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SATELLITE CALIBRATION DATA ANNUAL DATA REPORT - 1976.(U)
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RESEARCH AND DEVELOPMENT TECHNICAL REPORT
ECOM-DR-77-1

SATELLITE CALIBRATION DATA ANNUAL DATA REPORT - 1976

By

L. Edwin Williamson

Louis I. Murillo

Atmospheric Sciences Laboratory
US Army Electronics Command
White Sands Missile Range, New Mexico 88002

March 1977

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Ground truth	Reflected radiation
Pyranometers	Albedo

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This report contains data from observations of meteorological and radiative parameters at selected satellite calibration target sites. These sites include the highly reflective gypsum field in southcentral New Mexico, a dark lava surface, and a fresh water reservoir nearby. The report also contains narrative descriptions of the instruments in use at the target sites.

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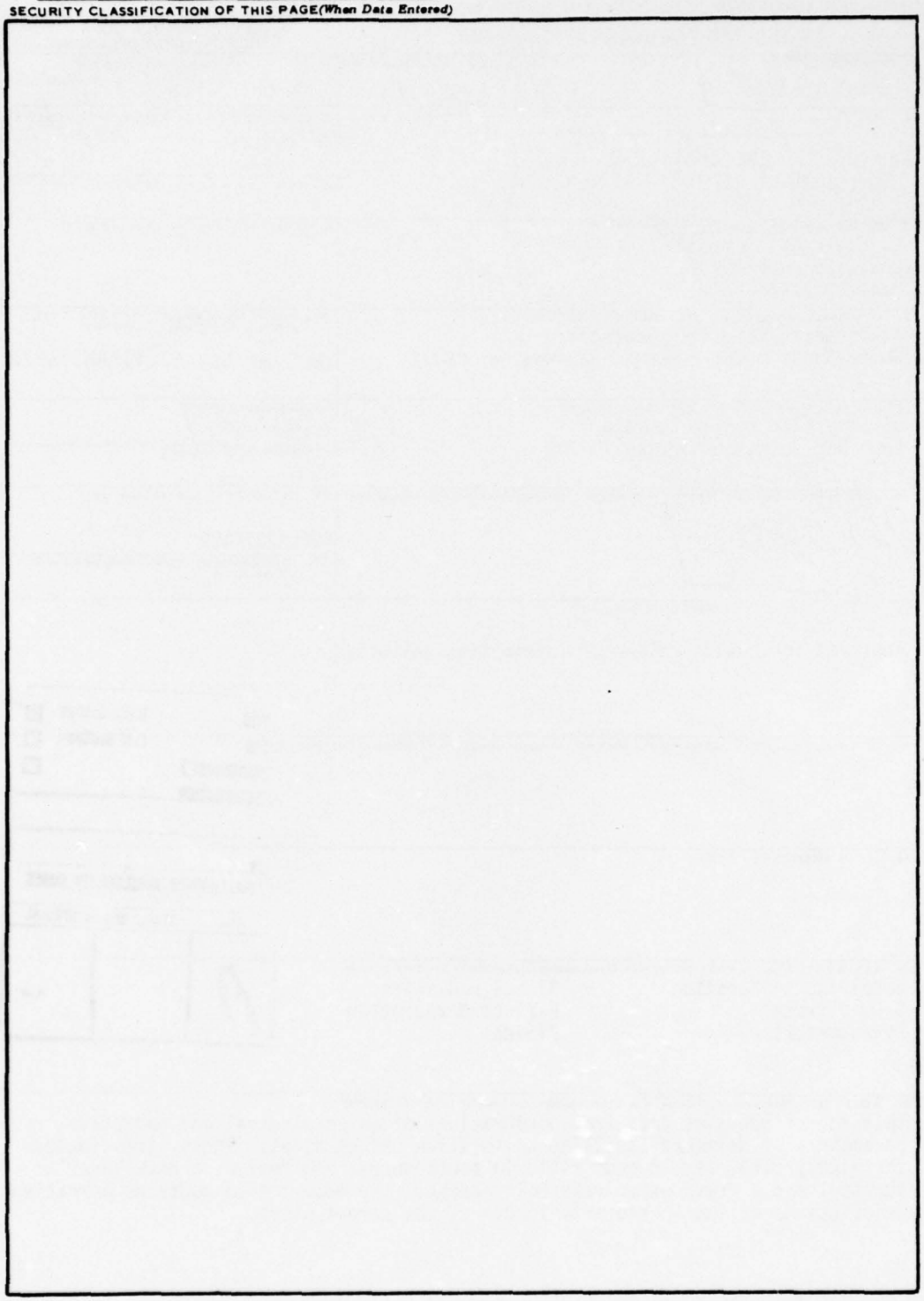

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PREFACE

The data presented herein were collected for application to satellite calibration. However, the data represent a meticulous effort of simultaneous mesoscale observations of surface meteorological and radiative parameters, and as such, may be directly applicable to other, nonsatellite applications. Persons or organizations requiring these data on a week-by-week time schedule or for special observations in conjunction with specific satellite observations may write to:

Commander/Director
Atmospheric Sciences Laboratory
US Army Electronics Command
ATTN: DRSEL-BL-MS-F
US Army White Sands Missile Range
White Sands Missile Range, NM 88002

INTRODUCTION

The Atmospheric Sciences Laboratory (ASL) has broad objectives in the utilization of meteorological satellite data as applied to Army needs. A principal effort in the utilization of such data involves the development of techniques for quality assurance of the data collected by satellites. An example of the necessity of such assurance can be found in Taylor and Williamson*. Most satellite sensors cannot be manually manipulated or visually examined in orbit; therefore, methods of evaluating their output must be found to determine the performance of the instruments. To accomplish this, surface parameters which can form a catalog of ground truth data for comparison with satellite data must be collected at prescribed target sites.

A systematic effort has been underway since 1973. Sites and instrumentation were selected and acquired the first year, and data were collected the second and subsequent years. Data collection facilities are now in operation at four instrumentation sites (one on the lava flow, two on the white sands, and one on a fresh water surface). Measurements are made in adherence to a coordinated satellite overpass schedule and the Meteorological Rocket Network. The data published consist of information on several atmospheric and radiative parameters. All measurements are performed by qualified Army meteorological observers and civilian staff members. The data collected during 1976 constitute the bulk of this report and are preceded by a brief description of the instruments and technology used.

SITE DATA

Several target sites have been selected within and near White Sands Missile Range (WSMR), NM (Figure 1). These sites display a wide range of albedo and emissivity characteristics for empirical comparisons with satellite-derived data. Two of the target sites are on white gypsum sand for high albedo data and one is on a dark lava bed for low albedo data. A site on a water surface is in operation and data from that site are included in this report. A significant feature of the geography of these sites is that they underlie nearly the same atmosphere column when viewed from a satellite, all being located within approximately a 40-mile (64-km) radius.

WHITE SANDS SITE (METSAT I)

The White Sands site actually consists of three physical instrument locations (Figure 2). Thw White Sands area consists of a flat plain and an

* S. E. Taylor and L. E. Williamson, 1973, "Satellite Calibration Target Has Brightness Equivalent to Clouds", Bull. Am. Met. Soc; 54 (6) 551.

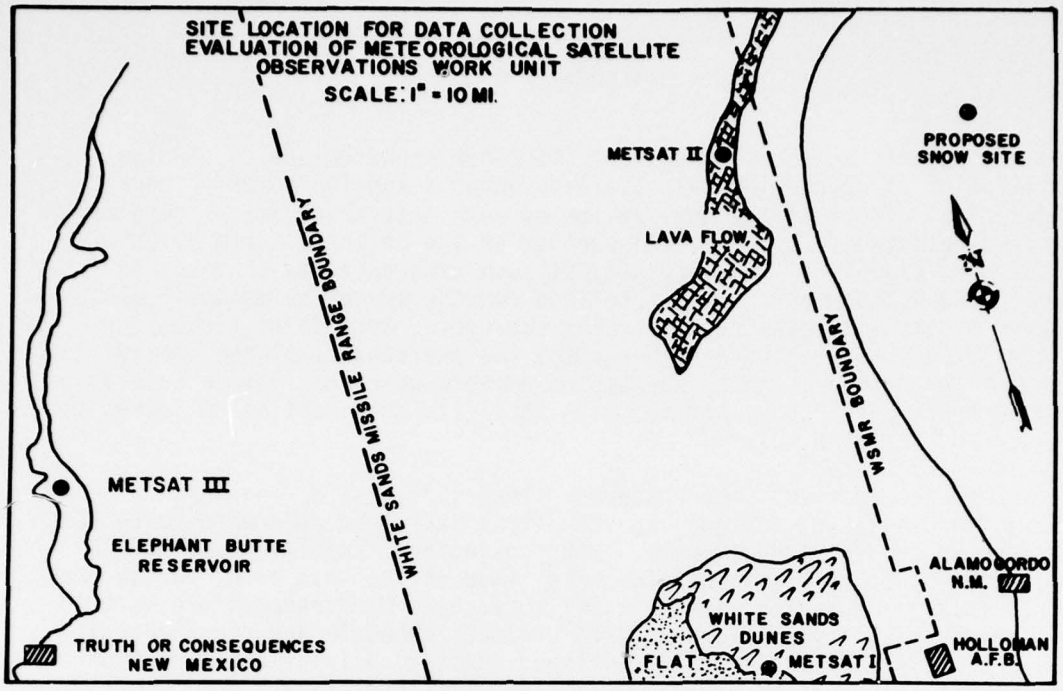

Fig. 1. General map of the WSMR Meteorological Satellite Evaluation System Target Sites in relation to each other and the WSMR boundaries.

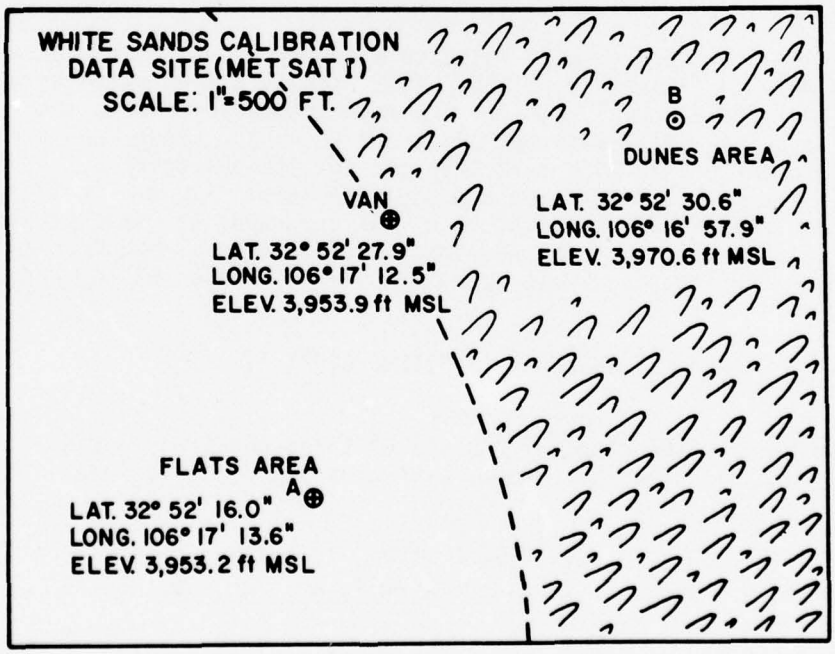

Fig. 2. Detail map of the METSAT I site showing the actual data collection points in relation to the terrain features.

area of white gypsum and dunes. The demarcation between these areas is distinct, although this distinction is not always apparent in satellite data. The data site was selected so that from a centrally instrumented location data could be collected from both the flat and the dunes areas. Locations A and B are the flats and dunes areas, respectively. Each of these locations contains an instrument mast from which outgoing spectral reflectance and surface radiant temperature data are collected. Soil temperature and soil moisture data are also acquired at each of these points. At the instrumented van, dynamic, thermodynamic, and incoming spectral radiation data are collected. Figure 2 also shows geodetic coordinates of the White Sands site.

LAVA BED SITE (METSAT II)

The lava bed site is located within the narrow protion of the lava bed which is approximately 40 miles (64-km) north of the METSAT I site. Spectral reflectance tests conducted via helicopter verified that the site was, generally, representative of the lava flow before it was qualified as a permanent site. The site is equipped with a complete set of instruments similar to those at METSAT I. Geodetic coordinates of the lava site are: latitude 33° 28' 42.8" N, longitude 106° 09' 17.3" W, and elevation 4,519.4 feet (1400 m) MSL.

WATER SITE (METSAT III)

The water site is located on the Elephant Butte Reservoir at latitude 33° 13' 13.78" N, longitude 107° 10' 48.89" W, and nominal elevation 4300 feet (1310 m) MSL.

DESERT SITE (METSAT IV)

The desert site is located approximately 7 miles east southeast of the main post area of White Sands Missile Range at latitude 32° 21' 11.0" N, longitude 106° 22' 59.24" W, and an elevation of 3991 feet (1220 m) MSL. The area is typified by small sandy dunes with shrubs and desert vegetation. The site installation was completed during 1976 and data publication for this site will begin in 1977.

INSTRUMENTATION

Since instrumentation systems installed at each site are as identical as possible, interpretative differences or implications are minimal. Each instrumentation system used on the calibration sites is described below to give the user a clearer understanding of the data. The order of discussion follows the listing on the data publication form (Figure 3) and is presented in two categories: meteorological (surface and upper air) and radiative.

METEOROLOGICAL

Surface

T_a - Air Temperature. These data are collected by a mercury-in-glass thermometer. Temperature is recorded on the standard form in degrees Celsius.

T_{dp} - Dew Point. Dew point is evaluated from measurements of dry bulb and wet bulb temperatures.

Thermal data, T_a and T_{dp} are collected approximately 2m above ground.

W_dW_s - Wind Direction and Speed. Wind direction and speed data are collected with a USWB F-420C airport wind indicator located 4m above the surface. The direction is recorded in degrees and the speed in meters per second.

P - Pressure. Atmospheric pressure is determined by means of a H. E. Sostman and Company pressure transducer. The electrical output is observed on a digital voltmeter. The voltage value is modified by certain instrument constants provided by the manufacturer, and the resulting station pressure is entered on the data form in inches Hg.

C - Sky Condition (Sky Cover). This parameter is entered in typical meteorological format, and all cloud heights and amounts are visually estimated by qualified meteorological observers. The entry is made with conventional meteorological symbols.

M - Precipitation. The entry on the data form is "yes" or "no" to indicate whether precipitation has fallen on the site within the preceding 48 hours. This information is drawn from an examination of records from manned observation stations nearby.

T_{a25} and T_{dp25}. Air temperature and dew point of air sample drawn from the 25 m level. Data acquired at METSAT I and METSAT II only.

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METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION_____

DATE OF OBSERVATION_____ TIME_____ (Local) (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a T_{dp} W_d, W_s W_p C M T_{a25} T_{dp25}										
	1	2	1	2	1	2	1	2	1	2
I I_a I_d N N_a N_b N_c N_d i i_a i_d										
T_g T_s Ψ ϵ										

REMARKS:

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ϵ = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

Fig. 3. Format for Meteorological Satellite Calibration Data-1975.

Upper Air

Rocketsonde Data. The upper atmospheric data acquired by rocketsondes which are included with the ground level are from the Meteorological Rocket Network Sounding Station at WSMR, NM. The rocket sounding is scheduled as nearly coincident with the satellite overpass as is compatible with the WSMR operational schedule. Generally, the time of rocket sounding will be within 1 hour. The coordinates of the rocket station are latitude 32° 29' 07.78" N, longitude 106° 24' 49.14" W. The launch direction of the rocketsondes is to the NNW and deployment at altitudes of the rocketsonde instrumentation is generally in the vicinity of latitude 32° 45' N, longitude 106° 31' W.

Balloonsonde Data. The upper air data acquired by balloonsonde, which is included with the calibration data, are generally provided from the ASL Holloman Upper Air Section, Meteorological Station (within WSMR) and located at latitude 32° 53' N, longitude 106° 05' W.

RADIATIVE

I - Incoming Global Radiant Flux between 0.285 and 2.800 microns. An Eppley Precision Spectral Pyranometer (PSP) is used to collect these data. The data are collected in the form of millivoltage readings, which are then converted via manufacturer-supplied instrument constants to cal cm^{-2} min^{-1}, and then by a conversion constant to erg $cm^{-1}sec^{-1}$. An Eppley White Glass Filter Dome (WG285) is used for this spectral band.

I_a - Incoming Global Radiant Flux between 0.500 and 2.800 microns. This measurement is identical to that of I, except that a yellow filter dome (GG495) is used on the PSP to permit only that radiation in the specified bandwidth.

I_d - Incoming Global Radiant Flux between 0.700 and 2.800 microns. A PSP with a red (RG695) filter dome is used. Data reduction and processing are identical to those of I and I_a.

N - Normal Radiant Flux between 0.285 and 4.000 microns. An Eppley Model 15 pyrheliometer with a fused silica filter is used to measure these data. After direct manual observation of millivoltage output plus the application of the instrument and conversion constants, the flux is recorded in cal $cm^{-2}min^{-1}$ and ergs $cm^{-2}sec^{-1}$.

N_a - Normal Radiant Flux between 0.500 and 4.000 microns. Data are collected with a yellow (GG495) filter on the pyrheliometer.

N_b - Normal Radiant Flux between 0.530 and 4.000 microns. Data are collected with an OG530 filter on the pyrheliometer.

N_c - Normal Radiant Flux between 0.630 and 4.000 microns. Filter RG630 is used.

N_d - Normal Radiant Flux between 0.700 and 4.000 microns. Filter RG695 is used.

N_a, N_b, N_c, and N_d are collected as per N.

i - Outgoing Radiant Flux between 0.285 and 2.800 microns.

i_a - Outgoing Radiant Flux between 0.500 and 2.800 microns.

i_d - Outgoing Radiant Flux between 0.700 and 2.800 microns. Outgoing flux data are collected with a set of Eppley PSP identical to those used to collect the incoming flux data. These instruments are mounted similarly to those used for I data, but are inverted and tower-mounted approximately 4m above the ground surface.

The above set of radiative data includes flux values for 10 directly measured bands, each of which includes a portion of the visible and infrared bands (Figure 4). Arithmetic combinations of these values render additional spectral discriminations within several narrower bands. Additional data that are pertinent to radiation analysis are as follows:

T_g - Soil/Water Temperature. This temperature is collected with a copper constantan thermocouple which is located from 1 to 4 mm below the ground or water surface. Its voltage value is observed on a meter and manually converted to temperature via references to the manufacturer's calibration chart. It is recorded on the standard data form in degrees Celsius.

T_s - Surface Temperature. The apparent radiant surface temperature is determined by a precision radiation thermometer [Barnes PRT-5 (9.5 - 11.5 micron) or IT-4 (8.0 - 14.0 micron)]. The temperatures are read directly from the instrument meters and recorded in degrees Celsius.

ψ - Soil Moisture. This parameter is currently determined gravimetrically for the White Sands sites. It is recorded in percent moisture of a soil sample taken from the upper 1 cm of the surface.

ε - Emissivity. This parameter is not routinely measured at each site. Measurements are being made of the entire area. The measurements technique involves the change in apparent radiant temperature of the test surface when the background radiation is artifically altered. When the emissivity map is completed, it will be published with the annual data report.

Special Instrumentation Data. Occasionally special requirements may exist for data from other sites, altitudes, or for other parameters. These data, when available, are included on the standard form and are individually identified.

Instrumentation Calibration. All primary instrumentation (sensors) are calibrated semiannually, and all secondary (sensors, recorders, meters, etc.) annually. An additional complete set of instruments is available for rotational service, and all instruments undergo additional calibration service if relocated and/or modified, e.g., filters changed.

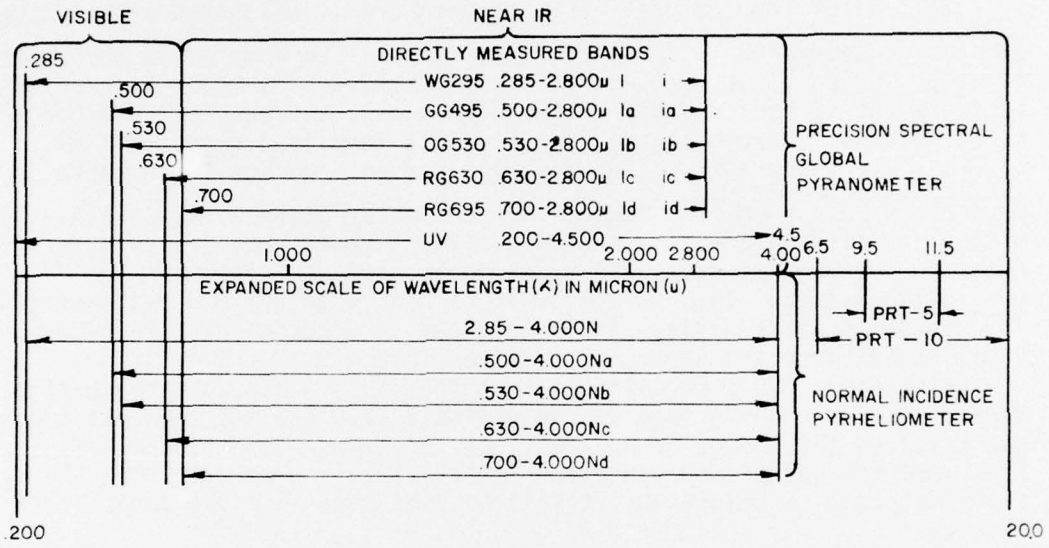

FIG. 4 MEASURED RADIATION BANDS REPORTED ON OBSERVATION FORM.

DATA PROCESSING

Data Form. When the data are collected and reduced as described above, they are entered on a data sheet which includes certain radiosonde and rocketsonde data collected from nearby sites on WSMR. Radiosonde* and rocketsonde** data are presented in accordance with national standards. The current format for ground truth calibration data consists of the satellite identifier and a list of the data parameters and their units and the site locations.

Data Dissemination. Two primary distributions are used. Mailings are made weekly to those users who have requested to be placed on the mailing list. Special observations are made occasionally and the data are relayed via telephone or special mailings.

Data Publications. All data are cataloged for assembly and binding on an annual basis. Each January a collection of the prior year's data will be published in the form of an ECOM Technical Data Report. Special data collections will be assembled and published as special data reports, or included in the annual report, as appropriate.

Changes and Corrections. This report represents the third year of routine data collection under this program, and some changes in techniques and processes have been made. Where significant, these changes have been brought to the attention of the data users. The weekly observational schedule is made to coincide with specific satellite schedules. An observation coincident with NOAA series satellites will continue to be made on a weekly basis, and observations coincident with other satellites, i.e., NIMBUS, DMSP, as required.

* Federal Meteorological Handbook No. 4, Radiosonde Code, January 1972.

** Federal Meteorological Handbook No. 10, Rocketsonde Observations, July 1975.

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METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 7 January 1976 TIME 1104 (Local) 1804 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	0.3		0.3		8.4		3.6			
T_{dp}	-8.0		-8.0		- 2.0		-9.7			
W_d, W_s	300 3.0		300 3.0		310 3.6		165 0.9			
P	26.59		26.59		25.80		26.03			
C	250 Φ		250 Φ		250 Φ		250 - Φ			
M	No		No		No		No			
$T_{a2\,5}$	#		#		#					
$T_{dp2\,5}$	#		#		#					
	1	2	1	2	1	2	1	2	1	2
I	.88	6.16	.88	6.16	.83	5.76	.81	5.67		
I_a	.74	5.13	.74	5.13	.71	4.94	.66	4.59		
I_d	.46	3.22	.46	3.22	.45	3.14	.42	2.91		
N	1.40	9.76	1.40	9.76	1.34	9.34	1.15	8.00		
N_a	1.08	7.54	1.08	7.54	1.03	7.18	#	#		
N_b	1.00	6.97	1.00	6.97	.98	6.84	#	#		
N_c	.85	5.90	.85	5.90	.81	5.66	#	#		
N_d	.72	5.05	.72	5.05	.69	4.82	#	#		
i	.44	3.04	.47	3.25	.10	.70	.06	.45		
i_a	.40	2.80	.43	3.03	.09	.63	.05	.36		
i_d	.26	1.82	.30	2.12	.07	.52	.03	.19		
T_g	7.0		6.0		12.0		#			
T_s	3.0		0.0		15.0		#			
Ψ	19.8		20.8							
ε										

REMARKS: METSAT 2: Surface temperature (grass cover) = 19.0°C
not measured this date

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 7 January 1976

RADIOSONDE: (0815 MST) TTAA 5715/ 72HMS 99883 03757 34007 00255 /////
///// 85564 02961 70073 12766 50562 19365 40724 33760 30919 485// 25037
539// 20178 595// 15358 609// 10608 609// 88207 613// 77999

TTBB 5715/ 72HMS 00883 03757 11871 01361 22850 02961 33795 07559 44762
08760 55700 12766 66673 15367 77634 16569 88626 14169 99605 13169 11597
11370 22588 11170 33538 14967 44443 22763 55400 33760 66353 41758 77335
447// 88315 461// 99300 485// 11246 535// 22207 613// 33194 581// 44127
607// 55115 645// 66100 609//

TTCC 5715/ 72HMS 70828 631// 50037 579// 88999 77999

TTDD 5715/ 72HMS 11843 635// 22700 631// 33664 595// 44538 623// 55508
617// 66500 579// 77344 557// 51515 10190 30362

ROCKETSONDE: (1110 MST) RRXX 07181 72269 81011 11101 25554 26006 30543
26027 31534 26030 35537 24024 41525 23023 41519 24023 43509 22016 44501
19013 45501 21019 50503 21014 55511 24023 59516 19012 60523 19017 62526
23031 63529 25033 64534 26043 65540 26048 66546 27050 67/// 27053 JJJ

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METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 8 January 1976 TIME 0910 (Local) 1610 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-7.0		-7.0		1.2		-3.3			
T_{dp}	-14.5		-14.5		-14.0		-9.2			
W_d, W_s	200 0.9		200 0.9		030 3.6		360 2.7			
P	26.60		26.60		25.79		26.01			
C	250 - ⓒ		250 - ⓒ		250 - ⓒ		250 - ⓒ			
M	No		No		No		No			
$T_{a2\,5}$	#		#		#					
$T_{dp2\,5}$	#		#		#					
	1	2	1	2	1	2	1	2	1	2
I	.46	3.21	.46	3.21	.45	3.16	.51	3.56		
I_a	.40	2.78	.40	2.78	.40	2.78	.41	2.86		
I_d	.25	1.72	.25	1.72	.27	1.89	.27	1.86		
N	1.00	6.99	1.00	6.99	1.23	8.59	1.10	7.64		
N_a	.75	5.20	.75	5.20	.98	6.85	#	#		
N_b	.65	4.56	.65	4.56	.92	6.43	#	#		
N_c	.55	3.84	.55	3.84	.78	5.43	#	#		
N_d	.47	3.27	.47	3.27	.67	4.65	#	#		
i	.22	1.53	.25	1.76	.06	.41	.06	.45		
i_a	.21	1.45	.24	1.65	.05	.38	.05	.36		
i_d	.14	.99	.17	1.18	.05	.32	.03	.24		
T_g	-3.1		-3.3		3.6		#			
T_s	-2.0		-3.7		-2.0		#			
Ψ	19.6		20.5							
ε										

REMARKS: METSAT I - Thin Cirrus between sun and sensors.

- not measured this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

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T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 8 January 1976

RADIOSONDE: (0800 MST) TTAA 58151 72HMS 99884 09723 00000 00286 /////
///// 85559 00563 36010 70112 01065 29018 50573 14565 32046 40739 26362
30062 30940 427// 31067 25060 527// 30559 20200 643// 31566 15373 665//
28557 10618 673// 30544 88175 711// 31066 77321 30570 40606

TTBB 5815/ 72HMS 00884 09723 11865 01759 22850 00563 33789 00067 44765
02162 55712 02065 66700 01065 77665 02763 88646 02963 99500 14564 11400
26362 22315 39960 33175 711// 44172 677// 55156 687// 66145 647// 77114
693// 88100 673//

TTCC 58152 72HMS 70832 639// 28025 50040 593// 26521 30362 531// 26521
20627 455// 26029

TTDD 5815/ 72HMS 11828 685// 22778 699// 33700 639// 44563 629// 55500
593// 66433 621// 77358 548// 88278 535// 99188 437// 11140 451// 22///
///// 33119 367// 44110 341// 55104 341// 51515 10167 01211 10190 10099

ROCKETSONDE: (0930 MST) RRXX 08163 72269 81011 11101 25552 21005 30538
24022 35542 22012 38533 22013 40527 20012 41518 22016 42512 24015 43505
26011 45507 12004 50505 16014 55506 17029 59513 23043 60515 24045 64///
25043 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 14 January 1976 TIME 0856 (Local) 1556 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-1.0		-1.0		5.2		2.9			
T_{dp}	-10.8		-10.8		-9.6		-9.8			
W_d, W_s	040 4.5		040 4.5		010 3.6		050 0.4			
P	26.65		26.65		25.86		26.08			
C	250 - ⊕		250 - ⊕		250 - ⊕		⊕			
M	No		No		No		No			
$T_{a2\ 5}$					5.8					
$T_{dp2\ 5}$					-10.1					
	1	2	1	2	1	2	1	2	1	2
I	.41	2.88	.41	2.88	.38	2.65	.47	3.28		
I_a	.37	2.56	.37	2.56	.34	2.37	.37	2.59		
I_d	.23	1.63	.23	1.63	.23	1.58	.25	1.77		
N	1.11	7.73	1.11	7.73	1.14	7.97	1.04	7.28		
N_a	.89	6.24	.89	6.24	.91	6.34	#	#		
N_b	.79	5.52	.79	5.52	.86	5.99	#	#		
N_c	.61	4.24	.61	4.24	.72	5.04	#	#		
N_d	.47	3.28	.47	3.28	.62	4.32	#	#		
i	.23	1.58	.24	1.68	.06	.46	.07	.51		
i_a	.21	1.48	.23	1.58	.05	.33	.05	.36		
i_d	.14	1.01	.16	1.12	.04	.29	.04	.28		
T_g	-0.8		-1.3		6.9		#			
T_s	0.0		-3.0		1.0		#			
Ψ	19.9		19.9							
ε										

REMARKS: METSAT 2: Surface temperature (grass cover) = 2.0°C

- Not measured this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-EL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 14 January 1976 TIME 1128 (Local) 1828 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	7.1		7.1		13.8		7.3			
T_{dp}	-5.5		-5.5		-11.0		-5.3			
W_d, W_s	270 1.3		270 1.3		320 2.7		355 2.7			
P	26.66		26.66		25.08		26.08			
C	☾		☾		250 - ☉		☾			
M	No		No		No		No			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	.90	6.25	.90	6.25	.86	5.97	.89	6.22		
I_a	.74	5.13	.74	5.13	.70	4.88	.75	5.23		
I_d	.46	3.18	.46	3.18	.46	3.19	.47	3.26		
N	1.34	9.37	1.34	9.37	1.35	9.41	1.28	8.94		
N_a	1.03	7.19	1.03	7.19	1.03	7.18	#	#		
N_b	.96	6.66	.96	6.66	.96	6.73	#	#		
N_c	.80	5.55	.80	5.55	.80	5.59	#	#		
N_d	.68	4.72	.68	4.72	.69	4.80	#	#		
i	.43	3.00	.48	3.33	.09	.60	.07	.48		
i_a	.39	2.73	.45	3.11	.08	.56	.05	.34		
i_d	.26	1.78	.31	2.16	.06	.40	.03	.18		
T_g	-0.5		-0.5		6.7		#			
T_s	10.0		9.0		18.0		#			
Ψ	19.9		19.9							
ε										

REMARKS: METSAT 2 - Surface temperature (grass cover): 22.0°C

- Not measured this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 14 January 1976

RADIOSONDE: (0800 MST) TTAA 64151 72HMS 99885 04158 00000 00275 /////
///// 85575 05464 14003 70150 00264 28508 50576 16364 29022 40740 29559
30028 30939 447// 29531 25058 541// 28533 20198 655// 28037 15373 643//
28041 10622 637// 27532 88188 665// 27539 77166 2704 40809

TTBB 6415/ 72HMS 00885 04158 11856 05063 22834 06466 33821 05065 44736
03066 55656 02764 66563 10970 77552 11559 88526 13165 99400 29559 11325
40559 22200 655// 33188 665// 44150 643// 55142 609// 66120 649// 77100
637// 51515 SUPER 83-82 12-12

TTCC 64151 72HMS 70842 649// 29030 50046 663// 28527 30365 565// 27023
20628 499// 26528 10085 453// 23524 51515 10190 07326 405//

TTDD 6415/ 72HMS 11700 649// 22667 673// 33628 649// 44500 663// 55354
557// 66300 565// 77223 497// 88119 489// 99100 453// 11077 405//

ROCKETSONDE: (1015 MST) RRXX 14172 72269 81011 11101 25551 27014 30545
23010 35535 25020 40531 23014 41526 23018 42521 23023 45519 23021 47511
25039 50514 25078 55527 26077 60531 25083 64537 26101 65/// 26108 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 21 January 1976 TIME 0936 (Local) 1636 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-4.5		-4.5		5.0		-1.5			
T_{dp}	-8.9		-8.9		-7.4		-3.2			
W_d, W_s	CALM		CALM		070	4.0	010	2.2		
P	26.77		26.77		25.94		26.18			
C	250 - ◐		205 - ◐		100 ◐		○			
M	No		No		No		No			
$T_{a2\ 5}$					5.6					
$T_{dp2\ 5}$					-7.6					
	1	2	1	2	1	2	1	2	1	2
I	.62	4.34	.62	4.34	1.05	7.35	.66	4.63		
I_a	.55	3.81	.55	3.81	.64	4.44	.55	3.81		
I_d	.34	2.39	.34	2.39	.43	3.00	.35	2.47		
N	1.29	8.98	1.29	8.98	1.32	9.22	1.20	8.39		
N_a	1.03	7.16	1.03	7.16	1.03	7.17	#	#		
N_b	.96	6.68	.96	6.68	.96	6.74	#	#		
N_c	.83	5.79	.83	5.79	.82	5.73	#	#		
N_d	.71	4.93	.71	4.93	.71	4.95	#	#		
i	.31	2.13	.33	2.31	.10	.72	.07	.49		
i_a	.29	1.99	.31	2.19	.07	.46	.05	.38		
i_d	.20	1.38	.22	1.56	.06	.42	.04	.27		
T_g	9.0		2.1		4.1		#			
T_s	0.0		-3.1		8.0		#			
Ψ	15.5		14.4							
ε										

REMARKS: METSAT 2 - Surface temperature (grass cover) = 9.0°C

\# - Not measured this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 21 January 1976 TIME 1152 (Local) 1852 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	4.6		4.6		11.7		5.5			
T_{dp}	-8.5		-8.5		-8.5		-5.4			
W_d, W_s	160 0.4		160 0.4		230 3.6		090 0.9			
P	26.76		26.76		25.93		26.13			
C	250 ⊕		250 ⊕		250 - ⊕		250 ⊕			
M	No		No		No		No			
$T_{a2\,5}$					10.7					
$T_{dp2\,5}$					-5.7					
	1	2	1	2	1	2	1	2	1	2
I	.87	6.06	.87	6.06	1.66	11.54	.95	6.65		
I_a	.70	4.91	.70	4.91	.96	6.66	.79	5.50		
I_d	.42	2.93	.42	2.93	.65	4.50	.52	3.61		
N	.87	6.09	.87	6.09	1.41	9.80	1.23	8.58		
N_a	.61	4.30	.61	4.30	1.09	7.57	#	#		
N_b	.52	3.60	.52	3.60	1.01	7.06	#	#		
N_c	.43	2.99	.43	2.99	.84	5.87	#	#		
N_d	.36	2.53	.36	2.53	.72	5.04	#	#		
i	.29	2.04	.44	3.10	.14	.96	.07	.47		
i_a	.25	1.78	.35	2.41	.09	.62	.05	.34		
i_d	.17	1.18	.24	1.64	.09	.61	.02	.17		
T_g	13.0		11.0		21.5		#			
T_s	10.3		9.3		29.0		#			
Ψ	15.5		14.4							
ε										

REMARKS: Cirrostratus between sun and sensors at each station.
METSAT 2 - Surface temperature (grass cover) = 20.0°C.
- Not measured this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 21 January 1976

RADIOSONDE: (0900 MST) TTAA 71161 72HMS 99889 03357 00000 00206 /////
///// 85621 03261 01507 70194 00473 10415 50581 20569 13018 40744 29767
22527 30944 451// 22524 25063 551// 20033 20202 645// 26523 15378 627//
26043 10627 621// 00523 88190 657// 01530 77149 25044 43642

TTBB 71161 72HMS 00889 03357 11860 02664 22806 03864 33756 03473 44700
00473 55607 05772 66500 17969 77466 20569 88400 29767 99382 31162 11328
39161 22300 451// 33224 607// 44190 657// 55156 615// 66110 645// 77100
621//

TTCC 71161 72HMS 70847 631// 29535 50055 609// 35518 30377 569// 34007
20637 513// 00517 10092 445// 31508 07334 397// 32010 88999 77999

TTDD 7611/ 72HMS 11803 641 22701 631// 33413 591// 44383 545// 55328
573// 66170 481// 77137 507// 88100 445// 99070 379// 11058 377//

ROCKETSONDE: (1030 MST) RRXX 21173 72269 81011 11101 24/// 36011 25553
36009 30546 32010 35536 28016 40533 31020 41526 27015 43529 26021 45519
28034 50518 26048 55518 26066 60528 25080 64536 27099 65/// 28103 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 29 January 1976 TIME 0917 (Local) 1617 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-2.0		-2.0		8.3		2.5			
T_{dp}	-12.1		-12.1		-6.3		-3.5			
W_d, W_s	CALM		CALM		240	1.3	360	2.2		
P	26.63		26.63		25.84		26.05			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\ 5}$					*					
$T_{dp2\ 5}$					*					
	1	2	1	2	1	2	1	2	1	2
I	.56	3.93	.56	3.93	.47	3.27	.59	4.13		
I_a	.48	3.33	.48	3.33	.42	2.92	.47	3.26		
I_d	.30	2.07	.30	2.07	.27	1.91	.31	2.13		
N	1.23	8.68	1.23	8.68	*	*	1.14	7.92		
N_a	.97	6.75	.97	6.75	*	*	#	#		
N_b	.90	6.29	.90	6.29	*	*	#	#		
N_c	.77	5.35	.77	5.35	*	*	#	#		
N_d	.65	4.56	.65	4.56	*	*	#	#		
i	.27	1.89	.30	2.06	*	*	.07	.46		
i_a	.26	1.80	.28	1.96	*	*	.05	.38		
i_d	.17	1.22	.20	1.38	*	*	.04	.25		
T_g	#		#		*		#			
T_s	21.0		17.0		2.0		#			
Ψ	23.5		19.4							
ε										

REMARKS: METSAT 2 - surface temperature (grass cover) = 8.5°C
* - Not measured this observation due to electrical power failure
# - Not measured this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 29 January 1976 TIME 1136 (Local) 1836 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	5.5		5.5		15.0		6.1			
T_{dp}	-9.2		-9.2		-7.7		-0.7			
W_d, W_s	CALM		CALM		260	2.7	350	0.9		
P	26.62		26.62		25.82		26.02			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\ 5}$					12.4					
$T_{dp2\ 5}$					-3.8					
	1	2	1	2	1	2	1	2	1	2
I	.96	6.66	.96	6.66	.86	6.01	.98	6.80		
I_a	.79	5.49	.79	5.49	.71	4.93	.82	5.70		
I_d	.48	3.38	.48	3.38	.46	3.21	.52	3.62		
N	1.39	9.67	1.39	9.67	1.39	9.66	1.27	8.87		
N_a	1.04	7.23	1.04	7.23	1.06	7.36	#	#		
N_b	.97	6.73	.97	6.73	.98	6.85	#	#		
N_c	.81	5.68	.81	5.68	.81	5.64	#	#		
N_d	.72	5.05	.72	5.05	.69	4.83	#	#		
i	.45	3.11	.49	3.40	.13	.93	.06	.42		
i_a	.41	2.85	.46	3.21	.08	.57	.05	.33		
i_d	.26	1.82	.31	2.17	.07	.52	.02	.16		
T_g	#		#		23.4		#			
T_s	17.0		9.0		10.0		#			
Ψ	23.5		19.4							
ε										

REMARKS: METSAT 2 - surface temperature (grass cover) = 9.5°C
- Not measured this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-EL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 29 January 1976

RADIOSONDE: (0900 MST) TTAA 79161 72HMS 99884 04858 00000 00257 /////
///// 85591 09467 30503 70175 00859 13004 50580 15560 01003 40745 26760
09018 30946 427// 09024 25067 519// 07031 20208 623// 08522 15387 603//
06025 10637 663// 09004 88200 623// 08522 77125 04535 42610

TTBB 7916/ 72HMS 00884 04858 11875 05066 22867 09467 33850 09468 44734
06266 55746 03059 66602 05361 77558 10558 88537 12159 99476 18558 11455
20160 22426 24557 33411 25362 44400 26760 55373 30760 66361 32557 77323
37962 88200 623// 99156 585// 11128 633// 22112 631// 33100 663//

TTCC 79165 72HMS 70856 627// 30505 50061 583// 34504 88999 77999

ROCKETSONDE: (1015 MST) RRXX 29172 72269 81011 11101 24/// 07012 25553
07013 30549 06008 35542 08005 40529 30014 44518 30026 45515 29030 46508
28039 47502 28049 50510 27062 55516 26058 59525 25074 60525 25074 63522
26119 64/// 27130 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 11 February 1976 TIME 1114 (Local) 1814 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	13.0		13.0		12.7					
T_{dp}	-1.9		-1.9		-1.3					
W_d, W_s	340 3.6		340 3.6		030 3.6					
P	26.59		26.59		25.85					
C	E250 ⊕		E250 ⊕		E250 ⊕					
M	Yes		Yes		No					
$T_{a2\ 5}$	13.5		13.5		14.2					
$T_{dp2\ 5}$	-1.7		-1.7		0.4					
	1	2	1	2	1	2	1	2	1	2
I	.95	6.64	.95	6.64	.76	5.29				
I_a	.78	5.45	.78	5.45	.63	4.38				
I_d	.48	3.38	.48	3.38	.43	2.99				
N	.83	5.81	.83	5.81	.51	3.55				
N_a	.63	4.37	.63	4.37	.37	2.58				
N_b	.56	3.89	.56	3.89	.33	2.30				
N_c	.47	3.30	.47	3.30	.23	1.62				
N_d	.41	2.86	.41	2.86	.17	1.19				
i	.42	2.92	.51	3.53	.08	.59				
i_a	.39	2.74	.48	3.32	.07	.47				
i_d	.25	1.75	.32	2.21	.05	.33				
T_g	21.5		missing		7.0					
T_s	2.3		missing		17.3					
Ψ	22.2		25.4							
ε										

REMARKS: METSAT II (Grass): 3.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 11 February 1976 TIME 0939 (Local) 1639 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	11.0		11.0		9.0					
T_{dp}	-1.1		-1.1		-2.7					
W_d, W_s	340 6.7		340 6.7		030 4.5					
P	26.58		26.58		25.85					
C	E250		E250		E250					
M	Yes		Yes		No					
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	.58	4.01	.58	4.01	.44	3.09				
I_a	.48	3.38	.48	3.38	.37	2.57				
I_d	.29	2.05	.29	2.05	.24	1.66				
N	.17	1.18	.17	1.18	.22	1.56				
N_a	.13	.94	.13	.94	.18	1.23				
N_b	.12	.81	.12	.81	.16	1.14				
N_c	.10	.70	.10	.70	.14	.98				
N_d	.08	.57	.08	.57	.12	.83				
i	.25	1.76	.32	2.20	.06	.40				
i_a	.23	1.63	.30	2.11	.05	.32				
i_d	.15	1.04	.20	1.41	.03	.22				
T_g	12.1		13.1		-2.0					
T_s	11.5		19.0		10.6					
Ψ	21.5		19.3							
ϵ										

REMARKS: METSAT II (Grass): -10.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ϵ = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 11 February 1976

RADIOSONDE: (0800 MST) TTAA 61151 72HMS 99883 05633 36003 00223 /////
///// 85577 08864 27011 70158 01471 24518 50580 13564 25044 40746 26150
24551 30947 41338 24072 25069 503// 23588 20212 563// 24076 15393 615//
24055 10643 653// 24544 88150 615// 24055 77250 23591 41615

TTBB 6115/ 72HMS 00883 05633 11872 10065 22794 06461 33757 02829 44720
01430 55700 01471 66672 01473 77586 06571 88569 07560 99500 13664 11462
18165 27446 20511 23440 20558 44400 26150 55376 29337 66275 45141 77230
547// 88150 615// 99133 609// 11100 653//

TTCC 61151 72HMS 70866 673// 26028 50062 653// 25508 30370 581// 26005
20632 547// 16007 10090 441// 27023 98999 77999

TTDD 6115/ 72HMS 11918 659// 22823 631// 33728 679// 44638 673// 55535
717// 66500 653// 77488 669// 88398 613// 99137 505// 11178 403// 22101
441// 33074 429// 51515 10190 07730

ROCKETSONDE: (0950 MST) RRXX 11182 72269 81011 11101 24558 08005 25557
08004 30548 28006 33541 26023 35533 27021 36535 26024 37532 27024 40530
26028 41522 28029 42525 28031 43520 28033 45519 27041 46518 27042 48514
25071 50518 26057 51520 26054 53519 24061 55519 25066 57526 25068 60527
25079 61527 24086 62/// 24096 63/// 25087 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA III

DATE OF OBSERVATION 18 February 1976 TIME 0914 (Local) 1614 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	1.0		1.0		8.9		5.0			
T_{dp}	-6.3		-6.3		-8.4		-1.3			
W_d, W_s	220 2.7		220 2.7		210 2.7		042 0.9			
P	26.38		26.38		25.64		25.81			
C	250 ⊕		250 ⊕		250 - ⊕		250 - ⊕			
M	No		No		No		No			
$T_{a2\,5}$					10.8		#			
$T_{dp2\,5}$					-3.9		#			
	1	2	1	2	1	2	1	2	1	2
I	.69	4.80	.69	4.80	.61	4.22	.72	5.04		
I_a	.58	4.06	.58	4.06	.52	3.66	.60	4.21		
I_d	.36	2.50	.36	2.50	.34	2.36	.40	2.80		
N	1.33	9.29	1.33	9.29	1.26	8.80	1.15	8.00		
N_a	1.04	7.25	1.04	7.25	.98	6.81	#	#		
N_b	.97	6.78	.97	6.78	.92	6.44	#	#		
N_c	.80	5.54	.80	5.54	.77	5.34	#	#		
N_d	.70	4.85	.70	4.85	.66	4.62	#	#		
i	.32	2.21	Missing	Missing	.08	.54	.07	.49		
i_a	.28	1.98	.34	2.35	.06	.43	.05	.34		
i_d	.19	1.29	.23	1.61	.04	.26	.03	.19		
T_g	8.5		6.7		9.8		#			
T_s	4.0		0.6		-5.0		3.5*			
Ψ	21.5		23.2							
ε										

REMARKS: METSAT 3: *Radiant temperature of water surface.
- NOT MEASURED.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 18 February 1976

RADIOSONDE: (0800 MST) TTAA 68151 72HMS 99877 03916 04503 00181 /////
///// 85521 09668 03005 70102 02268 31027 50574 12569 29046 40731 24762
28052 30933 41160 28055 511// 28550 20196 625// 28567 15370 701// 29070
10618 647// 28531 88166 703// 31056 77135 29074 40535

TTBB 5815/ 72HMS 00877 03956 11867 08665 22850 09668 33801 05465 44728
02065 55718 02866 66686 01070 77667 00563 88500 12569 99443 18368 11400
24762 22300 41160 33166 703// 44150 701// 55135 629// 66126 641// 77118
597// 88100 647//

TTCC 68151 72HMS 70334 629// 30020 50043 605// 27009 30369 529// 32016
20632 505// 01513 10088 443// 07513 88999 77999

TTDD 6815/ 72HMS 11828 693// 22655 593// 33599 627// 44523 589// 55419
605// 66447 591// 88130 489// 99100 443// 11083 407// 51515 10190 07311

ROCKETSONDE: (1130 MST) RRXX 18183 72269 81011 11101 25550 10008 30546
09009 32002 36529 34007 37529 01007 38523 05003 39517 23002 40513 29009
45511 25022 48515 27032 50517 27028 52511 28027 53516 29024 55515 27031
56515 26036 58523 27028 59523 25037 60/// 25050 63/// 26053 64/// 26062
JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 19 February 1976 TIME 0920 (Local) 1620 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	5.0		5.0		11.8		8.0			
T_{dp}	-4.4		-4.4		-6.3		-2.6			
W_d, W_s	140	0.4	140	0.4	240	0.9	105	1.3		
P	26.31		26.31		25.58		25.69			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\ 5}$					12.2					
$T_{dp2\ 5}$					-3.4					
	1	2	1	2	1	2	1	2	1	2
I	.70	4.90	.70	4.90	.63	4.41	.72	5.03		
I_a	.59	4.11	.59	4.11	.55	3.84	.58	4.02		
I_d	.36	2.51	.36	2.51	.36	2.53	.36	2.54		
N	1.32	9.18	1.32	9.18	1.34	9.31	1.23	8.58		
N_a	1.02	7.09	1.02	7.09	1.05	7.29	#	#		
N_b	.96	6.67	.96	6.67	.98	6.81	#	#		
N_c	.79	5.50	.79	5.50	.83	5.78	#	#		
N_d	.69	4.80	.69	4.80	.71	4.94	#	#		
i	.30	2.10	.37	2.60	.08	.55	.06	.42		
i_a	.27	1.92	.33	2.32	.06	.40	.05	.34		
i_d	.18	1.27	.21	1.46	.04	.25	.03	.22		
T_g	7.5		4.4		15.0					
T_s	8.1		11.5		2.9		4.0*			
Ψ	16.1		15.0							
ε										

REMARKS: METSAT II (Grass); 15.0°C
* - Radiant Temp. of Water Surface
\# - Not Measured

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 19 February 1976

RADIOSONDE: (1040 MST) TTAA 69181 72JAL 99878 13661 ØØØØØ ØØ122 /////
///// 855Ø1 1Ø473 145Ø3 7ØØ93 Ø2673 25524 5Ø573 15971 26538 4Ø738 27369
26Ø47 3Ø939 429// 26Ø66 25Ø29 525// 26Ø68 2Ø2ØØ 625// 26Ø58 15378 6Ø1//
26Ø62 1Ø629 663// 26Ø57 88189 645// 26Ø72 77346 26587 43919

TTBB 6918/ 72JAL ØØ878 13661 11868 11874 22741 Ø3872 33716 Ø4457 44700
Ø2673 554ØØ 27369 6635Ø 34166 77267 499// 88189 645// 99170 621// 11161
587// 22133 597// 331ØØ 663//

TTCC 69181 72JAL 7Ø846 649// 26Ø36 5ØØ53 579// 27ØØ5 3Ø381 517// Ø9Ø16
2Ø645 5Ø5// Ø9Ø15 1Ø1Ø4 439// Ø65Ø8 88999 77999

TTDD 6918/ 72JAL 11750 675// 22700 649// 33650 663// 44560 557// 55500
579// 66450 561// 77440 529// 88380 543// 99300 517// 11200 505// 22100
439// 33086 401// 51515 10190 07347

ROCKETSONDE: (0930 MST) 19163 72269 81011 11101 25553 08006 30546
08007 32545 08008 35533 06006 40521 04012 42514 05013 45510 04013 46516
36005 47515 29010 48507 30011 50514 28029 52520 30024 54513 29021 55516
27023 56519 30019 57522 27021 58525 26037 60*** 28048 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 25 February 76 TIME 0906 (Local) 1606 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	7.1		7.1		9.6		6.5			
T_{dp}	-11.2		-11.2		-14.8		-4.8			
W_d, W_s	325	2.2	325	2.2	040	5.4	030	3.6		
P	26.51		26.51		25.82		25.82			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	.68	4.73	.68	4.73	.63	4.39	.74	5.16		
I_a	.58	4.05	.58	4.05	.55	3.82	.57	4.01		
I_d	.37	2.57	.37	2.57	.36	2.50	.38	2.67		
N	1.33	9.31	1.33	9.31	1.30	9.10	1.29	9.02		
N_a	1.04	7.28	1.04	7.28	1.03	7.18	.99	6.91		
N_b	.97	6.74	.97	6.74	.97	6.74	.93	6.51		
N_c	.81	5.68	.81	5.68	.81	5.66	.79	5.49		
N_d	.71	4.97	.71	4.97	.70	4.88	.70	4.86		
i	.34	2.34	.39	2.75	.08	.56	.07	.47		
i_a	.31	2.18	.36	2.53	.07	.47	.05	.35		
i_d	.21	1.45	.23	1.59	.05	.34	.03	.24		
T_g	6.0		3.8		0.0					
T_s	12.0		8.5		12.5		2.0*			
Ψ	28.8		20.1							
ε										

REMARKS: METSAT II (Grass): 4.0°C
* - Radiant Temp. of Water Surface

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 25 February 76 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	14.8		14.8		15.0					
T_{dp}	-10.1		-10.1		-13.1					
W_d, W_s	320 6.7		320 6.7		130 1.3					
P	26.50		26.50		25.79					
C	0		0		0					
M	No		No		No					
$T_{a2\ 5}$	12.5		12.5		15.7					
$T_{dp2\ 5}$	-15.6		-15.6		-7.5					
	1	2	1	2	1	2	1	2	1	2
I	1.23	8.54	1.23	8.54	1.11	5.79				
I_a	1.02	7.14	1.02	7.14	.92	6.40				
I_d	.64	4.46	.64	4.46	.61	4.27				
N	1.48	10.29	1.48	10.29	1.45	10.13				
N_a	1.11	7.73	1.11	7.73	1.11	5.75				
N_b	1.02	7.13	1.02	7.13	1.04	7.27				
N_c	.86	5.97	.86	5.97	.86	6.02				
N_d	.75	5.22	.75	5.22	.74	5.16				
i	.72	5.03	.55	3.87	.11	.78				
i_a	.65	4.55	.52	3.60	.10	.68				
i_d	.43	3.01	.30	2.10	.07	.48				
T_g	18.5		18.0		12.0					
T_s	23.3		24.2		8.3					
Ψ	28.8		20.1							
ε										

REMARKS: METSAT II (Grass): 19.0°C
METSAT III Data Not Available

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 25 February 1976

RADIOSONDE: (0900 MST) TTAA 75161 72HMS 99882 11265 36012 00192
///// ///// 85563 08468 00521 70140 01071 33019 50575 19167 31033
40737 30566 32041 30936 457// 34550 25055 15374 583// 28547 10627
615// 26534 88195 631// 29047 77204 33062 40931 Ø

TTBB 7516/ 72HMS 00882 11265 11794 04068 22700 01071 33564 11370
44500 19167 55400 30566 66362 34765 77300 457// 88230 591// 99195
631// 11192 597// 22173 617// 33162 589// 44100 615// Ø

TTCC 75161 72HMS 70847 595// 29521 50057 579// 31502 30382 543//
24503 20644 515// 27529 10098 461// 28002 88999 77999 Ø

TTDD 7516/ 72HMS 11818 639// 22678 577// 33590 623// 44500 579//
55266 537// 66254 511// 77115 491// 88100 461// 99090 417// 11073
403// 51515 10190 07340 Ø

ROCKETSONDE: (0940 MST) 25164 72269 81011 11101 24556 10008
25553 08010 30549 07009 33540 10002 35537 27006 36538 30010 40525
30016 42523 29011 44516 29027 45517 31025 46514 28021 47511 27029
48512 27034 50516 26035 51513 26050 55524 26066 56523 26070 57526
27074 60525 26052 62*** 27071 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA III

DATE OF OBSERVATION 26 February 76 TIME 0856 (Local) 1556 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	0.5		0.5		8.6		3.8			
T_{dp}	-12.2		-12.2		-16.1		-5.2			
W_d, W_s	205	0.9	205	0.9	020	3.1	030	2.2		
P	26.53		26.53		25.82		25.82			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\ 5}$							#			
$T_{dp2\ 5}$							#			
	1	2	1	2	1	2	1	2	1	2
I	.62	4.30	.62	4.30	.60	4.16	.69	4.78		
I_a	.53	3.69	.53	3.69	.52	3.60	.54	3.75		
I_d	.35	2.43	.35	2.43	.34	2.37	.36	2.49		
N	1.34	9.33	1.34	9.33	1.32	9.19	1.30	9.08		
N_a	1.04	7.24	1.04	7.24	1.03	7.20	1.00	6.98		
N_b	.97	6.74	.97	6.74	.98	6.83	.95	6.63		
N_c	.81	5.68	.81	5.68	.82	5.69	.79	5.54		
N_d	.71	4.98	.71	4.98	.70	4.90	.70	4.90		
i	.30	2.12	.39	2.74	.08	.53	.07	.47		
i_a	.28	1.97	.36	2.53	.06	.45	.05	.37		
i_d	.17	1.19	.25	1.76	.05	.33	.04	.25		
T_g	8.7		6.7		11.1		#			
T_s	2.5		-2.2		-3.0(lava)		3.0(water)			
Ψ	28.0		19.6		#		#			
ε										

REMARKS: METSAT 3: Radiant temperature (T_s) of water surface.
not measured.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_g = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 26 February 1976

RADIOSONDE: (0800 MST) TTAA 76151 72HMS 99882 00859 00000 00229
///// ///// 85569 11470 12501 70166 03071 26011 50581 13962 29021
40746 26562 30530 30947 429// 30021 25067 529// 31024 20207 645//
31037 15380 651// 30538 10628 633// 28032 88166 711// 31033 77999

TTBB 7615/ 72HMS 00882 00859 11870 09469 22850 11470 33811 10871
44667 00872 55540 10969 66514 12562 77400 26562 99200 645// 11166
711// 22150 651// 33100 633//

TTCC 76151 72HMS 70849 613// 28520 50059 577// 29510 30383 546//
07510 20644 521// 10513 10101 449// 07005 88999 77930 28541 40716

TTDD 7615/ 72HMS 11863 631// 22833 599// 33548 611// 44500 577//
55100 449// 66078 435// 51515 10190 07340

ROCKETSONDE: (1030 MST) 26173 72269 81011 11101 24/// 10008 25555
11009 30548 04003 35540 27015 40528 27023 45519 26033 47510 26036
50512 24041 51512 24058 52513 26074 55520 27064 56522 26059 60532
27068 62530 25064 63528 27062 64530 28063 65535 29075 66/// 29083
67/// 29069 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 3 March 1976 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a					18.8					
T_{dp}					-1.4					
W_d, W_s					190 10.7					
P					25.32					
C					E50 ⓘ					
M					No					
$T_{a2\ 5}$					Missing					
$T_{dp2\ 5}$					Missing					
	1	2	1	2	1	2	1	2	1	2
I					.29	2.05				
I_a					.18	1.27				
I_d					.03	.19				
N					.33	2.30				
N_a					.27	1.86				
N_b					.02	.12				
N_c					.05	.33				
N_d					.01	.05				
i					.01	.06				
i_a					.01	.04				
i_d					.003	.02				
T_g					27.0					
T_s					25.3					
Ψ										
ϵ										

REMARKS: METSAT 2 (Grass); 19.0°C
METSAT 1 Cancelled due to blowing sand
METSAT 2 Blowing sand between sun and sensors
METSAT 3 Cancelled due to high waves

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ϵ = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 3 March 76

RADIOSONDE: (0800 MST) TTAA 53151 72HMS 99869 15269 16Ø13 ØØØ58 /////
///// 85450 12866 17Ø16 7ØØ43 ØØ76Ø 22Ø29 5Ø564 17958 23Ø59 4Ø739 27167
23180 3Ø94Ø 425// 33548 25Ø6Ø 519// 23568 2Ø2Ø1 633// 24556 15381 599//
25586 1Ø635 595// 29Ø18 882ØØ 623// 24Ø57 77127 246Ø5 42238

TTBB 5315/ 72HMS ØØ869 15269 11850 12866 22828 1Ø666 33783 Ø7864 44656
Ø4561 55615 Ø617Ø 66522 16366 775ØØ 17958 884ØØ 27167 99345 34965 112ØØ
623// 22179 625// 33164 583// 44123 623// 55116 553// 661Ø9 6Ø1// 771ØØ
595//

TTCC 53152 72HMS 7Ø854 641// 26Ø16 5ØØ63 625// 27ØØ5 3Ø3825 577// 33512
2Ø642 517// Ø3Ø19 88999 779999

TTDD 5315/ 72HMS 11878 657// 22750 623// 337ØØ 641// 445835 6Ø5// 555ØØ
625// 6/448 593// 77310 577// 882ØØ 517// 99145 5Ø7//

ROCKETSONDE: (1045 MST) RRXX 03175 72269 81010 11101 25556 01000 28551
35008 30545 34012 33532 30010 35530 27013 37530 30031 39521 29023 40523
28026 41515 27024 42513 26023 44506 24031 45505 27042 50506 25058 55514
25049 60519 25069 65531 28067 67*** 28065 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 4 March 76 TIME 1146 (Local) 1846 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a					7.1					
T_{dp}					-14.0					
W_d, W_s					240 4.5					
P					25.42					
C					50 ⊕					
M					Yes					
$T_{a2\ 5}$					14.4					
$T_{dp2\ 5}$					-1.3					
	1	2	1	2	1	2	1	2	1	2
I					1.17	8.16				
I_a					.96	6.71				
I_d					.63	4.40				
N					1.38	9.64				
N_a					1.07	7.43				
N_b					.99	6.94				
N_c					.83	5.78				
N_d					.71	4.95				
i					.12	.82				
i_a					.11	.75				
i_d					.08	.53				
T_g					5.0					
T_s					16.0					
Ψ										
ε										

REMARKS: METSAT 2 (grass): -5.0°C
METSAT 1 - Cancelled Due to Blowing Sand
METSAT 3 - Cancelled Due to High Waves

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 4 March 76

RADIOSONDE: (0800 MST) TTAA 54151 72HMS 99878 02058 25016 00097
///// ///// 85455 00062 24525 70967 11566 26056 50548 25168 25078
40707 34365 25619 30935 417// 24007 25028 429// 24596 20177 471//
24087 15365 533// 23560 10618 633// 25060 88108 655// 25060 77421
26621 41114

TTBB 5415/ 72HMS 00870 02058 11860 00863 22850 00062 33773 07956
44744 10745 55681 11970 66609 16769 77548 24168 38519 22969 99500
25168 11471 26767 22400 34365 33381 371// 44373 347// 55332 405//
66286 417// 77211 475// 88189 467// 99132 567// 11121 617// 22108
655// 33104 627// 44100 633//

TTCC 54151 72HMS 70841 593// 26526 50050 617// 25020 30369 551//
06020 20631 503// 03035 10085 447// 35002 88999 77999

TTDD 5415/ 72HMS 11942 579// 22807 639// 33784 551// 44618 641//
55563 601// 66399 621// 77300 551// 88200 503// 99175 517// 11100
447// 22093 447//

ROCKETSONDE: (1015 MST) RRXX 04172 72269 81010 11101 25552 06008
30546 07008 31546 05006 32538 04005 35531 30007 36525 31010 38525
30012 39523 29014 40517 27021 41521 27022 42513 28023 43505 26034
45505 27040 47507 26037 50508 25048 53519 25041 55520 24051 56519
25055 57520 25061 60530 26061 61529 25068 62528 26073 65*** 27061
66*** 28076 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 10 March 76 TIME 1108 (Local) 1808 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	12.9		12.9		17.0		10.8			
T_{dp}	-9.3		-9.3		-10.2		-4.3			
W_d, W_s	320 1.3		320 1.3		210 1.8		190 0.4			
P	26.26		26.26		25.56		25.63			
C	E250 ⊕		E250 ⊕		E250 ⊕		E250 ⊕			
M	No		No		No		No			
$T_{a2\,5}$	12.7		12.7		14.8					
$T_{dp2\,5}$	-10.1		-10.1		-10.1					
	1	2	1	2	1	2	1	2	1	2
I	.95	6.59	.95	6.59	.77	5.34	.91	6.32		
I_a	.75	5.23	.75	5.23	.64	4.45	.92	6.39		
I_d	.44	3.06	.44	3.06	.42	2.90	.53	3.72		
N	.31	2.13	.31	2.13	.20	1.37	.77	5.27		
N_a	.25	1.71	.25	1.71	.25	1.72	.65	4.50		
N_b	.29	2.05	.29	2.05	.20	1.39	.55	3.86		
N_c	.20	1.42	.20	1.42	.17	1.21	.46	3.21		
N_d	.16	1.14	.16	1.14	.24	1.70	.36	2.54		
i	.35	2.45	.49	3.39	.08	.59	.05	.32		
i_a	.32	2.25	.44	3.06	.07	.49	.03	.18		
i_d	.18	1.27	.26	1.82	.05	.34	.02	.11		
T_g	16.5		16.5		21.0					
T_s	18.5		21.9		18.8		9.8			
Ψ	20.3		20.0							
ε										

REMARKS:

METSAT II (Grass): 22.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 10 March 76 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	16.2		16.2		20.0		12.0			
T_{dp}	-10.0		-10.0		-12.1		-1.8			
W_d, W_s	005 1.3		005 1.3		210 4.9		180 0.9			
P	26.22		26.22		25.54		25.62			
C	E150 ⊕		E150 ⊕		E150 ◐250 ◐		140 ◐E250 ⊕			
M	NO		NO		NO		No			
$T_{a2\,5}$					17.8					
$T_{dp2\,5}$					-2.0					
	1	2	1	2	1	2	1	2	1	2
I	.66	4.64	.66	4.64	1.22	8.47	.87	6.04		
I_a	.54	3.74	.54	3.74	.99	6.93	.74	5.18		
I_d	.32	2.20	.32	2.20	.68	4.74	.47	3.30		
N	.02	.16	.02	.16	1.20	8.40	.20	1.37		
N_a	.02	.11	.02	.11	.95	6.64	.15	1.07		
N_b	.01	.10	.01	.10	.88	6.13	.13	.89		
N_c	.01	.08	.01	.08	.74	5.14	.12	.80		
N_d	.01	.08	.01	.08	.66	4.62	.09	.60		
i	.31	2.13	.37	2.56	.13	.89	.05	.34		
i_a	.27	1.86	.32	2.20	.12	.82	.03	.23		
i_d	.17	1.17	.21	1.44	.08	.56	.02	.12		
T_g	17.8		17.8		33.0					
T_s	19.9		23.9		28.2		10.1			
Ψ	20.3		20.0							
ε										

REMARKS: METSAT II(Grass): 28.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 10 March 76

RADIOSONDE: (0800 MST) TTAA 60151 72HMS 99876 06064 18001 00135
///// ///// 85506 12669 16003 70102 00059 24020 50572 16558 23533
40736 26525 26049 30937 40535 26086 25059 509// 26096 20201 615//
27098 15381 587// 27062 10631 643// 29031 88191 631// 27087 77206
27610 42641

TTBB 6015/ 72HMS 00876 06064 11850 12669 22810 11068 33717 02064
44700 00059 55652 03570 66531 12967 77500 16558 88470 19744 99468
19956 11448 21957 22413 26930 33400 26525 44333 34928 55270 46548
66210 611// 77191 631// 88187 607// 99156 577// 11121 647// 22108
621// 33100 643//

TTCC 60152 72HMS 70849 615// 27521 50058 607// 26502 30382 531//
08520 20677 515// 22001 88999 77999

TTDD 6015/ 72HMS 11820 649// 22700 615// 33590 631// 44560 585//
55500 607// 55300 531// 77200 515// 88130 759// 99110 475// 51515
10190 10102

ROCKETSONDE: (1102 MST) RRXX 10180 72269 81010 11101 25554 12005
30543 35001 32544 27000 35536 26014 40521 27028 43507 25041 45507
26045 50513 26053 52513 25052 53512 26052 55518 26039 56521 26037
60528 25065 62*** 25079 65*** 27072 68*** 28059 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 11 March 76 TIME 0906 (Local) 1626 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a					12.7					
T_{dp}					-7.3					
W_d, W_s					260 7.2					
P					25.40					
C					E80 ⓫					
M					NO					
$T_{a2\,5}$					15.2					
$T_{dp2\,5}$					-0.4					
	1	2	1	2	1	2	1	2	1	2
I					1.04	7.27				
I_a					.89	6.23				
I_d					.59	4.08				
N					1.26	8.82				
N_a					.64	4.44				
N_b					.47	3.29				
N_c					.30	2.11				
N_d					.20	1.41				
i					.09	.62				
i_a					.10	.72				
i_d					.07	.51				
T_g					19.5					
T_s					14.5					
Ψ										
ε										

REMARKS: METSAT I - Cancelled Due to Blowing Sand
METSAT II(Grass): 18.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 11 March 76

RADIOSONDE: (0800 MST) TTAA 61151 72HMS 99870 10861 25512 00042 /////
///// 85451 08661 25021 70017 05110 24032 50556 22568 40719 26769 30922
387// 23609 25045 425// 20195 489// 15379 605// 10628 633// 28049 88140
615// ///// 77295 23612 442//

TTBB 6115/ 72HMS 00870 10861 11850 08661 22803 05259 33710 04508 44658
08104 55647 09305 66630 12523 77620 13962 88589 16364 99580 17570 11535
20769 22465 24568 33439 24369 44409 25369 55400 26768 66371 31167 77358
30367 88336 33169 99280 417// 11257 415// 22211 463// 33140 615// 44134
597// 55104 647// 66100 633// 51515 SUPER 80-71 65-63

TTCC 61153 72HMS 70848 587// 28032 50060 565// 25027 30386 529// 08020
99888 77999

TTDD 6115/ 72HMS 11963 649// 22893 621// 33758 625// 44700 587// 55683
605// 66220 489// 51515 10190 20651 SUPER 70-68

ROCKETSONDE: (0930 MST) RRXX 11163 72269 81010 11101 23554 13008 25549
10006 30548 05005 33544 09001 35539 29008 37527 28017 39527 28025 40522
29029 42512 27035 45506 26041 47512 27047 50514 27048 52511 27050 53513
28052 55520 29037 57519 27045 60526 27051 64*** 26066

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 17 March 76 TIME 0912 (Local) 1612 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	8.6		8.6		14.0		9.3			
T_{dp}	-10.8		-10.8		-10.2		-2.2			
W_d, W_s	110	2.7	110	2.7	360	1.3	330	0.9		
P	26.37		26.37		25.66		25.72			
C	E150 ◍		E150 ◍		E150 ◍ 250 ◍		E150 ◍ 250 ◍			
M	NO		NO		NO		NO			
$T_{a2\,5}$					14.4					
$T_{dp2\,5}$					-2.9					
	1	2	1	2	1	2	1	2	1	2
I	.80	5.60	.80	5.60	.52	3.64	.87	6.15		
I_a	.73	5.07	.73	5.07	.43	2.97	.69	4.78		
I_d	.45	3.15	.45	3.15	.26	1.80	.49	3.42		
N	1.31	9.10	1.31	9.10	.23	1.62	1.30	9.06		
N_a	.96	6.71	.96	6.71	.10	.72	.82	5.69		
N_b	.92	6.42	.92	6.42	.06	.40	.80	5.59		
N_c	.77	5.40	.77	5.40	.03	.19	.79	5.54		
N_d	.67	4.69	.67	4.69	.03	.18	.52	3.65		
i	.45	3.13	.53	3.68	.06	.42	.06	.40		
i_a	.40	2.80	.46	3.23	.04	.29	.03	.23		
i_d	.26	1.84	.30	2.08	.03	.22	.01	.10		
T_g	10.9		13.0		22.0					
T_s	14.9		17.7		15.9		11.0			
Ψ	20.0		20.5							
ε										

REMARKS: METSAT II(Grass): 22.5°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 17 March 76 TIME 1134 (Local) 1834 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	17.4		17.4		20.2		13.9			
T_{dp}	-13.0		-13.0		-11.5		1.8			
W_d, W_s	110 1.8		110 1.8		200 4.5		310 0.4			
P	26.31		26.31		25.63		25.69			
C	160 ◑ E250 ◑		160 ◑ E250 ◑		160 ◑ E250 ◑		160 ◑ 250- ⊕			
M	NO		NO		NO		NO			
$T_{a2\,5}$					18.5					
$T_{dp2\,5}$					-6.7					
	1	2	1	2	1	2	1	2	1	2
I	1.28	8.93	1.28	8.93	1.06	7.42	1.14	7.98		
I_a	1.03	7.19	1.03	7.19	.80	5.60	.96	6.68		
I_d	.63	4.43	.63	4.43	.57	4.00	.61	4.28		
N	1.14	7.97	1.14	7.97	.86	5.95	.49	3.40		
N_a	.83	5.82	.83	5.82	.61	4.27	.44	3.06		
N_b	.79	5.43	.79	5.43	.59	4.15	.46	3.23		
N_c	.64	4.45	.64	4.45	.51	3.55	.35	2.44		
N_d	.55	3.87	.55	3.87	.43	3.02	.37	2.58		
i	.64	4.43	.70	4.90	.11	.77	.06	.39		
i_a	.55	3.86	.61	4.28	.10	.68	.04	.28		
i_d	.36	2.49	.40	2.79	.07	.48	.02	.13		
T_g	25.0		28.1		34.0					
T_s	27.3		32.5		29.5		11.1			
Ψ	20.0		20.5							
ε										

REMARKS:

METSAT II (Grass): 29.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 17 March 76 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	18.9		18.9		20.8		14.0			
T_{dp}	-11.8		-11.8		-12.1		0.4			
W_d, W_s	120 4.5		120 4.5		180 3.1		310 1.3			
P	26.31		26.31		25.61		25.68			
C	E250 ⏀		E250 ⏀		150 ⏀ E250 ⏀		150 ⏀ E250⊕			
M	NO		NO		NO		NO			
$T_{a2\,5}$	14.6		14.6		18.1					
$T_{dp2\,5}$	-13.0		-13.0		0.2					
	1	2	1	2	1	2	1	2	1	2
I	1.62	11.32	1.62	11.32	1.26	8.79	1.17	8.17		
I_a	1.33	9.33	1.33	9.33	1.03	7.16	1.00	7.01		
I_d	.82	5.69	.82	5.69	.70	4.87	.64	4.47		
N	1.15	5.24	1.15	5.24	1.07	7.43	.98	6.85		
N_a	.86	5.97	.86	5.97	.79	5.50	.71	4.93		
N_b	.82	5.69	.82	5.69	.75	5.22	.62	4.31		
N_c	.68	4.72	.68	4.72	.57	4.00	.48	3.37		
N_d	.59	4.12	.59	4.12	.44	3.09	.43	3.03		
i	.78	5.41	.88	6.12	.13	.90	.05	.38		
i_a	.70	4.88	.74	5.16	.11	.77	.04	.27		
i_d	.45	3.16	.48	3.33	.07	.52	.02	.13		
T_g	26.1		30.0		35.0					
T_s	27.4		33.3		30.0		11.2			
Ψ	20.0		20.5							
ε										

REMARKS: METSAT II (Grass): 26.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 17 March 76

RADIOSONDE: (0900 MST) TTAA 67161 72JAL 99879 11270 00000 00138
///// ///// 85511 09667 16002 70113 05069 20513 50576 14361 26531
40742 24557 28045 30946 38759 29049 25068 493// 29548 20211 611//
30556 15385 685// 29060 10632 649// 29033 88162 697// 28064 77162
28064 42116

TTBB 6716/ 72JAL 00879 11270 11869 09268 22819 09668 33735 07470
44626 01969 55605 02369 66503 13766 77500 14361 88468 18746 99460
19357 11400 24557 22384 25158 33287 41159 44200 611// 55162 697//
66145 689// 77139 711// 88128 673// 99121 607// 11100 649//

TTCC 67161 72JAL 70850 629// 28018 50059 591// 24010 30384 545//
07013 20646 507// 08017 88999 77999

TTDD 6716/ 72JAL 11730 649// 22700 629// 33400 553// 44200 507//
55140 519//

ROCKETSONDE: (1000 MST) RRXX 17170 72269 81010 11101 25555 08010
28552 09009 30544 10014 35536 08010 40524 01011 41526 01011 42517
36014 45513 34013 46510 32008 50509 29030 51515 29031 53512 30017
55517 28014 57523 29020 59527 27041 60529 27043 61530 27039 62529
29049 63531 30057 65539 34043 66*** 36029 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 24 March 76 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.6		21.6		24.0					
T_{dp}	-9.4		-9.4		-13.5					
W_d, W_s	190 0.9		190 0.9		260 3.6					
P	26.33		26.33		25.62					
C	○		○		○					
M	NO		NO		NO					
$T_{a2\,5}$					21.7					
$T_{dp2\,5}$					-9.0					
	1	2	1	2	1	2	1	2	1	2
I	1.34	9.41	1.34	9.41	1.30	9.10				
I_a	1.10	7.67	1.10	7.67	1.08	7.37				
I_d	.69	4.83	.69	4.83	.69	4.84				
N	1.42	9.89	1.42	9.89	1.42	9.91				
N_a	1.03	7.20	1.03	7.20	1.08	7.55				
N_b	.98	6.83	.98	6.83	1.02	7.08				
N_c	.80	5.59	.80	5.59	.84	5.88				
N_d	.72	5.00	.72	5.00	.72	5.04				
i	.67	4.67	.77	5.35	.13	.88				
i_a	.59	4.10	.68	4.73	.11	.79				
i_d	.38	2.66	.43	3.02	.08	.59				
T_g	39.2		31.5		42.0					
T_s	32.9		39.8		34.5					
Ψ	Missing		Missing							
ε										

REMARKS: METSAT II(Grass): 30.0°C
METSAT III Site not operated this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 24 March 76

RADIOSONDE: (0900 MST) TTAA 74161 72JAL 99878 13669 ØØØØØ ØØ118
///// ///// 85494 15Ø69 Ø9ØØ2 7Ø1ØØ Ø2866 3Ø52Ø 5Ø573 17164 3ØØ32
4Ø736 29962 3Ø528 3Ø932 471// 3Ø522 25Ø53 529// 27Ø2Ø 2Ø195 563//
27550 15377 573// 25546 1Ø632 615// 25Ø39 88219 577// 27Ø43 77117
25Ø55 4Ø514

TTBB 7416/ 72JAL ØØ878 13669 11868 12868 22868 15468 3385Ø 15Ø69
44622 Ø3965 556Ø2 Ø4966 66438 25361 774ØØ 29962 88347 38761 993ØØ
471// 11235 553// 22216 577// 332ØØ 563// 44189 569// 55177 555//
6617Ø 577// 7715Ø 573// 88137 597// 99124 573// 111ØØ 615//

TTCC 74162 72JAL 7Ø852 661// 25515 5ØØ6Ø 567// Ø75Ø3 3Ø385 529//
Ø8Ø11 2Ø648 5Ø7// Ø7022 88999 77999

TTDD 7416/ 72JAL 1189Ø 637// 22835 6Ø7// 33645 675// 44563 557//
5553Ø 557// 66443 575// 773ØØ 529// 88193 5Ø3//

ROCKETSONDE: (1125 MST) RRXX 24183 72269 81010 11101 25554 09009
30547 11004 35536 09002 36539 25002 40531 27004 42519 25005 43513
21007 45510 25009 50510 18009 53506 06009 55508 14007 56511 18616
57515 19018 59525 17008 60531 21012 61532 26013 62530 28020 63526
27834 64529 26054 65*** 27052 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 25 March 76 TIME 0853 (Local) 1553 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	15.6		15.6		16.8		10.7			
T_{dp}	-9.0		-9.0		-13.8		-0.1			
W_d, W_s	110 4.9		110 4.9		190 4.5		160 2.2			
P	26.19		26.19		25.50		25.42			
C	○		○		250-①		250-①			
M	No		No		No		No			
$T_{a2\,5}$	13.7		13.7		16.2					
$T_{dp2\,5}$	-14.5		-14.5		-3.9					
	1	2	1	2	1	2	1	2	1	2
I	.85	5.95	.85	5.95	.78	5.47	.80	5.56		
I_a	.68	4.73	.68	4.73	.67	4.65	.69	4.82		
I_d	.44	3.05	.44	3.05	.44	3.05	.45	3.16		
N	1.30	9.05	1.30	9.05	1.31	9.13	1.30	9.06		
N_a	.98	6.83	.98	6.83	1.02	7.13	.98	6.82		
N_b	.92	6.44	.92	6.44	.96	6.69	.92	6.40		
N_c	.78	5.41	.78	5.41	.80	5.60	.77	5.38		
N_d	.69	4.78	.69	4.78	.69	4.79	.68	4.74		
i	.47	3.28	.54	3.74	.09	.63	.05	.34		
i_a	.41	2.88	.47	3.29	.08	.57	.03	.23		
i_d	.27	1.90	.30	2.09	.06	.39	.02	.13		
T_g	13.9		16.0		24.0					
T_s	12.5		14.9		18.9		10.0			
Ψ	17.2		18.7							
ε										

REMARKS: METSAT II (Grass): 18.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 25 March 76 TIME 1120 (Local) 1820 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	#		#		22.9					
T_{dp}	#		#		-12.1					
W_d, W_s	210 13.4		210 13.4		180 8.9613.4					
P	26.16		26.16		25.44					
C	○		○		250 ⊕					
M	No		No		No					
$T_{a2\,5}$	#		#		20.6					
$T_{dp2\,5}$	#		#		-2.5					
	1	2	1	2	1	2	1	2	1	2
I	1.34	9.37	1.34	9.37	1.28	8.91				
I_a	1.15	8.05	1.15	8.05	1.04	7.26				
I_d	.70	4.87	.70	4.87	.67	4.69				
N	#	#	#	#	1.40	9.73				
N_a	#	#	#	#	1.07	7.45				
N_b	#	#	#	#	.99	6.90				
N_c	#	#	#	#	.82	5.69				
N_d	#	#	#	#	.70	4.87				
i	.63	4.40	.77	5.37	.13	.87				
i_a	.68	4.74	.72	4.99	.11	.79				
i_d	.46	3.21	.47	3.26	.08	.55				
T_g	#		#		36.0					
T_s	#		#		28.2					
Ψ	17.2		18.7							
ε										

REMARKS: #METSAT I Observation Incomplete Due to Blowing Sand
METSAT II(Grass): 28.0°C; Blowing Sand Partially Obscurring Sensors

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 25 March 76

RADIOSONDE: (0900 MST) TTAA 75161 72JAL 99874 11868 03005 00090
///// ///// 85464 13470 15005 70077 04669 24537 50572 15566 25027
40737 27965 23028 30936 451// 23035 25055 555// 24527 20194 667//
25029 15372 597// 25043 10625 607// 25541 88200 667// 25029 77128
25044 40103

TTBB 7516/ 72JAL 00874 11868 11863 09868 22850 13470 33824 14470
44700 04669 55669 03068 66500 15566 77472 17367 88400 27965 99341
37963 11200 667// 22184 603// 33112 587// 44100 607//

TTCC 75162 72JAL 70845 599// 24521 50056 575// 33503 30382 529//
08517 20646 493// 07017 88999 77999

TTDD 7516/ 72JAL 11858 629// 22453 553// 33383 565// 44173 493//

ROCKETSONDE: (1000 MST) RRXX 25170 72269 81010 11101 25/// 09009
30/// 13002 32/// 26002 35/// 25014 37/// 28019 38/// 29017 40///
24012 45/// 26023 46/// 27024 49/// 04003 50/// 13005 53/// 15020
55/// 15018 58/// 21012 60/// 24042 64/// 27046 65/// 28037 66///
28032 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 31 March 76 TIME 1200 (Local) 1900 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	16.4		16.4		16.0		14.4			
T_{dp}	-14.8		-14.8		-11.8		-6.6			
W_d, W_s	080 3.1		080 3.1		240 1.8		CALM			
P	26.43		26.43		25.72		25.79			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\ 5}$	14.5		14.5		17.8					
$T_{dp2\ 5}$	-16.4		-16.4		-1.1					
	1	2	1	2	1	2	1	2	1	2
I	1.43	10.00	1.43	10.00	1.35	9.44	1.35	9.40		
I_a	1.15	8.03	1.15	8.03	1.10	7.69	1.13	7.85		
I_d	.73	5.07	.73	5.07	.72	5.05	.73	5.08		
N	1.49	10.37	1.49	10.37	1.51	10.53	1.47	10.28		
N_a	1.11	7.72	1.11	7.72	1.15	8.00	1.08	7.55		
N_b	.98	6.86	.98	6.86	1.07	7.47	1.01	7.06		
N_c	.80	5.59	.80	5.59	.88	6.13	.85	5.90		
N_d	.71	4.98	.71	4.98	.75	5.24	.75	5.20		
i	.65	4.56	.77	5.40	.13	.90	.06	.40		
i_a	.58	4.07	.68	4.78	.11	.79	.04	.25		
i_d	.38	2.65	.43	3.03	.08	.56	.01	.08		
T_g	34.8		32.5		43.0					
T_s	28.0		34.9		30.0		11.0			
Ψ	15.7		16.8							
ε										

REMARKS: METSAT II(Grass): 27.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 31 March 76

RADIOSONDE: (0800 MST) TTAA 81151 72HMS 99881 06067 18004 00114
///// ///// 85548 05467 18503 70118 00565 33014 50574 17367 29531
40737 29915 31019 30935 471// 32525 25053 555// 32543 20194 559//
30048 15378 575// 30525 10633 567// 28518 88216 599// 30045 77202
30049 41016

TTBB 8115/ 72HMS 00881 06067 11860 04666 22839 06467 33785 04067
44717 01765 55700 00565 66638 01971 77500 17367 88400 29964 99359
36664 11300 471// 22216 599// 33190 541// 44166 543// 55126 601//
66100 567//

TTCC 8115/ 72HMS 70855 605// 28009 50064 587// 07014 30387 547//
05031 20647 519// 08517 10103 451// 30515 07344 395// 28022 05576
371// 28039 88999 77999

TTDD 8115/ 72HMS 11908 607// 22700 605// 33653 631// 44500 587//
55418 597// 66300 547// 77253 555// 88100 451// 99070 395// 11048
371//

ROCKETSONDE: (1055 MST) RRXX 18031 72269 81010 11101 25557 11007
30549 32005 35535 27021 36529 27031 40517 27042 45515 25043 50510
27044 53513 26032 55516 23037 57515 23052 58513 22058 60516 23057
61520 25055 62523 27057 63527 28052 65537 31012 67*** 36015 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 1 April 76 TIME 0931 (Local) 1631 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	10.1		10.1		17.3		10.1			
T_{dp}	-6.8		-6.8		-14.0		0.0			
W_d, W_s	190 0.9		190 0.9		280 1.3		030 0.4			
P	26.38		26.38		25.68		25.65			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\,5}$	11.8		11.8							
$T_{dp2\,5}$	-9.3		-9.3							
	1	2	1	2	1	2	1	2	1	2
I	1.05	7.34	1.05	7.34	1.01	7.05	1.06	7.42		
I_a	.84	5.88	.84	5.88	.85	5.92	.92	6.43		
I_d	.55	3.81	.55	3.81	.56	3.91	.59	4.10		
N	1.44	10.02	1.44	10.02	1.47	10.28	1.40	9.78		
N_a	1.09	7.57	1.09	7.57	1.13	7.90	1.04	7.27		
N_b	1.01	7.06	1.01	7.06	1.06	7.40	.98	6.81		
N_c	.85	5.93	.85	5.93	.88	6.17	.82	5.71		
N_d	.74	5.19	.74	5.19	.75	5.26	.73	5.07		
i	.48	3.37	.60	4.20	1.07	7.46	.06	.39		
i_a	.44	3.04	.52	3.63	.09	.64	.03	.22		
i_d	.28	1.97	.35	2.44	.06	.44	.02	.12		
T_g	21.5		19.6		30.6					
T_s	16.7		22.0		24.8		11.0			
Ψ	16.0		17.2							
ε										

REMARKS: METSAT II (Grass): 21.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}: Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 1 April 76 TIME 1137 (Local) 1837 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	20.0		20.0		21.2		17.5			
T_{dp}	-11.3		-11.3		-7.5		1.1			
W_d, W_s	030	5.8	030	5.8	180	4.5	CALM			
P	26.38		26.38		25.67		25.61			
C	○		○		○		250 ①			
M	No		No		No		No			
$T_{a2\,5}$					19.4					
$T_{dp2\,5}$					-5.2					
	1	2	1	2	1	2	1	2	1	2
I	1.41	9.83	1.41	9.83	1.36	9.50	1.40	9.81		
I_a	1.14	7.93	1.14	7.93	1.11	7.77	1.19	8.30		
I_d	.73	5.08	.73	5.08	.73	5.07	.74	5.18		
N	1.48	10.35	1.48	10.35	1.52	10.58	1.44	10.04		
N_a	1.11	7.76	1.11	7.76	1.13	7.91	1.06	7.40		
N_b	1.02	7.14	1.02	7.14	1.07	7.49	.99	6.90		
N_c	.86	6.02	.86	6.02	.88	6.11	.83	5.77		
N_d	.76	5.30	.76	5.30	.76	5.30	.73	5.12		
i	.65	4.54	.77	5.37	.13	.91	.06	.42		
i_a	.57	4.00	.67	4.68	.12	.84	.04	.30		
i_d	.37	2.59	.43	3.01	.08	.57	.02	.13		
T_g	31.5		41.5		35.0					
T_s	32.5		39.5		31.1		12.1			
Ψ	16.0		17.2							
ε										

REMARKS: MET SAT II(Grass): 24.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 1 April 76

RADIOSONDE: (0800 MST) TTAA 51151 72HMS 99878 11271 ØØØØØ ØØ149
///// ///// 85526 12Ø73 17ØØ6 7Ø129 Ø2872 22Ø1Ø 5Ø575 17968 25Ø24
4Ø738 29166 24520 3Ø937 443// 26Ø2Ø 25Ø57 535// 26Ø2Ø 2Ø199 529//
24528 15385 561// 25Ø32 1Ø635 647// 25Ø15 88222 77573 26525
77175 24Ø48 42520

TTBB 5115/ 72HMS ØØ878 11271 11867 Ø9872 22843 13473 33768 Ø9Ø73
44586 Ø7171 55500 17968 66400 29166 77367 33965 88250 535// 99222
573// 11191 515// 22164 533// 33117 655// 44100 647//

TTCC 51151 72HMS 70853 617// 23014 50061 619// 105// 30381 551//
1450Ø 2Ø64Ø 547// 1ØØ93 439// 32ØØ5 88999 77999

TTDD 5115/ 72HMS 11768 645// 22700 617// 33603 635// 44578 609//
55473 629// 66300 551// 77200 547// 88128 497// 99100 439// 11Ø93
4Ø5// 22Ø78 431// 51515 1Ø19Ø Ø7434

ROCKETSONDE: (1030 MST) RRXX 01173 72269 81010 11101 25558 07005
28554 02007 30546 22000 32545 29013 35530 29026 40514 28049 41511
28051 45510 26029 48508 26031 50509 26041 55515 24035 56512 23042
57509 24048 60515 27034 61518 26035 62523 26039 63526 25042 64528
26031 65*** 32011 66*** 06018 67*** 67012 68*** 31011 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 7 April 76 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	19.9		19.9		20.0		18.7			
T_{dp}	-6.8		-6.8		-5.9		+0.8			
W_d, W_s	310	2.2	310	2.2	310	6.3	020	0.4		
P	26.25		26.25		25.56		25.53			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2.5}$	16.8		16.8		21.8					
$T_{dp2.5}$	-7.1		-7.1		-6.3					
	1	2	1	2	1	2	1	2	1	2
I	1.42	9.92	1.42	9.92	1.36	9.52	1.43	9.98		
I_a	1.16	8.07	1.16	8.07	1.10	7.70	1.20	8.37		
I_d	.73	5.07	.73	5.07	.79	5.51	.78	5.41		
N	1.43	9.95	1.43	9.95	1.44	10.00	1.41	9.86		
N_a	1.06	7.38	1.06	7.38	1.09	7.61	1.03	7.21		
N_b	.98	6.82	.98	6.82	1.02	7.09	.97	6.74		
N_c	.82	5.73	.82	5.73	.83	5.76	.80	5.60		
N_d	.72	5.00	.72	5.00	.71	4.92	.71	4.94		
i	.69	4.82	.76	5.33	.13	.89	.07	.46		
i_a	.61	4.27	.68	4.76	.12	.81	.05	.31		
i_d	.39	2.72	.42	2.96	.08	.57	.02	.12		
T_g	27.1		31.8		37.1					
T_s	35.0		36.0		31.6		11.0			
Ψ	15.8		16.9							
ε										

REMARKS: MET SAT II Surface Temperature (Grass Cover): 26.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 7 April 76 TIME 1058 (Local) 1758 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	18.1		18.1		18.5		15.9			
T_{dp}	-4.8		-4.8		-5.5		-10.4			
W_d, W_s	350	4.5	350	4.5	310	5.8	045	1.8		
P	26.24		26.24		25.58		25.54			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\,5}$	18.3		18.3		20.8					
$T_{dp2\,5}$	-7.9		-7.9		-2.0					
	1	2	1	2	1	2	1	2	1	2
I	1.34	9.36	1.34	9.36	1.29	9.02	1.37	9.53		
I_a	1.09	7.62	1.09	7.62	1.06	7.36	1.16	8.12		
I_d	.69	4.80	.69	4.80	.68	4.76	.73	5.11		
N	1.42	9.93	1.42	9.93	1.44	10.00	1.39	9.72		
N_a	1.06	7.38	1.06	7.38	1.10	7.65	1.02	7.12		
N_b	.98	6.82	.98	6.82	1.02	7.13	.96	6.66		
N_c	.85	5.95	.85	5.95	.84	5.84	.79	5.52		
N_d	.75	5.24	.75	5.24	.71	4.98	.70	4.86		
i	.68	4.72	.75	5.22	.12	.86	.06	.44		
i_a	.60	4.18	.66	4.64	.11	.78	.04	.30		
i_d	.38	2.68	.42	2.90	.08	.55	.02	.12		
T_g	25.3		28.2		36.0					
T_s	32.0		28.0		29.7		11.0			
Ψ	15.8		16.9							
ε										

REMARKS: MET SAT II Surface Temperature (Grass Cover) 24.2°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 7 April 76 TIME 0917 (Local) 1617 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	15.3		15.3		16.2		15.2			
T_{dp}	-7.7		-7.7		-5.6		2.4			
W_d, W_s	040	4.5	040	4.5	320	2.2	045	0.4		
P	26.28		26.28		25.59		25.55			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\,5}$	15.8		15.8		18.5					
$T_{dp2\,5}$	-8.0		-8.0		-10.5					
	1	2	1	2	1	2	1	2	1	2
I	1.01	7.03	1.01	7.03	.93	6.51	1.02	7.14		
I_a	.80	5.58	.80	5.58	.78	5.46	.86	6.00		
I_d	.51	3.55	.51	3.55	.51	3.54	.55	3.80		
N	1.35	9.38	1.35	9.38	1.36	9.45	1.33	9.26		
N_a	1.01	7.06	1.01	7.06	1.04	7.28	.98	6.87		
N_b	.95	6.61	.95	6.61	.98	6.84	.92	6.43		
N_c	.79	5.50	.79	5.50	.80	5.61	.77	5.36		
N_d	.69	4.81	.69	4.81	.69	4.78	.68	4.73		
i	.53	3.72	.59	4.12	.10	.69	.06	.42		
i_a	.47	3.30	.52	3.66	.08	.57	.04	.25		
i_d	.30	2.13	.33	2.30	.06	.40	.02	.13		
T_g	35.0		18.0		25.0					
T_s	18.0		18.0		29.0		11.5			
Ψ	15.8		16.9							
ε										

REMARKS: MET SAT 2 Surface Temperature (Grass Cover): 20.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 7 April 76

RADIOSONDE: (0800 MST) TTAA 57151 72HMS 99874 14671 31505 00102
///// ///// 85497 11469 36012 70084 00763 32020 50569 18363 32543
40731 30962 31560 30930 445// 31582 25050 501// 31079 20193 569//
30065 15376 573// 29563 10632 589// 28025 88200 569// 30065 77215
30086 41045

TTBB 5715/ 72HMS 00874 14671 11850 11469 22657 04761 33630 07165
44608 08168 55566 11168 66400 30962 77348 37563 88265 501// 99258
491// 11200 569// 22194 537// 33174 553// 44162 595// 55157 569//
66132 595// 77112 559// 88100 589//

TTCC 5715/ 72HMS 88999 77999

TTDD 5715/ 72HMS 11925 627// 22813 617// 33744 641// 51515 10190
70852

ROCKETSONDE: (1010 MST) RRXX 07171 72269 81010 11101 25557 08014
27554 09011 30544 27002 31541 29003 35522 25030 37525 25036 40515
27026 41512 27018 42508 24014 43512 21018 45513 22018 50507 23021
55518 26005 58521 21019 60516 19019 61517 23018 62522 29010 63527
01020 64532 00026 65*** 35016 66*** 29005 68*** 06006 69*** 03025
JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 21 April 76 TIME 1200 (Local) 1900 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.7		23.7		24.9		22.3			
T_{dp}	-9.8		-9.8		-6.7		7.0			
W_d, W_s	020 1.8		020 1.8		250 3.1		270 0.4			
P	26.24		26.24		25.52		25.53			
C	250 ⓘ		250 ⓘ		250 - ⓘ		250 - ⓘ			
M	No		No		No		No			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.36	9.50	1.36	9.50	1.49	10.36	1.42	9.88		
I_a	1.14	7.92	1.14	7.92	1.21	8.41	1.22	8.52		
I_d	.65	4.56	.65	4.56	.78	5.46	.82	5.71		
N	.87	6.06	.87	6.06	1.41	9.83	1.35	9.44		
N_a	.69	4.79	.69	4.79	1.07	7.48	.98	6.87		
N_b	.66	4.50	.66	4.50	.99	6.89	.91	6.37		
N_c	.62	4.35	.62	4.35	.81	5.64	.76	5.33		
N_d	.50	3.46	.50	3.46	.69	4.82	.68	4.73		
i	.56	3.92	.66	4.60	.13	.91	.07	.50		
i_a	.49	3.43	.56	3.92	.12	.84	.06	.39		
i_d	.33	2.27	.34	2.39	.08	.56	.02	.13		
T_g	34.0		39.0		38.0		13.8			
T_s	34.0		36.0		43.0		14.0			
Ψ	14.7		14.8							
ε										

REMARKS:

MET SAT II Surface Temperature (Grass Cover): 24.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 21 April 76 TIME 0844 (Local) 1544 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	12.9		12.9		19.2		13.2			
T_{dp}	-1.6		-1.6		-4.5		3.4			
W_d, W_s	270 0.9		270 0.9		010 2.7		024 0.4			
P	26.25		26.25		25.56		25.59			
C	250 ⊕		250 ⊕		250 - ⊕		250 ⊕			
M	No		No		No		No			
$T_{a2\,5}$	13.2		13.2		17.5					
$T_{dp2\,5}$	1.3		-1.3		1.7					
	1	2	1	2	1	2	1	2	1	2
I	.96	6.67	.96	6.67	.88	6.11	.97	6.76		
I_a	.78	5.43	.78	5.43	.74	5.17	.84	5.86		
I_d	.49	3.39	.49	3.39	.48	3.36	.55	3.82		
N	1.26	8.79	1.26	8.79	1.28	8.92	1.29	8.97		
N_a	.95	6.64	.95	6.64	1.00	6.96	.94	6.58		
N_b	.86	5.97	.86	5.97	.93	6.46	.88	6.13		
N_c	.72	5.01	.72	5.01	.75	5.20	.73	5.07		
N_d	.63	4.42	.63	4.42	.65	4.52	.66	4.61		
i	.46	3.20	.55	3.84	.09	.61	.07	.47		
i_a	.41	2.86	.48	3.33	.08	.53	.05	.33		
i_d	.27	1.87	.31	2.14	.05	.37	.02	.15		
T_g	23.0		23.0		25.0		12.8			
T_s	19.5		20.0		28.0		12.0			
Ψ	14.7		14.8							
ε										

REMARKS:

MET SAT II Surface Temperature (Grass Cover): 18.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 21 April 76 TIME 1150 (Local) 1850 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.7		23.7		23.7		21.8			
T_{dp}	-10.2		-10.2		-7.8		7.3			
W_d, W_s	020	1.8	020	1.8	160	2.2	270	1.3		
P	26.24		26.24		25.53		25.53			
C	250 ⊕		250 ⊕		250 - ⊕		250 - ⊕			
M	No		No		No					
$T_{a2\ 5}$					21.5					
$T_{dp2\ 5}$					4.6					
	1	2	1	2	1	2	1	2	1	2
I	1.51	10.55	1.51	10.55	1.45	10.08	1.36	9.50		
I_a	1.20	8.38	1.20	8.38	1.16	8.11	1.19	8.27		
I_d	.76	5.27	.76	5.27	.77	5.38	.77	5.37		
N	1.35	9.39	1.35	9.39	1.40	9.79	1.39	9.72		
N_a	1.00	6.97	1.00	6.97	1.07	7.44	1.01	7.02		
N_b	.94	6.54	.94	6.54	.98	6.87	.93	6.49		
N_c	.79	5.48	.79	5.48	.80	5.59	.77	5.38		
N_d	.69	4.81	.69	4.81	.70	4.85	.69	4.79		
i	.69	4.82	.80	5.56	.13	.87	.07	.46		
i_a	.62	4.32	.70	4.85	.11	.78	.05	.34		
i_d	.40	2.80	.44	3.09	.08	.54	.02	.13		
T_g	34.0		40.0		38.0		13.8 *			
T_s	34.0		36.0		44.0		14.0 #			
Ψ	14.7		14.8							
ε										

REMARKS: MET SAT II Surface Temperature (Grass Cover): 30.0°C
*Water temperature at 4 mm depth
#Radiant temperature of water surface

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 21 April 76

RADIOSONDE: (0800 MST) TTAA 71151 72HMS 99873 16469 24002 00098
///// ///// 85490 15271 20004 70104 04065 29017 50576 13367 27530
40741 27163 28029 30942 419// 22540 25063 525// 27548 20048 555//
27552 15387 581// 26547 10638 665// 27520 88228 571// 27546 77194
27556 41107

TTBB 7115/ 72HMS 00873 16469 11850 15271 22820 14270 33700 04065
44622 00967 55500 13367 66400 27163 77322 38162 88228 571// 99200
555// 11127 609// 22100 665//

TTCC 71153 72HMS 70856 627// 22011 50063 619// 08003 30386 535//
130// 88999 77999

TTDD 7115/ 72HMS 11960 679// 22790 621// 33610 635// 44500 619//
55440 571// 66380 581// 77300 535// 88283 542//

ROCKETSONDE: (1030 MST) RRXX 21173 72269 81010 11101 25556 14001
30544 26011 31538 27013 33532 26015 35533 24016 36530 24024 37522
27023 38521 28018 40520 24015 42510 28010 44509 31004 45509 21007
46509 21014 47506 24015 48504 28010 49509 32012 50504 06006 53506
10010 54511 10009 55509 10012 59519 11022 60522 11017 61525 10012
63*** 13022 64*** 15022 65*** 21011 66*** 30027 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 28 April 76 TIME 1024 (Local) 1624 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	22.6		22.6		23.1		16.1			
T_{dp}	-9.4		-9.4		-6.7		0.6			
W_d, W_s	110 1.8		110 1.8		160 4.0		320 0.9			
P	26.33		26.33		25.65		25.64			
C	120 E 250		120 E 250		80 120 E 250		120 250			
M	No		NO		No		No			
$T_{a2\ 5}$					21.3					
$T_{dp2\ 5}$					0.4					
	1	2	1	2	1	2	1	2	1	2
I	1.22	8.54	1.22	8.54	1.45	10.16	.88	6.11		
I_a	.98	6.81	.98	6.81	.82	5.71	.76	5.27		
I_d	.62	4.31	.62	4.31	.40	2.82	.51	3.54		
N	1.27	8.87	1.27	8.87	1.25	8.71	.37	2.60		
N_a	.96	6.68	.96	6.68	.31	2.17	.32	2.22		
N_b	.88	6.11	.88	6.11	.71	4.92	.28	1.95		
N_c	.72	5.05	.72	5.05	.24	1.70	.20	1.40		
N_d	.63	4.37	.63	4.37	.13	.91	.20	1.40		
i	.63	4.39	.66	4.61	.12	.81	.05	.38		
i_a	.55	3.81	.58	4.04	.09	.64	.03	.23		
i_d	.35	2.47	.36	2.53	.05	.33	.02	.11		
T_g	30.0		35.0		34.0		14.6 *			
T_s	28.0		32.7		38.0		13.3 #			
Ψ	15.6		15.3							
ϵ										

REMARKS: MET SAT I, Clouds between sun & sensor
MET SAT II Surface Temperature (Grass Cover): 28.0°C
Clouds between sun & sensor at all sites
* Water temperature # Radiant temperature of water surface

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ϵ = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 28 April 1976 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	25.5		25.5		25.8		20.5			
T_{dp}	-6.4		-6.4		-6.1		2.8			
W_d, W_s	100 2.7		100 2.7		100 0.9		320 0.9			
P	26.30		26.30		25.61		25.62			
C	160 ⊕ 250 ◐		160 ◐ 250 ◐		60 ◐ E160 ◐ 250 ⊕		160 ◐ 250 ◐			
M	No		No		No		No			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.50	10.45	1.50	10.45	1.58	11.03	1.46	10.18		
I_a	1.18	8.25	1.18	8.25	1.27	8.85	1.26	8.81		
I_d	.74	5.13	.74	5.13	.80	5.59	.82	5.74		
N	1.35	9.45	1.35	9.45	.78	5.41	1.32	9.24		
N_a	1.01	7.01	1.01	7.01	.58	4.05	.95	6.63		
N_b	.92	6.40	.92	6.40	.39	2.72	.88	6.17		
N_c	.76	5.30	.76	5.30	.19	1.33	.73	5.11		
N_d	.66	4.63	.66	4.63	.31	2.14	.66	4.58		
i	.75	5.24	.80	5.59	.14	.97	.07	.47		
i_a	.66	4.58	.69	4.84	.10	.67	.05	.34		
i_d	.42	2.95	.43	3.01	.07	.52	.02	.15		
T_g	40.5		42.0		35.0		15.8			
T_s	40.0		42.8		40.0		14.8			
Ψ	15.6		15.3							
ε										

REMARKS: MET SAT II Surface Temperature (Grass Cover): 32.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 28 April 76

RADIOSONDE: (0800 MST) TTAA 78141 72HMS 99875 15470 15004 00104
///// ///// 85508 17441 20007 70130 04065 25514 50576 16522 22029
40741 28328 19013 30940 405// 24025 25062 503// 25029 20205 587//
24031 15385 595// 24038 10634 659// 25542 88185 607// 24036 77103
25543 41006

TTBB 7814/ 72HMS 00875 15470 11864 17671 22598 06560 33581 08356
44533 12563 55500 16522 66470 18522 77400 28328 88340 38742 99328
38960 11322 39560 22300 405// 33250 503// 44185 607// 55132 601//
66111 663// 77100 659// 51515 10186 //851 17471

TTCC 78142 72HMS 70851 629// 28015 50057 595// 20502 30383 521//
03015 20649 437// 18510 88999 77999

TTDD 7814/ 72HMS 11877 673// 22700 629// 33573 651// 44500 595//
55283 527// 66154 381// 77130 381//

ROCKETSONDE: (1030 MDT) RRXX 28163 72269 81010 11101 24553 14003
25546 14004 29540 15006 30535 15007 35534 11005 40527 06016 41518
08012 42512 09010 43518 05003 45508 06016 46511 11011 47510 09004
50509 10016 52508 12018 53506 16020 55512 26008 56516 05009 57518
08025 60521 10024 61521 11018 63*** 13024 64*** 14026 65*** 16013
JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 29 April 76 TIME 1235 (Local) 1835 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.1		23.1		24.1					
T_{dp}	-0.9		-0.9		4.6					
W_d, W_s	180 8.9		180 8.9		190 4.5		Site not operated this date			
P	26.32		26.32		25.62					
C	50 ◑ 250 ◑		50 ◑ 250 ◑		50 ◑ 250 ◑					
M	No		No		No					
$T_{a2\,5}$					23.1					
$T_{dp2\,5}$					7.3					
	1	2	1	2	1	2	1	2	1	2
I	1.25	8.62	1.25	8.62	1.46	10.21				
I_a	.97	6.76	.97	6.76	1.18	8.21				
I_d	.75	5.24	.75	5.24	.75	5.25				
N	.99	6.90	.99	6.90	1.33	9.27				
N_a	.66	4.58	.66	4.58	1.01	7.04				
N_b	.80	5.55	.80	5.55	.93	6.52				
N_c	.63	4.42	.63	4.42	.76	5.27				
N_d	.47	3.30	.47	3.30	.65	4.52				
i	.58	4.07	.83	5.79	.14	.99				
i_a	.56	3.93	.70	4.86	.12	.86				
i_d	.39	2.72	.41	2.88	.08	.58				
T_g	32.0		35.0		36.0					
T_s	28.8		32.1		42.0					
Ψ	15.8		15.1							
ε										

REMARKS: MET SAT II Surface Temperature (Grass Cover): 30.0°C
Clouds between sun & sensor at all sites.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 29 April 76

RADIOSONDE: (0800 MDT) TTAA 79141 72HMS 99877 15257 00000 00022
///// ///// 85522 15062 10504 70140 03859 21506 50577 16312 22017
40741 28525 20025 30940 435// 21534 25061 499// 24041 20204 569//
25549 15386 573// 25538 10637 645// 27527 88200 569// 25549 77215
25049 40604

TTBB 7914/ 72HMS 00877 15257 11866 16061 22797 13066 33571 08750
44561 10133 55545 11542 66479 18908 77400 28525 88325 41356 99319
42158 11200 569// 22164 557// 33129 607// 44115 661// 55112 665//
66100 645//

TTCC 79142 72HMS 70855 645// 27520 50062 621// 06003 30387 505//
05004 20657 403// 08008 88999 77999

TTDD 7914/ 72HMS 11700 645// 22608 613// 33500 621// 44300 505//
55243 467// 66200 403// 77126 389//

ROCKETSONDE: (1216 MDT) RRXX 29182 72269 81010 11101 25547 05002
30539 00007 35533 03008 40526 01009 41526 01004 42526 26006 43517
00014 44508 04013 45505 10009 46507 14002 47000 13006 50503 19013
52506 17006 54510 09007 55513 07020 56517 09031 57516 12034 60516
14014 61/// 19007 62/// 23019 63/// 24024 65/// 22007 67/// 07010
JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 6 May 76 TIME 1004 (Local) 1604 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a					17.5		14.8			
T_{dp}					7.8		9.8			
W_d, W_s					210 0.3		CALM			
P					25.59		25.56			
C					60 ⓘ 250-ⓓ		70 ⓘ 250-ⓘ			
M					Yes		No			
$T_{a2\,5}$					16.6					
$T_{dp2\,5}$					6.3					
	1	2	1	2	1	2	1	2	1	2
I					.96	6.72	.98	6.82		
I_a					.81	5.63	.85	5.96		
I_d					.52	3.65	.56	3.91		
N					1.16	8.08	.80	5.57		
N_a					.91	6.32	.57	3.94		
N_b					.84	5.83	.52	3.63		
N_c					.70	4.85	.42	2.92		
N_d					.60	4.17	.30	2.65		
i					.10	.70	.07	.46		
i_a					.08	.54	.05	.33		
i_d					.05	.35	.02	.16		
T_g					25.5		14.7			
T_s					26.0		15.0			
Ψ										
ε										

REMARKS: MET SAT I-A, I-B Observations not made due to thunderstorm.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 6 May 76

RADIOSONDE: (0800 MDT) TTAA 56141 72HMS 99873 10870 00000 00112
///// ///// 85486 11668 17505 70091 03659 18518 50573 14564 20524
40738 27358 22026 30938 43356 21535 25058 539// 20538 20198 635//
22035 15375 597// 23539 10627 603// 24026 88200 635// 22035 77254
20539 40808

TTBB 5614/ 72HMS 00873 10870 11832 12867 22700 03659 33643 01060
44611 04750 55602 05716 66580 07920 77568 09357 88550 10362 99516
13959 11489 15566 22456 19163 33400 27358 44386 29146 55370 31757
66348 36137 77322 38956 88250 539// 99229 587// 11200 635// 22183
643// 33150 597// 44100 603// 51515 SUPER 64-61

TTCC 56142 72HMS 70849 607// 22018 50059 611// 26008 30386 519//
15507 20649 511// 23507 88999 77999

TTDD 5614/ 72HMS 11500 611// 22437 535// 33373 549// 44300 519//
55169 489//

ROCKETSONDE: (1000 MDT) RRXX 06160 72269 81010 11101 25551 12001
27551 06001 30543 30004 35536 25004 37526 27006 38519 33003 40521
16007 41515 20012 42509 18004 43506 02003 44503 06003 45501 10015
46504 12020 47504 14019 50502 12021 52504 09021 55508 12022 56510
12014 58515 11024 60521 09023 62527 11024 64534 09039 65536 10038
66*** 12020 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 12 May 76 TIME 0950 (Local) 1550 (GMT)

PARA-METER	MET SAT I-A		MET SAT I-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.7		21.7		24.0		21.2			
T_{dp}	5.9		5.9		4.5		11.7			
W_d, W_s	Calm		Calm		340	0.9	150	1.3		
P	26.36		26.36		25.60		25.62			
C	160 ⊕		160 ⊕		○		60 ⊕			
M	No		No		No		No			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.03	7.19	1.03	7.19	.95	6.62	.95	6.62		
I_a	.85	5.91	.85	5.91	.81	5.62	.81	5.62		
I_d	.53	3.72	.53	3.72	.51	3.53	.52	3.65		
N	1.25	8.73	1.25	8.73	1.22	8.53	1.22	8.53		
N_a	.95	6.62	.95	6.62	.95	6.64	.92	6.45		
N_b	.87	6.09	.87	6.09	.88	6.13	.86	6.01		
N_c	.73	5.08	.73	5.08	.72	5.03	.71	4.94		
N_d	.63	4.40	.63	4.40	.61	4.27	.62	4.34		
i	.46	3.22	.23	1.61	.10	.70	.04	.30		
i_a	.38	2.67	.21	1.44	.07	.51	.03	.19		
i_d	.27	1.88	.09	.64	.05	.36	.01	.08		
T_g	25.7		26.6		29.0					
T_s	23.7		25.0		30.5		16.4 #			
Ψ	15.8		16.1							
ε										

REMARKS: MET SAT II (Grass): 18.0°C
Radiant temperature of water surface

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 12 May 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	27.2		27.2		28.7		27.5			
T_{dp}	2.4		2.4		0.6		8.4			
W_d, W_s	320 4.0		320 4.0		340 4.9		090 0.9			
P	26.37		26.37		25.60		25.60			
C	60 ◐ 160 ◐		60 ◐ 160 ◐		60 ◐		60 ◐ 250 ◐			
M	No		No		No		No			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.47	10.23	1.47	10.23	1.39	9.66	1.51	10.54		
I_a	1.16	8.08	1.16	8.08	1.17	8.19	1.29	8.98		
I_d	.73	5.07	.73	5.07	.72	5.01	.83	5.80		
N	1.34	9.32	1.34	9.32	1.29	8.97	1.27	8.89		
N_a	.99	6.92	.99	6.92	.99	6.89	.95	6.64		
N_b	.91	6.38	.91	6.38	.91	6.32	.88	6.17		
N_c	.75	5.26	.75	5.26	.74	5.19	.73	5.06		
N_d	.66	4.58	.66	4.58	.63	4.42	.63	4.42		
i	.65	4.52	.52	3.63	.13	.89	.06	.45		
i_a	.57	3.97	.45	3.12	.11	.75	.05	.33		
i_d	.38	2.62	.26	1.80	.08	.54	.02	.16		
T_g	17.3		18.1		44.0		16.5			
T_s	20.0		21.5		37.0					
Ψ	15.8		16.1							
ε										

REMARKS: MET SAT II (Grass): 32.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 12 May 76 TIME 1224 (Local) 1824 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	27.2		27.2		29.5		27.9			
T_{dp}	2.4		2.4		0.0		8.0			
W_d, W_s	320 4.0		320 4.0		280 3.1		045 2.2			
P	26.37		26.37		25.58		25.58			
C	60 ⊕ 160 ⊕		60 ⊕ 160 ⊕		60 ⊕		60 ⊕ 250 ⊕			
M	No		NO		No		No			
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.50	10.49	1.50	10.49	1.42	9.87	1.52	10.61		
I_a	1.18	8.26	1.18	8.26	1.19	8.31	1.30	9.04		
I_d	.94	6.55	.94	6.55	.74	5.14	.83	5.80		
N	1.33	9.25	1.33	9.25	1.29	8.99	1.27	8.84		
N_a	.99	6.88	.99	6.88	.97	6.80	.95	6.59		
N_b	.91	6.31	.91	6.31	.90	6.29	.88	6.13		
N_c	.75	5.21	.75	5.21	.74	5.13	.72	5.00		
N_d	.65	4.55	.65	4.55	.62	4.34	.63	4.42		
i	.66	4.62	.53	3.71	.13	.91	.06	.45		
i_a	.58	4.06	.46	3.22	.11	.79	.05	.31		
i_d	.38	2.68	.27	1.89	.08	.55	.02	.16		
T_g	17.5		18.1		46.0		18.5 *			
T_s	20.0		21.5		39.0		16.5			
Ψ	15.8		16.1							
ε										

REMARKS: MET SAT II Surface Temperature (Grass Cover): 33.0°C

METSAT III: *Temperature of water at 4 mm depth

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 12 May 76

RADIOSONDE: (0800 MDT) TTAA 62141 72HMS 99874 20463 17006 00070
///// ///// 85505 19264 18010 70151 09070 32012 50582 13166 28525
40748 25760 30031 30950 41559 30031 25071 511// 29534 20215 555//
27529 15399 561// 29542 10649 671// 34023 88207 561// 29541 77182
29546 40725

TTBB 6214/ 72HMS 00874 20463 11350 19264 22830 20465 33638 09761
44630 99766 55437 21651 66400 25760 77384 28366 88317 37759 99300
41559 11250 551// 22232 513// 33207 561// 44189 569// 55184 545//
77128 625// 88100 651// 51515 SUPER 32-30

TTCC 62141 72HMS 70864 637// 35020 50072 591// 36009 30398 515//
11016 20663 483// 02516 10126 399// 12003 88999 77999

TTDD 6214/ 72HMS 11903 695// 22866 671// 33778 683// 44699 637//
55301 515// 66138 471// 77100 399// 88088 379//

ROCKETSONDE: (1110 MDT) RRXX 12171 72269 81010 11101 20*** *****
24*** 06005 25552 07006 26554 07007 30543 15003 32544 07002 35536
34001 38518 16001 40512 34001 45505 10004 47506 08011 49500 11016
50504 14024 51505 14019 52501 10015 53503 08019 55507 13025 60***
14026 65*** 07037 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 19 May 76 TIME 1030 (Local) 1630 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	19.7		19.7		20.4		19.7			
T_{dp}	10.2		10.2		9.5		11.2			
W_d, W_s	330 3.1		330 3.1		170 3.1		180 1.8			
P	26.35		26.35		25.58		25.56			
C	50 ◐ 100 ◑ E250 ⊕		50 ◐ 100 ◑ E250 ⊕		100 ◑ E250 ⊕		50 ◐ 250 ◑			
M	No		No		No		No			
$T_{a2\,5}$					22.5					
$T_{dp2\,5}$					11.9					
	1	2	1	2	1	2	1	2	1	2
I	1.18	8.24	1.18	8.24	1.13	7.85	1.13	7.90		
I_a	.93	6.52	.93	6.52	.96	6.72	.95	6.84		
I_d	.56	3.94	.56	3.94	.58	4.05	.62	4.29		
N	1.14	7.96	1.14	7.96	1.18	8.22	1.22	8.51		
N_a	.85	5.96	.85	5.96	.92	6.41	.91	6.33		
N_b	.79	5.48	.79	5.48	.84	5.89	.84	5.87		
N_c	.67	4.69	.67	4.69	.69	4.84	.69	4.79		
N_d	.56	3.90	.56	3.90	.59	4.13	.60	4.21		
i	.55	3.80	.64	4.43	.11	.77	.05	.35		
i_a	.48	3.37	.55	3.86	.09	.64	.04	.25		
i_d	.31	2.14	.34	2.38	.06	.45	.02	.11		
T_g	31.5		34.5		27.0		*16.3			
T_s	31.2		35.0		32.6		#			
Ψ	14.9		14.8							
ε										

REMARKS: MET SAT II (Grass): 15.0°C

* Water Temperature at 4 mm depth for all observations

\# Radiant temperature of water surface, measurements discontinued

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 19 May 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.4		23.4		22.5		22.5			
T_{dp}	9.7		9.7		10.0		13.1			
W_d, W_s	140 4.0		140 4.0		220 2.7		210 1.3			
P	25.96		25.96		25.57		25.55			
C	50 ⊕ E 250 ⊕		50 ⊕ E 250 ⊕		100 ⊕ E 250 ⊕		50 ⊕ 250 ⊕			
M	No		No		No		No			
$T_{a2.5}$					24.3					
$T_{dp2.5}$					12.0					
	1	2	1	2	1	2	1	2	1	2
I	1.47	10.22	1.47	10.22	1.46	10.29	1.42	9.93		
I_a	1.15	8.01	1.15	8.01	1.21	8.41	1.22	8.50		
I_d	.71	4.93	.71	4.93	.74	5.13	.77	5.38		
N	1.30	9.05	1.30	9.05	1.13	7.88	1.28	8.90		
N_a	.97	6.77	.97	6.77	.89	6.24	.94	6.58		
N_b	.90	6.20	.90	6.20	.80	5.61	.87	6.10		
N_c	.71	4.97	.71	4.97	.66	4.57	.71	4.97		
N_d	.63	4.42	.63	4.42	.56	3.92	.63	4.37		
i	.69	4.78	.78	5.42	.13	.88	.06	.41		
i_a	.60	4.21	.68	4.73	.11	.79	.04	.30		
i_d	.38	2.66	.41	2.89	.08	.55	.02	.13		
T_g	38.0		39.0		24.0		*18.4			
T_s	35.0		39.6		35.7					
Ψ	14.9		14.8							
ε										

REMARKS: MET SAT II (Grass): 18.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 19 May 76 TIME 1251 (Local) 1851 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	24.6		24.6		24.9		28.3			
T_{dp}	8.7		8.7		9.2		12.0			
W_d, W_s	160 4.0		160 4.0		150 1.8		180 0.4			
P	25.93		25.93		25.54		25.54			
C	E50 ⓘ 100 ⓘ 250 ⓘ		E50 ⓘ 100 ⓘ 250 ⓘ		100 ⓘ E250 ⓘ		50 ⓘ E250 ⓘ			
M	No		No		No		No			
$T_{a2.5}$	23.3		23.3		24.6					
$T_{dp2.5}$	9.6		9.6		8.9					
	1	2	1	2	1	2	1	2	1	2
I	1.54	10.71	1.54	10.71	1.48	10.30	1.54	10.70		
I_a	1.20	8.39	1.20	8.39	1.25	8.69	1.33	9.25		
I_d	.75	5.20	.75	5.20	.75	5.24	.82	5.69		
N	1.31	9.14	1.31	9.14	1.28	8.90	1.28	8.94		
N_a	.98	6.82	.98	6.82	.99	6.92	.95	6.59		
N_b	.90	6.26	.90	6.26	.90	6.29	.87	6.10		
N_c	.72	5.05	.72	5.05	.74	5.15	.71	4.98		
N_d	.64	4.48	.64	4.48	.62	4.29	.63	4.42		
i	.73	5.08	.82	5.72	.13	.91	.06	.42		
i_a	.64	4.46	.71	4.97	.11	.78	.05	.33		
i_d	.41	2.84	.44	3.05	.08	.55	.02	.15		
T_g	41.5		39.5		33.5		*18.0			
T_s	38.7		36.2		39.6					
Ψ	14.9		14.8							
ε										

REMARKS: MET SAT II (Grass): 21.0°C
* Water Temp.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 19 May 76

RADIOSONDE: (0800 MDT) TTAA 69141 72HMS 99874 17657 27004 00096
///// ///// 85503 15257 21005 70118 04026 10005 50575 13357 08513
40742 23561 13006 30946 401// 05502 25067 511// 05004 20209 597//
21010 15388 583// 19512 10641 645// 19008 88202 607// 21510 77500
08513 40504

TTBB 6914/ 72HMS 00874 17657 11865 14858 22850 15257 33771 09227
44645 01519 55632 02523 66616 03565 77595 02969 88558 06166 99538
08757 11500 13357 22486 15158 33479 14962 44430 19957 55400 23561
66373 27163 77303 39361 88300 401// 99250 510// 11226 567// 22202
607// 33131 575// 44112 633// 55100 645//

TTCC 69142 72HMS 70858 643// 18008 50066 567// 13011 30393 507//
10012 20660 469// 26504 10128 397// 88999 77999

TTDD 6914/ 72HMS 11898 665// 22553 609// 33500 567// 44383 553//
55300 507// 66163 459// 77113 379// 88100 397//

ROCKETSONDE: (1150 MDT) RRXX 19175 72269 81010 11101 25551 11003
30543 19003 35530 19006 36527 03002 37526 07004 39514 12009 40513
12015 44509 10007 45504 10013 46502 10021 48508 09028 49511 10033
50507 11037 51502 12038 55509 10020 56509 08017 57/// 08014 60///
09035 61/// 08034 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 26 May 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.9		21.9		25.2		Site Not			
T_{dp}	3.5		3.5		-0.6					
W_d, W_s	300 3.1		300 3.1		330 3.1		Operated			
P	25.99		25.99		25.58					
C	60 ⓘ		60 ⓘ		60 ⓘ		This Date			
M	No		No		No					
$T_{a2\ 5}$					24.9					
$T_{dp2\ 5}$					-0.3					
	1	2	1	2	1	2	1	2	1	2
I	1.50	10.43	1.50	10.43	1.49	10.36				
I_a	1.18	8.26	1.18	8.26	1.27	8.84				
I_d	.74	5.16	.74	5.16	.78	5.43				
N	1.33	9.27	1.33	9.27	1.33	9.30				
N_a	.99	6.87	.99	6.87	1.05	7.32				
N_b	.90	6.25	.90	6.25	.95	6.62				
N_c	.75	5.24	.75	5.24	.79	5.52				
N_d	.65	4.54	.65	4.54	.66	4.59				
i	.73	5.10	.77	5.38	.13	.92				
i_a	.65	4.50	.67	4.69	.12	.84				
i_d	.42	2.92	.42	2.96	.08	.59				
T_g	40.0		42.1		36.3					
T_s	37.8		41.3		44.0					
Ψ	19.7		19.8							
ε										

REMARKS: MET SAT II (Grass): 33.0°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 26 May 76

RADIOSONDE: (0800 MDT) TTAA 76141 72HMS 99872 18868 00000 00051
///// ///// 85482 18869 03008 70113 05865 33018 50576 14164 31036
40742 27362 33025 30941 445// 34522 25061 513// 35037 20205 559//
31536 15388 585// 24036 10641 611// 28525 88200 559// 31536 77166
30039 41323

TTBB 7614/ 72HMS 00872 18868 11850 18869 22565 08959 33500 14164
44400 27362 55336 38161 66266 513// 77226 517// 88200 559// 99150
585// 11143 563// 22111 633// 33100 611// 51515 10186 //758 11868

TTCC 76143 72HMS 70862 653// 32004 50070 581// 06006 30398 513//
10015 88999 77999

TTDD 7614/ 72HMS 11700 653// 22671 617// 33560 625// 44400 533//
55260 501// 51515 10186 //930 531//

ROCKETSONDE: (1245 MDT) RRXX 26185 72269 81010 11101 25549 19005
30536 19005 33536 17007 35529 15007 37525 04009 40519 11013 42513
08018 43511 08028 45503 09029 46001 11028 48002 13022 50504 11026
55511 10042 58520 10035 60523 10045 63532 09058 64/// 08054 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 27 May 76 TIME 1011 (Local) 1611 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.0		23.0		22.7		20.8			
T_{dp}	5.0		5.0		2.1		8.8			
W_d, W_s	130 3.1		130 3.1		210 0.9		Calm			
P	26.17		26.17		25.75		25.72			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.14	7.94	1.14	7.94	1.07	7.49	1.09	7.63		
I_a	.91	6.34	.91	6.34	.92	6.43	.90	6.30		
I_d	.56	3.92	.56	3.92	.56	3.92	.61	4.24		
N	1.28	8.91	1.28	8.91	1.28	8.90	1.21	8.41		
N_a	.95	6.64	.95	6.64	.98	6.81	.89	6.22		
N_b	.87	6 09	.87	6.09	.91	6.34	.83	5.76		
N_c	.73	5.10	.73	5.10	.74	5.17	.67	4.68		
N_d	.63	4.39	.63	4.39	.63	4.38	.59	4.10		
i	.54	3.79	.60	4.21	.11	.76	.06	.39		
i_a	.48	3.32	.53	3.67	.09	.63	.05	.31		
i_d	.30	2.12	.32	2.25	.06	.44	.03	.18		
T_g	29.0		31.5		33.8		*18.8			
T_s	30.8		31.5		38.0					
Ψ	19.2		19.7							
ε										

REMARKS: MET SAT II (Grass): 26.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 27 May 76 TIME 1237 (Local) 1837 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	26.0		26.0		27.2		25.5			
T_{dp}	4.4		4.4		7.6		8.5			
W_d, W_s	120 2.7		120 2.7		230 3.1		180 0.9			
P	26.14		26.14		25.72		25.67			
C	50 ◐		50 ◐		50 ◐		○			
M	No		No		No		No			
$T_{a2\,5}$	27.3		27.3							
$T_{dp2\,5}$	6.3		6.3							
	1	2	1	2	1	2	1	2	1	2
I	1.52	10.60	1.52	10.60	1.45	10.14	1.46	10.21		
I_a	1.19	8.31	1.19	8.31	1.23	8.55	1.25	8.73		
I_d	.74	5.16	.74	5.16	.74	5.17	.80	5.58		
N	1.33	9.29	1.33	9.29	1.34	9.32	1.30	9.03		
N_a	.98	6.86	.98	6.86	1.01	7.03	.95	6.59		
N_b	.90	6.28	.90	6.28	.94	6.53	.87	6.10		
N_c	.75	5.24	.75	5.24	.76	5.31	.71	4.97		
N_d	.65	4.51	.65	4.51	.65	4.50	.62	4.35		
i	.73	5.06	.80	5.59	.13	.90	.06	.41		
i_a	.64	4.46	.69	4.84	.12	.81	.05	.33		
i_d	.41	2.86	.43	2.98	.08	.56	.03	.18		
T_g	38.7		38.7		38.5		*19.8			
T_s	M		M		49.0					
Ψ	19.2		19.7							
ε										

REMARKS: MET SAT II (Grass): 33.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 27 May 76

RADIOSONDE: (0800 MDT) TTAA 77141 72HMS 99880 18059 24001 00128
///// ///// 85551 15061 34004 70179 08464 22506 50585 12164 30513
40752 24762 29021 30954 415// 29026 25076 509// 29532 20218 595//
28537 15397 651// 28538 10646 633// 30033 88150 651// 28538 77172
28543 40705

TTBB 7714/ 72HMS 00880 18059 11867 15466 22818 14662 33700 08464
44589 03159 55544 08557 66540 08362 77518 09965 88400 24762 99334
32762 11313 38961 22250 509// 33200 595// 44172 623// 55150 651//
66135 613// 77109 641// 88100 633//

TTCC 77141 72HMS 70867 593// 35006 50077 583// 06008 30407 497//
08513 20675 455// 27008 10145 373// 31508 88999 77999

TTDD 7714/ 72HMS 11700 593// 22568 621// 33468 541// 44100 373//
55048 339// 51515 10190 07394

ROCKETSONDE: (1125 MDT) RRXX 27173 72269 81010 11101 25/// 19002
30/// 20002 35/// 06003 38/// 05013 40/// 04009 45/// 09026 49///
10032 50/// 10026 55/// 11034 60/// 10031 61/// 09040 63/// 09048
65/// 09039 66/// 08034 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 2 June 1976 TIME 0955 (Local) 1555 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	24.8		24.8		25.8		21.0			
T_{dp}	2.4		2.4		5.9		7.2			
W_d, W_s	010 2.2		010 2.2		300 0.3		330 0.9			
P	26.07		26.07		25.66		25.63			
C	250 ①		250 ①		250- ①		250- ①			
M	No		No		No		No			
$T_{a2.5}$	27.0		27.0		23.1					
$T_{dp2.5}$	8.3		8.3		3.0					
	1	2	1	2	1	2	1	2	1	2
I	1.08	7.54	1.08	7.54	1.02	7.12	1.04	7.25		
I_a	.85	5.91	.85	5.91	.88	6.14	.91	6.38		
I_d	.52	3.63	.52	3.63	.54	3.78	.60	4.21		
N	1.12	7.81	1.12	7.81	1.23	8.58	1.19	8.33		
N_a	.82	5.72	.82	5.72	.95	6.62	.89	6.19		
N_b	.77	5.34	.77	5.34	.88	6.17	.82	5.74		
N_c	.64	4.48	.64	4.48	.72	5.05	.68	4.71		
N_d	.57	3.94	.57	3.94	.62	4.31	.59	4.13		
i	.51	3.56	.57	3.97	.11	.76	.06	.44		
i_a	.45	3.16	.50	3.48	.08	.57	.05	.34		
i_d	.30	2.07	.31	2.17	.06	.40	.03	.22		
T_g	28.7		32.0		36.0		*19.8			
T_s	31.0		32.0		40.0					
Ψ	19.4		19.6							
ε										

REMARKS:

METSAT 2 - (grass): 31.0°C

* Water Temperature.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%);

ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV & Noon Run

DATE OF OBSERVATION 2 June 1976 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	28.9		28.9		30.2		25.5			
T_{dp}	3.8		3.8		4.5		10.4			
W_d, W_s	CALM		CALM		190 3.1		210 4.0			
P	26.04		26.04		25.66		25.60			
C	50 ①		50 ①		50 ① 250 ①		○			
M	No		No		No		No			
$T_{a2\,5}$	28.8		28.8		27.5					
$T_{dp2\,5}$	9.4		9.4		4.3					
	1	2	1	2	1	2	1	2	1	2
I	1.49	10.36	1.49	10.36	1.42	9.89	1.40	9.75		
I_a	1.17	8.15	1.17	8.15	1.20	8.36	1.19	8.26		
I_d	.73	5.08	.73	5.08	.73	5.11	.75	5.24		
N	1.34	9.37	1.34	9.37	1.31	9.16	1.25	8.75		
N_a	.98	6.83	.98	6.83	1.00	6.99	.92	6.43		
N_b	.90	6.28	.90	6.28	.93	6.46	.85	5.95		
N_c	.76	5.30	.76	5.30	.75	5.26	.70	4.86		
N_d	.66	4.61	.66	4.61	.64	4.49	.61	4.27		
i	.73	5.12	.76	5.31	.13	.89	.06	.42		
i_a	.65	4.52	.66	4.60	.11	.78	.05	.34		
i_d	.41	2.88	.41	2.88	.08	.65	.02	.17		
T_g	41.8		42.1		49.0		*19.2			
T_s	41.5		45.0		41.5					
Ψ	19.4		19.6							
ε										

REMARKS: METSAT 2 (Grass Cover): 34.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 2 June 1976

RADIOSONDE: (0800 MDT) TTAA 52141 72HMS 99877 25070 02002 00096 /////
///// 85529 20467 16013 70186 12067 18517 50587 12159 27513 40755 25964
24014 30959 401// 27518 25081 493// 28524 20224 611// 27026 15401 643//
27537 10652 645// 32012 88189 631// 26031 77167 28039 40514

TTBB 5214/ 72HMS 00877 25070 11850 20467 22804 20066 33700 12067 44500
12159 55473 16159 66459 17566 77400 25964 88370 27367 99329 34166 11300
401// 22189 631// 33150 643// 44129 605// 55100 645// 51515 SUPER 32-30

TTCC 52145 72HMS 70870 633// 20004 50081 567// 08009 88999 77999

TTDD 5214/ 72HMS 11867 673// 22751 603// 33653 639// 44500 567// 55307
51515 10186 30408

ROCKETSONDE: (1000 MDT) RRXX 02160 72269 81010 11101 26550 08007 30543
10008 35532 10007 36524 07009 40517 09013 44503 10027 45505 10032 47503
09037 48506 10050 50502 09029 51503 10043 52504 11057 54508 10044 55511
10047 60524 09055 62530 09062 65/// 09069 66/// 11060 67/// 12048 68///
12038 69/// 13054 JJJ

ROCKETSONDE: (1112 MDT) RRXX 02171 72269 81010 11101 25550 08007 30541
10008 31536 12008 32539 13007 34531 13010 35533 11009 36524 07014 40515
12018 41510 12022 43503 09024 45505 09025 47503 10033 50502 11030 51503
11046 52505 12055 55514 10045 60/// 10058 65/// 09074 66/// 10062 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 9 June 1976 TIME 1035 (Local) 1635 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	M		M		29.0		24.0			
T_{dp}	M		M		11.9		12.1			
W_d, W_s	180	0.9	180	0.9	220	6.3	220	0.4		
P	M		M		25.38		25.45			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\ 5}$	27.3		27.3		26.8					
$T_{dp2\ 5}$	15.9		15.9		12.5					
	1	2	1	2	1	2	1	2	1	2
I	1.24	8.65	1.24	8.65	1.19	8.30	1.19	8.27		
I_a	.99	6.87	.99	6.87	1.02	7.08	1.02	7.11		
I_d	.60	4.17	.60	4.17	.61	4.26	.67	4.69		
N	1.24	8.67	1.24	8.67	1.22	8.53	1.21	8.44		
N_a	.94	6.57	94	6.57	.92	6.48	.88	6.17		
N_b	.87	6.05	.87	6.05	.87	6.04	.82	5.73		
N_c	.72	5.00	.72	5.00	.71	4.92	.67	4.67		
N_d	.63	4.36	.63	4.36	60	4.17	.59	4.10		
i	M	M	.28	1.97	.11	.75	.07	.48		
i_a	.46	3.17	M	M	.09	.63	.05	.37		
i_d	.28	1.94	M	M	.06	.45	.03	.19		
T_g	28.0		29.0		35.2		*19.8			
T_s	28.9		30.4		27.0					
Ψ	23.4		19.6							
ε										

REMARKS:

MET SAT II (Grass): 31.0°C

* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 9 June 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	M		M		30.0		26.5			
T_{dp}	M		M		11.3		13.3			
W_d, W_s	180	1.8	180	1.8	220	5.8	320	0.4		
P	M		M		25.39		25.47			
C	◯		◯		50 ◐		◯			
M	No		No		No		No			
$T_{a2\,5}$	27.5		27.5							
$T_{dp2\,5}$	13.8		13.8							
	1	2	1	2	1	2	1	2	1	2
I	1.47	10.25	1.47	10.25	1.39	9.68	1.38	9.63		
I_a	1.16	8.12	1.16	8.12	1.17	8.17	1.19	8.28		
I_d	.71	4.98	.71	4.98	.71	4.96	.76	5.32		
N	1.29	9.01	1.29	9.01	1.27	8.83	1.26	8.82		
N_a	.96	6.72	.96	6.72	.96	6.69	.92	6.39		
N_b	.89	6.22	.89	6.22	.90	6.25	.85	5.92		
N_c	.74	5.13	.74	5.13	.73	5.10	.69	4.80		
N_d	.64	4.49	.64	4.49	.62	4.31	.61	4.23		
i	.57	4.01	.70	4.88	.12	.83	.07	.51		
i_a	.57	3.99	M	M	.10	.71	.06	.39		
i_d	.32	2.24	.38	2.64	.07	.52	.02	.17		
T_g	27.8		34.0		37.0		*21.4			
T_s	30.8		36.5		31.0					
Ψ	23.4		19.6							
ε										

REMARKS:

MET SAT II (Grass): 29.0°C

* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

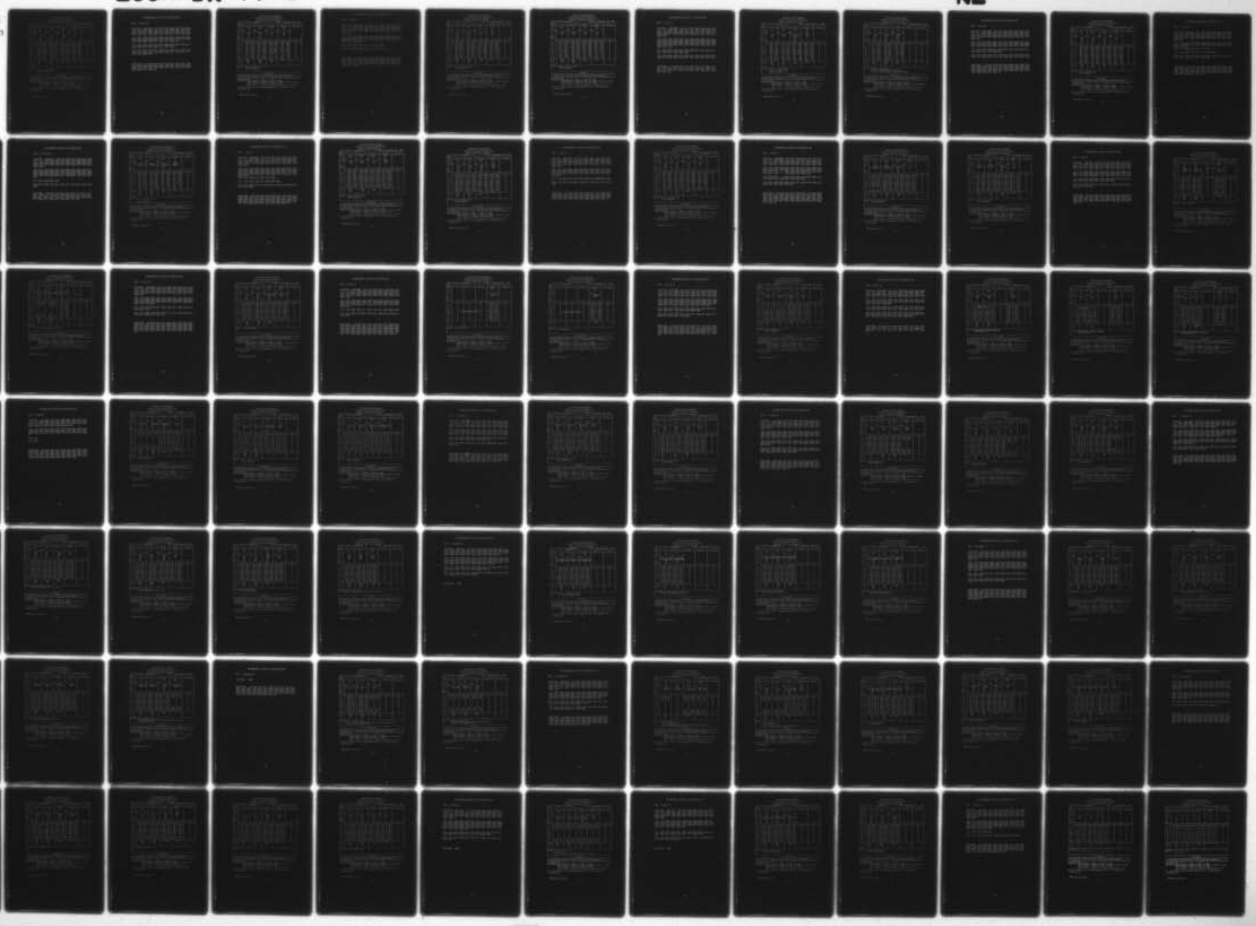
T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

AD-A039 462 ARMY ELECTRONICS COMMAND WHITE SANDS MISSILE RANGE N--ETC F/G 4/2
SATELLITE CALIBRATION DATA ANNUAL DATA REPORT - 1976.(U)
MAR 77 L E WILLIAMSON, L I MURILLO

UNCLASSIFIED ECOM-DR-77-1 NL

2 OF 4
AD
A039462



ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 9 TIME 1228 (Local) 1828 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	26.2		26.2		30.8		26.7			
T_{dp}	12.5		12.5		10.4		12.8			
W_d, W_s	180	4.0	180	4.0	220	5.4	320	0.9		
P	M		M		25.39		25.47			
C	50 ①		50 ①		50 ①		○			
M	No		No		No		No			
$T_{a2\,5}$	24.8		24.8		28.3					
$T_{dp2\,5}$	13.0		13.0		11.2					
	1	2	1	2	1	2	1	2	1	2
I	1.51	10.53	1.51	10.53	1.43	9.96	1.42	9.91		
I_a	1.19	8.27	1.19	8.27	1.21	8.45	1.23	8.55		
I_d	.73	5.10	.73	5.10	.73	5.10	.79	5.52		
N	1.31	9.13	1.31	9.13	1.28	8.90	1.28	8.94		
N_a	.96	6.68	.96	6.68	.97	6.75	.93	6.49		
N_b	.88	6.05	.88	6.05	.90	6.31	.86	6.00		
N_c	.67	4.65	.67	4.65	.73	5.11	.70	4.89		
N_d	.65	4.54	.65	4.54	.62	4.34	.62	4.29		
i	.58	4.06	.73	5.09	.12	.84	.07	.51		
i_a	.59	4.08	M	M	.11	.74	.06	.41		
i_d	.32	2.25	.39	2.73	.08	.53	.03	.19		
T_g	32.5		34.5		38.4		*21.4			
T_s	M		M		30.0					
Ψ	23.4		19.6							
ε										

REMARKS:

MET SAT II - 32.0°C (grass)

* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 9 June 1976

RADIOSONDE: (0800 MDT) TTAA 59141 72HMS 99876 21659 00000 00089
///// ///// 85524 20460 16505 70176 11060 20508 50588 10765 26914
40757 19766 26017 30965 31964 26547 25091 425// 27060 20239 529//
27064 15419 653// 25055 10662 721// 23020 88999 77215 27066 40409

TTBB 5914/ 72HMS 00876 21659 11866 19859 22830 21061 33780 16260
44728 14060 55562 03959 66550 04364 77500 10765 88400 19766 99300
31964 11269 38362 22167 615// 33150 653// 44100 721//

TTCC 59142 72HMS 70873 657// 05020 50080 583// 06011 30406 525//
09015 20670 481// 09015 88940 731// 24016 77999

TTDD 5914/ 72HMS 11940 731// 22880 701// 33770 721// 44700 657//
55610 659// 66540 589// 77200 481// 88180 487// 99160 423// 11110
417// 51515 10190 10136

ROCKETSONDE: (1130 MDT) RRXX 09173 72269 81010 11101 25551 10009
30541 12010 35529 09009 40516 07020 42508 09027 45508 10035 48505
10029 50504 09035 51502 10042 52505 10047 55511 10048 57518 10060
60524 09059 63/// 08051 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOON RUN

DATE OF OBSERVATION 16 June 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	29.0		29.0		29.8		26.4			
T_{dp}	4.6		4.6		4.1		6.6			
W_d, W_s	140 1.3		140 1.3		210 3.1		175 6.7			
P	25.95		25.95		25.36		25.41			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\,5}$	31.1		31.1							
$T_{dp2\,5}$	12.7		12.7							
	1	2	1	2	1	2	1	2	1	2
I	1.50	10.45	1.50	10.45	1.42	9.90	1.43	10.00		
I_a	1.19	8.27	1.19	8.27	1.20	8.40	1.22	8.48		
I_d	.74	5.16	.74	5.16	.74	5.13	.78	5.46		
N	1.33	9.27	1.33	9.27	1.31	9.15	1.35	9.41		
N_a	.98	6.85	.98	6.85	.98	6.87	1.01	7.01		
N_b	.90	6.29	.90	6.29	.91	6.38	.93	6.49		
N_c	.75	5.20	.75	5.20	.74	5.19	.76	5.32		
N_d	.65	4.53	.65	4.53	.63	4.40	.67	4.67		
i	.74	5.19	.76	5.33	M	M	.07	.48		
i_a	.61	4.28	.69	4.79	.11	.74	.05	.36		
i_d	.39	2.71	.42	2.96	.08	.57	.03	.18		
T_g	38.0		38.0		35.0		*20.8			
T_s	39.0		39.0		48.0					
Ψ	18.4		18.7							
ε										

REMARKS: MET SAT II(Grass): 35.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 16 June 76

RADIOSONDE: (0800 MDT) TTAA 66141 72HMS 99875 19265 00000 00114
///// ///// 85512 16867 18502 70163 11068 22511 50588 06169 27011
40758 19764 30016 30965 33964 27539 25091 425// 26061 20238 537//
26070 15418 ///// ///// 10660 713// 27526 88107 723// 27030 77214
26070 408//

TTBB 6614/ 72HMS 00875 19265 11865 17467 22850 16867 33816 19468
44739 14467 55592 00966 66576 01270 77500 06169 88400 19764 99341
26965 11284 36164 22178 593// 33173 595// 44/// ///// 55137 673//
66107 723// 77100 713//

TTCC 66147 72HMS 70875 645// 09002 88999 77999

TTDD 6614/ 72HMS 11930 717// 22810 657// 33700 645//

ROCKETSONDE: (1240 MDT) RRXX 16184 72269 81010 11101 25/// 07009
30/// 10009 35/// 09004 37/// 07016 39/// 09023 40/// 11019 41///
09015 42/// 08025 43/// 09032 45/// 10028 50/// 11037 53/// 09045
55/// 10037 57/// 11051 60/// 09046 61/// 08053 62/// 09061 63///
10064 65/// 10041 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 17 June 76 TIME 1017 (Local) 1617 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	28.2		28.2		28.8		23.5			
T_{dp}	5.0		5.0		5.8		9.0			
W_d, W_s	150 3.6		150 3.6		170 4.5		Calm			
P	25.89		25.89		25.28		25.34			
C	160 ⓘ		160 ⓘ		◯		◯			
M	No		No		No		No			
$T_{a2\ 5}$	30.2		30.2							
$T_{dp2\ 5}$	13.7		13.7							
	1	2	1	2	1	2	1	2	1	2
I	1.16	8.10	1.16	8.10	1.15	8.03	1.13	7.88		
I_a	.94	6.53	.94	6.53	.96	6.72	.98	6.81		
I_d	.58	4.01	.58	4.01	.59	4.13	.64	4.48		
N	1.23	8.58	1.23	8.58	1.32	9.18	1.33	9.25		
N_a	.93	6.52	.93	6.52	1.01	7.01	.99	6.89		
N_b	.86	6.02	.86	6.02	.94	6.55	.92	6.42		
N_c	.72	5.02	.72	5.02	.77	5.34	.76	5.27		
N_d	.63	4.39	.63	4.39	.66	4.57	.66	4.64		
i	.60	4.19	.62	4.30	.09	.63	.07	.46		
i_a	.49	3.45	.53	3.71	.08	.56	.05	.36		
i_d	.31	2.16	.33	2.27	.07	.46	.03	.21		
T_g	38.1		33.7		31.5		*21.5			
T_s	34.0		35.0		43.0					
Ψ	18.4		18.5							
ε										

REMARKS: MET SAT II (Grass): 34.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 17 JUNE 76 TIME 1214 (Local) 1814 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	32.0		32.0		33.0		29.0			
T_{dp}	0.7		0.7		4.1		11.8			
W_d, W_s	270 0.9		270 0.9		240 6.3		150 1.3			
P	25.91		25.91		25.28		25.35			
C	160 ①		160 ①		○		○			
M	No		No		No		No			
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.50	10.47	1.50	10.47	1.46	10.18	1.50	10.43		
I_a	1.19	8.29	1.19	8.29	1.23	8.55	1.25	8.76		
I_d	.74	5.19	.74	5.19	.76	5.32	.83	5.76		
N	1.34	9.33	1.34	9.33	1.38	9.62	1.37	9.56		
N_a	1.00	6.96	1.00	6.96	1.05	7.29	1.01	7.03		
N_b	.92	6.40	.92	6.40	.97	6.78	.94	6.55		
N_c	.77	5.34	.77	5.34	.79	5.50	.77	5.37		
N_d	.67	4.65	.67	4.65	.67	4.68	.68	4.70		
i	.76	5.27	.77	5.34	.11	.78	.07	.49		
i_a	.62	4.32	.64	4.43	.10	.71	.06	.40		
i_d	.40	2.77	.39	2.73	.08	.59	.03	.19		
T_g	44.5		44.0		36.5		*21.5			
T_s	47.0		47.0		55.0					
Ψ	18.4		18.5							
ϵ										

REMARKS: MET SAT II (Grass): 43.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ϵ = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 17 June 76

RADIOSONDE: (0600 MDT) TTAA 67121 72HMS 99870 20262 15005 00016
///// ///// 85463 25267 17005 70134 13271 28018 50585 07368 24515
40756 17565 24027 30964 32965 25035 25090 427// 26041 20237 531//
26546 15418 651// 25054 10659 707// 28020 88116 727// 26545 77131
25558 40618

TTBB 6712/ 72HMS 00870 20262 11856 25466 22804 20466 33766 20471
44533 05958 55524 05962 66477 09164 77469 10563 88453 12166 99448
11568 11400 17565 22384 19962 33366 23550 44350 25956 55343 26562
66287 35365 77219 495// 88128 713// 99116 727// 11100 707// 51515
SUPER 48-47 38-37

TTCC 67122 72HMS 70873 663// 24015 50088 573// 06512 30418 503//
08021 20686 445// 09021 88999 77999

TTDD 6712/ 72HMS 11850 707// 22780 651// 33700 663// 44650 609//
55600 623// 66470 543// 77200 445// 88120 437// 51515 10190 10151

ROCKETSONDE: (1115 MDT) RRXX 17172 72269 81010 11101 25/// 10011
30/// 11008 35/// 07004 37/// 09018 40/// 10020 45/// 10029 47///
10038 50/// 09040 55/// 09043 57/// 08051 58/// 08052 60/// 10038
64/// 10070 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 23 June 76 TIME 1003 (Local) 1603 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	30.1		30.1		29.9		24.5			
T_{dp}	5.3		5.3		8.2		9.7			
W_d, W_s	230 8.5		230 8.5		260 6.3		CALM			
P	25.85		25.85		25.28		25.32			
C	50 ⓘ		50 ⓘ		50 ⓘ 250 ⓘ		50 ⓘ			
M	No		No		No		No			
$T_{a2\ 5}$					28.7					
$T_{dp2\ 5}$					10.1					
	1	2	1	2	1	2	1	2	1	2
I	1.13	7.91	1.13	7.91	1.27	8.86	1.04	7.25		
I_a	.91	6.33	.91	6.33	1.07	7.49	.88	6.14		
I_d	.53	3.73	.53	3.73	.66	4.61	.57	3.98		
N	1.25	8.72	1.25	8.72	1.21	8.46	1.26	8.77		
N_a	.93	6.49	.93	6.49	.93	6.50	.93	6.48		
N_b	.85	5.95	.85	5.95	.87	6.04	.86	6.01		
N_c	.71	4.93	.71	4.93	.70	4.89	.71	4.92		
N_d	.61	4.23	.61	4.23	.60	4.15	.62	4.30		
i	.62	4.31	.62	4.31	.11	.74	.06	.44		
i_a	.51	3.56	.53	3.70	.10	.68	.05	.33		
i_d	.32	2.25	.32	2.24	.08	.56	.02	.13		
T_g	32.5		31.4		32.2		*23.0			
T_s	36.0		38.0		31.0					
Ψ	17.3		17.9							
ε										

REMARKS: MET SAT I - Blowing Gypsum
MET SAT II - (Grass): 36.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 23 June 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	31.5		31.5		31.8					
T_{dp}	4.2		4.2		6.1					
W_d, W_s	220	6.7	220	6.7	260	8.0				
P	25.83		25.83		25.26					
C	50 ⓘ		50 ⓘ		E50 ⓘ					
M	No		No		No					
$T_{a2\ 5}$	29.7		29.7		30.3					
$T_{dp2\ 5}$	14.9		14.9		2.1					
	1	2	1	2	1	2	1	2	1	2
I	1.51	10.53	1.51	10.53	1.47	10.23				
I_a	1.19	8.30	1.19	8.30	1.22	8.53				
I_d	.72	5.04	.72	5.04	.74	5.16				
N	1.32	9.18	1.32	9.18	1.33	9.30				
N_a	.93	6.50	.93	6.50	1.00	6.99				
N_b	.85	5.90	.85	5.90	.93	6.51				
N_c	.72	5.00	.72	5.00	.73	5.08				
N_d	.62	4.34	.62	4.34	.64	4.47				
i	.80	5.61	.79	5.53	.12	.84				
i_a	.66	4.63	.69	4.79	.11	.75				
i_d	.42	2.91	.42	2.92	.09	.62				
T_g	35.0		29.6		50.2					
T_s	40.0		40.0		42.0					
Ψ	17.3		17.9							
ε										

REMARKS: MET SAT I - Blowing Gypsum
MET SAT II -(Grass): 37.0°C - Blowing sand
MET SAT III - Observation not taken due to high winds

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 23 June 76

RADIOSONDE: (0800) MDT TTAA 73141 72HMS 99871 26267 18001 00016
///// ///// 85472 24264 25008 70135 10456 25528 50584 08367 23535
40754 18767 24036 30963 32165 24039 25089 421// 24046 20237 519//
25035 15419 603// 25532 10664 693// 24511 88116 711// 23521 77334
24552 41007

TTBB 7314/ 72HMS 00871 26267 11861 24063 22847 24665 33750 15861
44700 10456 55612 02257 66567 01368 77473 11963 88465 11764 99400
18767 11278 35565 22184 569// 33150 603// 44116 711// 55100 693//

TTCC 73142 72HMS 70880 617// 25515 50091 581// 07023 30420 505//
16006 20690 445// 07516 88999 77999

TTDD 7314/ 72HMS 11663 593// 22500 581// 33473 553// 44288 503//
55255 451// 66163 445// 77133 379// 88105 395// 51515 10190 10170

ROCKETSONDE: (1010 MDT) RRXX 23161 72269 81010 11101 25549 07011
30541 08013 34535 10017 35529 10016 38522 09028 39523 09026 40517
08027 43509 10024 45505 08037 47509 09032 50509 10052 55512 09050
58514 09058 60521 10061 61525 10071 62526 09080 63525 09072 65533
11036 66538 11030 67/// 09041 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 24 June 76 TIME 1243 (Local) 1843 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	29.7		29.7		29.9		26.0			
T_{dp}	-3.8		-3.8		-0.2		1.6			
W_d, W_s	310 4.0		310 4.0		050 5.8		020 1.8			
P	25.97		25.97		25.40		25.44			
C	50 ⓘ		50 ⓘ		☽		○			
M	No		No		No		No			
$T_{a2\,5}$	29.8		29.8		30.5					
$T_{dp2\,5}$	7.2		7.2		-3.0					
	1	2	1	2	1	2	1	2	1	2
I	1.56	10.90	1.56	10.90	1.50	10.44	1.53	10.70		
I_a	1.23	8.60	1.23	8.60	1.26	8.77	1.31	9.15		
I_d	.78	5.47	.78	5.47	.78	5.44	.85	5.91		
N	1.40	9.77	1.40	9.77	1.37	9.58	1.41	9.80		
N_a	1.02	7.13	1.02	7.13	1.04	7.24	1.03	7.21		
N_b	.96	6.68	.96	6.68	.96	6.73	.96	6.69		
N_c	.79	5.48	.79	5.48	.79	5.50	.80	5.55		
N_d	.68	4.77	.68	4.77	.67	4.70	.70	4.88		
i	.83	5.78	.90	6.26	.11	.78	.07	.48		
i_a	.68	4.74	.69	4.81	.10	.72	.05	.36		
i_d	.44	3.06	.44	3.09	.09	.62	.02	.15		
T_g	39.0		37.5		57.2		*21.4			
T_s	43.0		45.0		42.0					
Ψ	14.0		13.9							
ε										

REMARKS: MET SAT II (Grass): 36.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 24 June 76

RADIOSONDE: (0800 MDT) TTAA 74141 72HMS 99874 20676 36006 00065
///// ///// 85497 20437 36013 70133 11471 28508 50582 11170 27016
40749 22767 25527 30955 33966 24564 25080 427// 24565 20228 521//
24568 15411 601// 25050 10658 687// 25017 88116 671// 25532 77186
24569 40911

TTBB 7414/ 72HMS 00874 20676 11850 20473 22829 23075 33542 08159
44500 11170 55400 22767 66323 32566 77300 33966 88200 521// 99116
671// 11100 687//
TTBB 7414/ 72HMS 51515 10186 //533 08167

TTCC 74147 72HMS 70874 621// 15016 88999 77999

TTDD 7414/ 72HMS 11933 701// 22875 669// 33833 617// 44713 647//
55700 621// 66528 581// 51515 10190 50085

ROCKETSONDE: (1300 MDT) RRXX 24190 72269 81010 11101 25551 11012
30544 09018 35529 10019 40516 10027 42512 09024 45509 09035 46506
09038 47502 09041 50509 12037 51511 11048 55505 10061 56506 10057
58513 09065 60520 08054 61524 08052 62528 07060 63533 08063 64534
09051 65/// 10040 66/// 11043 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 30 June 1976 TIME 1207 (Local) 1807 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	31.9		31.9		30.4					
T_{dp}	6.0		6.0		9.8					
W_d, W_s	050 3.6		050 3.6		210 4.9					
P	26.01		26.01		25.45					
C	50 ◐ E250 ◍		50 ◐ E250 ◍		50 ◐ E250 ◍					
M	No		No		No					
$T_{a2\,5}$	32.0		32.0		28.7					
$T_{dp2\,5}$	11.7		11.7		11.8					
	1	2	1	2	1	2	1	2	1	2
I	1.50	10.45	1.50	10.45	.71	4.92				
I_a	1.18	8.21	1.18	8.21	.58	4.06				
I_d	.73	5.06	.73	5.06	.35	2.46				
N	.88	6.11	.88	6.11	.23	1.58				
N_a	.64	4.48	.64	4.48	.19	1.31				
N_b	.62	4.30	.62	4.30	.14	.96				
N_c	.47	3.30	.47	3.30	.09	.65				
N_d	.44	3.08	.44	3.08	.08	.56				
i	.78	5.45	.77	5.40	.05	.35				
i_a	.64	4.44	.66	4.58	.04	.31				
i_d	.40	2.80	.40	2.78	.04	.26				
T_g	40.5		43.3		42.3					
T_s	45.0		46.0		33.0					
Ψ	16.4		18.7							
ε										

REMARKS: MET SAT II(Grass): 36.0°C
MET SAT III Site Not Operated This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 30 June 1976 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	31.9		31.9		30.4					
T_{dp}	6.0		6.0		9.8					
W_d, W_s	050 3.6		050 3.6		210 4.9					
P	26.01		26.01		25.45					
C	50 ◐ E250 ◍		50 ◐ E250 ◍		50 ◐ E250 ◍					
M	No		No		No					
$T_{a2\,5}$	32.0		32.0		28.7					
$T_{dp2\,5}$	11.7		11.7		11.8					
	1	2	1	2	1	2	1	2	1	2
I	1.49	10.36	1.49	10.36	.82	5.74				
I_a	1.17	8.15	1.17	8.15	.68	4.73				
I_d	.72	5.00	.72	5.00	.43	3.02				
N	1.02	7.13	1.02	7.13	.47	3.28				
N_a	.72	5.03	.72	5.03	.30	2.10				
N_b	.70	4.87	.70	4.87	.29	2.01				
N_c	.55	3.80	.55	3.80	.22	1.56				
N_d	.51	3.54	.51	3.54	.21	1.45				
i	.77	5.39	.77	5.35	.06	.45				
i_a	.63	4.41	.66	4.58	.06	.43				
i_d	.40	2.79	.40	2.78	.05	.36				
T_g	40.5		43.3		42.3					
T_s	45.0		48.0		33.0					
Ψ	16.4		18.7							
ε										

REMARKS: MET SAT II(Grass): 36.0°C
MET SAT III Site Not Operated This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 30 June 1976

RADIOSONDE: (0800 MDT) TTAA 80141 72HMS 99877 21464 28004 00093
///// ///// 85533 22465 27005 70188 09457 16009 50588 06571 15006
40759 18364 23004 30967 34950 27515 25092 433// 29532 20238 545//
30037 15418 651// 30026 10659 747// 27515 88103 751// 27016 77215
29537 40504

TTBB 8014/ 72HMS 00877 21464 11850 22465 22799 19263 33649 03831
44632 02238 55606 00864 66537 05179 77529 04372 88428 13766 99400
18364 11366 24156 22326 30521 33316 31549 44290 37143 55281 38956
66674 38961 77200 545// 88150 651// 99122 689// 11103 751// 22100
747//

TTCC 8014/ 72HMS 88999 77999

TTDD 80141 72HMS 11980 753// 22854 741// 33773 647// 51515 10190
70873

ROCKETSONDE: (1155 MDT) RRXX 30180 72269 81010 11101 25/// 10011
30/// 12016 35/// 10020 40/// 09018 42/// 09035 45/// 10043 50///
09041 52/// 10049 53/// 11053 55/// 10043 57/// 08045 60/// 08074
61/// 09076 62/// 10065 63*** 11055 65*** 11077 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 1 July 76 TIME 0943 (Local) 1543 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	27.2		27.2		27.2		24.0			
T_{dp}	9.7		9.7		11.1		M			
W_d, W_s	110 1.8		110 1.8		160 2.7		CALM			
P	25.97		25.97		25.40		25.46			
C	50 ⊙ 160 ⊙ E220 ◐		50 ⊙ 160 ⊙ E220 ◐		140 ⊙ E250 ◐		50 ⊙ E150 ⊕			
M	Yes		Yes		Yes		Yes			
$T_{a2\,5}$					26.6					
$T_{dp2\,5}$					9.7					
	1	2	1	2	1	2	1	2	1	2
I	1.18	8.24	1.18	8.24	.67	4.64	.86	6.02		
I_a	.95	6.66	.95	6.66	.59	4.11	1.15	8.00		
I_d	.59	4.09	.59	4.09	.31	2.16	.69	4.81		
N	1.11	7.73	1.11	7.73	.56	3.89	.37	2.61		
N_a	.85	5.91	.85	5.91	.51	3.54	.43	2.97		
N_b	.75	5.26	.75	5.26	.43	2.98	.48	3.35		
N_c	.65	4.51	.65	4.51	.30	2.12	.55	3.81		
N_d	.55	3.87	.55	3.87	.18	1.26	.53	3.70		
i	.20	1.42	.61	4.22	.05	.35	.08	.57		
i_a	.15	1.07	.52	3.65	.03	.22	.08	.56		
i_d	.09	.61	.31	2.19	.03	.18	.03	.21		
T_g	33.4		35.7		37.6		*23.5			
T_s	31.5		30.0		34.0					
Ψ	37.0		44.6							
ε										

REMARKS:

MET SAT II (Grass): 31.00C

* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 1 July 76

RADIOSONDE: (0800 MDT) TTAA 51141 72HMS 99875 27065 18002 00066
///// ///// 85513 23063 17008 70174 11658 23007 50588 08304 26009
40759 17956 24506 30967 33163 09015 25092 435// 29026 20240 511//
29048 15422 631// 30030 10663 731// 27011 88111 735// 28017 77208
29550 41807

TTBB 5114/ 72HMS 00875 27065 11865 24464 22700 11658 33670 07856
44642 06057 55584 00356 66576 00766 77558 01968 88511 07701 99487
09706 11472 08948 22400 17956 33386 20156 44353 24961 55300 33163
66258 42756 77255 43356 88111 735// 99106 703// 11100 731// 51515
SUPER 30-28
TTBB 5114/ 72HMS 51515 10186 //278 37960

TTCC 51147 72HMS 70877 627// 07006 88999 77999

TTDD 5114/ 72HMS 11865 715// 22803 649// 33755 659// 44518 565//
51515 10190 50082

ROCKETSONDE: (0945 MDT) RRXX 01155 72269 81010 11101 25550 09014
28548 10009 30545 09015 35532 09026 36526 10022 37524 11018 40522
08020 42510 08033 43507 08040 45505 10041 47505 12037 48508 11036
50507 09054 52512 09061 53510 10068 55506 09061 56505 09061 58514
11051 60524 08056 61529 09051 64/// 08078 62534 08057 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 7 July 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	28.2		28.2		28.9		28.0			
T_{dp}	10.9		10.9		12.2		M			
W_d, W_s	140 4.5		140 4.5		110 2.2		CALM			
P	26.08		26.08		25.49		25.52			
C	90 ⊕		90 ⊕		90 ⊕		50 ⊕			
M	No		No		No		No			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.46	10.16	1.46	10.16	1.41	9.80	1.48	10.29		
I_a	1.15	8.03	1.15	8.03	1.17	8.16	1.26	8.81		
I_d	0.70	4.86	0.70	4.86	0.71	4.97	0.81	5.66		
N	1.24	8.66	1.24	8.66	1.26	8.76	1.29	8.97		
N_a	0.92	6.44	0.92	6.44	0.94	6.59	0.93	6.48		
N_b	0.85	5.92	0.85	5.92	0.88	6.17	0.87	6.06		
N_c	0.71	4.96	0.71	4.96	0.72	5.03	0.71	4.96		
N_d	0.61	4.23	0.61	4.23	0.61	4.24	0.63	4.37		
i	0.75	5.25	0.74	5.19	0.10	0.70	0.06	0.45		
i_a	0.61	4.28	0.64	4.47	0.09	0.64	0.04	0.29		
i_d	0.38	2.66	0.40	2.79	0.08	0.55	0.02	0.15		
T_g	37.0		41.0		42.0		25.0 *			
T_s	37.0		37.0		52.0					
Ψ	12.7		12.9							
ε										

REMARKS: MET SAT II (Grass) 40.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 7 July 76 TIME 1236 (Local) 1836 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	29.2		29.2		30.9		27.5			
T_{dp}	8.4		8.4		12.4		M			
W_d, W_s	170 2.2		170 2.2		130 2.2		CALM			
P	26.04		26.04		25.49		25.52			
C	90 ⓘ		90 ⓘ		90 ⓘ		50 ⓘ			
M	No		No		No		No			
$T_{a2\,5}$	31.0		31.0		30.5					
$T_{dp2\,5}$	12.2		12.2		11.0					
	1	2	1	2	1	2	1	2	1	2
I	1.51	10.50	1.51	10.50	1.55	10.84	1.47	10.22		
I_a	1.20	8.36	1.20	8.36	1.30	9.07	1.25	8.69		
I_d	0.73	5.07	0.73	5.07	0.79	5.54	0.79	5.48		
N	1.24	8.65	1.24	8.65	1.26	8.78	1.27	8.87		
N_a	0.93	6.45	0.93	6.45	0.95	6.61	0.92	6.46		
N_b	0.85	5.92	0.85	5.92	0.89	6.20	0.86	6.01		
N_c	0.71	4.93	0.71	4.93	0.72	5.05	0.71	4.97		
N_d	0.61	4.27	0.61	4.27	0.61	4.26	0.62	4.34		
i	0.78	5.97	0.78	5.42	0.12	.82	0.07	0.47		
i_a	0.64	4.45	0.66	4.63	0.11	.75	0.05	0.34		
i_d	0.40	2.78	0.42	2.92	0.09	.63	0.02	0.17		
T_g	41.0		44.0		46.4		24.9 *			
T_s	42.0		42.0		53.0					
Ψ	12.9		12.9							
ε										

REMARKS: MET SAT II (Grass): 41.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 7 July 76

RADIOSONDE: (0800 MDT) TTAA 57141 72HMS 99879 21858 36005 00126
///// ///// 85545 19457 34506 70187 08650 06017 50589 08362 06510
40758 19361 06521 30966 33960 05018 25091 449// 07513 20236 559//
05518 15415 675// 00522 10658 645// 02517 88144 689// 00523 77362
06528 40715

TTBB 5714/ 72HMS 00879 21858 11869 20458 22801 15456 33753 14457
44641 02018 55630 02062 66624 03463 77400 19361 88320 30160 99265
41159 11200 559// 22144 689// 33130 695// 44121 675// 55114 689//
66100 645//

TTCC 57145 72HMS 70876 623// 08014 50086 563// 08020 88999 77999

TTDD 5714/ 72HMS 11760 665// 22700 623// 33334 513// 51515 10190
30415

ROCKETSONDE: (1230 MDT) RRXX 07183 72269 81010 11101 25550 09010
30542 10015 32536 10011 35530 11023 38521 09031 40516 09027 44506
11043 45508 11047 50505 09052 52505 10059 53505 10065 55505 11056
56509 11050 58517 10056 60525 09046 64542 08074 65/// 08082 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 8 July 76 TIME 1023 (Local) 1623 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	26.9		26.9		25.8		25.0			
T_{dp}	9.0		9.0		8.3		10.4			
W_d, W_s	160	4.5	160	4.5	200	3.6	180	0.4		
P	26.06		26.06		25.50		25.56			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\,5}$	24.8		24.8		26.7					
$T_{dp2\,5}$	12.2		12.2		8.3					
	1	2	1	2	1	2	1	2	1	2
I	1.18	8.26	1.18	8.26	1.13	7.85	1.08	7.50		
I_a	.95	6.64	.95	6.64	.94	6.55	.92	6.44		
I_d	.58	4.03	.58	4.03	.57	3.98	.59	4.10		
N	1.27	8.82	1.27	8.82	1.26	8.76	1.21	8.41		
N_a	.94	6.54	.94	6.54	.95	6.64	.89	6.19		
N_b	.86	6.00	.86	6.00	.89	6.20	.83	5.79		
N_c	.72	5.02	.72	5.02	.72	5.05	.68	4.73		
N_d	.62	4.31	.62	4.31	.62	4.31	.60	4.16		
i	.64	4.44	.62	4.32	.09	.64	.06	.39		
i_a	.52	3.64	.54	3.77	.08	.57	.04	.30		
i_d	.32	2.26	.33	2.33	.07	.47	.02	.12		
T_g	31.0		34.0		33.0		*23.7			
T_s	34.0		34.0		46.0					
Ψ	11.6		13.5							
ε										

REMARKS: MET SAT II (Grass): 33.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 8 July 76

RADIOSONDE: (0800 MDT) TTAA 58141 72HMS 99878 21261 00000 00103
///// ///// 85543 23261 22507 70203 12659 04513 50594 04368 03012
40766 15767 05517 30975 31864 07025 25101 401// 04507 20249 499//
36014 15432 635// 01025 10677 639// 04019 88129 683// 02028 77999

TTBB 5814/ 72HMS 00878 21261 11850 23262 22797 18660 33664 10658
44634 07456 55594 03668 66500 04368 77487 04968 88400 15767 99333
27964 11270 37163 22216 497// 33204 485// 44200 499// 55150 635//
66129 683// 77120 685// 88100 639// 51515 SUPER 20-20

TTCC 58142 72HMS 70895 625// 08014 50107 539// 08522 30440 477//
10524 20709 427// 08025 88999 77145 09035 406//

TTDD 5814/ 72HMS 11882 655// 22700 624// 33550 547// 44300 477//
55232 485// 66184 399// 77138 431//

ROCKETSONDE: (1020 MDT) RRXX 08162 72269 81010 11101 25550 09015
28549 08016 29547 09017 30539 10021 32535 11020 33535 09018 34537
08023 35531 09026 37524 10029 40524 09026 41517 08032 42512 09040
45506 09044 47505 10053 50507 10053 52512 10048 53511 09043 55515
09056 56517 08066 58521 07067 60525 08083 61528 08090 63533 08075
64/// 07072 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 14 July 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	29.2		29.2		29.9		25.4			
T_{dp}	19.9		19.9		13.4		15.0			
W_d, W_s	CALM		CALM		280	2.7	045	1.8		
P	25.95		25.95		25.39		25.45			
C	70 ⊕ 90 ⊕ 140 ⊕		70 ⊕ 90 ⊕ 140 ⊕		70 ⊕ 120 ⊕		○			
M	No		No		No		No			
$T_{a2\,5}$					30.5					
$T_{dp2\,5}$					11.6					
	1	2	1	2	1	2	1	2	1	2
I	1.44	10.02	1.44	10.02	1.41	9.84	1.34	9.31		
I_a	1.14	7.97	1.14	7.97	1.18	8.21	1.13	7.89		
I_d	0.71	4.95	0.71	4.95	0.71	4.97	0.71	4.93		
N	1.28	8.90	1.28	8.90	1.26	8.81	1.23	8.55		
N_a	0.94	6.58	0.94	6.58	0.96	6.71	0.88	6.17		
N_b	0.87	6.07	0.87	6.07	0.89	6.20	0.82	5.73		
N_c	0.72	5.01	0.72	5.01	0.72	5.01	0.67	4.65		
N_d	0.62	4.35	0.62	4.35	0.61	4.22	0.58	4.06		
i			0.61	4.26	0.10	0.72	0.06	0.40		
i_a	0.51	3.52	0.55	3.87	0.09	0.64	0.04	0.28		
i_d	0.32	2.25	0.33	2.32	0.08	0.56	0.02	0.13		
T_g	33.0		33.0		45.0		23.8*			
T_s	39.0		36.0		50.0					
Ψ	12.6		15.1							
ε										

REMARKS: MET SAT II(Grass): 40°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 14 July 76 TIME 1010 (Local) 1610 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	24.5		24.5		25.7		23.2			
T_{dp}	17.1		17.1		14.2		15.9			
W_d, W_s	CALM		CALM		180 1.8		360 0.4			
P	25.96		25.96		25.41		25.47			
C	70 (1) 140 (1)		70 (1) 140 (1)		50 (1) 120 (1)		○			
M	No		No		No		No			
$T_{a2\,5}$					26.6					
$T_{dp2\,5}$					14.1					
	1	2	1	2	1	2	1	2	1	2
I	1.10	7.68	1.10	7.68	1.05	7.30	1.03	7.17		
I_a	0.89	6.19	0.89	6.19	0.87	6.09	0.88	6.14		
I_d	0.54	3.79	0.54	3.79	0.53	3.66	0.56	3.94		
N	1.71	11.89	1.71	11.89	1.19	8.27	1.17	8.15		
N_a	1.41	9.86	1.41	9.86	0.91	6.38	0.85	5.95		
N_b	1.35	9.43	1.35	9.43	0.85	5.92	0.80	5.56		
N_c	1.20	8.34	1.20	8.34	0.69	4.78	0.65	4.53		
N_d	1.10	7.68	1.10	7.68	0.58	4.05	0.57	3.96		
i	0.32	2.23	0.46	3.24	0.08	0.56	0.06	0.39		
i_a	0.38	2.62	0.42	2.93	0.07	0.49	0.04	0.27		
i_d	0.24	1.70	0.25	1.76	0.06	0.42	0.02	0.16		
T_g	30.0		28.0		33.0		23.2*			
T_s	28.0		26.2		33.0					
Ψ	12.6		15.1							
ε										

REMARKS: MET SAT II (Grass): 29°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 14 July 76

RADIOSONDE: (0600 MDT) TTAA 64121 72HMS 99874 18230 00000 00059
///// ///// 85494 20450 36002 70150 10656 01078 50587 07107 32566
40758 15943 34517 30968 31556 32012 25095 417// 25011 20242 539//
29514 15421 573// 34517 10661 713// 07511 88130 733// 34011 77999

TTBB 6712/ 72JMS 00874 18230 11850 20450 22700 10656 33698 01601
44553 01123 55484 08501 66466 08544 77458 09164 88400 15943 99348
23931 11258 40160 22159 655// 33180 733// 44123 711// 55100 713//

TTCC 64122 72HMS 70876 655// 08010 50084 575// 10018 30412 505//
10018 20679 481// 09027 88999 77163 09029 401//

TTDD 6712/ 72HMS 11793 653// 22633 647// 33500 575// 44228 473//
55683 487// 66158 441//

ROCKETSONDE: (1010 MDT) RRXX 14161 72269 81010 13101 25549 09011
30543 09019 35528 10019 36531 10022 38527 08026 40514 10034 41510
10038 45509 08033 46511 08037 47504 09040 48506 09044 50508 09062
51505 09061 53511 09062 55512 10054 56517 11041 57524 11043 59***
11058 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 15 July 76 TIME 1223 (Local) 1823 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	25.6		25.6		Site		28.7			
T_{dp}	16.6		16.6		Not		14.8			
W_d, W_s	CALM		CALM		Operated		030	1.3		
P	26.04		26.04		This		25.53			
C	50 ⓘ 180-ⓘ		50 ⓘ 180-ⓘ		Date		40 ⓘ 50 ⓘ			
M	No		No				Yes			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.10	7.68	1.10	7.68			1.43	9.94		
I_a	0.86	6.03	0.86	6.03			1.20	8.39		
I_d	0.53	3.70	0.53	3.70			0.74	5.15		
N	0.54	3.74	0.54	3.74			1.31	9.12		
N_a	0.40	2.81	0.40	2.81			0.95	6.63		
N_b	0.38	2.62	0.38	2.62			0.88	6.15		
N_c	0.31	2.18	0.31	2.18			0.71	4.97		
N_d	0.26	1.83	0.26	1.83			0.62	4.29		
i			0.47	3.30			0.07	0.47		
i_a	0.37	2.59	0.40	2.82			0.05	0.36		
i_d	0.24	1.67	0.19	1.29			0.02	0.15		
T_g	30.0		29.0				24.0*			
T_s	33.0		30.0							
Ψ	12.5		12.8							
ε										

REMARKS: * Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 15 July 76

RADIOSONDE: (0700 MDT) TTAA 65131 72HMS 99877 17606 00000 00102
///// ///// 85523 19419 27002 70172 09822 03007 50589 05340 02510
40761 15163 02517 30972 30946 01009 25098 41349 28510 20246 545//
26520 15424 659// 35017 10666 719// 08517 88133 707// 03014 77999

TTBB 6513/ 72HMS 00877 17606 11863 19411 22850 19419 33800 16441
44777 14209 55741 11401 66730 11823 77700 09822 88646 05012 99605
02408 11500 05340 22476 06358 33443 09558 44427 11563 55400 15163
66354 21762 77326 26538 88228 47550 99200 545// 11161 649// 22133
707// 33100 719//

TTCC 65133 72HMS 70879 645// 07514 50089 557// 09018 30418 525//
09028 88999 77280 09029 40603

TTDD 6513/ 72HMS 11848 671// 22753 701// 33700 645// 44433 527//
55300 525// 66263 471// 77208 453// 51515 10190 20686

ROCKETSONDE: (1220 MDT) RRXX 15182 72269 81010 13101 25550 09015
30541 09016 35533 11018 36535 10022 37535 09027 38533 08030 39532
08031 40515 09036 42516 10035 45508 10045 48506 11043 50510 09043
52514 09051 54517 09057 55514 10058 56516 10055 58524 10051 59528
08054 50531 08071 51532 08082 63*** 09070 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 21 July 76 TIME 1148 (Local) 1748 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.9		23.9		22.3					
T_{dp}	16.2		16.2		15.8		Site			
W_d, W_s	220 1.8		220 1.8		CALM					
P	26.10		26.10		25.48		Not			
C	40 ⊕ 50 ⊕ E 110 ⊕		40 ⊕ 50 ⊕ E 110 ⊕		E 50 ⊕ 120 ⊕					
M	No		No		Yes		Operated			
$T_{a2\,5}$					24.0					
$T_{dp2\,5}$					14.3					
	1	2	1	2	1	2	1	2	1	2
I	1.15	8.00	1.15	8.00	.29	2.05				
I_a	.66	4.62	.66	4.62	.24	1.65				
I_d	.70	4.87	.70	4.87	.13	.91				
N	.62	4.31	.62	4.31	.001	.02				
N_a	.23	1.64	.23	1.64	.001	.02				
N_b	.19	1.34	.19	1.34	.001	.02				
N_c	.10	.71	.10	.71	.001	.02				
N_d	.05	.33	.05	.33	.002	.02				
i	.72	5.05	1.05	7.32	.02	.15				
i_a	.63	4.36	.93	6.48	.02	.14				
i_d	.42	2.93	.56	3.93	.02	.12				
T_g	35.0		39.0		26.0					
T_s	39.0		44.0							
Ψ	20.6		19.4							
ε										

REMARKS:

MET SAT II: Raining lightly

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 21 July 76 TIME 1200 (Local) 1800 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.9		23.9		23.1					
T_{dp}	16.2		16.2		14.2		Site			
W_d, W_s	220 26.10 1.8		220 26.10 1.8		040 25.48 0.4		Not			
P										
C	40 ◐ 50 ◑ E 110 ◍		40 ◐ 50 ◑ E 110 ◍		E 50 ◍ 120 ⊕					
M	No		No		Yes		Operated			
$T_{a2\,5}$	27.8		27.8		24.8					
$T_{dp2\,5}$	18.9		18.9		14.3					
	1	2	1	2	1	2	1	2	1	2
I	1.33	9.30	1.33	9.30	.41	2.88				
I_a	.72	5.05	.72	5.05	.33	2.33				
I_d	.64	4.44	.64	4.44	.19	1.34				
N					.01	.04				
N_a					.01	.04				
N_b					.01	.04				
N_c					.01	.04				
N_d					.003	.02				
i	.64	1.97	.54	3.77	.03	.22				
i_a	.48	3.33	.48	3.33	.03	.21				
i_d	.28	4.47	.29	2.00	.02	.17				
T_g	35.0		39.0		27.5					
T_s	39.0		44.0							
Ψ	20.6		19.4							
ε										

REMARKS:

MET SAT II: Raining light to moderate

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 21 July 76

RADIOSONDE: (0900 MDT) TTAA 71151 72HMS 99879 21050 00000 00124
///// ///// 85574 19057 04006 70180 09456 13017 50589 07347 04525
40760 16969 07033 30969 31765 06524 25096 421// 03035 20243 533//
07050 15425 603// 03010 10668 681// 09511 88117 729// 09017 77198
07050 43527

TTBB 7115/ 72HMS 00879 21050 11834 19058 22729 11444 33664 07059
44556 02930 55482 09156 66470 10760 77456 13362 88437 13562 99429
13556 11400 16969 22263 38962 33215 505// 44167 595// 55150 603//
66117 729// 77100 681//

TTCC 71153 72HMS 70885 635// 08028 50096 551// 09522 30424 519//
08024 88999 77999

TTDD 7115/ 72HMS 11840 669// 22740 621// 33700 635// 44630 585//
55500 551// 66340 549// 77260 481//

ROCKETSONDE: (1145 MDT) RRXX 21175 72269 81010 13101 25551 09015
30542 09017 33538 09020 35530 09019 36533 09023 37526 09024 40518
09030 41513 09031 42507 09029 45507 08030 47505 10032 48508 09035
50510 09047 52509 09051 53510 10051 55518 10063 59524 09051 60525
09057 61529 09067 62535 09072 64531 10073 65*** 12066 66*** 13050
JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 22 July 76 TIME 0951 (Local) 1551 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.9		21.9		24.9		23.7			
T_{dp}	14.3		14.3		14.2		14.8			
W_d; W_s	310 2.2		310 2.2		240 1.8		360 2.2			
P	26.20		26.20		25.48		25.57			
C	50 ①		50 ①		70 ①160 ①250-◐		160①250 ◐			
M	No		No		No		No			
$T_{a2\ 5}$	24.6		24.6		24.5					
$T_{dp2\ 5}$	16.0		16.0		13.5					
	1	2	1	2	1	2	1	2	1	2
I	1.00	6.99	1.00	6.99	0.93	6.48	1.11	7.71		
I_a	0.72	5.05	0.72	5.05	0.78	5.40	0.95	6.65		
I_d	0.58	4.03	0.58	4.03	0.47	3.27	0.60	4.20		
N	1.22	8.50	1.22	8.50	1.18	8.23	1.14	7.98		
N_a	0.91	6.34	0.91	6.34	0.91	6.32	0.85	5.95		
N_b	0.84	5.83	0.84	5.83	0.85	5.90	0.80	5.55		
N_c	0.69	4.82	0.69	4.82	0.69	4.82	0.64	4.48		
N_d	0.61	4.25	0.61	4.25	0.58	4.06	0.56	3.93		
i	0.46	3.19	0.50	3.47	0.07	0.47	0.07	0.48		
i_a	0.38	2.67	0.45	3.10	0.06	0.43	0.05	0.34		
i_d	0.24	1.65	0.27	1.89	0.05	0.36	0.03	0.18		
T_g	29.0		28.0		48.0		23*			
T_s	35.0		34.0		39.6					
Ψ	19.5		18.3							
ε										

REMARKS: * Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 22 July 76

RADIOSONDE: (0800 MDT) TTAA 72141 72HMS 99878 17648 33002 00126
///// ///// 85540 19459 28003 70186 08657 06003 50589 05372 05515
40761 17165 06517 30970 33565 05033 25095 431// 06044 20243 531//
05547 15425 601// 06526 10692 663// 07519 88119 685// 06022 77218
95547 40403

TTBB 7214/ 72HMS 00878 17648 11850 19459 22767 15058 33168 06650
44649 05461 55579 00371 66531 04571 77486 06573 88477 06171 99400
17155 11292 35165 22200 531// 33164 597// 44141 609// 55119 685//
66600 663//

TTCC 72145 72HMS 70891 611// 09017 50101 575// 08021 88999 77999

TTDD 7214/ 72HMS 11950 681// 22810 621// 33660 625// 44440 567//
55430 547//

ROCKETSONDE: (1005 MDT) RRXX 22161 72269 81010 13101 25553 09016
28542 10017 30544 09015 34533 11015 35534 10017 36528 08024 38522
10018 40521 10024 41519 09022 43522 09037 45514 10036 46510 09034
47507 08038 49505 10056 50504 09056 51503 09057 52502 09061 55515
11060 56520 11063 58525 10046 59528 08040 60531 09046 61531 10063
62531 10071 65544 08070 66547 08077 67*** 08081 68*** 09061 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 28 July 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a							27.5			
T_{dp}							14.6			
W_d, W_s							180	0.9		
P							25.56			
C							50⊕ E 140⊕			
M							No			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I							1.43	9.99		
I_a							1.21	8.43		
I_d							0.76	5.29		
N							1.27	8.87		
N_a							0.94	6.57		
N_b			NO OBSERVATIONS-BAD WEATHER				0.87	6.07		
N_c							0.70	4.90		
N_d							0.62	4.29		
i							0.05	0.38		
i_a							0.04	0.27		
i_d							0.02	0.12		
T_g							23.1*			
T_s										
Ψ										
ε										

REMARKS: * Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 28 July 76 TIME 1218 (Local) 1818 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a							26.6			
T_{dp}							15.3			
W_d, W_s							160	2.7		
P							25.56			
C							50 Ⓘ E140 Ⓘ			
M							No			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I							1.42	9.91		
I_a							1.27	8.86		
I_d							0.74	5.14		
N							1.14	7.93		
N_a							0.83	5.79		
N_b			NO OBSERVATIONS - BAD WEATHER				0.76	5.31		
N_c							0.56	3.93		
N_d							0.28	1.94		
i							0.05	0.37		
i_a							0.04	0.29		
i_d							0.02	0.12		
T_g							23.2*			
T_s										
Ψ										
ε										

REMARKS: * Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 28 July 76

RADIOSONDE: (0800 MDT) TTAA 78141 72JAL 99877 22257 03006 00070
///// ///// 85510 19858 04505 70165 10857 25507 50587 08533 05003
40758 18345 35513 30967 325// 02515 25093 431// 02520 20240 559//
04526 15418 663// 06016 10662 683// 29505 88150 663// 06016 77999

TTBB 7814/ 72JAL 00877 22257 11867 20458 22850 19858 33804 19660
44700 10857 55663 07050 66642 04435 77576 02102 88500 08533 99448
13332 11444 13558 22400 18345 33332 26959 44320 28566 55310 309//
66200 559// 77150 663// 88119 687// 99112 659// 11100 683//

TTCC 78142 72JAL 70878 581// 08520 50090 581// 09518 30418 475//
08525 20686 483// 10534 88999 77195 08034 40504

TTDD 7814/ 72JAL 11816 677// 22700 581// 33500 581// 44362 537//
55300 475// 66172 489// 77156 457//

ROCKETSONDE: (1215 MDT) RRXX 28182 72269 81010 11101 25551 09015
30541 10022 34537 13013 35538 ///// 36535 ///// 37529 21007 39519
///// 40520 ///// 45507 09009 47502 ///// 48505 01008 50509 07012
51508 09018 52507 ///// 53506 07008 54509 05014 55512 ///// 56516
06016 58525 06029 60534 08025 61533 05027 62531 09019 63/// 15046
JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 29 July 76 TIME 1032 (Local) 1632 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	22.9		22.9		25.2		22.0			
T_{dp}	16.3		16.3		15.0		16.1			
W_d, W_s	280	2.7	280	2.7	070	0.9	220	1.3		
P	25.99		25.99		25.42		25.54			
C	20 Ⓘ 220 - Ⓘ		20 Ⓘ 220 - Ⓘ		50 Ⓘ 220 - Ⓘ		220 Ⓘ			
M	No		No		No		No			
$T_{a2\,5}$					25.6					
$T_{dp2\,5}$					14.0					
	1	2	1	2	1	2	1	2	1	2
I	M	M	M	M	1.05	7.31	1.06	7.36		
I_a	M	M	M	M	0.87	6.09	0.89	6.24		
I_d	M	M	M	M	0.54	3.74	0.56	3.90		
N	1.24	8.63	1.24	8.63	1.18	8.25	1.22	8.52		
N_a	0.91	6.35	0.91	6.35	0.90	6.25	0.91	6.33		
N_b	0.85	5.91	0.85	5.91	0.84	5.83	0.85	5.89		
N_c	0.69	4.78	0.69	4.78	0.68	4.77	0.68	4.74		
N_d	0.59	4.12	0.59	4.12	0.57	3.94	0.60	4.17		
i	0.50	3.48	0.49	3.40	0.07	0.49	0.05	0.35		
i_a	0.41	2.86	0.44	3.06	0.06	0.45	0.04	0.25		
i_d	0.25	1.75	0.27	1.91	0.06	0.40	0.01	0.09		
T_g	27.7		29.0		36.0		24.2 *			
T_s	29.0		28.0		44.0					
Ψ										
ε										

REMARKS: MET SAT II(Grass) 31.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 29 July 76

RADIOSONDE: (0800 MDT) TTAA 79141 72HMS 99876 22856 01002 00089
///// ///// 85528 21861 05004 70186 12260 26504 50591 05560 10502
40762 17163 06008 30972 31566 05514 25099 421// 07010 20246 537//
14512 15424 673// 07513 10667 695// 06015 88150 673// 07513 77999

TTBB 79141 72HMS 00876 22856 11866 22059 22822 20462 33700 12260
44566 00357 55500 05560 66400 17163 77324 27769 88277 35965 99178
605// 11150 673// 22100 695//

TTCC 79141 72HMS 70884 595// 09520 50097 555// 09519 30427 509//
10524 20695 455// 09535 10164 383// 08550 88999 77081 07052 416//

TTDD 79141 72HMS 11920 665// 22770 647// 33700 595// 44640 597//
55580 563// 66500 555// 77400 537// 88370 503// 99300 509// 11180
429// 22120 421// 33110 389// 44100 383// 55080 341//

ROCKETSONDE: (1032 MDT) RRXX 29163 72269 81010 13101 25/// 08013
30/// 09023 33/// 11024 35/// 10016 36/// 08014 40/// 09040 42///
09044 45/// 10037 46/// 10030 47/// 09027 50/// 10047 51*** 10046
JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7411

DATE OF OBSERVATION 4 August 76 TIME 0813 (Local) 1413 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	19.6		19.6				20.6			
T_{dp}	17.4		17.4				15.7			
W_d, W_s	360 0.9		360 0.9				CALM			
P	Missing		Missing				25.78			
C	50◐		50◐				50◐			
M	No		No				No			
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	0.67	4.70	0.67	4.70			0.56	3.88		
I_a		Missing Data					0.50	3.48		
I_d	0.57	4.01	0.57	4.01			0.33	2.30		
N	1.03	7.20	1.03	7.20			0.93	6.52		
N_a	0.85	5.92	0.85	5.92			0.73	5.10		
N_b	0.80	5.59	0.80	5.59			0.69	4.83		
N_c	0.68	4.74	0.68	4.74			0.57	3.99		
N_d	0.60	4.16	0.60	4.16			0.51	3.52		
i	0.20	1.39	0.20	1.38			0.06	0.41		
i_a	0.17	1.19	0.18	1.29			0.04	0.28		
i_d	0.11	0.76	0.11	0.79			0.03	0.18		
T_g	27.7		29.0				23.6*			
T_s	28.0		29.0							
Ψ	18.4		14.3							
ε										

REMARKS: **No observations at METSAT II this date.**
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 4 August 76 TIME 1010 (Local) 1610 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	24.2		24.2				24.5			
T_{dp}	16.5		16.5				16.2			
W_d, W_s	030 2.7		030 2.7				CALM			
P	Missing		Missing				25.786			
C	○		○				○			
M	No		No				No			
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.27	8.88	1.27	8.88			1.01	7.06		
I_a	Missing Data						0.86	6.00		
I_d	0.56	3.88	0.56	3.88			0.55	3.87		
N	1.21	8.41	1.21	8.41			1.22	8.49		
N_a	0.91	6.33	0.91	6.33			0.90	6.28		
N_b	0.84	5.86	0.84	5.86			0.84	5.88		
N_c	0.70	4.87	0.70	4.87			0.68	4.74		
N_d	0.61	4.23	0.61	4.23			0.60	4.17		
i	0.42	2.95	0.45	3.11			0.05	0.37		
i_a	0.36	2.49	0.40	2.82			0.04	0.25		
i_d	0.22	1.55	0.25	1.72			0.01	0.07		
T_g										
T_s	23.0		25.0				23.7*			
Ψ	18.4		14.3							
ε										

REMARKS: **No observations at METSAT II this date.**
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 4 August 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	26.5		26.5				29.5			
T_{dp}	15.1		15.1				18.7			
W_d, W_s	090 2.2		090 2.2				210 0.4			
P	Missing		Missing				25.76			
C	◯		◯				◯			
M	No		No				No			
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.56	10.85	1.56	10.85			1.30	9.05		
I_a	1.08	7.55	1.08	7.55			1.09	7.61		
I_d	0.56	3.93	0.56	3.93			0.70	4.86		
N	1.31	9.12	1.31	9.12			1.24	8.64		
N_a	0.96	6.71	0.96	6.71			0.88	6.14		
N_b	0.89	6.19	0.89	6.19			0.80	5.59		
N_c	0.73	5.11	0.73	5.11			0.47	3.26		
N_d	0.63	4.41	0.63	4.41			0.36	2.54		
i	0.57	3.96	0.61	4.27			0.06	0.39		
i_a	0.47	3.31	0.55	3.81			0.04	0.28		
i_d	0.30	2.07	0.33	2.31			0.02	0.12		
T_g	36.0		Missing				23.7*			
T_s	25.0		32.0							
Ψ	18.4		14.3							
ε										

REMARKS: **No observations at METSAT II this date.**
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 4 August 76 TIME 1239 (Local) 1839 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	28.6		28.6				30.4			
T_{dp}	16.2		16.2				17.6			
W_d, W_s	180 1.3		180 1.3				180 0.4			
P	Missing		Missing				25.74			
C	○		○				○			
M	No		No				No			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.84	12.82	1.84	12.82			1.36	9.49		
I_a	1.13	7.90	1.13	7.90			1.15	7.99		
I_d	0.72	5.05	0.72	5.05			0.74	5.14		
N	1.32	9.19	1.32	9.19			1.24	8.64		
N_a	0.97	6.80	0.97	6.80			0.89	6.20		
N_b	0.89	6.22	0.89	6.22			0.79	5.48		
N_c	0.73	5.12	0.73	5.12			0.64	4.47		
N_d	0.63	4.41	0.63	4.41			0.56	3.88		
i	0.60	4.21	0.65	4.51			0.06	0.40		
i_a	0.51	3.54	0.58	4.02			0.05	0.31		
i_d	0.32	2.20	0.35	2.42			0.02	0.16		
T_g	33.8		31.5				23.7*			
T_s	28.0		32.0							
Ψ	18.4		14.3							
ε										

REMARKS: **No observations at METSAT II this date.**
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 4 August 76 TIME 1332 (Local) 1932 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	29.6		29.6				30.8			
T_{dp}	14.3		14.3				19.9			
W_d, W_s	120 2.7		120 2.7				180 0.9			
P	Missing		Missing				25.72			
C	○		○				○			
M	No		No				No			
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.49	10.41	1.49	10.41			1.38	9.62		
I_a	1.15	8.01	1.15	8.01			1.16	8.09		
I_d	0.71	4.92	0.71	4.92			0.73	5.11		
N	1.32	9.22	1.32	9.22			1.23	8.59		
N_a	0.98	6.81	0.98	6.81			0.86	5.96		
N_b	0.90	6.25	0.90	6.25			0.78	5.44		
N_c	0.74	5.15	0.74	5.15			0.62	4.35		
N_d	0.64	4.44	0.64	4.44			0.54	3.79		
i	0.64	4.49	0.67	4.67			0.06	0.40		
i_a	0.53	3.73	0.60	4.16			0.05	0.31		
i_d	0.33	2.31	0.36	2.52			0.02	0.13		
T_g	27.7		31.5				23.6*			
T_s	34.0		36.0							
Ψ	18.4		14.3							
ε										

REMARKS: **No observations at METSAT II this date.**
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 4 August 76

RADIOSONDE: (0800 MDT) TTAA 54141 72HMS 99882 18824 06003 00149
///// ///// 85574 18856 33003 70229 10850 23022 50594 07171 31027
40765 17972 29538 30975 31969 28019 25100 425// 26017 20247 537//
24524 15426 667// 26014 88999 77420 29538 41108 Ø

TTBB 5414/ 72HMS 00882 18824 11786 18661 22638 05232 33596 01441
44546 01973 55485 09172 66470 08974 77400 17972 88339 24770 99300
31969 11145 683// 22117 741// 33107 717// 51515 10144 10190 10667
Ø

TTCC NONE

TTDD NONE

ROCKETSONDE: (1110 MDT) RRXX 04171 72269 81010 11101 25551 07015
30545 09022 33537 11019 35537 07019 36535 07026 37528 08034 40523
10031 41516 10031 42514 09028 43515 08025 45515 08035 47513 10045
48512 11038 49511 10034 50510 09041 55517 09038 59529 07034 60532
05040 61536 05048 63541 07049 64*** 08042 ***** *****

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7411

DATE OF OBSERVATION 11 August 76 TIME 0807 (Local) 1407 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.4		21.4		21.4		22.0			
T_{dp}	16.3		16.3		15.3		14.2			
W_d, W_s	230 1.3		230 1.3		050 2.7		090 1.3			
P	26.15		26.15		25.55		25.79			
C	110 ◐ 220 ◐		110 ◐ 220 ◐		E 100 ◐ 220 ◐		250- ◐			
M	No		No		No		No			
$T_{a2\,5}$	23.5		23.5		22.8					
$T_{dp2\,5}$	18.2		18.2		17.5					
	1	2	1	2	1	2	1	2	1	2
I	0.40	2.80	0.40	2.80	0.20	1.38	0.52	3.61		
I_a	0.31	2.16	0.31	2.16	0.16	1.13	0.45	3.13		
I_d	0.21	1.45	0.21	1.45	0.10	0.67	0.30	2.10		
N					0.16	1.09	0.77	5.40		
N_a					0.11	0.75	0.61	4.23		
N_b					0.06	0.42	0.46	3.19		
N_c					0.05	0.37	0.26	1.85		
N_d					0.05	0.32	0.18	1.24		
i	0.20	1.41	0.22	1.53	0.02	0.12	0.06	0.44		
i_a	0.18	1.27	0.19	1.34	0.02	0.14	0.03	0.24		
i_d	0.12	0.85	0.12	0.86	0.02	0.11	0.02	0.15		
T_g	25.0		23.0		23.0		22.6 *			
T_s	21.0		20.0		missing					
Ψ	17.9		17.9							
ε										

REMARKS: MET SAT II (Grass) 22°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 11 August 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	26.3		26.3		31.0		28.7			
T_{dp}	13.2		13.2		9.8		11.6			
W_d, W_s	160 1.8		160 1.8		220 2.7		CALM			
P	26.15		26.15		25.55		25.78			
C	60 ◐ 220 ◐		60 ◐ 220 ◐		70 ◐ 140 ◐ 220 ◐		250- ◐			
M	No		No		No		No			
$T_{a2\,5}$	24.7		24.7		30.3					
$T_{dp2\,5}$	15.4		15.4		10.6					
	1	2	1	2	1	2	1	2	1	2
I	1.15	8.02	1.15	8.02	1.37	9.57	1.37	9.54		
I_a	0.86	5.98	0.86	5.98	1.14	7.97	1.10	7.66		
I_d	0.55	3.81	0.55	3.81	0.69	4.84	0.69	4.80		
N	0.87	6.08	0.87	6.08	1.28	8.94	0.80	5.57		
N_a	0.69	4.81	0.69	4.81	1.03	7.18	0.46	3.19		
N_b	0.63	4.37	0.63	4.37	0.87	6.10	0.32	2.21		
N_c	0.54	3.79	0.54	3.79	0.76	5.29	0.18	1.22		
N_d	0.51	3.52	0.51	3.52	0.63	4.42	0.11	0.80		
i	0.47	3.26	0.55	3.84	0.10	0.72	0.06	0.45		
i_a	0.37	2.61	0.49	3.45	0.10	0.67	0.04	0.25		
i_d	0.22	1.54	0.31	2.17	0.08	0.55	0.01	0.10		
T_g	42.0		37.0		51.0		19.0 *			
T_s	44.0		38.0		22.0					
Ψ	17.9		17.9							
ϵ										

REMARKS: MET SAT II (Grass) 31.5°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ϵ = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 11 August 76 TIME 1321 (Local) 1921 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	30.8		30.8		31.2		29.8			
T_{dp}	10.1		10.1		10.8		15.6			
W_d, W_s	160 3.1		160 3.1		260 3.1		190 4.5			
P	26.13		26.13		25.55		25.72			
C	50 ◐ 210 ◐		50 ◐ 210 ◐		70 ◐ E140 ◐		50 ◐ 60 ◐ E250 ◐			
M	No		No		No		No			
$T_{a2\,5}$	28.2		28.2		30.0					
$T_{dp2\,5}$	13.7		13.7		10.6					
	1	2	1	2	1	2	1	2	1	2
I	1.45	10.12	1.45	10.12	0.79	5.52	1.36	9.51		
I_a	1.14	7.95	1.14	7.95	0.71	4.92	1.15	8.03		
I_d	0.71	4.94	0.71	4.94	0.43	3.01	0.70	4.89		
N	1.31	9.14	1.31	9.14	0.32	2.24	0.84	5.85		
N_a	0.93	6.51	0.93	6.51	0.20	1.40	0.67	4.64		
N_b	0.89	6.21	0.89	6.21	0.17	1.16	0.61	4.27		
N_c	0.73	5.11	0.73	5.11	0.15	1.02	0.51	3.55		
N_d	0.63	4.38	0.63	4.38	0.13	0.95	0.45	3.11		
i	0.67	4.20	0.73	5.09	0.07	0.46	0.06	0.45		
i_a	0.58	4.01	0.63	4.42	0.06	0.45	0.05	0.34		
i_d	0.36	2.49	0.38	2.65	0.05	0.37	0.02	0.15		
T_g	41.0		39.7		47.0		21.0 *			
T_s	42.5		44.0		31.0					
Ψ	17.9		17.9							
ε										

REMARKS: Grass MET SAT II 30°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 11 August 76

RADIOSONDE: (0900 MDT) TTAA 61151 72HMS 99882 22457 26005 00145
///// ///// 85576 21062 ///// 70235 11061 ///// 50595 07368 /////
40766 17770 ///// 30975 32561 23525 25101 429// 26024 20248 529//
28017 15429 637// 28017 10672 707// 33503 88110 723// 29506 77999

TTBB 6115/ 72HMS 00882 22457 11832 21264 22760 17464 33700 11060
44567 00958 55437 12962 66429 13768 77404 17371 88400 17770 99300
32561 11272 37963 22200 529// 33129 693// 44110 723// 55100 707//

TTCC 61152 72HMS 70889 621// 10021 50099 587// 08026 30427 509//
09533 20694 459// 08029 88999 77360 09035 40204

TTDD 6115/ 72HMS 11790 621// 22500 587// 33380 529// 44200 459//
55140 459//

ROCKETSONDE: (1200 MDT) RRXX 11180 72269 81010 11101 24555 08016
25552 08017 30543 09018 35536 09015 37537 09021 40528 07034 44509
10041 45510 12039 46513 12034 50510 11043 51510 11033 52507 08032
53504 08038 55513 11020 56518 09015 57523 07029 59535 09042 60535
10046 61534 10054 62538 09043 63*** 06026 ***** ***** JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 12 August 76 TIME 0951 (Local) 1551 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	26.5		26.5		28.6		25.2			
T_{dp}	4.6		4.6		11.2		13.3			
W_d, W_s	160 1.8		160 1.8		220 1.3		030 2.7			
P	26.15		26.15		25.55		25.79			
C	60◑ 220-◑		60◑ 220-◑		50◑ 220-◑		220-◑			
M	No		No		No		No			
$T_{a2\ 5}$	26.8		26.8		27.1					
$T_{dp2\ 5}$	8.8		8.8		10.6					
	1	2	1	2	1	2	1	2	1	2
I	0.90	6.37	0.90	6.37	0.88	6.14	0.89	6.19		
I_a	0.70	4.90	0.70	4.90	0.74	5.13	0.77	5.34		
I_d	0.44	3.10	0.44	3.10	0.45	3.13	0.48	3.36		
N	1.20	8.35	1.20	8.35	1.17	8.13	0.77	5.40		
N_a	0.87	6.05	0.87	6.05	0.92	6.41	0.66	4.60		
N_b	0.79	5.49	0.79	5.49	0.84	5.89	0.67	4.66		
N_c	0.68	4.75	0.68	4.75	0.70	4.87	0.58	4.04		
N_d	0.60	4.19	0.60	4.19	0.59	4.13	0.50	3.52		
i	0.44	3.07	0.49	3.39	0.07	0.46	0.06	0.40		
i_a	0.38	2.64	0.42	2.96	0.06	0.43	0.04	0.28		
i_d	0.23	1.63	0.26	1.81	0.05	0.35	0.02	0.13		
T_g	27.7		33.7				23.0 *			
T_s	28.0		30.0		43.0					
Ψ	17.6		16.4							
ε										

REMARKS: MET SAT II(Grass) 29.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 12 August 76 TIME 1227 (Local) 1827 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	32.2		32.2		33.0		28.8			
T_{dp}	13.6		13.6		8.5		13.4			
W_d, W_s	160 1.8		160 1.8		210 3.6		270 0.9			
P	26.12		26.12		25.52		25.76			
C	60 ⏀		60 ⏀		60 ⏀		220 - ⏀			
M	No		No		No		No			
$T_{a2\,5}$	31.8		31.8		32.2					
$T_{dp2\,5}$	13.9		13.9		8.0					
	1	2	1	2	1	2	1	2	1	2
I	1.41	9.81	1.41	9.81	1.36	9.47	1.37	9.53		
I_a	1.10	7.68	1.10	7.68	1.03	7.17	1.17	8.14		
I_d	0.68	4.76	0.68	4.76	0.68	4.75	0.74	5.14		
N	1.32	9.21	1.32	9.21	1.30	9.04	1.24	8.64		
N_a	0.98	6.86	0.98	6.86	0.98	6.83	0.92	6.39		
N_b	0.90	6.27	0.90	6.27	0.90	6.25	0.83	5.79		
N_c	0.74	5.15	0.74	5.15	0.83	5.76	0.69	4.82		
N_d	0.64	4.46	0.64	4.46	0.61	4.27	0.58	4.04		
i	0.66	4.61	0.71	4.97	0.10	0.73	0.06	0.44		
i_a	0.56	3.89	0.62	4.35	0.10	0.68	0.05	0.33		
i_d	0.34	2.40	0.38	2.64	0.08	0.55	0.02	0.11		
T_g	37.3		43.3		42.0		22.5 *			
T_s	44.0		44.5		54.0					
Ψ	17.6		16.4							
ε										

REMARKS: MET SAT II(Grass) 32.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 12 August 76

RADIOSONDE: (0800 MDT) TTAA 62141 72HMS 99881 23662 27005 00111
///// ///// 85564 23866 09007 70235 13061 24005 50595 07762 22010
40765 18761 27012 30974 33361 24515 25099 429// 27015 20246 535//
27016 15426 653// 30024 10667 701// 02002 88117 727// 26509 77156
30526 41312

TTBB 6214/ 72HMS 00881 23662 11870 22464 22837 24468 33760 19066
44625 04860 55573 01355 66505 07580 77503 07362 88478 08963 99400
18761 61358 24364 22329 28759 33320 29260 44272 38562 55136 701//
66117 727// 77115 707// 88100 701//

TTCC 62141 72269 70881 607// 08517 50092 577// 09026 30420 507//
08534 20685 487// 09031 10150 395// 09034 07396 389// 09028 77290
09038 41012

TTDD 6214/ 72269 11830 649// 22740 643// 33700 607// 44500 577//
55350 511// 66300 507// 77260 517// 88100 395// 99078 369// 11070
389// 22066 387// 51515 10158 34360 MTRS

ROCKETSONDE: (1130 MDT) RRXX 12173 72269 81010 11101 25553 09014
27547 08014 30546 10020 32539 09018 33539 07016 35538 10022 37535
08026 40521 08034 42515 09029 45517 10038 46509 12041 47508 14041
48512 11033 50514 08043 54516 09055 55513 10054 57522 12045 59515
10024 60*** 08023 63*** 09046 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7411

DATE OF OBSERVATION 18 August 76 TIME 1000 (Local) 1400 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	18.1		18.1		19.7		19.5			
T_{dp}	15.2		15.2		12.4		15.8			
W_d, W_s	340 1.3		340 1.3		050 2.2		030 1.3			
P	26.09		26.09		25.47		25.72			
C	140 ◐		140 ◐		70 ◐ 220 ◐		E 50 ◐			
M	No		No		No		Yes			
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	0.38	2.65	0.38	2.65	0.33	2.33	0.10	0.67		
I_a	0.29	2.05	0.29	2.05	0.28	1.98	0.06	0.43		
I_d	0.18	1.28	0.18	1.28	0.17	1.19	0.03	0.22		
N	0.95	6.62	0.95	6.62	0.90	6.27				
N_a	0.76	5.33	0.76	5.33	0.73	5.12				
N_b	0.71	4.92	0.71	4.92	0.69	4.78				
N_c	0.59	4.14	0.59	4.14	0.58	4.03				
N_d	0.51	3.58	0.51	3.58	0.49	3.42				
i	0.19	1.30	0.19	1.33	0.04	0.26	0.01	0.04		
i_a	0.16	1.15	0.17	1.22	0.04	0.29	0.00	0.00		
i_d	0.11	0.74	0.11	0.76	0.03	0.21	0.00	0.00		
T_g	18.0		20.5		28.0		22.0 *			
T_s	16.0		18.0		26.0					
Ψ	14.2		14.0							
ε										

REMARKS: MET SAT II(Grass) 21°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 18 August 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	26.0		26.0		27.2		23.6			
T_{dp}	15.3		15.3		11.9		15.0			
W_d, W_s	170 1.8		170 1.8		030 1.3		010 1.3			
P	26.065		26.065		25.47		25.71			
C	80		80		60 90		60			
M	No		No		No		No			
$T_{a2\,5}$	27.5		27.5		29.4					
$T_{dp2\,5}$	15.0		15.0		12.3					
	1	2	1	2	1	2	1	2	1	2
I	1.35	9.39	1.35	9.39	1.31	9.16	0.66	4.58		
I_a	1.04	7.28	1.04	7.28	0.99	6.91	0.49	3.42		
I_d	0.65	4.51	0.65	4.51	0.65	4.52	0.30	2.08		
N	1.31	9.16	1.31	9.16	1.29	9.02				
N_a	0.97	6.79	0.97	6.79	0.96	6.73				
N_b	0.87	6.05	0.87	6.05	0.89	6.24				
N_c	0.73	5.11	0.73	5.11	0.72	5.05				
N_d	0.63	4.42	0.63	4.42	0.60	4.24				
i	0.61	4.28	0.68	4.75	0.10	0.71	0.04	0.31		
i_a	0.52	3.63	0.59	4.14	0.09	0.64	0.03	0.18		
i_d	0.32	2.23	0.36	2.51	0.08	0.54	0.01	0.07		
T_g	35.0		36.0		55.0		21.0 *			
T_s	36.0		37.0		47.0					
Ψ	14.2		14.0							
ε										

REMARKS: MET SAT II(Grass) 27°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 18 August 76 TIME 1151 (Local) 1751 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	26.1		26.1		27.2		23.6			
T_{dp}	15.3		15.3		11.9		15.0			
W_d, W_s	180 2.7		180 2.7		030 1.3		010 1.3			
P	26.06		26.06		25.47		25.71			
C	80◑		80◑		60◑ 90◑		60◑			
M	No		No		No		Yes			
$T_{a2\,5}$	28.2		28.2		29.4					
$T_{dp2\,5}$	16.1		16.1		12.3					
	1	2	1	2	1	2	1	2	1	2
I	1.33	9.28	1.33	9.28	1.30	9.07	0.69	4.81		
I_a	1.03	7.18	1.03	7.18	1.08	7.54	0.52	3.59		
I_d	0.64	4.45	0.64	4.45	0.65	4.54	0.31	2.18		
N	1.31	9.12	1.31	9.12	1.29	9.01				
N_a	0.97	6.78	0.97	6.78	0.97	6.78				
N_b	0.87	6.04	0.87	6.04	0.89	6.24				
N_c	0.73	5.08	0.73	5.08	0.73	5.10				
N_d	0.63	4.37	0.63	4.37	0.61	4.27				
i	0.60	4.21	0.67	4.68	0.10	0.68	0.04	0.31		
i_a	0.51	3.55	0.59	4.08	0.09	0.63	0.02	0.17		
i_d	0.31	2.18	0.35	2.47	0.07	0.52	0.01	0.06		
T_g	35.0		36.0		55.0		21.0	*		
T_s	36.0		37.0		47.0					
Ψ	14.2		14.0							
ε										

REMARKS: MET SAT II(Grass) 27°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 18 August 76

RADIOSONDE: (0800 MDT) TTAA 68141 72HMS 99879 17437 30001 00132 /////
///// 85548 20258 33001 70194 09242 20004 50590 06563 15007 40762 16157
25006 30972 32557 24006 25098 413// 25008 20246 527// 26007 15426 657//
24008 10669 689// 17003 88113 715// 19504 77999 Ø

TTBB 6814/ 72HMS 00878 17437 11861 20257 22749 12843 33622 03658 44570
01541 55555 02556 66530 05324 77511 07142 88505 06363 99478 08169 11464
09160 22441 10771 33400 16157 44362 20561 55343 24159 66284 35364 77153
653// 88113 715// 99100 689// 51515 10186 //300 32558 Ø

TTCC 68141 72HMS 70883 647// 09018 50093 587// 08523 30419 521// 09030
20684 473// 09028 60147 427// 09032 07390 405// 09547 05620 387// 14556
88999 77033 11570 408// Ø

TTDD 6814/ 72HMS 11918 702// 22613 597// 33200 473// 44100 429// 55085
401// 66033 385// 51515 10190 03971 Ø

ROCKETSONDE: (1200 MDT) RRXX 18180 72269 81010 11101 25549 09015 30544
09017 32540 10015 35530 08027 37522 10026 40525 11025 42519 08025 43516
08032 44513 08036 45514 09038 50510 11044 55518 11038 56520 10039 57522
09052 58524 11053 60529 10023 61531 08030 62528 10024 63*** 08008 64***
02010 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7411

DATE OF OBSERVATION 25 August 76 TIME 0753 (Local) 1353 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	16.8		16.8		17.3					
T_{dp}	11.0		11.0		11.6					
W_d, W_s	260 2.2		260 2.2		050 1.8					
P	26.07		26.07		25.47					
C	○		○		250-◑					
M	No		No		No					
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	0.32	2.24	0.32	2.24	0.30	2.07				
I_a	0.26	1.81	0.26	1.81	0.26	1.78				
I_d	missing		missing		0.16	1.09				
N	0.80	5.61	0.80	5.61	0.85	5.96				
N_a	0.67	4.69	0.67	4.69	0.69	4.82				
N_b	0.64	4.43	0.64	4.43	0.65	4.56				
N_c	0.55	3.87	0.55	3.87	0.56	3.91				
N_d	0.49	3.44	0.49	3.44	0.48	3.35				
i	0.17	1.16	0.19	1.29	0.04	0.26				
i_a	0.16	1.08	0.18	1.24	0.04	0.31				
i_d	0.11	0.76	0.12	0.85	0.03	0.21				
T_g	19.0		18.0		18.0					
T_s	16.0		14.0		18.0					
Ψ	13.8		14.0							
ε										

REMARKS: MET SAT 2 (Grass) 16°C
MET SAT 3 - Observations not made this period

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 25 August 76 TIME 1016 (Local) 1616 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.6		23.6		25.8		24.0			
T_{dp}	12.0		12.0		10.0		13.2			
W_d, W_s	240	1.3	240	1.3	110	1.3	360	0.9		
P	26.10		26.10		25.50		25.73			
C	○		○		90-◐		○			
M	No		No		No		No			
$T_{a2\ 5}$					26.7					
$T_{dp2\ 5}$					8.3					
	1	2	1	2	1	2	1	2	1	2
I	0.97	6.78	0.97	6.78	0.95	6.63	0.99	6.92		
I_a	0.76	5.28	0.76	5.28	0.80	5.60	0.85	5.92		
I_d	0.49	3.40	0.49	3.40	0.50	3.49	0.53	3.69		
N	1.19	8.30	1.19	8.30	1.20	8.39	1.18	8.22		
N_a	0.89	6.22	0.89	6.22	0.93	6.50	0.87	6.06		
N_b	0.83	5.79	0.83	5.79	0.86	6.03	0.80	5.59		
N_c	0.69	4.83	0.69	4.83	0.71	4.96	0.65	4.53		
N_d	0.60	4.19	0.60	4.19	0.60	4.17	0.54	3.79		
i	0.52	3.65	0.55	3.86	0.06	0.45	0.06	0.40		
i_a	0.45	3.11	0.48	3.36	0.06	0.40	0.04	0.29		
i_d	0.28	1.93	0.29	2.06	0.05	0.36	0.02	0.15		
T_g	32.8		33.5		40.5		*			
T_s	33.0		32.0		38.0					
Ψ	13.8		14.0							
ε										

REMARKS: MET SAT 2: Grass cover temperature = 32°C

* MET SAT 3: Water temperature not measured

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION LANDSAT B

DATE OF OBSERVATION 25 August 76 TIME 1051 (Local) 1651 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	25.4		25.4		27.8		25.0			
T_{dp}	11.3		11.3		8.8		12.8			
W_d, W_s	250	1.8	250	1.8	230	2.2	360	1.3		
P	26.100		26.100		25.50		25.73			
C	○		○		90-◑		○			
M	No		No		No		No			
$T_{a2\ 5}$	25.6		25.6		26.6					
$T_{dp2\ 5}$	12.7		12.7		8.2					
	1	2	1	2	1	2	1	2	1	2
I	1.11	7.76	1.11	7.76	1.09	7.63	1.14	7.93		
I_a	0.87	6.06	0.87	6.06	0.91	6.34	0.96	6.70		
I_d	0.56	3.90	0.56	3.90	0.56	3.92	0.60	4.21		
N	1.23	8.58	1.23	8.58	1.24	8.65	1.21	8.45		
N_a	0.91	6.33	0.91	6.33	0.95	6.66	0.89	6.22		
N_b	0.85	5.94	0.85	5.94	0.88	6.51	0.82	5.75		
N_c	0.72	4.99	0.72	4.99	0.73	5.08	0.67	4.68		
N_d	0.62	4.29	0.62	4.29	0.61	4.26	0.56	3.92		
i	0.59	4.11	0.63	4.40	0.08	0.56	0.06	0.40		
i_a	0.50	3.51	0.55	3.84	0.07	0.50	0.04	0.28		
i_d	0.31	2.18	0.34	2.37	0.06	0.42	0.02	0.13		
T_g	33.0		37.0		46.0		*			
T_s	missing		missing		42.0					
Ψ	13.8		14.0							
ε										

REMARKS: MET SAT 2 (Grass Cover) 30°C

* No water temperature was taken at MET SAT 3.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = $ergs$ cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 25 August 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	27.9		27.9		29.9		26.3			
T_{dp}	7.6		7.6		8.8		10.3			
W_d, W_s	210 1.8		210 1.8		250 0.9		340 2.2			
P	26.090		26.09		25.49		25.72			
C	○		○		90◑		○			
M	No		No		No		No			
$T_{a2\,5}$	26.0		26.0		26.6					
$T_{dp2\,5}$	9.8		9.8		6.9					
	1	2	1	2	1	2	1	2	1	2
I	1.31	9.12	1.31	9.12	1.28	8.91	1.31	9.11		
I_a	1.02	7.14	1.02	7.14	1.06	7.42	1.11	7.74		
I_d	0.66	4.57	0.66	4.57	0.65	4.54	0.69	4.81		
N	1.27	8.86	1.27	8.86	1.27	8.90	1.25	8.74		
N_a	0.96	6.67	0.96	6.67	0.97	6.78	0.91	6.35		
N_b	0.88	6.13	0.88	6.13	0.90	6.27	0.84	5.85		
N_c	0.73	5.08	0.73	5.08	0.74	5.15	0.67	4.70		
N_d	0.63	4.42	0.63	4.42	0.62	4.33	0.57	3.96		
i	0.68	4.73	0.73	5.06	0.10	0.67	0.06	0.42		
i_a	0.58	4.04	0.63	4.42	0.09	0.63	0.05	0.31		
i_d	0.36	2.51	0.39	2.72	0.08	0.53	0.02	0.12		
T_g	38.0		44.5		51.0		*			
T_s	missing		missing		48.0					
Ψ	13.8		14.0							
ε										

REMARKS: MET SAT II(Grass) 34°C
* No water temperature taken at MET SAT 3

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 25 August 76 TIME 1221 (Local) 1821 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	28.0		28.0		29.8		26.5			
T_{dp}	7.9		7.9		8.2		10.9			
W_d, W_s	190 2.2		190 2.2		CALM		290 0.4			
P	26.08		26.08		25.48		25.72			
C	○		○		90◐		○			
M	No		No		No		No			
$T_{a2\ 5}$	26.0		26.0		26.8					
$T_{dp2\ 5}$	10.0		10.0		7.3					
	1	2	1	2	1	2	1	2	1	2
I	1.35	9.42	1.35	9.42	1.30	9.10	1.30	9.09		
I_a	1.06	7.40	1.06	7.40	1.09	7.59	1.11	7.75		
I_d	0.67	4.66	0.67	4.66	0.67	4.67	0.70	4.86		
N	1.28	8.93	1.28	8.93	1.28	8.92	1.28	8.95		
N_a	0.96	6.67	0.96	6.67	0.98	6.80	0.94	6.55		
N_b	0.87	6.10	0.87	6.10	0.90	6.29	0.86	6.00		
N_c	0.73	5.10	0.73	5.10	0.73	5.10	0.71	4.93		
N_d	0.63	4.42	0.63	4.42	0.62	4.33	0.59	4.12		
i	0.70	4.89	0.74	5.18	0.10	0.68	0.06	0.42		
i_a	0.59	4.14	0.65	4.51	0.09	0.64	0.04	0.30		
i_d	0.37	2.58	0.40	2.76	0.08	0.53	0.02	0.12		
T_g	38.0		44.5		53.0					
T_s	missing		missing		48.0					
Ψ	13.8		14.0							
ε										

REMARKS: MET SAT II (Grass) 34°C
* Not measured this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 25 August 76 TIME 1345 (Local) 1945 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	31.2		31.2		31.0					
T_{dp}	8.6		8.6		9.4					
W_d, W_s	CALM		CALM		120	0.9				
P	26.05		26.05		25.45					
C	50 ⊕		50 ⊕		90 ⊕					
M	No		No		No					
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.38	9.65	1.38	9.65	1.34	9.35				
I_a	1.09	7.63	1.09	7.63	1.13	7.86				
I_d	0.69	4.81	0.69	4.81	0.69	4.83				
N	1.29	9.00	1.29	9.00	1.29	8.97				
N_a	0.97	6.73	0.97	6.73	0.98	6.82				
N_b	0.88	6.16	0.88	6.16	0.90	6.29				
N_c	0.73	5.11	0.73	5.11	0.73	5.12				
N_d	0.64	4.44	0.64	4.44	0.61	4.27				
i	0.71	4.98	0.75	5.25	0.10	0.68				
i_a	0.60	4.20	0.66	4.60	0.09	0.65				
i_d	0.38	2.62	0.41	2.85	0.08	0.54				
T_g	39.5		48.0		56.5					
T_s	missing		missing		52.0					
Ψ	13.8		14.0							
ε										

REMARKS: MET SAT 2 (Grass) = 47°C
MET SAT 3 - Site not in operation for this observation.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 25 August 76

RADIOSONDE: (0600 MDT) TTAA 75121 72HMS 99878 16456 04003 00121 /////
///// 85542 27060 15006 70197 10057 25008 50589 07758 04514 40759 20149
00516 30965 36160 34539 25089 439// 35558 20236 537// 00548 15415 669//
00535 10656 703// 02513 88131 709// 01025 77250 35558 42203 Ø

TTBB 7512/ 72HMS 00878 16456 11867 21257 22850 22060 33725 12458 44624
01601 55556 03156 66500 07758 77488 09957 88477 11550 99462 11958 11400
20149 27339 29741 33337 30356 44300 36160 55275 39960 66150 669// 77131
709// 88106 731// 99100 703// 51515 SUPER 50-49 34-34 Ø

TTCC 75121 72HMS 70871 633// 07017 50080 585// 10015 30407 515// 10020
20675 451// 08514 10141 387// 12027 88999 77999 Ø

TTDD 7512/ 72HMS 11300 515// 22230 449// 33180 459// 44110 421// 55100
387// 66084 395// 51515 10190 07385 Ø

ROCKETSONDE: NONE

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOON RUN

DATE OF OBSERVATION 1 September 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	24.8		24.8		25.8					
T_{dp}	12.6		12.6		8.3					
W_d, W_s	120 1.8		120 1.8		060 5.8					
P	26.09		26.09		25.49					
C	60◐140◑220-◐		60◑140◑220-◐		70◐120◑E220◐					
M	Yes		Yes		Yes					
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.38	9.63	1.38	9.63	1.27	8.87				
I_a	1.09	7.62	1.09	7.62	1.07	7.47				
I_d	0.59	4.14	0.59	4.14	0.64	4.49				
N	1.21	8.45	1.21	8.45	1.28	8.94				
N_a	0.88	6.12	0.88	6.12	0.99	6.90				
N_b	0.86	5.98	0.86	5.98	0.91	6.34				
N_c	0.67	4.70	0.67	4.70	0.74	5.15				
N_d	0.56	3.93	0.56	3.93	0.61	4.27				
i	0.63	4.41	0.71	4.92	0.11	0.74				
i_a	0.52	3.61	0.61	4.25	0.10	0.70				
i_d	0.31	2.18	0.38	2.65	0.08	0.54				
T_g	28.0		23.0		31.5					
T_s	34.0		30.0		34.0					
Ψ	17.8		17.5							
ε										

REMARKS: MET SAT 2 (Grass Cover) = 34°C
MET SAT 3: Not Operated this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7411

DATE OF OBSERVATION 1 September 76 TIME 0745 (Local) 1345 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	16.3		16.3							
T_{dp}	12.2		12.2							
W_d, W_s	340 4.5		340 4.5							
P	26.10		26.10							
C	E90 ◐ 120 ◐ 220 ◐		E90 ◐ 120 ◐ 220 ◐							
M	Yes		Yes							
$T_{a2\ 5}$	17.6		17.6							
$T_{dp2\ 5}$	14.1		14.1							
	1	2	1	2	1	2	1	2	1	2
I	0.24	1.68	0.24	1.68						
I_a	0.20	1.40	0.20	1.40						
I_d	0.14	0.98	0.14	0.98						
N	0.28	1.93	0.28	1.93						
N_a	0.23	1.62	0.23	1.62						
N_b	0.28	1.95	0.28	1.95						
N_c	0.29	2.01	0.29	2.01						
N_d	0.16	1.10	0.16	1.10						
i	0.12	0.86	0.13	0.92						
i_a	0.09	0.59	0.13	0.87						
i_d	0.07	0.51	0.08	0.58						
T_g	13.0		11.0							
T_s	14.0		13.0							
Ψ	17.8		17.5							
ε										

REMARKS: MET SAT 2: Not operated this observation.
MET SAT 3: Not operated this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 1 September 76 TIME 1242 (Local) 1842 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	26.6		26.6		27.4					
T_{dp}	9.8		9.8		8.8					
W_d, W_s	250 1.8		250 1.8		040 6.7					
P	26.02		26.02		25.46					
C	60 ◐ 140 ◐ 220 - ◐		60 ◐ 140 ◐ 220 - ◐		70 ◐ 120 ◐ E220 ◐					
M	Yes		Yes		Yes					
$T_{a2\,5}$	25.0		25.0		26.7					
$T_{dp2\,5}$	11.1		11.1		7.8					
	1	2	1	2	1	2	1	2	1	2
I	1.42	9.91	1.42	9.91	1.42	9.92				
I_a	1.13	7.86	1.13	7.86	1.19	8.32				
I_d	0.72	4.99	0.72	4.99	0.72	5.01				
N	1.29	9.02	1.29	9.02	1.29	9.01				
N_a	0.95	6.62	0.95	6.62	0.98	6.85				
N_b	0.87	6.08	0.87	6.08	0.91	6.36				
N_c	0.73	5.07	0.73	5.07	0.74	5.17				
N_d	0.63	4.38	0.63	4.38	0.62	4.34				
i	0.64	4.43	0.68	4.71	0.12	0.83				
i_a	0.52	3.64	0.59	4.14	0.11	0.78				
i_d	0.35	2.42	0.36	2.54	0.08	0.59				
T_g	31.0		28.0		33.5					
T_s	40.0		32.0		34.0					
Ψ	17.8		17.5							
ε										

REMARKS: MET SAT 2 (Grass Cover) = 28°C
MET SAT 3: Not Operated This Date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 1 September 76 TIME 1316 (Local) 1916 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	27.4		27.4		26.0					
T_{dp}	11.0		11.0		8.3					
W_d, W_s	210 3.1		210 3.1		060 7.2					
P	26.02		26.02		25.46					
C	60 ◐ E140 ◍ 220 ◐		60 ◐ E140 ◍ 220 ◐		70 ◐ 120 ◑ E220 ◐					
M	Yes		Yes		Yes					
$T_{a2\,5}$	25.2		25.2		27.1					
$T_{dp2\,5}$	12.7		12.7		7.5					
	1	2	1	2	1	2	1	2	1	2
I	1.46	10.21	1.46	10.21	1.20	8.38				
I_a	1.16	8.07	1.16	8.07	0.83	5.80				
I_d	0.72	5.05	0.72	5.05	0.56	3.89				
N	1.18	8.24	1.18	8.24	1.28	8.94				
N_a	0.83	5.79	0.83	5.79	0.57	3.98				
N_b	0.80	5.58	0.80	5.58	0.53	3.68				
N_c	0.69	4.79	0.69	4.79	0.63	4.38				
N_d	0.59	4.10	0.59	4.10	0.57	3.96				
i	0.65	4.52	0.68	4.71	0.11	0.84				
i_a	0.52	3.63	0.61	4.26	0.10	0.71				
i_d	0.35	2.46	0.37	2.61	0.08	0.59				
T_g	33.0		29.0		35.0					
T_s	40.0		32.0		35.0					
Ψ	17.8		17.5							
ε										

REMARKS: MET SAT 2 (Grass Cover = 28°C
MET SAT 3: Not operated this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 1 September 76

RADIOSONDE: (0800 MDT) TTAA 51141 72HMS 99878 16250 00000 00126
///// ///// 85540 18160 00502 70179 08657 10505 50586 08160 35009
40756 21359 26015 30962 35358 26033 25087 449// 26046 20233 547//
26034 15415 617// 28515 10652 681// 05014 88114 679// 02012 77241
25549 41713

TTBB 5414/ 72HMS 00878 16250 11855 18458 22859 18160 33700 08657
44574 03931 55534 07731 66516 08946 77507 08359 88500 08160 99479
09362 11400 21359 22360 25331 33345 27756 44300 35358 55262 42558
66250 449// 77200 547// 88165 577// 99150 617// 11122 655// 22114
679// 33100 681//

TTCC 51143 72HMS 70878 627// 10017 50027 599// 07512 30404 519//
08521 88999 77999

TTDD 5114/ 72HMS 11960 687// 22500 599// 33420 545// 44300 519//
55280 493// 66240 493// 51515 10190 20670

ROCKETSONDE: (1233 MDT) RRXX 01183 72269 81010 11101 25552 10009
30545 09010 32541 10012 33534 11009 35536 12009 40524 09014 42517
11023 45508 09014 46504 08021 48511 13027 49510 13018 50509 11025
51509 12028 52511 14022 53514 13017 55514 14031 56513 15017 57512
21008 59520 25018 60526 22018 61533 19018 62533 22012 64*** 28010
65*** 24015 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 2 September 76 TIME 0956 (Local) 1556 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	20.4		20.4		22.9		22.4			
T_{dp}	11.0		11.0		10.7		12.3			
W_d, W_s	290 3.1		290 3.1		010 2.7		330 1.3			
P	26.14		26.14		25.53		25.78			
C	E200⊕		E200⊕		220◑		220 - ⊕			
M	No		No		No		No			
$T_{a2\,5}$	22.0		22.0		23.6					
$T_{dp2\,5}$	13.6		13.6		10.3					
	1	2	1	2	1	2	1	2	1	2
I	0.57	3.99	0.57	3.99	0.87	6.09	1.04	7.26		
I_a	0.45	3.11	0.45	3.11	0.74	5.17	0.90	6.25		
I_d	0.28	1.98	0.28	1.98	0.45	3.17	0.57	3.99		
N	0.31	2.17	0.31	2.17	1.21	8.46	1.04	7.26		
N_a	0.25	1.75	0.25	1.75	0.97	6.76	0.79	5.54		
N_b	0.25	1.76	0.25	1.76	0.87	6.10	0.74	5.13		
N_c	0.22	1.51	0.22	1.51	0.72	5.03	0.60	4.20		
N_d	0.12	0.86	0.12	0.86	0.61	4.22	0.49	3.40		
i	0.29	2.05	0.33	2.32	0.07	0.53	0.08	0.53		
i_a	0.25	1.71	0.29	2.05	0.07	0.50	0.06	0.40		
i_d	0.16	1.13	0.18	1.25	0.05	0.37	0.03	0.19		
T_g	15.5		20.0		33.0		*			
T_s	24.0		24.0		32.0					
Ψ	16.0		15.2							
ε										

REMARKS: MET SAT II (Grass Cover) = 26°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION LANDSAT A

DATE OF OBSERVATION 2 September 76 TIME 1016 (Local) 1616 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.2		21.2		23.5		22.7			
T_{dp}	11.1		11.1		10.5		12.4			
W_d, W_s	220 1.3		220 1.3		020 3.1		030 1.3			
P	26.13		26.13		25.53		25.78			
C	E200⊕		E200⊕		220◑		220-⊕			
M	No		No		No		No			
$T_{a2\ 5}$	22.2		22.2		24.0					
$T_{dp2\ 5}$	13.7		13.7		9.6					
	1	2	1	2	1	2	1	2	1	2
I	0.74	5.16	0.74	5.16	0.82	5.71	0.84	5.87		
I_a	0.59	4.08	0.59	4.08	0.45	3.11	0.73	5.06		
I_d	0.37	2.55	0.37	2.55	0.28	1.97	0.46	3.19		
N	0.32	2.20	0.32	2.20	0.76	5.29	0.75	5.26		
N_a	0.25	1.71	0.25	1.71	0.60	4.20	0.55	3.87		
N_b	0.23	1.58	0.23	1.58	0.56	3.87	0.49	3.42		
N_c	0.18	1.28	0.18	1.28	0.46	3.24	0.39	2.74		
N_d	0.15	1.06	0.15	1.06	0.39	2.75	0.33	2.29		
i	0.37	2.57	0.41	2.86	0.07	0.52	0.06	0.43		
i_a	0.30	2.10	0.36	2.51	0.08	0.53	0.04	0.30		
i_d	0.20	1.39	0.22	1.54	0.06	0.39	0.02	0.15		
T_g	15.5		20.0		36.0		*			
T_s	24.0		24.0		32.0					
Ψ	16.0		15.2							
ε										

REMARKS: MET SAT II (Grass Cover) = 27°C

* Water temperature not measured this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 2 September 76

RADIOSONDE: (0800 MDT) TTAA 52141 72HMS 99881 16650 19002 00159
///// ///// 85559 17260 25503 70186 05458 10005 50588 08356 21509
40758 19756 24509 30966 34958 27527 25090 447// 25039 20237 549//
25040 15417 621// 25014 10662 699// 08509 88116 695// 14504 77224
24545 40907⏀

TTBB 5214/ 72HMS 00881 16650 11871 14658 22850 17260 33824 16260
44700 05458 55614 00560 66600 00263 77580 01965 88541 06158 99500
08356 11451 12761 22400 19756 33369 22959 44276 39757 55262 40958
66200 549// 77182 583// 88150 621// 99145 621// 11116 695// 22100
699//⏀

TTCC 52141 72HMS 70878 635// 08514 50087 589// 09013 30413 519//
10022 20677 491// 08012 10137 409// 09523 07383 373// 10029 88999
77999⏀

TTDD 5214/ 72HMS 11980 701// 22810 637// 33700 635// 44300 519//
55105 449// 66100 409// 77091 369// 88060 373// 51515 10190 05615
⏀

ROCKETSONDE: (1015 MDT) RRXX 02162 72269 81010 11101 25554 09010
30545 11007 33541 11012 35533 11014 36533 12010 39524 07019 40515
09022 41519 10018 43513 09021 45510 12009 46511 07019 47510 10031
49002 13019 50502 10014 52505 15005 53509 18004 55517 12020 56518
11017 57*** 02024 58*** 01046 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 8 September 76 TIME 0942 (Local) 1542 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.8		21.8		24.1		21.8			
T_{dp}	14.3		14.3		11.7		13.4			
W_d, W_s	350 0.9		350 0.9		310 4.5		040 1.8			
P	26.12		26.12		25.48		25.74			
C	220◐		220◐		200-◐		160◐ E240◐			
M	No		No		No		No			
$T_{a2\ 5}$					23.6					
$T_{dp2\ 5}$					10.7					
	1	2	1	2	1	2	1	2	1	2
I	0.78	5.45	0.78	5.45	0.75	5.22	0.81	5.63		
I_a	0.65	4.56	0.65	4.56	0.62	4.35	0.70	4.88		
I_d	0.40	2.82	0.40	2.82	0.38	2.67	0.46	3.17		
N	1.19	8.30	1.19	8.30	1.15	7.99	1.01	7.05		
N_a	0.87	6.08	0.87	6.08	0.87	6.08	0.77	5.34		
N_b	0.80	5.61	0.80	5.61	0.83	5.80	0.70	4.89		
N_c	0.65	4.55	0.65	4.55	0.66	4.59	0.55	3.85		
N_d	0.55	3.86	0.55	3.86	0.55	3.82	0.44	3.05		
i	0.38	2.62	0.44	3.10	0.05	0.37	0.06	0.42		
i_a	0.30	2.07	0.34	2.34	0.06	0.39	0.04	0.30		
i_d	0.19	1.29	0.19	1.35	0.04	0.27	0.02	0.15		
T_g	26.5		28.0		33.0		*			
T_s	28.0		28.0		31.0					
Ψ	19.5		19.5							
ε										

REMARKS: MET SAT II(Grass) = 25°C
* Water temperature not measured this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 8 September 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.0		23.0		28.7		26.2			
T_{dp}	15.6		15.6		9.5		13.0			
W_d, W_s	290 2.2		290 2.2		030 2.7		040 1.3			
P	26.11		26.11		25.48		25.73			
C	60 ◐ 240-◐		60 ◐ 240-◐		50 ◐ E200 ⊕		220-⊕			
M	No		No		No		No			
$T_{a2\,5}$					26.5					
$T_{dp2\,5}$					8.2					
	1	2	1	2	1	2	1	2	1	2
I	1.06	7.39	1.06	7.39	0.89	6.23	1.17	8.16		
I_a	0.85	5.90	0.85	5.90	0.73	5.06	1.06	7.41		
I_d	0.53	3.70	0.53	3.70	0.37	2.58	0.65	4.51		
N	0.59	4.09	0.59	4.09	0.58	4.03	0.70	4.91		
N_a	0.42	2.92	0.42	2.92	0.34	2.37	0.59	4.14		
N_b	0.36	2.48	0.36	2.48	0.46	3.24	0.58	4.02		
N_c	0.24	1.67	0.24	1.67	0.37	2.61	0.48	3.32		
N_d	0.20	1.38	0.20	1.38	0.28	1.96	0.40	2.82		
i	0.50	3.52	0.61	4.23	0.08	0.54	0.06	0.45		
i_a	0.43	3.03	0.50	3.46	0.07	0.51	0.04	0.30		
i_d	0.28	1.92	0.25	1.74	0.06	0.39	0.02	0.13		
T_g	missing		missing		39.5		*			
T_s	36		36		49					
Ψ	19.5		19.5							
ε										

REMARKS: MET SAT II(Grass) = 32°C

* Water temperature not measured this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7411

DATE OF OBSERVATION 8 September 76 TIME 0739 (Local) 1339 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	17.3		17.3		17.9		19.2			
T_{dp}	13.6		13.6		11.2		12.8			
W_d, W_s	050 0.9		050 0.9		020 1.8		150 1.8			
P	26.11		26.11		25.48		25.72			
C	160⊕240-⊖		160⊕240-⊖		200-⊕		160⊖E240⊕			
M	No		No		No		No			
$T_{a2\,5}$					19.9					
$T_{dp2\,5}$					11.0					
	1	2	1	2	1	2	1	2	1	2
I	0.26	1.83	0.26	1.83	0.14	0.95	0.07	0.50		
I_a	0.24	1.64	0.24	1.64	0.12	0.82	0.05	0.36		
I_d	0.14	1.00	0.14	1.00	0.07	0.49	0.02	0.17		
N	0.79	5.52	0.79	5.52	0.51	3.57				
N_a	0.63	4.38	0.63	4.38	0.34	2.40				
N_b	0.59	4.11	0.59	4.11	0.33	2.30				
N_c	0.49	3.44	0.49	3.44	0.29	2.05				
N_d	0.42	2.92	0.42	2.92	0.23	1.59				
i	0.13	0.91	0.13	0.90	0.02	0.12	0.00	0.03		
i_a	0.10	0.71	0.09	0.62	0.02	0.15	0.00	0.02		
i_d	0.06	0.45	0.04	0.31	0.01	0.09	0.01	0.04		
T_g	13.0		15.0		12.0		*			
T_s	19.0		16.0		19.0					
Ψ	19.5		19.5							
ε										

REMARKS: MET SAT II(Grass) = 16°C
No normal incidence pyrheliometer at METSAT III because of clouds.
* Not measured this date

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 8 September 76

RADIOSONDE: NONE

ROCKETSONDE: (1110 MDT) RRXX 08171 72269 81010 11101 25551 08011
30545 09015 33537 11009 35537 10019 40528 11024 41522 10020 42517
08024 45517 08023 46516 08033 50514 10016 51510 09016 52505 09024
53506 11127 55515 18025 56509 20025 57513 22012 58517 21008 60527
12017 61532 11027 64534 27004 65*** 31005 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 9 September 76 TIME 1230 (Local) 1830 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	24.8		24.8		18.4					
T_{dp}	10.1		10.1		10.5					
W_d, W_s	030 8.0		030 8.0		030 8.9					
P	26.21		26.21		25.67					
C	E50 100 210		E50 100 210		E50					
M	No		No		No					
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.09	7.58	1.09	7.58	0.38	2.68				
I_a	0.88	6.11	0.88	6.11	0.30	2.07				
I_d	0.56	3.90	0.56	3.90	0.17	1.15				
N	0.42	2.95	0.42	2.95						
N_a	0.14	0.96	0.14	0.96						
N_b	0.15	1.02	0.15	1.02						
N_c	0.01	0.08	0.01	0.08						
N_d	0.00	0.03	0.00	0.03						
i	0.74	5.18	0.84	5.84	0.04	0.25				
i_a	0.60	4.21	0.65	4.51	0.03	0.22				
i_d	0.37	2.58	0.35	2.46	0.03	0.18				
T_g	missing		missing		19.0					
T_s	38.0		32.0		23.0					
Ψ	19.1		18.4							
ε										

REMARKS: MET SAT II (Grass) = 19°C
No normal incidence pyranometer data at MET SAT II because of over cast
No MET SAT III data because of wind

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 9 September 76 TIME 1409 (Local) 2009 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.5		23.5		19.5					
T_{dp}	9.9		9.9		10.5					
W_d, W_s	340 1.3		340 1.3		360 6.7					
P	26.21		26.21		25.67					
C	E50◐100⊕		E50◐100⊕		E50⊕					
M	No		No		Yes					
$T_{a2\,5}$					22.7					
$T_{dp2\,5}$					10.7					
	1	2	1	2	1	2	1	2	1	2
I	0.40	2.81	0.40	2.81	0.57	3.98				
I_a	0.32	2.21	0.32	2.21	0.45	3.14				
I_d	0.17	1.16	0.17	1.16	0.26	1.81				
N										
N_a										
N_b										
N_c										
N_d										
i	0.20	1.39	0.20	1.40	0.04	0.27				
i_a	0.15	1.06	0.16	1.09	0.04	0.25				
i_d	0.08	0.55	0.07	0.4[illegible]	0.03	0.21				
T_g	missing		missing		20.5					
T_s	27.0		27.0		28.0					
Ψ	19.1		18.4							
ε										

REMARKS: MET SAT II (Grass) = 24°C
No normal incidence pyrheliometer data because of over cast
No MET SAT III data because of wind

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 9 September 76

RADIOSONDE: (0800 MDT) TTAA 59141 72HMS 99884 17827 12001 00179
///// ///// 85597 19058 33001 70235 08030 12514 50594 06957 16013
40764 17536 22517 30973 32556 25518 25099 429// 27518 20245 555//
27049 15424 671// 27547 10663 721// 25512 88117 755// 26524 77169
26562 41223

TTBB 5914/ 72HMS 00884 17827 11857 19658 22808 15657 33588 00903
44538 07317 55520 05159 66457 11243 77400 12745 88423 15341 99407
16156 11400 17556 22300 32558 33250 429// 44200 555// 55124 757//
66117 755// 77103 711// 88100 721// 51515 10186 //253 41959

TTCC 59142 72HMS 647// 06010 50085 583// 09515 30410 543// 08017
20574 465// 09020 10135 438// 88999 77999

TTDD 5914/ 72HMS 11870 7111/ 226600 645// 33610 605// 4431 44300
543// 55200 465// 66140 471// 77100 439//

ROCKETSONDE: (1330 MDT) RRXX 09193 72269 81010 11101 25550 09011
30542 10011 34535 06009 35537 09011 40525 10016 41518 13020 42512
11020 45508 10014 46504 13019 47507 14022 48507 17025 49507 19025
50500 22014 53509 19007 55511 19011 56510 26006 57514 05002 58515
18012 59*** 22020 60*** 25020 63*** 29019 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7411

DATE OF OBSERVATION 15 September 76 TIME 0732 (Local) 1332 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	16.6		16.6		15.4		16.0			
T_{dp}	15.4		15.4		14.5		2.4			
W_d, W_s	CALM		CALM		010	1.3	360	0.9		
P	26.10		26.10		25.50		25.76			
C	E110 ◐ 200 ⊕		E110 ◑ 200 ⊕		E120 ◐ 200 ⊕		120 ◯ 220- ◐			
M	No		No		No		No			
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	0.09	0.62			0.07	0.52	0.05	0.37		
I_a	0.06	0.43			0.05	0.38	0.01	0.09		
I_d	0.03	0.21			0.03	0.24	0.02	0.13		
N										
N_a										
N_b										
N_c										
N_d										
i					0.01	0.06	0.02	0.13		
i_a					0.01	0.04	0.05	0.33		
i_d					0.01	0.04	0.05	0.33		
T_g	16.1		15.8		MISSING		22.2 *			
T_s	15.0		16.0		15.5					
Ψ	20.4		20.9							
ε										

REMARKS: MET SAT II(Grass) = 15°C
* Water temperature
Normal incidence pyrheliometer at all sites inoperative due to clouds
Global out going at MET SAT I missing

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 15 September 76 TIME 1021 (Local) 1621 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.2		21.2		22.2		18.5			
T_{dp}	15.8		15.8		14.4		13.8			
W_d, W_s	070 3.1		070 3.1		170 1.3		CALM			
P	26.11		26.11		25.52		25.76			
C	E220◐		E220◐		50◐120◐E200◐		220 -◐			
M	No		No		No		No			
$T_{a2\,5}$	23.6		23.6		24.0					
$T_{dp2\,5}$	18.2		18.2		13.2					
	1	2	1	2	1	2	1	2	1	2
I	1.05	7.35	1.05	7.35	0.92	6.39	0.87	6.04		
I_a	0.87	6.06	0.87	6.06	0.73	5.07	0.74	5.19		
I_d	0.53	3.69	0.53	3.69	0.46	3.24	0.48	3.37		
N					1.00	6.96	1.18	8.22		
N_a					0.67	4.70	0.87	6.08		
N_b					0.72	5.05	0.80	5.55		
N_c					0.48	3.36	0.65	4.56		
N_d					0.54	3.75	0.55	3.81		
i	0.41	2.85	0.46	3.17	0.06	0.44	0.07	0.46		
i_a	missing		0.35	2.44	0.05	0.35	0.04	0.30		
i_d	0.23	1.57	0.18	1.25	0.03	0.19	0.03	0.19		
T_g	25.0		24.0		missing		22.4 *			
T_s	26.0		26.0		32.5					
Ψ	20.4		20.0							
ε										

REMARKS: MET SAT II(Grass) = 26°C

* Water Temperature

Normal incidence pyranometer inoperative at MET SAT I

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 15 September 76 TIME 1155 (Local) 1755 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.4		23.4		23.8		25.1			
T_{dp}	16.4		16.4		13.5		14.5			
W_d, W_s	140 - 2.7		140 2.7		160 4.0		CALM			
P	26.10		26.10		25.49		25.73			
C	70⊖140⊖E220⊖		70⊖140⊖E220⊖		50⊖120⊖E200⊖		220-⊖			
M	No		No		No		No			
$T_{a2.5}$	22.8		22.8		25.2					
$T_{dp2.5}$	11.0		11.0		17.2					
	1	2	1	2	1	2	1	2	1	2
I	0.95	6.65	0.95	6.65	0.80	5.59	1.18	8.21		
I_a	0.73	5.12	0.73	5.12	0.71	4.96	0.97	6.78		
I_d	0.43	2.98	0.43	2.98	0.40	2.80	0.63	4.38		
N	0.10	0.66	0.10	0.66	0.35	2.42	1.23	8.59		
N_a	0.14	0.98	0.14	0.98	0.16	1.14	0.89	6.22		
N_b	0.23	1.62	0.23	1.62	0.15	1.05	0.81	5.61		
N_c	0.25	1.74	0.25	1.74	0.20	1.38	0.67	4.64		
N_d	0.27	1.90	0.27	1.90	0.18	1.24	0.55	3.83		
i	0.41	2.83	0.46	3.21	0.07	0.50	0.06	0.42		
i_a	0.34	2.36	0.33	2.29	0.06	0.44	0.04	0.30		
i_d	0.20	1.36	0.17	1.16	0.04	0.28	0.02	0.13		
T_g	29.7		29.0		missing		23.3 *			
T_s	29.0		29.0		35.0					
Ψ	20.4		20.9							
ε										

REMARKS: MET SAT II(Grass) = 25°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 15 September 76 TIME 1358 (Local) 1958 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	25.4		25.4		26.5		28.0			
T_{dp}	16.1		16.1		12.3		13.9			
W_d, W_s	140 1.3		140 1.3		150 3.6		270 0.9			
P	26.06		26.06		25.45		25.68			
C	70◑220◑		70◑220◑		70◔210①		◯			
M	No		No		No		No			
$T_{a2\,5}$	26.3		26.3		26.7					
$T_{dp2\,5}$	17.1		17.1		14.4					
	1	2	1	2	1	2	1	2	1	2
I	1.24	8.68	1.24	8.68	1.23	8.59	1.19	8.29		
I_a	0.97	6.77	0.97	6.77	1.00	6.96	0.99	6.93		
I_d	0.62	4.29	0.62	4.29	0.61	4.22	0.63	4.38		
N	1.27	8.86	1.27	8.86	1.32	9.18	1.25	8.74		
N_a	0.91	6.37	0.91	6.37	1.00	6.96	0.92	6.41		
N_b	0.83	5.79	0.83	5.79	0.91	6.38	0.84	5.83		
N_c	0.67	4.69	0.67	4.69	0.75	5.22	0.67	4.68		
N_d	0.56	3.93	0.56	3.93	0.63	4.38	0.55	3.85		
i	0.53	3.72	0.57	3.98	0.09	0.62	0.05	0.35		
i_a	0.46	3.24	0.45	3.15	0.07	0.46	0.03	0.24		
i_d	0.26	1.82	0.24	1.70	0.04	0.29	0.02	0.11		
T_g	35.5		33.0		missing		25.0 *			
T_s	36.0		32.0		50.0					
Ψ	20.4		20.9							
ε										

REMARKS: MET SAT II(Grass) = 23°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 15 September 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.4		23.4		23.8		25.1			
T_{dp}	16.4		16.4		13.5		14.5			
W_d, W_s	140 2.7		140 2.7		180 3.6		CALM			
P	26.10		26.10		25.50		25.73			
C	70 ◐ 140 ◑ E220 ◭		70 ◐ 140 ◑ E220 ◭		50 ◐ 120 ◑ E200 ◑		220 - ◑			
M	No		No		No		No			
$T_{a2\ 5}$	22.8		22.8		25.2					
$T_{dp2\ 5}$	11.0		11.0		13.1					
	1	2	1	2	1	2	1	2	1	2
I	1.26	8.81	1.26	8.81	1.09	7.62	1.18	8.25		
I_a	1.04	7.25	1.04	7.25	0.94	6.58	0.98	6.81		
I_d	0.69	4.83	0.69	4.83	0.60	4.17	0.64	4.43		
N	0.69	4.81	0.69	4.81	0.65	4.56	1.23	8.60		
N_a	0.57	3.96	0.57	3.96	0.45	3.17	0.90	6.25		
N_b	0.63	4.39	0.63	4.39	0.44	3.08	0.81	5.65		
N_c	0.55	3.84	0.55	3.84	0.21	1.47	0.67	4.64		
N_d	0.30	2.07	0.30	2.07	0.14	1.00	0.55	3.87		
i	0.47	3.25	0.56	3.90	0.05	0.36	0.06	0.43		
i_a	0.52	3.64	0.48	3.34	0.04	0.28	0.04	0.28		
i_d	0.22	1.52	0.27	1.91	0.02	0.16	0.02	0.12		
T_g	29.7		29.0		MISSING		23.3 *			
T_s	29.0		29.0		35.0					
Ψ	20.4		20.9							
ε										

REMARKS: MET SAT II (Grass) = 25°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 15 September 76

RADIOSONDE: (0800 MDT) TTAA 65141 72HMS 99880 16414 00000 00142
///// ///// 88557 16050 20503 70197 08455 20513 50589 07957 22513
40759 20167 32028 30966 35961 23034 25090 451// 20540 20235 575//
22053 15414 629// 25038 10659 711// 22015 88112 703// 22017 77206
22053 41019

TTBB 6514/ 72HMS 00880 16414 11858 11656 22834 15243 33809 16658
44751 13459 55642 03222 66561 03347 77518 08316 88500 07957 99492
07771 11400 20167 22373 22364 33278 40360 44200 575// 55123 661//
66112 703// 77100 711//

TTCC 65147 72HMS 70875 615// 34510 50085 581// ///// 88999 77999

TTDD 6514/ 72HMS 11970 713// 22700 615// 33500 581//

ROCKETSONDE: (1210 MDT) RRXX 15181 72269 81010 11101 25554 08010
30546 09014 34538 14009 35532 11006 37531 03008 40527 10013 41520
11014 42519 13016 43520 ;2016 44511 09014 45511 06016 50509 15009
52512 13013 55517 35006 56520 09017 58524 06008 59524 06016 60526
11009 61528 15016 62530 14029 63533 14040 64536 17032 65*** 23018
JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION LANDSAT A

DATE OF OBSERVATION 20 September 76 TIME 1017 (Local) 1617 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	20.4		20.4		23.0					
T_{dp}	9.7		9.7		12.2					
W_d, W_s	CALM		CALM		140	2.7				
P	26.08		26.08		25.51					
C	○		○		○					
M	No		No		No					
$T_{a2.5}$	24.1		24.1		23.8					
$T_{dp2.5}$	12.1		12.1		9.2					
	1	2	1	2	1	2	1	2	1	2
I	0.90	6.24	0.90	6.24	0.88	6.16				
I_a	0.73	5.12	0.73	5.12	0.74	5.18				
I_d	0.47	3.27	0.47	3.27	0.48	3.33				
N	1.23	8.56	1.23	8.56	1.22	8.50				
N_a	0.93	6.47	0.93	6.47	0.98	6.85				
N_b	0.86	5.99	0.86	5.99	0.88	6.15				
N_c	0.70	4.88	0.70	4.88	0.73	5.10				
N_d	0.60	4.19	0.60	4.19	0.60	4.19				
i	0.44	3.04	0.53	3.71	0.08	0.56				
i_a	0.35	2.42	0.43	3.01	0.06	0.43				
i_d	0.22	1.55	0.24	1.70	0.05	0.32				
T_g	27.5		32.0		31.0					
T_s	missing		missing		32.0					
Ψ	15.4		15.5							
ε										

REMARKS: MET SAT II (Grass) = 22°C
No observation at MET SAT III due to high wind

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 20 Sept 76

RADIOSONDE: (0800 MDT) TTAA 70140 72HMS 99881 17257 10005 00149
///// ///// 85562 17459 12009 70197 07446 31008 50588 09569 33016
40758 21368 26014 30963 37361 27520 25086 481// 25523 20230 559//
25523 15408 667// 26021 10652 699// 26008 88156 671// 26021 77215
25526 40306

TTBB 7014/ 72HMS 00881 17257 11861 17859 22700 07446 33691 06456
44679 07061 55605 01540 66566 03564 77434 15769 88400 21368 99361
26962 11349 28759 22330 32758 33289 39161 44250 481// 55200 559//
66156 671// 77139 641// 88100 669//

TTCC 70141 72HMS 70868 629// 04506 50078 585// 09004 30405 511//
03504 20671 445// 01504 10136 397// 15008 88999 77999

TTDD 7014/ 72HMS 11964 711// 22828 653// 33634 605// 44557 615//
55300 511// 66232 497// 77200 445// 88141 455// 99100 397// 11072
403// 51515 10190 07378

ROCKETSONDE: (1145 MDT) RRXX 20175 72269 81010 11101 25552 00001
30544 10004 31543 15010 35535 32004 38530 20000 39531 36003 40526
06006 41519 08012 42515 09019 43515 11024 44508 14019 45511 17013
46511 18006 47509 19010 48507 23019 49511 27014 50511 00002 51511
10009 55512 20023 55615 24028 57518 27024 58521 31015 59525 31009
60524 27017 62528 26018 63*** 25025 65*** 29017 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7411

DATE OF OBSERVATION 22 September 76 TIME 0726 (Local) 1326 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	11.6		11.6		11.8		16.2			
T_{dp}	8.3		8.3		9.1		12.7			
W_d, W_s	280 1.8		280 1.8		020 1.3		340 2.2			
P	26.04		26.04		25.42		25.70			
C	250 - ◐		250 - ◐		140 ◐		250 - ◐			
M	No		No		No		No			
$T_{a2\,5}$	20.6		20.6		18.8					
$T_{dp2\,5}$	11.3		11.3		9.8					
	1	2	1	2	1	2	1	2	1	2
I	0.08	0.54	0.08	0.54	0.06	0.45	0.18	1.24		
I_a	0.07	0.48	0.07	0.48	0.07	0.49	0.18	1.22		
I_d	0.04	0.29	0.04	0.29	0.05	0.33	0.12	0.83		
N	0.45	3.13	0.45	3.13	0.47	3.31	0.61	4.25		
N_a	0.39	2.71	0.39	2.71	0.42	2.96	0.53	3.69		
N_b	0.37	2.59	0.37	2.59	0.41	2.89	0.48	3.38		
N_c	0.33	2.32	0.33	2.32	0.38	2.65	0.43	2.99		
N_d	0.29	2.05	0.29	2.05	0.33	2.33	0.37	2.58		
i	0.04	0.24	0.04	0.25	0.02	0.13	0.03	0.22		
i_a	0.03	0.18	0.02	0.13	0.01	0.09	0.02	0.17		
i_d	0.01	0.09	0.00	0.03	0.01	0.10	0.02	0.12		
T_g	13.0		12.0		missing		missing			
T_s	10.5		10.0		12.0					
Ψ	15.0		14.0							
ε										

REMARKS: MET SAT II (Grass) = 8°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 22 September 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.2		23.2		26.6		22.7			
T_{dp}	10.1		10.1		11.9		12.0			
W_d, W_s	120 1.8		120 1.8		260 2.7		CALM			
P	26.03		26.03		25.40		25.66			
C	250 - ◑		250 - ◑		60 ◑		○			
M	No		No		No		No			
$T_{a2.5}$	21.6		21.6		25.5					
$T_{dp2.5}$	9.5		9.5		9.4					
	1	2	1	2	1	2	1	2	1	2
I	1.22	8.50	1.22	8.50	1.18	8.21	1.13	7.90		
I_a	0.98	6.85	0.98	6.85	0.98	6.85	0.95	6.63		
I_d	0.62	4.34	0.62	4.34	0.62	4.31	0.62	4.32		
N	1.29	9.03	1.29	9.03	1.29	8.91	1.25	8.68		
N_a	0.97	6.74	0.97	6.74	0.99	6.94	0.94	6.58		
N_b	0.88	6.14	0.88	6.14	0.91	6.36	0.86	5.96		
N_c	0.72	5.02	0.72	5.02	0.75	5.20	0.69	4.84		
N_d	0.62	4.33	0.62	4.33	0.62	4.31	0.58	4.06		
i	0.60	4.15	0.72	4.99	0.10	0.67	0.05	0.37		
i_a	0.48	3.32	0.58	4.03	0.07	0.51	0.03	0.22		
i_d	0.31	2.14	0.33	2.31	0.05	0.36	0.01	0.10		
T_g	35.0		38.0		missing		missing			
T_s	35.0		38.0		41.0					
Ψ	15.0		15.9							
ε										

REMARKS: MET SAT II(Grass) = 30°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 22 September 76 TIME 1225 (Local) 1825 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	24.3		24.3		27.0		25.6			
T_{dp}	10.6		10.6		11.6		11.7			
W_d, W_s	170 1.8		170 1.8		240 2.7		150 0.9			
P	26.01		26.01		25.39		25.65			
C	250 - ⊕		250 - ⊕		60 ⊕		60 ⊕			
M	No		No		No		No			
$T_{a2\ 5}$	23.3		23.3		25.8					
$T_{dp2\ 5}$	11.4		11.4		9.0					
	1	2	1	2	1	2	1	2	1	2
I	1.26	8.76	1.26	8.76	1.21	8.44	1.22	8.45		
I_a	1.01	7.06	1.01	7.06	1.01	7.03	1.02	7.10		
I_d	0.65	4.50	0.65	4.50	0.63	4.40	0.65	4.56		
N	1.31	9.13	1.31	9.13	1.31	9.13	1.27	8.86		
N_a	0.97	6.79	0.97	6.79	0.99	6.90	0.96	6.66		
N_b	0.89	6.19	0.89	6.19	0.92	6.41	0.87	6.04		
N_c	0.73	5.07	0.73	5.07	0.75	5.26	0.71	4.95		
N_d	0.63	4.37	0.63	4.37	0.63	4.36	0.60	4.20		
i	0.62	4.33	0.74	5.16	0.09	0.65	0.06	0.41		
i_a	0.50	3.47	0.60	4.18	0.07	0.49	0.05	0.31		
i_d	0.32	2.25	0.34	2.39	0.05	0.33	0.02	0.10		
T_g	36.0		39.0		missing		missing			
T_s	36.0		39.0		49.0					
Ψ	15.0		14.9							
ε										

REMARKS: MET SAT II (Grass) = 17°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 22 September 76 TIME 1329 (Local) 1929 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	26.3		26.3		28.3		27.0			
T_{dp}	11.9		11.9		9.0		11.6			
W_d, W_s	060 1.3		060 1.3		190 0.9		160 1.8			
P	25.99		25.99		25.36		25.63			
C	250 -Ⓘ		250 -Ⓘ		60Ⓘ		60Ⓘ			
M	No		No		No		No			
$T_{a2\,5}$	21.5		21.5		27.3					
$T_{dp2\,5}$	7.6		7.6		7.0					
	1	2	1	2	1	2	1	2	1	2
I	1.27	8.84	1.27	8.84	1.23	8.54	1.26	8.79		
I_a	1.01	7.01	1.01	7.01	1.01	7.04	1.07	7.46		
I_d	0.65	4.50	0.65	4.50	0.62	4.34	0.67	4.68		
N	1.31	9.16	1.31	9.16	1.32	9.20	1.27	8.84		
N_a	0.98	6.81	0.98	6.81	1.01	7.03	0.95	6.64		
N_b	0.89	6.21	0.89	6.21	0.93	6.46	0.87	6.08		
N_c	0.73	5.08	0.73	5.08	0.75	5.26	0.71	4.95		
N_d	0.63	4.38	0.63	4.38	0.64	4.47	0.60	4.20		
i	0.62	4.32	0.74	5.17	0.09	0.63	0.06	0.41		
i_a	0.50	3.48	0.60	4.18	0.07	0.50	0.04	0.30		
i_d	0.33	2.27	0.34	2.38	0.05	0.32	0.02	0.10		
T_g	37.0		40.0		missing		missing			
T_s	38.6		40.0		51.0					
Ψ	15.0		14.9							
ε										

REMARKS: MET SAT II(Grass) = 34°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 22 Sept 76

RADIOSONDE: (0800 MDT) TTAA 72141 72HMS 99878 13857 06002 00138
///// ///// 88536 18058 ///// 70169 07268 22506 50585 09171 24516
40754 19972 22521 30960 369// 27528 25083 473// 27032 20227 571//
25550 15406 649// 26541 10649 705// 27014 88124 695// 26014 77200
25551 41502

TTBB 7214/ 72HMS 00878 13857 11868 18257 22783 13456 33722 08660
44712 08870 55645 02963 66613 01157 77608 01163 88596 01956 99539
05773 11506 09171 72460 14164 33446 15756 44439 15363 55437 14960
66400 19972 77350 27570 88312 35166 99190 593// 11124 695// 22117
675// 33105 713// 44100 705//

TTCC 72141 72HMS 70864 649// 30508 50072 583// 06502 30398 523//
26005 20666 437// 24018 10131 437// 07523 88999 77999

TTDD 7214/ 72HMS 11426 547// 22376 567// 33200 437// 44100 437//
55093 437//

ROCKETSONDE: NONE

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 24 September 76 TIME 1002 (Local) 1602 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.4		21.4		20.8		24.2			
T_{dp}	15.6		15.6		13.3		14.7			
W_d, W_s	170 3.6		170 3.6		CALM		150 1.8			
P	26.06		26.06		25.45		25.71			
C	450 ◑ E110 ⊕		450 ◑ E110 ⊕		40 ◑ E70 ◑ 220 ⊕		E110 ⊕			
M	No		No		No		No			
$T_{a2\ 5}$	24.3		24.3		22.6					
$T_{dp2\ 5}$	17.7		17.7		12.6					
	1	2	1	2	1	2	1	2	1	2
I	0.59	4.12	0.59	4.12	0.38	2.64	0.45	3.11		
I_a	0.47	3.27	0.47	3.27	0.29	2.06	0.37	2.58		
I_d	0.27	1.90	0.27	1.90	0.18	1.25	0.23	1.58		
N										
N_a										
N_b										
N_c										
N_d										
i	0.26	1.78	0.33	2.31	0.03	0.19	0.03	0.23		
i_a	0.20	1.40	0.26	1.81	0.02	0.14	0.02	0.16		
i_d	0.12	0.83	0.13	0.94	0.01	0.10	0.01	0.08		
T_g	26.0		28.0		missing		22.2 *			
T_s	26.0		26.0		26.0					
Ψ	16.9		14.9							
ε										

REMARKS: MET SAT II (Grass) = 24°C
* Water Temperature
No normal incidence pyrheliometer readings due to cloudiness

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 24 Sept 76

RADIOSONDE: (0800 MDT) TTAA 74141 72HMS 99879 17823 12003 00125
///// ///// 85546 18043 15510 70177 06809 21010 50587 07729 21017
40757 18555 23009 30965 34957 23523 25089 439// 23525 20235 567//
24045 15412 667// 25038 10653 705// 15520 88119 725// 26028 77202
24045 40804

TTBB 7414/ 72HMS 00879 17823 11850 18043 22656 04001 33506 07113
44500 07729 55450 13301 66436 14543 77400 18555 88391 20759 99365
24156 11558 24959 22300 34957 33279 38962 44153 677// 55150 667//
66119 725// 77116 703// 88100 705//

TTCC 74142 72HMS 70868 661// 21003 50078 573// 20005 30405 513//
26002 20669 487// 04003 10131 451// ///// 88999 77999

TTDD 7414/ 72HMS 11700 661// 22566 595// 33346 513// 44222 513//
513// 55172 459// 66100 451//

ROCKETSONDE: NONE

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7411

DATE OF OBSERVATION 27 September 1976 TIME 0749 (Local) 1349 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	13.6		13.6		10.7					
T_{dp}	10.7		10.7		8.9					
W_d, W_s	CALM		CALM		360 0.4					
P	25.97		25.97		25.31					
C	80Ⓘ150Ⓘ250-Ⓓ		80Ⓘ150Ⓘ250-Ⓓ		60 ⓘE100Ⓓ					
M	No		No		No					
$T_{a2\,5}$	15.0		15.0		16.8					
$T_{dp2\,5}$	12.5		12.5		8.7					
	1	2	1	2	1	2	1	2	1	2
I	0.14	0.95	0.14	0.95	0.18	1.26				
I_a	0.12	0.83	0.12	0.83	0.17	1.21				
I_d	0.07	0.48	0.07	0.48	0.12	0.80				
N	0.63	4.37	0.63	4.37	0.64	4.43				
N_a	0.55	3.82	0.55	3.82	0.55	3.85				
N_b	0.54	3.78	0.54	3.78	0.53	3.70				
N_c	0.43	3.00	0.43	3.00	0.47	3.28				
N_d	0.27	1.85	0.27	1.85	0.41	2.86				
i	0.07	0.46	0.07	0.45	0.02	0.13				
i_a	0.05	0.36	0.04	0.29	0.01	0.04				
i_d	0.03	0.21	0.02	0.11	0.00	0.03				
T_g	16.0		18.0		missing					
T_s	11.2		11.4		12.0					
Ψ	12.9		14.4							
ε										

REMARKS: MET SAT II (Grass) = 10°C
No MET SAT III Observation

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 27 September 76 TIME 1337 (Local) 1937 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	24.1		24.1		21.8					
T_{dp}	7.2		7.2		5.8					
W_d, W_s	180 2.7		180 2.7		230 1.3					
P	25.97		25.97		25.31					
C	60◐		60◐		E50◑					
M	No		No		No					
$T_{a2\,5}$	23.4		23.4		21.9					
$T_{dp2\,5}$	9.2		9.2		5.9					
	1	2	1	2	1	2	1	2	1	2
I	1.27	8.83	1.27	8.83	1.44	10.06				
I_a	1.00	6.96	1.00	6.96	1.25	8.73				
I_d	0.64	4.45	0.64	4.45	0.77	5.38				
N	1.23	9.23	1.23	9.23	0.88	6.13				
N_a	0.97	6.79	0.97	6.79	1.00	6.96				
N_b	0.90	6.25	0.90	6.25	0.95	6.61				
N_c	0.73	5.11	0.73	5.11	0.99	6.94				
N_d	0.63	4.41	0.63	4.41	0.91	6.32				
i	0.56	3.92	0.64	4.47	0.09	0.66				
i_a	0.45	3.17	0.52	3.62	0.10	0.69				
i_d	0.29	2.05	0.30	2.08	0.10	0.71				
T_g	36.0		38.0		missing					
T_s	35.5		37.5		34.0					
Ψ	12.9		14.4							
ε										

REMARKS: MET SAT II(Grass) = 25°C
No MET SAT III observation

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 27 Sept 76

RADIOSONDE: (0800 MDT) TTAA 77141 72HMS 99874 15046 16006 00084
///// ///// 85497 15256 18011 70113 02427 29012 50575 14768 25535
40740 26766 26048 30944 365// 25584 25067 475// 25076 20212 537//
25567 15395 555// 25524 10470 605// 25012 88179 581// 25549 77234
25088 40922

TTBB 7714/ 72HMS 00874 15046 11861 15857 22804 12057 33700 02427
44667 00142 55658 00559 66601 04962 77575 07901 88570 07930 99527
13320 11525 13158 22519 12964 33450 20368 44427 23558 55400 26766
66346 32567 77300 365// 88128 537// 99209 521// 11179 581// 22150
555// 33121 635// 44100 605//

TTCC 7714/ 72HMS 88999 77999

TTDD 7714/ 72HMS 11878 655// 22848 649// 51515 10190 70865

ROCKETSONDE: (1230 MDT) RRXX 27183 72269 81010 13101 23556 11002
25553 10006 30541 12006 35538 19003 39522 07006 40523 12007 45507
30003 47505 21011 50506 21010 52507 25020 53506 25018 55511 25019
57517 27024 58520 27018 59*** 24012 60*** 24016 61*** 27010 62***
33003 63*** 20007 65*** 21034 66*** 24032 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 29 September 76 TIME 1013 (Local) 1613 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	14.6		14.6		18.4					
T_{dp}	7.3		7.3		6.1					
W_d, W_s	270	1.3	270	1.3	360	1.8				
P	26.03		26.03		25.42					
C	○		○		○					
M	No		No		No					
$T_{a2\,5}$					19.7					
$T_{dp2\,5}$					5.6					
	1	2	1	2	1	2	1	2	1	2
I	0.87	6.04	0.87	6.04	0.88	6.10				
I_a	0.72	4.99	0.72	4.99	0.72	5.04				
I_d	0.46	3.21	0.46	3.21	0.47	3.29				
N	1.26	8.80	1.26	8.80	1.29	9.01				
N_a	0.96	6.67	0.96	6.67	1.02	7.13				
N_b	0.88	6.16	0.88	6.16	0.93	6.48				
N_c	0.72	5.04	0.72	5.04	0.77	5.34				
N_d	0.63	4.38	0.63	4.38	0.63	4.38				
i	0.38	2.68	0.52	3.63	0.07	0.49				
i_a	0.31	2.17	0.42	2.95	0.05	0.38				
i_d	0.21	1.42	0.24	1.70	0.04	0.32				
T_g	26.0		27.0		29.0					
T_s	23.0		23.0		20.5					
Ψ	10.6		18.8							
ε										

REMARKS: MET SAT II(Grass) = 19°C
No observation taken at MET SAT III for this satellite

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-EL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 29 September 76 TIME 1200 (Local) 1800 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	20.0		20.0		23.4		20.0			
T_{dp}	5.4		5.4		3.4		9.3			
W_d, W_s	310 1.3		310 1.3		250 0.9		315 0.4			
P	26.03		26.03		25.41		25.69			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\,5}$	22.7		22.7		22.9					
$T_{dp2\,5}$	9.8		9.8		5.6					
	1	2	1	2	1	2	1	2	1	2
I	1.19	8.30	1.19	8.30	1.19	8.27	1.19	8.32		
I_a	0.97	6.75	0.97	6.75	0.97	6.78	1.04	7.22		
I_d	0.62	4.35	0.62	4.35	0.62	4.29	0.66	4.59		
N	1.35	9.39	1.35	9.39	1.37	9.57	1.30	9.05		
N_a	1.00	6.99	1.00	6.99	1.05	7.32	0.97	6.74		
N_b	0.91	6.37	0.91	6.37	0.96	6.73	0.88	6.16		
N_c	0.76	5.27	0.76	5.27	0.80	5.59	0.72	5.03		
N_d	0.65	4.53	0.65	4.53	0.67	4.70	0.62	4.31		
i	0.53	3.69	0.69	4.84	0.08	0.58	0.06	0.45		
i_a	0.43	2.97	0.56	3.91	0.06	0.43	0.05	0.33		
i_d	0.28	1.93	0.33	2.26	0.05	0.33	0.02	0.15		
T_g	35.0		35.0		20.0		21.4 *			
T_s	33.0		33.0		24.0					
Ψ	10.6		18.8							
ε										

REMARKS: MET SAT II (Grass) = 21°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^3$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

AD-A039 462 ARMY ELECTRONICS COMMAND WHITE SANDS MISSILE RANGE N--ETC F/G 4/2
SATELLITE CALIBRATION DATA ANNUAL DATA REPORT - 1976.(U)
MAR 77 L E WILLIAMSON, L I MURILLO

UNCLASSIFIED ECOM-DR-77-1 NL

3 OF 4
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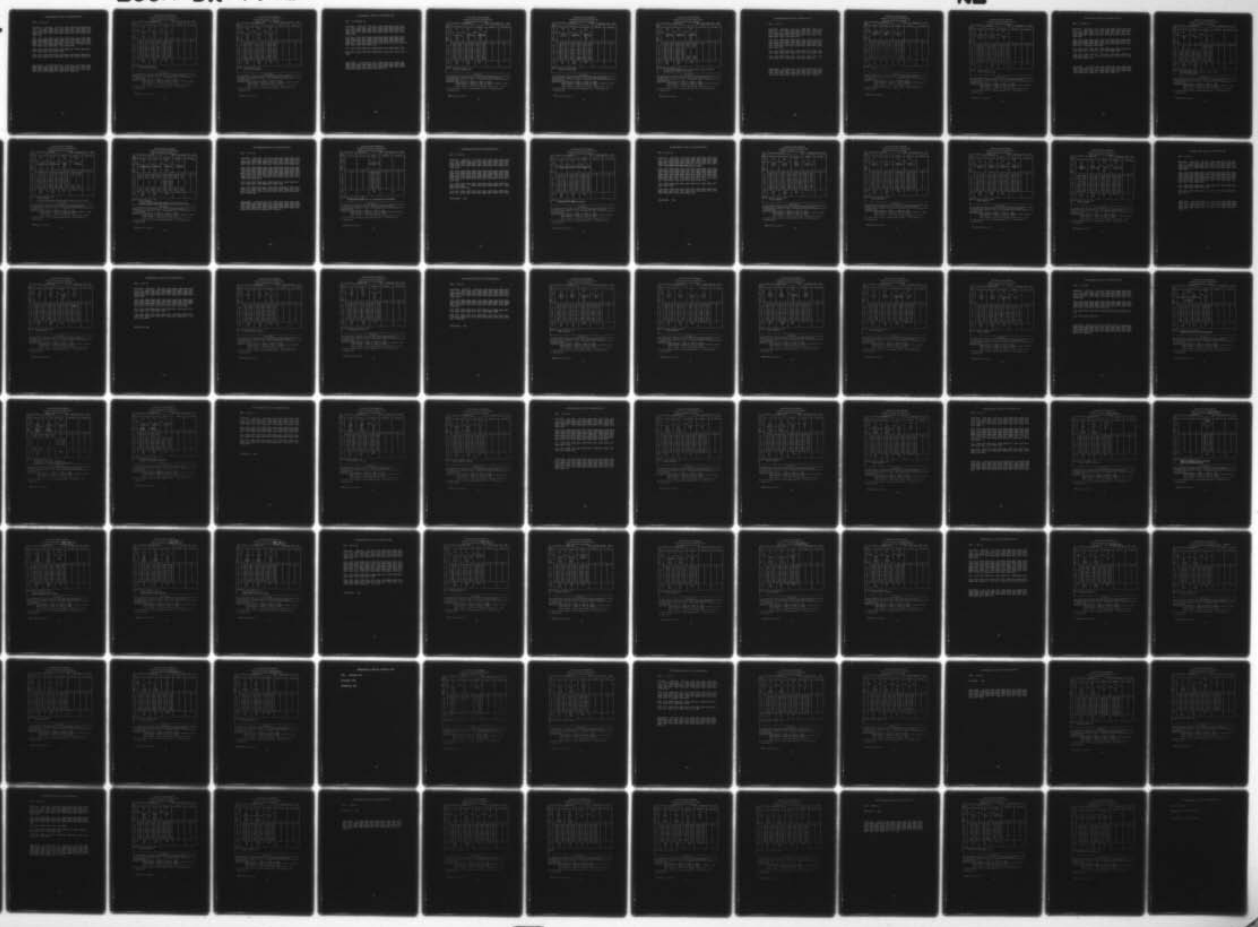
A039462



METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 29 Sept 76

RADIOSONDE: (0800 MDT) TTAA 79151 72HMS 99878 12658 00000 00132
///// ///// 85533 14460 34005 70153 04660 04507 50582 09965 35018
40740 22366 37523 30944 389// 28031 25072 443// 27558 20219 533//
25583 15399 659// 25587 10641 665// 28020 88118 723// 28589 77154
26093 41521

TTBB 7915/ 72HMS 00878 12658 11350 14460 22846 15860 33700 04660
44680 00469 55632 00058 66624 01160 77622 01171 88614 01564 99557
05571 11500 09965 22454 15763 33431 17168 44400 22366 55310 37363
66200 533// 77139 689// 88130 687// 99118 723// 11114 687// 22109
691// 33107 673// 44100 665// 51515 SUPER 63-62

TTCC 79152 72HMS 70858 649// 25009 50068 551// 22505 30396 529//
08010 20661 463// 08010 88999 77999

TTDD 7915/ 72HMS 11876 675// 22736 639// 33700 649// 44438 539//
55418 559// 66200 463// 77156 465// 88106 379// 51515 10190 10127

ROCKETSONDE: (1110 MDT) RRXX 29171 72269 81010 13101 25550 11007
30543 10005 35536 33004 40521 10010 42517 08006 45511 14015 46509
16020 47507 18020 50509 30011 52506 26014 54513 28011 55510 26014
60*** 26015 61*** 25006 63*** 24007 65*** 18022 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION LANDSAT B

DATE OF OBSERVATION 30 September 1976 TIME 1049 (Local) 1649 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	18.6		18.6		23.0					
T_{dp}	6.2		6.2		5.4					
W_d, W_s	340 1.3		340 1.3		060 1.3					
P	26.11		26.11		25.47					
C	250 - Φ		250 - Φ		240 - Φ					
M	No		No		No					
$T_{a2\,5}$	19.8		19.8		21.7					
$T_{dp2\,5}$	9.2		9.2		4.2					
	1	2	1	2	1	2	1	2	1	2
I	1.02	7.09	1.02	7.09	1.03	7.16				
I_a	0.83	5.81	0.83	5.81	0.84	5.88				
I_d	0.54	3.77	0.54	3.77	0.54	3.76				
N	1.33	9.25	1.33	9.25	1.35	9.43				
N_a	0.99	6.93	0.99	6.93	1.03	7.17				
N_b	0.92	6.40	0.92	6.40	0.96	6.69				
N_c	0.75	5.22	0.75	5.22	0.78	5.44				
N_d	0.65	4.51	0.65	4.51	0.66	4.61				
i	0.46	3.18	0.60	4.21	0.08	0.54				
i_a	0.37	2.59	0.49	3.40	0.06	0.40				
i_d	0.24	1.69	0.28	1.96	0.05	0.32				
T_g	28.0		26.0		23.0					
T_s	20.0		21.0		34.0					
Ψ	14.9		14.0							
ε										

REMARKS: MET SAT II(Grass) = 27°C
No MET SAT III Observation

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 30 September 1976 TIME 1214 (Local) 1814 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.9		21.9		24.9					
T_{dp}	5.0		5.0		3.8					
W_d, W_s	250 1.3		250 1.3		010 1.3					
P	26.11		26.11		25.46					
C	250 - ①		250 - ①		240 - ①					
M	No		No		No					
$T_{a2\,5}$	24.3		24.3		23.3					
$T_{dp2\,5}$	7.8		7.8		3.8					
	1	2	1	2	1	2	1	2	1	2
I	1.21	8.43	1.21	8.43	1.20	8.39				
I_a	0.98	6.81	0.98	6.81	0.99	6.89				
I_d	0.63	4.41	0.63	4.41	0.63	4.38				
N	1.32	9.18	1.32	9.18	1.39	9.71				
N_a	0.97	6.77	0.97	6.77	1.05	7.31				
N_b	0.91	6.32	0.91	6.32	0.97	6.80				
N_c	0.75	5.20	0.75	5.20	0.79	5.50				
N_d	0.65	4.52	0.65	4.52	0.67	4.66				
i	0.54	3.79	0.68	4.72	0.08	0.59				
i_a	0.44	3.06	0.56	3.88	0.06	0.43				
i_d	0.28	1.92	0.32	2.26	0.05	0.34				
T_g	33.0		34.0		44.0					
T_s	25.0		28.5		40.0					
Ψ	14.9		14.0							
ε										

REMARKS: MET SAT II(Grass) = 34°C
No MET SAT III Observation

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 30 September 76

RADIOSONDE: (0800 MDT) TTAA 80131 72HMS 99879 08858 03005 00151
///// ///// 85543 15661 33007 70175 07063 12003 50588 08365 35012
40757 20165 30013 30963 35963 26032 25087 459// 26029 20233 539//
27523 15412 677// 26581 10651 723// 30021 88126 747// 27561 77139
26082 41422

TTBB 8013/ 72HMS 00879 08858 11868 16660 22789 14662 33649 03465
44620 02470 55611 03471 66543 04166 77517 05767 88500 08365 99461
11766 11400 20165 22337 30563 33300 35963 44295 37163 55256 455//
66200 539// 77165 633// 88129 725// 99126 747// 1120 729// 22100 723
723// 51515 SUPER 52-50 30-29 13-13

TTCC 80125 72HMS 70864 651// 29004 50073 575// 22006 88999 77999

TTDD 8012/ 72HMS 11462 561// 22384 563// 33330 527// 51515 10190
30339

ROCKETSONDE: (1130 MDT) RRXX 30173 72269 81010 13101 25550 13005
30544 12004 35537 18003 40520 10011 42514 06010 45508 18009 48505
15007 50510 12003 51514 16015 52515 18022 55515 27020 57517 30020
60522 26022 26022 65540 22016 67*** 20025 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 6 October 1976 TIME 1010 (Local) 1610 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	15.0		15.0		17.5					
T_{dp}	5.7		5.7		6.8					
W_d, W_s	230 0.9		230 0.9		220 4.5					
P	26.02		26.02		25.36					
C	160 240-		160 240-		180 E250					
M	No		No		No					
$T_{a2\,5}$	16.5		16.5		19.4					
$T_{dp2\,5}$	8.8		8.8		5.9					
	1	2	1	2	1	2	1	2	1	2
I	0.71	4.95	0.71	4.95	0.89	6.20				
I_a	0.58	4.07	0.58	4.07	0.57	3.98				
I_d	0.36	2.56	0.36	2.56	0.37	2.56				
N	0.93	6.47	0.93	6.47	0.36	2.52				
N_a	0.68	4.74	0.68	4.74	0.23	1.58				
N_b	0.57	4.00	0.57	4.00	0.19	1.30				
N_c	0.48	3.37	0.48	3.37	0.15	1.03				
N_d	0.41	2.86	0.41	2.86	0.12	0.86				
i	0.34	2.34	0.44	3.05	0.06	0.40				
i_a	0.27	1.87	0.36	2.52	0.04	0.26				
i_d	0.17	1.18	0.21	1.48	0.03	0.20				
T_g	23.1		23.2		27.9					
T_s	19.0		20.0		25.0					
Ψ	18.7		18.4							
ε										

REMARKS: MET SAT II (Grass) = 17°C
No MET SAT III Observation

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 6 October 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	20.3		20.3		19.8					
T_{dp}	7.3		7.3		6.6					
W_d, W_s	140 3.1		140 3.1		210 5.4					
P	25.98		25.98		25.32					
C	140 E240		140 E240		180 E250					
M	No		No		No					
$T_{a2\,5}$					20.9					
$T_{dp2\,5}$					7.2					
	1	2	1	2	1	2	1	2	1	2
I	1.36	9.46	1.36	9.46	0.73	5.06				
I_a	1.05	7.35	1.05	7.35	0.60	4.19				
I_d	0.65	4.51	0.65	4.51	0.40	2.80				
N	1.09	7.59	1.09	7.59	0.57	3.98				
N_a	0.65	4.51	0.65	4.51	0.47	3.26				
N_b	0.47	3.29	0.47	3.29	0.44	3.05				
N_c	0.48	3.33	0.48	3.33	0.37	2.56				
N_d	0.40	2.78	0.40	2.78	0.31	2.17				
i	0.64	4.48	0.83	5.76	0.07	0.50				
i_a	0.51	3.57	0.66	4.58	0.06	0.44				
i_d	0.32	2.26	0.37	2.55	0.05	0.35				
T_g	27.7		25.3		36.0					
T_s	26.0		24.0		35.0					
Ψ	18.7		18.4							
ε										

REMARKS: MET SAT II (Grass) = 24°C
No MET SAT III Observation

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 6 October 1976 TIME 1412 (Local) 2012 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	24.3		24.3		23.0					
T_{dp}	6.9		6.9		7.1					
W_d, W_s	150 2.7		150 2.7		210 3.6					
P	25.95		25.95		25.28					
C	140 ⓘ E240 ⓘ		140 ⓘ E240 ⓘ		E160 ⓘ 250 ⓘ					
M	No		No		No					
$T_{a2\,5}$					22.2					
$T_{dp2\,5}$					5.4					
	1	2	1	2	1	2	1	2	1	2
I	1.31	7.90	1.13	7.90	0.76	5.32				
I_a	0.88	6.10	0.88	6.10	0.61	4.23				
I_d	0.56	3.88	0.56	3.88	0.38	2.66				
N	1.28	8.95	1.28	8.95						
N_a	0.95	6.62	0.95	6.62						
N_b	0.85	5.91	0.85	5.91						
N_c	0.67	4.70	0.67	4.70						
N_d	0.60	4.20	0.60	4.20						
i	0.55	3.86	0.69	4.78	0.06	0.45				
i_a	0.44	3.06	0.56	3.89	0.06	0.39				
i_d	0.29	2.03	0.32	2.26	0.04	0.31				
T_g	33.5		34.0		28.0					
T_s	32.0		32.5		34.0					
Ψ	18.7		18.4							
ε										

REMARKS: MET SAT II(Grass) = 25°C
No normal incidence pyrheliometer observation due to clouds at MET SAT II
No observations at MET SAT III this date

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 6 Oct 76

RADIOSONDE: (0800 MDT) TTAA 56141 72HMS 99877 07859 00000
00133 ///// ///// 85522 14258 18511 70136 04857 28018 50582
07972 31035 40751 22161 32043 30955 39758 32537 25078 503//
33545 20219 629// 32044 15393 651// 31057 10642 659// 30025
88156 689// 32565 77170 32566 42507

TTBB 5614/ 72HMS 00877 07859 11867 12458 22850 14258 33817
11857 44764 10658 55693 04056 66665 02060 77654 02240 85573
03165 99559 01773 11541 02773 22400 22161 33284 42557 44191
645// 55165 689// 66147 655// 77144 623// 88134 605// 99109
669// 11100 659//

TTCC 56141 72HMS 70860 595// 30009 50072 577// 27011 30400
507// 28006 20665 489// 34504 10126 403// 15015 88999 77999

TTDD 6514/ 72HMS 11810 669// 22750 585// 33500 577// 44366
545// 55300 507// 66130 463// 77100 403// 88093 396//

ROCKETSONDE: (1240 MDT) RRXX 06184 72269 81010 13101 25552
18002 30547 13002 34537 28005 35538 30003 36532 05003 40524
24001 45504 29007 50507 27020 52513 28020 55517 27032 58523
29034 60529 28038 63537 29048 64541 30049 65*** 30045 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7411

DATE OF OBSERVATION 7 October 1976 TIME 0837 (Local) 1437 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	9.3		9.3		8.5					
T_{dp}	-1.3		-1.3		-4.4					
W_d, W_s	360 8.9 G12.5		360 8.9 G12.5		020 8.9					
P	26.14		26.14		25.54					
C	160◐ 250-◐		160◐ 250-◐		⊄C ◐ E80◐					
M	No		No		No					
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	0.38	2.65	0.38	2.65	0.21	1.44				
I_a	0.33	2.32	0.33	2.32	0.16	1.15				
I_d	0.20	1.40	0.20	1.40	0.10	0.73				
N	1.00	6.96	1.00	6.96	0.43	2.98				
N_a	0.79	5.49	0.79	5.49	0.18	1.23				
N_b	0.73	5.07	0.73	5.07	0.14	0.96				
N_c	0.61	4.23	0.61	4.23	0.11	0.79				
N_d	0.53	3.68	0.53	3.68	0.07	0.46				
i	0.22	1.53	0.24	1.71	0.04	0.26				
i_a	0.18	1.25	0.19	1.36	0.03	0.19				
i_d	0.12	0.82	0.11	0.74	0.02	0.13				
T_g	11.0		13.0		14.0					
T_s	9.0		7.0		10.0					
Ψ	22.1									
ε			18.1							

REMARKS: MET SAT II (Grass) = 6°C
No MET SAT III Observation

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 7 October 76 TIME 1231 (Local) 1831 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	15.1		15.1		12.3					
T_{dp}	-2.6		-2.6		-4.5					
W_d, W_s	340 8.0 G11.6		340 8.0 G11.6		010 4.5					
P	26.13		26.13		25.52					
C	70 ◐ 250 ◐		70 ◐ 250 ◐		80 ◐					
M	No		No		No					
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.22	8.54	1.22	8.54	1.22	8.52				
I_a	0.99	6.88	0.99	6.88	1.00	6.97				
I_d	0.64	4.43	0.64	4.43	0.62	4.35				
N	1.31	9.13	1.31	9.13	1.40	9.78				
N_a	0.97	6.78	0.97	6.78	1.06	7.38				
N_b	0.91	6.37	0.91	6.37	0.98	6.82				
N_c	0.75	5.20	0.75	5.20	0.81	5.64				
N_d	0.64	4.50	0.64	4.50	0.68	4.73				
i	0.67	4.66	0.76	5.27	0.10	0.70				
i_a	0.54	3.78	0.62	4.30	0.09	0.62				
i_d	0.36	2.49	0.36	2.51	0.07	0.50				
T_g	25.0		23.5		24.0					
T_s	22.0		22.0		24.0					
Ψ	22.1		18.1							
ε										

REMARKS: MET SAT II (Grass) = 21°C
No MET SAT III Observation

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 7 October 76

RADIOSONDE: (0800 MDT) TTAA 57141 72HMS 99878 10058 00000 00143
///// ///// 85533 08058 17003 70103 02146 32513 50573 13169 30047
40740 22967 33086 30944 371// 32093 25067 481// 32093 20211 585//
34106 15391 649// 34056 10635 665// 33034 88135 681// 32556 77213
33628 43956

TTBB 5714/ 72HMS 00878 10058 11763 01857 22680 03925 33642 05150
44603 08956 55588 09869 66583 07372 77551 08170 88400 22967 99357
30565 11313 35965 22294 375// 33214 571// 44198 587// 55191 541//
66135 681// 77108 685// 88100 665//

TTCC 57141 72HMS 70857 599// 29506 50069 561// 29007 30395 513//
12006 20660 487// 03005 10120 421// 34004 88999 77999

TTDD 5714/ 72HMS 11910 577// 22759 631// 33728 597// 44500 561//
55462 589// 66388 571// 77354 519// 88132 471// 99100 421// 11087
409// 51515 10190 07362

ROCKETSONDE: (1200 MDT) RRXX 07180 72269 81010 13101 25552 24002
30543 19004 32543 23003 33538 18005 35540 22007 36539 23008 40520
03003 43508 23011 45501 24018 47002 27018 50507 27024 55520 26036
57520 26046 60518 28048 62/// 28040 65/// 30043 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 12 October 1976 TIME 1023 (Local) 1623 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	11.1		11.1		22.2					
T_{dp}	-4.0		-4.0		-2.1					
W_d, W_s	120 0.4		120 0.4		250 1.8					
P	26.03		26.03		25.39					
C	○		○		○					
M	No		No		No					
$T_{a2\,5}$					20.3					
$T_{dp2\,5}$					-3.0					
	1	2	1	2	1	2	1	2	1	2
I					0.89	6.18				
I_a					0.73	5.06				
I_d	M I S S I N G				0.47	3.31				
N	1.30	9.04	1.30	9.04	1.34	9.36				
N_a	0.96	6.67	0.96	6.67	1.02	7.10				
N_b	0.88	6.14	0.88	6.14	0.95	6.66				
N_c	0.73	5.06	0.73	5.06	0.79	5.48				
N_d	0.63	4.39	0.63	4.39	0.67	4.66				
i	0.46	3.21	0.56	3.89	0.07	0.47				
i_a	0.37	2.57	0.45	3.11	0.05	0.34				
i_d	0.24	1.69	0.26	1.81	0.04	0.27				
T_g	17.0		20.0		37.6					
T_s	missing		missing		31.0					
Ψ	19.4		20.0							
ε										

REMARKS: MET SAT II(Grass) = 12°C
No uplooking pyrheliometer at MET SAT I taken this day
No MET SAT III Observation

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 12 Oct 76

RADIOSONDE: (0900 MDT) TTAA 62151 72HMS 99877 14464 00000 00141
///// ///// 85523 13364 16005 70153 08066 26502 50582 12965 20012
40750 22562 22523 30953 40558 23032 25075 483// 24537 20220 545//
25539 15400 609// 26024 01650 681// 30008 88999 77203 25540 40312

TTBB 6215/ 72HMS 00877 14464 11865 12864 22819 15666 33700 08066
44547 08166 55521 09765 66500 12965 77433 18166 88400 22562 99300
40558 11297 41558 22277 453// 33176 573// 44105 685// 55100 681//
51515 SUPER 52-50 30-30

TTCC 62151 72HMS 70865 663// 33010 50072 605// 21503 30398 517//
26507 20661 483// 23008 10125 409// 27512 07367 405// 25016 88858
701// 28009 77999

TTDD 6215/ 72HMS 11958 673// 22858 701// 33788 663// 44620 625//
55576 535// 66412 555// 77321 545// 88300 517// 99260 531// 11200
483// 22100 409// 33070 407// 44059 405// 51515 10190 05597

ROCKETSONDE: (NONE)

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 13 October 1976 TIME 1156 (Local) 1756 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.9		21.9		23.5		19.5			
T_{dp}	3.9		3.9		3.2		8.7			
W_d, W_s	300 3.1		300 3.1		010 0.9		360 4.9			
P	26.02		26.02		25.33		25.81			
C	E80⊕140⊕220⊕		E80⊕140⊕220⊕		E250⊕		E120⊕200⊕			
M	No		No		NO		No			
$T_{a2\ 5}$	22.1		22.1		22.3					
$T_{dp2\ 5}$	7.4		7.4		2.2					
	1	2	1	2	1	2	1	2	1	2
I	1.53	10.66	1.53	10.66	0.94	6.56	0.47	3.30		
I_a	1.23	8.56	1.23	8.56	0.76	5.27	1.02	7.15		
I_d	0.84	5.86	0.84	5.86	0.32	2.26	0.61	4.27		
N	1.08	7.53	1.08	7.53	0.77	5.40				
N_a	0.78	5.41	0.78	5.41	0.54	3.73				
N_b	0.76	5.27	0.76	5.27	0.45	3.12				
N_c	0.63	4.38	0.63	4.38	0.30	2.07				
N_d	0.57	3.97	0.57	3.97	0.30	2.10				
i	0.74	5.16	0.76	5.30	0.07	0.49	0.12	0.81		
i_a	0.64	4.49	0.65	4.54	0.05	0.38	0.09	0.60		
i_d	0.42	2.91	0.39	2.70	0.04	0.26	0.05	0.36		
T_g	31.0		32.0		28.0		18.2 *			
T_s	31.0		33.0		25.0					
Ψ	18.9		19.0							
ε										

REMARKS: MET SAT II (Grass) = 23°C

* Water temperature

No normal incidence pyrheliometer observation at MET SAT III due to clouds

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 13 October 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	21.9		21.9		23.5		19.5			
T_{dp}	3.9		3.9		3.2		8.7			
W_d, W_s	300 3.6		300 3.6		010 0.9		360 4.9			
P	26.02		26.02		25.33		25.81			
C	E80⊕140⊕220⊕		E80⊕140⊕220⊕		E200⊕		E120⊕220⊕			
M	No		No		No					
$T_{a2\,5}$	22.1		22.1		22.3					
$T_{dp2\,5}$	7.4		7.4		2.2					
	1	2	1	2	1	2	1	2	1	2
I	1.44	10.03	1.44	10.03	0.63	4.43	0.56	3.88		
I_a	1.17	8.13	1.17	8.13	0.53	3.72	1.21	8.45		
I_d	0.75	5.21	0.75	5.21	0.35	2.47	0.76	5.31		
N	1.03	7.22	1.03	7.22	0.24	1.68				
N_a	0.77	5.33	0.77	5.33	0.23	1.61				
N_b	0.62	4.30	0.62	4.30	0.24	1.66				
N_c	0.54	3.75	0.54	3.75	0.13	0.89				
N_d	0.51	3.58	0.51	3.58	0.08	0.53				
i	0.79	5.51	0.83	5.80	0.06	0.40	0.12	0.81		
i_a	0.68	4.76	0.75	5.25	0.04	0.30	0.09	0.60		
i_d	0.43	2.98	0.45	3.14	0.03	0.22	0.05	0.36		
T_g	31.0		32.0		28.0		18.2	*		
T_s	31.0		33.0		25.0					
Ψ	18.9		19.0							
ε										

REMARKS: MET SAT II (Grass) = 22°C
* Water temperature
No normal incidence pyrheliometer observation at MET SAT III due to clouds

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 13 Oct 76, TIME 1343 (Local) 1943 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	23.3		23.3		24.6		20.3			
T_{dp}	2.3		2.3		4.4		7.2			
W_d, W_s	240 3.1		240 3.1		180 1.4		330 2.7			
P	25.92		25.92		25.27		25.76			
C	E80◑140◑220⊕		E80◑140◑220⊕		90◐E200◑		120◑E220⊕			
M	No		No		No		No			
$T_{a2\,5}$	25.9		25.9		23.5					
$T_{dp2\,5}$	8.1		8.1		0.5					
	1	2	1	2	1	2	1	2	1	2
I	0.53	3.72	0.53	3.72	0.67	4.69	0.24	1.65		
I_a	0.39	2.75	0.39	2.75	0.52	3.62	0.45	3.14		
I_d	0.26	1.78	0.26	1.78	0.32	2.21	0.28	1.96		
N					0.17	1.19				
N_a					0.12	0.82				
N_b					0.09	0.65				
N_c					0.09	0.61				
N_d					0.08	0.58				
i	0.25	1.71	0.28	1.95	0.05	0.38	0.05	0.36		
i_a	0.21	1.46	0.23	1.61	0.04	0.31	0.05	0.36		
i_d	0.13	0.89	0.14	0.96	0.04	0.25	0.03	0.24		
T_g	31.0		30.0		28.5		18.2 *			
T_s	29.0		29.0		36.0					
Ψ	18.9		19.0							
ε										

REMARKS: MET SAT II(Grass) = 23°C
*Water Temperature
No normal incidence pyrheliometer readings at MET SAT I due to clouds
No normal incidence pyrheliometer readings at MET SAT III due to clouds

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 13 Oct 76

RADIOSONDE: (0800 MDT) TTAA 63141 72HMS 99880 13260 08005 00163
///// ///// 85547 14061 14012 70174 06064 15010 50582 13545 16513
40748 26927 17020 30950 38960 21038 25073 479// 21536 20219 511//
25025 15402 581// 25021 10651 659// 34514 88999 77210 22049 41637

TTBB 6314/ 72HMS 00880 13260 11857 12060 22842 16063 33830 17066
44700 06064 55571 08357 66538 10902 77500 13545 88479 15148 99462
17750 11423 23912 22400 27127 33385 29320 44372 31338 55859 33157
66353 33161 77334 35760 88328 35760 99300 38960 11268 449// 22250
479// 33228 515// 44213 501// 55200 511// 66186 549// 77168 597//
88166 585// 99154 577// 11150 581// 22119 659// 33113 669// 51515
SUPER 47-46 46-42 39-37

TTCC 63142 72HMS 70866 663// 14009 50072 611// 34504 30385 517//
27514 20647 509// 27511 88883 691// 28506 77999

TTDD 6314/ 72HMS 11883 691// 22700 663// 33548 669// 44540 607//
55500 611// 66368 573// 77300 517// 88257 543// 99235 507// 11200
509// 22195 519// 33187 501// 44171 501// 55139 449// 66115 439//
51515 10190 10106

ROCKETSONDE: (1215 MDT) RRXX 13181 77269 81010 13101 25553 27006
28546 27009 30548 26009 32541 25013 33544 26017 35536 27020 38530
27019 39527 28023 40521 28029 42517 27029 44503 26035 45504 27039
47508 26037 50506 27047 55512 27047 59520 27052 60*** 27051 62***
27049 63*** 27041 65*** 26052 67*** 27050 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7411

DATE OF OBSERVATION 14 October 1976 TIME 0830 (Local) 1430 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a					11.3					
T_{dp}					2.8					
W_d, W_s					020	2.2				
P					25.39					
C					80⊕E160⊕220⊕					
M					No					
$T_{a2.5}$										
$T_{dp2.5}$										
	1	2	1	2	1	2	1	2	1	2
I					0.43	2.99				
I_a					0.29	2.03				
I_d					0.25	1.76				
N					0.45	3.12				
N_a					0.39	2.73				
N_b					0.39	2.70				
N_c					0.36	2.51				
N_d					0.34	2.38				
i					0.05	0.34				
i_a					0.04	0.31				
i_d					0.04	0.26				
T_g					12.0					
T_s					15.0					
Ψ										
ε										

REMARKS: MET SAT II (Grass) = 14°C

No observations at METSAT I-A, I-B, III this date due to bad weather.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 14 Oct 76

RADIOSONDE: (0900 MDT) TTAA 64151 72HMS 99877 13843 36004 00138
///// ///// 85520 12039 03004 70120 02647 18513 50576 13156 18022
40742 25766 14526 30944 405// 14527 25068 429// 16021 20215 515//
18018 15401 571// 21518 10651 659// 19505 88104 671// 24006 77372
15537 41519

TTBB 7415/ 72HMS 00877 13843 11865 12035 22832 11657 33762 07456
44651 01912 55604 04758 66592 05956 77582 06958 88555 09159 99552
08763 11537 09762 22525 11164 33509 12967 44464 17167 55400 25766
66380 28559 77359 30965 88329 36164 99285 429// 11250 429// 22200
515// 33187 515// 44170 551// 55161 543// 66118 647// 77104 671//
88100 659//

TTCC 64151 72HMS 70867 667// 01005 50072 609// 29009 30397 533//
28018 20659 509// 27522 10118 459// 26538 07359 391// 25552
88999 77061 25056 405//

TTDD 6415/ 72HMS 11600 655// 22520 629// 33450 565// 44200 509//
55170 471// 66100 459// 77078 401// 88060 393// 51515 10190 05589

ROCKETSONDE: NONE

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION LANDSAT B

DATE OF OBSERVATION 18 October 76 TIME 1049 (Local) 1649 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	11.6		11.6		19.0					
T_{dp}	9.2		9.2		2.5					
W_d, W_s	170 1.8		170 1.8		220 2.7					
P	26.01		26.01		25.31					
C	200①E210①220①		200①E210①220①		130①E160①240①					
M	No		No		No					
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.22	8.47	1.22	8.47	0.72	5.01				
I_a	1.02	7.11	1.02	7.11	0.66	4.61				
I_d	0.67	4.67	0.67	4.67	0.37	2.59				
N	1.29	8.97	1.29	8.97	0.69	4.78				
N_a	1.02	7.09	1.02	7.09	0.73	5.06				
N_b	0.93	6.46	0.93	6.46	0.31	2.14				
N_c	0.75	5.22	0.75	5.22	0.25	1.77				
N_d	0.64	4.50	0.64	4.50	0.36	2.49				
i	0.53	3.68	0.70	4.86	0.05	0.38				
i_a	0.45	3.15	0.57	3.99	0.04	0.30				
i_d	0.30	2.06	0.35	2.41	0.03	0.23				
T_g	24.0		23.0		21.0					
T_s	22.0		21.0		25.0					
Ψ	19.1		19.2							
ε										

REMARKS: MET SAT II (Grass) = 19°C
No observations at METSAT III this date.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 18 Oct 76

RADIOSONDE: (0800 MDT) TTAA 68141 72HMS 99874 13060 18004 00098
///// ///// 85492 15061 70110 03259 28526 50576 14148 26531 40741
25160 26027 30943 40357 26060 25066 495// 27065 20209 572// 26606
15388 651// 26564 10633 669// 27545 88132 685// 26074 77247 26607
44228 **WIND GROUP DATA FOR 850MB level is: 18504**

TTBB 6814/ 72HMS 00874 13060 11850 15061 22829 15061 33758 10061
44700 03259 55638 02548 66628 03161 77619 02565 88589 03568 99543
09157 11507 11357 22500 14148 33471 19101 44456 20340 55448 20760
66440 20561 77400 25160 88325 36957 99313 38736 11300 40357 22282
42159 33250 495// 44237 529// 55200 571// 66162 625// 77150 651//
88146 665// 99132 685// 11119 659// 22114 657// 33111 641// 44106
643// 55100 669// 51515 SUPER 76-70 52-50 50-47 25-24

TTCC 68143 72HMS 70851 625// 26517 50060 577// 26508 30387 529//
25016 88999 77999

TTDD 8614/ 72HMS 11898 677// 22753 611// 33700 625// 44643 641//
55608 605// 66593 617// 77553 593// 88533 605// 99500 577// 11473
583// 22440 541// 33301 529// 44283 511//

ROCKETSONDE: NONE

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 20 Oct 76 TIME 1020 (Local) 1620 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	6.5		6.5		10.0		9.5			
T_{dp}	-2.9		-2.9		-3.5		-0.6			
W_d, W_s	260 0.9		260 0.9		CALM		330 0.9			
P	26.28		26.28		25.57		25.84			
C	200 -◍		200 -◍		E200⊕		120◐220 -◍			
M	No		No		No		No			
$T_{a2\,5}$										
$T_{dp2\,5}$										
	1	2	1	2	1	2	1	2	1	2
I	0.97	6.77	0.97	6.77	0.37	2.61	0.96	6.71		
I_a	0.83	5.81	0.83	5.81	0.29	2.02	0.78	5.46		
I_d	0.53	3.73	0.53	3.73	0.19	1.30	0.55	3.82		
N	1.34	9.36	1.34	9.36	0.11	0.77	0.99	6.93		
N_a	1.01	7.04	1.01	7.04	0.10	0.67	0.75	5.21		
N_b	0.92	6.41	0.92	6.41	0.09	0.64	0.70	4.89		
N_c	0.73	5.11	0.73	5.11	0.10	0.68	0.60	4.16		
N_d	0.57	3.96	0.57	3.96	0.10	0.68	0.54	3.77		
i	0.45	3.13	0.56	3.94	0.03	0.20	0.08	0.56		
i_a	0.40	2.81	0.49	3.39	0.02	0.14	0.06	0.40		
i_d	0.26	1.83	0.30	2.07	0.02	0.11	0.03	0.21		
T_g	16.0		16.0		12.0		17.1 *			
T_s	8.0		12.0		29.0					
Ψ	19.5		20.2							
ε										

REMARKS: MET SAT II (Grass) = 22°C
* Water temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 20 Oct 76 TIME 1200 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	11.0		11.0		15.0		11.8			
T_{dp}	-4.3		-4.3		-1.6		-0.6			
W_d, W_s	110 0.4		110 0.4		180 0.9		315 0.9			
P	26.25		26.25		25.55		25.82			
C	190 200-		190 200-		200 E220		120 220-			
M	No		No		No		No			
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.29	8.99	1.29	8.99	1.14	7.98	1.11	7.77		
I_a	1.11	7.71	1.11	7.71	0.93	6.46	0.88	6.11		
I_d	0.69	4.82	0.69	4.82	0.59	4.12	0.56	3.88		
N	1.48	10.31	1.48	10.31	1.30	9.08	0.69	4.84		
N_a	1.12	7.84	1.12	7.81	1.02	7.11	0.53	3.67		
N_b	1.04	7.24	1.04	7.24	0.82	5.75	0.57	4.00		
N_c	0.87	6.04	0.87	6.04	0.65	4.50	0.61	4.23		
N_d	0.76	5.30	0.76	5.30	0.63	4.38	0.55	3.87		
i	0.59	4.11	0.71	4.93	0.09	0.63	0.06	0.44		
i_a	0.51	3.52	0.59	4.12	0.07	0.52	0.04	0.29		
i_d	0.33	2.30	0.36	2.52	0.06	0.39	0.00	0.02		
T_g	23.0		25.0		19.5		17.6 *			
T_s	21.0		24.0		15.0					
Ψ	19.5		20.2							
ε										

REMARKS: MET SAT II (Grass) = 20°C
* Water temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 20 October 1976 TIME 1226 (Local) 1826 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	17.4		17.4		15.0		12.0			
T_{dp}	-12.2		-12.2		-1.6		-0.8			
W_d, W_s	070 1.8		070 1.8		180 3.6		315 0.4			
P	26.24		26.24		25.55		25.82			
C	190 ◑ 200- ◑		190 ◑ 200- ◑		200 ◑ E220 ◑		120 ◑ 220- ◑			
M	No		No		No		No			
$T_{a2\ 5}$			3.4							
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I	1.31	9.15	1.31	9.15	1.18	8.20	1.09	7.62		
I_a	1.04	7.26	1.04	7.26	0.91	6.37	0.89	6.17		
I_d	0.71	4.92	0.71	4.92	0.63	4.38	0.59	4.11		
N	1.48	10.34	1.48	1.48	1.05	7.31	1.32	9.19		
N_a	1.13	7.87	1.13	7.87	0.93	6.46	0.96	6.70		
N_b	1.04	7.27	1.04	7.27	0.74	5.17	0.87	6.10		
N_c	0.87	6.07	0.87	6.07	0.53	3.70	0.72	5.01		
N_d	0.76	5.31	0.76	5.31	0.51	3.52	0.62	4.29		
i	0.62	4.30	0.72	5.05	0.10	0.67	0.07	0.47		
i_a	0.53	3.70	0.61	4.23	0.09	0.59	0.05	0.36		
i_d	0.35	2.44	0.37	2.58	0.06	0.44	0.01	0.06		
T_g	23.0		25.0		21.0		17.6 *			
T_s	21.0		24.0		20.0					
Ψ	19.5		20.2							
ε										

REMARKS: MET SAT II (grass) = 16°C
* Water temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 20 October 1976 TIME 1315 (Local) 1915 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	13.8		13.8		17.3		16.0			
T_{dp}	-5.9		-5.9		-1.3		-2.4			
W_d, W_s	CALM		CALM		230 3.1		315 0.4			
P	26.20		26.20		25.51		25.77			
C	190 ◑ 200 ◑		190 ◑ 200 ◑		220 ◑		120 ◑ 220- ◑			
M	No		No		No		No			
$T_{a2\,5}$					19.3					
$T_{dp2\,5}$					-3.2					
	1	2	1	2	1	2	1	2	1	2
I	1.29	8.98	1.29	8.98	1.16	8.06	1.03	7.18		
I_a	1.00	6.96	1.00	6.96	0.95	6.59	0.84	5.89		
I_d	0.69	4.78	0.69	4.78	0.61	4.24	0.49	3.39		
N	1.49	10.37	1.49	10.37	1.33	9.25	1.28	8.95		
N_a	1.13	7.85	1.13	7.85	1.03	7.17	0.91	6.31		
N_b	1.04	7.27	1.04	7.27	0.91	6.32	0.81	5.63		
N_c	0.87	6.07	0.87	6.07	0.66	4.57	0.68	4.74		
N_d	0.76	5.33	0.76	5.33	0.62	4.29	0.56	3.88		
i	0.61	4.25	0.71	4.97	0.10	0.66	0.05	0.38		
i_a	0.52	3.66	0.60	4.15	0.08	0.56	0.03	0.23		
i_d	0.34	2.40	0.36	2.53	0.06	0.43	0.01	0.09		
T_g	28.5		32.0		22.0		18.2 *			
T_s	31.0		32.0		10.0					
Ψ	19.5		20.2							
ε										

REMARKS: MET SAT II (Grass) = 12°C
* Water temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 20 Oct 76

RADIOSONDE: (0900 MDT) TTAA 70151 72HMS 99884 07662 31004 00232
///// ///// 85579 07063 29503 70169 03472 21012 50581 14568 28517
40746 25561 27033 30950 38557 26549 25073 481// 26558 20217 587//
27068 15395 597// 27557 10643 675// 28547 88102 685// 28546 77218
27068 41007

TTBB 7015/ 72HMS 00884 07662 11862 05661 22850 07063 33819 05863
44794 07468 55749 04469 66742 05471 77700 03472 88570 07770 99527
12768 11520 12567 22419 22966 33400 25761 44388 27760 55379 26957
77350 30756 88323 34156 99281 42557 11227 537// 22200 587// 33174
607// 44163 629// 55150 597// 66128 645// 27120 643// 88102 685//
99100 675// 51515 SUPER 40-39

TTCC 70152 72HMS 70859 629// 28523 50069 581// 28522 30396 503//
24517 20662 487// 25520 88999 77999

TTDD 7015/ 72HMS 11750 661// 22700 629// 33300 503// 44200 487//
55170 471//

ROCKETSONDE: (1130 MDT) RRXX 20173 72269 81010 13101 25551 25008
28546 24011 30548 24017 35543 26019 37542 25035 40531 28044 41527
28042 45508 28060 47510 27053 50511 26056 53515 25058 55518 25070
56521 26073 58526 26077 60532 27081 62539 27085 64543 27105 65***
28114 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 3 November 1976 TIME 0847 (Local) 1547 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	5.3		5.3		11.0		7.8			
T_{dp}	0.4		0.4		1.0		1.6			
W_d, W_s	310 2.7		310 2.7		050 4.5		CALM			
P	26.25		26.25		25.66		25.93			
C	200- ⏀		200- ⏀		210 ⏀		210 ⏀			
M	No		No		No		No			
$T_{a2\,5}$					13.9					
$T_{dp2\,5}$					1.5					
	1	2	1	2	1	2	1	2	1	2
I	0.60	4.16	0.60	4.16	0.60	4.19	0.64	4.44		
I_a	0.45	3.14	0.45	3.14	0.59	4.10	INOPERATIVE			
I_d	0.28	1.98	0.28	1.98	0.34	2.36	0.37	2.56		
N	0.82	5.75	0.82	5.75	1.24	8.62	1.14	7.91		
N_a	0.66	4.64	0.66	4.64	0.98	6.85	0.87	6.08		
N_b	0.60	4.16	0.60	4.16	0.92	6.43	0.81	5.63		
N_c	0.54	3.78	0.54	3.78	0.77	5.40	0.69	4.82		
N_d	0.46	3.19	0.46	3.19	0.67	4.66	0.60	4.21		
i	0.26	1.79	0.29	1.99	0.09	0.62	0.07	0.48		
i_a	0.23	1.57	0.24	1.70	0.08	0.53	0.05	0.36		
i_d	0.15	1.01	0.15	1.03	0.07	0.46	0.02	0.16		
T_g	16.0		16.0		14.0		14.3 *			
T_s	missing		missing		7.0					
Ψ	23.3		17.9							
ε										

REMARKS: MET SAT II(Grass) = 8°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 3 November 1976 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	16.1		16.1		19.4		18.2			
T_{dp}	2.3		2.3		-1.9		4.3			
W_d, W_s	110	1.3	110	1.3	050	2.2	180	0.4		
P	26.24		26.24		25.65		25.86			
C	○		○		220 ◑		○			
M	No		No		No		No			
$T_{a2\ 5}$	18.5		18.5		19.0					
$T_{dp2\ 5}$	5.3		5.3		-0.8					
	1	2	1	2	1	2	1	2	1	2
I	1.11	7.72	1.11	7.72	1.03	7.21	1.04	7.27		
I_a	0.86	5.97	0.86	5.97	0.93	6.47	INOPERATIVE			
I_d	0.56	3.87	0.56	3.87	0.89	4.15	0.53	3.73		
N	1.40	9.77	1.40	9.77	1.46	10.16	1.30	9.07		
N_a	1.07	7.43	1.07	7.43	1.15	8.02	0.96	6.68		
N_b	0.98	6.86	0.98	6.86	1.08	7.50	0.88	6.14		
N_c	0.83	5.76	0.83	5.76	0.90	6.29	0.72	5.05		
N_d	0.71	4.98	0.71	4.98	0.78	5.47	0.62	4.29		
i	0.52	3.63	0.62	4.31	0.19	1.33	0.05	0.37		
i_a	0.44	3.09	0.51	3.57	0.16	1.13	0.04	0.27		
i_d	0.28	1.98	0.31	2.14	0.14	1.01	INOPERATIVE			
T_g	22.0		21.0		28.0		15.4 *			
T_s	22.0		20.0		33.0					
Ψ	23.3		17.9							
ε										

REMARKS: MET SAT II (Grass) = 22°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 3 November 1976 TIME 1256 (Local) 1956 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	17.3		17.3		20.0		17.0			
T_{dp}	1.1		1.1		-1.5		4.1			
W_d, W_s	CALM		CALM		050 2.2		CALM			
P	26.21		26.21		25.55		25.82			
C	○		○		220 ◐		○			
M	No		No		No		No			
$T_{a2\ 5}$					19.2					
$T_{dp2\ 5}$					-5.7					
	1	2	1	2	1	2	1	2	1	2
I	1.07	7.46	1.07	7.46	0.99	6.90	0.92	6.44		
I_a	0.82	5.71	0.82	5.71	0.89	6.21	INOPERATIVE			
I_d	0.54	3.76	0.54	3.76	0.56	3.93	0.47	3.30		
N	1.40	9.73	1.40	9.73	1.44	10.07	1.30	9.07		
N_a	1.07	7.43	1.07	7.43	1.15	7.99	0.96	6.70		
N_b	0.98	6.86	0.98	6.86	1.07	7.48	0.89	6.18		
N_c	0.83	5.76	0.83	5.76	0.91	6.32	0.72	5.05		
N_d	0.72	5.01	0.72	5.01	0.79	5.50	0.62	4.33		
i	0.50	3.50	0.60	4.17	0.20	1.36	0.02	0.16		
i_a	0.43	3.00	0.50	3.46	0.17	1.18	0.01	0.10		
i_d	0.28	1.93	0.30	2.08	0.15	1.06	0.01	0.04		
T_g	23.0		23.0		30.0		16.4 *			
T_s	24.0		22.8		34.0					
Ψ	22.3		17.9							
ε										

REMARKS: MET SAT II (Grass) = 22°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 3 Nov 76

RADIOSONDE: (0900 MST) TTAA 53161 72HMS 99886 11860 00000 00240
///// ///// 85605 11461 00000 70200 02663 13507 50584 13762 33507
40749 27360 32023 30949 447// 32029 25069 541// 30031 20209 599//
03643 15388 619// 30048 10635 691// 30537 88126 663// 30046 77159
30052 41506

TTBB 5316/ 72HMS 00886 11869 11875 10861 22850 11461 33810 09862
44730 02658 55700 01669 66672 00370 77655 00962 88601 04570 99593
03970 11400 27360 22367 32556 33250 541// 44220 591// 55171 627//
66.50 619// 77126 663// 88114 651// 99100 691// SUPER 38-40

TTCC 53162 72HMS 70850 655// 31018 50056 627// 31523 30377 533//
37516 20642 475// 23514 88999 77999

TTDD 53161 72HMS 11822 685// 22742 637// 33619 661// 44570 625//
55500 627// 66430 570// 77366 601// 88300 533// 99200 475// 11159
501// 22122 461//

ROCKETSONDE: NONE

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION LANDSAT B

DATE OF OBSERVATION 5 November 1976 TIME 0948 (Local) 1648 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	9.7		9.7		14.4					
T_{dp}	2.0		2.0		1.8					
W_d, W_s	CALM		CALM		180	3.6				
P	26.15		26.15		25.56					
C	○		○		○					
M	No		No		No					
$T_{a2\ 5}$					15.8					
$T_{dp2\ 5}$					5.0					
	1	2	1	2	1	2	1	2	1	2
I	0.90	6.30	0.90	6.30	0.83	5.75				
I_a	0.67	4.68	0.67	4.68	0.68	4.72				
I_d	0.43	3.02	0.43	3.02	0.43	2.98				
N	1.32	9.22	1.32	9.22	1.28	8.92				
N_a	1.02	7.11	1.02	7.11	1.02	7.13				
N_b	0.94	6.55	0.94	6.55	0.96	6.68				
N_c	0.79	5.50	0.79	5.50	0.80	5.55				
N_d	0.68	4.73	0.68	4.73	0.70	4.85				
i	0.40	2.81	0.49	3.39	0.10	0.70				
i_a	0.36	2.41	0.41	2.83	0.08	0.53				
i_d	0.22	1.54	0.24	1.68	0.06	0.43				
T_g	16.0		14.0		18.0					
T_s	13.0		8.0		18.0					
Ψ	21.3		19.7							
ε										

REMARKS: MET SAT 2 (Grass) = 14°C
No run at MET SAT 3 this day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 5 November 1976 TIME 1054 (Local) 1754 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	13.0		13.0		17.3					
T_{dp}	4.2		4.2		1.8					
W_d, W_s	CALM		CALM		140	2.7				
P	26.15		26.15		25.54					
C	○		○		○					
M	No		No		No					
$T_{a2\,5}$					19.1					
$T_{dp2\,5}$					0.5					
	1	2	1	2	1	2	1	2	1	2
I	1.04	7.24	1.04	7.24	0.97	6.79				
I_a	M I S S	I N G	M I S S	I N G	0.82	5.69				
I_d	0.29	2.01	0.29	2.01	0.51	3.57				
N	1.38	9.65	1.38	9.65	1.37	9.53				
N_a	1.05	7.33	1.05	7.33	1.07	7.43				
N_b	0.98	6.83	0.98	6.83	0.99	6.90				
N_c	0.81	5.67	0.81	5.67	0.83	5.76				
N_d	0.65	4.55	0.65	4.55	0.71	4.94				
i	0.46	3.22	0.46	3.99	0.12	0.84				
i_a	0.39	2.73	0.39	3.31	0.10	0.69				
i_d	0.25	1.75	0.25	1.97	0.08	0.57				
T_g	23.0		23.0		21.5					
T_s	19.0		18.0		24.0					
Ψ	21.3		19.7							
ε										

REMARKS: MET SAT 2 (Grass Cover) = 19.5°C
No run at MET SAT 3 this day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 5 Nov 76

RADIOSONDE: (0800 MST) TTAA 55151 72HMS 99883 09457 00000 00217
///// ///// 85573 10259 17508 70169 04466 01001 50583 11569 04012
40750 25365 01012 30952 419// 00508 25073 521// 35514 20215 621//
34517 15312 667// 00533 10637 665// 36019 88137 675// 01041 77131
01044 41210

TTBB 5515/ 72HMS 00883 09457 11873 08057 22863 10660 33784 06858
44689 04671 55590 04362 66500 11569 77400 25365 88325 37163 99200
621// 11165 633// 22137 675// 33122 655// 44113 691// 55107 655//
66100 665//

TTCC 55151 72HMS 70853 671// 33017 50059 617// 35506 30384 509//
27514 20651 463// 23024 10113 461// 26033 88999 77999

TTDD 5515/ 72HMS 11700 671// 22546 609// 33500 617// 44340 567//
55300 509// 66200 463// 22175 485// 88136 427// 99100 461// 11076
445// 10190 07351

ROCKETSONDE: NONE

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 10 November 1976 TIME 0858 (Local) 1558 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	4.3		4.3		13.9		8.0			
T_{dp}	-2.7		-2.7		-4.2		-0.6			
W_d, W_s	CALM		CALM		060 3.1		030 0.9			
P	26.05		26.05		25.42		25.71			
C	220- ◐		220- ◐		220◐250 ◐		240- ◐			
M	No		No		No		No			
$T_{a2\ 5}$					14.2					
$T_{dp2\ 5}$					-3.6					
	1	2	1	2	1	2	1	2	1	2
I	0.71	4.97	0.71	4.97	0.63	4.39	0.64	4.49		
I_a	0.52	3.64	0.52	3.64	0.52	3.61	M I S S	N G		
I_d	0.34	2.34	0.34	2.34	0.34	2.34	0.37	2.61		
N	1.29	9.00	1.29	9.00	1.26	8.76	1.21	8.41		
N_a	1.01	7.01	1.01	7.01	1.00	6.99	0.92	6.39		
N_b	0.93	6.51	0.93	6.51	0.93	6.49	0.85	5.90		
N_c	0.79	5.48	0.79	5.48	0.78	5.43	0.71	4.93		
N_d	0.68	4.78	0.68	4.78	0.68	4.71	0.59	4.10		
i	0.31	2.15	0.40	2.78	0.06	0.44	0.06	0.43		
i_a	0.27	1.89	0.34	2.35	0.05	0.38	0.04	0.29		
i_d	0.17	1.21	0.21	1.44	0.04	0.31	0.02	0.14		
T_g	8.0		1.0		13.8		13.2 *			
T_s	6.0		4.0		19.5					
Ψ	21.1		19.5							
ε										

REMARKS: MET SAT II (Grass) = 18.0°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 10 November 1976 TIME 0928 (Local) 1628 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	6.8		6.8		15.9		9.8			
T_{dp}	-1.4		-1.4		-3.1		-0.5			
W_d, W_s	CALM		CALM		010 0.9		CALM			
P	26.11		26.11		25.42		25.71			
C	220- ⓘ		220- ⓘ		220 ⓘ 250- ⓘ		240- ⓘ			
M	No		No		No		No			
$T_{a2\ 5}$					15.9					
$T_{dp2\ 5}$					-3.5					
	1	2	1	2	1	2	1	2	1	2
I	0.84	5.87	0.84	5.87	0.74	5.18	0.79	5.49		
I_a	0.65	4.56	0.65	4.56	0.60	4.18	M I S	S I N G		
I_d	0.42	2.91	0.42	2.91	0.39	2.72	0.44	3.06		
N	1.35	9.40	1.35	9.40	1.30	9.06	1.22	8.51		
N_a	1.05	7.34	1.05	7.34	1.03	7.18	0.92	6.39		
N_b	0.97	6.78	0.97	6.78	0.95	6.66	0.84	5.89		
N_c	0.82	5.73	0.82	5.73	0.79	5.52	0.69	4.82		
N_d	0.72	5.02	0.72	5.02	0.69	4.78	0.59	4.12		
i	0.37	2.59	0.48	3.33	0.07	0.46	0.06	0.43		
i_a	0.32	2.24	0.41	2.86	0.05	0.37	0.04	0.28		
i_d	0.21	1.45	0.25	1.77	0.04	0.30	0.02	0.11		
T_g	13.0		0.5		16.0		13.4 *			
T_s	10.0		7.0		24.0					
Ψ	21.1		19.5							
ε										

REMARKS: MET SAT II (Grass) = 22.5°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 10 November 1976 TIME 1100 (Local) 1800 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	13.0		13.0		19.1		13.5			
T_{dp}	-3.4		-3.4		-3.2		0.5			
W_d, W_s	CALM		CALM		180 2.7		CALM			
P	26.08		26.08		25.40		25.69			
C	210- ⓒ		210- ⓒ		220ⓒ250-ⓒ		220- ⓒ			
M	No		No		No		No			
$T_{a2\ 5}$					17.7					
$T_{dp2\ 5}$					-3.6					
	1	2	1	2	1	2	1	2	1	2
I	1.05	7.30	1.05	7.30	0.97	6.78	0.96	6.71		
I_a	0.82	5.73	0.82	5.73	0.79	5.54	M I S S	I N G		
I_d	0.53	3.72	0.53	3.72	0.50	3.47	0.51	3.54		
N	1.41	9.87	1.41	9.87	1.36	9.48	1.31	9.13		
N_a	1.09	7.57	1.09	7.57	1.05	7.32	0.97	6.74		
N_b	1.00	7.00	1.00	7.00	0.98	6.85	0.88	6.16		
N_c	0.84	5.89	0.84	5.89	0.82	5.69	0.73	5.09		
N_d	0.73	5.11	0.73	5.11	0.70	4.87	0.62	4.29		
i	0.49	3.39	0.62	4.31	0.09	0.64	0.06	0.40		
i_a	0.42	2.92	0.53	3.66	0.08	0.54	0.04	0.27		
i_d	0.27	1.87	0.32	2.25	0.06	0.39	0.01	0.07		
T_g	missing		missing		21.9		11.5	*		
T_s	15.0		16.0		32.0					
Ψ	21.1		19.5							
ϵ										

REMARKS: MET SAT II (Grass) = 27°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ϵ = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 10 November 1976 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	16.0		16.0		19.2		18.3			
T_{dp}	-0.8		-0.8		-1.1		4.2			
W_d, W_s	CALM		CALM		210 3.6		225 1.3			
P	26.06		26.06		25.38		25.65			
C	210- ⊕		210- ◐		E220 ◐ 250 ⊕		220- ◐			
M	No		No		No		No			
$T_{a2\ 5}$					17.9					
$T_{dp2\ 5}$					-2.5					
	1	2	1	2	1	2	1	2	1	2
I	1.05	7.35	1.05	7.35	1.00	6.99	0.98	6.82		
I_a	0.80	5.59	0.80	5.59	0.83	5.80	M I S	S I N G		
I_d	0.52	3.66	0.52	3.66	0.52	3.63	0.51	3.54		
N	1.28	8.94	1.28	8.94	1.33	9.27	1.28	8.90		
N_a	1.00	6.99	1.00	6.99	1.05	7.29	0.94	6.58		
N_b	0.93	6.51	0.93	6.51	0.98	6.82	0.86	6.02		
N_c	0.77	5.40	0.77	5.40	0.80	5.61	0.71	4.95		
N_d	0.62	4.33	0.62	4.33	0.70	4.85	0.59	4.14		
i	0.48	3.35	0.58	4.07	0.10	0.72	0.06	0.40		
i_a	0.41	2.86	0.50	3.50	0.09	0.62	0.04	0.30		
i_d	0.27	1.85	0.31	2.17	0.07	0.50	0.02	0.13		
T_g	20.0		22.0		25.0		12.0	*		
T_s	18.5		18.5		28.4					
Ψ	21.1		19.5							
ε										

REMARKS: MET SAT II (Grass) = 26.2°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 10 November 1976 TIME 1226 (Local) 1926 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	16.3		16.3		21.1		18.5			
T_{dp}	0.3		0.3		-3.5		4.0			
W_d, W_s	CALM		CALM		180 4.0		225 1.3			
P	26.02		26.02		25.35		25.64			
C	210- ⓜ		210- ⓜ		E220ⓜ 250 ⊕		220- ⓜ			
M	No		No		NO		No			
$T_{a2\,5}$					18.3					
$T_{dp2\,5}$					-2.5					
	1	2	1	2	1	2	1	2	1	2
I	1.11	7.73	1.11	7.73	0.93	6.49	1.02	7.11		
I_a	0.86	5.98	0.86	5.98	0.77	5.35	M I S S I N G			
I_d	0.57	3.97	0.57	3.97	0.48	3.38	0.53	3.71		
N	1.38	9.06	1.38	9.06	1.08	7.52	1.32	9.19		
N_a	1.04	7.27	1.04	7.27	0.87	6.06	0.99	6.88		
N_b	0.92	6.40	0.92	6.40	0.80	5.59	0.90	6.27		
N_c	0.76	5.27	0.76	5.27	0.68	4.74	0.75	5.21		
N_d	0.56	3.93	0.56	3.93	0.58	4.06	0.63	4.39		
i	0.53	3.67	0.66	4.58	0.10	0.67	0.06	0.42		
i_a	0.45	3.17	0.56	3.94	0.09	0.59	0.05	0.35		
i_d	0.30	2.07	0.35	2.43	0.07	0.47	0,02	0.12		
T_g	20.5		23.0		25.5		12.0 *			
T_s	22.0		22.0		38.0					
Ψ	21.1		19.5							
ε										

REMARKS: MET SAT II (Grass) = 32°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 10 Nov 76

RADIOSONDE: (0800 MST) TTAA 60151 72HMS 99878 06059 00000 00173
///// ///// 85531 13864 16502 70152 05066 29509 50581 13368 29516
40748 25366 26018 30949 415// 28020 25070 519// 28023 20212 613//
27528 15387 651// 27533 10634 673// 27525 88172 681// 26027 77115
27534 40602

TTBB 6015/ 72HMS 00878 06059 11869 09660 22850 13864 33788 12467
44727 08267 55700 05066 66604 03768 77536 09170 88500 13368 99465
15568 11400 25366 22335 36361 33322 38161 44172 681// 55150 651//
66109 645// 77100 673// 51515 SUPER 73-70

TTCC 60155 72HMS 70850 649// 28518 50057 609// 28010 30378 571//
/////

TTDD 6015/ 72HMS 11300 571//

ROCKETSONDE: (0929 MST) RRXX 10163 72269 81010 13101 24556 28012
25555 26013 30549 26026 33548 25035 35541 25046 40531 27055 41523
27058 45508 27065 50511 26070 52511 27070 54511 25077 55517 25087
56516 25100 57515 26109 58518 26119 60528 26125 61533 26118 62***
26106 64*** 26098 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 17 November 1976 TIME 1130 (Local) 1830 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	MISSING		MISSING		14.5					
T_{dp}	MISSING		MISSING		-9.0					
W_d, W_s	CALM		CALM		340 2.2					
P	26.20		26.20		25.55					
C	60◐120◐ E180◐		60◐120◐ E180◐		120◐					
M	No		No		No					
$T_{a2.5}$	MISSING		MISSING		13.5					
$T_{dp2.5}$	MISSING		MISSING		-6.1					
	1	2	1	2	1	2	1	2	1	2
I	0.47	3.27	0.47	3.27	0.69	4.83				
I_a	0.31	2.20	0.31	2.20	0.36	2.53				
I_d	0.22	1.57	0.22	1.57	0.24	1.69				
N	0.27	1.92	0.27	1.92	0.64	4.45				
N_a	0.04	0.28	0.04	0.28	0.54	3.75				
N_b	0.02	0.17	0.02	0.17	0.51	3.57				
N_c	0.01	0.10	0.01	0.10	0.45	3.17				
N_d	0.02	0.14	0.02	0.14	0.42	2.93				
i	0.47	3.25	0.25	1.75	0.15	1.07				
i_a	0.40	2.78	0.19	1.36	0.13	0.93				
i_d	0.27	1.89	0.11	0.77	0.13	0.90				
T_g	MISSING		MISSING		24.5					
T_s	12.8		7.7		22.0					
Ψ	24.9		23.8							
ε										

REMARKS: MET SAT II (Grass) = 16°C

Observations not made at METSAT III this period.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 17 November 1976 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	8.0		8.0							
T_{dp}	-1.4		-1.4							
W_d, W_s	130 0.4		130 0.4							
P	26.19		26.19							
C	60 E120 180		60 E120 180							
M	NO		No							
$T_{a2\ 5}$	Missing		Missing							
$T_{dp2\ 5}$	Missing		Missing							
	1	2	1	2	1	2	1	2	1	2
I	0.52	3.62	0.52	3.62						
I_a	0.39	2.70	0.39	2.70						
I_d	0.24	1.68	0.24	1.68						
N	0.02	0.11	0.02	0.11						
N_a	0.02	0.15	0.02	0.15						
N_b	0.01	0.10	0.01	0.10						
N_c	0.01	0.09	0.01	0.09						
N_d	0.01	0.08	0.01	0.08						
i	0.19	1.32	0.22	1.56						
i_a	0.16	1.10	0.19	1.30						
i_d	0.10	0.67	0.11	0.77						
T_g	M I S S I N G									
T_s	12.0		7.0							
Ψ	24.9		23.8							
ϵ										

REMARKS: **Observations not made at METSAT II or III this period.**

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ϵ = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE

DATE: 17 Nov 76

RADIOSONDE: (0800 MST) TTAA 67151 72HMS 99884 01840 15005 00258
///// ///// 85579 04662 09508 70146 00766 08513 50576 16173 09536
40740 28164 07527 30941 421// 08552 25063 481// 06537 20209 513//
06053 15394 581// 06539 10642 665// 04520 88115 671// 04524 77209
06062 42419

TTBB 6715/ 72HMS 00884 01840 11850 04662 22829 05467 33733 00768
44723 00468 55657 03564 66594 10356 77576 09962 88550 11771 99509
15960 11487 16966 22400 28164 33349 35565 44330 381// 55289 443//
66250 481// 77200 513// 88192 497// 99130 639// 11115 671// 22100
665//

TTCC 67153 72HMS 70858 659// 28003 50062 633// 09011 30382 581//
11006 88999 77999

TTDD 6715/ 72HMS 11737 641// 22640 685// 33400 587// 44210 565//
51515 10190 2037

ROCKETSONDE: (1215 MST) RRXX 17192 72269 81010 13101 22*** 06003
25*** 10004 28553 04004 30549 10009 32546 09011 33546 09011 34543
05004 35543 33009 37544 33016 40535 27024 42525 26039 43521 27045
45522 27050 46520 26062 47516 27072 50514 26069 52508 25087 54513
27103 55512 26114 56509 26129 57512 25136 60526 27128 63*** 28087
JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 18 November 1976 TIME 0925 (Local) 1625 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	8.1		8.1		11.3					
T_{dp}	0.8		0.8		-2.9					
W_d, W_s	CALM		CALM		060 1.8					
P	26.16		26.16		25.49					
C	E140 210		E140 210		100 E220					
M	No		No		No					
$T_{a2\,5}$	Missing		Missing		12.9					
$T_{dp2\,5}$	Missing		Missing		-3.6					
	1	2	1	2	1	2	1	2	1	2
I	0.64	4.45	0.64	4.45						
I_a	0.53	3.72	0.53	3.72						
I_d	0.34	2.39	0.34	2.39						
N					1.24	8.64				
N_a					0.92	6.39				
N_b					0.86	5.99				
N_c					0.76	5.27				
N_d					0.68	4.77				
i	0.27	1.89	0.32	2.22						
i_a	0.24	1.64	0.28	1.93						
i_d	0.15	1.05	0.17	1.18						
T_g	10.5		10.0		17.0					
T_s	9.2		8.0		17.0					
Ψ	21.0		18.3							
ε										

REMARKS: MET SAT II (Grass) = 16°C
No observation at MET SAT III this day
No normal incoming readings taken at MET SAT I
No global incoming or outgoing readings taken at MET SAT II

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 18 November 1976 TIME 1319 (Local) 2019 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	11.3		11.3		17.2					
T_{dp}	1.8		1.8		2.3					
W_d, W_s	210 3.1		210 3.1		180 0.9					
P	26.02		26.02		25.38					
C	E130◐210⊕		E130◐210⊕		E180◐220⊕					
M	NO		No		No					
$T_{a2\ 5}$	Missing		Missing		14.3					
$T_{dp2\ 5}$	Missing		Missing		2.7					
	1	2	1	2	1	2	1	2	1	2
I	0.52	3.59	0.52	3.59						
I_a	0.39	2.73	0.39	2.73						
I_d	0.26	1.78	0.26	1.78						
N	0.53	3.68	0.53	3.68	0.46	3.22				
N_a	0.41	2.89	0.41	2.89	0.35	2.44				
N_b	0.21	1.47	0.21	1.47	0.33	2.31				
N_c	0.06	0.40	0.06	0.40	0.30	2.10				
N_d	0.04	0.26	0.04	0.26	0.29	2.03				
i	0.22	1.54	0.28	1.93	0.04	0.26				
i_a	0.18	1.29	0.23	1.61	0.03	0.20				
i_d	0.11	0.80	0.14	0.95	0.03	0.19				
T_g	15.0		16.0		16.0					
T_s	14.8		14.3		24.0					
Ψ	21.0		18.3							
ε										

REMARKS: MET SAT II (Grass) = 15°C
No Observation at MET SAT III This Day
No Global Incoming Readings at MET SAT II

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 18 Nov 76

RADIOSONDE: (0800 MST) TTAA 68151 72HMS 99881 06260 30002 00207
///// ///// 85550 07463 34507 70130 00518 15017 50577 13575 14536
40742 28367 17037 30942 413// 18048 25065 465// 19064 20211 515//
21050 15395 581// 19033 10646 655// 24515 88999 77275 18570 41832

TTBB 6815/ 72HMS 00881 06260 11850 07463 22823 08456 33706 01701
44700 00518 55676 01558 66630 02756 77613 03566 88596 04777 99580
04777 11400 28367 22359 34165 33300 413// 44158 579// 55100 655//

TTCC 68151 72HMS 70860 691// 27020 50062 631// 10008 30380 577//
11010 20640 515// 12514 10093 451// 08025 88870 689// 28017 77999

TTDD 6815/ 72HMS 11870 689// 22742 673// 33700 691// 44618 715//
55500 631// 66200 515// 77118 485// 88100 451// 99088 451// 51515
10165 07009

ROCKETSONDE: NONE

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION LANDSAT B

DATE OF OBSERVATION 23 November 1976 TIME 0948 (Local) 1648 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	5.5		5.5		11.2					
T_{dp}	-1.2		-1.2		2.6					
W_d, W_s	CALM		CALM		020	4.5				
P	26.16		26.16		25.52					
C	220 ◐		220 ◐		○					
M	No		No		No					
$T_{a2\ 5}$	missing		missing		12.9					
$T_{dp2\ 5}$	missing		missing		1.4					
	1	2	1	2	1	2	1	2	1	2
I	0.81	5.62	0.81	5.62	0.71	4.93				
I_a	0.61	4.23	0.61	4.23	0.51	3.55				
I_d	0.40	2.80	0.40	2.80	0.38	2.68				
N	1.21	8.44	1.21	8.44	1.25	8.73				
N_a	0.94	6.58	0.94	6.58	0.98	6.82				
N_b	0.87	6.09	0.87	6.09	0.92	6.39				
N_c	0.71	4.98	0.71	4.98	0.76	5.33				
N_d	0.64	4.48	0.64	4.48	0.66	4.57				
i	0.35	2.47	0.44	3.07	0.09	0.62				
i_a	0.31	2.14	0.38	2.62	0.08	0.53				
i_d	0.20	1.38	0.23	1.58	0.06	0.44				
T_g	7.0		5.8		15.5					
T_s	6.0		1.0		13.0					
Ψ	24.7		20.1							
ε										

REMARKS: MET SAT 2(Grass) = 10°C
No Run at MET SAT 3 This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 23 November 1976 TIME 1055 (Local) 1755 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	7.6		7.6		15.2					
T_{dp}	1.4		1.4		-0.8					
W_d, W_s	160 3.1		160 3.1		030 2.7					
P	26.16		26.16		25.50					
C	220◑		220◑		○					
M	No		No		No					
$T_{a2\ 5}$	missing		missing		14.9					
$T_{dp2\ 5}$	missing		missing		-0.9					
	1	2	1	2	1	2	1	2	1	2
I	0.94	6.56	0.94	6.56	0.85	5.95				
I_a	0.74	5.15	0.74	5.15	0.61	4.26				
I_d	0.47	3.31	0.47	3.31	0.45	3.17				
N	1.28	8.91	1.28	8.91	0.98	6.87				
N_a	0.98	6.82	0.98	6.82	0.93	6.52				
N_b	0.91	6.32	0.91	6.32	0.89	6.22				
N_c	0.74	5.16	0.74	5.16	0.76	5.29				
N_d	0.66	4.62	0.66	4.62	0.67	4.68				
i	0.43	3.00	0.56	3.91	0.10	0.72				
i_a	0.37	2.60	0.47	3.31	0.09	0.62				
i_d	0.24	1.64	0.29	1.99	0.07	0.51				
T_g	10.7		6.3		18.8					
T_s	7.0		2.0		18.0					
Ψ	24.7		20.1							
ε										

REMARKS: MET SAT 2 (Grass) = 15°C
No Run at MET SAT 3 This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 23 Nov 76

RADIOSONDE: (0800 MST) TTAA 73151 72HMS 99881 00629 15002 00214
///// ///// 85548 08659 03506 70148 02471 07007 50577 17170 30015
40740 28966 28021 30940 437// 27046 25061 515// 25567 20203 549//
27052 15381 521// 27550 10629 639// 28036 88183 615// 26059 77255
25568 42207

TTBB 7315/ 72HMS 00881 00629 11870 02040 22860 08458 33850 08659
44827 08460 55783 09472 66740 06473 77700 02471 88588 07173 99512
16170 11500 17170 22457 21569 33400 28966 44371 32963 55358 33764
66340 36963 77300 437// 88250 515// 99208 587// 11200 599// 22183
615// 33166 599// 22183 615// 33166 599// 44152 633// 55150 621//
66137 629// 77118 673// 88109 667// 99108 645// 11100 639//

TTCC 73153 72HMS 70852 655// 32508 50065 599// 33006 30389 535//
05504 88999 77999

TTDD 7315/ 72HMS 11700 655// 22638 647// 33560 601// 44500 599//
55300 535// 66256 545//

ROCKETSONDE: (0950 MST) RRXX 23165 72269 81010 11101 25554 05006
28551 13002 30552 01003 35545 30011 36544 31014 38533 30011 39535
29013 40522 29023 41524 29027 42522 28022 44514 28039 45510 28040
47505 28040 48503 ***** 49505 26042 50508 26047 53505 25067 55508
26069 56511 27076 57515 27084 58518 27089 60524 28071 64528 27051
65*** 28049 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 24 November 1976 TIME 0855 (Local) 1555 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	2.3		2.3		8.4		3.6			
T_{dp}	-2.0		-2.0		-3.5		-1.4			
W_d, W_s	030 1.3		030 1.3		030 1.3		040 1.3			
P	26.17		26.17		25.54		25.82			
C	220 ◐		220 ◐		250 ◐		○			
M	No		No		No		No			
$T_{a2\,5}$	missing		missing							
$T_{dp2\,5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.61	4.26	0.61	4.26	0.51	3.55	0.54	3.75		
I_a	0.47	3.30	0.47	3.30	0.44	3.06	0.42	2.91		
I_d	0.28	1.97	0.28	1.97	0.28	1.98	0.30	2.12		
N	1.17	8.17	1.17	8.17	1.13	7.85	1.05	7.34		
N_a	0.92	6.41	0.92	6.41	0.90	6.31	0.81	5.63		
N_b	0.84	5.89	0.84	5.89	0.85	5.96	0.75	5.22		
N_c	0.71	4.94	0.71	4.94	0.73	5.06	0.63	4.41		
N_d	0.63	4.37	0.63	4.37	0.63	4.38	0.53	3.71		
i	0.26	1.82	0.33	2.30	0.06	0.43	0.05	0.38		
i_a	0.23	1.63	0.29	1.99	0.05	0.37	0.04	0.30		
i_d	0.15	1.07	0.17	1.20	0.04	0.31	0.02	0.17		
T_g	0.6		0.7		7.6		8.0 *			
T_s	11.1		8.7		11.0					
Ψ	23.2		21.5							
ε										

REMARKS: MET SAT II (Grass) = 11°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 24 November 1976 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	9.4		9.4		16.3		11.0			
T_{dp}	1.2		1.2		-3.8		0.6			
W_d, W_s	CALM		CALM		200	4.0	CALM			
P	26.12		26.12		25.49		25.77			
C	140◐ 220◐		140◐ 220◐		250-◐		○			
M	No		No		No		No			
$T_{a2\ 5}$	missing		missing		15.4					
$T_{dp2\ 5}$	missing		missing		-1.5					
	1	2	1	2	1	2	1	2	1	2
I	1.05	7.31	1.05	7.31	0.89	6.24	0.89	6.20		
I_a	0.81	5.68	0.81	5.68	0.77	5.35	0.65	4.55		
I_d	0.53	3.68	0.53	3.68	0.48	3.35	0.46	3.19		
N	1.30	9.07	1.30	9.07	1.35	9.44	1.25	8.74		
N_a	0.91	6.36	0.91	6.36	1.05	7.34	0.92	6.45		
N_b	0.93	6.47	0.93	6.47	0.99	6.89	0.85	5.92		
N_c	0.76	5.29	0.76	5.29	0.83	5.78	0.70	4.89		
N_d	0.67	4.69	0.67	4.69	0.71	4.96	0.59	4.12		
i	0.46	3.18	0.62	4.32	0.11	0.79	0.04	0.30		
i_a	0.36	2.50	0.52	3.61	0.10	0.69	0.04	0.25		
i_d	0.27	1.88	0.30	20.9	0.08	0.57	0.01	0.09		
T_g	12.3		11.2		20.1		10.0 *			
T_s	17.2		15.9		20.0					
Ψ	23.2		21.5							
ε										

REMARKS: MET SAT II (Grass) = 17°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 24 November 1976 TIME 1309 (Local) 2009 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	11.3		11.3		16.7		15.4			
T_{dp}	1.0		1.0		-2.7		2.6			
W_d, W_s	CALM		CALM		200	2.2	CALM			
P	26.08		26.08		25.45		25.72			
C	140 E220		140 E220		220-		○			
M	No		No		No		No			
$T_{a2.5}$	missing		missing		15.6					
$T_{dp2.5}$	missing		missing		-2.0					
	1	2	1	2	1	2	1	2	1	2
I	0.93	6.50	0.93	6.50	0.82	5.69	0.79	5.49		
I_a	0.71	4.94	0.71	4.94	0.71	4.97	0.59	4.09		
I_d	0.47	3.26	0.47	3.26	0.45	3.16	0.41	2.86		
N	1.30	9.08	1.30	9.08	1.35	9.41	1.19	8.27		
N_a	1.00	7.00	1.00	7.00	1.06	7.39	0.88	6.14		
N_b	0.92	6.41	0.92	6.41	0.99	6.94	0.81	5.65		
N_c	0.77	5.37	0.77	5.37	0.83	5.78	0.67	4.66		
N_d	0.66	4.64	0.66	4.64	0.73	5.08	0.56	3.90		
i	0.41	2.87	0.54	3.78	0.12	0.83	0.04	0.26		
i_a	0.35	2.47	0.45	3.17	0.10	0.70	0.01	0.08		
i_d	0.23	1.59	0.28	1.94	0.09	0.60	0.02	0.12		
T_g	15.2		13.9		22.7		10.4 *			
T_s	14.8		14.9		22.0					
Ψ	23.2		21.5							
ε										

REMARKS: MET SAT II (Grass) = 20°C
* Water Temperature

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 24 Nov 76

RADIOSONDE: (0800 MST) TTAA 74151 72HMS 99882 00048 00000 00237
///// ///// 85567 08062 21001 70159 02463 24010 50579 15760 13012
40744 28964 23016 30944 407// 26056 25067 473// 26575 20211 565//
25117 15389 667// 26045 10634 681// 28227 88164 659// 25566 77200
25117 42638

TTBB 7415/ 72HMS 00882 00048 11873 04457 22862 07859 33850 08062
44797 07260 55764 06471 66725 04072 77700 02463 88666 01360 99648
02562 11629 04962 22603 06763 33586 06972 44553 09561 55543 10770
66500 15760 77458 20359 88400 28964 99368 33566 11344 357// 22325
371// 33300 407// 77210 547// 88200 565// 99164 659// 11156 655//
22150 667// 33138 663// 44124 679// 55115 671// 66100 681// 51515
SUPER 65-63

TTCC 74152 72HMS 70849 661// 29512 50056 617// 27510 30375 569//
35009 20634 543// 27017 88999 77999

TTDD 7415/ 72HMS 11980 685// 22893 665// 33700 661// 44678 665//
55563 611// 66500 617// 77463 633// 88363 585// 99300 569// 11200
543// 22185 541//

ROCKETSONDE: (1040 MST) RRXX 24174 72269 81010 11101 25556 34004
30549 35003 32549 03003 35541 25002 37539 29012 38519 33009 39520
01004 40522 25011 41521 27025 43512 29018 45511 30020 46506 27021
47506 26030 50505 26029 51505 28030 52507 30028 54510 28008 55514
28011 60521 28035 61520 30028 62524 30029 65*** 30054 67*** 29060
JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA GOES 1 SMS-1 SMS-2

SATELLITE IDENTIFICATION CORRELATION STUDY

DATE OF OBSERVATION 29 November 1976 TIME 1210 (Local) 1910 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-6.9		-6.9		-1.0					
T_{dp}	-13.0		-13.0		missing					
W_d, W_s	CALM		CALM		CALM					
P	26.17		26.17		25.47					
C	○		○		○					
M	No		No		No					
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.99	6.88	0.99	6.88	0.93	6.49				
I_a	0.76	5.28	0.76	5.28	0.78	5.40				
I_d	0.51	3.54	0.51	3.54	0.50	3.49				
N	1.33	9.28	1.33	9.28	1.46	10.18				
N_a	0.99	6.87	0.99	6.87	1.15	8.01				
N_b	0.94	6.56	0.94	6.56	1.08	7.52				
N_c	0.79	5.53	0.79	5.53	0.91	6.32				
N_d	0.70	4.85	0.70	4.85	0.79	5.48				
i	0.72	5.03	0.59	4.08	0.46	3.21				
i_a	0.57	3.96	0.48	3.34	0.36	2.52				
i_d	0.33	2.32	0.29	2.04	0.24	1.65				
T_g	9.0		11.5		1.0					
T_s	7.0		3.0		-2.0					
Ψ	16.4		16.8							
ε										

REMARKS: MET SAT II (Grass) = -4°C
No Run at MET SAT III This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION GOES I SMS-1 SMS-2 CORRELATION STUDY

DATE OF OBSERVATION 29 November 1976 TIME 0840 (Local) 1540 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a					missing					
T_{dp}					missing					
W_d, W_s					010 2.7					
P					25.43					
C					○					
M					No					
$T_{a2\ 5}$										
$T_{dp2\ 5}$										
	1	2	1	2	1	2	1	2	1	2
I					0.54	3.80				
I_a					0.40	2.78				
I_d					0.26	1.82				
N					1.25	8.71				
N_a					1.01	7.01				
N_b					0.95	6.66				
N_c					0.81	5.66				
N_d					0.71	4.92				
i					0.24	1.70				
i_a					0.20	1.39				
i_d					0.13	0.93				
T_g					-3.0					
T_s					-14.0					
Ψ										
ε										

REMARKS: MET SAT II (Grass) = -13°C
METSAT I not operated for this observation.
METSAT III not operated this day.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION GOES 1 SMS-1 SMS-2 CORRELATION STUDY

DATE OF OBSERVATION 29 November 1976 TIME 1540 (Local) 2240 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-8.0		-8.0		Missing					
T_{dp}	-13.2		-13.2		Missing					
W_d, W_s	220 1.3		220 1.3		040 2.2					
P	26.13		26.13		25.46					
C	○		○		○					
M	No		No		No					
$T_{a2\ 5}$	missing		missing		4.8					
$T_{dp2\ 5}$	missing		missing		-12.0					
	1	2	1	2	1	2	1	2	1	2
I	0.47	3.27	0.47	3.27	0.31	2.16				
I_a	0.34	2.39	0.34	2.39	0.30	2.10				
I_d	0.23	1.59	0.23	1.59	0.20	1.39				
N	1.10	7.64	1.10	7.64	1.16	8.06				
N_a	0.86	6.02	0.86	6.02	0.96	6.73				
N_b	0.81	5.64	0.81	5.64	0.91	6.38				
N_c	0.69	4.83	0.69	4.83	0.80	5.57				
N_d	0.62	4.32	0.62	4.32	0.70	4.89				
i	0.28	1.96	0.27	1.87	0.17	1.21				
i_a	0.22	1.56	0.23	1.59	0.15	1.02				
i_d	0.14	0.94	0.14	1.01	0.12	0.83				
T_g	1.5		-1.5		-1.0					
T_s	0.0		-2.5		-6.0					
Ψ	16.4		16.8							
ε										

REMARKS: MET SAT II (Grass) = -4°C
No Run at MET SAT III This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 29 Nov 76

RADIOSONDE: (0800 MST) TTAA 79151 72HMS 99884 15139 05001 00311
///// ///// 85556 10359 ///// 70068 06566 ///// 50566 19960 /////
40728 30162 ///// 30926 457// 27064 25045 529// 27078 20188 581//
28051 15368 589// 27049 10620 645// 28046 88189 605// 28056 77241
27579 40921

TTBB 7915/ 72HMS 00884 15139 11840 08962 22802 07966 33769 08168
44749 05966 55710 07565 66688 06968 77677 04569 88643 05370 99537
15761 11428 27359 22400 30162 33340 39161 44300 457// 55274 485//
66189 605// 77178 595// 88176 605// 99153 613// 11150 589// 22144
581// 33131 615// 44111 609// 55100 645// 51515 SUPER 18-18

TTCC 79155 72HMS 70839 609// 30026 50048 599// 28022 88999 77999

TTDD 7915/ 72HMS 11953 643// 22873 625// 33803 639// 44701 609//
55623 611// 66563 639// 77501 599// 88458 579// 99378 603// 11338
579// 51515 10190 30369

ROCKETSONDE: NONE

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA GOES 1 SMS-1 SMS-2

SATELLITE IDENTIFICATION CORRELATION STUDY

DATE OF OBSERVATION 30 November 1976 TIME 0840 (Local) 1540 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-12.0		-12.0		-5.9					
T_{dp}	missing		missing		-11.6					
W_d, W_s	CALM		CALM		020 2.2					
P	26.31		26.31		25.56					
C	○		○		○					
M	Yes		Yes		Yes					
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.57	3.97	0.57	3.97	0.47	3.27				
I_a	0.44	3.05	0.44	3.05	0.42	2.96				
I_d	0.28	1.93	0.28	1.93	0.28	1.94				
N	1.23	8.56	1.23	8.56	1.31	9.13				
N_a	0.96	6.70	0.96	6.70	1.04	7.27				
N_b	0.87	6.08	0.87	6.08	0.99	6.89				
N_c	0.75	5.25	0.75	5.25	0.84	5.89				
N_d	0.67	4.65	0.67	4.65	0.74	5.15				
i	0.39	2.69	0.33	2.28	0.24	1.65				
i_a	0.31	2.18	0.27	1.91	0.19	1.35				
i_d	0.19	1.34	0.17	1.18	0.14	0.98				
T_g	-10.8		-10.6		-3.0					
T_s	-14.4		-13.0		-5.0					
Ψ	25.2		18.5							
ε										

REMARKS: MET SAT II (Grass) = -6°C
No Run at MET SAT III This Day
Ground covered with snow at all sites.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA GOES 1 SMS-1 SMS-2

SATELLITE IDENTIFICATION CORRELATION STUDY

DATE OF OBSERVATION 30 November 1976 TIME 1210 (Local) 1910 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-5.3		-5.3		2.5					
T_{dp}	-12.4		-12.4		-3.6					
W_d, W_s	CALM		CALM		240 2.7					
P	26.27		26.27		25.51					
C	○		○		○					
M	Yes		Yes		yes					
$T_{a2\ 5}$	missing		missing		5.3					
$T_{dp2\ 5}$	missing		missing		-7.5					
	1	2	1	2	1	2	1	2	1	2
I	1.00	6.96	1.00	6.96	0.94	6.58				
I_a	0.78	5.45	0.78	5.45	0.85	5.90				
I_d	0.51	3.54	0.51	3.54	0.55	3.80				
N	1.37	9.57	1.37	9.57	1.52	10.56				
N_a	1.04	7.23	1.04	7.23	1.20	8.36				
N_b	0.94	6.53	0.94	6.53	1.13	7.87				
N_c	0.81	5.62	0.81	5.62	0.96	6.69				
N_d	0.72	4.99	0.72	4.99	0.85	5.90				
i	0.72	5.04	0.59	4.13	0.44	3.05				
i_a	0.57	3.98	0.49	3.44	0.35	2.47				
i_d	0.34	2.34	0.30	2.12	0.26	1.79				
T_g	-2.5		2.0		13.0					
T_s	-3.6		2.5		5.0					
Ψ	25.2		18.5							
ε										

REMARKS: MET SAT II (Grass) = 3°C
No Run at MET SAT III This Day
Ground covered with snow at all sites.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA GOES 1 SMS-1 SMS-2

SATELLITE IDENTIFICATION CORRELATION STUDY

DATE OF OBSERVATION 30 November 1976 TIME 1540 (Local) 2240 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-4.0		-4.0		5.0					
T_{dp}	-6.1		-6.1		-6.5					
W_d, W_s	CALM		CALM		210	0.9				
P	26.16		26.16		25.49					
C	○		○		○					
M	**Yes**		**Yes**		**Yes**					
$T_{a2\ 5}$	missing		missing		7.2					
$T_{dp2\ 5}$	missing		missing		-4.7					
	1	2	1	2	1	2	1	2	1	2
I	0.41	2.86	0.41	2.86	m i s	s i n g				
I_a	0.26	1.82	0.26	1.82	0.45	3.10				
I_d	0.18	1.26	0.18	1.26	0.30	2.06				
N	1.05	7.29	1.05	7.29	1.33	9.25				
N_a	0.85	5.90	0.85	5.90	1.09	7.57				
N_b	0.78	5.43	0.78	5.43	1.04	7.22				
N_c	0.68	4.74	0.68	4.74	0.91	6.36				
N_d	0.61	4.28	0.61	4.28	0.82	5.73				
i	0.22	1.52	0.22	1.55	0.27	1.89				
i_a	0.17	1.20	0.18	1.27	0.23	1.58				
i_d	0.10	0.72	0.12	0.82	0.21	1.46				
T_g	-2.5		-1.5		19.5					
T_s	-7.5		-2.5		5.0					
Ψ	25.2		18.5							
ε										

REMARKS: MET SAT II (Grass) = 4°C
No Run at MET SAT III This Day
Ground covered with snow at all sites.

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 30 Nov 76

RADIOSONDE: (0800 MST) TTAA 80151 72HMS 99885 10557 00000 00312
///// ///// 85579 02561 36011 70124 03772 33005 50573 17568 32520
40736 30564 33027 30934 459// 32535 25053 561// 31536 20194 575//
28063 15382 559// 28553 10634 675// 29560 88240 575// 31540 77186
26068 43015

TTBB 8015/ 72HMS 00885 10557 11866 06957 22850 02561 33820 01763
44810 00265 55760 02367 66751 01570 77716 03572 88700 03772 99669
05170 11625 05571 22517 16567 33510 16368 44500 17568 55400 30564
66356 36764 77300 459// 88250 561// 99240 575// 11231 565// 22227
549// 33113 551// 44200 575// 55184 555// 66167 585// 77156 551//
88150 559// 565// 11135 589// 22125 599// 33105 665// 44100 675//

TTCC 80152 72HMS 70850 665// 29526 50055 611// 32520 30374 579//
08003 20632 539// 32021 88999 77999

TTDD 8015/ 72HMS 11948 683// 22758 639// 33700 665// 44638 683//
55601 631// 66512 635// 77500 611// 88383 605// 99300 579// 11248
571// 22223 535// 33200 539// 44175 575//

ROCKETSONDE: NONE

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION GOES 1 SMS-1 SMS-2 Correlation Study

DATE OF OBSERVATION 1 December 1976 TIME 0840 (Local) 1540 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-7.7		-7.7		1.8					
T_{dp}	-18.6		-18.6		-5.4					
W_d, W_s	250 1.8		250 1.8		030 8.9G 12.5					
P	26.22		26.22		25.54					
C	60 ⓘ E110 ⓜ		60 ⓘ E110 ⓜ		60 ⓘ E140 ⓜ					
M	No		No		No					
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.53	3.70	0.53	3.70	m i s	s i n g				
I_a	0.45	3.11	0.45	3.11	0.40	2.76				
I_d	0.25	1.77	0.25	1.77	0.26	1.80				
N	0.51	3.58	0.51	3.58	0.46	3.21				
N_a	0.45	3.10	0.45	3.10	0.43	3.00				
N_b	0.41	2.84	0.41	2.84	0.39	2.72				
N_c	0.24	1.66	0.24	1.66	0.33	2.30				
N_d	0.18	1.23	0.18	1.23	0.30	2.08				
i	0.48	3.36	0.31	2.17	0.19	1.34				
i_a	0.46	3.19	0.25	1.74	0.16	1.13				
i_d	0.29	2.03	0.14	0.96	0.13	0.91				
T_g	-4.0		-6.0		6.0					
T_s	-2.0		-4.0		0.0					
Ψ	missing		19.2							
ε										

REMARKS: MET SAT II (Grass) = 2°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 1 December 1976 TIME 0935 (Local) 1635 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-5.1		-5.1		1.0					
T_{dp}	-16.6		-16.6		-3.8					
W_d, W_s	090 2.2		090 2.2		030 8.9G 15.2					
P	26.26		26.26		25.58					
C	60① E110①		60① E110①		60①160①					
M	No		No		No					
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.84	5.84	0.84	5.84	m i s	s i n g				
I_a	0.71	4.98	0.71	4.98	0.26	1.84				
I_d	0.36	2.48	0.36	2.48	0.16	1.14				
N	1.16	8.07	1.16	8.07	0.55	3.82				
N_a	0.90	6.31	0.90	6.31	0.17	1.16				
N_b	0.83	5.80	0.83	5.80	0.16	1.14				
N_c	0.71	4.93	0.71	4.93	0.19	1.30				
N_d	0.62	4.33	0.62	4.33	0.20	1.40				
i	0.53	3.67	0.42	2.93	0.17	1.16				
i_a	0.42	2.91	0.34	2.40	0.13	0.93				
i_d	0.24	1.67	0.21	1.44	0.12	0.82				
T_g	-1.5		-3.0		7.5					
T_s	-1.0		-2.5		-2.0					
Ψ	missing		19.2							
ε										

REMARKS: MET SAT II (Grass) = -2°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 1 December 1976 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	0.4		0.4		4.8					
T_{dp}	-5.5		-5.5		-0.5					
W_d, W_s	150 2.2		150 2.2		020 6.7 G8.9					
P	26.28		26.28		25.62					
C	60 E100		60 E100		140					
M	No		No		No					
$T_{a2\ 5}$	missing		missing		6.8					
$T_{dp2\ 5}$	missing		missing		-5.1					
	1	2	1	2	1	2	1	2	1	2
I	0.47	3.31	0.47	3.31	m i s	s i n g				
I_a	0.32	2.25	0.32	2.25	0.92	6.42				
I_d	0.19	1.32	0.19	1.32	0.59	4.11				
N	0.02	0.11	0.02	0.11	1.56	10.86				
N_a	0.01	0.10	0.01	0.10	1.25	8.71				
N_b	0.01	0.08	0.01	0.08	1.19	8.30				
N_c	0.01	0.05	0.01	0.05	1.03	7.15				
N_d	0.01	0.04	0.01	0.04	0.91	6.38				
i	0.30	2.12	0.22	1.52	0.39	2.73				
i_a	0.22	1.52	0.17	1.18	0.32	2.25				
i_d	0.11	0.79	0.10	0.68	0.26	1.83				
T_g	2.0		5.0		17.5					
T_s	3.0		4.5		4.0					
Ψ	missing		19.2							
ϵ										

REMARKS: MET SAT II (Grass) = 5°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ϵ = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION GOES I, SMS-1, SMS-2 Correlation Study

DATE OF OBSERVATION 1 December 1976 TIME 1210 (Local) 1910 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	0.4		0.4		4.8					
T_{dp}	-5.5		-5.5		-0.5					
W_d, W_s	120 3.1		120 3.1		010 6.7G 8.9					
P	26.28		26.28		25.60					
C	60◯ E100◍		60◯ E100◍		140◑					
M	No		No		No					
$T_{a2\ 5}$	missing		missing		6.9					
$T_{dp2\ 5}$	missing		missing		-5.1					
	1	2	1	2	1	2	1	2	1	2
I	1.05	7.35	1.05	7.35	m i s	s i n g				
I_a	0.84	5.84	0.84	5.84	0.92	6.44				
I_d	0.55	3.82	0.55	3.82	0.59	4.14				
N	1.20	8.37	1.20	8.37	1.57	10.92				
N_a	0.88	6.13	0.88	6.13	1.25	8.74				
N_b	0.87	6.09	0.87	6.09	1.19	8.32				
N_c	0.72	5.04	0.72	5.04	1.02	7.13				
N_d	0.60	4.21	0.60	4.21	0.91	6.34				
i	0.77	5.36	0.63	4.42	0.39	2.72				
i_a	0.60	4.21	0.53	3.71	0.32	2.26				
i_d	0.34	2.39	0.32	2.22	0.27	1.85				
T_g	2.0		5.0		18.0					
T_s	3.0		4.5		4.0					
Ψ	missing		19.2							
ε										

REMARKS: MET SAT II (Grass) = 5°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION GOES I, SMS-1, SMS-2 Correlation Study

DATE OF OBSERVATION 1 December 1976 TIME 1540 (Local) 2240 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	0.1		0.1		3.9					
T_{dp}	-3.8		-3.8		2.3					
W_d, W_s	210 2.7		210 2.7		360 4.5G 7.6					
P	26.29		26.29		25.65					
C	60 ◐		60 ◐		○					
M	No		No		No					
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.43	3.02	0.43	3.02	m i s	s i n g				
I_a	0.32	2.24	0.32	2.24	0.48	3.31				
I_d	0.20	1.42	0.20	1.42	0.32	2.24				
N	0.84	5.89	0.84	5.89	1.33	9.29				
N_a	0.68	4.71	0.68	4.71	1.14	7.94				
N_b	0.61	4.28	0.61	4.28	1.09	7.62				
N_c	0.53	3.68	0.53	3.68	0.97	6.80				
N_d	0.48	3.36	0.48	3.36	0.88	6.13				
i	0.26	1.79	0.25	1.74	0.28	1.92				
i_a	0.21	1.45	0.21	1.50	0.23	1.63				
i_d	0.12	0.87	0.13	0.94	0.23	1.58				
T_g	3.0		2.0		18.0					
T_s	0.5		0.0		-1.0					
Ψ	missing		19.2							
ε										

REMARKS: MET SAT II (Grass) = 2°C
No Run at MET SAT III This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 1 Dec 76

RADIOSONDE: (0800 MST) TTAA 51151 72HMS 99883 07538 08004 00284
///// ///// 85558 00557 07015 70101 07556 34519 50565 21759 28058
40726 32564 27060 30924 415// 28062 25046 483// 29081 20192 525//
28074 15377 563// 28572 10627 659// 29037 88102 673// 29037 77327
29586 41620

TTBB 5115/ 72HMS 00883 07538 11872 06942 22850 00557 33843 02659
44835 02061 55784 00561 66756 03159 77737 04159 88700 07556 99643
11914 11592 15506 22577 14956 33560 15560 44537 17159 55500 21759
66469 26127 77447 28159 88440 28761 99412 31964 11400 32564 22387
33566 33349 387// 44314 395// 55300 415// 66250 483// 77232 509//
88228 481// 99206 529// 11200 525// 22185 543// 33176 523// 44168
547// 55165 537// 66150 563// 77102 673// 88100 659//

TTCC 51155 72HMS 70844 577// 29518 50052 601// 14504 88999 77999

TTDD 5115/ 72HMS 11771 679// 22723 595// 33700 577// 44576 651//
55500 601// 66403 611// 77353 551// 88341 549// 51515 10190 30375

ROCKETSONDE: (1110 MST) RRXX 01181 72269 81010 11101 25556 03005
27554 24008 30544 26015 35538 29024 37534 27019 40525 28034 42518
27042 44505 27053 45504 27061 50512 26080 55528 26079 56532 25081
59527 24106 60/// 25111 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION GOES I SMS-1 SMS-2 Correlation Study

DATE OF OBSERVATION 2 December 1976 TIME 0840 (Local) 1540 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-7.2		-7.2		-1.4					
T_{dp}	-11.2		-11.2		-9.2					
W_d, W_s	070 1.3		070 1.3		050 2.2					
P	26.40		26.40		25.71					
C	○		○		○					
M	No		No		No					
$T_{a2\,5}$	missing		missing							
$T_{dp2\,5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.55	3.83	0.55	3.83	0.59	4.15				
I_a	0.40	2.82	0.40	2.82	0.42	2.93				
I_d	0.26	1.78	0.26	1.78	0.26	1.83				
N	1.24	8.62	1.24	8.62	1.24	8.67				
N_a	0.96	6.70	0.96	6.70	1.00	6.97				
N_b	0.88	6.17	0.88	6.17	0.95	6.61				
N_c	0.76	5.33	0.76	5.33	0.81	5.62				
N_d	0.66	4.64	0.66	4.64	0.70	4.87				
i	0.35	2.45	0.28	1.95	0.12	0.85				
i_a	0.28	1.97	0.23	1.62	0.10	0.72				
i_d	0.17	1.20	0.14	1.01	0.08	0.58				
T_g	-8.0		-5.0		0.0					
T_s	-9.0		-7.5		-2.0					
Ψ	missing		missing							
ε										

REMARKS: MET SAT II (Grass) =-3°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION GOES I, SMS-1, SMS-2, DMSP 7218 Correlation Study

DATE OF OBSERVATION 2 December 1976 TIME 1210 (Local) 1910 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	0.0		0.0		7.3					
T_{dp}	-2.1		-2.1		-6.6					
W_d, W_s	220 1.8		220 1.8		070 0.9					
P	26.32		26.32		25.66					
C	○		○		○					
M	No		No		No					
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.97	6.77	0.97	6.77	m i s	s i n g				
I_a	0.75	5.29	0.75	5.29	0.98	6.85				
I_d	0.48	8.18	0.48	8.18	0.64	4.47				
N	1.40	9.74	1.40	9.74	1.65	11.49				
N_a	1.07	7.43	1.07	7.43	1.33	9.27				
N_b	0.99	6.87	0.99	6.87	1.27	8.85				
N_c	0.83	5.79	0.83	5.79	1.10	7.64				
N_d	0.73	5.06	0.73	5.06	0.98	6.85				
i	0.68	4.75	0.55	3.87	0.37	2.58				
i_a	0.53	3.70	0.46	3.21	0.31	2.15				
i_d	0.31	2.13	0.28	1.98	0.28	1.94				
T_g	-0.5		4.0		25.0					
T_s	-1.0		5.5		14.0					
Ψ	missing		missing							
ε										

REMARKS: MET SAT II (Grass) = 12°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION GOES I SMS-1 SMS-2 Correlation Study

DATE OF OBSERVATION 2 December 1976 TIME 1540 (Local) 2240 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	0.6		0.6		10.8					
T_{dp}	-1.9		-1.9		-6.0					
W_d, W_s	190 1.8		190 1.8		230 1.3					
P	26.23		26.23		25.61					
C	○		○		○					
M	No		No		No					
$T_{a2\,5}$	missing		missing		9.8					
$T_{dp2\,5}$	missing		missing		-5.5					
	1	2	1	2	1	2	1	2	1	2
I	0.40	2.77	0.40	2.77	m i s	s i n g				
I_a	0.29	2.01	0.29	2.01	0.46	3.20				
I_d	0.17	1.20	0.17	1.20	0.31	2.14				
N	1.09	7.61	1.09	7.61	1.31	9.11				
N_a	0.90	6.25	0.90	6.25	1.11	7.74				
N_b	0.82	5.72	0.82	5.72	1.06	7.45				
N_c	0.72	5.04	0.72	5.04	0.94	6.59				
N_d	0.64	4.43	0.64	4.43	0.85	5.94				
i	0.22	1.52	0.22	1.53	0.26	1.95				
i_a	0.17	1.19	0.19	1.30	0.23	1.61				
i_d	0.10	0.70	0.12	0.83	0.23	1.58				
T_g	-3.0		1.5		25.0					
T_s	-3.5		0.0		15.0					
Ψ	missing		missing							
ε										

REMARKS: MET SAT II (Grass) = 12°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. Hg); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

DATE: 2 Dec 76

RADIOSONDE: (0800 MST) TTAA 52151 72HMS 99889 06557 10002 00326
///// ///// 85613 00660 02510 70176 00764 08518 50579 16166 01523
40743 28563 00525 30943 441// 34530 25063 529// 33033 20204 609//
31034 15382 625// 30042 10629 659// 30033 88208 625// 32032 77150
30042 40806

TTBB 5215/ 72HMS 00889 06557 11863 00459 22850 00660 33825 00061
44815 00762 55796 01065 66792 03067 77761 02665 88700 00764 99626
05367 11532 13564 22500 16166 33483 17366 44400 28563 55326 39761
66300 441// 77250 529// 88208 625// 99200 609// 11192 597// 22180
629// 33163 635// 44159 623// 55150 625// 66137 647// 77127 637//
88117 683// 99108 665// 11100 659//

TTCC 52153 72HMS 70844 655// 30024 50050 615// 31505 30370 553//
35505 88999 77999

TTDD 5215/ 72HMS 11793 681// 22700 655// 33613 657// 44588 629//
55558 647// 66500 615// 77463 625// 88418 579// 99393 595// 11300
569// 22273 553//

ROCKETSONDE: (1100 MST) RRXX 02180 72269 81010 11101 25555 23006
30548 30007 35537 29022 37533 28022 40527 28039 41524 28048 42522
28038 45511 28069 46508 28064 48510 27079 50510 27078 52514 26086
54520 26079 55522 26084 56525 26087 58521 25110 59519 25120 60523
25122 63536 25112 64/// 27109 65/// 28097 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION GOES-1, SMS-1, SMS-2 Correlation Study

DATE OF OBSERVATION 3 December 1976 TIME 0840 (Local) 1540 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-8.1		-8.1		-1.1					
T_{dp}	-10.2		-10.2		-5.7					
W_d, W_s	CALM		CALM		020	1.3				
P	26.18		26.18		25.51					
C	○		○		○					
M	No		No		No					
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.54	3.77	0.54	3.77	missing					
I_a	0.40	2.77	0.40	2.77	0.40	2.76				
I_d	0.24	1.70	0.24	1.70	0.26	1.83				
N	1.23	8.58	1.23	8.58	1.24	8.67				
N_a	0.98	6.85	0.98	6.85	1.01	7.06				
N_b	0.92	6.42	0.92	6.42	0.96	6.69				
N_c	0.78	5.44	0.78	5.44	0.82	5.73				
N_d	0.69	4.80	0.69	4.80	0.73	5.06				
i	0.38	2.68	0.33	2.28	0.11	0.76				
i_a	0.27	1.89	0.20	1.40	0.09	0.64				
i_d	0.16	1.14	0.12	0.86	0.08	0.57				
T_g	-3.0		-5.0		1.5					
T_s	-3.0		-5.0		3.0					
Ψ	19.5		19.7							
ε										

REMARKS: MET SAT II (Grass) = 1°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION GOES 1, SMS-1, SMS-2 Correlation Study

DATE OF OBSERVATION 3 December 1976 TIME 1210 (Local) 1910 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	2.1		2.1		8.9					
T_{dp}	-2.0		-2.0		-5.3					
W_d, W_s	310 1.8		310 1.8		CALM					
P	26.11		26.11		25.46					
C	○		○		○					
M	No		No		No					
$T_{a2\,5}$	missing		missing		10.0					
$T_{dp2\,5}$	missing		missing		-3.3					
	1	2	1	2	1	2	1	2	1	2
I	0.97	6.73	0.97	6.73	m i s	s i n g				
I_a	0.76	5.33	0.76	5.33	1.02	7.13				
I_d	0.48	3.35	0.48	3.35	0.67	4.70				
N	1.42	9.94	1.42	9.94	1.70	11.84				
N_a	1.09	7.60	1.09	7.60	1.39	9.67				
N_b	1.01	7.06	1.01	7.06	1.32	9.20				
N_c	0.85	5.93	0.85	5.93	1.15	8.02				
N_d	0.74	5.19	0.74	5.19	1.04	7.25				
i	0.65	4.51	0.54	3.75	0.39	2.69				
i_a	0.51	3.54	0.45	3.12	0.32	2.25				
i_d	0.29	2.01	0.27	1.90	0.31	2.14				
T_g	8.0		6.0		27.5					
T_s	15.0		8.0		28.0					
Ψ	19.5		19.7							
ε										

REMARKS: MET SAT II (Grass) = 17°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION GOES-1, SMS-1, SMS-2 Correlation Study

DATE OF OBSERVATION 3 December 1976 TIME 1540 (Local) 2240 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	3.2		3.2		12.6					
T_{dp}	-1.1		-1.1		-5.0					
W_d, W_s	CALM		CALM		CALM					
P	26.04		26.04		25.39					
C	○		○		○					
M	No		No		No					
$T_{a2\,5}$	missing		missing		10.3					
$T_{dp2\,5}$	missing		missing		-4.0					
	1	2	1	2	1	2	1	2	1	2
I	0.45	3.12	0.45	3.12	missing					
I_a	0.33	2.31	0.33	2.31	0.46	3.20				
I_d	0.21	1.46	0.21	1.46	0.31	2.16				
N	1.17	8.17	1.17	8.17	1.32	9.18				
N_a	0.94	6.55	0.94	6.55	1.12	7.78				
N_b	0.88	6.16	0.88	6.16	1.07	7.48				
N_c	0.76	5.30	0.76	5.30	0.95	6.65				
N_d	0.67	4.67	0.67	4.67	0.86	5.99				
i	0.24	1.67	0.25	1.74	0.26	1.79				
i_a	0.19	1.31	0.21	1.47	0.22	1.55				
i_d	0.11	0.76	0.13	0.94	missing					
T_g	3.0		6.5		26.0					
T_s	5.0		3.0		20.0					
Ψ	19.5		19.7							
ε										

REMARKS: MET SAT II (Grass) =12°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 3 December 1976

RADIOSONDE: NONE

ROCKETSONDE: NONE

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 7 December 1976 TIME 0904 (Local) 1604 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-1.6		-1.6		2.3					
T_{dp}	-6.8		-6.8		-6.2					
W_d, W_s	250 3.1		250 3.1		220 2.2					
P	26.15		26.15		25.48					
C	200- ⓫		200- ⓫		210- ①					
M	No		No		No					
$T_{a2\,5}$	missing		missing							
$T_{dp2\,5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.60	4.20	0.60	4.20	0.62	4.31				
I_a	0.44	3.07	0.44	3.07	0.46	3.24				
I_d	0.29	2.01	0.29	2.01	0.30	2.10				
N	1.24	8.66	1.24	8.66	1.25	8.71				
N_a	0.98	6.80	0.98	6.80	0.99	6.90				
N_b	0.90	6.30	0.90	6.30	0.90	6.31				
N_c	0.78	5.41	0.78	5.41	0.77	5.37				
N_d	0.68	4.74	0.68	4.74	0.69	4.84				
i	0.31	2.19	0.33	2.32	0.10	0.70				
i_a	0.26	1.82	0.25	1.94	0.09	0.59				
i_d	0.16	1.11	0.17	1.18	0.08	0.53				
T_g	0.5		-1.5		5.0					
T_s	-4.0		-2.0		2.0					
Ψ	19.5		24.9							
ε										

REMARKS: MET SAT II (Grass) = 1°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 7 December 1976 TIME 1227 (Local) 1927 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	3.4		3.4		8.9					
T_{dp}	-3.4		-3.4		-6.8					
W_d, W_s	300 4.5		300 4.5		CALM					
P	26.08		26.08		25.45					
C	200- ⓘ		200- ⓘ		210- ⓘ					
M	No		No		No					
$T_{a2\,5}$	missing		missing		10.6					
$T_{dp2\,5}$	missing		missing		-6.0					
	1	2	1	2	1	2	1	2	1	2
I	0.81	5.68	0.81	5.68	0.87	6.05				
I_a	0.61	4.22	0.61	4.22	0.85	5.92				
I_d	0.45	3.13	0.45	3.13	0.55	3.48				
N	1.35	9.43	1.35	9.43	1.53	10.67				
N_a	1.01	7.02	1.01	7.02	1.21	8.46				
N_b	0.98	6.84	0.98	6.84	1.15	8.01				
N_c	0.83	5.77	0.83	5.77	0.98	6.83				
N_d	0.72	5.02	0.72	5.02	0.86	5.99				
i	0.42	2.91	0.55	3.84	0.22	1.56				
i_a	0.34	2.40	0.46	3.22	0.19	1.32				
i_d	0.22	1.52	0.28	1.94	0.18	1.23				
T_g	8.0		12.0		21.5					
T_s	7.0		10.5		22.0					
Ψ	19.5		24.9							
ε										

REMARKS: MET SAT II (Grass) = 26°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 7 Dec 76

RADIOSONDE: (0800 MST) TTAA 57151 72HMS 99881 03761 33002 00239
///// ///// 85543 01664 ///// 70089 00564 34538 50572 15163 33549
40736 29361 33545 30935 467// 35043 25053 561// 35048 20194 583//
30532 15373 601// 31053 10623 651// 30040 88221 595// 34050 77162
31560 42214

TTBB 5715/ 72HMS 00881 03761 11871 02463 22801 02563 33768 03164
44700 00564 55658 01171 66564 07970 77555 08965 88400 29361 99352
36763 11254 561// 22221 595// 33204 577// 44164 627// 55150 601//
66137 633// 77128 599// 88100 651//

TTCC 57152 72HMS 70838 621// 29027 50046 611// 29525 30367 561//
27525 20626 521// 27036 88999 77999

TTDD 5715/ 72HMS 11830 693// 22750 671// 33658 593// 44568 651//
55510 635// 66475 573// 77400 601// 88135 499//

ROCKETSONDE: (0930 MST) RRXX 07163 72269 81010 11101 25555 26013
28550 28019 30551 27021 32550 27033 35540 26033 40526 26052 45507
26050 47504 27051 50508 26048 51511 26046 52513 25054 53515 25062
55520 24057 59529 24053 60532 23059 64544 26095 65/// 27102 67///
29099 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 8 December 1976 TIME 1107 (Local) 1807 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	3.2		3.2		11.9		3.7			
T_{dp}	-2.2		-2.2		-7.2		-3.0			
W_d, W_s	220 0.9		220 0.9		240 1.3		360 1.8			
P	26.12		26.12		25.48		25.79			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\ 5}$	missing		missing		9.8					
$T_{dp2\ 5}$	missing		missing		-7.1					
	1	2	1	2	1	2	1	2	1	2
I	0.90	6.30	0.90	6.30	0.84	5.88	0.91	6.32		
I_a	0.65	4.55	0.65	4.55	0.78	5.40	0.69	4.84		
I_d	0.42	2.91	0.42	2.91	0.49	3.42	0.49	3.41		
N	1.40	9.76	1.40	9.76	1.45	10.13	1.30	9.03		
N_a	1.06	7.41	1.06	7.41	1.16	8.06	0.98	6.86		
N_b	0.98	6.83	0.98	6.83	1.08	7.53	0.91	6.31		
N_c	0.82	5.73	0.82	5.73	0.92	6.45	0.76	5.28		
N_d	0.71	4.98	0.71	4.98	0.81	5.64	0.65	4.56		
i	0.35	2.47	0.50	3.48	0.18	1.28	0.06	0.41		
i_a	0.30	2.10	0.42	2.91	0.15	1.07	0.05	0.32		
i_d	0.19	1.33	0.34	1.80	0.14	0.95	0.02	0.12		
T_g	6.5		5.2		-6.0		missing			
T_s	7.2		5.8		16.0					
Ψ	22.5		19.4							
ε										

REMARKS: MET SAT II (Grass) = 12°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 8 December 1976 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	4.1		4.1		13.1		6.6			
T_{dp}	-0.8		-0.8		-7.1		-2.8			
W_d, W_s	220	1.8	220	1.8	240	1.3	030	0.4		
P	25.86		25.86		25.45		25.75			
C	O		O		O		O			
M	No		No		No		No			
$T_{a2\ 5}$	missing		missing		12.9					
$T_{dp2\ 5}$	missing		missing		-4.3					
	1	2	1	2	1	2	1	2	1	2
I	0.93	6.51	0.93	6.51	0.87	6.04	0.90	6.30		
I_a	0.68	4.71	0.68	4.71	0.82	5.75	0.69	4.78		
I_d	0.43	2.99	0.43	2.99	0.53	3.67	0.48	3.32		
N	1.41	9.85	1.41	9.85	1.51	10.53	1.33	9.26		
N_a	1.07	7.48	1.07	7.48	1.20	8.36	1.00	6.95		
N_b	0.99	6.88	0.99	6.88	1.12	7.83	0.91	6.37		
N_c	0.83	5.78	0.83	5.78	0.96	6.69	0.76	5.30		
N_d	0.72	5.02	0.72	5.02	0.84	5.82	0.63	4.41		
i	0.52	3.63	0.37	2.59	0.20	1.41	0.05	0.38		
i_a	0.43	2.99	0.32	2.23	0.17	1.21	0.04	0.30		
i_d	0.26	1.78	0.25	1.48	0.16	1.10	0.01	0.07		
T_g	7.5		10.7		-1.0		missing			
T_s	8.0		10.0		17.0					
Ψ	22.5		19.4							
ε										

REMARKS: MET SAT II (Grass) = 14°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 8 Dec 76

RADIOSONDE: NONE

ROCKETSONDE: (1135 MST) RRXX 08184 72269 81010 11101 25557 26022
27557 27026 30548 25034 35537 26045 38520 26044 40515 26048 41507
26050 45507 27055 50509 25062 55517 25059 56514 25059 60*** 26054
61*** 27054 62*** 27044 63*** 28022 64*** 23015 65*** 23024 66***
27038 67*** 28071

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 15 December 1976 TIME 0901 (Local) 1601 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-2.0		-2.0		3.3		0.6			
T_{dp}	-8.3		-8.3		-7.5		-4.8			
W_d, W_s	120 2.7		120 2.7		040 1.8		360 2.2			
P	26.10		26.10		25.47		25.74			
C	W2X		W2X		O		O			
M	No		No		No		No			
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.49	3.43	0.49	3.43	0.46	3.23	0.50	3.47		
I_a	0.36	2.50	0.36	2.50	0.39	2.74	0.39	2.73		
I_d	0.24	1.65	0.24	1.65	0.26	1.80	0.29	2.04		
N	0.73	5.10	0.73	5.10	1.26	8.76	1.16	8.08		
N_a	0.47	3.27	0.47	3.27	1.01	7.04	0.91	6.37		
N_b	0.30	2.07	0.30	2.07	0.94	6.59	0.85	5.90		
N_c	0.19	1.31	0.19	1.31	0.80	5.57	0.72	5.05		
N_d	0.06	0.40	0.06	0.40	0.69	4.82	0.63	4.39		
i	0.20	1.39	0.29	2.02	0.06	0.40	0.06	0.42		
i_a	0.17	1.17	0.22	1.55	0.05	0.34	0.05	0.35		
i_d	0.11	0.76	0.14	0.95	0.04	0.28	0.03	0.19		
T_g	-0.5		-0.5		4.1		missing			
T_s	3.0		-3.0		6.9					
Ψ	missing		missing							
ϵ										

REMARKS: MET SAT II (Grass) = 4°C
Fog Present at MET SAT I

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ϵ = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 15 December 1976 TIME 1137 (Local) 1837 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	2.8		2.8		12.5		6.2			
T_{dp}	-1.9		-1.9		-9.6		-3.3			
W_d, W_s	110 1.8		110 1.8		060 2.2		CALM			
P	26.06		26.06		25.43		25.71			
C	○		○		210 ⊕		○			
M	NO		NO		NO		No			
$T_{a2\ 5}$	missing		missing		10.4					
$T_{dp2\ 5}$	missing		missing		-4.5					
	1	2	1	2	1	2	1	2	1	2
I	0.96	6.66	0.96	6.66	0.85	5.90	0.86	6.01		
I_a	0.70	4.90	0.70	4.90	0.70	4.85	0.64	4.45		
I_d	0.45	3.14	0.45	3.14	0.44	3.07	0.47	3.26		
N	1.42	9.88	1.42	9.88	1.41	9.83	1.29	8.97		
N_a	1.08	7.55	1.08	7.55	1.09	7.60	0.96	6.70		
N_b	1.00	6.95	1.00	6.95	1.02	7.08	0.88	6.16		
N_c	0.85	5.93	0.85	5.93	0.85	5.90	0.73	5.07		
N_d	0.72	4.99	0.72	4.99	0.73	5.08	0.61	4.27		
i	0.40	2.82	0.53	3.72	0.08	0.56	0.05	0.37		
i_a	0.35	2.45	0.45	3.12	0.07	0.48	0.04	0.29		
i_d	0.23	1.61	0.28	1.94	0.05	0.35	0.01	0.10		
T_g	1.0		1.0		15.1					
T_s	6.5		6.5		24.0					
Ψ	missing		missing							
ε										

REMARKS: MET SAT II (Grass) = 16°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 15 December 1976 TIME 1200 (Local) 1900 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	4.0		4.0		13.2		missing			
T_{dp}	-1.7		-1.7		-9.3		missing			
W_d, W_s	120 0.9		120 0.9		360 2.2		320 0.4			
P	26.06		26.06		25.43		25.70			
C	Clear		Clear		210- ⓘ		Clear			
M	No		No		No		No			
$T_{a2\ 5}$	missing		missing		11.8					
$T_{dp2\ 5}$	missing		missing		-6.6					
	1	2	1	2	1	2	1	2	1	2
I	0.97	6.77	0.97	6.77	0.85	5.93	0.94	6.54		
I_a	0.71	4.94	0.71	4.94	0.70	4.89	0.72	5.00		
I_d	0.46	3.16	0.46	3.16	0.44	3.09	0.50	3.49		
N	1.12	7.80	1.12	7.80	1.40	9.74	1.30	9.03		
N_a	0.86	5.98	0.86	5.98	1.09	7.59	0.96	6.72		
N_b	0.79	5.53	0.79	5.53	1.01	7.06	0.89	6.18		
N_c	0.69	4.80	0.69	4.80	0.84	5.85	0.73	5.07		
N_d	0.61	4.27	0.61	4.27	0.72	5.05	0.61	4.23		
i	0.41	2.83	0.54	3.80	0.08	0.54	0.05	0.37		
i_a	0.35	2.47	0.46	3.18	0.07	0.46	0.04	0.28		
i_d	0.24	1.64	0.29	1.99	0.05	0.34	0.01	0.09		
T_g	1.0		0.5		16.4		missing			
T_s	10.5		7.6		25.0					
Ψ	missing		missing							
ε										

REMARKS: MET SAT II (Grass) = 15°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 15 December 1976 TIME 1320 (Local) 2020 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	6.5		6.5		14.5					
T_{dp}	2.4		2.4		-9.0					
W_d, W_s	150 2.7		150 2.7		010 3.6					
P	26.04		26.04		25.39					
C	○		○		○					
M	No		No		No					
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.89	6.24	0.89	6.24	0.77	5.36				
I_a	0.63	4.37	0.63	4.37	0.64	4.48				
I_d	0.43	2.97	0.43	2.97	0.41	2.85				
N	1.39	9.67	1.39	9.67	1.38	9.62				
N_a	1.07	7.45	1.07	7.45	1.08	7.53				
N_b	0.98	6.82	0.98	6.82	1.01	7.01				
N_c	0.84	5.86	0.84	5.86	0.83	5.82				
N_d	0.71	4.93	0.71	4.93	0.72	5.01				
i	0.38	2.63	0.53	3.67	0.08	0.53				
i_a	0.33	2.29	0.45	3.11	0.07	0.46				
i_d	0.22	1.50	0.28	1.95	0.05	0.36				
T_g	1.0		1.1		18.7					
T_s	12.0		10.5		23.0					
Ψ	missing		missing							
ε										

REMARKS: MET SAT II (Grass) = 16°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 15 Dec 76

RADIOSONDE: (0800 MST) TTAA 65151 72HMS 99879 05507 00000 00228
///// ///// 85531 04059 34006 70103 00268 35010 50572 17765 30011
40734 30964 28016 30932 425// 25552 25054 487// 25558 20199 551//
25576 15380 595// 25068 10630 657// 26534 88132 635// 26061 77197
25578 41015

TTBB 6515/ 72HMS 00879 11/// ///// 22850 04059 33813 04665 44782
02464 55750 03259 66597 06368 77400 30964 88352 39160 99334 393//
11315 427// 22300 425// 33191 565// 44132 635// 55116 621// 66100
657//

TTBB 6515/ 72HMS 51515 10186 //843 03864

TTCC 65152 72HMS 70846 665// 26511 50052 637// 32012 30366 601//
01008 20620 597// 35021 88999 77999

TTDD 6515/ 72HMS 11851 681// 22602 623// 33535 645// 44368 637//
55300 601// 66141 569//

ROCKETSONDE: (1010 MST) ZRXX 15171 72269 81010 11101 25562 00007
26562 36009 28560 31007 30556 29017 35538 26034 36538 26044 37530
26059 38526 26070 40522 26071 42512 26076 45506 25083 48506 25083
49513 25081 50511 24083 51508 24087 52511 24086 53505 25084 54506
26085 55513 25083 56521 24089 57521 25089 60543 27090 61543 27085
62542 26081 64*** 26095 ///// ///// JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION LANDSAT A

DATE OF OBSERVATION 20 December 1976 TIME 0911 (Local) 1611 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	2.5		2.5		5.2					
T_{dp}	-1.4		-1.4		-5.1					
W_d, W_s	100 1.8		100 1.8		010 1.8					
P	26.29		26.29		25.64					
C	E120 ⑦		E120 ⑩		130 ①					
M	No		No		NO					
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.50	3.50	0.50	3.50	0.46	3.18				
I_a	0.40	2.77	0.40	2.77	0.40	2.79				
I_d	0.27	1.88	0.27	1.88	0.26	1.81				
N	0.38	2.67	0.38	2.67	1.04	7.22				
N_a	0.34	2.34	0.34	2.34	0.86	5.97				
N_b	0.42	2.95	0.42	2.95	0.81	5.66				
N_c	0.47	3.29	0.47	3.29	0.70	4.89				
N_d	0.31	2.17	0.31	2.17	0.62	4.31				
i	0.21	1.46	0.22	1.56	0.07	0.49				
i_a	0.18	1.29	0.19	1.31	0.06	0.42				
i_d	0.15	0.86	0.11	0.78	0.06	0.38				
T_g	4.0		3.0		6.0					
T_s	3.0		4.0		10.0					
Ψ	20.3		19.2							
ε										

REMARKS: MET SAT II (Grass) = 8°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NIMBUS VI

DATE OF OBSERVATION 20 December 1976 TIME 1144 (Local) 1844 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	9.8		9.8		8.8					
T_{dp}	-3.2		-3.2		-5.9					
W_d, W_s	CALM		CALM		200 1.8					
P	26.22		26.22		25.62					
C	110 Ⓒ E120 Ⓒ		110 Ⓒ E120 Ⓒ		E200 Ⓒ					
M	No		No		No					
$T_{a2\,5}$	missing		missing							
$T_{dp2\,5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.87	6.04	0.87	6.04	0.60	4.20				
I_a	0.67	4.70	0.67	4.70	0.53	3.72				
I_d	0.44	3.07	0.44	3.07	0.34	2.40				
N	1.23	8.61	1.23	8.61	0.15	1.02				
N_a	0.96	6.69	0.96	6.69	0.11	0.77				
N_b	0.90	6.27	0.90	6.27	0.10	0.70				
N_c	0.75	5.26	0.75	5.26	0.10	0.67				
N_d	0.64	4.48	0.64	4.48	0.09	0.65				
i	0.38	2.68	0.54	3.73	0.11	0.78				
i_a	0.33	2.32	0.45	3.12	0.09	0.64				
i_d	0.27	1.54	0.28	1.93	0.08	0.57				
T_g	12.0		13.0		17.0					
T_s	14.0		14.0		24.5					
Ψ	20.3		19.2							
ε										

REMARKS: MET SAT II (Grass) = 19°C
No Run at MET SAT III

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 20 Dec 76

RADIOSONDE: NONE

ROCKETSONDE: (1130 MST) RRXX 20183 72269 81010 11101 23559 07011
25557 08011 30554 04009 31554 04013 32554 06011 33549 11001 35548
26016 37546 28022 40525 26059 41520 26070 45501 25080 48507 25081
50517 24083 51521 25085 55520 26091 57518 26092 59525 26108 60///
27115 JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA IV

DATE OF OBSERVATION 22 December 1976 TIME 0910 (Local) 1610 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-2.0		-2.0		2.6		-0.6			
T_{dp}	-6.0		-6.0		-6.5		-5.0			
W_d, W_s	060 2.2		060 2.2		030 4.0		360 2.7			
P	25.98		25.98		25.35		25.69			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.54	3.78	0.54	3.78	0.51	3.54	0.53	4.59		
I_a	0.39	2.69	0.39	2.69	0.43	2.97	0.40	2.82		
I_d	0.27	1.86	0.27	1.86	0.28	1.93	0.31	2.14		
N	1.24	8.63	1.24	8.63	1.26	8.78	1.12	7.79		
N_a	0.93	6.46	0.93	6.46	1.02	7.11	0.87	6.10		
N_b	0.88	6.17	0.88	6.17	0.95	6.66	0.81	5.67		
N_c	0.74	5.16	0.74	5.16	0.81	5.64	0.69	4.82		
N_d	0.65	4.56	0.65	4.56	0.70	4.91	0.58	4.08		
i	0.26	1.82	0.31	2.16	0.06	0.41	0.06	0.45		
i_a	0.23	1.65	0.26	1.84	0.05	0.38	0.05	0.38		
i_d	0.16	1.10	0.16	1.14	0.04	0.31	0.03	0.24		
T_g	missing		missing		1.5		missing			
T_s	missing		missing		3.0					
Ψ	22.2		20.2							
ε										

REMARKS: MET SAT 2 (Grass) = 2°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No). $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 22 December 1976 TIME 0942 (Local) 1642 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-1.5		-1.5		5.2		0.0			
T_{dp}	-6.0		-6.0		-7.3		-4.8			
W_d, W_s	CALM		CALM		020	3.1	360	1.3		
P	26.01		26.01		25.38		25.70			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\ 5}$	missing		missing							
$T_{dp2\ 5}$	missing		missing							
	1	2	1	2	1	2	1	2	1	2
I	0.67	4.65	0.67	4.65	0.61	4.25	0.65	5.68		
I_a	0.50	3.48	0.50	3.48	0.52	3.61	0.51	3.55		
I_d	0.33	2.29	0.33	2.29	0.33	2.33	0.37	2.59		
N	1.29	8.99	1.29	8.99	1.32	9.22	1.18	8.25		
N_a	0.96	6.72	0.96	6.72	1.05	7.34	0.91	6.31		
N_b	0.92	6.40	0.92	6.40	0.99	6.90	0.84	5.83		
N_c	0.77	5.34	0.77	5.34	0.83	5.82	0.70	4.89		
N_d	0.66	4.63	0.66	4.63	0.72	5.03	0.59	4.14		
i	0.31	2.17	0.38	2.68	0.07	0.49	0.07	0.47		
i_a	0.27	1.94	0.32	2.27	0.06	0.44	0.05	0.38		
i_d	0.18	1.27	0.20	1.41	0.05	0.35	0.03	0.24		
T_g	-11.5		-11.0		5.0		missing			
T_s	1.0		1.5		missing					
Ψ	22.2		20.2							
ε										

REMARKS:

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 22 December 1976 TIME 1200 (Local) 1900 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	7.2		7.2		12.3		6.2			
T_{dp}	-5.7		-5.7		-12.2		-4.2			
W_d, W_s	CALM		CALM		300	2.2	CALM			
P	25.95		25.95		25.36		25.65			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2.5}$	missing		missing		11.0					
$T_{dp2.5}$	missing		missing		-8.3					
	1	2	1	2	1	2	1	2	1	2
I	0.90	6.30	0.90	6.30	0.87	6.04	0.85	9.05		
I_a	0.69	4.84	0.69	4.84	0.74	5.13	0.64	4.45		
I_d	0.46	3.25	0.46	3.25	0.48	3.33	0.46	3.23		
N	1.38	9.64	1.38	9.64	1.45	10.14	1.30	9.05		
N_a	1.04	7.29	1.04	7.29	1.15	7.99	0.98	6.84		
N_b	0.98	6.84	0.98	6.84	1.07	7.48	0.91	6.31		
N_c	0.82	5.69	0.82	5.69	0.90	6.29	0.75	5.22		
N_d	0.71	4.97	0.71	4.97	0.79	5.50	0.63	4.37		
i	0.41	2.84	0.56	3.89	0.11	0.73	0.06	0.45		
i_a	0.36	2.53	0.47	3.26	0.09	0.61	0.05	0.33		
i_d	0.24	1.67	0.29	2.03	0.07	0.51	0.03	0.18		
T_g	10.0		12.0		15.0		missing			
T_s	11.0		12.0		20.0					
Ψ	22.2		20.2							
ε										

REMARKS: MET SAT II (Grass) = 19°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 22 December 1976 TIME 1251 (Local) 1951 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	7.7		7.7		12.7		9.2			
T_{dp}	-7.0		-7.0		-6.9		-5.6			
W_d, W_s	110 2.2		110 2.2		230 0.9		360 1.8			
P	25.94		25.94		25.34		25.63			
C	○		○		○		○			
M	No		No		No		No			
$T_{a2\ 5}$	missing		missing		11.1					
$T_{dp2\ 5}$	missing		missing		-9.0					
	1	2	1	2	1	2	1	2	1	2
I	0.88	6.15	0.88	6.15	0.83	5.79	0.85	7.43		
I_a	0.69	4.82	0.69	4.82	0.71	4.97	0.67	4.69		
I_d	0.45	3.13	0.45	3.13	0.46	3.20	0.48	3.32		
N	1.39	9.66	1.39	9.66	1.43	9.95	1.30	9.07		
N_a	1.04	7.25	1.04	7.25	1.11	7.73	0.98	6.86		
N_b	0.98	6.82	0.98	6.82	1.04	7.27	0.91	6.35		
N_c	0.81	5.66	0.81	5.66	0.88	6.13	0.76	5.30		
N_d	0.71	4.94	0.71	4.94	0.76	5.33	0.64	4.47		
i	0.40	2.80	0.55	3.84	0.11	0.76	0.06	0.42		
i_a	0.35	2.48	0.46	3.20	0.09	0.66	0.05	0.35		
i_d	0.23	1.61	0.29	2.00	0.08	0.55	0.02	0.16		
T_g	11.0		13.0		17.0		missing			
T_s	9.0		11.0		19.5					
Ψ	22.2		20.2							
ε										

REMARKS: MET SAT II (Grass) = 18°C

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s = Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 22 Dec 76

RADIOSONDE: NONE

ROCKETSONDE: (0940 MST) RRXX 22164 72269 81010 11101 25558 35006
30553 34004 32546 01009 35540 04017 37532 04025 40523 03026 43509
05034 44505 06033 45510 06032 47514 04027 49507 05030 50509 05029
51512 05028 52515 05021 53518 03010 54516 32018 55519 30030 56519
29041 57519 30045 60529 31042 61528 29033 62531 27036 63534 26048
64538 28047 65/// 30043 ///// ///// JJJ

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION NOAA V

DATE OF OBSERVATION 28 December 1976 TIME 0911 (Local) 1611 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-1.5		-1.5		6.0					
T_{dp}	-7.6		-7.6		-8.6					
W_d, W_s	220 2.2		220 2.2		020 4.5					
P	26.03		26.03		25.43					
C	210- ⓒ		210- ⓒ		210 ⓒ E220 ⓒ					
M	No		No		No					
$T_{a2\,5}$	m		m							
$T_{dp2\,5}$	m		m							
	1	2	1	2	1	2	1	2	1	2
I	.64	4.48	.64	4.48	.42	2.90				
I_a	.48	3.35	.48	3.35	.37	2.61				
I_d	.31	2.13	.31	2.13	.24	1.70				
N	1.18	8.23	1.18	8.23	.64	4.49				
N_a	.92	6.42	.92	6.42	.48	3.32				
N_b	.89	6.26	.89	6.26	.58	4.03				
N_c	.75	5.20	.75	5.20	.57	3.96				
N_d	.65	4.56	.65	4.56	.54	3.77				
i	.33	1.31	.39	2.76	.05	.34				
i_a	.30	2.06	.30	2.06	.05	.33				
i_d	.20	1.38	.20	1.38	.04	.30				
T_g	0.5		1.0		7.5					
T_s	9.5		7.0		7.0					
Ψ	19.1		20.2							
ε										

REMARKS: MET SAT II (Grass): 4.0°C
MET SAT III: Not Operated This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION DMSP 7218

DATE OF OBSERVATION 28 December 1976 TIME 1240 (Local) 1940 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	11.5		11.5		13.2					
T_{dp}	-10.1		-10.1		-14.5					
W_d, W_s	330 1.3		330 1.3		350 3.1					
P	25.99		25.99		25.40					
C	210 ⓒ 230 - ⓒ		210 ⓒ 230 - ⓒ		210 ⓒ 230 - ⓒ					
M	No		No		No					
$T_{a2.5}$	m		m		11.6					
$T_{dp2.5}$	m		m		-13.0					
	1	2	1	2	1	2	1	2	1	2
I	.87	6.07	.87	6.07	.87	6.08				
I_a	.67	4.67	.67	4.67	.72	5.02				
I_d	.43	3.02	.43	3.02	.46	3.20				
N	1.23	8.58	1.23	8.58	1.43	9.99				
N_a	1.00	6.97	1.00	6.97	1.11	7.73				
N_b	.96	6.66	.96	6.66	1.05	7.29				
N_c	.80	5.60	.80	5.60	.88	6.15				
N_d	.70	4.91	.70	4.91	.77	5.34				
i	.40	2.80	.53	3.72	.09	.64				
i_a	.36	2.52	.36	2.52	.09	.56				
i_d	.24	1.69	.24	1.69	.07	.45				
T_g	5.0		6.0		17.5					
T_s	24.5		28.5		28.0					
Ψ	19.1		20.2							
ε										

REMARKS: MET SAT II (Grass): 21.0°C
MET SAT III: Not Operated This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2.5}$, $T_{dp2.5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 28 Dec 76

RADIOSONDE: No Flight This Day

ROCKETSONDE: No Flight This Day

AD-A039 462 ARMY ELECTRONICS COMMAND WHITE SANDS MISSILE RANGE N--ETC F/G 4/2
SATELLITE CALIBRATION DATA ANNUAL DATA REPORT - 1976.(U)
MAR 77 L E WILLIAMSON, L I MURILLO

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ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION LANDSAT B

DATE OF OBSERVATION 29 December 1976 TIME 0947 (Local) 1647 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	-2.1		-2.1		2.6					
T_{dp}	-12.6		-12.6		-13.5					
W_d, W_s	330 2.2		330 2.2		350 1.3					
P	25.95		25.95		25.33					
C	170 E220		170 E220		120 200 210					
M	No		No		No					
$T_{a2\,5}$	m		m							
$T_{dp2\,5}$	m		m							
	1	2	1	2	1	2	1	2	1	2
I	.46	3.11	.46	3.11	.33	2.29				
I_a	.32	2.23	.32	2.23	.23	1.62				
I_d	.20	1.40	.20	1.40	.16	1.09				
N	.30	2.10	.30	2.10	.35	2.44				
N_a	.33	2.28	.33	2.28	.24	1.68				
N_b	.13	.88	.13	.88	.23	1.63				
N_c	.19	1.36	.19	1.36	.18	1.28				
N_d	.07	.48	.07	.48	.16	1.10				
i	.21	1.47	.25	1.74	.03	.20				
i_a	.19	1.30	.20	1.41	.02	.16				
i_d	.12	.86	.12	.86	.02	.13				
T_g	0.5		1.0		2.0					
T_s	2.0		3.5		5.0					
Ψ	20.0		19.6							
ε										

REMARKS: MET SAT II (Grass): 3.0°C
MET SAT III: Not Operated This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695

(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Nimbus VI

DATE OF OBSERVATION 29 December 1976 TIME 1052 (Local) 1752 (GMT)

PARAMETER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	0.0		0.0		6.5					
T_{dp}	-8.9		-8.9		-13.2					
W_d, W_s	280 2.7		280 2.7		000 00					
P	25.94		25.94		25.31					
C	E170 ⓣ		E170 ⓚ		120Ⓘ200Ⓘ210Ⓘ					
M	No		No		No					
$T_{a2\,5}$	m		m							
$T_{dp2\,5}$	m		m							
	1	2	1	2	1	2	1	2	1	2
I	.42	2.90	.42	2.90	.87	6.04				
I_a	.31	2.17	.31	2.17	.70	4.88				
I_d	.19	1.35	.19	1.35	.46	3.20				
N	m	m	m	m	1.42	9.92				
N_a	m	m	m	m	1.13	7.85				
N_b	m	m	m	m	1.05	7.32				
N_c	m	m	m	m	.88	6.13				
N_d	m	m	m	m	.73	5.12				
i	.20	1.40	.25	1.77	.08	.53				
i_a	.17	1.20	.21	1.46	.06	.44				
i_d	.11	.78	.12	.87	.05	.33				
T_g	3.0		4.5		7.0					
T_s	7.0		8.0		9.0					
Ψ	20.0		19.6							
ε										

REMARKS: MET SAT II (Grass): 7.5°C
MET SAT III: Not Operated This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\,5}$, $T_{dp2\,5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} x 10^5)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

ATMOSPHERIC SCIENCES LABORATORY

METEOROLOGICAL SATELLITE CALIBRATION DATA

SATELLITE IDENTIFICATION Noon Run

DATE OF OBSERVATION 29 December 1976 TIME 1200 (Local) 1900 (GMT)

PARA-METER	MET SAT 1-A		MET SAT 1-B		MET SAT 2		MET SAT 3		MET SAT 4	
T_a	5.4		5.4		8.1					
T_{dp}	-8.9		-8.9		-14.2					
W_d, W_s	330 2.7		330 2.7		000 00					
P	25.89		25.89		25.23					
C	E170 ⛅		E170 ⛅		120⛅ E200 ⛅					
M	No		No		No					
$T_{a2\ 5}$	m		m		8.8					
$T_{dp2\ 5}$	m		m		-11.5					
	1	2	1	2	1	2	1	2	1	2
I	.65	4.52	.65	4.52	.38	2.61				
I_a	.47	3.28	.47	3.28	.29	2.02				
I_d	.30	2.12	.30	2.12	.18	1.28				
N	.03	.23	.03	.23	m	m				
N_a	.04	.30	.04	.30	m	m				
N_b	.05	.32	.05	.32	m	m				
N_c	.06	.39	.06	.39	m	m				
N_d	.02	.17	.02	.17	m	m				
i	.32	2.20	.47	3.30	.03	.22				
i_a	.26	1.84	.37	2.56	.03	.19				
i_d	.17	1.18	.22	1.53	.02	.15				
T_g	8.0		12.0		9.0					
T_s	14.0		16.0		8.0					
Ψ										
ε										

REMARKS: MET SAT II (Grass): 6.0°C
MET SAT III: Not Operated This Day

L E G E N D

T_a = Air Temperature (°C); T_{dp} = Dew Point Temperature (°C); W_d, W_s= Wind Direction (degr.) Wind Speed (m/s); P = Station Pressure (In. H_g); C = Sky Condition (Symbolic); M = Precipitation (Yes/No); $T_{a2\ 5}$, $T_{dp2\ 5}$ = Air Temperature (°C), Dew Point Temperature (°C) at 25 meter height.

RADIANT FLUX: Global Incoming: I = WG280, I_a = GG495, I_d = RG695
Normal Incoming: N = WG280, N_a = GG495, N_b = OG530, N_c = RG630, N_d = RG695
Global Outgoing: i = WG280, i_a = GG495, i_d = RG695
(Units - Column 1 = cal cm^{-2} min^{-1}; Column 2 = ergs cm^{-2} sec^{-1} $\times 10^5$)

T_g = Soil Temperature (°C); T_s = Surface Temperature (°C); Ψ = Soil Moisture (%); ε = Emissivity (%)

AMSEL-BL-MS 121, 28 Mar 75

METEOROLOGICAL SATELLITE CALIBRATION DATA

DATE: 29 Dec 76

RADIOSONDE: No Flight This Day

ROCKETSONDE: (1110 MST) RRXX 29181 72269 81010 11101 25554 29006
30551 24012 32552 24019 35542 25037 36539 25040 37535 25043 40507
24055 42506 24061 43503 25065 45003 21058 46501 22054 47002 24043
48501 24045 49506 21058 50002 20054 51504 22042 52510 22035 53516
21039 54511 21044 55515 21047 56516 20058 57513 20063 59506 21045
60*** 21047 62*** 22042 JJJ

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