	80840.5	(93,220)
0.472726	3.253902	301	115975	(147,85)
0.570982	2.433772	315	107974	(134,78)
0.498738	3.021271	323	180944	(46,255)
0.189675	7.219892	342	106646	(32,360)
0.219013	6.595291	349	94214.3	(26,363)
0.341628	4.664461	358	203582	(10,261)
0.144852	8.390758	369	217250	(30,139)
0.180762	7.428917	375	179576	(36,467)
0.217803	6.619365	380	231234	(8,416)
0.179891	7.449308	386	89582.6	(3,417)
0.166927	7.774728	394	184621	(3,139)
0.194033	7.121248	401	148164	(38,51)
0.123058	9.098912	409	0	(0,470)
0.148904	8.270937	413	0	(0,479)
0.144455	8.402668	420	0	(0,495)
0.056204	12.502306	433	0	(0,60)

0.049599 13.045290 436 0 (0,55)
0.083531 10.781543 450 60966.8 (9,17)
0.080351 10.950074 456 102056 (9,7)
0.118319 9.269451 465 0 (4,0)
Nearest Corr s'delobe: ratio 0.299135, dBdown 5.241327 at distance 22
Largest Corr sidelobe: ratio 0.652145, dBdown 1.856561 at distance 283

Laplacian Side Lobe Information, Maximum Value is 3.92886e+06

Slide-Lobe-To-Peak-Ratio DBs-Down Distance Location
1.000000 0 0.000000 0 (367,290)

0.117630	7.526885	5	(371,293)
0.114685	9.404938	9	(374,295)
0.095355	10.206561	16	(354,280)
0.090335	10.441449	25	(346,303)
0.068062	11.670968	32	(340,307)
0.062931	12.011346	34	(401,287)
0.053982	12.677520	37	(374,254)
0.072677	11.386033	42	(379,250)
0.049959	13.013880	45	(392,252)
0.055343	12.569371	49	(409,264)
0.058441	12.332852	54	(413,261)
0.071374	11.464624	57	(415,260)
0.064437	11.908620	64	(421,256)
0.047470	13.235772	67	(352,225)
0.089149	10.498842	70	(427,253)
0.044788	13.488348	73	(294,286)
0.048894	13.107479	76	(432,250)
0.047611	13.222946	80	(444,267)
0.037879	14.216017	82	(286,275)
0.044680	13.498844	85	(282,298)
0.045002	13.467727	89	(445,247)
0.049781	13.029370	92	(394,202)
0.055512	12.556127	97	(454,248)
0.051496	12.882286	100	(383,191)
0.061209	12.131838	103	(380,188)
0.061618	12.102931	105	(266,260)
0.065311	11.850138	109	(466,245)
0.046506	13.324893	116	(254,266)
0.111556	9.525083	121	(386,170)
0.064786	11.885207	123	(401,172)
0.077629	11.099770	126	(394,167)
0.087129	10.598372	129	(377,161)
0.078544	11.048866	133	(403,162)
0.055936	12.523095	139	(420,161)
0.034091	12.668731	141	(421,160)
0.061100	12.139604	143	(392,149)
0.094816	10.231194	147	(401,147)
0.084525	10.730149	152	(405,143)
0.063075	12.001455	156	(325,440)
0.071401	11.462972	161	(445,149)
0.061126	12.137727	168	(424,132)
0.073773	11.321040	171	(464,431)
0.080243	10.955922	173	(306,452)
0.101073	9.953652	179	(282,447)
0.076776	11.147734	182	(309,463)
0.083676	10.773988	185	(312,467)
0.081987	10.862556	187	(448,122)
0.081134	10.907968	193	(455,118)
0.073177	11.356244	195	(345,96)
0.073670	11.327070	198	(471,122)
0.067586	11.701431	200	(257,457)
0.077082	11.130450	204	(231,442)
0.071661	11.447147	206	(251,460)

0.096113	10.172163 210	(234,453)	0.024494	16.109431 418	(2,494)
0.073326	11.347415 214	(475,475)	0.022981	16.386246 420	(4,79)
0.088895	10.511211 216	(465,482)	0.018190	17.401783 423	(10,64)
0.098764	10.054027 219	(448,493)	0.017970	17.454637 426	(12,55)
0.078391	11.057314 226	(425,508)	0.018628	17.298233 428	(9,55)
0.091938	10.365026 228	(217,462)	0.019919	17.007296 432	(7,51)
0.050708	12.949273 231	(501,478)	0.012887	18.898551 434	(2,55)
0.081798	10.872565 231	(209,463)	0.010309	19.867787 436	(2,52)
0.057225	12.424159 238	(211,470)	0.015095	18.211775 442	(13,25)
0.083698	10.772857 242	(197,462)	0.017891	17.473554 446	(12,20)
0.048918	13.105271 247	(138,382)	0.023731	16.246916 449	(15,12)
0.049989	13.011247 250	(200,104)	0.021625	16.650395 452	(12,10)
0.042509	13.715169 255	(204,486)	0.025976	15.854282 456	(9,7)
0.080767	10.927674 260	(137,168)	0.006915	21.601888 459	(2,12)
0.067135	11.730534 262	(135,169)	0.024485	16.111022 465	(2,2)
0.085352	10.687845 265	(154,448)	0.000000	0.000000 468	(0,0)
0.072282	11.409701 270	(386,21)	Nearest Laplacian sidelobe: ratio 0.176730, dBdown 7.526885 at distance 5		
0.081023	10.913892 273	(391,18)	Largest Laplacian sidelobe: ratio 0.176730, dBdown 7.526885 at distance 5		
0.080177	10.959521 276	(395,15)			
0.070765	11.501806 278	(397,14)			
0.072794	11.379046 280	(400,12)			
0.074824	11.259590 282	(133,448)			
0.082770	10.821246 286	(408,7)			
0.076212	11.179744 288	(411,5)			
0.083636	10.776052 291	(414,3)			
0.057213	12.425057 294	(87,199)			
0.059993	12.218968 300	(80,203)			
0.053754	12.695868 302	(77,205)			
0.055559	12.552419 304	(69,348)			
0.053841	12.688831 306	(97,435)			
0.061352	12.121722 309	(69,210)			
0.049280	13.073281 312	(57,329)			
0.057234	12.423450 316	(79,420)			
0.046953	13.283372 320	(68,405)			
0.046055	13.367223 323	(46,255)			
0.057021	12.439674 325	(58,390)			
0.050144	12.997810 328	(42,332)			
0.051070	12.918355 332	(49,387)			
0.054308	12.651326 334	(50,396)			
0.040664	13.907932 337	(1,7,26)			
0.056785	12.457639 340	(62,139)			
0.075514	11.219698 344	(37,386)			
0.050631	12.955820 348	(53,141)			
0.062466	12.043541 350	(41,418)			
0.071743	11.442188 353	(49,137)			
0.052968	12.759895 357	(11,262)			
0.062169	12.064264 359	(60,476)			
0.059204	12.276499 361	(32,424)			
0.068056	11.671324 364	(34,142)			
0.062524	12.039555 366	(38,450)			
0.065905	11.810835 370	(30,138)			
0.060499	12.182501 373	(33,455)			
0.045707	13.400176 375	(36,467)			
0.055019	12.594893 377	(19,146)			
0.061022	12.145155 381	(12,152)			
0.057835	12.378097 383	(10,151)			
0.047305	13.250949 386	(14,135)			
0.049213	13.168340 392	(16,465)			
0.046991	13.279851 394	(3,139)			
0.069799	11.561526 397	(7,457)			
0.076408	11.168632 401	(6,464)			
0.043768	13.588451 403	(2,460)			
0.053263	12.735709 406	(6,476)			
0.039809	14.000192 411	(12,82)			

9001/16
13:28:11

a2w3_3.rep

1

Image AQVIR2 at compression 15.0:1 against window W3.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (367,290)
Location of max in compression is (367,290), sub-pixel is (367.000,290.000)
Max Laplacian Value is 1.62176e+06 at location (367,290)
Smoothed (FFT) Maximum Laplacian Value is 1691680.00 at (367.250,290.500)

Correlation Side Lobe Information, Maximum Value is 5.26895e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	1.62176e+06	(367,290)
0.359104	4.447794	24	244234	(347,303)
0.286464	5.429293	33	157415	(339,307)
0.278099	5.58009	37	119986	(335,309)
0.341572	4.665177	43	157188	(410,286)
0.329072	4.827093	49	131563	(409,264)
0.329933	4.815748	51	91450.5	(410,263)
0.334311	4.758494	55	161503	(413,260)
0.307225	5.125441	68	164677	(425,254)
0.290086	5.374725	72	140903	(304,325)
0.269794	5.689675	79	115341	(443,267)
0.251836	5.988818	86	70269.4	(312,356)
0.166776	7.778676	97	133368	(405,201)
0.280308	5.523644	109	137958	(402,187)
0.301231	5.211006	124	133121	(419,177)
0.338606	4.703047	128	122381	(433,180)
0.339493	4.691695	130	149268	(434,179)
0.314154	5.028576	140	70651.4	(443,172)
0.344593	4.626930	153	86140.9	(455,165)
0.428798	3.677471	167	103622	(260,162)
0.360603	4.429712	182	121465	(296,122)
0.356852	4.475119	185	116829	(206,199)
0.368137	4.339903	190	227306	(229,160)
0.353741	4.513149	194	163596	(497,146)
0.290068	5.375008	203	108272	(503,139)
0.292789	5.334459	206	125140	(503,135)
0.358113	4.459805	215	144302	(494,463)
0.346143	4.607444	220	114716	(498,467)
0.358475	4.455409	225	119473	(500,471)
0.232626	6.333422	236	88876.8	(223,477)
0.238427	6.226446	239	115782	(229,485)
0.281178	5.510190	244	246033	(206,473)
0.598844	2.226863	262	78982.3	(122,197)
0.675942	1.700905	269	99743.8	(111,206)
0.768792	1.141913	283	117001	(93,220)
0.562043	2.502308	301	107373	(150,81)
0.668873	1.746566	315	131836	(134,78)
0.266487	5.743242	349	91965	(26,363)
0.412716	3.843485	358	173129	(10,261)
0.211321	6.750576	374	122311	(37,467)
0.244279	6.121145	380	159255	(9,416)
0.209500	6.788154	385	72731.9	(4,417)
0.193684	7.129062	394	128153	(3,139)
0.226120	6.456616	401	133567	(38,61)
0.149054	8.265567	409	0	(0,470)
0.177343	7.511861	413	0	(0,479)
0.166512	7.785536	420	0	(0,495)
0.055163	12.583518	430	28608.1	(1,65)
0.061076	12.141323	433	0	(0,60)
0.100774	9.965529	448	55519.6	(7,23)
0.096715	10.145041	456	71461.2	(9,7)
0.135572	8.678315	465	0	(4,0)

Nearest Corr sidelobe: ratio 0.359104, dBdown 4.447794 at distance 24
Largest Corr sidelobe: ratio 0.768792, dBdown 1.141913 at distance 283

Laplacian Side Lobe Information, Maximum Value is 1.62176e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(367,290)
0.189241	7.229846	4	(364,287)
0.126370	8.983577	10	(376,285)
0.102815	9.879443	12	(357,296)
0.138500	8.585509	16	(354,280)
0.150598	8.221806	24	(347,303)
0.146803	8.332637	26	(389,276)
0.12422	9.086091	31	(390,269)
0.095333	10.207566	35	(337,308)
0.114300	9.419538	37	(373,253)
0.127570	8.942506	42	(379,250)
0.074581	11.273717	45	(328,313)
0.101298	9.943999	50	(317,289)
0.125761	9.004540	54	(403,250)
0.139716	8.547537	56	(414,260)
0.117425	9.302413	59	(317,321)
0.091206	10.399755	62	(400,238)
0.149243	8.261054	70	(426,253)
0.103935	9.832367	73	(303,325)
0.128049	8.926226	77	(368,213)
0.084769	10.717612	80	(444,268)
0.081707	10.877382	83	(406,217)
0.091135	10.403140	90	(278,300)
0.102473	9.893893	93	(394,201)
0.099821	10.007782	95	(299,356)
0.094958	10.224675	103	(400,192)
0.085862	10.662002	106	(398,189)
0.094650	10.238798	109	(454,355)
0.089027	10.504775	112	(471,249)
0.120752	9.181049	118	(381,173)
0.148133	7.403755	121	(387,171)
0.148231	8.290597	127	(395,166)
0.174201	7.589484	130	(378,160)
0.170612	7.679910	132	(379,159)
0.113390	9.454253	135	(385,156)
0.108232	9.656428	140	(420,160)
0.103171	9.864434	143	(418,156)
0.158325	8.004502	148	(401,146)
0.170837	7.674181	152	(406,143)
0.160167	7.954263	157	(412,140)
0.140472	8.524097	160	(360,450)
0.131714	8.803686	163	(377,453)
0.165388	7.814965	173	(306,452)
0.168201	7.741704	179	(282,447)
0.158191	8.008175	182	(310,463)
0.129987	8.860999	185	(313,467)
0.144812	8.391947	187	(230,417)
0.143655	8.426779	190	(228,161)
0.133998	8.729006	195	(498,146)
0.144637	8.397193	199	(279,468)
0.137788	8.607871	204	(231,442)
0.121679	9.147833	207	(504,445)
0.178474	7.484256	211	(234,454)
0.150063	8.237267	215	(380,75)
0.158143	8.009495	219	(448,493)
0.157607	8.024243	223	(240,473)
0.125902	8.999657	229	(218,464)
0.096797	10.141397	232	(489,93)
0.105936	9.749555	235	(199,455)
0.108794	9.633962	237	(169,420)
0.135649	8.078523	241	(198,462)
0.151707	8.189936	244	(206,473)

0.079651	10.988086	247	(457, 60)
0.081547	10.885924	250	(196, 472)
0.100949	9.958977	252	(404, 41)
0.105775	9.756150	254	(211, 491)
0.118629	9.258034	258	(369, 32)
0.123297	9.090475	266	(153, 448)
0.132718	8.770692	272	(137, 436)
0.128334	8.916595	274	(392, 17)
0.120530	9.189040	279	(398, 13)
0.120607	9.186262	282	(403, 10)
0.127414	8.947819	285	(406, 8)
0.111908	9.511395	288	(411, 5)
0.137589	8.614158	291	(414, 3)
0.107515	9.685314	295	(86, 199)
0.113309	9.457357	299	(81, 202)
0.120323	9.196514	301	(78, 205)
0.099595	10.017604	305	(73, 208)
0.113580	9.446979	309	(69, 210)
0.095489	10.200447	311	(173, 47)
0.107184	9.698693	313	(56, 329)
0.128027	8.926996	317	(128, 82)
0.114056	9.428818	320	(55, 218)
0.106279	9.735530	324	(46, 335)
0.093041	10.313240	328	(42, 333)
0.105894	9.751269	332	(42, 221)
0.102519	9.891957	334	(88, 474)
0.117802	9.288472	339	(44, 392)
0.173313	7.611696	344	(37, 386)
0.096179	10.169189	347	(45, 418)
0.131157	8.822090	350	(27, 205)
0.123574	9.080745	357	(11, 261)
0.132141	8.789611	359	(60, 477)
0.122893	9.104729	362	(25, 409)
0.124747	9.039704	367	(37, 450)
0.136397	8.651938	371	(12, 182)
0.109850	9.591980	373	(73, 60)
0.095100	10.218212	377	(23, 136)
0.098199	10.078923	380	(9, 416)
0.085926	10.658734	385	(33, 481)
0.092984	10.315936	388	(9, 140)
0.093939	10.271538	391	(5, 437)
0.104099	9.825527	397	(3, 132)
0.109862	9.591509	400	(7, 464)
0.069985	11.549957	403	(2, 461)
0.057090	12.434417	407	(20, 77)
0.055350	12.568796	410	(27, 61)
0.067272	11.721628	413	(10, 83)
0.041770	13.791336	417	(12, 508)
0.047270	13.254151	421	(4, 504)
0.028468	15.456484	426	(12, 55)
0.035459	14.502767	429	(12, 50)
0.027086	15.672556	431	(2, 60)
0.013311	18.757787	436	(2, 52)
0.050267	12.987170	441	(14, 25)
0.051296	12.899193	450	(9, 17)
0.044064	13.559158	456	(9, 7)
0.026229	15.812218	463	(4, 2)
0.020552	16.871500	465	(2, 2)
0.000000	0.000000	468	(0, 0)

Nearest Laplacian sidelobe: ratio 0.189241, dBdown 7.229846 at distance 4
Largest Laplacian sidelobe: ratio 0.189241, dBdown 7.229846 at distance 4

9001/16
13:29:01

a2w327.rep

1

Image AQVIR2 at compression 27.0:1 against window W3.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (367,290)
Location of max in compression is (367,290), sub-pixel is (367.000,290.000)
Max Laplacian Value is 1.15545e+06 at location (367,290)
Smoothed (fft) Maximum Laplacian Value is 1250848.00 at (366.625,290.625)

Correlation Side Lobe Information, Maximum Value is 4.94086e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	1.15545e+06	(367,290)
0.417768	3.790650	16	93202.8	(355,301)
0.361128	4.423388	23	128259	(348,303)
0.306693	5.132967	31	130015	(341,306)
0.370527	4.311806	44	97201.5	(411,286)
0.350504	4.533066	50	102413	(409,263)
0.359845	4.438842	55	158688	(413,260)
0.309328	5.095801	65	79121.6	(422,255)
0.316729	4.993125	68	144091	(425,254)
0.288394	5.400133	73	167212	(303,325)
0.283711	5.471231	78	101152	(442,267)
0.241948	6.162779	87	32806	(312,357)
0.284059	5.465909	108	89739.9	(402,188)
0.333021	4.775288	124	136967	(418,177)
0.356617	4.477981	128	121673	(433,180)
0.334036	4.762069	133	50632.6	(436,176)
0.334583	4.754960	141	52793.6	(443,171)
0.372222	4.234030	151	171235	(454,166)
0.379111	4.212333	153	111491	(455,165)
0.452317	3.445567	167	84486	(303,136)
0.378468	4.219714	183	117120	(296,121)
0.389514	4.094770	190	133144	(230,159)
0.388805	4.102678	194	74812.5	(496,145)
0.317977	4.976037	202	98063.6	(504,140)
0.303608	5.176871	207	73451.9	(504,135)
0.363011	4.400803	215	116099	(494,144)
0.370492	4.312216	222	107426	(498,146)
0.272802	5.641526	242	75419.5	(227,487)
0.688113	1.623402	261	127412	(123,197)
0.718172	1.437713	268	113692	(112,206)
0.793282	1.005726	283	59244.8	(93,220)
0.602322	2.201709	302	49698.5	(140,91)
0.731020	1.360710	316	112195	(133,78)
0.269858	5.688645	349	74403.9	(26,363)
0.321102	4.933575	354	84282	(15,329)
0.407045	3.903578	360	91882.9	(8,266)
0.230946	6.364897	374	126543	(37,467)
0.276726	5.579493	380	145460	(8,416)
0.222284	6.530909	386	84681.3	(2,417)
0.237091	6.250856	401	132380	(38,61)
0.178869	7.474652	409	0	(0,470)
0.188997	7.235445	413	0	(0,479)
0.188368	7.249939	420	0	(0,495)
0.162473	7.892180	423	36635.1	(5,509)
0.083097	10.804166	433	0	(0,61)
0.104285	9.817763	447	49136.3	(8,23)
0.085075	10.701993	453	0	(0,24)
0.147011	8.326503	465	0	(3,0)

Nearest Cor side lobe: ratio 0.417768, dBdown 3.790650 at distance 16
Largest Cor side lobe: ratio 0.793282, dBdown 1.005726 at distance 283

Laplacian Side Lobe Information, Maximum Value is 1.15545e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	(367,290)
0.149326	8.258646	4	(364,287)

0.186864	7.284737	10	(376,285)
0.114202	9.423254	14	(353,293)
0.150082	8.236728	16	(354,280)
0.130820	8.833246	20	(372,271)
0.146809	8.332473	25	(388,276)
0.132645	8.775081	28	(374,263)
0.139723	8.547332	32	(340,307)
0.127332	8.950615	37	(403,280)
0.133196	8.755103	42	(331,312)
0.120086	9.205061	44	(324,281)
0.124043	9.064284	49	(409,264)
0.113409	9.453519	51	(324,317)
0.143774	8.423183	56	(414,260)
0.138747	8.577755	58	(318,321)
0.139287	8.560889	62	(399,237)
0.166478	7.786429	70	(426,253)
0.144716	8.394832	73	(303,325)
0.106707	9.718076	77	(439,262)
0.096562	10.151958	82	(297,332)
0.119198	9.237323	85	(433,237)
0.116984	9.318717	87	(282,307)
0.149187	8.262696	92	(441,235)
0.108839	9.632139	96	(272,304)
0.115198	9.385559	100	(459,250)
0.091916	10.366099	105	(469,267)
0.135509	8.680318	108	(401,187)
0.099480	10.022632	112	(472,251)
0.089872	10.463751	115	(395,178)
0.192077	7.165247	122	(387,170)
0.141102	8.504675	124	(417,177)
0.163576	7.862804	127	(395,166)
0.189721	7.218847	130	(381,161)
0.145295	8.377493	134	(272,384)
0.132113	8.790528	139	(407,157)
0.146781	8.333288	142	(392,150)
0.122815	9.107503	144	(255,347)
0.196519	7.065949	147	(400,141)
0.181263	7.416901	151	(453,166)
0.171209	7.664721	157	(412,140)
0.176059	7.543406	161	(445,149)
0.128915	8.896952	164	(439,143)
0.138541	8.584210	167	(213,355)
0.177857	7.499284	173	(305,452)
0.122719	9.110870	176	(353,115)
0.225892	6.460985	179	(285,449)
0.164416	7.840550	182	(305,461)
0.158410	8.002183	185	(192,349)
0.178191	7.491144	188	(195,365)
0.159949	7.960178	193	(383,98)
0.162536	7.889982	199	(279,468)
0.160029	7.958014	204	(186,384)
0.208672	6.805368	211	(234,454)
0.148933	8.270092	214	(256,473)
0.151826	8.186542	216	(465,483)
0.182079	7.397407	219	(448,493)
0.142403	8.464810	223	(240,473)
0.157143	8.037047	229	(218,464)
0.121871	9.140996	235	(200,456)
0.164311	7.843339	240	(490,84)
0.146050	8.354979	244	(206,473)
0.100052	9.997748	247	(455,59)
0.113732	9.441181	249	(500,500)
0.121207	9.164741	251	(200,102)
0.121673	9.148075	254	(211,490)

0.134511	8.712435	257	(370, 33)
0.148744	8.275616	260	(137, 169)
0.133661	8.739951	264	(156, 449)
0.156761	8.047618	266	(154, 449)
0.167922	7.748918	272	(137, 436)
0.135845	8.669552	276	(141, 449)
0.120122	9.203778	282	(104, 188)
0.135931	8.666799	286	(408, 7)
0.125859	9.001158	289	(95, 193)
0.134103	8.725617	292	(415, 2)
0.095623	10.194378	295	(126, 120)
0.120847	9.177651	298	(83, 201)
0.134519	8.712160	301	(97, 422)
0.119434	9.228721	303	(68, 338)
0.127655	8.939630	305	(103, 138)
0.119035	9.243257	309	(68, 211)
0.121034	9.170937	312	(57, 328)
0.172369	7.635414	316	(129, 82)
0.123191	9.094221	321	(65, 399)
0.114816	9.399957	323	(111, 93)
0.143814	8.421981	325	(49, 355)
0.121434	9.156607	328	(41, 323)
0.121922	9.139175	331	(48, 378)
0.130386	8.847683	335	(39, 223)
0.115451	9.376013	339	(44, 392)
0.118579	9.259931	342	(61, 138)
0.132664	8.772454	344	(37, 386)
0.167465	7.760767	350	(41, 418)
0.133118	8.757640	356	(12, 271)
0.139522	8.553568	359	(60, 477)
0.140301	8.529379	362	(25, 408)
0.128411	8.913974	366	(36, 134)
0.152933	8.154992	370	(30, 138)
0.144360	8.405533	373	(36, 118)
0.119592	9.222966	377	(19, 146)
0.153563	8.137131	381	(12, 153)
0.137324	8.622536	383	(17, 135)
0.116686	9.329808	387	(37, 493)
0.104076	9.826501	389	(21, 112)
0.114750	9.402487	394	(3, 139)
0.121729	9.146056	397	(3, 132)
0.114570	9.409276	401	(38, 61)
0.099219	10.034040	404	(10, 480)
0.075964	11.193925	407	(20, 77)
0.081055	10.912206	412	(11, 83)
0.058307	12.342827	415	(53, 18)
0.076322	11.173515	420	(9, 71)
0.049585	13.046475	425	(17, 49)
0.036951	14.323790	430	(2, 62)
0.032242	14.915833	442	(11, 28)
0.047580	13.225798	449	(4, 26)
0.036659	14.358172	451	(16, 7)
0.030473	15.160894	454	(10, 9)
0.034164	14.664347	456	(13, 3)
0.030510	15.155574	460	(3, 9)
0.043730	13.592158	463	(4, 2)
0.000000	0.000000	468	(0, 0)

Nearest Laplacian sidelobe: ratio 0.149326, dBdown 8.258646 at distance 4
Largest Laplacian sidelobe: ratio 0.225892, dBdown 6.460985 at distance 179

90/01/16
13:29:47

a2w36.rep

Image AQVIR2 at compression 36.0:1 against window W3.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (367,290)
Location of max in compression is (367,290), sub-pixel is (367.000,290.000)
Max Laplacian Value is 868934 at location (367,290)
Smoothed (FFT) Maximum Laplacian Value is 1017536.00 at (367.750,290.625)

Correlation Side Lobe Information, Maximum Value is 4.63562e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	868934	(367,290)
0.456746	3.403252	16	88974.1	(355,301)
0.322195	4.918816	30	114660	(342,306)
0.329656	4.819385	33	156049	(339,307)
0.385373	4.141185	44	64284.4	(411,286)
0.381961	4.179811	51	79981	(410,263)
0.331935	4.789471	65	101242	(422,255)
0.323643	4.899333	68	99584.6	(425,254)
0.327164	4.852351	73	153906	(303,325)
0.316110	5.001624	78	111248	(442,267)
0.262071	5.815803	85	41864.4	(313,356)
0.262403	5.810318	89	62193.1	(310,358)
0.290287	5.371730	108	101009	(401,188)
0.390274	4.086303	127	114231	(432,181)
0.365688	4.368890	141	65822.3	(443,171)
0.403969	3.936520	153	112585	(455,165)
0.483691	3.154319	167	65190	(304,135)
0.420646	3.760831	183	85717	(296,121)
0.428579	3.679688	190	139340	(230,159)
0.395366	4.030003	193	77766.6	(495,145)
0.338019	4.710588	207	109985	(504,135)
0.391571	4.071900	215	82853.1	(494,464)
0.390900	4.079345	218	47018.5	(496,466)
0.393895	4.046195	220	65796.5	(497,467)
0.401095	3.967526	225	80547.6	(500,471)
0.265629	5.752422	236	115376	(223,477)
0.295722	5.291169	242	84379.9	(226,487)
0.716871	1.445592	261	119884	(123,197)
0.764548	1.165952	268	92464	(112,206)
0.873920	0.585285	283	52004	(93,220)
0.651100	1.863524	303	57945	(148,81)
0.774076	1.112163	316	110957	(126,363)
0.288923	5.392177	349	39757.3	(37,467)
0.444831	3.518053	359	125823	(9,267)
0.223545	6.506342	374	94706.7	(8,416)
0.255442	5.927081	380	113403	(1,417)
0.206537	6.850030	387	103866	(38,61)
0.253288	5.963853	401	122040	(0,470)
0.164972	7.825886	409	0	(10,507)
0.193532	7.132469	418	46119.4	(0,495)
0.197460	7.045211	420	0	(0,61)
0.084959	10.707882	433	0	(10,19)
0.116900	9.321872	448	27393.2	(4,0)
0.151311	8.201307	465	0	

Nearest Corr sidelobe: ratio 0.456746, dBdown 3.403252 at distance 16
Largest Corr sidelobe: ratio 0.873920, dBdown 0.585285 at distance 283

Laplacian Side Lobe Information, Maximum Value is 868934

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	(367,290)
0.187433	7.271531	6	(362,287)
0.204986	6.882757	10	(376,285)
0.181271	7.416712	17	(356,303)
0.193845	7.125444	25	(386,276)
0.166931	7.774619	27	(374,264)

0.189200	7.230794	32	(340,307)
0.151839	8.186164	37	(403,280)
0.171174	7.665624	42	(331,312)
0.157996	8.013535	44	(330,313)
0.137304	8.623165	47	(407,265)
0.138023	8.600483	49	(409,264)
0.147518	8.311550	54	(404,251)
0.188399	7.249216	57	(415,259)
0.142160	8.472235	62	(401,238)
0.145418	8.373819	67	(351,225)
0.199407	7.002588	70	(427,253)
0.177120	7.517324	73	(303,325)
0.155349	8.086905	80	(287,284)
0.117493	9.299868	82	(297,332)
0.128451	8.912625	84	(432,237)
0.167383	7.762888	87	(280,299)
0.145274	8.378130	89	(278,299)
0.182456	7.388423	92	(441,235)
0.106881	9.710989	98	(270,304)
0.139322	8.559810	100	(459,250)
0.115026	9.392036	106	(462,244)
0.167044	7.771691	109	(402,187)
0.106904	9.710053	112	(447,369)
0.122004	9.136251	115	(254,268)
0.121876	9.140804	117	(282,371)
0.200180	6.985793	121	(386,170)
0.222385	6.528937	127	(396,166)
0.212673	6.722881	130	(381,161)
0.172944	7.620947	134	(272,384)
0.147431	8.314124	140	(390,152)
0.159581	7.970185	142	(392,150)
0.194717	7.105963	147	(400,147)
0.199568	6.999089	151	(453,166)
0.186545	7.292156	153	(262,401)
0.205162	6.879036	157	(412,140)
0.199988	6.989952	162	(446,149)
0.212538	6.725625	172	(465,431)
0.178963	7.472375	175	(486,162)
0.263440	5.793185	179	(285,449)
0.219980	6.576165	182	(305,461)
0.211952	6.737634	187	(230,417)
0.196082	7.075612	190	(330,104)
0.173231	7.613740	193	(187,360)
0.191684	7.174130	198	(483,129)
0.208977	6.799018	204	(186,384)
0.206321	6.854557	211	(234,454)
0.187254	7.127586	216	(464,483)
0.239888	6.199917	219	(446,494)
0.180064	7.445729	223	(238,472)
0.170945	7.671424	229	(218,464)
0.137248	8.624949	232	(475,85)
0.159516	7.971953	235	(207,462)
0.211769	6.741385	240	(490,84)
0.173129	7.616293	243	(206,472)
0.135710	8.673885	247	(455,59)
0.161895	7.907661	252	(404,41)
0.153686	8.133646	255	(191,474)
0.164813	7.830086	257	(370,33)
0.214600	6.683700	260	(137,169)
0.190351	7.204439	266	(154,449)
0.191673	7.174391	272	(137,436)
0.183096	7.373204	277	(111,184)
0.154028	8.123994	280	(400,12)

0.139078	8.567403	283	(103,188)
0.170709	7.677434	286	(408,7)
0.149881	8.242542	288	(152,481)
0.172348	7.635947	292	(416,2)
0.150699	8.218891	294	(100,413)
0.161581	7.916090	298	(83,201)
0.139708	8.547795	300	(80,204)
0.142693	8.455981	302	(77,205)
0.131790	8.801166	306	(72,208)
0.147707	8.306000	310	(172,49)
0.137079	8.630292	312	(172,46)
0.198872	7.014271	316	(129,82)
0.120444	9.192162	320	(228,2)
0.134893	8.700103	325	(49,355)
0.142958	8.447928	328	(141,52)
0.125143	9.025942	332	(41,228)
0.159110	7.982851	335	(49,395)
0.135419	8.683219	338	(113,67)
0.123818	9.072167	341	(44,399)
0.181925	7.401071	344	(37,386)
0.145159	8.381554	347	(67,464)
0.200591	6.976878	350	(41,418)
0.178656	7.479836	359	(9,269)
0.183939	7.353251	362	(25,408)
0.154760	8.103416	367	(4,237)
0.201125	6.965337	371	(12,182)
0.147026	8.326071	377	(19,146)
0.163935	7.853289	381	(11,153)
0.163424	7.866844	383	(17,135)
0.139669	8.548988	388	(22,112)
0.102367	9.898396	391	(34,494)
0.125012	9.030474	394	(14,464)
0.157442	8.028806	397	(3,132)
0.140448	8.524852	401	(38,61)
0.106385	9.731197	404	(10,480)
0.097861	10.093893	407	(5,476)
0.102061	9.911408	412	(11,83)
0.065737	11.821907	416	(12,507)
0.083678	10.773896	420	(9,71)
0.055038	12.593370	424	(17,50)
0.055271	12.575056	426	(5,66)
0.050912	12.931766	430	(2,62)
0.024971	16.025699	433	(3,55)
0.041201	13.850912	441	(11,29)
0.041383	13.831755	444	(14,20)
0.055107	12.587919	448	(7,23)
0.044285	13.537395	453	(11,10)
0.041658	13.803057	457	(12,2)
0.040363	13.940191	463	(4,2)
0.044655	13.501254	465	(2,2)
0.000000	0.000000	468	(0,0)

Nearest Laplacian sidelobe: ratio 0.187433, dBdown 7.271531 at distance 6
 Largest Laplacian sidelobe: ratio 0.263440, dBdown 5.793185 at distance 179

9001/16
13:30:44

Image AOVR2 at compression 60.0:1 against Window W3.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (367,290)

Location of max in compression is (367,290), sub-pixel is (367.000,290.125)

Max Laplacian Value is 519262 at location (367,290)

Smoothed (FFT) Maximum Laplacian Value is 741024.00 at (367.750,290.750)

Correlation Side Lobe Information, Maximum Value is 4.23687e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	519262	(367,290)
0.336554	4.729456	34	84034.4	(337,307)
0.426414	3.701683	44	120612	(411,285)
0.425360	3.717435	53	124486	(411,261)
0.384032	4.156331	66	91462.5	(423,255)
0.358106	4.459881	72	99948.1	(304,324)
0.362277	4.409596	79	84941.3	(442,266)
0.300590	5.220261	85	42133.3	(313,356)
0.299302	5.238907	88	42494.6	(310,357)
0.282155	5.495119	104	64823.6	(465,255)
0.313778	5.033771	108	102529	(402,188)
0.416194	3.807044	128	60673.4	(432,180)
0.389630	4.093479	135	47044.1	(437,175)
0.378060	4.224398	142	61632	(443,170)
0.436505	3.600107	153	159781	(456,165)
0.536055	2.707903	168	70520	(261,160)
0.443495	3.531113	186	59985	(204,200)
0.428113	3.684412	190	104885	(231,158)
0.426695	3.698825	194	54811.8	(495,144)
0.367033	4.352952	203	62368.4	(503,139)
0.369724	4.321219	207	74012	(504,135)
0.419945	3.768080	215	74616	(494,164)
0.433428	3.610834	225	96359.3	(500,471)
0.309001	5.100408	243	44451.4	(225,487)
0.292866	5.333315	248	35187.6	(221,491)
0.736457	1.328527	261	107526	(123,196)
0.816429	0.880818	269	84844.3	(111,206)
0.962779	0.164733	283	48530.5	(93,220)
0.689034	1.671596	302	47013.3	(141,90)
0.747618	1.263204	309	61673.5	(156,64)
0.864406	0.632820	316	142638	(133,78)
0.726683	1.386549	323	72483	(46,254)
0.474439	3.238200	359	108302	(9,260)
0.254708	5.939574	375	68019.6	(37,468)
0.288652	5.396249	381	72456.1	(7,416)
0.272848	5.640790	401	87649.5	(37,62)
0.201852	6.949677	409	0	(0,470)
0.191131	7.186696	412	0	(0,478)
0.205505	6.871784	420	0	(0,495)
0.082261	10.848069	433	0	(0,60)
0.100264	9.988568	448	27835.1	(7,23)
0.093247	10.303669	455	31734.6	(9,9)
0.153236	8.146386	465	0	(4,0)

Nearest Corr sidelobe: ratio 0.336554, dBdown 4.729456 at distance 34

Largest Corr sidelobe: ratio 0.962779, dBdown 0.164733 at distance 283

Laplacian Side Lobe Information, Maximum Value is 519262

Side-Lobe-To-Peak-Ratio DBs-Down Distance Location

1.000000	0.000000	0	(367,290)
0.233178	6.286037	6	(362,287)
0.243413	6.136558	9	(375,285)
0.249746	6.025010	17	(354,279)
0.189674	7.219933	23	(348,303)
0.219783	6.580065	25	(388,277)
0.202030	6.945834	27	(374,264)

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7.229623	10	(342,306)
7.419634	33	(378,259)
6.109044	38	(403,279)
6.560650	42	(331,311)
6.339978	14	(411,285)
7.490811	19	(410,266)
6.202678	3	(411,261)
7.889338	18	(318,321)
6.134004	42	(401,238)
6.415283	64	(352,224)
6.470058	73	(427,253)
6.439957	73	(303,325)
6.602190	77	(438,261)
7.052576	83	(287,285)
7.264629	85	(284,309)
7.050445	89	(278,299)
6.422491	93	(441,234)
6.440549	95	(405,203)
7.478077	99	(384,192)
7.313267	102	(381,189)
7.774623	105	(465,253)
7.007117	109	(402,187)
7.331767	112	(446,369)
8.060906	114	(339,401)
5.936322	119	(482,259)
6.106759	124	(389,188)
5.811056	129	(381,162)
6.883824	137	(363,427)
5.200024	144	(419,156)
6.164386	146	(468,395)
5.047029	153	(455,165)
5.366804	159	(412,138)
4.585499	162	(446,149)
6.449806	165	(291,437)
6.257083	168	(454,146)
5.060174	173	(465,432)
4.406637	179	(285,449)
5.116793	182	(305,461)
5.395232	189	(331,104)
5.764544	194	(345,97)
5.539384	197	(276,465)
6.150759	202	(204,410)
6.086540	204	(381,86)
6.329293	206	(504,444)
5.785051	208	(504,133)
5.902079	217	(381,73)
5.545065	219	(449,493)
5.477072	221	(235,113)
5.969976	224	(236,473)
6.43168	228	(217,462)
7.159196	233	(477,85)
7.285340	238	(146,377)
6.597132	240	(491,84)
7.303914	243	(207,473)
7.305924	246	(138,380)
6.212981	252	(404,41)
5.524527	257	(371,33)
5.163537	260	(137,169)
5.745797	265	(154,448)
6.520588	269	(386,22)
5.712888	272	(137,436)
5.958206	274	(394,17)
5.733727	277	(111,184)

0.216179	6.651859	279	(400,13)
0.209515	6.787846	281	(97,211)
0.265184	5.764526	286	(98,193)
0.253517	5.959921	291	(92,195)
0.253480	5.960568	295	(147,486)
0.174928	7.571417	299	(81,202)
0.270806	5.673422	302	(77,205)
0.203200	6.920759	307	(71,209)
0.226036	6.458220	311	(66,212)
0.290492	5.368657	315	(134,78)
0.275463	5.599366	317	(129,81)
0.227028	6.439202	324	(110,93)
0.186253	7.298966	327	(77,441)
0.221129	6.535552	329	(40,324)
0.222781	6.521212	331	(48,377)
0.202399	6.937911	333	(51,396)
0.214791	6.679849	335	(70,445)
0.230096	6.380903	341	(62,138)
0.231674	6.351218	344	(52,152)
0.242755	6.148311	347	(28,216)
0.272717	5.642872	351	(45,150)
0.191829	7.170858	355	(13,270)
0.264702	5.772430	359	(9,268)
0.221832	6.539763	363	(14,207)
0.218100	6.613450	365	(34,141)
0.245224	6.104375	371	(12,181)
0.198520	7.021956	374	(32,456)
0.234914	6.290906	377	(7,177)
0.219698	6.581734	381	(11,153)
0.174730	7.576313	387	(25,109)
0.154613	8.107533	390	(6,438)
0.166520	7.785329	393	(17,469)
0.178984	7.471846	397	(6,456)
0.172550	7.630846	402	(36,62)
0.142148	8.472577	407	(5,477)
0.155060	8.095013	410	(13,83)
0.094723	10.235428	415	(14,509)
0.123221	9.093137	417	(5,83)
0.124223	9.057965	419	(9,508)
0.101513	9.934788	423	(21,47)
0.073393	11.343465	428	(11,53)
0.031891	14.963311	435	(2,53)
0.071489	11.457588	445	(13,20)
0.102159	9.907214	448	(6,25)
0.059578	12.249171	453	(8,14)
0.066220	11.790120	456	(9,8)
0.016539	17.814803	462	(5,3)
0.030161	15.205471	465	(2,2)
0.000000	0.000000	468	(0,0)

Nearest Laplacian sidelobe: ratio 0.235178, dBdown 6.286037 at distance 6
Largest Laplacian sidelobe: ratio 0.362524, dBdown 4.406637 at distance 179

9001/16
13:35:26

a2w3_04.rep

1

Image AQVIR2 at compression 84.0:1 against window W3.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (367,290)
Location of max in compression is (367,290), sub-pixel is (366.875,290.375)
Max Laplacian Value is 366153 at location (368,290)
Laplacian pixel error is (1,0).
Smoothed (FFT) Maximum Laplacian Value is 709456.00 at (369.375,290.875)

Correlation Side Lobe Information, Maximum Value is 4.08666e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0	0.000000	358843	(367,290)
0.438648	3	3.578837	44	(411,287)
0.476200	3	3.22102	53	(411,261)
0.407688	3	3.896725	65	(422,256)
0.343043	4	4.646517	72	(304,324)
0.323926	4	4.895538	76	(440,269)
0.323913	4	4.895711	87	(41504.9
0.330687	4	4.805831	104	(70860
0.322805	4	4.910597	109	(46298.9
0.403181	3	3.944995	126	(77436.1
0.425687	3	3.709099	133	(84912.6
0.362711	4	4.404393	141	(57968.5
0.412848	3	3.842098	153	(70957.1
0.541134	2	2.666951	166	(56883.3
0.455479	3	3.415320	182	(45561.4
0.435402	3	3.611097	190	(86526.1
0.443834	3	3.527791	194	(39338.1
0.344665	4	4.626030	207	(67287.4
0.458924	3	3.382588	215	(79134.4
0.460335	3	3.369543	222	(72464.8
0.274005	5	5.622416	237	(79316.5
0.334426	4	4.757000	248	(40190.4
0.784395	1	1.054650	262	(48912.3
0.902225	0	0.446849	269	(93964.8
0.935726	0	0.288515	282	(43327.3
0.936208	0	0.286277	284	(38002.3
0.728036	1	1.378472	301	(50992.5
0.748557	1	1.257749	308	(51454.3
0.833290	0	0.792041	315	(72483.3
0.825833	0	0.81078	318	(54726.8
0.551213	2	2.999773	359	(115401
0.309988	5	5.086558	383	(77601
0.276939	5	5.576166	401	(53631.3
0.200733	6	6.973806	409	0
0.217297	6	6.629457	412	0
0.199716	6	6.995875	421	0
0.111836	9	9.514175	436	0
0.107295	9	9.694193	448	(55326.1
0.105856	9	9.752846	450	(36437.1
0.156692	8	8.049540	465	0
Nearest Corr sidelobe: ratio 0.438648, dBdown 3.578837 at distance 44				
Largest Corr sidelobe: ratio 0.936208, dBdown 0.286277 at distance 284				
Laplacian Side Lobe Information, Maximum Value is 366153				
Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location	
1.000000	0	0.000000	(368,290)	
0.304793	5	5.159949	15	(356,299)
0.290912	5	5.362385	23	(387,277)
0.219143	6	5.92724	27	(345,305)
0.238285	6	6.229040	33	(339,306)
0.207360	6	6.832758	37	(391,261)
0.265029	5	5.767073	43	(331,312)
0.178422	7	7.485512	46	(388,249)
0.356741	4	4.476465	52	(411,261)

0.245490	64	6.096661	(400,235)
0.282816	67	5.484954	(352,225)
0.243141	73	6.141421	(303,323)
0.227604	75	6.428209	(304,329)
0.233554	78	6.316124	(291,305)
0.205732	81	6.866976	(297,330)
0.248844	89	6.040727	(455,269)
0.211421	93	6.748516	(404,204)
0.203593	97	6.912369	(301,360)
0.207579	103	6.828156	(465,255)
0.198339	107	7.025916	(399,188)
0.203557	110	6.913129	(261,264)
0.194119	112	7.119329	(307,384)
0.270019	118	5.686057	(383,173)
0.262719	120	5.805079	(250,269)
0.363874	123	4.390486	(389,169)
0.356013	128	4.485339	(378,162)
0.251259	134	5.998789	(436,175)
0.270288	137	5.681735	(363,427)
0.366458	144	4.359754	(420,156)
0.362062	151	4.412172	(403,143)
0.408628	158	3.886719	(412,138)
0.345124	161	4.620242	(446,149)
0.307953	166	5.115156	(291,437)
0.327695	169	4.845301	(305,447)
0.317564	171	4.981691	(305,449)
0.324200	174	4.891874	(391,118)
0.279485	176	5.536409	(271,437)
0.320905	179	4.936239	(285,449)
0.409862	182	3.873621	(305,461)
0.297761	187	5.261319	(197,365)
0.295170	189	5.299277	(195,365)
0.284462	192	5.459751	(498,149)
0.279132	194	5.541908	(233,429)
0.373730	201	4.274418	(206,409)
0.312949	205	5.045262	(503,444)
0.314061	208	5.029863	(235,450)
0.278228	211	5.555996	(197,414)
0.293833	214	5.318992	(492,464)
0.398629	218	3.994315	(382,72)
0.316487	221	4.996447	(235,114)
0.222385	230	6.528949	(217,463)
0.224126	233	6.495080	(428,65)
0.250515	236	6.011654	(135,325)
0.280019	239	5.528132	(477,77)
0.233694	245	6.313519	(206,474)
0.214458	248	6.686575	(131,362)
0.267551	254	5.725940	(200,100)
0.258649	256	5.872885	(411,38)
0.297519	262	5.264856	(134,173)
0.313461	265	5.038170	(155,448)
0.321664	272	4.925969	(140,438)
0.294762	278	5.305286	(140,449)
0.276803	280	5.578286	(99,211)
0.272765	282	5.642117	(106,187)
0.252193	284	5.982666	(177,500)
0.264461	288	5.776386	(84,240)
0.293460	291	5.324516	(85,221)
0.262095	295	5.815412	(126,121)
0.262045	300	5.816248	(69,317)
0.266842	305	5.737452	(167,61)
0.385881	311	4.135471	(67,212)
0.325103	318	4.879791	(129,80)
0.276447	325	5.583879	(109,94)

90/01/16
13:35:26

2

a2w3_34.rep

0.294919	5.302966	327	(57,390)
0.264361	5.778033	335	(51,397)
0.236647	6.258989	341	(42,389)
0.250728	6.007975	346	(35,385)
0.310645	5.077349	351	(27,205)
0.375973	4.248436	359	(21,198)
0.343425	4.641687	361	(8,269)
0.261480	5.825621	368	(31,141)
0.248391	6.048643	371	(16,172)
0.247904	6.057158	373	(22,430)
0.261379	5.827295	376	(20,148)
0.248535	6.046128	381	(22,450)
0.229598	6.390327	383	(12,149)
0.231517	6.354179	386	(4,417)
0.267701	5.723492	393	(5,140)
0.202948	6.926145	396	(14,468)
0.184988	7.328559	402	(68,23)
0.162667	7.887005	407	(18,497)
0.148598	8.279880	410	(10,489)
0.117980	9.281915	416	(10,502)
0.124621	9.044101	420	(3,83)
0.128203	8.921027	423	(22,47)
0.097171	10.124612	429	(11,53)
0.113730	9.441233	436	(2,53)
0.092271	10.349355	441	(15,25)
0.075999	11.191942	444	(12,25)
0.151101	8.207320	449	(6,25)
0.078961	11.025872	456	(24,2)
0.038368	14.160340	459	(11,2)
0.089912	10.461803	463	(4,4)
0.000000	0.000000	469	(0,0)

Nearest Laplacian sidelobe: ratio 0.304793, dBdown 5.159949 at distance 15
Largest Laplacian sidelobe: ratio 0.409862, dBdown 3.873621 at distance 182

90/01/16
13:36:24

a2w37.rep

Image AQWIR2 at compression 117.0:1 against window W3.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (367,290)
Location of max in compression is (90,222), sub-pixel is (92.625,218.500)
Max Laplacian Value is 287369 at location (367,290)
Smoothed (FFT) Maximum Laplacian Value is 451408.00 at (366.625,290.750)

Correlation Side Lobe Information, Maximum Value is 3.84264e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	287369	(367,290)
0.400673	3.972094	34	77691	(337,307)
0.471682	3.263509	41	66193.1	(408,286)
0.480274	3.185109	53	84008	(411,260)
0.397126	4.010717	61	47293.5	(313,319)
0.316023	5.002806	75	39865.8	(439,268)
0.318655	4.966787	77	42285.3	(438,261)
0.385327	4.141706	85	63345.6	(313,356)
0.327407	4.849123	105	32459.5	(466,256)
0.330918	4.802801	108	42655.8	(403,188)
0.323509	4.901130	112	38556.1	(474,257)
0.438745	3.577880	126	55058.4	(429,180)
0.458355	3.387976	134	70374.9	(437,176)
0.442336	3.542480	140	47562.3	(442,172)
0.430761	3.917295	154	38012.5	(458,166)
0.560050	2.517729	168	70513.3	(303,135)
0.44959	3.516798	177	61649.6	(228,181)
0.497781	3.023621	184	62818.1	(305,117)
0.456405	3.406494	190	73866.8	(231,158)
0.465823	3.317788	194	46903.4	(493,143)
0.465217	3.323441	216	60751.6	(494,465)
0.478698	3.199382	222	64282.3	(499,469)
0.308672	5.103026	244	52408.9	(207,474)
0.821292	0.855024	262	70353.8	(122,196)
0.878025	0.564932	269	61891.8	(123,177)
0.845011	0.731377	273	52800.3	(124,165)
1.000128	-0.000555	285	40846.5	(90,222)
0.828213	0.818579	309	40201.8	(158,63)
0.931715	0.307168	315	98991.5	(133,79)
0.327994	4.841337	350	47243.4	(25,364)
0.503827	2.977186	359	58718.1	(9,261)
0.277018	5.294912	376	52950.4	(36,469)
0.294571	5.308100	384	72108	(5,417)
0.321084	4.933813	401	57186.6	(37,62)
0.244502	6.117181	414	42521.9	(12,503)
0.119914	9.211303	436	0	(0,55)
0.119674	9.220001	449	38240.9	(10,17)
0.150170	8.234160	462	0	(7,0)

Nearest Corr sidelobe: ratio 0.400673, dBdown 3.972094 at distance 34
Largest Corr sidelobe: ratio 1.000128, dBdown -0.000555 at distance 285

Laplacian Side Lobe Information, Maximum Value is 287369

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(367,290)
0.307241	5.125214	9	(359,295)
0.319200	4.959372	12	(377,284)
0.335053	4.748861	21	(349,301)
0.264433	5.776838	24	(387,277)
0.245234	6.104191	26	(346,305)
0.291242	5.357466	31	(340,306)
0.303962	5.171805	33	(339,307)
0.334498	4.756062	42	(331,312)
0.199895	6.991984	46	(406,266)
0.355132	4.496102	51	(324,317)
0.359758	4.439896	54	(412,261)

6.376758	58	(425,285)
6.088927	62	(426,270)
5.183151	69	(359,221)
7.014269	75	(292,289)
6.248940	79	(299,330)
5.881688	82	(286,305)
5.893508	86	(282,278)
5.345004	89	(454,269)
5.211966	91	(388,201)
7.383627	101	(411,199)
6.594290	104	(464,253)
5.551579	109	(261,264)
6.353763	114	(476,258)
5.203853	118	(381,173)
5.627040	120	(249,269)
4.601499	123	(390,169)
4.504147	125	(394,168)
4.234188	129	(380,162)
4.370760	131	(376,159)
4.864033	139	(425,416)
5.273755	145	(398,148)
4.192792	151	(406,144)
4.477903	153	(373,137)
5.243183	156	(497,377)
4.764502	159	(412,137)
3.981727	162	(447,149)
4.258316	170	(306,449)
3.649798	174	(390,118)
5.032903	179	(290,452)
3.778287	182	(306,462)
4.462660	185	(198,366)
4.747706	191	(212,402)
3.948658	199	(207,409)
5.143569	207	(200,413)
5.557780	214	(492,464)
3.964391	218	(381,72)
4.834544	222	(229,116)
5.806645	225	(434,505)
5.612383	232	(476,85)
5.557549	238	(470,505)
5.353155	241	(138,364)
5.644747	245	(133,362)
6.729452	250	(402,42)
5.124371	255	(191,474)
4.900005	261	(124,196)
5.771955	263	(131,173)
4.982526	281	(92,233)
5.377943	283	(102,389)
5.263205	288	(89,216)
4.915204	276	(141,449)
4.223154	270	(140,437)
4.717798	265	(154,448)
5.210616	300	(72,347)
4.672508	294	(81,221)
5.024461	302	(77,205)
4.806932	305	(74,207)
3.467024	310	(67,212)
3.913704	315	(132,80)
5.157819	323	(111,93)
5.091830	326	(57,390)
5.274722	329	(44,353)
5.55278	333	(152,36)
6.561148	340	(42,389)
6.644099	342	(49,417)

90/01/16
13:36:24

a2w3_7.rep

2

0.258520	5.875059	345	(35, 385)
0.264182	5.780964	347	(33, 384)
0.276575	5.581865	349	(28, 205)
0.270497	5.678377	352	(25, 205)
0.333880	4.764100	355	(13, 269)
0.355723	4.488922	357	(11, 269)
0.362462	4.407377	362	(15, 204)
0.350275	4.555914	369	(29, 141)
0.326709	4.858385	374	(12, 172)
0.240538	6.188169	380	(9, 417)
0.256236	5.913597	383	(6, 417)
0.209654	6.784976	392	(5, 140)
0.196657	7.062907	394	(16, 468)
0.212105	6.734497	401	(38, 61)
0.115295	9.381885	407	(17, 498)
0.181285	7.416375	413	(13, 502)
0.162223	7.898878	416	(53, 17)
0.158856	7.989974	419	(24, 49)
0.092380	10.344220	429	(10, 53)
0.131175	8.821500	435	(2, 53)
0.104734	9.799114	441	(14, 25)
0.137248	8.624930	448	(11, 18)
0.123321	9.089630	452	(7, 17)
0.064650	11.894340	461	(5, 4)
0.077969	11.080760	464	(2, 3)
0.000000	0.000000	468	(0, 0)

Nearest Laplacian sidelobe: ratio 0.307241, dBdown 5.125214 at distance 9
Largest Laplacian sidelobe: ratio 0.450088, dBdown 3.467024 at distance 310

90/01/16
13:37:19

Exhibit II-9-h

Image A2W4 at compression 1.0:1 against window W4.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (368,286)
Location of max in compression is (368,286), sub-pixel is (367.500,286.125)
Max Laplacian Value is 2.27996e+06 at location (368,286)
S-sorted (FFT) Maximum Laplacian Value is 3044864.00 at (367.500,286.125)

a2w4.rep

Correlation Side Lobe Information, Maximum Value is 5.07803e+06			
Side-Lobe-To-Peak-Ratio	DBs-Down	Laplacian	Location
1.000000	0	2.27996e+06	(368,286)
0.488111	3.114816	402096	(363,290)
0.371318	4.302537	293190	(356,294)
0.356637	4.477132	55299.6	(355,297)
0.315078	5.015816	292944	(347,299)
0.259675	5.855706	305816	(342,303)
0.306330	5.138109	43	(342,303)
0.276245	4.873328	49	(411,283)
0.325597	5.582368	58	(410,260)
0.253481	5.960539	62	(317,314)
0.278607	5.550085	65	(427,266)
0.309187	5.097787	73	(310,316)
0.257293	5.895727	73	(304,322)
0.248643	6.044237	82	(443,264)
0.268863	5.704693	87	(317,350)
0.182526	6.464233	97	(313,353)
0.282084	5.496232	105	(407,197)
0.340785	4.675196	124	(401,186)
0.360243	4.324042	127	(431,179)
0.274030	5.632026	134	(433,177)
0.275045	5.605963	143	(437,171)
0.334748	4.752821	154	(261,381)
0.402379	3.953649	165	(457,160)
0.325412	4.875669	175	(303,134)
0.323316	4.870515	184	(476,148)
0.325798	4.903722	189	(207,196)
0.342939	4.647064	195	(200,200)
0.291135	5.359049	200	(498,141)
0.264840	5.770162	208	(206,403)
0.326793	4.857275	215	(504,444)
0.317957	4.976311	218	(495,460)
0.318069	4.974781	220	(497,462)
0.290327	5.362163	224	(499,463)
0.271950	6.584863	239	(500,467)
0.227327	6.433487	241	(230,481)
0.239735	6.220849	244	(233,486)
0.232808	6.330013	247	(208,470)
0.559342	2.518570	266	(234,79)
0.741783	1.297230	283	(129,170)
0.530794	2.750738	301	(91,227)
0.542480	2.656164	306	(147,82)
0.566221	2.470139	316	(159,63)
0.225550	6.467575	343	(130,78)
0.265544	5.758641	349	(32,357)
0.311195	5.069672	353	(27,360)
0.357210	4.470759	359	(25,203)
0.195402	7.090713	369	(10,258)
0.198680	7.018457	377	(31,135)
0.186596	7.290368	380	(36,464)
0.156052	8.067301	387	(10,412)
0.179294	7.464341	395	(3,415)
0.176913	7.522415	397	(3,134)
0.169569	7.706528	401	(41,61)
0.193998	7.122035	417	(38,58)
0.157078	8.038846	426	(12,504)

Laplacian Side Lobe Information, Maximum Value is 2.27996e+06			
Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0	0	(368,286)
0.043807	13.584556	434	0
0.055802	12.533476	443	(11,24)
0.087475	10.581170	451	(10,12)
0.076602	11.157262	454	(8,10)
0.083382	10.789250	456	(10,3)
0.082851	10.817026	461	(7,0)
0.085944	10.657837	464	(2,0)
Nearest Corr sidelobe: ratio 0.488111, dBdown 3.114816 at distance 6			
Largest Corr sidelobe: ratio 0.741783, dBdown 1.297230 at distance 283			
Laplacian Side Lobe Information, Maximum Value is 2.27996e+06			
Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0	0	(368,286)
0.194234	7.116757	6	(363,283)
0.187505	7.269879	9	(361,281)
0.134551	8.711127	12	(358,279)
0.135260	8.688292	14	(357,278)
0.158434	8.001510	17	(354,276)
0.120689	9.183322	19	(373,268)
0.098546	10.063592	22	(388,294)
0.128487	8.911416	25	(347,299)
0.098111	10.082838	29	(339,281)
0.134132	8.724660	31	(342,303)
0.078881	11.030232	37	(395,260)
0.111540	9.525685	41	(333,308)
0.082363	10.842692	44	(331,309)
0.105137	9.782458	49	(410,260)
0.094533	10.244174	53	(402,245)
0.102158	9.907258	55	(398,240)
0.076492	11.163835	59	(359,228)
0.069027	11.609787	61	(400,234)
0.076720	11.150941	65	(314,249)
0.084903	10.710775	67	(302,295)
0.100025	9.998723	70	(427,249)
0.073768	11.321305	73	(304,322)
0.084392	10.736974	80	(300,328)
0.095141	10.216312	84	(379,203)
0.128527	8.910044	93	(395,197)
0.114967	9.394259	101	(386,187)
0.106733	9.717017	103	(380,184)
0.124251	9.056591	106	(462,238)
0.086999	10.604866	108	(397,182)
0.092719	10.328318	112	(402,179)
0.098255	10.076446	117	(359,169)
0.150033	8.238126	121	(386,166)
0.094786	10.232550	123	(414,172)
0.124885	9.034881	126	(395,163)
0.143341	8.436291	128	(381,159)
0.123846	9.071179	132	(405,159)
0.113764	9.439951	135	(394,154)
0.127248	8.953481	138	(422,159)
0.109380	9.610608	140	(420,156)
0.113616	9.445615	143	(392,145)
0.162841	7.882353	147	(401,143)
0.117246	9.309033	150	(313,426)
0.110400	9.570328	153	(367,133)
0.110298	9.574336	155	(440,149)
0.112007	9.507539	157	(413,136)
0.106007	9.746666	160	(385,127)
0.127292	8.951996	164	(466,155)
0.088049	10.552742	167	(409,124)
0.095189	10.214111	169	(347,454)
0.116388	9.340922	171	(464,427)
0.122244	9.127719	173	(306,448)

9001/16
13:37:19

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2

0.142554	8.460216	175	(433,124)	0.075052	11.246361	393	(16,461)
0.153948	8.126257	179	(283,443)	0.092431	10.341808	397	(8,454)
0.117238	9.309329	182	(310,458)	0.101355	9.941538	399	(4,450)
0.104762	9.797954	184	(215,388)	0.078948	11.026586	403	(3,456)
0.115090	9.389618	186	(314,108)	0.055895	12.526296	407	(6,471)
0.164583	7.836146	189	(195,361)	0.063491	11.972889	410	(2,471)
0.134832	8.720259	193	(236,427)	0.064967	11.873091	412	(3,477)
0.134138	8.724476	199	(485,125)	0.049885	13.020298	416	(2,483)
0.139251	8.562011	204	(232,438)	0.050055	13.005564	419	(2,489)
0.141913	8.479767	212	(234,450)	0.047285	13.252774	422	(15,55)
0.139263	8.561637	216	(466,478)	0.050634	12.955589	427	(4,509)
0.143505	8.431318	218	(217,443)	0.027746	15.567971	431	(4,55)
0.136252	8.656572	223	(240,469)	0.035074	14.550100	433	(2,55)
0.118944	9.246589	226	(424,505)	0.024203	16.161314	437	(15,28)
0.138395	8.588788	228	(218,458)	0.035912	14.447566	440	(14,24)
0.150995	8.210367	233	(192,439)	0.026422	15.780368	443	(9,26)
0.143993	8.416571	236	(200,452)	0.032716	14.852414	447	(12,15)
0.104087	9.826043	239	(192,124)	0.046570	13.318936	451	(10,12)
0.120330	9.196246	242	(203,463)	0.039994	13.980099	456	(10,4)
0.132602	8.774512	244	(206,469)	0.016890	17.723677	461	(3,4)
0.098132	10.081876	249	(196,106)	0.000000	0.000000	466	(0,0)
0.094570	10.242471	251	(200,100)	Nearest Laplacian sidelobe: ratio 0.194234, dBdown 7.116757 at distance 6			
0.084535	10.729617	255	(194,472)	Largest Laplacian sidelobe: ratio 0.194234, dBdown 7.116757 at distance 6			
0.113682	9.443089	258	(154,430)				
0.088150	10.547785	260	(141,412)				
0.088820	10.514915	262	(376,24)				
0.103878	9.834772	264	(132,168)				
0.099325	10.029428	266	(153,443)				
0.113762	9.440038	270	(387,17)				
0.115734	9.365375	272	(141,435)				
0.117039	9.316682	275	(395,12)				
0.126418	8.981917	279	(141,448)				
0.116882	9.322538	282	(404,6)				
0.108661	9.639280	284	(406,5)				
0.107870	9.670979	286	(409,3)				
0.090064	10.454505	291	(126,125)				
0.091398	10.390643	294	(148,481)				
0.100950	9.958920	300	(81,199)				
0.086520	10.628844	305	(69,344)				
0.090601	10.428663	308	(97,432)				
0.088595	10.525908	313	(57,320)				
0.100283	9.987722	317	(128,79)				
0.091120	10.403855	322	(50,335)				
0.085510	10.679831	324	(66,168)				
0.107697	9.677978	328	(43,328)				
0.109370	9.611004	333	(90,103)				
0.084838	10.714075	337	(50,398)				
0.107253	9.695905	339	(58,148)				
0.107172	9.699198	344	(49,415)				
0.098112	10.082759	347	(29,211)				
0.092859	10.321754	349	(53,135)				
0.112206	9.499845	353	(50,133)				
0.097711	10.100561	357	(12,267)				
0.094511	10.245169	360	(60,472)				
0.118029	9.280130	363	(39,132)				
0.108473	9.646764	367	(27,423)				
0.106036	9.745462	369	(31,437)				
0.120122	9.203762	372	(23,425)				
0.087797	10.565179	376	(12,408)				
0.091116	10.404064	378	(5,181)				
0.098829	10.051141	383	(12,146)				
0.088664	10.522526	385	(33,476)				
0.092954	10.317315	387	(4,154)				
0.070439	11.521883	390	(4,146)				

9001/16
13:38:24

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Image AQVIR2 at compression 15.0:1 against window W4.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (368,286)
Location of max in compression is (368,286), sub-pixel is (367.625,286.125)
Max Laplacian Value is 1.28887e+06 at location (368,286)
Smoothed (FFT) Maximum Laplacian Value is 1599168.00 at (367.500,286.625)

Correlation Side Lobe Information, Maximum Value is 4.52282e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location
1.000000 0 1.28887e+06 (368,286)

0.404829	3.927279	14	102724	(357,294)
0.404696	3.928707	17	141153	(355,297)
0.350005	4.559254	24	181318	(348,299)
0.273078	5.637128	31	170727	(342,303)
0.346109	4.607868	43	136083	(411,283)
0.363079	4.399985	49	167599	(410,260)
0.299993	5.228885	58	78132.4	(317,314)
0.316190	5.000518	66	78036	(310,317)
0.357683	4.465020	72	174764	(305,321)
0.281044	5.512258	82	86872.5	(317,350)
0.302871	5.187429	87	95992.4	(313,353)
0.310415	5.080567	107	75196.8	(402,185)
0.392910	4.057074	127	187575	(433,177)
0.313143	5.042572	143	153879	(261,381)
0.377785	4.227558	154	70791.3	(301,147)
0.456294	3.407352	165	79284.3	(303,134)
0.365920	4.366141	185	114258	(207,195)
0.357907	4.462298	189	158378	(200,200)
0.381904	4.180455	194	183760	(498,142)
0.334074	4.761576	200	160044	(206,404)
0.308405	5.108783	208	128601	(504,443)
0.381293	4.187408	215	142908	(495,460)
0.359390	4.44341	219	60507.8	(498,462)
0.327497	4.847933	225	110924	(500,468)
0.239798	6.201547	232	66872.4	(493,481)
0.265887	5.753023	244	140883	(208,470)
0.668934	1.746165	269	138654	(112,202)
0.831761	0.800017	283	107024	(91,226)
0.591754	2.278589	301	64305.8	(147,82)
0.620321	2.073838	306	106229	(159,62)
0.627093	2.026683	315	100650	(134,75)
0.626535	2.030544	317	215442	(129,78)
0.304412	5.165387	349	83322.9	(27,360)
0.335818	4.738963	353	181035	(25,203)
0.410432	3.867587	360	128080	(9,258)
0.225091	6.476415	368	143024	(32,135)
0.213785	7.000225	376	115316	(37,464)
0.195511	7.088045	380	98246.2	(9,412)
0.165941	7.803072	387	55610.3	(3,415)
0.199923	6.991375	396	130781	(42,61)
0.183908	7.353995	401	82184	(38,58)
0.221242	6.551330	417	72133.7	(12,504)
0.046766	13.300661	434	0	(0,55)
0.059734	12.237809	442	30688.4	(13,23)
0.095298	10.209145	451	89862.8	(9,13)
0.096781	10.142079	456	67779.4	(10,3)
0.099922	10.003371	461	0	(7,0)
0.100310	9.986557	465	0	(1,0)

Nearest Corr sidelobe: ratio 0.404829, dBdown 3.927279 at distance 14
Largest Corr sidelobe: ratio 0.831761, dBdown 0.800017 at distance 283

Laplacian Side Lobe Information, Maximum Value is 1.28887e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location
1.000000 0 1.28887e+06 (368,286)

0.216247	6.650505	5	(364,283)
0.138063	8.599215	10	(377,281)
0.104149	9.823449	12	(358,292)
0.148704	8.276772	18	(351,281)
0.138714	8.578803	21	(386,276)
0.1174603	7.579476	25	(347,299)
0.115350	9.379828	28	(388,306)
0.145604	8.368257	31	(390,264)
0.131273	8.818251	36	(394,261)
0.145453	8.372762	41	(333,308)
0.156523	8.054217	48	(409,261)
0.140921	8.510248	51	(411,259)
0.160861	7.935488	53	(403,246)
0.154629	8.107095	56	(415,255)
0.103289	9.859460	59	(420,258)
0.114541	9.410376	62	(326,332)
0.138573	8.583204	65	(315,249)
0.153981	8.125329	70	(428,250)
0.135594	8.677584	72	(305,321)
0.098959	10.045434	77	(441,261)
0.118638	9.257750	80	(300,328)
0.111515	9.526669	82	(286,280)
0.113646	9.444450	85	(289,316)
0.188003	7.258362	93	(395,197)
0.122864	9.105771	97	(284,335)
0.129398	8.880728	99	(383,188)
0.142995	8.446803	104	(268,256)
0.127897	8.931387	109	(455,351)
0.091743	10.374276	111	(390,177)
0.147758	8.304504	116	(396,173)
0.221832	6.539749	121	(388,167)
0.148955	8.269456	124	(279,373)
0.211700	6.742787	128	(381,159)
0.156311	8.060106	132	(406,160)
0.129004	8.893967	134	(385,153)
0.149228	8.261498	139	(413,154)
0.136540	8.647401	141	(420,155)
0.144136	8.412281	143	(391,145)
0.137408	8.619872	145	(437,159)
0.206975	6.840822	147	(401,143)
0.168362	7.737563	152	(406,139)
0.189177	7.231328	156	(412,136)
0.167697	7.754753	159	(360,445)
0.157588	8.024777	161	(367,125)
0.140278	8.530111	165	(203,283)
0.146921	8.329169	168	(426,128)
0.148695	8.277049	170	(463,427)
0.151238	8.203394	174	(308,449)
0.226610	6.447203	179	(283,443)
0.176042	7.543827	181	(308,457)
0.149612	8.250340	184	(215,388)
0.156020	8.068198	188	(196,361)
0.153465	8.139920	190	(229,157)
0.157452	8.028510	192	(300,466)
0.14724	8.455020	195	(499,142)
0.154345	8.115075	199	(278,464)
0.150825	8.215281	201	(443,99)
0.197972	7.033969	205	(231,438)
0.128692	8.904477	208	(187,389)
0.194283	7.115647	212	(234,450)
0.169234	7.715117	215	(380,71)
0.191292	7.183040	217	(233,456)
0.177791	7.500897	223	(240,469)
0.151830	8.186413	225	(177,405)

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13:38:24

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Nearest Laplacian sidelobe: ratio 0.216247, dBdown 6.650505 at distance 5
Largest Laplacian sidelobe: ratio 0.226610, dBdown 6.447203 at distance 179

0.138924	8.572224	228	(216,456)
0.112513	9.487978	233	(239,480)
0.158690	7.994506	237	(170,416)
0.171126	7.666837	243	(207,468)
0.141252	8.500056	248	(165,428)
0.126646	8.974080	250	(162,427)
0.113210	9.461138	252	(405,37)
0.131486	8.811217	255	(211,487)
0.154359	8.114662	259	(141,411)
0.158844	7.990283	265	(157,446)
0.155285	8.088693	270	(387,17)
0.138162	8.596120	275	(115,178)
0.123482	9.083957	278	(142,448)
0.134413	8.715603	280	(186,499)
0.130315	8.850054	282	(405,6)
0.139491	8.554536	285	(407,4)
0.127023	8.961175	291	(93,192)
0.155328	8.087516	294	(148,481)
0.114972	9.394078	297	(74,325)
0.147701	8.306178	301	(79,201)
0.133720	8.738035	306	(73,205)
0.121161	9.166365	309	(69,207)
0.125854	9.001318	312	(65,210)
0.107541	9.684273	314	(56,325)
0.167155	7.768801	317	(129,78)
0.128733	8.903097	320	(56,215)
0.134243	8.721075	324	(47,331)
0.131689	8.804512	329	(42,328)
0.168566	7.732312	333	(89,105)
0.112652	9.482612	337	(69,442)
0.118560	9.260607	339	(74,454)
0.162923	7.880181	344	(38,382)
0.153208	8.147172	351	(46,146)
0.176693	7.527818	353	(25,204)
0.142421	8.464258	357	(12,267)
0.170108	7.692764	359	(61,472)
0.126065	8.994038	363	(24,403)
0.139252	8.561983	367	(27,423)
0.185539	7.315652	372	(23,425)
0.126921	8.964673	377	(11,407)
0.115259	9.383258	380	(13,151)
0.131026	8.826420	382	(12,147)
0.115584	9.371008	385	(33,476)
0.122862	9.105816	388	(2,156)
0.111772	9.516666	392	(5,433)
0.105518	9.766738	394	(13,458)
0.111808	9.515268	398	(6,451)
0.086952	10.607213	401	(39,57)
0.103261	9.860624	404	(2,456)
0.094518	10.244870	407	(2,465)
0.076203	11.180282	409	(13,83)
0.085713	10.669518	413	(2,478)
0.073332	11.347061	416	(13,503)
0.073222	11.353579	418	(3,83)
0.056208	12.502039	423	(14,55)
0.046063	13.366506	427	(4,509)
0.044100	13.555385	433	(2,55)
0.044688	13.498079	438	(14,28)
0.058729	12.311467	442	(14,22)
0.046646	13.311814	447	(12,15)
0.069722	11.566296	451	(9,13)
0.057906	12.372771	455	(7,9)
0.017130	17.662454	461	(3,5)
0.000000	0.000000	466	(0,0)

900116
13:39:23

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1

Image AQVIR2 at compression 27.0:1 against window W4.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (368,286)
Location of max in compression is (368,286), sub-pixel is (367.500,286.125)
Max Laplacian Value is 937165 at location (368,286)
Smoothed (FFT) Maximum Laplacian Value is 124286.00 at (367.500,286.625)

Correlation Side Lobe Information, Maximum Value is 4.2321e+06

Side-Lobe-To-Peak-Ratio	DBs-Down Distance	Laplacian Location
1.000000	0.000000	937165 (368,286)
0.446827	3.498607	17 (126737 (356,298)
0.357639	4.46556	24 (133263 (348,300)
0.299386	5.237690	31 (180741 (342,303)
0.374163	4.269387	43 (89449.6 (411,283)
0.383284	4.164796	49 (156758 (410,260)
0.315695	5.007320	57 (77061.8 (318,314)
0.316700	4.993513	65 (117024 (310,315)
0.346737	4.599998	73 (131095 (304,322)
0.314274	5.026913	87 (93154.4 (313,353)
0.342554	4.652711	106 (144658 (403,186)
0.426589	3.699907	126 (141900 (433,178)
0.330985	4.801919	134 (116457 (438,172)
0.325803	4.870447	141 (86926.3 (446,168)
0.472697	3.254174	163 (75404 (302,137)
0.477449	3.210728	166 (68818.1 (304,133)
0.405906	3.915746	185 (106115 (489,146)
0.418502	3.783026	195 (152467 (498,141)
0.343362	4.642482	202 (140460 (206,406)
0.296151	5.284869	208 (143974 (505,443)
0.386483	4.128698	216 (102641 (495,461)
0.385957	4.134612	218 (84618.3 (496,462)
0.263185	5.797385	241 (75752.9 (229,483)
0.277722	5.563892	246 (80505.8 (234,480)
0.287319	5.416354	249 (54206.6 (219,486)
0.670079	1.738737	261 (109233 (124,193)
0.698349	1.559278	268 (113247 (113,202)
0.879101	0.559613	283 (102016 (91,226)
0.632600	1.988705	301 (95610.3 (146,83)
0.642758	1.919527	306 (73282.5 (159,62)
0.697671	1.563491	316 (177695 (130,78)
0.315166	5.014610	349 (77766.5 (27,360)
0.378997	4.213638	353 (184509 (25,203)
0.407316	3.900682	360 (86969.3 (9,259)
0.226419	6.450870	369 (123429 (31,135)
0.239111	6.214012	376 (120679 (37,464)
0.239983	6.198199	380 (133159 (9,411)
0.190347	7.204548	388 (58069.9 (2,415)
0.216476	6.645896	396 (107127 (42,61)
0.214552	6.684677	398 (0 (0,134)
0.231714	6.350483	417 (55171.1 (12,504)
0.055950	12.521962	434 (0 (0,56)
0.094336	10.253227	448 (45432.4 (8,20)
0.089517	10.480935	453 (0 (0,21)
0.086461	10.631776	457 (0 (11,0)
0.112506	9.488243	464 (0 (2,0)

Nearest Corr sidelobe: ratio 0.446827, dBdown 3.498607 at distance 17
Largest Corr sidelobe: ratio 0.879101, dBdown 0.559613 at distance 283

Laplacian Side Lobe Information, Maximum Value is 937165

Side-Lobe-To-Peak-Ratio	DBs-Down Distance	Location
1.000000	0.000000	0 (368,286)
0.168975	7.721784	5 (364,283)
0.195915	7.079328	10 (377,281)
0.120388	9.194152	13 (358,278)

0.202817	6.928966	17 (352,281)
0.173628	7.603802	19 (373,268)
0.190514	7.200726	21 (386,276)
0.183582	7.361710	25 (347,300)
0.192860	7.147590	31 (342,303)
0.138837	8.574936	36 (402,275)
0.136100	8.661408	40 (353,249)
0.195403	7.090589	48 (409,261)
0.146075	8.354236	52 (324,314)
0.171654	7.653466	55 (414,256)
0.138613	8.581963	59 (318,317)
0.135187	8.690637	61 (426,266)
0.176693	7.527806	69 (403,227)
0.156388	8.057957	75 (369,211)
0.180305	7.439911	79 (289,287)
0.137372	8.621024	82 (298,328)
0.143798	8.422486	86 (412,212)
0.125356	9.018537	88 (280,285)
0.205436	6.873233	93 (395,197)
0.151917	8.183939	96 (285,335)
0.175281	7.562640	99 (384,188)
0.154845	8.101022	101 (386,187)
0.159736	7.965963	106 (404,186)
0.142678	8.456426	109 (262,260)
0.133943	8.730799	111 (309,380)
0.155817	8.073860	116 (396,173)
0.234545	6.297736	121 (387,167)
0.242019	6.161501	129 (381,158)
0.181028	7.422533	134 (272,380)
0.190042	7.211514	137 (411,156)
0.156370	8.058477	139 (422,158)
0.173889	7.597273	144 (256,377)
0.229410	6.393878	147 (401,143)
0.199672	6.996828	150 (345,434)
0.206668	6.847257	155 (412,137)
0.215434	6.666861	157 (413,136)
0.190404	7.203249	161 (367,125)
0.183918	7.353756	167 (388,120)
0.185790	7.309777	171 (457,140)
0.160469	7.946093	174 (486,158)
0.300555	5.220763	179 (285,445)
0.186359	7.296500	182 (305,457)
0.170519	7.682263	186 (192,345)
0.235003	6.289260	189 (195,361)
0.187999	7.258449	193 (384,94)
0.173684	7.602403	195 (379,91)
0.178903	7.473818	199 (279,464)
0.207363	6.832678	201 (259,455)
0.218801	6.599514	205 (231,438)
0.169282	7.713897	208 (187,388)
0.216244	6.650565	213 (257,468)
0.203289	6.918865	217 (233,456)
0.224622	6.485476	219 (225,452)
0.218488	6.605714	223 (239,468)
0.133945	8.730751	227 (421,507)
0.140774	8.514788	230 (138,295)
0.156527	8.054099	233 (135,280)
0.166534	7.784975	236 (220,470)
0.156026	8.068023	238 (169,416)
0.173475	7.607624	243 (207,468)
0.167024	7.772213	249 (165,430)
0.176901	7.522685	251 (201,98)
0.152716	8.161168	254 (211,486)
0.180541	7.434235	257 (371,29)

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13:39:23

2

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0.163324	7.869498	259	(141,411)
0.181925	7.401072	265	(157,446)
0.154629	8.107099	271	(151,449)
0.163404	7.867372	273	(117,178)
0.125873	9.000674	279	(110,181)
0.138544	8.584111	283	(134,445)
0.140165	8.533619	285	(408,4)
0.135613	8.676975	287	(479,21)
0.147955	8.298710	292	(92,192)
0.128934	8.896321	294	(148,481)
0.145955	8.357810	296	(126,115)
0.177795	7.500793	301	(79,201)
0.139673	8.548860	305	(103,134)
0.135089	8.693792	310	(126,93)
0.162659	7.887228	313	(57,324)
0.210858	6.760103	317	(129,78)
0.153024	8.152391	321	(68,401)
0.142446	8.463487	325	(50,351)
0.164566	7.836599	329	(42,328)
0.193190	7.140149	333	(89,104)
0.142892	8.449918	337	(43,377)
0.145955	8.357821	340	(44,388)
0.155514	8.082316	343	(38,381)
0.152813	8.158399	345	(35,194)
0.154050	8.123384	348	(153,12)
0.230813	6.367396	353	(25,204)
0.151689	8.190452	357	(12,267)
0.154655	8.106359	360	(11,331)
0.173081	7.617500	364	(14,203)
0.142486	8.462282	367	(5,233)
0.186767	7.287003	371	(13,178)
0.153586	8.136497	377	(8,175)
0.200240	6.984496	380	(13,150)
0.114796	9.400732	383	(37,479)
0.142397	8.464988	385	(33,476)
0.170434	7.684446	389	(2,155)
0.126464	8.980325	395	(3,135)
0.127235	8.953951	402	(38,57)
0.137990	8.601512	404	(2,456)
0.108918	9.628991	406	(7,472)
0.113164	9.462908	409	(3,470)
0.098497	10.065778	412	(10,83)
0.086134	10.648244	415	(14,503)
0.085268	10.692131	420	(10,67)
0.084228	10.745452	422	(15,55)
0.087977	10.556302	427	(4,509)
0.038360	14.161166	433	(2,55)
0.068031	11.672923	440	(15,23)
0.054236	12.657088	444	(6,29)
0.051689	12.866014	448	(8,19)
0.036294	14.401634	454	(11,6)
0.036237	14.408467	456	(10,3)
0.035972	14.440294	461	(3,5)
0.000000	0.000000	466	(0,0)

Nearest Laplacian sidelobe: ratio 0.168975, dBdown 7.721784 at distance 5
Largest Laplacian sidelobe: ratio 0.300555, dBdown 5.220763 at distance 179

900116
13:40:34

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1

Image AOI#2 at compression 36.0:1 against window W4.

Window contains 0.00% noise and is out of scale by a factor of 1.00

Location of max in original is (368,286)

Location of max in compression is (368,286), sub-pixel is (367.625,286.250)

Max Laplacian Value is 756868 at location (368,286)

Smoothed (FFT) Maximum Laplacian Value is 972192.00 at (367.500,286.625)

Correlation Side Lobe Information, Maximum Value is 4.00225e+6

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	756868	(368,286)
0.486604	3.128247	16	120659	(356,297)
0.306350	5.137823	31	146599	(342,303)
0.381800	4.181641	44	37650	(412,283)
0.401264	3.965695	49	140003	(410,260)
0.326622	4.859543	57	47300.6	(318,314)
0.332638	4.780284	66	45856.1	(309,316)
0.385915	4.135086	73	112978	(304,321)
0.322540	4.914160	78	94981.6	(443,264)
0.327784	4.844118	86	58551.1	(314,353)
0.339798	4.687194	106	127570	(403,186)
0.284295	5.462312	113	53665.3	(420,186)
0.458740	3.384330	126	143326	(433,178)
0.364944	4.377740	134	95795.3	(438,172)
0.356057	4.484806	143	115897	(261,381)
0.509778	2.926190	166	82628.6	(304,133)
0.395369	4.029978	175	135494	(477,149)
0.369196	4.327432	178	86880.6	(221,186)
0.409008	3.882684	186	65423.3	(490,146)
0.410339	3.868569	194	75857.1	(497,141)
0.380161	4.200321	202	123138	(206,406)
0.317235	4.986191	206	71461.5	(505,132)
0.323341	4.573397	208	112647	(504,443)
0.410064	3.871484	216	70902.6	(495,461)
0.410905	4.62587	218	50545.6	(496,462)
0.246944	6.574020	235	37280.5	(497,482)
0.306494	5.135781	246	90647.9	(234,80)
0.688633	1.620125	261	111660	(124,193)
0.741848	1.296852	268	77483.8	(113,203)
0.952831	0.209839	283	90167	(91,226)
0.685460	1.640179	301	65895	(147,82)
0.656612	1.826910	306	96385	(159,62)
0.709927	1.487862	316	90091	(131,77)
0.706437	1.509266	319	70084	(50,263)
0.264831	5.770313	340	99288.8	(35,354)
0.334850	4.751501	348	88051.6	(28,360)
0.362301	4.409309	355	133973	(23,204)
0.432198	3.643174	361	78303.5	(8,259)
0.230800	6.367637	376	97000.3	(37,464)
0.213329	6.709494	380	93741	(9,411)
0.172596	7.629681	387	50929.8	(47,70)
0.229670	6.388957	396	91588.2	(42,61)
0.261194	5.830368	418	57826.1	(11,504)
0.065698	11.824505	434	0	(0,55)
0.083549	10.780572	442	26749.5	(13,23)
0.102827	9.878947	448	34291.3	(8,19)
0.106818	9.713560	451	47855.9	(10,11)
0.104531	9.807536	457	0	(11,0)
0.115708	9.366365	464	0	(3,0)
Nearest Corr sidelobe: ratio 0.486604, dBdown 3.128247 at distance 16				
Largest Corr sidelobe: ratio 0.952831, dBdown 0.209839 at distance 283				
Laplacian Side Lobe Information, Maximum Value is 756868				
Side-Lobe-To-Peak-Ratio DBs-Down Distance Location				
1.000000	0.000000	0	(368,286)	

0.183771	7.357220	6	(363,283)
0.171077	7.668096	9	(361,291)
0.162654	7.887360	13	(358,278)
0.211283	6.751356	18	(351,281)
0.187487	7.270293	21	(386,276)
0.166452	7.787103	24	(389,274)
0.145336	8.376268	27	(374,260)
0.193691	7.128903	31	(342,303)
0.186926	7.283294	37	(403,275)
0.148453	8.284110	42	(352,325)
0.180282	7.440467	46	(407,261)
0.196285	7.071121	49	(409,260)
0.202302	6.939991	54	(406,248)
0.180114	7.444521	56	(415,255)
0.141108	8.504471	59	(318,317)
0.145726	8.364626	61	(426,266)
0.182431	7.389009	65	(317,246)
0.185639	7.313300	69	(427,250)
0.172091	7.642408	74	(367,212)
0.175464	7.558132	80	(288,279)
0.155181	8.091610	82	(298,328)
0.142788	8.453079	85	(289,316)
0.159384	7.975546	87	(281,295)
0.246082	6.089206	91	(441,231)
0.129935	8.862750	96	(286,335)
0.211767	6.741426	99	(385,188)
0.214496	6.685801	101	(386,187)
0.175378	7.560258	105	(462,239)
0.159252	7.979155	109	(262,260)
0.127678	8.938848	111	(309,380)
0.152712	8.161264	114	(474,329)
0.188584	7.244959	116	(382,171)
0.196797	7.059825	119	(483,254)
0.218696	6.601594	121	(387,167)
0.170371	7.686044	123	(415,172)
0.278398	5.553342	127	(397,162)
0.225200	6.474318	130	(381,157)
0.189099	7.233106	135	(271,380)
0.207377	6.832399	137	(410,156)
0.182233	7.393727	144	(254,374)
0.232827	6.329673	147	(401,143)
0.210231	6.773039	150	(404,140)
0.212359	6.729294	153	(368,133)
0.269757	5.690266	156	(413,137)
0.221983	6.536812	161	(367,125)
0.183186	7.371066	163	(423,133)
0.229656	6.389214	167	(387,120)
0.213729	6.701376	171	(465,427)
0.196760	7.060624	175	(476,148)
0.309457	5.094003	179	(286,445)
0.239197	6.212435	182	(305,457)
0.207715	6.825328	186	(311,109)
0.245627	6.097235	188	(196,361)
0.235052	6.288352	191	(192,359)
0.204912	6.884324	193	(458,115)
0.232391	6.337812	198	(483,125)
0.210199	6.773686	201	(260,455)
0.237081	6.251026	204	(187,380)
0.249444	6.030276	212	(197,412)
0.247626	6.062043	216	(193,413)
0.234037	6.307153	219	(225,452)
0.201338	6.960741	221	(442,494)
0.219234	6.590930	223	(239,468)
0.164871	7.828564	227	(276,494)

0.207161	6.836918	235	(202,452)
0.186084	7.302919	237	(170,416)
0.206501	6.850784	243	(207,468)
0.202671	6.932082	250	(162,427)
0.160791	7.937395	252	(405,37)
0.204322	6.896848	257	(370,29)
0.191360	7.181497	260	(140,411)
0.203801	6.907928	265	(157,446)
0.190206	7.207769	272	(138,432)
0.186706	7.288416	277	(112,180)
0.148174	8.292288	281	(184,499)
0.114782	8.312608	283	(87,320)
0.214526	6.685207	287	(153,476)
0.168289	7.739455	292	(92,192)
0.154886	8.099885	296	(127,115)
0.172802	7.624503	298	(84,197)
0.193011	7.144185	301	(80,200)
0.163480	7.865352	305	(168,56)
0.155357	8.086700	307	(72,205)
0.152887	8.156283	311	(172,45)
0.234732	6.294271	317	(129,78)
0.163474	7.865505	321	(55,217)
0.174008	7.594312	325	(50,220)
0.181151	7.419586	329	(42,328)
0.164236	7.845309	333	(89,104)
0.150258	8.231615	335	(50,391)
0.150160	8.234452	337	(89,97)
0.171794	7.649919	339	(52,408)
0.153536	8.137899	341	(42,387)
0.195579	7.086769	344	(38,382)
0.180617	7.432420	346	(35,379)
0.234829	6.292475	353	(25,204)
0.164926	7.827108	380	(13,150)
0.148160	8.292683	385	(7,152)
0.153218	8.146897	389	(22,108)
0.155306	8.088128	394	(14,459)
0.121010	9.171804	396	(42,61)
0.120674	9.183851	399	(2,126)
0.155676	8.077796	402	(38,57)
0.127315	8.951196	404	(23,75)
0.155316	8.087834	407	(5,471)
0.110945	9.548922	412	(10,83)
0.099371	10.027399	416	(13,503)
0.080235	10.956345	422	(15,55)
0.090575	10.429930	427	(4,509)
0.051485	12.883190	433	(2,55)
0.070749	11.502776	441	(12,25)
0.050465	12.970098	444	(16,16)
0.073344	11.346335	448	(6,22)
0.063229	11.990846	451	(10,11)
0.040721	13.901802	458	(9,2)
0.000000	0.000000	466	(0,0)

Nearest Laplacian sidelobe: ratio 0.183771, dBdown 7.357220 at distance 6
Largest Laplacian sidelobe: ratio 0.309457, dBdown 5.094003 at distance 179

9001/16
13:41:19

a2w4_0.rep

1

Image AQVIR2 at compression 60.0:1 against window W4.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of m.x in original is (368,286)
Location of max in compression is (91,226), sub-pixel is (93.500,224.500)
Max Laplacian Value is 474815 at location (368,286)
Smoothed (FFT) Maximum Laplacian Value is 731104.00 at (367.625,286.750)

Correlation Side Lobe Information, Maximum Value is 3.637e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	474815	(368,286)
0.503787	2.977533	16	99791.3	(356,297)
0.400678	3.972043	23	74105	(349,299)
0.412813	3.842464	44	57751	(412,282)
0.436692	3.598248	49	128338	(410,260)
0.357968	4.461562	56	58589.8	(319,314)
0.357341	4.469176	58	69906.3	(318,315)
0.350276	4.558893	63	63670	(428,266)
0.432427	3.640868	72	92946.8	(305,320)
0.361925	4.413812	86	38114.3	(314,353)
0.339708	4.688338	106	66929.3	(403,186)
0.477897	3.206655	126	94941.4	(433,178)
0.380849	4.192472	134	73305.9	(439,172)
0.379299	4.210185	143	136597	(261,381)
0.560866	2.511412	165	56119	(260,161)
0.464800	3.327336	174	137061	(476,149)
0.473792	3.244127	187	62550.1	(204,197)
0.453115	3.437919	196	82597.5	(497,139)
0.423698	3.729431	202	146008	(206,406)
0.350584	4.552074	208	111329	(504,443)
0.441699	3.548740	216	85000.4	(495,461)
0.408255	3.890683	223	54405.3	(500,466)
0.300807	5.217124	232	98416	(492,482)
0.291194	5.358180	242	36161.8	(228,484)
0.308952	5.101084	247	70589.3	(234,79)
0.704194	1.523078	261	116161	(124,192)
1.040042	-0.170509	283	68911.8	(91,226)
0.777702	1.091869	306	72038	(159,62)
0.805956	0.936889	316	108614	(133,75)
0.370371	4.313625	349	48230.8	(27,360)
0.416373	3.803177	354	109578	(24,203)
0.465190	3.323692	359	114019	(10,257)
0.251972	5.986481	376	52538.9	(37,465)
0.215775	6.659990	391	52209.1	(42,70)
0.253679	5.957160	398	0	(0,134)
0.235252	6.284673	401	74966.6	(38,59)
0.266692	5.739899	419	70826.6	(10,504)
0.057227	12.424023	434	0	(0,55)
0.096696	10.145894	448	30222.5	(7,20)
0.108866	9.631076	460	0	(8,0)

Nearest Corr sidelobe: ratio 0.503787, dBdown 2.977533 at distance 16

Largest Corr sidelobe: ratio 1.040042, dBdown -0.170509 at distance 283

Laplacian Side Lobe Information, Maximum Value is 474815

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	474815	(368,286)
0.253085	5.967338	8	362.291	(362,291)
0.179897	7.449766	13	359.277	(359,277)
0.263272	5.795953	18	355.298	(355,298)
0.230144	6.379998	21	387.276	(387,276)
0.260628	5.839787	24	389.275	(389,275)
0.227163	6.436625	30	343.303	(343,303)
0.197294	7.048858	33	343.265	(343,265)
0.278668	5.549127	37	403.274	(403,274)
0.190342	7.204653	44	412.281	(412,281)

0.245740	5.413019	49	(409,260)
0.245743	6.095196	52	(412,258)
0.209738	6.783229	54	(408,249)
0.196343	7.069853	57	(311,288)
0.293611	5.322272	64	(317,247)
0.196309	7.070607	68	(405,229)
0.207479	6.830252	70	(422,242)
0.215627	6.662971	75	(304,325)
0.204355	6.896150	78	(442,262)
0.207880	6.821863	81	(287,281)
0.200604	6.976600	87	(281,295)
0.192210	7.162243	89	(279,294)
0.295390	5.296047	93	(395,197)
0.307126	5.126840	99	(384,188)
0.248659	6.043957	102	(380,185)
0.171308	7.662216	104	(266,306)
0.235481	6.280444	109	(262,261)
0.182854	7.378950	116	(255,261)
0.235189	6.285825	119	(251,265)
0.334300	4.758642	124	(395,165)
0.323529	4.900873	129	(381,158)
0.208152	6.816200	132	(381,155)
0.279335	5.538742	137	(410,156)
0.313442	5.038431	143	(420,153)
0.360550	4.430351	149	(403,141)
0.313729	5.034453	153	(456,161)
0.312329	5.053883	157	(413,136)
0.384039	4.156246	161	(447,146)
0.247965	6.056091	169	(359,117)
0.312072	5.057447	172	(466,427)
0.384298	4.153315	179	(285,445)
0.258788	5.870560	182	(305,457)
0.258258	5.879463	185	(313,109)
0.378024	4.224803	189	(331,101)
0.264632	5.773571	193	(188,355)
0.254853	5.937110	195	(486,441)
0.312651	5.049404	198	(269,458)
0.316046	5.002494	202	(205,406)
0.296570	5.278730	205	(230,437)
0.243309	6.138415	207	(237,446)
0.298111	5.256222	210	(198,410)
0.292701	5.357664	214	(493,460)
0.289281	5.386808	216	(193,413)
0.262133	5.814789	221	(235,109)
0.261600	5.823619	224	(239,469)
0.227215	6.435634	228	(217,457)
0.227511	6.429973	232	(243,482)
0.234905	6.291075	237	(170,416)
0.338839	4.700065	244	(207,469)
0.214686	6.681968	249	(500,497)
0.221593	6.544437	252	(404,37)
0.279913	5.529774	255	(192,470)
0.294138	5.314491	257	(371,29)
0.255677	5.923076	261	(125,192)
0.295974	5.287463	264	(159,448)
0.264344	5.778305	269	(113,201)
0.252524	5.976972	272	(139,433)
0.250909	6.004842	277	(112,181)
0.217188	6.631634	283	(134,445)
0.273972	5.622939	286	(154,476)
0.251354	5.997141	291	(93,192)
0.283099	5.480619	295	(147,482)
0.263971	5.784439	303	(77,202)
0.226281	6.453511	308	(71,205)

9001/16
13:41:19

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2

0.204642	6.890051	312	(172,43)
0.291452	5.354331	317	(129,78)
0.269698	5.691226	320	(69,401)
0.259038	5.866365	324	(51,220)
0.206163	6.857894	328	(77,438)
0.221044	6.555221	331	(59,404)
0.226209	6.454905	333	(155,30)
0.234927	6.290676	335	(71,441)
0.181655	7.407533	338	(35,344)
0.271344	5.664801	344	(53,149)
0.236422	6.263123	347	(29,211)
0.337735	4.714236	352	(26,203)
0.285168	5.448994	358	(11,257)
0.272838	5.640951	364	(14,202)
0.271119	5.668396	366	(29,425)
0.245285	6.103291	371	(13,178)
0.278003	5.559509	373	(14,169)
0.274695	5.611489	378	(7,173)
0.185626	7.313621	385	(7,153)
0.190754	7.195254	387	(30,474)
0.214438	6.686992	389	(2,155)
0.180183	7.442851	392	(4,431)
0.182226	7.393905	395	(14,461)
0.187010	7.281344	401	(38,58)
0.169051	7.719823	408	(5,472)
0.125297	9.020606	412	(10,83)
0.129873	8.864826	416	(14,505)
0.149167	8.263279	419	(10,504)
0.111373	9.532209	423	(22,43)
0.115604	9.370268	426	(5,508)
0.092178	10.353705	429	(2,509)
0.086891	10.610252	432	(2,57)
0.091592	10.381405	438	(16,25)
0.050697	12.950187	445	(14,16)
0.099518	10.021005	449	(15,9)
0.081056	10.912153	454	(8,10)
0.063631	11.963333	457	(9,3)
0.000030	0.000000	466	(0,0)

Nearest Laplacian sidelobe: ratio 0.253085, dBdown 5.967338 at distance 8
Largest Laplacian sidelobe: ratio 0.384298, dBdown 4.153315 at distance 179

9001/16
13:42:04

a2w4_084.rep

Image AQR2 at compression 34.0:1 against window W4.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (368,286)
Location of max in compression is (92,226), sub-pixel is (91.875,226.125)
Max Laplacian Value is 343638 at location (368,286)
Smoothed (FFT) Maximum Laplacian Value is 675504.00 at (367.875,286.750)

Correlation Side Lobe Information, Maximum Value is 3.5138e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	343638	(368,286)
0.439306	3.572326	44	53754.4	(412,285)
0.451989	3.448722	50	71117.5	(411,260)
0.361936	4.413688	57	67674.4	(318,314)
0.359127	4.447518	62	60631.3	(427,267)
0.417616	3.792224	72	85509.8	(305,320)
0.394006	4.044976	86	55384.5	(314,353)
0.361280	4.421556	105	49171.3	(404,187)
0.316235	4.999898	111	33962	(475,257)
0.468720	3.290867	126	81730.4	(432,178)
0.393539	4.050123	134	64988.9	(438,172)
0.363457	4.395467	141	57435.5	(262,379)
0.442260	2.399646	165	42951.5	(261,160)
0.463066	3.543224	175	112157	(476,148)
0.420483	3.343575	194	29087.8	(496,140)
0.352781	3.762514	200	115124	(207,405)
0.479830	4.524953	208	91326.8	(504,443)
0.467060	3.118912	216	108410	(494,461)
0.328219	3.306275	220	53894.4	(498,463)
0.781313	4.838366	232	36969.3	(493,482)
0.899792	1.071752	261	79647.8	(124,193)
0.901923	0.448303	272	28626.5	(112,203)
1.031864	-0.136225	282	41220.3	(92,226)
0.769633	1.137163	301	52852.8	(148,80)
0.773889	1.113212	306	34858	(159,62)
0.862873	0.640529	318	34969	(51,262)
0.333826	4.764792	347	46245.9	(29,360)
0.485078	3.114185	360	90011.3	(9,265)
0.237902	6.236021	372	73887.8	(46,473)
0.274112	5.620720	376	66430.1	(37,465)
0.275530	5.598313	379	64127.9	(11,412)
0.233844	6.310736	396	31984.1	(41,62)
0.236297	6.265417	401	43736.4	(38,58)
0.245036	6.107710	419	39902.8	(10,504)
0.076947	11.138105	436	0	(0,53)
0.108079	9.662570	448	42854.5	(7,21)
0.135298	8.687082	462	0	(5,0)

Nearest Corr sidelobe: ratio 0.439306, dBdown 3.572326 at distance 44
Largest Corr sidelobe: ratio 1.031864, dBdown -0.136225 at distance 282

Laplacian Side Lobe Information, Maximum Value is 343638

Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location

1.000000	0.000000	0	343638	(368,286)
1.197322	7.048244	8	362,291	(362,291)
0.222734	6.522135	11	358,291	(358,291)
0.284952	5.452286	17	355,297	(355,297)
0.360716	4.428348	23	388,275	(388,275)
0.225427	6.469950	28	345,302	(345,302)
0.237380	6.245554	30	343,303	(343,303)
0.247925	6.056800	37	405,280	(405,280)
0.239798	6.201546	43	331,308	(331,308)
0.276187	5.587971	46	407,261	(407,261)
0.285490	5.444094	49	409,260	(409,260)
0.278669	5.549107	52	412,258	(412,258)

5.787498	54	(406,247)
6.989186	61	(426,267)
5.458625	65	(423,252)
5.979721	69	(362,217)
6.040849	72	(305,320)
6.678927	75	(304,325)
6.616992	77	(292,301)
6.396828	83	(402,362)
6.372616	87	(308,349)
6.324853	89	(279,294)
5.534681	93	(405,201)
6.341563	100	(386,188)
6.199421	103	(465,252)
5.905762	105	(266,261)
6.857059	109	(471,251)
6.147210	116	(482,265)
4.666718	122	(389,166)
5.590386	125	(396,164)
4.154964	129	(381,158)
4.839048	133	(261,365)
6.009420	137	(248,353)
5.354265	140	(413,153)
4.566889	144	(420,152)
5.130609	148	(313,423)
4.708218	151	(405,140)
4.446523	159	(413,134)
4.483169	161	(287,425)
5.465499	164	(422,131)
5.563954	166	(388,121)
5.598036	168	(223,370)
4.539532	175	(477,149)
4.696211	179	(285,445)
4.527938	182	(449,123)
5.007451	187	(197,361)
4.884899	189	(217,399)
5.583651	194	(435,104)
4.535701	202	(206,406)
4.608016	207	(236,446)
4.719057	211	(197,410)
4.084018	214	(493,460)
5.093015	218	(383,69)
5.014886	220	(235,111)
5.345188	223	(421,69)
5.484253	228	(217,457)
6.617410	232	(237,477)
6.067138	234	(138,331)
5.689484	237	(170,416)
6.746938	239	(477,73)
4.796166	244	(207,469)
5.997967	247	(131,357)
6.083155	249	(500,497)
6.247118	251	(198,101)
5.434716	255	(192,471)
4.880940	260	(126,192)
5.932631	263	(132,170)
4.577434	271	(111,201)
5.050270	276	(93,308)
5.924712	281	(93,230)
6.242321	284	(94,213)
5.331325	288	(84,236)
5.280542	291	(85,217)
6.072101	295	(126,118)
5.883575	301	(79,202)
5.820416	305	(152,501)

90/01/1
13:42:04

a2w4_084.rep

2

0.297724	5.261864	311	(67,208)
0.326448	4.861860	313	(163,49)
0.293271	5.327335	318	(129,76)
0.264435	5.776818	320	(49,401)
0.283128	5.480167	322	(89,447)
0.282785	5.485440	324	(110,90)
0.275897	5.592527	327	(57,386)
0.238748	6.220610	332	(90,104)
0.266203	5.747876	334	(71,439)
0.216151	6.652420	341	(42,387)
0.250365	6.014267	343	(53,150)
0.281648	5.502933	345	(36,381)
0.296324	5.282330	347	(53,140)
0.391127	4.076821	350	(28,203)
0.363013	4.400783	358	(22,193)
0.275348	5.801184	364	(39,131)
0.23687	5.627541	366	(29,425)
0.263066	5.799345	368	(31,138)
0.324542	4.887284	373	(34,453)
0.267263	5.730613	378	(7,173)
0.261121	5.831581	381	(22,445)
0.217198	6.631449	386	(4,414)
0.320239	4.945665	393	(4,433)
0.236063	6.269721	395	(15,464)
0.174222	7.588959	400	(68,21)
0.176402	7.534967	408	(18,495)
0.155576	8.080586	411	(11,83)
0.131522	8.810020	413	(2,478)
0.124347	9.053640	416	(5,83)
0.156619	8.051568	420	(10,505)
0.102149	9.907671	427	(12,50)
0.086982	10.605728	435	(2,51)
0.0736	11.962941	438	(16,25)
0.211	11.354231	441	(13,25)
0.63375	11.980829	443	(12,22)
0.132220	8.787034	448	(6,22)
0.07346	11.110026	456	(10,3)
0.000000	0.000000	466	(0,0)

Nearest Laplacian sidelobe: ratio 0.197322, dBdown 7.048244 at distance 8
Largest Laplacian sidelobe: ratio 0.391127, dBdown 4.076821 at distance 350

90/01/1
12:32:26

a2w4_117.rep

Image AQUIR2 at compression 117.0:1 against window W4.
Window contains 0.00A noise and is out of scale by a factor of 1.00
Location of max in original is (368,286)
Location of max in compression is (92,227), sub-pixel is (91.875,226.625)
Max Laplacian Value is 249336 at location (368,286)
Smoothed (FFT) Maximum Laplacian Value is 453888.00 at (367.750,286.750)

Correlation Side Lobe Information, Maximum Value is 3.21124e+06

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Laplacian	Location
1.000000	0.000000	0	249336	(368,286)
1.003664	-0.001588	1	248588	(367,286)
1.013926	4.313926	32	81414.1	(341,303)
0.495385	3.000574	40	64487.5	(408,282)
0.472785	3.253366	53	68274.5	(411,260)
0.472968	3.251684	68	79556.4	(309,319)
0.378471	4.219683	77	42886.4	(302,325)
0.460392	3.368721	87	59661.5	(313,353)
0.418234	3.785803	105	60738.3	(404,187)
0.502378	2.989691	125	78397.4	(430,177)
0.428792	3.677537	133	61719.4	(439,173)
0.415176	3.817683	141	66453.5	(443,167)
0.623884	2.069892	164	38928.3	(250,172)
0.496312	3.042423	176	105080	(478,149)
0.512453	2.903462	186	47287.1	(205,197)
0.500778	3.003547	192	55071	(493,140)
0.503389	2.980961	216	77594.8	(495,461)
0.502118	2.991344	218	30046.8	(496,462)
0.504101	2.974824	221	55906	(499,464)
0.322177	4.919048	232	34612.5	(493,481)
0.321495	4.928264	240	47279.6	(140,361)
0.828435	0.817416	262	64248.3	(123,193)
0.911305	0.403363	268	68556.5	(125,173)
1.138195	-0.562168	282	59271	(92,227)
0.890361	0.504338	306	42039.8	(161,60)
0.901232	0.451635	315	100557	(133,76)
0.384643	4.149418	350	35932.8	(26,361)
0.519385	2.845106	360	84615.4	(9,257)
0.309642	5.091397	377	74515.7	(36,465)
0.274957	5.607347	391	29489	(42,70)
0.279502	5.536154	397	20992.8	(40,63)
0.299460	5.236617	417	38114.4	(12,503)
0.087952	10.557531	434	0	(0,56)
0.110172	9.579210	448	25828.1	(7,21)
0.110405	9.570119	450	33944.1	(10,14)
0.123960	9.067181	461	0	(6,0)

Nearest Corr sidelobe: ratio 1.003664, dBdown -0.015883 at distance 1
Largest Corr sidelobe: ratio 1.138195, dBdown -0.562168 at distance 282

Laplacian Side Lobe Information, Maximum Value is 249336

Side-Lobe-To-Peak-Ratio	DBs-Down	Distance	Location
1.000000	0.000000	0	(368,286)
0.362135	4.411297	9	(361,291)
0.293038	5.30767	16	(382,293)
0.316776	4.992473	19	(353,297)
0.333900	4.763835	24	(389,275)
0.326524	4.860853	32	(341,303)
0.353349	4.517961	40	(408,281)
0.331825	4.790905	42	(332,308)
0.401017	3.968371	45	(406,261)
0.348946	4.572420	52	(324,314)
0.392026	4.066849	54	(406,247)
0.376837	4.238470	60	(339,233)
0.354822	4.49897	69	(360,217)
0.280604	5.519059	75	(368,211)

0.247494	6.044356	79	(301,328)
0.225458	6.469352	82	(297,328)
0.289971	5.376454	86	(384,201)
0.311208	5.069489	90	(437,228)
0.322218	4.918505	93	(405,201)
0.254388	5.945036	98	(284,337)
0.293401	5.325388	100	(386,188)
0.335921	4.737626	105	(405,188)
0.273046	5.637650	110	(261,260)
0.276235	5.587214	115	(443,373)
0.327754	4.844526	120	(250,265)
0.460872	3.364194	125	(395,164)
0.402488	3.92474	129	(381,158)
0.386807	4.125058	133	(261,365)
0.295905	5.288474	138	(425,412)
0.315261	5.013297	141	(414,153)
0.371965	4.294974	146	(261,385)
0.337968	4.711243	148	(400,142)
0.342360	3.542436	151	(406,140)
0.449466	3.473031	159	(459,416)
0.329929	4.815799	167	(414,125)
0.334639	4.754230	169	(454,141)
0.441516	3.550538	173	(390,114)
0.464951	3.325925	175	(477,149)
0.382311	4.175836	179	(293,449)
0.381078	4.189860	182	(447,122)
0.413824	3.831842	186	(198,361)
0.446518	4.446518	189	(328,101)
0.359481	3.985039	199	(208,405)
0.372786	3.727866	202	(206,406)
0.404221	4.044221	207	(201,409)
0.327851	3.727851	218	(226,451)
0.398013	3.980134	218	(229,113)
5.445475	5.445475	225	(435,501)
5.197504	5.197504	227	(277,494)
5.329460	5.329460	229	(215,457)
5.557264	5.557264	232	(493,90)
5.700435	5.700435	236	(135,323)
4.813529	4.813529	243	(504,85)
5.521518	5.521518	247	(131,357)
5.928598	5.928598	249	(407,40)
4.422305	4.422305	255	(193,471)
4.464129	4.464129	261	(125,192)
5.008779	5.008779	264	(131,170)
3.910138	3.910138	270	(141,433)
5.377699	5.377699	276	(98,227)
3.998837	3.998837	281	(93,230)
4.817019	4.817019	289	(87,217)
4.729857	4.729857	293	(150,482)
5.555687	5.555687	297	(487,14)
4.659601	4.659601	303	(77,202)
4.185126	4.185126	311	(67,208)
3.943727	3.943727	315	(133,76)
4.445721	4.445721	323	(52,217)
4.564522	4.564522	325	(59,386)
4.439841	4.439841	328	(46,349)
4.643344	4.643344	331	(91,104)
5.086073	5.086073	340	(35,353)
5.091522	5.091522	343	(49,413)
4.914410	4.914410	345	(36,381)
3.131641	3.131641	350	(28,203)
4.352909	4.352909	354	(23,205)
3.883408	3.883408	358	(11,257)

9001/16
12:32:26

a2w4_117.rep

2

0.411696	3.854234	363	(15,200)
0.354234	4.507100	369	(30,138)
0.324315	4.890331	373	(35,453)
0.325448	4.875189	378	(35,464)
0.271067	5.669237	382	(2,176)
0.274829	5.609368	390	(2,421)
0.275228	5.603074	393	(3,433)
0.242900	6.145722	402	(2,453)
0.195517	7.088157	410	(11,84)
0.204366	6.895918	414	(14,501)
0.232602	6.333874	417	(13,504)
0.095593	10.195744	424	(4,503)
0.107049	9.704185	428	(10,51)
0.104689	9.87987	434	(4,50)
0.103207	9.862907	441	(12,25)
0.170192	7.690602	449	(11,14)
0.072946	11.369956	458	(4,8)
0.060526	12.180580	460	(2,7)
0.000000	0.000000	466	(0,0)

Nearest Laplacian sidelobe: ratio 0.362135, dBdown 4.411297 at distance 9
Largest Laplacian sidelobe: ratio 0.486000, dBdown 3.133641 at distance 350



**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-10

**Graph: Laplacian of Correlation of A1 W1 (at various scalings) with A1 (at
a given compression) vs. Radial Distance**
[Two graphs per compression; seven scalings per graph]

Exhibit II-10-a-1

A1 W1: Laplacian of Correlation of A1 (uncompressed)
with A1 W1 (scaled variously) vs. Radial Distance

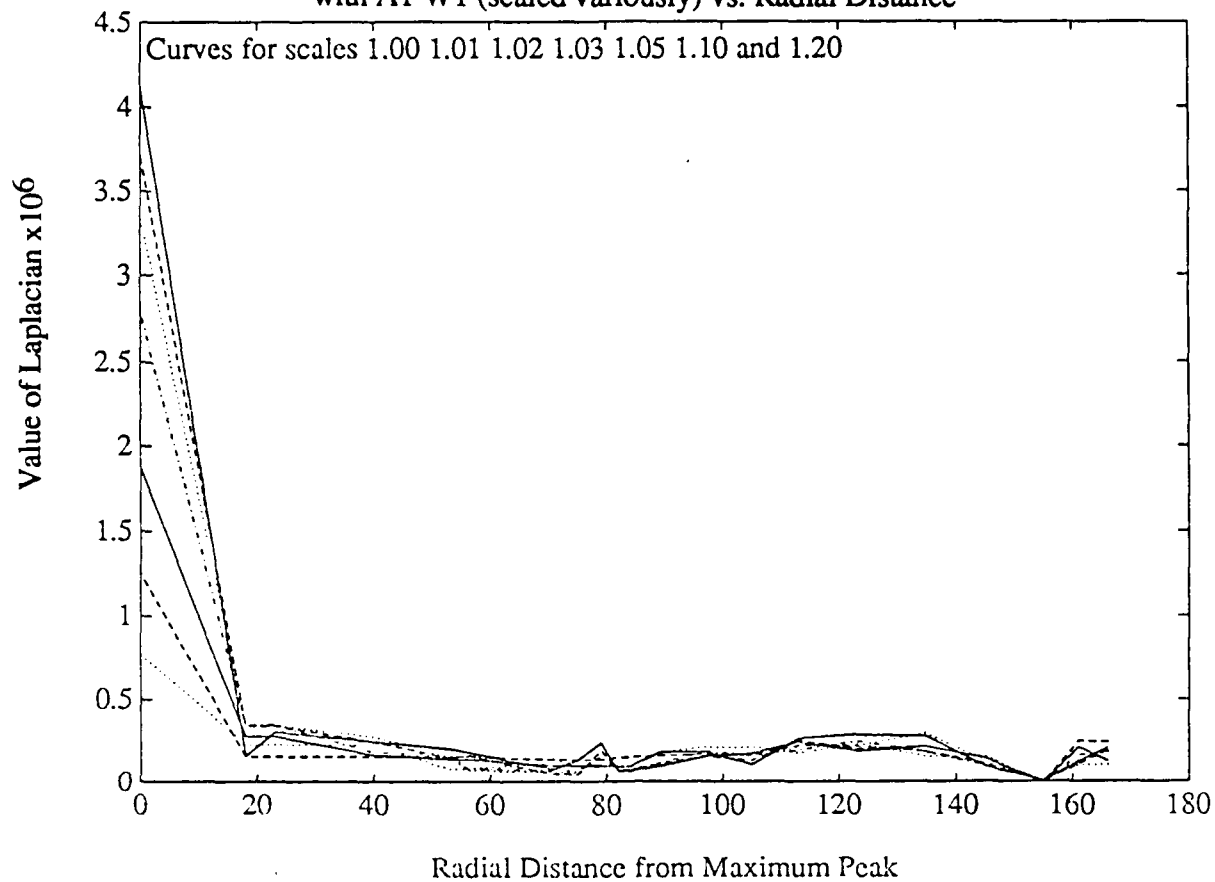


Exhibit II-10-a-2

A1 W1: Laplacian of Correlation of A1 (uncompressed)
with A1 W1 (scaled variously) vs. Radial Distance

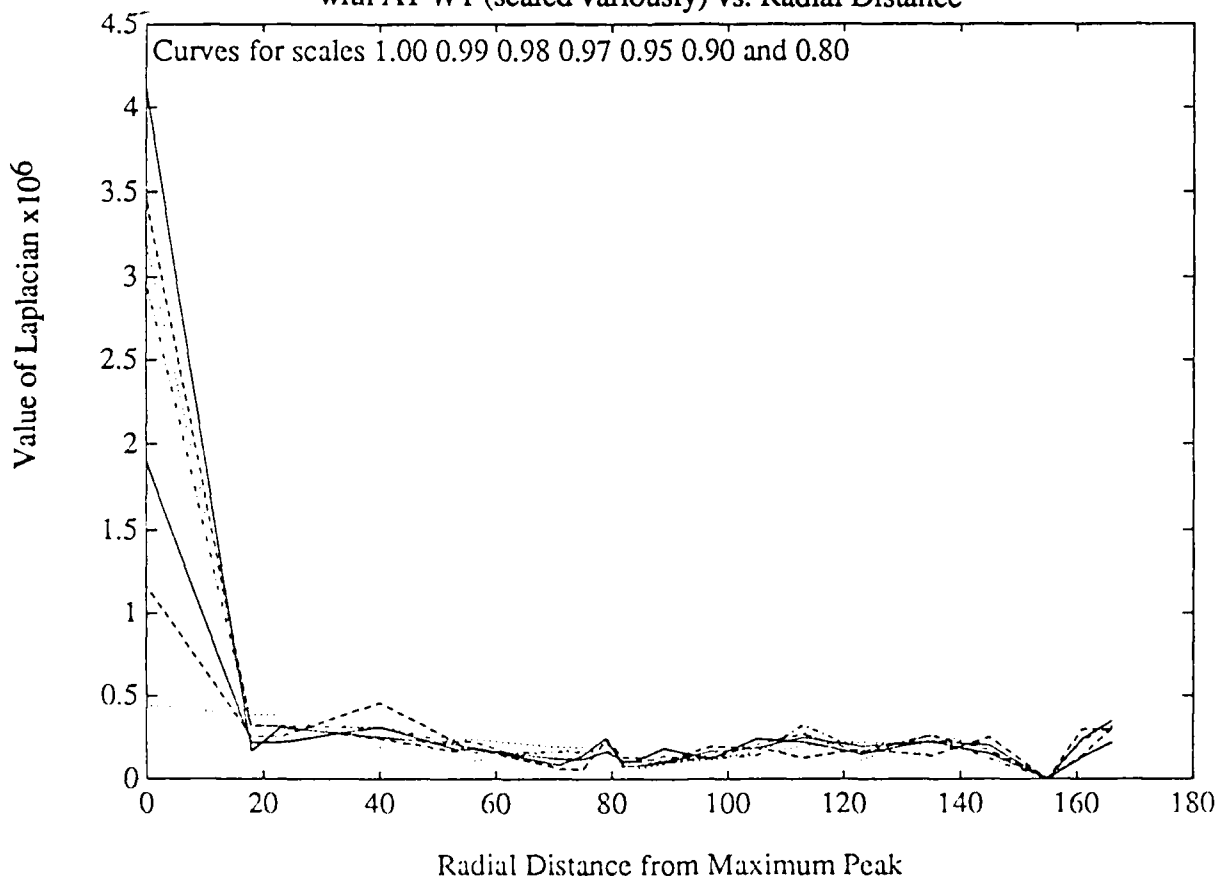


Exhibit II-10-b-1

A1 W1: Laplacian of Correlation of A1 (compressed 14:1)
with A1 W1 (scaled variously) vs. Radial Distance

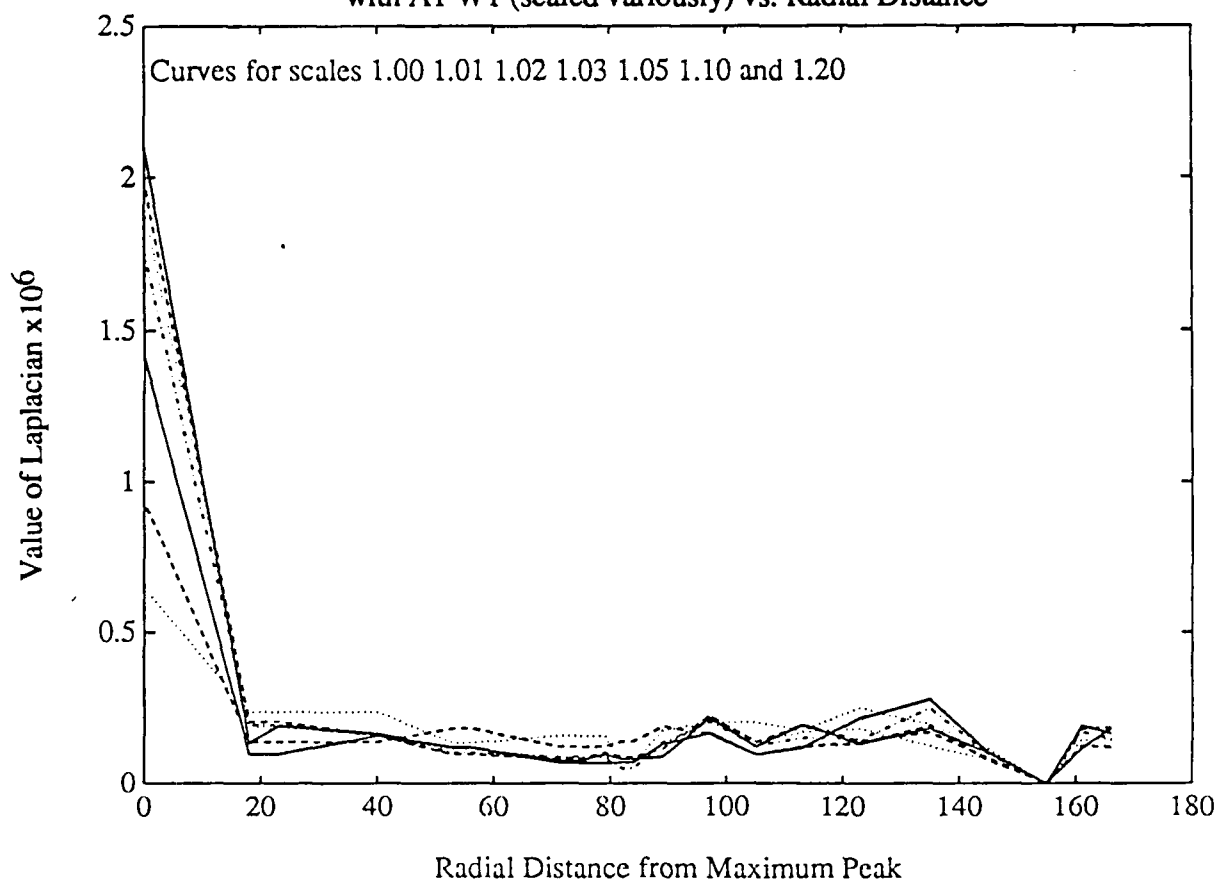


Exhibit II-10-b-2

A1 W1: Laplacian of Correlation of A1 (compressed 14:1)
with A1 W1 (scaled variously) vs. Radial Distance

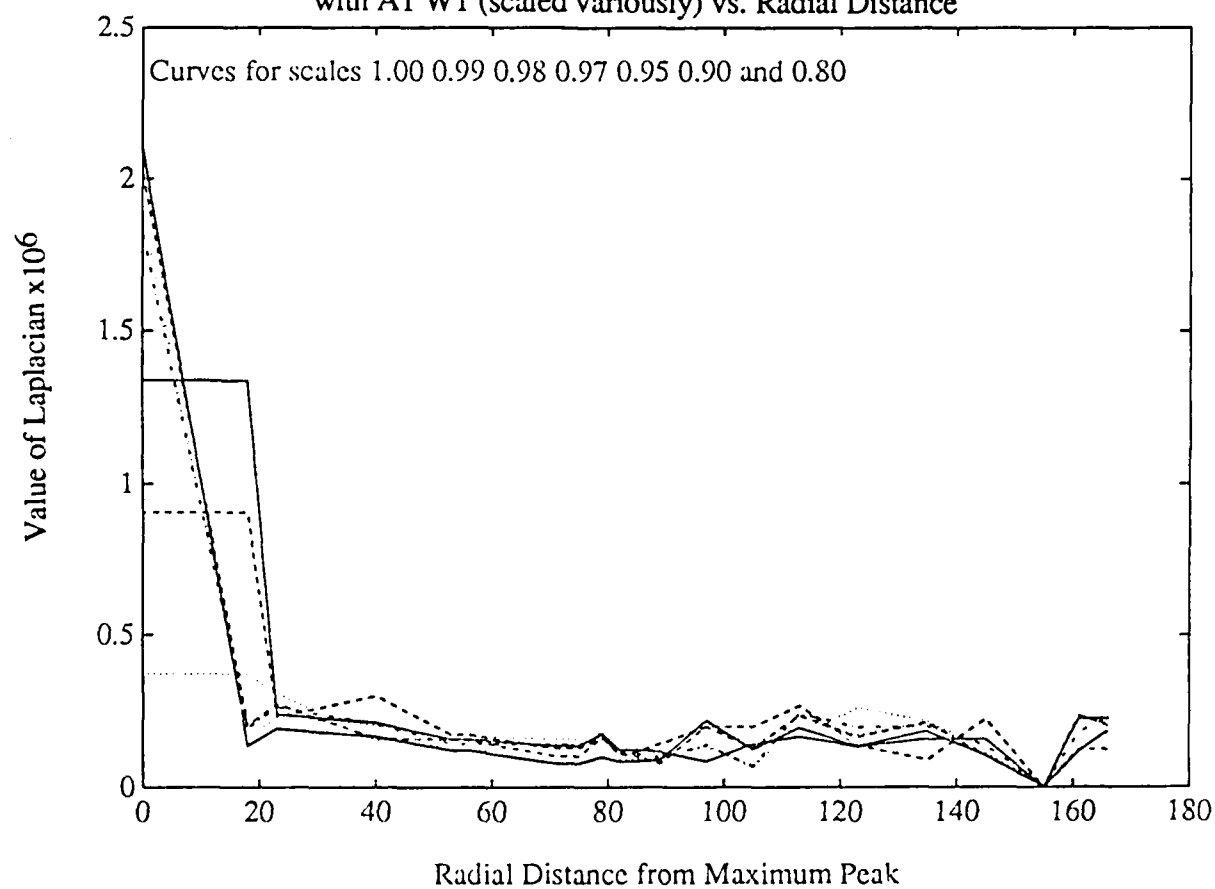


Exhibit II-10-c-1

A1 W1: Laplacian of Correlation of A1 (compressed 23:1)
with A1 W1 (scaled variously) vs. Radial Distance

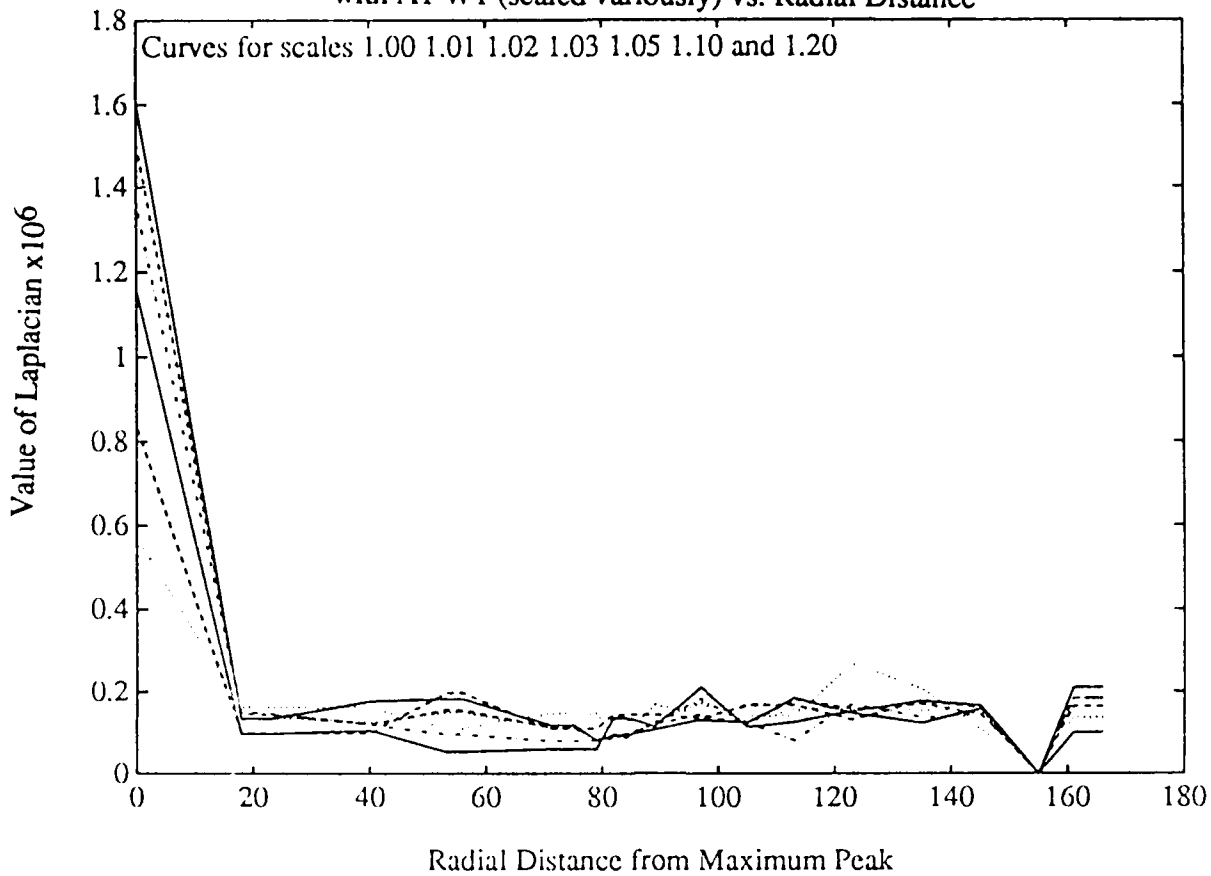
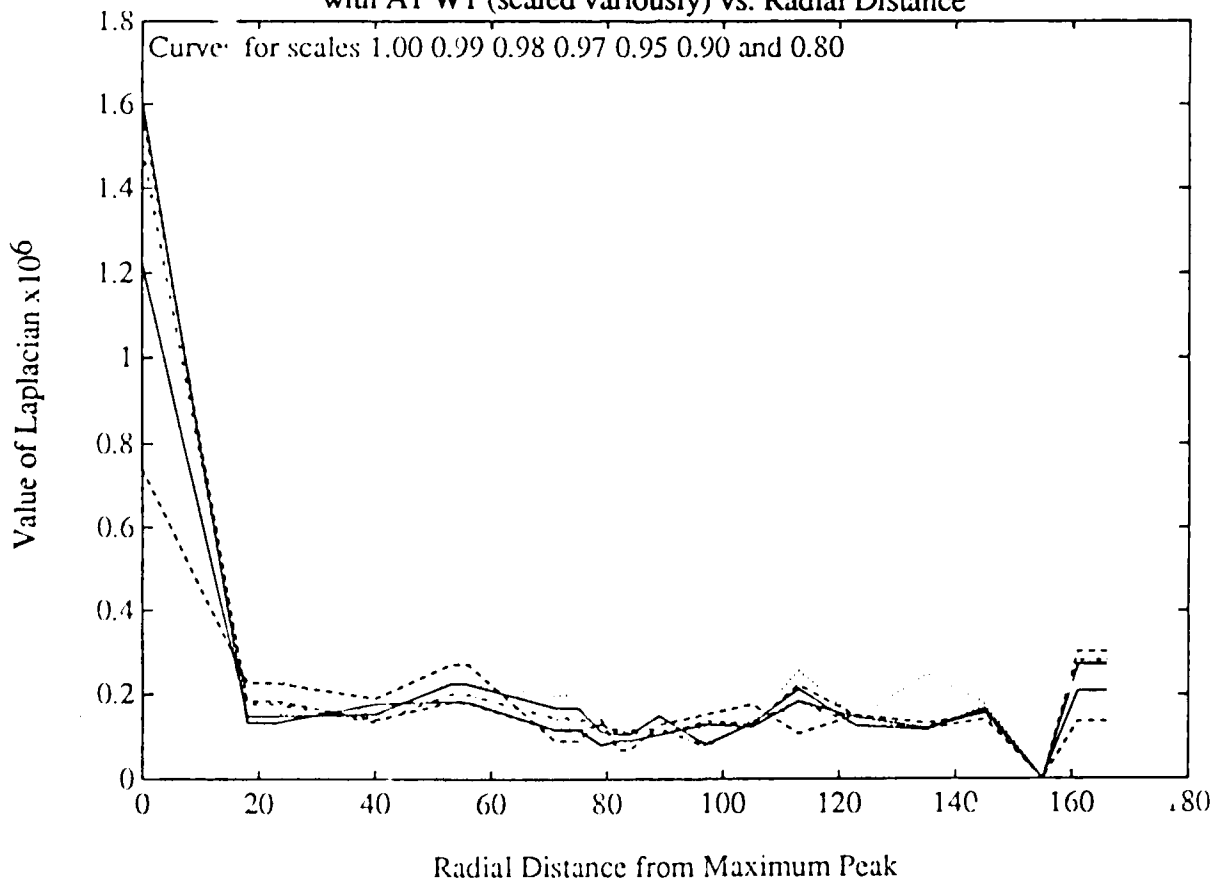
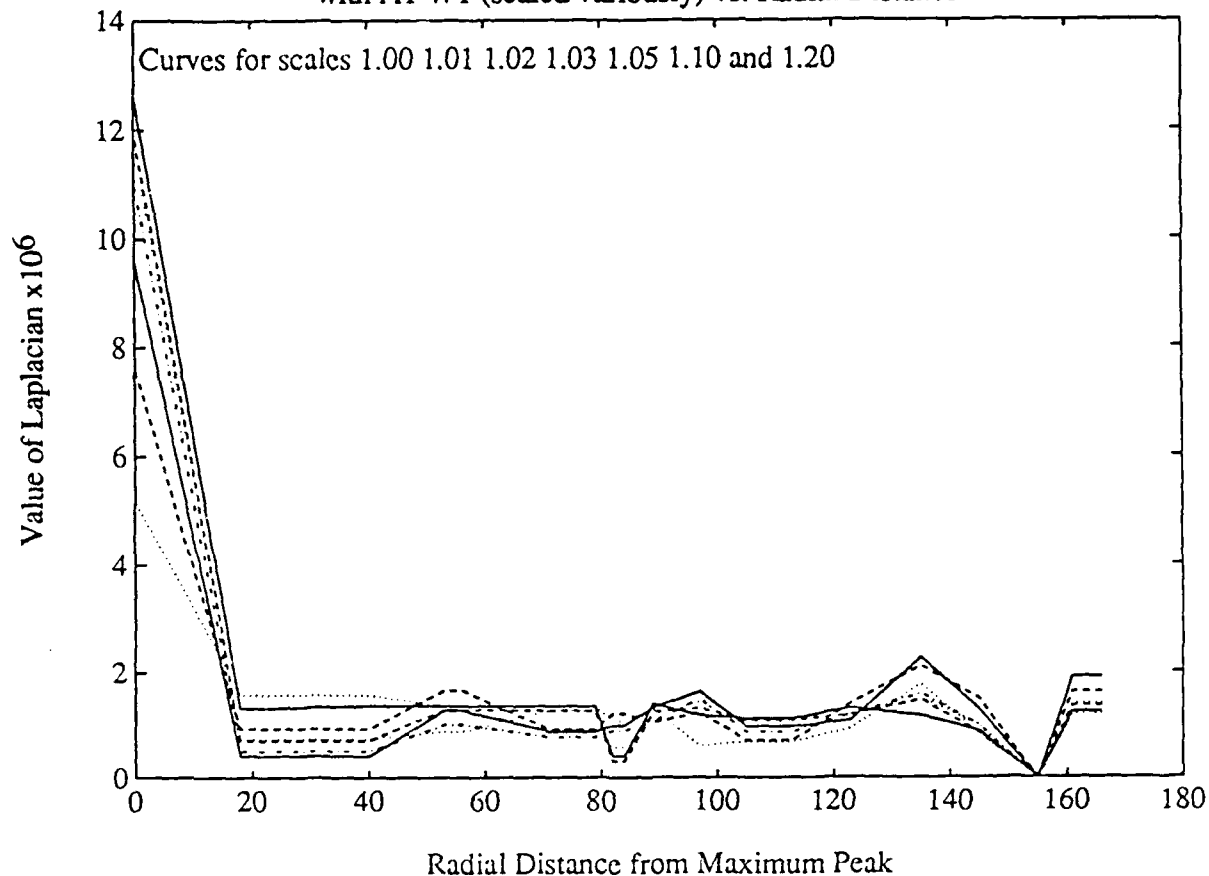


Exhibit II-10-c-2

A1 W1: Laplacian of Correlation of A1 (compressed 23:1)
with A1 W1 (scaled variously) vs. Radial Distance



A1 W1: Laplacian of Correlation of A1 (compressed 33:1)
with A1 W1 (scaled variously) vs. Radial Distance



A1 W1: Laplacian of Correlation of A1 (compressed 33:1)
with A1 W1 (scaled variously) vs. Radial Distance

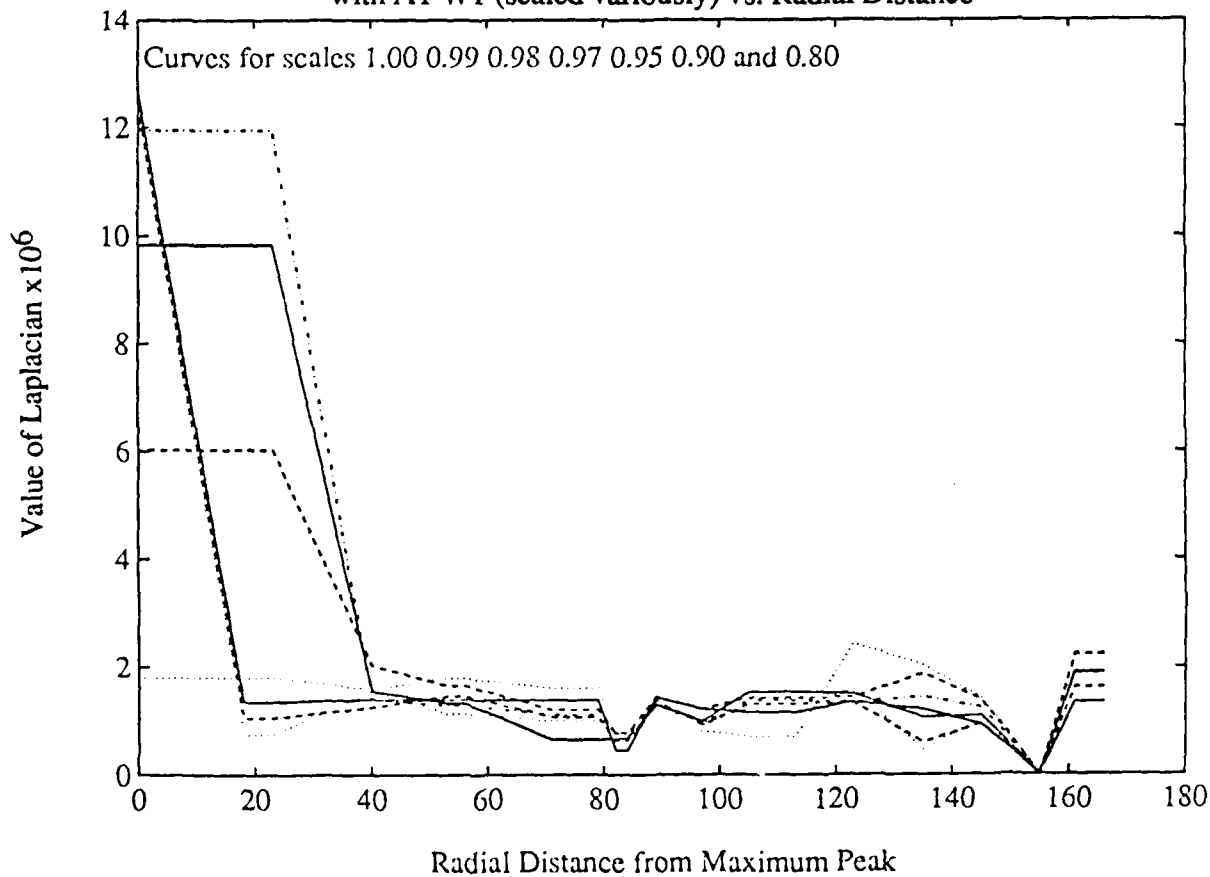


Exhibit II-10-e-1

A1 W1: Laplacian of Correlation of A1 (compressed 58:1)
with A1 W1 (scaled variously) vs. Radial Distance

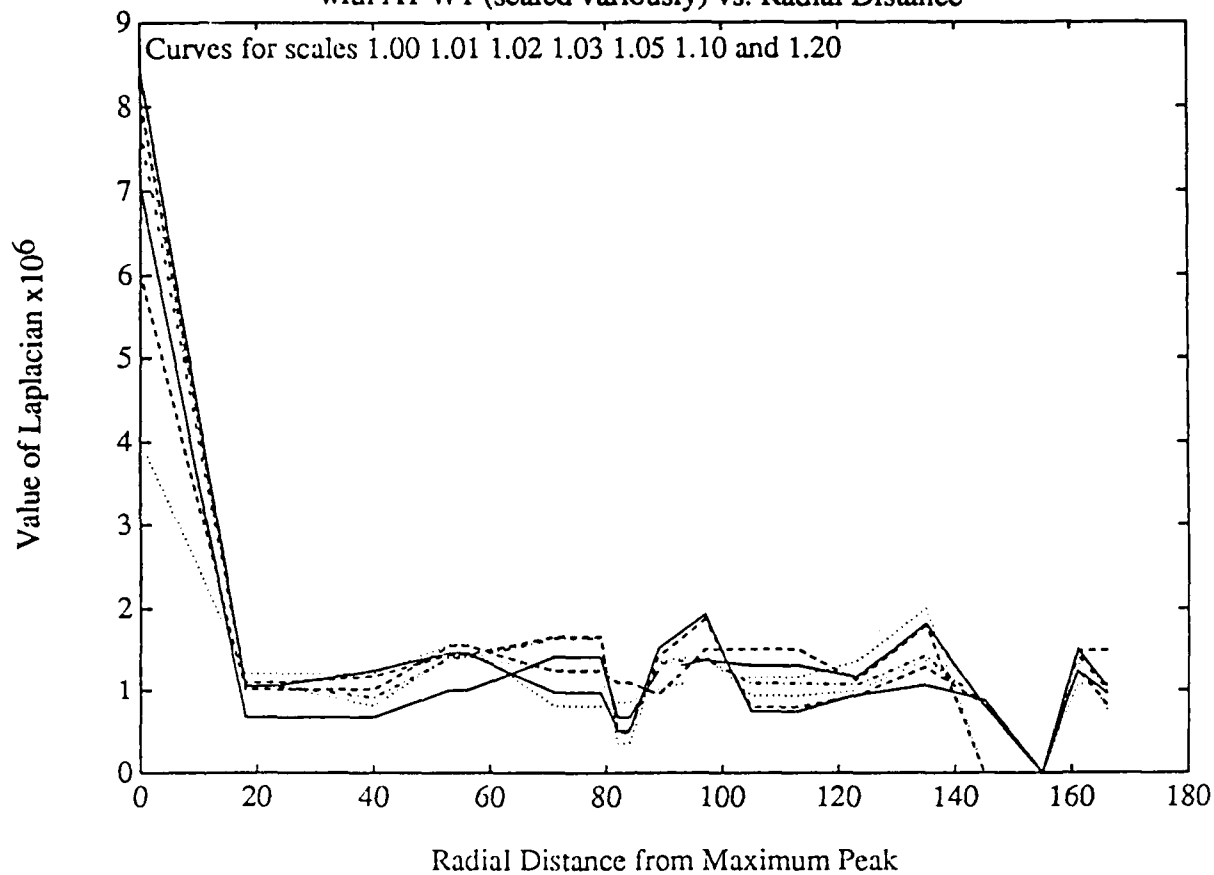


Exhibit II-10-e-2

A1 W1: Laplacian of Correlation of A1 (compressed 58:1)
with A1 W1 (scaled variously) vs. Radial Distance

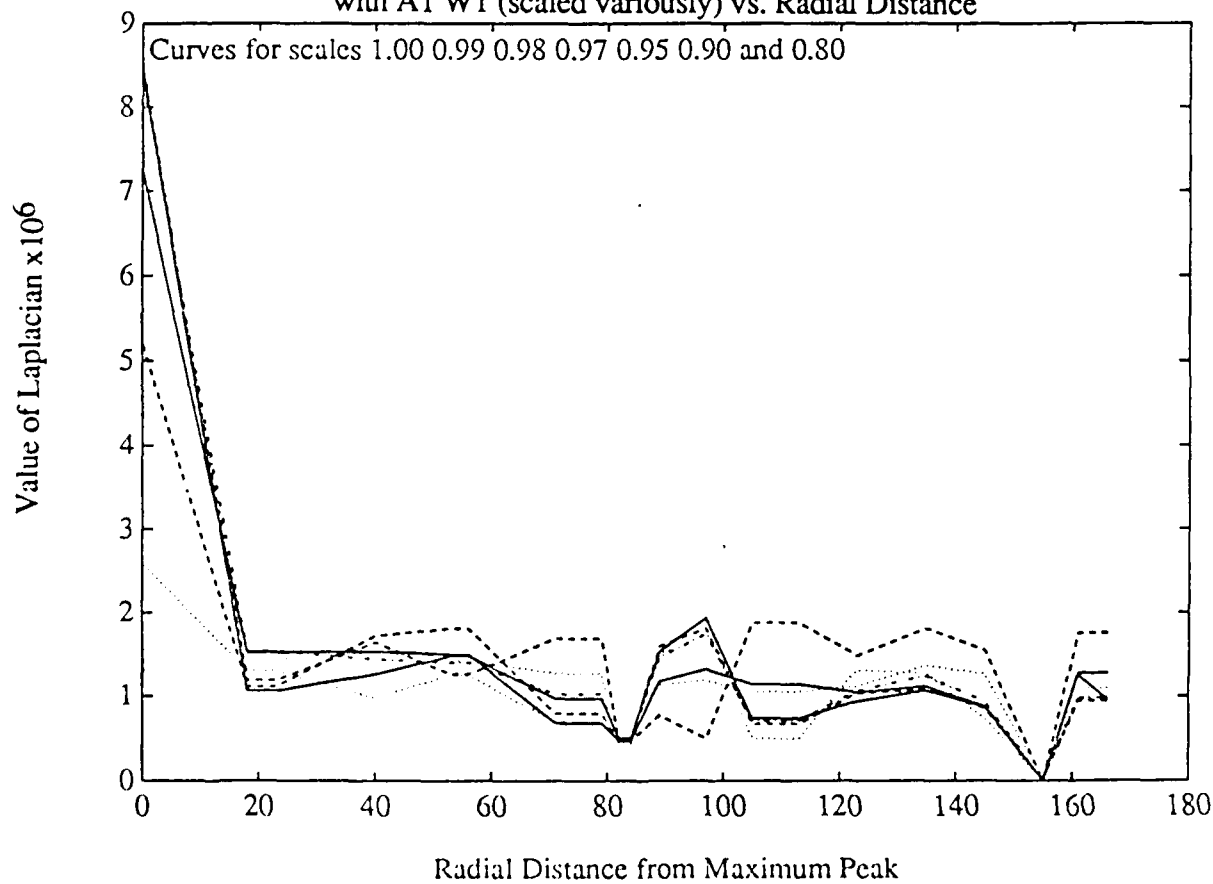


Exhibit II-10-f-1

A1 W1: Laplacian of Correlation of A1 (compressed 90:1)
with A1 W1 (scaled variously) vs. Radial Distance

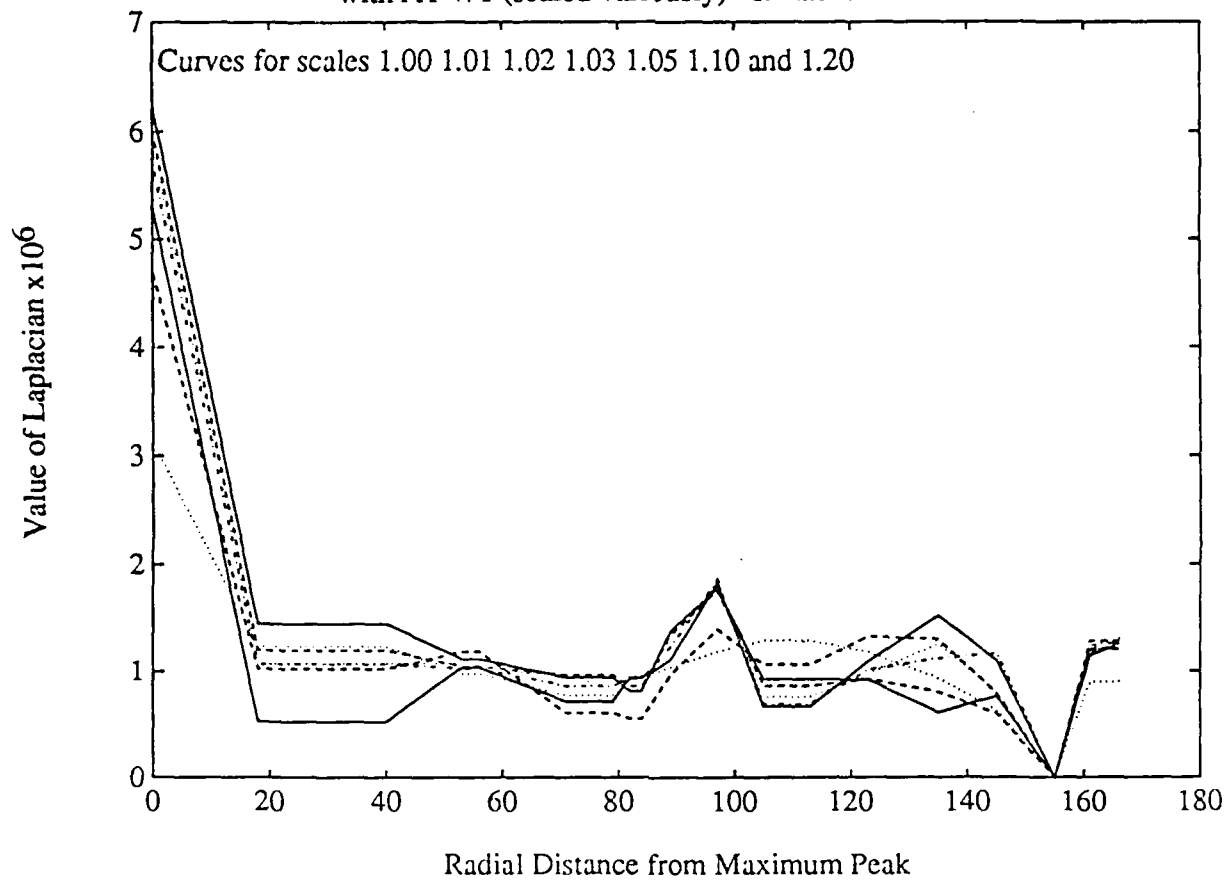


Exhibit II-10-f-2

A1 W1: Laplacian of Correlation of A1 (compressed 90:1)
with A1 W1 (scaled variously) vs. Radial Distance

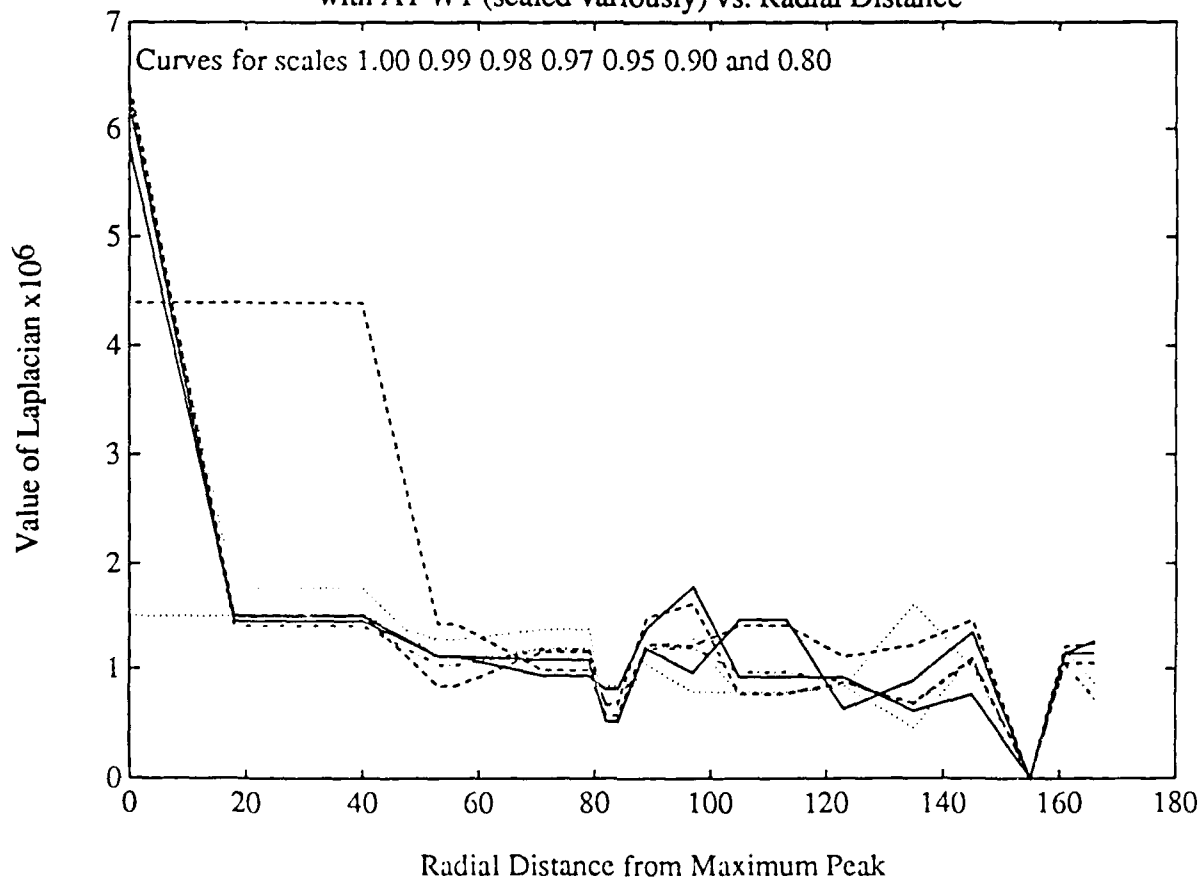


Exhibit II-10-g-1

A1 W1: Laplacian of Correlation of A1 (compressed 120:1)

with A1 W1 (scaled variously) vs. Radial Distance

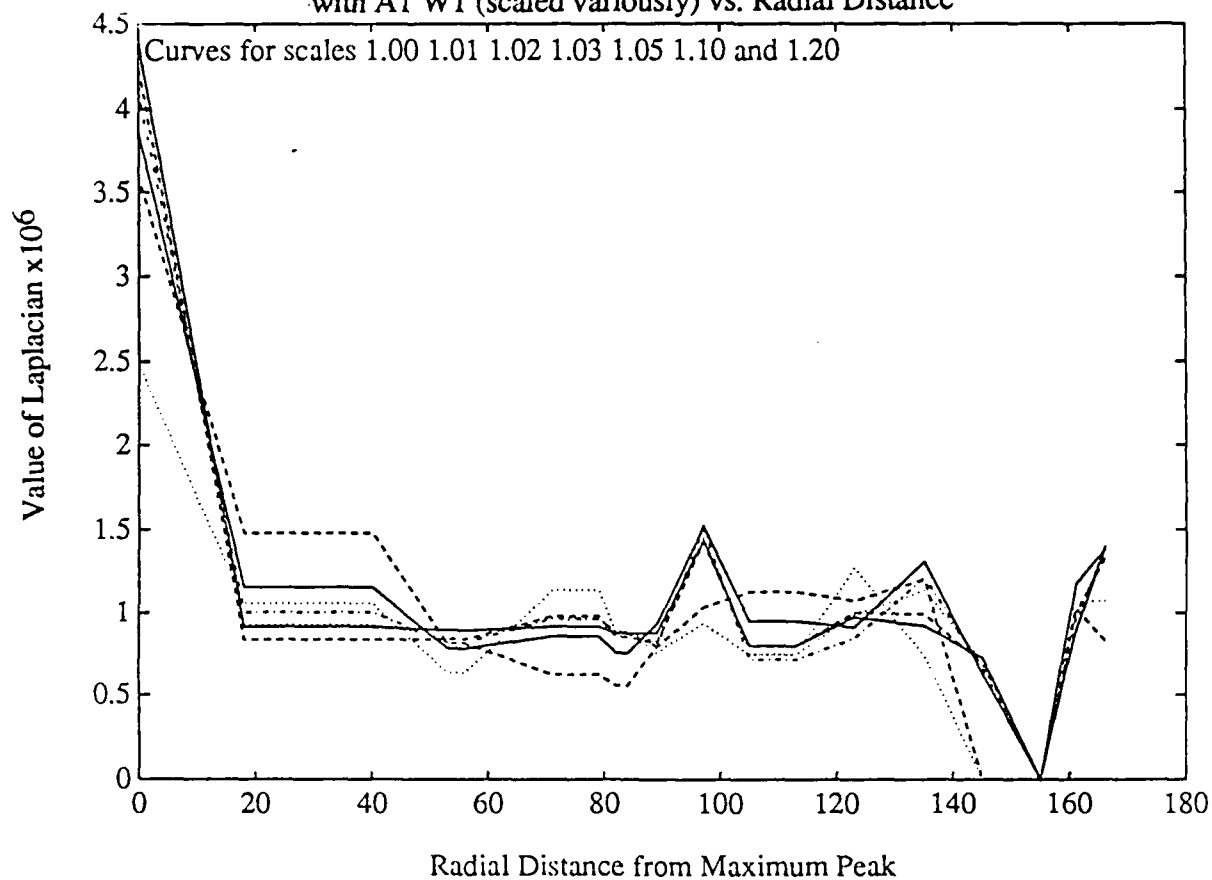
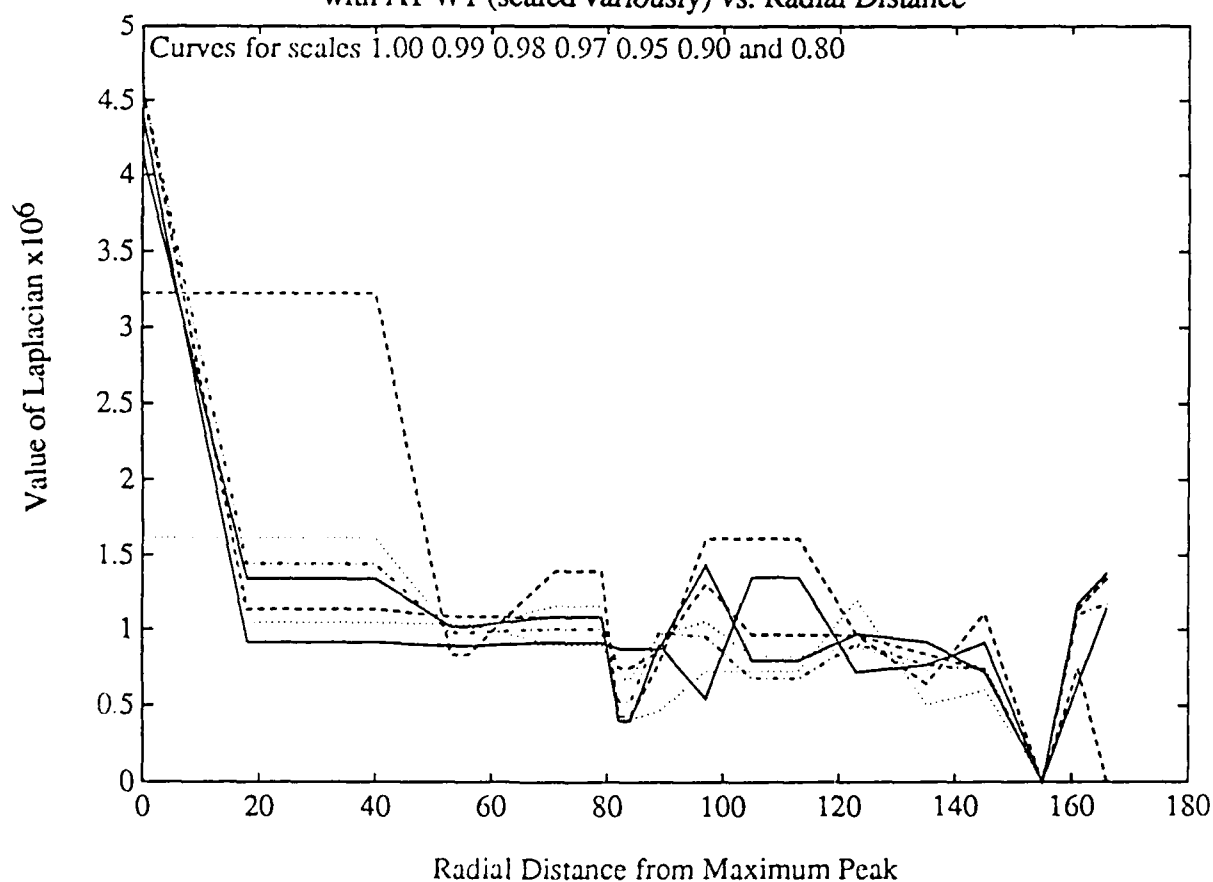


Exhibit II-10-g-2

A1 W1: Laplacian of Correlation of A1 (compressed 120:1)

with A1 W1 (scaled variously) vs. Radial Distance





**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-11

Graph: Laplacian of Correlation of A1 W1 (at a given scale) with A1 (at various compressions) vs. Radial Distance

[One graph per scaling; seven compressions per graph]

Exhibit II-11-a

Laplacian of Correlation of A1 W1 (scale 1.0) with A1
(at various compressions) vs. Radial Distance

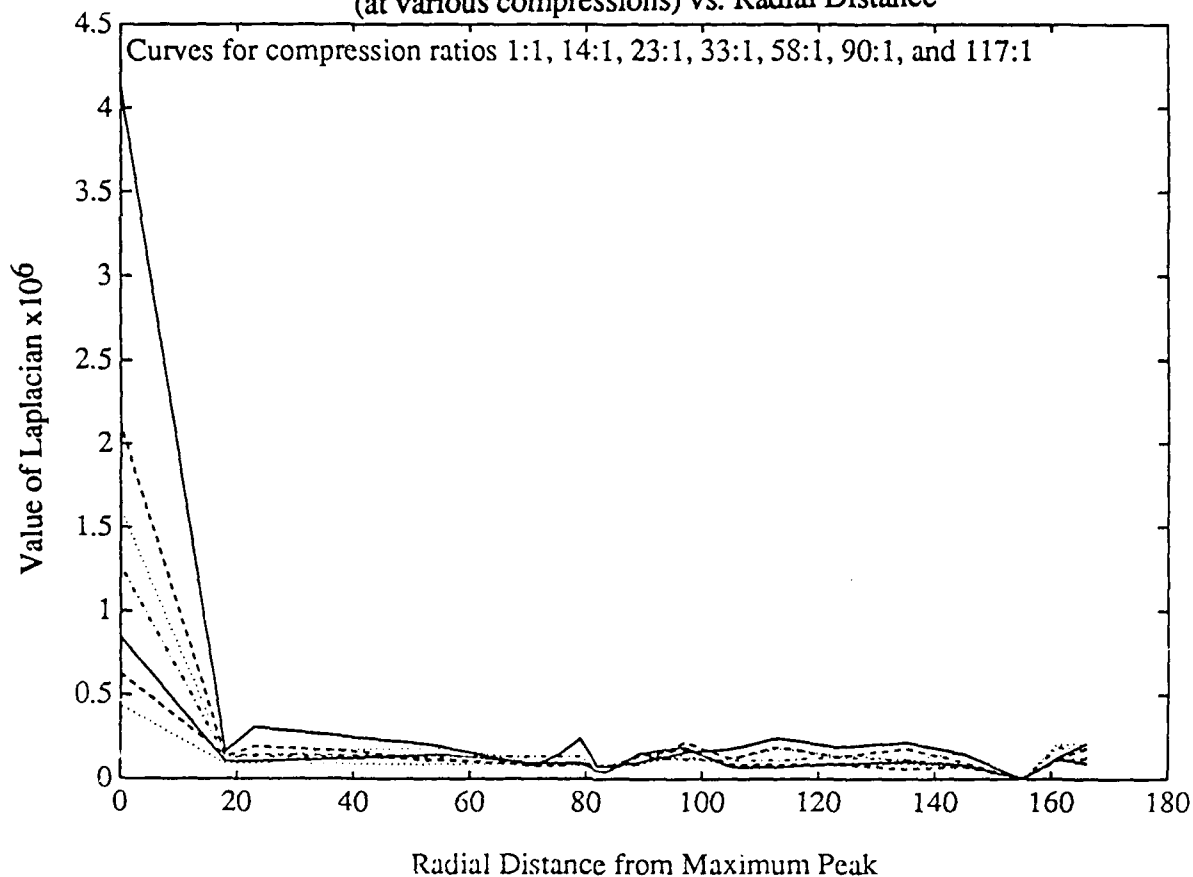
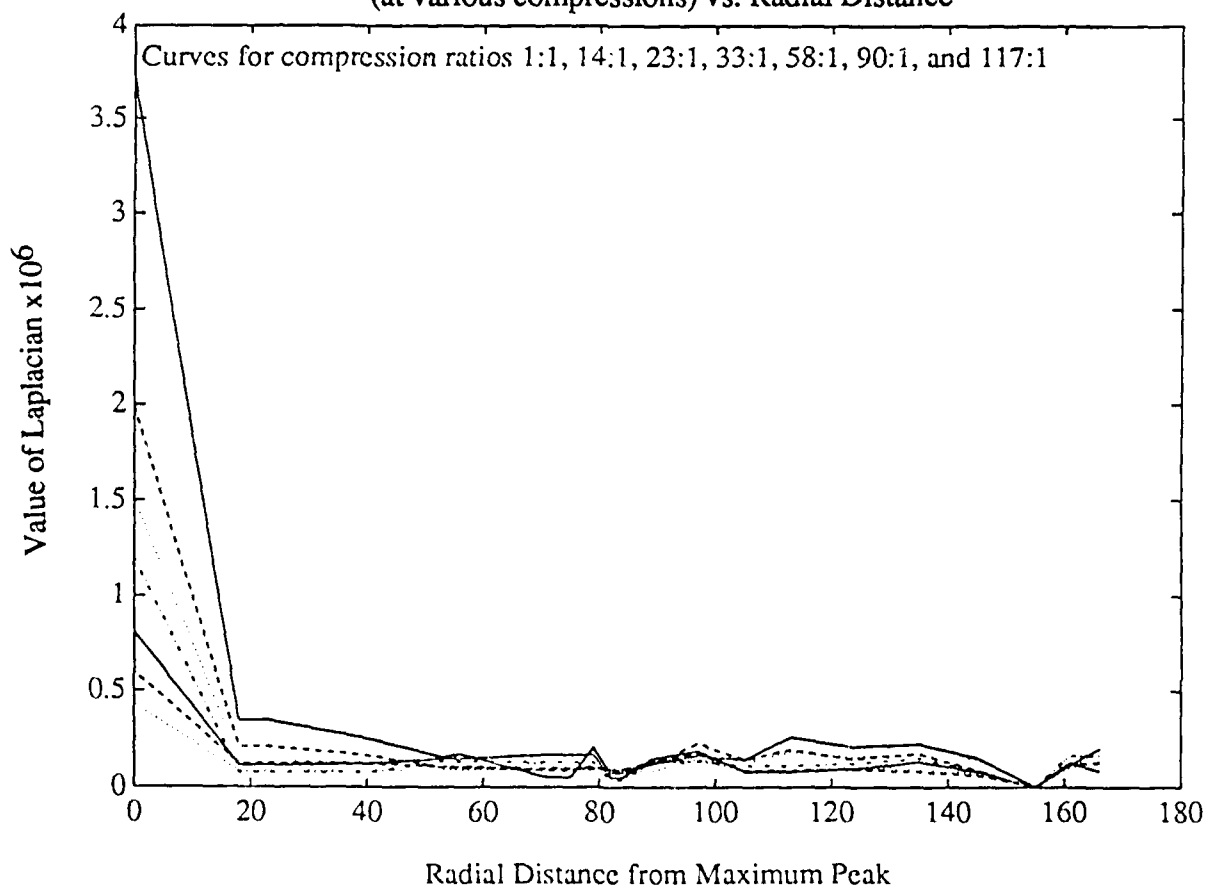
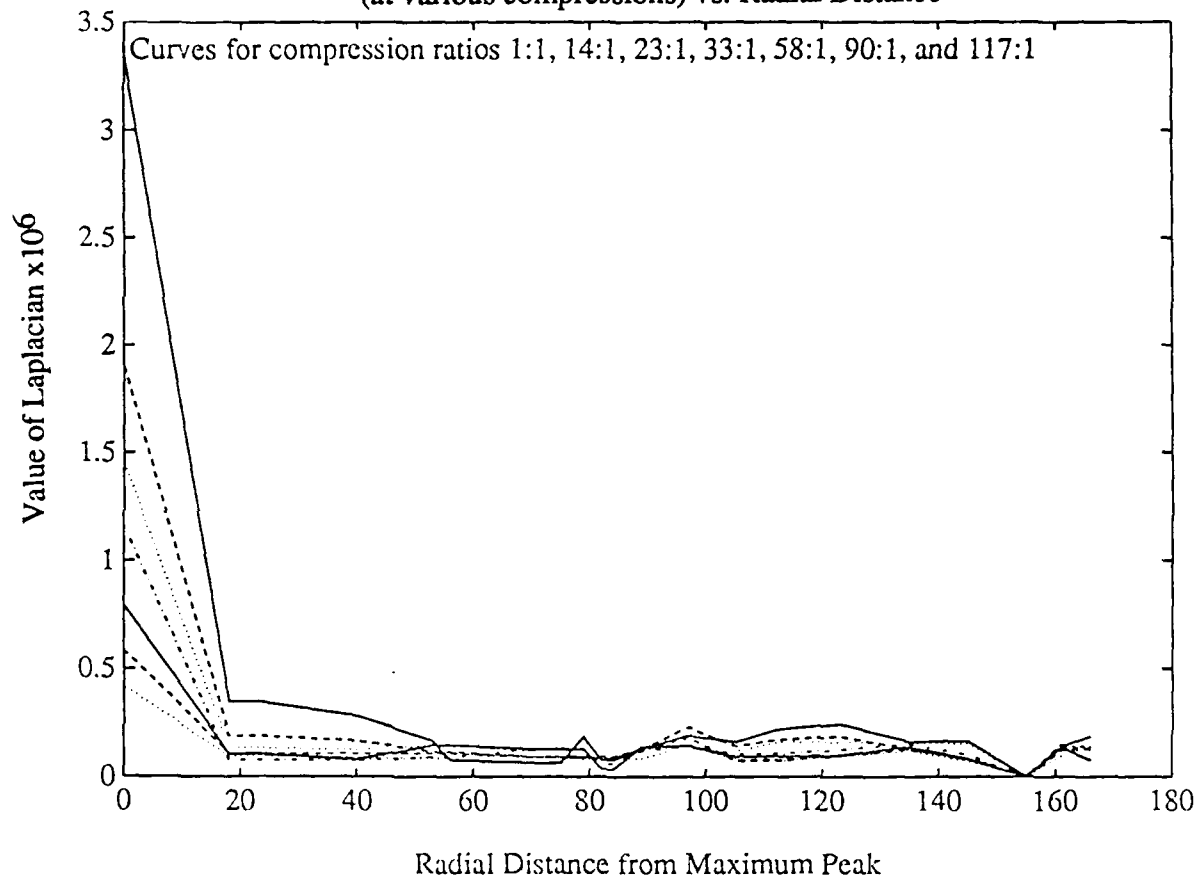


Exhibit II-11-b

Laplacian of Correlation of A1 W1 (scale 1.01) with A1
(at various compressions) vs. Radial Distance



Laplacian of Correlation of A1 W1 (scale 1.02) with A1
(at various compressions) vs. Radial Distance



Laplacian of Correlation of A1 W1 (scale 1.03) with A1
(at various compressions) vs. Radial Distance

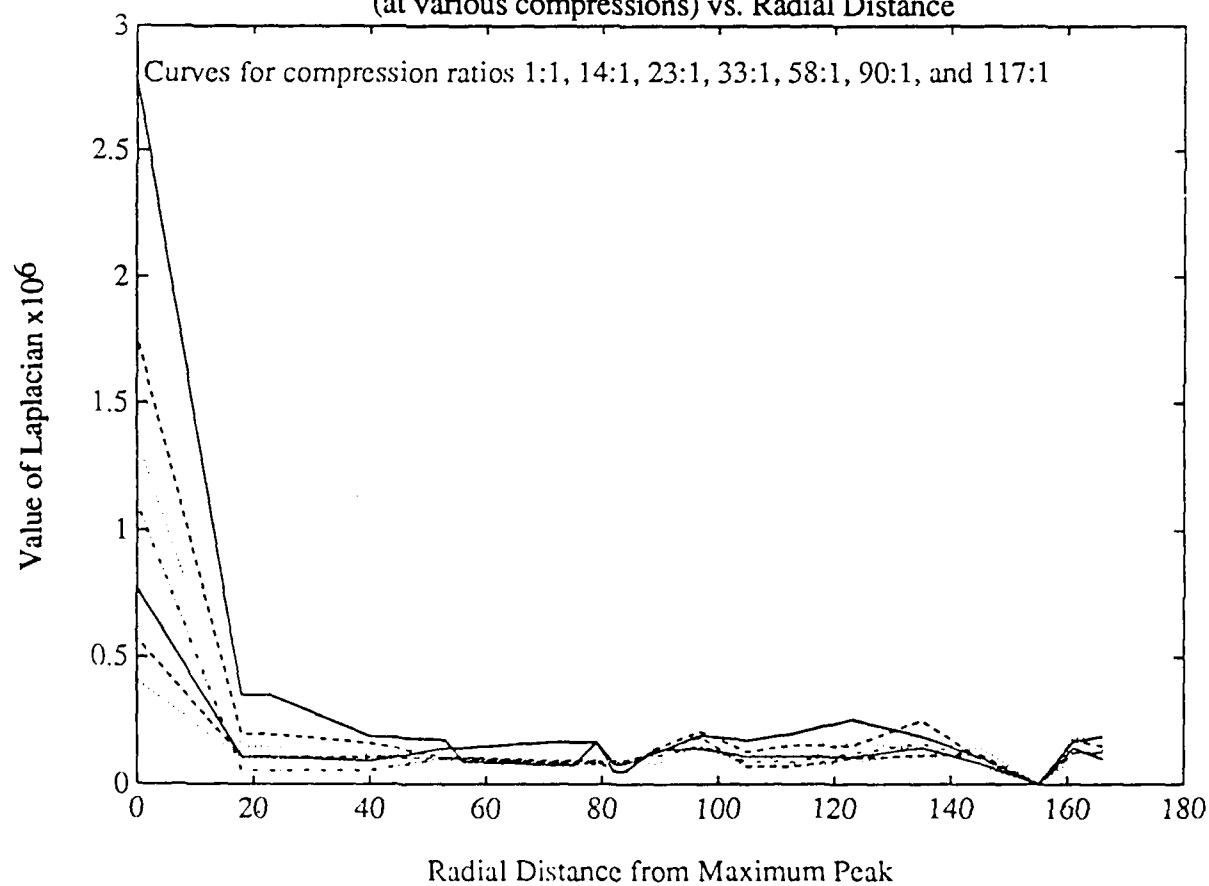


Exhibit II-11-e

Laplacian of Correlation of A1 W1 (scale 1.05) with A1
(at various compressions) vs. Radial Distance

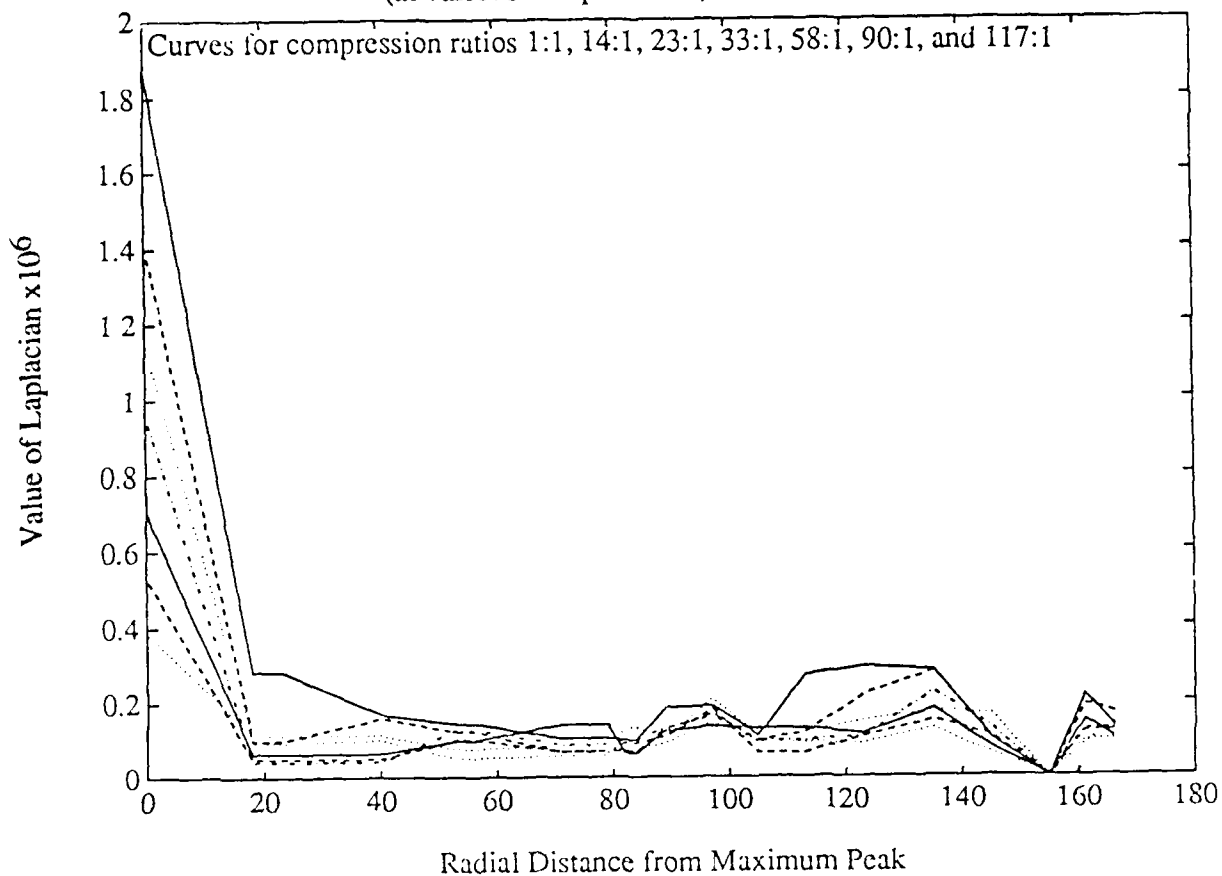


Exhibit II-11-f

Laplacian of Correlation of A1 W1 (scale 1.10) with A1
(at various compressions) vs. Radial Distance

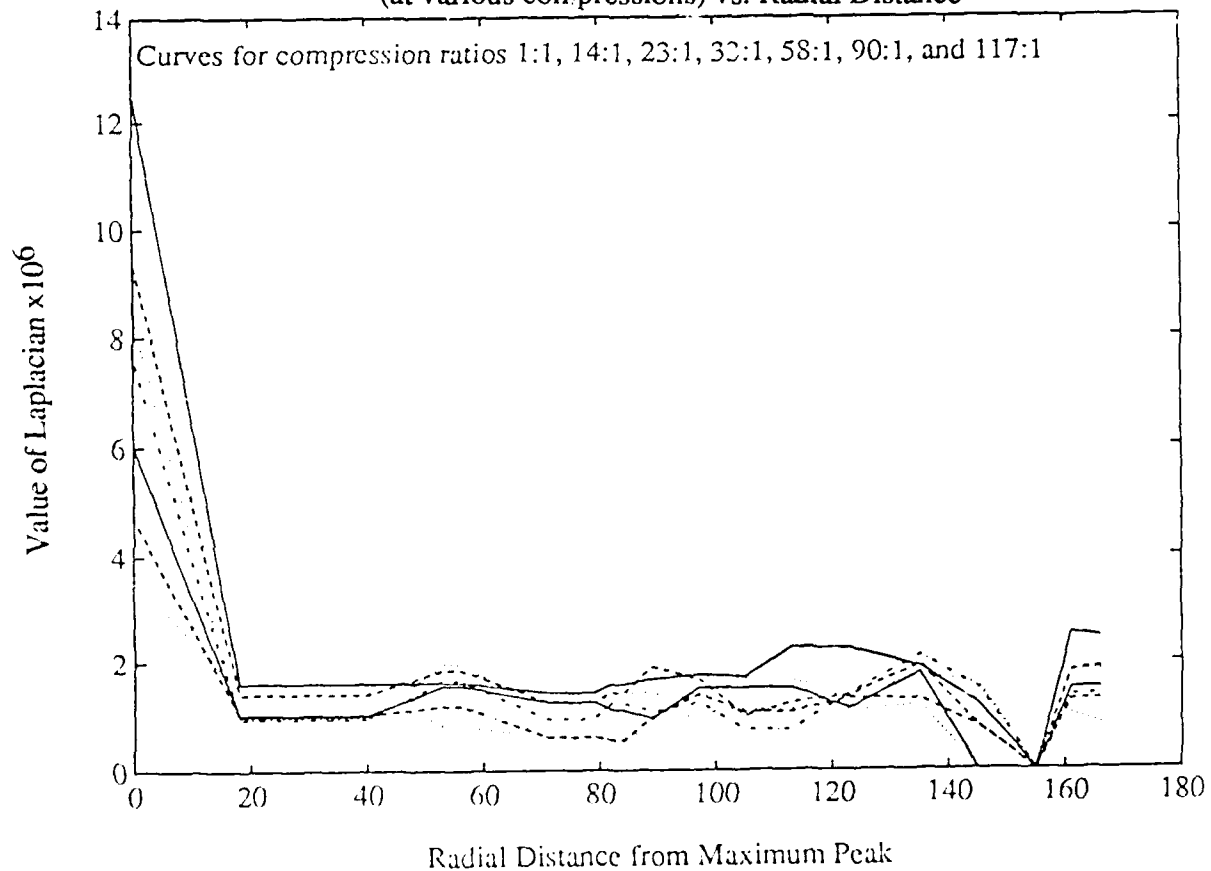


Exhibit II-11-g

Laplacian of Correlation of A1 W1 (scale 1.20) with A1
(at various compressions) vs. Radial Distance

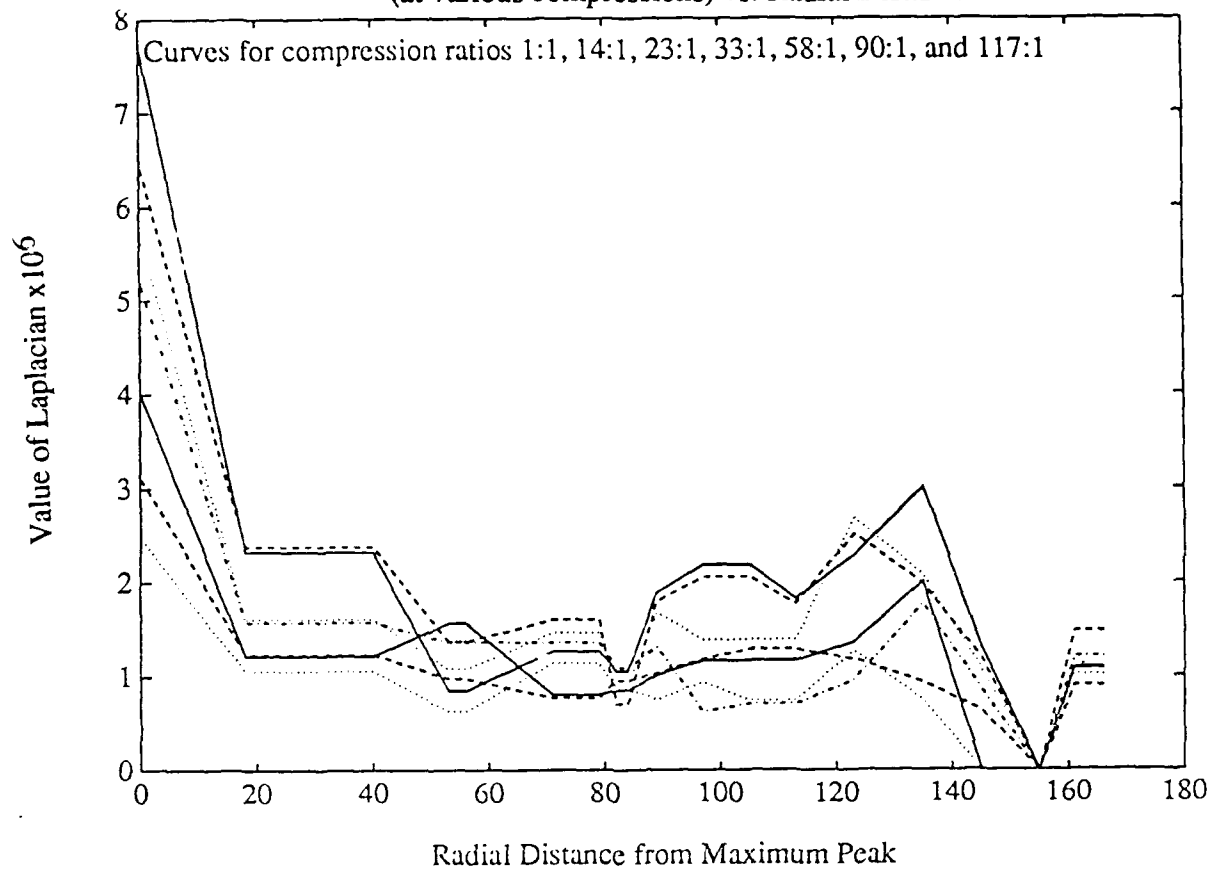


Exhibit II-11-h

Laplacian of Correlation of A1 W1 (scale 0.99) with A1
(at various compressions) vs. Radial Distance

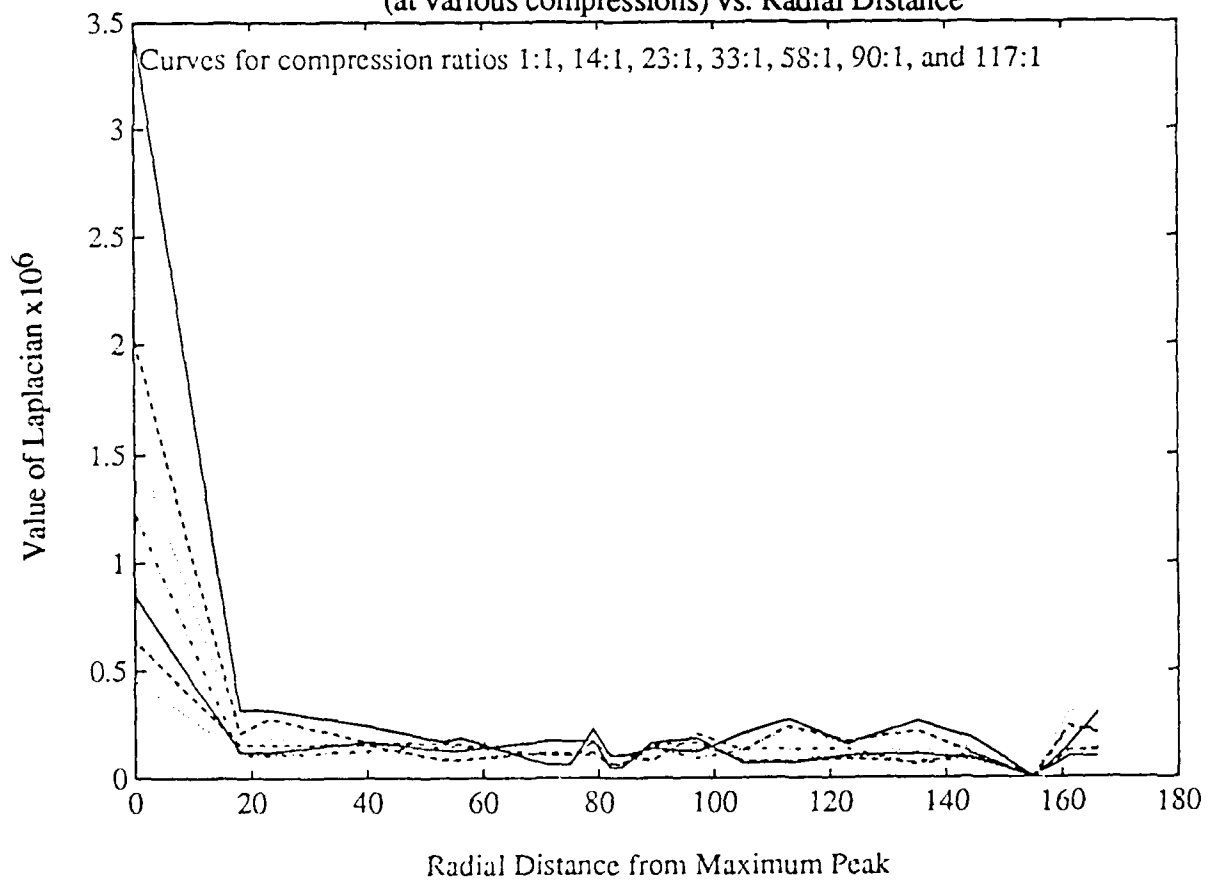


Exhibit II-11-i

Laplacian of Correlation of A1 W1 (scale 0.98) with A1
(at various compressions) vs. Radial Distance

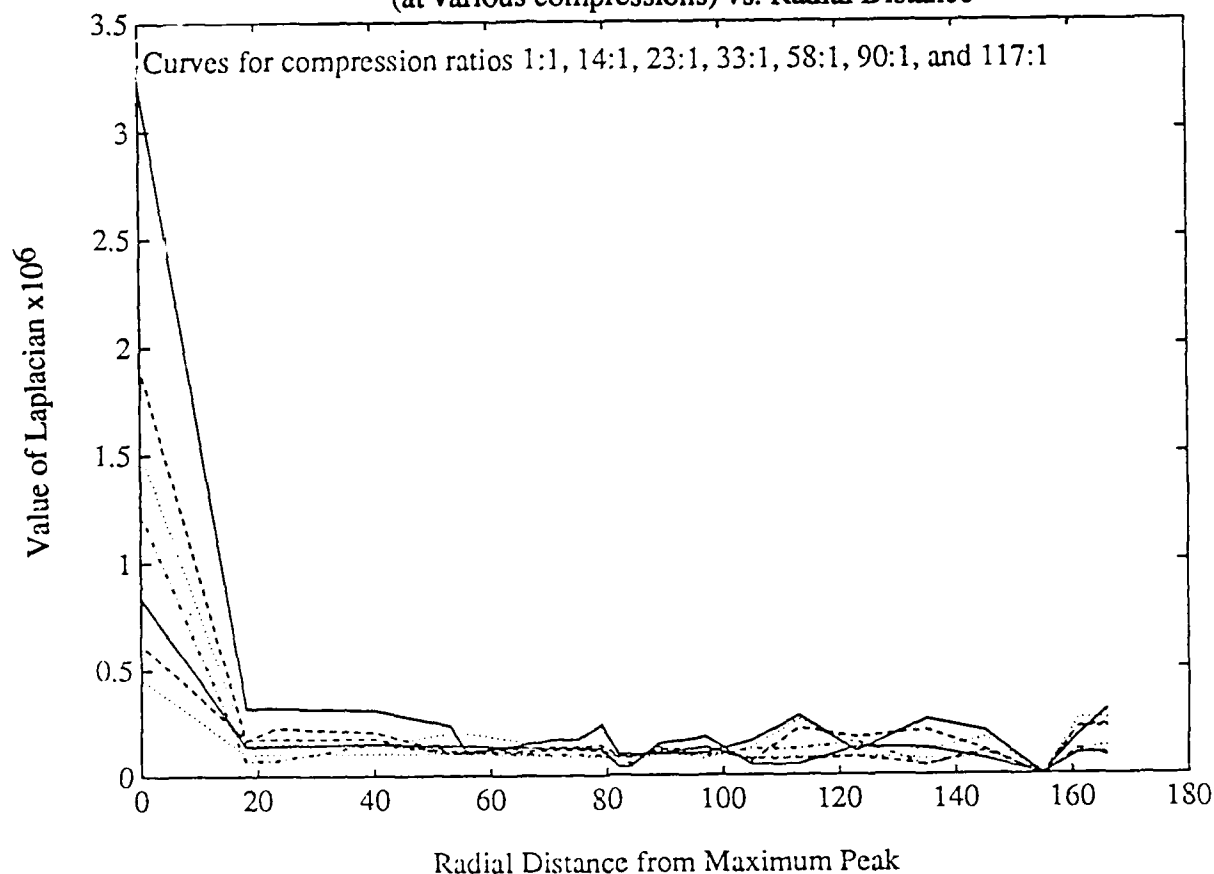


Exhibit II-11-j

Laplacian of Correlation of A1 W1 (scale 0.97) with A1
(at various compressions) vs. Radial Distance

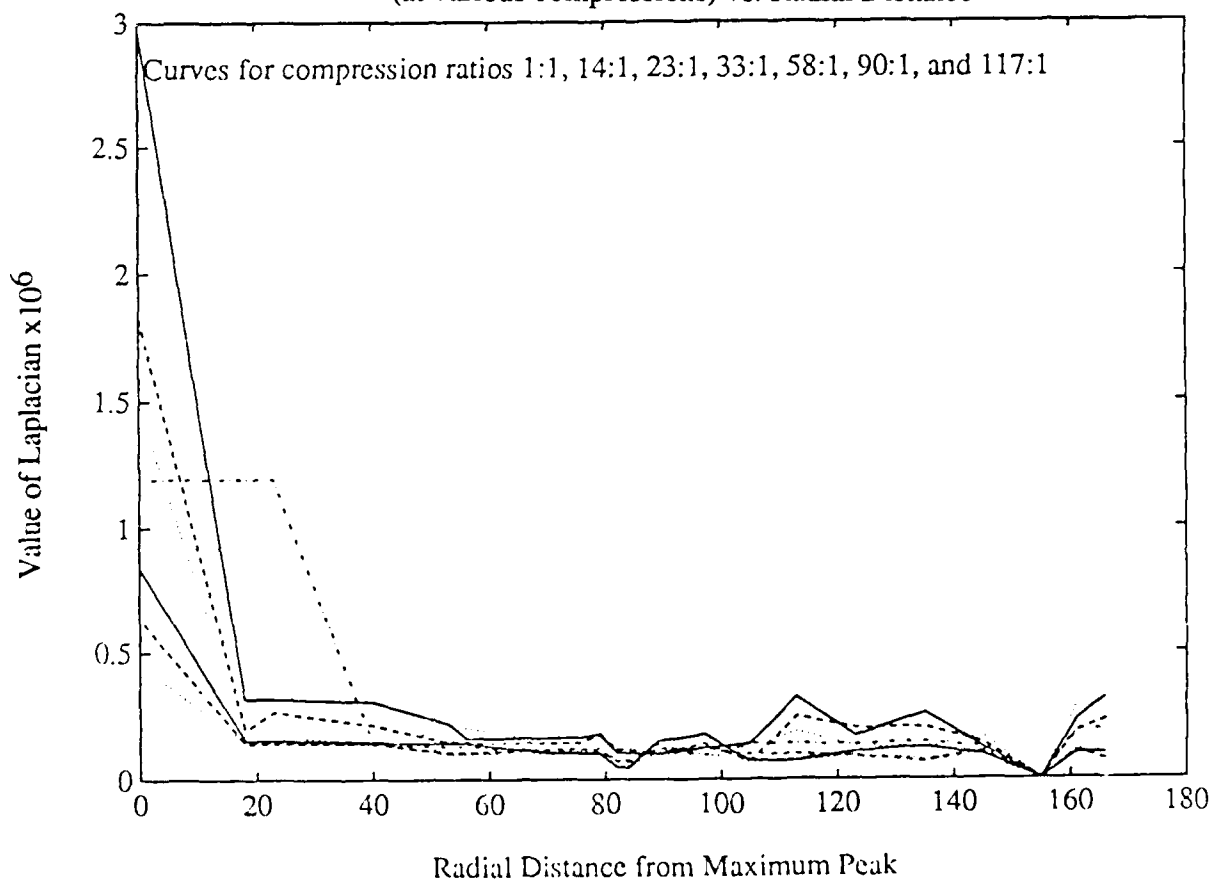


Exhibit II-11-k

Laplacian of Correlation of A1 W1 (scale 0.95) with A1
(at various compressions) vs. Radial Distance

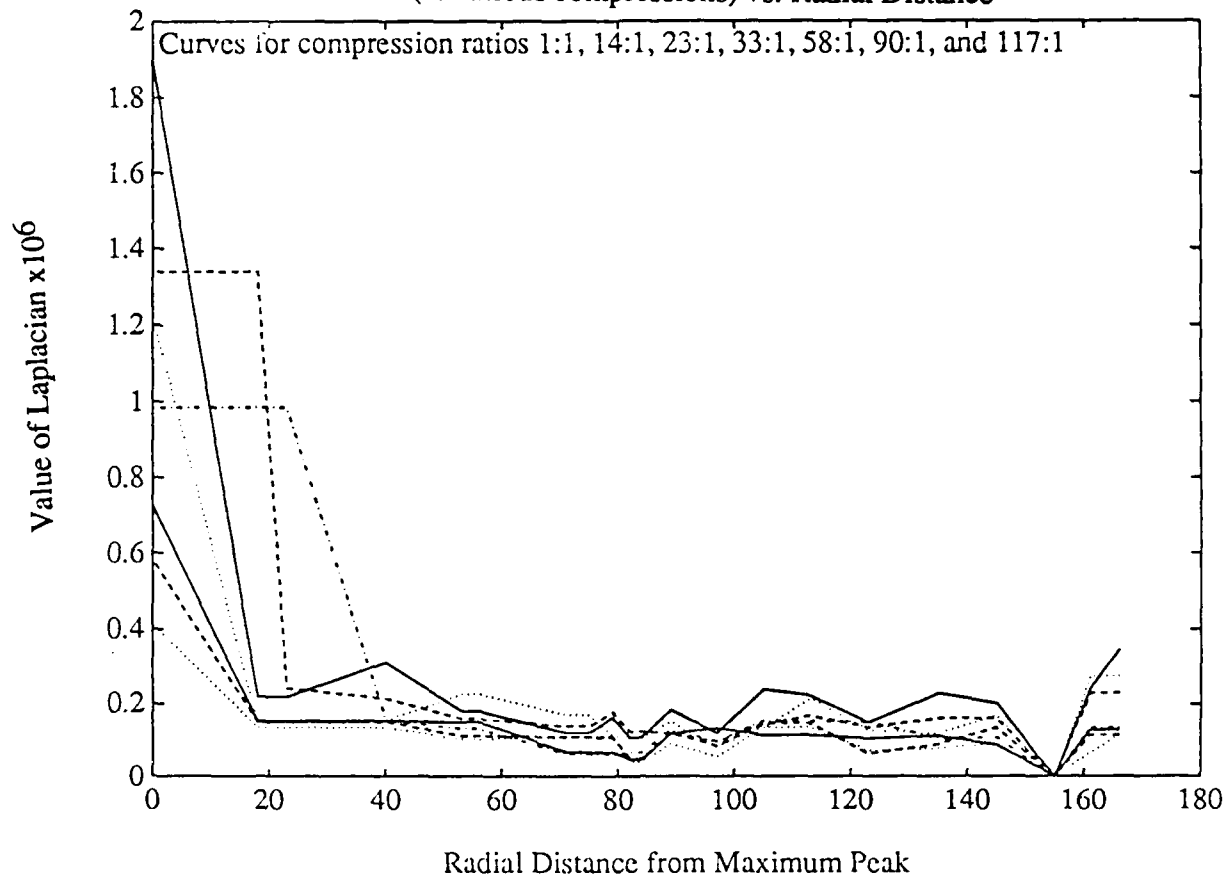
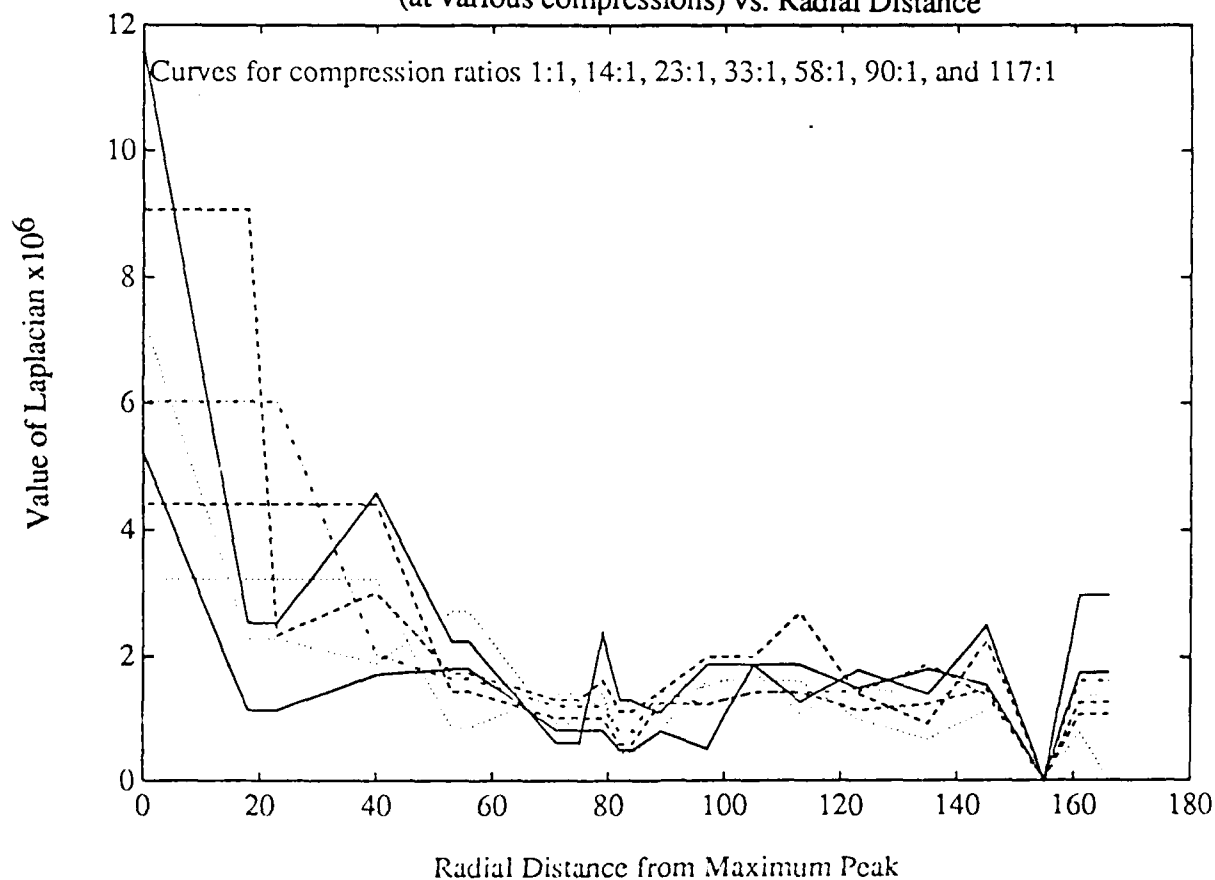
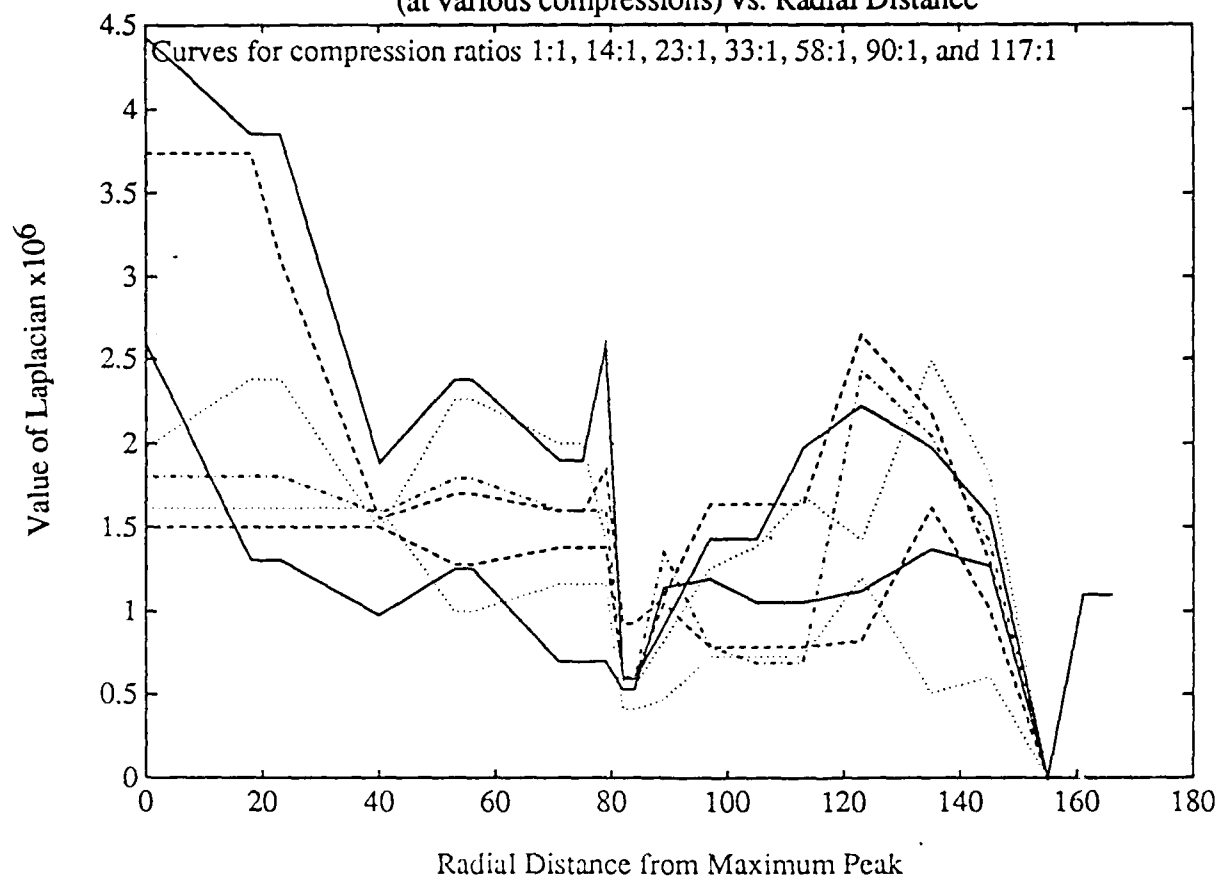


Exhibit II-11-l

Laplacian of Correlation of A1 W1 (scale 0.90) with A1
(at various compressions) vs. Radial Distance



Laplacian of Correlation of A1 W1 (scale 0.80) with A1
(at various compressions) vs. Radial Distance





**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-12

Scaled Data

89/12/01
16:35:32

sc001080.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.80

Location of max in original is (169,359)

Location of max in compression is (161,354), sub-pixel is (163.625,352.250)

Laplacian Value at max location is 705093.500000 at (160,354)

Smoothed (FFT) Maximum Laplacian Value is 1425488.00 at (170.375,360.375)

Adjusting Locations:

```

(165,356) <==> new (161,354)
(184,343) <==> new (180,341)
(184,343) <==> new (180,341)
(174,321) <==> new (175,322)
(221,356) <==> new (216,353)
(221,356) <==> new (216,353)
(161,432) <==> new (157,432)
(161,432) <==> new (157,432)
(167,439) <==> new (158,436)
(229,301) <==> new (224,301)
(229,301) <==> new (224,301)
(242,305) <==> new (244,300)
(174,460) <==> new (172,462)
(174,460) <==> new (172,462)
(178,471) <==> new (179,470)
(48,309) <==> new (44,308)
(276,280) <==> new (272,279)
(251,474) <==> new (257,475)
(276,235) <==> new (275,231)
(276,235) <==> new (275,231)

```

Side Lobe Information, Maximum Value is 5.7837e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(161,354)	442654
0.649484	1.874313	18	(180,341)	385289
0.649484	1.874313	23	(180,341)	385289
0.255579	5.924756	40	(175,322)	188601
0.614770	2.112872	53	(216,353)	237597
0.614770	2.112872	56	(216,353)	237597
0.523040	2.814655	71	(157,432)	189868
0.523040	2.814655	75	(157,432)	189868
0.515090	2.881171	79	(158,436)	257433
0.242851	6.146608	82	(224,301)	59287.4
0.242851	6.146608	84	(224,301)	59287.4
0.190419	7.202897	89	(244,300)	90529.4
0.411770	3.853452	97	(172,462)	143024
0.411770	3.853452	105	(172,462)	143024
0.242493	6.153000	113	(179,470)	197281
0.355157	4.495798	123	(44,308)	221970
0.347899	4.585468	135	(272,279)	197498
0.389450	4.095480	145	(257,475)	156435
0.153889	8.127910	155	(258,231)	0
0.331694	4.792626	161	(275,231)	0
0.331694	4.792626	166	(275,231)	0

89/12/01
16:34:14

sc001090.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.90
Location of max in original is (169,359)
Location of max in compression is (165,356), sub-pixel is (164.625,356.375)
Laplacian Value at max location is 1190622.500000 at (164,357)
Smoothed (FFT) Maximum Laplacian Value is 1704736.00 at (170.375,360.375)

Adjusting Locations:

(167,358) <==> new (165,356)
(186,344) <==> new (184,343)
(186,344) <==> new (184,343)
(176,321) <==> new (174,321)
(223,357) <==> new (221,356)
(223,357) <==> new (221,356)
(161,430) <==> new (161,432)
(161,430) <==> new (161,432)
(165,437) <==> new (167,439)
(230,303) <==> new (229,301)
(230,303) <==> new (229,301)
(243,306) <==> new (242,305)
(174,454) <==> new (174,460)
(175,461) <==> new (174,460)
(180,472) <==> new (178,471)
(52,310) <==> new (48,309)
(278,280) <==> new (276,280)
(253,474) <==> new (251,474)
(275,238) <==> new (276,235)
(279,235) <==> new (276,235)

Side Lobe Information, Maximum Value is 8.2423e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(165,356)	1.16537e+06
0.470280	3.276439	18	(184,343)	252865
0.470280	3.276439	23	(184,343)	252865
0.247527	6.063766	40	(174,321)	457402
0.368116	4.340151	53	(221,356)	224108
0.368116	4.340151	56	(221,356)	224108
0.299115	5.241614	71	(161,432)	59147.8
0.299115	5.241614	75	(161,432)	59147.8
0.274671	5.611866	79	(167,439)	236150
0.222551	6.525707	82	(229,301)	128389
0.222551	6.525707	84	(229,301)	128389
0.203942	6.904941	89	(242,305)	107498
0.358341	4.457031	97	(174,460)	188350
0.358341	4.457031	105	(174,460)	188350
0.272272	5.649973	113	(178,471)	125416
0.278669	5.549120	123	(48,309)	179192
0.230987	6.364128	135	(276,280)	138354
0.253759	5.955778	145	(251,474)	249558
0.230077	6.381267	155	(258,231)	0
0.278534	5.551223	161	(276,235)	297477
0.278534	5.551223	166	(276,235)	297477

89/12/01
16:32:56

sc001095.rep

1

Image A2VIR1(41:297,231:487) at compression 1.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.95

Location of max in original is (169,359)

Location of max in compression is (167,358), sub-pixel is (167.250,357.500)

Laplacian Value at max location is 1899927.000000 at (167,358)

Smoothed (FFT) Maximum Laplacian Value is 1307264.00 at (168.750,358.625)

Adjusting Locations:

(168,358) <==> new (167,358)
(187,345) <==> new (186,344)
(187,345) <==> new (186,344)
(178,320) <==> new (176,321)
(222,364) <==> new (223,357)
(223,358) <==> new (223,357)
(160,429) <==> new (161,430)
(160,429) <==> new (161,430)
(165,437) does not move
(231,303) <==> new (230,303)
(231,303) <==> new (230,303)
(243,307) <==> new (243,306)
(175,455) <==> new (174,454)
(176,463) <==> new (175,461)
(181,472) <==> new (180,472)
(53,310) <==> new (52,310)
(279,281) <==> new (278,280)
(255,475) <==> new (253,474)
(275,239) <==> new (275,238)
(280,236) <==> new (279,235)

Side Lobe Information, Maximum Value is 9.3478e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(167,358)	1.89993e+06
0.428843	3.677012	18	(186,344)	217907
0.428843	3.677012	23	(186,344)	217907
0.207838	6.822747	40	(176,321)	310500
0.298933	5.244263	53	(223,357)	179074
0.298933	5.244263	56	(223,357)	179074
0.236692	6.258169	71	(161,430)	119390
0.236692	6.258169	75	(161,430)	119390
0.237810	6.237698	79	(165,437)	162454
0.199730	6.995564	82	(230,303)	106873
0.199730	6.995564	84	(230,303)	106873
0.204572	6.891542	89	(243,306)	182654
0.287046	5.420491	97	(174,454)	118628
0.312029	5.058047	105	(175,461)	238411
0.248676	6.043667	113	(180,472)	221383
0.247021	6.072657	123	(52,310)	148349
0.197243	7.049992	135	(278,280)	227539
0.227980	6.421033	145	(253,474)	200903
0.241460	6.171542	155	(258,231)	0
0.220032	6.575146	161	(275,238)	239980
0.251159	6.000512	166	(279,235)	345419

89/12/01
16:31:40

sc001097.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.97
Location of max in original is (169,359)
Location of max in compression is (168,358), sub-pixel is (168.125,358.125)
Laplacian Value at max location is 2969877.000000 at (168,358)
Smoothed (FFT) Maximum Laplacian Value is 3018176.00 at (168.500,358.500)

Adjusting Locations:

(168,358) does not move
(187,345) does not move
(187,345) does not move
(178,320) does not move
(222,364) does not move
(224,359) <==> new (223,358)
(160,429) does not move
(160,429) does not move
(165,438) <==> new (165,437)
(231,303) does not move
(231,303) does not move
(243,307) does not move
(175,455) does not move
(176,463) does not move
(181,472) does not move
(54,310) <==> new (53,310)
(279,281) does not move
(256,474) <==> new (255,475)
(275,239) does not move
(280,236) does not move

Side Lobe Information, Maximum Value is 1.00744e+07

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,358)	2.96988e+06
0.407743	3.896131	18	(187,345)	317532
0.407743	3.896131	23	(187,345)	317532
0.191472	7.178953	40	(178,320)	304687
0.261225	5.829850	53	(222,364)	215383
0.269302	5.697607	56	(223,358)	158540
0.210962	6.757949	71	(160,429)	161442
0.210962	6.757949	75	(160,429)	161442
0.213742	6.701109	79	(165,437)	176856
0.186833	7.285470	82	(231,303)	101805
0.186833	7.285470	84	(231,303)	101805
0.199300	7.004934	89	(243,307)	98381.5
0.263525	5.791776	97	(175,455)	122566
0.281864	5.499606	105	(176,463)	137641
0.231248	6.359219	113	(181,472)	321949
0.237413	6.244959	123	(53,310)	167769
0.181487	7.411555	135	(279,281)	258139
0.216268	6.650077	145	(255,475)	121198
0.252864	5.971128	155	(258,231)	0
0.201933	6.947930	161	(275,239)	229702
0.229685	6.388673	166	(280,236)	317931

89/12/01
16:30:24

sc001098.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.98
Location of max in original is (169,359)
Location of max in compression is (168,358), sub-pixel is (168.250,358.375)
Laplacian Value at max location is 3215502.000000 at (168,358)
Smoothed (FFT) Maximum Laplacian Value is 4070720.00 at (168.500,358.500)

Adjusting Locations:

(169,359) <==> new (168,358)
(188,345) <==> new (187,345)
(188,345) <==> new (187,345)
(179,320) <==> new (178,320)
(222,364) does not move
(224,359) does not move
(161,430) <==> new (160,429)
(161,430) <==> new (160,429)
(166,438) <==> new (165,438)
(232,303) <==> new (231,303)
(232,303) <==> new (231,303)
(243,307) does not move
(175,455) does not move
(177,464) <==> new (176,463)
(182,472) <==> new (181,472)
(54,311) <==> new (54,310)
(280,281) <==> new (279,281)
(256,475) <==> new (256,474)
(275,239) does not move
(281,236) <==> new (280,236)

Side Lobe Information, Maximum Value is 1.01726e+07

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,358)	3.2155e+06
0.404522	3.930576	18	(187,345)	320653
0.404522	3.930576	23	(187,345)	320653
0.190090	7.210411	40	(178,320)	309619
0.268319	5.713489	53	(222,364)	236904
0.275405	5.600288	56	(224,359)	109123
0.212006	6.736524	71	(160,429)	170021
0.212006	6.736524	75	(160,429)	170021
0.210240	6.772838	79	(165,438)	238814
0.181951	7.400462	82	(231,303)	101405
0.181951	7.400462	84	(231,303)	101405
0.201218	6.963334	89	(243,307)	101023
0.261981	5.817302	97	(175,455)	105936
0.278432	5.552801	105	(176,463)	163204
0.226396	6.451315	113	(181,472)	278604
0.239505	6.206856	123	(54,310)	111614
0.170924	7.671975	135	(279,281)	261667
0.215804	6.659413	145	(256,474)	204589
0.254987	5.934817	155	(258,231)	0
0.194915	7.101541	161	(275,239)	186166
0.223344	6.510265	166	(280,236)	306227

89/12/01
16:29:06

sc001099.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.99
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (168.750,358.750)
Laplacian Value at max location is 3458610.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 4878144.00 at (168.625,358.750)

Adjusting Locations:

(169,359) does not move
(184,348) <==> new (188,345)
(188,345) does not move
(179,320) does not move
(222,365) <==> new (222,364)
(225,361) <==> new (224,359)
(161,430) does not move
(165,434) <==> new (161,430)
(166,438) does not move
(231,304) <==> new (232,303)
(231,304) <==> new (232,303)
(243,308) <==> new (243,307)
(174,456) <==> new (175,455)
(177,464) does not move
(182,472) does not move
(55,311) <==> new (54,311)
(280,281) does not move
(256,475) does not move
(276,238) <==> new (275,239)
(281,236) does not move

Side Lobe Information, Maximum Value is 1.0383e+07

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	3.45861e+06
0.398560	3.995058	18	(188,345)	314249
0.398560	3.995058	23	(188,345)	314249
0.185933	7.305443	40	(179,320)	239026
0.261499	5.825296	53	(222,364)	165007
0.269068	5.701374	56	(224,359)	183357
0.203298	6.918674	71	(161,430)	62702.3
0.203298	6.918674	75	(161,430)	62702.3
0.201663	6.953746	79	(166,438)	222614
0.180703	7.430338	82	(232,303)	99897.1
0.180703	7.430338	84	(232,303)	99897.1
0.201247	6.962717	89	(243,307)	137580
0.255823	5.920611	97	(175,455)	120109
0.270028	5.685917	105	(177,464)	204449
0.221175	6.552631	113	(182,472)	268834
0.237816	6.237591	123	(54,311)	154932
0.167711	7.754378	135	(280,281)	259922
0.217214	6.631132	145	(256,475)	173846
0.265730	5.755586	155	(258,231)	0
0.190966	7.190432	161	(275,239)	142613
0.217982	6.615787	166	(281,236)	297308

89/12/01
16:09:32

sc001100.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.000,359.000)
Laplacian Value at max location is 4118315.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 5076544.00 at (169.000,359.000)

Adjusting Locations:

(169,359) does not move
(184,348) does not move
(188,345) does not move
(179,320) does not move
(222,365) does not move
(225,361) does not move
(161,430) does not move
(165,434) does not move
(166,438) does not move
(231,304) does not move
(231,304) does not move
(243,308) does not move
(174,456) does not move
(177,464) does not move
(182,472) does not move
(55,311) does not move
(280,281) does not move
(256,475) does not move
(276,238) does not move
(281,236) does not move

Side Lobe Information, Maximum Value is 1.02405e+07

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	4.11832e+06
0.377852	4.226782	18	(184,348)	165128
0.388681	4.104063	23	(188,345)	307951
0.178127	7.492702	40	(179,320)	250356
0.253640	5.957830	53	(222,365)	208390
0.259972	5.850740	56	(225,361)	187901
0.198038	7.032518	71	(161,430)	83990.8
0.192373	7.158564	75	(165,434)	142316
0.188350	7.250345	79	(166,438)	243345
0.177267	7.513723	82	(231,304)	76353.5
0.177267	7.513723	84	(231,304)	76353.5
0.198642	7.019295	89	(243,308)	103493
0.247097	6.071321	97	(174,456)	161380
0.259886	5.852168	105	(177,464)	182125
0.213665	6.702670	113	(182,472)	248292
0.236570	6.260406	123	(55,311)	193854
0.159277	7.978469	135	(280,281)	222228
0.213608	6.703832	145	(256,475)	153156
0.264582	5.774397	155	(258,231)	0
0.184123	7.348929	161	(276,238)	131663
0.207498	6.829853	166	(281,236)	216115

89/12/01
16:10:48

sc001101.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.01
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (168.875,358.875)
Laplacian Value at max location is 3710037.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 4642752.00 at (168.875,358.875)

Adjusting Locations:

(169,359) does not move
(184,348) <==> new (188,345)
(188,345) does not move
(179,320) <==> new (179,322)
(222,365) <==> new (222,364)
(225,361) does not move
(161,430) does not move
(165,434) <==> new (161,430)
(166,438) <==> new (166,437)
(231,304) <==> new (232,303)
(231,304) <==> new (232,303)
(243,308) does not move
(174,456) <==> new (174,455)
(177,464) <==> new (177,463)
(182,472) does not move
(55,311) does not move
(280,281) does not move
(256,475) does not move
(276,238) does not move
(281,236) does not move

Side Lobe Information, Maximum Value is 9.85941e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	3.71004e+06
0.390904	4.079301	18	(188,345)	343891
0.390904	4.079301	23	(188,345)	343891
0.174173	7.590185	40	(179,322)	249019
0.259880	5.852266	53	(222,364)	153818
0.262273	5.812472	56	(225,361)	170404
0.198447	7.023549	71	(161,430)	49779
0.198447	7.023549	75	(161,430)	49779
0.188035	7.257617	79	(166,437)	202009
0.180226	7.441815	82	(232,303)	72253.1
0.180226	7.441815	84	(232,303)	72253.1
0.201325	6.961020	89	(243,308)	119142
0.250737	6.007815	97	(174,455)	163321
0.263424	5.793444	105	(177,463)	139772
0.219809	6.579545	113	(182,472)	258083
0.243507	6.134879	123	(55,311)	208663
0.157584	8.024876	135	(280,281)	221863
0.213137	6.713403	145	(256,475)	151838
0.266796	5.738213	155	(258,231)	0
0.187978	7.258924	161	(276,238)	114590
0.206389	6.848936	166	(281,236)	198786

89/12/01
16:11:06

sc001102.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.02
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.000,358.875)
Laplacian Value at max location is 3352681.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 3959936.00 at (169.000,359.000)

Adjusting Locations:

(169,359) does not move
(188,345) does not move
(188,345) does not move
(179,322) does not move
(222,364) does not move
(225,361) <==> new (224,360)
(161,430) does not move
(161,430) does not move
(166,437) does not move
(232,303) does not move
(232,303) does not move
(243,308) does not move
(174,455) does not move
(177,463) does not move
(182,472) does not move
(55,311) does not move
(280,281) <==> new (281,280)
(256,475) does not move
(276,238) <==> new (276,239)
(281,236) does not move

Side Lobe Information, Maximum Value is 9.69639e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	3.35268e+06
0.393583	4.049640	18	(188,345)	346935
0.393583	4.049640	23	(188,345)	346935
0.173804	7.599391	40	(179,322)	279150
0.271960	5.654948	53	(222,364)	164746
0.272453	5.647089	56	(224,360)	76738.3
0.202184	6.942524	71	(161,430)	64145.9
0.202184	6.942524	75	(161,430)	64145.9
0.186170	7.300900	79	(166,437)	182554
0.182587	7.385309	82	(232,303)	76562
0.182587	7.385309	84	(232,303)	76562
0.205803	6.865490	89	(243,308)	129623
0.254094	5.950049	97	(174,455)	191363
0.267192	5.731765	105	(177,463)	160203
0.220314	6.569579	113	(182,472)	219690
0.253048	5.967967	123	(55,311)	241951
0.152991	8.153347	135	(281,280)	160646
0.215572	6.664071	145	(256,475)	164596
0.269911	5.687801	155	(258,231)	0
0.191741	7.172841	161	(276,239)	138216
0.206588	6.848948	166	(281,236)	185943

89/12/01
16:13:22

sc001103.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.03
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.000,358.750)
Laplacian Value at max location is 2788088.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 3207296.00 at (169.000,358.875)

Adjusting Locations:

(169,359) does not move
(188,345) does not move
(188,345) does not move
(179,322) <==> new (184,342)
(222,364) does not move
(224,360) <==> new (224,361)
(161,430) does not move
(161,430) does not move
(166,437) does not move
(232,303) does not move
(232,303) does not move
(243,308) does not move
(174,455) does not move
(177,463) does not move
(182,472) does not move
(55,311) does not move
(281,280) <==> new (284,274)
(256,475) <==> new (255,475)
(276,239) does not move
(281,236) does not move

Side Lobe Information, Maximum Value is 9.36507e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	2.78809e+06
0.402482	3.952539	18	(188,345)	349922
0.402482	3.952539	23	(188,345)	349922
0.401014	3.968402	40	(184,342)	187529
0.287489	5.413791	53	(222,364)	171932
0.286524	5.428386	56	(224,361)	89028.5
0.209450	6.789203	71	(161,430)	75268.3
0.209450	6.789203	75	(161,430)	75268.3
0.186530	7.292509	79	(166,437)	164252
0.187479	7.270484	82	(232,303)	80197.5
0.187479	7.270484	84	(232,303)	80197.5
0.211243	6.752172	89	(243,308)	123055
0.259563	5.857568	97	(174,455)	192955
0.276373	5.585042	105	(177,463)	171558
0.227180	6.436300	113	(182,472)	199149
0.266226	5.747493	123	(55,311)	254752
0.188988	7.235665	135	(284,274)	187840
0.216078	6.653891	145	(255,475)	106373
0.271908	5.655779	155	(258,231)	0
0.199051	7.010351	161	(276,239)	168702
0.209157	6.795270	166	(281,236)	188609

89/12/01
16:14:40

sc001105.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.05
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.250,358.750)
Laplacian Value at max location is 1873085.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 2225792.00 at (169.625,358.750)

Adjusting Locations:

(169,359) does not move
(188,345) does not move
(188,345) does not move
(184,342) does not move
(222,364) does not move
(224,361) <==> new (222,364)
(161,430) <==> new (160,431)
(161,430) <==> new (160,431)
(166,437) <==> new (160,431)
(232,303) does not move
(232,303) does not move
(243,308) <==> new (243,307)
(174,455) does not move
(177,463) <==> new (178,463)
(182,472) <==> new (183,472)
(55,311) does not move
(284,274) does not move
(255,475) does not move
(276,239) does not move
(281,236) <==> new (282,236)

Side Lobe Information, Maximum Value is 8.80054e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.87309e+06
0.417264	3.795892	18	(188,345)	281815
0.417264	3.795892	23	(188,345)	281815
0.427013	3.695587	40	(184,342)	170075
0.312731	5.048295	53	(222,364)	145172
0.312731	5.048295	56	(222,364)	145172
0.225991	6.459081	71	(160,431)	106920
0.225991	6.459081	75	(160,431)	106920
0.225991	6.459081	79	(160,431)	106920
0.200095	6.987632	82	(232,303)	102417
0.200095	6.987632	84	(232,303)	102417
0.223049	6.516003	89	(243,307)	187955
0.270093	5.684867	97	(174,455)	191224
0.289935	5.376992	105	(178,463)	113668
0.242433	6.154078	113	(183,472)	270280
0.292027	5.345766	123	(55,311)	292738
0.207611	6.827494	135	(284,274)	282740
0.222767	6.521497	145	(255,475)	103639
0.281747	5.501413	155	(258,231)	0
0.212475	6.726929	161	(276,239)	217633
0.214365	6.688468	166	(282,236)	132896

89/12/01
16:15:56

sc001110.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.10
Location of max in original is (169,359)
Location of max in compression is (170,358), sub-pixel is (169.875,358.500)
Laplacian Value at max location is 1288857.000000 at (170,359)
Smoothed (FFT) Maximum Laplacian Value is 1859200.00 at (170.000,358.625)

Adjusting Locations:

(169,359) <==> new (170,358)
(188,345) <==> new (185,342)
(188,345) <==> new (185,342)
(184,342) <==> new (185,342)
(222,364) <==> new (222,363)
(222,364) <==> new (222,363)
(160,431) does not move
(160,431) does not move
(160,431) does not move
(232,303) <==> new (234,301)
(232,303) <==> new (234,301)
(243,307) <==> new (244,307)
(174,455) <==> new (175,456)
(178,463) does not move
(183,472) does not move
(55,311) <==> new (56,310)
(284,274) does not move
(255,475) <==> new (255,474)
(276,239) does not move
(282,236) <==> new (282,235)

Side Lobe Information, Maximum Value is 7.91956e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(170,358)	1.25144e+06
0.485611	3.137118	18	(185,342)	160643
0.485611	3.137118	23	(185,342)	160643
0.485611	3.137118	40	(185,342)	160643
0.359304	4.445382	53	(222,363)	162317
0.359304	4.445382	56	(222,363)	162317
0.257759	5.887865	71	(160,431)	143038
0.257759	5.887865	75	(160,431)	143038
0.257759	5.887865	79	(160,431)	143038
0.233338	6.320149	82	(234,301)	158860
0.233338	6.320149	84	(234,301)	158860
0.238908	6.217687	89	(244,307)	168905
0.282182	5.494702	97	(175,456)	176449
0.312895	5.046008	105	(178,463)	172921
0.267494	5.726859	113	(183,472)	227669
0.333399	4.770363	123	(56,310)	225898
0.229752	6.387415	135	(284,274)	191201
0.232872	6.328830	145	(255,474)	120555
0.297359	5.267189	155	(258,231)	0
0.238176	6.231017	161	(276,239)	253735
0.223484	6.507527	166	(282,235)	245945

89/12/01
16:17:14

sc001120.rep

1

Image AQVIR1(41:297,231:487) at compression 1.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.20
Location of max in original is (169,359)
Location of max in compression is (171,357), sub-pixel is (171.000,357.500)
Laplacian Value at max location is 817246.000000 at (171,358)
Smoothed (FFT) Maximum Laplacian Value is 735808.00 at (168.500,358.625)

Adjusting Locations:

(170,358) <==> new (171,357)
(185,342) <==> new (185,340)
(185,342) <==> new (185,340)
(185,342) <==> new (185,340)
(222,363) <==> new (222,362)
(222,363) <==> new (222,362)
(160,431) <==> new (160,432)
(160,431) <==> new (160,432)
(160,431) <==> new (160,432)
(234,301) <==> new (233,300)
(234,301) <==> new (233,300)
(244,307) does not move
(175,456) <==> new (178,460)
(178,463) <==> new (178,460)
(183,472) <==> new (185,474)
(56,310) <==> new (56,309)
(284,274) <==> new (286,271)
(255,474) <==> new (253,475)
(276,239) <==> new (277,239)
(282,235) <==> new (277,239)

Side Lobe Information, Maximum Value is 6.59663e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(171,357)	770505
0.603522	2.193067	18	(185,340)	231872
0.603522	2.193067	23	(185,340)	231872
0.603522	2.193067	40	(185,340)	231872
0.392222	4.064683	53	(222,362)	84964.3
0.392222	4.064683	56	(222,362)	84964.3
0.304006	5.171177	71	(160,432)	126896
0.304006	5.171177	75	(160,432)	126896
0.304006	5.171177	79	(160,432)	126896
0.273137	5.636197	82	(233,300)	105919
0.273137	5.636197	84	(233,300)	105919
0.263062	5.799415	89	(244,307)	188837
0.328035	4.840801	97	(178,460)	217915
0.328035	4.840801	105	(178,460)	217915
0.319139	4.960201	113	(185,474)	182592
0.375400	4.255062	123	(56,309)	227561
0.261988	5.817178	135	(286,271)	300643
0.248920	6.039411	145	(253,475)	130983
0.333193	4.773035	155	(258,231)	0
0.251940	5.987025	161	(277,239)	109221
0.251940	5.987025	166	(277,239)	109221

89/12/01
17:17:22

Exhibit II-12-b

Compressed 14.0:1, All Scalings

sc014080.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.80
Location of max in original is (169,359)
Location of max in compression is (161,353), sub-pixel is (163.625,351.625)
Laplacian Value at max location is 503001.000000 at (160,354)
Smoothed (FFT) Maximum Laplacian Value is 1375408.00 at (170.375,360.375)

Adjusting Locations:

(165,356) <==> new (161,353)
(165,356) <==> new (161,353)
(184,343) <==> new (180,341)
(174,321) <==> new (175,323)
(220,356) <==> new (216,353)
(220,356) <==> new (216,353)
(161,430) <==> new (157,432)
(161,430) <==> new (157,432)
(167,440) <==> new (158,436)
(229,302) <==> new (224,301)
(229,302) <==> new (224,301)
(242,306) <==> new (240,301)
(174,460) <==> new (172,462)
(174,460) <==> new (172,462)
(174,465) <==> new (172,462)
(48,309) <==> new (47,313)
(276,280) <==> new (272,279)
(251,474) <==> new (258,474)
(278,233) <==> new (284,231)
(278,233) <==> new (284,231)

Side Lobe Information, Maximum Value is 5.76636e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(161,353)	373959
1.000000	0.000000	18	(161,353)	373959
0.638846	1.946035	23	(180,341)	310860
0.254813	5.937791	40	(175,323)	155315
0.599901	2.219204	53	(216,353)	170222
0.599901	2.219204	56	(216,353)	170222
0.525984	2.790279	71	(157,432)	159658
0.525984	2.790279	75	(157,432)	159658
0.506864	2.951089	79	(158,436)	184163
0.254875	5.936730	82	(224,301)	92505.8
0.254875	5.936730	84	(224,301)	92505.8
0.205898	6.863478	89	(240,301)	108238
0.415081	3.818672	97	(172,462)	163925
0.415081	3.818672	105	(172,462)	163925
0.415081	3.818672	113	(172,462)	163925
0.337496	4.717313	123	(47,313)	264328
0.351668	4.538673	135	(272,279)	217538
0.393859	4.046588	145	(258,474)	128919
0.143866	8.420414	155	(258,231)	0
0.418495	3.783095	161	(284,231)	0
0.418495	3.783095	166	(284,231)	0

89/12/01
17:16:04

sc014090.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.90

Location of max in original is (169,359)

Location of max in compression is (165,356), sub-pixel is (164.625,356.500)

Laplacian Value at max location is 1029820.500000 at (164,357)

Smoothed (FFT) Maximum Laplacian Value is 1708736.00 at (170.375,360.375)

Adjusting Locations:

(167,358) <==> new (165,356)
(167,358) <==> new (165,356)
(186,344) <==> new (184,343)
(176,321) <==> new (174,321)
(222,357) <==> new (220,356)
(222,357) <==> new (220,356)
(161,430) does not move
(161,430) does not move
(165,437) <==> new (167,440)
(230,303) <==> new (229,302)
(230,303) <==> new (229,302)
(243,307) <==> new (242,306)
(174,455) <==> new (174,460)
(175,462) <==> new (174,460)
(180,471) <==> new (174,465)
(52,310) <==> new (48,309)
(279,279) <==> new (276,280)
(252,476) <==> new (251,474)
(280,235) <==> new (278,233)
(280,235) <==> new (278,233)

Side Lobe Information, Maximum Value is 8.11489e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(165,356)	905923
1.000000	0.000000	18	(165,356)	905923
0.472730	3.253865	23	(184,343)	232934
0.251609	5.992743	40	(174,321)	301479
0.364137	4.387356	53	(220,356)	173908
0.364137	4.387356	56	(220,356)	173908
0.306012	5.142617	71	(161,430)	128679
0.306012	5.142617	75	(161,430)	128679
0.288876	5.392885	79	(167,440)	162805
0.231088	6.362220	82	(229,302)	109747
0.231088	6.362220	84	(229,302)	109747
0.211044	6.756270	89	(242,306)	142988
0.359895	4.438247	97	(174,460)	199689
0.359895	4.438247	105	(174,460)	199689
0.356448	4.480032	113	(174,465)	269631
0.267776	5.722286	123	(48,309)	138849
0.234140	6.305235	135	(276,280)	89648.6
0.253680	5.957133	145	(251,474)	226013
0.219410	6.587429	155	(258,231)	0
0.289646	5.381330	161	(278,233)	124881
0.289646	5.381330	166	(278,233)	124881

89/12/01
17:14:46

sc014095.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.95
Location of max in original is (169,359)
Location of max in compression is (167,358), sub-pixel is (167.250,357.500)
Laplacian Value at max location is 1337268.000000 at (167,358)
Smoothed (FFT) Maximum Laplacian Value is 1367328.00 at (170.375,360.375)

Adjusting Locations:

(168,358) <==> new (167,358)
(184,347) <==> new (167,358)
(187,345) <==> new (186,344)
(178,320) <==> new (176,321)
(223,358) <==> new (222,357)
(223,358) <==> new (222,357)
(163,431) <==> new (161,430)
(163,431) <==> new (161,430)
(166,437) <==> new (165,437)
(230,304) <==> new (230,303)
(230,304) <==> new (230,303)
(244,307) <==> new (243,307)
(174,456) <==> new (174,455)
(177,463) <==> new (175,462)
(181,472) <==> new (180,471)
(53,311) <==> new (52,310)
(279,280) <==> new (279,279)
(253,476) <==> new (252,476)
(275,238) <==> new (280,235)
(280,236) <==> new (280,235)

Side Lobe Information, Maximum Value is 9.04949e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(167,358)	1.33727e+06
1.000000	0.000000	18	(167,358)	1.33727e+06
0.442475	3.541114	23	(186,344)	240632
0.218471	6.606066	40	(176,321)	213313
0.302017	5.199679	53	(222,357)	159111
0.302017	5.199679	56	(222,357)	159111
0.252870	5.971019	71	(161,430)	136881
0.252870	5.971019	75	(161,430)	136881
0.245034	6.107738	79	(165,437)	176362
0.212753	6.721237	82	(230,303)	123189
0.212753	6.721237	84	(230,303)	123189
0.216221	6.651016	89	(243,307)	118544
0.286599	5.427246	97	(174,455)	84973
0.314612	5.022252	105	(175,462)	142539
0.253794	5.955192	113	(180,471)	167446
0.243950	6.126988	123	(52,310)	134220
0.206267	6.855696	135	(279,279)	159743
0.235913	6.272489	145	(252,476)	159719
0.244925	6.109664	155	(258,231)	0
0.263130	5.798298	161	(280,235)	228236
0.263130	5.798298	166	(280,235)	228236

89/12/01
17:13:28

sc014097.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.97

Location of max in original is (169,359)

Location of max in compression is (168,358), sub-pixel is (168.125,358.250)

Laplacian Value at max location is 1831507.000000 at (168,358)

Smoothed (FFT) Maximum Laplacian Value is 2159808.00 at (168.500,358.500)

Adjusting Locations:

(168,358) does not move
(184,347) does not move
(187,345) does not move
(178,320) does not move
(223,359) <==> new (223,358)
(223,359) <==> new (223,358)
(163,431) does not move
(163,431) does not move
(166,437) does not move
(230,304) does not move
(230,304) does not move
(243,307) <==> new (244,307)
(174,456) does not move
(177,463) does not move
(181,472) does not move
(53,311) does not move
(280,280) <==> new (279,280)
(253,477) <==> new (253,476)
(275,239) <==> new (275,238)
(281,235) <==> new (280,236)

Side Lobe Information, Maximum Value is 9.55621e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,358)	1.83151e+06
0.424546	3.720752	18	(184,347)	195463
0.428283	3.682694	23	(187,345)	265327
0.205966	6.862043	40	(178,320)	210917
0.279578	5.534963	53	(223,358)	143658
0.279578	5.534963	56	(223,358)	143658
0.230037	6.382015	71	(163,431)	141534
0.230037	6.382015	75	(163,431)	141534
0.222989	6.517158	79	(166,437)	171913
0.202962	6.925858	82	(230,304)	113808
0.202962	6.925858	84	(230,304)	113808
0.215362	6.668310	89	(244,307)	99037
0.271561	5.661332	97	(174,456)	139705
0.288339	5.400972	105	(177,463)	68807
0.239157	6.213170	113	(181,472)	244215
0.240397	6.190714	123	(53,311)	199079
0.193511	7.132949	135	(279,280)	201571
0.231638	6.351894	145	(253,476)	139106
0.257578	5.890910	155	(258,231)	0
0.222401	6.528642	161	(275,238)	181963
0.245888	6.092627	166	(280,236)	229894

89/12/01
17:12:12

sc014098.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.98

Location of max in original is (169,359)

Location of max in compression is (168,358), sub-pixel is (168.375,358.375)

Laplacian Value at max location is 1901641.000000 at (168,358)

Smoothed (FFT) Maximum Laplacian Value is 2485120.00 at (168.500,358.500)

Adjusting Locations:

(169,359) <==> new (168,358)
(184,348) <==> new (184,347)
(188,345) <==> new (187,345)
(179,320) <==> new (178,320)
(224,359) <==> new (223,359)
(224,359) <==> new (223,359)
(163,431) does not move
(163,431) does not move
(166,438) <==> new (166,437)
(231,304) <==> new (230,304)
(231,304) <==> new (230,304)
(243,308) <==> new (243,307)
(174,456) does not move
(178,463) <==> new (177,463)
(182,472) <==> new (181,472)
(54,311) <==> new (53,311)
(280,281) <==> new (280,280)
(254,477) <==> new (253,477)
(275,239) does not move
(281,236) <==> new (281,235)

Side Lobe Information, Maximum Value is 9.61524e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,358)	1.90164e+06
0.422979	3.736817	18	(184,347)	168822
0.425951	3.706407	23	(187,345)	227230
0.205616	6.869440	40	(178,320)	205833
0.287906	5.407495	53	(223,359)	119419
0.287906	5.407495	56	(223,359)	119419
0.230591	6.371583	71	(163,431)	136231
0.230591	6.371583	75	(163,431)	136231
0.219161	6.592362	79	(166,437)	144435
0.197553	7.043163	82	(230,304)	90335.4
0.197553	7.043163	84	(230,304)	90335.4
0.218189	6.611674	89	(243,307)	105406
0.273223	5.634822	97	(174,456)	134016
0.286176	5.433674	105	(177,463)	65384
0.236599	6.259873	113	(181,472)	220736
0.243828	6.129173	123	(53,311)	177140
0.183654	7.360000	135	(280,280)	210266
0.230998	6.363923	145	(253,477)	116640
0.259062	5.865966	155	(258,231)	0
0.216647	6.642472	161	(275,239)	224422
0.241381	6.172969	166	(281,235)	233421

89/12/01
17:10:54

sc014099.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.99
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (168.750,358.750)
Laplacian Value at max location is 2029471.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 2593344.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(184,348) does not move
(188,345) does not move
(179,320) does not move
(224,360) <==> new (224,359)
(224,360) <==> new (224,359)
(161,430) <==> new (163,431)
(161,430) <==> new (163,431)
(166,438) does not move
(231,304) does not move
(231,304) does not move
(243,308) does not move
(174,456) does not move
(178,463) does not move
(182,472) does not move
(54,311) does not move
(280,281) does not move
(254,477) does not move
(276,239) <==> new (275,239)
(281,237) <==> new (281,236)

Side Lobe Information, Maximum Value is 9.78081e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	2.02947e+06
0.416516	3.803686	18	(184,348)	205170
0.422368	3.743086	23	(188,345)	274532
0.202132	6.943649	40	(179,320)	162448
0.281339	5.507693	53	(224,359)	156443
0.281339	5.507693	56	(224,359)	156443
0.222690	6.522984	71	(163,431)	103065
0.222690	6.522984	75	(163,431)	103065
0.209342	6.791429	79	(166,438)	163159
0.198325	7.026217	82	(231,304)	107461
0.198325	7.026217	84	(231,304)	107461
0.219011	6.595350	89	(243,308)	78466
0.270828	5.673067	97	(174,456)	200744
0.279216	5.540592	105	(178,463)	127786
0.233062	6.325288	113	(182,472)	237019
0.242273	6.156948	123	(54,311)	166515
0.178781	7.476793	135	(280,281)	214564
0.231790	6.349045	145	(254,477)	104481
0.268184	5.715675	155	(258,231)	0
0.213953	6.696812	161	(275,239)	237307
0.235151	6.286532	166	(281,236)	203865

89/12/01
16:44:32

sc014100.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.125,359.000)
Laplacian Value at max location is 2103098.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 2212288.00 at (169.500,359.125)

Adjusting Locations:

(169,359) does not move
(184,348) does not move
(188,345) does not move
(179,320) does not move
(222,365) <==> new (224,360)
(225,361) <==> new (224,360)
(161,430) does not move
(165,434) <==> new (161,430)
(166,438) does not move
(231,304) does not move
(231,304) does not move
(243,308) does not move
(174,456) does not move
(177,464) <==> new (178,463)
(182,472) does not move
(55,311) <==> new (54,311)
(280,281) does not move
(256,475) <==> new (254,477)
(276,238) <==> new (276,239)
(281,236) <==> new (281,237)

Side Lobe Information, Maximum Value is 9.49651e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	2.1031e+06
0.410019	3.871962	18	(184,348)	137085
0.417111	3.797488	23	(188,345)	193115
0.196760	7.060635	40	(179,320)	167411
0.276892	5.576894	53	(224,360)	122011
0.276892	5.576894	56	(224,360)	122011
0.216864	6.638129	71	(161,430)	79061.4
0.216864	6.638129	75	(161,430)	79061.4
0.195760	7.082767	79	(166,438)	99875.6
0.197973	7.033948	82	(231,304)	84216
0.197973	7.033948	84	(231,304)	84216
0.219379	6.588041	89	(243,308)	91043.3
0.264858	5.769874	97	(174,456)	220103
0.273852	5.624845	105	(178,463)	125897
0.229963	6.383425	113	(182,472)	195946
0.243219	6.140024	123	(54,311)	136086
0.173152	7.615734	135	(280,281)	185917
0.231559	6.353392	145	(254,477)	105538
0.270230	5.682664	155	(258,231)	0
0.208249	6.814164	161	(276,239)	118871
0.227439	6.431355	166	(281,237)	186180

891201
16:45:50

sc014101.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.01

Location of max in original is (169,359)

Location of max in compression is (169,359), sub-pixel is (169.000,358.750)

Laplacian Value at max location is 1987188.000000 at (169,359)

Smoothed (FFT) Maximum Laplacian Value is 2283712.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(184,348) <==> new (188,345)
(188,345) does not move
(179,320) <==> new (180,319)
(224,360) does not move
(224,360) does not move
(161,430) does not move
(161,430) does not move
(166,438) does not move
(231,304) does not move
(231,304) does not move
(243,308) does not move
(174,456) does not move
(178,463) does not move
(182,472) does not move
(54,311) does not move
(280,281) does not move
(254,477) does not move
(276,239) does not move
(281,237) <==> new (281,236)

Side Lobe Information, Maximum Value is 9.1907e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.98719e+06
0.416009	3.808971	18	(188,345)	206468
0.416009	3.808971	23	(188,345)	206468
0.193743	7.127730	40	(180,319)	162251
0.278954	5.544674	53	(224,360)	100173
0.278954	5.544674	56	(224,360)	100173
0.217417	6.627068	71	(161,430)	85924.3
0.217417	6.627068	75	(161,430)	85924.3
0.194271	7.115911	79	(166,438)	107333
0.199343	7.003981	82	(231,304)	91476.5
0.199343	7.003981	84	(231,304)	91476.5
0.221376	6.548686	89	(243,308)	116671
0.266009	5.751044	97	(174,456)	225291
0.277428	5.568499	105	(178,463)	140086
0.234482	6.298904	113	(182,472)	194796
0.249112	6.036056	123	(54,311)	145034
0.169423	7.710284	135	(280,281)	172795
0.230438	6.374461	145	(254,477)	87641.4
0.270604	5.676653	155	(258,231)	0
0.210603	6.765348	161	(276,239)	128456
0.224919	6.479743	166	(281,236)	123526

891201
16:47:08

sc014102.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.02

Location of max in original is (169,359)

Location of max in compression is (169,359), sub-pixel is (169.000,358.875)

Laplacian Value at max location is 1909633.000000 at (169,359)

Smoothed (FFT) Maximum Laplacian Value is 2123072.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(188,345) does not move
(188,345) does not move
(180,319) does not move
(224,360) does not move
(224,360) does not move
(161,430) does not move
(161,430) does not move
(166,438) does not move
(231,304) does not move
(231,304) does not move
(243,308) does not move
(174,456) does not move
(178,463) does not move
(182,472) <==> new (182,471)
(54,311) <==> new (55,311)
(280,281) <==> new (281,280)
(254,477) does not move
(276,239) does not move
(281,236) <==> new (282,236)

Side Lobe Information, Maximum Value is 9.09862e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.90963e+06
0.415202	3.817401	18	(188,345)	188533
0.415202	3.817401	23	(188,345)	188533
0.193106	7.142035	40	(180,319)	164869
0.287573	5.412513	53	(224,360)	114809
0.287573	5.412513	56	(224,360)	114809
0.219528	6.585098	71	(161,430)	91383.1
0.219528	6.585098	75	(161,430)	91383.1
0.190299	7.205638	79	(166,438)	89852
0.199546	6.999559	82	(231,304)	85378.4
0.199546	6.999559	84	(231,304)	85378.4
0.224506	6.487727	89	(243,308)	128136
0.267046	5.734144	97	(174,456)	228327
0.279397	5.537790	105	(178,463)	141909
0.234907	6.291049	113	(182,471)	171515
0.255738	5.922044	123	(55,311)	185625
0.165435	7.813725	135	(281,280)	127595
0.230749	6.368597	145	(254,477)	82031
0.271540	5.661670	155	(258,231)	0
0.214000	6.695862	161	(276,239)	149734
0.223945	6.498580	166	(282,236)	125894

89/12/01
16:48:26

sc014103.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.03
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.000,358.750)
Laplacian Value at max location is 1757410.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 2042048.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(188,345) does not move
(188,345) does not move
(180,319) does not move
(224,360) does not move
(224,360) does not move
(161,430) does not move
(161,430) does not move
(166,438) <==> new (161,430)
(231,304) <==> new (231,303)
(231,304) <==> new (231,303)
(243,308) does not move
(174,456) does not move
(178,463) does not move
(182,471) does not move
(55,311) <==> new (54,311)
(281,280) <==> new (284,274)
(254,477) <==> new (253,478)
(276,239) does not move
(282,236) does not move

Side Lobe Information, Maximum Value is 8.87598e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.75741e+06
0.419916	3.768380	18	(188,345)	195803
0.419916	3.768380	23	(188,345)	195803
0.191540	7.177415	40	(180,319)	160545
0.297809	5.260622	53	(224,360)	105544
0.297809	5.260622	56	(224,360)	105544
0.224857	6.480941	71	(161,430)	91800.6
0.224857	6.480941	75	(161,430)	91800.6
0.224857	6.480941	79	(161,430)	91800.6
0.201848	6.949758	82	(231,303)	52466.8
0.201848	6.949758	84	(231,303)	52466.8
0.228638	6.408515	89	(243,308)	138901
0.269178	5.699604	97	(174,456)	207421
0.284861	5.453673	105	(178,463)	127671
0.240147	6.195237	113	(182,471)	153357
0.266635	5.740833	123	(54,311)	149841
0.204206	6.899306	135	(284,274)	251034
0.229882	6.384958	145	(253,478)	100374
0.270713	5.674905	155	(258,231)	0
0.220373	6.568412	161	(276,239)	173415
0.225785	6.463047	166	(282,236)	150921

89/12/01
16:49:44

sc014105.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.05

Location of max in original is (169,359)

Location of max in compression is (169,359), sub-pixel is (169.250,358.750)

Laplacian Value at max location is 1413076.000000 at (169,359)

Smoothed (FFT) Maximum Laplacian Value is 1663648.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(188,345) <==> new (185,346)
(188,345) <==> new (185,346)
(180,319) <==> new (184,342)
(224,360) <==> new (223,362)
(224,360) <==> new (223,362)
(161,430) does not move
(161,430) does not move
(161,430) does not move
(231,303) <==> new (232,303)
(231,303) <==> new (232,303)
(243,308) does not move
(174,456) <==> new (175,456)
(178,463) does not move
(182,471) does not move
(54,311) <==> new (55,311)
(284,274) does not move
(253,478) does not move
(276,239) does not move
(282,236) does not move

Side Lobe Information, Maximum Value is 8.49416e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.41308e+06
0.432753	3.637596	18	(185,346)	101097
0.432753	3.637596	23	(185,346)	101097
0.441945	3.546318	40	(184,342)	160927
0.318487	4.969083	53	(223,362)	124404
0.318487	4.969083	56	(223,362)	124404
0.234707	6.294746	71	(161,430)	71157.9
0.234707	6.294746	75	(161,430)	71157.9
0.234707	6.294746	79	(161,430)	71157.9
0.209756	6.782863	82	(232,303)	72452.5
0.209756	6.782863	84	(232,303)	72452.5
0.237562	6.242227	89	(243,308)	132935
0.276081	5.589628	97	(175,456)	170667
0.292267	5.342200	105	(178,463)	99816.5
0.249334	6.032191	113	(182,471)	120547
0.286620	5.426942	123	(55,311)	218373
0.217407	6.627273	135	(284,274)	280468
0.232691	6.332213	145	(253,478)	106456
0.275402	5.600326	155	(258,231)	0
0.229585	6.390568	161	(276,239)	193814
0.229630	6.389710	166	(282,236)	169174

89/12/01
16:51:02

sc014110.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.10

Location of max in original is (169,359)

Location of max in compression is (170,358), sub-pixel is (169.750,358.500)

Laplacian Value at max location is 934494.000000 at (170,358)

Smoothed (FFT) Maximum Laplacian Value is 1241952.00 at (170.000,358.625)

Adjusting Locations:

(169,359) <==> new (170,358)
(185,346) <==> new (185,342)
(185,346) <==> new (185,342)
(184,342) <==> new (185,342)
(223,362) <==> new (222,363)
(223,362) <==> new (222,363)
(161,430) <==> new (160,431)
(161,430) <==> new (160,431)
(161,430) <==> new (160,431)
(232,303) <==> new (234,302)
(232,303) <==> new (234,302)
(243,308) <==> new (244,307)
(175,456) <==> new (175,457)
(178,463) does not move
(182,471) <==> new (182,467)
(55,311) <==> new (55,310)
(284,274) does not move
(253,478) <==> new (253,477)
(276,239) does not move
(282,236) <==> new (282,235)

Side Lobe Information, Maximum Value is 7.70228e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(170,358)	934494
0.500149	3.009006	18	(185,342)	141066
0.500149	3.009006	23	(185,342)	141066
0.500149	3.009006	40	(185,342)	141066
0.364429	4.383875	53	(222,363)	185679
0.364429	4.383875	56	(222,363)	185679
0.265807	5.754340	71	(160,431)	126194
0.265807	5.754340	75	(160,431)	126194
0.265807	5.754340	79	(160,431)	126194
0.236679	6.258404	82	(234,302)	142869
0.236679	6.258404	84	(234,302)	142869
0.255725	5.922275	89	(244,307)	191276
0.287679	5.410921	97	(175,457)	168573
0.307776	5.117651	105	(178,463)	99212.3
0.283701	5.471384	113	(182,467)	124398
0.327722	4.844944	123	(55,310)	138013
0.234105	6.305898	135	(284,274)	195328
0.245050	6.107457	145	(253,477)	78532.5
0.291833	5.348650	155	(258,231)	0
0.251903	5.987666	161	(276,239)	183181
0.232880	6.328673	166	(282,235)	188343

891201
16:51:20

sc014120.rep

1

Image AQVIR1(41:297,231:487) at compression 14.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.20
Location of max in original is (169,359)
Location of max in compression is (171,357), sub-pixel is (170.750,357.500)
Laplacian Value at max location is 645265.500000 at (171,357)
Smoothed (FFT) Maximum Laplacian Value is 700800.00 at (170.375,360.375)

Adjusting Locations:

(170,358) <==> new (171,357)
(185,342) <==> new (185,341)
(185,342) <==> new (185,341)
(185,342) <==> new (185,341)
(222,363) <==> new (222,362)
(222,363) <==> new (222,362)
(160,431) <==> new (160,432)
(160,431) <==> new (160,432)
(160,431) <==> new (160,432)
(234,302) <==> new (233,300)
(234,302) <==> new (233,300)
(244,307) does not move
(175,457) <==> new (178,461)
(178,463) <==> new (178,461)
(182,467) <==> new (181,466)
(55,310) <==> new (50,314)
(284,274) <==> new (286,273)
(253,477) <==> new (253,476)
(276,239) <==> new (278,239)
(282,235) <==> new (278,239)

Side Lobe Information, Maximum Value is 6.46782e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(171,357)	645266
0.606544	2.171378	18	(185,341)	237571
0.606544	2.171378	23	(185,341)	237571
0.606544	2.171378	40	(185,341)	237571
0.400155	3.977721	53	(222,362)	137752
0.400155	3.977721	56	(222,362)	137752
0.311833	5.060784	71	(160,432)	161072
0.311833	5.060784	75	(160,432)	161072
0.311833	5.060784	79	(160,432)	161072
0.278868	5.546007	82	(233,300)	70844
0.278868	5.546007	84	(233,300)	70844
0.277808	5.562549	89	(244,307)	179890
0.325514	4.874303	97	(178,461)	205192
0.325514	4.874303	105	(178,461)	205192
0.326731	4.858102	113	(181,466)	177261
0.407739	3.896179	123	(50,314)	250260
0.260846	5.836166	135	(286,273)	197945
0.261001	5.833586	145	(253,476)	118983
0.330365	4.810059	155	(258,231)	0
0.268862	5.704703	161	(278,239)	148387
0.268862	5.704703	166	(278,239)	148387

89/12/01
18:04:48

Exhibit II-12-c

Compressed 23.0:1, All Scalings

sc023080.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.80

Location of max in original is (169,359)

Location of max in compression is (163,352), sub-pixel is (162.500,351.875)

Laplacian Value at max location is 435397.500000 at (160,354)

Smoothed (FFT) Maximum Laplacian Value is 1211392.00 at (170.375,360.375)

Adjusting Locations:

(165,356) <==> new (163,352)
(185,343) <==> new (180,341)
(185,343) <==> new (180,341)
(174,321) <==> new (175,323)
(221,356) <==> new (216,354)
(221,356) <==> new (216,354)
(161,432) <==> new (157,430)
(161,432) <==> new (157,430)
(166,440) <==> new (161,438)
(228,302) <==> new (224,300)
(228,302) <==> new (224,300)
(242,305) <==> new (236,303)
(172,451) <==> new (172,450)
(175,460) <==> new (169,457)
(180,472) <==> new (179,471)
(48,310) <==> new (47,312)
(278,280) <==> new (272,279)
(252,473) <==> new (258,473)
(277,234) <==> new (285,231)
(277,234) <==> new (285,231)

Side Lobe Information, Maximum Value is 5.61377e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(163,352)	197318
0.632553	1.989028	18	(180,341)	237810
0.632553	1.989028	23	(180,341)	237810
0.245292	6.103171	40	(175,323)	148816
0.630873	2.000582	53	(216,354)	225760
0.630873	2.000582	56	(216,354)	225760
0.541155	2.666783	71	(157,430)	199760
0.541155	2.666783	75	(157,430)	199760
0.499257	3.016755	79	(161,438)	140909
0.238480	6.225479	82	(224,300)	55389.5
0.238480	6.225479	84	(224,300)	55389.5
0.214099	6.693846	89	(236,303)	81945.9
0.481032	3.178260	97	(172,450)	125819
0.495987	3.045298	105	(169,457)	138195
0.243383	6.137095	113	(179,471)	168438
0.319977	4.948812	123	(47,312)	142228
0.352512	4.528257	135	(272,279)	249284
0.387334	4.119145	145	(258,473)	180813
0.140729	8.516150	155	(258,231)	0
0.436232	3.602824	161	(285,231)	0
0.436232	3.602824	166	(285,231)	0

89/12/01
18:03:28

sc023090.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.90
Location of max in original is (169,359)
Location of max in compression is (165,356), sub-pixel is (164.875,356.375)
Laplacian Value at max location is 819734.000000 at (164,357)
Smoothed (FFT) Maximum Laplacian Value is 1517952.00 at (170.375,360.375)

Adjusting Locations:

(167,358) <==> new (165,356)
(186,344) <==> new (185,343)
(186,344) <==> new (185,343)
(176,321) <==> new (174,321)
(223,357) <==> new (221,356)
(223,357) <==> new (221,356)
(162,430) <==> new (161,432)
(162,430) <==> new (161,432)
(166,436) <==> new (166,440)
(229,304) <==> new (228,302)
(229,304) <==> new (228,302)
(243,307) <==> new (242,305)
(173,453) <==> new (172,451)
(176,463) <==> new (175,460)
(180,472) does not move
(50,312) <==> new (48,310)
(280,278) <==> new (278,280)
(256,474) <==> new (252,473)
(280,234) <==> new (277,234)
(280,234) <==> new (277,234)

Side Lobe Information, Maximum Value is 7.69457e+06

Side-Lobe	To-Peak-Ratio	DBs-Down	Distance-From-Max	Location	Laplacian
1.000000	0.000000	0	(165,356)	738302	
0.484449	3.147521	18	(185,343)	227395	
0.484449	3.147521	23	(185,343)	227395	
0.235924	6.272287	40	(174,321)	189928	
0.411839	3.852730	53	(221,356)	271352	
0.411839	3.852730	56	(221,356)	271352	
0.320645	4.939750	71	(161,432)	90529.8	
0.320645	4.939750	75	(161,432)	90529.8	
0.314377	5.025488	79	(166,440)	141358	
0.231752	6.349758	82	(228,302)	69299.8	
0.231752	6.349758	84	(228,302)	69299.8	
0.217545	6.624517	89	(242,305)	129650	
0.366613	4.357918	97	(172,451)	152340	
0.390634	4.082299	105	(175,460)	177048	
0.287299	5.416656	113	(180,472)	107275	
0.281745	5.501434	123	(48,310)	151381	
0.230408	6.375015	135	(278,280)	132133	
0.268926	5.703676	145	(252,473)	155196	
0.218505	6.605378	155	(258,231)	0	
0.291277	5.356932	161	(277,234)	136043	
0.291277	5.356932	166	(277,234)	136043	

89/12/01
18:02:10

sc023095.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.95

Location of max in original is (169,359)

Location of max in compression is (167,358), sub-pixel is (167.250,357.625)

Laplacian Value at max location is 1225129.000000 at (167,358)

Smoothed (FFT) Maximum Laplacian Value is 1327616.00 at (170.375,360.375)

Adjusting Locations:

(168,358) <==> new (167,358)
(187,345) <==> new (186,344)
(187,345) <==> new (186,344)
(178,320) <==> new (176,321)
(224,358) <==> new (223,357)
(224,358) <==> new (223,357)
(162,430) does not move
(162,430) does not move
(166,437) <==> new (166,436)
(230,304) <==> new (229,304)
(230,304) <==> new (229,304)
(243,307) does not move
(174,454) <==> new (173,453)
(177,464) <==> new (176,463)
(181,472) <==> new (180,472)
(50,313) <==> new (50,312)
(281,278) <==> new (280,278)
(256,474) does not move
(280,235) <==> new (280,234)
(280,235) <==> new (280,234)

Side Lobe Information, Maximum Value is 8.62328e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(167,358)	1.22513e+06
0.448194	3.485341	18	(186,344)	147877
0.448194	3.485341	23	(186,344)	147877
0.208478	6.809392	40	(176,321)	153330
0.338610	4.702997	53	(223,357)	225213
0.338610	4.702997	56	(223,357)	225213
0.260511	5.841745	71	(162,430)	168976
0.260511	5.841745	75	(162,430)	168976
0.260618	5.839953	79	(166,436)	112559
0.215193	6.671727	82	(229,304)	106307
0.215193	6.671727	84	(229,304)	106307
0.218864	6.598259	89	(243,307)	150373
0.322483	4.914934	97	(173,453)	81466
0.347525	4.590140	105	(176,463)	130576
0.264058	5.783008	113	(180,472)	214463
0.262995	5.800526	123	(50,312)	126011
0.197129	7.052490	135	(280,278)	116871
0.249157	6.035270	145	(256,474)	167288
0.247127	6.070797	155	(258,231)	0
0.272361	5.648555	161	(280,234)	273574
0.272361	5.648555	166	(280,234)	273574

89/12/01
18:00:50

sc023097.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.97

Location of max in original is (169,359)

Location of max in compression is (168,358), sub-pixel is (168.125,358.250)

Laplacian Value at max location is 1495786.000000 at (168,358)

Smoothed (FFT) Maximum Laplacian Value is 1799488.00 at (168.500,358.625)

Adjusting Locations:

(168,358) does not move
(187,345) does not move
(187,345) does not move
(178,320) does not move
(224,358) does not move
(224,358) does not move
(162,430) does not move
(162,430) does not move
(166,437) does not move
(230,304) does not move
(230,304) does not move
(243,307) does not move
(174,454) does not move
(177,464) does not move
(181,473) <==> new (181,472)
(54,310) <==> new (50,313)
(281,279) <==> new (281,278)
(256,474) does not move
(280,235) does not move
(280,235) does not move

Side Lobe Information, Maximum Value is 9.00534e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,358)	1.49579e+06
0.437111	3.594082	18	(187,345)	175755
0.437111	3.594082	23	(187,345)	175755
0.195866	7.080401	40	(178,320)	133325
0.313678	5.035164	53	(224,358)	200450
0.313678	5.035164	56	(224,358)	200450
0.242611	6.150903	71	(162,430)	145093
0.242611	6.150903	75	(162,430)	145093
0.241415	6.172352	79	(166,437)	126862
0.209433	6.789549	82	(230,304)	116018
0.209433	6.789549	84	(230,304)	116018
0.221485	6.546564	89	(243,307)	122453
0.305327	5.152342	97	(174,454)	76411.8
0.323422	4.902303	105	(177,464)	135169
0.248215	6.051726	113	(181,472)	184686
0.260983	5.833881	123	(50,313)	127238
0.184505	7.339908	135	(281,278)	122335
0.247521	6.063887	145	(256,474)	163981
0.270900	5.671914	155	(258,231)	0
0.261837	5.819696	161	(280,235)	283090
0.261837	5.819696	166	(280,235)	283090

89/12/01
17:59:32

sc023098.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.98
Location of max in original is (169,359)
Location of max in compression is (168,358), sub-pixel is (168.375,358.375)
Laplacian Value at max location is 1529192.000000 at (168,358)
Smoothed (FFT) Maximum Laplacian Value is 2009536.00 at (168.500,358.625)

Adjusting Locations:

(169,359) <==> new (168,358)
(188,345) <==> new (187,345)
(188,345) <==> new (187,345)
(179,320) <==> new (178,320)
(225,359) <==> new (224,358)
(225,359) <==> new (224,358)
(162,430) does not move
(162,430) does not move
(167,437) <==> new (166,437)
(230,305) <==> new (230,304)
(230,305) <==> new (230,304)
(243,308) <==> new (243,307)
(174,455) <==> new (174,454)
(177,464) does not move
(182,473) <==> new (181,473)
(54,311) <==> new (54,310)
(281,280) <==> new (281,279)
(256,475) <==> new (256,474)
(281,235) <==> new (280,235)
(281,235) <==> new (280,235)

Side Lobe Information, Maximum Value is 9.04685e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,358)	1.52919e+06
0.437288	3.592327	18	(187,345)	155779
0.437288	3.592327	23	(187,345)	155779
0.197471	7.044970	40	(178,320)	147487
0.320915	4.936102	53	(224,358)	200715
0.320915	4.936102	56	(224,358)	200715
0.243646	6.132403	71	(162,430)	139696
0.243646	6.132403	75	(162,430)	139696
0.237367	6.245796	79	(166,437)	113025
0.203782	6.908341	82	(230,304)	86833.9
0.203782	6.908341	84	(230,304)	86833.9
0.223657	6.504170	89	(243,307)	119358
0.305467	5.150351	97	(174,454)	77491.5
0.321167	4.932693	105	(177,464)	133330
0.245197	6.104856	113	(181,473)	258154
0.252395	5.979185	123	(54,310)	143693
0.174856	7.573196	135	(281,279)	114093
0.247963	6.056127	145	(256,474)	174906
0.273704	5.627188	155	(258,231)	0
0.255938	5.918653	161	(280,235)	263958
0.255938	5.918653	166	(280,235)	263958

89/12/01
17:58:14

sc023099.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.99
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (168.750,358.750)
Laplacian Value at max location is 1577705.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 2069504.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(188,345) does not move
(188,345) does not move
(179,320) does not move
(225,359) does not move
(225,359) does not move
(162,430) does not move
(162,430) does not move
(167,437) does not move
(230,305) does not move
(230,305) does not move
(243,308) does not move
(175,456) <==> new (174,455)
(178,465) <==> new (177,464)
(182,473) does not move
(54,311) does not move
(281,281) <==> new (281,280)
(256,475) does not move
(281,236) <==> new (281,235)
(281,236) <==> new (281,235)

Side Lobe Information, Maximum Value is 9.18673e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.57771e+06
0.434302	3.622085	18	(188,345)	183576
0.434302	3.622085	23	(188,345)	183576
0.196176	7.073532	40	(179,320)	139564
0.310079	5.085274	53	(225,359)	180361
0.310079	5.085274	56	(225,359)	180361
0.235370	6.282481	71	(162,430)	115481
0.235370	6.282481	75	(162,430)	115481
0.227121	6.437436	79	(167,437)	131400
0.204453	6.894067	82	(230,305)	110322
0.204453	6.894067	84	(230,305)	110322
0.224990	6.478375	89	(243,308)	105511
0.301395	5.208646	97	(174,455)	137883
0.311913	5.059666	105	(177,464)	128638
0.241366	6.173241	113	(182,473)	224085
0.252358	5.979821	123	(54,311)	148618
0.169841	7.699584	135	(281,280)	118417
0.250555	6.010969	145	(256,475)	141870
0.286746	5.425026	155	(258,231)	0
0.250867	6.005563	161	(281,235)	304111
0.250867	6.005563	166	(281,235)	304111

89/12/01
17:48:08

sc023100.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.125,359.000)
Laplacian Value at max location is 1606380.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1800448.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(184,348) <==> new (188,345)
(188,345) does not move
(179,320) does not move
(222,365) <==> new (225,359)
(225,361) <==> new (225,359)
(161,430) <==> new (162,430)
(165,434) <==> new (162,430)
(166,438) <==> new (167,437)
(231,304) <==> new (230,305)
(231,304) <==> new (230,305)
(243,308) does not move
(174,456) <==> new (175,456)
(177,464) <==> new (178,465)
(182,472) <==> new (182,473)
(55,311) <==> new (54,311)
(280,281) <==> new (281,281)
(256,475) does not move
(276,238) <==> new (281,236)
(281,236) does not move

Side Lobe Information, Maximum Value is 8.89328e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.60638e+06
0.431683	3.648355	18	(188,345)	132499
0.431683	3.648355	23	(188,345)	132499
0.194079	7.120222	40	(179,320)	177153
0.306172	5.140343	53	(225,359)	182734
0.306172	5.140343	56	(225,359)	182734
0.232092	6.343392	71	(162,430)	117005
0.232092	6.343392	75	(162,430)	117005
0.214262	6.690543	79	(167,437)	80344
0.204265	6.898063	82	(230,305)	91498.3
0.204265	6.898063	84	(230,305)	91498.3
0.225852	6.461763	89	(243,308)	105385
0.295342	5.296752	97	(175,456)	128838
0.305342	5.152138	105	(178,465)	123112
0.236941	6.253589	113	(182,473)	184909
0.255378	5.928162	123	(54,311)	146423
0.165319	7.816780	135	(281,281)	121154
0.251746	5.990377	145	(256,475)	158143
0.291002	5.361042	155	(258,231)	0
0.244963	6.108999	161	(281,236)	210146
0.244963	6.108999	166	(281,236)	210146

89/12/01
17:49:28

sc023101.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.01

Location of max in original is (169,359)

Location of max in compression is (169,359), sub-pixel is (169.000,358.750)

Laplacian Value at max location is 1508222.500000 at (169,359)

Smoothed (FFT) Maximum Laplacian Value is 1835328.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(188,345) does not move
(188,345) does not move
(179,320) <==> new (180,319)
(225,359) does not move
(225,359) does not move
(162,430) does not move
(162,430) does not move
(167,437) does not move
(230,305) <==> new (231,304)
(230,305) <==> new (231,304)
(243,308) does not move
(175,456) does not move
(178,465) <==> new (178,464)
(182,473) does not move
(54,311) does not move
(281,281) <==> new (284,271)
(256,475) does not move
(281,236) does not move
(281,236) does not move

Side Lobe Information, Maximum Value is 8.61231e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.50822e+06
0.430874	3.656496	18	(188,345)	143609
0.430874	3.656496	23	(188,345)	143609
0.190944	7.190942	40	(180,319)	118265
0.306809	5.131316	53	(225,359)	154368
0.306809	5.131316	56	(225,359)	154368
0.231126	6.361511	71	(162,430)	110772
0.231126	6.361511	75	(162,430)	110772
0.212797	6.720346	79	(167,437)	81567
0.205481	6.872285	82	(231,304)	94160.8
0.205481	6.872285	84	(231,304)	94160.8
0.226103	6.456931	89	(243,308)	118006
0.295780	5.290316	97	(175,456)	141053
0.307816	5.117087	105	(178,464)	120265
0.240858	6.182384	113	(182,473)	181769
0.261875	5.819059	123	(54,311)	158081
0.199685	6.996537	135	(284,271)	169634
0.249557	6.028294	145	(256,475)	144343
0.290782	5.364321	155	(258,231)	0
0.241008	6.179684	161	(281,236)	164284
0.241008	6.179684	166	(281,236)	164284

89/12/01
17:50:46

sc023102.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.02
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.125,358.750)
Laplacian Value at max location is 1455668.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1732736.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(188,345) does not move
(188,345) does not move
(180,319) does not move
(225,359) does not move
(225,359) does not move
(162,430) does not move
(162,430) does not move
(167,437) <==> new (166,435)
(231,304) does not move
(231,304) does not move
(243,308) does not move
(175,456) does not move
(178,464) does not move
(182,473) does not move
(54,311) does not move
(284,271) does not move
(256,475) does not move
(281,236) does not move
(281,236) does not move

Side Lobe Information, Maximum Value is 8.5382e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.45567e+06
0.430771	3.657533	18	(188,345)	133108
0.430771	3.657533	23	(188,345)	133108
0.190234	7.207112	40	(180,319)	123260
0.313304	5.040334	53	(225,359)	146919
0.313304	5.040334	56	(225,359)	146919
0.232456	6.336584	71	(162,430)	109362
0.232456	6.336584	75	(162,430)	109362
0.210228	6.773086	79	(166,435)	76924.3
0.205404	6.873904	82	(231,304)	90225
0.205404	6.873904	84	(231,304)	90225
0.228305	6.414844	89	(243,308)	122063
0.296798	5.275397	97	(175,456)	171863
0.309567	5.092455	105	(178,464)	118949
0.239796	6.201585	113	(182,473)	157616
0.268116	5.716774	123	(54,311)	158931
0.202053	6.945349	135	(284,271)	152835
0.249973	6.021064	145	(256,475)	150367
0.291334	5.356095	155	(258,231)	0
0.239291	6.210734	161	(281,236)	135815
0.239291	6.210734	166	(281,236)	135815

89/12/01
17:52:04

sc023103.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.03
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.125,358.750)
Laplacian Value at max location is 1360309.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1670560.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(188,345) does not move
(188,345) does not move
(180,319) does not move
(225,359) <==> new (225,360)
(225,359) <==> new (225,360)
(162,430) <==> new (161,430)
(162,430) <==> new (161,430)
(166,435) <==> new (161,430)
(231,304) does not move
(231,304) does not move
(243,308) does not move
(175,456) does not move
(178,464) does not move
(182,473) <==> new (182,472)
(54,311) does not move
(284,271) does not move
(256,475) does not move
(281,236) <==> new (281,235)
(281,236) <==> new (281,235)

Side Lobe Information, Maximum Value is 8.34944e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.36031e+06
0.435707	3.608053	18	(188,345)	146524
0.435707	3.608053	23	(188,345)	146524
0.188038	7.257554	40	(180,319)	116684
0.323112	4.906475	53	(225,360)	94448.5
0.323112	4.906475	56	(225,360)	94448.5
0.236859	6.255097	71	(161,430)	77878.8
0.236859	6.255097	75	(161,430)	77878.8
0.236859	6.255097	79	(161,430)	77878.8
0.206923	6.841910	82	(231,304)	85622.3
0.206923	6.841910	84	(231,304)	85622.3
0.230885	6.366046	89	(243,308)	123311
0.298383	5.252264	97	(175,456)	182001
0.316334	4.998538	105	(178,464)	122288
0.245075	6.107007	113	(182,472)	79573.6
0.280112	5.526680	123	(54,311)	169670
0.205162	6.879031	135	(284,271)	134662
0.245888	6.092624	145	(256,475)	142963
0.289667	5.381002	155	(258,231)	0
0.238473	6.225600	161	(281,235)	184621
0.238473	6.225600	166	(281,235)	184621

89/12/01
17:53:24

sc023105.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.05
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.375,358.625)
Laplacian Value at max location is 1155651.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1437536.00 at (169.750,358.625)

Adjusting Locations:

(169,359) does not move
(188,345) <==> new (185,346)
(188,345) <==> new (185,346)
(180,319) <==> new (181,319)
(225,360) <==> new (224,361)
(225,360) <==> new (224,361)
(161,430) <==> new (160,430)
(161,430) <==> new (160,430)
(161,430) <==> new (160,430)
(231,304) <==> new (234,302)
(231,304) <==> new (234,302)
(243,308) does not move
(175,456) does not move
(178,464) does not move
(182,472) <==> new (183,472)
(54,311) does not move
(284,271) <==> new (284,273)
(256,475) <==> new (256,474)
(281,235) <==> new (281,236)
(281,235) <==> new (281,236)

Side Lobe Information, Maximum Value is 8.04045e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.15565e+06
0.446483	3.501950	18	(185,346)	95168.3
0.446483	3.501950	23	(185,346)	95168.3
0.187621	7.267192	40	(181,319)	103568
0.337198	4.721149	53	(224,361)	52813.8
0.337198	4.721149	56	(224,361)	52813.8
0.246723	6.077905	71	(160,430)	59175.4
0.246723	6.077905	75	(160,430)	59175.4
0.246723	6.077905	79	(160,430)	59175.4
0.214713	6.681410	82	(234,302)	134643
0.214713	6.681410	84	(234,302)	134643
0.237092	6.250834	89	(243,308)	112838
0.302673	5.190267	97	(175,456)	209476
0.323919	4.895642	105	(178,464)	111853
0.253855	5.954148	113	(183,472)	123532
0.297392	5.266703	123	(54,311)	151559
0.210230	6.773048	135	(284,273)	178446
0.245797	6.094233	145	(256,474)	166031
0.292961	5.331905	155	(258,231)	0
0.238089	6.232615	161	(281,236)	97888.1
0.238089	6.232615	166	(281,236)	97888.1

89/12/01
17:54:42

sc023110.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.10

Location of max in original is (169,359)

Location of max in compression is (170,358), sub-pixel is (169.750,358.375)

Laplacian Value at max location is 837248.500000 at (170,358)

Smoothed (FFT) Maximum Laplacian Value is 1152448.00 at (169.875,358.750)

Adjusting Locations:

(169,359) <==> new (170,358)
(185,346) <==> new (185,342)
(185,346) <==> new (185,342)
(181,319) <==> new (185,342)
(224,361) <==> new (221,364)
(224,361) <==> new (221,364)
(160,430) <==> new (160,431)
(160,430) <==> new (160,431)
(160,430) <==> new (160,431)
(234,302) does not move
(234,302) does not move
(243,308) <==> new (243,307)
(175,456) <==> new (175,455)
(178,464) <==> new (177,464)
(183,472) <==> new (177,464)
(54,311) does not move
(284,273) <==> new (284,274)
(256,474) does not move
(281,236) <==> new (281,235)
(281,236) <==> new (281,235)

Side Lobe Information, Maximum Value is 7.39753e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(170,358)	837249
0.503103	2.983427	18	(185,342)	97023.3
0.503103	2.983427	23	(185,342)	97023.3
0.503103	2.983427	40	(185,342)	97023.3
0.383213	4.165599	53	(221,364)	197395
0.383213	4.165599	56	(221,364)	197395
0.272761	5.642176	71	(160,431)	108345
0.272761	5.642176	75	(160,431)	108345
0.272761	5.642176	79	(160,431)	108345
0.238742	6.220710	82	(234,302)	143659
0.238742	6.220710	84	(234,302)	143659
0.247841	6.058276	89	(243,307)	142389
0.303723	5.175224	97	(175,455)	132260
0.335260	4.746183	105	(177,464)	168087
0.335260	4.746183	113	(177,464)	168087
0.333384	4.770555	123	(54,311)	129575
0.226606	6.447288	135	(284,274)	177934
0.250492	6.012062	145	(256,474)	159612
0.301810	5.202665	155	(258,231)	0
0.242001	6.161830	161	(281,235)	184060
0.242001	6.161830	166	(281,235)	184060

89/12/01
17:56:02

sc023120.rep

1

Image AQVIR1(41:297,231:487) at compression 23.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.20
Location of max in original is (169,359)
Location of max in compression is (171,357), sub-pixel is (170.875,357.250)
Laplacian Value at max location is 570942.500000 at (171,357)
Smoothed (FFT) Maximum Laplacian Value is 693472.00 at (170.375,360.375)

Adjusting Locations:

(170,358) <==> new (171,357)
(185,342) <==> new (185,340)
(185,342) <==> new (185,340)
(185,342) <==> new (185,340)
(221,364) <==> new (222,362)
(221,364) <==> new (222,362)
(160,431) <==> new (160,432)
(160,431) <==> new (160,432)
(160,431) <==> new (160,432)
(234,302) <==> new (233,301)
(234,302) <==> new (233,301)
(243,307) does not move
(175,455) <==> new (178,461)
(177,464) <==> new (178,461)
(177,464) <==> new (178,461)
(54,311) <==> new (50,314)
(284,274) <==> new (286,271)
(256,474) <==> new (255,474)
(281,235) <==> new (277,237)
(281,235) <==> new (277,237)

Side Lobe Information, Maximum Value is 6.22778e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(171,357)	570943
0.614490	2.114850	18	(185,340)	161601
0.614490	2.114850	23	(185,340)	161601
0.614490	2.114850	40	(185,340)	161601
0.430466	3.660611	53	(222,362)	108030
0.430466	3.660611	56	(222,362)	108030
0.322190	4.918874	71	(160,432)	147035
0.322190	4.918874	75	(160,432)	147035
0.322190	4.918874	79	(160,432)	147035
0.271898	5.655940	82	(233,301)	89793.1
0.271898	5.655940	84	(233,301)	89793.1
0.265961	5.751825	89	(243,307)	168401
0.338375	4.706020	97	(178,461)	139569
0.338375	4.706020	105	(178,461)	139569
0.338375	4.706020	113	(178,461)	139569
0.418387	3.784215	123	(50,314)	267488
0.253320	5.963299	135	(286,271)	206929
0.262765	5.804320	145	(255,474)	106723
0.327319	4.850284	155	(258,231)	0
0.264718	5.772162	161	(277,237)	101342
0.264718	5.772162	166	(277,237)	101342

89/12/01
18:30:32

Exhibit II-12-d

Compressed 33.0:1, All Scalings

sc033080.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.80

Location of max in original is (169,359)

Location of max in compression is (162,352), sub-pixel is (164.500,351.500)

Laplacian Value at max location is 368399.500000 at (159,356)

Smoothed (FFT) Maximum Laplacian Value is 1233728.00 at (170.375,360.375)

Adjusting Locations:

(165,356) <==> new (162,352)
(165,356) <==> new (162,352)
(165,356) <==> new (162,352)
(174,320) <==> new (180,341)
(220,356) <==> new (216,354)
(220,356) <==> new (216,354)
(162,431) <==> new (157,430)
(162,431) <==> new (157,430)
(162,431) <==> new (157,430)
(228,301) <==> new (226,299)
(228,301) <==> new (226,299)
(242,305) <==> new (233,303)
(172,451) <==> new (168,449)
(175,463) <==> new (169,456)
(175,463) <==> new (169,456)
(54,305) <==> new (56,307)
(278,265) <==> new (275,260)
(252,473) <==> new (257,475)
(276,234) <==> new (274,231)
(276,234) <==> new (274,231)

Side Lobe Information, Maximum Value is 5.54695e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(162,352)	180610
1.000000	0.000000	18	(162,352)	180610
1.000000	0.000000	23	(162,352)	180610
0.649102	1.876873	40	(180,341)	158338
0.618358	2.087603	53	(216,354)	179451
0.618358	2.087603	56	(216,354)	179451
0.527528	2.777547	71	(157,430)	160082
0.527528	2.777547	75	(157,430)	160082
0.527528	2.777547	79	(157,430)	160082
0.231230	6.359563	82	(226,299)	60285.5
0.231230	6.359563	84	(226,299)	60285.5
0.234061	6.306709	89	(233,303)	134154
0.457231	3.398645	97	(168,449)	79051.5
0.461333	3.359858	105	(169,456)	69140.3
0.461333	3.359858	113	(169,456)	69140.3
0.241574	6.169505	123	(56,307)	243106
0.374817	4.261807	135	(275,260)	204051
0.426351	3.702330	145	(257,475)	140566
0.173117	7.616612	155	(258,231)	0
0.336250	4.733374	161	(274,231)	0
0.336250	4.733374	166	(274,231)	0

89/12/01
15:39:12

sc033090.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.90

Location of max in original is (169,359)

Location of max in compression is (165,356), sub-pixel is (164.875,356.375)

Laplacian Value at max location is 706545.000000 at (164,357)

Smoothed (FFT) Maximum Laplacian Value is 1642272.00 at (170.375,360.375)

Adjusting Locations:

(167,358) <==> new (165,356)
(167,358) <==> new (165,356)
(167,358) <==> new (165,356)
(176,321) <==> new (174,320)
(223,358) <==> new (220,356)
(223,358) <==> new (220,356)
(161,429) <==> new (162,431)
(161,429) <==> new (162,431)
(161,429) <==> new (162,431)
(230,302) <==> new (228,301)
(230,302) <==> new (228,301)
(243,306) <==> new (242,305)
(174,452) <==> new (172,451)
(176,464) <==> new (175,463)
(176,464) <==> new (175,463)
(56,307) <==> new (54,305)
(280,268) <==> new (278,265)
(253,475) <==> new (252,473)
(279,235) <==> new (276,234)
(279,235) <==> new (276,234)

Side Lobe Information, Maximum Value is 7.59973e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(165,356)	602175
1.000000	0.000000	18	(165,356)	602175
1.000000	0.000000	23	(165,356)	602175
0.239656	6.204118	40	(174,320)	203602
0.395127	4.032635	53	(220,356)	164965
0.395127	4.032635	56	(220,356)	164965
0.311367	5.067272	71	(162,431)	118875
0.311367	5.067272	75	(162,431)	118875
0.311367	5.067272	79	(162,431)	118875
0.234189	6.304339	82	(228,301)	76291.1
0.234189	6.304339	84	(228,301)	76291.1
0.216860	6.638197	89	(242,305)	142844
0.350059	4.558585	97	(172,451)	119971
0.383444	4.162984	105	(175,463)	142161
0.383444	4.162984	113	(175,463)	142161
0.241295	6.174510	123	(54,305)	142219
0.272460	5.646974	135	(278,265)	188723
0.273507	5.630322	145	(252,473)	136794
0.242911	6.145532	155	(258,231)	0
0.299444	5.236850	161	(276,234)	161405
0.299444	5.236850	166	(276,234)	161405

89/12/01
18:27:52

sc033095.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.95
Location of max in original is (169,359)
Location of max in compression is (167,358), sub-pixel is (167.250,357.625)
Laplacian Value at max location is 983300.000000 at (167,358)
Smoothed (FFT) Maximum Laplacian Value is 1445056.00 at (170.375,360.375)

Adjusting Locations:

(168,358) <==> new (167,358)
(168,358) <==> new (167,358)
(168,358) <==> new (167,358)
(178,321) <==> new (176,321)
(224,359) <==> new (223,358)
(224,359) <==> new (223,358)
(162,430) <==> new (161,429)
(162,430) <==> new (161,429)
(162,430) <==> new (161,429)
(231,303) <==> new (230,302)
(231,303) <==> new (230,302)
(243,307) <==> new (243,306)
(175,453) <==> new (174,452)
(177,464) <==> new (176,464)
(177,464) <==> new (176,464)
(54,309) <==> new (56,307)
(281,273) <==> new (280,268)
(253,476) <==> new (253,475)
(280,235) <==> new (279,235)
(280,235) <==> new (279,235)

Side Lobe Information, Maximum Value is 8.43618e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(167,358)	983300
1.000000	0.000000	18	(167,358)	983300
1.000000	0.000000	23	(167,358)	983300
0.207928	6.820880	40	(176,321)	154497
0.327449	4.848570	53	(223,358)	131862
0.327449	4.848570	56	(223,358)	131862
0.256958	5.901380	71	(161,429)	63432.3
0.256958	5.901380	75	(161,429)	63432.3
0.256958	5.901380	79	(161,429)	63432.3
0.217599	6.623422	82	(230,302)	66705.6
0.217599	6.623422	84	(230,302)	66705.6
0.223687	6.503587	89	(243,306)	127676
0.320756	4.938249	97	(174,452)	97639.5
0.342680	4.651107	105	(176,464)	152656
0.342680	4.651107	113	(176,464)	152656
0.245078	6.106954	123	(56,307)	149014
0.220695	6.562069	135	(280,268)	104614
0.257513	5.892007	145	(253,475)	107694
0.270122	5.684399	155	(258,231)	0
0.267917	5.719999	161	(279,235)	133691
0.267917	5.719999	166	(279,235)	133691

89/12/01
18:26:34

sc033097.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.97

Location of max in original is (169,359)

Location of max in compression is (168,358), sub-pixel is (168.125,358.375)

Laplacian Value at max location is 1194501.500000 at (168,358)

Smoothed (FFT) Maximum Laplacian Value is 1512256.00 at (168.500,358.625)

Adjusting Locations:

(168,358) does not move
(186,345) <==> new (168,358)
(186,345) <==> new (168,358)
(178,321) does not move
(224,360) <==> new (224,359)
(224,360) <==> new (224,359)
(161,429) <==> new (162,430)
(161,429) <==> new (162,430)
(161,429) <==> new (162,430)
(231,303) does not move
(231,303) does not move
(243,307) does not move
(175,453) does not move
(177,464) does not move
(177,464) does not move
(54,309) does not move
(282,271) <==> new (281,273)
(253,477) <==> new (253,476)
(281,235) <==> new (280,235)
(281,235) <==> new (280,235)

Side Lobe Information, Maximum Value is 8.73925e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,358)	1.1945e+06
1.000000	0.000000	18	(168,358)	1.1945e+06
1.000000	0.000000	23	(168,358)	1.1945e+06
0.196106	7.075091	40	(178,321)	138609
0.307603	5.120090	53	(224,359)	127121
0.307603	5.120090	56	(224,359)	127121
0.243544	6.134232	71	(162,430)	109343
0.243544	6.134232	75	(162,430)	109343
0.243544	6.134232	79	(162,430)	109343
0.212165	6.733258	82	(231,303)	75468.4
0.212165	6.733258	84	(231,303)	75468.4
0.231761	6.349591	89	(243,307)	135546
0.308351	5.109545	97	(175,453)	92109.3
0.319727	4.952212	105	(177,464)	137402
0.319727	4.952212	113	(177,464)	137402
0.245952	6.091504	123	(54,309)	133401
0.207811	6.823324	135	(281,273)	143508
0.256343	5.911785	145	(253,476)	122750
0.292320	5.341413	155	(258,231)	0
0.256493	5.909238	161	(280,235)	189204
0.256493	5.909238	166	(280,235)	189204

89/12/01
18:25:16

sc033098.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.98
Location of max in original is (169,359)
Location of max in compression is (168,358), sub-pixel is (168.375,358.500)
Laplacian Value at max location is 1232435.500000 at (168,358)
Smoothed (FFT) Maximum Laplacian Value is 1663232.00 at (168.500,358.625)

Adjusting Locations:

(169,359) <==> new (168,358)
(187,345) <==> new (186,345)
(187,345) <==> new (186,345)
(179,321) <==> new (178,321)
(225,360) <==> new (224,360)
(225,360) <==> new (224,360)
(161,429) does not move
(161,429) does not move
(161,429) does not move
(231,304) <==> new (231,303)
(231,304) <==> new (231,303)
(243,307) does not move
(175,454) <==> new (175,453)
(177,465) <==> new (177,464)
(177,465) <==> new (177,464)
(55,309) <==> new (54,309)
(283,271) <==> new (282,271)
(254,477) <==> new (253,477)
(281,236) <==> new (281,235)
(281,236) <==> new (281,235)

Side Lobe Information, Maximum Value is 8.7756e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	(	(168,358)	1.23244e+06
0.465443	3.321337	18	(186,345)	73065.3
0.465443	3.321337	23	(186,345)	73065.3
0.196920	7.057111	40	(178,321)	153009
0.315036	5.016396	53	(224,360)	111417
0.315036	5.016396	56	(224,360)	111417
0.245992	6.090795	71	(161,429)	98284.3
0.245992	6.090795	75	(161,429)	98284.3
0.245992	6.090795	79	(161,429)	98284.3
0.207514	6.829533	82	(231,303)	57970.8
0.207514	6.829533	84	(231,303)	57970.8
0.234798	6.293056	89	(243,307)	132974
0.310199	5.083596	97	(175,453)	90563.5
0.315734	5.006782	105	(177,464)	123273
0.315734	5.006782	113	(177,464)	123273
0.252013	5.985763	123	(54,309)	155670
0.202967	6.925750	135	(282,271)	44596.5
0.255703	5.922644	145	(253,477)	103037
0.293806	5.319387	155	(258,231)	0
0.251088	6.001736	161	(281,235)	221805
0.251088	6.001736	166	(281,235)	221805

89/12/01
18:23:58

sc033099.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.99

Location of max in original is (169,359)

Location of max in compression is (169,359), sub-pixel is (168.750,358.750)

Laplacian Value at max location is 1239245.000000 at (169,359)

Smoothed (FFT) Maximum Laplacian Value is 1723648.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(188,345) <==> new (187,345)
(188,345) <==> new (187,345)
(179,321) does not move
(225,360) does not move
(225,360) does not move
(162,429) <==> new (161,429)
(162,429) <==> new (161,429)
(162,429) <==> new (161,429)
(231,304) does not move
(231,304) does not move
(243,308) <==> new (243,307)
(175,454) does not move
(178,465) <==> new (177,465)
(178,465) <==> new (177,465)
(55,310) <==> new (55,309)
(284,272) <==> new (283,271)
(256,475) <==> new (254,477)
(281,236) does not move
(281,236) does not move

Side Lobe Information, Maximum Value is 8.90336e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.23925e+06
0.463586	3.338694	18	(187,345)	103597
0.463586	3.338694	23	(187,345)	103597
0.193432	7.134709	40	(179,321)	123866
0.307276	5.124715	53	(225,360)	144752
0.307276	5.124715	56	(225,360)	144752
0.238010	6.234039	71	(161,429)	105475
0.238010	6.234039	75	(161,429)	105475
0.238010	6.234039	79	(161,429)	105475
0.207807	6.823394	82	(231,304)	62528.3
0.207807	6.823394	84	(231,304)	62528.3
0.238206	6.230470	89	(243,307)	136594
0.304608	5.162582	97	(175,454)	90230.8
0.305917	5.143957	105	(177,465)	129871
0.305917	5.143957	113	(177,465)	129871
0.249588	6.027755	123	(55,309)	132303
0.198807	7.015692	135	(283,271)	58245
0.256788	5.904257	145	(254,477)	93042.8
0.305841	5.145044	155	(258,231)	0
0.247778	6.059378	161	(281,236)	223692
0.247778	6.059378	166	(281,236)	223692

89/12/01
18:14:26

sc033100.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.125,359.000)
Laplacian Value at max location is 1264883.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1524640.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(184,348) <==> new (188,345)
(188,345) does not move
(179,320) <==> new (179,321)
(222,365) <==> new (225,360)
(225,361) <==> new (225,360)
(161,430) <==> new (162,429)
(165,434) <==> new (162,429)
(166,438) <==> new (162,429)
(231,304) does not move
(231,304) does not move
(243,308) does not move
(174,456) <==> new (175,454)
(177,464) <==> new (178,465)
(182,472) <==> new (178,465)
(55,311) <==> new (55,310)
(280,281) <==> new (284,272)
(256,475) does not move
(276,238) <==> new (281,236)
(281,236) does not move

Side Lobe Information, Maximum Value is 8.60016e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.26488e+06
0.461284	3.360314	18	(188,345)	133600
0.461284	3.360314	23	(188,345)	133600
0.189966	7.213233	40	(179,321)	138536
0.303706	5.175463	53	(225,360)	138013
0.303706	5.175463	56	(225,360)	138013
0.236713	6.257784	71	(162,429)	136999
0.236713	6.257784	75	(162,429)	136999
0.236713	6.257784	79	(162,429)	136999
0.207916	6.821119	82	(231,304)	43789.9
0.207916	6.821119	84	(231,304)	43789.9
0.240801	6.183412	89	(243,308)	141867
0.299180	5.240676	97	(175,454)	120254
0.300664	5.219184	105	(178,465)	114114
0.300664	5.219184	113	(178,465)	114114
0.252638	5.975013	123	(55,310)	133782
0.200996	6.968132	135	(284,272)	119690
0.251858	5.988447	145	(256,475)	90969
0.310554	5.078623	155	(258,231)	0
0.244221	6.122179	161	(281,236)	190896
0.244221	6.122179	166	(281,236)	190896

89/12/01
18:15:44

sc033101.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.01
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.000,358.750)
Laplacian Value at max location is 1195405.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1531776.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(188,345) <==> new (187,345)
(188,345) <==> new (187,345)
(179,321) <==> new (187,345)
(225,360) does not move
(225,360) does not move
(162,429) does not move
(162,429) does not move
(162,429) does not move
(231,304) <==> new (232,303)
(231,304) <==> new (232,303)
(243,308) does not move
(175,454) does not move
(178,465) does not move
(178,465) does not move
(55,310) does not move
(284,272) does not move
(256,475) does not move
(281,236) does not move
(281,236) does not move

Side Lobe Information, Maximum Value is 8.34965e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.19541e+06
0.458623	3.385444	18	(187,345)	73337.5
0.458623	3.385444	23	(187,345)	73337.5
0.458623	3.385444	40	(187,345)	73337.5
0.304750	5.160568	53	(225,360)	131215
0.304750	5.160568	56	(225,360)	131215
0.235720	6.276034	71	(162,429)	129014
0.235720	6.276034	75	(162,429)	129014
0.235720	6.276034	79	(162,429)	129014
0.209708	6.783845	82	(232,303)	33681.8
0.209708	6.783845	84	(232,303)	33681.8
0.239233	6.211783	89	(243,308)	127230
0.299900	5.230237	97	(175,454)	133333
0.301423	5.208231	105	(178,465)	110662
0.301423	5.208231	113	(178,465)	110662
0.257731	5.888335	123	(55,310)	121691
0.206817	6.844142	135	(284,272)	149233
0.250055	6.019645	145	(256,475)	87478.5
0.310144	5.084366	155	(258,231)	0
0.240519	6.188501	161	(281,236)	163736
0.240519	6.188501	166	(281,236)	163736

89/12/01
18:17:02

sc033102.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.02
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.125,358.875)
Laplacian Value at max location is 1160676.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1442368.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(187,345) <==> new (185,346)
(187,345) <==> new (185,346)
(187,345) <==> new (185,346)
(225,360) <==> new (223,362)
(225,360) <==> new (223,362)
(162,429) does not move
(162,429) does not move
(162,429) does not move
(232,303) <==> new (233,302)
(232,303) <==> new (233,302)
(243,308) does not move
(175,454) does not move
(178,465) does not move
(178,465) does not move
(55,310) does not move
(284,272) does not move
(256,475) does not move
(281,236) does not move
(281,236) does not move

Side Lobe Information, Maximum Value is 8.28871e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.16068e+06
0.459399	3.378099	18	(185,346)	76567.5
0.459399	3.378099	23	(185,346)	76567.5
0.459399	3.378099	40	(185,346)	76567.5
0.314892	5.018384	53	(223,362)	90393.3
0.314892	5.018384	56	(223,362)	90393.3
0.237085	6.250956	71	(162,429)	129021
0.237085	6.250956	75	(162,429)	129021
0.237085	6.250956	79	(162,429)	129021
0.212121	6.734154	82	(233,302)	60627.1
0.212121	6.734154	84	(233,302)	60627.1
0.241193	6.176362	89	(243,308)	120182
0.298569	5.249548	97	(175,454)	144878
0.302284	5.195844	105	(178,465)	106620
0.302284	5.195844	113	(178,465)	106620
0.263420	5.793512	123	(55,310)	124217
0.211272	6.751589	135	(284,272)	151621
0.250626	6.009740	145	(256,475)	101420
0.310125	5.084633	155	(258,231)	0
0.238983	6.216328	161	(281,236)	141797
0.238983	6.216328	166	(281,236)	141797

89/12/01
18:18:20

sc033103.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.03
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.125,358.750)
Laplacian Value at max location is 1103800.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1384000.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(185,346) <==> new (186,345)
(185,346) <==> new (186,345)
(185,346) <==> new (186,345)
(223,362) <==> new (221,364)
(223,362) <==> new (221,364)
(162,429) <==> new (161,429)
(162,429) <==> new (161,429)
(162,429) <==> new (161,429)
(233,302) <==> new (234,302)
(233,302) <==> new (234,302)
(243,308) does not move
(175,454) does not move
(178,465) <==> new (178,464)
(178,465) <==> new (178,464)
(55,310) does not move
(284,272) does not move
(256,475) does not move
(281,236) does not move
(281,236) does not move

Side Lobe Information, Maximum Value is 8.13578e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	1.1038e+06
0.463800	3.336696	18	(186,345)	53550.5
0.463800	3.336696	23	(186,345)	53550.5
0.463800	3.336696	40	(186,345)	53550.5
0.327220	4.851604	53	(221,364)	103026
0.327220	4.851604	56	(221,364)	103026
0.239934	6.199079	71	(161,429)	80102.8
0.239934	6.199079	75	(161,429)	80102.8
0.239934	6.199079	79	(161,429)	80102.8
0.217304	6.629316	82	(234,302)	92045.6
0.217304	6.629316	84	(234,302)	92045.6
0.242316	6.156173	89	(243,308)	109443
0.298841	5.245594	97	(175,454)	150731
0.307348	5.123691	105	(178,464)	89256.3
0.307348	5.123691	113	(178,464)	89256.3
0.272980	5.638690	123	(55,310)	122134
0.215465	6.666237	135	(284,272)	160264
0.246352	6.084436	145	(256,475)	100912
0.307455	5.122186	155	(258,231)	0
0.237420	6.244834	161	(281,236)	125005
0.237420	6.244834	166	(281,236)	125005

89/12/01
18:19:38

sc033105.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.05
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.375,358.625)
Laplacian Value at max location is 958864.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1290976.00 at (169.875,358.625)

Adjusting Locations:

(169,359) does not move
(186,345) <==> new (185,344)
(186,345) <==> new (185,344)
(186,345) <==> new (185,344)
(221,364) does not move
(221,364) does not move
(161,429) <==> new (160,429)
(161,429) <==> new (160,429)
(161,429) <==> new (160,429)
(234,302) does not move
(234,302) does not move
(243,308) <==> new (242,308)
(175,454) does not move
(178,464) <==> new (179,464)
(178,464) <==> new (179,464)
(55,310) does not move
(284,272) <==> new (284,273)
(256,475) <==> new (256,474)
(281,236) <==> new (281,235)
(281,236) <==> new (281,235)

Side Lobe Information, Maximum Value is 7.87879e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	958864
0.475398	3.229424	18	(185,344)	44141
0.475398	3.229424	23	(185,344)	44141
0.475398	3.229424	40	(185,344)	44141
0.348034	4.583779	53	(221,364)	129768
0.348034	4.583779	56	(221,364)	129768
0.247129	6.070759	71	(160,429)	90107.1
0.247129	6.070759	75	(160,429)	90107.1
0.247129	6.070759	79	(160,429)	90107.1
0.229806	6.386394	82	(234,302)	101604
0.229806	6.386394	84	(234,302)	101604
0.248160	6.052682	89	(242,308)	134849
0.300819	5.216945	97	(175,454)	164024
0.312317	5.054049	105	(179,464)	99587
0.312317	5.054049	113	(179,464)	99587
0.288870	5.392979	123	(55,310)	110825
0.224743	6.483139	135	(284,273)	226769
0.245889	6.092605	145	(256,474)	131332
0.310421	5.080493	155	(258,231)	0
0.235326	6.283298	161	(281,235)	126827
0.235326	6.283298	166	(281,235)	126827

89/12/01
18:20:56

sc033110.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.10

Location of max in original is (169,359)

Location of max in compression is (170,358), sub-pixel is (169.875,358.375)

Laplacian Value at max location is 762488.000000 at (170,358)

Smoothed (FFT) Maximum Laplacian Value is 1095168.00 at (169.875,358.750)

Adjusting Locations:

(169,359) <==> new (170,358)
(185,344) <==> new (185,342)
(185,344) <==> new (185,342)
(185,344) <==> new (185,342)
(221,364) does not move
(221,364) does not move
(160,429) does not move
(160,429) does not move
(160,429) does not move
(234,302) <==> new (234,301)
(234,302) <==> new (234,301)
(242,308) does not move
(175,454) does not move
(179,464) <==> new (178,463)
(179,464) <==> new (178,463)
(55,310) <==> new (56,309)
(284,273) does not move
(256,474) does not move
(281,235) does not move
(281,235) does not move

Side Lobe Information, Maximum Value is 7.3683e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(170,358)	762488
0.520422	2.836440	18	(185,342)	95345.5
0.520422	2.836440	23	(185,342)	95345.5
0.520422	2.836440	40	(185,342)	95345.5
0.386551	4.127937	53	(221,364)	166997
0.386551	4.127937	56	(221,364)	166997
0.261936	5.818051	71	(160,429)	94023.8
0.261936	5.818051	75	(160,429)	94023.8
0.261936	5.818051	79	(160,429)	94023.8
0.257166	5.897872	82	(234,301)	123287
0.257166	5.897872	84	(234,301)	123287
0.256401	5.910799	89	(242,308)	107131
0.299810	5.231542	97	(175,454)	125395
0.316967	4.989858	105	(178,463)	73892
0.316967	4.989858	113	(178,463)	73892
0.323265	4.904416	123	(56,309)	142119
0.240770	6.183982	135	(284,273)	211483
0.252031	5.985455	145	(256,474)	150784
0.323279	4.904231	155	(258,231)	0
0.235156	6.286445	161	(281,235)	137501
0.235156	6.286445	166	(281,235)	137501

39/12/01
18:22:14

sc033120.rep

1

Image AQVIR1(41:297,231:487) at compression 33.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.20
Location of max in original is (169,359)
Location of max in compression is (171,357), sub-pixel is (170.875,357.375)
Laplacian Value at max location is 519788.000000 at (171,357)
Smoothed (FFT) Maximum Laplacian Value is 681760.00 at (170.375,360.375)

Adjusting Locations:

(170,358) <==> new (171,357)
(185,342) <==> new (185,341)
(185,342) <==> new (185,341)
(185,342) <==> new (185,341)
(221,364) <==> new (222,363)
(221,364) <==> new (222,363)
(160,429) <==> new (160,433)
(160,429) <==> new (160,433)
(160,429) <==> new (160,433)
(234,301) <==> new (234,300)
(234,301) <==> new (234,300)
(242,308) <==> new (243,308)
(175,454) <==> new (176,453)
(178,463) <==> new (178,460)
(178,463) <==> new (178,460)
(56,309) <==> new (56,308)
(284,273) <==> new (286,273)
(256,474) <==> new (254,475)
(281,235) <==> new (277,237)
(281,235) <==> new (277,237)

Side Lobe Information, Maximum Value is 6.25994e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(171,357)	519788
0.627242	2.025651	18	(185,341)	158177
0.627242	2.025651	23	(185,341)	158177
0.627242	2.025651	40	(185,341)	158177
0.427001	3.695709	53	(222,363)	137363
0.427001	3.695709	56	(222,363)	137363
0.298495	5.250632	71	(160,433)	136526
0.298495	5.250632	75	(160,433)	136526
0.298495	5.250632	79	(160,433)	136526
0.296618	5.278018	82	(234,300)	109324
0.296618	5.278018	84	(234,300)	109324
0.283816	5.469635	89	(243,308)	131808
0.308156	5.112294	97	(176,453)	62545.3
0.324914	4.882321	105	(178,460)	71053.8
0.324914	4.882321	113	(178,460)	71053.8
0.366681	4.357112	123	(56,308)	95608.3
0.255045	5.933831	135	(286,273)	177340
0.273672	5.627703	145	(254,475)	85470.3
0.357896	4.462435	155	(258,231)	0
0.258209	5.880290	161	(277,237)	120723
0.258209	5.880290	166	(277,237)	120723

89/12/01
18:52:20

Exhibit II-12-e

Compressed 58.0:1, All Scalings

sc058080.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.80
Location of max in original is (169,359)
Location of max in compression is (162,353), sub-pixel is (161.875,352.625)
Laplacian Value at max location is 274164.000000 at (159,356)
Smoothed (FFT) Maximum Laplacian Value is 1276688.00 at (170.375,360.375)

Adjusting Locations:

(165,356) <==> new (162,353)
(184,343) <==> new (180,341)
(184,343) <==> new (180,341)
(174,320) <==> new (171,318)
(220,356) <==> new (216,353)
(220,356) <==> new (216,353)
(161,431) <==> new (157,429)
(161,431) <==> new (157,429)
(161,431) <==> new (157,429)
(229,301) <==> new (227,300)
(229,301) <==> new (227,300)
(242,305) <==> new (233,303)
(171,452) <==> new (174,452)
(176,465) <==> new (168,455)
(176,465) <==> new (168,455)
(48,309) <==> new (45,306)
(278,266) <==> new (286,268)
(259,479) <==> new (257,475)
(277,234) <==> new (281,237)
(277,234) <==> new (281,237)

Side Lobe Information, Maximum Value is 5.79067e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(162,353)	259108
0.586662	2.316119	18	(180,341)	130130
0.586662	2.316119	23	(180,341)	130130
0.298859	5.245337	40	(171,318)	97740.3
0.616954	2.097470	53	(216,353)	125184
0.616954	2.097470	56	(216,353)	125184
0.479104	3.195705	71	(157,429)	69736.5
0.479104	3.195705	75	(157,429)	69736.5
0.479104	3.195705	79	(157,429)	69736.5
0.245824	6.093764	82	(227,300)	52844.9
0.245824	6.093764	84	(227,300)	52844.9
0.238659	6.222218	89	(233,303)	113705
0.459159	3.380371	97	(174,452)	119159
0.453331	3.435848	105	(168,455)	105323
0.453331	3.435848	113	(168,455)	105323
0.378084	4.224120	123	(45,306)	112104
0.328068	4.840360	135	(286,268)	136610
0.406623	3.908081	145	(257,475)	126597
0.143712	8.425057	155	(258,231)	0
0.343110	4.645664	161	(281,237)	109759
0.343110	4.645664	166	(281,237)	109759

89/12/01
18:51:00

sc058090.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.90

Location of max in original is (169,359)

Location of max in compression is (165,356), sub-pixel is (165.250,356.125)

Laplacian Value at max location is 567856.000000 at (164,357)

Smoothed (FFT) Maximum Laplacian Value is 1805376.00 at (170.375,360.375)

Adjusting Locations:

(167,358) <==> new (165,356)
(186,344) <==> new (184,343)
(186,344) <==> new (184,343)
(177,320) <==> new (174,320)
(223,358) <==> new (220,356)
(223,358) <==> new (220,356)
(160,429) <==> new (161,431)
(160,429) <==> new (161,431)
(160,429) <==> new (161,431)
(230,303) <==> new (229,301)
(230,303) <==> new (229,301)
(242,306) <==> new (242,305)
(174,453) <==> new (171,452)
(177,463) <==> new (176,465)
(177,463) <==> new (176,465)
(50,310) <==> new (48,309)
(280,269) <==> new (278,266)
(254,475) <==> new (259,479)
(278,235) <==> new (277,234)
(278,235) <==> new (277,234)

Side Lobe Information, Maximum Value is 7.65648e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(165,356)	521996
0.480000	3.187591	18	(184,343)	111478
0.480000	3.187591	23	(184,343)	111478
0.260281	5.845577	40	(174,320)	171593
0.424946	3.716660	53	(220,356)	180737
0.424946	3.716660	56	(220,356)	180737
0.308304	5.110214	71	(161,431)	79828.3
0.308304	5.110214	75	(161,431)	79828.3
0.308304	5.110214	79	(161,431)	79828.3
0.240665	6.185875	82	(229,301)	47633.1
0.240665	6.185875	84	(229,301)	47633.1
0.203958	6.904593	89	(242,305)	77495.3
0.347105	4.595391	97	(171,452)	49605
0.386276	4.131027	105	(176,465)	187845
0.386276	4.131027	113	(176,465)	187845
0.309178	5.097908	123	(48,309)	148484
0.272667	5.643676	135	(278,266)	180887
0.357308	4.469569	145	(259,479)	154664
0.221041	6.555281	155	(258,231)	0
0.289062	5.390085	161	(277,234)	175257
0.289062	5.390085	166	(277,234)	175257

89/12/01
18:49:40

sc058095.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.95

Location of max in original is (169,359)

Location of max in compression is (167,358), sub-pixel is (167.250,357.500)

Laplacian Value at max location is 727073.500000 at (167,358)

Smoothed (FFT) Maximum Laplacian Value is 1897504.00 at (170.375,360.375)

Adjusting Locations:

(168,358) <==> new (167,358)
(187,344) <==> new (186,344)
(187,344) <==> new (186,344)
(178,321) <==> new (177,320)
(224,359) <==> new (223,358)
(224,359) <==> new (223,358)
(159,429) <==> new (160,429)
(159,429) <==> new (160,429)
(159,429) <==> new (160,429)
(230,304) <==> new (230,303)
(230,304) <==> new (230,303)
(243,307) <==> new (242,306)
(175,453) <==> new (174,453)
(177,463) does not move
(177,463) does not move
(51,310) <==> new (50,310)
(281,273) <==> new (280,269)
(254,476) <==> new (254,475)
(279,236) <==> new (278,235)
(279,236) <==> new (278,235)

Side Lobe Information, Maximum Value is 8.26246e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(167,358)	727074
0.472897	3.252331	18	(186,344)	152246
0.472897	3.252331	23	(186,344)	152246
0.239434	6.208137	40	(177,320)	153081
0.370096	4.316855	53	(223,358)	149723
0.370096	4.316855	56	(223,358)	149723
0.259265	5.862555	71	(160,429)	68583
0.259265	5.862555	75	(160,429)	68583
0.259265	5.862555	79	(160,429)	68583
0.228695	6.407440	82	(230,303)	47094.9
0.228695	6.407440	84	(230,303)	47094.9
0.222991	6.517127	89	(242,306)	117566
0.324844	4.883252	97	(174,453)	132217
0.343213	4.644356	105	(177,463)	114170
0.343213	4.644356	113	(177,463)	114170
0.290735	5.365029	123	(50,310)	104602
0.238428	6.226432	135	(280,269)	111835
0.265448	5.760205	145	(254,475)	88262.8
0.259393	5.860415	155	(258,231)	0
0.264708	5.772325	161	(278,235)	127787
0.264708	5.772325	166	(278,235)	127787

89/12/01
18:48:20

sc058097.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.97
Location of max in original is (169,359)
Location of max in compression is (168,358), sub-pixel is (168.125,358.250)
Laplacian Value at max location is 834768.500000 at (168,358)
Smoothed (FFT) Maximum Laplacian Value is 1644448.00 at (170.375,360.375)

Adjusting Locations:

(168,358) does not move
(187,344) does not move
(187,344) does not move
(178,321) does not move
(224,359) does not move
(224,359) does not move
(159,429) does not move
(159,429) does not move
(159,429) does not move
(230,304) does not move
(230,304) does not move
(243,307) does not move
(175,453) does not move
(178,463) <==> new (177,463)
(178,463) <==> new (177,463)
(52,309) <==> new (51,310)
(281,273) does not move
(254,477) <==> new (254,476)
(279,236) does not move
(279,236) does not move

Side Lobe Information, Maximum Value is 8.48709e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,358)	834769
0.472834	3.252912	18	(187,344)	153462
0.472834	3.252912	23	(187,344)	153462
0.229570	6.390855	40	(178,321)	144057
0.348953	4.572327	53	(224,359)	139938
0.348953	4.572327	56	(224,359)	139938
0.252505	5.977304	71	(159,429)	102852
0.252505	5.977304	75	(159,429)	102852
0.252505	5.977304	79	(159,429)	102852
0.225908	6.460686	82	(230,304)	45570
0.225908	6.460686	84	(230,304)	45570
0.233993	6.307970	89	(243,307)	146735
0.314652	5.021699	97	(175,453)	174165
0.319145	4.960115	105	(177,463)	70961.8
0.319145	4.960115	113	(177,463)	70961.8
0.287112	5.419480	123	(51,310)	106520
0.231732	6.350131	135	(281,273)	124022
0.266733	5.739274	145	(254,476)	93766.8
0.278087	5.558196	155	(258,231)	0
0.252749	5.973110	161	(279,236)	98124.8
0.252749	5.973110	166	(279,236)	98124.8

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.
 Window contains 0.00% noise and is out of scale by a factor of 0.98
 Location of max in original is (169,359)
 Location of max in compression is (168,358), sub-pixel is (168.375,358.375)
 Laplacian Value at max location is 839725.500000 at (168,358)
 Smoothed (FFT) Maximum Laplacian Value is 1587744.00 at (170.375,360.375)

Adjusting Locations:

(169,359) <==> new (168,358)
 (187,344) does not move
 (187,344) does not move
 (178,321) does not move
 (224,360) <==> new (224,359)
 (224,360) <==> new (224,359)
 (159,429) does not move
 (159,429) does not move
 (159,429) does not move
 (230,304) does not move
 (230,304) does not move
 (243,308) <==> new (243,307)
 (175,454) <==> new (175,453)
 (177,464) <==> new (178,463)
 (177,464) <==> new (178,463)
 (52,310) <==> new (52,309)
 (282,274) <==> new (281,273)
 (254,477) does not move
 (280,236) <==> new (279,236)
 (280,236) <==> new (279,236)

Side Lobe Information, Maximum Value is 8.49865e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,358)	839726
0.475451	3.228939	18	(187,344)	143341
0.475451	3.228939	23	(187,344)	143341
0.230760	6.368397	40	(178,321)	152615
0.357351	4.469050	53	(224,359)	142546
0.357351	4.469050	56	(224,359)	142546
0.257430	5.893407	71	(159,429)	127507
0.257430	5.893407	75	(159,429)	127507
0.257430	5.893407	79	(159,429)	127507
0.223402	6.509121	82	(230,304)	40597.8
0.223402	6.509121	84	(230,304)	40597.8
0.238336	6.228096	89	(243,307)	149842
0.318147	4.973720	97	(175,453)	180651
0.317626	4.980844	105	(178,463)	49851.3
0.317626	4.980844	113	(178,463)	49851.3
0.290480	5.368834	123	(52,309)	131529
0.228138	6.418026	135	(281,273)	127052
0.267233	5.731103	145	(254,477)	73636
0.279106	5.542315	155	(258,231)	0
0.248457	6.047490	161	(279,236)	98892.8
0.248457	6.047490	166	(279,236)	98892.8

89/12/01
18:45:42

sc058099.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.99
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (168.750,358.625)
Laplacian Value at max location is 847972.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1283648.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(187,344) does not move
(187,344) does not move
(179,321) <==> new (178,321)
(225,360) <==> new (224,360)
(225,360) <==> new (224,360)
(160,430) <==> new (159,429)
(160,430) <==> new (159,429)
(160,430) <==> new (159,429)
(230,304) does not move
(230,304) does not move
(243,308) does not move
(175,454) does not move
(177,464) does not move
(177,464) does not move
(53,310) <==> new (52,310)
(283,274) <==> new (282,274)
(254,478) <==> new (254,477)
(277,238) <==> new (280,236)
(281,236) <==> new (280,236)

Side Lobe Information, Maximum Value is 8.58804e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	847973
0.475787	3.225872	18	(187,344)	118946
0.475787	3.225872	23	(187,344)	118946
0.228099	6.418768	40	(178,321)	163884
0.347195	4.594265	53	(224,360)	126026
0.347195	4.594265	56	(224,360)	126026
0.251001	6.003241	71	(159,429)	168656
0.251001	6.003241	75	(159,429)	168656
0.251001	6.003241	79	(159,429)	168656
0.226379	6.451645	82	(230,304)	47558.4
0.226379	6.451645	84	(230,304)	47558.4
0.243116	6.141869	89	(243,308)	159702
0.313609	5.036116	97	(175,454)	181173
0.307245	5.125158	105	(177,464)	67187.5
0.307245	5.125158	113	(177,464)	67187.5
0.288053	5.405283	123	(52,310)	103258
0.226432	6.450628	135	(282,274)	108051
0.269369	5.696521	145	(254,477)	85932.3
0.290555	5.367709	155	(258,231)	0
0.243898	6.127910	161	(280,236)	94652.4
0.243898	6.127910	166	(280,236)	94652.4

89/12/01
18:34:52

sc058100.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.250,358.875)
Laplacian Value at max location is 842943.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1161280.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(184,348) <==> new (187,344)
(188,345) <==> new (187,344)
(179,320) <==> new (179,321)
(222,365) <==> new (225,360)
(225,361) <==> new (225,360)
(161,430) <==> new (160,430)
(165,434) <==> new (160,430)
(166,438) <==> new (160,430)
(231,304) <==> new (230,304)
(231,304) <==> new (230,304)
(243,308) does not move
(174,456) <==> new (175,454)
(177,464) does not move
(182,472) <==> new (177,464)
(55,311) <==> new (53,310)
(280,281) <==> new (283,274)
(256,475) <==> new (254,478)
(276,238) <==> new (277,238)
(281,236) does not move

Side Lobe Information, Maximum Value is 8.27317e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	842943
0.476796	3.216674	18	(187,344)	106297
0.476796	3.216674	23	(187,344)	106297
0.223459	6.508021	40	(179,321)	125795
0.343553	4.640068	53	(225,360)	147982
0.343553	4.640068	56	(225,360)	147982
0.250689	6.008654	71	(160,430)	97450.1
0.250689	6.008654	75	(160,430)	97450.1
0.250689	6.008654	79	(160,430)	97450.1
0.228355	6.413899	82	(230,304)	50378.9
0.228355	6.413899	84	(230,304)	50378.9
0.245446	6.100443	89	(243,308)	153552
0.306214	5.139752	97	(175,454)	193213
0.301982	5.200184	105	(177,464)	73799.3
0.301982	5.200184	113	(177,464)	73799.3
0.290754	5.364745	123	(53,310)	94086.5
0.228050	6.419697	135	(283,274)	106721
0.270807	5.673409	145	(254,478)	87508.3
0.296871	5.274327	155	(258,231)	0
0.232384	6.337933	161	(277,238)	125333
0.241868	6.164216	166	(281,236)	96072.5

89/12/01
13:36:10

sc058101.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.01
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.125,358.750)
Laplacian Value at max location is 809052.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1148704.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(187,344) does not move
(187,344) does not move
(179,321) does not move
(225,360) does not move
(225,360) does not move
(160,430) <==> new (159,429)
(160,430) <==> new (159,429)
(160,430) <==> new (159,429)
(230,304) does not move
(230,304) does not move
(243,308) does not move
(175,454) does not move
(177,464) does not move
(177,464) does not move
(53,310) does not move
(283,274) does not move
(254,478) does not move
(277,238) does not move
(281,236) <==> new (280,236)

Side Lobe Information, Maximum Value is 8.01865e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	809053
0.476217	3.221947	18	(187,344)	110745
0.476217	3.221947	23	(187,344)	110745
0.221020	6.555692	40	(179,321)	118698
0.344692	4.625690	53	(225,360)	145743
0.344692	4.625690	56	(225,360)	145743
0.253103	5.967030	71	(159,429)	166918
0.253103	5.967030	75	(159,429)	166918
0.253103	5.967030	79	(159,429)	166918
0.230911	6.365550	82	(230,304)	48835.1
0.230911	6.365550	84	(230,304)	48835.1
0.244818	6.111563	89	(243,308)	143810
0.306356	5.137730	97	(175,454)	187608
0.304401	5.165538	105	(177,464)	78994
0.304401	5.165538	113	(177,464)	78994
0.297026	5.272060	123	(53,310)	93584.3
0.234090	6.306175	135	(283,274)	130260
0.270275	5.681938	145	(254,478)	80450.5
0.297404	5.266532	155	(258,231)	0
0.235343	6.282983	161	(277,238)	125900
0.240115	6.195800	166	(280,236)	81877.9

89/12/01
18:37:30

sc058102.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.02
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.250,358.750)
Laplacian Value at max location is 796027.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1103456.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(187,344) does not move
(187,344) does not move
(179,321) <==> new (180,321)
(225,360) does not move
(225,360) does not move
(159,429) <==> new (160,429)
(159,429) <==> new (160,429)
(159,429) <==> new (160,429)
(230,304) <==> new (231,303)
(230,304) <==> new (231,303)
(243,308) does not move
(175,454) <==> new (176,454)
(177,464) does not move
(177,464) does not move
(53,310) does not move
(283,274) does not move
(254,478) does not move
(277,238) does not move
(280,236) <==> new (281,236)

Side Lobe Information, Maximum Value is 7.96479e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	796028
0.476252	3.221629	18	(187,344)	106198
0.476252	3.221629	23	(187,344)	106198
0.218339	6.608687	40	(180,321)	80493.9
0.351311	4.543080	53	(225,360)	144368
0.351311	4.543080	56	(225,360)	144368
0.254731	5.939177	71	(160,429)	126426
0.254731	5.939177	75	(160,429)	126426
0.254731	5.939177	79	(160,429)	126426
0.231774	6.349344	82	(231,303)	35110.1
0.231774	6.349344	84	(231,303)	35110.1
0.246765	6.077163	89	(243,308)	137255
0.303454	5.179075	97	(176,454)	144716
0.306525	5.135344	105	(177,464)	93350.5
0.306525	5.135344	113	(177,464)	93350.5
0.302811	5.188284	123	(53,310)	99221.3
0.238730	6.220926	135	(283,274)	138468
0.270255	5.682269	145	(254,478)	81999.5
0.298241	5.254326	155	(258,231)	0
0.236062	6.269736	161	(277,238)	136780
0.240001	6.197873	166	(281,236)	76493.1

89/12/01
18:38:50

sc058103.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.03
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.250,358.625)
Laplacian Value at max location is 771689.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 1073600.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(187,344) does not move
(187,344) does not move
(180,321) does not move
(225,360) does not move
(225,360) does not move
(160,429) <==> new (159,429)
(160,429) <==> new (159,429)
(160,429) <==> new (159,429)
(231,303) <==> new (232,303)
(231,303) <==> new (232,303)
(243,308) does not move
(176,454) does not move
(177,464) does not move
(177,464) does not move
(53,310) does not move
(283,274) does not move
(254,478) does not move
(277,238) does not move
(281,236) <==> new (281,235)

Side Lobe Information, Maximum Value is 7.81967e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	771690
0.480982	3.178710	18	(187,344)	106317
0.480982	3.178710	23	(187,344)	106317
0.217395	6.627509	40	(180,321)	90996.4
0.360345	4.432809	53	(225,360)	141746
0.360345	4.432809	56	(225,360)	141746
0.260319	5.844943	71	(159,429)	164919
0.260319	5.844943	75	(159,429)	164919
0.260319	5.844943	79	(159,429)	164919
0.235443	6.281147	82	(232,303)	49906.8
0.235443	6.281147	84	(232,303)	49906.8
0.248600	6.044991	89	(243,308)	134358
0.303402	5.179814	97	(176,454)	140878
0.312791	5.047462	105	(177,464)	109276
0.312791	5.047462	113	(177,464)	109276
0.314496	5.023853	123	(53,310)	107446
0.242955	6.144735	135	(283,274)	143913
0.267445	5.727660	145	(254,478)	81172.9
0.297276	5.268405	155	(258,231)	0
0.239080	6.214565	161	(277,238)	144451
0.240404	6.190578	166	(281,235)	99947.8

89/12/01
13:40:08

sc058105.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.05
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.500,358.500)
Laplacian Value at max location is 709141.000000 at (170,359)
Smoothed (FFT) Maximum Laplacian Value is 1006208.00 at (169.875,358.750)

Adjusting Locations:

(169,359) does not move
(187,344) <==> new (186,343)
(187,344) <==> new (186,343)
(180,321) <==> new (186,343)
(225,360) <==> new (223,362)
(225,360) <==> new (223,362)
(159,429) <==> new (160,429)
(159,429) <==> new (160,429)
(159,429) <==> new (160,429)
(232,303) does not move
(232,303) does not move
(243,308) does not move
(176,454) does not move
(177,464) does not move
(177,464) does not move
(53,310) <==> new (53,311)
(283,274) <==> new (284,274)
(254,478) <==> new (254,479)
(277,238) does not move
(281,235) does not move

Side Lobe Information, Maximum Value is 7.61049e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	705759
0.489417	3.103206	18	(186,343)	66836
0.489417	3.103206	23	(186,343)	66836
0.489417	3.103206	40	(186,343)	66836
0.369240	4.326917	53	(223,362)	100686
0.369240	4.326917	56	(223,362)	100686
0.268653	5.708090	71	(160,429)	142708
0.268653	5.708090	75	(160,429)	142708
0.268653	5.708090	79	(160,429)	142708
0.244897	6.110166	82	(232,303)	66808.6
0.244897	6.110166	84	(232,303)	66808.6
0.253279	5.964007	89	(243,308)	125883
0.303093	5.184245	97	(176,454)	139119
0.319451	4.955957	105	(177,464)	132117
0.319451	4.955957	113	(177,464)	132117
0.332478	4.782370	123	(53,311)	117431
0.250526	6.011480	135	(284,274)	182460
0.264929	5.768706	145	(254,479)	80157.4
0.301733	5.203771	155	(258,231)	0
0.242723	6.148886	161	(277,238)	151505
0.239645	6.204308	166	(281,235)	104739

89/12/01
18:41:28

sc058110.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.10
Location of max in original is (169,359)
Location of max in compression is (170,358), sub-pixel is (169.750,358.250)
Laplacian Value at max location is 602269.000000 at (170,358)
Smoothed (FFT) Maximum Laplacian Value is 945888.00 at (170.375,360.375)

Adjusting Locations:

(169,359) <==> new (170,358)
(186,343) <==> new (185,343)
(186,343) <==> new (185,343)
(186,343) <==> new (185,343)
(223,362) <==> new (221,363)
(223,362) <==> new (221,363)
(160,429) <==> new (160,430)
(160,429) <==> new (160,430)
(160,429) <==> new (160,430)
(232,303) <==> new (234,301)
(232,303) <==> new (234,301)
(243,308) does not move
(176,454) <==> new (177,463)
(177,464) <==> new (177,463)
(177,464) <==> new (177,463)
(53,311) <==> new (54,310)
(284,274) does not move
(254,479) <==> new (256,486)
(277,238) does not move
(281,235) <==> new (277,238)

Side Lobe Information, Maximum Value is 7.14298e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(170,358)	602269
0.528561	2.769045	18	(185,343)	101652
0.528561	2.769045	23	(185,343)	101652
0.528561	2.769045	40	(185,343)	101652
0.404132	3.934770	53	(221,363)	156481
0.404132	3.934770	56	(221,363)	156481
0.283662	5.471995	71	(160,430)	125423
0.283662	5.471995	75	(160,430)	125423
0.283662	5.471995	79	(160,430)	125423
0.268175	5.715811	82	(234,301)	110635
0.268175	5.715811	84	(234,301)	110635
0.258014	5.883570	89	(243,308)	94849.6
0.332006	4.788546	97	(177,463)	151914
0.332006	4.788546	105	(177,463)	151914
0.332006	4.788546	113	(177,463)	151914
0.374280	4.268029	123	(54,310)	113452
0.271108	5.668570	135	(284,274)	179943
0.324280	4.890795	145	(256,486)	0
0.316814	4.991950	155	(258,231)	0
0.257612	5.890345	161	(277,238)	150620
0.257612	5.890345	166	(277,238)	150620

89/12/01
18:42:46

sc058120.rep

1

Image AQVIR1(41:297,231:487) at compression 58.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.20

Location of max in original is (169,359)

Location of max in compression is (171,357), sub-pixel is (170.625,357.125)

Laplacian Value at max location is 401887.500000 at (171,357)

Smoothed (FFT) Maximum Laplacian Value is 812384.00 at (170.375,360.375)

Adjusting Locations:

(170,358) <==> new (171,357)
(185,343) <==> new (186,340)
(185,343) <==> new (186,340)
(185,343) <==> new (186,340)
(221,363) <==> new (222,362)
(221,363) <==> new (222,362)
(160,430) does not move
(160,430) does not move
(160,430) does not move
(234,301) <==> new (232,300)
(234,301) <==> new (232,300)
(243,308) <==> new (242,308)
(177,463) <==> new (178,461)
(177,463) <==> new (178,461)
(177,463) <==> new (178,461)
(54,310) <==> new (54,309)
(284,274) <==> new (286,273)
(277,238) <==> new (278,237)
(277,238) <==> new (278,237)

Side Lobe Information, Maximum Value is 5.98123e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(171,357)	401888
0.639511	1.941517	18	(186,340)	122239
0.639511	1.941517	23	(186,340)	122239
0.639511	1.941517	40	(186,340)	122239
0.460817	3.364717	53	(222,362)	157686
0.460817	3.364717	56	(222,362)	157686
0.311072	5.071396	71	(160,430)	80301.8
0.311072	5.071396	75	(160,430)	80301.8
0.311072	5.071396	79	(160,430)	80301.8
0.326779	4.857462	82	(232,300)	85248.1
0.326779	4.857462	84	(232,300)	85248.1
0.277171	5.572523	89	(242,308)	101219
0.341393	4.667457	97	(178,461)	117095
0.341393	4.667457	105	(178,461)	117095
0.341393	4.667457	113	(178,461)	117095
0.443563	3.530451	123	(54,309)	136641
0.300980	5.214619	135	(286,273)	200260
0.367450	4.348012	145	(256,486)	0
0.351266	4.543634	155	(258,231)	0
0.286020	5.436037	161	(278,237)	107786
0.286020	5.436037	166	(278,237)	107786

89/12/01
19:17:18

Exhibit II-12-f

Compressed 90.0:1, All Scalings

sc090080.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.80
Location of max in original is (169,359)
Location of max in compression is (163,352), sub-pixel is (162.375,352.500)
Laplacian Value at max location is 216465.000000 at (161,354)
Smoothed (FFT) Maximum Laplacian Value is 1083984.00 at (170.375,360.375)

Adjusting Locations:

(165,356) <==> new (163,352)
(165,356) <==> new (163,352)
(165,356) <==> new (163,352)
(165,356) <==> new (163,352)
(220,356) <==> new (215,353)
(220,356) <==> new (215,353)
(161,432) <==> new (160,437)
(161,432) <==> new (160,437)
(161,432) <==> new (160,437)
(228,299) <==> new (226,299)
(228,299) <==> new (226,299)
(239,306) <==> new (233,305)
(175,453) <==> new (168,450)
(175,462) <==> new (168,450)
(175,462) <==> new (168,450)
(47,310) <==> new (44,309)
(278,265) <==> new (275,260)
(252,473) <==> new (256,476)
(277,235) <==> new (275,231)
(277,235) <==> new (275,231)

Side Lobe Information, Maximum Value is 5.30717e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(163,352)	150020
1.000000	0.000000	18	(163,352)	150020
1.000000	0.000000	23	(163,352)	150020
1.000000	0.000000	40	(163,352)	150020
0.622855	2.056130	53	(215,353)	127599
0.622855	2.056130	56	(215,353)	127599
0.543696	2.646437	71	(160,437)	137594
0.543696	2.646437	75	(160,437)	137594
0.543696	2.646437	79	(160,437)	137594
0.235750	6.275489	82	(226,299)	60524.9
0.235750	6.275489	84	(226,299)	60524.9
0.227053	6.438731	89	(233,305)	104402
0.529499	2.761349	97	(168,450)	78716.8
0.529499	2.761349	105	(168,450)	78716.8
0.529499	2.761349	113	(168,450)	78716.8
0.347545	4.589893	123	(44,309)	82414.4
0.372870	4.284420	135	(275,260)	161574
0.357763	4.464051	145	(256,476)	101008
0.169413	7.710538	155	(258,231)	0
0.338825	4.700248	161	(275,231)	0
0.338825	4.700248	166	(275,231)	0

89/12/01
19:15:56

sc090090.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.90
Location of max in original is (169,359)
Location of max in compression is (165,356), sub-pixel is (165.500,355.875)
Laplacian Value at max location is 439827.000000 at (165,356)
Smoothed (FFT) Maximum Laplacian Value is 1557824.00 at (170.375,360.375)

Adjusting Locations:

(167,358) <==> new (165,356)
(186,343) <==> new (165,356)
(186,343) <==> new (165,356)
(186,343) <==> new (165,356)
(222,358) <==> new (220,356)
(222,358) <==> new (220,356)
(163,433) <==> new (161,432)
(163,433) <==> new (161,432)
(163,433) <==> new (161,432)
(227,301) <==> new (228,299)
(227,301) <==> new (228,299)
(242,307) <==> new (239,306)
(174,453) <==> new (175,453)
(177,462) <==> new (175,462)
(177,462) <==> new (175,462)
(49,312) <==> new (47,310)
(280,268) <==> new (278,265)
(253,475) <==> new (252,473)
(277,236) <==> new (277,235)
(277,236) <==> new (277,235)

Side Lobe Information, Maximum Value is 7.00664e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(165,356)	439827
1.000000	0.000000	18	(165,356)	439827
1.000000	0.000000	23	(165,356)	439827
1.000000	0.000000	40	(165,356)	439827
0.399364	3.986307	53	(220,356)	142667
0.399364	3.986307	56	(220,356)	142667
0.337749	4.714057	71	(161,432)	99068.5
0.337749	4.714057	75	(161,432)	99068.5
0.337749	4.714057	79	(161,432)	99068.5
0.249203	6.034465	82	(228,299)	56982.1
0.249203	6.034465	84	(228,299)	56982.1
0.227597	6.428332	89	(239,306)	123154
0.409165	3.881011	97	(175,453)	121705
0.413791	3.832190	105	(175,462)	141434
0.413791	3.832190	113	(175,462)	141434
0.288202	5.403031	123	(47,310)	111402
0.281255	5.508994	135	(278,265)	122379
0.288799	5.394042	145	(252,473)	146447
0.245711	6.095752	155	(258,231)	0
0.309645	5.091364	161	(277,235)	105159
0.309645	5.091364	166	(277,235)	105159

89/12/01
19:14:36

sc090095.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.95

Location of max in original is (169,359)

Location of max in compression is (167,358), sub-pixel is (167.500,357.500)

Laplacian Value at max location is 584052.500000 at (167,358)

Smoothed (FFT) Maximum Laplacian Value is 1426368.00 at (170.375,360.375)

Adjusting Locations:

(168,358) <==> new (167,358)
(186,344) <==> new (186,343)
(186,344) <==> new (186,343)
(186,344) <==> new (186,343)
(223,360) <==> new (222,358)
(223,360) <==> new (222,358)
(164,433) <==> new (163,433)
(164,433) <==> new (163,433)
(164,433) <==> new (163,433)
(227,301) does not move
(227,301) does not move
(242,308) <==> new (242,307)
(175,454) <==> new (174,453)
(178,462) <==> new (177,462)
(178,462) <==> new (177,462)
(51,311) <==> new (49,312)
(281,270) <==> new (280,268)
(254,476) <==> new (253,475)
(276,238) <==> new (277,236)
(281,235) <==> new (277,236)

Side Lobe Information, Maximum Value is 7.52432e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(167,358)	584053
0.535917	2.709022	18	(186,343)	150130
0.535917	2.709022	23	(186,343)	150130
0.535917	2.709022	40	(186,343)	150130
0.352449	4.529035	53	(222,358)	111847
0.352449	4.529035	56	(222,358)	111847
0.293211	5.328191	71	(163,433)	108409
0.293211	5.328191	75	(163,433)	108409
0.293211	5.328191	79	(163,433)	108409
0.246584	6.080356	82	(227,301)	51423.5
0.246584	6.080356	84	(227,301)	51423.5
0.239057	6.214992	89	(242,307)	118892
0.393166	4.054241	97	(174,453)	96431.3
0.376595	4.241251	105	(177,462)	146849
0.376595	4.241251	113	(177,462)	146849
0.271937	5.655311	123	(49,312)	62801.5
0.232080	6.343631	135	(280,268)	89275.1
0.286838	5.423635	145	(253,475)	134318
0.268241	5.714753	155	(258,231)	0
0.279924	5.529594	161	(277,236)	114435
0.279924	5.529594	166	(277,236)	114435

89/12/01
19:13:16

sc090097.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.97
Location of max in original is (169,359)
Location of max in compression is (168,358), sub-pixel is (168.250,358.250)
Laplacian Value at max location is 633185.500000 at (168,358)
Smoothed (FFT) Maximum Laplacian Value is 1125696.00 at (170.375,360.375)

Adjusting Locations:

(168,358) does not move
(187,344) <==> new (186,344)
(187,344) <==> new (186,344)
(187,344) <==> new (186,344)
(223,360) does not move
(223,360) does not move
(164,433) does not move
(164,433) does not move
(164,433) does not move
(227,301) does not move
(227,301) does not move
(242,308) does not move
(175,454) does not move
(178,462) does not move
(178,462) does not move
(51,311) does not move
(282,270) <==> new (281,270)
(254,476) does not move
(276,238) does not move
(281,235) does not move

Side Lobe Information, Maximum Value is 7.66994e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,358)	633186
0.540517	2.671908	18	(186,344)	140653
0.540517	2.671908	23	(186,344)	140653
0.540517	2.671908	40	(186,344)	140653
0.343811	4.636803	53	(223,360)	103359
0.343811	4.636803	56	(223,360)	103359
0.278386	5.553531	71	(164,433)	118276
0.278386	5.553531	75	(164,433)	118276
0.278386	5.553531	79	(164,433)	118276
0.252034	5.985408	82	(227,301)	68544.8
0.252034	5.985408	84	(227,301)	68544.8
0.250184	6.017400	89	(242,308)	119126
0.387628	4.115851	97	(175,454)	119946
0.351469	4.541129	105	(178,462)	96874.5
0.351469	4.541129	113	(178,462)	96874.5
0.272118	5.652434	123	(51,311)	87830.6
0.217360	6.628204	135	(281,270)	67311
0.288505	5.398463	145	(254,476)	107375
0.281084	5.511636	155	(258,231)	0
0.268337	5.713200	161	(276,238)	104270
0.265170	5.764757	166	(281,235)	72792

89/12/01
19:11:56

sc090098.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.98
Location of max in original is (169,359)
Location of max in compression is (168,358), sub-pixel is (168.500,358.375)
Laplacian Value at max location is 640492.500000 at (168,359)
Smoothed (FFT) Maximum Laplacian Value is 1072448.00 at (170.375,360.375)

Adjusting Locations:

(169,359) <==> new (168,358)
(187,344) does not move
(187,344) does not move
(187,344) does not move
(224,361) <==> new (223,360)
(224,361) <==> new (223,360)
(164,432) <==> new (164,433)
(164,432) <==> new (164,433)
(164,432) <==> new (164,433)
(228,301) <==> new (227,301)
(228,301) <==> new (227,301)
(243,308) <==> new (242,308)
(175,454) does not move
(179,463) <==> new (178,462)
(179,463) <==> new (178,462)
(52,311) <==> new (51,311)
(282,273) <==> new (282,270)
(254,476) does not move
(276,239) <==> new (276,238)
(282,235) <==> new (281,235)

Side Lobe Information, Maximum Value is 7.65647e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,358)	622060
0.546026	2.627871	18	(187,344)	176509
0.546026	2.627871	23	(187,344)	176509
0.546026	2.627871	40	(187,344)	176509
0.356134	4.483864	53	(223,360)	108010
0.356134	4.483864	56	(223,360)	108010
0.280674	5.517975	71	(164,433)	119426
0.280674	5.517975	75	(164,433)	119426
0.280674	5.517975	79	(164,433)	119426
0.253264	5.964268	82	(227,301)	84444.5
0.253264	5.964268	84	(227,301)	84444.5
0.255179	5.931554	89	(242,308)	120666
0.394303	4.041703	97	(175,454)	128218
0.349066	4.570925	105	(178,462)	76861.8
0.349066	4.570925	113	(178,462)	76861.8
0.275845	5.593342	123	(51,311)	84616
0.214665	6.682385	135	(282,270)	45404.5
0.289767	5.379516	145	(254,476)	110050
0.281933	5.498539	155	(258,231)	0
0.263714	5.788665	161	(276,238)	117386
0.263448	5.793051	166	(281,235)	87233.3

89/12/01
19:10:36

sc090099.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.99
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (168.750,358.625)
Laplacian Value at max location is 641218.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 948384.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(187,345) <==> new (187,344)
(187,345) <==> new (187,344)
(187,345) <==> new (187,344)
(224,362) <==> new (224,361)
(224,362) <==> new (224,361)
(164,432) does not move
(164,432) does not move
(164,432) does not move
(228,301) does not move
(228,301) does not move
(243,308) does not move
(175,454) does not move
(180,463) <==> new (179,463)
(180,463) <==> new (179,463)
(52,312) <==> new (52,311)
(283,273) <==> new (282,273)
(255,476) <==> new (254,476)
(276,239) does not move
(282,236) <==> new (282,235)

Side Lobe Information, Maximum Value is 7.72962e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	641219
0.545467	2.632317	18	(187,344)	151020
0.545467	2.632317	23	(187,344)	151020
0.545467	2.632317	40	(187,344)	151020
0.353230	4.519426	53	(224,361)	83978
0.353230	4.519426	56	(224,361)	83978
0.274584	5.613249	71	(164,432)	115989
0.274584	5.613249	75	(164,432)	115989
0.274584	5.613249	79	(164,432)	115989
0.255864	5.919913	82	(228,301)	66851.8
0.255864	5.919913	84	(228,301)	66851.8
0.261082	5.832225	89	(243,308)	148627
0.392234	4.064547	97	(175,454)	161900
0.337385	4.718738	105	(179,463)	77019
0.337385	4.718738	113	(179,463)	77019
0.275788	5.594253	123	(52,311)	87530
0.211799	6.740759	135	(282,273)	68226.6
0.290122	5.374192	145	(254,476)	109492
0.290877	5.362902	155	(258,231)	0
0.259610	5.856784	161	(276,239)	121140
0.261276	5.829013	166	(282,235)	123081

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.375,358.875)
Laplacian Value at max location is 624297.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 936480.00 at (169.875,358.500)

Adjusting Locations:

(169,359) does not move
(184,348) <==> new (187,345)
(188,345) <==> new (187,345)
(179,320) <==> new (187,345)
(222,365) <==> new (224,362)
(225,361) <==> new (224,362)
(161,430) <==> new (164,432)
(165,434) <==> new (164,432)
(166,438) <==> new (164,432)
(231,304) <==> new (228,301)
(231,304) <==> new (228,301)
(243,308) does not move
(174,456) <==> new (175,454)
(177,464) <==> new (180,463)
(182,472) <==> new (180,463)
(55,311) <==> new (52,312)
(280,281) <==> new (283,273)
(256,475) <==> new (255,476)
(276,238) <==> new (276,239)
(281,236) <==> new (282,236)

Side Lobe Information, Maximum Value is 7.42262e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	624298
0.547622	2.615188	18	(187,345)	145227
0.547622	2.615188	23	(187,345)	145227
0.547622	2.615188	40	(187,345)	145227
0.355735	4.488738	53	(224,362)	111774
0.355735	4.488738	56	(224,362)	111774
0.269913	5.687756	71	(164,432)	93939.3
0.269913	5.687756	75	(164,432)	93939.3
0.269913	5.687756	79	(164,432)	93939.3
0.259430	5.859796	82	(228,301)	81306.4
0.259430	5.859796	84	(228,301)	81306.4
0.262186	5.813903	89	(243,308)	138912
0.388638	4.104542	97	(175,454)	177845
0.331072	4.800769	105	(180,463)	92665.3
0.331072	4.800769	113	(180,463)	92665.3
0.281435	5.506218	123	(52,312)	92052.8
0.215526	6.665008	135	(283,273)	61116.9
0.291009	5.360932	145	(255,476)	76379
0.297167	5.269995	155	(258,231)	0
0.258545	5.874644	161	(276,239)	114492
0.261252	5.829409	166	(282,236)	125727

89/12/01
18:58:40

sc090101.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.01
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.250,358.750)
Laplacian Value at max location is 599689.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 849216.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(187,345) <==> new (187,344)
(187,345) <==> new (187,344)
(187,345) <==> new (187,344)
(224,362) does not move
(224,362) does not move
(164,432) does not move
(164,432) does not move
(164,432) does not move
(228,301) does not move
(228,301) does not move
(243,308) does not move
(175,454) does not move
(180,463) does not move
(180,463) does not move
(52,312) does not move
(283,273) does not move
(255,476) does not move
(276,239) does not move
(282,236) does not move

Side Lobe Information, Maximum Value is 7.20775e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	599689
0.545007	2.635980	18	(187,344)	120172
0.545007	2.635980	23	(187,344)	120172
0.545007	2.635980	40	(187,344)	120172
0.356590	4.478303	53	(224,362)	104719
0.356590	4.478303	56	(224,362)	104719
0.267431	5.727889	71	(164,432)	96354.5
0.267431	5.727889	75	(164,432)	96354.5
0.267431	5.727889	79	(164,432)	96354.5
0.261219	5.829953	82	(228,301)	85807
0.261219	5.829953	84	(228,301)	85807
0.261300	5.828614	89	(243,308)	135191
0.389122	4.099138	97	(175,454)	176326
0.332630	4.780385	105	(180,463)	86191.8
0.332630	4.780385	113	(180,463)	86191.8
0.287003	5.421129	123	(52,312)	92635.5
0.220384	6.568198	135	(283,273)	80395.8
0.287777	5.409444	145	(255,476)	60184.8
0.299378	5.237798	155	(258,231)	0
0.260276	5.845659	161	(276,239)	117743
0.260062	5.849228	166	(282,236)	126967

89/12/01
19:00:00

sc090102.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.02
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.375,358.750)
Laplacian Value at max location is 586421.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 873504.00 at (169.875,358.625)

Adjusting Locations:

(169,359) does not move
(187,344) does not move
(187,344) does not move
(187,344) does not move
(224,362) does not move
(224,362) does not move
(164,432) does not move
(164,432) does not move
(164,432) does not move
(228,301) does not move
(228,301) does not move
(243,308) does not move
(175,454) does not move
(180,463) does not move
(180,463) does not move
(52,312) does not move
(283,273) <==> new (283,274)
(255,476) <==> new (254,476)
(276,239) does not move
(282,236) does not move

Side Lobe Information, Maximum Value is 7.15571e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	586421
0.544467	2.640286	18	(187,344)	107287
0.544467	2.640286	23	(187,344)	107287
0.544467	2.640286	40	(187,344)	107287
0.367460	4.347896	53	(224,362)	108044
0.367460	4.347896	56	(224,362)	108044
0.267659	5.724185	71	(164,432)	90076.1
0.267659	5.724185	75	(164,432)	90076.1
0.267659	5.724185	79	(164,432)	90076.1
0.260460	5.842597	82	(228,301)	92439.6
0.260460	5.842597	84	(228,301)	92439.6
0.263107	5.798681	89	(243,308)	129636
0.388948	4.101085	97	(175,454)	183526
0.331803	4.791202	105	(180,463)	75869.3
0.331803	4.791202	113	(180,463)	75869.3
0.294673	5.306603	123	(52,312)	97938
0.224609	6.485733	135	(283,274)	125625
0.286256	5.432450	145	(254,476)	80370.8
0.301199	5.211459	155	(258,231)	0
0.262095	5.815420	161	(276,239)	122209
0.261188	5.830469	166	(282,236)	131086

89/12/01
19:01:20

sc090103.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.03
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.375,358.625)
Laplacian Value at max location is 571109.500000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 847744.00 at (169.875,358.750)

Adjusting Locations:

(169,359) does not move
(187,344) does not move
(187,344) does not move
(187,344) does not move
(224,362) does not move
(224,362) does not move
(164,432) does not move
(164,432) does not move
(164,432) does not move
(228,301) does not move
(228,301) does not move
(243,308) does not move
(175,454) does not move
(180,463) does not move
(180,463) does not move
(52,312) does not move
(283,274) <==> new (283,273)
(254,476) <==> new (254,475)
(276,239) does not move
(282,236) does not move

Side Lobe Information, Maximum Value is 7.03444e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	571110
0.548061	2.611714	18	(187,344)	106954
0.548061	2.611714	23	(187,344)	106954
0.548061	2.611714	40	(187,344)	106954
0.377629	4.229346	53	(224,362)	102867
0.377629	4.229346	56	(224,362)	102867
0.268311	5.713620	71	(164,432)	86004.9
0.268311	5.713620	75	(164,432)	86004.9
0.268311	5.713620	79	(164,432)	86004.9
0.260022	5.849899	82	(228,301)	92572.4
0.260022	5.849899	84	(228,301)	92572.4
0.264829	5.770347	89	(243,308)	123580
0.390635	4.082284	97	(175,454)	186021
0.334156	4.760506	105	(180,463)	69394.8
0.334156	4.760506	113	(180,463)	69394.8
0.305269	5.153169	123	(52,312)	101848
0.227823	6.424034	135	(283,273)	112293
0.281579	5.504003	145	(254,475)	116832
0.301298	5.210034	155	(258,231)	0
0.264467	5.776285	161	(276,239)	124463
0.259239	5.862996	166	(282,236)	127098

89/12/01
19:02:42

sc090105.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.05
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.625,358.500)
Laplacian Value at max location is 532073.000000 at (169,359)
Smoothed (FFT) Maximum Laplacian Value is 861568.00 at (169.875,358.750)

Adjusting Locations:

(169,359) does not move
(187,344) <==> new (186,344)
(187,344) <==> new (186,344)
(187,344) <==> new (186,344)
(224,362) does not move
(224,362) does not move
(164,432) does not move
(164,432) does not move
(164,432) does not move
(228,301) does not move
(228,301) does not move
(243,308) does not move
(175,454) does not move
(180,463) <==> new (180,464)
(180,463) <==> new (180,464)
(52,312) does not move
(283,273) <==> new (283,274)
(254,475) does not move
(276,239) does not move
(282,236) does not move

Side Lobe Information, Maximum Value is 6.86732e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	532073
0.554306	2.562506	18	(186,344)	52583
0.554306	2.562506	23	(186,344)	52583
0.554306	2.562506	40	(186,344)	52583
0.390992	4.078324	53	(224,362)	103767
0.390992	4.078324	56	(224,362)	103767
0.270063	5.685357	71	(164,432)	71273.4
0.270063	5.685357	75	(164,432)	71273.4
0.270063	5.685357	79	(164,432)	71273.4
0.260557	5.840979	82	(228,301)	93767.8
0.260557	5.840979	84	(228,301)	93767.8
0.268740	5.706678	89	(243,308)	111305
0.391172	4.076327	97	(175,454)	183585
0.334021	4.762258	105	(180,464)	66707.3
0.334021	4.762258	113	(180,464)	66707.3
0.322548	4.914052	123	(52,312)	109629
0.233702	6.313384	135	(283,274)	152710
0.277806	5.562585	145	(254,475)	110141
0.306247	5.139282	155	(258,231)	0
0.267198	5.731672	161	(276,239)	121512
0.256524	5.908713	166	(282,236)	120838

89/12/01
19:04:02

sc090110.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.10
Location of max in original is (169,359)
Location of max in compression is (170,358), sub-pixel is (169.750,358.375)
Laplacian Value at max location is 473022.000000 at (170,359)
Smoothed (FFT) Maximum Laplacian Value is 796224.00 at (169.875,358.750)

Adjusting Locations:

(169,359) <==> new (170,358)
(186,344) <==> new (185,343)
(186,344) <==> new (185,343)
(186,344) <==> new (185,343)
(224,362) <==> new (224,363)
(224,362) <==> new (224,363)
(164,432) <==> new (161,431)
(164,432) <==> new (161,431)
(164,432) <==> new (161,431)
(228,301) <==> new (229,301)
(228,301) <==> new (229,301)
(243,308) does not move
(175,454) <==> new (176,454)
(180,464) <==> new (182,468)
(180,464) <==> new (182,468)
(52,312) <==> new (51,312)
(283,274) does not move
(254,475) does not move
(276,239) <==> new (277,238)
(282,236) <==> new (277,238)

Side Lobe Information, Maximum Value is 6.55659e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(170,358)	469785
0.587219	2.311996	18	(185,343)	102269
0.587219	2.311996	23	(185,343)	102269
0.587219	2.311996	40	(185,343)	102269
0.412189	3.849035	53	(224,363)	118709
0.412189	3.849035	56	(224,363)	118709
0.273767	5.626185	71	(161,431)	60824.6
0.273767	5.626185	75	(161,431)	60824.6
0.273767	5.626185	79	(161,431)	60824.6
0.262698	5.805426	82	(229,301)	55363.8
0.262698	5.805426	84	(229,301)	55363.8
0.269878	5.688322	89	(243,308)	96962.5
0.385715	4.137336	97	(176,454)	139853
0.339308	4.694057	105	(182,468)	106501
0.339308	4.694057	113	(182,468)	106501
0.356380	4.480872	123	(51,312)	133074
0.238789	6.219853	135	(283,274)	130377
0.273390	5.632170	145	(254,475)	78989
0.318462	4.969423	155	(258,231)	0
0.276382	5.584900	161	(277,238)	128738
0.276382	5.584900	166	(277,238)	128738

89/12/01
19:05:22

sc090120.rep

1

Image AQVIR1(41:297,231:487) at compression 90.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.20
Location of max in original is (169,359)
Location of max in compression is (171,357), sub-pixel is (170.625,357.000)
Laplacian Value at max location is 319604.500000 at (172,357)
Smoothed (FFT) Maximum Laplacian Value is 620512.00 at (170.375,360.375)

Adjusting Locations:

(170,358) <==> new (171,357)
(185,343) <==> new (185,342)
(185,343) <==> new (185,342)
(185,343) <==> new (185,342)
(224,363) <==> new (225,363)
(224,363) <==> new (225,363)
(161,431) <==> new (160,433)
(161,431) <==> new (160,433)
(161,431) <==> new (160,433)
(229,301) <==> new (234,299)
(229,301) <==> new (234,299)
(243,308) does not move
(176,454) <==> new (177,453)
(182,468) <==> new (183,469)
(182,468) <==> new (183,469)
(51,312) <==> new (54,309)
(283,274) <==> new (285,273)
(254,475) <==> new (253,475)
(277,238) <==> new (278,237)
(277,238) <==> new (278,237)

Side Lobe Information, Maximum Value is 5.61768e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(171,357)	312608
0.684013	1.649358	18	(185,342)	123502
0.684013	1.649358	23	(185,342)	123502
0.684013	1.649358	40	(185,342)	123502
0.451499	3.453433	53	(225,363)	97692.3
0.451499	3.453433	56	(225,363)	97692.3
0.311781	5.061498	71	(160,433)	77117.6
0.311781	5.061498	75	(160,433)	77117.6
0.311781	5.061498	79	(160,433)	77117.6
0.330721	4.805378	82	(234,299)	95589.4
0.330721	4.805378	84	(234,299)	95589.4
0.283969	5.467290	89	(243,308)	103723
0.386691	4.126361	97	(177,453)	118657
0.386070	4.133335	105	(183,469)	129261
0.386070	4.133335	113	(183,469)	129261
0.416872	3.799972	123	(54,309)	118148
0.242820	6.147150	135	(285,273)	93191.6
0.278995	5.544036	145	(253,475)	63319.6
0.345316	4.617828	155	(258,231)	0
0.290125	5.374155	161	(278,237)	89781.3
0.290125	5.374155	166	(278,237)	89781.3

09/12/01
19:38:20

Exhibit II-12-g

Compressed 120.0:1, All Scalings

sc120080.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.80

Location of max in original is (169,359)

Location of max in compression is (163,352), sub-pixel is (162.500,352.625)

Laplacian Value at max location is 208092.000000 at (162,352)

Smoothed (FFT) Maximum Laplacian Value is 1198784.00 at (170.375,360.375)

Adjusting Locations:

(166,356) <==> new (163,352)
(166,356) <==> new (163,352)
(166,356) <==> new (163,352)
(166,356) <==> new (163,352)
(220,358) <==> new (215,352)
(220,358) <==> new (215,352)
(160,430) <==> new (156,429)
(160,430) <==> new (156,429)
(160,430) <==> new (156,429)
(229,299) <==> new (227,300)
(229,299) <==> new (227,300)
(238,306) <==> new (231,304)
(175,461) <==> new (169,456)
(175,461) <==> new (169,456)
(175,461) <==> new (169,456)
(48,312) <==> new (44,308)
(279,275) <==> new (282,271)
(252,475) <==> new (254,479)
(276,237) <==> new (275,231)

Side Lobe Information, Maximum Value is 5.4962e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(163,352)	161531
1.000000	0.000000	18	(163,352)	161531
1.000000	0.000000	23	(163,352)	161531
1.000000	0.000000	40	(163,352)	161531
0.532160	2.739582	53	(215,352)	99705.8
0.532160	2.739582	56	(215,352)	99705.8
0.517549	2.860481	71	(156,429)	115969
0.517549	2.860481	75	(156,429)	115969
0.517549	2.860481	79	(156,429)	115969
0.283114	5.480392	82	(227,300)	41035.5
0.283114	5.480392	84	(227,300)	41035.5
0.288145	5.403893	89	(231,304)	46567.3
0.476856	3.216128	97	(169,456)	72901
0.476856	3.216128	105	(169,456)	72901
0.476856	3.216128	113	(169,456)	72901
0.387441	4.117948	123	(44,308)	119978
0.357901	4.462366	135	(282,271)	50747.8
0.342702	4.650830	145	(254,479)	60347.6
0.133553	8.743461	155	(258,231)	0
0.328490	4.834778	161	(275,231)	0
0.332056	4.787884	166	(280,231)	0

89/12/01
19:37:00

sc120090.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.90

Location of max in original is (169,359)

Location of max in compression is (166,356), sub-pixel is (165.500,356.125)

Laplacian Value at max location is 359817.500000 at (164,358)

Smoothed (FFT) Maximum Laplacian Value is 1377984.00 at (170.375,360.375)

Adjusting Locations:

(167,358) <==> new (166,356)
(180,345) <==> new (166,356)
(180,345) <==> new (166,356)
(180,345) <==> new (166,356)
(222,360) <==> new (220,358)
(222,360) <==> new (220,358)
(162,431) <==> new (160,430)
(162,431) <==> new (160,430)
(162,431) <==> new (160,430)
(228,300) <==> new (229,299)
(228,300) <==> new (229,299)
(240,308) <==> new (238,306)
(175,454) <==> new (175,461)
(177,461) <==> new (175,461)
(177,461) <==> new (175,461)
(50,313) <==> new (48,312)
(280,275) <==> new (279,275)
(253,477) <==> new (252,475)
(277,238) <==> new (276,237)
(282,233) <==> new (280,231)

Side Lobe Information, Maximum Value is 6.85443e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(166,356)	322814
1.000000	0.000000	18	(166,356)	322814
1.000000	0.000000	23	(166,356)	322814
1.000000	0.000000	40	(166,356)	322814
0.336511	4.730011	53	(220,358)	83409.5
0.336511	4.730011	56	(220,358)	83409.5
0.351409	4.541871	71	(160,430)	139615
0.351409	4.541871	75	(160,430)	139615
0.351409	4.541871	79	(160,430)	139615
0.282459	5.490442	82	(229,299)	43419.8
0.282459	5.490442	84	(229,299)	43419.8
0.256891	5.902519	89	(238,306)	77675.3
0.419208	3.775705	97	(175,461)	161412
0.419208	3.775705	105	(175,461)	161412
0.419208	3.775705	113	(175,461)	161412
0.328632	4.832907	123	(48,312)	96881.5
0.298270	5.253904	135	(279,275)	64736.3
0.309519	5.093131	145	(252,475)	110797
0.264225	5.780263	155	(258,231)	0
0.291112	5.359393	161	(276,237)	75072
0.297609	5.263533	166	(280,231)	0

89/12/01
19:35:40

sc120095.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.95

Location of max in original is (169,359)

Location of max in compression is (167,358), sub-pixel is (167.500,357.625)

Laplacian Value at max location is 414081.500000 at (167,358)

Smoothed (FFT) Maximum Laplacian Value is 1015520.00 at (170.375,360.375)

Adjusting Locations:

(168,359) <--> new (167,358)
(181,345) <--> new (180,345)
(181,345) <--> new (180,345)
(181,345) <--> new (180,345)
(223,361) <--> new (222,360)
(223,361) <--> new (222,360)
(163,432) <--> new (162,431)
(163,432) <--> new (162,431)
(163,432) <--> new (162,431)
(228,301) <--> new (228,300)
(228,301) <--> new (228,300)
(240,309) <--> new (240,308)
(175,454) does not move
(178,460) <--> new (177,461)
(178,460) <--> new (177,461)
(51,314) <--> new (50,313)
(281,275) <--> new (280,275)
(254,478) <--> new (253,477)
(275,240) <--> new (277,238)
(283,234) <--> new (282,233)

Side Lobe Information, Maximum Value is 7.15962e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(167,358)	414082
0.567631	2.459336	18	(180,345)	134501
0.567631	2.459336	23	(180,345)	134501
0.567631	2.459336	40	(180,345)	134501
0.322279	4.917684	53	(222,360)	102063
0.322279	4.917684	56	(222,360)	102063
0.312068	5.057509	71	(162,431)	108653
0.312068	5.057509	75	(162,431)	108653
0.312068	5.057509	79	(162,431)	108653
0.281086	5.511604	82	(228,300)	40231.6
0.281086	5.511604	84	(228,300)	40231.6
0.266887	5.736733	89	(240,308)	90390.6
0.373796	4.273648	97	(175,454)	54679.3
0.388227	4.109140	105	(177,461)	135552
0.388227	4.109140	113	(177,461)	135552
0.316843	4.991565	123	(50,313)	72294.5
0.281657	5.502793	135	(280,275)	77143.3
0.313736	5.034363	145	(253,477)	91485
0.303541	5.177821	155	(258,231)	0
0.263617	5.790265	161	(277,238)	64060.1
0.285265	5.447514	166	(282,233)	114299

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.97
Location of max in original is (169,359)
Location of max in compression is (168,359), sub-pixel is (168.375,358.500)
Laplacian Value at max location is 456708.500000 at (168,359)
Smoothed (FFT) Maximum Laplacian Value is 700864.00 at (168.625,360.375)

Adjusting Locations:

(168,359) does not move
(182,345) <==> new (181,345)
(182,345) <==> new (181,345)
(182,345) <==> new (181,345)
(223,361) does not move
(223,361) does not move
(163,432) does not move
(163,432) does not move
(163,432) does not move
(228,300) <==> new (228,301)
(228,300) <==> new (228,301)
(240,309) does not move
(175,454) does not move
(179,460) <==> new (178,460)
(179,460) <==> new (178,460)
(51,314) does not move
(282,274) <==> new (281,275)
(254,478) does not move
(275,240) does not move
(283,234) does not move

Side Lobe Information, Maximum Value is 7.22494e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,359)	456709
0.555536	2.552881	18	(181,345)	144268
0.555536	2.552881	23	(181,345)	144268
0.555536	2.552881	40	(181,345)	144268
0.321880	4.923060	53	(223,361)	98062.8
0.321880	4.923060	56	(223,361)	98062.8
0.300724	5.218326	71	(163,432)	100569
0.300724	5.218326	75	(163,432)	100569
0.300724	5.218326	79	(163,432)	100569
0.286317	5.431535	82	(228,301)	52865.5
0.286317	5.431535	84	(228,301)	52865.5
0.279904	5.529916	89	(240,309)	98589.3
0.371967	4.294958	97	(175,454)	95773.8
0.366461	4.359727	105	(178,460)	68046.3
0.366461	4.359727	113	(178,460)	68046.3
0.320447	4.942438	123	(51,314)	91040.3
0.276653	5.580653	135	(281,275)	77235.6
0.318083	4.974593	145	(254,478)	74240.5
0.313876	5.032416	155	(258,231)	0
0.260275	5.845681	161	(275,240)	110061
0.276337	5.585613	166	(283,234)	117203

89/12/01
19:33:00

sc120098.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 0.98
Location of max in original is (169,359)
Location of max in compression is (168,359), sub-pixel is (168.625,358.625)
Laplacian Value at max location is 458682.500000 at (168,359)
Smoothed (FFT) Maximum Laplacian Value is 674304.00 at (168.500,358.500)

Adjusting Locations:

(169,359) <--> new (168,359)
(186,344) <--> new (182,345)
(186,344) <--> new (182,345)
(186,344) <--> new (182,345)
(223,362) <--> new (223,361)
(223,362) <--> new (223,361)
(164,433) <--> new (163,432)
(164,433) <--> new (163,432)
(164,433) <--> new (163,432)
(228,301) <--> new (228,300)
(228,301) <--> new (228,300)
(241,310) <--> new (240,309)
(175,454) does not move
(180,461) <--> new (179,460)
(180,461) <--> new (179,460)
(52,314) <--> new (51,314)
(282,275) <--> new (282,274)
(254,479) <--> new (254,478)
(275,241) <--> new (275,240)
(283,235) <--> new (283,234)

Side Lobe Information, Maximum Value is 7.2159e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(168,359)	458683
0.561905	2.503372	18	(182,345)	104538
0.561905	2.503372	23	(182,345)	104538
0.561905	2.503372	40	(182,345)	104538
0.334857	4.751404	53	(223,361)	103844
0.334857	4.751404	56	(223,361)	103844
0.303965	5.171766	71	(163,432)	90043.3
0.303965	5.171766	75	(163,432)	90043.3
0.303965	5.171766	79	(163,432)	90043.3
0.286164	5.433848	82	(228,300)	67851.8
0.286164	5.433848	84	(228,300)	67851.8
0.285147	5.449305	09	(240,309)	97090.9
0.377261	4.233585	97	(175,454)	105570
0.366750	4.356301	105	(179,460)	82555
0.366750	4.356301	113	(179,460)	82555
0.324275	4.890864	123	(51,314)	89402
0.273539	5.629812	135	(282,274)	73365.5
0.319467	4.955741	145	(254,478)	77170.3
0.315122	5.015217	155	(258,231)	0
0.254169	5.948767	161	(275,240)	114361
0.273967	5.623022	166	(283,234)	133403

89/12/01
19:31:42

sc120099.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 0.99

Location of max in original is (169,359)

Location of max in compression is (169,359), sub-pixel is (169.000,359.000)

Laplacian Value at max location is 455687.000000 at (169,359)

Smoothed (FFT) Maximum Laplacian Value is 656512.00 at (168.500,358.500)

Adjusting Locations:

(169,359) does not move
(186,344) does not move
(186,344) does not move
(186,344) does not move
(224,362) <==> new (223,362)
(224,362) <==> new (223,362)
(164,433) does not move
(164,433) does not move
(164,433) does not move
(228,301) does not move
(228,301) does not move
(241,310) does not move
(175,454) does not move
(180,461) does not move
(180,461) does not move
(52,314) does not move
(283,275) <==> new (282,275)
(254,479) does not move
(275,242) <==> new (275,241)
(283,235) does not move

Side Lobe Information, Maximum Value is 7.27443e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	455687
0.558831	2.527194	18	(186,344)	113552
0.558831	2.527194	23	(186,344)	113552
0.558831	2.527194	40	(186,344)	113552
0.332448	4.782769	53	(223,362)	108573
0.332448	4.782769	56	(223,362)	108573
0.297312	5.267875	71	(164,433)	108172
0.297312	5.267875	75	(164,433)	108172
0.297312	5.267875	79	(164,433)	108172
0.289192	5.388141	82	(228,301)	75122.3
0.289192	5.388141	84	(228,301)	75122.3
0.291765	5.349669	89	(241,310)	86072.4
0.375238	4.256936	97	(175,454)	131076
0.356508	4.479306	105	(180,461)	96934.3
0.356508	4.479306	113	(180,461)	96934.3
0.325305	4.877088	123	(52,314)	96559.8
0.269924	5.687579	135	(282,275)	84095.5
0.321736	4.924999	145	(254,479)	73611.5
0.319964	4.948987	155	(258,231)	0
0.255280	5.929828	161	(275,241)	113162
0.270319	5.681238	166	(283,235)	134943

89/12/01
19:21:56

sc120100.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.00
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.500,359.375)
Laplacian Value at max location is 446961.000000 at (169,360)
Smoothed (FFT) Maximum Laplacian Value is 853952.00 at (169.750,359.750)

Adjusting Locations:

(169,359) does not move
(184,348) <==> new (186,344)
(188,345) <==> new (186,344)
(179,320) <==> new (186,344)
(222,365) <==> new (224,362)
(225,361) <==> new (224,362)
(161,430) <==> new (164,433)
(165,434) <==> new (164,433)
(166,438) <==> new (164,433)
(231,304) <==> new (228,301)
(231,304) <==> new (228,301)
(243,308) <==> new (241,310)
(174,456) <==> new (175,454)
(177,464) <==> new (180,461)
(182,472) <==> new (180,461)
(55,311) <==> new (52,314)
(280,281) <==> new (283,275)
(256,475) <==> new (254,479)
(276,238) <==> new (275,242)
(281,236) <==> new (283,235)

Side Lobe Information, Maximum Value is 6.93581e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	439914
0.565147	2.478385	18	(186,344)	91630.3
0.565147	2.478385	23	(186,344)	91630.3
0.565147	2.478385	40	(186,344)	91630.3
0.336404	4.731383	53	(224,362)	89306.8
0.336404	4.731383	56	(224,362)	89306.8
0.295626	5.292574	71	(164,433)	91707.8
0.295626	5.292574	75	(164,433)	91707.8
0.295626	5.292574	79	(164,433)	91707.8
0.293725	5.320586	82	(228,301)	87557.8
0.293725	5.320586	84	(228,301)	87557.8
0.296996	5.272487	89	(241,310)	87567.4
0.373824	4.273329	97	(175,454)	143829
0.352449	4.529039	105	(180,461)	79879.5
0.352449	4.529039	113	(180,461)	79879.5
0.332005	4.788557	123	(52,314)	97527
0.275488	5.598977	135	(283,275)	92100.3
0.323855	4.896495	145	(254,479)	72320
0.324256	4.891119	155	(258,231)	0
0.256880	5.902690	161	(275,242)	117355
0.271028	5.669865	166	(283,235)	138206

89/12/01
19:23:16

scl20101.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.01

Location of max in original is (169,359)

Location of max in compression is (169,359), sub-pixel is (169.375,359.250)

Laplacian Value at max location is 431691.000000 at (169,360)

Smoothed (FFT) Maximum Laplacian Value is 719008.00 at (169.750,359.625)

Adjusting Locations:

(169,359) does not move
(186,344) <==> new (184,344)
(186,344) <==> new (184,344)
(186,344) <==> new (184,344)
(224,362) does not move
(224,362) does not move
(164,433) does not move
(164,433) does not move
(164,433) does not move
(228,301) does not move
(228,301) does not move
(241,310) does not move
(175,454) does not move
(180,461) does not move
(180,461) does not move
(52,314) does not move
(283,275) does not move
(254,479) does not move
(275,242) <==> new (275,241)
(283,235) does not move

Side Lobe Information, Maximum Value is 6.75496e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	425683
0.562365	2.499819	18	(184,344)	83562.5
0.562365	2.499819	23	(184,344)	83562.5
0.562365	2.499819	40	(184,344)	83562.5
0.335941	4.737368	53	(224,362)	83806
0.335941	4.737368	56	(224,362)	83806
0.294379	5.310937	71	(164,433)	97985.5
0.294379	5.310937	75	(164,433)	97985.5
0.294379	5.310937	79	(164,433)	97985.5
0.293463	5.324472	82	(228,301)	85255.1
0.293463	5.324472	84	(228,301)	85255.1
0.294300	5.312104	89	(241,310)	81313.4
0.372896	4.284126	97	(175,454)	142808
0.351573	4.539848	105	(180,461)	79687.3
0.351573	4.539848	113	(180,461)	79687.3
0.335048	4.748933	123	(52,314)	100115
0.277465	5.567915	135	(283,275)	99368.9
0.321220	4.931976	145	(254,479)	68913
0.326311	4.863680	155	(258,231)	0
0.254265	5.947137	161	(275,241)	100550
0.269777	5.689950	166	(283,235)	132839

89/12/01
19:24:36

sc120102.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.02

Location of max in original is (169,359)

Location of max in compression is (169,359), sub-pixel is (169.500,359.250)

Laplacian Value at max location is 426128.000000 at (169,360)

Smoothed (FFT) Maximum Laplacian Value is 768608.00 at (169.750,359.625)

Adjusting Locations:

(169,359) does not move
(184,344) does not move
(184,344) does not move
(184,344) does not move
(224,362) does not move
(224,362) does not move
(164,433) does not move
(164,433) does not move
(164,433) does not move
(228,301) does not move
(228,301) does not move
(241,310) does not move
(175,454) does not move
(180,461) does not move
(180,461) does not move
(52,314) does not move
(283,275) does not move
(254,479) does not move
(275,241) does not move
(283,235) does not move

Side Lobe Information, Maximum Value is 6.70043e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	417543
0.567582	2.459714	18	(184,344)	92732.5
0.567582	2.459714	23	(184,344)	92732.5
0.567582	2.459714	40	(184,344)	92732.5
0.346515	4.602774	53	(224,362)	85021.3
0.346515	4.602774	56	(224,362)	85021.3
0.296023	5.286745	71	(164,433)	95476.8
0.296023	5.286745	75	(164,433)	95476.8
0.296023	5.286745	79	(164,433)	95476.8
0.291532	5.353139	82	(228,301)	88769.1
0.291532	5.353139	84	(228,301)	88769.1
0.296528	5.279336	89	(241,310)	82732.8
0.372564	4.287994	97	(175,454)	147624
0.350157	4.557376	105	(180,461)	74573
0.350157	4.557376	113	(180,461)	74573
0.342278	4.656214	123	(52,314)	98619
0.281680	5.502437	135	(283,275)	113627
0.320679	4.939300	145	(254,479)	70266.8
0.328120	4.839671	155	(258,231)	0
0.253847	5.954282	161	(275,241)	97409.3
0.270105	5.684669	166	(283,235)	137961

89/12/01
19:25:54

sc120103.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.03
Location of max in original is (169,359)
Location of max in compression is (169,359), sub-pixel is (169.500,359.000)
Laplacian Value at max location is 416715.000000 at (169,360)
Smoothed (FFT) Maximum Laplacian Value is 727872.00 at (169.750,358.500)

Adjusting Locations:

(169,359) does not move
(184,344) does not move
(184,344) does not move
(184,344) does not move
(224,362) does not move
(224,362) does not move
(164,433) does not move
(164,433) does not move
(164,433) does not move
(228,301) does not move
(228,301) does not move
(241,310) <==> new (241,309)
(175,454) does not move
(180,461) does not move
(180,461) does not move
(52,314) <==> new (51,314)
(283,275) does not move
(254,479) does not move
(275,241) does not move
(283,235) does not move

Side Lobe Information, Maximum Value is 6.59969e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(169,359)	409330
0.574157	2.409697	18	(184,344)	100378
0.574157	2.409697	23	(184,344)	100378
0.574157	2.409697	40	(184,344)	100378
0.356723	4.476683	53	(224,362)	81677.3
0.356723	4.476683	56	(224,362)	81677.3
0.297724	5.261867	71	(164,433)	96451.9
0.297724	5.261867	75	(164,433)	96451.9
0.297724	5.261867	79	(164,433)	96451.9
0.288472	5.398959	82	(228,301)	88211.1
0.288472	5.398959	84	(228,301)	88211.1
0.296522	5.279434	89	(241,309)	79125.8
0.373182	4.280799	97	(175,454)	151619
0.350933	4.547757	105	(180,461)	71459.3
0.350933	4.547757	113	(180,461)	71459.3
0.350582	4.552108	123	(51,314)	84368.3
0.283235	5.478532	135	(283,275)	121691
0.316530	4.995851	145	(254,479)	66575.8
0.328358	4.836521	155	(258,231)	0
0.253165	5.965967	161	(275,241)	96437.6
0.265685	5.756329	166	(283,235)	137575

89/12/01
19:27:14

sc120105.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.

Window contains 0.00% noise and is out of scale by a factor of 1.05

Location of max in original is (169,359)

Location of max in compression is (170,359), sub-pixel is (169.625,358.750)

Laplacian Value at max location is 389866.000000 at (169,360)

Smoothed (FFT) Maximum Laplacian Value is 745728.00 at (169.750,358.500)

Adjusting Locations:

(169,359) <==> new (170,359)
(184,344) does not move
(184,344) does not move
(184,344) does not move
(224,362) does not move
(224,362) does not move
(164,433) does not move
(164,433) does not move
(164,433) does not move
(228,301) <==> new (228,302)
(228,301) <==> new (228,302)
(241,309) <==> new (242,309)
(175,454) does not move
(180,461) <==> new (181,461)
(180,461) <==> new (181,461)
(51,314) does not move
(283,275) does not move
(254,479) <==> new (253,480)
(275,241) <==> new (276,240)
(283,235) does not move

Side Lobe Information, Maximum Value is 6.47912e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(170,359)	385984
0.584071	2.335341	18	(184,344)	115418
0.584071	2.335341	23	(184,344)	115418
0.584071	2.335341	40	(184,344)	115418
0.366915	4.354341	53	(224,362)	78145.5
0.366915	4.354341	56	(224,362)	78145.5
0.301055	5.213541	71	(164,433)	85623.9
0.301055	5.213541	75	(164,433)	85623.9
0.301055	5.213541	79	(164,433)	85623.9
0.285882	5.438130	82	(228,302)	75432.5
0.285882	5.438130	84	(228,302)	75432.5
0.301535	5.206616	89	(242,309)	92711
0.371801	4.296889	97	(175,454)	152231
0.349109	4.570390	105	(181,461)	95087
0.349109	4.570390	113	(181,461)	95087
0.365342	4.372999	123	(51,314)	91270.3
0.287394	5.415230	135	(283,275)	130963
0.310321	5.081891	145	(253,480)	62786.1
0.329916	4.815972	155	(258,231)	0
0.250937	6.004350	161	(276,240)	88308.6
0.260192	5.847057	166	(283,235)	139923

89/12/01
19:28:34

sc120110.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.10
Location of max in original is (169,359)
Location of max in compression is (170,358), sub-pixel is (169.875,358.500)
Laplacian Value at max location is 364481.000000 at (170,359)
Smoothed (FFT) Maximum Laplacian Value is 694464.00 at (169.875,358.750)

Adjusting Locations:

(170,359) <==> new (170,358)
(184,344) does not move
(184,344) does not move
(184,344) does not move
(224,362) does not move
(224,362) does not move
(164,433) <==> new (161,432)
(164,433) <==> new (161,432)
(164,433) <==> new (161,432)
(228,302) <==> new (229,301)
(228,302) <==> new (229,301)
(242,309) <==> new (242,308)
(175,454) <==> new (176,455)
(181,461) <==> new (182,461)
(181,461) <==> new (182,461)
(51,314) <==> new (51,313)
(283,275) <==> new (283,276)
(253,480) <==> new (257,486)
(276,240) <==> new (277,239)
(283,235) <==> new (282,236)

Side Lobe Information, Maximum Value is 6.23987e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(170,358)	358829
0.614555	2.114393	18	(184,344)	148018
0.614555	2.114393	23	(184,344)	148018
0.614555	2.114393	40	(184,344)	148018
0.381117	4.189414	53	(224,362)	81186
0.381117	4.189414	56	(224,362)	81186
0.306587	5.134463	71	(161,432)	62102
0.306587	5.134463	75	(161,432)	62102
0.306587	5.134463	79	(161,432)	62102
0.284139	5.464685	82	(229,301)	55396.1
0.284139	5.464685	84	(229,301)	55396.1
0.302135	5.197996	89	(242,308)	78929
0.367619	4.346024	97	(176,455)	103510
0.340598	4.677578	105	(182,461)	112781
0.340598	4.677578	113	(182,461)	112781
0.401588	3.962197	123	(51,313)	107453
0.292565	5.337781	135	(283,276)	120306
0.332631	4.780369	145	(257,486)	0
0.334663	4.753927	155	(258,231)	0
0.257021	5.900308	161	(277,239)	103004
0.253986	5.951908	166	(282,236)	82850.3

89/12/01
19:29:54

sc120120.rep

1

Image AQVIR1(41:297,231:487) at compression 120.0:1 against window W1.
Window contains 0.00% noise and is out of scale by a factor of 1.20
Location of max in original is (169,359)
Location of max in compression is (171,357), sub-pixel is (170.750,356.750)
Laplacian Value at max location is 260974.500000 at (172,356)
Smoothed (FFT) Maximum Laplacian Value is 537632.00 at (170.000,360.375)

Adjusting Locations:

(170,358) <==> new (171,357)
(184,344) <==> new (184,343)
(184,344) <==> new (184,343)
(184,344) <==> new (184,343)
(224,362) <==> new (225,363)
(224,362) <==> new (225,363)
(161,432) does not move
(161,432) does not move
(161,432) does not move
(229,301) <==> new (234,298)
(229,301) <==> new (234,298)
(242,308) <==> new (243,307)
(176,455) <==> new (177,454)
(182,461) <==> new (183,461)
(182,461) <==> new (183,461)
(51,313) <==> new (50,313)
(283,276) <==> new (285,274)
(277,239) <==> new (278,237)
(282,236) <==> new (278,237)

Side Lobe Information, Maximum Value is 5.47833e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max Location Laplacian

1.000000	0.000000	0	(171,357)	247664
0.691244	1.603688	18	(184,343)	105707
0.691244	1.603688	23	(184,343)	105707
0.691244	1.603688	40	(184,343)	105707
0.397715	4.004279	53	(225,363)	63100.5
0.397715	4.004279	56	(225,363)	63100.5
0.353503	4.516068	71	(161,432)	113736
0.353503	4.516068	75	(161,432)	113736
0.353503	4.516068	79	(161,432)	113736
0.348724	4.575181	82	(234,298)	87293.3
0.348724	4.575181	8	(234,298)	87293.3
0.314559	5.022980	89	(243,307)	75464.6
0.356853	4.475106	97	(177,454)	93718.1
0.342270	4.656313	105	(183,461)	74541.3
0.342270	4.656313	113	(183,461)	74541.3
0.454504	3.424620	123	(50,313)	127354
0.286245	5.432615	135	(285,274)	73726.5
0.352801	4.524706	145	(257,486)	0
0.340385	4.680295	155	(258,231)	0
0.281038	5.512351	161	(278,237)	106978
0.281038	5.512351	166	(278,237)	106978



**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-13

**Graph: Laplacian of Correlation of Test Patch A1 W2 (with varying
amounts of noise added) with Reference Image A1 (at various
compressions) vs. Radial Distance
[One graph per (noise, compression) pair]**

Exhibit II-13-a-1

Laplacian of Correlation of A1 W2 (1.0% noise) with A1 (uncompressed)
vs. Radial Distance from Maximum

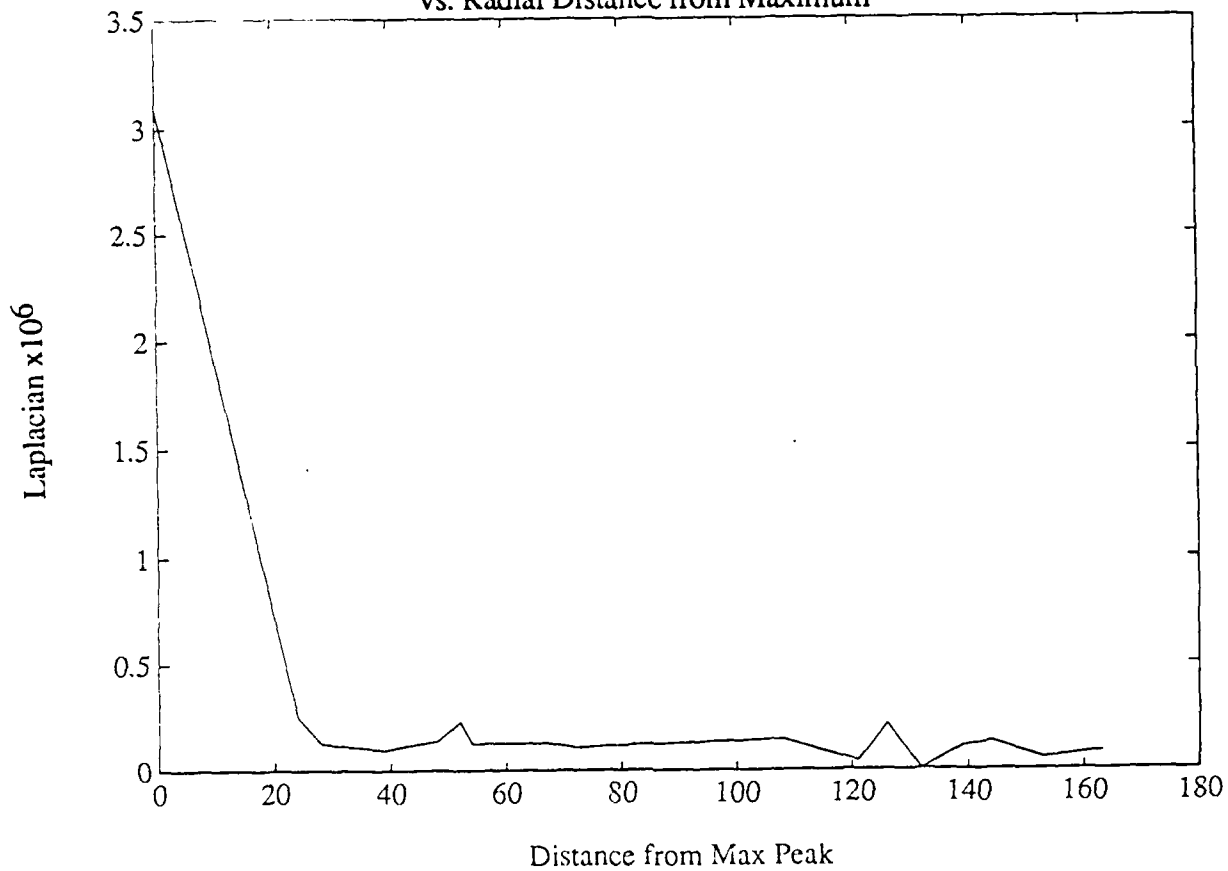


Exhibit II-13-b-1

Laplacian of Correlation of A1 W2 (4.6% noise) with A1 (uncompressed)
vs. Radial Distance from Maximum

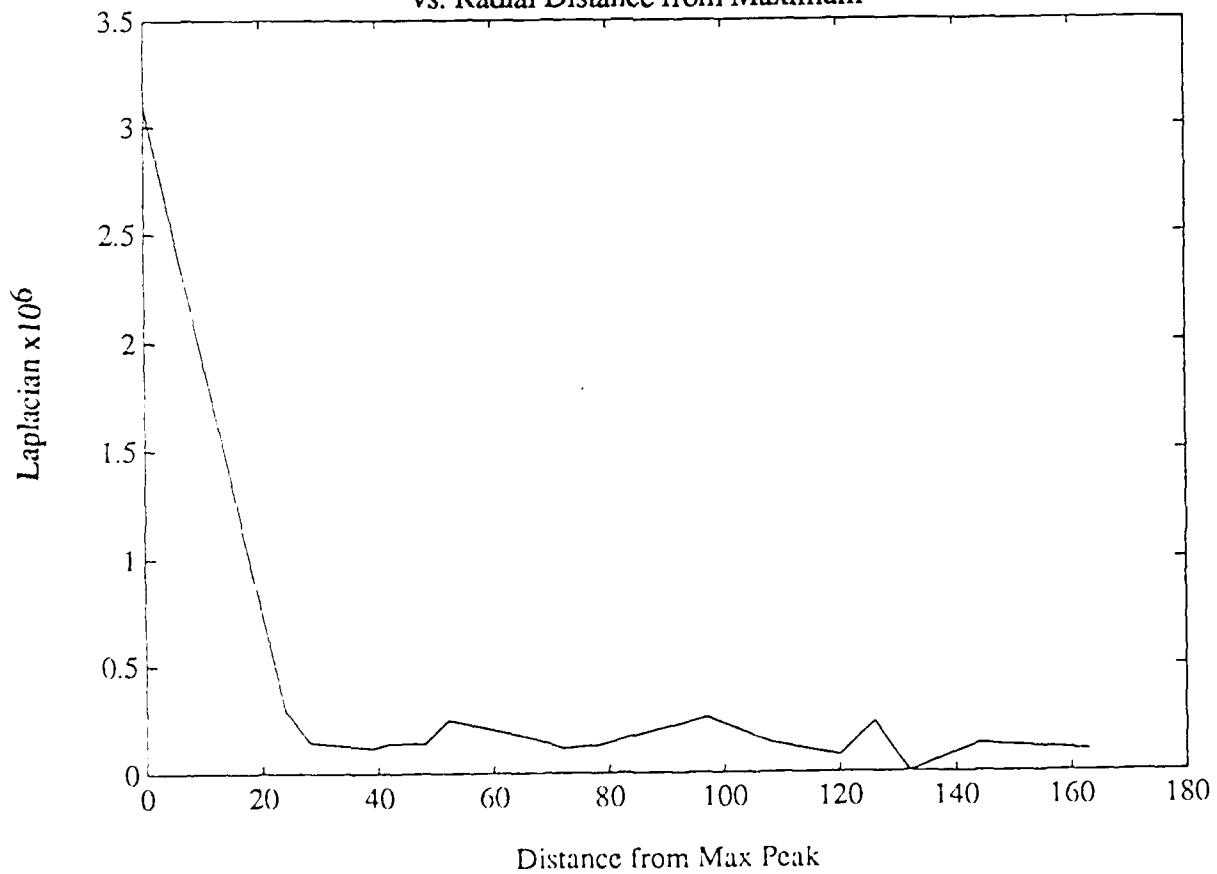


Exhibit II-13-a-2

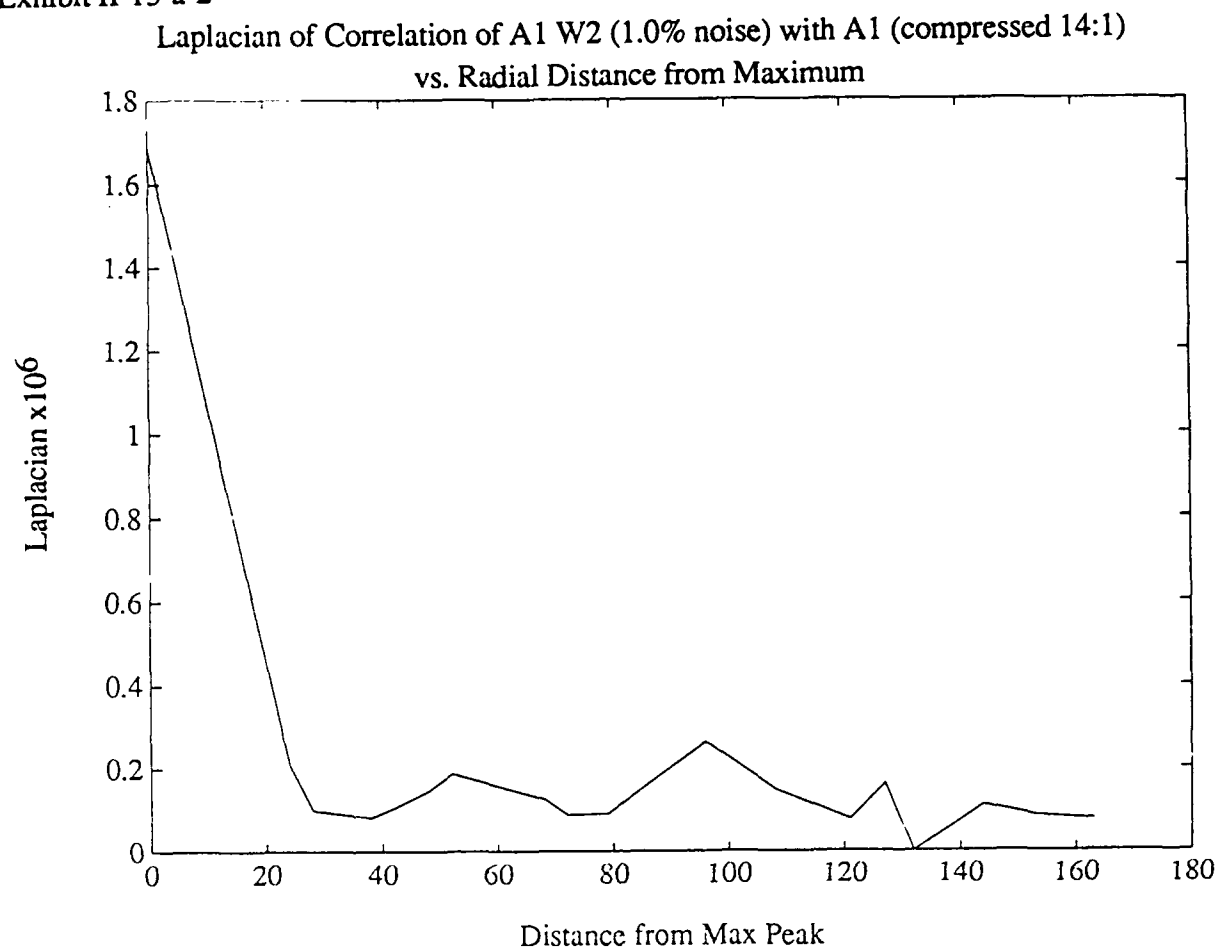


Exhibit II-13-b-2

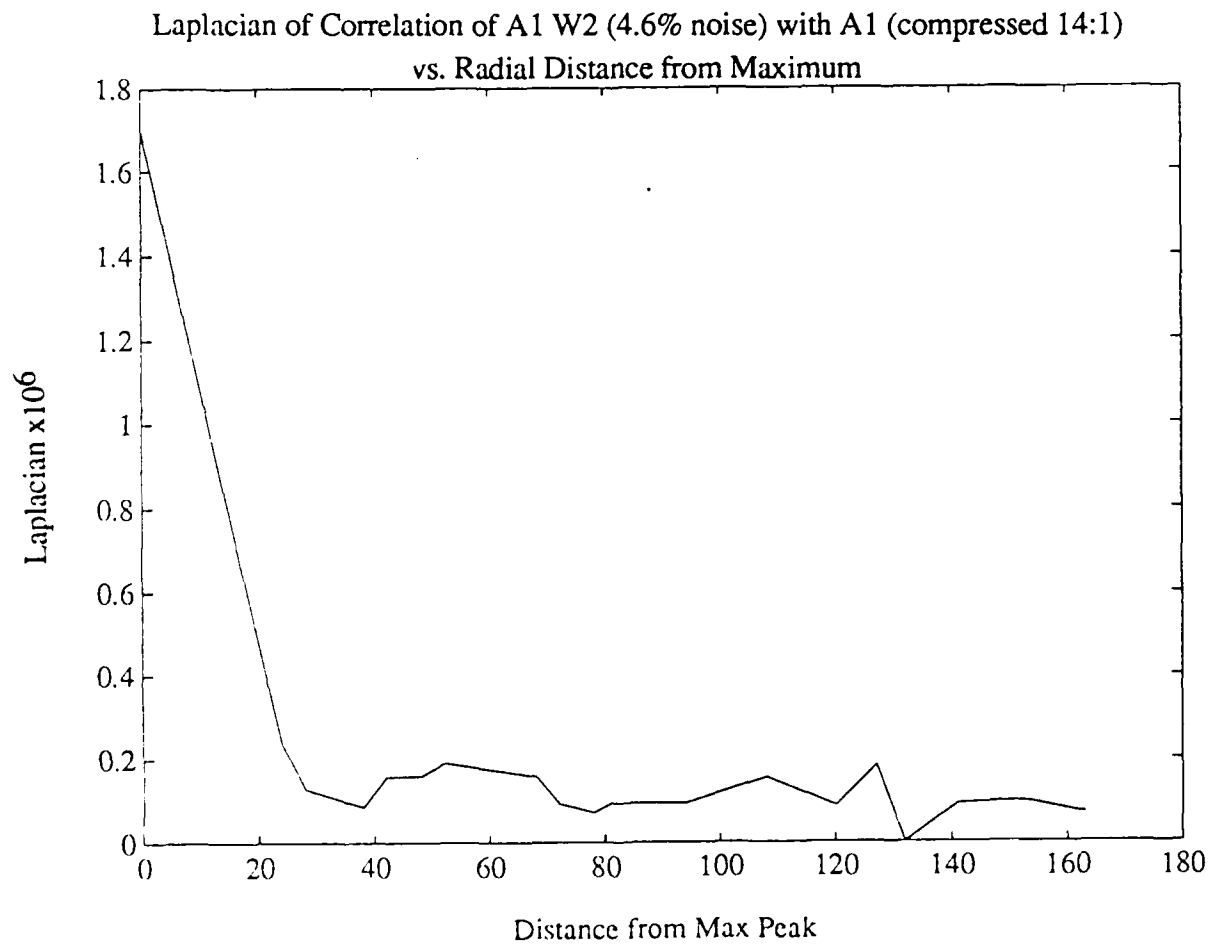


Exhibit II-13-a-3

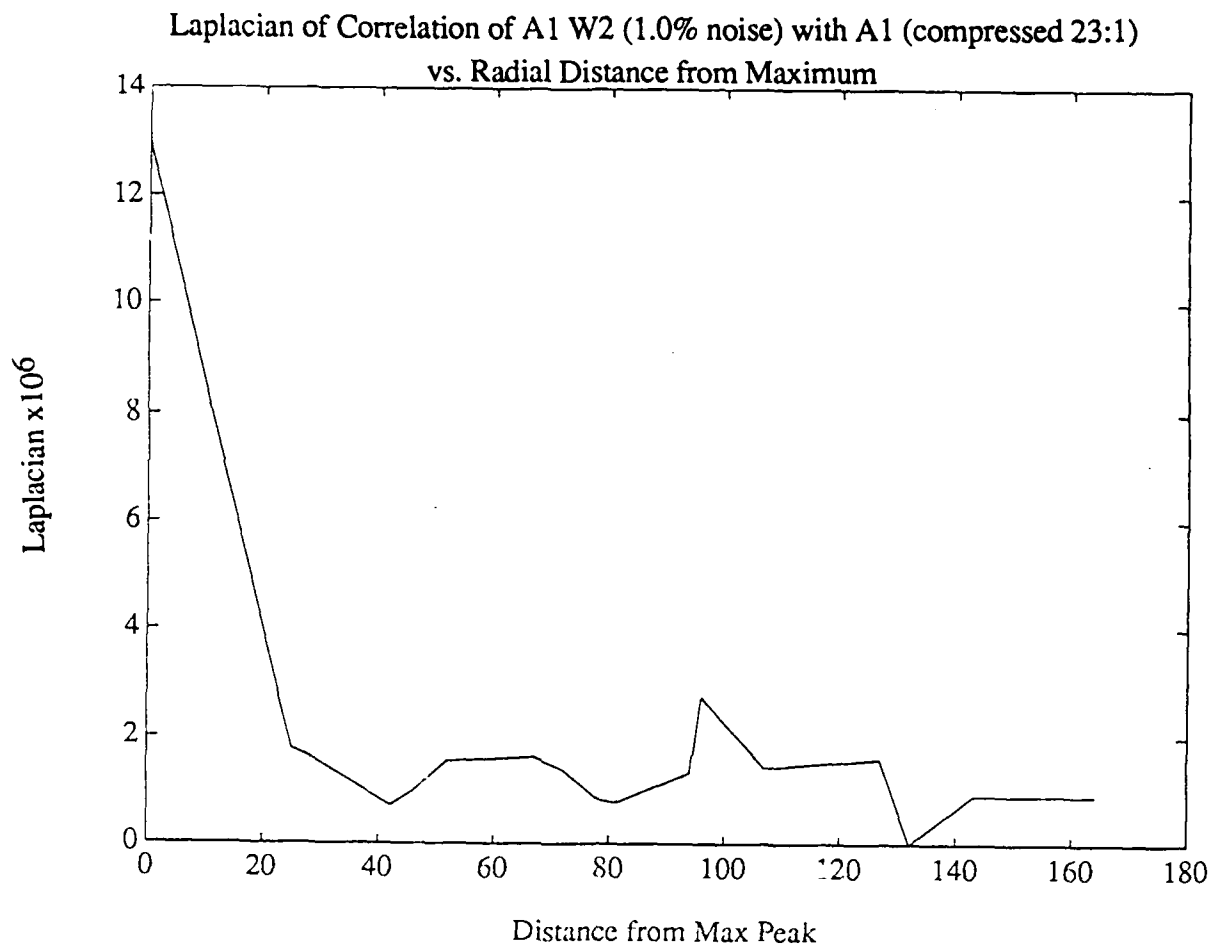


Exhibit II-13-b-3

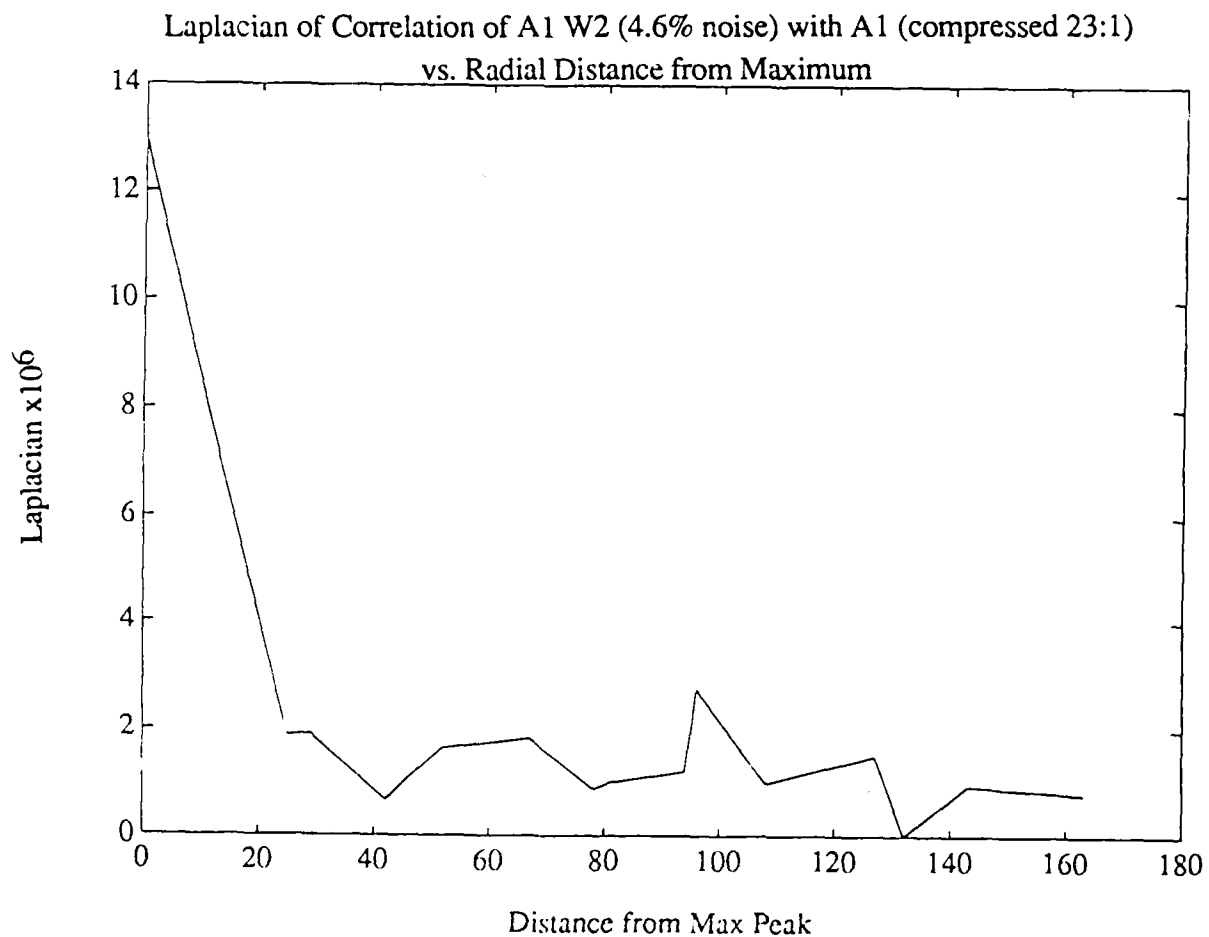


Exhibit II-13-a-4

Laplacian of Correlation of A1 W2 (1.0% noise) with A1 (compressed 33:1)
vs. Radial Distance from Maximum

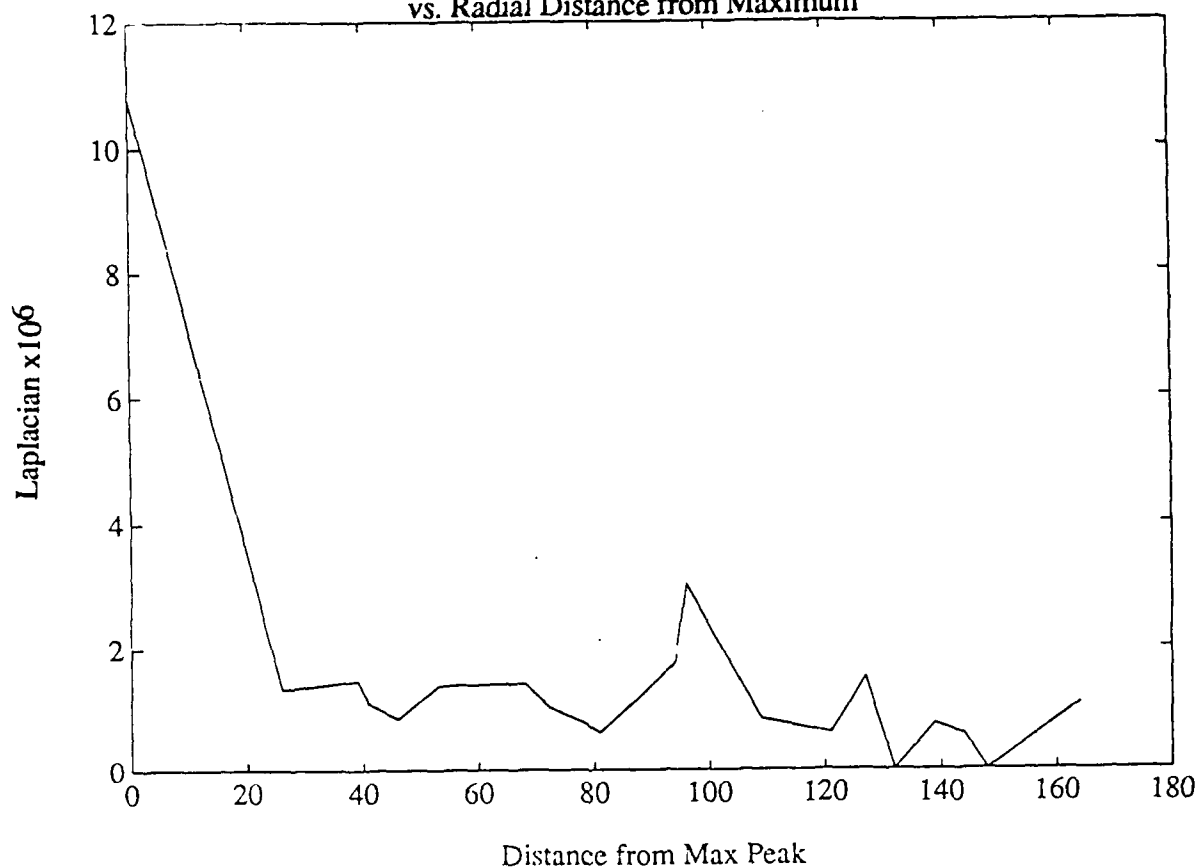
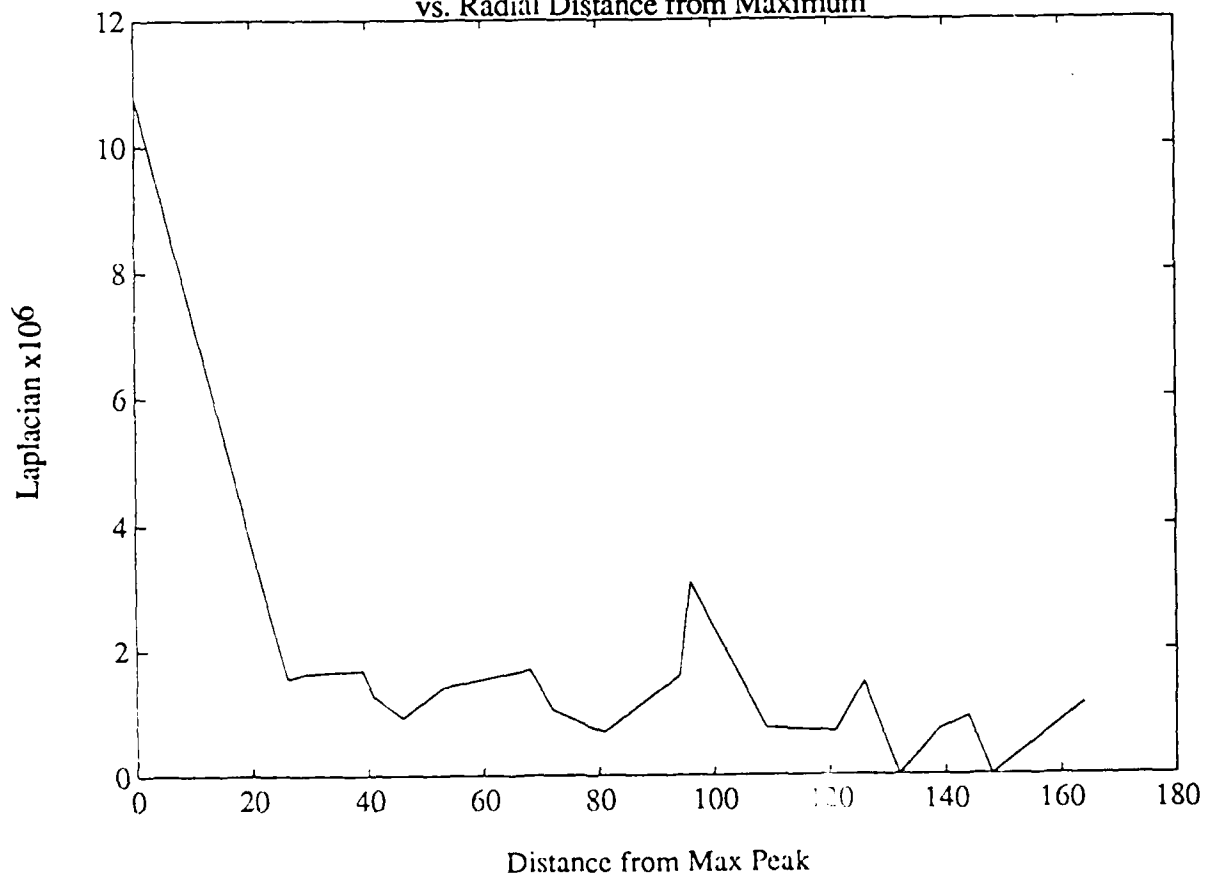
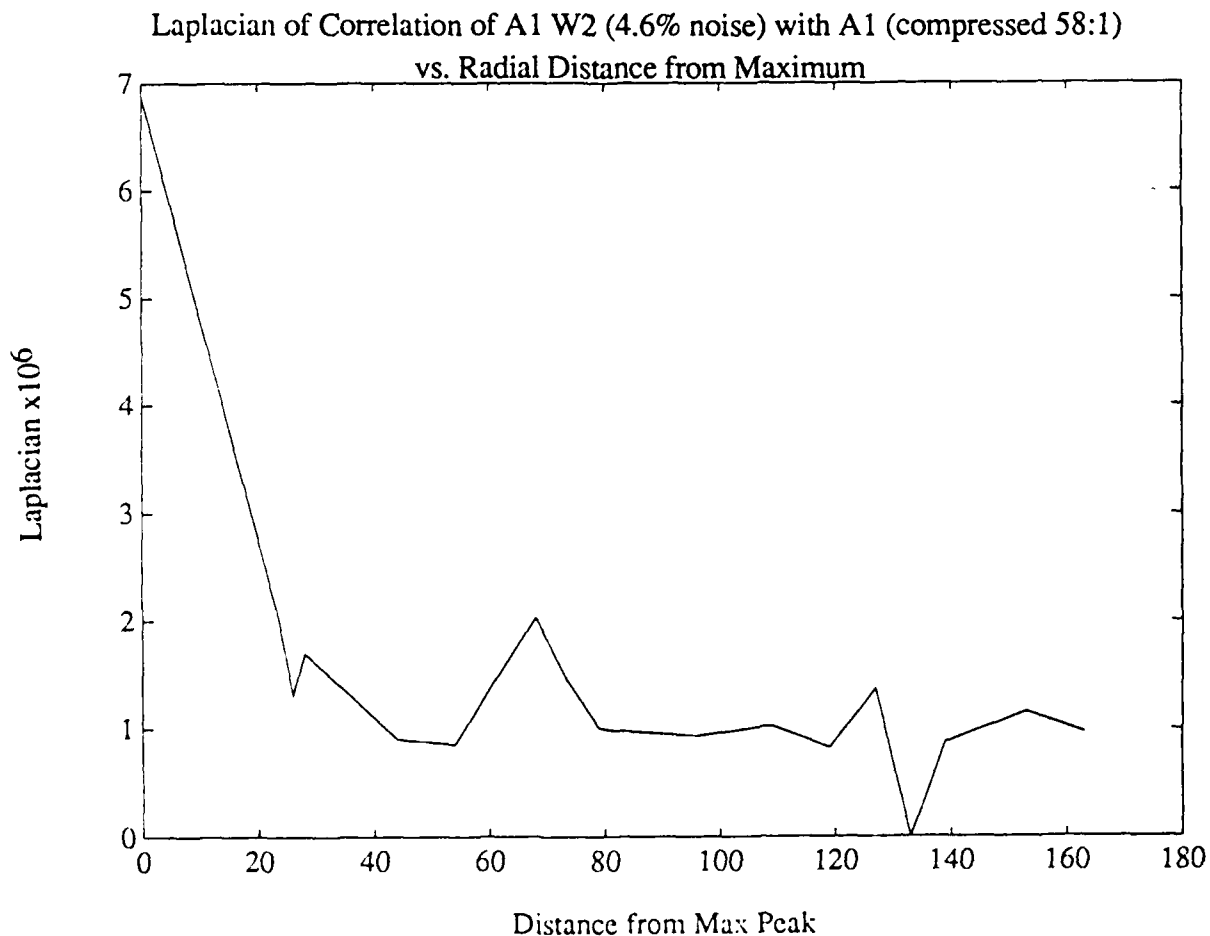
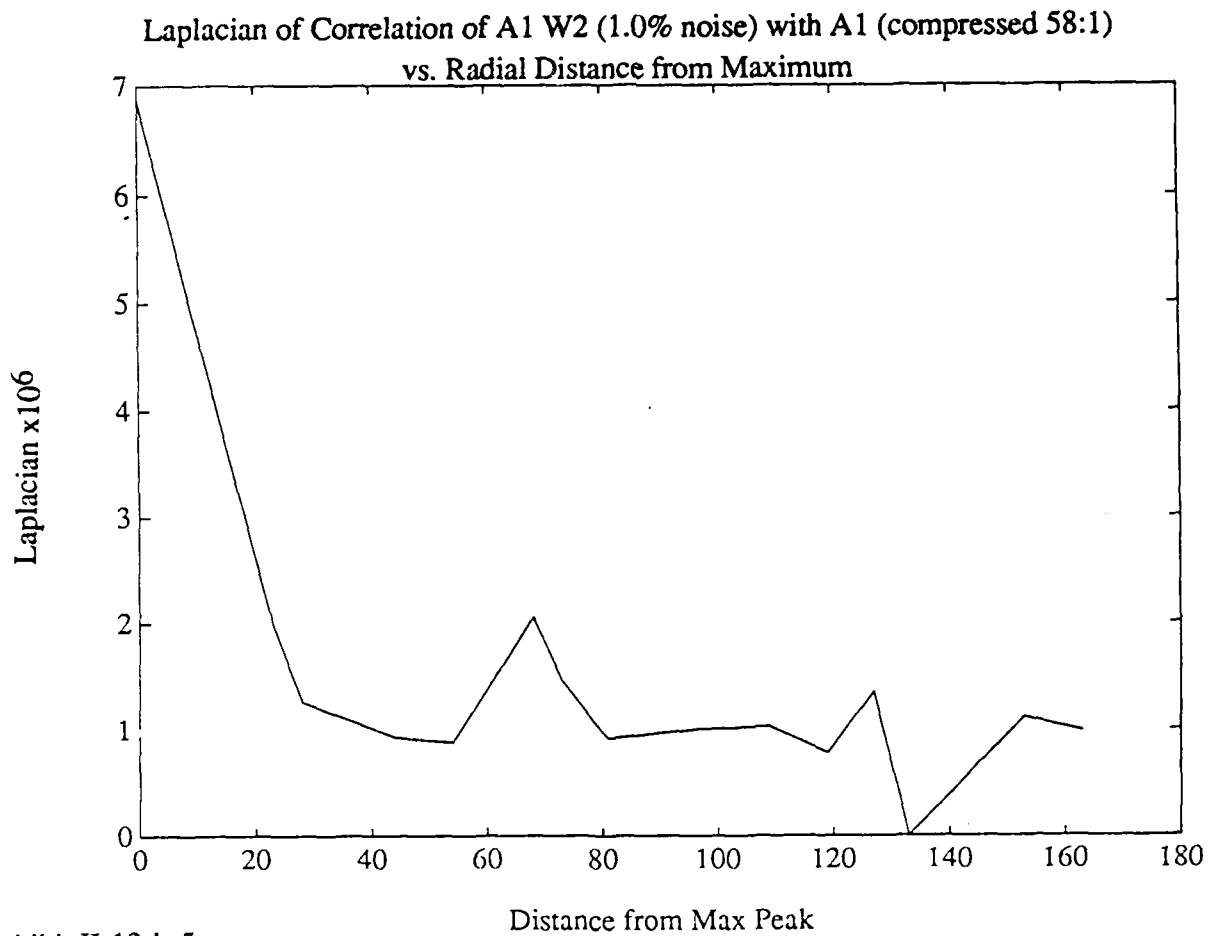


Exhibit II-13-b-4

Laplacian of Correlation of A1 W2 (4.6% noise) with A1 (compressed 33:1)
vs. Radial Distance from Maximum





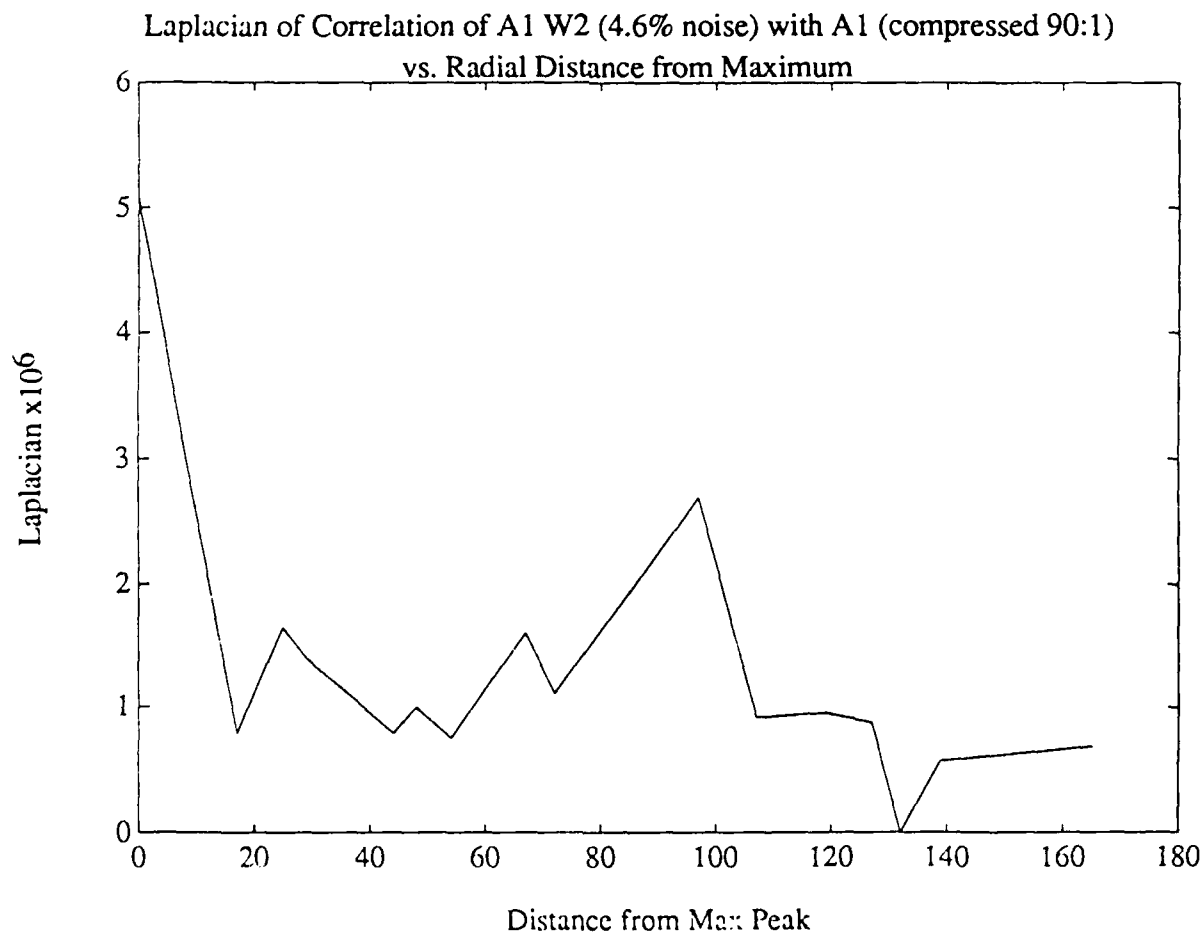
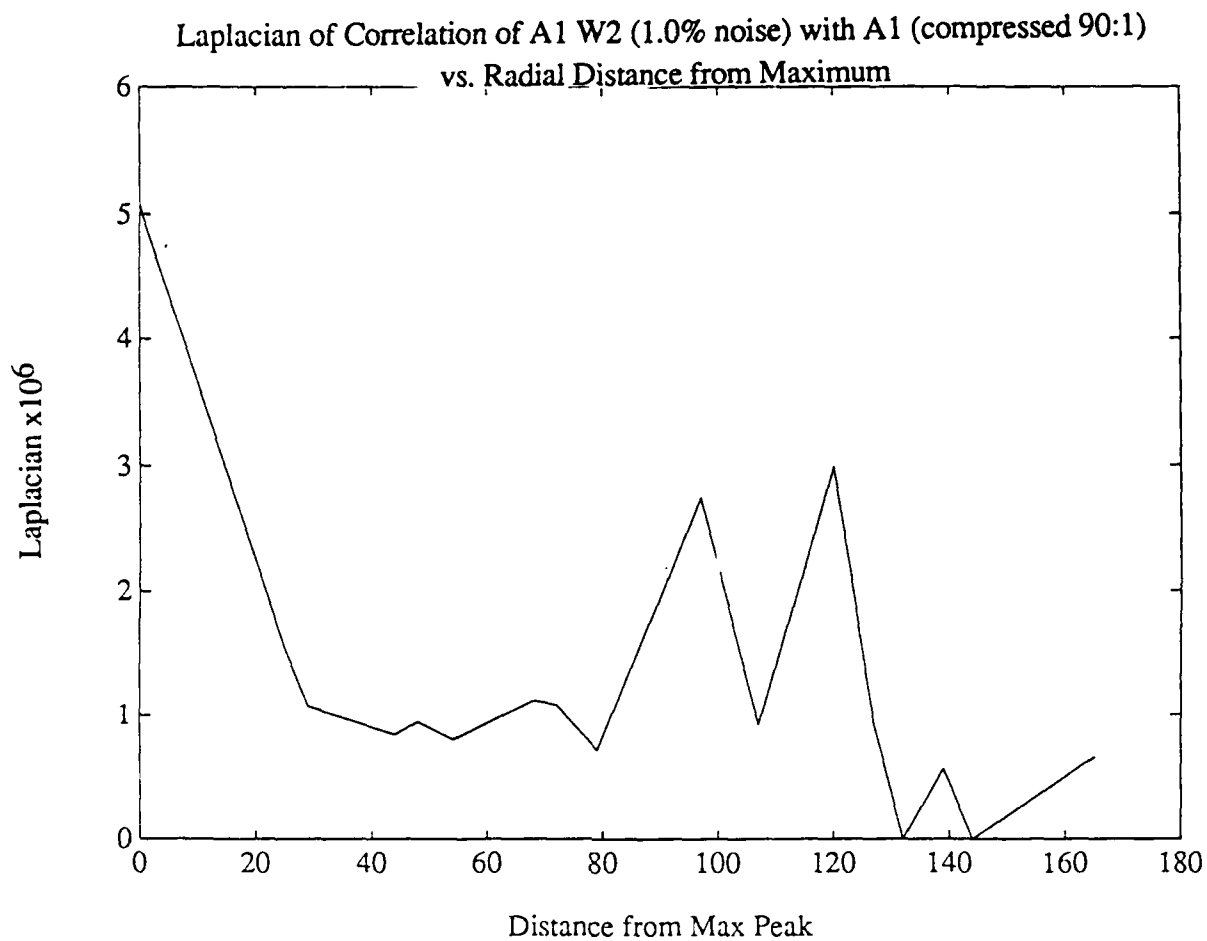


Exhibit II-13-a-7

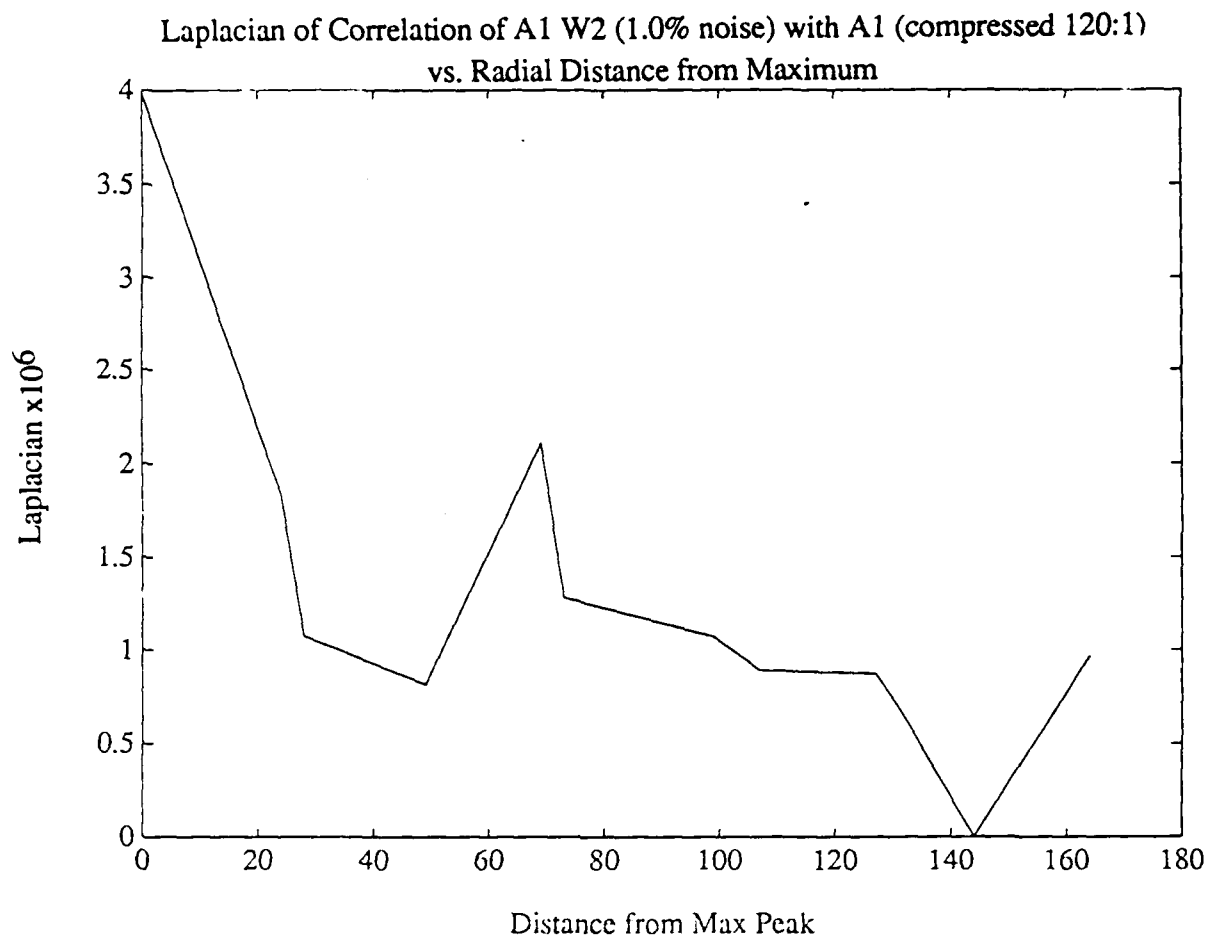
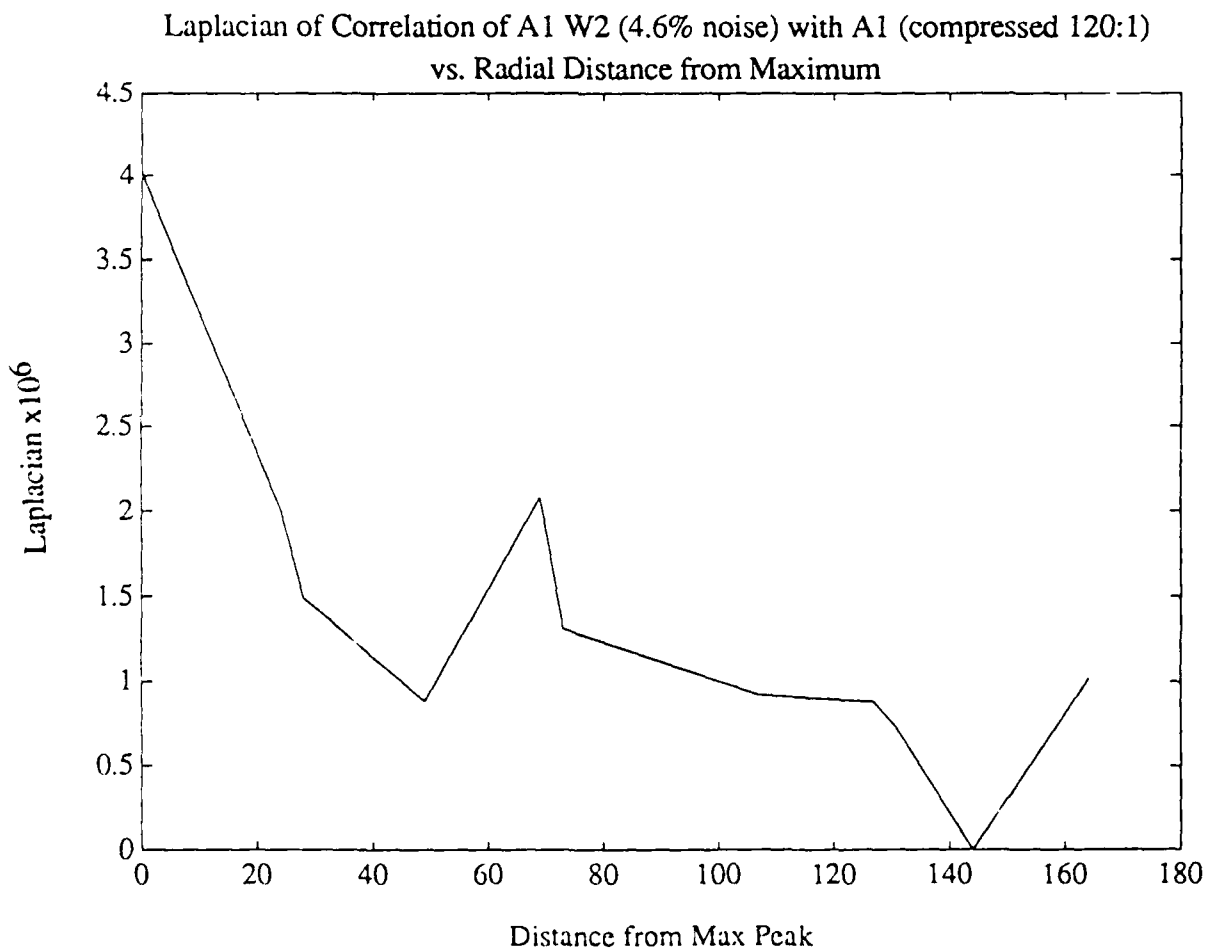


Exhibit II-13-b-7



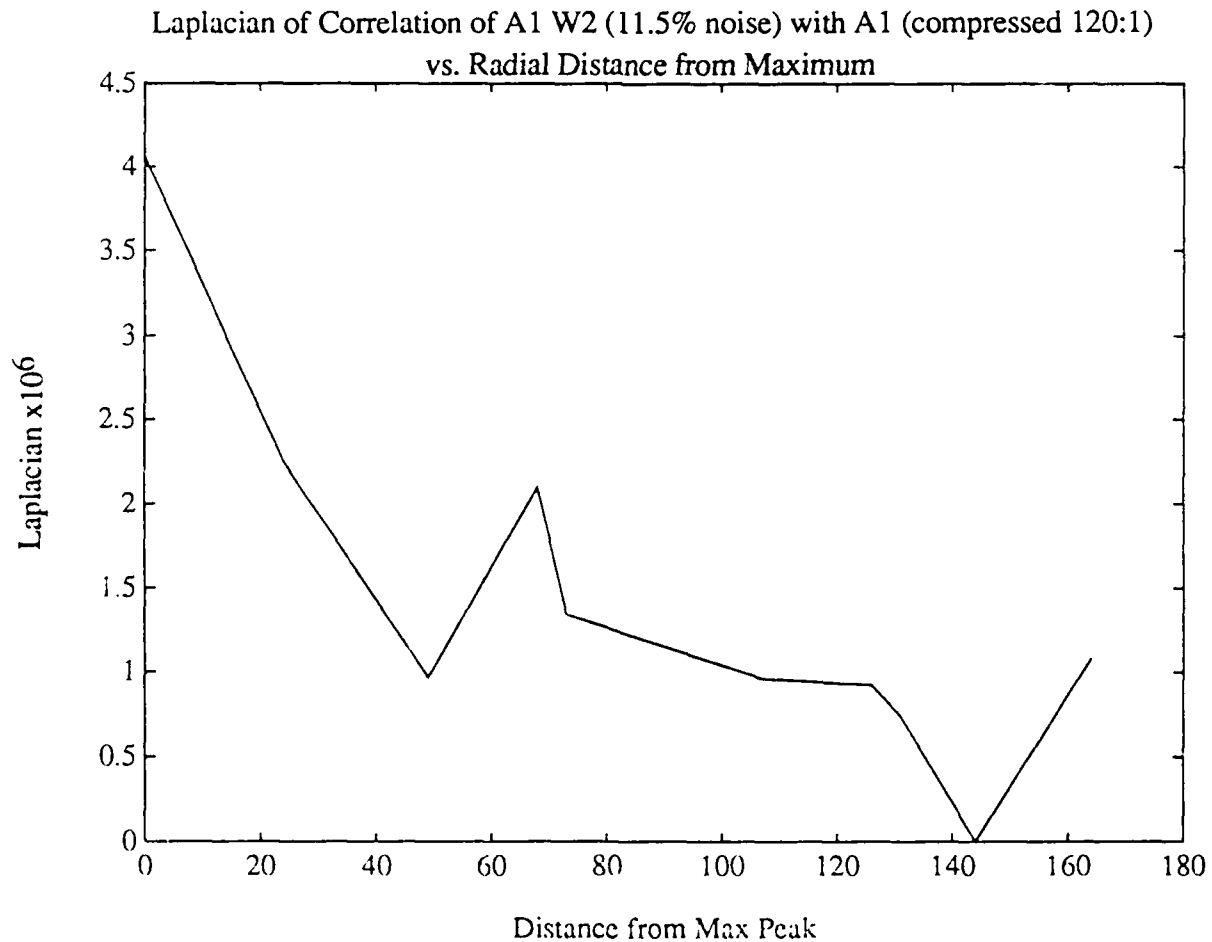
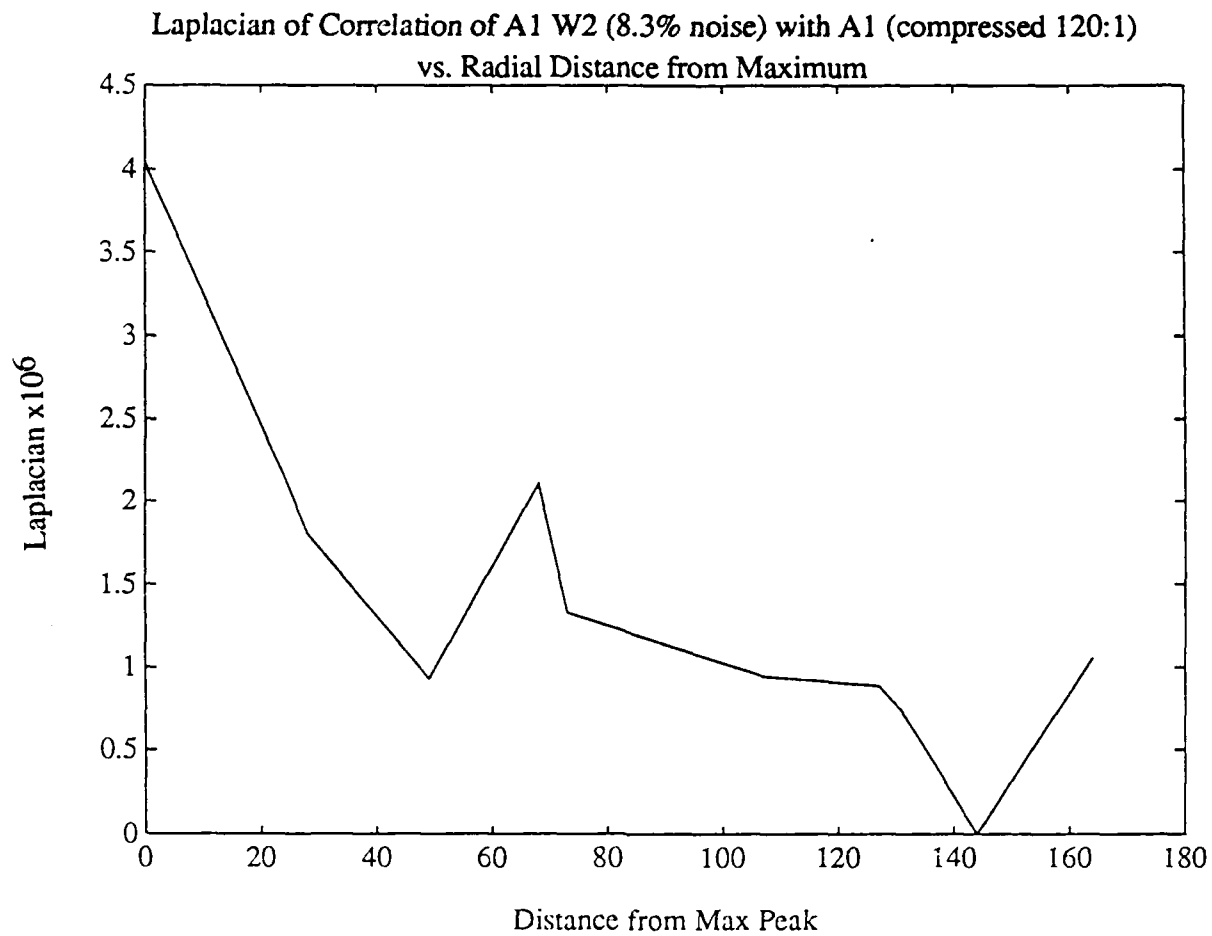


Exhibit II-13-c-6

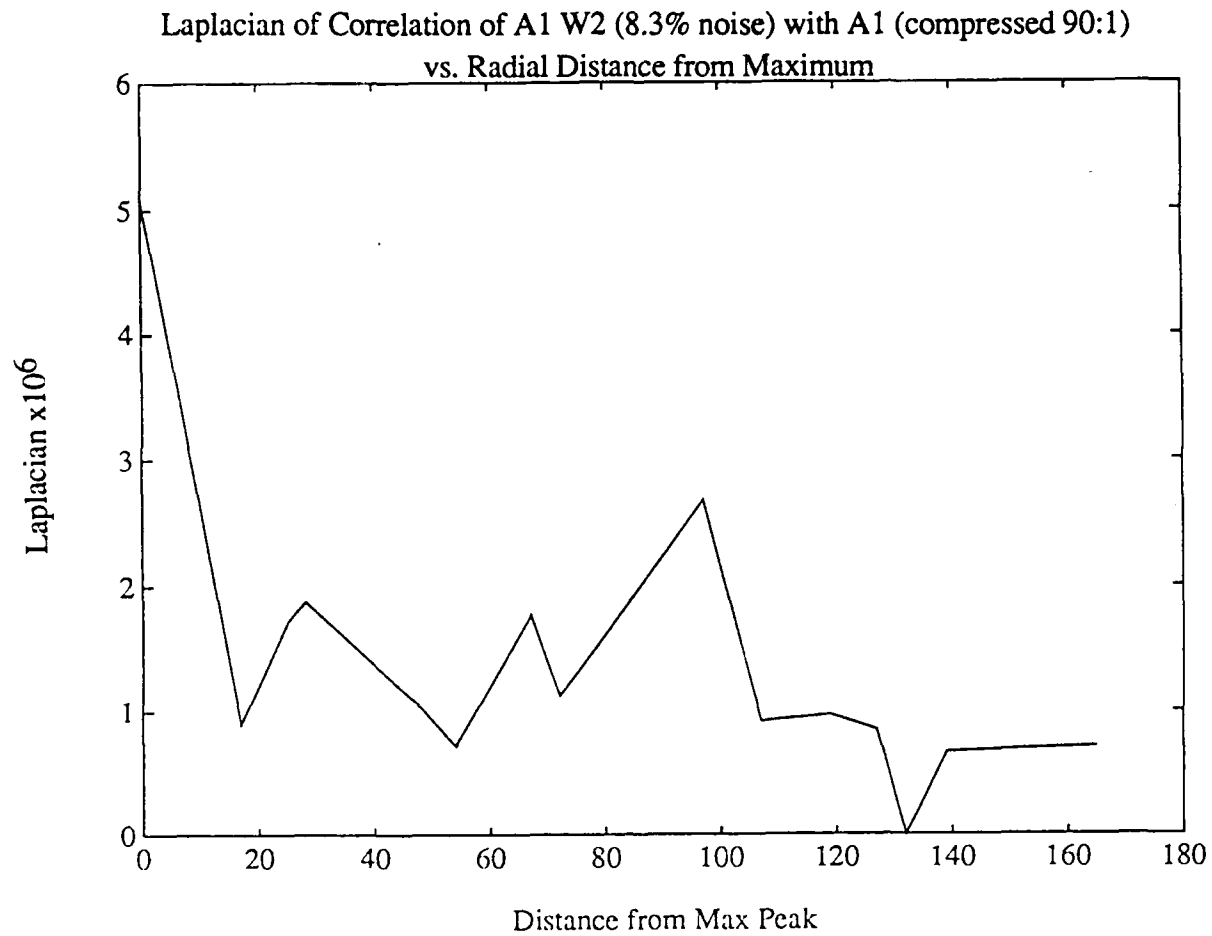


Exhibit II-13-d-6

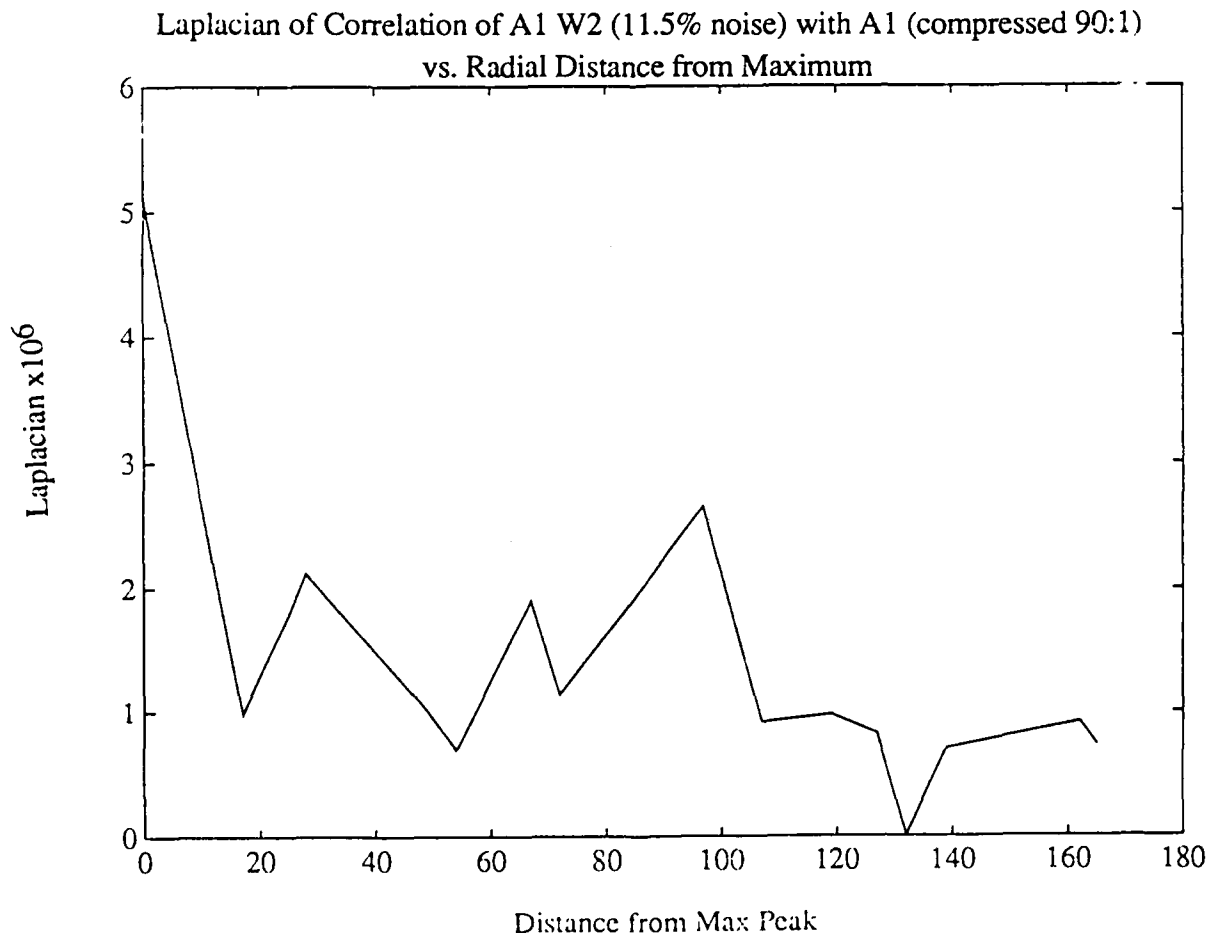


Exhibit II-13-c-5

Laplacian of Correlation of A1 W2 (8.3% noise) with A1 (compressed 58:1)
vs. Radial Distance from Maximum

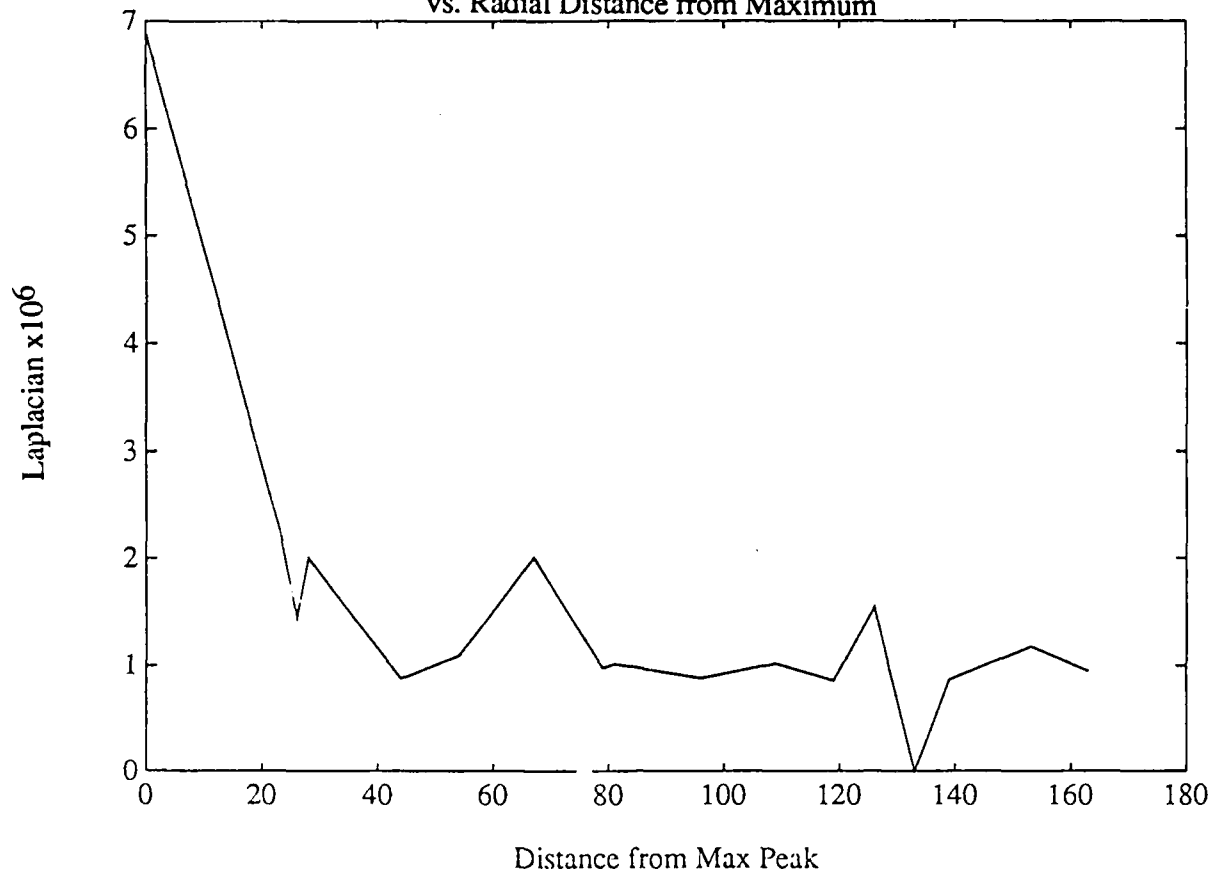


Exhibit II-13-d-5

Laplacian of Correlation of A1 W2 (11.5% noise) with A1 (compressed 58:1)
vs. Radial Distance from Maximum

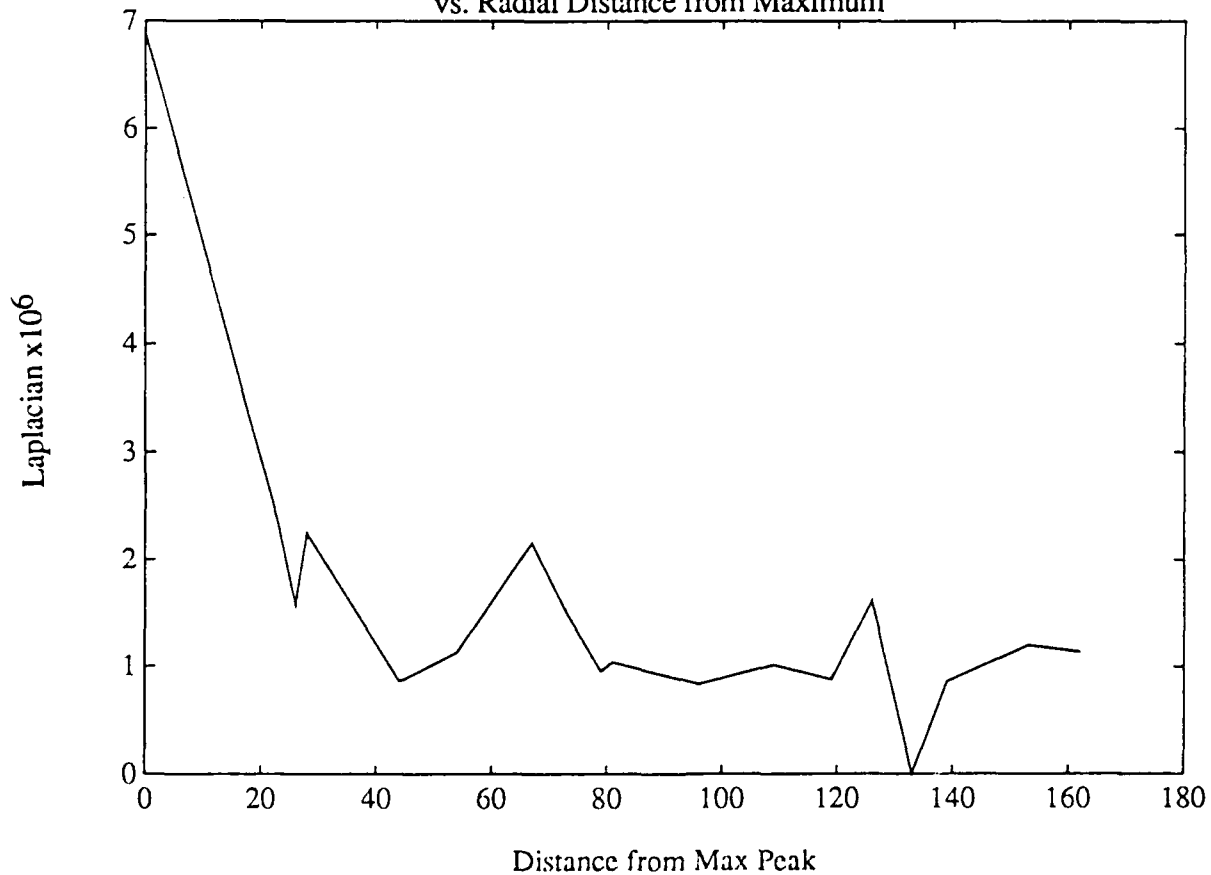


Exhibit II-13-c-4

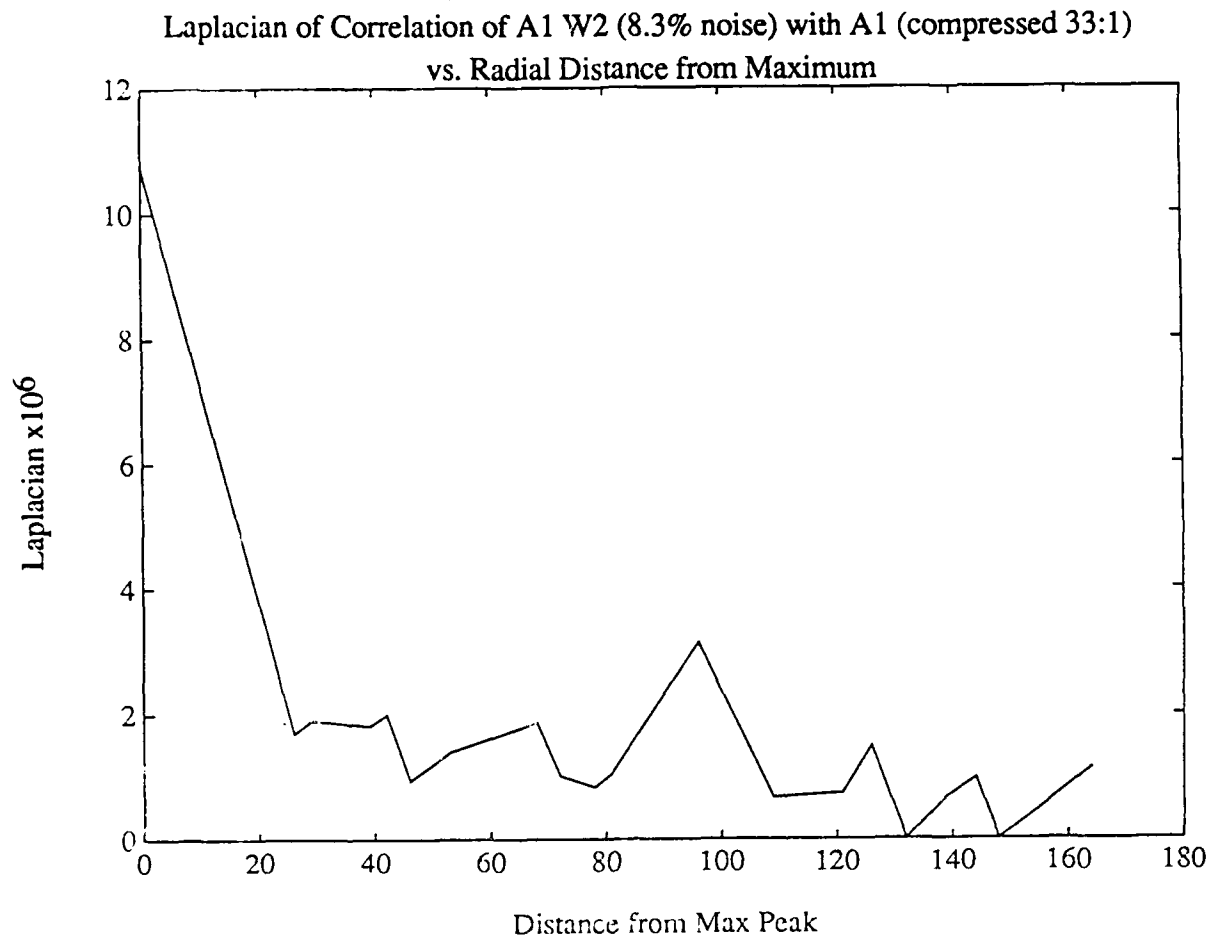


Exhibit II-13-d-4

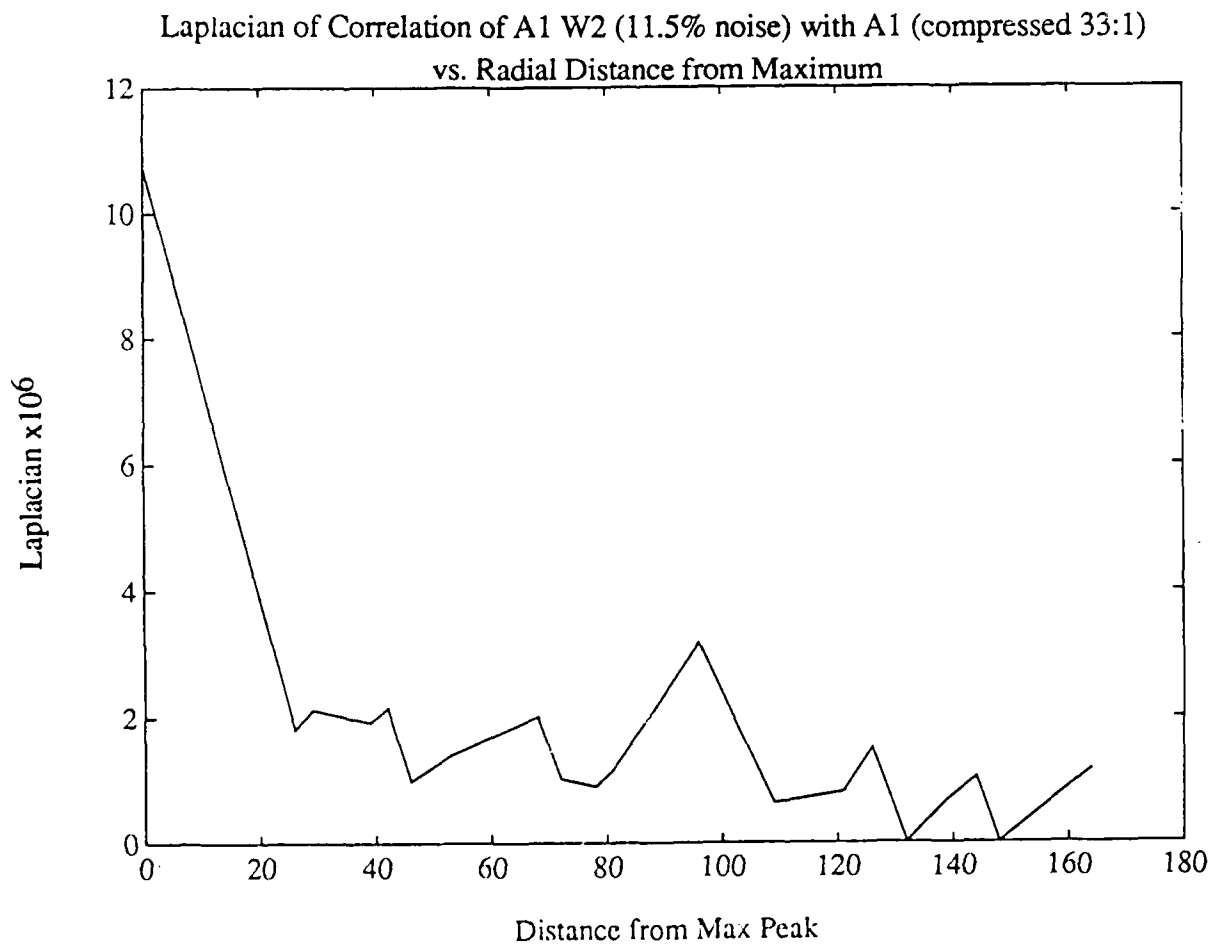


Exhibit II-13-c-3

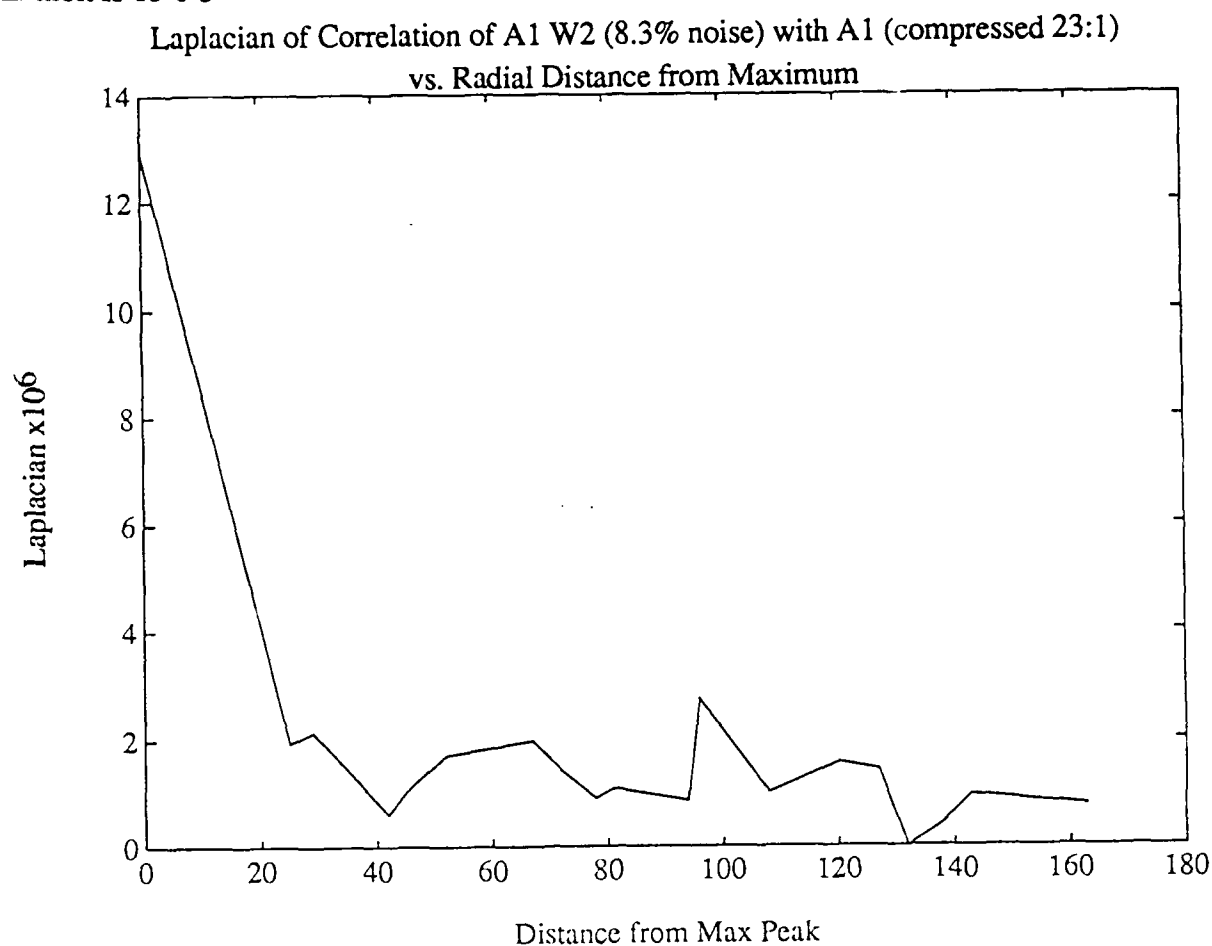


Exhibit II-13-d-3

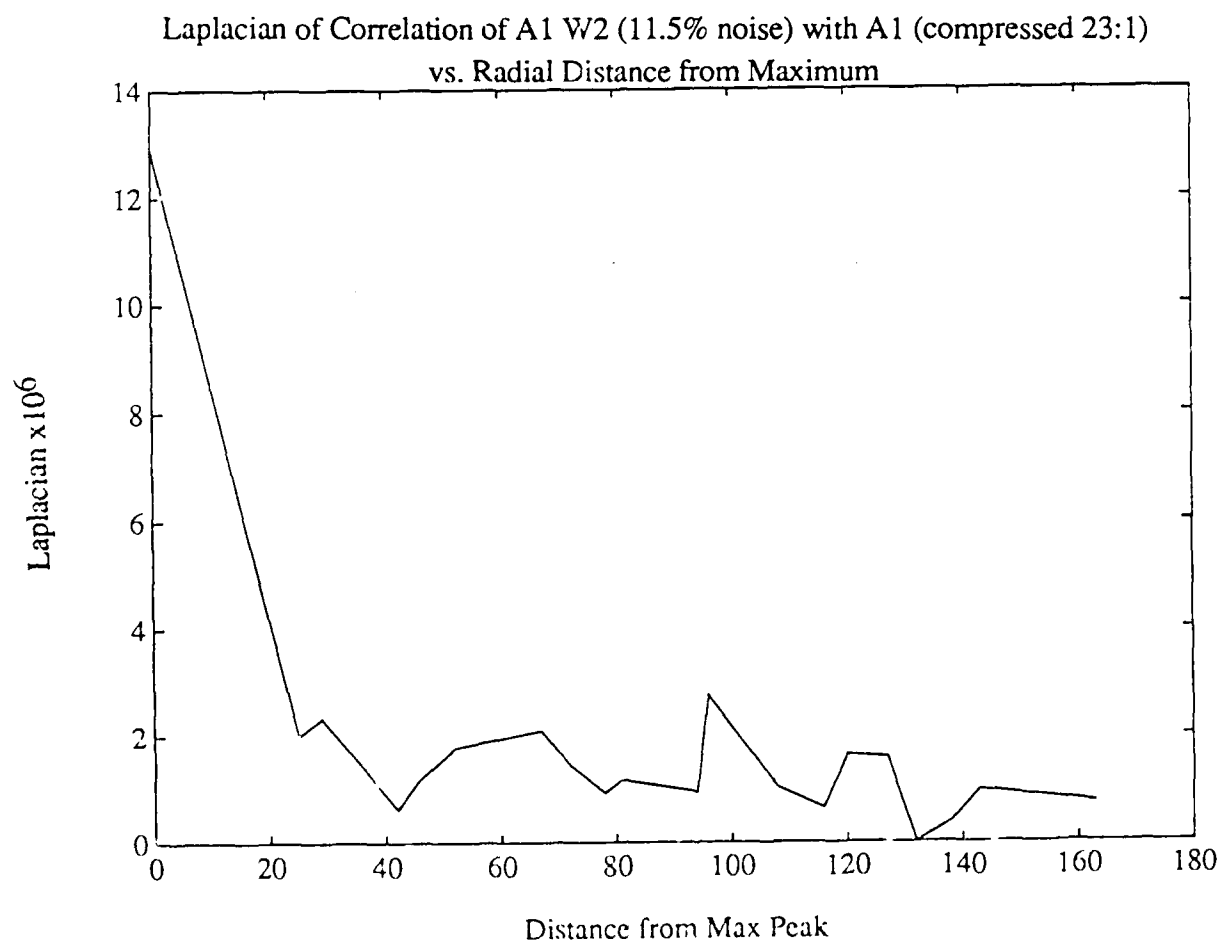


Exhibit II-13-c-2

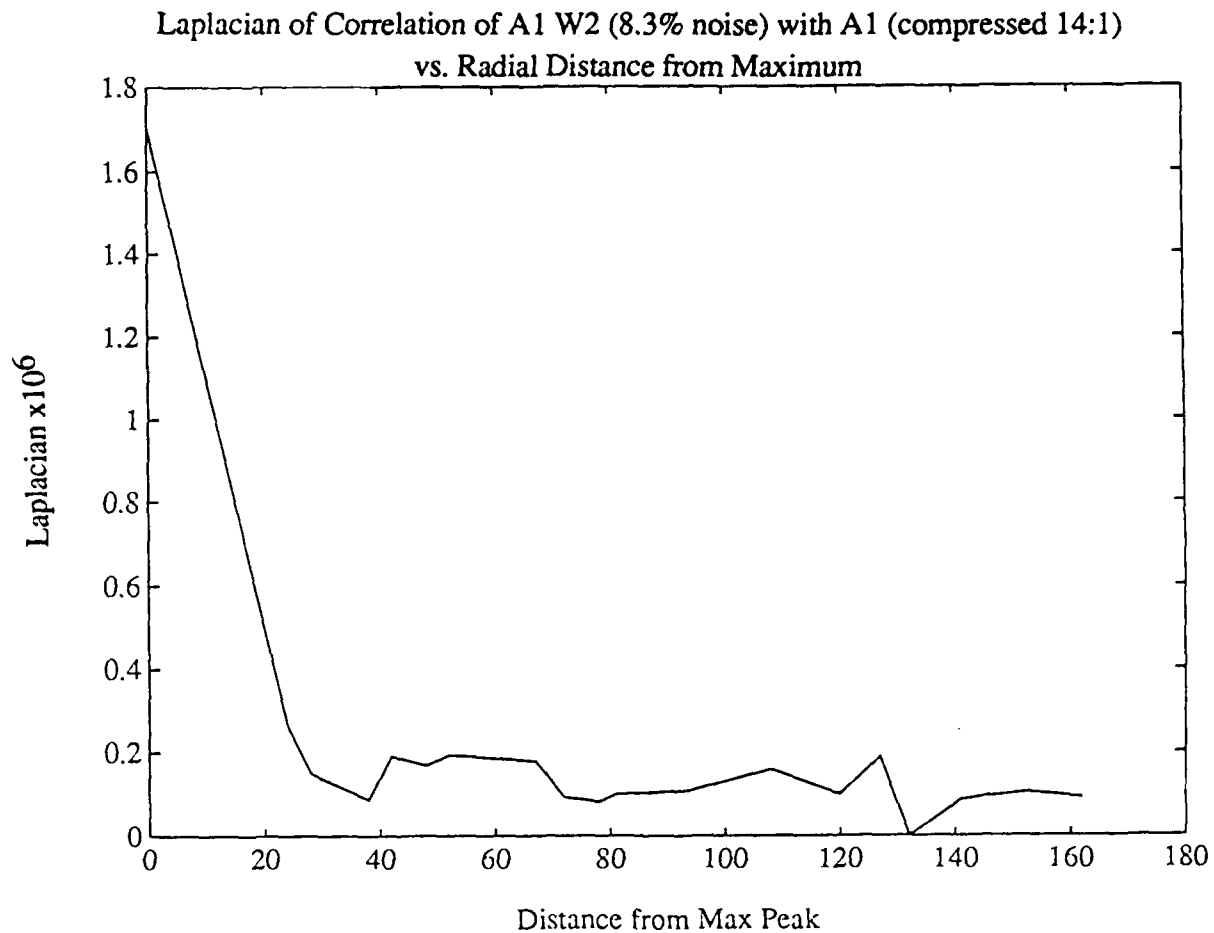
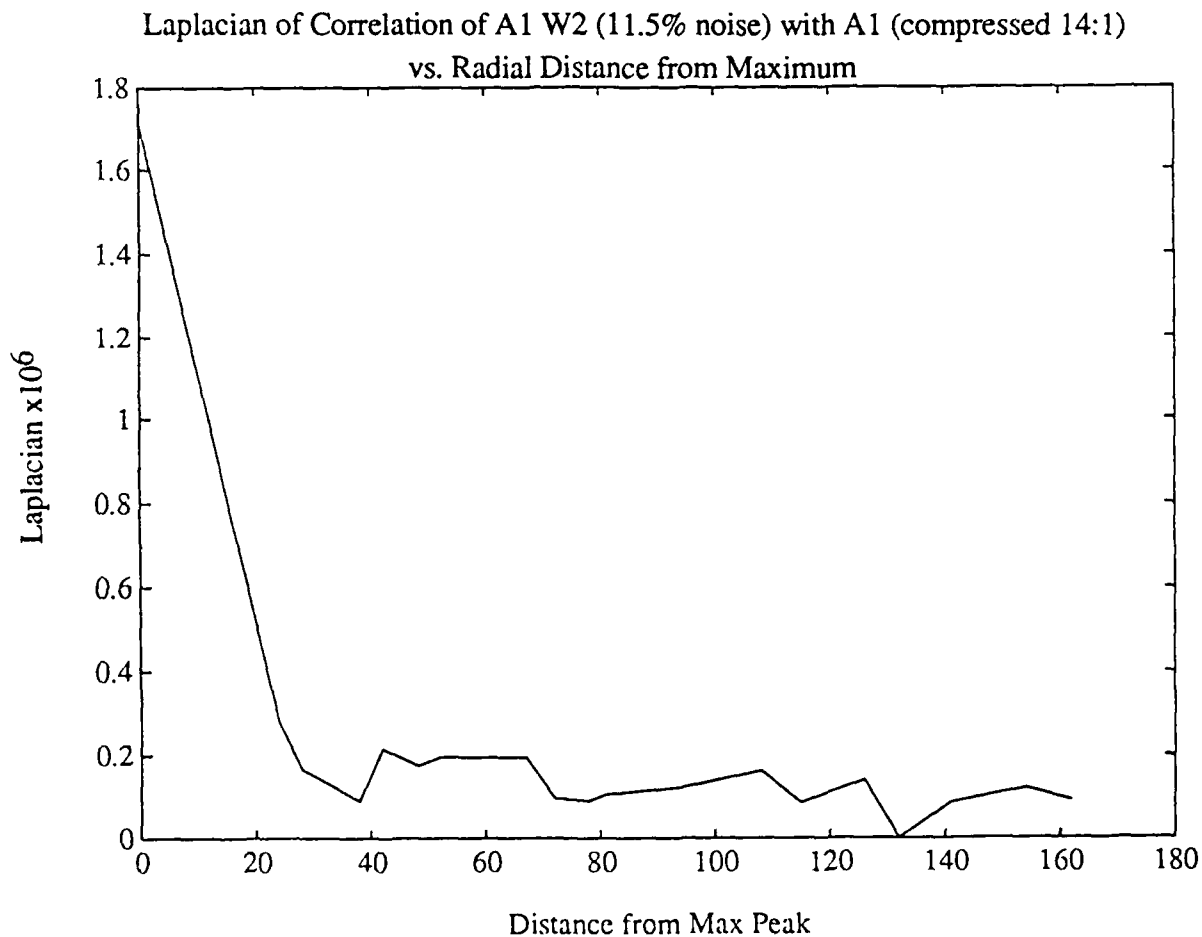


Exhibit II-13-d-2



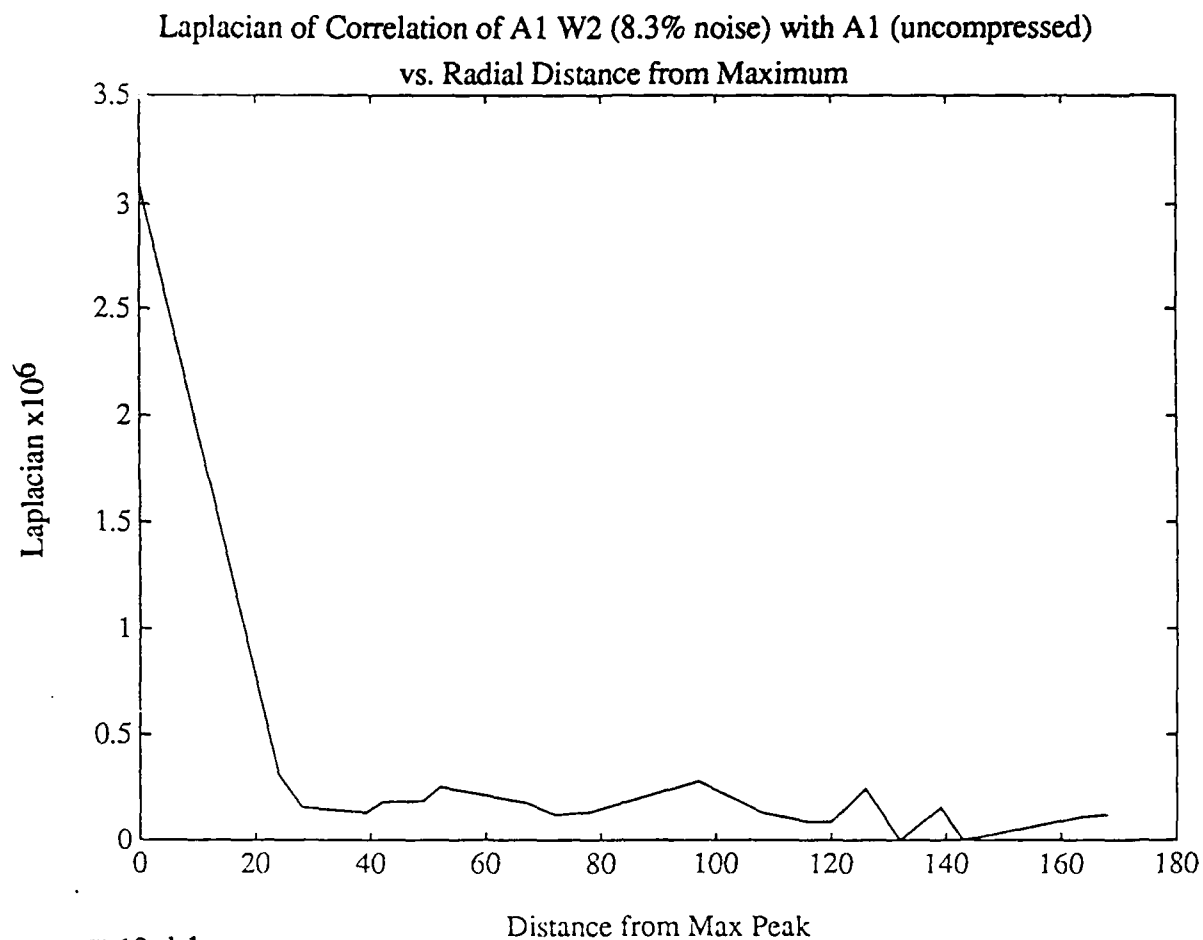
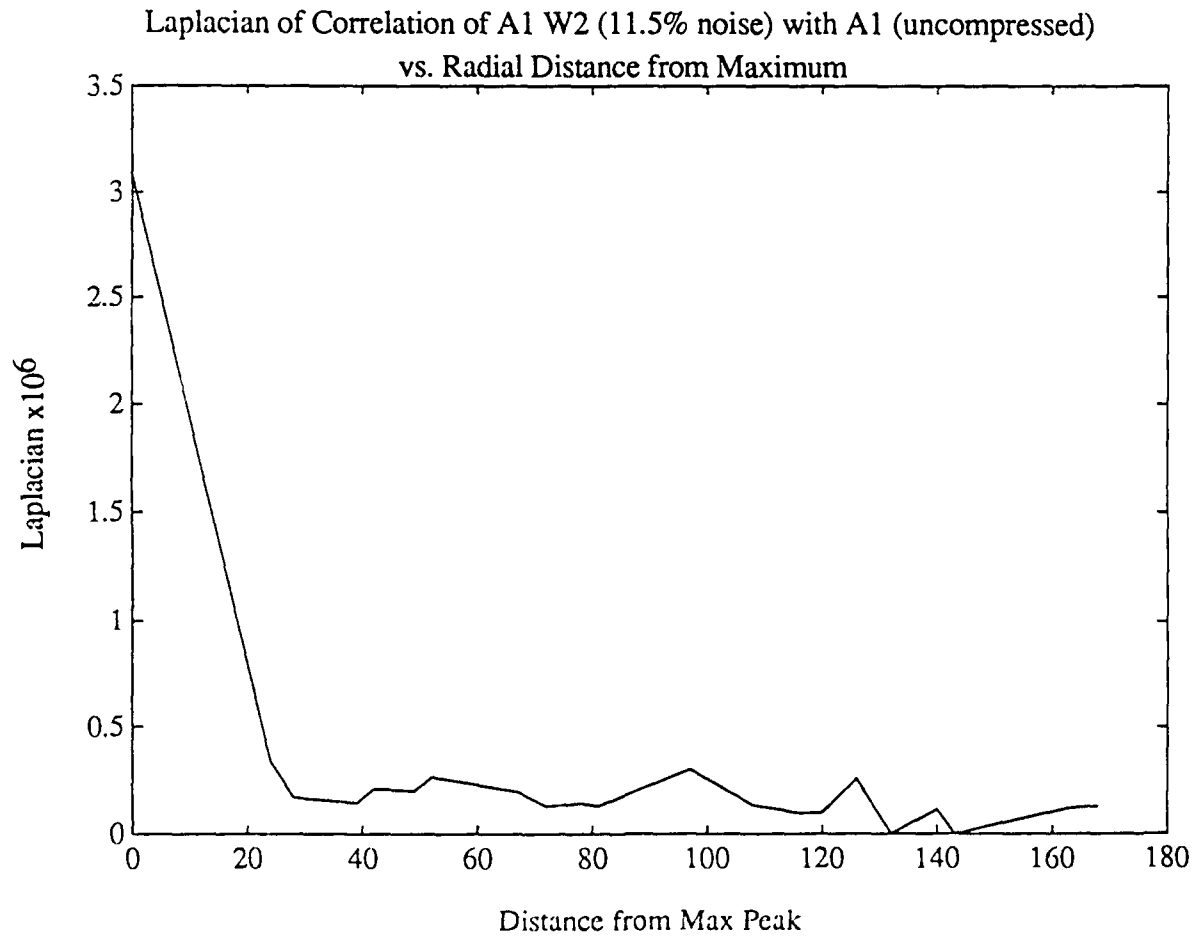


Exhibit II-13-d-1



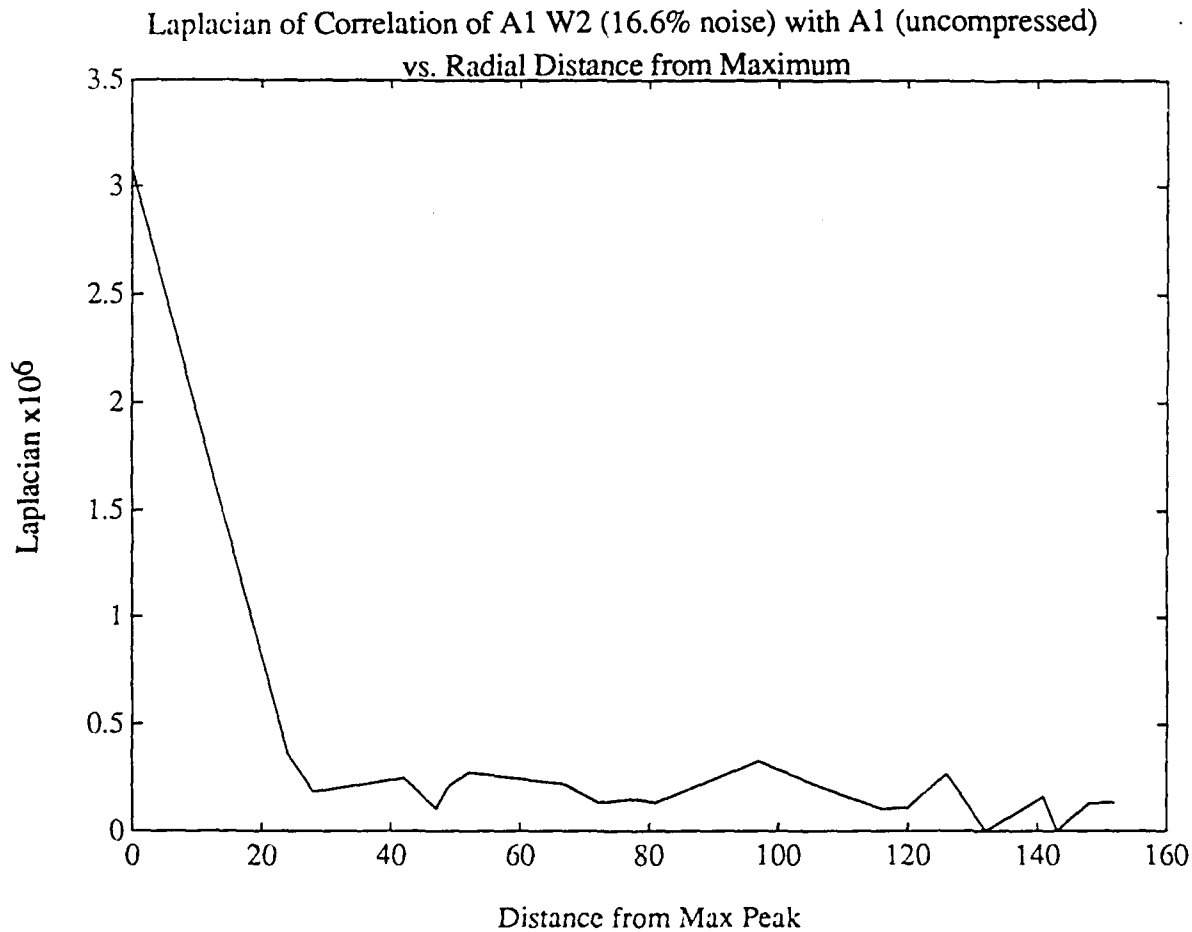
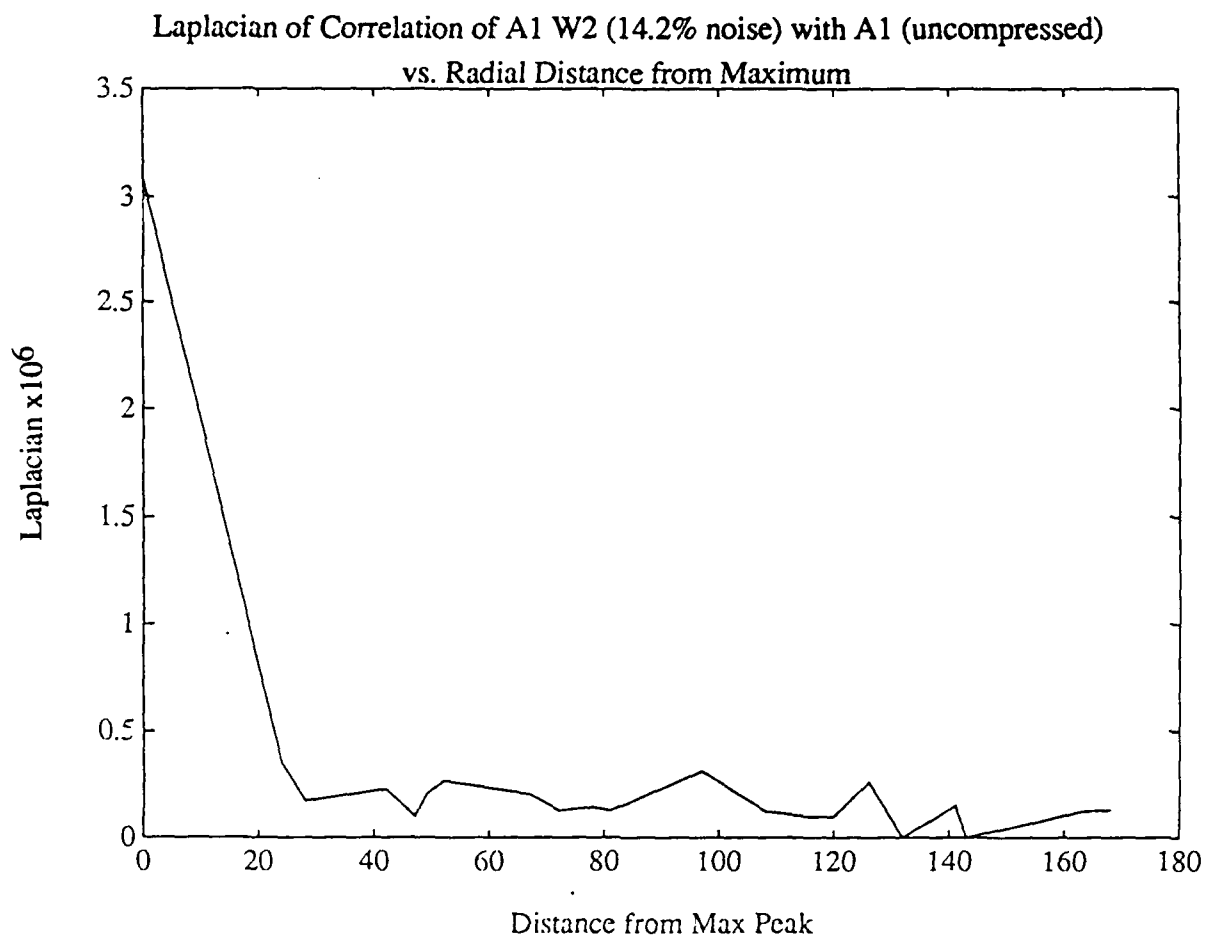


Exhibit II-13-e-2

Laplacian of Correlation of A1 W2 (14.2% noise) with A1 (compressed 14:1)
vs. Radial Distance from Maximum

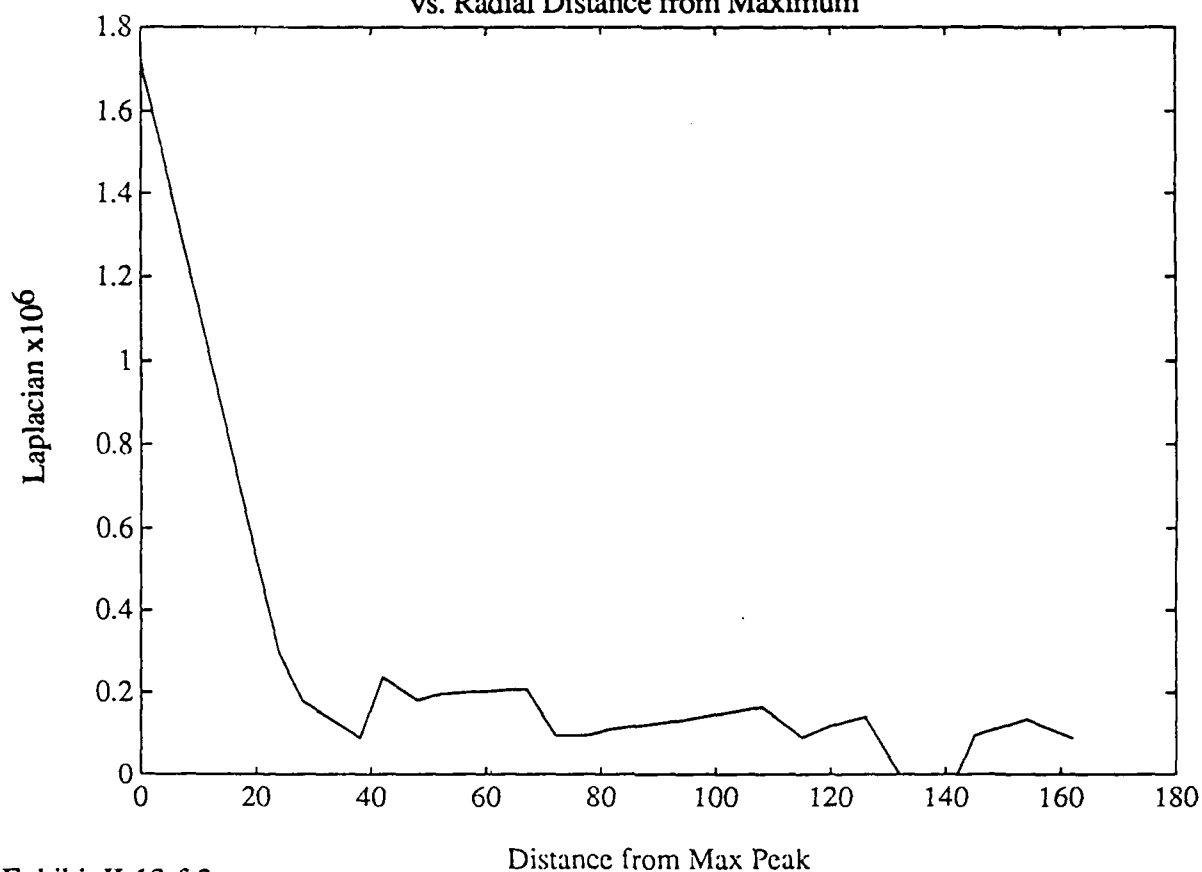


Exhibit II-13-f-2

Laplacian of Correlation of A1 W2 (16.6% noise) with A1 (compressed 14:1)
vs. Radial Distance from Maximum

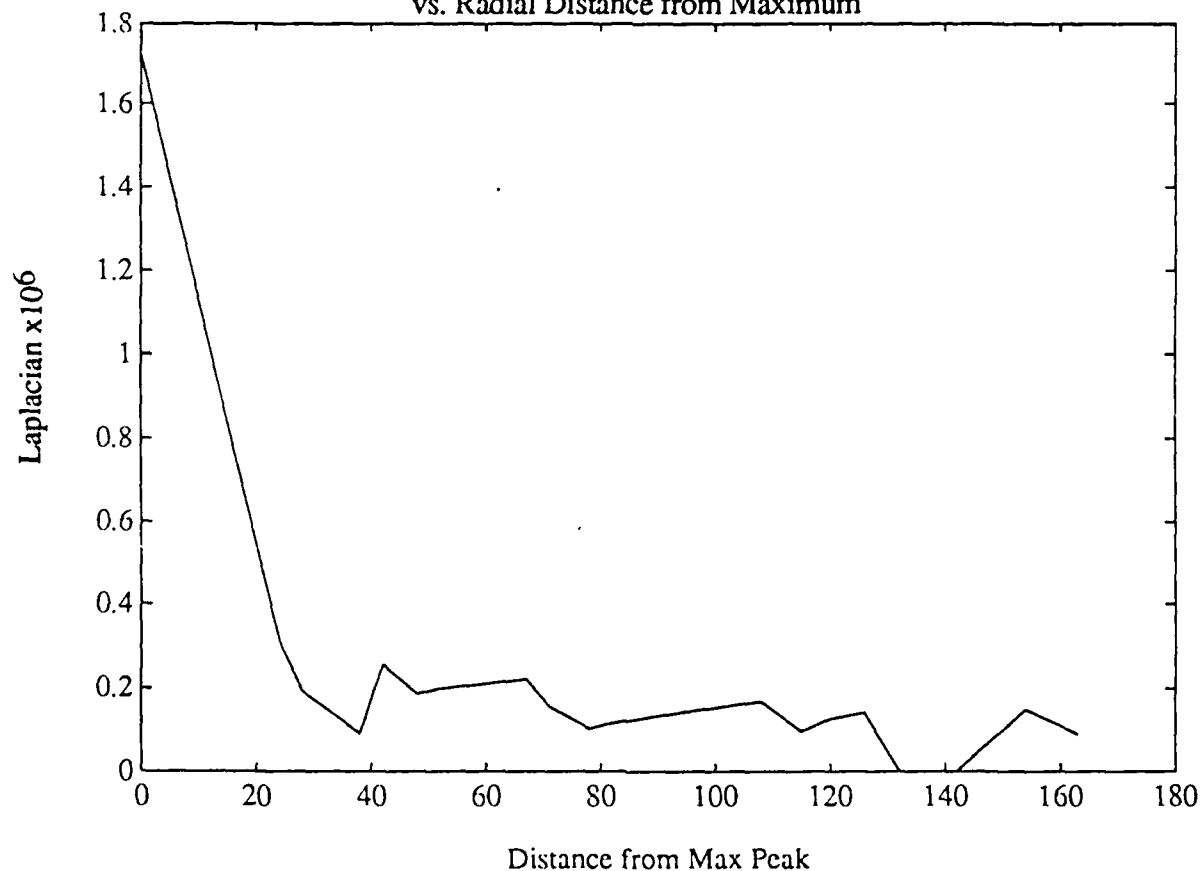


Exhibit II-13-e-3

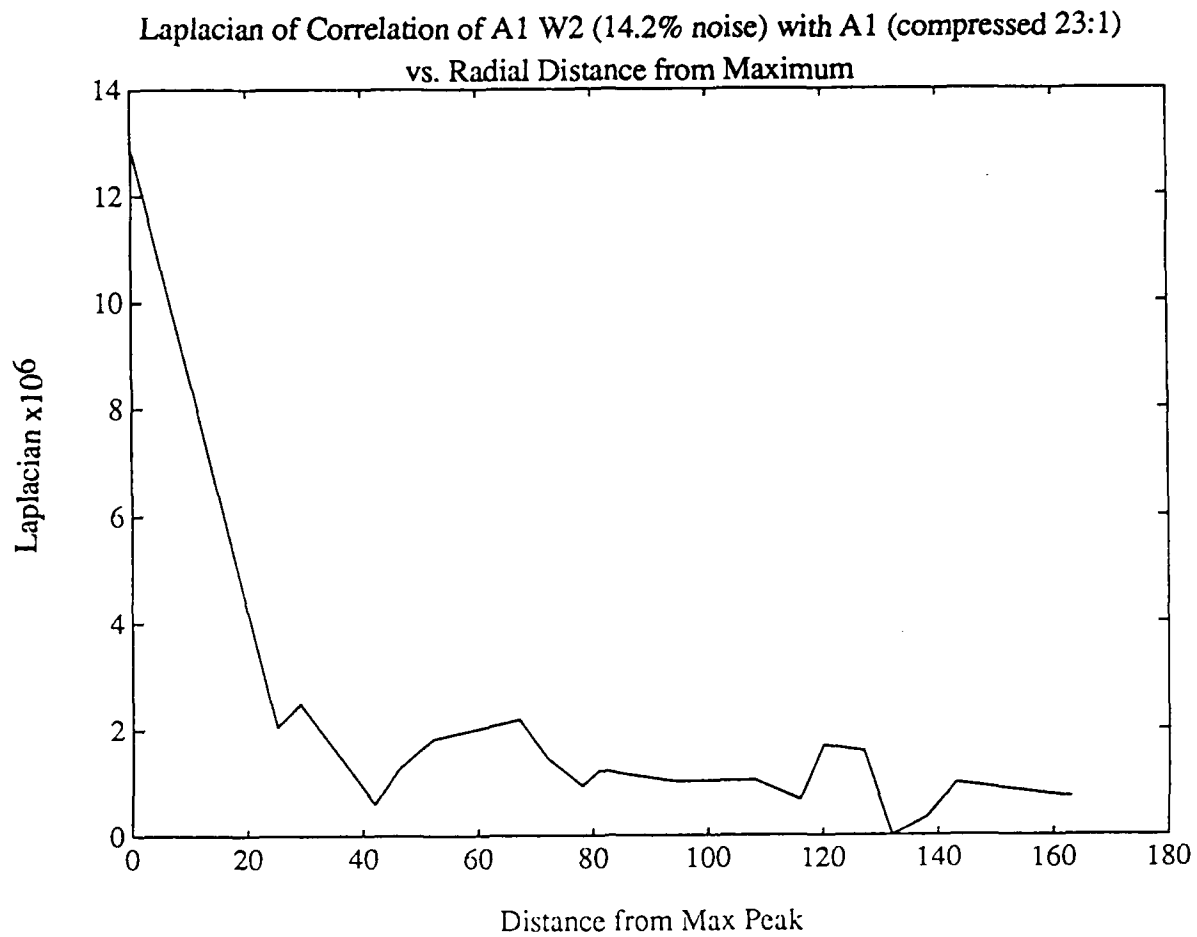


Exhibit II-13-f-3

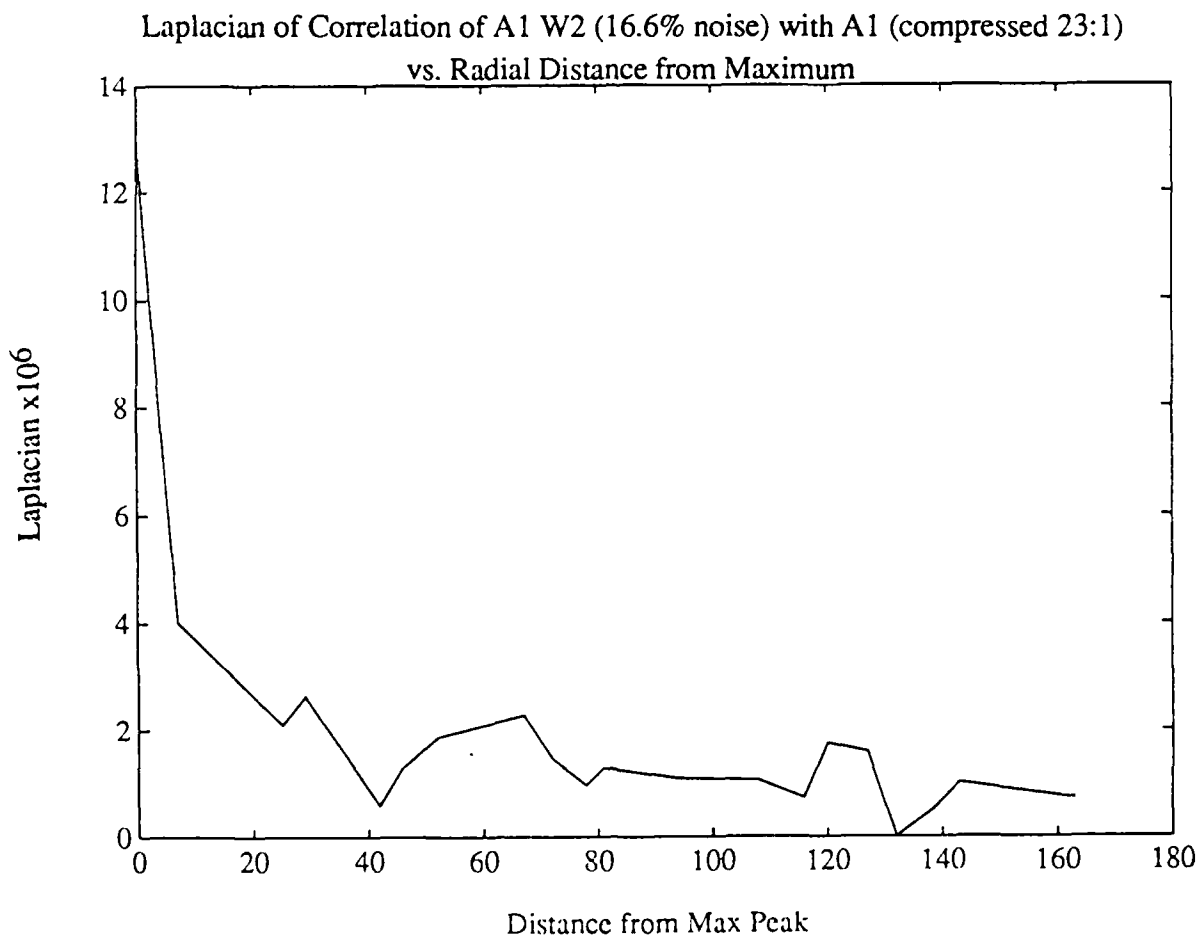


Exhibit II-13-e-4

Laplacian of Correlation of A1 W2 (14.2% noise) with A1 (compressed 33:1)
vs. Radial Distance from Maximum

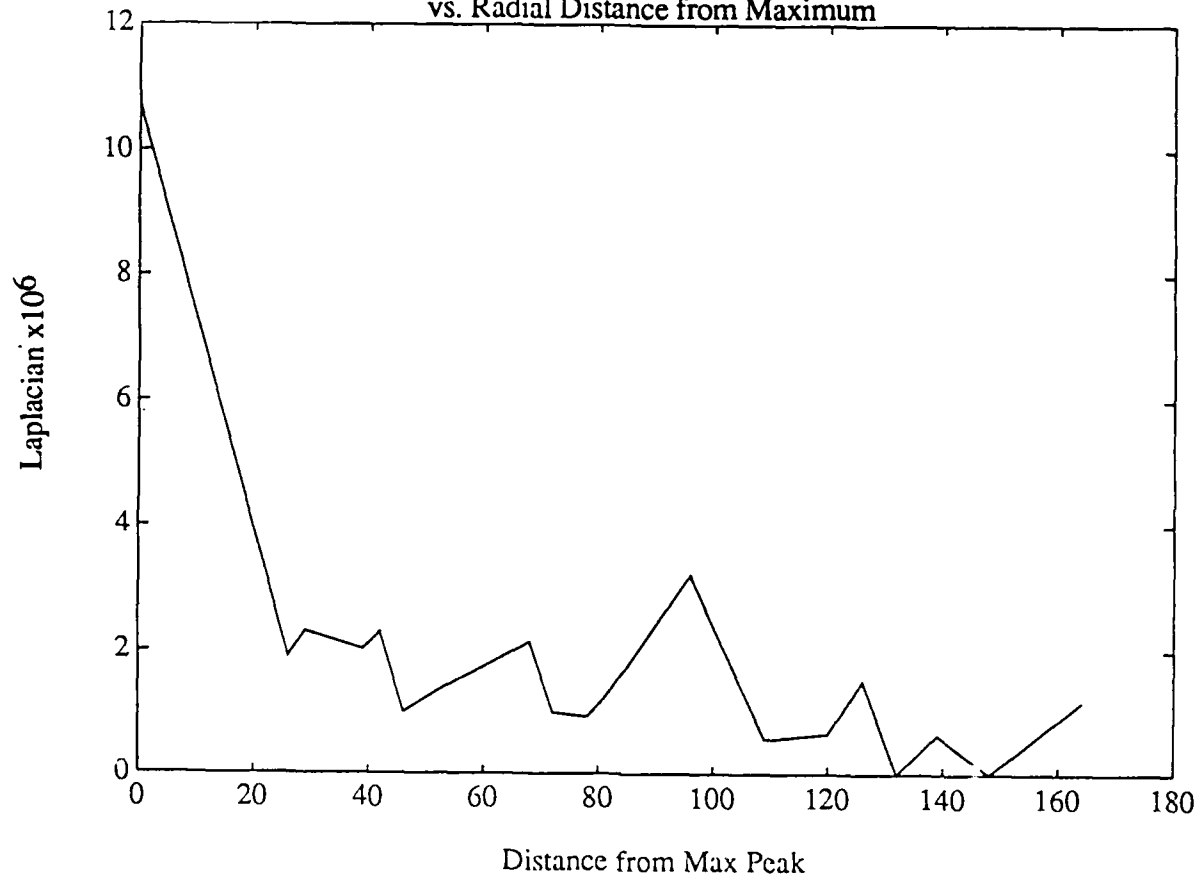


Exhibit II-13-f-4

Laplacian of Correlation of A1 W2 (16.6% noise) with A1 (compressed 33:1)
vs. Radial Distance from Maximum

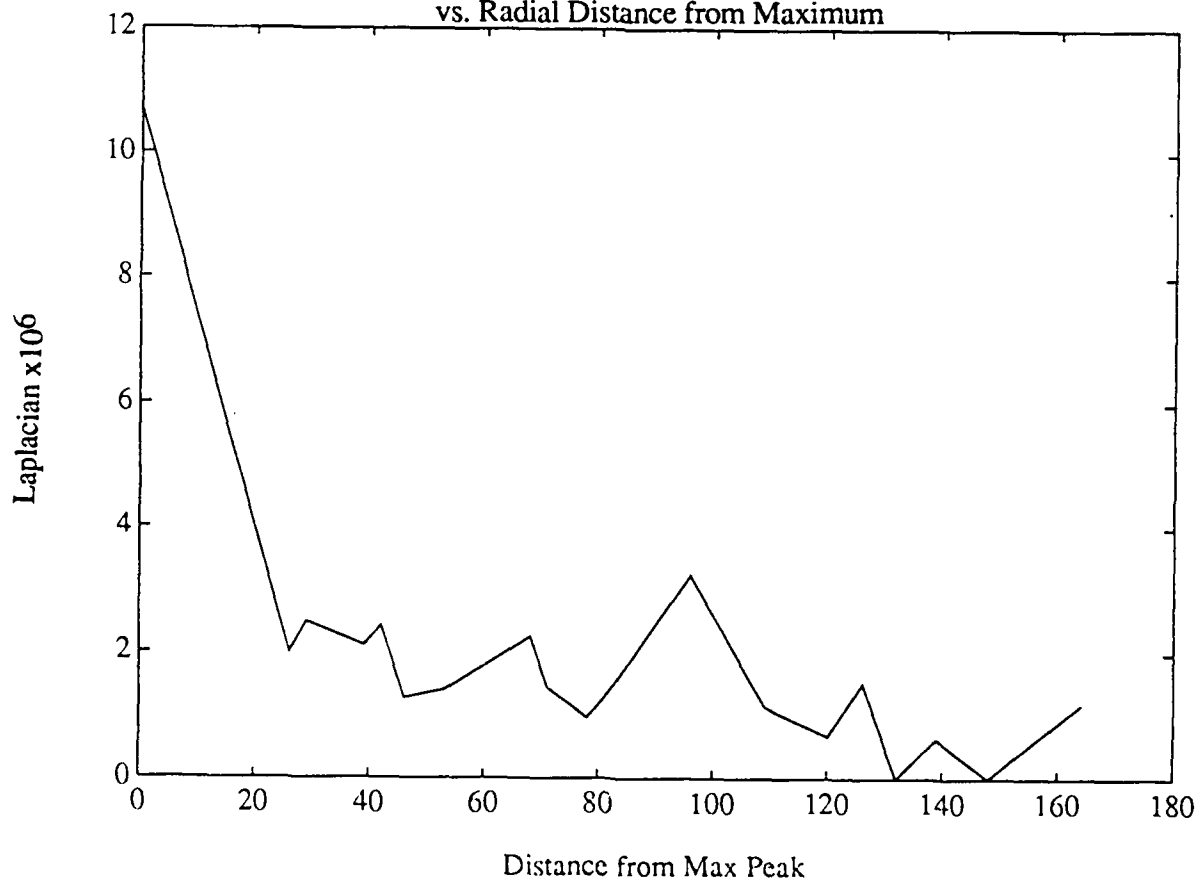


Exhibit II-13-e-5

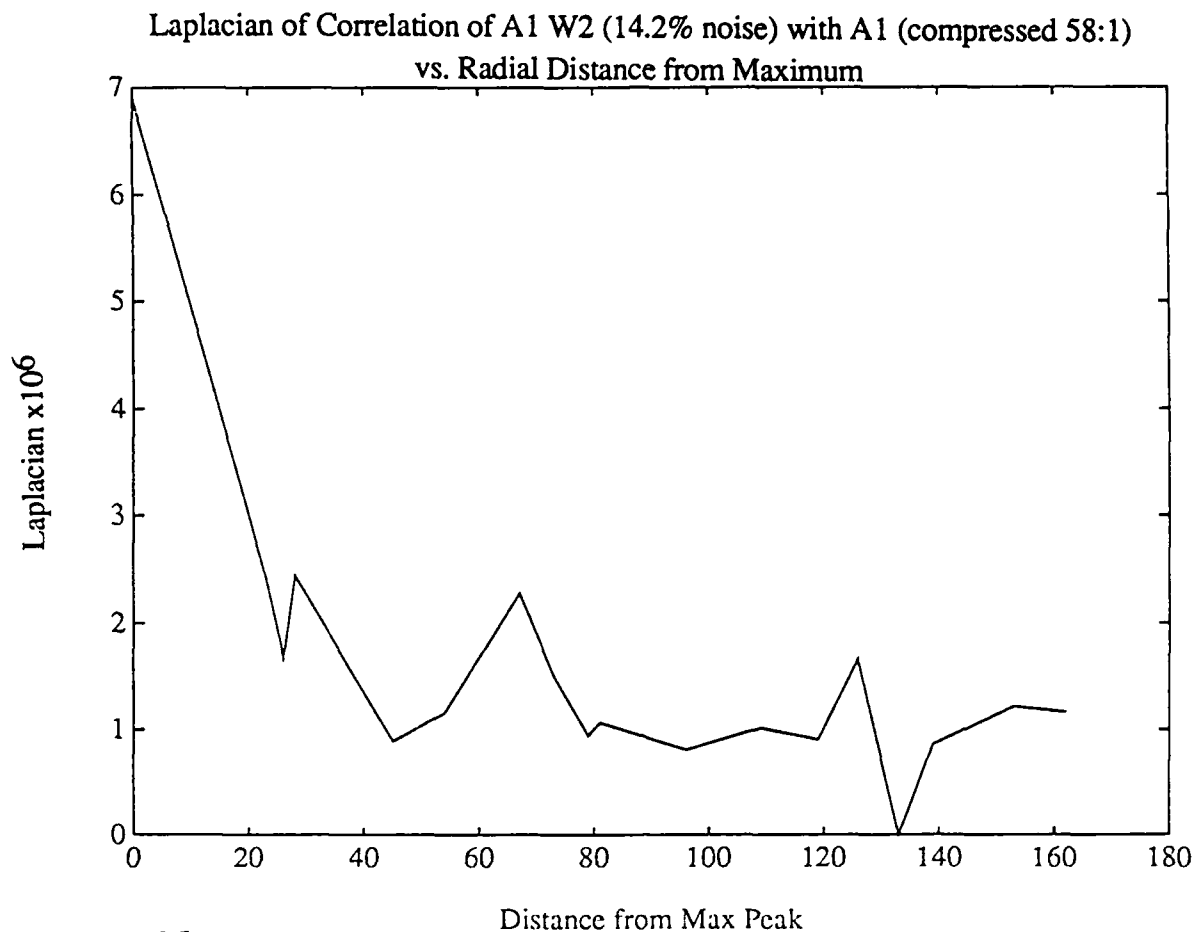


Exhibit II-13-f-5

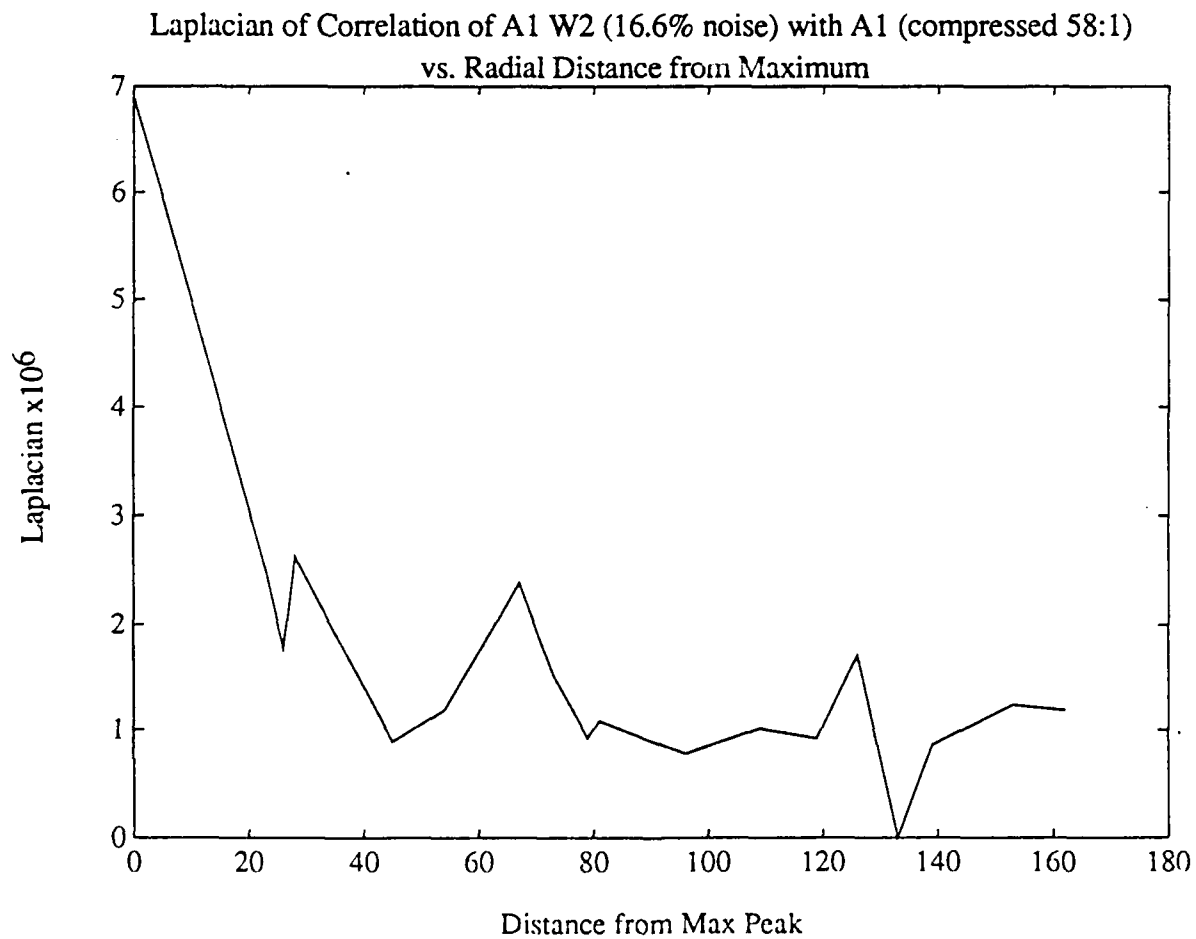


Exhibit II-13-e-6

Laplacian of Correlation of A1 W2 (14.2% noise) with A1 (compressed 90:1)
vs. Radial Distance from Maximum

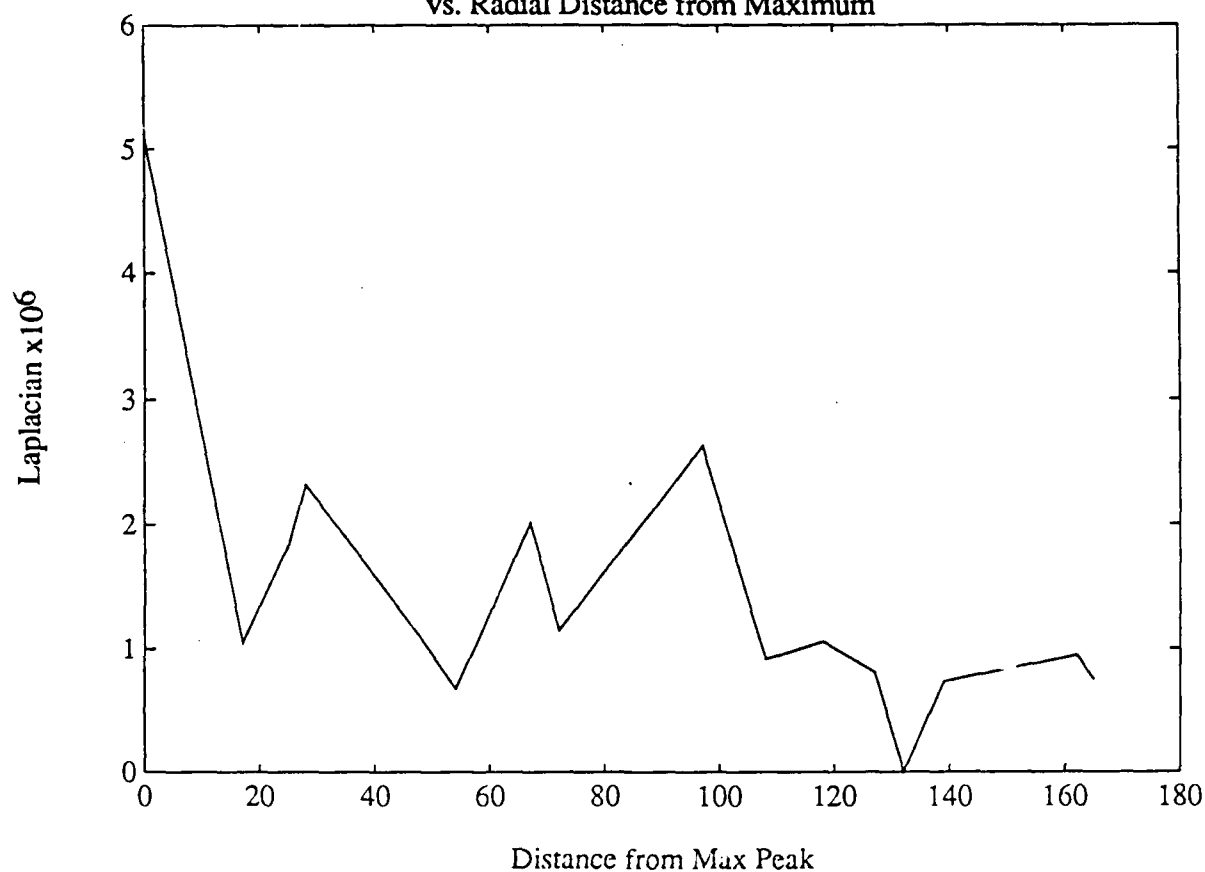


Exhibit II-13-f-6

Laplacian of Correlation of A1 W2 (16.6% noise) with A1 (compressed 90:1)
vs. Radial Distance from Maximum

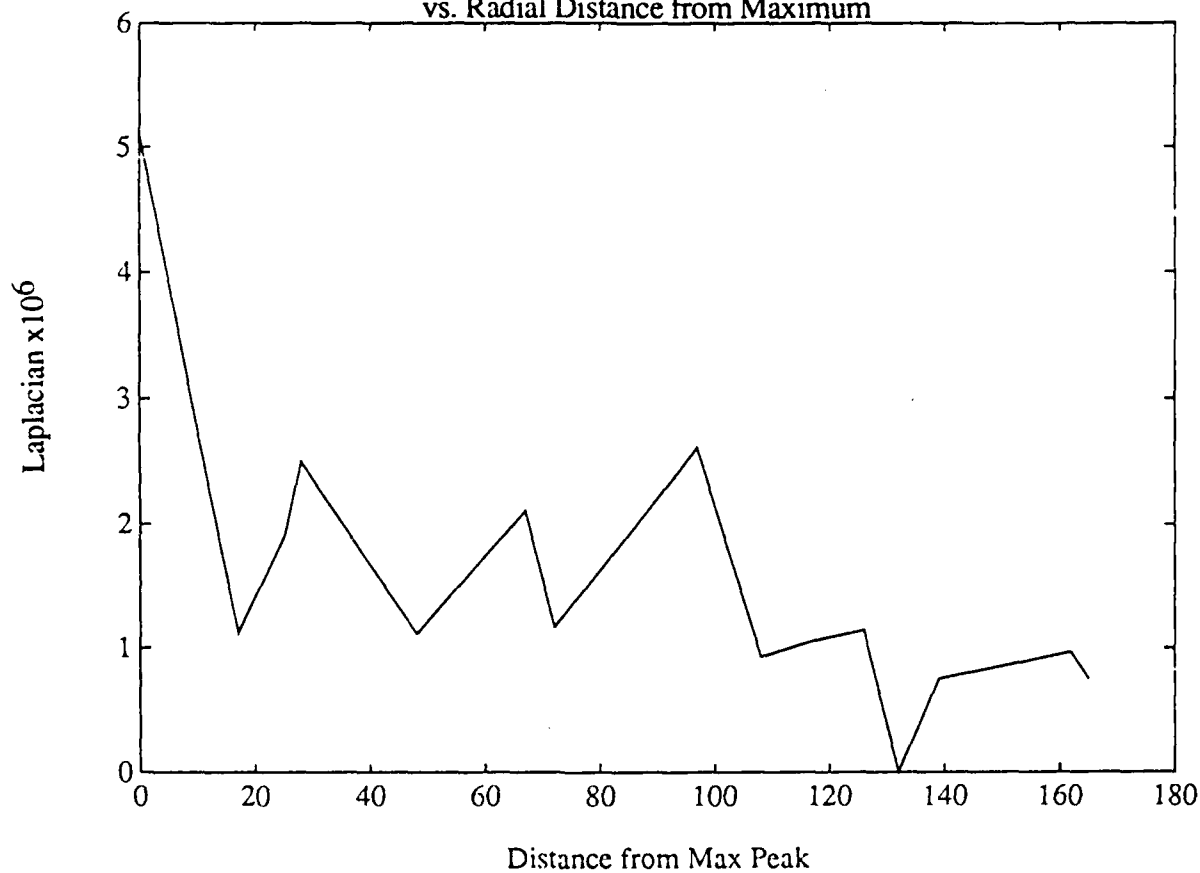


Exhibit II-13-e-7

Laplacian of Correlation of A1 W2 (14.2% noise) with A1 (compressed 120:1)
vs. Radial Distance from Maximum

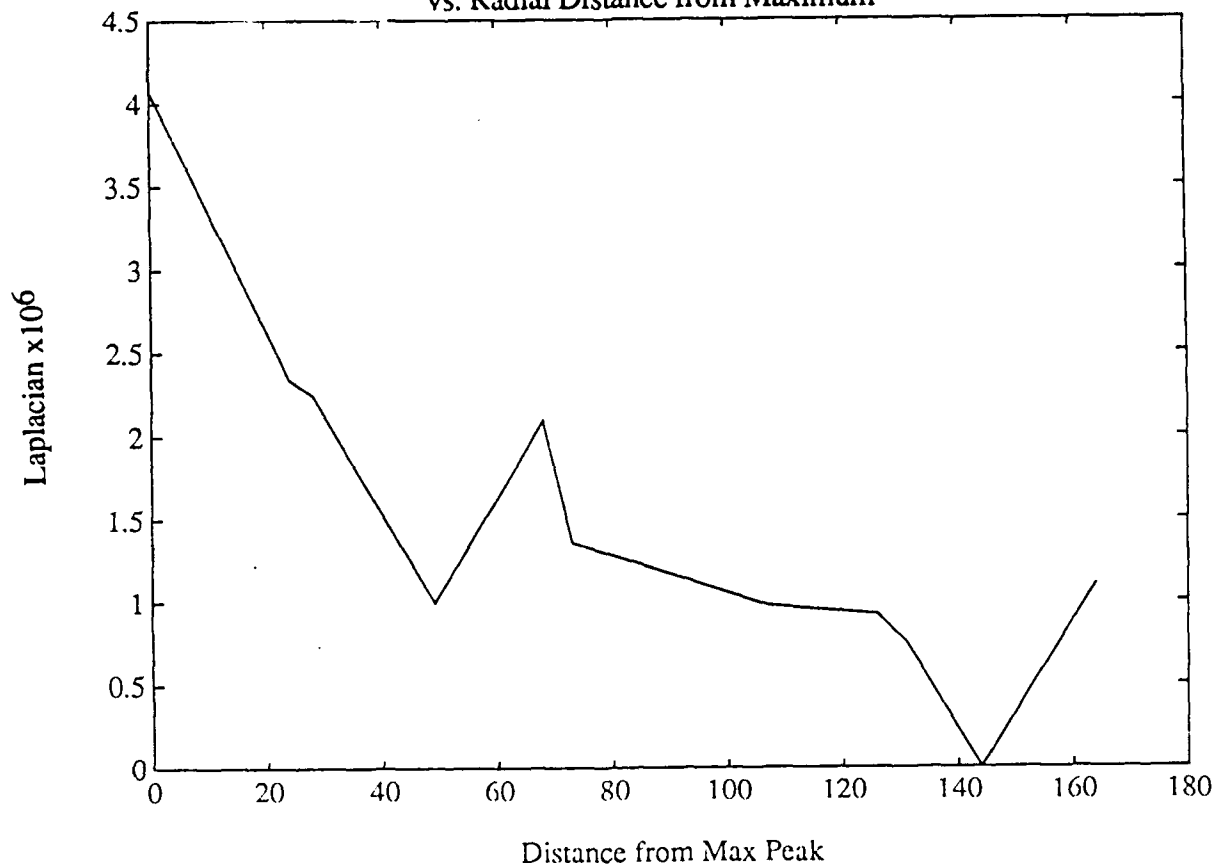
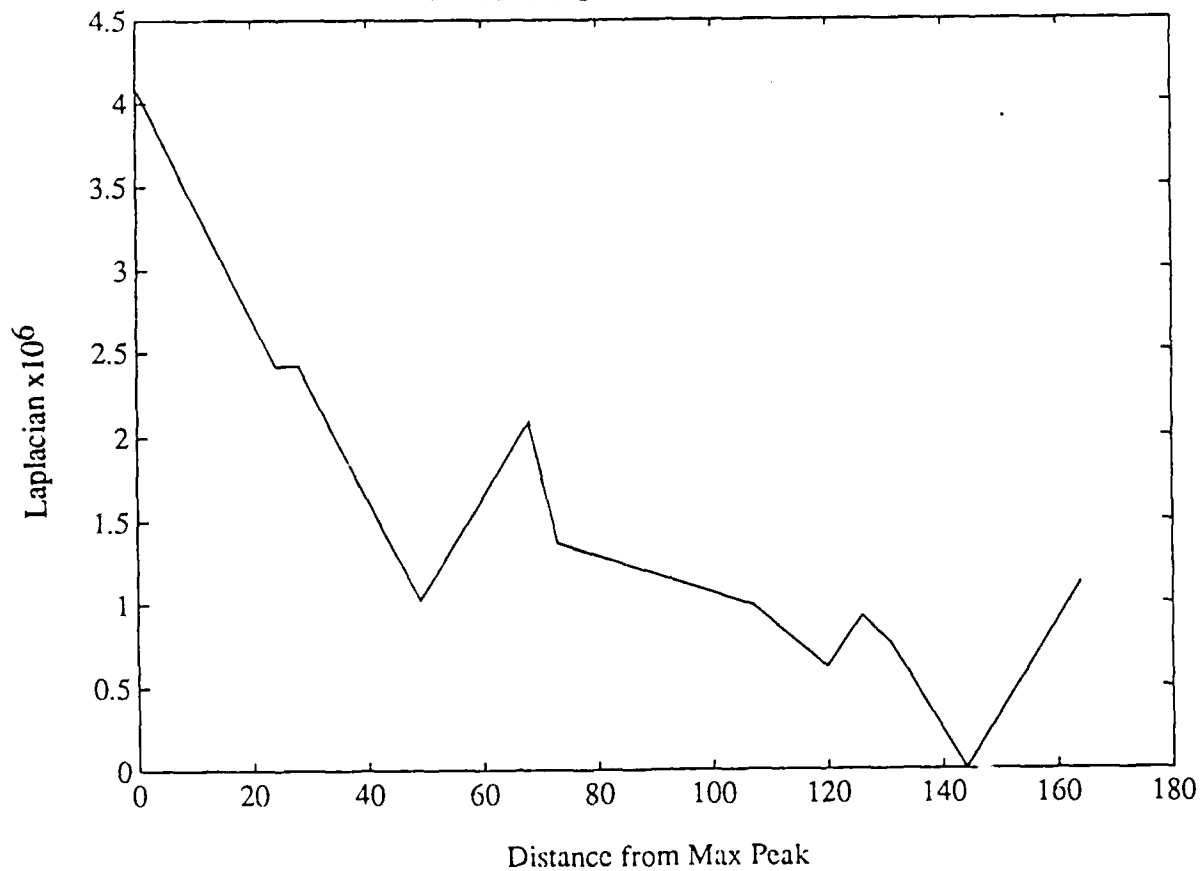


Exhibit II-13-f-7

Laplacian of Correlation of A1 W2 (16.6% noise) with A1 (compressed 120:1)
vs. Radial Distance from Maximum



Laplacian of Correlation of A1 W2 (18.7% noise) with A1 (uncompressed)
vs. Radial Distance from Maximum

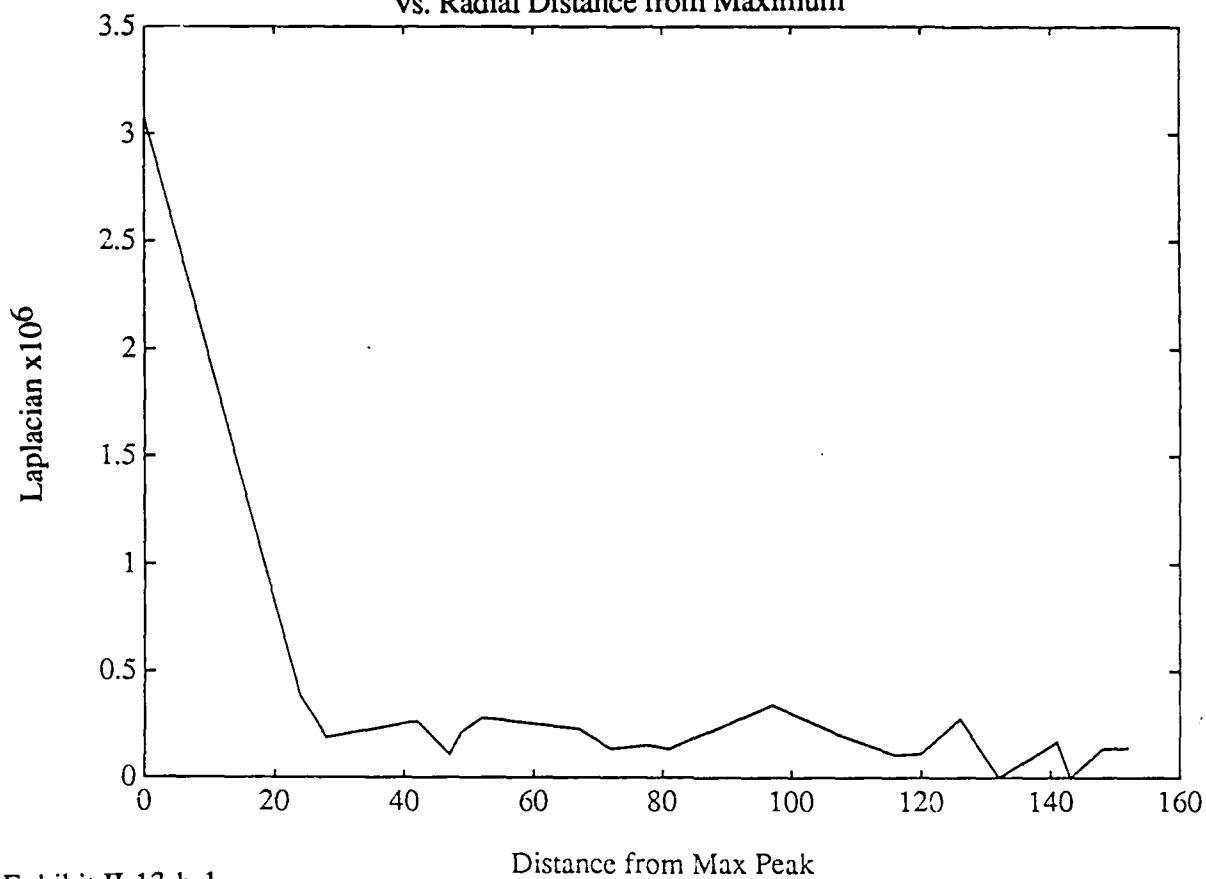


Exhibit II-13-h-1

Laplacian of Correlation of A1 W2 (20.5% noise) with A1 (uncompressed)
vs. Radial Distance from Maximum

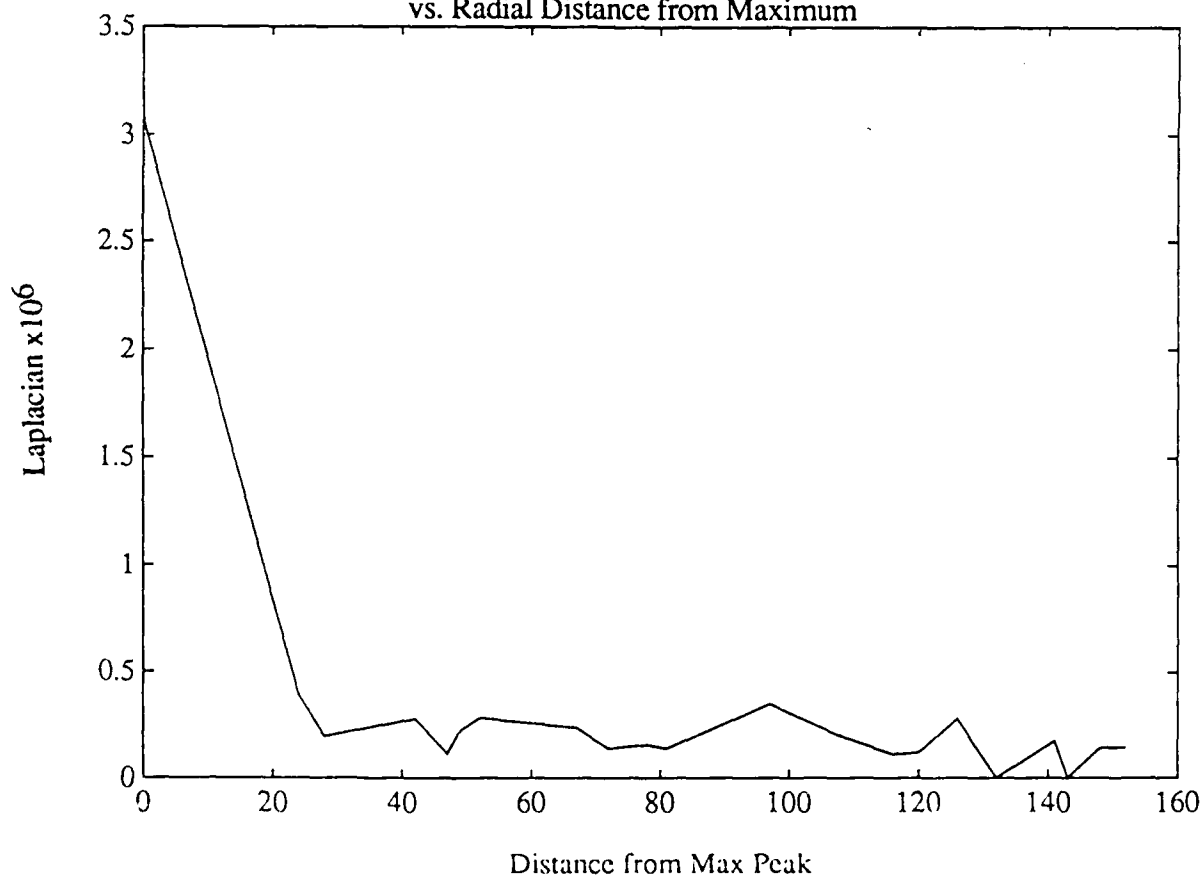


Exhibit II-13-g-2

Laplacian of Correlation of A1 W2 (18.7% noise) with A1 (compressed 14:1)
vs. Radial Distance from Maximum

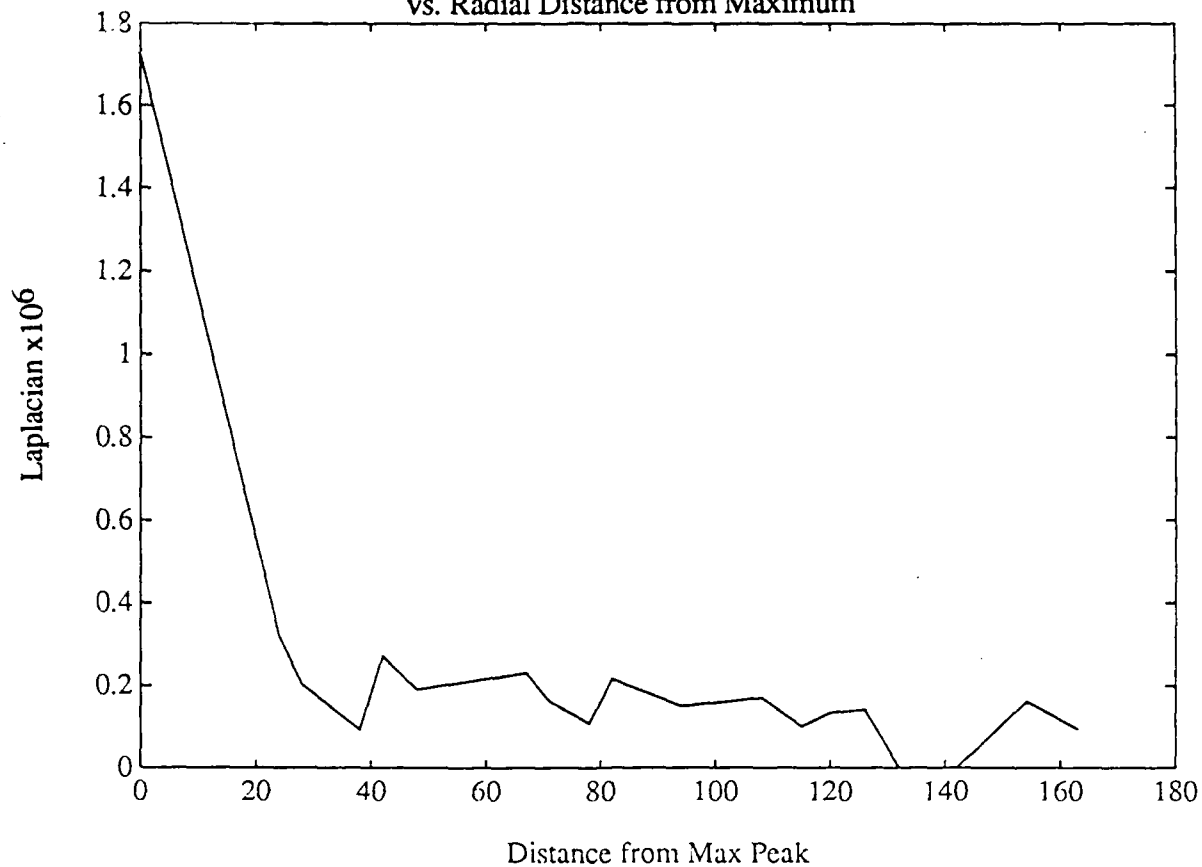


Exhibit II-13-h-2

Laplacian of Correlation of A1 W2 (20.5% noise) with A1 (compressed 14:1)
vs. Radial Distance from Maximum

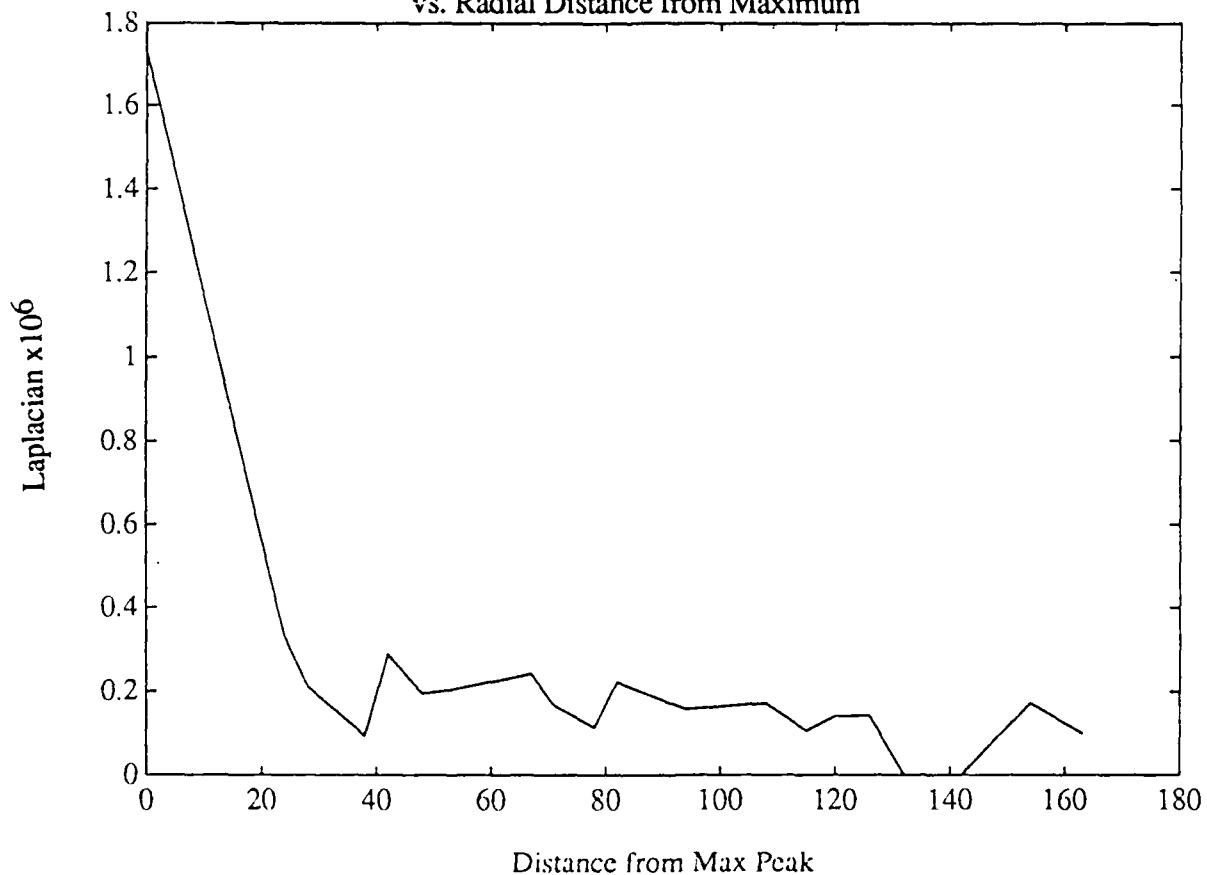


Exhibit II-13-g-3

Laplacian of Correlation of A1 W2 (18.7% noise) with A1 (compressed 23:1)
vs. Radial Distance from Maximum

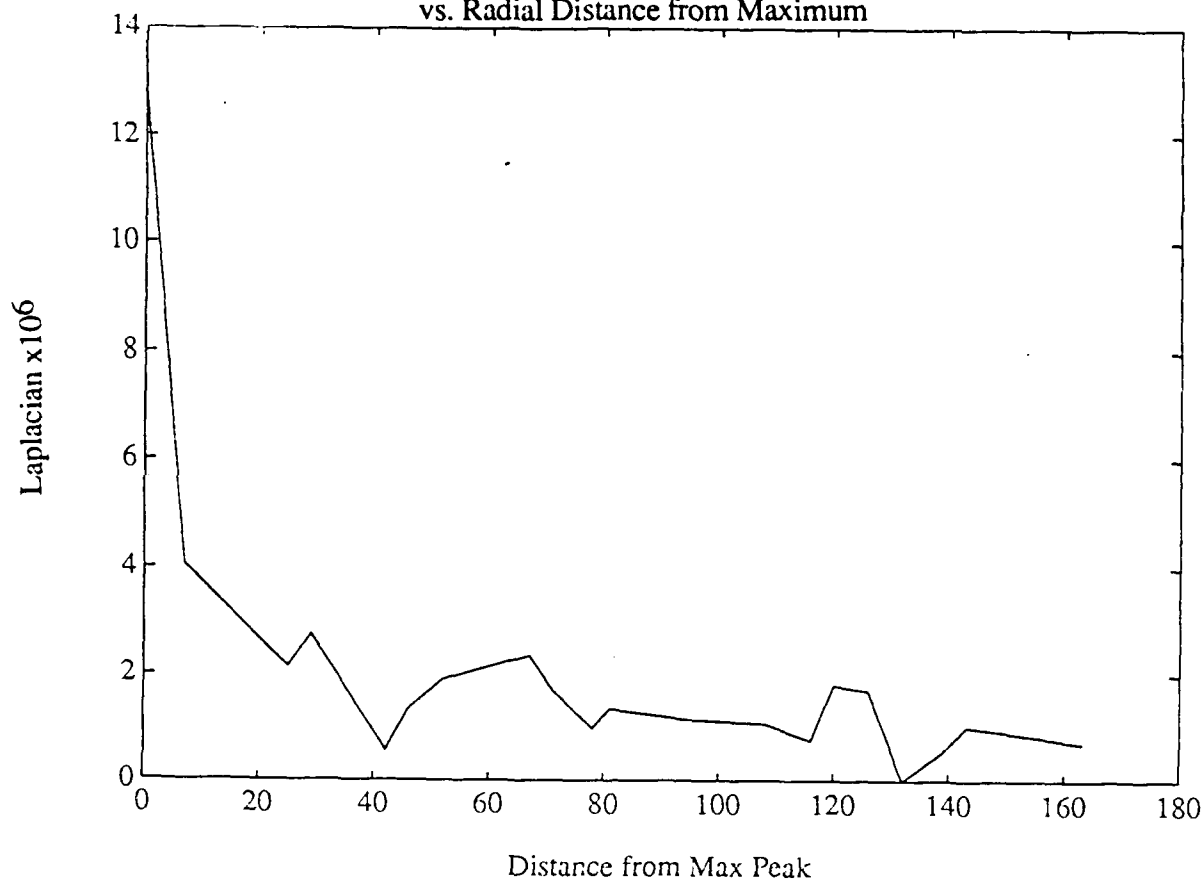


Exhibit II-13-h-3

Laplacian of Correlation of A1 W2 (20.5% noise) with A1 (compressed 23:1)
vs. Radial Distance from Maximum

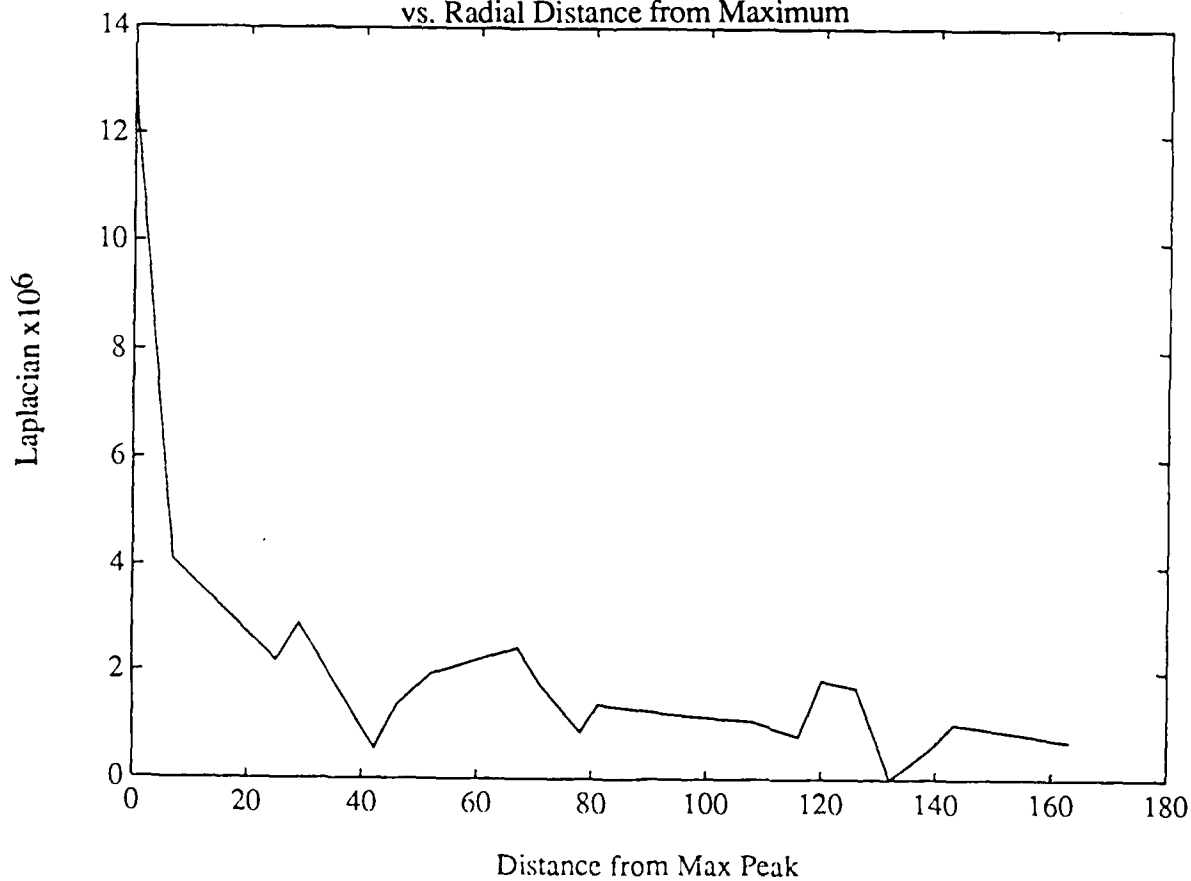


Exhibit II-13-g-4

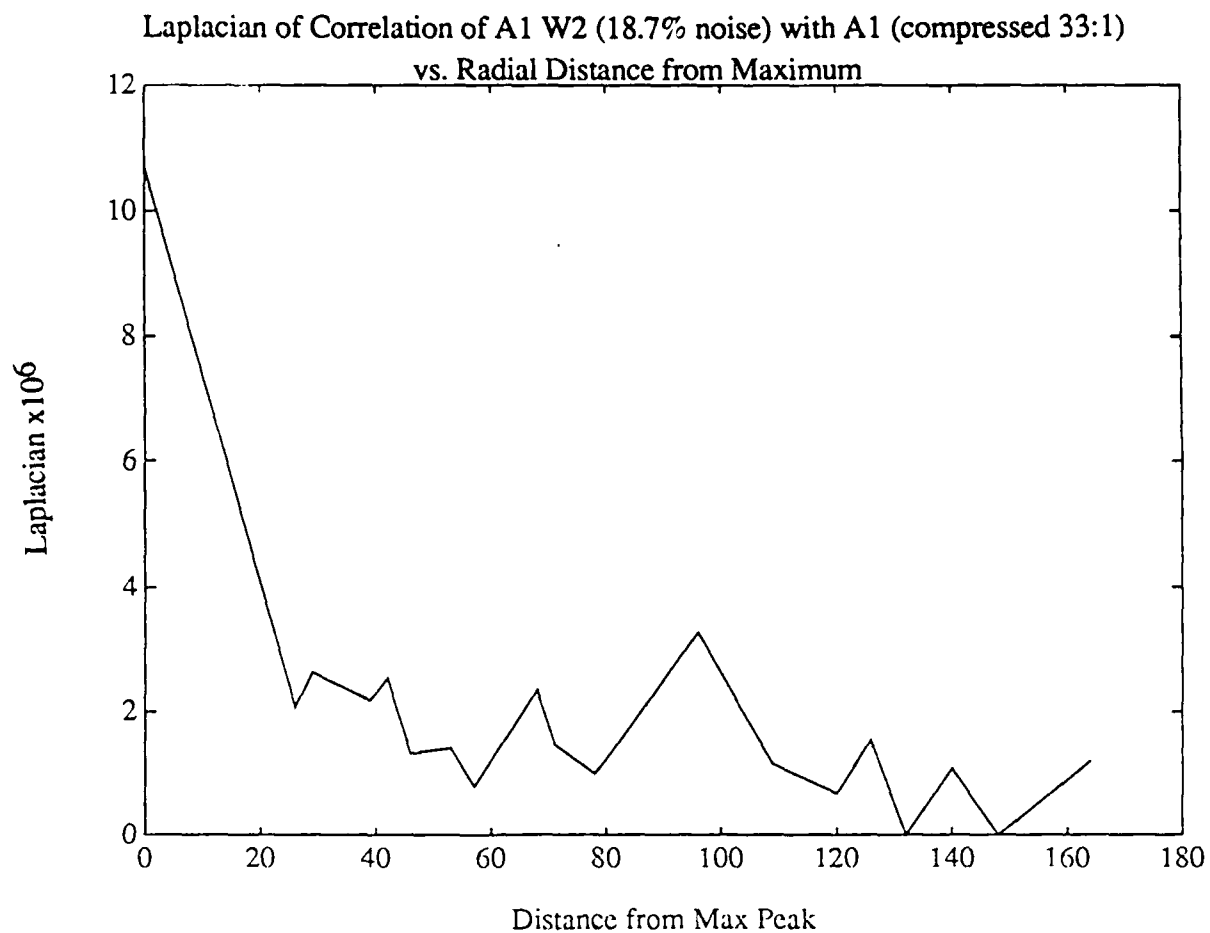


Exhibit II-13-h-4

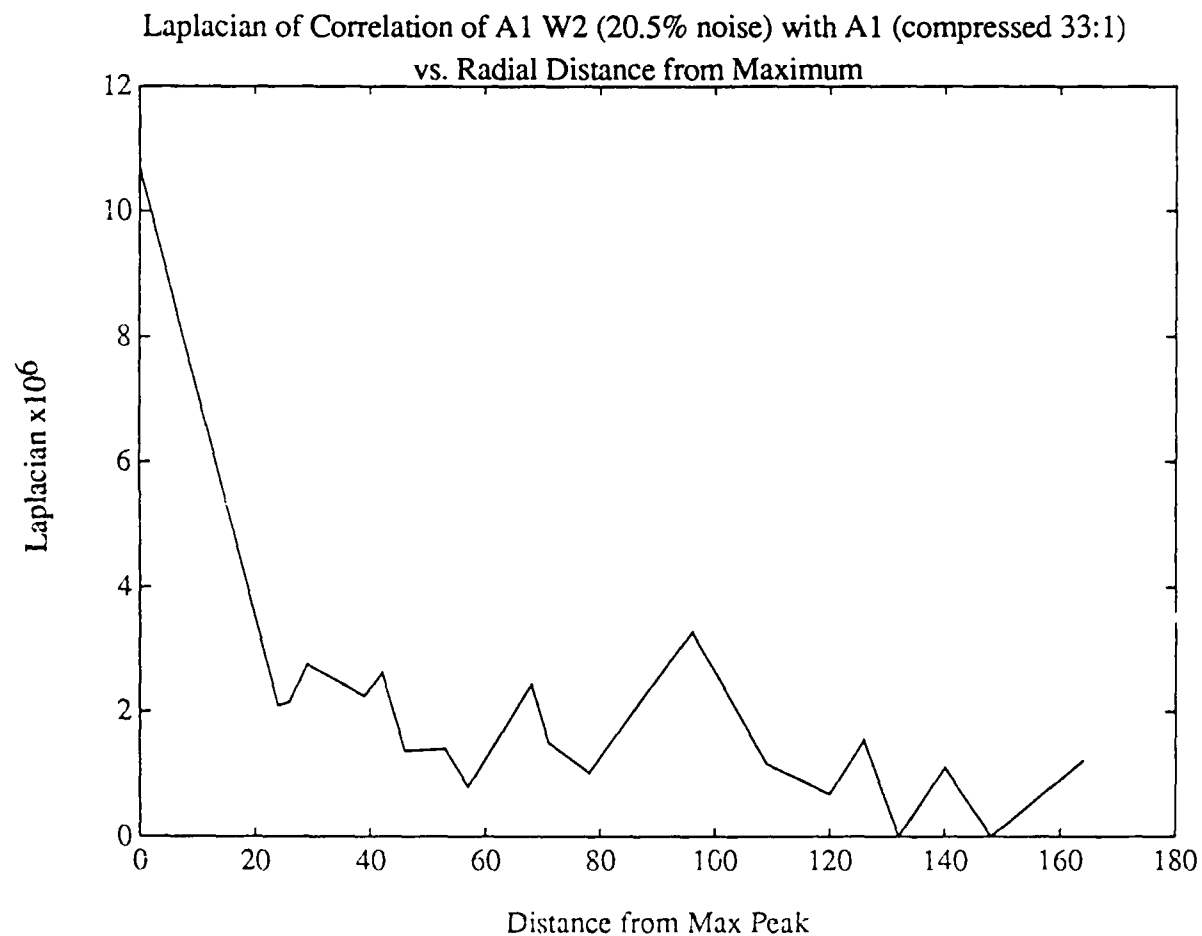


Exhibit II-13-g-5

Laplacian of Correlation of A1 W2 (18.7% noise) with A1 (compressed 58:1)
vs. Radial Distance from Maximum

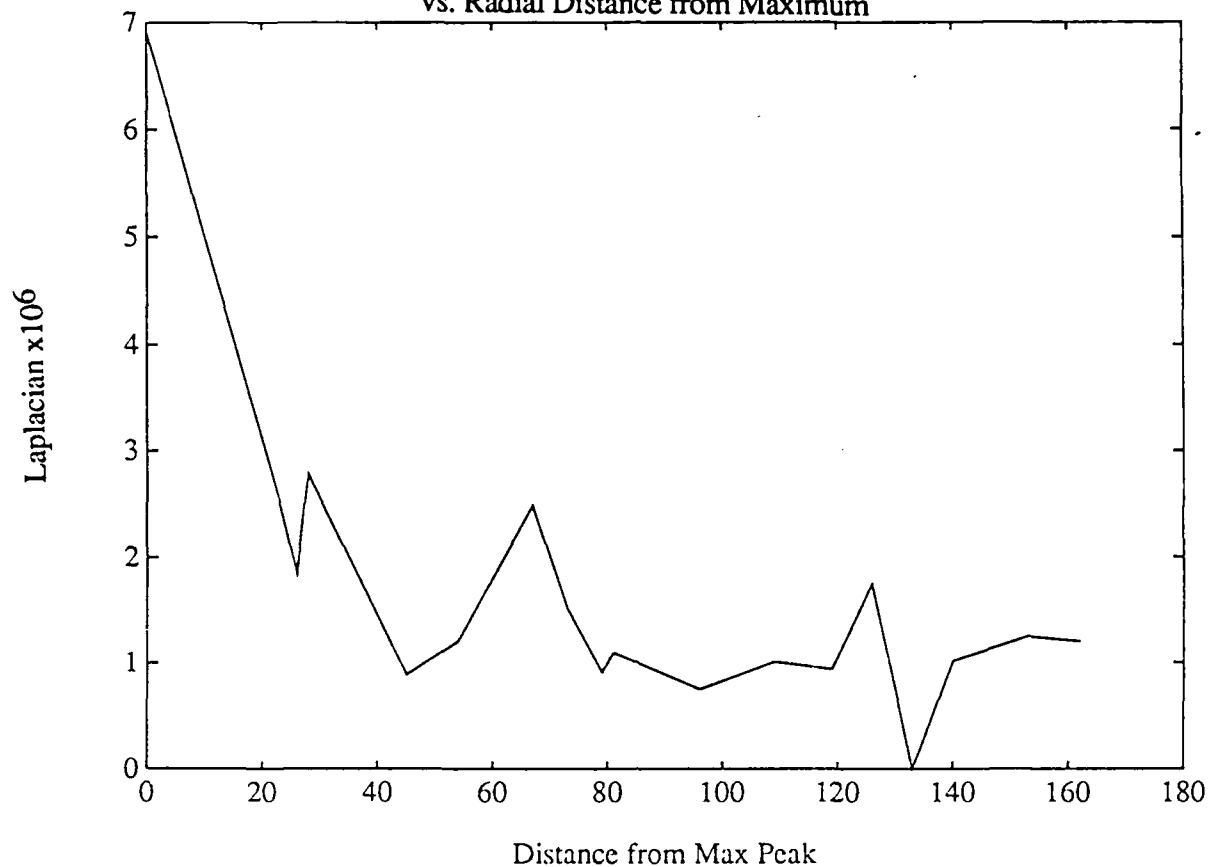


Exhibit II-13-h-5

Laplacian of Correlation of A1 W2 (20.5% noise) with A1 (compressed 58:1)
vs. Radial Distance from Maximum

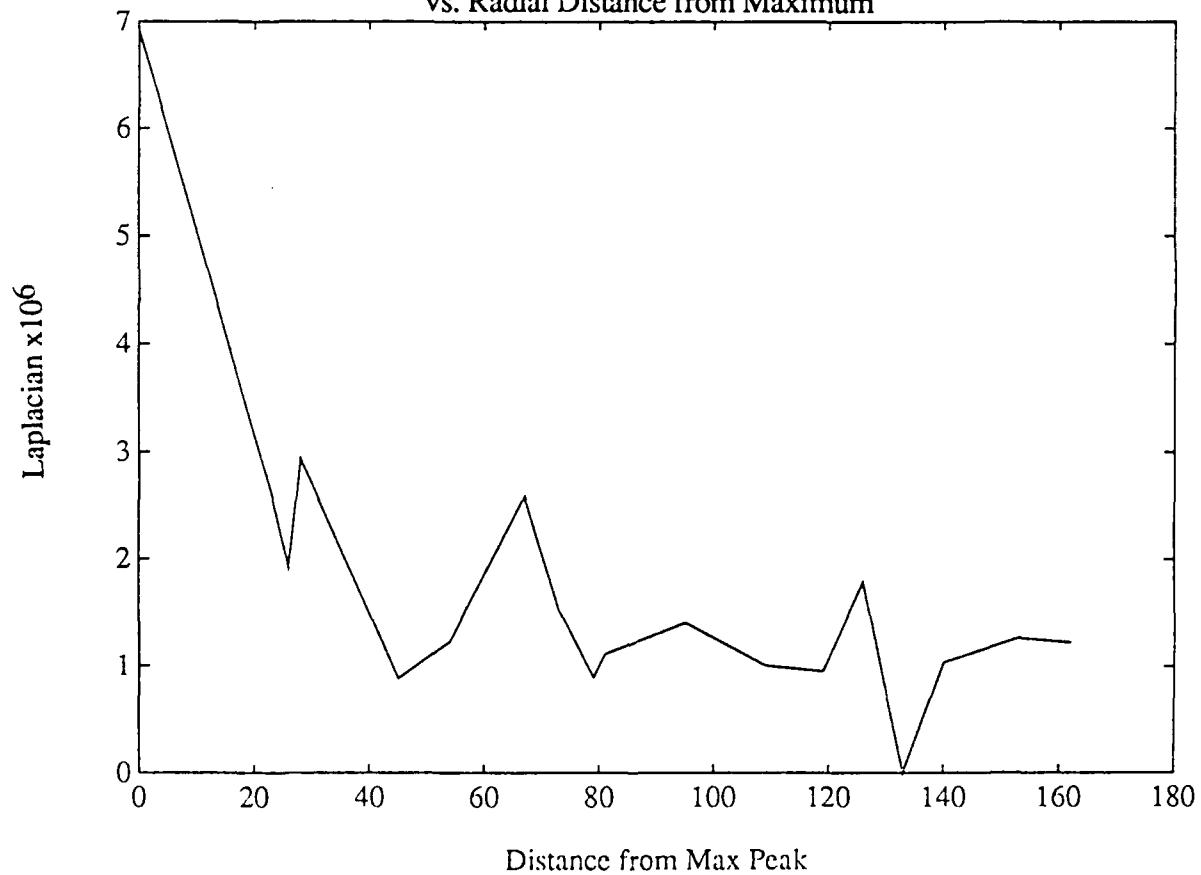


Exhibit II-13-g-6

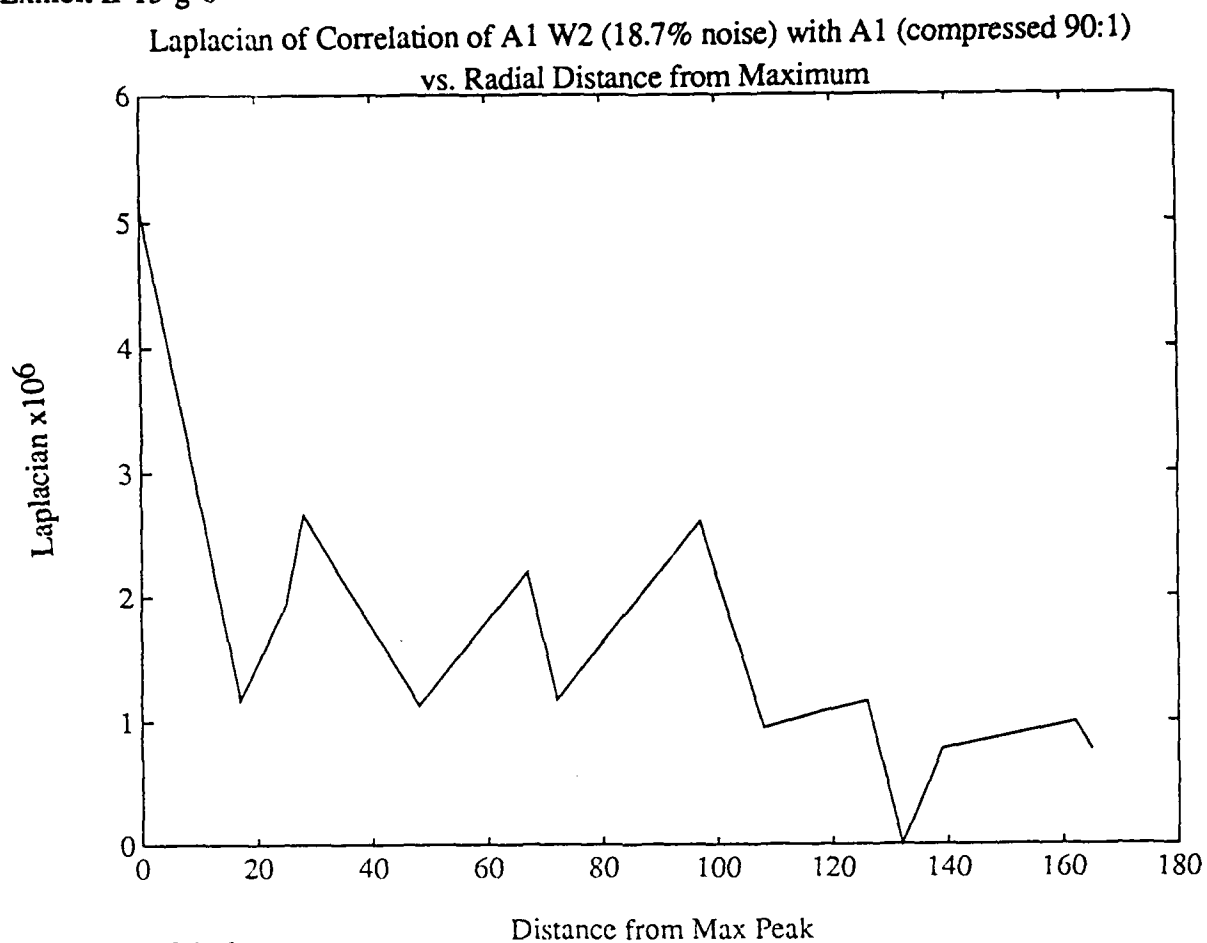


Exhibit II-13-h-6

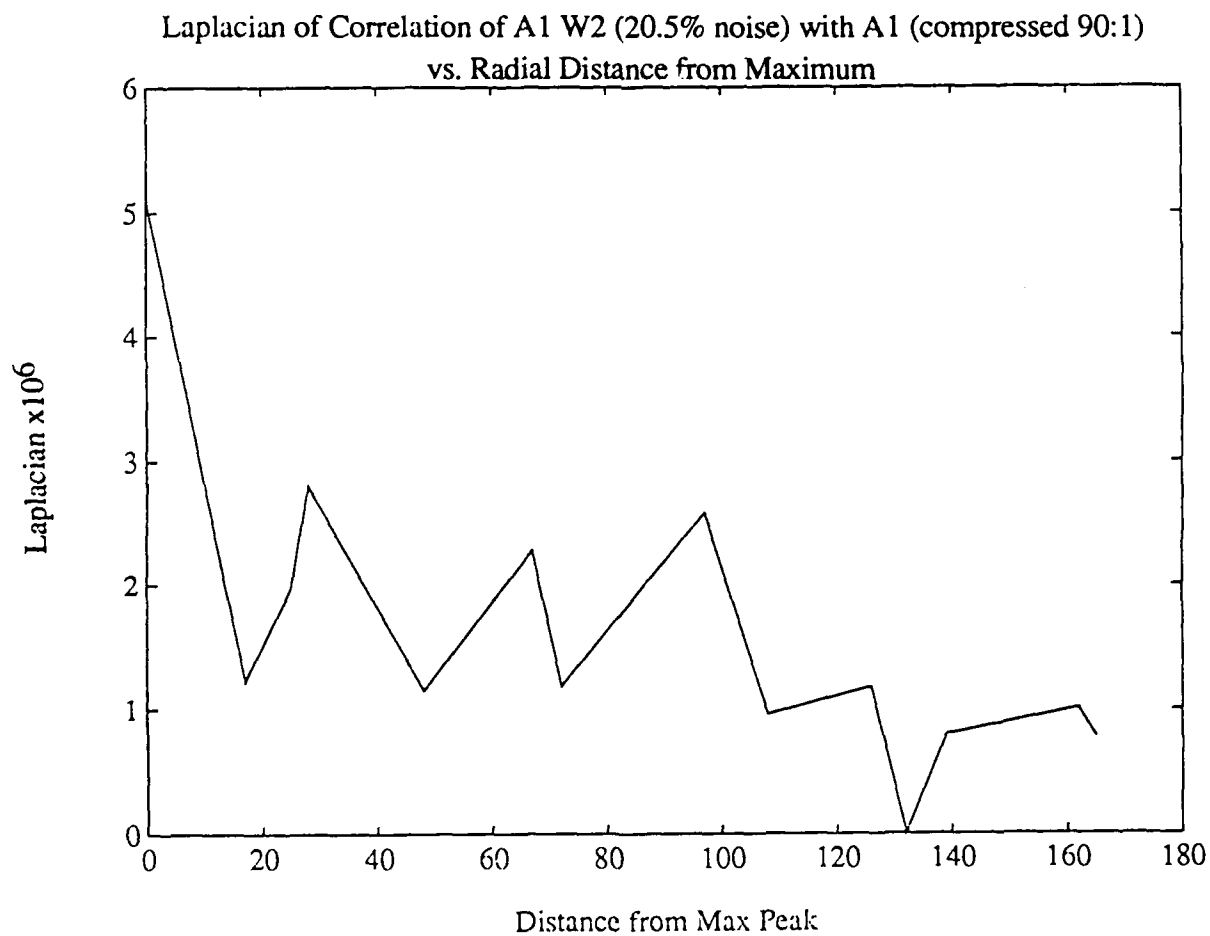


Exhibit II-13-g-7

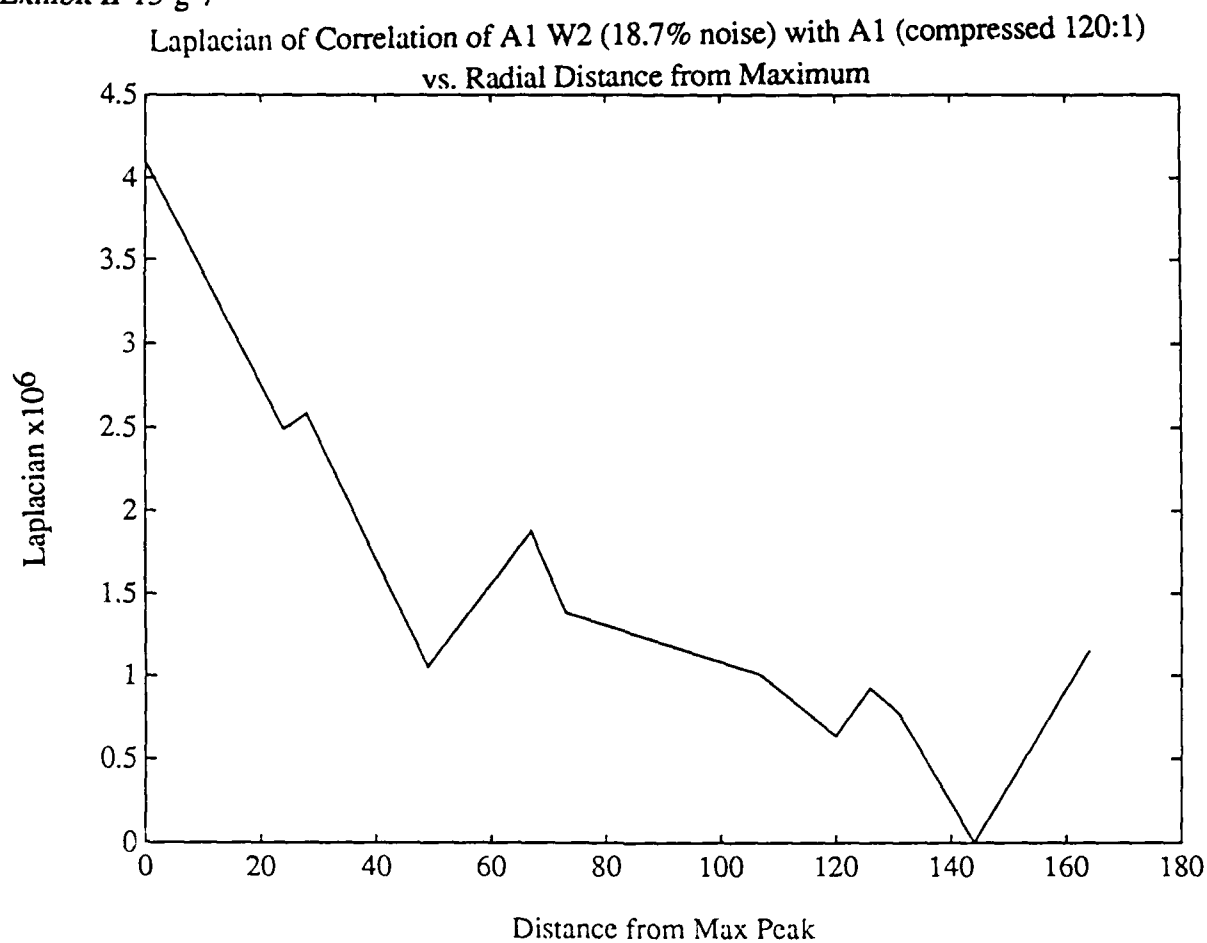
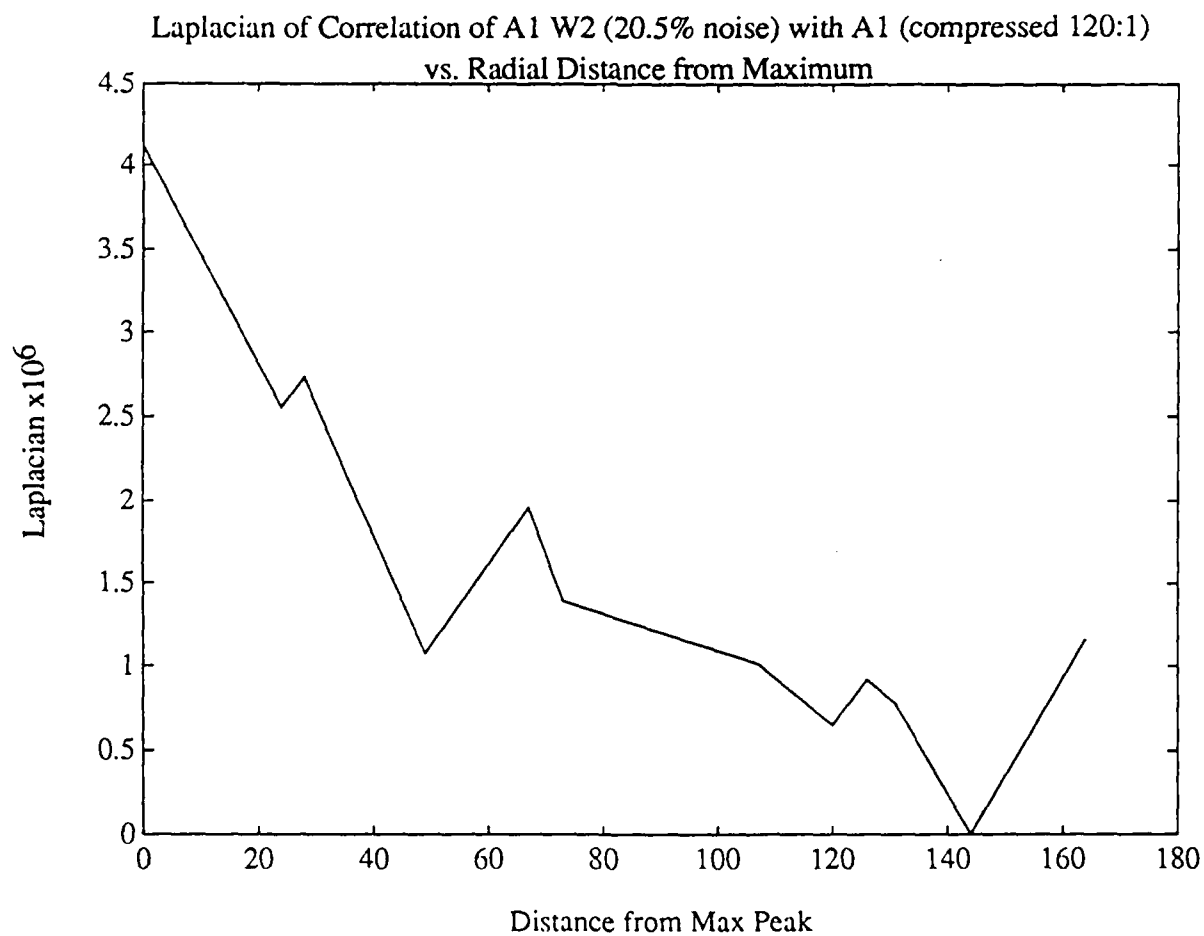
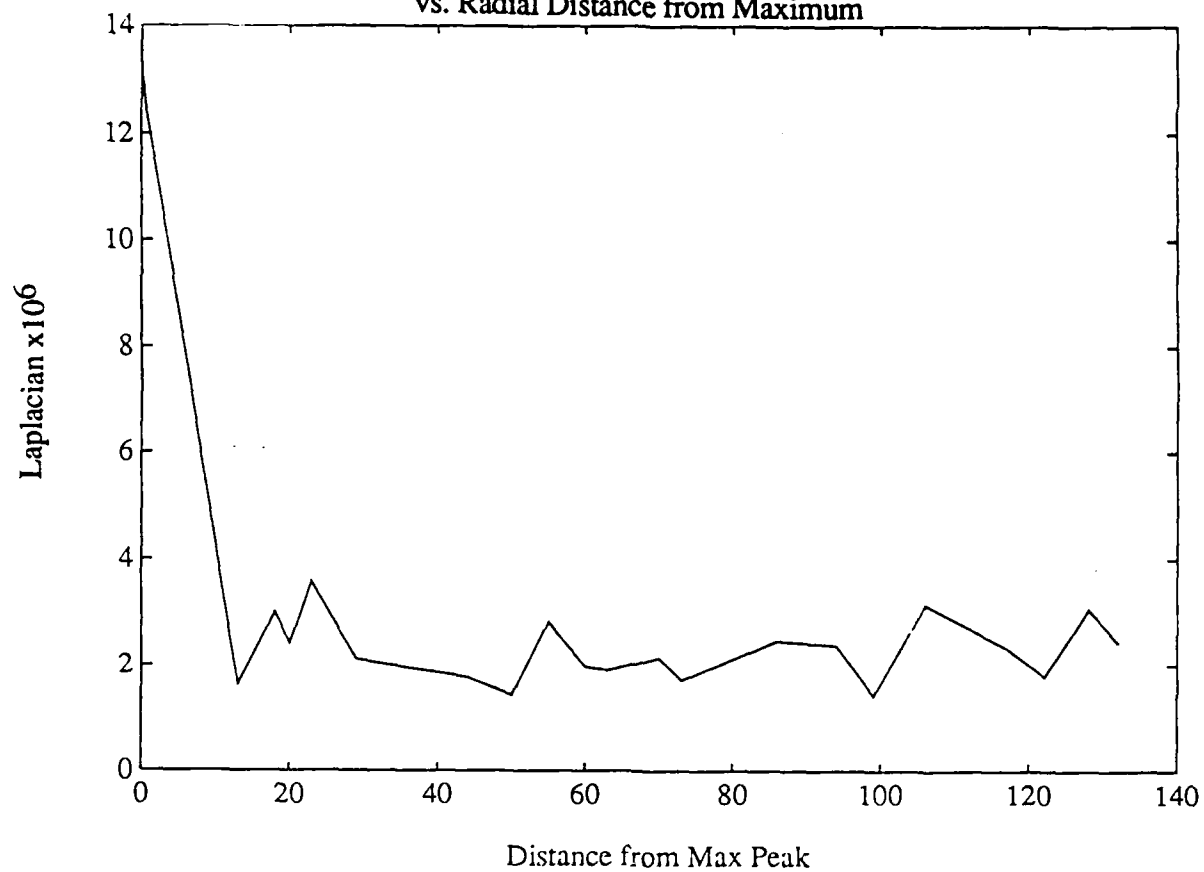


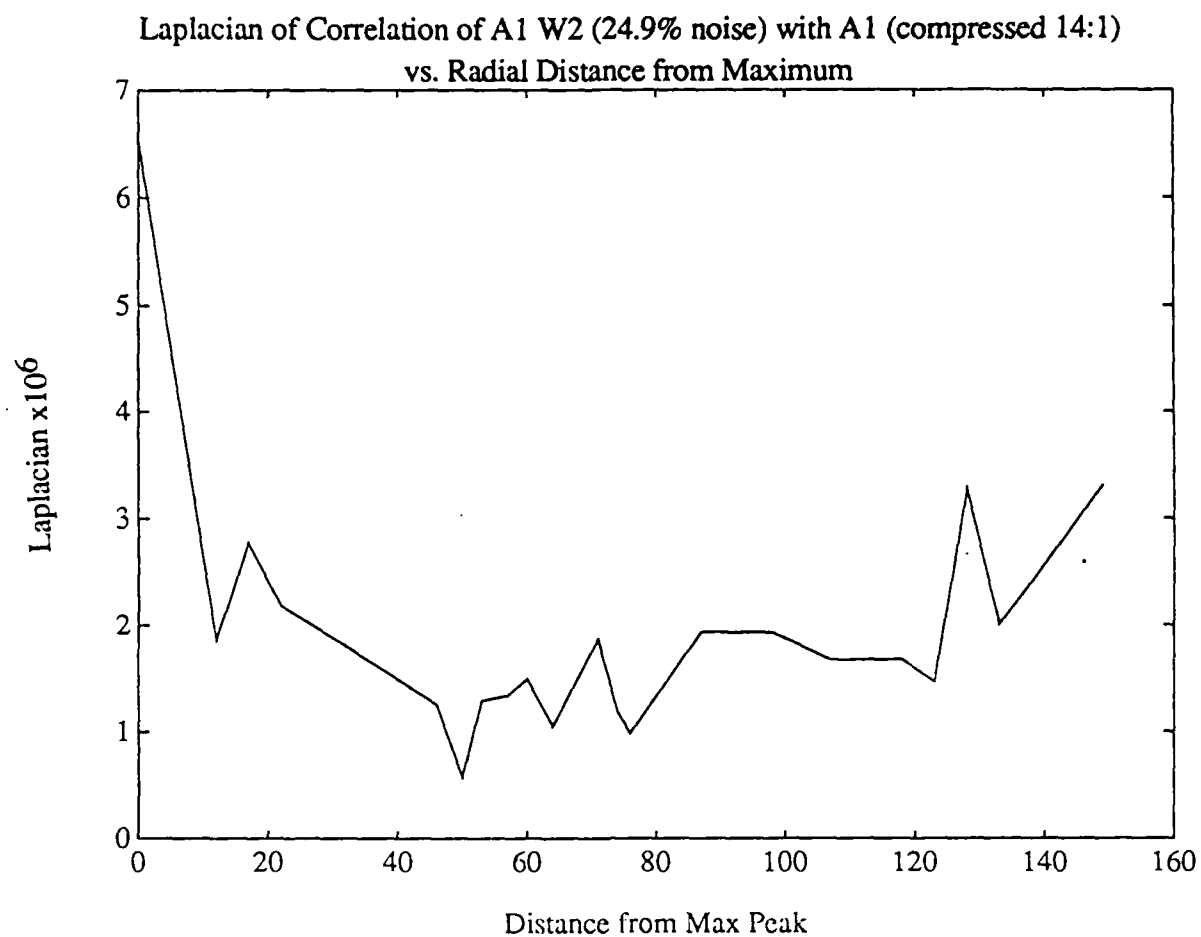
Exhibit II-13-h-7

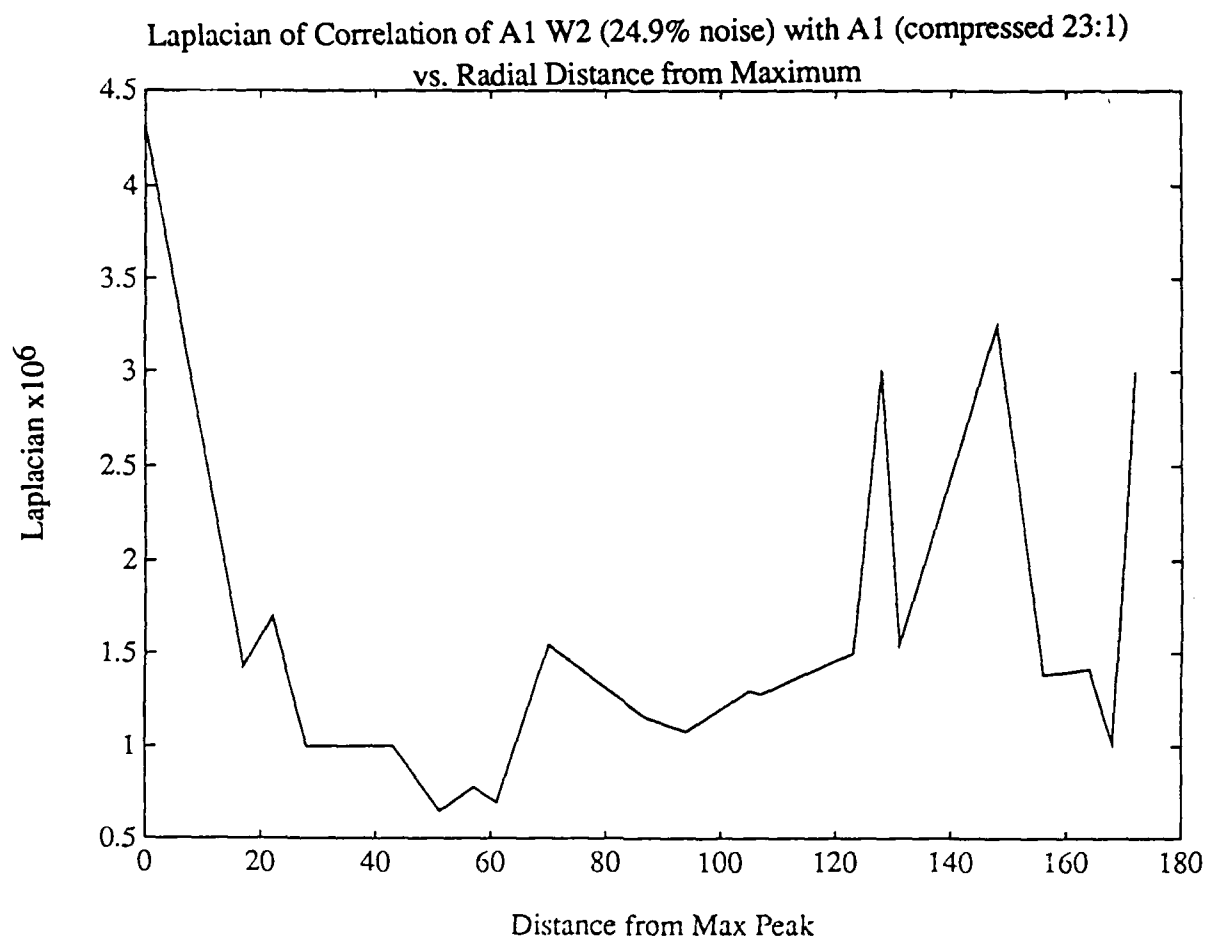


Laplacian of Correlation of A1 W2 (24.9% noise) with A1 (uncompressed)

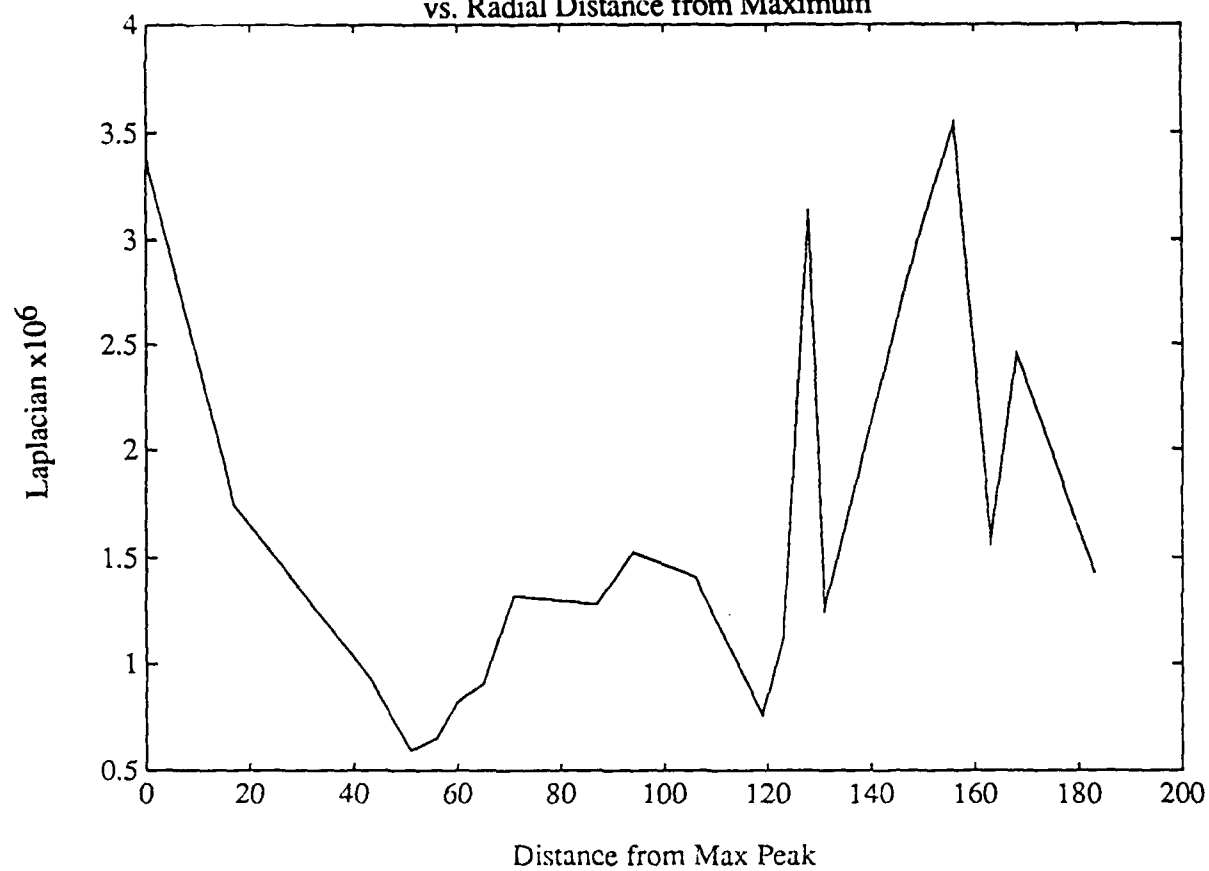
vs. Radial Distance from Maximum

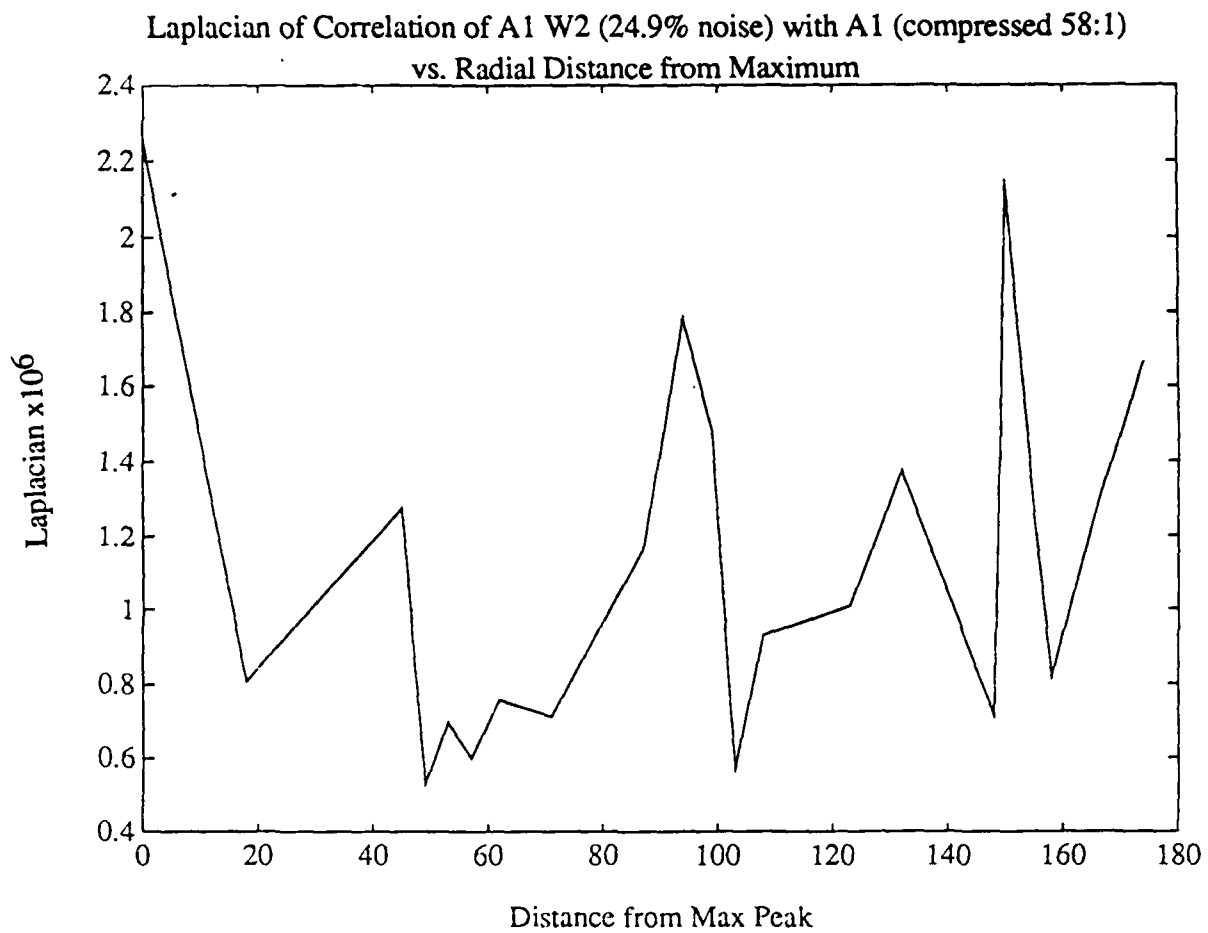






Laplacian of Correlation of A1 W2 (24.9% noise) with A1 (compressed 33:1)
vs. Radial Distance from Maximum





Laplacian of Correlation of A1 W2 (24.9% noise) with A1 (compressed 90:1)
vs. Radial Distance from Maximum

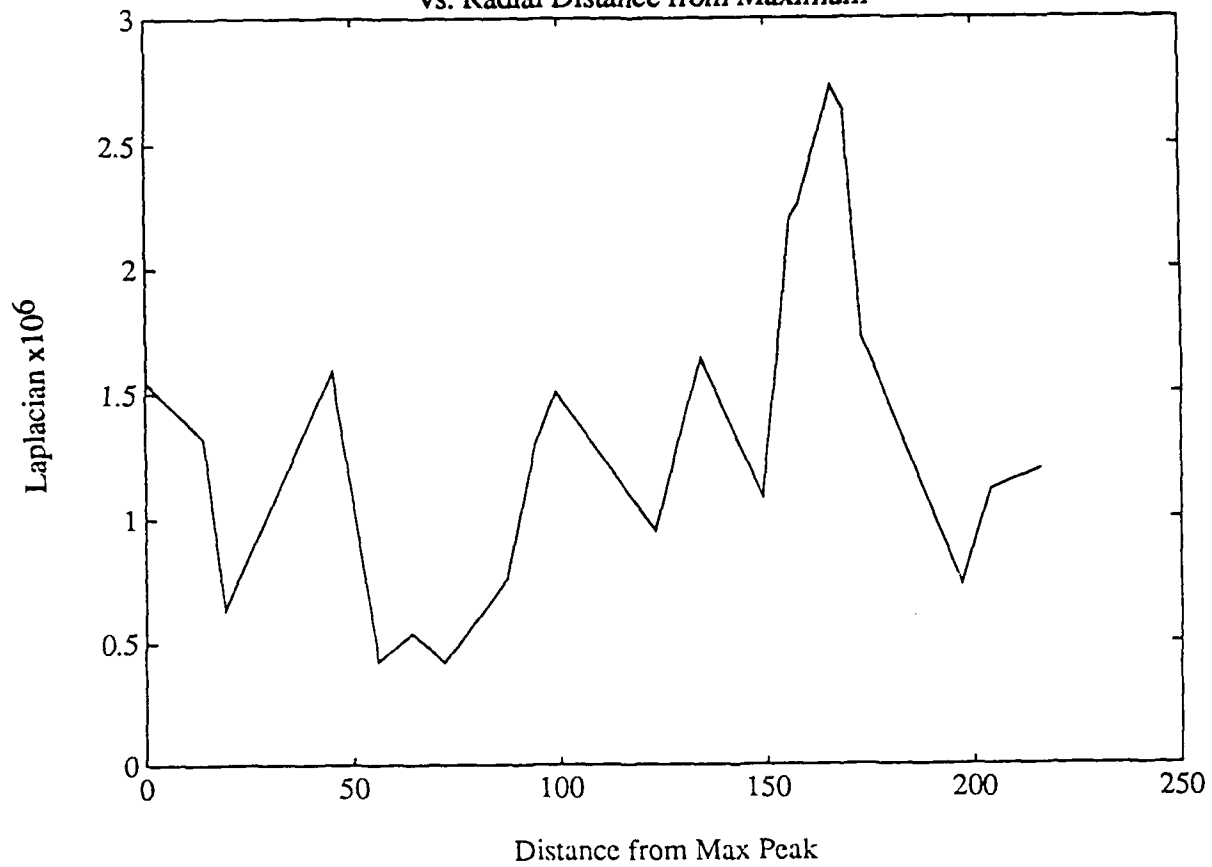
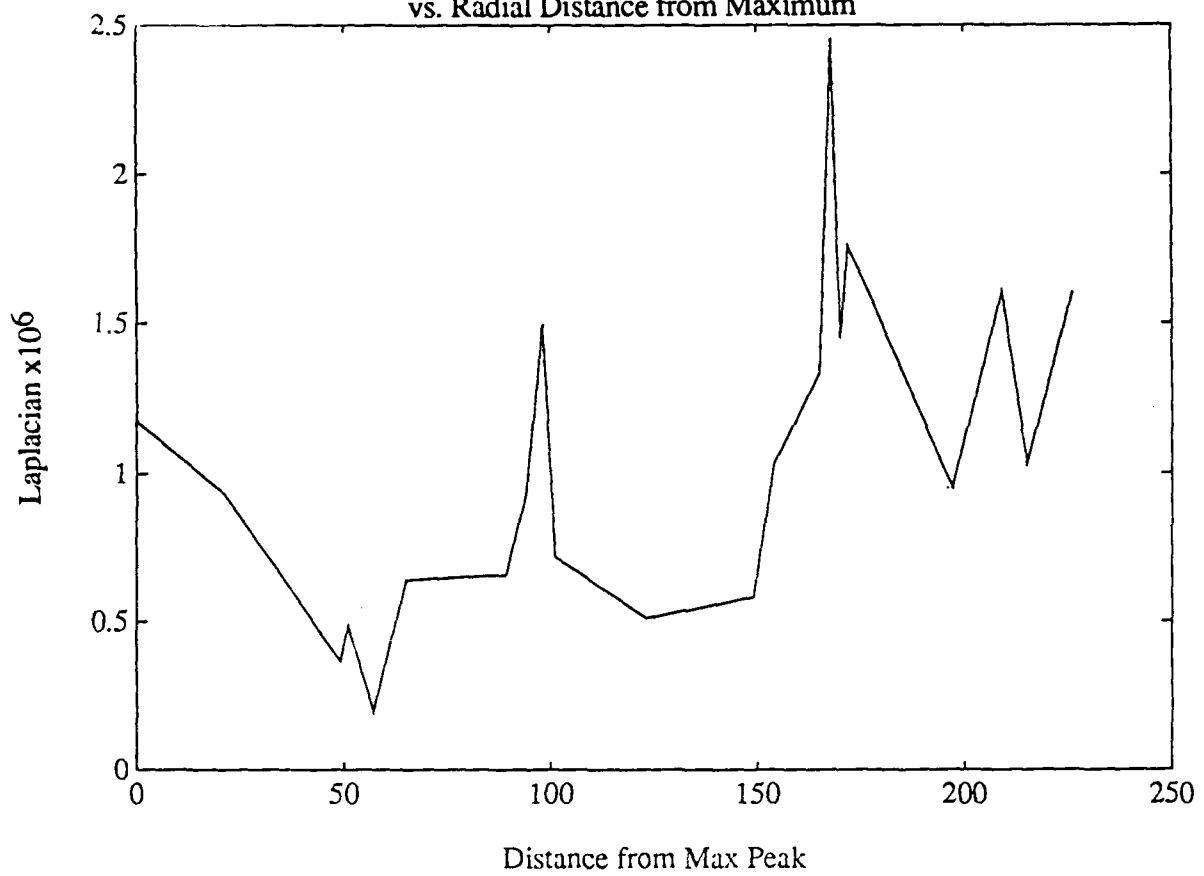


Exhibit II-13-i-7

Laplacian of Correlation of A1 W2 (24.9% noise) with A1 (compressed 120:1)
vs. Radial Distance from Maximum





**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-14

Noisy Data

89/11/15
11:16:47

Exhibit II-14-a

Compression Ratio 1:1

swc rep

1.0 % N532

Location of max in compression is (128,128), sub-pixel is (128.000,128.000)
2:d Derivative Value at max location is 3093680.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 3660416.00 at (128.000,128.000)
Side Lobe Information, Maximum Value is 8.65937e+06
Side-Lobe-to-Peak-Ratio DBs-Down Distance-From-Max

0.371413	8.602869	24
0.354939	8.996936	28
0.247264	12.136784	39
0.247298	12.135571	42
0.288268	11.428616	48
0.257928	11.770028	52
0.253797	11.910265	54
0.426623	7.399114	67
0.424630	7.439783	72
0.416344	7.610963	78
0.328851	9.660030	108
0.289514	10.766607	121
0.346867	9.196747	126
0.329403	9.645448	132
0.242900	12.291456	139
0.242658	12.300097	144
0.192640	14.305090	153
0.304384	10.331552	163
Derivatives at Peaks		
24	254950	
28	131714	
39	102503	
42	119899	
48	145824	
52	233512	
54	130905	
67	134779	
72	111684	
78	121697	
108	148967	
121	41647	
126	218011	
139	115312	
144	136830	
153	54212.5	
163	85847.3	
0	3.09368e+06	
0	3.09368e+06	

89/11/15
11:16:52

4.6 % Noise

sw...rep

Location of max in compression is (128,128), sub-pixel is (128.000,128.000)
2nd Derivative Value at max location is 3090234.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 3652032.00 at (128.000,128.000)
Side Lobe Information: Maximum Value is 8.67382e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.373398	8.556551	24
0.354062	9.018412	28
0.248620	12.089290	39
0.248957	12.077528	42
0.268844	11.409991	48
0.260284	11.691045	52
0.429574	7.339235	67
0.425872	7.414427	72
0.415749	7.623386	78
0.234867	12.583557	97
0.329990	9.629996	108
0.289715	10.760592	120
0.347525	9.180275	126
0.329069	9.654256	132
0.241713	12.334017	140
0.239960	12.397239	144
0.305327	10.304706	163

Derivatives at Peaks

24	289182
28	146928
39	119679
42	141526
48	139264
52	245773
67	160001
72	118114
78	130041
97	257232
108	141047
120	79215
126	233481
140	90289.4
144	130434
163	100060
0	3.09023e+06
0	3.09023e+06
0	3.09023e+06

89/11/15
11:16:58

8.3% Noise

sw...rep

1

Location of max in compression is (128,128), sub-pixel is (128.000,128.000)
2nd Derivative Value at max location is 3087651.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 3645888.00 at (128.000,128.000)
Side Lobe Information, Maximum Value is 8.68465e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.374882	8.522104	24
0.353407	9.034491	28
0.249633	12.053972	39
0.251163	12.000881	42
0.269580	11.386253	49
0.262045	11.632497	52
0.431779	7.294763	67
0.426799	7.395532	72
0.415304	7.632678	78
0.236692	12.516317	97
0.330841	9.607624	108
0.280280	11.048165	116
0.290470	10.737965	120
0.348017	9.167988	126
0.328820	9.660344	132
0.242396	12.309487	139
0.239620	12.409521	143
0.306031	10.284701	163
0.293774	10.639726	168

Derivatives at Peaks

24	314833
28	158330
39	132550
42	183024
49	187806
52	254961
67	178902
72	122930
78	136294
97	280404
108	135114
116	89826.5
120	88984
126	245071
139	157899
163	110711
168	122940
0	3.08765e+06

89/11/15
11:17:03

11.5 % Noise

SW1-.rep

1

Location of max in compression is (128,128), sub-pixel is (128.000,128.000)
2nd Derivative Value at max location is 3085674.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 3641216.00 at (128.000,128.000)
Side Lobe Information, Maximum Value is 8.69297e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.376018	8.495826	24
0.352906	9.046823	28
0.250408	12.027030	39
0.253138	11.932842	42
0.270497	11.356742	49
0.263392	11.587939	52
0.433467	7.260870	67
0.427509	7.381092	72
0.414964	7.639801	78
0.407283	7.802081	81
0.238090	12.465187	97
0.331492	9.590536	108
0.282320	10.985154	116
0.291049	10.720680	120
0.348394	9.158595	126
0.328629	9.665892	132
0.243247	12.279060	140
0.240676	12.371333	143
0.306570	10.269419	163
0.293920	10.635409	168

Derivatives at Peaks

24	334513
28	167078
39	142426
42	207422
49	196803
52	262012
67	193404
72	126628
78	141091
81	127198
97	298184
108	130562
116	94997.5
120	96482
126	253968
140	111654
163	118883
168	127125

89/11/15
11:17:09

14.2 % Noise

sw-...rep

1

Location of max in compression is (128,128), sub-pixel is (128.000,128.000)
2nd Derivative Value at max location is 3084005.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 3637056.00 at (128.000,128.000)
Side Lobe Information, Maximum Value is 8.69997e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.376974	8.473770	24
0.352484	9.057213	28
0.254801	11.875989	42
0.269912	11.375546	47
0.271269	11.331983	49
0.264526	11.550617	52
0.434888	7.232445	67
0.428107	7.368958	72
0.414677	7.645797	78
0.407266	7.802439	81
0.239266	12.422389	97
0.332040	9.576181	108
0.284038	10.932476	116
0.291536	10.706163	120
0.348711	9.150696	126
0.328468	9.670141	132
0.244149	12.246915	141
0.241565	12.339322	143
0.307023	10.256575	163
0.294043	10.631776	168

Derivatives at Peaks

24	351108
28	174454
42	227994
47	101844
49	204389
52	267955
67	205631
72	129744
78	145137
81	129849
97	313175
108	126722
116	99358
120	102800
126	261466
141	151619
163	125773
168	130652

89/11/15
11:17:14

sw_...rep

1

16.6 % Noise

Location of max in compression is (128,128), sub-pixel is (128.000,128.000)
2nd Derivative Value at max location is 3082534.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 3633280.00 at (128.000,128.000)
Side Lobe Information, Maximum Value is 8.70615e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.377815	8.454415	24
0.352113	9.066364	28
0.256263	11.826284	42
0.270243	11.364918	47
0.271949	11.310260	49
0.265524	11.517917	52
0.436138	7.207521	67
0.428632	7.358300	72
0.414425	7.651077	78
0.407251	7.802756	81
0.240300	12.384915	97
0.332627	9.560845	107
0.285549	10.886400	116
0.291964	10.693411	120
0.348989	9.143753	126
0.328326	9.673881	132
0.245049	12.214930	141
0.242347	12.311260	143
0.225814	12.924967	148
0.182242	14.787012	152
0.307422	10.245295	163
0.294178	10.627782	168

Derivatives at Peaks

24	365726
28	180952
42	246115
47	105259
49	211072
52	273191
67	216401
72	132489
78	148700
81	132183
97	326381
107	200312
116	103198
120	108369
126	268072
141	159440
148	129645
152	133605

89/11/15
12:12:30

sw...rep

19.7% Noise

Location of max in compression is (128,128), sub-pixel is (128.000,128.000)
2nd Derivative Value at max location is 3081202.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 3630528.00 at (128.000,128.000)
Side Lobe Information, Maximum Value is 8.71173e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.378574 8.436977 24
0.351778 9.074634 28
0.257583 11.781649 42
0.270541 11.355333 47
0.272562 11.290695 49
0.266425 11.488458 52
0.437266 7.185077 67
0.429107 7.348686 72
0.414198 7.655847 78
0.407238 7.803042 81
0.241234 12.351220 97
0.333492 9.538296 107
0.286913 10.845009 116
0.292351 10.681913 120
0.349241 9.137490 126
0.328199 9.677259 132
0.245862 12.186154 141
0.243052 12.286001 143
0.225603 12.933101 148
0.181212 14.836256 152
0.307782 10.235123 163
0.294544 10.617004 168

Derivatives at Peaks

24 378942
28 186827
42 262500
47 108348
49 217114
52 277925
67 226139
72 134972
78 151921
81 134293
97 338319
107 204536
116 106670
120 113402
126 274044
141 166509
148 134831
152 138389

89/11/15
12:12:38

20.5 % Noise

sw...rep

1

Location of max in compression is (128,128), sub-pixel is (128.000,128.000)
2nd Derivative Value at max location is 3079984.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 3627200.00 at (128.000,128.000)
Side Lobe Information, Maximum Value is 8.71686e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.379272	8.420994	24
0.351470	9.082239	28
0.258796	11.740858	42
0.270815	11.346539	47
0.273125	11.272762	49
0.267252	11.461566	52
0.438303	7.164516	67
0.429543	7.339868	72
0.413989	7.660229	78
0.407225	7.803303	81
0.242092	12.320388	97
0.334286	9.517638	107
0.288165	10.807168	116
0.292706	10.671369	120
0.349472	9.131742	126
0.328082	9.680365	132
0.246609	12.159808	141
0.243701	12.262869	143
0.225409	12.940581	148
0.180266	14.881731	152
0.308113	10.225793	163
0.294879	10.607118	168

Derivatives at Peaks

24	391095
28	192228
42	277566
47	111187
49	222672
52	282278
67	235095
72	137257
78	154887
81	111137
97	343299
107	208420
116	109862
120	118031
126	279537
141	173013
148	139600
152	142788

89/11/15
12:12:04

22.1 % Noise

SW-...rep

1

Location of max in compression is (128,128), sub-pixel is (128.000,128.000)
2nd Derivative Value at max location is 3078843.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 3624448.00 at (128.000,128.000)
Side Lobe Information, Maximum Value is 8.72163e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.379920	8.406157	24
0.351184	9.089313	28
0.259923	11.703102	42
0.271070	11.338372	47
0.273649	11.256123	49
0.268022	11.436601	52
0.439266	7.145441	67
0.429948	7.331676	72
0.413794	7.664306	78
0.407214	7.803544	81
0.242890	12.291817	97
0.335024	9.498475	107
0.289330	10.772131	116
0.293036	10.661575	120
0.349687	9.126400	126
0.327973	9.683251	132
0.247304	12.135385	141
0.244303	12.241416	143
0.225228	12.947538	148
0.179386	14.924225	152
0.308421	10.217123	163
0.295191	10.597935	168

Derivatives at Peaks

24	402407
28	197256
42	291589
47	113829
49	227844
52	286331
67	243430
72	139379
78	157643
81	138045
97	359519
107	212035
116	112833
120	122338
126	284650
141	179063
148	144038
152	146883

89/11/15
12:12:50

23.6.8 Noise

SW4...rep

1

Location of max in compression is (128,128), sub-pixel is (128.000,128.000)
2nd Derivative Value at max location is 3077774.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 3622272.00 at (128.000,127.875)
Side Lobe Information, Maximum Value is 8.72612e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.380528	8.392261	24
0.350915	9.095955	28
0.260981	11.667827	42
0.271309	11.330715	47
0.274140	11.240543	49
0.268743	11.413244	52
0.440170	7.127583	67
0.430329	7.323996	72
0.413612	7.668132	78
0.407203	7.803773	81
0.243638	12.265097	97
0.335717	9.480535	107
0.290423	10.739388	116
0.293346	10.652394	120
0.349889	9.121391	126
0.327870	9.685959	132
0.247955	12.112533	141
0.244869	12.221336	143
0.225059	12.954072	148
0.178561	14.964283	152
0.308710	10.208998	163
0.295484	10.589328	168

Derivatives at Peaks

24	413032
28	201979
42	304761
47	116312
49	232701
52	290136
67	251259
72	141376
78	160233
81	139741
97	369119
107	215430
116	115624
120	126387
126	289452
141	184746
148	148206
152	150729

89/11/15
11:17:20

24.9 % Noise - miscorrelation

Location of max in compression is (219,45), sub-pixel is (219.250,44.875)
2nd Derivative Value at max location is 1309364.250000 at (219,45)
Smoothed (FFT) 2nd Derivative Maximum Value is 1630784.00 at (219.500,45.000)
Side Lobe Information, Maximum Value is 4.30515e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.625981 4.068772 13
0.648254 3.765099 18
0.630955 4.000032 20
0.628118 4.039169 23
0.560621 5.026607 29
0.154338 16.230519 44
0.183479 14.728281 50
0.181984 14.799339 55
0.175246 15.127027 60
0.171320 15.33832 63
0.213137 13.426841 70
0.205945 13.724967 73
0.483686 6.308728 86
0.363311 8.794440 94
0.338596 9.406357 99
0.338990 9.396257 106
0.380662 8.389202 117
0.408468 7.776833 122
0.344814 9.248310 128
0.301395 10.417273 132
0.283290 10.955369 144
0.342385 9.309706 148
0.404527 7.861040 156
0.430358 7.323408 162
0.434219 7.245821 164
0.433649 7.257240 167
0.432034 7.289639 172
0.413807 7.664045 175
0.397790 8.006928 178
0.367469 8.695583 183
0.522790 5.633455 195
0.446733 6.999031 203
0.400344 7.951329 208
0.383355 8.327984 211
0.373619 8.551416 215
0.588641 4.602995 223
0.600162 4.434635 225
0.450563 6.924885 247
0.147943 16.598094 260
0.175156 15.131520 267
0.250322 12.030026 272
0.250783 12.014034 274
0.257853 11.772548 277
0.269738 11.381148 279
0.215004 13.351073 286
-0.146498 0.000000 303

Derivatives at Peaks

13 163200
18 302303
20 242678
23 358347
29 211593
44 176147
50 141821
55 283487
60 196755
63 190041
70 214539
73 170971

sw...rep

86 247330
94 238820
99 140477
106 316711
117 233872
122 178077
128 309161
132 244322

89/11/15
13:28:46

Exhibit II-14-b

AQVIR1 Window ~ (14:1) - sw01.rep

Compression Ratio 14:1

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.000)
2nd Derivative Value at max location is 1686798.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 2027840.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 8.15427e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.386813	8.249976	24
0.370824	8.616647	28
0.267806	11.443593	38
0.263572	11.582020	42
0.287466	10.828267	48
0.270826	11.346201	52
0.447415	6.985787	68
0.442867	7.074535	72
0.433266	7.264911	79
0.241344	12.347256	96
0.348341	9.159398	108
0.305780	10.291831	121
0.366501	8.718493	127
0.340912	9.347156	132
0.260644	11.679040	144
0.209757	13.565690	153
0.328733	9.663140	163

Derivatives at Peaks

24	208954
28	100243
38	83760.3
42	107246
48	147844
52	187992
68	127752
72	90147.3
79	93112.5
96	263568
108	149610
121	78499.8
127	163351
144	113073
153	87404
163	78614.5
0	1.6868e+06
0	1.6868e+06
0	1.6868e+06

89/11/15
13:28:56

AQVIR1 Window.~ (14:1) - sw05.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.000)
2nd Derivative Value at max location is 1697771.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 2061408.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 8.17271e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.388840	8.204584	24
0.370006	8.635814	28
0.268946	11.406692	38
0.264853	11.539905	42
0.288685	10.791507	48
0.272768	11.284133	52
0.450032	6.935125	68
0.444024	7.051879	72
0.432056	7.289194	78
0.428049	7.370133	81
0.242354	12.310989	94
0.349788	9.123911	108
0.305468	10.300698	120
0.365034	8.753342	127
0.339795	9.375660	132
0.254932	11.871501	141
0.258523	11.750010	145
0.206531	13.700297	153
0.328712	9.663681	163

Derivatives at Peaks

24	240118
28	128655
38	86166.3
42	158665
48	159742
52	191359
68	158776
72	92454.3
78	72171.8
81	94005.3
94	94163.9
108	155414
120	86874
127	184735
141	91293
145	93822
153	97576.4
163	69228.5
0	1.69777e+06

89/11/15
13:29:05

AQVIR1 Window (14:1) - sw10.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.000)
2nd Derivative Value at max location is 1705994.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 2086400.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 8.18653e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.390353	8.170860	24
0.369396	8.650147	28
0.269797	11.379251	38
0.267375	11.457572	42
0.289595	10.764170	48
0.274218	11.238092	52
0.452234	6.892743	67
0.444887	7.035010	72
0.431910	7.292135	78
0.426597	7.399636	81
0.243632	12.265318	94
0.350867	9.097148	108
0.306173	10.280675	120
0.364242	8.772198	127
0.339274	9.368981	132
0.256142	11.830378	141
0.256990	11.801674	145
0.204123	13.802144	153
0.328830	9.660563	162

Derivatives at Peaks

24	263469
28	149945
38	87970.5
42	191196
48	168658
52	193884
67	179058
72	94181.3
78	82519.8
81	100727
94	110233
108	159765
120	100382
127	188888
141	87978.5
145	94953
153	105199
162	92636.3
0	1.70599e+06

89/11/15
13:29:14

AQVIR1 Window. ~ (14:1) - sw15.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.000)
2nd Derivative Value at max location is 1712304.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 2105728.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 8.19713e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.391510	8.145147	24
0.368930	8.661128	28
0.270448	11.358317	38
0.269305	11.395104	42
0.290291	10.743315	48
0.275327	11.203033	52
0.453981	6.859254	67
0.445547	7.022125	72
0.431798	7.294383	78
0.425487	7.422276	81
0.244609	12.230536	94
0.351693	9.076729	108
0.306403	10.274135	115
0.306712	10.265391	120
0.364157	8.774226	126
0.339058	9.394514	132
0.257068	11.799049	141
0.255817	11.841406	145
0.202758	13.860455	154
0.329103	9.653353	162

Derivatives at Peaks

24	281385
28	166283
38	89354
42	216160
48	175499
52	195822
67	195322
72	95508
78	90462
81	105884
94	122564
108	163102
115	85395.3
120	110744
126	140170
141	85433.8
145	95822.6
154	120553
162	91022.5

89/11/15
13:29:23

AQVIR1 Window - (14:1) - sw20.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,127.875)
2nd Derivative Value at max location is 1717622.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 2122048.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 8.20607e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.392483	8.123579	24
0.368537	8.670375	28
0.270996	11.340747	38
0.270928	11.342915	42
0.290877	10.725814	48
0.276259	11.173659	52
0.455450	6.831189	67
0.446103	7.011303	72
0.431704	7.296274	78
0.424553	7.441362	81
0.245431	12.201394	94
0.352387	9.059592	108
0.307501	10.243081	115
0.307165	10.252556	120
0.364152	8.774335	126
0.338876	9.399172	132
0.258212	11.760472	142
0.254831	11.874962	145
0.201657	13.907738	154
0.329333	9.647294	162

Derivatives at Peaks

24	296493
28	180055
38	90522.3
42	237204
48	181267
52	197454
67	209031
72	96626.5
78	97157
81	110230
94	132957
108	165918
115	91196.8
120	119481
126	140879
145	96554.3
154	135907
162	89662.8

89/11/15
13:29:32

AQVIR1 Window_ (14:1) - sw25.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,127.875)
2nd Derivative Value at max location is 1722310.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 2136288.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 8.21394e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.393339	8.104663	24
0.368192	8.678512	28
0.271477	11.325332	38
0.272355	11.297285	42
0.291392	10.710457	48
0.277079	11.147915	52
0.456742	6.806589	67
0.446721	6.999275	71
0.431622	7.297938	78
0.423732	7.458177	81
0.246154	12.175851	94
0.352998	9.044555	108
0.308466	10.215868	115
0.307564	10.241287	120
0.364148	8.774431	126
0.338717	9.403267	132
0.259224	11.726510	142
0.200689	13.949528	154
0.329575	9.640923	163

Derivatives at Peaks

24	309799
28	192190
38	91548.3
42	255745
48	186347
52	198892
67	221110
71	156385
78	103054
81	114061
94	142116
108	168394
115	96309
120	127178
126	141504
154	149432
163	89397
0	1.72231e+06

89/11/15
13:29:40

AQVIR1 Window - (14:1) - sw30.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,127.875)
2nd Derivative Value at max location is 1726544.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 2149344.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 8.22106e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.394111	8.087626	24
0.367881	8.685862	28
0.271912	11.311442	38
0.273643	11.256313	42
0.291856	10.696621	48
0.277819	11.124746	52
0.457907	6.784448	67
0.447545	6.983259	71
0.431547	7.299439	78
0.423720	7.458427	82
0.246807	12.152863	94
0.353549	9.031005	108
0.309336	10.191385	115
0.307924	10.231129	120
0.364145	8.774519	126
0.338573	9.406966	132
0.260136	11.695975	142
0.199816	13.987411	154
0.329943	9.631226	163

Derivatives at Peaks

24	321832
28	203159
38	92478.3
42	272507
48	190941
52	200193
67	232030
71	162096
78	108387
82	216689
94	150396
108	170635
115	100930
120	134136
126	142066
154	161661
163	94215.5
0	1.72654e+06

89/11/15
13:29:49

AQVIR1 Window. (14:1) - sw35.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,127.875)
2nd Derivative Value at max location is 1730440.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 2161120.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 8.22761e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.394820	8.072014	24
0.367595	8.692615	28
0.272311	11.298710	38
0.274825	11.218867	42
0.292283	10.683936	48
0.278499	11.103530	52
0.458978	6.764171	67
0.448302	6.968583	71
0.431478	7.300819	78
0.423829	7.456194	82
0.247405	12.131814	94
0.354055	9.018585	108
0.310136	10.168967	115
0.308254	10.221815	120
0.364141	8.774599	126
0.338440	9.410362	132
0.260975	11.668036	142
0.199014	14.022336	154
0.330281	9.622331	163

Derivatives at Peaks

24	332896
28	213247
38	93333.8
42	287922
48	195166
52	201389
67	242073
71	167348
78	113291
82	222767
94	158009
108	172698
115	105181
120	140536
126	142585
154	172907
163	98648
0	1.73044e+06

89/11/15
13:29:59

AQVIR1 Window (14:1) - sw40.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,127.875)
2nd Derivative Value at max location is 1734071.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 2172416.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 8.2337e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.395479	8.057533	24
0.367329	8.698898	28
0.272681	11.286895	38
0.275924	11.184212	42
0.292679	10.672167	48
0.279130	11.083860	52
0.459972	6.745371	67
0.449005	6.954967	71
0.431415	7.302101	78
0.423930	7.454119	82
0.247962	12.112300	94
0.354525	9.007059	108
0.310878	10.148187	115
0.308561	10.213169	120
0.364138	8.774674	126
0.338317	9.413521	132
0.258147	11.762665	139
0.261753	11.642153	142
0.198269	14.054918	154
0.330595	9.614074	163

Derivatives at Peaks

24	343195
28	222636
38	94129.5
42	302268
48	199098
52	202502
67	251418
71	172236
78	117855
82	228425
94	165096
108	174617
115	109136
120	146490
126	143069
139	98733.3
154	183374
163	102773

89/11/15
13:30:08

AQVIR1 Window - (14:1) - sw45.rep

Location of max in compression is (128,128), sub-pixel is (128.125,127.875)
2nd Derivative Value at max location is 1737472.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 2182624.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 8.23943e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.396097	8.043971	24
0.367080	8.704791	28
0.273029	11.275827	38
0.276954	11.151832	42
0.293051	10.661142	48
0.279723	11.065452	52
0.460905	6.727772	67
0.449665	6.942213	71
0.431355	7.303302	78
0.424025	7.452171	82
0.248484	12.094032	94
0.354966	8.996262	108
0.311575	10.128739	115
0.308849	10.205066	120
0.364135	8.774742	126
0.338202	9.416483	132
0.258637	11.746196	139
0.262484	11.617945	142
0.197570	14.085589	154
0.330890	9.606337	163

Derivatives at Peaks

24	352865
28	231456
38	94876.3
42	315745
48	202790
52	203548
67	260197
71	176828
78	122141
82	233741
94	171752
108	176418
115	112854
120	152085
126	143522
139	100670
154	193205
163	106646

89/11/15
13:30:18

AQVIRI Window (14:1) - sw50.rep

1

Location of max in compression is (220,45), sub-pixel is (219.500,44.875)
2nd Derivative Value at max location is 730369.250000 at (219,45)
Smoothed (FFT) 2nd Derivative Maximum Value is 927456.00 at (219.500,44.625)
Side Lobe Information, Maximum Value is 4.11919e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.648106	3.767077	12
0.665559	3.536270	17
0.647485	3.775406	22
0.166825	15.554777	46
0.183241	14.739542	50
0.184959	14.658485	53
0.187032	14.561663	57
0.186478	14.587429	60
0.180474	14.871716	64
0.228070	12.838655	71
0.218883	13.195760	74
0.226856	12.885006	76
0.495949	6.091262	87
0.346988	9.193707	98
0.339849	9.374282	107
0.406318	7.822670	118
0.438422	7.162147	123
0.366743	8.712764	128
0.293748	10.640498	133
0.349086	9.141353	149
0.428931	7.352248	157
0.448440	6.965913	163
0.458314	6.776745	168
0.454898	6.841717	173
0.384336	8.305778	183
0.545566	5.263060	196
0.458082	6.781136	204
0.418173	7.572887	209
0.382752	8.341651	214
0.621636	4.129279	225
0.463788	6.673615	247
0.139616	17.101280	261
0.268976	11.405735	273
0.273626	11.256866	277
0.274367	11.233362	280
0.227658	12.854331	286

Derivatives at Peaks

12	166301
17	277586
22	218831
46	125749
50	57508.6
53	129129
57	133903
60	149735
64	105059
71	186725
74	119112
76	98516.3
87	193320
98	193052
107	167223
118	167659
123	146847
128	327456
133	200748
149	331331

89/11/15
15:07:38

Exhibit II-14-c

AQVIR1 Window (23:1) - sw01.rep

Compression Ratio 23:1

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.000)
2.d Derivative Value at max location is 1296637.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1779200.00 at (128.750,128.625)
Side Lobe Information, Maximum Value is 7.56026e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.395200	8.063656	25
0.381181	8.377383	29
0.296274	10.566124	42
0.316788	9.984614	46
0.302535	10.384481	52
0.499337	6.032133	67
0.493016	6.142774	72
0.484239	6.298798	78
0.481086	6.355348	81
0.273059	11.274884	94
0.272020	11.307996	96
0.381047	8.380440	107
0.398193	7.998128	127
0.378946	8.428453	132
0.286152	10.868051	143
0.346316	9.210541	164

Derivatives at Peaks

25	177486
29	158467
42	70839
46	97677.8
52	154137
67	162362
72	138256
78	83066
81	76686.5
94	131896
96	276168
107	142326
127	158481
143	90044
164	89753
0	1.296664e+06
0	1.296664e+06
0	1.296664e+06
0	1.296664e+06

89/11/15
15:07:49

AQVIR1 Window. _ (23:1) - sw05.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.000)
2nd Derivative Value at max location is 1294105.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1770304.00 at (128.750,128.625)
Side Lobe Information, Maximum Value is 7.56817e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.395368	8.059971	25
0.380058	8.403014	29
0.297381	10.533727	42
0.318115	9.948316	46
0.305672	10.294897	52
0.502762	5.972759	67
0.494860	6.110346	72
0.483423	6.313456	78
0.480761	6.361415	81
0.273423	11.263288	94
0.272678	11.286993	96
0.382912	8.338022	108
0.396784	8.028914	127
0.378606	8.436240	132
0.285930	10.874812	143
0.347188	9.188718	163

Derivatives at Peaks

25	187761
29	190903
42	65421.5
46	107671
52	164400
67	182774
72	140626
78	87150.5
81	99610.8
94	120585
96	275331
108	98582.3
127	149809
143	93324
163	78261.8
0	1.29411e+06
0	1.29411e+06
0	1.29411e+06
0	1.29411e+06

89/11/15
15:07:58

AQVIR1 Window... (23:1) - sw10.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.000)
2nd Derivative Value at max location is 1292207.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1763552.00 at (128.750,128.625)
Side Lobe Information, Maximum Value is 7.5741e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.395493	8.057213	25
0.379217	8.422233	29
0.298209	10.509572	42
0.319107	9.921264	46
0.308017	10.228493	52
0.505323	5.928614	67
0.496240	6.086169	72
0.482812	6.324434	78
0.480522	6.365734	81
0.274100	11.241813	94
0.273171	11.271317	96
0.384334	8.305827	108
0.334362	9.515666	120
0.395730	8.052011	127
0.378352	8.442070	132
0.288647	10.792662	138
0.285763	10.879870	143
0.347890	9.171150	163

Derivatives at Peaks

25	195462
29	215207
42	61362.3
46	115160
52	172089
67	198068
72	142401
78	90209.5
81	109453
94	85861.5
96	274703
108	100953
120	157200
127	143311
138	41504.8
143	95782.5
163	76049.3
0	1.29221e+06
0	1.29221e+06

89/11/15
15:08:06

Location of max in compression is (128,128), sub-pixel is (128.250,128.000)
2nd Derivative Value at max location is 1290751.500000 at (128,128)
Smoothed (fft) 2nd Derivative Maximum Value is 1767648.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 7.57865e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.395590	8.055102	25
0.378574	8.436991	29
0.298879	10.490099	42
0.319868	9.900593	46
0.309815	10.177951	52
0.507286	5.894939	67
0.497297	6.067690	72
0.482344	6.332858	78
0.480339	6.369045	81
0.275270	11.204831	94
0.273548	11.259324	96
0.385423	8.281239	108
0.320523	9.882811	116
0.335202	9.493872	120
0.395022	8.067566	127
0.378158	8.446540	132
0.289024	10.781314	138
0.285636	10.883749	143
0.348429	9.157715	163

Derivatives at Peaks

25	201371
29	233856
42	62571.8
46	120906
52	177991
67	209804
72	143762
78	92558
81	117005
94	94816
96	274221
108	102772
116	63619.3
120	164098
127	159300
138	38059.5
143	97669.5
163	74349.5
0	1.29075e+06

89/11/15
15:08:15

AQVIR1 Window. - (23:1) - sw20.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.000)
2nd Derivative Value at max location is 1289526.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1777472.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 7.58248e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.395671	8.053326	25
0.378032	8.449438	29
0.299470	10.472941	42
0.320508	9.883225	46
0.311329	10.135616	52
0.508939	5.866682	67
0.498187	6.052157	72
0.481950	6.339956	78
0.480185	6.371835	81
0.276255	11.173808	94
0.386341	8.260585	108
0.322495	9.829538	116
0.335909	9.475561	120
0.394521	8.078605	127
0.377994	8.450305	132
0.289342	10.771768	138
0.285528	10.887019	143
0.348883	9.146416	163
Derivatives at Peaks		
25	206351	
29	249578	
42	60440.5	
46	125750	
52	182966	
67	219697	
72	144911	
78	94536	
81	123370	
94	102366	
108	104309	
116	68154.3	
120	169914	
127	158947	
138	35154	
143	99258	
163	72917	
0	1.28953e+06	
0	1.28953e+06	

89/11/15
15:08:24

AQVIR1 Window. _ (23:1) - sw25.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.000)
2nd Derivative Value at max location is 1288446.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1786368.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 7.58586e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.704105	3.047256	7
0.395742	8.051761	25
0.377554	8.460408	29
0.299990	10.457866	42
0.321071	9.867966	46
0.312661	10.098525	52
0.510394	5.841885	67
0.498970	6.038510	72
0.481603	6.346210	78
0.480049	6.374292	81
0.277122	11.146595	94
0.387149	8.242447	108
0.324231	9.782914	116
0.336532	9.459477	120
0.394079	8.088333	127
0.377850	8.453622	132
0.290008	10.751793	139
0.285434	10.889895	143
0.349282	9.136482	163
Derivatives at Peaks		
7	401035	
25	210739	
29	263428	
42	58563.5	
46	130018	
52	187348	
67	228415	
72	145924	
78	96279.5	
81	128979	
94	109017	
108	105661	
116	72150	
120	175037	
127	158638	
139	55277	
143	100660	
163	71656.5	
0	1.28845e+06	

89/11/15
15:08:33

AQVIR1 Window, (23:1) - sw30.rep

Location of max in compression is (128,128), sub-pixel is (128.250,128.000)
2nd Derivative Value at max location is 1287466.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1793920.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 7.58891e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.705079	3.035242	7
0.395806	8.050348	25
0.377123	8.470329	29
0.300460	10.444269	42
0.321581	9.854204	46
0.313865	10.065154	52
0.511708	5.819548	67
0.499903	6.022279	71
0.481290	6.351863	78
0.479926	6.376511	81
0.277905	11.122086	94
0.387878	8.226097	108
0.325799	9.741012	116
0.337094	9.444970	120
0.394140	8.086980	126
0.377719	8.456618	132
0.290696	10.731219	139
0.285348	10.892495	143
0.349642	9.127520	163

Derivatives at Peaks

7	405796
25	214707
29	275950
42	56866.8
46	133876
52	191310
67	236294
71	170284
78	97855
81	134050
94	115031
108	106881
116	75765.3
120	179671
126	168880
139	55644
143	101926
163	70516.3
0	1.28747e+06

89/11/15
15:08:41

AQVIR1 Window ~ (23:1) - sw35.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.000)
2nd Derivative Value at max location is 1286568.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1801184.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 7.59172e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.705975	3.024216	7
0.395865	8.049051	25
0.376727	8.479454	29
0.300892	10.431796	42
0.322048	9.841577	46
0.314970	10.034604	52
0.512916	5.799074	67
0.500771	6.007218	71
0.481175	6.353947	78
0.479814	6.378550	81
0.278624	11.099627	94
0.388548	8.211098	108
0.327239	9.702687	116
0.337611	9.431664	120
0.394308	8.083295	126
0.377599	8.459372	132
0.291328	10.712359	139
0.285270	10.894884	143
0.349974	9.119292	163

Derivatives at Peaks

7	410178
25	218354
29	287468
42	55306
46	137425
52	194953
67	243541
71	174290
78	87003.5
81	138712
94	120559
108	108006
116	79086.8
120	183930
126	169900
139	55981
143	103092
163	69467.3
0	1.28657e+06

89/11/15
15:08:50

AQVIR1 Window, ~ (23:1) - sw40.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.000)
2nd Derivative Value at max location is 1285731.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1807936.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 7.59434e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.706808	3.013974	7
0.395920	8.047843	25
0.376359	8.487950	29
0.301293	10.420210	42
0.322483	9.829851	46
0.315999	10.006285	52
0.514039	5.780072	67
0.501578	5.993234	71
0.481084	6.355586	78
0.479709	6.380448	81
0.279293	11.078790	94
0.389172	8.197173	108
0.328579	9.667191	116
0.338092	9.419306	120
0.394463	8.079869	126
0.377488	8.461935	132
0.291916	10.694853	139
0.285197	10.897109	143
0.350282	9.111645	163

Derivatives at Peaks

7	414253
25	221751
29	298187
42	53853.8
46	140728
52	198345
67	250287
71	178015
78	88968.3
81	143052
94	125705
108	109031
116	82180
120	187894
126	170849
139	56295.8
143	104174
163	68491.5
0	1.28573e+06

89/11/15
15:09:00

AQVIR1 Window (23:1) - sw45.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.000)
2nd Derivative Value at max location is 1284944.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1814080.00 at (128.625,127.500)
Side Lobe Information, Maximum Value is 7.59679e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.707590	3.004372	7
0.395972	8.046710	25
0.376013	8.495934	29
0.301670	10.409349	42
0.322892	9.818859	46
0.316964	9.979788	52
0.515094	5.762276	67
0.502335	5.980129	71
0.480999	6.357124	78
0.479610	6.382228	81
0.279922	11.059274	94
0.389757	8.184123	108
0.329837	9.634008	116
0.338543	9.407723	120
0.394609	8.076653	126
0.377384	8.464339	132
0.292467	10.678451	139
0.285128	10.899195	143
0.350571	9.104475	163

Derivatives at Peaks

7	418082
25	224941
29	308253
42	52490.3
46	143830
52	201530
67	256621
71	181512
78	90813.8
81	147129
94	130540
108	110035
116	85083.5
120	191618
126	171740
139	56590.5
143	105193
163	67575.3
0	1.28494e+06

89/11/15
15:09:09

AQVIR1 Window 2 (23:1) - sw50.rep

1

Location of max in compression is (220,45), sub-pixel is (219.625,44.750)
2nd Derivative Value at max location is 491353.500000 at (219,45)
Smoothed (FFT) 2nd Derivative Maximum Value is 662256.00 at (219.500,44.625)
Side Lobe Information, Maximum Value is 3.86232e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.673070	3.438798	17
0.658694	3.626330	22
0.597769	4.469329	28
0.161824	15.819167	43
0.222498	13.053492	51
0.199284	14.010535	57
0.202728	13.861739	61
0.243808	12.259037	70
0.537110	5.398733	87
0.408096	7.784746	94
0.354790	9.000583	105
0.353350	9.035905	107
0.460002	6.744799	123
0.422266	7.488283	128
0.384404	8.304234	131
0.359051	8.896877	148
0.463084	6.686801	156
0.482274	6.334124	164
0.488310	6.226080	168
0.481629	6.345742	172
0.406142	7.826441	183
0.438418	7.162239	188
0.529969	5.514995	197
0.504964	5.934794	201
0.492648	6.149265	204
0.480570	6.364863	207
0.452123	6.894860	211
0.397328	8.017007	215
0.664829	3.545796	225
0.521322	5.657881	246
0.137143	17.256542	260
0.276511	11.165752	274
0.299096	10.483776	279
0.223278	13.023091	286
0.126720	17.943096	294

Derivatives at Peaks

17	142554
22	169920
28	99895
43	100074
51	64987.1
57	77667.8
61	69535.9
70	154283
87	115636
94	107984
105	130167
107	128080
123	149961
128	300504
131	154675
148	324448
156	138292
164	141331
168	101283
172	300185

89/11/15
15:48:33

Exhibit II-14-d

AQVIR1 Window - (33:1) - sw01.rep

Compression Ratio 33:1

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.125)
2nd Derivative Value at max location is 1079984.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1694496.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.75941e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-Frcm-Max

0.395218	8.063257	26
0.293833	10.637989	39
0.293192	10.656947	41
0.286295	10.863714	46
0.272848	11.281573	53
0.470666	6.545737	68
0.457969	6.783286	72
0.448073	6.973022	78
0.443932	7.053670	81
0.256359	11.823041	94
0.255622	11.848051	96
0.358319	8.914597	109
0.317733	9.958763	121
0.366930	8.708332	127
0.369347	8.651301	132
0.282971	10.965162	139
0.277902	11.122161	144
0.270623	11.352692	148
0.341727	9.326405	164

Derivatives at Peaks

26	134786
39	148698
41	111481
46	86763
53	140672
68	143855
72	106365
78	80395.5
81	61867.3
94	176143
96	302395
109	85480
121	60729.3
127	153329
139	76381.5
144	58483.8
164	110178
0	1.07998e+06

89/11/15
15:41:43

AQVIR1 Window (33:1) - sw05.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.125)
2nd Derivative Value at max location is 1077291.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1700544.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.77145e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.393665	8.097467	26
0.387140	8.242632	29
0.295405	10.591634	39
0.294721	10.611787	41
0.287394	10.830439	46
0.274830	11.218732	53
0.473408	6.495291	68
0.459026	6.763252	72
0.447843	6.977492	78
0.443092	7.070122	81
0.255713	11.844950	94
0.255926	11.837718	96
0.359359	8.889423	109
0.317724	9.959003	121
0.365144	8.750709	126
0.368548	8.670126	132
0.284105	10.930423	139
0.276255	11.173804	144
0.269809	11.378886	148
0.342290	9.312115	164

Derivatives at Peaks

26	154835
29	162645
39	167674
41	125639
46	91659.3
53	140618
68	168793
72	104123
78	78918
81	69337.8
94	158905
96	309036
109	75415.8
121	69036.8
126	147685
139	72265.8
144	92829.4
164	113058

89/11/15
15:41:51

AQVIR1 Window (33:1) - sw10.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.125)
2nd Derivative Value at max location is 1075277.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1704960.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.78048e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.392504	8.123121	26
0.386501	8.256987	29
0.298580	10.557155	39
0.296273	10.566169	42
0.288215	10.805659	46
0.276310	11.172065	53
0.475457	6.457783	68
0.459816	6.748313	72
0.447803	6.978269	78
0.443009	7.071756	81
0.256153	11.830005	96
0.360136	8.870661	109
0.317717	9.959184	121
0.364948	8.755380	126
0.367950	8.684220	132
0.284952	10.904554	139
0.276308	11.172141	144
0.269200	11.398511	148
0.342710	9.301453	164

Derivatives at Peaks

26	169857
29	191119
39	181893
42	200354
46	95326.5
53	140580
68	187481
72	102443
78	84749.5
81	106852
96	314014
109	67871
121	75261.8
126	149388
139	69182.3
144	98889
164	115218
0	1.07528e+06

89/11/15
15:42:00

AQVIR1 Window_ (33:1) - sw15.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.125)
2nd Derivative Value at max location is 1073729.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1708576.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.78741e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.391615	8.142818	26
0.386012	8.267995	29
0.297480	10.530842	39
0.297630	10.526454	42
0.288844	10.786729	46
0.277444	11.136501	53
0.477025	6.429171	68
0.460421	6.736889	72
0.447772	6.978867	78
0.442955	7.072817	81
0.256327	11.824104	96
0.360731	8.856320	109
0.317712	9.959322	121
0.364798	8.758959	126
0.367493	8.695028	132
0.285601	10.684798	139
0.276348	11.170868	144
0.268733	11.413570	148
0.343032	9.293296	164

Derivatives at Peaks

26	181384
29	212970
39	192806
42	216350
46	98141
53	140549
68	201819
72	101154
78	89219.5
81	115527
96	317833
109	62082.8
121	80036.5
126	150695
139	66814.5
144	103539
164	116874
0	1.07373e+06

89/11/15
15:42:08

AQVIR1 Window ~ (33:1) - sw20.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.125)
2nd Derivative Value at max location is 1072424.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1711392.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.79324e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.390867	8.159429	26
0.385599	8.277271	29
0.298237	10.508761	39
0.298773	10.493171	42
0.289373	10.770830	46
0.278398	11.106678	53
0.478346	6.405162	68
0.460931	6.727287	72
0.447746	6.979368	78
0.442909	7.073712	81
0.256474	11.819142	96
0.361232	8.844268	109
0.317747	9.958360	120
0.364671	8.761973	126
0.367107	8.704136	132
0.286147	10.868204	139
0.268341	11.426265	148
0.343303	9.286437	164
Derivatives at Peaks		
26	191103	
29	231391	
39	202004	
42	229833	
46	100514	
53	140525	
68	213908	
72	100066	
78	92992.8	
81	122840	
96	321051	
109	57204.3	
120	66048	
126	151796	
139	64818.5	
164	118271	
0	1.07242e+06	
0	1.07242e+06	

89/11/15
15:42:19

AQVIR1 Window (33:1) - sw25.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.125)
2nd Derivative Value at max location is 1071279.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1714240.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.79839e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.390208	8.174070	26
0.385237	8.285441	29
0.298904	10.489379	39
0.299778	10.463991	42
0.289894	10.755225	46
0.279237	11.080528	53
0.479507	6.384095	68
0.461644	6.713855	71
0.447723	6.979810	78
0.442869	7.074499	81
0.256603	11.814778	96
0.361976	8.826415	109
0.317930	9.953367	120
0.364560	8.764625	126
0.366769	8.712158	132
0.286628	10.853630	139
0.267996	11.437450	148
0.343542	9.280408	164

Derivatives at Peaks

26	199666
29	247618
39	210108
42	241714
46	127395
53	140501
68	224560
71	144439
78	96314.8
81	129284
96	323887
109	114440
120	66861.8
126	152767
139	63061.5
164	119501
0	1.07128e+06
0	1.07128e+06

89/11/15
15:42:27

AQVIR1 Window ~ (33:1) - sw30.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.125)
2nd Derivative Value at max location is 1070240.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1716576.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.80304e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-from-Max

0.389614	8.187311	26
0.384910	8.292823	29
0.299505	10.471916	39
0.300686	10.437729	42
0.290500	10.737088	46
0.279995	11.056981	53
0.259094	11.730854	57
0.480556	6.365115	68
0.462337	6.700456	71
0.447703	6.980209	78
0.442833	7.075209	81
0.256715	11.810839	96
0.362647	8.810315	109
0.318095	9.948862	120
0.364459	8.767021	126
0.366463	8.719406	132
0.287354	10.831666	140
0.267684	11.447561	148
0.343757	9.274969	164

Derivatives at Peaks

26	207406
29	262290
39	217434
42	252454
46	132491
53	140480
57	77540.3
68	234188
71	147708
78	99318.3
81	135110
96	326452
109	115567
120	67597.8
126	153644
140	108307
164	120612
0	1.07024e+06

89/11/15
15:42:36

AQVIR1 Window (33:1) - sw35.rep

Location of max in compression is (128,128), sub-pixel is (128.125,128.000)
2nd Derivative Value at max location is 1069284.000000 at (128,128)
Smoothed (fft) 2nd Derivative Maximum Value is 1718624.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.80732e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max
0.388511 8.211928 24
0.389068 8.199491 26
0.384609 8.299608 29
0.300058 10.455907 39
0.301520 10.413676 42
0.291056 10.720461 46
0.280692 11.035407 53
0.259808 11.706964 57
0.481520 6.347718 68
0.463011 6.688167 71
0.447684 6.980575 78
0.442799 7.075861 81
0.256826 11.807220 96
0.363264 8.795554 109
0.318247 9.944725 120
0.364367 8.769221 126
0.366132 8.726068 132
0.288030 10.811239 140
0.267397 11.456858 148
0.343955 9.269973 164

Derivatives at Peaks

24 208801
26 214524
29 275784
39 224171
42 262330
46 137178
53 140463
57 79674.4
68 243043
71 150714
78 102081
81 140466
96 328810
109 116604
120 68274
126 154451
140 110727
164 121635

89/11/15
15:42:45

AQVIR1 Window ~ (33:1) - sw40.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.000)
2nd Derivative Value at max location is 1068397.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1720704.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.8113e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.388368	8.215126	24
0.388560	8.210832	26
0.384330	8.305925	29
0.300571	10.441047	39
0.302295	10.391371	42
0.291574	10.705031	46
0.281339	11.015399	53
0.260471	11.684811	57
0.482415	6.331575	68
0.463620	6.676759	71
0.447666	6.980916	78
0.442768	7.076468	81
0.256925	11.803862	96
0.363837	8.781851	109
0.318387	9.940881	120
0.364281	8.771268	126
0.365920	8.732270	132
0.288659	10.792293	140
0.267131	11.465512	148
0.344139	9.265332	164

Derivatives at Peaks

24	211449
26	221149
29	288341
39	230442
42	271524
46	141541
53	140445
57	81660.4
68	251284
71	153508
78	104653
81	145452
96	331004
109	117568
120	68904.3
126	155202
140	112978
164	122588

89/11/15
15:42:54

AQVIR1 Window (33:1) - sw45.rep

1

Location of max in compression is (128,128), sub-pixel is (128.125,128.000)
2nd Derivative Value at max location is 1067562.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1722720.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.81504e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.388234	8.218124	24
0.388084	8.221486	26
0.384067	8.311853	29
0.301053	10.427128	39
0.303023	10.370494	42
0.292059	10.690576	46
0.281946	10.998666	53
0.261094	11.664076	57
0.483256	6.316454	68
0.464191	6.666065	71
0.447650	6.981235	78
0.442339	7.077037	81
0.257019	11.800708	96
0.364376	8.769014	109
0.318520	9.937275	120
0.364201	8.773188	126
0.365675	8.738090	132
0.289249	10.774552	140
0.266881	11.473640	148
0.344311	9.260978	164

Derivatives at Peaks

24	213938
26	227372
29	300137
39	236331
42	280158
46	145640
53	140428
57	83525.4
68	259024
71	156136
78	107067
81	150135
96	333066
109	118474
120	69495.8
126	155908
140	115093
164	123482

89/11/15
15:43:03

AQVIR1 Window (33:1) - sw50.rep

1

Location of max in compression is (220,45), sub-pixel is (219.875,44.625)
2nd Derivative Value at Max location is 338348.250000 at (219,45)
Smoothed (FFT) 2nd Derivative Maximum Value is 527152.00 at (219.500,44.500)
Side Lobe Information, Maximum Value is 3.65166e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.764092	2.337090	17
0.196592	14.128688	43
0.196670	14.125231	51
0.209660	13.569673	56
0.211136	13.508746	60
0.204133	13.801732	65
0.258136	11.763025	71
0.522956	5.630704	87
0.425681	7.418311	94
0.389569	8.188317	106
0.415750	7.623355	119
0.430431	7.321919	123
0.403578	7.881446	128
0.354230	9.014283	131
0.419109	7.553454	149
0.480649	6.363435	156
0.495409	6.100721	163
0.501354	5.997115	168
0.534312	5.444098	172
0.429030	7.350254	183
0.573961	4.822357	196
0.457118	6.799428	211
0.446199	7.009420	214
0.715009	2.913768	226
0.550707	5.181596	246
0.212437	13.455411	266
0.298978	10.487221	274
0.310006	10.172609	279
0.237129	12.500297	286
0.236286	12.531250	288
0.141535	16.982740	294

Derivatives at Peaks

17	174790
43	93739.3
51	59945.9
56	65755.9
60	82311.4
65	90926.9
71	131946
87	128115
94	152532
106	140712
119	76384.3
123	110631
128	314078
131	126188
149	299247
156	354067
163	158621
168	245361
172	217798
183	142669

89/11/15
16:17:15

AQVIR1 Windo. _ (58:1) - sw05.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.125)
2nd Derivative Value at max location is 688035.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1385376.00 at (128.750,128.875)
Side Lobe Information, Maximum Value is 7.29514e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.425004	7.432149	23
0.429298	7.344828	26
0.433732	7.255579	28
0.313065	10.087317	44
0.292543	10.676214	54
0.503149	6.018008	68
0.518951	5.697472	73
0.503014	5.968400	79
0.502995	5.968728	81
0.293512	10.647473	96
0.402431	7.906163	109
0.335609	9.483325	119
0.410382	7.736224	127
0.409625	7.752260	133
0.295680	10.581111	139
0.239766	12.404100	153
0.377660	8.453392	163

Derivatives at Peaks

23	214463
26	129907
28	168908
44	89955.5
54	85120
68	203063
73	148120
79	100479
81	98447.8
96	93249.8
109	102625
119	82321
127	136344
139	87290.3
153	115391
163	96357.3
0	688035
0	688035
0	688035

89/11/15
16:17:07

AQVIR1 Windo (58:1) - sw10.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.125)
2nd Derivative Value at max location is 689114.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1389120.00 at (128.750,128.875)
Side Lobe Information, Maximum Value is 7.30539e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max
0.425414 7.423769 23
0.428233 7.366399 26
0.433184 7.266547 28
0.313606 10.072313 44
0.293541 10.646629 54
0.501431 5.995770 67
0.519050 5.695809 73
0.501803 5.989342 79
0.502135 5.983599 81
0.293314 10.653352 96
0.403742 7.877927 109
0.336161 9.469043 119
0.410193 7.740240 126
0.409034 7.764805 133
0.297148 10.540341 139
0.236567 12.520905 153
0.378197 8.445637 163

Derivatives at Peaks

23 225806
26 145586
28 200312
44 87681.5
54 109748
67 201022
73 149144
79 97736.8
81 101665
96 67944.3
109 102110
119 85593.5
126 155381
139 86798
153 118118
163 94630
0 689114
0 689114
0 689114

89/11/15
16:16:59

AQVIR1 Window, -(58:1) - sw15.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.125)
2nd Derivative Value at max location is 689946.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1391712.00 at (128.750,128.875)
Side Lobe Information, Maximum Value is 7.31327e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.425728	7.417359	23
0.427418	7.382949	26
0.432765	7.274954	28
0.314020	10.060847	44
0.294638	10.614240	54
0.503057	5.967650	67
0.519127	5.694535	73
0.500875	6.005409	79
0.501476	5.994999	81
0.293162	10.657853	96
0.404745	7.856376	109
0.336584	9.458128	119
0.410664	7.730261	126
0.408582	7.774413	133
0.298272	10.507761	139
0.234119	12.611257	153
0.378641	8.435444	162

Derivatives at Peaks

23	234513
26	157614
28	224407
44	85936.5
54	113156
67	215753
73	149932
79	95630.8
81	104135
96	83873.8
109	101717
119	88103.5
126	161259
139	86419.8
153	120213
162	113893
0	689946
0	689946

89/11/15
16:16:50

AQVIR1 Window. ~ (58:1) - sw20.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.125)
2nd Derivative Value at max location is 690640.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1393888.00 at (128.750,128.875)
Side Lobe Information, Maximum Value is 7.3199e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.425992	7.411968	23
0.426732	7.396894	26
0.432413	7.282031	28
0.314690	10.042354	45
0.295560	10.587077	54
0.504426	5.944059	67
0.519191	5.693463	73
0.500095	6.018945	79
0.500922	6.004601	81
0.293034	10.661645	96
0.405589	7.838287	109
0.336940	9.448956	119
0.411061	7.721873	126
0.408202	7.782504	133
0.299217	10.480273	139
0.232060	12.688009	153
0.379196	8.422727	162

Derivatives at Peaks

23	241852
26	167756
28	244722
45	88737.5
54	116032
67	228167
73	150595
79	93857.8
81	106216
96	80440.5
109	101382
119	90219
126	166212
139	86101
153	121977
162	116311
0	690640
0	690640
0	690640

89/11/15
16:16:41

AQVIR1 Windov. _ (58:1) - sw25.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.125)
2nd Derivative Value at max location is 691253.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1395936.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.32575e+06
Side Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.426225	7.407230	23
0.426129	7.409179	26
0.432103	7.288261	28
0.315318	10.025021	45
0.296372	10.563259	54
0.505629	5.923363	67
0.519247	5.692520	73
0.499409	6.030871	79
0.500435	6.013055	81
0.292921	10.664977	96
0.406331	7.822405	109
0.337253	9.440893	119
0.411410	7.714501	126
0.407867	7.789628	133
0.300049	10.456168	139
0.230248	12.756083	153
0.379684	8.411560	162

Derivatives at Peaks

23	248318
26	176692
28	262617
45	88680.3
54	118564
67	239110
73	151180
79	92294
81	108049
96	77417.8
109	101089
119	92085.5
126	170578
139	85820.5
153	123530
162	118443
0	691253
0	691253
0	691253

89/11/15
16:16:31

AQVIR1 Window.~ (58:1) - sw30.rep

Location of max in compression is (128,128), sub-pixel is (128.250,128.125)
2nd Derivative Value at max location is 691810.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1397760.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.33103e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.426434	7.402955	23
0.425584	7.420285	26
0.431823	7.293888	28
0.315886	10.009404	45
0.297105	10.541813	54
0.506715	5.904725	67
0.519298	5.691671	73
0.498790	6.041653	79
0.499995	6.020694	81
0.292820	10.667988	96
0.407001	7.808096	109
0.337535	9.433623	119
0.411725	7.707854	126
0.407565	7.796063	133
0.300957	10.429918	140
0.228613	12.817994	153
0.380124	8.401491	162

Derivatives at Peaks

23	254164
26	184769
28	278799
45	88629
54	120855
67	248998
73	151707
79	90878.3
81	109708
96	74683.8
109	100823
119	93770.8
126	174523
140	101810
153	124936
162	120370
0	691810
0	691810
0	691810

89/11/15
16:16:23

1

Location of max in compression is (128,128), sub-pixel is (128.750,128.125)
 2nd Derivative Value at max location is 692324.000000
 Smoothed (FFT) 2nd Derivative Maximum Value is 1399840.00 at (128.750,128.750)
 Side Lobe Information, Maximum Value is 7.33589e+06
 Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.428627	7.399034	23
0.425084	7.430495	26
0.431566	7.299061	28
0.316407	9.995089	45
0.297777	10.522167	54
0.507712	5.887643	67
0.519344	5.690890	73
0.498221	6.051563	79
0.499591	6.027716	81
0.293005	10.662511	95
0.407616	7.794975	109
0.337794	9.426954	119
0.412014	7.701754	126
0.407288	7.801978	133
0.301883	10.403229	140
0.227111	12.875240	153
0.380528	8.392258	162

Derivatives at Peaks

23	259537
26	192200
28	293677
45	88579.3
54	122960
67	258094
73	152194
79	89580
81	111232
95	140259
109	100581
119	95321.3
126	178153
140	103839
153	126228
162	12214
0	692324
0	692324
0	692324

89/11/15
16:16:14

AQVIR1 Window.~ (58:1) - sw40.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.125)
2nd Derivative Value at max location is 692796.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1401408.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.34042e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.426806	7.395387	23
0.424620	7.439997	26
0.431327	7.303869	28
0.316891	9.981799	45
0.298403	10.503941	54
0.508640	5.871794	67
0.519388	5.690165	73
0.497692	6.060786	79
0.499215	6.034247	81
0.293359	10.632011	95
0.408188	7.782796	109
0.338035	9.420758	119
0.412283	7.696086	126
0.407030	7.807477	133
0.302744	10.378491	140
0.225715	12.928792	153
0.380904	8.383679	162

Derivatives at Peaks

23	264542
26	199113
28	307528
45	88536.5
54	124921
67	266559
73	152643
79	88369
81	112651
95	145225
109	100353
119	96763.3
126	181531
140	105728
153	127432
162	123789
0	692797
0	692797
0	692797

89/11/15
16:16:06

AQVIR1 Window ~ (58:1) - sw45.rep

1

Location of max in compression is (128,128), sub-pixel is (128.250,128.125)
2nd Derivative Value at max location is 693243.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1403008.00 at (128.750,128.750)
Side Lobe Information, Maximum Value is 7.34467e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.426974	7.391969	23
0.424184	7.448920	26
0.431103	7.308384	28
0.317345	9.969356	45
0.298990	10.486881	54
0.509510	5.856952	67
0.519429	5.889482	73
0.497465	6.064752	78
0.498863	6.040378	81
0.293691	10.642174	95
0.408725	7.711386	109
0.338262	9.414947	119
0.412536	7.690773	126
0.406788	7.812641	133
0.303552	10.355348	140
0.224405	12.979334	153
0.381257	8.375641	162

Derivatives at Peaks

23	269240
26	205606
28	320535
45	88492
54	126761
67	274509
73	153071
78	115827
81	113984
95	149889
109	100141
119	98119
126	184703
140	107503
153	128561
162	125339
0	693244
0	693244
0	693244

89/11/15
16:15:57

AQVIR1 Window, z (58:1) - sw50.rep

1

Location of max in compression is (221,44), sub-pixel is (220.250,44.375)
2nd Derivative Value at max location is 307006.000000 at (220,45)
Smoothed (FFT) 2nd Derivative Maximum Value is 487648.00 at (222.375,45.375)
Side Lobe Information, Maximum Value is 3.68261e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.746239	2.54243	18
0.187260	14.55117	45
0.204952	13.768971	49
0.205314	13.751643	53
0.207864	13.644403	57
0.209536	13.574807	62
0.221656	13.086395	71
0.585926	4.643138	87
0.432947	7.271315	94
0.377441	8.463024	99
0.355392	8.985840	103
0.362532	8.813077	108
0.488304	6.226188	123
0.355151	8.991741	132
0.355630	8.980021	148
0.358100	8.919903	150
0.459713	6.750260	155
0.475777	6.451934	158
0.522235	5.642673	166
0.513251	5.793406	174
0.488392	6.224631	178
0.422601	7.481394	187
0.561862	5.007400	197
0.561784	5.008613	203
0.468954	6.577395	212
0.415949	7.619209	216
0.701147	3.083814	227
0.502432	5.978448	247
0.212166	13.466492	269
0.284772	10.910065	277
0.298244	10.508570	279
0.259913	11.703425	290

Derivatives at Peaks

18	80784.5
45	127522
49	52909.9
53	69563.9
57	59919.8
62	75693.1
71	71132.1
87	116326
94	178180
99	147492
103	57196.5
108	93041.3
123	100796
132	137326
148	71375.5
150	214872
155	124515
158	82020
166	128634
174	166369

89/11/15
17:16:05

AQVIR1 Windo. - (90:1) - sw05.rep

1

Location of max in compression is (128,128), sub-pixel is (128.375,128.000)
2nd Derivative Value at max location is 507937.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1092992.00 at (128.750,128.875)
Side Lobe Information, Maximum Value is 6.56199e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.543398	5.297634	17
0.486177	6.264104	25
0.477740	6.416176	29
0.346802	9.198376	44
0.372673	8.573452	48
0.330680	9.611838	54
0.526045	5.579539	67
0.512498	5.806160	72
0.310834	10.149416	97
0.432747	7.275325	107
0.376076	8.494487	119
0.435038	7.229457	127
0.435502	7.220199	132
0.326250	9.728992	139
0.412802	7.685160	165

Derivatives at Peaks

17	79093.5
25	164579
29	139220
44	79078
48	99777
54	75267.5
67	160158
72	110820
97	270012
107	91914
119	95652
127	87934.8
139	57329.5
165	68910.5
0	507937
0	507937
0	507937
0	507937
0	507937

89/11/15
17:16:13

Exhibit II-14-f

AQVIR1 Window, (90:1) - sw01.rep

Compression Ratio 70:1

1

Location of max in compression is (128,128), sub-pixel is (128.375,128.000)
2nd Derivative Value at max location is 506716.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1089504.00 at (128.750,128.875)
Side Lobe Information, Maximum Value is 6.55031e+06

Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.485868	6.269642	25
0.478850	6.396007	29
0.346692	9.201115	44
0.370818	8.616792	49
0.330239	9.623430	54
0.522742	5.634254	68
0.510999	5.831604	72
0.457514	6.791918	79
0.310656	10.154411	97
0.430890	7.312665	107
0.377876	8.453018	120
0.435769	7.214869	127
0.436797	7.194398	132
0.324295	9.781200	139
0.312264	10.109555	144
0.412811	7.684983	165

Derivatives at Peaks

25	153794
29	107409
44	84108.3
48	94804
54	79960.5
68	111960
72	108401
79	71756.3
97	273926
107	92259.5
120	298913
127	92167.5
139	56514.1
165	65899.5
0	506717
0	506717
0	506717
0	506717

AQVIR1 Windo, ~ (90:1) - sw10.rep

Location of max in compression is (128,128), sub-pixel is (128.375,128.000)
 2nd Derivative Value at max location is 508856.500000 at (128,128)
 Smoothed (FFT) 2nd Derivative Maximum Value is 1095808.00 at (128.750,128.875)
 Side Lobe Information, Maximum Value is 6.57074e+06
 Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

[illegible]

89/11/15
17:15:48

AQVIR1 Window. _ (90:1) - sw15.rep

1

Location of max in compression is (128,128), sub-pixel is (128.375,128.000)
2nd Derivative Value at max location is 509561.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1097984.00 at (128.750,128.875)
Side Lobe Information, Maximum Value is 6.57746e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max
0.543931 5.289123 17
0.486586 6.256807 25
0.476689 6.435300 28
0.375119 8.516624 48
0.331262 9.596579 54
0.530700 5.503019 67
0.514475 5.772723 72
0.311070 10.142831 97
0.435195 7.226323 107
0.376427 8.486390 119
C.434073 7.248736 127
C.433733 7.254345 132
0.329759 9.636075 139
0.411056 7.721972 162
0.412791 7.685399 165

Derivatives at Peaks

17 98281.8
25 178865
28 212083
48 106362
54 69050.8
67 190277
72 114020
97 264831
107 91457.8
119 97916.8
127 82328
139 70177.3
162 91870.5
165 72894.5
0 509561
0 509561
0 509561
0 509561
0 509561

89/11/15
17:15:40

AQVIR1 Window - (90:1) - sw20.rep

1

Location of max in compression is (128,128), sub-pixel is (128.375,128.000)
2nd Derivative Value at max location is 510152.500000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 1099680.00 at (128.750,128.875)
Side Lobe Information, Maximum Value is 6.58312e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.544125	5.286019	17
0.486735	6.254146	25
0.476443	6.439785	28
0.376011	8.495983	48
0.331474	9.591017	54
0.532398	5.475267	67
0.515196	5.760555	72
0.311156	10.140430	97
0.436192	7.206444	108
0.376558	8.483355	118
0.433722	7.255780	127
0.433170	7.266836	132
0.331177	9.598794	139
0.411262	7.717620	162
0.412787	7.685485	165

Derivatives at Peaks

17	105306
25	184095
28	232143
48	108772
54	66776.5
67	901299
72	115192
97	262935
108	91551.5
118	105924
127	80276.3
139	73010.8
162	94516.3
165	74352.5
0	510153
0	510153
0	510153
0	510153
0	510153

AQVIR1 Window, _ (90:1) · sw25.rep

Location of max in compression is (128,128), sub-pixel is (128.375,127.875)
 2nd Derivative Value at max location is 510674.000000 at (128,128)
 2nd Derivative (FFT) Smoothed Maximum Value is 1101312.00 at (128.750,128.875)
 Side Lobe Information, Maximum Value is 6.58811e+06
 Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

[illegible]

AQVIR1 Window (90:1) - sw30.rep

[illegible]

[illegible]

AQVIR1 Windo... (90:1) - sw40.rep

Location of max in compression is (128,128), sub-pixel is (128.375,127.875)
 2nd Derivative Value at max location is 511988.500000 at (128,128)
 2nd Derivative (fft) 2nd Derivative Maximum Value is 1105120.00 at (128.750,128.875)
 Side Lobe Information, Maximum Value is 6.60063e+06
 Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

[illegible]

Derivatives at Peaks

[illegible]

AQVIR1 Windo. _ (90:1) - sw45.rep

Location of max in compression is (128,128), sub-pixel is (128.375,127.875)
 2nd Derivative Value at max location is 512369.500000 at (128,128)
 Smoothed (FFT) 2nd Derivative Maximum Value is 1106272.00 at (128.750,128.875)
 Side Lobe Information, Maximum Value is 6.60425e+06
 Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

[illegible]

Derivatives at Peaks

89/11/15
17:14:46

AQVIR1 Windo. _ (90:1) - sw50.rep

1

Location of max in compression is (221,44), sub-pixel is (220.500,44.375)
2nd Derivative Value at max location is 223431.500000 at (220,45)
Smoothed (FFT) 2nd Derivative Maximum Value is 328816.00 at (221.875,43.625)
Side Lobe Information, Maximum Value is 3.49084e+06
Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.734277	2.682804	14
0.759347	2.391198	19
0.266456	11.487494	45
0.230518	12.745886	56
0.239967	12.396985	64
0.218456	13.292599	72
0.583132	4.684659	87
0.495916	6.091846	94
0.473320	6.496901	99
0.584095	4.670326	123
0.343053	9.292773	134
0.418759	7.560720	149
0.477996	6.411517	156
0.473094	6.501059	158
0.502380	5.979345	166
0.524168	5.610589	169
0.530177	5.511578	173
0.630231	4.010002	197
0.551727	5.165520	204
0.400653	7.944640	216
0.768155	2.291024	227
0.472328	6.515125	247
0.253447	11.922249	269
0.314520	10.047021	275
0.303037	10.370080	281
0.241355	12.346884	289
-0.192791	0.000000	304

Derivatives at Peaks

14	131771
19	63762.8
45	158677
56	42529.4
64	54041.2
72	42148.6
87	75664.9
94	129508
99	150470
123	94905.3
134	163763
149	108673
156	220477
158	225477
166	273272
169	263255
173	172212
197	73343.3
204	111263
216	119436

Location of max in compression is (128,128), sub-pixel is (128.375,127.625)
 2nd Derivative Value at max location is 398508.500000 at (128,128)
 Smoothed (FFT) 2nd Derivative Maximum Value is 940704.00 at (128.750,127.500)
 Side Lobe Information, Maximum Value is 6.15999e+06
 Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.529745	5.518664	24
0.498323	6.49782	28
0.367621	8.631985	49
0.572705	4.841387	69
0.594891	4.511248	73
0.343224	9.288459	99
0.470514	6.548540	107
0.471322	6.539956	127
0.468005	6.594990	131
0.344636	9.267927	144
0.461959	6.707928	164

Derivatives at Peaks

[illegible]

AQVIR1 Window - (120:1) - sw05.rep

T

Derivatives at Peaks

[illegible]

AQVIR1 Window_ (120:1) - sw10.rep

Location of max in compression is (128,128), sub-pixel is (128.500,127.625)
2nd Derivative Value at max location is 404128.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 965600.00 at (128.750,127.500)
Side Lobe Information, Maximum Value is 6.17874e+06
Side-Lobe-to-Peak-Ratio DBs-Down Distance-from-Max
0.531793 5.485142 24
0.498691 6.043377 28
0.371497 8.600891 49
0.573177 4.834218 68
0.596881 4.482241 73
0.472868 6.505196 107
0.470454 6.549662 127
0.465709 6.637707 131
0.346465 9.206813 144
0.462394 6.659765 164

[illegible]

Location of max in compression is (128,128), sub-pixel is (128.500,127.625)
 2nd Derivative Value at max location is 405973.500000 at (128,128)
 Smoothed (FFT) 2nd Derivative Maximum Value is 973760.00 at (128.750,127.500)
 Side Lobe Information, Maximum Value is 6.18491e+06
 Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

Derivatives at Peaks

[illegible]

AQVIR1 Window_ (120:1) - sw20.rep

Figure 1

Location of max in compression is (128,128), sub-pixel is (128.500,127.625)
 2nd Derivative Value at max location is 407532.000000 at (128,128)
 Smoothed (FFT) 2nd Derivative Maximum Value is 980896.00 at (128.750,127.500)
 Side Lobe Information, Maximum Value is 6.1901e+06
 Side-Lobe-to-Peak-Ratio DBs-Down Distance-From-Max

0.533028	5.464997	24
0.498912	6.039519	28
0.373833	8.546436	49
0.574102	4.820214	68
0.598081	4.464802	73
0.474287	6.479172	107
0.470181	6.554694	126
0.464325	6.663561	131
0.347567	9.179217	144
0.462655	6.694847	164

Derivatives at Peaks

[illegible]

AQVIR1 Window_ (120:1) - sw25.rep

1

Derivatives at Peaks

[illegible]

89/11/16
09:39:34



Location of max in compression is (128,128), sub-pixel is (128.500,127.625)
2nd Derivative Value at max location is 410143.000000 at (128,128)
Smoothed (FFT) 2nd Derivative Maximum Value is 992352.00 at (128.750,127.500)
Side Lobe Information, Maximum Value is 6.19882e+06
Side-Lobe-To-Peak-Ratio, DBs-Down Distance-From-Max
0.533973 5.445620 24
0.499082 6.036568 28
0.375620 8.505016 49
0.575143 4.804483 67
0.598998 4.451486 73
0.475373 6.459318 107
0.393410 8.103084 120
0.470223 6.553925 126
0.463266 6.683388 131
0.348411 9.158167 144
0.462856 6.691088 164

Derivatives at Peaks

[illegible]

9-6363

1

Derivatives at Peaks

[illegible]

0.534767	5.436710	24
0.499922	6.034088	28
0.377123	8.043034	49
0.577309	4.771831	67
0.599770	4.440307	73
0.476285	6.442661	107
0.393592	8.093658	120
0.470258	6.553278	126
0.462376	6.700093	131
0.345808	9.223310	138
0.349120	9.140509	144
0.463024	6.687926	164

Derivatives at Peaks

AQVIR1 Window ~ (120:1) - sw45.rep

Location of max in compression is (128,128), sub-pixel is (128.500,127.625)
 2nd Derivative Value at max location is 41341.500000 at (128,128)
 Smoothed (FFT) 2nd Derivative Maximum Value is 1008560.00 at (128.750,127.500)
 Side Lobe Information, Maximum Value is 6.20949e+06
 Side-Lobe-To-Peak-Ratio DBs-Down Distance-From-Max

0.535126	5.430883	24
0.499289	6.032967	28
0.377802	8.547111	49
0.578288	4.757113	67
0.600119	4.35256	73
0.476598	6.435142	107
0.393675	8.097253	120
0.470374	6.552986	126
0.461974	6.707654	131
0.346288	9.211261	138
0.349440	9.125540	144
0.463100	6.686500	164

Derivatives at Peaks

[illegible]



**THE PERFORMANCE OF
WAVELETS FOR DATA COMPRESSION IN
SELECTED MILITARY APPLICATIONS**

FINAL REPORT

Exhibit II-15

Source Code Listing

Exhibit II-15
Source Code Listing

1. Correlation code

m_corr.c: main program for correlation
rm_corr.c: rmatrix fft routines

2. Data collection code

m_rcorr.c: main program for collecting data from correlations
rcorr.c: tools for collecting correlation data

3. Test Patch creation code

m_small.c: main code to create windows with noise or scale
interp.c: code to scale a section of a matrix

4. Miscellaneous tools of programs

jtools.c: tool library of code common to all programs
m_subimg.c: code to create a subimage
makewin.c: code to load $aqvir_n w_n$ into a matrix window
mattool.c: code to convert rmatrix to matlab format file
makefile: makefile of dependencies and build instructions

89/11/14
21:44:12

m_corr.c

1

```
#include <stdio.h>
#include <string.h>
#include <zlib.h>

void MakeImgFileFromRMatrix();
MATRIX RMatrixFromCMatrix();
CMATRIX MakeFFTCMatrixFromFileFromFileName();
void parsefn();
RMATRIX cmatrix_corr();

main(argc, argv)
int argc;
char *argv[];
{
    int mode, i;
    RMATRIX rmatrix, small_rmatrix, corr;
    CMATRIX cmatrix1, cmatrix2;
    char dir[128], base[9], ext[4], fnbuf[128], buffer[512];
    unsigned row, col;

    if (argc < 3) {
        printf("usage: %s <image> <icon>\n", argv[0]);
        exit(1);
    }
    parsefn(argv[1], dir, base, ext);

    cmatrix1 = MakeFFTCMatrixFromFileFromFileName(argv[1], TRUE);
    cmatrix2 = MakeFFTCMatrixFromFileFromFileName(argv[2], FALSE);

    sprintf(fnbuf, "%s%s.fft", dir, base);
    if (access(fnbuf, 0x00) == -1) {
        printf("Dumping CMATRIX %s\n", fnbuf);
        DumpCMatrix(fnbuf, cmatrix1);
    }

    parsefn(argv[2], dir, base, ext);
    sprintf(fnbuf, "%s%s.fft", dir, base);
    if (access(fnbuf, 0x00) == -1) {
        printf("Dumping CMATRIX %s\n", fnbuf);
        DumpCMatrix(fnbuf, cmatrix2);
    }

    if FALSE
        printf("Image FFT:\n");
        for (row = 0; row < 10; row++) {
            for (col = 0; col < 10; col++) {
                printf("(%q%qi) ", CM_ELEMENT(cmatrix1, row, col).r,
                    CM_ELEMENT(cmatrix1, row, col).i);
            }
            printf("\n");
        }

        printf("Window FFT:\n");
        for (row = 0; row < 10; row++) {
            for (col = 0; col < 10; col++) {
                printf("(%q%qi) ", CM_ELEMENT(cmatrix2, row, col).r,
                    CM_ELEMENT(cmatrix2, row, col).i);
            }
            printf("\n");
        }

    #endif

    corr = cmatrix_corr(cmatrix1, cmatrix2);
    /*
    FreeCMatrix(cmatrix1);
    FreeCMatrix(cmatrix2);
    */

    parsefn(argv[1], dir, base, ext);
    sprintf(fnbuf, "%s%s.cor", dir, base);
    sprintf(buffer, "Correlation of %s and %s", argv[1], argv[2]);

    DumpCoeffBlock(fnbuf, corr);

    if FALSE
        sprintf(fnbuf, "corr.img", dir, base);
        MakeImgFileFromRMatrix(fnbuf, corr, buffer);

    mode = getmode();
    setmode (0x12);

    for (i = 0; i < 16; i++) {
        setpal (i, i << 2, i << 2, i << 2);
        setpal (i, i);
    }
}
```

89/11/14
21:44:12

m_corr.c

2

```
DisplayCoeffBlock (corr, 0, 0, 16);  
getchar();  
setmode(mode);
```

```
endif
```

89/10/26
11:28:04

rm_corr.h

1

```
CMATRIX rmatrix_fft(/*RMATRIX rmatrix*/);  
RMATRIX cmatrix_ifft(/*CMATRIX cmatrix*/);  
RMATRIX make_small_image(/*RMATRIX rmatrix,unsigned int rows,unsigned int cols,unsigned int from_row,unsigned int from_col*/);  
RMATRIX cmatrix_corr(/* CMATRIX cmatrix1, CMATRIX cmatrix2*/);  
extern void fourl(/*float *data,int nn,int isign*/);  
RMATRIX MakeFFTCMatrixFromFileName(/*char *fn,unsigned int zero_p*/);
```

90/01/13
22:02:00

rm_corr.c

1

```
#include <stdio.h>
#include <assert.h>
#include <malloc.h>
#include <zlib.h>
#include "jtools.h"
#include "rm_corr.h"

char *xAMalloc();

CMATRIX rmatrix_fft(rmatrix)
RMATRIX rmatrix;
{
    CMATRIX cmatrix;
    unsigned rm_rows, rm_cols, row, col;
    unsigned cm_rows, cm_cols;
    float *rvecptr, *fft, *fftptr;
    FCOMPLEX *cvecptr, fcomplex;

    printf("rmatrix_fft()\n");

    /* First some assumptions to make life easy */
    assert(RM_START(rmatrix) == 0);
    assert(START(RM_ROW(rmatrix, 0)) == 0);

    rm_rows = (unsigned) RM_ROWS(rmatrix);
    rm_cols = (unsigned) RM_COLUMNS(rmatrix);

    /*
    cm_rows = (unsigned) pow(2., ceil(lg((double)rm_rows)));
    cm_cols = (unsigned) pow(2., ceil(lg((double)rm_cols)));
    */

    cm_rows = rm_rows;
    cm_cols = rm_cols;

    /*FROG D*/
    printf("rm_rows %u, rm_cols %u, cm_rows %u, cm_cols %u\n",
           rm_rows, rm_cols, cm_rows, cm_cols);
    /*EOF D*/

    cmatrix = MakeCMatrix((AINT)cm_rows, (AINT)cm_cols);
    ZeroMatrix(cmatrix);

    printf("rmatrix_fft(): copy FFT of each row of rmatrix to cmatrix\n");
    /* copy FFT of each row of rmatrix to cmatrix */
    fft = (float *) AMalloc(sizeof(float)*cm_rows*2);
    for (row = 0; row < rm_rows; row++) {
        rvecptr = STORAGE(RM_ROW(rmatrix, row));
        bzero(fft, sizeof(float)*cm_rows*2);
        fftptr = fft;
        for (col = 0; col < rm_cols; col++) {
            *fftptr++ = *rvecptr++;
            fftptr++;
        }
        fourl(fft-1, cm_rows, 1);
        cvecptr = STORAGE(CM_ROW(cmatrix, row));
        fftptr = fft;
        for (col = 0; col < cm_cols; col++) {
            cvecptr->r = *fftptr++;
            cvecptr->i = *fftptr++;
            cvecptr++;
        }
    }
    free(fft);

    printf("rmatrix_fft(): Now compute fft of cols of cmatrix\n");
    /* Now compute fft of cols of cmatrix */
    fft = (float *) malloc(sizeof(float)*cm_cols*2);
    for (col = 0; col < cm_cols; col++) {
        bzero(fft, sizeof(float)*cm_cols*2);
        fftptr = fft;
        for (row = 0; row < cm_rows; row++) {
            fcomplex = CM_ELEMENT(cmatrix, row, col);
            *fftptr++ = fcomplex.r;
            *fftptr++ = fcomplex.i;
        }
        fourl(fft-1, cm_rows, 1);
        fftptr = fft;
        for (row = 0; row < cm_rows; row++) {
            fcomplex.r = *fftptr++;
            fcomplex.i = *fftptr++;
            CM_ELEMENT(cmatrix, row, col) = fcomplex;
        }
    }
    free(fft);
    return cmatrix;
}
```

```
RMATRIX cmatrix_ifft (cmatrix)
RMATRIX cmatrix;
```

```
RMATRIX rmatrix;
unsigned row, col;
unsigned cm_rows, cm_cols;
float *rvecptr, *fft, *fftptr;
FCOMPLEX *cvecptr, fcomplex;
unsigned long rowsbycols;
```

```
printf("rmatrix_ifft(): \n");
```

```
if (TYPE(cmatrix) != TYPE_CMATRIX) {
    printf ("cmatrix_ifft - argument is not a CMATRIX!\n");
    exit (-1);
}
```

```
/* Complex matrices and vectors always start at 0 */
```

```
cm_rows = CM_ROWS(cmatrix);
cm_cols = CM_ROWS(cmatrix);
```

```
rmatrix = MakeRMATRIX(OL, (AINT)cm_rows, OL, (AINT)cm_cols);
ZeroMatrix(rmatrix);
```

```
printf("rmatrix_ifft(): First, compute ifft of cols of cmatrix \n");
```

```
/* First, compute ifft of cols of cmatrix */
```

```
fft = (float *) AMalloc(sizeof(float)*cm_cols*2);
```

```
for (col = 0; col < cm_cols; col++) {
    fftptr = fft;
    for (row = 0; row < cm_rows; row++) {
        fcomplex = CM_ELEMENT(cmatrix, row, col);
        *fftptr++ = fcomplex.r;
        *fftptr++ = fcomplex.i;
    }
    fourl(fft-1, cm_rows, -1);
    fftptr = fft;
    for (row = 0; row < cm_rows; row++) {
        fcomplex.r = *fftptr++/(float)cm_rows;
        fcomplex.i = *fftptr++/(float)cm_rows;
        CM_ELEMENT(cmatrix, row, col) = fcomplex;
    }
}
```

```
free(fft);
```

```
printf("rmatrix_ifft(): Copy IFFT of each row of cmatrix to rmatrix \n");
```

```
/* Copy IFFT of each row of cmatrix to rmatrix */
```

```
fft = (float *) AMalloc(sizeof(float)*cm_rows*2);
```

```
for (row = 0; row < cm_rows; row++) {
    cvecptr = STORAGE(CM_ROW(cmatrix, row));
    fftptr = fft;
    for (col = 0; col < cm_cols; col++) {
        *fftptr++ = (*cvecptr).r;
        *fftptr++ = (*cvecptr).i;
        cvecptr++;
    }
    fourl(fft-1, cm_cols, -1);
    rvecptr = STORAGE(RM_ROW(rmatrix, row));
    fftptr = fft;
    for (col = 0; col < cm_cols; col++) {
        *rvecptr++ = *fftptr++/cm_rows; /* copy real part
        *fftptr++ = *fftptr++/cm_rows; /* copy imaginary part */
    }
}
```

```
free(fft);
```

```
return rmatrix;
```

```
RMATRIX make_small_image(rmatrix, rows, cols, from_row, from_col)
```

```
RMATRIX rmatrix;
```

```
unsigned rows, cols, from_row, from_col;
```

```
RMATRIX small_rmatrix;
unsigned row, col;
```

```
printf("make_small_image(rows=%u, cols=%u, from_row=%u, from_col=%u)\n",
    rows, cols, from_row, from_col);
```

```
if (rows+from_row > (unsigned)RM_ROWS(rmatrix)) {
```

90/01/13
22:02:00

3

rm_corr.c

```
from_row = (unsigned)RM_ROWS(rmatrix) - rows;
printf("from_row changed to %u\n", from_row);
}

if (cols+from_col > (unsigned)RM_COLUMNS(rmatrix)) {
    from_col = (unsigned)RM_COLUMNS(rmatrix) - cols;
    printf("from_col changed to %u\n", from_col);
}

small_rmatrix = MakeRMMatrix(OL, RM_ROWS(rmatrix), OL, RM_COLUMNS(rmatrix));
ZeroMatrix(small_rmatrix);

for (row = 0; row < rows; row++) {
    for (col = 0; col < cols; col++) {
        RM_ELEMENT(small_rmatrix, row, col) =
            RM_ELEMENT(rmatrix, row+from_row, col+from_col);
    }
}

ZeroSumRMMatrix(small_rmatrix, cols /*width*/, rows/*height*/);
printf("make_small_image() returns\n");
return small_rmatrix;
}

RMATRIX cmatrix_corr(cmatrix1, cmatrix2)
CMATRIX cmatrix1, cmatrix2;
{
    RMATRIX corr;
    unsigned row, col;
    FCOMPLEX *cvecptr1, *cvecptr2;

    printf("cmatrix_corr()\n");

    printf("cmatrix_corr(): point mult of matrices\n");
    for (row = 0; row < CM_ROWS(cmatrix1); row++) {
        cvecptr1 = STORAGE(CM_ROW(cmatrix1, row));
        cvecptr2 = STORAGE(CM_ROW(cmatrix2, row));
        for (col = 0; col < CM_COLUMNS(cmatrix1); col++) {
            *cvecptr2 = Cmul(*cvecptr1, Conjg(*cvecptr2));
            cvecptr1++, cvecptr2++;
        }
    }

    FALSE
    printf("Correlation FFT:\n");
    for (row = 0; row < 10; row++) {
        for (col = 0; col < 10; col++) {
            printf("(%g+%qi) ", CM_ELEMENT(cmatrix2, row, col).r, CM_ELEMENT(cmatrix2, row, col).i);
        }
        printf("\n");
    }

    #endif
    /*Now compute the inverse FFT on matrix cmatrix2 into corr */
    corr = cmatrix_ifft(cmatrix2);
    printf("cmatrix_corr() returns\n");
    return corr;
}

#define SWAP(a,b) tempr=(a);(a)=(b);(b)=tempr

void fourl(data,nn,lsign) /* From Numerical Recipes */
float data[];
int nn,lsign;
{
    int n,mmax,m,j,istep,i;
    float wtemp,wr,wpr,wpi,wl,theta;
    float tempr,tempi;

    n=nn << 1;
    j=1;
    for (i=1;i<n;i+=2) {
        if (j > i) {
            SWAP(data[j],data[i]);
            SWAP(data[j+1],data[i+1]);
        }
        m=n >> 1;
        while (m >= 2 && j > m) {
            j -= m;
            m >>= 1;
        }
        j += m;
    }

    mmax=2;
    while (n > mmax) {
        istep=2*mmax;
        theta=6.28318530717959/(lsign*mmax);
    }
}
```

90/01/13
22:02:00

rm_corr.c

4

```
wtemp=sin(0.5*theta);
wpr = -2.0*wtemp*wtemp;
wpi=sin(theta);
wr=1.0;
wi=0.0;
for (m=1;m<mmax;m+=2) {
    for (i=m;i<=n;i+=1step) {
        j=i+mmax;
        tempr=wr*data[j]-wi*data[j+1];
        tempi=wr*data[j+1]+wi*data[j];
        data[j]=data[i]-tempr;
        data[j+1]=data[i+1]-tempi;
        data[i] += tempr;
        data[i+1] += tempi;
    }
    wr=(wtemp-wr)*wpr-wi*wpi+wr;
    wi=wi*wpr+wtemp*wpi+wi;
}
mmax=1step;
```

#undef SWAP

CMATRIX MakeFFTCMatrixFromFileName(fn, zero_p)

char *fn;

unsigned zero_p;

```
{
    RMATRIX rmatrix;
    CMATRIX cmatrix;
    char dir[128], base[9], ext[4], tryname[128];

    parsefn(fn, dir, base, ext);
    if (!base[0]) {
        printf("MakeFFTCMatrixFromFileName: Couldn't parse filename %s\n",
            fn);
        exit(-1);
    }
    /* Try fn, fn.fft, fn.img, fn.flt in order */
    strcpy(tryname, fn);
    if (access(tryname, 0x04) < 0) {
        sprintf(tryname, "%s%s.fft", dir, base);
        if (access(tryname, 0x04) < 0) {
            sprintf(tryname, "%s%s.img", dir, base);
            if (access(tryname, 0x04) < 0) {
                sprintf(tryname, "%s%s.flt", dir, base);
                if (access(tryname, 0x04) < 0) {
                    sprintf(tryname, "MakeFFTCMatrixFromFileName: %s", fn);
                    perror(tryname);
                    exit(-1);
                }
            }
        }
    }

    parsefn(tryname, dir, base, ext);
    if (!strcmp(ext, "img")) {
        rmatrix = MakeRMatrixFromImgFile(tryname);
        if (zero_p) ZeroSumRMatrix(rmatrix, 0, 0);
        cmatrix = rmatrix_fft(rmatrix);
        FreeRMatrix(rmatrix);
        return cmatrix;
    }

    if (!strcmp(ext, "flt")) {
        rmatrix = MakeRMatrixFromFile(tryname);
        if (zero_p) ZeroSumRMatrix(rmatrix, 0, 0);
        cmatrix = rmatrix_fft(rmatrix);
        FreeRMatrix(rmatrix);
        return cmatrix;
    }

    if (!strcmp(ext, "fft")) {
        /* stored as .flt files */
        cmatrix = MakeCMatrixFromFile(tryname);
        return cmatrix;
    }

    printf("MakeFFTCMatrixFromFileName: don't recognize extention %s\n", ext);
    exit(-1);
}
```


90/01/15
01:51:16

m_rcorr.c

1

```
#include <stdio.h>
#include <string.h>
#include <zlib.h>
#include "rcorr.h"

MakeImgFileFromRMatrix();
RMatrix RMatrixFromCMatrix();
CMatrix MakeFFTCMatrixFromFileName();
void parsefn();
RMatrix cmatrix_corr();
RMatrix MakeRMatrixFromFileExt();

float cr, noise, scale;
char *imag_nam, *win_nam;

main(argc, argv)
int argc;
char *argv[];
{
    RMatrix rmatrix, laplacian;
    unsigned max_row, max_col, cor_max_row, cor_max_col;
    float sub_max_row, sub_max_col;
    char dir[128], base[9], ext[4], fnbuf[128];
    RMatrix cor_locations, lap_locations;
    float lap_min_value, lap_max_value, threshold;
    float cor_min_value, cor_max_value;
    FILE *report;
    unsigned true_max_row, true_max_col, row_offset, col_offset;
    char *loc_in, *loc_out;
    float *rvecptr1, *rvecptr2;
    unsigned rm_rows, rm_cols, row, col;

    if (argc < 9) {
        printf("usage: %s <image> \"Image description\" <compression> \"Window description\" <noise> <scale> <max_row> <max_col>\n", argv[0]);
        exit(1);
    }

    imag_nam = argv[2];
    win_nam = argv[4];
    cr = atof(argv[3]);
    noise = atoi(argv[5])/100.;
    scale = atoi(argv[6])/100.;
    true_max_row = atoi(argv[7]);
    true_max_col = atoi(argv[8]);

    if (argc > 9 && strcmp(argv[9], "nil")) {
        loc_in = argv[9];
    } else {
        loc_in = (char *) NULL;
    }

    if (argc > 10 && strcmp(argv[10], "nil")) {
        loc_out = argv[10];
    } else {
        loc_out = (char *) NULL;
    }

    if (argc > 12) {
        row_offset = atoi(argv[11]);
        col_offset = atoi(argv[12]);
    } else {
        row_offset = 0;
        col_offset = 0;
    }

    parsefn(argv[1], dir, base, ext);
    sprintf(fnbuf, "%s%s.rep", dir, base);
    if (!(report = fopen(fnbuf, "w+")) == (FILE *)NULL) {
        fprintf(stderr, "%s: Cannot open report file %s\n", argv[0], fnbuf);
        exit(-1);
    }

    rmatrix = MakeRMatrixFromFileExt(argv[1]);

    fprintf(report, "Image %s at compression %3.1f:1 against window %s.\n",
        argv[2], cr, argv[4]);
    fprintf(report, "Window contains %4.2f%% noise and is out of scale by a factor of %4.2f\n", noise, scale);
    if (true_max_row && true_max_col) {
        fprintf(report, "Location of max in original is (%u,%u)\n", true_max_row+row_offset, true_max_col+col_offset);
    } else {
        fprintf(report, "Location of max in original is unspecified\n");
    }

    find_max_pixel_location(rmatrix, 0,0,0,0,&cor_max_row, &cor_max_col);
    FreeRMatrix(sub_pixel_location(rmatrix, cor_max_row, cor_max_col,
        &sub_max_row, &sub_max_col, 8, 8));

    fprintf(report, "Location of max in compression is (%u,%u), sub-pixel is (%0.3f,%0.3f)\n", cor_max_row+row_offset, cor_max_col+col_offset,
        sub_max_row, sub_max_col);

    laplacian = rmatrix_second_derivative(rmatrix, 1);
    threshold = RM_ELEMENT(rmatrix, max_row, max_col)/5.0;
```

```

rm_rows = (unsigned) RM_ROWS(rmatrix);
rm_cols = (unsigned) RM_COLUMNS(rmatrix);

for (row = 0; row < rm_rows; row++) {
    rvecptr1 = STORAGE(RM_ROW(rmatrix, row));
    rvecptr2 = STORAGE(RM_ROW(laplacian, row));
    for (col = 0; col < rm_cols; col++) {
        if (*rvecptr1++ < threshold) {
            *rvecptr2++ = 0.0;
        } else {
            rvecptr2++;
        }
    }
}

find_max_pixel_location(laplacian, 0, 0, 0, 0, &max_row, &max_col);
fprintf(report, "Max Laplacian Value is %g at location (%u,%u)\n",
        RM_ELEMENT(laplacian, max_row, max_col), max_row, max_col);

if (true_max_row && true_max_col) {
    if ((max_row - true_max_row) || (max_col - true_max_col)) {
        fprintf(report, "Laplacian pixel error is (%d,%d).\n",
            (max_row - true_max_row), (max_col - true_max_col));
    }
}

if ((cor_max_row - max_row) || (cor_max_col - max_col)) {
    /* the laplacian and the correlation maximum do not agree ..
       find a new correlation maximum near the laplacian */
    find_max_pixel_location(rmatrix, max_row-4, max_col-4, 8, 8, &cor_max_row, &cor_max_col);
}

smoothed_derivative_statistic(report, rmatrix, max_row, max_col, row_offset, col_offset, 8, 8);

if (loc_in != (char *) NULL) {
    cor_locations = MakeIMatrixFromFile(loc_in);
    cor_max_value = RM_ELEMENT(rmatrix, cor_max_row, cor_max_col);
    AdjustLocations(report, rmatrix, cor_locations, row_offset, col_offset);
} else {
    collect_radial_maxima_and_locations(rmatrix, cor_max_row, cor_max_col,
        &cor_min_value, &cor_max_value, &cor_locations);
}

if (loc_out != (char *) NULL) {
    DumpIntegerBlock(loc_out, cor_locations);
}

report_corr_side_lobe_info(report, rmatrix, cor_locations, cor_max_row, cor_max_col, row_offset, col_offset);

/* collect and report on laplacian radial peaks */
collect_radial_maxima_and_locations(laplacian, max_row, max_col,
    &lap_min_value, &lap_max_value, &lap_locations);
report_laplacian_side_lobe_info(report, laplacian, lap_locations, max_row, max_col, row_offset, col_offset);

fclose(report);

report_corr_side_lobe_info(report, rmatrix, locations, max_row, max_col, row_offset, col_offset)
FILE *report;
RMATRIX rmatrix;
IMATRIX locations;
unsigned row_offset, col_offset;
{
    unsigned i, j, dist, row, col, rm_rows, rm_cols;
    RVECTOR derivatives, ratios;
    FILE *fp;
    float ratio, max_value, max_ratio=0.0;
    unsigned max_row, max_col, max_dist;

    max_row = IM_ELEMENT(locations, 0, 0);
    max_col = IM_ELEMENT(locations, 1, 0);
    max_value = RM_ELEMENT(rmatrix, max_row, max_col);

    rm_rows = (unsigned) RM_ROWS(rmatrix);
    rm_cols = (unsigned) RM_COLUMNS(rmatrix);

    printf("report_second_derivative_info()...\n"); fflush(stdout);
    derivatives = MakeRVector(OL, IM_COLUMNS(locations));
    ratios = MakeRVector(OL, IM_COLUMNS(locations));

    fprintf(report, "\nCorrelation Side Lobe Information, Maximum Value is %g\n", max_value);
    fprintf(report, "Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location\n");

    for (i=0; i < IM_COLUMNS(locations); i++) {
        row = IM_ELEMENT(locations, 0, i);
        col = IM_ELEMENT(locations, 1, i);
    }
}

```

m_rcorr.c

```

dist = IM_ELEMENT(locations,2,1);
/*if (!dist) continue;*/

VREF(ratios, i) = ratio = RM_ELEMENT(rmatrix,row,col)/max_value;

if (ratio > max_ratio && dist != 0) {
    max_ratio = ratio;
    max_dist = dist;
}

if (row == rm_rows-1 || col == rm_cols-1 || row == 0 || col == 0) {
    VREF(derivatives, i) = 0.;
} else {
    VREF(derivatives, i) = 4.*RM_ELEMENT(rmatrix, row, col)
        - RM_ELEMENT(rmatrix, row+1, col)
        - RM_ELEMENT(rmatrix, row-1, col)
        - RM_ELEMENT(rmatrix, row, col+1)
        - RM_ELEMENT(rmatrix, row, col-1);
}

fprintf(report,
    "%08f %9f %4u %9g (%u,%u)\n",
    ratio, (float) -10.*log10(ratio), dist, VREF(derivatives,i), row+row_offset, col+col_offset);
}

row = IM_ELEMENT(locations,0,1);
col = IM_ELEMENT(locations,1,1);
dist = IM_ELEMENT(locations,2,1);
ratio = RM_ELEMENT(rmatrix,row,col)/max_value;

fprintf(report, "Nearest Corr sidelobe: ratio %f, dBdown %f at distance %u\n",
    ratio, -10.*log10(ratio), dist);
fprintf(report, "Largest Corr sidelobe: ratio %f, dBdown %f at distance %u\n",
    max_ratio, -10.*log10(max_ratio), max_dist);

fp = fopen("derivs.m", "a+");
fprintf(fp, "%% Laplacians at Side Lobes for %s %f:1 against %s %f%% noise, %f scale\n",
    imag_name, cr, win_name, noise, scale);

fprintf(fp, "corr_%03u_%03u_dist = [",
    (unsigned) (cr), (unsigned) (scale*100.));
for (i=0; i< IM_COLUMNS(locations); i++) {
    dist = IM_ELEMENT(locations,2,i);
    if (i && !dist) break;
    fprintf(fp, "%u\n", dist);
}
fprintf(fp, "\n];\nncorr_%03u_%03u_lap = [",
    (unsigned) (cr), (unsigned) (scale*100.));
for (j=0; j<1; j++) {
    fprintf(fp, "%u\n", VREF(derivatives, j));
}
fprintf(fp, "\n];\nncorr_%03u_%03u_ratios = [",
    (unsigned) (cr), (unsigned) (scale*100.));
for (j=0; j<1; j++) {
    fprintf(fp, "%08f\n", VREF(ratios, j));
}
fprintf(fp, "\n];\n");
fclose(fp);
FreeRVector(derivatives);
FreeRVector(ratios);

report_laplacian_side_lobe_info(report, laplacian, locations, max_row, max_col, row_offset, col_offset)
FILE *report;
RMATRIX laplacian;
IMATRIX locations;
unsigned row_offset, col_offset;
{
    unsigned i, j, dist, row, col, rm_rows, rm_cols;
    RVECTOR derivatives, ratios;
    FILE *fp;
    float ratio, max_value, max_ratio=0.0;
    unsigned max_row, max_col, max_dist;

    max_row = IM_ELEMENT(locations, 0, 0);
    max_col = IM_ELEMENT(locations, 1, 0);
    max_value = RM_ELEMENT(laplacian, max_row, max_col);

    rm_rows = (unsigned) RM_ROWS(laplacian);
    rm_cols = (unsigned) RM_COLUMNS(laplacian);

    printf("report_second_derivative_info()...\n"); fflush(stdout);
    derivatives = MakeRVector(0L, IM_COLUMNS(locations));
    ratios = MakeRVector(0L, IM_COLUMNS(locations));

    fprintf(report, "\nLaplacian Side Lobe Information, Maximum Value is %g\n",max_value);
    fprintf(report, "Side-Lobe-To-Peak-Ratio DBs-Down Distance Laplacian Location\n");

```

90/01/15
01:51:16

m_rcorr.c

4

```
for (i=0; i < IM_COLUMNS(locations); i++) {
    row = IM_ELEMENT(locations,0,i);
    col = IM_ELEMENT(locations,1,i);
    dist = IM_ELEMENT(locations,2,i);
    /*if (!dist) continue;*/

    VREF(ratios, i) = ratio = RM_ELEMENT(laplacian,row,col)/max_value;
    if (ratio > max_ratio && dist != 0) {
        max_ratio = ratio;
        max_dist = dist;
    }

    VREF(derivatives, i) = RM_ELEMENT(laplacian, row, col);

    fprintf(report,
        "      %08f          %9f %4u      %9g      (%u,%u)\n",
        ratio, (float) -10.*log10(ratio), dist, VREF(derivatives,i), row+row_offset, col+col_offset);
}

row = IM_ELEMENT(locations,0,1);
col = IM_ELEMENT(locations,1,1);
dist = IM_ELEMENT(locations,2,1);
ratio = RM_ELEMENT(laplacian,row,col)/max_value;

fprintf(report, "Nearest Laplacian sidelobe: ratio %f, dBdown %f at distance %u\n",
    ratio, -10.*log10(ratio), dist);
fprintf(report, "Largest Laplacian sidelobe: ratio %f, dBdown %f at distance %u\n",
    max_ratio, -10.*log10(max_ratio), max_dist);

fp = fopen("derivs.m", "a+");
fprintf(fp, "%% Max Radial Laplacian's for %s %f:1 against %s %f%% noise, %f scale\n",
    imag_nam, cr, win_nam, noise, scale);

fprintf(fp, "lap_%03u_%03u_dist = [",
    (unsigned) (cr), (unsigned) (scale*100.));
for (i=0; i < IM_COLUMNS(locations); i++) {
    dist = IM_ELEMENT(locations,2,i);
    if (!dist) break;
    fprintf(fp, "%t%u\n", dist);
}

fprintf(fp, "%t]:\nlap_%03u_%03u_lap = [",
    (unsigned) (cr), (unsigned) (scale*100.));
for (j=0; j < i; j++) {
    fprintf(fp, "%t%g\n", VREF(derivatives, j));
}

fprintf(fp, "%t]:\nlap_%03u_%03u_ratios = [",
    (unsigned) (cr), (unsigned) (scale*100.));
for (j=0; j < i; j++) {
    fprintf(fp, "%t%08f\n", VREF(ratios, j));
}

fprintf(fp, "%t]:\n");
fclose(fp);
FreeRVector(derivatives);
FreeRVector(ratios);
}

void find_local_max(rmatrix,trow,tcol,row,col)
RMATRIX rmatrix;
unsigned trow, tcol;
unsigned *row, *col;
{
    float maxval;
    unsigned currow, curcol;
    int irow, icol, save_row, save_col;

    currow = trow;
    curcol = tcol;
    maxval = RM_ELEMENT(rmatrix, currow, curcol);

    while (TRUE) {
        save_row = save_col = 0;
        for (irow = -1; irow < 2; irow++) {
            for (icol = -1; icol < 2; icol++) {
                if (maxval < RM_ELEMENT(rmatrix, currow+irow, curcol+icol)) {
                    maxval = RM_ELEMENT(rmatrix, currow+irow, curcol+icol);
                    save_row = irow;
                    save_col = icol;
                }
            }
        }

        if (save_row || save_col) {
            currow += save_row;
            curcol += save_col;
            continue;
        }
    }
}
```

90/01/15
01:51:16

m_rcorr.c

5

```
        break;
    }
    *row = currow;
    *col = curcol;

AdjustLocations(report, rmatrix, locations, row_offset, col_offset)
FILE *report;
RMATRIX rmatrix;
IMATRIX locations;
unsigned row_offset, col_offset;
{
    unsigned old_row, old_col, new_row, new_col, i;
    unsigned rm_rows, rm_cols;

    rm_rows = RM_ROWS(rmatrix);
    rm_cols = RM_COLUMNS(rmatrix);
    DumpIntegerBlock("before", locations);
    fprintf(report, "\nAdjusting Locations:\n");

    for (i = 0; i < IM_COLUMNS(locations); i++) {
        old_row = IM_ELEMENT(locations, 0, i);
        old_col = IM_ELEMENT(locations, 1, i);
        if (!old_row || !old_col ||
            old_row == rm_rows-1 || old_col == rm_cols-1) {
            continue;
        }
        find_local_max(rmatrix, old_row, old_col, &new_row, &new_col);
        if (new_row != old_row || new_col != old_col) {
            IM_ELEMENT(locations, 0, i) = new_row;
            IM_ELEMENT(locations, 1, i) = new_col;
            fprintf(report, "\t(%u,%u) <=> new (%u,%u)\n",
                old_row+row_offset, old_col+col_offset,
                new_row+row_offset, new_col+col_offset);
        } else {
            fprintf(report, "\t(%u,%u) does not move\n",
                old_row+row_offset, old_col+col_offset);
        }
    }
    DumpIntegerBlock("after", locations);
}
```

89/11/29
22:44:20

rcorr.h

1

```
void find_max_pixel_location(/*RMATRIX rmatrix,unsigned int *max_row,unsigned int *max_col*/);
RMATRIX rmatrix_submatrix(/*RMATRIX rmatrix,unsigned int central_row,unsigned int central_col,unsigned int dimension*/);
RMATRIX sub_pixel_location(/*RMATRIX rmatrix,unsigned int max_row,unsigned int max_col,float *sub_max_row,float *sub_max_col,unsigned int *sub_max_col*/);
RMATRIX make_2nd_deriv_rmatrix(/*unsigned int rows,unsigned int cols*/);
RMATRIX rmatrix_second_derivative(/*RMATRIX rmatrix*/);
void second_derivative_statistic(/*FILE *report,RMATRIX rmatrix,unsigned int max_row,unsigned int max_col,unsigned int row_offset,
int smoothed_derivative_statistic(/*FILE *report,RMATRIX rmatrix,unsigned int max_row,unsigned int max_col,unsigned int row_offset,
void collect_radial_maxima_and_locat(/*RMATRIX rmatrix,unsigned int max_row,unsigned int max_col,RVECTOR *plot,unsigned int *maxi
int report_side_lobe_information(/* a lot of stuff */);
```

90/01/14
21:55:58

RCORR.C

1

```
#include <stdio.h>
#include "assert.h"
#include "zlib.h"
#include "jtools.h"
```

```
RMATRIX rmatrix_fft();
RMATRIX cmatrix_ift();
FCOMPLEX Cmul();
```

```
/*
 * Computations on correlations
 *
 * 1. Pixel Location.
 */
```

```
void find_max_pixel_location(rmatrix, from_row, from_col, rm_rows, rm_cols, max_row, max_col)
```

```
RMATRIX rmatrix;
```

```
unsigned from_row, from_col, rm_rows, rm_cols;
```

```
unsigned *max_row, *max_col;
```

```
{
```

```
    unsigned row, col;
```

```
    float *rvecptr, max;
```

```
    unsigned to_row, to_col;
```

```
    printf("find_max_pixel_location()\n");
```

```
    if (from_row) printf("\tfrom_row = %u\n", from_row);
```

```
    if (from_col) printf("\tfrom_col = %u\n", from_col);
```

```
    if (rm_rows) printf("\trm_rows = %u\n", rm_rows);
```

```
    if (rm_cols) printf("\trm_cols = %u\n", rm_cols);
```

```
    rm_rows = rm_rows?rm_rows:(unsigned) RM_ROWS(rmatrix);
```

```
    rm_cols = rm_cols?rm_cols:(unsigned) RM_COLUMNS(rmatrix);
```

```
    to_row = from_row+rm_rows;
```

```
    to_col = from_col+rm_cols;
```

```
    printf("\tto_row = %u\n", to_row);
```

```
    printf("\tto_col = %u\n", to_col);
```

```
    max = RM_ELEMENT(rmatrix, from_row, from_col);
```

```
    *max_row = from_row; *max_col = from_col;
```

```
    for (row = from_row; row < to_row; row++) {
```

```
        rvecptr = STORAGE(RM_ROW(rmatrix, row));
```

```
        rvecptr += from_col;
```

```
        for (col = from_col; col < to_col; col++, rvecptr++) {
```

```
            if (*rvecptr > max) {
```

```
                max = *rvecptr;
```

```
                *max_row = row;
```

```
                *max_col = col;
```

```
            }
```

```
        }
```

```
    printf("Found maximum %f at row=%u, col=%u\n", max, *max_row, *max_col);
```

```
    return;
```

```
}
```

```
/*
 * CMATRIX
 *
 * sub_pixel_location(rmatrix, max_row, max_col, *sub_max_row, *sub_max_col)
 *
 * Returns subpixel maximum location (in coordinates of rmatrix) of 8x8
 * region centered on max_row, max_col. Also returns the smoothed 64x64
 * region.
 */
```

```
RMATRIX
```

```
sub_pixel_location(rmatrix, max_row, max_col, sub_max_row, sub_max_col, dimension, blowup)
```

```
RMATRIX rmatrix;
```

```
unsigned max_row, max_col;
```

```
float *sub_max_row, *sub_max_col;
```

```
unsigned dimension, blowup;
```

```
{
```

```
    RMATRIX region, expanded_region;
```

```
    CMATRIX region_fft, expanded_region_fft;
```

```
    unsigned row, col;
```

```
    unsigned temp_row, temp_col;
```

```
    unsigned dimension2, blowupsize;
```

```
    unsigned temp;
```

```
    float scale;
```

```
    printf("sub_pixel_location(row=%u, col=%u, dim=%u, blowup=%u)\n",
           max_row, max_col, dimension, blowup);
```

```
    dimension2 = dimension/2;
```

```
    blowupsize = dimension*blowup;
```

```
    temp = blowupsize - dimension2;
```

```
    region = rmatrix_submatrix(rmatrix, max_row, max_col, dimension);
```

90/01/14
21:55:58

RCORR.C

2

```
region_fft = rmatrix_fft(region);
FreeRMatrix(region);

expanded_region_fft =
    MakeCMatrix((AINT)blowupsize, (AINT)blowupsize);
ZeroMatrix(expanded_region_fft);

for (row = 0; row < dimension2; row++) {
    for (col = 0; col < dimension2; col++) {
        CM_ELEMENT(expanded_region_fft, row, col) =
            CM_ELEMENT(region_fft, row, col);
        CM_ELEMENT(expanded_region_fft, row+temp, col) =
            CM_ELEMENT(region_fft, row+dimension2, col);
        CM_ELEMENT(expanded_region_fft, row, col+temp) =
            CM_ELEMENT(region_fft, row, col+dimension2);
        CM_ELEMENT(expanded_region_fft, row+temp, col+temp) =
            CM_ELEMENT(region_fft, row+dimension2, col+dimension2);
    }
}

expanded_region = cmatrix_iffit(expanded_region_fft);
scale = (float)blowupsize/(float)dimension*
        (float)blowupsize/(float)dimension;
for (row = 0; row < blowupsize; row++) {
    for (col = 0; col < blowupsize; col++) {
        RM_ELEMENT(expanded_region, row, col) *= scale;
    }
}

FreeCMatrix(expanded_region_fft);

/*
char buffer[128];
sprintf(buffer, "Expanded region of dimension %d around center (%u,%u)",
        dimension, row, col);
MakeImgFileFromRMatrix("er.img", expanded_region, buffer);
*/

find_max_pixel_location(expanded_region, 0, 0, 0, 0, &temp_row, &temp_col);

/* put subpixel location in terms of coordinates of rmatrix */
*sub_max_row = (float)max_row +
    ((float)temp_row/(float)blowup-(float)dimension2);
*sub_max_col = (float)max_col +
    ((float)temp_col/(float)blowup-(float)dimension2);

printf("sub_pixel_location: max found at (%f,%f)\n", *sub_max_row, *sub_max_col);
printf("sub_pixel_location() returns\n");
return expanded_region;
}

RMATRIX make_2nd_deriv_rmatrix(rows, cols)
unsigned rows, cols;
{
    RMATRIX rmatrix;
    printf("make 2nd deriv_rmatrix(rows=%u, cols=%u)...", rows, cols);
    rmatrix = MakeRMatrix(0L, (AINT)rows, 0L, (AINT)cols);
    assert ((rows>2) && (cols>2));
    ZeroMatrix((CMATRIX)rmatrix);
    RM_ELEMENT(rmatrix, 1, 0) =
        RM_ELEMENT(rmatrix, 0, 1) =
            RM_ELEMENT(rmatrix, 1, 2) =
                RM_ELEMENT(rmatrix, 2, 1) = 1;

    RM_ELEMENT(rmatrix, 1, 1) = -4;
    printf("\n");
    return rmatrix;
}

/*
* RMATRIX rmatrix_second_derivative(rmatrix)
* Computes derivative approx by convolving rmatrix with
* [0 1 0]
* [1 -4 1]
* [0 1 0]
* using the Fourier method. Returns derivative matrix.
*/
FALSE
RMATRIX
    rmatrix_second_derivative(rmatrix)
RMATRIX rmatrix;
{
    RMATRIX result, convolv;
    CMATRIX convolv_fft, rmat_fft;
```


90/01/14
21:55:58

RCORT.C

3

```
unsigned rm_rows, rm_cols, row, col;
FCOMPLEX *cvecptr1, *cvecptr2;
unsigned step_squared = step*step;

printf("rmatrix_second_derivative()\n");

rm_rows = (unsigned) RM_ROWS(rmatrix);
rm_cols = (unsigned) RM_COLUMNS(rmatrix);

convolv = make_2nd_deriv_rmatrix(rm_rows, rm_cols);
convolv_fft = rmatrix_fft(convolv);
FreeRMatrix(convolv);
rmat_fft = rmatrix_fft(rmatrix);

for (row = 0; row < rm_rows; row++) {
    cvecptr1 = STORAGE(CM_ROW(rmat_fft, row));
    cvecptr2 = STORAGE(CM_ROW(convolv_fft, row));
    for (col = 0; col < rm_cols; col++) {
        *cvecptr1 = Cmul(*cvecptr1, *cvecptr2);
        cvecptr1++, cvecptr2++;
    }
}
FreeCMatrix(convolv_fft);
result = cmatrix_ifft(rmat_fft);
FreeCMatrix(rmat_fft);
printf("rmatrix_second_derivative() returns\n");
return result;
}

else
static unsigned count=0;
RMATRIX
rmatrix_second_derivative(rmatrix, step)
RMATRIX rmatrix;
unsigned step;
{
    RMATRIX result;
    unsigned rm_rows, rm_cols, row, col;
    unsigned step_squared = step*step;

    rm_rows = (unsigned) RM_ROWS(rmatrix);
    rm_cols = (unsigned) RM_COLUMNS(rmatrix);
    printf("rmatrix_second_derivative() rows=%u, cols=%u\n", rm_rows, rm_cols);

    result = MakeRMatrix(OL, (AINT)rm_rows, OL, (AINT)rm_cols);
    ZeroMatrix(result);
#ifdef IDONICARE
    /* First do corners */
    RM_ELEMENT(result, 0, 0) = RM_ELEMENT(rmatrix, 0, 1) +
        RM_ELEMENT(rmatrix, 1, 0) - 2*RM_ELEMENT(rmatrix, 0, 0);

    RM_ELEMENT(result, 0, rm_cols-1) = RM_ELEMENT(rmatrix, 0, rm_cols-2) +
        RM_ELEMENT(rmatrix, 1, rm_cols-1) -
        2*RM_ELEMENT(rmatrix, 0, rm_cols-1);

    RM_ELEMENT(result, rm_rows-1, 0) = RM_ELEMENT(rmatrix, rm_rows-2, 0) +
        RM_ELEMENT(rmatrix, rm_rows-1, 1) -
        2*RM_ELEMENT(rmatrix, rm_rows-1, 0);

    RM_ELEMENT(result, rm_rows-1, rm_cols-1) =
        RM_ELEMENT(rmatrix, rm_rows-2, rm_cols-1) +
        RM_ELEMENT(rmatrix, rm_rows-1, rm_cols-2) -
        2*RM_ELEMENT(rmatrix, rm_rows-1, rm_cols-1);
#endif
    /* Do Vertical edges */
    for (row = 1; row < rm_rows-1; row++) {
        RM_ELEMENT(result, row, 0) = RM_ELEMENT(rmatrix, row, 1) +
            RM_ELEMENT(rmatrix, row-1, 0) + RM_ELEMENT(rmatrix, row+1, 0) -
            3*RM_ELEMENT(rmatrix, row, 0);

        RM_ELEMENT(result, row, rm_cols-1) =
            RM_ELEMENT(rmatrix, row, rm_cols-2) +
            RM_ELEMENT(rmatrix, row-1, rm_cols-1) +
            RM_ELEMENT(rmatrix, row+1, rm_cols-1) -
            3*RM_ELEMENT(rmatrix, row, rm_cols-1);
    }

    /* Do Horizontal edges */
    for (col = 1; col < rm_cols-1; col++) {
        RM_ELEMENT(result, 0, col) = RM_ELEMENT(rmatrix, 1, col) +
            RM_ELEMENT(rmatrix, 0, col-1) + RM_ELEMENT(rmatrix, 0, col+1) -
            3*RM_ELEMENT(rmatrix, 0, col);

        RM_ELEMENT(result, rm_rows-1, col) =
            RM_ELEMENT(rmatrix, rm_rows-2, col) +
            RM_ELEMENT(rmatrix, rm_rows-1, col-1) +
            RM_ELEMENT(rmatrix, rm_rows-1, col+1) -
            3*RM_ELEMENT(rmatrix, rm_rows-1, col);
    }
}
```

90/01/14
21:55:58

4

RCORR.C

```
RM_ELEMENT(rmatrix, rm_rows-1, col+1) -  
3*RM_ELEMENT(rmatrix, rm_rows-1, col);
```

```
/* IDONTCARE */  
  
/* Do Central Region */  
for (row = 2; row < rm_rows-2; row++) {  
    for (col = 2; col < rm_cols-2; col++) {  
        RM_ELEMENT(result, row, col) = step_squared *  
            (4*RM_ELEMENT(rmatrix, row, col) -  
             RM_ELEMENT(rmatrix, row, col-1) -  
             RM_ELEMENT(rmatrix, row, col+1) -  
             RM_ELEMENT(rmatrix, row-1, col) -  
             RM_ELEMENT(rmatrix, row+1, col));  
    }  
}  
  
#ifdef ZOMBIE  
    RM_ELEMENT(result, row, col) = fabs(RM_ELEMENT(rmatrix, row, col-1) +  
    RM_ELEMENT(rmatrix, row, col+1) + RM_ELEMENT(rmatrix, row-1, col) +  
    RM_ELEMENT(rmatrix, row+1, col) -  
    4*RM_ELEMENT(rmatrix, row, col));  
#endif  
  
}  
printf("rmatrix_second_derivative() returns\n");  
return result;  
  
#endif  
  
second_derivative_statistic(report, rmatrix, max_row, max_col, row_offset, col_offset, dimension)  
FILE *report;  
RMATRIX rmatrix;  
unsigned max_row, max_col;  
unsigned row_offset, col_offset;  
unsigned dimension;  
{  
    RMATRIX region, region_derivative;  
    unsigned dimension2;  
    unsigned region_max_row, region_max_col;  
  
    if (!dimension) dimension = 64;  
    dimension2 = dimension/2;  
  
    printf("second_derivative_statistic(rows=%u, cols=%u, dim=%u)\n",  
        max_row, max_col, dimension);  
  
    region = rmatrix_submatrix(rmatrix, max_row, max_col, dimension);  
    region_derivative = rmatrix_second_derivative(region, 1);  
    FreeRMATRIX(region);  
    find_max_pixel_location(region_derivative, 0, 0, 0, 0, &region_max_row, &region_max_col);  
  
    printf("second_derivative_statistic: second derivative at (%u,%u) is %f\n",  
        max_row+row_offset, max_col+col_offset,  
        RM_ELEMENT(region_derivative, dimension2, dimension2));  
  
    /* Express max row and col in terms of rmatrix */  
    max_row = max_row + row_offset + region_max_row - dimension2;  
    max_col = max_col + col_offset + region_max_col - dimension2;  
  
    printf("second_derivative_statistic: max %f found at (%u,%u)\n",  
        RM_ELEMENT(region_derivative, region_max_row, region_max_col),  
        max_row, max_col);  
  
    fprintf(report, "Laplacian Value at max location is %f at (%u,%u)\n",  
        RM_ELEMENT(region_derivative, region_max_row, region_max_col),  
        max_row, max_col);  
}  
  
smoothed_derivative_statistic(report, rmatrix, max_row, max_col, row_offset, col_offset, dimension, blowup)  
FILE *report;  
RMATRIX rmatrix;  
unsigned max_row, max_col;  
unsigned row_offset, col_offset;  
unsigned dimension, blowup;  
{  
    RMATRIX smoothed_region, region_derivative;  
    unsigned smoothed_region_max_row, smoothed_region_max_col;  
    float sub_max_row, sub_max_col;  
    unsigned dimension2;  
  
    if (!dimension) dimension = 8;  
    if (!blowup) blowup = 8;  
  
    dimension2 = dimension/2;
```

```
printf("smoothed_derivative_statistic(rows=%u,cols=%u,dim=%u,blowup=%u)\n",
      max_row, max_col, dimension, blowup);
```

```
smoothed_region = sub_pixel_location(rmatrix, max_row, max_col,
                                     &sub_max_row, &sub_max_col, dimension, blowup);
```

```
region_derivative = rmatrix_second_derivative(smoothed_region, blowup);
```

```
find_max_pixel_location(region_derivative,
                        (dimension*blowup-blowup)/2, (dimension*blowup-blowup)/2,
                        2*blowup, 2*blowup,
                        &smoothed_region_max_row, &smoothed_region_max_col);
FreeRMMatrix(smoothed_region);
```

```
/* Express max row and col in terms of rmatrix */
sub_max_row = (float) max_row + row_offset +
              (float) smoothed_region_max_row / (float) blowup - (float) dimension2;
sub_max_col = (float) max_col + col_offset +
              (float) smoothed_region_max_col / (float) blowup - (float) dimension2;

fprintf(report,
        "Smoothed (FFT) Maximum Laplacian Value is %0.2f at (%0.3f,%0.3f)\n",
        RM_ELEMENT(region_derivative,
                    smoothed_region_max_row, smoothed_region_max_col),
        sub_max_row, sub_max_col);
```

```
#define MIN_FLOAT -3.4e38
```

```
void collect_radial_maxima_and_locations(rmatrix, max_row, max_col, min_value, max_value, locations)
```

```
RMATRIX rmatrix;
```

```
unsigned max_row, max_col;
```

```
float *min_value, *max_value;
```

```
IMATRIX *locations;
```

```
{
```

```
    RVECTOR plot;
```

```
    IVECTOR max_rows, max_cols;
```

```
    float *rvecptr;
```

```
    unsigned rm_rows, rm_cols, row, col, dist, max_dist;
```

```
    enum mode {up, down} direction;
```

```
    unsigned maxima_count = 0;
```

```
    rm_rows = (unsigned) RM_ROWS(rmatrix);
```

```
    rm_cols = (unsigned) RM_COLS(rmatrix);
```

```
    if (!max_row || !max_col || max_row == rm_rows || max_col == rm_cols) {
        fprintf(stderr, "collect_radial_maxima...: max_row or max_col out of bounds\n");
        exit(1);
    }
```

```
    max_dist = (unsigned) sqrt((double) (rm_rows*rm_rows+rm_cols*rm_cols));
```

```
    plot = MakeRVector(0L, (AINT)max_dist);
```

```
    max_rows = MakeIVector(0L, (AINT)max_dist);
```

```
    max_cols = MakeIVector(0L, (AINT)max_dist);
```

```
    for (dist = 0 ; dist < max_dist; dist++) {
```

```
        VREF(plot, dist) = MIN_FLOAT;
```

```
        VREF(max_rows, dist) = -1;
```

```
        VREF(max_cols, dist) = -1;
```

```
    }
```

```
    *min_value = RM_ELEMENT(rmatrix, 0, 0);
```

```
    for (row = 0; row < rm_rows; row++) {
```

```
        rvecptr = STORAGE(RM_ROW(rmatrix, row));
```

```
        for (col = 0; col < rm_cols; col++, rvecptr++) {
```

```
            dist = (unsigned) (sqrt((double) ((row - max_row)*(row - max_row) +
            (col - max_col)*(col - max_col))) + .5);
```

```
            if (VREF(plot, dist) < *rvecptr) {
```

```
                VREF(plot, dist) = *rvecptr;
```

```
                VREF(max_rows, dist) = row;
```

```
                VREF(max_cols, dist) = col;
```

```
            }
```

```
            if (*min_value > *rvecptr) {
```

```
                *min_value = *rvecptr;
```

```
            }
```

```
        }
```

```
    *max_value = VREF(plot, 0);
```

```
    for (dist = 0 ; dist < max_dist; dist++) {
```

```
        if (VREF(plot, dist) < *min_value)
```

```
            VREF(plot, dist) = *min_value;
```

```
    }
```

90/01/14
21:55:58

6

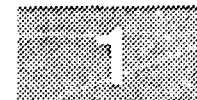
rcorr.c

```
(*locations) = MakeIMatrix(OL,3L,OL, (AINT)max_dist/2);
ZeroMatrix((*locations));
maxima_count = 0;
IM_ELEMENT((*locations), 0, maxima_count) = VREF(max_rows, 0);
IM_ELEMENT((*locations), 1, maxima_count) = VREF(max_cols, 0);
IM_ELEMENT((*locations), 2, maxima_count) = 0;
maxima_count++;

direction = down;
for (dist = 1; dist < max_dist; dist++) {
    if (VREF(plot, dist) < VREF(plot, dist-1)) {
        if (direction==up) {
            /* mark as max and change direction */
            IM_ELEMENT((*locations), 0, maxima_count) =
                VREF(max_rows, dist-1);
            IM_ELEMENT((*locations), 1, maxima_count) =
                VREF(max_cols, dist-1);
            IM_ELEMENT((*locations), 2, maxima_count) = dist-1;
            maxima_count++;
            direction = down;
        }
    }
    else if (direction == down) {
        direction = up;
    }
}
IM_COLUMNS((*locations)) = maxima_count;
```

90/01/18
09:17:31

m_small.c



```
#include <stdio.h>
#include <zlib.h>
#include "jtools.h"
#include "rm_corr.h"

int main(void) {
    int argc;
    char *argv[];

    if (argc < 8) {
        printf("usage: %s <image> <row> <col> <width> <height> <rate> <scale> {output}\n", argv[0]);
        exit(1);
    }

    unsigned row, col, width, height;
    char buffer[128], dir[128], base[9], ext[4];
    float rate, scale;

    row = atoi(argv[2]);
    col = atoi(argv[3]);
    width = atoi(argv[4]);
    height = atoi(argv[5]);
    rate = atof(argv[6]);
    scale = atof(argv[7]);

    if (width == 0 || height == 0) {
        printf("%s: width and height must be non-zero\n", argv[0]);
        exit(1);
    }

    image = MakeRMMatrixFromFileExt(argv[1]);
    if (scale != 0.0 && scale < 1.0) {
        unsigned srow, scol, swidth, sheight;
        srow = row - height/2;
        scol = col - width/2;
        swidth = 2*width;
        sheight = 2*height;
        subimage = make_small_image(image, sheight, swidth, srow, scol);

        if (rate != 0.0) {
            IntroduceGaussianWhiteNoise(subimage, sheight, swidth, (double)rate);
        }

        if (scale != 0.0 && scale != 1.0) {
            RescaleImage(subimage, sheight, swidth, (double)scale);
        }
    } else {
        subimage = make_small_image(image, height, width, row, col);

        if (rate != 0.0) {
            IntroduceGaussianWhiteNoise(subimage, height, width, (double)rate);
        }

        if (scale != 0.0 && scale != 1.0) {
            RescaleImage(subimage, height, width, (double)scale);
        }
    }

    ZeroSumRMMatrix(subimage, width, height);
    sprintf(buffer, "SubImage of %s: x=%u, y=%u, width=%u, height=%u",
        argv[1], col, row, width, height);

    if (argc > 8) {
        parsefn(argv[8], dir, base, ext);
        if (base[0]) {
            DumpCoeffBlock(argv[8], subimage);
            exit(0);
        }
    }

    DumpCoeffBlock("aaaaa.flit", subimage);
    exit(0);
}
```

89/11/22
19:35:38

interp.c

1

```
#include <stdio.h>
#include <zlib.h>
#include "jtools.h"
#include "rm_corr.h"
#define max(a,b) (((a)<(b))?(b):(a))
RMATRIX rmatrix_interpolate();
void RescaleImage();

RMATRIX
rmatrix_interpolate(rmatrix, row_start, col_start, dimension, blowupsize)
RMATRIX rmatrix;
unsigned row_start, col_start, dimension, blowupsize;
{
    unsigned row, col, rm_rows, rm_cols;
    RMATRIX region, expanded_rmatrix;
    CMATRIX rmat_fft, expanded_rmatrix_fft;
    unsigned temp, dimension2;
    float scale;

    printf("rmatrix_interpolate: \n");
    dimension = dimension?dimension:RM_ROWS(rmatrix);
    dimension2 = dimension/2;
    temp = blowupsize - dimension2;

    if (row_start != 0 || col_start != 0 || dimension != RM_ROWS(rmatrix)) {
        rmatrix = rmatrix_submatrix(rmatrix, row_start+dimension2,
                                     col_start+dimension2, dimension);
        rmat_fft = rmatrix_fft(rmatrix);
        FreeRMATRIX(rmatrix);
    }
    else {
        rmat_fft = rmatrix_fft(rmatrix);
        FreeRMATRIX(rmatrix);
    }

    expanded_rmatrix_fft =
        MakeCMATRIX((AINT)blowupsize, (AINT)blowupsize);
    ZeroMatrix(expanded_rmatrix_fft);

    for (row = 0; row < dimension2; row++) {
        for (col = 0; col < dimension2; col++) {
            CM_ELEMENT(expanded_rmatrix_fft, row, col) =
                CM_ELEMENT(rmat_fft, row, col) -
                CM_ELEMENT(expanded_rmatrix_fft, row+temp, col) -
                CM_ELEMENT(rmat_fft, row+dimension2, col);
            CM_ELEMENT(expanded_rmatrix_fft, row, col+temp) =
                CM_ELEMENT(rmat_fft, row, col+dimension2);
            CM_ELEMENT(expanded_rmatrix_fft, row+temp, col+temp) =
                CM_ELEMENT(rmat_fft, row+dimension2, col+dimension2);
        }
    }

    expanded_rmatrix = cmatrix_ifft(expanded_rmatrix_fft);
    FreeCMATRIX(expanded_rmatrix_fft);
    /* cmatrix_ifft divided each element in expanded_rmatrix by
     * blowupsize*blowupsize when it should have divided by
     * dimension*dimension
     */
    scale = (float)blowupsize/(float)dimension*
        (float)blowupsize/(float)dimension;
    for (row = 0; row < blowupsize; row++) {
        for (col = 0; col < blowupsize; col++) {
            RM_ELEMENT(expanded_rmatrix, row, col) *= scale;
        }
    }

    MakeImgFileFromRMATRIX("j:\\bigw2.img", expanded_rmatrix, "");
    return expanded_rmatrix;
}

void RescaleImage(rmatrix, height, width, scale)
RMATRIX rmatrix;
unsigned width, height;
double scale;
{
    RMATRIX interp;
    unsigned row, col;
    unsigned row_offset, col_offset;
    unsigned n;

    printf("RescaleImage: scale = %lf\n", scale);

    n = max(width,height);
    if (scale > 1.0) {
        n = max(width,height);
        row_offset = (unsigned) (512.*((1.-height/(n*scale))/2.));
        col_offset = (unsigned) (512.*((1.-width/(n*scale))/2.));
    }
}
```

89/11/22
19:35:38

interp.c

2

```
interp = rmatrix_interpolate(rmatrix, 0, 0, n, 512);

for (row = 0; row < height; row++) {
    for (col = 0; col < width; col++) {
        RM_ELEMENT(rmatrix, row, col) =
            RM_ELEMENT(interp,
                row_offset + (unsigned) (512./n/scale*row),
                col_offset + (unsigned) (512./n/scale*col));
    }
}
FreeRMatrix(interp);
return;
}
else {
    /* scale < 1.0 */
    /* Rescale RMatrix to contain width/2 by height/2 points */
    row_offset = (unsigned) (512.*((1.-height/(n*scale))/2.)) + 128;
    col_offset = (unsigned) (512.*((1.-width/(n*scale))/2.)) + 128;

    interp = rmatrix_interpolate(rmatrix, 0, 0, n, 512);

    for (row = 0; row < height; row++) {
        for (col = 0; col < width; col++) {
            if (row < height/2 && col < width/2) {
                RM_ELEMENT(rmatrix, row, col) =
                    RM_ELEMENT(interp,
                        row_offset + (unsigned) (512./n/scale*row),
                        col_offset + (unsigned) (512./n/scale*col));
            }
            else {
                RM_ELEMENT(rmatrix, row, col) = 0.0;
            }
        }
    }

    FreeRMatrix(interp);
    return;
}
}
```

89/11/14
14:40:58

jtools.h

1

```
RMATRIX rmatrix_submatrix(/*RMATRIX,unsigned int central_row,unsigned int central_col,unsigned int dimension*/);
void DumpRVector(/*char *fn,RVECTOR rvec*/);
RVECTOR MakeRVectorFromFile(/*char *fn*/);
void ZeroSumRMATRIX(/*RMATRIX rmatrix,int width,int height*/);
void NormalizeRMATRIX(/*RMATRIX rmatrix*/);
void MakeImgfileFromRMATRIX(/*char *filename,RMATRIX rmatrix,char *comment*/);
extern void parsefn(/*char *fn,char *dirbuf,char *basebuf,char *extbuf*/);
RMATRIX MakeRMATRIXFromFileExt(/*char *fn*/);
CMATRIX MakeCMATRIXFromFile(/*char *filename*/);
void DumpCMATRIX(/*char *f_name,struct UNNAMED *cmatrix*/);
RMATRIX RMATRIXFromCMATRIX(/*CMATRIX cmatrix*/);
double random1();
double gaussian_random();
void IntroduceGaussianWhiteNoise(/*RMATRIX rmatrix, unsigned rows, unsigned cols, double rate*/);
```


89/11/21
16:02:48

jtools.c

1

```
#include <stdio.h>
#include <assert.h>
#include <malloc.h>
#include <strings.h>
#include <zlib.h>
#include "jtools.h"

char *xAMalloc();

/*
 * rmatrix_submatrix(rmatrix, row, col, dimension)
 * Creates a submatrix of "rmatrix" whose "dimension"x"dimension"
 * entries are the submatrix of that size with center "row", "col" in
 * "rmatrix".
 *
 * Dimension defaults to 64 if zero. rmatrix is not altered.
 */
RMATRIX rmatrix_submatrix(rmatrix, central_row, central_col, dimension)
RMATRIX rmatrix;
unsigned central_row, central_col;
unsigned dimension;
{
    RMATRIX region;
    unsigned row, col, dimension2;

    if (!dimension) dimension = 64;
    dimension2 = dimension/2;

    if ((central_row+dimension2 > (unsigned)RM_ROWS(rmatrix)) ||
        (central_col+dimension2 > (unsigned)RM_COLUMNS(rmatrix)) ||
        ((int)central_row-(int)dimension2 < (int)0) ||
        ((int)central_col-(int)dimension2 < (int)0)) {
        fprintf(stderr, "rmatrix_submatrix: arguments invalid\n");
        exit(-1);
    }

    printf("rmatrix_submatrix(row=%u, col=%u, dim=%u)...",
           central_row, central_col, dimension);
    printf("from row %u to before row %u", central_row-dimension2, central_row+dimension2);
    region = MakeRMMatrix(0L, (AINT)dimension, 0L, (AINT)dimension);
    for (row = 0; row < dimension; row++) {
        for (col = 0; col < dimension; col++) {
            RM_ELEMENT(region, row, col) =
                RM_ELEMENT(rmatrix, (central_row-dimension2+row),
                           (central_col-dimension2+col));
        }
    }

#ifdef ZOMBIE
    for (row = central_row-dimension2; row < central_row+dimension2; row++) {
        for (col = central_col-dimension2; col < central_col+dimension2; col++) {
            RM_ELEMENT(region,
                       row-(central_row-dimension2),
                       col-(central_col-dimension2)) =
                RM_ELEMENT(rmatrix, row, col);
        }
    }
#endif

    printf("\n"), fflush(stdout);
    return region;
}

void DumpRVector(fn, rvec)
char *fn;
RVECTOR rvec;
{
    RMATRIX rmatrix;
    unsigned i;

    rmatrix = MakeRMMatrix(0L, 1L, 0L, SIZE(rvec));
    for (i=0; i<SIZE(rvec); i++) {
        RM_ELEMENT(rmatrix, 0, i) = VREF(rvec, i);
    }
    DumpCoeffBlock(fn, rmatrix);
    FreeRMMatrix(rmatrix);
    return;
}

RVECTOR MakeRVectorFromFile(fn)
char *fn;
{
    RMATRIX rmatrix;
    RVECTOR rvec;
    unsigned i;
}
```

89/11/21
16:02:48

jtools.c

2

```
rmatrix = MakeRMMatrixFromFile(fn);
for (i=0; i<RM_COLUMNS(rmatrix); i++) {
    VREF(rvec, i) = RM_ELEMENT(rmatrix, 0, i);
}
FreeRMMatrix(rmatrix);
return rvec;
```

```
/*
 * Function: ZeroSumRMMatrix
 *
 * Modifies: input
 *
 * Description:
 *
 * Transforms RMATRIX "rmatrix" to be zero-sum. Optional arguments
 * width and height override RM_COLUMNS() and RM_ROWS().
 */
```

```
void ZeroSumRMMatrix(rmatrix, width, height)
RMATRIX rmatrix;
int width, height;
{
    int i, j, rm_rows, rm_cols;
    float *rvecptr, average;
    double sum=0.0;

    printf("ZeroSumRMMatrix(width=%d, height=%d):\n", width, height);
    rm_rows = (height)?height:(int)RM_ROWS(rmatrix);
    rm_cols = (width)?width:(int)RM_COLUMNS(rmatrix);

    for (i=0; i<rm_rows; i++) {
        rvecptr = STORAGE(RM_ROW(rmatrix, i));
        for(j=0; j<rm_cols; j++) {
            sum += *rvecptr++;
        }
    }

    average = (sum/(rm_rows*rm_cols));

    for (i=0; i<rm_rows; i++) {
        rvecptr = STORAGE(RM_ROW(rmatrix, i));
        for(j=0; j<rm_cols; j++) {
            (*rvecptr) -= average;
            rvecptr++;
        }
    }
    printf("ZeroSumRMMatrix() returns\n");
}
```

```
/*
 * Function: NormalizeRMMatrix
 *
 * Modifies: input
 *
 * Description:
 *
 * Transforms RMATRIX "rmatrix" to be zero-sum with a range of 255.
 *
 * Assumes that 0 is a valid column.
 */
```

```
void NormalizeRMMatrix(rmatrix)
RMATRIX rmatrix;
{
    int i, j, rm_rows, rm_cols;
    float *rvecptr, average, max, min, element, range, scale;
    double sum=0.0;

    rm_rows = (int) RM_ROWS(rmatrix);
    rm_cols = (int) RM_COLUMNS(rmatrix);

    printf("NormalizeRMMatrix() called with size = %d,%d\n",
           rm_rows, rm_cols);
    fflush(stdout);

    max = min = RM_ELEMENT(rmatrix, 0, 0);

    for (i=0; i<rm_rows; i++) {
        rvecptr = STORAGE(RM_ROW(rmatrix, i));
```

89/11/21
16:02:48

jtools.c

3

```
        for(j=0; j<rm_cols; j++) {
            element = *rvecptr++;
            if (min>element) min=element;
            else if (max<element) max=element;
            sum += element;
        }

    average = (sum/(rm_rows*rm_cols));
    range   = max - min;
    scale   = 255./range;

    printf("NormalizeRMatrix: max =%f, min=%f, average=%f, range=%f\n",
           max, min, average, range);
    fflush(stdout);

    for (i=0; i<rm_rows; i++) {
        rvecptr = STORAGE(RM_ROW(rmatrix, i));
        for(j=0; j<rm_cols; j++) {
            (*rvecptr) = scale*((*rvecptr)-min);
            (*rvecptr) = 255*((*rvecptr)-average)/range;
        }
        rvecptr++;
    }
}

/*
*/

void
MakeImgFileFromRMatrix (filename, rmatrix, comment)
char *filename, *comment;
RMATRIX rmatrix;
{
    register int i, j;
    unsigned char data8;
    char out_str[20];
    int rows, columns;
    FILE *img_file;

    if (TYPE(rmatrix) != TYPE_RMATRIX)
    {
        printf ("MakeImgFileFromRMatrix - argument is not an RMATRIX!\n");
        exit (-1);
    }

    rows = RM_ROWS(rmatrix);
    columns = RM_COLUMNS(rmatrix);

    /* in NDP C-386, _pmode takes the place of "wb" in the fopen */
    _pmode = 0x8000;
    img_file = fopen (filename, "w");
    if (img_file == NULL)
    {
        printf ("MakeImgFileFromRMatrix - can't open %s\n", filename);
        exit (-1);
    }

    NormalizeRMatrix(rmatrix);

    data8 = 0x33; /* ASCII '3' */
    fwrite (&data8, 1, 1, img_file);

    fwrite (comment, 1, strlen (comment) + 1, img_file);

    strcpy (out_str, "Data Format");
    fwrite (out_str, 1, strlen (out_str) + 1, img_file);

    strcpy (out_str, "u_char");
    fwrite (out_str, 1, strlen (out_str) + 1, img_file);

    strcpy (out_str, "Y Dimension");
    fwrite (out_str, 1, strlen (out_str) + 1, img_file);

    sprintf (out_str, "%d", rows);
    fwrite (out_str, 1, strlen (out_str) + 1, img_file);

    strcpy (out_str, "X Dimension");
    fwrite (out_str, 1, strlen (out_str) + 1, img_file);

    sprintf (out_str, "%d", columns);
    fwrite (out_str, 1, strlen (out_str) + 1, img_file);

    for (j = 0; j < rows; j++)
        for (i = 0; i < columns; i++)
        {
            data8 = (unsigned char) RM_ELEMENT(rmatrix, j, i);
```

89/11/21
16:02:48

jtools.c

4

```
if (fwrite (&data8, 1, 1, img_file) < 1)
{
    printf ("MakeImgFileFromRMatrix - write error!\n");
    exit (-1);
}

fclose (img_file);

void parsefn(fn, dirbuf, basebuf, extbuf)
char *fn, dirbuf[], basebuf[], extbuf[];
{
    int i, dotindex;

    extbuf[0] = NULL;
    dirbuf[0] = NULL;
    basebuf[0] = NULL;
    dotindex = strlen(fn);

    for (i = dotindex-1; i>=0; i--) {
        if (fn[i] == '.') {
            /* found extension */
            strncpy(extbuf, &fn[i+1], dotindex-i);
            dotindex = i;
            continue;
        }

        if (fn[i] == '\\' || fn[i] == '/' || fn[i] == ':') {
            strncpy(basebuf, &fn[i+1], dotindex-i-1);
            basebuf[dotindex-i-1] = NULL;
            i++;
            break;
        }
    }

    if (i > 0) {
        strncpy(dirbuf, fn, i);
        dirbuf[i] = NULL;
    }
    else {
        strncpy(basebuf, fn, dotindex);
        basebuf[dotindex] = NULL;
    }

    printf("dirname: dir=%s, base=%s, ext=%s\n", dirbuf, basebuf, extbuf);
    return;
}

RMATRIX MakeRMatrixFromFileExt (fn)
char *fn;
{
    char dir[128], base[9], ext[4];
    parsefn(fn, dir, base, ext);
    if (!base[0]) {
        printf("MakeRMatrixFromFileExt: Couldn't parse filename %s\n",
            fn);
        exit (-1);
    }
    if (access(fn, 0x04)) {
        /* Use "dir" as temp space */
        sprintf(dir, "MakeRMatrixFromFileExt: %s", fn);
        perror(dir);
        exit (-1);
    }
    if (!strcmp(ext, "img")) {
        return MakeRMatrixFromImgFile(fn);
    }
    if (!strcmp(ext, "flt") || !strcmp(ext, "cor")) {
        return MakeRMatrixFromFile(fn);
    }
    if (!strcmp(ext, "fft")) {
        /* stored as .flt files */
        return MakeRMatrixFromFile(fn);
    }
    printf("MakeRMatrixFromFileExt: don't recognize extension %s\n", ext);
    exit (-1);
}
```

#define SWAP 0x53574150 /* ASCII "SWAP" */

89/11/21
16:02:48

jtools.c

5

```
/*
 * This code has to be prepared to make the swap if necessary, but alas
 * I left no way of knowing whether the swap is in fact necessary.
 * My solution: if we get an early EOF, we swap and try again.
 *               also, if there is still some file left after reading,
 *               we swap and try again. I realize this is an outlaw
 *               routine, but wtf?
 */
static int swap = {FALSE};

CMATRIX
MakeCMatrixFromFile (filename)
char *filename;
{
    register int i, j;
    unsigned short rows, columns;
    unsigned short data16;
    unsigned long data32, data32b;
    float fl_temp;
    CMATRIX cmatrix;
    FCOMPLEX *cvecptr;
    FILE *infile;

    /* _pmode set takes the place of "rb" in the fopen */
    _pmode = "08000";
    infile = fopen (filename, "r");
    if (!infile || !infile)
    {
        printf ("MakeCMatrixFromFile - can't open file %s\n", filename);
        exit (-1);
    }

    #ifdef SWAP
        fread (&data32, 4, 1, infile);
        if (data32 != SWAP)
        {
            data32b = 0;
            for (i = 0; i < 4; i++)
            {
                data32b |= ((data32 >> (24 - (i * 8))) & 0xff) << (i * 8);
            }
            if (data32b != SWAP) /* must be an old style file, without SWAP */
            {
                rows = *(unsigned short *)&data32;
                columns = *((unsigned short *)&data32 + 1);
            }
            else
            {
                fread (&rows, 2, 1, infile);
                fread (&columns, 2, 1, infile);
                swap = TRUE;
            }
        }
        else
        {
            fread (&rows, 2, 1, infile);
            fread (&columns, 2, 1, infile);
        }
    #else
        fread (&rows, 2, 1, infile);
        fread (&columns, 2, 1, infile);
    #endif /* SWAP */

    if (swap) {
        data16 = rows >> 8;
        data16 |= (rows & 0xff) << 8;
        rows = data16;
        data16 = columns >> 8;
        data16 |= (columns & 0xff) << 8;
        columns = data16;
    }

    if (rows > 16384) { /* kind of arbitrary */
        if (!swap) {
            swap = TRUE;
            fclose (infile);
            return (MakeCMatrixFromFile (filename));
        }
        else {
            printf ("MakeCMatrixFromFile - broken file, line %d\n", __LINE__);
            exit (-2);
        }
    }

    cmatrix = MakeCMatrix ((AINT)rows, (AINT)columns);

    for (j = 0; j < rows; j++) {
```

89/11/21
16:02:48

jtools.c

6

```
cvecptr = STORAGE(CM_ROW(cmatrix, j));
for (i = 0; i < columns; i++, cvecptr++) {
    if (fread (&fl_temp, sizeof(float), 1, infile) < 1) {
        if (!swap) {
            swap = TRUE;
            fclose (infile);
            return (MakeCMatrixFromFile (filename));
        }
        else {
            printf ("MakeCMatrixFromFile - broken file, line %d\n", __LINE__);
            exit (-2);
        }
    }
    if (swap) {
        data32 = *((unsigned long *)&fl_temp >> 24;
        data32 |= ((* (unsigned long *)&fl_temp >> 16) & 0xff) << 8;
        data32 |= ((* (unsigned long *)&fl_temp >> 8) & 0xff) << 16;
        data32 |= ((* (unsigned long *)&fl_temp & 0xff) << 24;
        fl_temp = *(float *)&data32;
    }
    cvecptr->r = fl_temp;

    if (fread (&fl_temp, sizeof(float), 1, infile) < 1) {
        if (!swap) {
            swap = TRUE;
            fclose (infile);
            return (MakeCMatrixFromFile (filename));
        }
        else {
            printf ("MakeCMatrixFromFile - broken file, line %d\n", __LINE__);
            exit (-2);
        }
    }
    if (swap) {
        data32 = *((unsigned long *)&fl_temp >> 24;
        data32 |= ((* (unsigned long *)&fl_temp >> 16) & 0xff) << 8;
        data32 |= ((* (unsigned long *)&fl_temp >> 8) & 0xff) << 16;
        data32 |= ((* (unsigned long *)&fl_temp & 0xff) << 24;
        fl_temp = *(float *)&data32;
    }
    cvecptr->i = fl_temp;
}

/* The next read SHOULD produce an error. If not, try again */
if (fread (&fl_temp, sizeof(float), 1, infile) > 0) {
    if (!swap) {
        swap = TRUE;
        fclose (infile);
        return (MakeCMatrixFromFile (filename));
    }
    else {
        printf ("MakeCMatrixFromFile - broken file, line %d\n", __LINE__);
        exit (-2);
    }
}

fclose (infile);
swap = FALSE;
return (cmatrix);

void
DumpCMatrix (f_name, cmatrix)
char *f_name;
CMATRIX cmatrix;
{
    register int i, j;
    unsigned short data16;
    unsigned long data32;
    float fl_temp;
    FCOMPLEX *cvecptr;
    FILE *outfile;
    unsigned cm_rows, cm_cols;

    if (TYPE(cmatrix) != TYPE_CMATRIX) {
        printf ("DumpCMatrix - Argument is not a CMATRIX!\n");
        exit (-1);
    }
    /* _pmode set takes the place of "wb" in the fopen */
    _pmode = 0x8000;
    if (!outfile = fopen (f_name, "w")) {
        printf ("DumpCMatrix - can't open file %s\n", f_name);
        exit (-2);
    }
}
```

```

cm_rows = (unsigned) CM_ROWS(cmatrix);
cm_cols = (unsigned) CM_COLUMNS(cmatrix);

data32 = SWAP;
fwrite (&data32, 4, 1, outfile);
data16 = CM_ROWS(cmatrix);
fwrite (&data16, 2, 1, outfile);
data16 = CM_COLUMNS(cmatrix);
fwrite (&data16, 2, 1, outfile);

for (j = 0; j < cm_rows; j++) {
    cvecptr = STORAGE(CM_ROW(cmatrix, j));
    for (i = 0; i < cm_cols; i++, cvecptr++) {
        fl_temp = *cvecptr;
        fwrite (&fl_temp, sizeof(float), 1, outfile);
        fl_temp = *cvecptr;
        fwrite (&fl_temp, sizeof(float), 1, outfile);
    }
}
fclose (outfile);
}

RMATRIX RMatrixFromCMatrix(cmatrix)
CMATRIX cmatrix;
{
    RMATRIX rmatrix;
    unsigned cm_rows, cm_cols, row, col;
    FCOMPLEX *cvecptr;
    float *rvecptr;

    if (TYPE(cmatrix) != TYPE_CMATRIX) {
        printf ("CMatrix - Argument is not a CMATRIX!\n");
        exit (-1);
    }

    rmatrix = MakeRMATRIX(OL, (AINT)cm_rows, OL, (AINT)cm_cols);

    for (row = 0; row < cm_rows; row++) {
        rvecptr = STORAGE(RM_ROW(rmatrix, row));
        cvecptr = STORAGE(CM_ROW(cmatrix, row));
        for (col=0; col < cm_cols; col++, cvecptr++) {
            *rvecptr++ = *cvecptr;
        }
    }
    return rmatrix;
}

double randoml()
{
    double retval;
    retval = (double) ((double)(rand())%1771875)/(double)1771875.0;
    return retval;
}

double gaussian_random()
{
    static int generate_p = TRUE;
    static double r, theta;

    if (generate_p) {
        r = sqrt(-2.*log(randoml())); /* rayleigh distribution */
        theta = 2.*PI*randoml(); /* uniform distribution */
        generate_p = FALSE;
        return (r * cos(theta)); /* gaussian */
    }
    else {
        generate_p = TRUE;
        return (r * sin(theta)); /* gaussian */
    }
}

void IntroduceGaussianWhiteNoise(rmatrix, rows, cols, rate)
RMATRIX rmatrix;
unsigned rows, cols;
double rate;
{
    unsigned row, col, rm_rows, rm_cols;
    double power, grand;

```

89/11/21
16:02:48

jtools.c

8

```
RMATRIX noise;
double rm_power, n_power, t_power;

rm_rows = (rows)?rows:(unsigned)RM_ROWS(rmatrix);
rm_cols = (cols)?cols:(unsigned)RM_COLUMNS(rmatrix);

power = 0.0;
/* find average power of matrix */
for (row = 0; row < rm_rows; row++) {
    for (col = 0; col < rm_cols; col++) {
        power += (float)(RM_ELEMENT(rmatrix, row, col)*RM_ELEMENT(rmatrix,row,col));
    }
}

rm_power = power;
power /= (double)(rm_rows*rm_cols);
power = sqrt(power) * sqrt(rate);
printf("sqrt(power)*sqrt(rate) = %f\n", power);

noise = MakeRMATRIX(OL, (AINT) rm_rows, OL, (AINT) rm_cols);
/* Snow the matrix */
for (row = 0; row < rm_rows; row++) {
    for (col = 0; col < rm_cols; col++) {
        RM_ELEMENT(noise, row, col) = (float)(gaussian_random() * power);
    }
}

/* Calculate power of noise */
for (row = 0; row < rm_rows; row++) {
    for (col = 0; col < rm_cols; col++) {
        power += (float)(RM_ELEMENT(noise, row, col)*RM_ELEMENT(noise,row,col));
    }
}

n_power = power;

/* Add noise to rmatrix */
for (row = 0; row < rm_rows; row++) {
    for (col = 0; col < rm_cols; col++) {
        RM_ELEMENT(rmatrix, row, col) += RM_ELEMENT(noise, row, col);
    }
}

/* Calculate power of combined rmatrix and noise */
for (row = 0; row < rm_rows; row++) {
    for (col = 0; col < rm_cols; col++) {
        power += (float)(RM_ELEMENT(rmatrix, row, col)*RM_ELEMENT(rmatrix,row,col));
    }
}

t_power = power;

printf("Powers: rmatrix %g, noise %g, combined %g, %4.1f%% noise\n", rm_power, n_power, t_power, 100.*n_power/t_power);
}
```


89/11/07
18:14:16

m_subimg.c

1

```
#include <stdio.h>
#include <zlib.h>
#include "jtools.h"

main(argc, argv)
int argc;
char *argv[];
{
    RMATRIX image, subimage;
    unsigned row, col, dim;
    cchar buffer[128], dir[128], base[9], ext[4];

    if (argc < 5) {
        printf("usage: %s <image> <row> <col> <dimension> (output)\n", argv[0]);
        exit(1);
    }

    row = atoi(argv[2]);
    col = atoi(argv[3]);
    dim = atoi(argv[4]);

    if (dim == 0) {
        printf("%s: dimension must be non-zero\n", argv[0]);
        exit(1);
    }

    image = MakeRMATRIXFromFileExt(argv[1]);
    subimage = rmatrix_submatrix(image, row, col, dim);

    sprintf(buffer, "SubImage of %s: x=%u, y=%u, dim=%u",
        argv[1], col, row, dim);

    if (argc > 5) {
        parsefn(argv[5], dir, base, ext);
        if (base[0]) {
            DumpCoeffBlock(argv[5], subimage);

#ifdef ZOMBIE
            MakeImgFileFromRMATRIX (argv[5], subimage, buffer);
            exit(0);
#endif
        }

        DumpCoeffBlock("small.flt", subimage);

#ifdef ZOMBIE
        MakeImgFileFromRMATRIX ("small.img", subimage, buffer);
        exit(0);
#endif
    }
}
```

89/11/02
17:04:28

makewin.c

1

```
#include <stdio.h>
#include <zlib.h>
#include "assert.h"
#include "jtools.h"
```

```
main(argc, argv)
int argc;
char *argv[];
{
```

```
    RMATRIX rmatrix;
    unsigned row, col, r, c;
    float result;
    unsigned char byte;
    char dir[128], base[9], ext[4], fn[128];
    FILE *fp;
```

```
    if (argc < 2) {
        fprintf(stderr, "usage: %s <matrix>", argv[0]);
        exit(-1);
    }
```

```
    fp = fopen(argv[1], "r");
    assert(fp);
```

```
    rmatrix = MakeRMMatrix(0L, 512L, 0L, 512L);
    ZeroMatrix(rmatrix);
```

```
    for (row = 0; row < 64; row++) {
        for (col = 0; col < 64; col++) {
            assert(fread(&byte, 1, 1, fp) == 1);
            RM_ELEMENT(rmatrix, row, col) = (float) byte;
        }
    }
```

```
    ZeroSumRMMatrix(rmatrix, 64, 64);
    parsefn(argv[1], dir, base, ext);
    sprintf(fn, "%s.flt", base);
    DumpCoeffBlock(fn, rmatrix);
```

89/10/26
10:46:00

mattool.c

1

```
#include <stdio.h>
#include <zlib.h>
```

```
RMATRIX MakeRMMatrixFromFileExt();
```

```
/*
 * savemat - C language routine to save a matrix in a MAT-file.
 *
 * Here is an example that uses 'savemat' to save two matrices to disk,
 * the second of which is complex:
 *
 * FILE *fp;
 * double xyz[1000], ar[1000], ai[1000];
 * fp = fopen("foo.mat","wb");
 * savemat(fp, 2000, "xyz", 2, 3, 0, xyz, (double *)0);
 * savemat(fp, 2000, "a", 5, 5, 1, ar, ai);
 * fclose(fp);
 */
```

```
typedef struct {
    long type; /* type */
    long mrows; /* row dimension */
    long ncols; /* column dimension */
    long imagf; /* flag indicating imag part */
    long namlen; /* name length (including NULL) */
} Fmatrix;
```

```
savemat(fp, type, pname, mrows, ncols, imagf, preal, pimag)
FILE *fp; /* File pointer */
int type; /* Type flag: Normally 0 for PC, 1000 for Sun, Mac, and */
/* Apollo, 2000 for VAX D-float, 3000 for VAX G-float */
/* Add 1 for text variables. */
/* See LOAD in reference section of guide for more info. */
int mrows; /* row dimension */
int ncols; /* column dimension */
int imagf; /* imaginary flag */
char *pname; /* pointer to matrix name */
double *preal; /* pointer to real data */
double *pimag; /* pointer to imag data */
```

```
Fmatrix x;
int mn;
```

```
x.type = type;
x.mrows = mrows;
x.ncols = ncols;
x.imagf = imagf;
x.namlen = strlen(pname) + 1;
mn = x.mrows * x.ncols;
```

```
fwrite(&x, sizeof(Fmatrix), 1, fp);
fwrite(pname, sizeof(char), (int)x.namlen, fp);
fwrite(preal, sizeof(double), mn, fp);
if (imagf) {
    fwrite(pimag, sizeof(double), mn, fp);
}
```

```
/*
 *
 */
```

```
void MakeMATFileFromRMMatrix(fn, rmatrix, name)
char *fn;
RMATRIX rmatrix;
char *name;
```

```
{
    unsigned rm_rows, rm_cols, row, col;
    float *rvecptr;
    double *preal, *prealptr;
    char dir[128], base[9], ext[4], buf[128];
    FILE *fp;

    rm_rows = (unsigned) RM_ROWS(rmatrix);
    rm_cols = (unsigned) RM_COLUMNS(rmatrix);

    prealptr = preal = (double *) AMalloc((sizeof(double)*rm_rows*rm_cols));

    for (row=0; row<rm_rows; row++) {
        rvecptr = STORAGE(RM_ROW(rmatrix, row));
        for (col=0; col<rm_cols; col++) {
            preal[rm_rows*col+row] = *rvecptr++;
        }
    }
}
```

89/10/26
10:46:00

mattool.c

2

```
parsefn(fn, dir, base, ext);
sprintf(buf, "%s%s.mat", dir, base);
_pmode = 0x8000;
if ((fp = fopen(buf, "w")) == (FILE *)NULL) {
    sprintf(dir, "MakeMATFileFromRMatrix: %s", buf);
    perror(dir);
    exit(-1);
}
savemat(fp, 0, name, rm_rows, rm_cols, 0, preal, (double *)NULL);
return;
}
```

```
main(argc, argv)
int argc;
char *argv[];
{
    char name[128];
    char dir[128], base[9], ext[4], buf[128], fn[128];
    RMATRIX rmatrix;

    if (argc < 2) {
        fprintf(stderr, "usage: %s <image> {mat-name}\n", argv[0]);
        exit(1);
    }

    rmatrix = MakeRMatrixFromFileExt(argv[1]);

    parsefn(argv[1], dir, base, ext);
    sprintf(fn, "%s%s.mat", dir, base);

    if (argc > 2) {
        strcpy(name, argv[2], 126);
    } else {
        strcpy(name, base, 9);
    }

    MakeMATFileFromRMatrix(fn, rmatrix, name);
    return 0;
}
```

90/01/17
23:34:14

makefile

1

```
.....
# This is a prototypical makefile.  It includes a good starting
# set of inference rules and macros.
.....

# Macro definitions for Make variables.
AI =
IFLAGS = -Ic:\ndp -Ic:\ndp\zlib
LIB = c:\lib
LIBRARIES =
THISLIB = zlib

# For Microsoft C 5.1
CC = cl
# For performance
CFLAGS = /AL /Zdp /G2 /Oxn /W2
DFLAGS = /NOI
# For debugging
CFLAGS = /AL /Zildp /G2 /Oa /W2
DFLAGS = /CO /LI /NOI
AFLAGS = /Ml /v /w2 /z /Zi /Zd

# For NDP C compiler
CC = cc
CFLAGS = -OLM -n2 -n3
# -symbols place symbols into the linker file
# -g turn on trace and debug information
# -ga generate frame pointer for all functions
# -rt2 print names of files as opened
# -CS1 for runtime range and bound checking
# -O(L)(M) [L]loop unrolling and [M]alias optimizations
AFLAGS =
DFLAGS =

.....

FIXES: .exp .obj .asm .c
j.exe:
$(CC) $(DFLAGS) $*.obj $(LIBRARIES)

.c.exe:
$(CC) $(CFLAGS) $(IFLAGS) $*.c $(LIBRARIES)

.c.obj: $*.c
$(CC) $(CFLAGS) $(DFLAGS) -c $(IFLAGS) $*.c

.c.exp: $*.obj
$(CC) $(CFLAGS) $(DFLAGS) $*.obj -lz -lcgrex

.....

m_corr.exp: m_corr.obj jtools.obj rm_corr.obj
$(CC) $(CFLAGS) $(DFLAGS) m_corr.obj jtools.obj rm_corr.obj -lz -lcgrex

m_rcorr.exp: m_rcorr.obj rcorr.obj jtools.obj rm_corr.obj
$(CC) $(CFLAGS) $(DFLAGS) m_rcorr.obj rcorr.obj jtools.obj rm_corr.obj -lz -lcgrex

m_small.exp: m_small.obj jtools.obj rm_corr.obj interp.obj
$(CC) $(CFLAGS) $(DFLAGS) m_small.obj jtools.obj rm_corr.obj interp.obj -lz -lcgrex

m_subimg.exp: m_subimg.obj jtools.obj rm_corr.obj
$(CC) $(CFLAGS) $(DFLAGS) m_subimg.obj jtools.obj rm_corr.obj -lz -lcgrex

mse.exp: mse.obj jtools.obj
$(CC) $(CFLAGS) $(DFLAGS) mse.obj jtools.obj -lz -lcgrex

MATTOOL_OBJS = mattool.obj jtools.obj
ool.exp: $(MATTOOL_OBJS)
$(CC) $(CFLAGS) $(DFLAGS) $(MATTOOL_OBJS) -lz -lcgrex

flt2img_OBJS = flt2img.obj jtools.obj rm_corr.obj
flt2img.exp: $(flt2img_OBJS)
$(CC) $(CFLAGS) $(DFLAGS) $(flt2img_OBJS) -lz -lcgrex
```

90/01/17
23:34:14

makefile

2

```
makewin_OBJ = makewin.obj jtools.obj rm_corr.obj  
makewin.exp: $(makewin_OBJ)  
$(CC) $(CFLAGS) $(DFLAGS) $(makewin_OBJ) -lz -lcgrex
```