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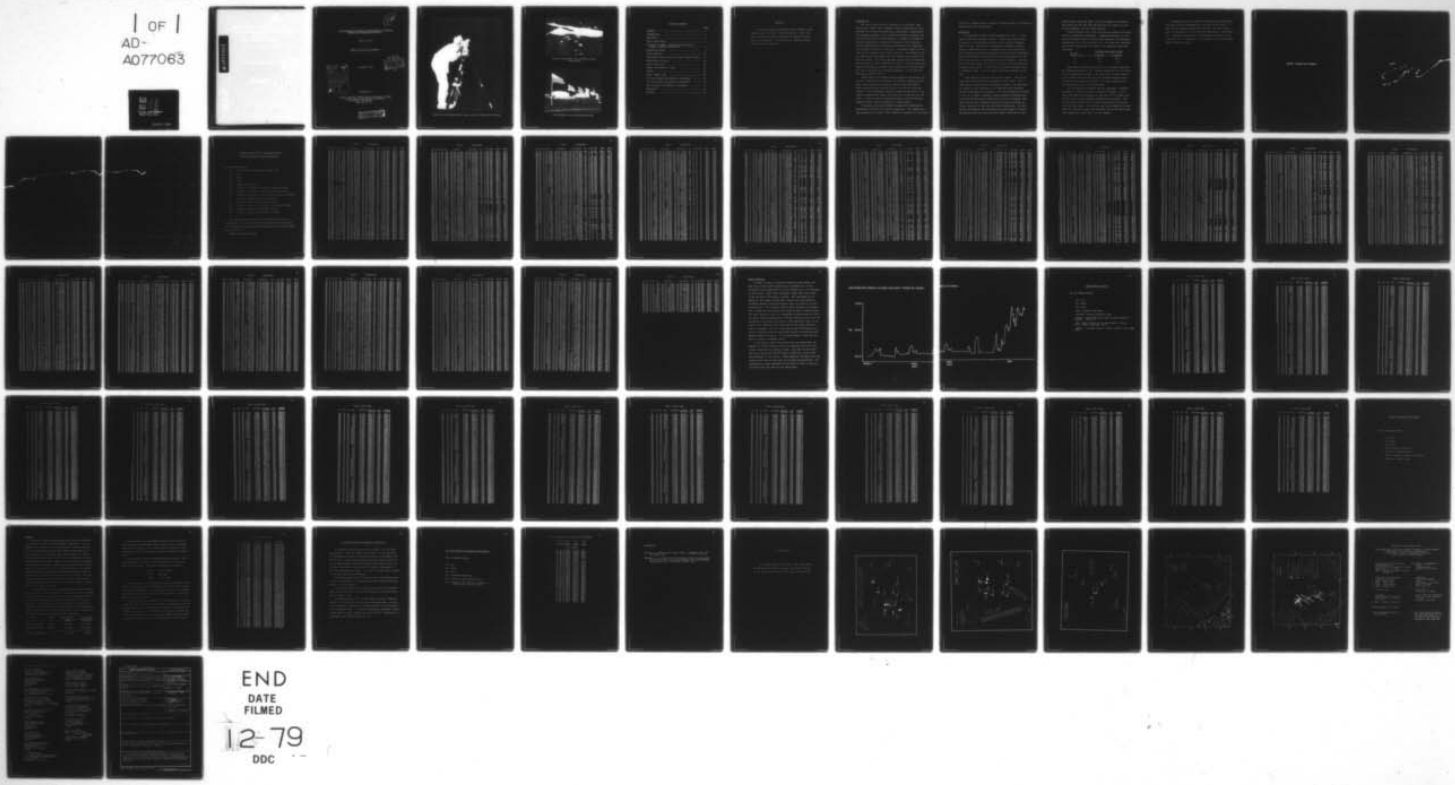

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Observations of Position, Ocean Depth, Ice Rotation, Magnetic Declination and Gravity

taken at the

FRAM I Drifting Ice Station

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September 1979

prepared by

Kenneth Hunkins, Thomas Manley and Werner Tiemann
Lamont-Doherty Geological Observatory
of Columbia University
New York, N. Y.

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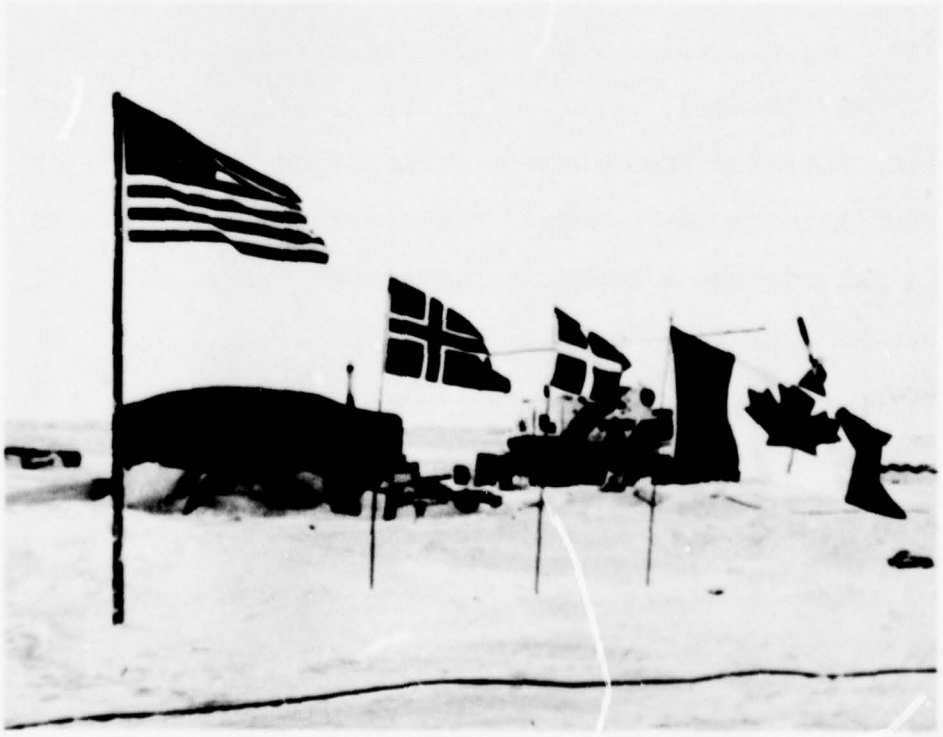
SHOOTING THE SUN FOR CAMP AZIMUTH AT FRAM I. ALLAN GILL IS OPERATING THE THEODOLITE

HELICOPTER VIEW OF FRAM I AFTER THE CAMP ICE FLOE SPLIT
ON MARCH 28, 1979



FLAGS ON FRAM I OF THE FOUR PARTICIPATING NATIONS

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ABSTRACT

This report contains geophysical data collected by the Lamont group at the FRAM I drifting station. These data include station positions determined by satellite navigation, echo soundings, ice floe azimuths, magnetic declination and gravity readings.

Introduction

The Arctic Ocean north of Greenland is a relatively unexplored area. FRAM I was a research station established on drifting pack ice to carry out geological, geophysical, oceanographic and biological studies in this region with primary financial support from the Office of Naval Research. Aircraft for establishing and maintaining the station were based at Nord, Greenland through cooperation of the Danish government and the Commission for Scientific Research in Greenland. Additional support was provided by the Norwegian North Polar Institute. The scientific party consisted of participants from the United States, Norway, Denmark and Canada. The initial airplane landing at the station was made on March 11, 1979 at $84^{\circ}24'N$ and $6^{\circ}00'W$. Within the next few weeks the scientific programs began operation and continued until the 13th of May when all programs terminated. On that date the camp was at $83^{\circ}19'N$ $6^{\circ}52'W$.

Investigators from Lamont-Doherty Geological Observatory carried out observations of position, ice rotation, magnetic declination, ocean depth and the earth's gravity field from FRAM I. These observations are reported here in the form of tables and figures. This information, especially position and depth, is essential background for nearly all scientific projects at the station. In order to make it available quickly, only the data are reported without detailed analysis or interpretation.

The Lamont group also conducted acoustic and oceanographic measurements which will be reported separately. The Lamont party participating in the FRAM I field expedition consisted of Jay Ardai,

Allan Gill, Kenneth Hunkins (Station Scientific Leader, 3/11-4/10/79), Thomas Manley and Charles Monjo.

Navigation

All positions of FRAM I were determined with the U. S. Navy Transit satellite navigation system. Transit satellites circle the earth in 107-minute polar orbits at an altitude of approximately 100 km. Each satellite continuously transmits position data as a function of time. By measuring the change in the Doppler frequency of the received signals as the satellite approaches, passes, and recedes, the position of the station relative to the satellites path can be determined with great precision. The number of satellite passes at a given site over a given time will be greatest at the poles. In the Arctic the interval between fixes is therefore short. Up to 40 useable fixes were received in one day.

Three satellite receivers were used at FRAM I. Most of the fixes were determined with two Magnavox MX 1502 units. One of these (serial number 30) was furnished by Lamont. The other (serial number 22) was furnished by the Norwegian Polar Institute. The MX 1502 system was introduced in 1977 and represents the state of the art in rugged, portable, nearly automatic navigation sets. The fixes and associated information are stored on magnetic tape. These data are also displayed visually and they were logged as often as possible in case the tape should malfunction. An older system, the Magnavox 706 (designated by serial number 706 here), was employed when the other sets were either being used in heli-

copter surveys away from FRAM I or out of operation for repairs. This system did not have tape recording and all fixes had to be recorded manually from the visual display.

Fixes calculated with the MX 1502 sets are based on the World Geodetic System-1972 coordinates. "Standard deviations" in latitude and longitude based on Doppler data residuals are calculated automatically by the 1502 for each fix. All fixes with "standard deviations" greater than the values in the following table were eliminated.

MX 1502 Serial No.	"Standard deviation" cutoff	
	Latitude	Longitude
22	64 m	88 m
30	56 m	73 m

These cutoff values were arrived at by calculating the mean and standard deviation of the "standard deviations" for all fixes of each instrument separately. All fixes with "standard deviations" greater than the mean plus one standard deviation were eliminated in two successive trials. The final cutoffs on the second pass are those in the above table.

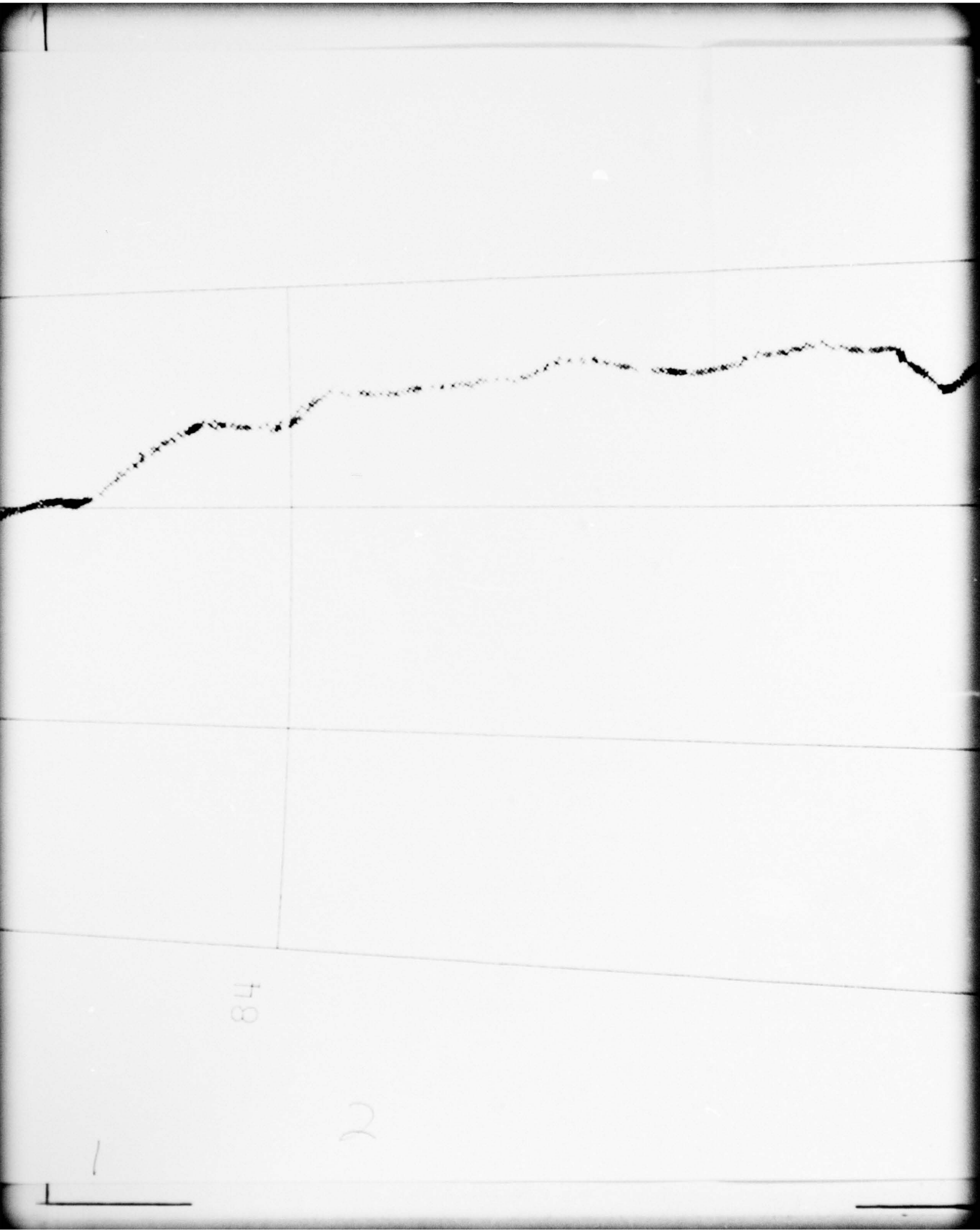
The 706 satellite navigator does not calculate a "standard deviation" and the data required different treatment. First, fixes with satellite elevations of less than 50° or greater than 70° and with 6 or more computer iterations were dropped. Then the data were analyzed with a simple running mean of 20 points which was used twice. On the first pass, fixes departing by more than 2 km from the average were eliminated and on the second pass, those departing by more than 1 km were dropped.

A comparison was made between fixes based on the same satellite pass received simultaneously on the two MX 1502 units. A total of 220 identical passes were recorded. The mean difference in latitude was 0.1 m and the mean difference in longtitude, 57 m. Standard deviations of the differences were 183 m in latitude and 218 m in longitude. The antennae of the two sets were located about 25 m apart.

DRIFT TRACK OF FRAM I

85

1



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8W

10W

12W

88

1 3

Positions of the FRAM I Drifting Station based on TRANSIT Satellite Navigation

Key to column headings:

SN	Serial number of satellite receiver unit
DY	Day
MN	Month
YR	Year
GMT	Greenwich mean time
LAT	Latitude in degrees, minutes and decimal seconds
LONG	Longitude in degrees, minutes and decimal seconds
EL	Maximum elevation of satellite above horizon in degrees
I	Number of iterations in the computation
DP	Number of 23/28 - second Doppler counts
SAT	Last three digits of satellite identification number
SDY	Standard deviation of latitude in meters
SDX	Standard deviation of longitude in meters

Note that the last four columns of information are not available for the 706 fixes and the columns are filled with zeroes. Also, maximum elevation and iteration number were not always logged for the 706 fixes.

Negative longitude is west.

FRAME 1 NAVIGATION

SN	DY	MN	HR	SEC	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
30	18	3	19	2057	64 47 50.000	-6 30 43.362	56	3	26	140	37.0	24.0
30	18	3	19	2216	64 47 36.630	-6 29 26.320	66	2	25	190	51.0	42.0
30	19	3	19	2	64 47 12.330	-6 27 39.238	61	2	16	190	51.0	36.0
30	19	3	19	210	64 46 49.918	-6 25 12.124	66	2	21	140	54.0	54.0
30	19	3	19	229	64 46 42.502	-6 25 42.529	60	3	21	200	41.0	33.0
30	19	3	19	334	64 46 35.306	-6 24 52.644	68	2	31	190	46.0	36.0
30	19	3	19	802	64 46 18.794	-6 23 40.326	63	2	24	120	43.0	32.0
30	19	3	19	850	64 46 12.455	-6 23 21.698	71	3	26	190	39.0	57.0
30	19	3	19	924	64 46 8.115	-6 22 59.119	63	2	27	140	39.0	19.0
30	19	3	19	1043	64 45 57.953	-6 22 1.868	62	3	29	190	48.0	32.0
30	19	3	19	1134	64 45 51.361	-6 21 15.042	60	3	20	120	56.0	26.0
30	19	3	19	1146	64 45 47.296	-6 21 27.136	60	3	23	130	53.0	29.0
30	19	3	19	1231	64 45 38.857	-6 21 5.323	59	3	29	190	38.0	19.0
30	19	3	19	1238	64 45 32.959	-6 20 48.315	67	3	25	140	48.0	35.0
30	19	3	19	1336	64 45 28.839	-6 20 25.882	60	3	25	130	46.0	23.0
30	19	3	19	1418	64 45 23.291	-6 20 14.532	62	3	31	190	38.0	21.0
30	19	3	19	1524	64 45 16.869	-6 19 47.288	66	3	24	130	39.0	30.0
30	19	3	19	1606	64 45 10.057	-6 20 2.110	70	3	35	190	30.0	35.0
30	19	3	19	1711	64 45 3.988	-6 20 7.434	74	3	36	130	27.0	60.0
30	19	3	19	2045	64 44 47.531	-6 19 33.359	69	3	33	130	33.0	50.0
30	19	3	19	2127	64 44 40.439	-6 19 23.869	69	3	32	190	50.0	55.0
30	19	3	19	2232	64 44 34.182	-6 19 17.513	59	3	24	130	41.0	29.0
30	19	3	19	2313	64 44 27.206	-6 19 19.552	62	3	25	190	40.0	18.0
30	19	3	19	2335	64 44 25.942	-6 20 27.066	75	3	23	200	36.0	71.0
30	20	3	19	0	64 44 17.426	-6 19 34.521	58	3	23	120	47.0	39.0
30	20	3	19	10	64 44 17.263	-6 18 58.260	55	3	24	130	47.0	19.0
30	20	3	19	100	64 44 9.353	-6 18 34.110	61	3	30	190	53.0	27.0
30	20	3	19	121	64 44 4.519	-6 18 35.502	64	3	16	200	41.0	33.0
30	20	3	19	148	64 43 57.433	-6 19 35.874	67	3	26	120	53.0	53.0
30	20	3	19	204	64 43 50.954	-6 18 31.810	57	3	17	130	46.0	47.0
30	20	3	19	240	64 43 50.457	-6 18 43.757	65	3	25	190	54.0	48.0
30	20	3	19	308	64 43 47.965	-6 18 59.639	58	3	18	200	44.0	31.0
30	20	3	19	1354	64 42 27.235	-6 20 13.103	73	3	24	140	49.0	56.0
30	22	3	19	1108	64 38 33.391	-6 31 14.384	60	4	31	130	35.0	18.0
30	23	3	19	1018	64 37 10.434	-6 29 51.898	63	7	15	130	44.0	52.0
30	23	3	19	1102	64 37 5.885	-6 29 51.259	60	3	27	190	35.0	23.0
30	23	3	19	1250	64 37 0.846	-6 29 10.486	59	2	29	190	41.0	22.0
30	23	3	19	2334	64 37 33.076	-6 33 55.375	60	2	37	190	48.0	21.0
30	24	3	19	23	64 37 40.437	-6 35 13.248	67	2	32	200	28.0	32.0
30	24	3	19	118	64 37 48.479	-6 36 1.107	61	3	37	190	40.0	19.0
30	24	3	19	209	64 37 57.141	-6 37 5.981	59	3	29	200	32.0	25.0
30	24	3	19	304	64 37 59.348	-6 36 10.244	67	3	32	190	36.0	33.0
30	24	3	19	356	64 38 11.803	-6 36 8.040	57	3	31	200	29.0	16.0
30	24	3	19	625	64 38 54.345	-6 41 40.111	72	3	33	190	32.0	49.0
30	24	3	19	629	64 38 11.078	-6 43 28.422	67	2	20	130	38.0	53.0
30	24	3	19	1012	64 39 21.456	-6 43 47.483	62	3	27	190	37.0	29.0
30	24	3	19	1030	64 39 28.290	-6 44 17.160	57	3	20	120	37.0	22.0
30	24	3	19	1110	64 39 41.012	-6 45 3.371	60	3	21	130	37.0	22.0
30	24	3	19	1200	64 39 50.570	-6 44 55.070	59	3	37	190	35.0	18.0
30	24	3	19	1244	64 40 1.342	-6 46 16.959	66	3	28	200	40.0	41.0
30	24	3	19	1304	64 40 7.489	-6 45 42.551	59	3	30	130	30.0	18.0
30	24	3	19	1345	64 40 19.349	-6 45 53.043	61	3	36	190	34.0	22.0
30	24	3	19	1430	64 40 30.346	-6 46 58.434	59	3	35	200	42.0	21.0
30	24	3	19	1452	64 40 40.723	-6 46 9.475	65	3	26	130	38.0	33.0
30	24	3	19	1530	64 40 54.346	-6 46 5.739	69	3	27	190	46.0	73.0
30	24	3	19	1614	64 40 59.819	-6 47 34.372	59	3	27	200	40.0	23.0
30	24	3	19	1639	64 41 14.561	-6 45 48.656	77	3	27	130	36.0	62.0
30	24	3	19	1759	64 41 34.006	-6 48 41.581	64	4	32	200	40.0	32.0
30	24	3	19	2013	64 42 26.027	-6 50 41.984	71	3	25	130	52.0	72.0
30	24	3	19	2057	64 42 42.141	-6 50 51.020	70	3	33	190	45.0	52.0
30	24	3	19	2200	64 43 3.051	-6 50 51.755	60	3	25	130	44.0	27.0
30	24	3	19	2243	64 43 12.826	-6 51 4.437	62	3	30	190	40.0	24.0
30	24	3	19	2316	64 43 19.969	-6 49 46.469	75	2	28	200	27.0	56.0
30	24	3	19	2340	64 43 32.549	-6 51 13.254	55	3	23	130	44.0	31.0
30	25	3	19	29	64 43 41.982	-6 51 49.193	60	3	27	190	30.0	14.0
30	25	3	19	43	64 43 51.081	-6 51 31.738	63	2	16	120	34.0	27.0
30	25	3	19	102	64 43 52.379	-6 51 50.971	64	3	34	200	27.0	23.0
30	25	3	19	132	64 43 57.053	-6 52 49.563	56	3	28	130	43.0	21.0

FRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
30	25	3	79	216	64 44 5.508	-8 54 5.808	64	3	29	190	48.0	27.0
30	25	3	79	248	64 44 20.559	-8 53 42.475	58	3	33	200	32.0	19.0
30	25	3	79	319	64 44 21.932	-8 55 10.936	63	3	33	130	34.0	33.0
30	25	3	79	402	64 44 29.403	-8 57 21.481	73	3	31	190	47.0	66.0
30	25	3	79	434	64 44 47.091	-8 55 52.952	58	3	30	200	33.0	18.0
30	25	3	79	620	64 45 13.676	-8 57 50.631	65	3	28	200	36.0	34.0
30	25	3	79	840	64 45 45.868	-9 1 38.410	72	3	25	130	41.0	55.0
30	25	3	79	923	64 45 59.001	-9 2 31.261	66	3	28	190	38.0	47.0
30	25	3	79	1111	64 46 37.394	-9 0 4.629	60	3	25	190	55.0	32.0
30	25	3	79	1215	64 47 0.959	-9 7 29.780	59	3	28	130	35.0	18.0
30	25	3	79	1259	64 47 16.176	-9 8 17.303	60	3	33	190	34.0	18.0
30	25	3	79	1323	64 47 20.295	-9 9 7.147	63	3	35	200	42.0	30.0
30	25	3	79	1402	64 47 34.193	-9 9 41.067	62	3	25	130	35.0	30.0
30	25	3	79	1446	64 47 46.882	-9 10 18.942	65	3	23	190	53.0	45.0
30	25	3	79	1550	64 48 0.725	-9 11 39.040	72	3	30	130	30.0	40.0
30	25	3	79	1652	64 48 4.241	-9 14 36.881	61	3	26	200	48.0	25.0
30	25	3	79	1838	64 48 26.708	-9 17 25.240	68	3	25	200	43.0	49.0
30	25	3	79	2111	64 49 3.347	-9 19 41.964	65	3	29	130	35.0	40.0
30	25	3	79	2154	64 49 13.070	-9 20 1.197	65	3	32	190	46.0	36.0
30	25	3	79	2257	64 49 23.562	-9 20 57.790	57	3	21	130	44.0	29.0
30	25	3	79	2354	64 49 38.394	-9 21 55.565	70	3	21	200	34.0	5.0
30	26	3	79	44	64 49 43.557	-9 22 23.731	56	3	19	130	44.0	25.0
30	26	3	79	127	64 49 47.842	-9 23 6.097	62	3	26	190	41.0	20.0
30	26	3	79	140	64 49 56.031	-9 23 15.133	61	3	24	200	38.0	32.0
30	26	3	79	314	64 50 4.871	-9 25 35.985	69	3	32	190	51.0	48.0
30	26	3	79	750	64 50 37.610	-9 29 49.007	78	3	31	130	29.0	59.0
30	26	3	79	834	64 50 40.086	-9 31 6.440	71	3	30	190	38.0	46.0
30	26	3	79	938	64 50 44.586	-9 32 41.492	67	3	34	130	30.0	28.0
30	26	3	79	1022	64 50 47.552	-9 33 26.948	62	3	26	190	43.0	44.0
30	26	3	79	1125	64 50 52.386	-9 34 57.716	60	2	34	130	31.0	17.0
30	26	3	79	1210	64 50 52.441	-9 35 23.618	59	2	22	190	51.0	49.0
30	26	3	79	1313	64 50 55.463	-9 36 31.024	60	2	33	130	37.0	18.0
30	26	3	79	1356	64 50 57.330	-9 37 32.911	62	2	23	190	46.0	34.0
30	26	3	79	1500	64 50 57.550	-9 38 35.273	67	2	35	130	30.0	27.0
30	26	3	79	1648	64 50 58.374	-9 40 4.729	79	3	31	130	34.0	69.0
30	26	3	79	2022	64 50 51.178	-9 42 46.990	69	2	31	130	29.0	43.0
706	26	3	79	2202	64 50 45.900	-9 43 22.200	0	0	0	0	0.0	0.0
30	26	3	79	2208	64 50 46.619	-9 43 25.174	60	2	31	130	37.0	27.0
30	26	3	79	2355	64 50 43.552	-9 43 56.801	56	2	25	130	40.0	20.0
30	27	3	79	327	64 50 41.020	-9 44 35.457	65	3	23	130	44.0	44.0
706	27	3	79	506	64 50 41.400	-9 44 11.760	0	0	0	0	0.0	0.0
706	27	3	79	1102	64 50 37.020	-9 46 21.480	0	0	0	0	0.0	0.0
706	27	3	79	1306	64 50 42.000	-9 46 52.440	0	0	0	0	0.0	0.0
706	27	3	79	1452	64 50 35.220	-9 48 49.260	0	0	0	0	0.0	0.0
706	27	3	79	1636	64 50 33.720	-9 49 28.980	0	0	0	0	0.0	0.0
706	27	3	79	1820	64 50 32.100	-9 50 19.800	0	0	0	0	0.0	0.0
30	27	3	79	1822	64 50 35.032	-9 51 22.633	37	3	19	120	52.0	45.0
706	27	3	79	2006	64 50 5.100	-9 48 37.020	0	0	0	0	0.0	0.0
30	27	3	79	2009	64 50 29.205	-9 51 36.098	58	2	33	120	29.0	20.0
30	27	3	79	2120	64 50 25.360	-9 52 4.731	63	3	28	130	40.0	35.0
30	27	3	79	2156	64 50 24.426	-9 51 44.764	55	2	27	120	34.0	16.0
30	27	3	79	2306	64 50 21.460	-9 52 18.478	56	2	25	130	33.0	17.0
30	27	3	79	2343	64 50 19.373	-9 52 18.176	59	2	29	120	30.0	24.0
30	28	3	79	52	64 50 18.164	-9 52 33.474	56	3	17	130	51.0	24.0
30	28	3	79	130	64 50 17.340	-9 52 43.307	69	2	28	120	33.0	40.0
30	28	3	79	238	64 50 15.582	-9 53 17.598	61	2	24	130	44.0	42.0
30	28	3	79	425	64 50 12.781	-9 53 5.081	72	3	29	130	31.0	65.0
30	28	3	79	444	64 50 9.375	-9 53 53.338	59	3	30	200	43.0	24.0
706	28	3	79	644	64 50 3.120	-9 54 12.120	0	0	0	0	0.0	0.0
30	28	3	79	649	64 50 1.190	-9 54 5.423	67	2	33	120	32.0	32.0
706	28	3	79	752	64 49 59.700	-9 55 3.480	0	0	0	0	0.0	0.0
30	28	3	79	759	64 49 59.872	-9 54 59.812	77	3	29	130	33.0	62.0
706	28	3	79	812	64 49 55.080	-9 54 8.040	0	0	0	0	0.0	0.0
30	28	3	79	1913	64 49 46.414	-10 2 27.869	62	3	29	120	34.0	30.0
30	29	3	79	1112	64 50 9.265	-10 32 44.857	60	3	19	120	45.0	32.0
30	29	3	79	1130	64 50 14.703	-10 33 8.575	60	2	32	190	53.0	29.0
706	29	3	79	1216	64 50 10.500	-10 34 10.440	0	0	0	0	0.0	0.0
30	29	3	79	1225	64 50 11.298	-10 34 28.575	67	3	33	200	44.0	43.0

FRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
30	29	3	79	1258	84 50 13.110	-10 33 58.953	68	2	20	120	35.0	36.0
30	29	3	79	1410	84 50 13.440	-10 34 51.577	80	3	25	200	48.0	27.0
706	29	3	79	1732	84 50 12.780	-10 34 1.980	0	0	0	0	0.0	0.0
706	29	3	79	1832	84 50 8.880	-10 33 6.540	0	0	0	0	0.0	0.0
30	29	3	79	1935	84 50 13.165	-10 34 42.513	64	3	22	140	49.0	62.0
30	29	3	79	2021	84 50 12.177	-10 34 20.609	56	3	31	140	45.0	25.0
30	29	3	79	2126	84 50 10.693	-10 34 13.139	62	3	26	130	50.0	34.0
30	29	3	79	2256	84 50 11.957	-10 34 53.266	76	3	27	200	33.0	67.0
30	29	3	79	2314	84 50 11.737	-10 34 9.754	56	2	31	130	38.0	21.0
30	29	3	79	2353	84 50 10.913	-10 34 29.591	57	2	33	140	35.0	25.0
30	30	3	79	42	84 50 11.462	-10 34 51.605	65	2	34	200	28.0	25.0
30	30	3	79	101	84 50 11.023	-10 34 27.943	56	3	32	130	32.0	16.0
30	30	3	79	415	84 50 1.740	-10 34 27.579	58	2	34	200	42.0	23.0
30	30	3	79	606	84 49 40.261	-10 35 16.521	75	3	31	130	32.0	53.0
30	30	3	79	847	84 49 37.515	-10 34 52.319	63	3	29	140	45.0	31.0
30	30	3	79	955	84 49 33.175	-10 34 16.057	64	2	20	130	49.0	55.0
30	30	3	79	1143	84 49 26.748	-10 33 1.590	60	3	32	130	35.0	21.0
30	30	3	79	1222	84 49 26.034	-10 32 43.566	68	3	27	140	45.0	31.0
30	30	3	79	1303	84 49 27.572	-10 31 57.691	64	2	28	200	48.0	37.0
30	30	3	79	1330	84 49 22.516	-10 31 45.867	62	2	29	130	34.0	21.0
30	30	3	79	1446	84 49 23.562	-10 30 54.101	59	3	34	200	40.0	18.0
30	30	3	79	1516	84 49 20.815	-10 30 50.249	70	2	30	130	38.0	42.0
30	30	3	79	1633	84 49 22.169	-10 30 23.250	60	2	33	200	40.0	22.0
30	30	3	79	2116	84 49 7.632	-10 30 14.255	54	3	28	140	42.0	22.0
30	30	3	79	2226	84 49 1.315	-10 29 43.871	58	3	26	130	38.0	27.0
30	30	3	79	2302	84 48 59.557	-10 29 36.091	55	2	28	140	43.0	24.0
30	30	3	79	2334	84 48 57.744	-10 29 32.623	71	3	32	200	36.0	53.0
30	31	3	79	12	84 48 53.350	-10 29 10.603	55	2	29	130	49.0	21.0
30	31	3	79	48	84 48 51.152	-10 28 34.128	62	3	26	140	39.0	39.0
30	31	3	79	121	84 48 46.923	-10 28 34.389	61	3	33	200	37.0	26.0
30	31	3	79	156	84 48 43.846	-10 28 22.524	59	3	33	130	34.0	22.0
30	31	3	79	344	84 48 36.376	-10 27 0.332	68	3	16	130	40.0	64.0
30	31	3	79	906	84 47 45.729	-10 27 47.347	68	3	24	130	32.0	36.0
706	31	3	79	1050	84 47 17.520	-10 27 5.160	61	3	0	0	0.0	0.0
706	31	3	79	1050	84 47 17.520	-10 27 5.160	61	3	0	0	0.0	0.0
706	31	3	79	1050	84 47 17.520	-10 27 5.160	61	3	0	0	0.0	0.0
706	31	3	79	1050	84 47 17.520	-10 27 5.160	61	3	0	0	0.0	0.0
30	31	3	79	1053	84 47 18.373	-10 27 13.056	61	3	27	130	42.0	27.0
30	31	3	79	1106	84 47 15.846	-10 27 5.132	60	3	25	120	41.0	27.0
706	31	3	79	1122	84 47 5.520	-10 27 17.460	0	0	0	0	0.0	0.0
30	31	3	79	1130	84 47 4.530	-10 27 6.752	65	3	34	140	46.0	29.0
706	31	3	79	1146	84 46 53.340	-10 26 41.400	0	0	0	0	0.0	0.0
706	31	3	79	1148	84 46 53.340	-10 26 41.400	0	0	0	0	0.0	0.0
30	31	3	79	1156	84 46 54.917	-10 26 56.755	69	3	27	200	54.0	62.0
30	31	3	79	1241	84 46 45.469	-10 26 34.034	60	3	27	130	29.0	15.0
706	31	3	79	1310	84 46 33.540	-10 26 49.800	0	0	0	0	0.0	0.0
30	31	3	79	1316	84 46 32.230	-10 27 6.533	74	3	29	140	42.0	53.0
706	31	3	79	1330	84 46 31.140	-10 26 22.080	61	3	0	0	0.0	0.0
30	31	3	79	1341	84 46 31.626	-10 26 26.673	61	3	32	200	47.0	28.0
706	31	3	79	1422	84 46 18.480	-10 24 43.080	0	0	0	0	0.0	0.0
30	31	3	79	1429	84 46 17.014	-10 24 56.187	65	3	26	130	35.0	30.0
706	31	3	79	1644	84 45 45.900	-10 20 57.060	0	0	0	0	0.0	0.0
706	31	3	79	1944	84 45 11.640	-10 19 26.620	0	0	0	0	0.0	0.0
706	31	3	79	2202	84 44 48.720	-10 17 5.760	0	0	0	0	0.0	0.0
706	1	4	79	102	84 44 19.200	-10 13 23.580	56	3	0	0	0.0	0.0
706	1	4	79	134	84 44 11.040	-10 12 45.000	68	3	0	0	0.0	0.0
30	1	4	79	816	84 43 29.143	-10 10 22.870	72	2	30	130	29.0	45.0
30	1	4	79	902	84 43 29.694	-10 10 26.488	66	3	17	190	53.0	51.0
706	1	4	79	1224	84 42 52.740	-10 9 39.960	0	0	0	0	0.0	0.0
30	1	4	79	1339	84 42 57.502	-10 7 54.417	62	2	22	130	54.0	33.0
706	1	4	79	1740	84 42 37.500	-10 5 45.120	68	3	0	0	0.0	0.0
706	1	4	79	1944	84 42 28.380	-10 4 35.760	0	0	0	0	0.0	0.0
706	2	4	79	812	84 42 37.320	-10 7 37.500	70	4	0	0	0.0	0.0
706	2	4	79	906	84 42 42.960	-10 8 32.700	0	0	0	0	0.0	0.0
706	2	4	79	954	84 42 46.840	-10 9 17.880	61	3	0	0	0.0	0.0
706	2	4	79	1120	84 43 0.900	-10 10 3.300	0	0	0	0	0.0	0.0
706	2	4	79	1140	84 43 0.540	-10 10 7.560	58	3	0	0	0.0	0.0
706	2	4	79	1304	84 43 10.440	-10 10 7.200	61	3	0	0	0.0	0.0

PRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
706	2	4	79	1304	84 43 10.440	-10 10 7.200	61	3	0	0	0.0	0.0
706	2	4	79	1304	84 43 10.440	-10 10 7.200	61	3	0	0	0.0	0.0
706	2	4	79	1520	84 43 24.240	-10 10 51.000	70	2	0	0	0.0	0.0
706	2	4	79	1802	84 43 47.160	-10 14 42.540	0	0	0	0	0.0	0.0
706	2	4	79	2336	84 44 20.820	-10 14 15.780	59	3	0	0	0.0	0.0
706	3	4	79	112	84 44 27.000	-10 13 27.240	0	0	0	0	0.0	0.0
706	3	4	79	1140	84 44 12.000	-10 14 21.180	0	0	0	0	0.0	0.0
706	3	4	79	1340	84 44 3.420	-10 13 14.760	59	3	0	0	0.0	0.0
706	3	4	79	1408	84 43 56.820	-10 14 14.340	0	0	0	0	0.0	0.0
706	3	4	79	1428	84 43 55.140	-10 12 43.560	60	3	0	0	0.0	0.0
706	3	4	79	1706	84 43 34.980	-10 10 42.000	0	0	0	0	0.0	0.0
706	3	4	79	1852	84 43 17.220	-10 6 21.060	60	3	0	0	0.0	0.0
706	3	4	79	2040	84 43 2.940	-10 6 18.660	0	0	0	0	0.0	0.0
706	3	4	79	2208	84 42 59.880	-10 10 59.940	0	0	0	0	0.0	0.0
706	3	4	79	2226	84 42 51.540	-10 4 19.140	56	3	0	0	0.0	0.0
706	4	4	79	106	84 42 31.740	-10 0 21.120	62	3	0	0	0.0	0.0
706	4	4	79	202	84 42 23.340	-9 59 45.660	57	3	0	0	0.0	0.0
706	4	4	79	232	84 42 20.040	-9 57 35.220	0	0	0	0	0.0	0.0
706	4	4	79	534	84 42 2.220	-9 55 46.560	0	0	0	0	0.0	0.0
706	4	4	79	606	84 41 58.980	-9 54 57.000	0	0	0	0	0.0	0.0
706	4	4	79	754	84 41 43.260	-9 52 36.000	0	0	0	0	0.0	0.0
706	4	4	79	814	84 41 40.920	-9 52 21.480	68	2	0	0	0.0	0.0
706	4	4	79	1050	84 41 21.000	-9 49 2.520	0	0	0	0	0.0	0.0
706	4	4	79	1614	84 40 20.040	-9 39 56.700	0	0	0	0	0.0	0.0
706	4	4	79	1836	84 40 17.580	-9 39 25.140	60	3	0	0	0.0	0.0
706	4	4	79	2004	84 40 7.800	-9 38 25.860	0	0	0	0	0.0	0.0
706	4	4	79	2022	84 40 7.320	-9 38 4.680	54	3	0	0	0.0	0.0
706	4	4	79	2122	84 39 58.380	-9 39 52.860	0	0	0	0	0.0	0.0
706	4	4	79	2152	84 39 58.920	-9 37 24.000	0	0	0	0	0.0	0.0
706	4	4	79	2206	84 39 58.980	-9 37 1.620	54	3	0	0	0.0	0.0
706	4	4	79	2306	84 39 49.560	-9 37 0.600	69	3	0	0	0.0	0.0
706	4	4	79	2354	84 39 52.980	-9 36 11.400	0	0	0	0	0.0	0.0
706	5	4	79	54	84 39 49.080	-9 37 13.500	60	4	0	0	0.0	0.0
706	5	4	79	54	84 39 49.080	-9 37 13.500	60	4	0	0	0.0	0.0
706	5	4	79	124	84 39 48.060	-9 36 21.240	0	0	0	0	0.0	0.0
706	5	4	79	242	84 39 47.400	-9 35 38.400	56	2	0	0	0.0	0.0
706	5	4	79	612	84 39 39.120	-9 33 34.140	67	3	0	0	0.0	0.0
706	5	4	79	1036	84 39 20.160	-9 30 35.100	63	3	0	0	0.0	0.0
706	5	4	79	1354	84 39 5.880	-9 28 19.620	0	0	0	0	0.0	0.0
706	5	4	79	1412	84 39 4.040	-9 28 53.760	0	0	0	0	0.0	0.0
706	5	4	79	1436	84 39 1.560	-9 28 15.900	67	4	0	0	0.0	0.0
706	5	4	79	1458	84 39 2.400	-9 28 2.100	0	0	0	0	0.0	0.0
706	5	4	79	1518	84 39 1.080	-9 29 3.720	0	0	0	0	0.0	0.0
706	5	4	79	1536	84 38 57.960	-9 27 28.200	0	0	0	0	0.0	0.0
706	5	4	79	1750	84 38 48.240	-9 26 5.220	0	0	0	0	0.0	0.0
706	5	4	79	1832	84 38 54.000	-9 25 8.520	0	0	0	0	0.0	0.0
706	5	4	79	1932	84 38 46.080	-9 25 18.300	0	0	0	0	0.0	0.0
706	5	4	79	1956	84 38 44.640	-9 24 45.120	0	0	0	0	0.0	0.0
706	5	4	79	2118	84 38 44.580	-9 23 43.560	0	0	0	0	0.0	0.0
706	5	4	79	2142	84 38 41.280	-9 23 35.880	0	0	0	0	0.0	0.0
706	5	4	79	2224	84 38 41.220	-9 22 59.100	0	0	0	0	0.0	0.0
706	5	4	79	2304	84 38 41.700	-9 22 33.480	0	0	0	0	0.0	0.0
706	6	4	79	156	84 38 35.760	-9 21 11.460	0	0	0	0	0.0	0.0
706	6	4	79	744	84 38 17.400	-9 16 25.800	0	0	0	0	0.0	0.0
706	6	4	79	809	84 38 25.440	-9 18 29.520	0	0	0	0	0.0	0.0
706	6	4	79	900	84 38 25.800	-9 18 20.940	0	0	0	0	0.0	0.0
706	6	4	79	944	84 38 24.000	-9 18 10.980	0	0	0	0	0.0	0.0
706	6	4	79	1118	84 38 23.340	-9 17 15.540	0	0	0	0	0.0	0.0
706	6	4	79	1134	84 38 24.060	-9 17 0.540	67	3	0	0	0.0	0.0
706	6	4	79	1158	84 38 21.960	-9 17 8.220	0	0	0	0	0.0	0.0
706	6	4	79	1232	84 38 23.940	-9 16 25.920	0	0	0	0	0.0	0.0
706	6	4	79	1300	84 38 22.320	-9 16 41.760	0	0	0	0	0.0	0.0
706	6	4	79	1418	84 38 21.420	-9 14 40.560	0	0	0	0	0.0	0.0
706	6	4	79	1448	84 38 18.840	-9 15 54.660	70	4	0	0	0.0	0.0
706	6	4	79	2202	84 38 7.620	-9 13 6.900	0	0	0	0	0.0	0.0
706	6	4	79	2216	84 38 13.140	-9 13 9.960	0	0	0	0	0.0	0.0
706	6	4	79	2314	84 38 10.920	-9 11 58.260	60	3	0	0	0.0	0.0
706	7	4	79	210	84 38 12.720	-9 11 36.900	0	0	0	0	0.0	0.0

FRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
706	1	4	79	620	84 36 11.520	-9 12 24.720	64	5	0	0	0.0	0.0
706	1	4	79	648	84 36 15.780	-9 11 7.260	0	0	0	0	0.0	0.0
706	1	4	79	706	84 36 15.720	-9 10 26.700	0	0	0	0	0.0	0.0
706	1	4	79	834	84 36 16.920	-9 10 28.800	0	0	0	0	0.0	0.0
706	1	4	79	854	84 36 17.280	-9 10 33.000	61	4	0	0	0.0	0.0
706	1	4	79	1042	84 36 16.720	-9 9 57.060	64	3	0	0	0.0	0.0
30	1	4	79	1048	84 36 20.922	-9 9 51.270	64	3	31	140	40.0	21.0
706	1	4	79	1216	84 36 17.880	-9 9 39.240	0	0	0	0	0.0	0.0
706	1	4	79	1232	84 36 17.700	-9 9 40.200	0	0	0	0	0.0	0.0
706	1	4	79	1250	84 36 16.200	-9 10 54.840	0	0	0	0	0.0	0.0
30	1	4	79	1406	84 36 20.702	-9 9 20.598	66	2	26	130	39.0	27.0
30	1	4	79	1704	84 36 20.757	-9 8 34.277	70	3	21	120	33.0	60.0
706	1	4	79	1820	84 36 16.440	-9 9 17.760	0	0	0	0	0.0	0.0
30	1	4	79	1851	84 36 19.104	-9 8 14.577	59	2	27	120	31.0	23.0
30	1	4	79	2038	84 36 18.560	-9 8 37.813	55	3	23	120	35.0	28.0
706	1	4	79	2120	84 36 14.940	-9 8 54.120	0	0	0	0	0.0	0.0
706	1	4	79	2152	84 36 16.320	-9 8 55.980	0	0	0	0	0.0	0.0
30	1	4	79	2200	84 36 17.076	-9 9 1.550	60	2	34	190	55.0	32.0
30	1	4	79	2220	84 36 17.461	-9 8 16.321	57	2	30	120	24.0	16.0
706	8	4	79	38	84 36 17.400	-9 8 13.860	0	0	0	0	0.0	0.0
706	8	4	79	58	84 36 15.960	-9 8 56.640	66	5	0	0	0.0	0.0
706	8	4	79	124	84 36 14.160	-9 8 35.160	63	3	0	0	0.0	0.0
706	8	4	79	618	84 36 13.080	-9 8 24.660	0	0	0	0	0.0	0.0
706	8	4	79	644	84 36 12.240	-9 8 57.240	0	0	0	0	0.0	0.0
706	8	4	79	710	84 36 10.320	-9 9 6.300	60	2	0	0	0.0	0.0
706	8	4	79	836	84 36 11.880	-9 8 36.660	64	3	0	0	0.0	0.0
30	8	4	79	904	84 36 13.011	-9 9 3.185	57	2	26	120	37.0	19.0
30	8	4	79	1028	84 36 12.462	-9 8 32.650	58	2	28	190	52.0	30.0
706	8	4	79	1042	84 36 12.000	-9 8 7.920	61	3	0	0	0.0	0.0
30	8	4	79	1126	84 36 12.902	-9 8 42.316	59	3	26	130	36.0	19.0
706	8	4	79	1140	84 36 9.300	-9 8 36.780	68	3	0	0	0.0	0.0
706	8	4	79	1208	84 36 10.500	-9 8 44.520	0	0	0	0	0.0	0.0
706	8	4	79	1322	84 36 9.480	-9 8 16.140	0	0	0	0	0.0	0.0
706	8	4	79	1356	84 36 8.100	-9 8 33.240	64	3	0	0	0.0	0.0
22	8	4	79	1504	84 36 7.079	-9 8 31.496	72	2	24	130	32.0	48.0
30	8	4	79	1608	84 36 7.024	-9 8 59.779	77	3	27	120	24.0	69.0
706	8	4	79	1750	84 36 3.060	-9 8 47.100	64	3	0	0	0.0	0.0
22	8	4	79	1755	84 36 5.321	-9 8 34.119	64	2	32	120	31.0	31.0
706	8	4	79	1916	84 37 54.720	-9 8 15.120	0	0	0	0	0.0	0.0
706	8	4	79	2104	84 37 52.980	-9 8 59.580	0	0	0	0	0.0	0.0
706	8	4	79	2124	84 37 51.900	-9 8 39.840	55	3	0	0	0.0	0.0
30	8	4	79	2130	84 37 52.247	-9 8 36.673	55	2	28	120	37.0	21.0
22	8	4	79	2211	84 37 52.302	-9 9 12.516	56	3	22	130	45.0	35.0
22	8	4	79	2317	84 37 48.567	-9 8 23.970	60	2	35	120	26.0	21.0
30	9	4	79	104	84 37 44.282	-9 8 2.217	71	3	27	120	37.0	49.0
706	9	4	79	136	84 37 44.280	-9 7 46.680	60	3	0	0	0.0	0.0
22	9	4	79	144	84 37 47.358	-9 7 49.734	60	3	15	130	54.0	46.0
706	9	4	79	220	84 37 41.580	-9 7 26.100	69	3	0	0	0.0	0.0
22	9	4	79	437	84 37 31.428	-9 7 12.944	76	3	33	120	38.0	72.0
22	9	4	79	623	84 37 23.883	-9 7 34.364	64	3	31	120	38.0	32.0
706	9	4	79	656	84 37 21.720	-9 8 15.720	0	0	0	0	0.0	0.0
706	9	4	79	744	84 37 15.420	-9 7 40.260	0	0	0	0	0.0	0.0
706	9	4	79	804	84 37 12.180	-9 7 50.560	58	3	0	0	0.0	0.0
22	9	4	79	809	84 37 12.861	-9 7 57.514	58	3	33	120	37.0	17.0
706	9	4	79	844	84 37 9.720	-9 7 48.180	65	2	0	0	0.0	0.0
22	9	4	79	955	84 37 3.248	-9 7 31.003	58	2	24	120	43.0	21.0
706	9	4	79	1132	84 36 48.780	-9 7 13.680	65	3	0	0	0.0	0.0
30	9	4	79	1140	84 36 50.779	-9 7 19.487	65	2	25	120	44.0	32.0
706	9	4	79	1454	84 36 26.040	-9 9 6.000	0	0	0	0	0.0	0.0
706	9	4	79	1642	84 36 15.180	-9 9 52.380	0	0	0	0	0.0	0.0
30	9	4	79	1700	84 36 16.062	-9 10 10.524	70	3	24	120	35.0	53.0
706	9	4	79	1730	84 36 10.440	-9 9 22.920	0	0	0	0	0.0	0.0
706	9	4	79	1750	84 36 10.920	-9 9 59.640	62	3	0	0	0.0	0.0
706	9	4	79	1828	84 36 8.040	-9 10 3.480	0	0	0	0	0.0	0.0
30	9	4	79	1847	84 36 10.734	-9 10 47.273	59	2	23	120	36.0	31.0
706	9	4	79	1938	84 36 8.280	-9 10 52.380	55	3	0	0	0.0	0.0
706	9	4	79	2014	84 36 8.100	-9 10 37.200	66	4	0	0	0.0	0.0
30	9	4	79	2122	84 36 8.097	-9 10 47.630	58	2	27	130	39.0	28.0

PRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
706	9	4	79	2122	84 36 5.160	-9 10 39.720	53	3	0	0	0.0	0.0
30	9	4	79	2300	84 36 8.701	-9 10 38.992	54	2	20	130	48.0	22.0
706	10	4	79	139	84 36 2.940	-9 9 58.800	0	0	0	0	0.0	0.0
706	10	4	79	220	84 36 4.560	-9 10 50.700	0	0	0	0	0.0	0.0
706	10	4	79	240	84 36 0.420	-9 11 2.940	66	3	0	0	0.0	0.0
706	10	4	79	516	84 36 1.620	-9 10 50.460	0	0	0	0	0.0	0.0
706	10	4	79	758	84 36 2.040	-9 10 52.620	69	4	0	0	0.0	0.0
30	10	4	79	802	84 36 3.043	-9 11 16.847	59	3	14	130	51.0	64.0
706	10	4	79	842	84 35 58.260	-9 11 17.100	62	3	0	0	0.0	0.0
706	10	4	79	924	84 36 2.640	-9 12 27.660	0	0	0	0	0.0	0.0
706	10	4	79	1030	84 35 56.700	-9 11 6.180	57	3	0	0	0.0	0.0
706	10	4	79	1106	84 36 0.600	-9 10 45.120	0	0	0	0	0.0	0.0
706	10	4	79	1130	84 35 59.160	-9 10 40.320	0	0	0	0	0.0	0.0
30	10	4	79	1137	84 35 58.484	-9 10 30.862	59	2	30	130	38.0	26.0
30	10	4	79	1325	84 35 54.199	-9 10 25.541	63	3	22	130	44.0	34.0
706	10	4	79	1404	84 35 54.900	-9 10 33.540	0	0	0	0	0.0	0.0
706	10	4	79	1438	84 35 53.760	-9 9 54.000	56	3	0	0	0.0	0.0
706	10	4	79	1926	84 35 51.780	-9 10 5.400	0	0	0	0	0.0	0.0
706	10	4	79	2026	84 35 49.380	-9 10 2.100	61	3	0	0	0.0	0.0
706	10	4	79	2326	84 35 46.920	-9 9 51.240	64	3	0	0	0.0	0.0
22	11	4	79	636	84 35 48.926	-9 7 53.284	72	2	25	200	51.0	69.0
22	11	4	79	714	84 35 44.257	-9 6 53.814	74	3	20	130	61.0	85.0
706	11	4	79	752	84 35 45.720	-9 7 19.560	66	3	0	0	0.0	0.0
30	11	4	79	801	84 35 56.509	-9 7 30.295	66	3	23	190	50.0	53.0
706	11	4	79	1040	84 35 50.580	-9 4 29.220	59	3	0	0	0.0	0.0
706	11	4	79	1128	84 35 52.200	-9 3 13.080	0	0	0	0	0.0	0.0
30	11	4	79	1155	84 35 57.056	-9 2 59.578	62	3	33	200	44.0	37.0
706	11	4	79	1314	84 35 53.160	-8 59 7.980	0	0	0	0	0.0	0.0
30	11	4	79	1340	84 35 54.858	-8 59 47.009	56	3	34	200	47.0	23.0
706	11	4	79	1500	84 35 41.760	-8 58 16.380	0	0	0	0	0.0	0.0
706	11	4	79	1602	84 35 32.940	-8 58 6.780	0	0	0	0	0.0	0.0
30	11	4	79	2130	84 34 42.898	-8 54 40.682	57	3	26	130	36.0	26.0
706	11	4	79	2310	84 34 38.760	-8 53 44.340	55	3	0	0	0.0	0.0
706	12	4	79	142	84 34 32.160	-8 51 7.200	0	0	0	0	0.0	0.0
706	12	4	79	802	84 34 0.000	-8 50 1.140	0	0	0	0	0.0	0.0
30	12	4	79	811	84 34 4.061	-8 50 22.016	67	3	17	130	38.0	48.0
706	12	4	79	1034	84 34 0.660	-8 48 17.280	0	0	0	0	0.0	0.0
30	12	4	79	1041	84 34 0.875	-8 48 30.285	61	3	23	120	46.0	31.0
706	12	4	79	1140	84 33 58.020	-8 47 37.560	0	0	0	0	0.0	0.0
706	12	4	79	1222	84 34 0.000	-8 46 0.060	0	0	0	0	0.0	0.0
30	12	4	79	1227	84 33 58.578	-8 46 14.123	71	3	22	120	52.0	67.0
22	12	4	79	1334	84 33 52.800	-8 45 31.613	65	3	21	130	38.0	44.0
30	12	4	79	1740	84 33 12.810	-8 41 58.025	63	3	20	120	37.0	29.0
706	12	4	79	1934	84 32 44.280	-8 41 9.960	0	0	0	0	0.0	0.0
22	12	4	79	2304	84 31 57.444	-8 45 0.578	65	3	33	200	37.0	41.0
22	13	4	79	51	84 31 52.889	-8 46 46.876	57	3	24	200	51.0	44.0
22	13	4	79	423	84 31 5.204	-8 49 43.955	58	3	28	200	46.0	33.0
22	13	4	79	721	84 30 39.496	-8 52 11.557	72	3	16	130	45.0	75.0
706	13	4	79	954	84 30 9.060	-8 53 3.960	57	3	0	0	0.0	0.0
706	13	4	79	954	84 30 9.060	-8 53 3.960	57	3	0	0	0.0	0.0
706	13	4	79	954	84 30 9.060	-8 53 3.960	57	3	0	0	0.0	0.0
706	13	4	79	954	84 30 9.060	-8 53 3.960	57	3	0	0	0.0	0.0
22	13	4	79	1126	84 29 57.528	-8 54 2.539	64	3	24	200	48.0	54.0
22	13	4	79	1146	84 29 57.034	-8 54 9.667	57	3	28	190	52.0	27.0
706	13	4	79	1240	84 29 53.940	-8 53 31.080	0	0	0	0	0.0	0.0
706	13	4	79	1310	84 29 51.420	-8 54 22.680	0	0	0	0	0.0	0.0
22	13	4	79	1311	84 29 51.541	-8 54 30.747	56	3	25	200	59.0	35.0
22	13	4	79	1333	84 29 51.980	-8 54 16.979	62	3	32	190	51.0	39.0
22	13	4	79	1521	84 29 52.804	-8 55 33.602	74	3	33	190	46.0	84.0
706	13	4	79	1820	84 29 56.400	-8 57 32.520	0	0	0	0	0.0	0.0
22	13	4	79	1836	84 29 58.407	-8 58 14.092	58	3	19	120	61.0	47.0
30	13	4	79	1950	84 29 56.155	-8 59 29.122	54	3	26	140	51.0	30.0
22	13	4	79	1953	84 29 55.166	-8 58 55.778	63	3	27	130	40.0	40.0
22	13	4	79	2025	84 29 57.803	-8 59 0.028	54	3	21	120	47.0	23.0
30	13	4	79	2136	84 29 57.363	-9 0 27.995	53	3	25	140	39.0	24.0
22	13	4	79	2157	84 30 0.385	-9 0 53.208	73	3	29	200	48.0	87.0
22	13	4	79	2212	84 30 1.318	-9 0 38.535	57	3	23	120	42.0	22.0
22	13	4	79	2322	84 29 59.121	-9 1 59.600	59	3	20	140	50.0	51.0

PRAM I NAVIGATION

SW	DI	MN	YR	GMT	LATITUDE	LONGITUDE	RL	I	DP	SAT	STDY	STDX
22	13	4	79	2343	64 30 3.131	-9 1 46.842	61	3	29	200	48.0	44.0
22	14	4	79	0	64 30 4.009	-9 1 33.404	65	3	25	120	36.0	34.0
22	14	4	79	129	64 30 15.106	-9 3 10.112	55	3	23	200	55.0	31.0
22	14	4	79	146	64 30 16.040	-9 2 11.342	80	3	21	120	34.0	79.0
22	14	4	79	316	64 30 29.224	-9 4 32.750	55	3	23	200	52.0	38.0
706	14	4	79	514	64 30 43.620	-9 6 45.360	68	3	0	0	0.0	0.0
30	14	4	79	630	64 30 53.943	-9 6 38.090	65	3	26	140	51.0	38.0
22	14	4	79	705	64 30 57.823	-9 7 33.344	59	3	26	120	39.0	24.0
22	14	4	79	817	64 31 6.115	-9 8 22.357	61	4	30	140	44.0	22.0
706	14	4	79	850	64 31 9.200	-9 9 0.600	0	0	0	0	0.0	0.0
30	14	4	79	851	64 31 6.577	-9 8 57.080	57	4	31	120	34.0	16.0
30	14	4	79	1005	64 31 19.266	-9 9 43.134	62	3	29	140	50.0	28.0
706	14	4	79	1018	64 31 11.820	-9 9 41.620	0	0	0	0	0.0	0.0
706	14	4	79	1032	64 31 16.200	-9 10 46.080	0	0	0	0	0.0	0.0
706	14	4	79	1032	64 31 16.200	-9 10 46.080	0	0	0	0	0.0	0.0
30	14	4	79	1056	64 31 21.738	-9 10 27.683	56	3	33	190	53.0	27.0
30	14	4	79	1222	64 31 25.858	-9 12 51.817	71	3	28	120	45.0	65.0
706	14	4	79	1520	64 31 45.440	-9 15 54.300	0	0	0	0	0.0	0.0
30	14	4	79	1535	64 31 46.183	-9 14 32.479	76	3	33	120	21.0	49.0
706	14	4	79	1612	64 31 44.820	-9 16 5.280	0	0	0	0	0.0	0.0
706	14	4	79	1612	64 31 44.820	-9 16 5.280	0	0	0	0	0.0	0.0
706	14	4	79	1856	64 31 42.360	-9 15 40.920	0	0	0	0	0.0	0.0
706	14	4	79	1944	64 31 39.840	-9 15 37.260	0	0	0	0	0.0	0.0
706	14	4	79	2038	64 31 41.400	-9 15 50.760	0	0	0	0	0.0	0.0
30	15	4	79	819	64 31 23.107	-9 15 27.102	62	3	36	190	52.0	44.0
706	15	4	79	930	64 31 21.840	-9 15 21.480	0	0	0	0	0.0	0.0
706	15	4	79	1050	64 31 17.040	-9 15 45.060	0	0	0	0	0.0	0.0
22	15	4	79	1057	64 31 19.616	-9 15 31.853	66	3	20	200	42.0	57.0
706	15	4	79	1120	64 31 18.240	-9 15 14.220	0	0	0	0	0.0	0.0
22	15	4	79	1127	64 31 19.376	-9 15 31.970	65	2	28	120	35.0	33.0
706	15	4	79	1140	64 31 17.760	-9 15 52.680	57	3	0	0	0.0	0.0
22	15	4	79	1155	64 31 20.145	-9 15 41.769	57	3	25	190	61.0	42.0
706	15	4	79	1234	64 31 18.900	-9 15 41.460	57	3	0	0	0.0	0.0
22	15	4	79	1242	64 31 17.948	-9 15 54.492	57	3	22	200	56.0	48.0
22	15	4	79	1342	64 31 18.442	-9 15 26.525	64	2	31	190	51.0	48.0
22	15	4	79	1427	64 31 19.596	-9 15 30.748	55	2	32	200	56.0	26.0
30	15	4	79	1440	64 31 15.476	-9 15 23.229	72	3	24	130	37.0	47.0
22	15	4	79	1612	64 31 16.575	-9 15 23.529	59	2	26	200	52.0	35.0
706	15	4	79	1644	64 31 7.980	-9 16 38.400	68	2	0	0	0.0	0.0
30	15	4	79	1646	64 31 16.245	-9 15 9.778	68	3	26	120	30.0	36.0
22	15	4	79	1757	64 31 17.509	-9 14 54.486	70	2	28	200	49.0	73.0
22	15	4	79	1834	64 31 16.520	-9 15 4.724	58	2	32	120	29.0	22.0
706	15	4	79	1948	64 31 15.180	-9 15 15.720	53	4	0	0	0.0	0.0
22	15	4	79	2001	64 31 12.894	-9 15 12.531	62	3	27	130	34.0	40.0
22	15	4	79	2021	64 31 14.542	-9 15 9.036	54	3	22	120	36.0	25.0
22	15	4	79	2050	64 31 13.059	-9 15 6.290	61	3	32	190	62.0	44.0
22	15	4	79	2148	64 31 13.773	-9 15 10.719	55	3	21	130	47.0	35.0
30	15	4	79	2208	64 31 11.796	-9 14 50.346	57	3	22	120	51.0	35.0
706	15	4	79	2308	64 31 13.500	-9 15 16.200	63	3	0	0	0.0	0.0
22	15	4	79	2314	64 31 14.542	-9 14 54.246	63	2	26	200	47.0	53.0
22	15	4	79	2334	64 31 12.839	-9 15 5.335	55	2	24	130	33.0	20.0
22	15	4	79	2355	64 31 11.576	-9 15 2.987	65	2	16	120	44.0	68.0
706	16	4	79	56	64 31 12.240	-9 14 45.360	56	4	0	0	0.0	0.0
22	16	4	79	120	64 31 11.960	-9 14 57.741	60	2	22	130	38.0	53.0
22	16	4	79	246	64 31 11.027	-9 14 46.473	54	2	31	200	44.0	25.0
22	16	4	79	307	64 31 5.479	-9 16 18.600	71	2	24	130	37.0	66.0
22	16	4	79	433	64 31 10.642	-9 14 32.390	59	3	33	200	49.0	40.0
22	16	4	79	514	64 31 8.994	-9 14 39.545	68	2	17	120	58.0	62.0
22	16	4	79	619	64 31 9.873	-9 14 40.266	71	2	27	200	39.0	64.0
22	16	4	79	640	64 31 11.191	-9 14 15.478	75	3	21	130	38.0	57.0
22	16	4	79	700	64 31 8.884	-9 14 35.416	59	3	22	120	44.0	27.0
706	16	4	79	728	64 31 6.000	-9 13 54.540	0	0	0	0	0.0	0.0
22	16	4	79	730	64 31 10.807	-9 14 14.694	66	3	31	190	46.0	45.0
706	16	4	79	844	64 31 5.340	-9 14 54.360	0	0	0	0	0.0	0.0
706	16	4	79	914	64 31 7.680	-9 14 26.340	56	3	0	0	0.0	0.0
22	16	4	79	918	64 31 8.445	-9 14 24.954	58	3	34	190	56.0	38.0
22	16	4	79	1016	64 31 6.852	-9 14 26.945	58	3	24	130	41.0	23.0
30	16	4	79	1032	64 31 7.456	-9 14 27.681	61	3	26	120	34.0	24.0

FRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
22	18	4	79	1106	84 31 7.676	-9 14 25.942	56	2	33	190	50.0	26.0
706	18	4	79	1126	84 31 7.140	-9 14 54.300	62	3	0	0	0.0	0.0
22	18	4	79	1135	84 31 7.621	-9 14 22.530	62	3	22	200	55.0	79.0
22	18	4	79	1204	84 31 8.087	-9 14 34.141	60	2	20	130	50.0	34.0
30	18	4	79	1320	84 31 8.193	-9 14 30.632	56	3	23	200	52.0	27.0
30	18	4	79	1738	84 31 7.731	-9 14 59.512	62	4	14	120	46.0	56.0
706	18	4	79	1806	84 31 8.100	-9 15 44.040	0	0	0	0	0.0	0.0
706	18	4	79	1828	84 31 8.600	-9 15 37.080	0	0	0	0	0.0	0.0
30	18	4	79	1912	84 31 8.193	-9 14 45.237	67	3	25	130	41.0	52.0
706	18	4	79	1918	84 31 8.940	-9 14 56.460	0	0	0	0	0.0	0.0
30	18	4	79	1925	84 31 8.083	-9 14 37.554	55	3	23	120	42.0	28.0
22	18	4	79	2059	84 31 8.742	-9 14 50.977	57	4	23	130	46.0	30.0
22	18	4	79	2245	84 31 7.450	-9 14 43.678	54	3	24	130	40.0	20.0
706	18	4	79	2254	84 31 8.420	-9 14 21.780	0	0	0	0	0.0	0.0
30	18	4	79	2300	84 31 8.533	-9 14 37.472	60	4	26	120	40.0	26.0
30	18	4	79	2352	84 31 8.248	-9 14 36.736	59	3	24	200	47.0	37.0
22	17	4	79	31	84 31 5.753	-9 14 41.193	57	3	22	130	63.0	26.0
22	17	4	79	416	84 31 5.039	-9 14 46.130	66	2	26	130	41.0	49.0
30	17	4	79	625	84 31 4.874	-9 14 32.953	62	3	23	120	56.0	34.0
22	17	4	79	641	84 31 5.204	-9 14 50.964	72	4	31	190	44.0	77.0
30	17	4	79	739	84 31 5.281	-9 15 9.853	76	1	26	130	32.0	37.0
22	17	4	79	808	84 31 4.292	-9 15 12.504	61	2	29	190	55.0	38.0
706	17	4	79	908	84 31 3.900	-9 15 21.360	0	0	0	0	0.0	0.0
22	17	4	79	926	84 31 5.039	-9 15 18.986	60	2	17	130	50.0	32.0
706	17	4	79	930	84 31 3.720	-9 15 7.800	58	3	0	0	0.0	0.0
22	17	4	79	1114	84 31 4.567	-9 15 29.642	58	3	22	130	53.0	44.0
30	17	4	79	1204	84 31 5.446	-9 15 40.956	57	3	35	190	48.0	29.0
30	17	4	79	1302	84 31 4.545	-9 15 48.292	63	3	29	130	34.0	27.0
22	17	4	79	1449	84 31 8.115	-9 16 32.759	75	2	23	130	44.0	58.0
30	17	4	79	1823	84 31 12.345	-9 20 11.552	72	3	29	130	32.0	73.0
22	17	4	79	2200	84 31 19.761	-9 23 38.156	55	2	26	130	46.0	30.0
30	17	4	79	2342	84 31 21.738	-9 25 6.162	55	3	25	130	38.0	21.0
22	18	4	79	129	84 31 21.738	-9 27 25.367	61	3	18	130	55.0	63.0
30	18	4	79	550	84 31 30.033	-9 30 0.089	68	3	28	200	51.0	63.0
22	18	4	79	649	84 31 30.967	-9 31 46.094	73	3	19	130	45.0	60.0
30	18	4	79	1024	84 31 30.527	-9 34 55.017	58	4	22	130	45.0	19.0
706	18	4	79	1024	84 31 28.460	-9 35 12.780	61	3	0	0	0.0	0.0
706	18	4	79	1058	84 31 24.540	-9 35 30.420	0	0	0	0	0.0	0.0
706	18	4	79	1420	84 31 18.000	-9 37 37.740	0	0	0	0	0.0	0.0
706	18	4	79	1614	84 31 14.160	-9 37 55.980	0	0	0	0	0.0	0.0
706	18	4	79	1858	84 31 4.260	-9 38 6.060	0	0	0	0	0.0	0.0
706	18	4	79	1858	84 31 4.260	-9 38 6.060	0	0	0	0	0.0	0.0
706	18	4	79	1858	84 31 4.260	-9 38 6.060	0	0	0	0	0.0	0.0
706	18	4	79	1858	84 31 4.260	-9 38 6.060	0	0	0	0	0.0	0.0
706	18	4	79	1858	84 31 4.260	-9 38 6.060	0	0	0	0	0.0	0.0
706	18	4	79	2104	84 30 53.940	-9 37 51.420	0	0	0	0	0.0	0.0
706	18	4	79	2230	84 30 50.520	-9 37 23.760	0	0	0	0	0.0	0.0
706	18	4	79	2250	84 30 47.700	-9 37 46.740	54	3	0	0	0.0	0.0
30	18	4	79	2323	84 30 46.967	-9 37 19.783	61	3	25	200	39.0	38.0
22	19	4	79	23	84 30 46.912	-9 36 26.092	67	3	33	140	47.0	67.0
22	19	4	79	110	84 30 25.214	-9 36 26.985	54	2	22	200	60.0	44.0
22	19	4	79	255	84 30 25.104	-9 36 25.455	54	3	30	200	52.0	34.0
22	19	4	79	442	84 30 33.014	-9 36 26.231	61	3	33	200	41.0	37.0
22	19	4	79	544	84 30 28.729	-9 35 40.102	68	3	31	140	51.0	41.0
706	19	4	79	642	84 30 25.620	-9 36 52.740	69	3	0	0	0.0	0.0
30	19	4	79	650	84 30 24.609	-9 35 43.295	69	2	31	190	42.0	62.0
22	19	4	79	732	84 30 28.015	-9 35 58.038	61	2	33	140	44.0	20.0
706	19	4	79	744	84 30 17.520	-9 35 20.820	0	0	0	0	0.0	0.0
30	19	4	79	747	84 30 19.006	-9 36 41.466	57	2	28	120	43.0	22.0
22	19	4	79	748	84 30 25.928	-9 36 31.834	66	2	16	130	59.0	57.0
706	19	4	79	952	84 30 14.040	-9 37 11.820	0	0	0	0	0.0	0.0
22	19	4	79	1458	84 29 52.365	-9 36 7.774	77	3	22	130	37.0	74.0
30	19	4	79	1659	84 29 41.708	-9 37 20.627	64	3	29	200	51.0	50.0
22	19	4	79	1814	84 29 42.104	-9 36 58.353	57	2	33	140	41.0	29.0
706	19	4	79	1826	84 29 38.100	-9 36 44.700	70	3	0	0	0.0	0.0
22	19	4	79	1832	84 29 39.620	-9 36 19.825	70	2	23	130	54.0	78.0
706	19	4	79	1914	84 29 35.220	-9 36 35.940	67	3	0	0	0.0	0.0
22	19	4	79	1922	84 29 34.786	-9 36 32.933	67	3	33	190	56.0	63.0

FRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
22	19	4	79	2000	84 29 35.336	-9 36 40.486	53	2	25	140	43.0	32.0
22	19	4	79	2018	84 29 32.369	-9 36 41.935	59	3	26	130	27.0	24.0
22	19	4	79	2108	84 29 29.236	-9 36 29.671	58	3	33	190	60.0	34.0
22	19	4	79	2205	84 29 25.997	-9 36 14.696	54	3	27	130	54.0	41.0
30	19	4	79	2216	84 29 24.240	-9 35 37.287	67	3	27	200	40.0	51.0
22	20	4	79	41	84 29 14.881	-9 35 43.391	61	3	34	190	52.0	36.0
22	20	4	79	452	84 28 56.334	-9 34 11.944	72	3	23	140	45.0	67.0
22	20	4	79	639	84 28 43.480	-9 33 14.664	63	3	24	140	55.0	33.0
30	20	4	79	652	84 28 36.559	-9 32 53.681	59	3	28	120	38.0	22.0
22	20	4	79	658	84 28 41.667	-9 33 3.156	71	3	15	130	54.0	70.0
30	20	4	79	748	84 28 31.230	-9 31 48.662	63	3	36	190	45.0	41.0
22	20	4	79	827	84 28 30.881	-9 31 57.355	60	3	26	140	60.0	26.0
22	20	4	79	936	84 28 19.840	-9 30 42.730	56	3	36	190	43.0	24.0
22	20	4	79	1014	84 28 14.257	-9 30 13.733	64	3	32	140	38.0	25.0
30	20	4	79	1037	84 28 7.061	-9 29 13.191	65	3	23	200	55.0	51.0
22	20	4	79	1124	84 28 2.281	-9 29 8.824	56	3	35	190	43.0	24.0
22	20	4	79	1202	84 27 56.896	-9 28 53.100	74	3	25	140	61.0	68.0
30	20	4	79	1312	84 27 39.155	-9 27 56.534	61	3	35	190	45.0	40.0
22	20	4	79	1536	84 27 16.414	-9 22 57.040	73	3	31	140	39.0	79.0
22	20	4	79	1722	84 26 59.165	-9 21 1.512	60	3	30	140	41.0	37.0
106	20	4	79	1734	84 26 58.860	-9 19 54.720	0	0	0	0	0.0	0.0
106	20	4	79	1820	84 26 45.000	-9 19 28.140	0	0	0	0	0.0	0.0
106	20	4	79	1902	84 26 42.840	-9 18 45.000	0	0	0	0	0.0	0.0
106	20	4	79	2012	84 26 31.800	-9 17 26.460	0	0	0	0	0.0	0.0
106	20	4	79	2040	84 26 27.720	-9 16 28.560	0	0	0	0	0.0	0.0
106	20	4	79	2040	84 26 27.720	-9 16 28.560	0	0	0	0	0.0	0.0
106	20	4	79	2040	84 26 27.720	-9 16 28.560	0	0	0	0	0.0	0.0
106	20	4	79	2106	84 26 24.900	-9 16 31.260	0	0	0	0	0.0	0.0
106	21	4	79	540	84 25 30.120	-9 8 38.220	66	3	0	0	0.0	0.0
22	21	4	79	547	84 25 30.505	-9 8 8.919	66	3	19	140	63.0	53.0
22	21	4	79	756	84 25 16.553	-9 5 59.129	64	2	25	130	38.0	36.0
22	21	4	79	922	84 25 4.408	-9 4 45.219	61	2	20	140	56.0	47.0
22	21	4	79	944	84 25 4.413	-9 4 1.294	58	2	26	130	40.0	30.0
22	21	4	79	1034	84 24 56.338	-9 3 10.160	55	3	24	190	55.0	34.0
22	21	4	79	1110	84 24 52.057	-9 2 53.090	69	2	21	140	55.0	49.0
22	21	4	79	1132	84 24 50.080	-9 2 7.332	59	3	28	130	46.0	24.0
22	21	4	79	1222	84 24 42.005	-9 0 48.848	58	3	29	190	53.0	46.0
22	21	4	79	1319	84 24 32.992	-9 0 6.496	66	2	25	130	48.0	37.0
22	21	4	79	1410	84 24 25.192	-8 59 6.709	68	3	31	190	49.0	70.0
22	21	4	79	2027	84 23 24.932	-8 50 11.366	57	3	26	130	36.0	19.0
22	21	4	79	2140	84 23 14.275	-8 48 41.230	69	3	21	200	50.0	72.0
22	21	4	79	2213	84 23 13.451	-8 48 6.651	54	3	31	130	34.0	20.0
22	21	4	79	2304	84 23 8.804	-8 47 4.791	56	3	33	190	57.0	29.0
22	21	4	79	2335	84 23 4.991	-8 45 38.679	63	3	18	140	55.0	66.0
22	21	4	79	2359	84 22 59.333	-8 45 47.722	56	3	31	130	28.0	19.0
22	22	4	79	146	84 22 48.182	-8 43 11.380	64	4	30	130	38.0	48.0
22	22	4	79	305	84 22 33.076	-8 42 43.797	54	2	28	200	53.0	42.0
22	22	4	79	452	84 22 17.860	-8 41 34.130	62	2	30	200	39.0	41.0
106	22	4	79	658	84 21 56.940	-8 39 29.640	68	3	0	0	0.0	0.0
22	22	4	79	707	84 21 59.788	-8 39 31.694	68	2	25	130	35.0	44.0
106	22	4	79	816	84 21 47.700	-8 38 42.000	68	3	0	0	0.0	0.0
106	22	4	79	840	84 21 39.420	-8 37 27.420	0	0	0	0	0.0	0.0
106	22	4	79	840	84 21 39.420	-8 37 27.420	0	0	0	0	0.0	0.0
106	22	4	79	840	84 21 39.420	-8 37 27.420	0	0	0	0	0.0	0.0
106	22	4	79	840	84 21 39.420	-8 37 27.420	0	0	0	0	0.0	0.0
106	22	4	79	840	84 21 39.420	-8 37 27.420	0	0	0	0	0.0	0.0
22	22	4	79	854	84 21 42.814	-8 37 1.751	60	3	22	130	37.0	33.0
22	22	4	79	940	84 21 33.585	-8 36 27.529	55	3	27	190	46.0	28.0
22	22	4	79	1008	84 21 33.036	-8 35 36.738	67	4	28	200	53.0	64.0
30	22	4	79	1042	84 21 26.719	-8 35 7.349	58	3	35	130	27.0	15.0
106	22	4	79	1126	84 21 18.360	-8 34 24.060	55	3	0	0	0.0	0.0
30	22	4	79	1133	84 21 16.611	-8 34 11.621	55	3	34	190	48.0	30.0
30	22	4	79	1153	84 21 18.359	-8 33 24.922	56	3	32	200	51.0	34.0
22	22	4	79	1230	84 21 8.921	-8 33 8.608	62	3	29	130	34.0	24.0
22	22	4	79	1321	84 21 1.945	-8 32 16.368	63	3	29	190	44.0	49.0
22	22	4	79	1338	84 21 3.922	-8 31 10.107	53	3	25	200	39.0	21.0
22	22	4	79	1418	84 20 53.046	-8 31 29.909	73	3	25	130	26.0	39.0
22	22	4	79	1523	84 20 47.223	-8 28 59.953	56	3	22	200	59.0	47.0

FRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
706	22	4	79	1708	84 20 25.860	-8 27 35.520	66	3	0	0	0.0	0.0
30	22	4	79	1752	84 20 20.036	-8 26 27.044	73	3	25	130	40.0	68.0
22	22	4	79	1842	84 20 16.846	-8 25 56.790	69	3	32	190	53.0	75.0
706	22	4	79	1904	84 20 13.560	-8 25 33.660	53	3	0	0	0.0	0.0
30	22	4	79	1911	84 20 13.440	-8 25 35.271	53	3	29	140	38.0	18.0
706	22	4	79	1936	84 20 6.480	-8 25 18.480	61	2	0	0	0.0	0.0
30	22	4	79	1938	84 20 9.540	-8 25 17.061	61	3	25	130	32.0	28.0
22	22	4	79	2028	84 20 5.200	-8 24 31.323	59	3	28	190	56.0	43.0
30	22	4	79	2057	84 20 3.992	-8 24 24.519	53	2	35	140	37.0	20.0
30	22	4	79	2124	84 20 1.959	-8 24 8.726	54	3	26	130	35.0	22.0
30	22	4	79	2215	84 20 0.256	-8 23 45.531	55	2	33	190	46.0	21.0
706	22	4	79	2236	84 19 57.600	-8 23 3.300	58	4	0	0	0.0	0.0
30	22	4	79	2243	84 19 58.499	-8 23 18.360	58	2	35	140	33.0	29.0
30	22	4	79	2310	84 19 57.070	-8 23 16.877	45	2	25	130	43.0	27.0
30	23	4	79	1	84 19 56.136	-8 22 35.212	58	2	29	190	45.0	31.0
30	23	4	79	29	84 19 54.763	-8 22 27.665	70	3	31	140	40.0	68.0
30	23	4	79	57	84 19 54.763	-8 22 28.888	60	3	27	130	40.0	34.0
30	23	4	79	148	84 19 52.456	-8 21 51.184	68	3	30	190	56.0	72.0
30	23	4	79	243	84 19 52.072	-8 21 37.046	72	3	26	130	36.0	68.0
30	23	4	79	520	84 19 41.305	-8 20 47.745	64	3	27	140	43.0	29.0
706	23	4	79	610	84 19 34.140	-8 20 59.700	0	0	0	0	0.0	0.0
30	23	4	79	617	84 19 40.371	-8 20 41.922	74	3	24	130	48.0	67.0
706	23	4	79	700	84 19 34.380	-8 20 15.300	0	0	0	0	0.0	0.0
30	23	4	79	708	84 19 37.899	-8 20 20.718	64	3	30	190	36.0	37.0
30	23	4	79	805	84 19 34.933	-8 19 34.315	62	3	23	130	41.0	45.0
706	23	4	79	910	84 19 21.660	-8 19 45.000	0	0	0	0	0.0	0.0
30	23	4	79	1110	84 19 29.989	-8 17 39.789	66	2	23	120	48.0	50.0
706	23	4	79	1956	84 19 3.180	-8 14 54.720	0	0	0	0	0.0	0.0
706	23	4	79	1956	84 19 3.180	-8 14 54.720	0	0	0	0	0.0	0.0
706	23	4	79	2028	84 19 9.900	-8 14 40.860	56	3	0	0	0.0	0.0
706	24	4	79	636	84 19 1.020	-8 13 54.120	58	3	0	0	0.0	0.0
22	24	4	79	903	84 18 58.733	-8 13 21.343	59	3	26	130	41.0	21.0
22	24	4	79	939	84 18 58.348	-8 13 23.066	69	3	27	200	56.0	78.0
22	24	4	79	955	84 18 58.239	-8 13 1.753	54	3	20	190	60.0	34.0
22	24	4	79	1014	84 19 0.930	-8 12 32.323	61	3	17	120	59.0	57.0
22	24	4	79	1051	84 18 57.250	-8 12 40.069	58	3	21	130	51.0	29.0
706	24	4	79	1118	84 18 56.400	-8 13 18.300	0	0	0	0	0.0	0.0
22	24	4	79	1129	84 18 57.305	-8 13 5.316	57	3	31	200	45.0	33.0
22	24	4	79	1142	84 18 56.371	-8 12 32.502	56	3	32	190	44.0	29.0
22	24	4	79	1200	84 18 56.536	-8 12 57.200	73	3	25	120	46.0	75.0
22	24	4	79	1238	84 18 54.338	-8 12 38.338	63	3	29	130	44.0	34.0
22	24	4	79	1309	84 18 57.909	-8 12 35.736	53	3	23	200	53.0	31.0
22	24	4	79	1330	84 18 54.833	-8 12 26.555	64	3	26	190	47.0	46.0
706	24	4	79	1510	84 18 53.340	-8 12 32.340	0	0	0	0	0.0	0.0
706	24	4	79	1530	84 18 52.740	-8 11 44.340	0	0	0	0	0.0	0.0
706	24	4	79	1656	84 18 6.660	-8 10 49.320	0	0	0	0	0.0	0.0
22	24	4	79	1841	84 18 45.330	-8 10 50.404	66	8	32	190	59.0	64.0
22	24	4	79	2055	84 18 43.572	-8 10 4.983	54	3	26	120	34.0	21.0
22	24	4	79	2156	84 18 47.307	-8 11 2.125	65	3	32	200	41.0	50.0
22	24	4	79	2242	84 18 36.705	-8 10 14.754	61	3	22	120	50.0	48.0
22	24	4	79	2319	84 18 41.155	-8 9 45.372	54	3	29	130	33.0	22.0
22	24	4	79	2342	84 18 38.848	-8 9 27.300	55	3	30	200	39.0	29.0
22	25	4	79	10	84 18 39.781	-8 9 19.184	59	3	23	190	53.0	44.0
22	25	4	79	105	84 18 37.310	-8 9 30.005	61	3	27	130	43.0	42.0
22	25	4	79	128	84 18 37.969	-8 9 16.993	51	3	31	200	43.0	25.0
22	25	4	79	156	84 18 34.673	-8 10 6.143	70	3	33	190	55.0	77.0
22	25	4	79	314	84 18 37.914	-8 8 38.953	54	3	31	200	48.0	34.0
22	25	4	79	501	84 18 34.178	-8 8 10.979	64	3	25	200	49.0	58.0
22	25	4	79	548	84 18 28.081	-8 8 30.068	60	3	29	120	51.0	36.0
22	25	4	79	626	84 18 28.575	-8 8 5.445	72	3	26	130	54.0	60.0
22	25	4	79	718	84 18 31.212	-8 8 26.071	62	3	29	190	51.0	50.0
22	25	4	79	734	84 18 22.753	-8 8 4.147	56	3	22	120	51.0	26.0
22	25	4	79	814	84 18 26.673	-8 8 16.596	61	3	33	130	38.0	27.0
22	25	4	79	906	84 18 24.840	-8 7 41.371	55	3	24	190	61.0	28.0
22	25	4	79	1001	84 18 22.533	-8 7 7.588	57	3	29	130	42.0	31.0
706	25	4	79	1014	84 18 18.660	-8 7 20.220	0	0	0	0	0.0	0.0
22	25	4	79	1018	84 18 20.775	-8 7 24.212	63	3	29	200	42.0	43.0
706	25	4	79	1046	84 18 20.160	-8 6 59.340	54	3	0	0	0.0	0.0

FRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
22	25	4	79	1053	84 18 21.434	-8 6 22.530	54	3	33	190	49.0	28.0
22	25	4	79	1149	84 18 19.512	-8 6 29.767	60	3	29	130	38.0	23.0
22	25	4	79	1241	84 18 15.447	-8 6 27.083	60	3	32	190	47.0	39.0
22	25	4	79	1337	84 18 12.920	-8 6 53.573	73	5	21	130	45.0	65.0
22	25	4	79	1428	84 18 13.524	-8 6 12.910	72	3	30	190	38.0	72.0
706	25	4	79	1628	84 18 9.960	-8 5 36.240	62	2	0	0	0.0	0.0
22	25	4	79	1636	84 18 10.068	-8 5 36.834	62	3	32	140	37.0	43.0
706	25	4	79	1704	84 18 7.620	-8 5 37.500	0	0	0	0	0.0	0.0
22	25	4	79	1802	84 18 7.427	-8 4 57.249	72	3	27	190	49.0	77.0
22	25	4	79	1822	84 18 6.768	-8 4 44.429	54	3	30	140	51.0	30.0
22	25	4	79	2008	84 17 56.770	-8 4 41.923	52	3	35	140	37.0	19.0
22	25	4	79	2044	84 17 56.935	-8 4 20.506	55	4	20	130	47.0	37.0
22	25	4	79	2135	84 17 52.760	-8 4 0.642	55	3	32	190	46.0	22.0
22	25	4	79	2154	84 17 51.167	-8 3 50.088	56	4	34	140	44.0	33.0
706	25	4	79	2222	84 17 51.480	-8 3 26.160	53	3	0	0	0.0	0.0
22	25	4	79	2322	84 17 51.057	-8 3 5.161	56	4	33	190	54.0	28.0
22	25	4	79	2341	84 17 49.135	-8 3 2.133	65	3	28	140	35.0	45.0
22	26	4	79	108	84 17 47.871	-8 2 39.068	64	3	32	190	55.0	52.0
22	26	4	79	501	84 17 44.026	-8 2 42.323	67	3	35	140	38.0	35.0
22	26	4	79	626	84 17 39.741	-8 2 43.305	67	3	30	190	46.0	53.0
706	26	4	79	640	84 17 34.860	-8 2 46.800	0	0	0	0	0.0	0.0
22	26	4	79	649	84 17 40.455	-8 2 36.603	60	3	30	140	42.0	25.0
706	26	4	79	806	84 17 31.740	-8 2 37.440	0	0	0	0	0.0	0.0
22	26	4	79	816	84 17 37.819	-8 2 27.883	57	3	29	190	43.0	27.0
22	26	4	79	836	84 17 36.810	-8 1 54.478	60	3	35	140	45.0	22.0
706	26	4	79	956	84 17 34.500	-8 1 41.820	53	3	0	0	0.0	0.0
22	26	4	79	1004	84 17 35.017	-8 1 31.351	53	3	29	190	48.0	27.0
22	26	4	79	1024	84 17 32.600	-8 1 39.522	66	3	36	140	45.0	39.0
22	26	4	79	1056	84 17 37.928	-8 0 54.403	59	3	29	200	50.0	34.0
22	26	4	79	1247	84 17 25.679	-8 1 9.784	65	3	21	130	41.0	43.0
22	26	4	79	1339	84 17 34.907	-7 59 44.142	66	3	30	190	41.0	45.0
22	26	4	79	1435	84 17 30.897	-8 1 6.673	78	3	27	130	47.0	78.0
706	26	4	79	1726	84 17 35.220	-8 0 25.500	0	0	0	0	0.0	0.0
706	26	4	79	1852	84 17 3.660	-8 0 15.540	0	0	0	0	0.0	0.0
22	26	4	79	2103	84 17 25.459	-7 59 58.115	53	3	28	140	39.0	26.0
706	26	4	79	2120	84 17 23.040	-8 0 43.380	0	0	0	0	0.0	0.0
22	26	4	79	2141	84 17 25.404	-7 59 51.026	53	3	21	130	59.0	27.0
22	26	4	79	2233	84 17 23.536	-7 59 36.287	55	3	27	190	54.0	30.0
22	26	4	79	2328	84 17 24.141	-7 59 9.133	55	3	25	130	44.0	35.0
22	27	4	79	19	84 17 24.635	-7 59 4.210	60	3	30	190	58.0	51.0
22	27	4	79	114	84 17 24.250	-7 58 25.741	63	3	21	130	49.0	43.0
22	27	4	79	409	84 17 24.635	-7 58 15.026	73	3	24	140	49.0	70.0
22	27	4	79	635	84 17 20.845	-7 58 10.820	69	3	17	130	31.0	48.0
706	27	4	79	720	84 17 16.080	-7 59 10.080	0	0	0	0	0.0	0.0
706	27	4	79	720	84 17 16.080	-7 59 10.080	0	0	0	0	0.0	0.0
22	27	4	79	727	84 17 18.593	-7 57 36.065	60	3	20	190	42.0	41.0
22	27	4	79	822	84 17 17.439	-7 58 13.594	60	3	23	130	45.0	46.0
22	27	4	79	932	84 17 13.868	-7 57 59.738	62	3	27	140	52.0	26.0
22	27	4	79	1010	84 17 12.275	-7 57 46.035	57	3	25	130	45.0	31.0
22	27	4	79	1102	84 17 13.319	-7 57 38.905	54	3	27	190	44.0	27.0
22	27	4	79	1119	84 17 11.122	-7 57 42.139	72	3	24	140	54.0	62.0
30	27	4	79	1134	84 17 15.516	-7 56 57.965	55	2	29	200	38.0	25.0
30	27	4	79	1156	84 17 16.395	-7 57 6.763	61	2	32	130	35.0	29.0
30	27	4	79	1318	84 17 16.945	-7 57 42.949	52	2	30	200	37.0	18.0
30	27	4	79	1346	84 17 16.505	-7 56 13.428	72	2	27	130	45.0	55.0
706	27	4	79	1446	84 17 13.860	-7 57 44.160	0	0	0	0	0.0	0.0
30	27	4	79	1503	84 17 17.988	-7 57 28.560	55	2	31	200	40.0	26.0
30	27	4	79	1620	84 17 18.538	-7 58 23.492	65	3	22	120	37.0	52.0
30	27	4	79	1648	84 17 19.032	-7 57 10.327	65	2	29	200	50.0	58.0
22	27	4	79	1720	84 17 13.429	-7 58 12.197	74	3	28	130	27.0	64.0
22	27	4	79	1807	84 17 15.022	-7 58 22.685	56	4	27	120	37.0	21.0
22	27	4	79	1825	84 17 15.077	-7 58 47.439	53	3	26	140	54.0	26.0
30	27	4	79	1900	84 17 17.878	-7 59 37.306	61	3	32	130	39.0	35.0
30	27	4	79	1954	84 17 20.460	-7 58 41.853	53	2	30	120	29.0	17.0
30	27	4	79	2052	84 17 20.405	-7 59 44.290	54	2	23	130	53.0	28.0
22	27	4	79	2142	84 17 16.121	-7 59 4.241	57	3	32	120	36.0	26.0
22	27	4	79	2156	84 17 17.164	-7 59 13.992	56	3	17	140	55.0	48.0
30	27	4	79	2205	84 17 20.405	-8 0 9.730	62	2	29	200	37.0	41.0

PRAM 1 NAVIGATION

SN	DY	MN	HR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
30	27	4	19	2234	64 17 21.886	-7 59 23.900	54	3	19	130	54.0	28.0
30	27	4	19	2351	64 17 21.284	-7 59 55.214	53	3	29	200	42.0	26.0
22	28	4	19	25	64 17 15.026	-7 59 55.029	59	3	18	130	34.0	32.0
30	28	4	19	324	64 17 26.613	-8 0 5.177	55	3	26	200	43.0	40.0
30	28	4	19	448	64 17 28.480	-8 2 34.124	64	2	27	120	33.0	33.0
22	28	4	19	504	64 17 25.349	-8 1 14.398	66	3	25	140	47.0	44.0
30	28	4	19	510	64 17 27.766	-8 0 9.606	67	2	22	200	43.0	51.0
30	28	4	19	540	64 17 29.249	-8 3 23.494	75	3	33	130	31.0	59.0
30	28	4	19	634	64 17 29.139	-8 2 49.395	57	2	28	120	39.0	20.0
30	28	4	19	733	64 17 30.842	-8 3 18.489	63	3	36	130	31.0	25.0
22	28	4	19	820	64 17 25.184	-8 3 5.276	56	4	26	120	39.0	23.0
22	28	4	19	840	64 17 24.690	-8 2 55.115	60	3	24	140	43.0	21.0
22	28	4	19	920	64 17 24.066	-8 3 5.937	57	3	31	130	36.0	19.0
30	28	4	19	1006	64 17 29.414	-8 2 38.595	62	3	28	120	48.0	35.0
30	28	4	19	1026	64 17 28.261	-8 4 14.903	61	3	26	200	42.0	43.0
22	28	4	19	1106	64 17 22.877	-8 3 19.622	59	3	34	130	31.0	20.0
22	28	4	19	1212	64 17 22.108	-8 3 43.187	53	3	28	200	47.0	26.0
30	28	4	19	1250	64 17 25.844	-8 2 48.826	66	2	34	130	38.0	39.0
22	28	4	19	1350	64 17 22.822	-8 3 40.647	52	3	27	200	56.0	32.0
22	28	4	19	1524	64 17 21.998	-8 4 10.145	71	3	26	120	26.0	49.0
22	28	4	19	1541	64 17 22.057	-8 3 58.321	58	3	17	200	49.0	49.0
30	28	4	19	1712	64 17 23.317	-8 5 20.567	59	2	32	120	30.0	24.0
30	28	4	19	1817	64 17 21.724	-8 5 57.941	66	3	28	130	34.0	53.0
30	28	4	19	1859	64 17 21.394	-8 5 0.105	54	2	26	120	36.0	20.0
30	28	4	19	2004	64 17 18.757	-8 5 26.843	57	2	32	130	33.0	24.0
30	28	4	19	2046	64 17 15.901	-8 4 46.537	55	2	32	120	34.0	24.0
30	28	4	19	2150	64 17 13.594	-8 4 59.233	53	3	28	130	37.0	18.0
30	28	4	19	2233	64 17 9.639	-8 4 23.754	62	2	34	120	28.0	28.0
30	28	4	19	2252	64 17 9.803	-8 4 0.305	62	3	29	140	36.0	46.0
22	28	4	19	2336	64 17 3.431	-8 4 52.504	56	3	33	130	33.0	22.0
30	29	4	19	122	64 17 3.706	-8 3 35.449	65	2	36	130	31.0	38.0
30	29	4	19	353	64 16 57.554	-8 5 57.152	70	2	28	120	45.0	60.0
30	29	4	19	412	64 16 56.730	-8 5 56.342	71	2	34	140	41.0	52.0
30	29	4	19	534	64 16 49.753	-8 5 2.591	60	2	34	120	44.0	29.0
30	29	4	19	600	64 16 50.193	-8 4 44.690	62	3	27	140	54.0	42.0
30	29	4	19	644	64 16 44.535	-8 5 14.736	64	2	26	130	36.0	40.0
30	29	4	19	724	64 16 39.921	-8 4 5.579	56	2	31	120	46.0	21.0
30	29	4	19	831	64 16 31.081	-8 4 11.951	59	2	33	130	29.0	17.0
30	29	4	19	910	64 16 27.726	-8 3 9.562	58	2	28	120	40.0	24.0
30	29	4	19	1019	64 16 15.586	-8 3 11.705	57	2	33	130	35.0	18.0
30	29	4	19	1056	64 16 15.256	-8 1 27.266	64	3	27	120	48.0	47.0
30	29	4	19	1207	64 16 0.150	-8 2 22.136	62	2	34	130	36.0	28.0
30	29	4	19	1259	64 15 54.547	-8 1 45.991	62	2	25	190	46.0	40.0
30	29	4	19	1354	64 15 47.021	-8 1 0.267	74	2	33	130	34.0	57.0
30	29	4	19	1616	64 15 32.904	-8 1 41.685	64	3	23	120	41.0	37.0
30	29	4	19	1803	64 15 21.698	-8 0 21.396	55	2	27	120	39.0	22.0
30	29	4	19	1820	64 15 19.391	-8 1 6.309	67	3	24	190	44.0	68.0
30	29	4	19	1915	64 15 11.371	-8 0 11.082	60	3	28	130	39.0	31.0
30	29	4	19	2101	64 15 0.439	-7 59 36.266	54	3	28	130	39.0	18.0
30	29	4	19	2153	64 14 54.122	-7 59 21.335	54	3	26	190	50.0	29.0
30	29	4	19	2247	64 14 48.519	-7 58 58.363	54	3	35	130	33.0	17.0
30	29	4	19	2322	64 14 45.059	-7 59 22.921	54	3	30	200	33.0	24.0
30	30	4	19	34	64 14 40.005	-7 57 54.183	60	3	29	130	37.0	35.0
30	30	4	19	108	64 14 35.281	-7 58 31.200	51	3	28	200	31.0	22.0
30	30	4	19	255	64 14 27.480	-7 57 22.799	53	3	26	200	45.0	35.0
30	30	4	19	441	64 14 18.582	-7 56 3.128	64	3	25	200	40.0	42.0
30	30	4	19	554	64 14 15.011	-7 58 31.292	73	3	32	130	31.0	48.0
30	30	4	19	647	64 14 7.980	-7 57 26.065	62	3	26	190	42.0	51.0
30	30	4	19	742	64 14 3.530	-7 56 57.098	61	3	27	130	40.0	35.0
706	30	4	19	826	64 13 51.000	-7 57 0.780	54	4	0	0	0.0	0.0
30	30	4	19	834	64 13 55.730	-7 56 56.288	54	3	31	190	44.0	27.0
706	30	4	19	922	64 13 43.800	-7 56 59.580	0	0	0	0	0.0	0.0
30	30	4	19	929	64 13 49.468	-7 56 46.328	57	3	34	130	38.0	19.0
30	30	4	19	958	64 13 44.304	-7 57 27.736	62	3	29	200	34.0	36.0
30	30	4	19	1022	64 13 41.832	-7 56 45.583	53	3	31	190	41.0	23.0
30	30	4	19	1117	64 13 34.087	-7 56 43.273	59	3	35	130	34.0	21.0
30	30	4	19	1142	64 13 30.626	-7 57 19.915	54	3	30	200	44.0	25.0
30	30	4	19	1210	64 13 28.099	-7 56 26.577	58	3	30	190	46.0	35.0

PRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
30	30	4	79	1305	64 13 20.354	-7 56 2.173	68	3	27	130	43.0	60.0
30	30	4	79	1327	64 13 20.903	-7 56 41.724	51	3	28	200	35.0	19.0
30	30	4	79	1356	64 13 15.685	-7 55 43.088	70	3	30	190	30.0	48.0
706	30	4	79	1506	64 13 8.040	-7 56 8.100	56	3	0	0	0.0	0.0
30	30	4	79	1512	64 13 12.664	-7 55 52.056	56	3	24	200	51.0	44.0
30	30	4	79	1639	64 13 2.446	-7 58 25.016	79	3	28	130	36.0	21.0
30	30	4	79	1826	64 12 54.097	-7 56 54.362	64	3	32	130	33.0	30.0
30	30	4	79	2012	64 12 46.791	-7 56 55.354	55	3	33	130	30.0	18.0
30	30	4	79	2042	64 12 47.560	-7 56 23.817	54	3	23	120	48.0	26.0
30	30	4	79	2104	64 12 46.296	-7 57 0.387	54	3	29	190	39.0	22.0
22	30	4	79	2158	64 12 39.650	-7 57 3.779	53	3	29	130	34.0	17.0
30	30	4	79	2214	64 12 43.989	-7 57 55.934	59	3	26	200	33.0	30.0
30	30	4	79	2229	64 12 42.067	-7 56 22.841	62	3	29	120	37.0	33.0
22	30	4	79	2251	64 12 36.573	-7 57 25.738	55	3	29	190	49.0	33.0
30	30	4	79	2344	64 12 39.924	-7 56 54.197	57	3	35	130	34.0	24.0
22	1	5	79	0	64 12 36.464	-7 57 22.116	52	3	21	200	38.0	26.0
22	1	5	79	10	64 12 34.706	-7 57 7.972	76	3	20	120	53.0	82.0
30	1	5	79	149	64 12 33.552	-7 57 20.327	51	3	27	200	38.0	23.0
30	1	5	79	333	64 12 27.070	-7 56 37.004	56	3	25	200	34.0	28.0
30	1	5	79	348	64 12 27.620	-7 58 41.091	70	3	29	120	47.0	59.0
30	1	5	79	505	64 12 23.335	-7 59 51.492	79	3	35	130	29.0	71.0
30	1	5	79	519	64 12 19.105	-7 55 43.167	70	4	20	200	55.0	68.0
30	1	5	79	534	64 12 18.940	-7 57 21.687	59	3	26	120	56.0	34.0
30	1	5	79	550	64 12 19.160	-7 58 4.448	67	4	31	190	37.0	50.0
30	1	5	79	652	64 12 13.887	-7 57 51.014	65	3	35	130	32.0	30.0
30	1	5	79	720	64 12 8.943	-7 56 57.757	56	3	25	120	37.0	16.0
30	1	5	79	745	64 12 6.636	-7 57 13.461	56	3	28	190	49.0	31.0
30	1	5	79	840	64 11 59.275	-7 56 57.589	58	3	28	130	37.0	22.0
30	1	5	79	906	64 11 58.341	-7 56 6.980	58	3	33	120	34.0	21.0
30	1	5	79	933	64 11 51.090	-7 56 34.727	52	3	32	190	39.0	22.0
30	1	5	79	1028	64 11 43.619	-7 56 11.210	57	3	24	130	40.0	22.0
30	1	5	79	1052	64 11 44.716	-7 54 40.243	67	3	32	120	47.0	58.0
30	1	5	79	1121	64 11 33.018	-7 55 43.030	55	3	27	190	42.0	28.0
30	1	5	79	1216	64 11 25.437	-7 55 7.496	63	3	23	130	47.0	41.0
30	1	5	79	1611	64 10 54.895	-7 52 12.504	63	3	34	120	29.0	34.0
30	1	5	79	1758	64 10 38.086	-7 49 5.050	55	3	31	120	35.0	22.0
30	1	5	79	1946	64 10 20.837	-7 46 32.958	53	3	35	120	34.0	19.0
30	1	5	79	2133	64 10 3.973	-7 44 36.905	57	3	28	120	36.0	26.0
30	1	5	79	2253	64 9 53.152	-7 43 42.914	55	3	30	200	33.0	25.0
22	1	5	79	2320	64 9 51.888	-7 40 37.289	68	2	29	120	33.0	47.0
30	2	5	79	39	64 9 33.926	-7 41 18.025	50	3	29	200	44.0	26.0
22	2	5	79	236	64 9 20.687	-7 38 24.235	52	2	25	200	38.0	24.0
30	2	5	79	412	64 8 56.847	-7 36 3.064	61	3	26	200	29.0	31.0
30	2	5	79	439	64 8 56.902	-7 36 54.823	63	3	29	120	38.0	30.0
22	2	5	79	558	64 8 41.246	-7 29 48.437	77	3	20	200	46.0	85.0
30	2	5	79	625	64 8 38.390	-7 33 50.579	56	3	32	120	39.0	18.0
30	2	5	79	656	64 8 29.601	-7 33 10.812	60	3	24	190	36.0	33.0
22	2	5	79	811	64 8 28.337	-7 30 41.051	56	3	26	120	40.0	21.0
30	2	5	79	928	64 7 59.498	-7 30 8.422	64	3	26	200	32.0	42.0
30	2	5	79	956	64 7 59.333	-7 27 15.181	62	3	31	120	50.0	42.0
30	2	5	79	1032	64 7 43.074	-7 27 30.984	52	3	27	190	37.0	25.0
30	2	5	79	1114	64 7 37.855	-7 27 14.233	54	3	29	200	36.0	23.0
22	2	5	79	1219	64 7 24.122	-7 24 5.996	59	3	29	190	37.0	36.0
30	2	5	79	1258	64 7 14.894	-7 24 15.733	51	3	29	200	38.0	19.0
30	2	5	79	1314	64 7 4.072	-7 23 43.368	70	3	28	130	40.0	44.0
30	2	5	79	1443	64 6 50.229	-7 21 34.770	54	3	31	200	33.0	21.0
30	2	5	79	1516	64 6 41.001	-7 23 27.170	70	3	27	120	28.0	54.0
30	2	5	79	1628	64 6 28.477	-7 18 36.606	64	3	30	200	41.0	51.0
30	2	5	79	1702	64 6 17.875	-7 20 14.999	58	3	23	120	36.0	31.0
30	2	5	79	1834	64 6 0.187	-7 18 47.307	61	4	31	130	45.0	37.0
30	2	5	79	1850	64 5 57.880	-7 18 25.300	53	3	27	120	37.0	23.0
30	2	5	79	1926	64 5 54.858	-7 17 52.935	51	3	25	140	45.0	25.0
30	2	5	79	2021	64 5 45.520	-7 17 41.228	54	3	26	130	43.0	22.0
30	2	5	79	2037	64 5 42.059	-7 16 58.972	45	3	28	120	40.0	25.0
30	2	5	79	2112	64 5 41.125	-7 16 11.706	54	3	26	140	47.0	31.0
30	2	5	79	2145	64 5 35.907	-7 17 21.291	61	3	32	200	32.0	33.0
30	2	5	79	2207	64 5 33.325	-7 16 17.282	53	3	27	130	42.0	24.0
22	2	5	79	2224	64 5 34.094	-7 14 46.106	62	3	31	120	36.0	37.0

FRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
30	2	5	79	2258	64 5 27.173	-7 14 32.950	64	3	28	140	32.0	38.0
22	2	5	79	2331	64 5 26.404	-7 16 18.676	52	3	26	200	29.0	19.0
30	2	5	79	2353	64 5 18.054	-7 14 56.766	57	3	28	130	38.0	33.0
30	3	5	79	11	64 5 11.407	-7 14 17.891	76	3	34	120	28.0	72.0
22	3	5	79	116	64 5 7.178	-7 14 46.037	50	3	31	200	31.0	18.0
30	3	5	79	140	64 5 2.179	-7 12 29.055	69	3	28	130	40.0	71.0
30	3	5	79	304	64 4 42.239	-7 13 49.698	54	3	29	200	27.0	20.0
30	3	5	79	344	64 4 36.086	-7 15 0.067	68	3	24	120	52.0	71.0
22	3	5	79	450	64 4 23.068	-7 12 5.204	66	3	27	200	25.0	35.0
30	3	5	79	513	64 4 19.277	-7 16 36.882	75	4	29	130	33.0	64.0
30	3	5	79	530	64 4 10.543	-7 14 4.557	58	3	32	120	47.0	28.0
30	3	5	79	701	64 3 53.295	-7 15 17.163	63	3	36	130	37.0	31.0
22	3	5	79	716	64 3 50.426	-7 14 21.647	55	3	24	120	38.0	17.0
22	3	5	79	754	64 3 48.296	-7 14 27.405	58	3	26	140	49.0	26.0
30	3	5	79	849	64 3 26.873	-7 15 18.587	56	3	30	130	39.0	21.0
22	3	5	79	941	64 3 21.599	-7 14 8.982	64	3	20	140	57.0	55.0
30	3	5	79	1006	64 3 5.014	-7 16 8.651	59	3	30	200	33.0	30.0
30	3	5	79	1036	64 2 59.956	-7 15 34.415	57	3	30	130	38.0	24.0
30	3	5	79	1130	64 2 45.509	-7 15 47.330	55	4	26	190	42.0	31.0
30	3	5	79	1152	64 2 40.730	-7 16 25.419	51	3	31	200	39.0	22.0
30	3	5	79	1224	64 2 31.007	-7 15 48.886	64	3	35	130	30.0	27.0
22	3	5	79	1336	64 2 22.987	-7 16 11.476	50	3	29	200	34.0	19.0
30	3	5	79	1521	64 1 48.765	-7 16 10.714	57	3	28	200	37.0	31.0
30	3	5	79	1706	64 1 24.210	-7 14 38.453	70	4	29	200	38.0	65.0
30	3	5	79	1745	64 1 10.642	-7 16 2.716	66	3	27	130	38.0	47.0
30	3	5	79	1932	64 0 53.394	-7 17 44.277	56	3	33	130	34.0	23.0
30	3	5	79	2118	64 0 44.110	-7 17 2.535	52	3	32	130	35.0	19.0
22	3	5	79	2126	64 0 48.724	-7 15 48.505	57	3	31	120	26.0	23.0
22	3	5	79	2304	64 0 45.428	-7 15 35.658	54	3	32	130	40.0	25.0
22	4	5	79	50	64 0 37.299	-7 13 23.351	63	3	24	130	41.0	42.0
30	4	5	79	812	64 0 6.866	-7 15 24.561	67	2	32	130	35.0	37.0
30	4	5	79	759	64 0 1.099	-7 14 22.619	58	2	29	130	32.0	19.0
30	4	5	79	947	63 59 51.815	-7 13 28.621	56	3	29	130	33.0	19.0
30	4	5	79	1041	63 59 46.816	-7 13 4.826	52	2	21	190	49.0	34.0
22	4	5	79	1135	63 59 32.804	-7 11 7.794	60	3	25	130	40.0	40.0
30	4	5	79	1230	63 59 38.467	-7 11 34.315	50	2	24	200	41.0	24.0
22	4	5	79	1322	63 59 39.950	-7 7 54.767	72	4	22	130	29.0	47.0
22	4	5	79	1511	63 59 27.206	-7 11 27.442	69	3	20	120	35.0	66.0
22	4	5	79	1559	63 59 24.899	-7 5 10.408	61	3	23	200	55.0	73.0
30	4	5	79	1656	63 59 4.904	-7 7 14.269	72	3	25	130	32.0	69.0
30	4	5	79	1843	63 58 50.676	-7 4 54.444	59	3	31	130	37.0	34.0
22	4	5	79	1929	63 58 37.323	-7 3 36.266	50	3	22	140	55.0	39.0
30	4	5	79	2029	63 58 37.163	-7 3 16.885	53	3	31	130	32.0	17.0
22	4	5	79	2115	63 58 42.711	-7 1 0.792	54	3	32	140	41.0	32.0
30	4	5	79	2215	63 58 22.881	-7 1 27.685	52	3	22	130	39.0	19.0
30	5	5	79	2	63 58 6.676	-6 59 36.954	59	3	33	130	26.0	22.0
30	5	5	79	148	63 57 47.450	-6 57 3.096	71	3	26	130	36.0	67.0
30	5	5	79	421	63 57 7.460	-6 58 17.655	62	3	25	200	35.0	41.0
22	5	5	79	710	63 56 44.388	-6 59 34.612	61	3	30	130	30.0	22.0
30	5	5	79	938	63 56 1.487	-6 58 29.257	60	3	29	200	36.0	37.0
30	5	5	79	952	63 55 58.960	-6 58 31.938	50	3	24	190	55.0	31.0
30	5	5	79	1122	63 55 40.448	-6 58 58.621	51	3	24	200	39.0	25.0
30	5	5	79	1139	63 55 36.603	-6 59 11.307	55	3	32	190	39.0	31.0
30	5	5	79	1307	63 55 18.091	-6 59 32.957	49	3	29	200	34.0	20.0
30	5	5	79	1452	63 54 53.042	-6 59 11.025	54	3	29	200	41.0	31.0
30	5	5	79	1637	63 54 24.368	-6 58 14.370	66	3	26	200	51.0	70.0
22	5	5	79	1651	63 54 27.554	-7 0 26.711	55	3	20	140	49.0	27.0
30	5	5	79	1750	63 54 4.208	-6 59 43.311	53	3	23	120	43.0	28.0
22	5	5	79	1837	63 54 0.692	-6 59 12.138	50	3	24	140	39.0	19.0
22	5	5	79	1937	63 53 41.741	-6 58 28.000	52	3	29	120	37.0	25.0
30	5	5	79	2023	63 53 23.998	-6 57 54.512	51	3	25	140	44.0	27.0
22	5	5	79	2124	63 53 12.462	-6 56 50.005	57	3	29	120	31.0	23.0
30	5	5	79	2154	63 52 59.333	-6 58 13.546	57	3	31	200	28.0	26.0
30	5	5	79	2209	63 52 56.971	-6 56 20.431	59	3	30	140	40.0	43.0
30	5	5	79	2313	63 52 41.151	-6 56 11.608	55	3	26	130	37.0	27.0
22	5	5	79	2340	63 52 39.338	-6 57 15.555	49	3	30	200	35.0	22.0
30	6	5	79	127	63 51 57.810	-6 55 57.838	48	3	30	200	30.0	19.0
30	6	5	79	313	63 51 23.862	-6 55 31.429	55	3	30	200	34.0	29.0

FRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
30	6	5	79	330	83 51 24.576	-6 56 51.863	70	3	28	140	49.0	65.0
30	6	5	79	459	83 50 47.662	-6 55 41.897	68	3	31	200	25.0	44.0
30	6	5	79	517	83 50 45.850	-6 55 47.964	60	3	30	140	45.0	28.0
30	6	5	79	616	83 50 23.218	-6 54 52.716	54	3	31	120	45.0	23.0
30	6	5	79	704	83 50 4.431	-6 54 59.215	57	3	28	140	49.0	22.0
30	6	5	79	802	83 49 48.226	-6 54 12.777	54	3	28	120	43.0	22.0
22	6	5	79	830	83 49 43.667	-6 56 27.092	69	4	30	200	28.0	47.0
30	6	5	79	852	83 49 25.210	-6 54 4.785	60	3	26	140	53.0	43.0
30	6	5	79	948	83 49 12.960	-6 52 40.506	62	3	33	120	43.0	37.0
30	6	5	79	1016	83 48 55.272	-6 53 18.076	55	3	28	200	31.0	26.0
30	6	5	79	1200	83 48 17.205	-6 52 45.398	49	3	26	200	38.0	21.0
30	6	5	79	1345	83 47 42.103	-6 52 34.724	50	3	30	200	36.0	21.0
30	6	5	79	1507	83 47 16.835	-6 53 44.889	67	3	27	120	42.0	52.0
30	6	5	79	1600	83 46 53.434	-6 51 33.468	58	3	23	140	43.0	42.0
30	6	5	79	1654	83 46 40.195	-6 51 56.914	56	3	28	120	35.0	28.0
30	6	5	79	1746	83 46 24.485	-6 50 55.305	50	3	30	140	40.0	25.0
30	6	5	79	1841	83 46 6.577	-6 49 55.141	51	3	24	120	45.0	25.0
30	6	5	79	1932	83 45 56.140	-6 48 33.200	49	3	27	140	40.0	22.0
30	6	5	79	2028	83 45 31.036	-6 47 23.650	53	3	27	120	32.0	24.0
30	6	5	79	2046	83 45 28.400	-6 47 40.095	65	3	29	200	32.0	41.0
30	6	5	79	2118	83 45 22.797	-6 45 15.199	54	3	30	140	39.0	33.0
30	6	5	79	2216	83 44 51.595	-6 44 51.297	62	3	24	120	46.0	49.0
30	6	5	79	2233	83 44 49.893	-6 44 34.944	52	3	31	200	26.0	20.0
30	6	5	79	2304	83 44 43.026	-6 41 49.205	66	4	25	140	33.0	57.0
30	7	5	79	2	83 44 9.957	-6 43 52.012	77	4	29	120	25.0	71.0
30	7	5	79	19	83 44 6.332	-6 42 56.168	47	3	28	200	31.0	20.0
30	7	5	79	206	83 43 24.034	-6 42 37.761	49	3	29	200	24.0	16.0
22	7	5	79	237	83 43 18.651	-6 44 39.645	77	3	34	140	38.0	77.0
22	7	5	79	335	83 42 42.506	-6 42 16.979	66	3	26	120	42.0	49.0
30	7	5	79	352	83 42 41.353	-6 43 52.548	58	3	27	200	27.0	28.0
22	7	5	79	425	83 42 32.673	-6 44 23.742	63	3	30	140	33.0	30.0
30	7	5	79	521	83 42 8.394	-6 44 41.293	56	3	32	120	40.0	23.0
22	7	5	79	621	83 41 55.375	-6 45 31.624	56	3	32	140	34.0	21.0
22	7	5	79	707	83 41 35.160	-6 46 0.882	53	3	29	120	39.0	19.0
30	7	5	79	800	83 41 21.207	-6 46 44.377	57	3	27	140	50.0	26.0
30	7	5	79	852	83 41 7.749	-6 46 55.243	57	3	28	120	45.0	27.0
30	7	5	79	908	83 41 2.311	-6 47 22.764	62	4	22	200	31.0	37.0
30	7	5	79	948	83 40 50.995	-6 47 32.137	65	3	26	140	46.0	41.0
30	7	5	79	1038	83 40 40.942	-6 47 11.421	67	4	30	120	39.0	49.0
30	7	5	79	1148	83 40 21.497	-6 48 54.884	55	3	22	190	51.0	29.0
30	7	5	79	1508	83 39 22.885	-6 49 12.548	63	3	29	140	46.0	55.0
30	7	5	79	1558	83 39 13.821	-6 49 59.374	60	3	29	120	29.0	24.0
30	7	5	79	1654	83 38 54.850	-6 49 17.712	52	4	35	140	45.0	32.0
30	7	5	79	1710	83 38 52.617	-6 49 13.953	69	4	21	190	43.0	59.0
30	7	5	79	1745	83 38 44.762	-6 49 58.145	52	3	30	120	34.0	19.0
30	7	5	79	1840	83 38 27.404	-6 49 51.739	48	3	34	140	39.0	21.0
30	7	5	79	1850	83 38 24.547	-6 49 51.460	50	3	25	190	39.0	26.0
30	7	5	79	1932	83 38 17.021	-6 50 11.847	51	3	31	120	34.0	19.0
30	7	5	79	1949	83 38 13.066	-6 49 58.207	52	3	23	130	38.0	19.0
30	7	5	79	2020	83 38 7.189	-6 50 0.950	51	3	25	140	50.0	39.0
30	7	5	79	2042	83 38 2.739	-6 50 20.739	50	3	24	190	47.0	23.0
30	7	5	79	2120	83 37 56.093	-6 50 45.867	56	3	26	120	38.0	23.0
30	7	5	79	2135	83 37 53.840	-6 50 58.405	50	3	19	130	42.0	30.0
30	7	5	79	2321	83 37 40.986	-6 50 39.237	55	3	20	130	39.0	37.0
30	8	5	79	15	83 37 34.340	-6 50 35.197	60	4	25	190	55.0	52.0
30	8	5	79	108	83 37 29.286	-6 50 30.994	66	4	23	130	34.0	58.0
30	8	5	79	332	83 37 7.917	-6 51 38.224	68	4	28	140	39.0	45.0
30	8	5	79	426	83 36 51.383	-6 50 45.455	60	4	26	120	38.0	31.0
22	8	5	79	520	83 36 39.957	-6 50 32.707	58	3	28	140	43.0	31.0
30	8	5	79	536	83 36 36.002	-6 51 20.319	63	3	24	190	33.0	46.0
30	8	5	79	612	83 36 26.774	-6 50 14.680	53	3	27	120	36.0	16.0
30	8	5	79	629	83 36 23.258	-6 50 55.950	62	4	32	130	28.0	28.0
22	8	5	79	707	83 36 8.207	-6 49 59.134	55	2	36	140	45.0	24.0
30	8	5	79	723	83 36 5.735	-6 50 18.961	52	3	22	190	44.0	38.0
22	8	5	79	757	83 35 56.561	-6 49 34.404	54	3	29	120	40.0	30.0
30	8	5	79	816	83 35 50.629	-6 49 55.779	54	3	31	130	34.0	19.0
30	8	5	79	855	83 35 36.566	-6 49 32.760	60	3	36	140	34.0	25.0
30	8	5	79	911	83 35 35.083	-6 49 29.653	48	3	21	190	42.0	26.0

PRAM 1 NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SAT	STDY	STDX
30	8	5	79	1004	83 35 16.439	-6 49 5.356	54	3	36	130	38.0	21.0
30	8	5	79	1043	83 35 7.727	-6 49 2.970	72	4	29	140	48.0	57.0
30	8	5	79	1059	83 35 4.156	-6 48 42.034	51	3	29	190	38.0	25.0
30	8	5	79	1152	83 34 49.270	-6 48 9.511	61	4	31	130	40.0	33.0
30	8	5	79	1247	83 34 34.054	-6 47 29.819	62	4	26	190	30.0	29.0
30	8	5	79	1340	83 34 13.070	-6 47 34.760	75	4	30	130	45.0	72.0
22	8	5	79	1410	83 34 0.326	-6 44 20.339	70	3	28	140	50.0	78.0
30	8	5	79	1501	83 33 53.130	-6 44 34.756	54	3	23	200	39.0	27.0
30	8	5	79	1603	83 33 21.964	-6 44 7.870	56	3	31	140	48.0	45.0
30	8	5	79	1640	83 33 11.437	-6 41 33.828	69	4	24	200	32.0	62.0
30	8	5	79	1714	83 32 51.112	-6 42 57.578	66	4	30	130	34.0	44.0
22	8	5	79	1749	83 32 38.203	-6 43 1.116	49	3	33	140	42.0	27.0
30	8	5	79	1808	83 32 28.045	-6 42 41.267	60	4	30	190	53.0	49.0
30	8	5	79	1900	83 32 5.244	-6 42 28.464	54	3	30	130	32.0	24.0
22	8	5	79	1934	83 31 52.994	-6 41 56.058	48	3	30	140	44.0	28.0
30	8	5	79	1954	83 31 43.381	-6 41 42.706	51	3	28	190	43.0	23.0
30	8	5	79	2017	83 31 35.561	-6 43 18.528	67	4	23	200	28.0	46.0
30	8	5	79	2040	83 31 21.299	-6 41 4.429	50	3	20	130	44.0	25.0
30	8	5	79	2120	83 31 8.390	-6 40 25.744	54	4	22	140	44.0	39.0
30	8	5	79	2140	83 30 58.447	-6 40 37.286	49	3	23	190	32.0	18.0
22	8	5	79	2204	83 30 47.900	-6 40 51.610	53	3	28	200	29.0	28.0
30	8	5	79	2232	83 30 36.639	-6 39 47.906	52	3	17	130	50.0	35.0
30	8	5	79	2307	83 30 24.884	-6 37 58.321	67	4	25	140	39.0	71.0
30	8	5	79	2326	83 30 16.095	-6 39 2.268	55	4	30	190	39.0	28.0
30	8	5	79	2350	83 30 2.582	-6 39 42.410	46	3	28	200	29.0	18.0
30	9	5	79	113	83 29 32.844	-6 37 15.210	68	4	31	190	48.0	72.0
30	9	5	79	136	83 29 17.373	-6 39 1.039	47	3	26	200	21.0	12.0
22	9	5	79	240	83 28 55.016	-6 40 43.459	75	3	27	140	53.0	86.0
30	9	5	79	322	83 28 28.539	-6 39 40.154	55	3	23	200	28.0	26.0
30	9	5	79	428	83 28 9.423	-6 40 44.513	61	4	30	140	39.0	33.0
30	9	5	79	446	83 28 0.139	-6 42 0.765	70	4	33	190	33.0	57.0
30	9	5	79	509	83 27 46.626	-6 40 52.166	71	4	26	200	32.0	55.0
30	9	5	79	539	83 27 33.983	-6 42 15.033	66	4	26	130	33.0	46.0
22	9	5	79	615	83 27 27.675	-6 41 21.211	55	3	34	140	43.0	24.0
30	9	5	79	634	83 27 22.950	-6 42 9.705	55	4	31	190	29.0	25.0
22	9	5	79	727	83 27 16.194	-6 42 50.135	56	3	21	130	61.0	62.0
30	9	5	79	803	83 26 52.189	-6 42 6.965	56	3	35	140	41.0	23.0
30	9	5	79	840	83 26 39.170	-6 42 2.475	64	4	27	200	31.0	36.0
30	9	5	79	915	83 26 30.436	-6 42 12.874	53	3	31	130	32.0	16.0
30	9	5	79	950	83 26 19.120	-6 42 17.636	65	4	32	140	49.0	46.0
30	9	5	79	1024	83 26 11.375	-6 41 47.049	51	4	28	200	29.0	19.0
30	9	5	79	1103	83 26 1.487	-6 41 38.009	57	4	35	130	38.0	26.0
30	9	5	79	1210	83 25 47.974	-6 41 32.853	46	3	25	200	37.0	20.0
30	9	5	79	1250	83 25 36.548	-6 41 36.791	69	4	32	130	36.0	43.0
30	9	5	79	1354	83 25 28.693	-6 41 36.482	49	3	25	200	39.0	23.0
30	9	5	79	1511	83 25 12.158	-6 42 32.385	61	4	35	140	38.0	43.0
30	9	5	79	1539	83 25 12.048	-6 42 25.488	58	4	29	200	32.0	31.0
30	9	5	79	1554	83 25 11.444	-6 43 30.836	59	4	21	120	29.0	33.0
30	9	5	79	1657	83 25 2.545	-6 43 56.564	51	3	30	140	41.0	25.0
30	9	5	79	1741	83 25 3.754	-6 44 17.847	51	3	27	120	35.0	27.0
30	9	5	79	1811	83 25 1.172	-6 44 26.636	58	4	27	130	33.0	35.0
22	9	5	79	1843	83 25 0.238	-6 44 47.029	47	3	34	140	43.0	24.0
30	9	5	79	1905	83 25 2.985	-6 44 50.160	53	4	18	190	42.0	24.0
30	9	5	79	1928	83 25 3.534	-6 45 4.326	50	3	26	120	40.0	33.0
22	9	5	79	1957	83 25 0.128	-6 45 19.205	50	3	24	130	37.0	26.0
22	9	5	79	2029	83 24 59.799	-6 45 40.008	50	3	34	120	37.0	24.0
22	9	5	79	2052	83 25 0.732	-6 45 51.282	49	3	19	190	45.0	30.0
30	9	5	79	2055	83 25 3.259	-6 46 31.108	60	4	27	200	30.0	33.0
30	9	5	79	2116	83 25 2.490	-6 45 53.531	55	3	31	120	28.0	20.0
22	9	5	79	2144	83 24 59.359	-6 46 23.788	50	3	31	130	44.0	23.0
30	9	5	79	2215	83 25 0.293	-6 46 35.203	60	4	35	140	34.0	37.0
22	9	5	79	2238	83 24 58.810	-6 47 2.206	51	3	18	190	51.0	45.0
30	9	5	79	2242	83 25 0.897	-6 47 9.375	49	3	26	200	29.0	23.0
30	9	5	79	2302	83 24 58.370	-6 46 43.189	68	4	30	120	30.0	48.0
22	9	5	79	2330	83 24 56.558	-6 47 8.688	55	3	32	130	35.0	26.0
30	10	5	79	24	83 24 56.063	-6 46 58.182	61	4	18	190	56.0	51.0
30	10	5	79	116	83 24 48.593	-6 47 33.431	68	4	27	130	38.0	55.0
30	10	5	79	236	83 24 36.068	-6 49 29.165	72	4	33	120	34.0	57.0

FRAM I NAVIGATION

SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	EL	I	DP	SA1	STDY	STDX
30	10	5	79	336	83 24 32.058	-6 50 20.677	66	4	34	140	39.0	38.0
22	10	5	79	422	83 24 22.006	-6 49 55.072	58	3	24	120	38.0	38.0
30	10	5	79	523	83 24 16.875	-6 51 13.645	56	4	34	140	43.0	24.0
30	10	5	79	545	83 24 16.238	-6 52 2.054	60	4	25	190	40.0	37.0
30	10	5	79	607	83 24 9.316	-6 51 29.843	52	3	28	120	34.0	15.0
30	10	5	79	636	83 24 9.701	-6 52 43.383	59	4	36	130	31.0	24.0
30	10	5	79	711	83 24 4.867	-6 52 34.443	54	3	32	140	44.0	21.0
22	10	5	79	732	83 23 59.319	-6 52 51.228	50	3	19	190	31.0	24.0
22	10	5	79	753	83 23 53.936	-6 53 2.908	53	3	29	120	45.0	25.0
30	10	5	79	852	83 23 52.452	-6 53 55.896	53	3	25	130	41.0	25.0
30	10	5	79	858	83 23 48.442	-6 53 54.917	60	4	32	140	48.0	35.0
30	10	5	79	918	83 23 42.505	-6 54 42.255	58	4	25	200	28.0	30.0
30	10	5	79	938	83 23 40.472	-6 54 48.641	60	4	29	120	48.0	42.0
30	10	5	79	1013	83 23 38.719	-6 55 18.733	54	3	30	130	35.0	22.0
30	10	5	79	1102	83 23 26.195	-6 56 32.146	48	3	27	200	30.0	20.0
30	10	5	79	1201	83 23 19.823	-6 57 39.825	62	4	34	130	42.0	37.0
30	10	5	79	1247	83 23 10.756	-6 58 55.970	46	3	23	200	22.0	12.0
30	10	5	79	1432	83 22 54.994	-7 0 29.481	51	4	30	200	24.0	17.0
30	10	5	79	1458	83 22 52.577	-7 1 47.882	65	4	27	120	31.0	37.0
30	10	5	79	1617	83 22 42.250	-7 1 16.544	64	4	28	200	25.0	33.0
30	10	5	79	1645	83 22 38.459	-7 2 17.127	54	4	28	120	45.0	27.0
30	10	5	79	1722	83 22 37.086	-7 2 46.134	63	4	31	130	38.0	44.0
30	10	5	79	1832	83 22 30.372	-7 2 19.887	49	3	31	120	30.0	18.0
30	10	5	79	1908	83 22 30.812	-7 2 29.472	53	4	29	130	48.0	27.0
30	10	5	79	1948	83 22 30.812	-7 2 51.318	71	4	28	200	23.0	46.0
30	10	5	79	2020	83 22 35.219	-7 2 11.795	52	3	22	120	41.0	28.0
30	10	5	79	2054	83 22 36.921	-7 2 16.038	49	3	26	130	43.0	21.0
30	10	5	79	2134	83 22 37.471	-7 2 25.754	55	4	28	200	22.0	19.0
30	10	5	79	2207	83 22 36.097	-7 1 54.381	61	4	35	120	28.0	28.0
30	10	5	79	2241	83 22 36.537	-7 2 3.239	52	3	29	130	35.0	25.0
30	10	5	79	2320	83 22 36.152	-7 2 28.000	47	3	30	200	23.0	14.0
30	10	5	79	2354	83 22 34.779	-7 1 19.150	77	4	31	120	22.0	62.0
30	11	5	79	27	83 22 36.317	-7 1 52.414	61	4	34	130	36.0	38.0
30	11	5	79	107	83 22 35.328	-7 2 16.986	46	3	29	200	24.0	16.0
30	11	5	79	253	83 22 34.614	-7 2 12.663	52	4	29	200	23.0	18.0
30	11	5	79	326	83 22 35.104	-7 3 3.005	64	4	31	120	34.0	35.0
30	11	5	79	440	83 22 32.527	-7 2 6.260	67	4	24	200	23.0	31.0
30	11	5	79	512	83 22 32.966	-7 2 47.892	54	4	29	120	37.0	21.0
30	11	5	79	548	83 22 33.571	-7 3 17.132	64	4	29	130	30.0	33.0
30	11	5	79	658	83 22 30.769	-7 2 36.809	51	3	21	120	46.0	21.0
30	11	5	79	736	83 22 29.141	-7 2 56.588	55	3	34	130	33.0	20.0
30	11	5	79	810	83 22 24.891	-7 3 15.838	67	4	17	200	30.0	61.0
30	11	5	79	844	83 22 24.067	-7 2 27.447	56	4	33	120	35.0	23.0
30	11	5	79	924	83 22 20.057	-7 2 32.212	53	3	31	130	36.0	20.0
30	11	5	79	1029	83 22 17.860	-7 1 41.891	67	4	34	120	37.0	45.0
30	11	5	79	1112	83 22 13.960	-7 1 57.471	58	4	27	130	39.0	32.0
30	11	5	79	1259	83 22 10.498	-7 1 25.000	71	4	32	130	40.0	54.0
30	11	5	79	1325	83 22 10.609	-7 1 51.494	47	3	27	200	28.0	17.0
30	11	5	79	1402	83 22 9.346	-7 2 34.015	74	4	22	120	41.0	73.0
30	11	5	79	1510	83 22 7.533	-7 0 56.940	55	4	29	200	33.0	27.0
30	11	5	79	1549	83 22 4.402	-7 1 15.994	58	4	30	120	35.0	26.0
30	11	5	79	1655	83 22 1.490	-6 59 23.361	72	4	25	200	27.0	54.0
30	11	5	79	1736	83 21 55.942	-7 0 28.633	50	3	32	120	29.0	17.0
30	11	5	79	1820	83 21 52.976	-7 0 10.410	56	4	33	130	37.0	29.0
30	11	5	79	1924	83 21 44.736	-6 59 26.914	49	3	22	120	38.0	27.0
30	11	5	79	2006	83 21 42.155	-6 59 9.412	49	3	34	130	34.0	18.0
30	11	5	79	2020	83 21 39.792	-6 59 17.037	63	4	28	200	30.0	33.0
30	11	5	79	2111	83 21 32.487	-6 58 5.567	55	4	32	120	28.0	22.0
30	11	5	79	2152	83 21 32.432	-6 57 38.644	50	3	30	130	42.0	19.0
30	11	5	79	2212	83 21 28.367	-6 57 44.188	50	4	27	200	27.0	22.0
30	11	5	79	2258	83 21 24.467	-6 56 39.197	69	4	30	120	28.0	44.0
30	11	5	79	2338	83 21 24.576	-6 56 9.174	57	4	33	130	36.0	31.0
30	11	5	79	2359	83 21 20.786	-6 56 23.096	45	3	29	200	24.0	15.0
30	12	5	79	124	83 21 18.094	-6 54 34.812	71	4	23	130	37.0	59.0
30	12	5	79	146	83 21 15.897	-6 55 18.555	47	3	28	200	26.0	17.0
30	12	5	79	231	83 21 15.018	-6 55 43.603	71	4	35	120	32.0	51.0
30	12	5	79	332	83 21 9.580	-6 54 12.317	56	4	29	200	22.0	22.0
30	12	5	79	417	83 21 9.305	-6 54 29.700	58	4	33	120	32.0	23.0

PRAM I NAVIGATION

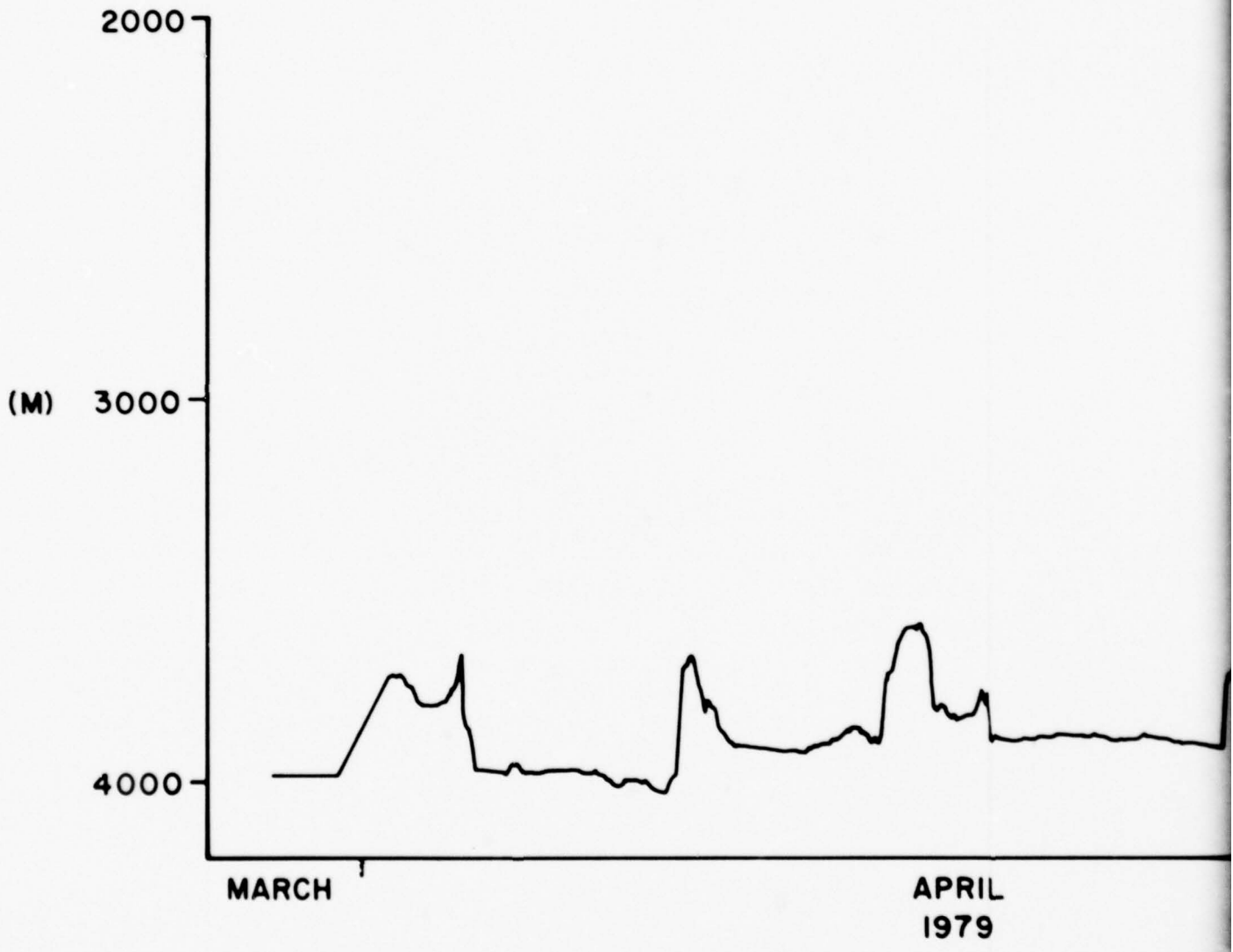
SN	DY	MN	YR	GMT	LATITUDE	LONGITUDE	ED	I	DP	SAT	STDY	STDX
30	12	5	79	456	83 21 6.888	-6 54 31.265	70	4	35	130	34.0	47.0
30	12	5	79	518	83 21 3.208	-6 52 57.813	74	4	26	200	24.0	50.0
30	12	5	79	603	83 21 1.780	-6 53 35.355	52	3	33	120	37.0	18.0
30	12	5	79	646	83 20 58.429	-6 53 25.502	57	4	31	130	34.0	26.0
30	12	5	79	748	83 20 53.375	-6 52 54.840	53	3	22	120	51.0	27.0
30	12	5	79	834	83 20 49.365	-6 52 46.868	53	3	30	130	43.0	22.0
30	12	5	79	849	83 20 48.761	-6 53 1.788	60	4	20	200	35.0	32.0
30	12	5	79	934	83 20 45.630	-6 52 7.715	61	4	33	120	36.0	31.0
30	12	5	79	1022	83 20 42.389	-6 52 18.327	55	4	25	130	51.0	30.0
30	12	5	79	1049	83 20 40.796	-6 51 48.345	75	4	27	140	52.0	70.0
30	12	5	79	1118	83 20 39.752	-6 52 0.087	52	4	27	190	27.0	21.0
30	12	5	79	1210	83 20 39.148	-6 51 41.066	64	4	27	130	38.0	45.0
30	12	5	79	1422	83 20 37.830	-6 52 7.416	66	4	31	140	44.0	66.0
30	12	5	79	1609	83 20 37.830	-6 51 57.299	53	4	34	140	40.0	30.0
30	12	5	79	1639	83 20 35.522	-6 52 11.478	70	4	28	190	45.0	73.0
30	12	5	79	1751	83 20 37.830	-6 52 27.360	61	4	13	130	56.0	60.0
30	12	5	79	1754	83 20 34.973	-6 51 50.487	47	3	31	140	46.0	24.0
30	12	5	79	1820	83 20 32.941	-6 52 2.953	55	4	22	190	44.0	27.0
30	12	5	79	1940	83 20 28.931	-6 52 4.402	48	3	31	140	37.0	22.0
30	12	5	79	2011	83 20 26.624	-6 52 38.855	49	3	23	190	42.0	22.0
30	12	5	79	2126	83 20 22.014	-6 52 31.270	55	4	32	140	42.0	38.0
30	12	5	79	2158	83 20 20.911	-6 52 51.362	49	3	25	190	38.0	24.0

Depth Soundings

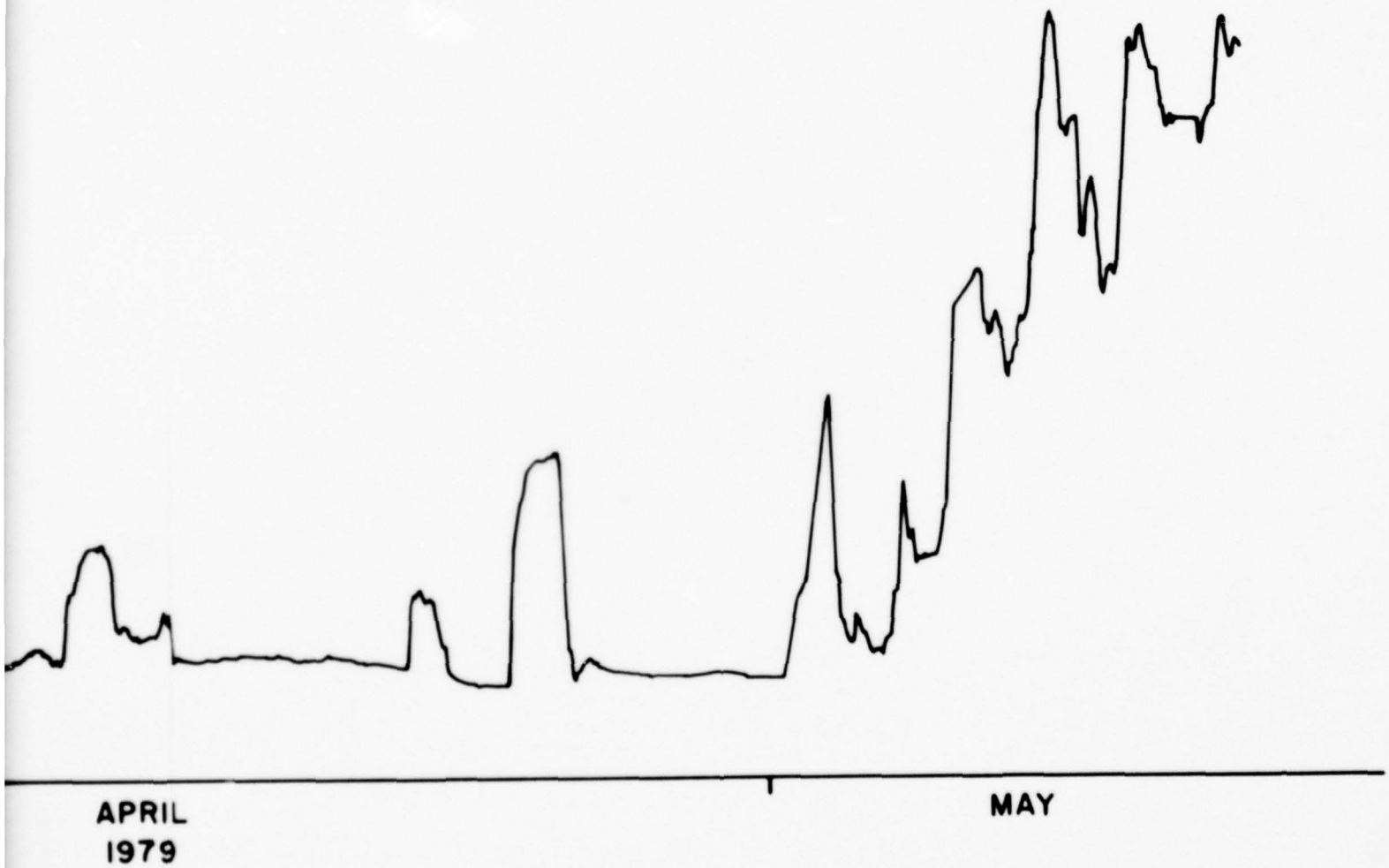
As FRAM I drifted, a continuous record of ocean depths was made with an echo sounder operating at a frequency of 12 kHz. The sounder was manufactured by the Edo Western Corp. and consisted of three units: Model D-100 transducer, Model 248E sonar transceiver and Model 550A graphic recorder. The instrument was installed in the Lamont current meter shelter with the transducer suspended through an open gydrographic well at a depth of 2 m below sea level. The equipment operated well throughout the expedition. Depths for this report were scaled at hourly intervals from the chart records on which 19" represented a depth change of 1500 m. The actual physical measurement is two-way reflection time from the transducer to the bottom and return. The uncorrected depth is defined as the reflection time multiplied by the nominal speed of sound in seawater, 1500 m/s. More precise depth determination requires a correction for the sound speed profile in particular geographic areas of the ocean. The corrected depths listed here are based on tables by Matthews (1939).

At the outset, FRAM I was located over the southernmost extension of the Pole Abyssal Plain which separates the Arctic Mid-Oceanic Ridge from the Lomonosov Ridge. The camp drifted southward and it moved over the Mid-Oceanic Ridge which trends northeast-southwest in this region. Depths generally decreased over the course of the drift as the crest of the Ridge was approached. The characteristic rough topography of the flank is shown in the profile which ends just short of the Ridge crest.

BATHYMETRIC PROFILE ALONG THE DRIFT TRACK OF FRAM I



ACK OF FRAM I



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OCEAN DEPTHS AT FRAM I

Key to column headings:

DY = Day

MN = Month

YR = Year

GMT = Greenwich Mean Time

SECONDS = Two-way reflection time

METERS (UNCORR) = Uncorrected depth based on sound speed of 1500 m s^{-1}

VEL (CORR) = Depth correction for sound speed in Arctic waters (Matthews, 1939)

METERS (CORR) = Corrected depths = METERS (UNCORR) + VEL (CORR)

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
26	3	79	1500	5.386	4039.5	-58	3981.5
26	3	79	1600	5.387	4040.3	-58	3982.3
26	3	79	1700	5.389	4041.8	-58	3983.8
26	3	79	1800	5.387	4040.3	-58	3982.3
26	3	79	1900	5.387	4040.3	-58	3982.3
26	3	79	2000	5.387	4040.3	-58	3982.3
26	3	79	2100	5.388	4041.0	-58	3983.0
26	3	79	2200	5.389	4041.8	-58	3983.8
26	3	79	2300	5.387	4040.3	-58	3982.3
27	3	79	0	5.387	4040.3	-58	3982.3
27	3	79	100	5.388	4041.0	-58	3983.0
27	3	79	200	5.388	4041.0	-58	3983.0
27	3	79	300	5.388	4041.0	-58	3983.0
27	3	79	400	5.387	4040.3	-58	3982.3
27	3	79	500	5.386	4039.5	-58	3981.5
27	3	79	600	5.386	4039.5	-58	3981.5
27	3	79	700	5.386	4039.5	-58	3981.5
27	3	79	800	5.386	4039.5	-58	3981.5
27	3	79	900	5.385	4038.8	-58	3980.8
27	3	79	1000	5.385	4038.8	-58	3980.8
27	3	79	1100	5.387	4040.3	-58	3982.3
27	3	79	1200	5.385	4038.8	-58	3980.8
27	3	79	1300	5.385	4038.8	-58	3980.8
27	3	79	1400	5.385	4038.8	-58	3980.8
27	3	79	1500	5.386	4039.5	-58	3981.5
27	3	79	1600	5.386	4039.5	-58	3981.5
27	3	79	1700	5.385	4038.8	-58	3980.8
27	3	79	1800	5.386	4039.5	-58	3981.5
27	3	79	1900	5.385	4038.8	-58	3980.8
27	3	79	2000	5.385	4038.8	-58	3980.8
27	3	79	2100	5.385	4038.8	-58	3980.8
27	3	79	2200	5.386	4039.5	-58	3981.5
27	3	79	2300	5.386	4039.5	-58	3981.5
28	3	79	0	5.386	4039.5	-58	3981.5
28	3	79	100	5.385	4038.8	-58	3980.8
28	3	79	200	5.386	4039.5	-58	3981.5
28	3	79	300	5.386	4039.5	-58	3981.5
28	3	79	400	5.385	4038.8	-58	3980.8
28	3	79	500	5.386	4039.5	-58	3981.5
28	3	79	600	5.385	4038.8	-58	3980.8
28	3	79	700	5.385	4038.8	-58	3980.8
28	3	79	800	5.385	4038.8	-58	3980.8
28	3	79	900	5.386	4039.5	-58	3981.5
28	3	79	1000	5.385	4038.8	-58	3980.8
29	3	79	1800	5.039	3779.3	-60	3719.3
29	3	79	1900	5.033	3774.8	-60	3714.8
29	3	79	2000	5.031	3773.3	-60	3713.3
29	3	79	2100	5.031	3773.3	-60	3713.3
29	3	79	2200	5.037	3777.8	-60	3717.8
29	3	79	2300	5.039	3779.3	-60	3719.3
30	3	79	0	5.033	3774.8	-60	3714.8
30	3	79	100	5.038	3778.5	-60	3718.5
30	3	79	200	5.039	3779.3	-60	3719.3
30	3	79	300	5.044	3783.0	-60	3723.0
30	3	79	400	5.053	3789.8	-60	3729.8
30	3	79	500	5.068	3801.0	-60	3741.0
30	3	79	600	5.075	3806.3	-60	3746.3
30	3	79	700	5.078	3808.5	-60	3748.5
30	3	79	800	5.080	3810.0	-60	3750.0
30	3	79	900	5.085	3813.8	-60	3753.8
30	3	79	1000	5.100	3825.0	-60	3765.0
30	3	79	1100	5.105	3828.8	-60	3768.8
30	3	79	1200	5.132	3849.0	-59	3790.0
30	3	79	1300	5.136	3852.0	-59	3793.0
30	3	79	1400	5.142	3856.5	-59	3797.5
30	3	79	1500	5.141	3855.8	-59	3796.8
30	3	79	1600	5.141	3855.8	-59	3796.8
30	3	79	1700	5.141	3855.8	-59	3796.8

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
30	3	79	1800	5.141	3855.8	-59	3796.8
30	3	79	1900	5.142	3856.5	-59	3797.5
30	3	79	2000	5.140	3855.0	-59	3796.0
30	3	79	2100	5.141	3855.8	-59	3796.8
30	3	79	2200	5.140	3855.0	-59	3796.0
30	3	79	2300	5.140	3855.0	-59	3796.0
31	3	79	0	5.139	3854.3	-59	3795.3
31	3	79	100	5.135	3851.3	-59	3792.3
31	3	79	200	5.132	3849.0	-59	3790.0
31	3	79	300	5.130	3847.5	-60	3787.5
31	3	79	400	5.129	3846.8	-60	3786.8
31	3	79	500	5.124	3843.0	-60	3783.0
31	3	79	600	5.120	3840.0	-60	3780.0
31	3	79	700	5.101	3825.8	-60	3765.8
31	3	79	800	5.097	3822.8	-60	3762.8
31	3	79	900	5.080	3810.0	-60	3750.0
31	3	79	1000	5.081	3810.8	-60	3750.8
31	3	79	1100	5.072	3804.0	-60	3744.0
31	3	79	1200	5.060	3795.0	-60	3735.0
31	3	79	1300	5.040	3780.0	-60	3720.0
31	3	79	1400	5.000	3750.0	-60	3690.0
31	3	79	1500	4.961	3720.8	-60	3660.8
31	3	79	1600	4.985	3738.8	-60	3678.8
31	3	79	1700	5.168	3876.0	-59	3817.0
31	3	79	1800	5.205	3903.8	-59	3844.8
31	3	79	1900	5.225	3918.8	-59	3859.8
31	3	79	2000	5.227	3920.3	-59	3861.3
31	3	79	2300	5.309	3981.8	-58	3923.8
1	4	79	0	5.365	4023.8	-58	3965.8
1	4	79	100	5.370	4027.5	-58	3969.5
1	4	79	200	5.370	4027.5	-58	3969.5
1	4	79	300	5.371	4028.3	-58	3970.3
1	4	79	400	5.371	4028.3	-58	3970.3
1	4	79	500	5.371	4028.3	-58	3970.3
1	4	79	600	5.371	4028.3	-58	3970.3
1	4	79	700	5.372	4029.0	-58	3971.0
1	4	79	800	5.373	4029.8	-58	3971.8
1	4	79	900	5.375	4031.3	-58	3973.3
1	4	79	1000	5.374	4030.5	-58	3972.5
1	4	79	1100	5.373	4029.8	-58	3971.8
1	4	79	1200	5.374	4030.5	-58	3972.5
1	4	79	1300	5.373	4029.8	-58	3971.8
1	4	79	1400	5.374	4030.5	-58	3972.5
1	4	79	1500	5.375	4031.3	-58	3973.3
1	4	79	1600	5.375	4031.3	-58	3973.3
1	4	79	1700	5.375	4031.3	-58	3973.3
1	4	79	1800	5.376	4032.0	-58	3974.0
1	4	79	1900	5.378	4033.5	-58	3975.5
1	4	79	2000	5.370	4027.5	-58	3969.5
1	4	79	2100	5.358	4018.5	-58	3960.5
1	4	79	2200	5.345	4008.8	-58	3950.8
1	4	79	2300	5.345	4008.8	-58	3950.8
2	4	79	0	5.341	4005.8	-58	3947.8
2	4	79	100	5.340	4005.0	-58	3947.0
2	4	79	200	5.339	4004.3	-58	3946.3
2	4	79	300	5.341	4005.8	-58	3947.8
2	4	79	400	5.346	4009.5	-58	3951.5
2	4	79	500	5.355	4016.3	-58	3958.3
2	4	79	600	5.368	4026.0	-58	3968.0
2	4	79	700	5.376	4032.0	-58	3974.0
2	4	79	800	5.377	4032.8	-58	3974.8
2	4	79	900	5.378	4033.5	-58	3975.5
2	4	79	1000	5.375	4031.3	-58	3973.3
2	4	79	1100	5.375	4031.3	-58	3973.3
2	4	79	1200	5.375	4031.3	-58	3973.3
2	4	79	1300	5.375	4031.3	-58	3973.3
2	4	79	1400	5.375	4031.3	-58	3973.3
2	4	79	1500	5.375	4031.3	-58	3973.3

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
2	4	79	1600	5.374	4030.5	-58	3972.5
2	4	79	1700	5.372	4029.0	-58	3971.0
2	4	79	1800	5.371	4028.3	-58	3970.3
2	4	79	1900	5.372	4029.0	-58	3971.0
2	4	79	2000	5.372	4029.0	-58	3971.0
2	4	79	2100	5.370	4027.5	-58	3969.5
2	4	79	2200	5.370	4027.5	-58	3969.5
2	4	79	2300	5.370	4027.5	-58	3969.5
3	4	79	0	5.370	4027.5	-58	3969.5
3	4	79	100	5.370	4027.5	-58	3969.5
3	4	79	200	5.369	4026.8	-58	3968.8
3	4	79	300	5.369	4026.8	-58	3968.8
3	4	79	400	5.370	4027.5	-58	3969.5
3	4	79	500	5.370	4027.5	-58	3969.5
3	4	79	600	5.370	4027.5	-58	3969.5
3	4	79	700	5.370	4027.5	-58	3969.5
3	4	79	800	5.370	4027.5	-58	3969.5
3	4	79	900	5.370	4027.5	-58	3969.5
3	4	79	1000	5.370	4027.5	-58	3969.5
3	4	79	1100	5.370	4027.5	-58	3969.5
3	4	79	1200	5.370	4027.5	-58	3969.5
3	4	79	1300	5.370	4027.5	-58	3969.5
3	4	79	1400	5.371	4028.3	-58	3970.3
3	4	79	1500	5.371	4028.3	-58	3970.3
3	4	79	1600	5.371	4028.3	-58	3970.3
3	4	79	1700	5.374	4030.5	-58	3972.5
3	4	79	1800	5.375	4031.3	-58	3973.3
3	4	79	1900	5.375	4031.3	-58	3973.3
3	4	79	2000	5.375	4031.3	-58	3973.3
3	4	79	2100	5.375	4031.3	-58	3973.3
3	4	79	2200	5.375	4031.3	-58	3973.3
3	4	79	2300	5.375	4031.3	-58	3973.3
4	4	79	0	5.375	4031.3	-58	3973.3
4	4	79	100	5.375	4031.3	-58	3973.3
4	4	79	200	5.375	4031.3	-58	3973.3
4	4	79	300	5.370	4027.5	-58	3969.5
4	4	79	400	5.374	4030.5	-58	3972.5
4	4	79	500	5.380	4035.0	-58	3977.0
4	4	79	600	5.380	4035.0	-58	3977.0
4	4	79	700	5.385	4038.8	-58	3980.8
4	4	79	800	5.385	4038.8	-58	3980.8
4	4	79	900	5.390	4042.5	-58	3984.5
4	4	79	1000	5.396	4047.0	-58	3989.0
4	4	79	1100	5.398	4048.5	-58	3990.5
4	4	79	1200	5.400	4050.0	-58	3992.0
4	4	79	1300	5.408	4056.0	-58	3998.0
4	4	79	1400	5.416	4062.0	-58	4004.0
4	4	79	1500	5.426	4069.5	-58	4011.5
4	4	79	1600	5.426	4069.5	-58	4011.5
4	4	79	1700	5.423	4067.3	-58	4009.3
4	4	79	1800	5.420	4065.0	-58	4007.0
4	4	79	1900	5.417	4062.8	-58	4004.8
4	4	79	2000	5.414	4060.5	-58	4002.5
4	4	79	2100	5.410	4057.5	-58	3999.5
4	4	79	2200	5.400	4050.0	-58	3992.0
4	4	79	2300	5.397	4047.8	-58	3989.8
5	4	79	0	5.397	4047.8	-58	3989.8
5	4	79	100	5.395	4046.3	-58	3988.3
5	4	79	200	5.395	4046.3	-58	3988.3
5	4	79	300	5.395	4046.3	-58	3988.3
5	4	79	400	5.396	4047.0	-58	3989.0
5	4	79	500	5.397	4047.8	-58	3989.8
5	4	79	600	5.395	4046.3	-58	3988.3
5	4	79	700	5.400	4050.0	-58	3992.0
5	4	79	800	5.405	4053.8	-58	3995.8
5	4	79	900	5.409	4056.8	-58	3998.8
5	4	79	1000	5.405	4053.8	-58	3995.8
5	4	79	1100	5.403	4052.3	-58	3994.3

PRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
5	4	79	1200	5.405	4053.8	-58	3995.8
5	4	79	1300	5.414	4060.5	-58	4002.5
5	4	79	1400	5.420	4065.0	-58	4007.0
5	4	79	1500	5.432	4074.0	-58	4016.0
5	4	79	1600	5.435	4076.3	-58	4018.3
5	4	79	1700	5.440	4080.0	-58	4022.0
5	4	79	1800	5.442	4081.5	-58	4023.5
5	4	79	1900	5.443	4082.3	-58	4024.3
5	4	79	2000	5.445	4036.8	-58	4025.8
5	4	79	2100	5.446	4084.5	-58	4026.5
5	4	79	2200	5.446	4084.5	-58	4026.5
5	4	79	2300	5.445	4083.8	-58	4025.8
6	4	79	0	5.427	4070.3	-58	4012.3
6	4	79	100	5.411	4058.3	-58	4000.3
6	4	79	200	5.400	4050.0	-58	3992.0
6	4	79	300	5.390	4042.5	-58	3984.5
6	4	79	400	5.385	4038.8	-58	3980.8
6	4	79	500	5.381	4035.8	-58	3977.8
6	4	79	600	5.380	4035.0	-58	3977.0
6	4	79	700	5.269	3966.8	-58	3908.8
6	4	79	800	5.199	3899.3	-59	3840.3
6	4	79	900	5.109	3891.8	-60	3771.8
6	4	79	1000	5.015	3761.3	-60	3701.3
6	4	79	1100	5.000	3750.0	-60	3690.0
6	4	79	1200	4.999	3749.3	-60	3689.3
6	4	79	1300	5.000	3750.0	-60	3690.0
6	4	79	1400	4.970	3727.5	-60	3667.5
6	4	79	1500	4.964	3723.0	-60	3663.0
6	4	79	1600	4.976	3732.0	-60	3672.0
6	4	79	1700	4.989	3741.8	-60	3681.8
6	4	79	1800	5.012	3759.0	-60	3699.0
6	4	79	1900	5.035	3776.3	-60	3716.3
6	4	79	2000	5.058	3790.5	-60	3733.5
6	4	79	2100	5.081	3810.8	-60	3750.8
6	4	79	2200	5.092	3819.0	-60	3759.0
6	4	79	2300	5.107	3830.3	-60	3770.3
7	4	79	0	5.111	3833.3	-60	3823.3
7	4	79	100	5.120	3840.0	-60	3780.0
7	4	79	200	5.122	3841.5	-60	3781.5
7	4	79	300	5.130	3847.5	-60	3787.5
7	4	79	400	5.135	3851.3	-59	3792.3
7	4	79	500	5.140	3855.0	-59	3796.0
7	4	79	600	5.157	3867.8	-59	3808.8
7	4	79	700	5.162	3871.5	-59	3812.5
7	4	79	800	5.178	3883.5	-59	3824.5
7	4	79	900	5.201	3900.8	-59	3841.8
7	4	79	1000	5.219	3914.3	-59	3855.3
7	4	79	1100	5.229	3921.8	-59	3862.8
7	4	79	1200	5.235	3926.3	-59	3867.3
7	4	79	1300	5.240	3930.0	-59	3871.0
7	4	79	1400	5.248	3936.0	-59	3877.0
7	4	79	1500	5.259	3944.3	-59	3885.3
7	4	79	1600	5.268	3951.0	-58	3893.0
7	4	79	1700	5.275	3956.3	-58	3898.3
7	4	79	1800	5.276	3957.0	-58	3899.0
7	4	79	1900	5.283	3962.3	-58	3904.3
7	4	79	2000	5.283	3962.3	-58	3904.3
7	4	79	2100	5.282	3961.5	-58	3903.5
7	4	79	2200	5.283	3962.3	-58	3904.3
7	4	79	2300	5.285	3963.8	-58	3905.8
8	4	79	0	5.285	3963.8	-58	3905.8
8	4	79	100	5.285	3963.8	-58	3905.8
8	4	79	200	5.284	3963.0	-58	3905.0
8	4	79	300	5.285	3963.8	-58	3905.8
8	4	79	400	5.285	3963.8	-58	3905.8
8	4	79	500	5.286	3964.5	-58	3906.5
8	4	79	600	5.288	3966.0	-58	3908.0
8	4	79	700	5.287	3965.3	-58	3907.3

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
8	4	79	800	5.268	3966.0	-58	3908.0
8	4	79	900	5.269	3966.8	-58	3908.8
8	4	79	1000	5.267	3965.3	-58	3907.3
8	4	79	1100	5.268	3966.0	-58	3908.0
8	4	79	1200	5.268	3966.0	-58	3908.0
8	4	79	1300	5.269	3966.8	-58	3908.8
8	4	79	1400	5.270	3967.5	-58	3909.5
8	4	79	1500	5.271	3968.3	-58	3910.3
8	4	79	1600	5.272	3969.0	-58	3911.0
8	4	79	1700	5.273	3969.8	-58	3911.8
8	4	79	1800	5.274	3970.5	-58	3912.5
8	4	79	1900	5.275	3971.3	-58	3913.3
8	4	79	2000	5.276	3972.0	-58	3914.0
8	4	79	2100	5.277	3972.8	-58	3914.8
8	4	79	2200	5.277	3972.8	-58	3914.8
8	4	79	2300	5.277	3972.8	-58	3914.8
9	4	79	0	5.276	3972.0	-58	3914.0
9	4	79	100	5.278	3973.5	-58	3915.5
9	4	79	200	5.278	3973.5	-58	3915.5
9	4	79	300	5.278	3973.5	-58	3915.5
9	4	79	400	5.278	3973.5	-58	3915.5
9	4	79	500	5.278	3973.5	-58	3915.5
9	4	79	600	5.278	3973.5	-58	3915.5
9	4	79	700	5.278	3973.5	-58	3915.5
9	4	79	800	5.278	3973.5	-58	3915.5
9	4	79	900	5.278	3973.5	-58	3915.5
9	4	79	1000	5.279	3974.3	-58	3916.3
9	4	79	1100	5.280	3975.0	-58	3917.0
9	4	79	1200	5.280	3975.0	-58	3917.0
9	4	79	1300	5.281	3975.8	-58	3917.8
9	4	79	1400	5.281	3975.8	-58	3917.8
9	4	79	1500	5.281	3975.8	-58	3917.8
9	4	79	1600	5.281	3975.8	-58	3917.8
9	4	79	1700	5.271	3968.3	-58	3910.3
9	4	79	1800	5.270	3967.5	-58	3909.5
9	4	79	1900	5.268	3966.0	-58	3908.0
9	4	79	2000	5.261	3960.8	-58	3902.8
9	4	79	2100	5.260	3960.0	-58	3902.0
9	4	79	2200	5.260	3960.0	-58	3902.0
9	4	79	2300	5.260	3960.0	-58	3902.0
10	4	79	0	5.275	3956.3	-58	3898.3
10	4	79	100	5.274	3955.5	-58	3897.5
10	4	79	200	5.273	3954.8	-58	3896.8
10	4	79	300	5.269	3951.8	-58	3893.8
10	4	79	400	5.269	3951.8	-58	3893.8
10	4	79	500	5.270	3952.5	-58	3894.5
10	4	79	600	5.270	3952.5	-58	3894.5
10	4	79	700	5.269	3951.8	-58	3893.8
10	4	79	800	5.261	3945.8	-59	3886.8
10	4	79	900	5.258	3943.5	-59	3884.5
10	4	79	1000	5.257	3942.8	-59	3883.8
10	4	79	1100	5.254	3940.5	-59	3881.5
10	4	79	1200	5.250	3937.5	-59	3878.5
10	4	79	1300	5.250	3937.5	-59	3878.5
10	4	79	1400	5.240	3930.0	-59	3871.0
10	4	79	1500	5.239	3929.3	-59	3870.3
10	4	79	1600	5.230	3922.5	-59	3863.5
10	4	79	1700	5.228	3921.0	-59	3862.0
10	4	79	1800	5.229	3921.8	-59	3862.8
10	4	79	1900	5.223	3917.3	-59	3858.3
10	4	79	2000	5.217	3912.8	-59	3853.8
10	4	79	2100	5.214	3910.5	-59	3851.5
10	4	79	2200	5.216	3912.0	-59	3853.0
10	4	79	2300	5.218	3913.5	-59	3854.5
11	4	79	0	5.218	3913.5	-59	3854.5
11	4	79	100	5.218	3913.5	-59	3854.5
11	4	79	200	5.229	3921.8	-59	3862.8
11	4	79	300	5.229	3921.8	-59	3862.8

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
11	4	79	400	5.237	3927.8	-59	3868.8
11	4	79	500	5.238	3928.5	-59	3869.5
11	4	79	600	5.241	3930.8	-59	3871.8
11	4	79	700	5.250	3937.5	-59	3878.5
11	4	79	800	5.268	3951.0	-58	3893.0
11	4	79	900	5.269	3951.8	-58	3893.8
11	4	79	1000	5.272	3954.0	-58	3896.0
11	4	79	1100	5.270	3952.5	-58	3879.5
11	4	79	1200	5.270	3952.5	-58	3894.5
11	4	79	1300	5.274	3955.5	-58	3897.5
11	4	79	1400	5.264	3948.0	-59	3889.0
11	4	79	1500	5.205	3903.8	-59	3844.8
11	4	79	1600	5.135	3851.3	-59	3792.3
11	4	79	1700	5.073	3804.8	-60	3744.8
11	4	79	1800	5.038	3778.5	-60	3718.5
11	4	79	1900	5.029	3771.8	-60	3711.8
11	4	79	2000	5.029	3771.8	-60	3711.8
11	4	79	2100	5.019	3764.3	-60	3704.3
11	4	79	2200	5.000	3750.0	-60	3690.0
11	4	79	2300	4.970	3727.5	-60	3667.5
12	4	79	0	4.949	3711.8	-60	3651.8
12	4	79	100	4.926	3694.5	-60	3634.5
12	4	79	200	4.915	3686.3	-60	3626.3
12	4	79	300	4.903	3677.3	-60	3617.3
12	4	79	400	4.890	3667.5	-60	3607.5
12	4	79	500	4.880	3660.0	-60	3600.0
12	4	79	600	4.875	3656.3	-60	3596.3
12	4	79	700	4.870	3652.5	-60	3592.5
12	4	79	800	4.870	3652.5	-60	3592.5
12	4	79	900	4.866	3651.0	-60	3591.0
12	4	79	1000	4.867	3650.3	-60	3590.3
12	4	79	1100	4.865	3648.8	-61	3587.8
12	4	79	1200	4.872	3654.0	-60	3593.0
12	4	79	1300	4.878	3658.5	-60	3598.5
12	4	79	1400	4.869	3651.8	-60	3591.8
12	4	79	1500	4.859	3644.3	-61	3583.3
12	4	79	1600	4.866	3649.5	-61	3588.5
12	4	79	1700	4.888	3666.0	-60	3606.0
12	4	79	1800	4.900	3675.0	-60	3615.0
12	4	79	1900	4.910	3682.5	-60	3622.5
12	4	79	2000	4.926	3694.5	-60	3634.5
12	4	79	2100	4.958	3718.5	-60	3658.5
12	4	79	2200	5.029	3771.8	-60	3711.8
12	4	79	2300	5.101	3825.8	-60	3765.8
13	4	79	0	5.160	3870.0	-59	3811.0
13	4	79	100	5.162	3871.5	-59	3812.5
13	4	79	200	5.160	3870.0	-59	3811.0
13	4	79	300	5.150	3862.5	-59	3803.5
13	4	79	400	5.145	3858.8	-59	3799.8
13	4	79	500	5.147	3860.3	-59	3801.3
13	4	79	600	5.149	3861.8	-59	3802.8
13	4	79	700	5.154	3865.5	-59	3806.5
13	4	79	800	5.169	3876.8	-59	3817.8
13	4	79	900	5.175	3881.3	-59	3822.3
13	4	79	1000	5.181	3885.8	-59	3826.8
13	4	79	1100	5.185	3888.8	-59	3829.8
13	4	79	1200	5.181	3885.8	-59	3826.8
13	4	79	1300	5.180	3885.0	-59	3826.0
13	4	79	1400	5.190	3892.5	-59	3833.5
13	4	79	1500	5.189	3891.8	-59	3832.8
13	4	79	1600	5.188	3891.0	-59	3832.0
13	4	79	1700	5.186	3889.5	-59	3830.5
13	4	79	1800	5.184	3888.0	-59	3829.0
13	4	79	1900	5.180	3885.0	-59	3826.0
13	4	79	2000	5.180	3885.0	-59	3826.0
13	4	79	2100	5.174	3880.5	-59	3821.5
13	4	79	2200	5.174	3880.5	-59	3821.5
13	4	79	2300	5.174	3880.5	-59	3821.5

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
14	4	79	0	5.174	3880.5	-59	3821.5
14	4	79	100	5.174	3880.5	-59	3821.5
14	4	79	200	5.168	3876.0	-59	3817.0
14	4	79	300	5.155	3866.3	-59	3807.3
14	4	79	400	5.125	3843.8	-60	3783.8
14	4	79	500	5.105	3828.8	-60	3768.8
14	4	79	600	5.084	3813.0	-60	3753.0
14	4	79	700	5.098	3823.5	-60	3763.5
14	4	79	800	5.140	3855.0	-59	3796.0
14	4	79	900	5.137	3852.8	-59	3793.8
14	4	79	1000	5.110	3832.5	-60	3772.5
14	4	79	1100	5.217	3912.8	-59	3853.8
14	4	79	1200	5.265	3948.8	-59	3889.8
14	4	79	1300	5.265	3948.8	-59	3889.8
14	4	79	1400	5.260	3945.0	-59	3886.0
14	4	79	1500	5.250	3937.5	-59	3878.5
14	4	79	1600	5.254	3940.5	-59	3881.5
14	4	79	1700	5.257	3942.8	-59	3883.8
14	4	79	1800	5.259	3944.3	-59	3885.3
14	4	79	1900	5.260	3945.0	-59	3886.0
14	4	79	2000	5.260	3945.0	-59	3886.0
14	4	79	2100	5.260	3945.0	-59	3886.0
14	4	79	2200	5.261	3945.8	-59	3886.8
14	4	79	2300	5.262	3946.5	-59	3887.5
15	4	79	0	5.264	3948.0	-59	3889.0
15	4	79	100	5.264	3948.0	-59	3889.0
15	4	79	200	5.262	3946.5	-59	3887.5
15	4	79	300	5.261	3945.8	-59	3886.8
15	4	79	400	5.262	3946.5	-59	3887.5
15	4	79	500	5.260	3945.0	-59	3886.0
15	4	79	600	5.260	3945.0	-59	3886.0
15	4	79	700	5.260	3945.0	-59	3886.0
15	4	79	800	5.258	3943.5	-59	3884.5
15	4	79	900	5.255	3941.3	-59	3882.3
15	4	79	1000	5.258	3943.5	-59	3884.5
15	4	79	1100	5.255	3941.3	-59	3882.3
15	4	79	1200	5.255	3941.3	-59	3882.3
15	4	79	1300	5.255	3941.3	-59	3882.3
15	4	79	1400	5.255	3941.3	-59	3882.3
15	4	79	1500	5.253	3939.8	-59	3880.8
15	4	79	1600	5.255	3941.3	-59	3882.3
15	4	79	1700	5.251	3938.3	-59	3879.3
15	4	79	1800	5.250	3937.5	-59	3878.5
15	4	79	1900	5.251	3938.3	-59	3879.3
15	4	79	2000	5.250	3937.5	-59	3878.5
15	4	79	2100	5.250	3937.5	-59	3878.5
15	4	79	2200	5.249	3936.8	-59	3877.8
15	4	79	2300	5.249	3936.8	-59	3877.8
16	4	79	0	5.248	3936.0	-59	3877.0
16	4	79	100	5.248	3936.0	-59	3877.0
16	4	79	200	5.250	3937.5	-59	3878.5
16	4	79	300	5.247	3935.3	-59	3876.3
16	4	79	400	5.245	3933.8	-59	3874.8
16	4	79	500	5.244	3933.0	-59	3874.0
16	4	79	600	5.246	3934.5	-59	3875.5
16	4	79	700	5.246	3934.5	-59	3875.5
16	4	79	800	5.245	3933.8	-59	3874.8
16	4	79	900	5.245	3933.8	-59	3874.8
16	4	79	1000	5.245	3933.8	-59	3874.8
16	4	79	1100	5.245	3933.8	-59	3874.8
16	4	79	1200	5.244	3933.0	-59	3874.0
16	4	79	1300	5.244	3933.0	-59	3874.0
16	4	79	1400	5.244	3933.0	-59	3874.0
16	4	79	1500	5.244	3933.0	-59	3874.0
16	4	79	1600	5.244	3933.0	-59	3874.0
16	4	79	1700	5.244	3933.0	-59	3874.0
16	4	79	1800	5.245	3933.8	-59	3874.8
16	4	79	1900	5.244	3933.0	-59	3874.0

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
16	4	79	2000	5.243	3932.3	-59	3873.3
16	4	79	2100	5.243	3932.3	-59	3873.3
16	4	79	2200	5.247	3935.3	-59	3876.3
16	4	79	2300	5.246	3934.5	-59	3875.5
17	4	79	0	5.246	3934.5	-59	3875.5
17	4	79	100	5.246	3934.5	-59	3875.5
17	4	79	200	5.245	3933.8	-59	3874.8
17	4	79	300	5.245	3933.8	-59	3874.8
17	4	79	400	5.242	3931.5	-59	3872.5
17	4	79	500	5.244	3933.0	-59	3874.0
17	4	79	600	5.246	3934.5	-59	3875.5
17	4	79	700	5.248	3936.0	-59	3877.0
17	4	79	800	5.245	3933.8	-59	3874.8
17	4	79	900	5.250	3937.5	-59	3878.5
17	4	79	1000	5.250	3937.5	-59	3878.5
17	4	79	1100	5.250	3937.5	-59	3878.5
17	4	79	1200	5.253	3939.8	-59	3880.8
17	4	79	1300	5.255	3941.3	-59	3882.3
17	4	79	1400	5.257	3942.8	-59	3883.8
17	4	79	1500	5.260	3945.0	-59	3886.0
17	4	79	1600	5.262	3946.5	-59	3887.5
17	4	79	1700	5.265	3948.8	-59	3889.8
17	4	79	1800	5.265	3948.8	-59	3889.8
17	4	79	1900	5.266	3949.5	-59	3890.5
17	4	79	2000	5.268	3951.0	-59	3892.0
17	4	79	2100	5.262	3946.5	-59	3887.5
17	4	79	2200	5.264	3948.0	-59	3889.0
17	4	79	2300	5.262	3946.5	-59	3887.5
18	4	79	0	5.262	3946.5	-59	3887.5
18	4	79	100	5.260	3945.0	-59	3886.0
18	4	79	200	5.261	3945.8	-59	3886.8
18	4	79	300	5.260	3945.0	-59	3886.0
18	4	79	400	5.259	3944.3	-59	3885.3
18	4	79	500	5.259	3944.3	-59	3885.3
18	4	79	600	5.259	3944.3	-59	3885.3
18	4	79	700	5.259	3944.3	-59	3885.3
18	4	79	800	5.259	3944.3	-59	3885.3
18	4	79	900	5.254	3940.5	-59	3881.5
18	4	79	1000	5.252	3939.0	-59	3880.0
18	4	79	1100	5.249	3936.8	-59	3877.8
18	4	79	1200	5.246	3934.5	-59	3875.5
18	4	79	1300	5.247	3935.3	-59	3876.3
18	4	79	1400	5.249	3936.8	-59	3877.8
18	4	79	1500	5.251	3938.3	-59	3879.3
18	4	79	1600	5.251	3938.3	-59	3879.3
18	4	79	1700	5.251	3938.3	-59	3879.3
18	4	79	1800	5.252	3939.0	-59	3880.0
18	4	79	1900	5.250	3937.5	-59	3878.5
18	4	79	2000	5.252	3939.0	-59	3880.0
18	4	79	2100	5.255	3941.3	-59	3882.3
18	4	79	2200	5.256	3942.0	-59	3883.0
18	4	79	2300	5.258	3943.5	-59	3884.5
19	4	79	0	5.259	3944.3	-59	3885.3
19	4	79	100	5.260	3945.0	-59	3886.0
19	4	79	200	5.260	3945.0	-59	3886.0
19	4	79	300	5.260	3945.0	-59	3886.0
19	4	79	400	5.261	3945.8	-59	3886.8
19	4	79	500	5.262	3946.5	-59	3887.5
19	4	79	600	5.265	3948.8	-59	3889.8
19	4	79	700	5.265	3948.8	-59	3889.8
19	4	79	800	5.265	3948.8	-59	3889.8
19	4	79	900	5.265	3948.8	-59	3889.8
19	4	79	1000	5.266	3949.5	-59	3890.5
19	4	79	1100	5.268	3951.0	-58	3893.0
19	4	79	1200	5.269	3951.8	-58	3893.8
19	4	79	1300	5.270	3952.5	-58	3894.5
19	4	79	1400	5.270	3952.5	-58	3894.5
19	4	79	1500	5.270	3952.5	-58	3894.5

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
19	4	79	1600	5.270	3952.5	-58	3894.5
19	4	79	1700	5.271	3953.3	-58	3895.3
19	4	79	1800	5.271	3953.3	-58	3895.3
19	4	79	1900	5.271	3953.3	-58	3895.3
19	4	79	2000	5.271	3953.3	-58	3895.3
19	4	79	2100	5.275	3956.3	-58	3898.3
19	4	79	2200	5.276	3957.0	-58	3899.0
19	4	79	2300	5.276	3956.5	-58	3900.5
20	4	79	0	5.279	3959.3	-58	3901.3
20	4	79	100	5.280	3960.0	-58	3902.0
20	4	79	200	5.280	3960.0	-58	3902.0
20	4	79	300	5.280	3960.0	-58	3902.0
20	4	79	400	5.282	3961.5	-58	3903.5
20	4	79	500	5.282	3961.5	-58	3903.5
20	4	79	600	5.285	3963.8	-58	3905.8
20	4	79	700	5.286	3964.5	-58	3906.5
20	4	79	800	5.288	3966.0	-58	3908.0
20	4	79	900	5.289	3966.8	-58	3908.8
20	4	79	1000	5.290	3967.5	-58	3909.5
20	4	79	1100	5.290	3967.5	-58	3909.5
20	4	79	1200	5.290	3967.5	-58	3909.5
20	4	79	1300	5.290	3967.5	-58	3909.5
20	4	79	1400	5.290	3967.5	-58	3909.5
20	4	79	1500	5.283	3962.3	-58	3904.3
20	4	79	1000	5.271	3953.3	-58	3895.3
20	4	79	1700	5.062	3796.5	-60	3736.5
20	4	79	1800	5.033	3774.8	-60	3714.8
20	4	79	1900	5.040	3780.0	-60	3720.0
20	4	79	2000	5.040	3780.0	-60	3720.0
20	4	79	2100	5.026	3769.5	-60	3709.5
20	4	79	2200	5.020	3765.0	-60	3705.0
20	4	79	2300	5.020	3765.0	-60	3705.0
21	4	79	0	5.028	3771.0	-60	3711.0
21	4	79	100	5.041	3780.8	-60	3720.8
21	4	79	200	5.056	3792.0	-60	3732.0
21	4	79	300	5.066	3799.5	-60	3739.5
21	4	79	400	5.059	3794.3	-60	3734.3
21	4	79	500	5.056	3792.0	-60	3732.0
21	4	79	600	5.056	3792.0	-60	3732.0
21	4	79	700	5.060	3795.0	-60	3735.0
21	4	79	800	5.068	3801.0	-60	3741.0
21	4	79	900	5.100	3825.0	-60	3765.0
21	4	79	1000	5.150	3862.5	-59	3803.5
21	4	79	1100	5.170	3877.5	-59	3818.5
21	4	79	1200	5.186	3889.5	-59	3830.5
21	4	79	1300	5.219	3914.3	-59	3855.3
21	4	79	1400	5.226	3919.5	-59	3860.5
21	4	79	1500	5.237	3927.8	-59	3868.8
21	4	79	1000	5.285	3963.8	-58	3905.8
21	4	79	1700	5.315	3986.3	-58	3928.3
21	4	79	1800	5.320	3990.0	-58	3932.0
21	4	79	1900	5.324	3993.0	-58	3935.0
21	4	79	2000	5.329	3996.8	-58	3938.8
21	4	79	2100	5.332	3999.0	-58	3941.0
21	4	79	2200	5.335	4001.3	-58	3943.3
21	4	79	2300	5.338	4003.5	-58	3945.5
22	4	79	0	5.340	4005.0	-58	3947.0
22	4	79	100	5.340	4005.0	-58	3947.0
22	4	79	200	5.341	4005.8	-58	3947.8
22	4	79	300	5.341	4005.8	-58	3947.8
22	4	79	400	5.342	4006.5	-58	3948.5
22	4	79	500	5.344	4008.0	-58	3950.0
22	4	79	600	5.345	4008.8	-58	3950.8
22	4	79	700	5.345	4008.8	-58	3950.8
22	4	79	800	5.345	4008.8	-58	3950.8
22	4	79	900	5.347	4010.3	-58	3952.3
22	4	79	1000	5.349	4011.8	-58	3953.8
22	4	79	1100	5.350	4012.5	-58	3954.5

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
22	4	79	1200	5.350	4012.5	-58	3954.5
22	4	79	1300	5.350	4012.5	-58	3954.5
22	4	79	1400	5.350	4012.5	-58	3954.5
22	4	79	1500	5.350	4012.5	-58	3954.5
22	4	79	1600	5.350	4012.5	-58	3954.5
22	4	79	1700	5.350	4012.5	-58	3954.5
22	4	79	1800	5.350	4012.5	-58	3954.5
22	4	79	1900	5.350	4012.5	-58	3954.5
22	4	79	2000	5.349	4011.8	-58	3953.8
22	4	79	2100	5.350	4012.5	-58	3954.5
22	4	79	2200	5.350	4012.5	-58	3954.5
22	4	79	2300	5.349	4011.8	-58	3953.8
23	4	79	0	5.348	4011.0	-58	3953.0
23	4	79	100	5.348	4011.0	-58	3953.0
23	4	79	200	5.346	4009.5	-58	3951.5
23	4	79	300	5.345	4008.8	-58	3950.8
23	4	79	400	5.347	4010.3	-58	3952.3
23	4	79	500	5.346	4009.5	-58	3951.5
23	4	79	600	5.332	3999.0	-58	3941.0
23	4	79	700	5.271	3953.3	-58	3895.3
23	4	79	800	5.190	3895.5	-59	3833.5
23	4	79	900	4.877	3657.8	-60	3597.8
23	4	79	1000	4.836	3627.0	-61	3566.0
23	4	79	1100	4.786	3589.5	-61	3528.5
23	4	79	1200	4.767	3575.3	-61	3514.3
23	4	79	1300	4.728	3546.0	-61	3485.0
23	4	79	1400	4.700	3525.0	-61	3464.0
23	4	79	1500	4.679	3509.3	-61	3448.3
23	4	79	1600	4.651	3488.3	-61	3427.3
23	4	79	1700	4.619	3464.3	-61	3403.3
23	4	79	1800	4.610	3457.5	-61	3396.5
23	4	79	1900	4.601	3450.8	-61	3389.8
23	4	79	2000	4.592	3444.0	-60	3384.0
23	4	79	2100	4.583	3437.3	-60	3377.3
23	4	79	2200	4.580	3435.0	-60	3375.0
23	4	79	2300	4.575	3431.3	-60	3371.3
24	4	79	0	4.575	3431.3	-60	3371.3
24	4	79	100	4.576	3432.0	-60	3372.0
24	4	79	200	4.574	3430.5	-60	3370.5
24	4	79	300	4.575	3431.3	-60	3371.3
24	4	79	400	4.570	3427.5	-60	3367.5
24	4	79	500	4.569	3426.8	-60	3366.8
24	4	79	600	4.568	3426.0	-60	3366.0
24	4	79	700	4.563	3422.3	-60	3362.3
24	4	79	800	4.560	3420.0	-60	3360.0
24	4	79	900	4.557	3417.8	-60	3357.8
24	4	79	1000	4.551	3413.3	-60	3353.3
24	4	79	1100	4.550	3412.5	-60	3352.5
24	4	79	1200	4.550	3412.5	-60	3352.5
24	4	79	1300	4.548	3411.0	-60	3351.0
24	4	79	1400	4.548	3411.0	-60	3351.0
24	4	79	1500	4.684	3513.0	-61	3452.0
24	4	79	1600	4.820	3615.0	-61	3554.0
24	4	79	1700	4.956	3717.0	-60	3657.0
24	4	79	1800	5.092	3819.0	-60	3759.0
24	4	79	1900	5.228	3921.0	-59	3862.0
24	4	79	2000	5.228	3921.0	-59	3862.0
24	4	79	2100	5.232	3924.0	-59	3865.0
24	4	79	2200	5.266	3949.5	-59	3890.5
24	4	79	2300	5.338	4003.5	-58	3945.5
25	4	79	0	5.338	4003.5	-58	3945.5
25	4	79	100	5.310	3982.5	-58	3924.5
25	4	79	200	5.299	3974.3	-58	3916.3
25	4	79	300	5.291	3968.3	-58	3910.3
25	4	79	400	5.286	3964.5	-58	3906.5
25	4	79	500	5.278	3958.5	-58	3900.5
25	4	79	600	5.268	3951.0	-58	3893.0
25	4	79	700	5.265	3948.8	-59	3889.8

PRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
25	4	79	800	5.260	3945.0	-59	3886.0
25	4	79	900	5.264	3948.0	-59	3889.0
25	4	79	1000	5.263	3947.3	-59	3888.3
25	4	79	1100	5.271	3953.3	-58	3895.3
25	4	79	1200	5.270	3952.5	-58	3894.5
25	4	79	1300	5.275	3956.3	-58	3898.3
25	4	79	1400	5.280	3960.0	-58	3902.0
25	4	79	1500	5.285	3963.8	-58	3905.8
25	4	79	1600	5.290	3967.5	-58	3909.5
25	4	79	1700	5.294	3970.5	-58	3912.5
25	4	79	1800	5.298	3973.5	-58	3915.5
25	4	79	1900	5.298	3973.5	-58	3915.5
25	4	79	2000	5.301	3975.8	-58	3917.8
25	4	79	2100	5.302	3976.5	-58	3918.5
25	4	79	2200	5.305	3978.8	-58	3920.8
25	4	79	2300	5.305	3978.8	-58	3920.8
26	4	79	0	5.305	3978.8	-58	3920.8
26	4	79	100	5.307	3980.3	-58	3922.3
26	4	79	200	5.308	3981.0	-58	3923.0
26	4	79	300	5.308	3981.0	-58	3923.0
26	4	79	400	5.308	3981.0	-58	3923.0
26	4	79	500	5.309	3981.8	-58	3923.8
26	4	79	600	5.309	3981.8	-58	3923.8
26	4	79	700	5.309	3981.8	-58	3923.8
26	4	79	800	5.309	3981.8	-58	3923.8
26	4	79	900	5.310	3982.5	-58	3924.5
26	4	79	1000	5.310	3982.5	-58	3924.5
26	4	79	1100	5.312	3984.0	-58	3926.0
26	4	79	1200	5.312	3984.0	-58	3926.0
26	4	79	1300	5.314	3985.5	-58	3927.5
26	4	79	1400	5.314	3985.5	-58	3927.5
26	4	79	1500	5.314	3985.5	-58	3927.5
26	4	79	1600	5.315	3986.3	-58	3928.3
26	4	79	1700	5.314	3985.5	-58	3927.5
26	4	79	1800	5.314	3985.5	-58	3927.5
26	4	79	1900	5.314	3985.5	-58	3927.5
26	4	79	2000	5.315	3986.3	-58	3928.3
26	4	79	2100	5.315	3986.3	-58	3928.3
26	4	79	2200	5.317	3987.8	-58	3929.8
26	4	79	2300	5.318	3988.5	-58	3930.5
27	4	79	0	5.318	3988.5	-58	3930.5
27	4	79	100	5.318	3988.5	-58	3930.5
27	4	79	200	5.318	3988.5	-58	3930.5
27	4	79	300	5.318	3988.5	-58	3930.5
27	4	79	400	5.318	3988.5	-58	3930.5
27	4	79	500	5.318	3988.5	-58	3930.5
27	4	79	600	5.318	3988.5	-58	3930.5
27	4	79	700	5.319	3989.3	-58	3931.3
27	4	79	800	5.319	3989.3	-58	3931.3
27	4	79	900	5.319	3989.3	-58	3931.3
27	4	79	1000	5.319	3989.3	-58	3931.3
27	4	79	1100	5.320	3990.0	-58	3932.0
27	4	79	1200	5.320	3990.0	-58	3932.0
27	4	79	1300	5.320	3990.0	-58	3932.0
27	4	79	1400	5.320	3990.0	-58	3932.0
27	4	79	1500	5.321	3990.8	-58	3932.8
27	4	79	1600	5.320	3990.0	-58	3932.0
27	4	79	1700	5.320	3990.0	-58	3932.0
27	4	79	1800	5.320	3990.0	-58	3932.0
27	4	79	1900	5.319	3989.3	-58	3931.3
27	4	79	2000	5.319	3989.3	-58	3931.3
27	4	79	2100	5.319	3989.3	-58	3931.3
27	4	79	2200	5.319	3989.3	-58	3931.3
27	4	79	2300	5.319	3989.3	-58	3931.3
28	4	79	0	5.318	3988.5	-58	3930.5
28	4	79	100	5.318	3988.5	-58	3930.5
28	4	79	200	5.316	3987.0	-58	3929.0
28	4	79	300	5.316	3987.0	-58	3929.0

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
28	4	79	400	5.315	3986.3	-58	3928.3
28	4	79	500	5.315	3986.3	-58	3928.3
28	4	79	600	5.315	3986.3	-58	3928.3
28	4	79	700	5.314	3985.5	-58	3927.5
28	4	79	800	5.313	3984.8	-58	3926.8
28	4	79	900	5.312	3984.0	-58	3926.0
28	4	79	1000	5.312	3984.0	-58	3926.0
28	4	79	1100	5.311	3983.3	-58	3925.3
28	4	79	1200	5.311	3983.3	-58	3925.3
28	4	79	1300	5.312	3984.0	-58	3926.0
28	4	79	1400	5.312	3984.0	-58	3926.0
28	4	79	1500	5.312	3984.0	-58	3926.0
28	4	79	1600	5.311	3983.3	-58	3925.3
28	4	79	1700	5.310	3982.5	-58	3924.5
28	4	79	1800	5.310	3982.5	-58	3924.5
28	4	79	1900	5.310	3982.5	-58	3924.5
28	4	79	2000	5.310	3982.5	-58	3924.5
28	4	79	2100	5.311	3983.3	-58	3925.3
28	4	79	2200	5.311	3983.3	-58	3925.3
28	4	79	2300	5.312	3984.0	-58	3926.0
29	4	79	0	5.312	3984.0	-58	3926.0
29	4	79	100	5.313	3984.8	-58	3926.8
29	4	79	200	5.314	3985.5	-58	3927.5
29	4	79	300	5.315	3986.3	-58	3928.3
29	4	79	400	5.315	3986.3	-58	3928.3
29	4	79	500	5.318	3988.5	-58	3930.5
29	4	79	600	5.316	3987.0	-58	3929.0
29	4	79	700	5.318	3988.5	-58	3930.5
29	4	79	800	5.319	3989.3	-58	3931.3
29	4	79	900	5.320	3990.0	-58	3932.0
29	4	79	1000	5.321	3990.8	-58	3932.8
29	4	79	1100	5.325	3993.8	-58	3935.8
29	4	79	1200	5.326	3994.5	-58	3936.5
29	4	79	1300	5.328	3996.0	-58	3938.0
29	4	79	1400	5.329	3996.8	-58	3938.8
29	4	79	1500	5.330	3997.5	-58	3939.5
29	4	79	1600	5.330	3997.5	-58	3939.5
29	4	79	1700	5.330	3997.5	-58	3939.5
29	4	79	1800	5.331	3998.3	-58	3940.3
29	4	79	1900	5.331	3998.3	-58	3940.3
29	4	79	2000	5.331	3998.3	-58	3940.3
29	4	79	2100	5.331	3998.3	-58	3940.3
29	4	79	2200	5.331	3998.3	-58	3940.3
29	4	79	2300	5.331	3998.3	-58	3940.3
30	4	79	0	5.331	3998.3	-58	3940.3
30	4	79	100	5.331	3998.3	-58	3940.3
30	4	79	200	5.331	3998.3	-58	3940.3
30	4	79	300	5.331	3998.3	-58	3940.3
30	4	79	400	5.331	3998.3	-58	3940.3
30	4	79	500	5.331	3998.3	-58	3940.3
30	4	79	600	5.331	3998.3	-58	3940.3
30	4	79	700	5.331	3998.3	-58	3940.3
30	4	79	800	5.331	3998.3	-58	3940.3
30	4	79	900	5.330	3997.0	-58	3939.0
30	4	79	1000	5.330	3997.0	-58	3939.0
30	4	79	1100	5.281	3960.8	-58	3902.8
30	4	79	1200	5.250	3937.5	-59	3878.5
30	4	79	1300	5.229	3921.8	-59	3862.8
30	4	79	1400	5.195	3896.3	-59	3837.3
30	4	79	1500	5.161	3870.8	-59	3811.8
30	4	79	1600	5.127	3845.3	-60	3785.3
30	4	79	1700	5.093	3819.8	-60	3759.8
30	4	79	1800	5.060	3795.0	-60	3735.0
30	4	79	1900	5.043	3782.3	-60	3722.3
30	4	79	2000	5.033	3774.8	-60	3714.8
30	4	79	2100	5.022	3766.5	-60	3706.5
30	4	79	2200	5.011	3758.3	-60	3698.3
30	4	79	2300	5.000	3750.0	-60	3690.0

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
1	5	79	0	4.972	3729.0	-60	3669.0
1	5	79	100	4.908	3681.0	-60	3621.0
1	5	79	200	4.870	3652.5	-60	3592.5
1	5	79	300	4.830	3622.5	-61	3561.5
1	5	79	400	4.788	3591.0	-61	3530.0
1	5	79	500	4.738	3553.5	-61	3492.5
1	5	79	600	4.689	3516.8	-61	3455.8
1	5	79	700	4.630	3472.5	-61	3411.5
1	5	79	800	4.589	3441.8	-60	3388.8
1	5	79	900	4.559	3419.3	-60	3359.3
1	5	79	1000	4.520	3390.0	-60	3330.0
1	5	79	1100	4.485	3363.8	-60	3303.8
1	5	79	1200	4.432	3324.0	-60	3264.0
1	5	79	1300	4.375	3281.3	-61	3220.3
1	5	79	1400	4.350	3262.5	-61	3201.5
1	5	79	1500	4.370	3277.5	-61	3216.5
1	5	79	1600	4.438	3328.5	-60	3268.5
1	5	79	1700	4.545	3408.8	-60	3348.8
1	5	79	1800	4.736	3552.0	-61	3491.2
1	5	79	1900	4.966	3724.5	-60	3664.5
1	5	79	2000	4.983	3737.3	-60	3677.3
1	5	79	2100	5.000	3750.0	-60	3690.0
1	5	79	2200	5.125	3843.8	-60	3783.8
1	5	79	2300	5.135	3851.3	-59	3792.3
2	5	79	0	5.149	3861.8	-59	3802.8
2	5	79	100	5.171	3878.3	-59	3819.3
2	5	79	200	5.189	3891.8	-59	3832.8
2	5	79	300	5.201	3900.8	-59	3841.8
2	5	79	400	5.209	3906.8	-59	3847.8
2	5	79	500	5.205	3903.8	-59	3844.8
2	5	79	600	5.192	3874.0	-59	3835.0
2	5	79	700	5.110	3832.5	-60	3772.5
2	5	79	800	5.118	3838.5	-60	3778.5
2	5	79	900	5.127	3845.3	-60	3785.3
2	5	79	1000	5.150	3862.5	-59	3803.5
2	5	79	1100	5.170	3877.5	-59	3818.5
2	5	79	1200	5.176	3882.0	-59	3823.0
2	5	79	1300	5.177	3882.8	-59	3823.8
2	5	79	1400	5.193	3894.8	-59	3835.8
2	5	79	1500	5.208	3906.0	-59	3847.0
2	5	79	1600	5.235	3926.3	-59	3867.3
2	5	79	1700	5.239	3929.3	-59	3870.3
2	5	79	1800	5.246	3934.5	-59	3875.5
2	5	79	1900	5.240	3930.0	-59	3871.0
2	5	79	2000	5.237	3927.8	-59	3868.8
2	5	79	2100	5.235	3926.3	-59	3867.3
2	5	79	2200	5.231	3923.3	-59	3864.3
2	5	79	2300	5.240	3930.0	-59	3871.0
3	5	79	0	5.239	3929.3	-59	3870.3
3	5	79	100	5.232	3924.0	-59	3865.0
3	5	79	200	5.198	3898.5	-59	3839.5
3	5	79	300	5.185	3888.8	-59	3829.8
3	5	79	400	5.176	3882.0	-59	3823.0
3	5	79	500	5.130	3847.5	-60	3787.5
3	5	79	600	5.047	3785.3	-60	3725.3
3	5	79	700	5.025	3768.8	-60	3708.8
3	5	79	800	5.023	3767.3	-60	3707.3
3	5	79	900	5.020	3765.0	-60	3705.0
3	5	79	1000	4.911	3683.3	-60	3623.3
3	5	79	1100	4.802	3601.5	-61	3540.5
3	5	79	1200	4.692	3519.0	-61	3458.0
3	5	79	1300	4.644	3483.0	-61	3422.0
3	5	79	1400	4.720	3540.0	-61	3479.0
3	5	79	1500	4.796	3597.0	-61	3536.0
3	5	79	1600	4.852	3639.0	-61	3578.0
3	5	79	1700	4.851	3638.3	-61	3577.3
3	5	79	1800	4.820	3615.0	-61	3554.0
3	5	79	1900	4.813	3609.8	-61	3548.8

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
3	5	79	2000	4.873	3654.8	-60	3594.8
3	5	79	2100	4.934	3700.5	-60	3640.5
3	5	79	2200	4.921	3690.8	-60	3630.8
3	5	79	2300	4.919	3689.3	-60	3629.3
4	5	79	0	4.920	3690.0	-60	3630.0
4	5	79	100	4.919	3689.3	-60	3629.3
4	5	79	200	4.915	3686.3	-60	3623.3
4	5	79	300	4.910	3682.5	-60	3622.5
4	5	79	400	4.911	3683.3	-60	3623.3
4	5	79	500	4.909	3681.8	-60	3621.8
4	5	79	600	4.907	3680.3	-60	3620.3
4	5	79	700	4.906	3676.5	-60	3619.5
4	5	79	800	4.906	3679.5	-60	3619.5
4	5	79	900	4.905	3678.8	-60	3618.8
4	5	79	1000	4.890	3667.5	-60	3607.5
4	5	79	1100	4.869	3651.8	-60	3591.8
4	5	79	1200	4.835	3626.3	-61	3565.3
4	5	79	1300	4.797	3597.8	-61	3536.8
4	5	79	1400	4.760	3570.0	-61	3509.0
4	5	79	1500	4.730	3547.5	-61	3486.5
4	5	79	1600	4.610	3457.5	-61	3396.5
4	5	79	1700	4.492	3369.0	-60	3309.0
4	5	79	1800	4.400	3300.0	-60	3240.0
4	5	79	1900	4.314	3235.5	-61	3174.5
4	5	79	2000	4.183	3137.3	-61	3076.3
4	5	79	2100	4.051	3038.3	-61	2977.3
5	5	79	1000	3.940	2955.0	-61	2894.0
5	5	79	1100	3.921	2940.8	-60	2880.8
5	5	79	1200	3.920	2940.0	-60	2880.0
5	5	79	1300	3.920	2940.0	-60	2880.0
5	5	79	1400	3.935	2951.3	-61	2890.3
5	5	79	1500	3.949	2961.8	-61	2900.8
5	5	79	1600	4.024	3018.0	-61	2957.0
5	5	79	1700	4.112	3084.0	-61	3023.0
5	5	79	1800	4.120	3090.0	-61	3029.0
5	5	79	1900	4.156	3117.0	-61	3056.0
5	5	79	2000	4.144	3108.0	-61	3047.0
5	5	79	2100	4.132	3099.0	-61	3038.0
5	5	79	2200	4.080	3060.0	-61	2999.0
5	5	79	2300	4.061	3045.8	-61	2984.8
6	5	79	0	4.080	3060.0	-61	2999.0
6	5	79	100	4.105	3078.8	-61	3017.8
6	5	79	200	4.123	3092.3	-61	3031.3
6	5	79	300	4.134	3100.5	-61	3039.5
6	5	79	400	4.214	3160.5	-61	3099.5
6	5	79	500	4.176	3207.0	-61	3146.0
6	5	79	600	4.295	3221.3	-61	3160.3
6	5	79	700	4.300	3225.0	-61	3164.0
6	5	79	800	4.250	3187.5	-61	3126.5
6	5	79	900	4.250	3187.5	-61	3126.5
6	5	79	1000	4.226	3169.5	-61	3108.5
6	5	79	1100	4.193	3144.8	-61	3083.8
6	5	79	1200	4.190	3142.5	-61	3081.5
6	5	79	1300	4.127	3095.3	-61	3034.3
6	5	79	1400	4.084	3063.0	-61	3002.0
6	5	79	1500	4.100	3075.0	-61	3014.0
6	5	79	1600	4.098	3073.5	-61	3012.5
6	5	79	1700	4.100	3075.0	-61	3014.0
6	5	79	1800	4.083	3062.3	-61	3001.3
6	5	79	1900	4.056	3042.0	-61	2981.0
6	5	79	2000	3.930	2947.5	-60	2887.5
6	5	79	2100	3.872	2904.0	-60	2844.0
6	5	79	2200	3.790	2842.5	-60	2782.5
6	5	79	2300	3.790	2842.5	-60	2785.5
7	5	79	0	3.758	2818.5	-60	2758.5
7	5	79	100	3.619	2714.3	-59	2655.3
7	5	79	200	3.376	2532.0	-58	2474.0
7	5	79	300	3.390	2542.5	-58	2484.5

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
7	5	79	400	3.287	2465.3	-58	2407.3
7	5	79	500	3.199	2399.3	-57	2342.3
7	5	79	600	3.180	2385.0	-57	2328.0
7	5	79	700	3.132	2349.0	-56	2293.0
7	5	79	800	3.069	2301.8	-56	2245.8
7	5	79	900	3.047	2285.3	-55	2230.3
7	5	79	1000	3.022	2266.5	-55	2211.5
7	5	79	1100	3.062	2296.5	-55	2241.5
7	5	79	1200	3.059	2294.3	-55	2239.3
7	5	79	1300	3.080	2310.0	-56	2254.0
7	5	79	1400	3.174	2380.5	-57	2323.5
7	5	79	1500	3.335	2501.3	-58	2443.3
7	5	79	1600	3.415	2561.3	-58	2503.3
7	5	79	1700	3.439	2579.3	-58	2521.3
7	5	79	1800	3.439	2579.3	-58	2521.3
7	5	79	1900	3.445	2583.8	-58	2525.8
7	5	79	2000	3.465	2598.8	-58	2540.8
7	5	79	2100	3.428	2571.0	-58	2513.0
7	5	79	2200	3.414	2560.5	-58	2502.5
7	5	79	2300	3.400	2550.0	-58	2492.0
8	5	79	0	3.402	2551.5	-58	2493.5
8	5	79	100	3.394	2545.5	-58	2487.5
8	5	79	200	3.398	2548.5	-58	2490.5
8	5	79	300	3.449	2586.8	-58	2528.8
8	5	79	400	3.545	2658.8	-59	2599.8
8	5	79	500	3.790	2842.5	-60	2782.5
8	5	79	600	3.814	2860.5	-60	2800.5
8	5	79	700	3.815	2861.3	-60	2801.3
8	5	79	800	3.724	2793.0	-60	2733.0
8	5	79	900	3.674	2755.5	-60	2695.5
8	5	79	1000	3.634	2725.5	-59	2666.5
8	5	79	1100	3.594	2695.5	-59	2636.5
8	5	79	1200	3.615	2711.3	-59	2652.3
8	5	79	1300	3.655	2741.3	-59	2682.3
8	5	79	1400	3.718	2788.5	-60	2728.5
8	5	79	1500	3.877	2907.8	-60	2847.8
8	5	79	1600	3.976	2982.0	-61	2921.0
8	5	79	1700	3.990	2992.5	-61	2931.5
8	5	79	1800	4.018	3013.5	-61	2952.5
8	5	79	1900	4.015	3011.3	-61	2950.3
8	5	79	2000	4.000	3000.0	-61	2939.0
8	5	79	2100	3.945	2958.8	-61	2897.8
8	5	79	2200	3.921	2940.8	-60	2880.8
8	5	79	2300	3.917	2937.8	-60	2877.8
9	5	79	0	3.910	2932.5	-60	2872.5
9	5	79	100	3.938	2953.5	-61	2892.5
9	5	79	200	3.940	2955.0	-61	2894.0
9	5	79	300	3.913	2934.8	-60	2874.8
9	5	79	400	3.830	2872.5	-60	2812.5
9	5	79	500	3.730	2797.5	-60	2737.5
9	5	79	600	3.666	2749.5	-59	2690.5
9	5	79	700	3.505	2628.8	-58	2570.8
9	5	79	800	3.432	2574.0	-58	2516.0
9	5	79	900	3.291	2468.3	-58	2410.3
9	5	79	1000	3.220	2415.0	-57	2358.0
9	5	79	1100	3.134	2350.5	-57	2293.5
9	5	79	1200	3.118	2338.5	-56	2282.5
9	5	79	1300	3.165	2373.8	-57	2316.8
9	5	79	1400	3.170	2377.5	-57	2320.5
9	5	79	1500	3.157	2367.8	-57	2310.8
9	5	79	1600	3.138	2353.5	-57	2296.5
9	5	79	1700	3.090	2317.5	-56	2261.5
9	5	79	1800	3.080	2310.0	-56	2254.0
9	5	79	1900	3.070	2302.5	-56	2246.5
9	5	79	2000	3.108	2331.0	-56	2275.0
9	5	79	2100	3.130	2347.5	-56	2291.5
9	5	79	2200	3.160	2370.0	-57	2313.0
9	5	79	2300	3.182	2386.5	-57	2329.5

FRAM I DEPTH DATA

DY	MN	YR	GMT	SECONDS	METERS (UNCORR)	VEL CORR	METERS (CORR)
10	5	79	0	3.198	2398.5	-57	2341.5
10	5	79	100	3.230	2422.5	-57	2365.5
10	5	79	200	3.224	2418.0	-57	2361.0
10	5	79	300	3.232	2424.0	-57	2367.0
10	5	79	400	3.225	2418.8	-57	2361.8
10	5	79	500	3.290	2467.5	-58	2409.5
10	5	79	600	3.334	2500.5	-58	2442.5
10	5	79	700	3.365	2523.8	-58	2465.8
10	5	79	800	3.370	2527.5	-58	2469.5
10	5	79	900	3.400	2550.0	-58	2492.0
10	5	79	1000	3.419	2564.3	-58	2506.3
10	5	79	1100	3.432	2574.0	-58	2516.0
10	5	79	1200	3.422	2566.5	-58	2508.5
10	5	79	1300	3.389	2541.8	-58	2483.8
10	5	79	1400	3.399	2549.3	-58	2491.3
10	5	79	1500	3.418	2563.5	-58	2505.5
10	5	79	1600	3.412	2559.0	-58	2501.0
10	5	79	1700	3.400	2550.0	-58	2492.0
10	5	79	1800	3.400	2550.0	-58	2492.0
10	5	79	1900	3.400	2550.0	-58	2492.0
10	5	79	2000	3.400	2550.0	-58	2492.0
10	5	79	2100	3.400	2550.0	-58	2492.0
10	5	79	2200	3.400	2550.0	-58	2492.0
10	5	79	2300	3.400	2550.0	-58	2492.0
11	5	79	0	3.400	2550.0	-58	2492.0
11	5	79	100	3.400	2550.0	-58	2492.0
11	5	79	200	3.400	2550.0	-58	2492.0
11	5	79	300	3.400	2550.0	-58	2492.0
11	5	79	400	3.401	2550.8	-58	2492.8
11	5	79	500	3.401	2550.8	-58	2492.8
11	5	79	600	3.408	2556.0	-58	2498.0
11	5	79	700	3.406	2554.5	-58	2496.5
11	5	79	800	3.411	2558.3	-58	2550.3
11	5	79	900	3.409	2556.8	-58	2498.8
11	5	79	1000	3.403	2552.3	-58	2494.3
11	5	79	1100	3.390	2542.5	-58	2484.5
11	5	79	1200	3.378	2533.5	-58	2475.5
11	5	79	1300	3.365	2523.8	-58	2465.8
11	5	79	1400	3.353	2514.8	-58	2456.8
11	5	79	1500	3.348	2511.0	-58	2453.0
11	5	79	1600	3.340	2505.0	-58	2447.0
11	5	79	1700	3.263	2447.3	-57	2390.3
11	5	79	1800	3.190	2392.5	-57	2335.5
11	5	79	1900	3.125	2343.8	-56	2287.8
11	5	79	2000	3.058	2293.5	-55	2238.5
11	5	79	2100	3.040	2280.0	-55	2225.0
11	5	79	2200	3.048	2286.0	-55	2231.0
11	5	79	2300	3.066	2299.5	-55	2244.5
12	5	79	0	3.108	2331.0	-56	2275.0
12	5	79	100	3.152	2364.0	-57	2307.0
12	5	79	200	3.180	2385.0	-57	2328.0
12	5	79	300	3.190	2392.5	-57	2335.5
12	5	79	400	3.165	2373.8	-57	2316.8
12	5	79	500	3.139	2354.3	-57	2297.3
12	5	79	600	3.127	2345.3	-56	2289.3
12	5	79	700	3.129	2346.8	-56	2290.8
12	5	79	800	3.143	2357.3	-57	2300.3
12	5	79	900	3.149	2361.8	-57	2304.8

GRAVITY OBSERVATIONS AT FRAM I

Key to column headings:

DY = Day

MN = Month

YR = Year

GMT = Greenwich mean time

CTR RDG = Counter reading

MGALS = Relative gravity in milligals

GRAVITY = Gravity value

Gravity

The earth's gravity field was monitored during the station drift with a La Coste and Romberg Model G gravimeter. This instrument has a range of over 7000 milligals, a reading accuracy of ± 0.01 milligal and a drift rate normally less than 1 milligal per month. The instrument used, serial number 27, was especially modified for use on ice floes by the addition of variable damping and electronic readout. Gravity output was monitored continuously with a chart recorder but only those values read directly for calibrating the chart are reported here. The instrument was located in the Lamont residence hut at FRAM I where it was mounted on a wooden pier frozen into the ice floe. The pier extended through a hole in the floor of the hut and was free of any contact with the hut itself. The instrument was at an elevation of 1/2 m above sea level.

The gravity readings were calibrated with readings at Lamont, Thule and Nord. The manufacturer's screw curve for the instrument was checked between the gravity pier in the Oceanography Building at Lamont and Hangar #7 (SE corner, field level) at Thule AFB, Greenland. The difference in gravity between the two points is over 2600 milligals yet the difference based on the manufacturer's screw curve was found to give a gravity tie within 2 milligals of that based on the survey values for these two sites.

Site	Date	Base Surveyed Value (gals.)	Value based on G-27 Rdgs. (gals.)
Thule AFB HGR #7	3/3/79	982.9280	982.92997
Lamont Grav. Pier	2/26/79	980.2546	(980.2546)
Gravity Difference		2.6734	2.67537

Gravity based on our gravimeter readings using the screw curve agree with the accepted surveyed values with a difference of only 1.97 milligals. This check provided confidence in the manufacturer's screw curve which was used to reduce all observations.

Drift is also a possible potential source of error. Readings were taken at the same site at Nord on both the trip to FRAM I and on return. The relative readings at Nord were:

3/13/79	6766.773 mgal
5/17/79	6767.774
Drift	1.00 mgal

The drift rate of 1/2 milligal per month is considered quite small, in fact negligible considering the difficulties of obtaining precise observations on a drifting ice floe which oscillates vertically with periods of about 15s and amplitudes in the millimeter range (Hunkins, 1962).

The FRAM I values are based on the Thule base site. An auxiliary base was established at the geodetic monument near the HQ building at Nord. The instrument was placed on the monument and centered over the pin. The location of the site is reported as $81^{\circ}36'09"N$ $16^{\circ}40'12"W$. Based on the tie between Thule and Nord in March, the gravity value at the Nord site is 983.0823 gals.

FRAM I GRAVITY DATA

DY	MN	YR	GMT	CTR RDG	MGALS	GRAVITY
27	3	79	1715	6530.06	6875.25	983194.69
31	3	79	2220	6539.55	6885.24	983204.63
2	4	79	1730	6538.98	6884.64	983204.06
3	4	79	1320	6537.92	6883.52	983202.94
5	4	79	1000	6535.38	6880.85	983200.25
6	4	79	1200	6537.43	6883.01	983202.44
8	4	79	1621	6538.98	6884.64	983204.06
9	4	79	804	6537.98	6883.59	983203.00
9	4	79	806	6540.13	6885.85	983205.25
9	4	79	1545	6540.13	6885.85	983205.25
9	4	79	2115	6541.12	6886.89	983206.31
9	4	79	2217	6541.12	6886.89	983206.31
11	4	79	1210	6541.56	6887.38	983206.81
11	4	79	1610	6542.79	6885.65	983205.06
11	4	79	2359	6543.81	6889.52	983208.94
12	4	79	638	6545.83	6891.65	983211.25
12	4	79	2325	6543.56	6889.46	983208.87
13	4	79	1130	6541.01	6886.78	983206.19
14	4	79	1625	6539.53	6885.22	983204.63
14	4	79	2104	6538.51	6884.14	983203.56
15	4	79	1615	6537.40	6882.98	983202.37
15	4	79	1741	6538.60	6884.24	983203.62
16	4	79	34	6537.90	6883.50	983202.94
16	4	79	651	6539.00	6884.66	983204.06
16	4	79	1655	6539.02	6884.68	983204.06
16	4	79	1710	6539.02	6884.68	983204.06
16	4	79	2343	6539.00	6884.66	983204.06
17	4	79	1444	6538.00	6883.61	983203.00
17	4	79	1605	6538.29	6883.91	983203.31
18	4	79	1236	6536.00	6881.50	983200.94
19	4	79	847	6535.25	6880.71	983200.13
19	4	79	1640	6534.04	6879.44	983198.87
19	4	79	1732	6534.50	6879.92	983199.31
19	4	79	2301	6534.18	6879.58	983199.00
20	4	79	816	6535.18	6880.64	983200.06
20	4	79	1213	6537.00	6882.55	983201.94
20	4	79	2115	6539.00	6884.66	983204.06
21	4	79	642	6537.00	6882.55	983201.94
21	4	79	2010	6531.61	6876.88	983196.31
22	4	79	29	6530.00	6875.18	983194.56
22	4	79	1714	6531.00	6876.24	983195.63
23	4	79	47	6533.90	6879.29	983198.69
23	4	79	918	6535.00	6880.45	983199.87
23	4	79	1645	6536.00	6881.50	983200.94
23	4	79	2123	6537.00	6882.55	983201.94
24	4	79	924	6537.00	6882.55	983201.94
25	4	79	2300	6536.00	6881.50	983200.94
26	4	79	658	6534.00	6879.40	983198.81
27	4	79	1114	6533.30	6878.66	983198.06
29	4	79	1139	6530.00	6875.18	983194.56
30	4	79	113	6532.00	6877.29	983196.69
30	4	79	1827	6533.00	6878.34	983197.75
9	5	79	842	6557.00	6903.62	983223.00
9	5	79	1022	6560.23	6907.02	983226.44
9	5	79	1618	6563.00	6909.94	983229.37
9	5	79	1638	6561.04	6907.87	983227.25
10	5	79	112	6559.00	6905.72	983225.13
10	5	79	913	6559.00	6905.72	983225.13
10	5	79	1005	6557.86	6904.52	983223.94
10	5	79	1320	6554.01	6900.47	983219.87
10	5	79	2341	6555.50	6902.04	983221.44
11	5	79	1152	6556.50	6903.09	983222.50
12	5	79	1555	6559.50	6906.25	983225.69
12	5	79	2230	6560.56	6907.37	983226.75

Ice Floe Rotation and Magnetic Declination

The satellite navigation sets used at FRAM I did not determine azimuth. Since ice floes tend to rotate, it was desirable to determine the change in azimuth with time of a reference line on the floe. A line from the Lamont profiling current meter hut to the meteorological tower was chosen as an arbitrary base line. A break in the FRAM I floe on March 28th made it necessary to move the meteorological tower. So at that time there was a change in the base line used for reference.

Azimuth was determined by solar fixes on a daily basis using a Wild T-2 theodolite. On occasion cloud cover obscured the sun and no fix could be taken.

The ice floe showed a net clockwise rotation of 56° between April 2nd and May 11th. The azimuth values are considered reliable to within $\pm$ 0.2°.

A magnetic compass with a 4-inch needle, sighting vanes and mounted on a tripod was read when sun sights were made. Declination was found by comparing the magnetic bearing with the azimuth of the reference line. The value of declination decreased steadily during FRAM I's drift, ranging from 33°W to 20°W. Declination is estimated to be reliable within $\pm$ 0.5°.

Ice Floe Azimuth and Magnetic Declination

Key to column headings:

DY = Day

MN = Month

YR = Year

GMT = Greenwich mean time

AZ = Azimuth of camp reference line

MGDC = Magnetic declination in degrees of bearing west from true north

FRAM I AZIMUTH AND MAGNETIC DECLINATION

DY	MN	YR	GMT	AZ	MGDC
26	03	79	1503	149.7	32.3
27	03	79	1427	153.1	28.9
			CAMP BREAKUP		
02	04	79	1034	191.9	33.0
03	04	79	1250	190.8	28.7
04	04	79	1611	192.4	28.6
05	04	79	1125	193.3	28.0
06	04	79	1329	194.2	28.0
07	04	79	1332	193.5	26.5
08	04	79	1256	194.0	27.2
09	04	79	1819	194.0	
10	04	79	1304	198.1	24.7
11	04	79	1609	194.8	28.6
12	04	79	1413	196.4	28.1
13	04	79	1300	202.6	26.7
14	04	79	1259	207.1	26.4
15	04	79	1240	207.2	26.0
16	04	79	1243	208.4	25.1
17	04	79	1241	209.2	25.0
18	04	79	1526	212.4	25.0
19	04	79	1314	214.3	25.7
20	04	79	1412	218.7	27.0
21	04	79	1321	224.0	26.0
22	04	79	1251	226.7	24.3
23	04	79	1246	227.7	24.5
24	04	79	1444	228.2	25.0
25	04	79	1316	228.8	24.2
26	04	79	1248	229.4	23.8
27	04	79	1243	229.3	25.2
28	04	79	1236	228.5	24.5
29	04	79	1404	229.8	24.2
30	04	79	1240	230.1	23.7
01	05	79	1300	231.5	26.3
02	05	79	1259	232.6	24.4
03	05	79	1357	233.4	26.3
04	05	79	1333	234.0	25.0
05	05	79	1319	236.3	24.0
06	05	79	1244	238.4	24.0
07	05	79	1251	239.9	24.1
08	05	79	1252	246.4	24.0
09	05	79	1313	245.1	24.0
10	05	79	1335	247.0	23.0
11	05	79	1412	247.8	20.0

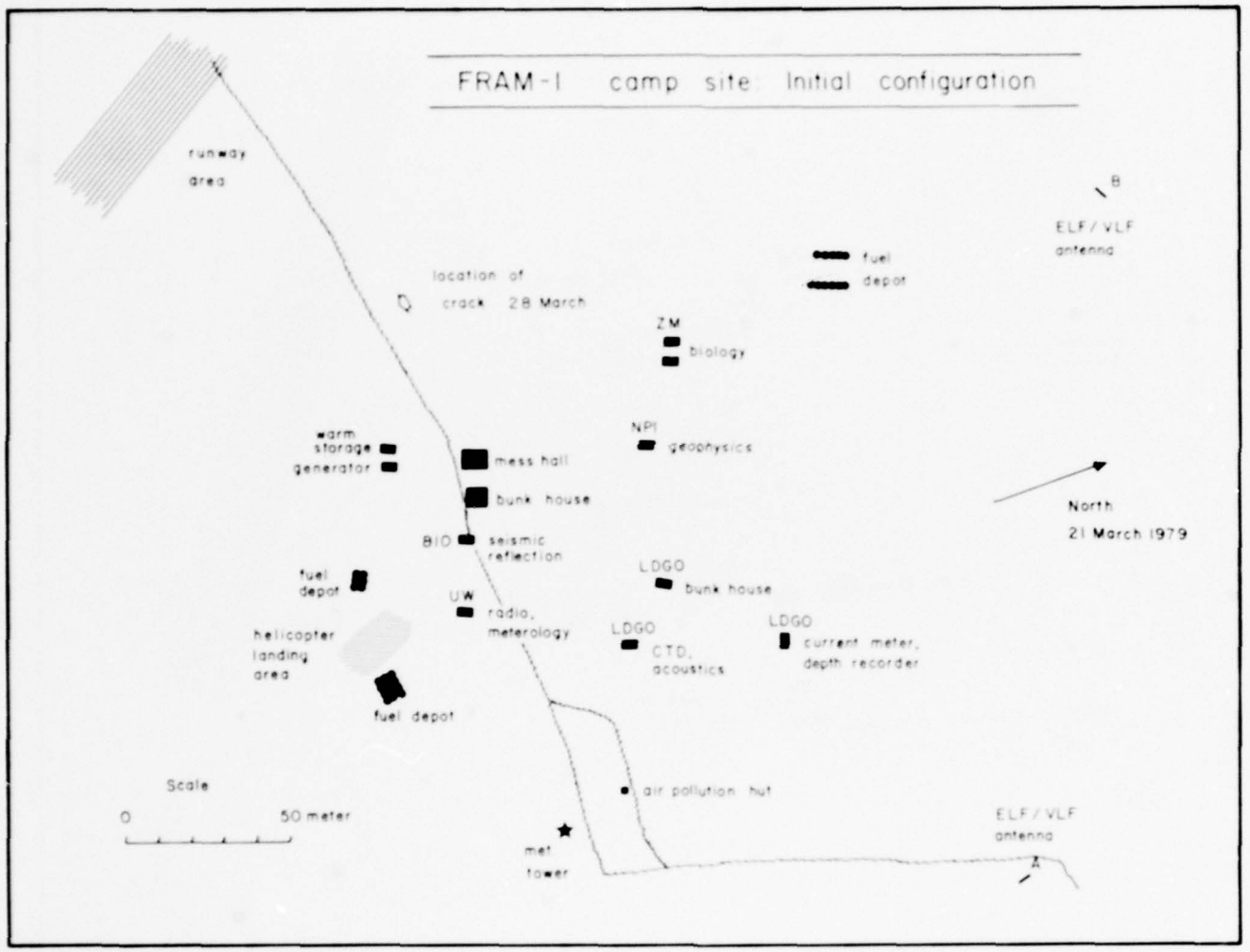
REFERENCES:

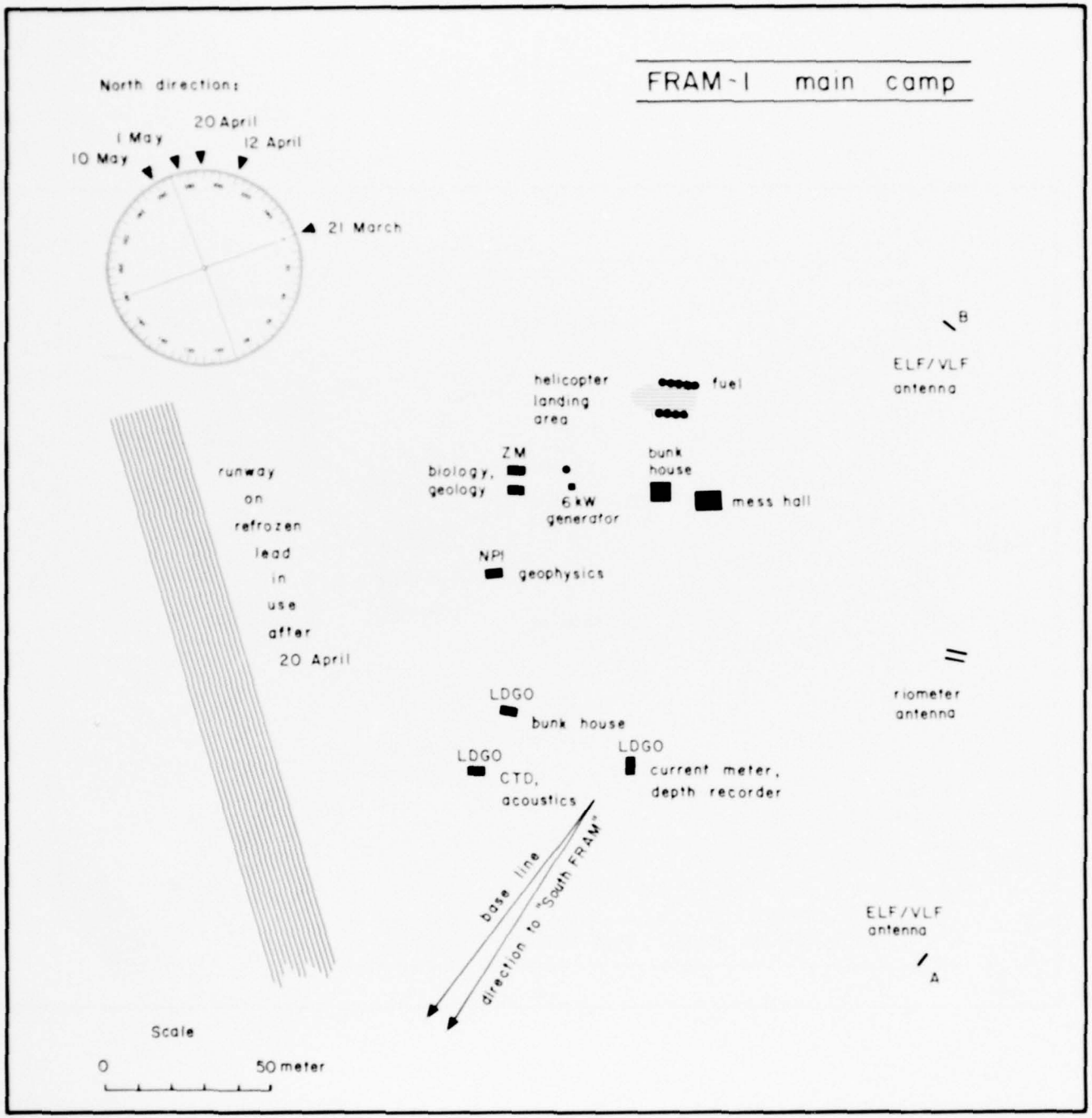
Hunkins, K., Waves on the Arctic Ocean, J. Geophys. Res., 67, 2477-2489, 1962.

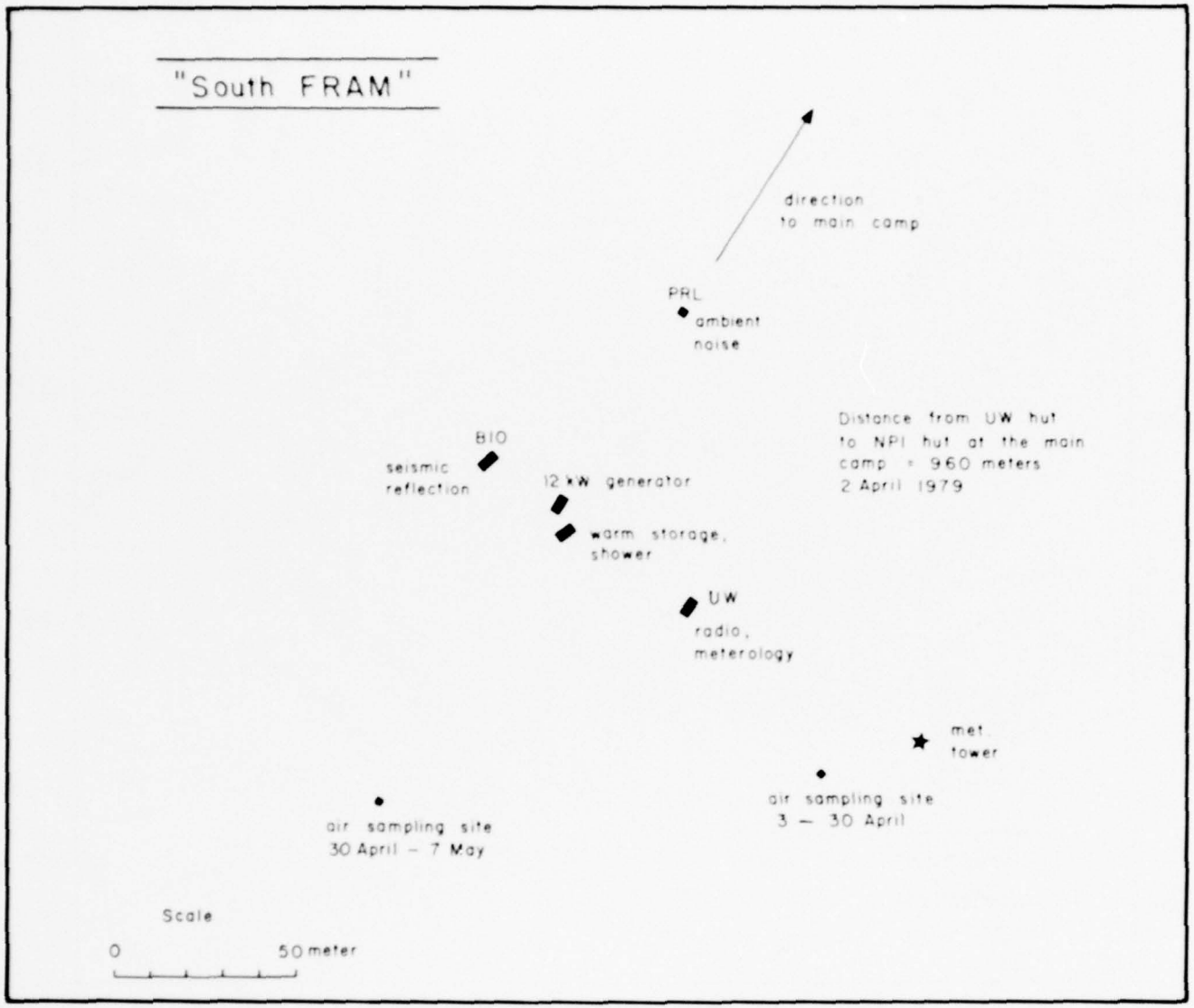
Matthews, D. J., Tables of the velocity of sound in pure water and sea water for use in echo-sounding and sound-ranging, Hydrographic Dept., Admiralty, London, 1939.

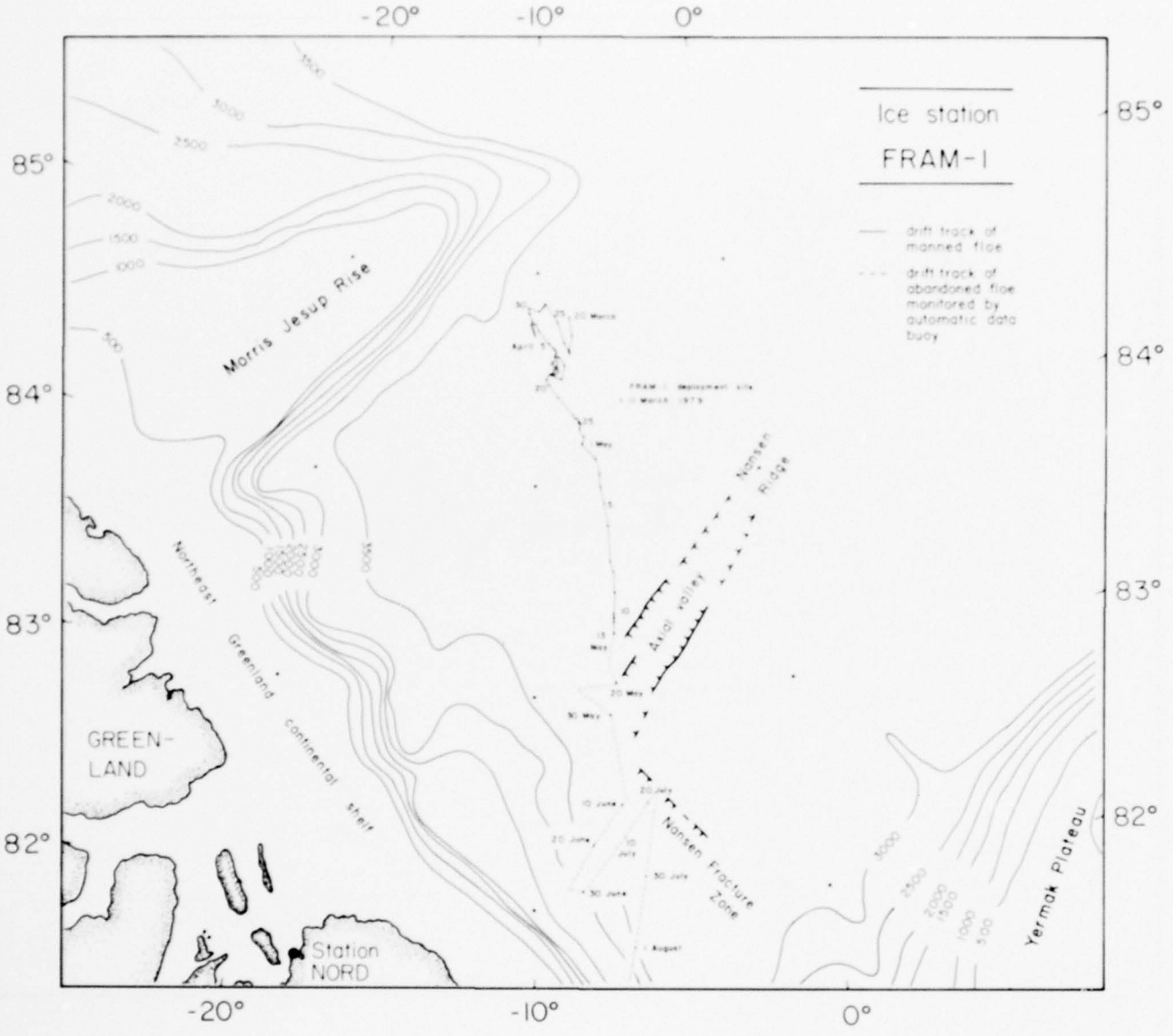
A P P E N D I X

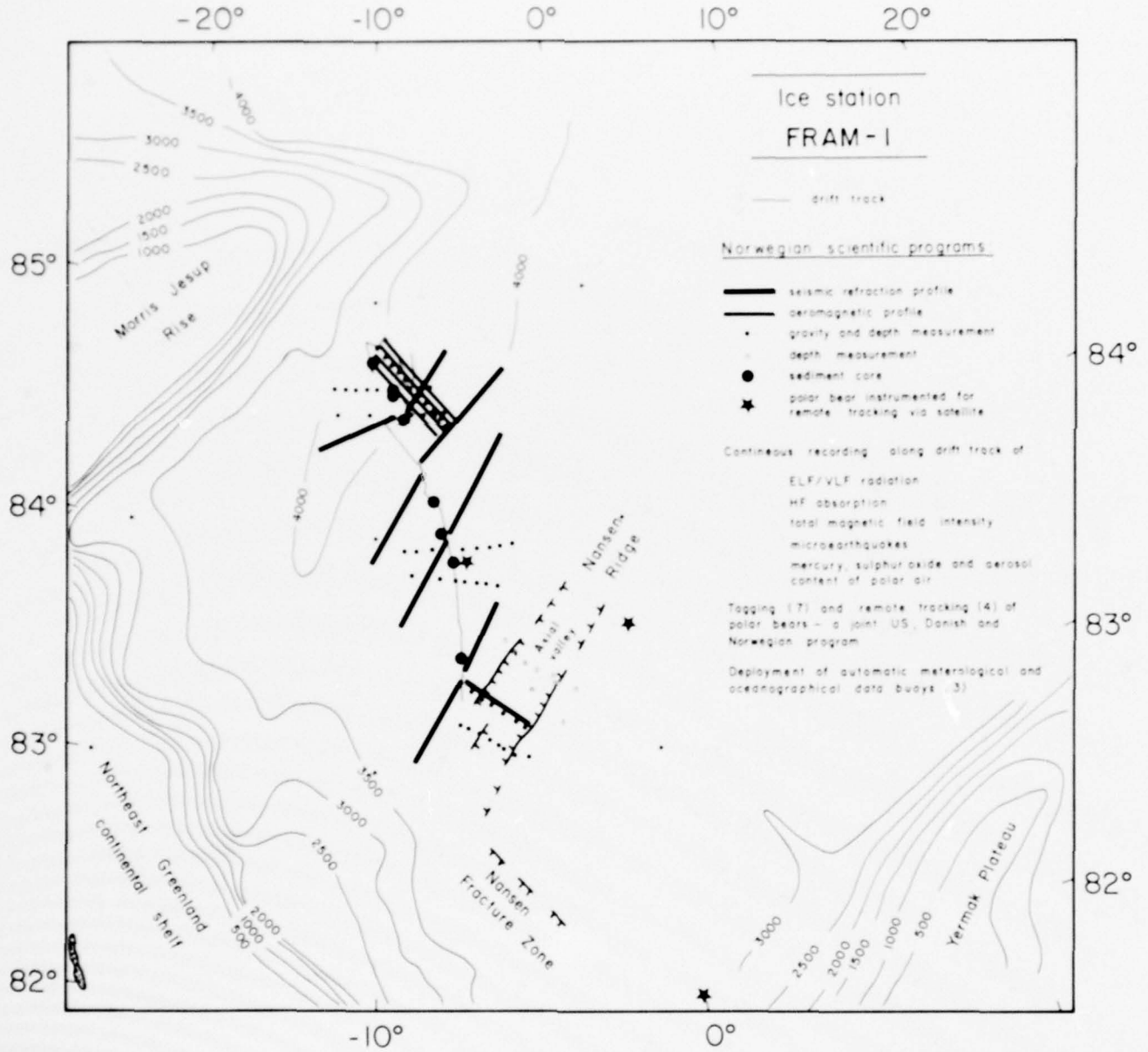
THE FOLLOWING MAPS OF THE FRAM I CAMP, DRIFT TRACK AND NORWEGIAN SCIENTIFIC PROGRAMS WERE KINDLY PROVIDED BY DR. YNGVE KRISTOFFERSEN OF THE NORSK POLARINSTITUTT.


FRAM-I camp site: Initial configuration
runway area
B
ELF/VLF antenna
fuel depot
location of crack 28 March
ZM
biology
warm storage generator
NPI
geophysics
mess hall
bunk house
North
21 March 1979
BIO
seismic reflection
fuel depot
LDGO
bunk house
UW
radio, meterology
helicopter landing area
LDGO
CTD, acoustics
LDGO
current meter, depth recorder
fuel depot
Scale
0
50 meter
air pollution hut
met tower
ELF/VLF antenna
A


FRAM-I main camp
North direction:
20 April
1 May
12 April
10 May
21 March
B
ELF/VLF
antenna
helicopter
landing
area
fuel
runway
on
refrozen
lead
in
use
after
20 April
ZM
biology,
geology
6 kW
generator
bunk
house
mess hall
NPI
geophysics
riometer
antenna
LDGO
bunk house
LDGO
CTD,
acoustics
LDGO
current meter,
depth recorder
base line
direction to "South FRAM"
ELF/VLF
antenna
A
Scale
0
50 meter


"South FRAM"
direction
to main camp
PRL
ambient
noise
Distance from UW hut
to NPI hut at the main
camp = 960 meters
2 April 1979
BIO
seismic
reflection
12 kW generator
warm storage,
shower
UW
radio,
meterology
met.
tower
air sampling site
3 — 30 April
air sampling site
30 April — 7 May
Scale
0
50 meter


-20°
-10°
0°
85°
84°
83°
82°
Ice station
FRAM-I
drift track of manned floe
drift track of abandoned floe monitored by automatic data buoy
Morris Jesup Rise
Northeast Greenland continental shelf
Axial valley
Nansen Ridge
Nansen Fracture Zone
Yermak Plateau
GREEN-LAND
Station NORD


-20°
-10°
0°
10°
20°
85°
84°
83°
82°
Ice station
FRAM-I
drift track
Norwegian scientific programs
seismic refraction profile
aeromagnetic profile
gravity and depth measurement
depth measurement
sediment core
polar bear instrumented for remote tracking via satellite
Continuous recording along drift track of
ELF/VLF radiation
HF absorption
total magnetic field intensity
microearthquakes
mercury, sulphur oxide and aerosol content of polar air
Tagging (7) and remote tracking (4) of polar bears - a joint US, Danish and Norwegian program
Deployment of automatic meteorological and oceanographical data buoys (3)
Morris Jesup Rise
Nansen Ridge
Axial valley
Northeast Greenland Continental shelf
Nansen Fracture Zone
Yermak Plateau
4000
3500
3000
2500
2000
1500
1000
500

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This report contains geophysical data collected by the Lamont group at the FRAM I drifting station. These data include station positions determined by satellite navigation, echo soundings, ice floe azimuths, magnetic declination and gravity readings.

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