

# DIURNAL EXPERIMENT

## DATA REPORT,

MARCH 19-20, 1974

SCHMIDLIN, YAMASAKI, MOTTA, and BRYNSZTEIN



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

# DIURNAL EXPERIMENT

## DATA REPORT,

MARCH 19–20, 1974

By Francis J. Schmidlin, Yoshihiro Yamasaki,  
Aduatto Motta, and Saul Brynsztein

*Prepared at NASA Wallops Flight Center*



*Scientific and Technical Information Office*  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
1975  
*Washington, D.C.*

---

For sale by the National Technical Information Service  
Springfield, Virginia 22161  
Price - \$6.25

## FOREWORD

On March 19-20, 1974, the Diurnal Tidal Variation Experiment was conducted. This experiment involved the launch of 77 meteorological rockets in a 24-hour time period. These rockets were launched from eight different launch sites located in six different countries. The launch sites were located roughly along 70°W longitude and extend from Fort Churchill, Canada (59°N) to Mar Chiquita, Argentina (38°S). This coordinated experiment was made possible through the cooperation and participation of the Centre National d' Etudes Spatiales in France, the Comision Nacional de Investigaciones Espaciales in Argentina, the Instituto de Pesquisas Espaciais in Brazil, and the Department of Defense and the National Aeronautics and Space Administration in the United States. Mr. Ernest Fisher, Headquarters, 6th Weather Wing, Andrews Air Force Base, Maryland, and Mr. Norman J. Beyers, Atmospheric Sciences Laboratory, White Sands Missile Range, New Mexico were especially helpful in providing for the launches from the DOD sites.

Joseph R. Duke  
NASA Meteorological Rocket Networks  
Project Manager  
Wallops Flight Center  
Wallops Island, Virginia 23337

## DIURNAL EXPERIMENT DATA REPORT, MARCH 19-20, 1974

Francis J. Schmidlin,<sup>o</sup> Yoshihiro Yamasaki,\*  
Adautto Motta,\* and Saul Brynsztein+

NASA Wallops Flight Center  
Wallops Island, VA

### SUMMARY

An experiment initiated by NASA Wallops Flight Center called for the launching of meteorological rockets from eight selected launch sites of the Western Hemisphere. The launchings took place during the equinox of March 19-20, 1974, when temperature and wind data were obtained from 70 small rocket systems. A unique advantage of this experiment was that only one type of wind and temperature sensor was used at all sites, thus improving observational compatibility between the individual measurements and between measurements obtained from different launch sites. It was planned to conduct a harmonic analysis of the data based on equally spaced observations at three-hour intervals over 24 hours; however, because of bad weather and systems failures, equally spaced observations could not be obtained at all locations, thus, other analysis techniques will need to be utilized. This unique data set will, for the first time, permit an examination of tidal variability with latitude.

### INTRODUCTION

During the equinox of March 19-20, 1974, temperature and wind data were obtained from 70 small meteorological sounding rockets launched from eight selected launch sites in the Western Hemisphere. These launch sites extended from Fort Churchill, Canada (59°N), to Mar Chiquita, Argentina (38°S). Table 1 gives a complete listing of the launch sites involved and the altitude of temperature and wind observations successfully completed. The rocket motor used was either the Loki or Super Loki and the temperature sensor was the loop-mounted thermistor (Ref. 1). This loop-mounted sensor has been found capable of providing temperature measurements repeatable to about 1°C (Ref. 2).

---

<sup>o</sup> - National Weather Service, NOAA, Wallops Flight Center, Wallops Island, VA

\* - Instituto de Pesquisas Espaciais (INPE), Sao Jose dos Campos, SP, Brazil

+ - Argentine Meteorological Service, Buenos Aires, Argentina

TABLE 1

## MAR CHIQUITA, ARGENTINA (89689)

Date	Launch Time (GMT)	Temp Top (km)	Temp Bottom (km)	Wind Top (km)	Wind Bottom (km)
March 19	1540	55	21	56	20
March 19	1831	62	21	56	20
March 19	2130	60	21	58	21
March 20	0030	62	34	61	20
March 20	0330	53	21	20	21
March 20	0630	63	21	61	21
March 20	0931	62	21	61	21

## ASCENSION ISLAND (61902)

Date	Launch Time (GMT)	Temp Top (km)	Temp Bottom (km)	Wind Top (km)	Wind Bottom (km)
March 19	1600	65	25	63	25
March 19	1900			64	25
March 20	0100	63	25	61	25
March 20	0400	66	25	64	25
March 20	0700	69	25	67	25
March 20	1000	65	25	63	25
March 20	1303	64	25	62	25
March 20	1600	63	25	61	25

NATAL, BRAZIL (82599)

Date	Launch Time (GMT)	Temp Top (km)	Temp Bottom (km)	Wind Top (km)	Wind Bottom (km)
March 19	1600	67	25	64	25
March 19	1900	66	25	64	25
March 19	2218			62	26
March 20	0100	62	25	62	25
March 20	0748	64	25	64	25
March 20	1000	65	25	64	25
March 20	1321	66	25	64	25
March 20	1600	60	25	60	25

KOUROU, FRENCH GUIANA (81403)

Date	Launch Time (GMT)	Temp Top (km)	Temp Bottom (km)	Wind Top (km)	Wind Bottom (km)
March 19	1500	68	25	73	25
March 19	1800	70	25	75	25
March 19	2100	66	25	75	25
March 19	2220	70	25	75	25
March 20	0000	67	25	76	25
March 20	0300	70	26	74	25
March 20	0600	70	25	75	25
March 20	0900	67	25	67	25
March 20	1200	67	25	75	25
March 20	1500	64	25	77	25

FT. SHERMAN, C. Z. (78801)

Date	Launch Time (GMT)	Temp Top (km)	Temp Bottom (km)	Wind Top (km)	Wind Bottom (km)
March 19	1600	64	25	62	25
March 19	1900	67	23	66	23
March 19	2200			64	21
March 20	0100	58	24	61	23
March 20	1400	67	24	64	24
March 20	0700	62	23	61	23
March 20	1015	60	23	55	23
March 20	1315	66	28	67	25

ANTIGUA, B.W. I. (78861)

Date	Launch Time (GMT)	Temp Top (km)	Temp Bottom (km)	Wind Top (km)	Wind Bottom (km)
March 19	1501	63	26	61	26
March 19	1820	69	25	67	25
March 19	2100			73	25
March 20	0300	70	25	74	25
March 20	0600	70	25	72	25
March 20	0900	70	25	72	25
March 20	1200	70	25	74	25
March 20	1500	63	24	61	24



WALLOPS ISLAND, VA (72402)

Date	Launch Time (GMT)	Temp Top (km)	Temp Bottom (km)	Wind Top (km)	Wind Bottom (km)
March 19	1605	63	25	56	25
March 19	1954	67	25	67	25
March 19	2200	70	26	78	26
March 20	0005	70	63	78	65
March 20	0021	70	51	76	51
March 20	0047	64	26	63	26
March 20	0108	70	25	77	25
March 20	0453	62	25	62	25
March 20	0706	63	25	62	26
March 20	1000	59	26	59	26
March 20	1040	62	25	61	25
March 20	1240	63	25	62	32
March 20	1639	61	25	61	25

FT. CHURCHILL, MANITOBA (72913)

Date	Launch Time (GMT)	Temp Top (km)	Temp Bottom (km)	Wind Top (km)	Wind Bottom (km)
March 19	1500	66	25	65	25
March 19	1800	43	21	64	21
March 19	2100	59	22	62	22
March 20	0000	62	25	61	25
March 20	0300	64	25	63	25
March 20	0600			62	25
March 20	0900	63	22	65	22
March 20	1200	62	22	62	22

NASA Wallops Flight Center initiated and coordinated the cooperative experiment. In order to meet the experiment data requirements, Wallops Flight Center launched Super Loki and Loki systems from Wallops Island (38°N); provided Super Loki systems, launch crew, and telemetry equipment for the Kourou (5°N) launchings; and provided Loki Datasonde systems for launching from Natal, Brazil (6°S), and Mar Chiquita, Argentina (38°S). The launchings from Natal (6°S), were made with the cooperation of the Instituto de Pesquisas Espaciais (INPE) and the Brazilian Air Force while those launched from Mar Chiquita were made with the cooperation of the Comision Nacional Investigaciones Espaciales (CNIE) and the Argentine Meteorological Service. The U.S. Dept. of Defense cooperated by providing flight systems and launchings from Ascension Island (8°S), Ft. Sherman (9°N), Antigua (17°N), and Ft. Churchill (59°N). These soundings were made as part of the Cooperative Meteorological Rocket Network (CMRN) and the Experimental Inter-American Meteorological Rocket Network (EXAMETNET). The component winds and temperature data obtained from these rocket observations are presented here.

The study of tidal oscillations in the atmosphere has been going on for over a hundred years. Only within the last two decades have scientists been able to make in situ measurements of the upper stratosphere and lower mesosphere through the use of meteorological rockets. This technique has provided significant information on certain aspects of tidal behavior; however, the results obtained are relatively inexact for a number of reasons. Chief among these was the use of different instruments which, for one reason or another, did not provide comparable measurements. A few specifically designed tidal experiments were carried out by a small number of researchers (Ref. 3, 4, 5, 6) but, unfortunately, the results obtained were somewhat controversial. Other investigators using routinely available Meteorological Rocket Network data compiled results using the wind data (Ref. 7, 8, 9). In these studies, attempts were made to discern tidal information about the temperature structure, but these studies were mostly unsuccessful. However, one study (Ref. 10) used wind data published for White Sands Missile Range, Cape Kennedy, and Ascension Island, and were grouped according to two-hour intervals. While this study was apparently successful in providing tidal information on the meridional wind, it did not provide any information on the other parameters or on the latitudinal distribution of the tides.

The theoretical distribution of the tidal phase and amplitude for each 15 degrees of latitude has been described by Lindzen (Ref. 11). This work advanced the theory of thermal tides using very meager supporting measurement data. One important aspect of tidal motions is their role in forcing semi-annual variations in the temperature and zonal wind. Lindzen

(Ref. 12) suggested that the semi-annual oscillation of the zonal wind may be caused by interaction with tidal motions. Meyer (Ref. 13) successfully verified Lindzen's hypothesis in a numerical study using Lindzen's (Ref. 11) theoretically computed tidal components. Although the present experiment is for one day only, it gives, for the first time, a latitudinal resolution of temperature and wind data from which tidal components and the divergence of eddy momentum and heat flux due to tidal motions can be calculated. Such calculations might give information regarding the orders of magnitude of momentum and heat fluxes.

### THE MEASUREMENTS

In order to study the latitudinal variation of the tides, eight launch sites in the Northern and Southern Hemispheres participated in this experiment. Launchings were scheduled every three hours from these sites in order to compare results. The time of the experiment was selected for March 19-20, 1974, when the sun would be over the equator and, therefore, irradiating each hemisphere equally. The assumption was made that at similar latitudes north and south of the equator the magnitude and phase of the diurnal wave would be the same. This assumption is supported by the work of Lindzen (Ref. 11).

One important aspect of the measurements was the instrumentation. Recently, within the United States, a single instrument type, the Datasonde, is being used at all the launch sites. The corrections used for temperature and wind data (Ref. 14, 15) has resulted in improved observational compatibility between the ranges and increased confidence in the measurements. This same instrument is currently being used at the Brazil and Argentina launch sites as part of the EXAMETNET program. This instrument is described in Ref. 1 and, from an experiment designed to investigate the instrument's repeatability and reliability (Ref. 2), it was determined that the Datasonde instrument is capable of repeatable measurements to about 1°C.

In order to properly apply harmonic analysis techniques, it was desired to launch at equally spaced intervals of time. During the observational phase of the experiment, most launchings occurred within a few minutes of the scheduled times; however, bad weather or systems failures caused missing data, and in some instances required backup launchings. For those sites which did not achieve equally spaced launchings, harmonic analysis techniques are being replaced with regression analysis.

Corrections to the temperature data have been applied following the method of Krumins and Lyons (Ref. 15). For those sites with digital capability, the corrections were applied in the computer. Those launch sites which depend solely on manual techniques used a manual correction method which is comparable to the digital technique. Wind data are corrected only for those sites having digital capability. The appendix presents tabulations of the temperature and wind data with graphs of these data. Corrected or uncorrected component winds are so labeled. It should be noted that there is essentially little difference between corrected and uncorrected winds below about 60 Km.

Wallops Flight Center

National Aeronautics and Space Administration

Wallops Island, Virginia 23337

September 16, 1975

## APPENDIX

This Appendix contains lists of tabulated temperature and wind data with corresponding graphs.

LAUNCH SITE Mar Chiquita, Arg. 87689 LAT. 37.8 S LONG. 57.4 W

DATE March 19, 1974 TIME (GMT) 1540

FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 Ft. Starute

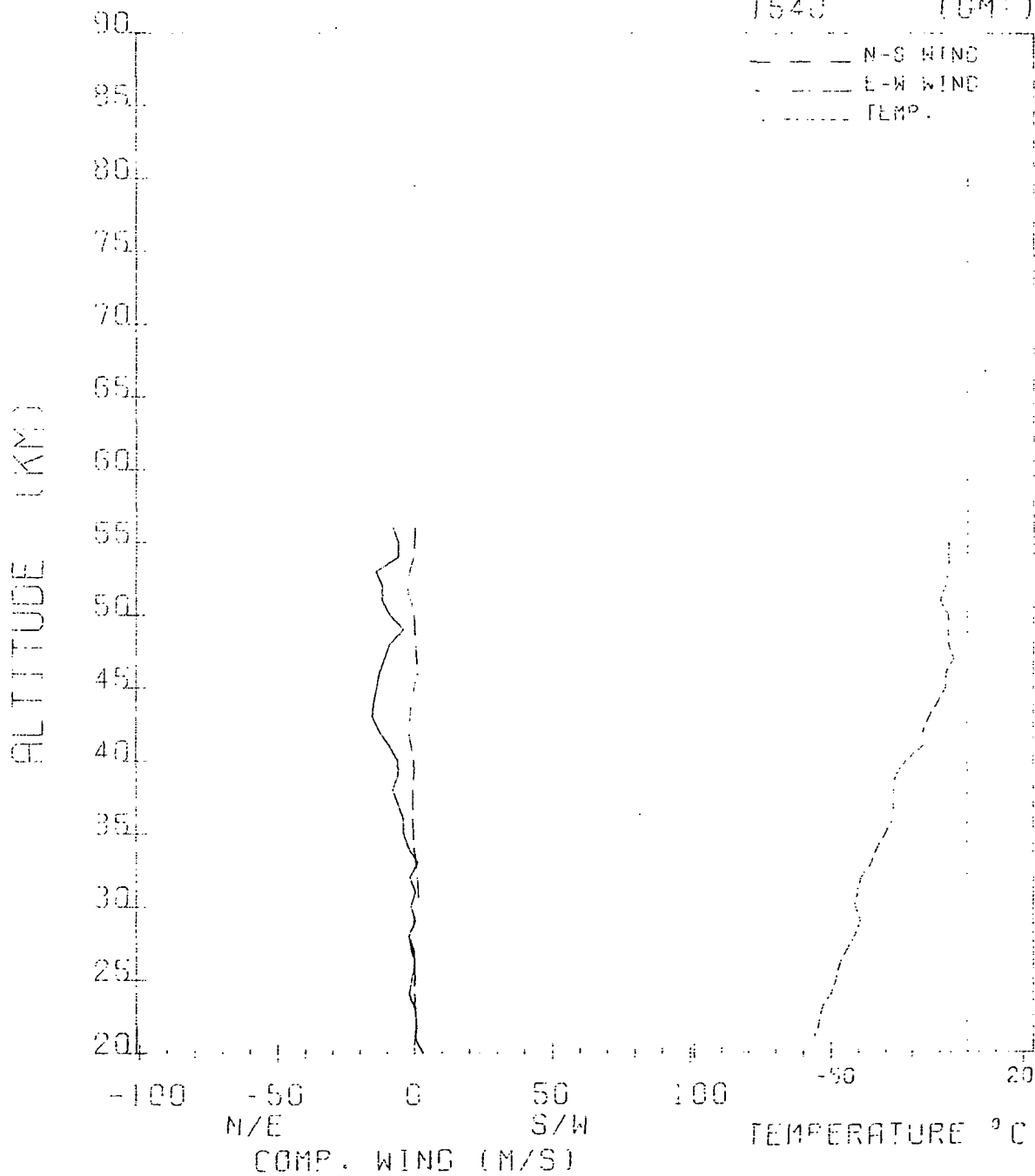
PWN-8B TEMP SENSOR 10 Mil Bead Thermistor

ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
56			0	-8	75
55	-7	-3	0	-6	69
54	-7	-4	-1	-6	64
53	-7	-3	-5	-14	61
52	-8	-3	-3	-12	57
51	-10	-3	-1	-12	54
50	-7	-2	0	-9	50
49	-7	-2	0	-4	45
48	-7	-2	0	-9	41
47	-5	-2	1	-11	38
46	-8	-2	1	-13	38
45	-8	-2	1	-14	36
44	-11	-1	-1	-15	36
43	-14	-2	-4	-15	32
42	-16	-1	-2	-13	26
41	-16	-1	0	-9	26
40	-22	-1	0	-6	24
39	-26	-1	0	-6	26
38	-27	-1	-1	-3	24
37	-27	-1	-1	-6	19
36	-27	-1	-1	-4	16
35	-30	-1	0	-4	15
34	-33	-1	0	-2	14
33	-35	-1	-1	1	14
32	-39	-1	1	-2	13
31	-40	-1	2	0	13
30	-41	-1	1	-1	12
29	-39	-1	2	0	11
28	-41	-1	-2	-2	9
27	-44	-1	-1	0	8
26	-47	-1	0	0	8
25	-48	-1	0	-1	8
24	-50	-1	0	-2	8
23	-53	0	1	0	7
22	-54	0	1	1	7
21	-56	0	1	0	6
20			-2	-1	5

MAR CHIQUITA, ARGENTINA

MAR. 19, 1974

1543 (GMT)



LAUNCH SITE Mar Chiquita, Argentina 87689 LAT. 37.8 S LONG. 57.4 W

DATE March 19, 1974 TIME (GMT) 1831

FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 Ft. Starute

PWN-8B TEMP SENSOR 10 Mil Bead Thermistor

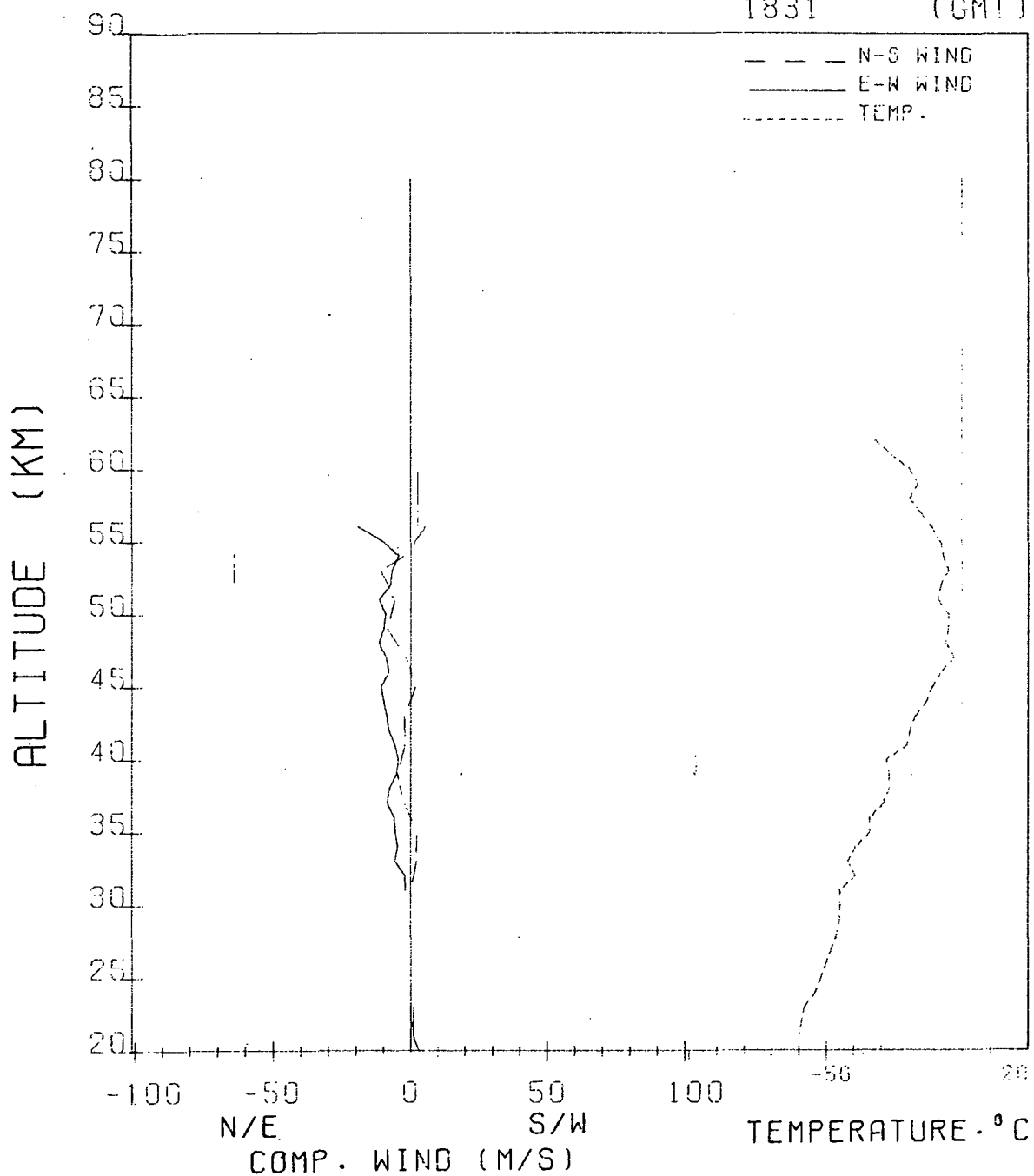
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62	-32	-12			125
61	-26	-8			105
60	-19	-5			95
59	-16	-5			80
58	-19	-5			71
57	-15	-4			69
56	-11	-3	6	-19	67
55	-8	-4	6	-10	64
54	-7	-3	-3	-5	62
53	-5	-3	-11	-7	61
52	-8	-3	-11	-8	57
51	-9	-3	-6	-11	50
50	-5	-2	-4	-9	44
49	-5	-2	-9	-10	43
48	-6	-2	-6	-12	42
47	-3	-2	-2	-9	40
46	-8	-2	1	-8	39
45	-11	-2	2	-11	38
44	-13	-2	-2	-10	32
43	-17	-1	-2	-9	27
42	-19	-1	0	-8	26
41	-20	-1	-2	-6	25
40	-28	-1	-4	-4	24
39	-27	-1	-5	-5	24
38	-27	-1	-4	-8	24
37	-29	-1	-3	-9	21
36	-34	-1	1	-6	16
35	-34	-1	2	-5	15
34	-39	-1	4	-5	14
33	-42	-1	2	-5	14
32	-39	-1	2	-2	13
31	-45	-1	0	-2	13
30	-45	-1			13
29	-45	-1			11
28	-46	-1			9
27	-48	-1			9
26	-50	-1			7
25	-52	-1			7
24	-54	-1			7
23	-58	-1	0	1	7
22	-59	0	0	1	7
21	-60	0	0	1	6
20			0	3	5



MAR CHIQUITA, ARGENTINA

MAR. 19, 1974

1831 (GMT)



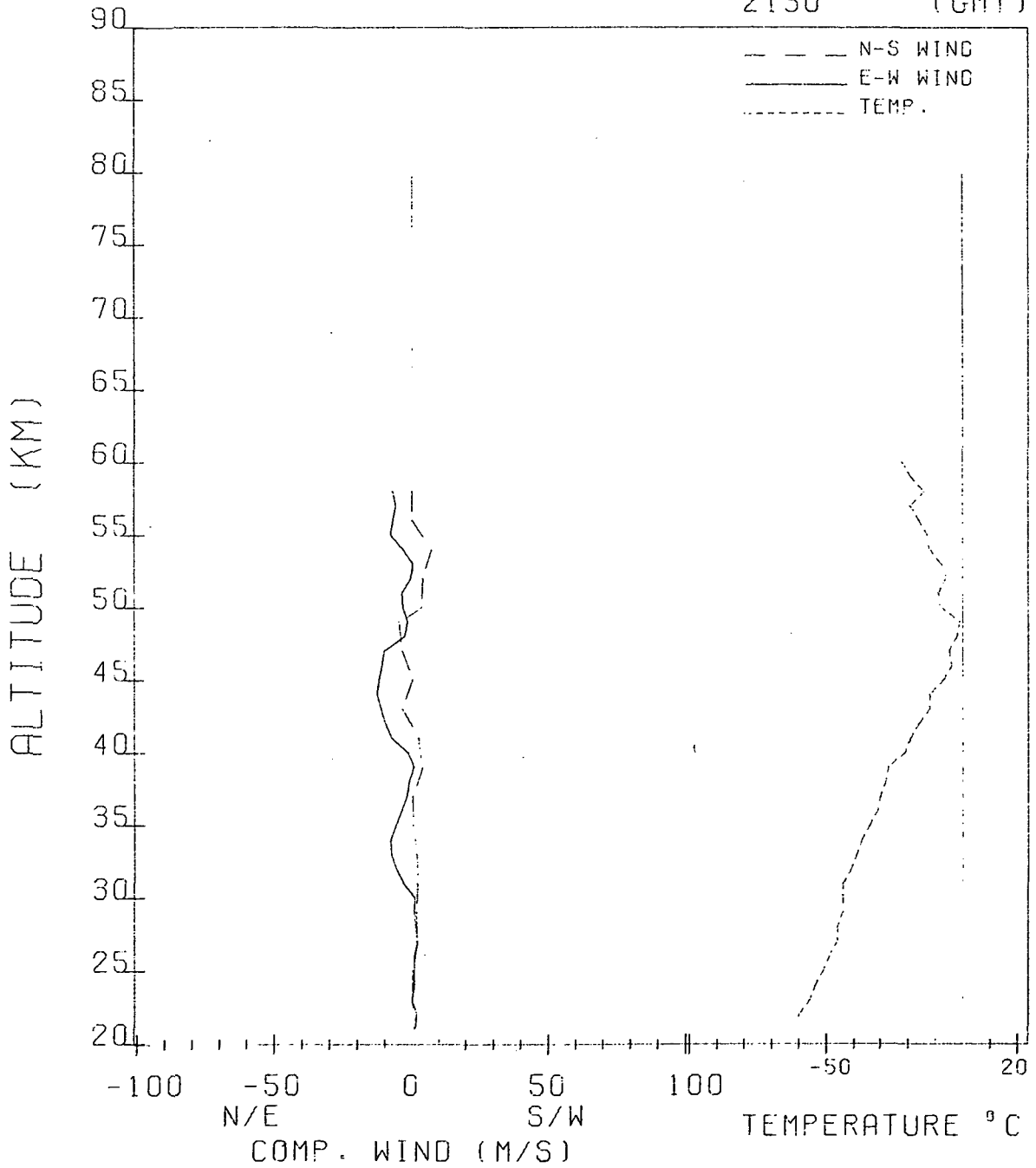
LAUNCH SITE Mar Chiquita, Argentina LAT. 37.8 S LONG. 57.4 W  
 DATE March 19, 1974 TIME (GMT) 2130  
 FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 Ft. Starute  
 PWN-8B TEMP SENSOR 10 Mil Bead Thermistor

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
60	-22	-8			111
59	-19	-6			95
58	-14	-5	0	-7	83
57	-19	-6	0	-6	74
56	-16	-4	0	-7	71
55	-13	-3	1	-8	69
54	-12	-4	7	-3	69
53	-8	-3	3	0	67
52	-6	-3	4	-1	61
51	-9	-3	6	-4	55
50	-8	-2	4	-4	50
49	-1	-2	-5	-2	45
48	-2	-2	-7	-3	43
47	-5	-2	-4	-10	42
46	-4	-2	-1	-11	40
45	-7	-2	0	-12	39
44	-12	-2	-3	-13	36
43	-12	-1	-4	-12	33
42	-16	-1	-1	-10	29
41	-19	-1	2	-7	24
40	-21	-1	5	-2	24
39	-27	-1	4	1	24
38	-28	-1	3	-1	22
37	-30	-1	0	-2	20
36	-31	-1	-1	-4	19
35	-34	-1	1	-6	17
34	-37	-1	4	-8	14
33	-39	-1	2	-7	13
32	-41	-1	-1	-6	13
31	-44	-1	2	-4	13
30	-44	-1	3	1	12
29	-44	-1	2	1	11
28	-46	-1	3	1	10
27	-46	-1	2	2	10
26	-49	-1	0	1	8
25	-51	-1	0	1	7
24	-54	-1	0	1	7
23	-56	-1	0	0	7
22	-60	0	1	1	7
21	-61	0	1	1	6

MAR CHIQUITA, ARGENTINA

MAR. 19, 1974

2130 (GMT)



LAUNCH SITE Mar Chiquita, Argentina LAT. 37.8 S LONG. 57.4 W

DATE March 20, 1974 TIME (GMT) 0030

FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 Ft. Starute

PWN-8R TEMP SENSOR 10 Mil Bead Thermistor

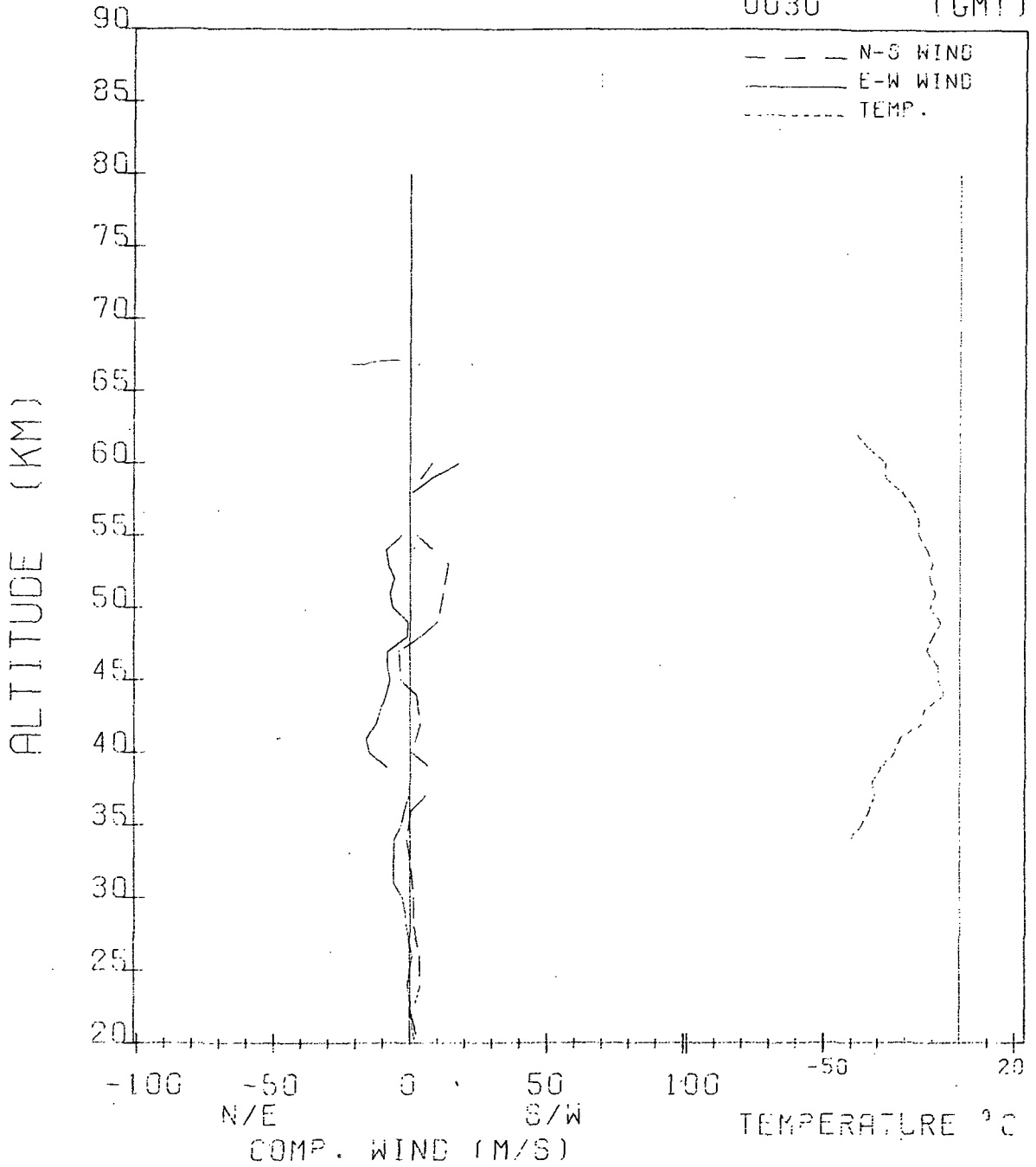
ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62	-38	-8			118
61	-33	-5	20	33	111
60	-27	-4	8	18	111
59	-27	-5	10	8	105
58	-21	-3	0	1	90
57	-17	-2			87
56	-15	-2			74
55	-15	-2	3	-3	71
54	-12	-2	7	-9	69
53	-10	-1	14	-8	64
52	-11	-1	14	-6	59
51	-9	-1	12	-7	51
50	-11	-1	13	-6	49
49	-7	-1	10	-1	49
48	-10	-1	4	-1	44
47	-12	-1	4	-8	42
46	-8	-1	4	-8	41
45	-8	-1	3	-7	39
44	-6	-1	2	-9	36
43	-13	-1	5	-10	33
42	-14	-1	4	-12	29
41	-22	-1	0	-16	27
40	-24	-1	2	-15	25
39	-29	-1	7	-8	25
38	-32	-1			24
37	-31	-1	6	0	23
36	-33	-1	0	-2	19
35	-36	-1	0	-3	16
34	-41	0	-1	-6	15
33			0	-6	14
32			1	-6	14
31			1	-6	14
30			2	-3	13
29			1	-2	11
28			2	-1	10
27			3	1	9
26			4	1	8
25			1	0	7
24			4	-1	7
23			4	0	7
22			1	1	6
21			1	1	5
20			3	2	5

MAR CHIQUITA, ARGENTINA

MAR. 20, 1974

0030

(GMT)



LAUNCH SITE Mar Chiquita, Argentina LAT. 37.8 S LONG. 57.4 W

DATE March 20, 1974 TIME (GMT) 0330

FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 Ft. Starute

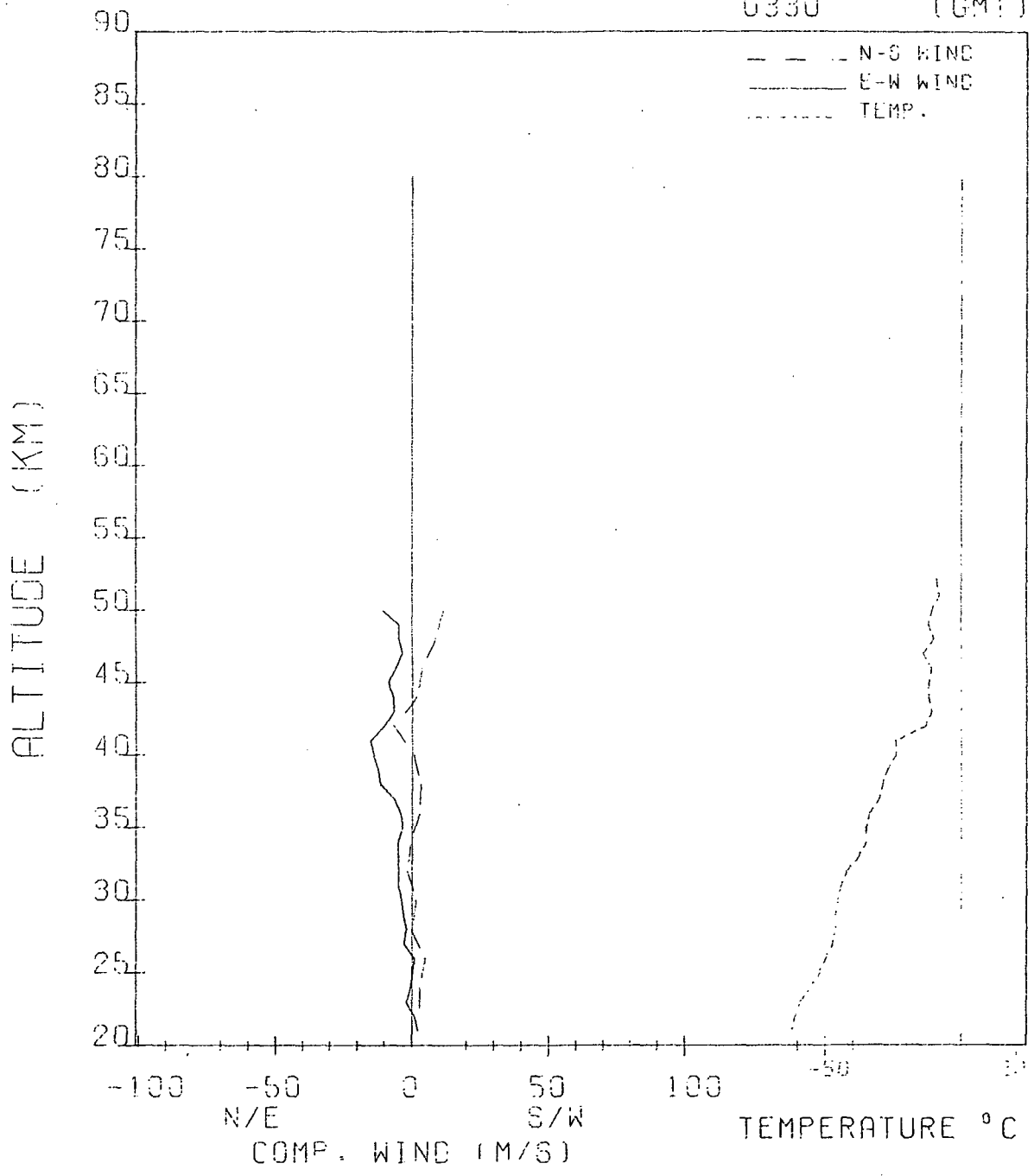
PWN-8B TEMP SENSOR 10 Mil Bead Thermistor

ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
53	-10	-2			67
52	-9	-1			57
51	-8	-1			51
50	-11	-1	12	-11	48
49	-12	-1	9	-5	43
48	-10	-1	9	-5	40
47	-14	-1	5	-3	38
46	-11	-1	4	-6	36
45	-12	-1	5	-9	42
44	-12	-1	2	-7	43
43	-11	-1	-2	-7	32
42	-13	0	-7	-10	26
41	-24	-1	-5	-15	24
40	-24	-1	1	-14	24
39	-27	-1	4	-12	24
38	-29	-1	3	-11	26
37	-30	0	3	-6	22
36	-34	0	3	-4	19
35	-35	0	2	-4	17
34	-35	0	0	-5	15
33	-38	0	-3	-5	14
32	-42	0	-2	-5	13
31	-44	0	0	-5	13
30	-45	0	2	-4	13
29	-46	0	0	-3	12
28	-46	0	0	-2	10
27	-47	0	3	-2	8
26	-50	0	5	1	8
25	-52	0	1	0	7
24	-55	0	3	0	6
23	-59	0	3	-2	7
22	-61	0	3	1	7
21	-62	0	1	2	7

MAR CHICUITA, ARGENTINA

MAR. 20, 1974

0330 (GMT)



LAUNCH SITE Mar Chiquita, Argentina LAT. 37.8 S LONG. 57.4 W

DATE March 20, 1974 TIME (GMT) 0630

FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 Ft. Starute

PWN-8B TEMP SENSOR 10 Mil Bead Thermistor

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
63	-36	-9			118
62	-31	-5			111
61	-26	-4			111
60	-23	-4	-6	-11	105
59	-24	-4	1	-6	95
58	-24	-4	16	-10	90
57	-26	-4	16	-10	90
56	-24	-3	13	-4	87
55	-20	-3	20	3	80
54	-17	-2	14	2	74
53	-15	-2	4	-8	71
52	-15	-2	-4	-14	69
51	-13	-2	-7	-18	62
50	-11	-2	-6	-16	55
49	-8	-1	1	-11	53
48	-10	-1	6	-16	51
47	-10	-1	19	-10	49
46	-8	-1	18	-8	46
45	-10	-1	10	-6	44
44	-15	-1	1	-7	39
43	-13	-1	0	-8	34
42	-16	-1	0	-6	32
41	-19	-1	-2	-3	31
40	-22	-1	-4	-6	29
39	-22	-1	-2	-8	28
38	-25	-1	0	-10	26
37	-29	-1	0	-12	24
36	-34	-1	-1	-11	21
35	-36	-1	0	-9	19
34	-36	-1	0	-7	16
33	-37	-1	1	-5	16
32	-40	-1	1	-3	15
31	-39	-1	0	-2	15
30	-42	-1	0	-2	14
29	-44	0	1	-1	13
28	-44	0			11
27	-46	0	-2	0	9
26	-48	0	-2	-2	9
25	-51	0	1	-2	9
24	-52	0	5	-1	8
23	-53	0	4	-1	7
22	-58	0	1	-1	7
21	-60	0	3	0	6
	-61	0	4	1	

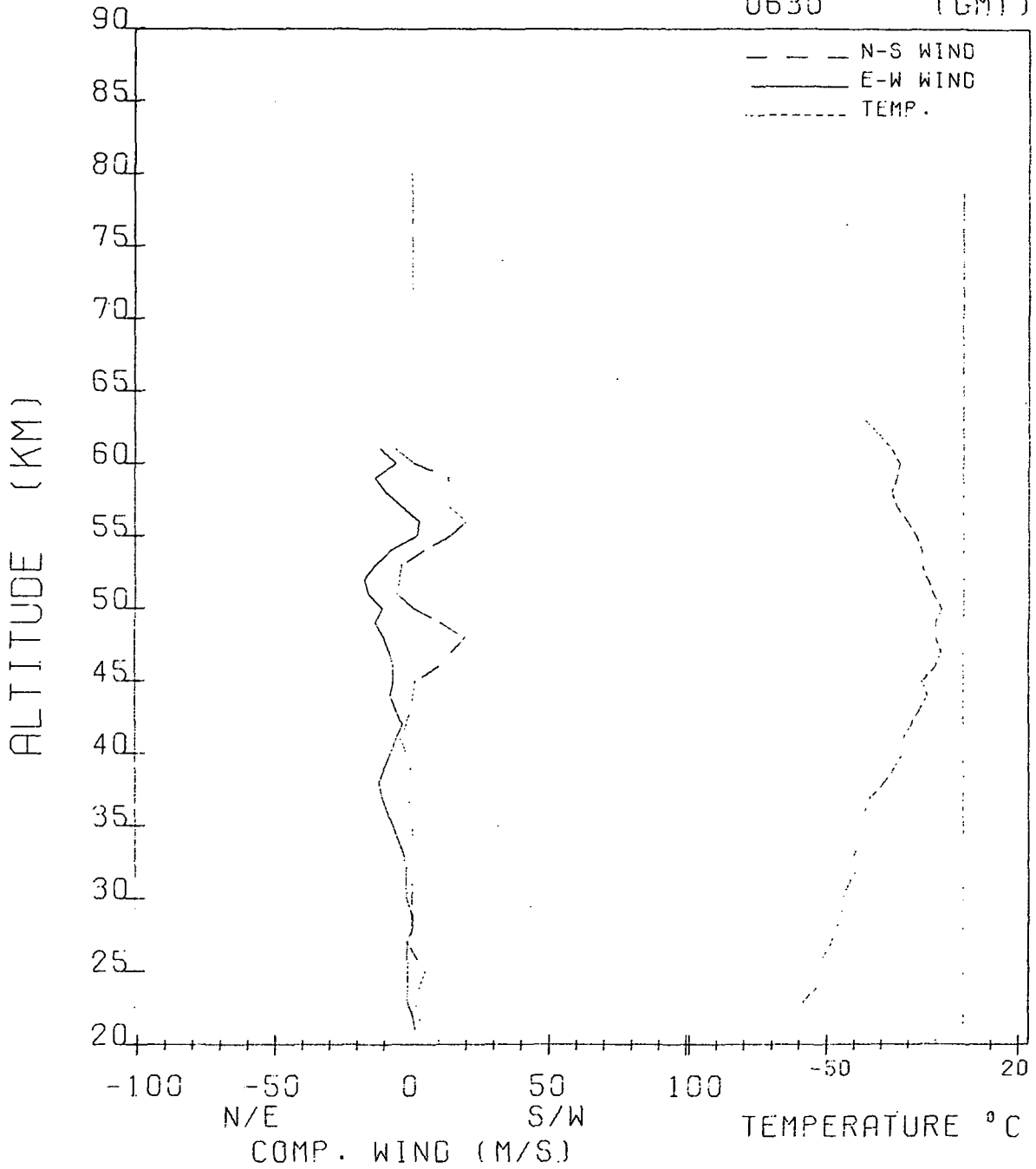


MAR CHIQUITA, ARGENTINA

MAR. 20. 1974

0630

(GMT)



LAUNCH SITE Mar Chiquita, Argentina LAT. 37.8 S LONG. 57.4 W  
 DATE March 20, 1974 TIME (GMT) 0931  
 FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 Ft. Starute  
 PWN-8B TEMP SENSOR 10 Mil Bead Thermistor

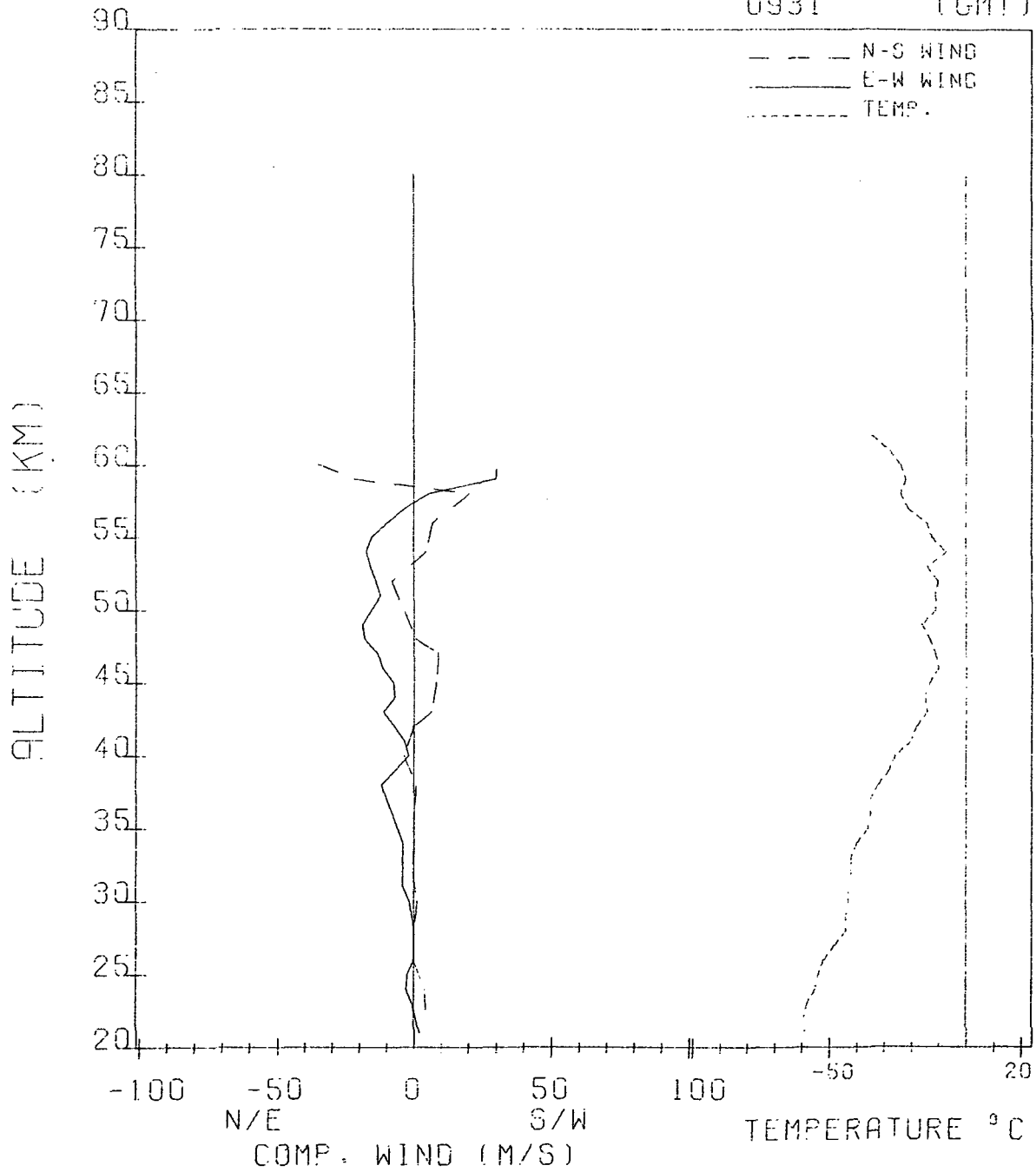
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62	-34	-11			111
61	-28	-8	-10	7	105
60	-24	-6	-35	30	95
59	-22	-6	-22	30	95
58	-24	-8	20	5	95
57	-21	-5	17	-3	83
56	-14	-3	7	-10	71
55	-12	-3	4	-16	69
54	-7	-3	5	-17	69
53	-14	-4	0	-16	69
52	-10	-3	-8	-14	64
51	-11	-2	-7	-12	55
50	-11	-3	-4	-16	48
49	-16	-2	-2	-19	42
48	-13	-2	1	-18	41
47	-11	-2	9	-13	40
46	-10	-2	10	-11	42
45	-13	-2	8	-7	41
44	-15	-2	9	-7	36
43	-13	-2	7	-11	35
42	-18	-1	0	-7	29
41	-20	-1	-5	-4	26
40	-26	-1	-4	-2	24
39	-28	-1	-4	-7	23
38	-32	-1	1	-12	22
37	-35	-1	0	-10	22
36	-35	-1	0	-8	19
35	-36	-1	1	-6	16
34	-40	-1	0	-4	15
33	-42	-1	-1	-4	14
32	-42	-1	0	-4	13
31	-43	-1	0	-4	12
30	-43	-1	1	-1	11
29	-44	-1	2	-1	11
28	-44	-1	0	0	10
27	-48	-1	0	0	9
26	-52	-1	0	0	8
25	-54	-1	2	-2	8
24	-55	-1	4	-3	8
23	-58	-1	6	-1	7
22	-59	0	5	1	7
21	-59	0	4	2	6

MAR CHIQUITA, ARGENTINA

MAR. 20, 1974

0931

(GMT)



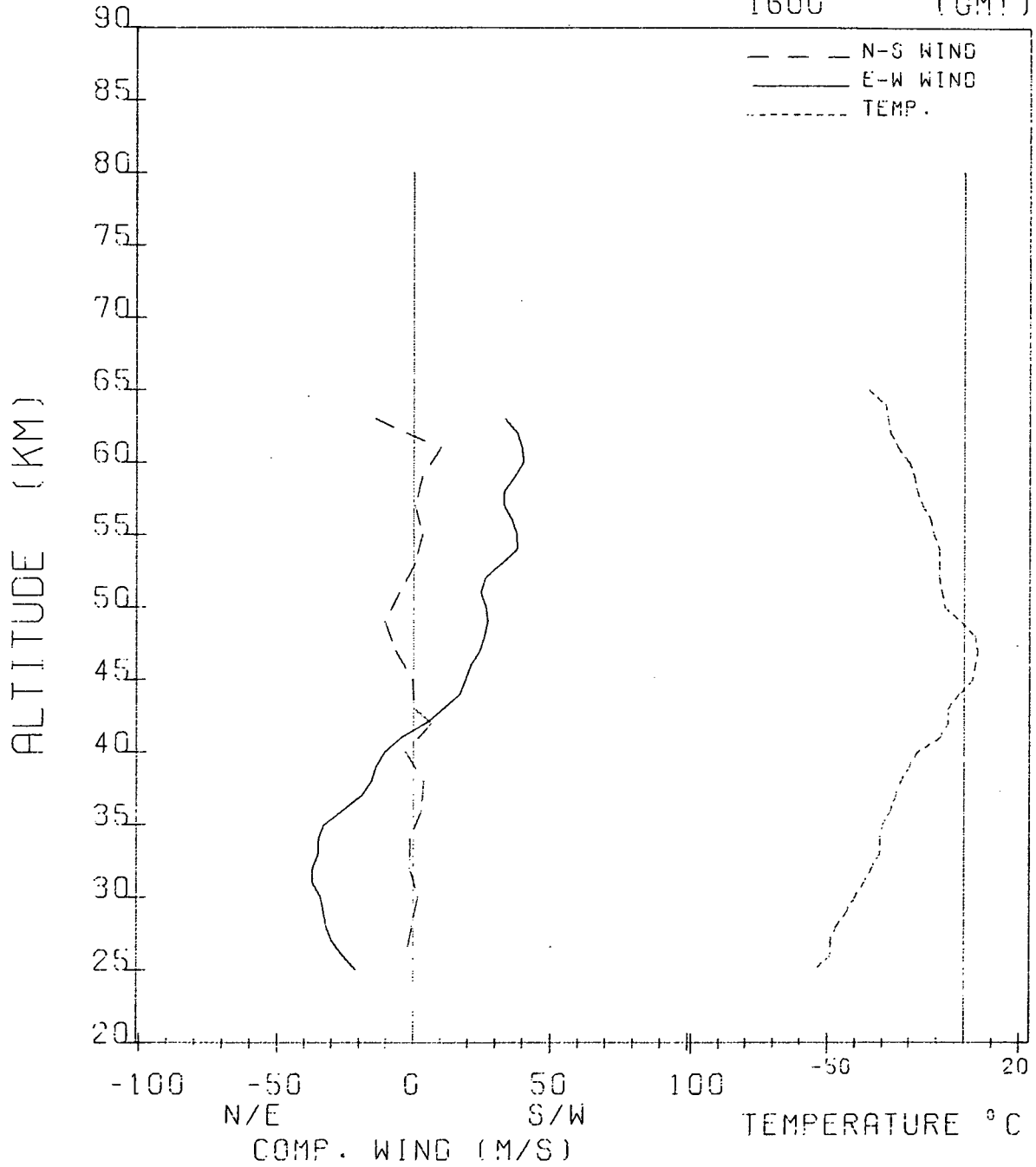
LAUNCH SITE Ascension Island 61902 LAT 8.0S LONG. 14.4W  
 DATE March 19, 1974 TIME (GMT) 1600  
 FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 10 ft. square starute  
 PWN-10A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
65	-35	-11			133
64	-29	-11			135
63	-28	-12	-14	33	130
62	-27	-10	-3	38	116
61	-24	-7	10	39	92
60	-20	-5	7	40	80
59	-18	-5	3	37	79
58	-17	-4	1	33	71
57	-15	-4	0	33	71
56	-12	-3	2	36	62
55	-11	-3	3	38	58
54	-9	-3	2	38	55
53	-9	-3	1	32	51
52	-9	-2	0	26	51
51	-8	-2	-5	25	45
50	-7	-2	-9	26	45
49	-1	-1	-10	27	38
48	4	-1	-10	26	36
47	5	-2	-6	24	40
46	4	-1	-3	21	32
45	3	-1	0	19	33
44	-2	-1	-1	17	33
43	-6	-1	0	11	27
42	-6	-1	7	5	26
41	-9	-1	4	-4	26
40	-17	-1	-3	-10	23
39	-20	-1	-1	-14	22
38	-23	-1	4	-16	22
37	-25	-1	6	-19	20
36	-27	-1	3	-26	18
35	-30	-1	1	-33	17
34	-31	-1	-1	-35	16
33	-31	-1	-2	-35	15
32	-34	-1	-1	-37	14
31	-37	-1	1	-37	13
30	-40	-1	2	-34	12
29	-43	-1	0	-33	11
28	-47	-1	-1	-32	9
27	-49	-1	-2	-30	9
26	-49	-1	-2	-25	8
25	-55	0	-1	-21	7

ASCENSION ISLAND, AFB

MAR. 19, 1974

1600 (GMT)



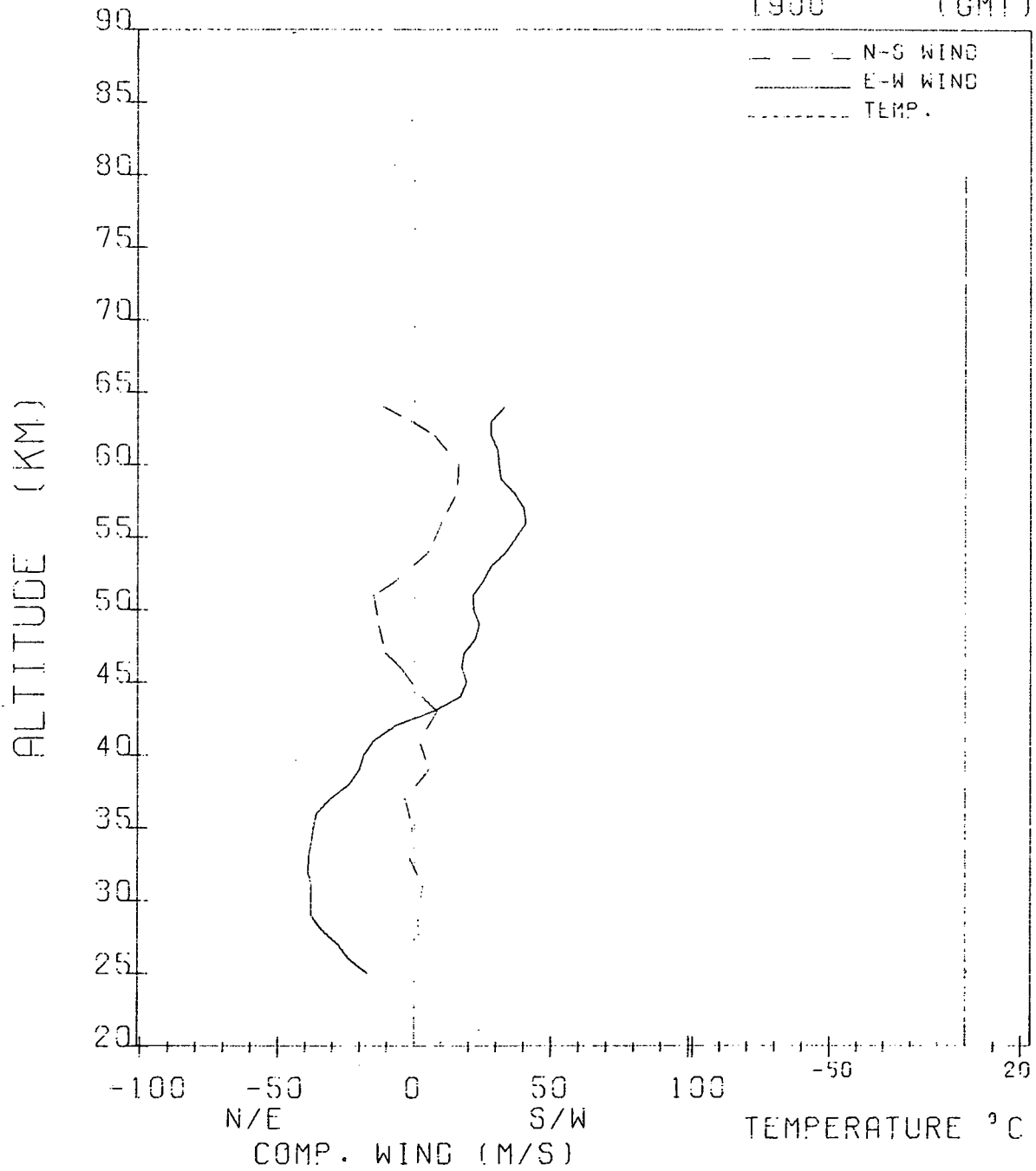
LAUNCH SITE Ascension Island 61902 LAT. 8.0S LONG. 14.4W  
 DATE March 19, 1974 TIME (GMT) 1900  
 FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 10 ft. square starute  
 PWN-10A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
64			-12	33	106
63			-1	28	100
62			8	28	94
61			12	30	88
60			16	31	76
59			17	32	81
58			15	37	72
57			13	40	68
56			10	40	63
55			8	37	60
54			5	33	56
53			1	28	53
52			-7	25	49
51			-15	21	47
50			-14	22	44
49			-13	24	41
48			-13	23	38
47			-11	19	36
46			-5	17	35
45			0	19	32
44			3	17	29
43			9	7	27
42			7	-8	26
41			2	-15	24
40			4	-19	23
39			6	-21	20
38			2	-24	18
37			-3	-31	17
36			-2	-36	16
35			0	-37	15
34			-1	-38	14
33			-2	-39	13
32			1	-39	12
31			3	-38	11
30			1	-38	11
29			1	-38	9
28			2	-34	9
27			2	-28	8
26			2	-24	7
25			0	-17	7

ASCENSION ISLAND, AFB

MAR. 19, 1974

1900 (GMT)



LAUNCH SITE Ascension Island 61902 LAT. 8.0S LONG. 14.4W  
 DATE March 20, 1974 TIME (GMT) 0100  
 FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 10 ft. square starute  
 PWN-10A TEMP SENSOR 10 mil bead loop mount

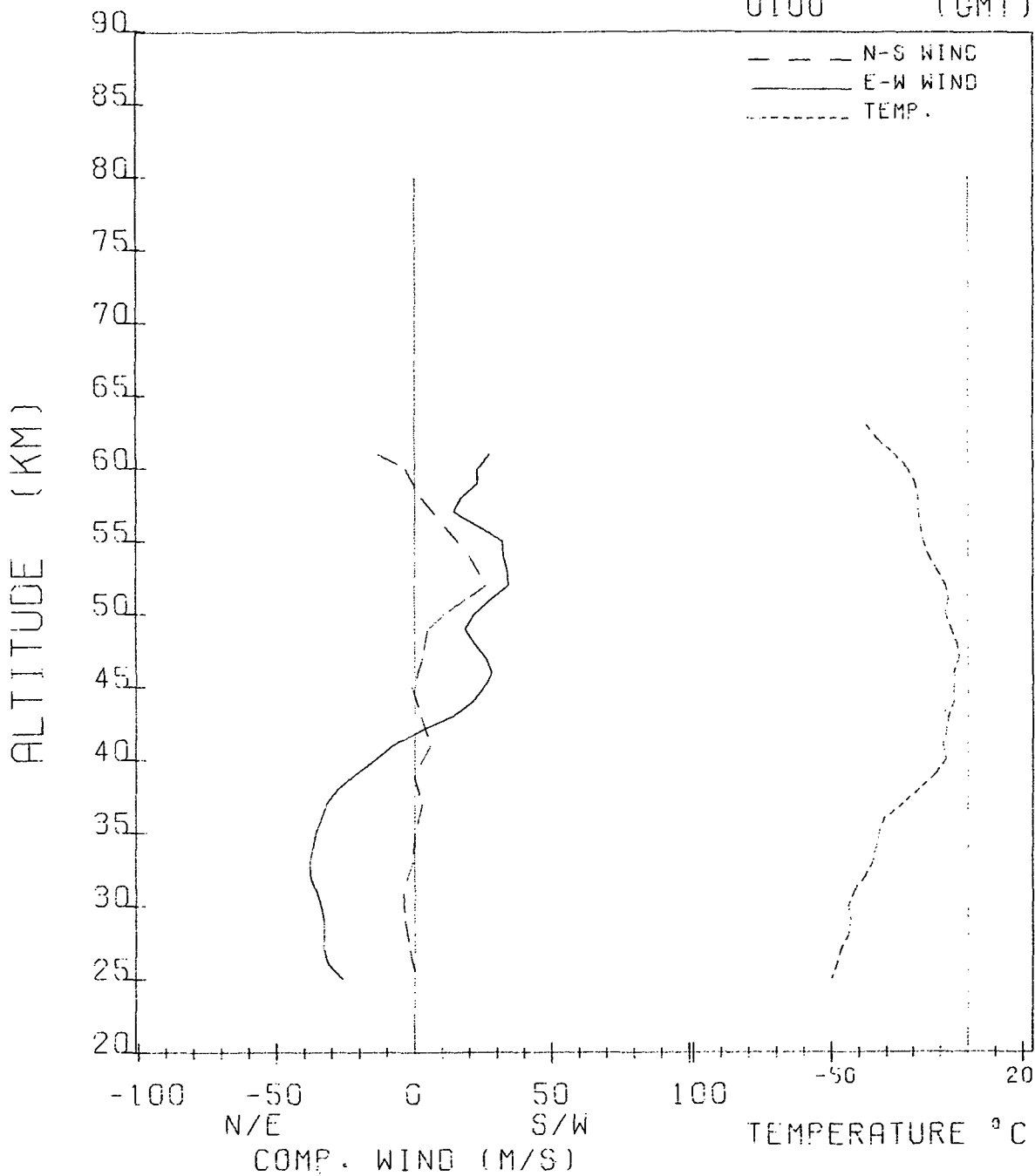
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
63	-37	-4			100
62	-33	-3			102
61	-27	-3			100
60	-22	-2	-13	27	89
59	-19	-3	2	23	84
58	-18	-3	3	17	78
57	-18	-2	6	14	74
56	-17	-2	11	23	67
55	-16	-2	17	32	64
54	-14	-1	20	32	59
53	-11	-1	24	34	56
52	-8	-1	26	34	53
51	-7	-1	18	27	50
50	-8	-1	11	22	47
49	-6	-1	5	19	43
48	-4	-1	3	21	41
47	-3	-1	3	26	38
46	-5	-1	1	28	36
45	-5	0	-1	25	34
44	-5	0	-2	21	31
43	-7	-1	2	14	27
42	-8	0	5	2	27
41	-9	0	6	-8	26
40	-8	0	3	-14	24
39	-12	0	0	-22	23
38	-18	0	0	-28	21
37	-24	0	3	-32	19
36	-31	0	2	-34	17
35	-33	0	0	-36	17
34	-34	0	0	-37	16
33	-35	0	-1	-38	14
32	-38	0	-3	-38	12
31	-42	0	-4	-36	11
30	-44	0	-3	-34	11
29	-43	0	-4	-32	9
28	-44	0	-3	-33	8
27	-47	0	-2	-33	7
26	-48	0	0	-31	8
25	-50	0	1	-26	7



ASCENSION ISLAND, AFB

MAR. 20, 1974

0100 (GMT)

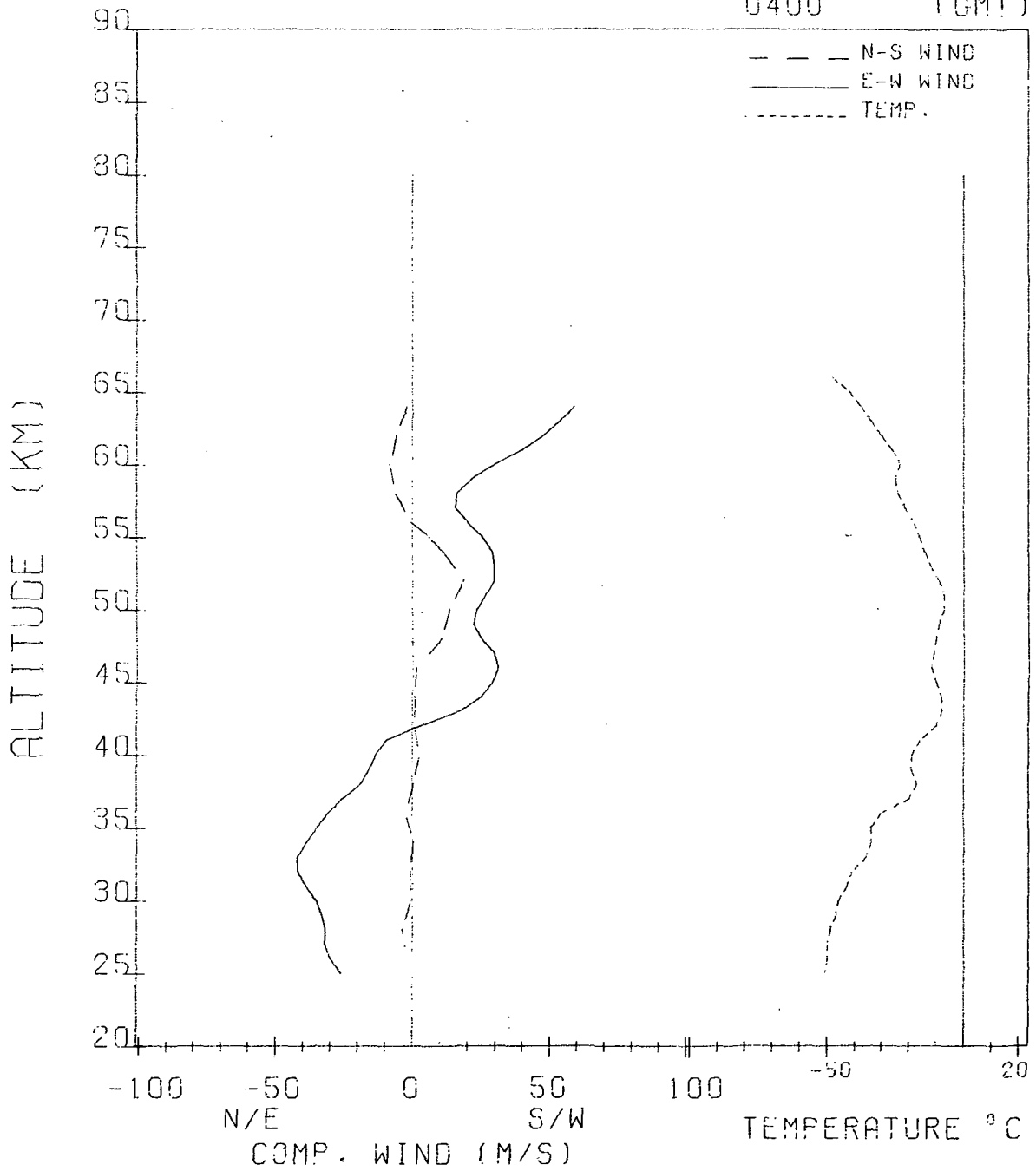


**LAUNCH SITE** Ascension Island 61902 **LAT.** 8.0S **LONG.** 14.4W  
**DATE** March 20, 1974 **TIME (GMT)** 0400  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 10 ft. square starute  
PWN-10A **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
66	-48	-6			123
65	-42	-4			114
64	-38	-4	-2	59	111
63	-34	-4	-6	54	108
62	-30	-4	-6	48	102
61	-26	-3	-5	39	94
60	-23	-3	-8	30	87
59	-25	-4	-9	21	86
58	-24	-3	-6	15	78
57	-21	-2	-4	15	73
56	-18	-2	0	20	67
55	-16	-2	6	25	65
54	-14	-1	11	29	59
53	-12	-1	14	30	57
52	-9	-1	19	30	53
51	-7	-1	18	27	49
50	-7	-1	14	24	45
49	-9	-1	9	22	44
48	-10	-1	10	25	42
47	-11	-1	9	29	38
46	-12	-1	1	31	38
45	-10	0	-2	29	34
44	-8	0	1	25	30
43	-8	0	1	17	30
42	-10	0	0	2	26
41	-16	0	1	-10	25
40	-19	0	2	-14	24
39	-19	0	2	-16	23
38	-17	0	0	-19	22
37	-20	0	-1	-26	19
36	-30	0	-3	-31	18
35	-34	0	-2	-35	16
34	-34	0	0	-39	15
33	-36	0	0	-42	14
32	-41	0	-1	-42	13
31	-43	0	0	-39	11
30	-46	0	-1	-35	11
29	-47	0	-3	-33	10
28	-49	0	-4	-32	8
27	-50	0	-3	-31	8
26	-50	0	-2	-30	8
25	-51	0	0	-26	6

ASCENSION ISLAND, AFB

MAR. 20, 1974  
0400 (GMT)



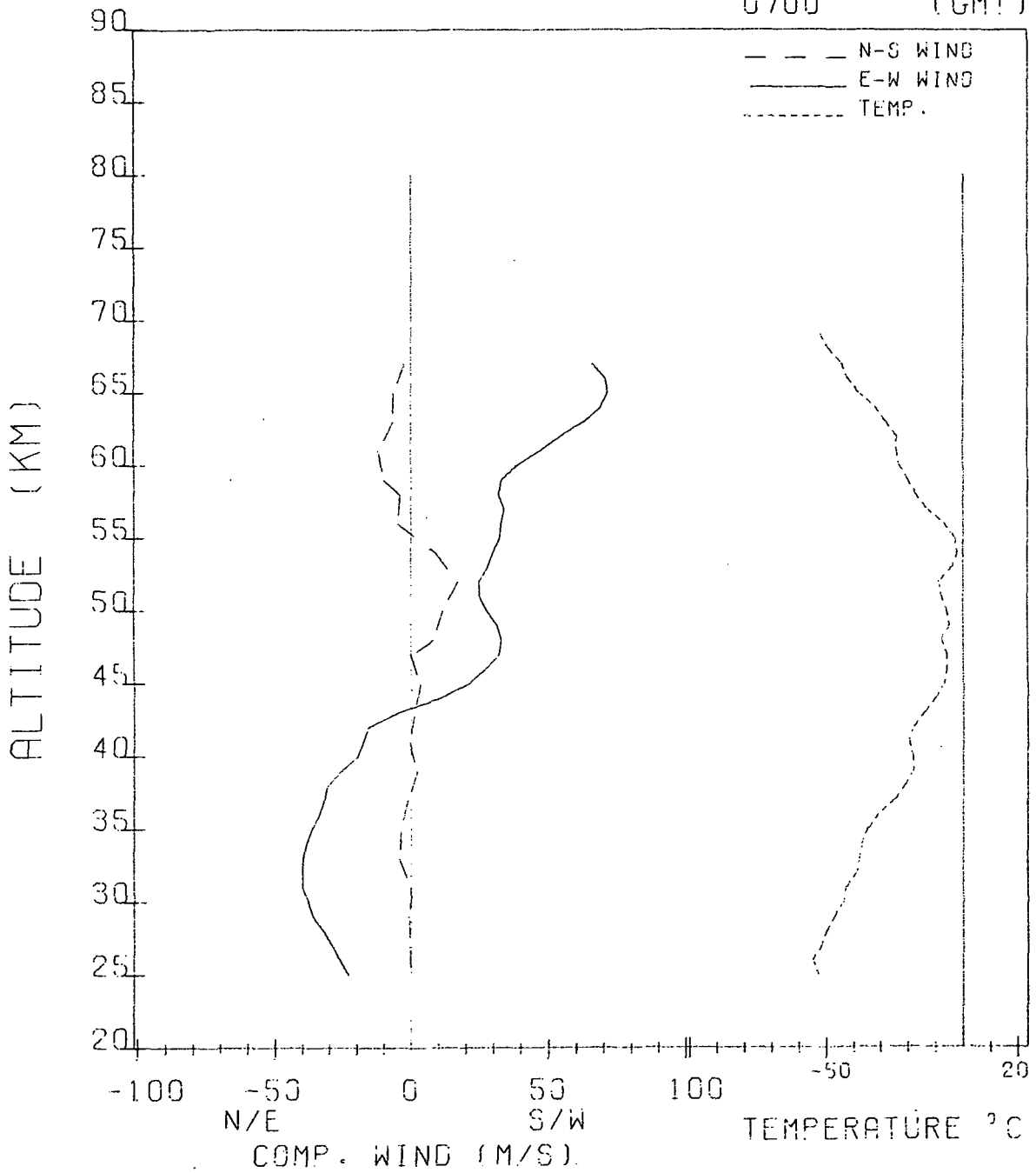
**LAUNCH SITE** Ascension Island 61902 **LAT.** 8.0S **LONG.** 14.4W  
**DATE** March 20, 1974 **TIME (GMT)** 0700  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 10 ft. square starute  
PWN-10A **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
69	-52	-22			126
68	-49	-18			126
67	-44	-14	-2	66	125
66	-42	-13	-6	71	122
65	-38	-11	-7	71	118
64	-32	-8	-4	69	109
63	-28	-7	-6	63	100
62	-24	-7	-11	54	95
61	-24	-7	-12	47	89
60	-23	-6	-12	38	82
59	-20	-5	-10	32	79
58	-17	-4	-4	32	72
57	-13	-3	-3	34	68
56	-7	-3	-4	33	65
55	-3	-3	0	32	61
54	-2	-3	9	30	57
53	-4	-3	14	28	55
52	-9	-3	17	24	51
51	-8	-2	13	25	45
50	-6	-2	12	28	43
49	-5	-2	13	31	42
48	-8	-2	9	33	39
47	-6	-1	0	32	34
46	-6	-1	-1	27	35
45	-7	-1	3	21	31
44	-10	-1	3	10	31
43	-14	-1	1	-5	32
42	-18	-1	-1	-16	29
41	-20	-1	-1	-18	24
40	-18	-1	2	-20	21
39	-18	-1	2	-26	21
38	-21	-1	1	-31	19
37	-25	-1	-1	-32	18
36	-31	-1	-3	-34	16
35	-35	-1	-4	-36	15
34	-37	-1	-5	-39	14
33	-38	-1	-4	-40	13
32	-39	-1	-1	-40	12
31	-43	-1	0	-40	12
30	-44	-1	-1	-38	11
29	-47	-1	-1	-36	9
28	-50	-1	0	-32	9
27	-52	-1	0	-29	8
26	-55	-1	-1	-26	7
25	-53	0	0	-23	7

ASCENSIÓN ISLAND, AFB

MAR. 20, 1974

0700 (GMT)



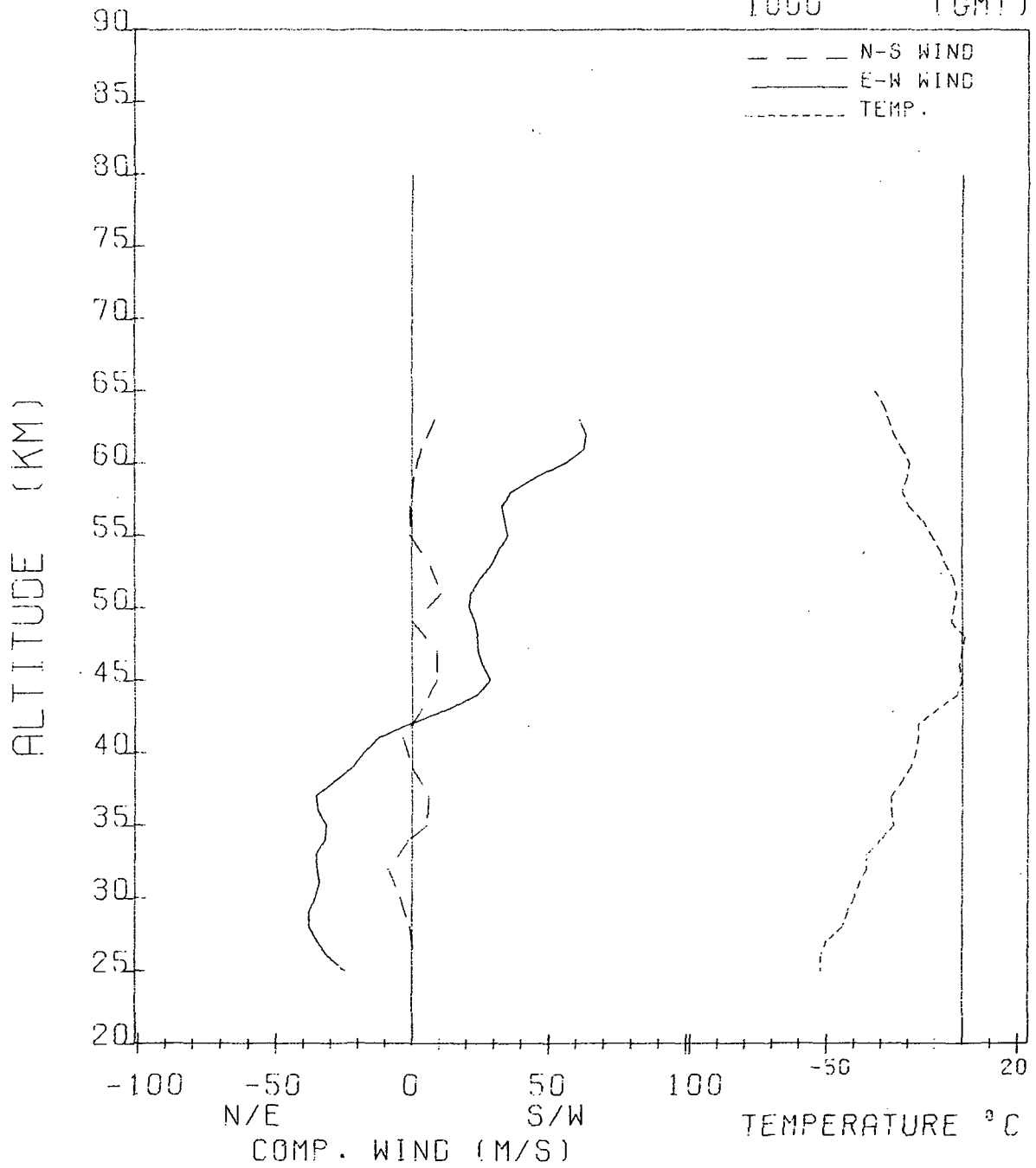
LAUNCH SITE Ascension Island 61902 LAT. 8.0S LONG. 14.4W  
 DATE March 20, 1974 TIME (GMT) 1000  
 FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 10 ft. square starute  
 PWN-10A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
65	-32	-10			121
64	-29	-10			116
63	-27	-9	8	61	110
62	-25	-8	5	64	102
61	-22	-7	3	63	95
60	-19	-6	2	56	90
59	-20	-6	1	45	83
58	-22	-6	-1	36	77
57	-19	-4	0	33	72
56	-14	-3	0	34	66
55	-11	-3	0	35	64
54	-8	-3	3	32	61
53	-6	-3	7	29	58
52	-3	-2	10	25	54
51	-2	-2	11	21	50
50	-3	-2	7	20	47
49	-4	-2	1	23	44
48	1	-1	1	24	42
47	0	-2	9	24	40
46	-1	-1	10	26	36
45	0	-1	9	29	35
44	-2	-1	7	24	31
43	-9	-2	4	14	30
42	-16	-1	-1	0	25
41	-16	-1	-3	-13	25
40	-17	-1	-3	-18	24
39	-19	-1	0	-22	22
38	-22	-1	3	-29	20
37	-26	-1	6	-35	19
36	-26	-1	9	-35	18
35	-25	-1	6	-32	17
34	-30	-1	-1	-32	15
33	-35	-1	-6	-35	13
32	-35	-1	-9	-35	12
31	-38	-1	-8	-34	12
30	-40	-1	-4	-35	10
29	-42	-1	-2	-38	10
28	-44	-1	0	-38	8
27	-50	-1	1	-35	8
26	-52	-1	1	-31	8
25	-52	0	-3	-24	5

ASCENSION ISLAND, AFB

MAR. 20, 1974

1000 (GMT)



**LAUNCH SITE** Ascension Island 61902 **LAT.** 8.0S **LONG.** 14.4W  
**DATE** March 20, 1974 **TIME (GMT)** 1303  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 10 ft. square starute  
PWN-10A **TEMP SENSOR** 10 mil bead loop mount

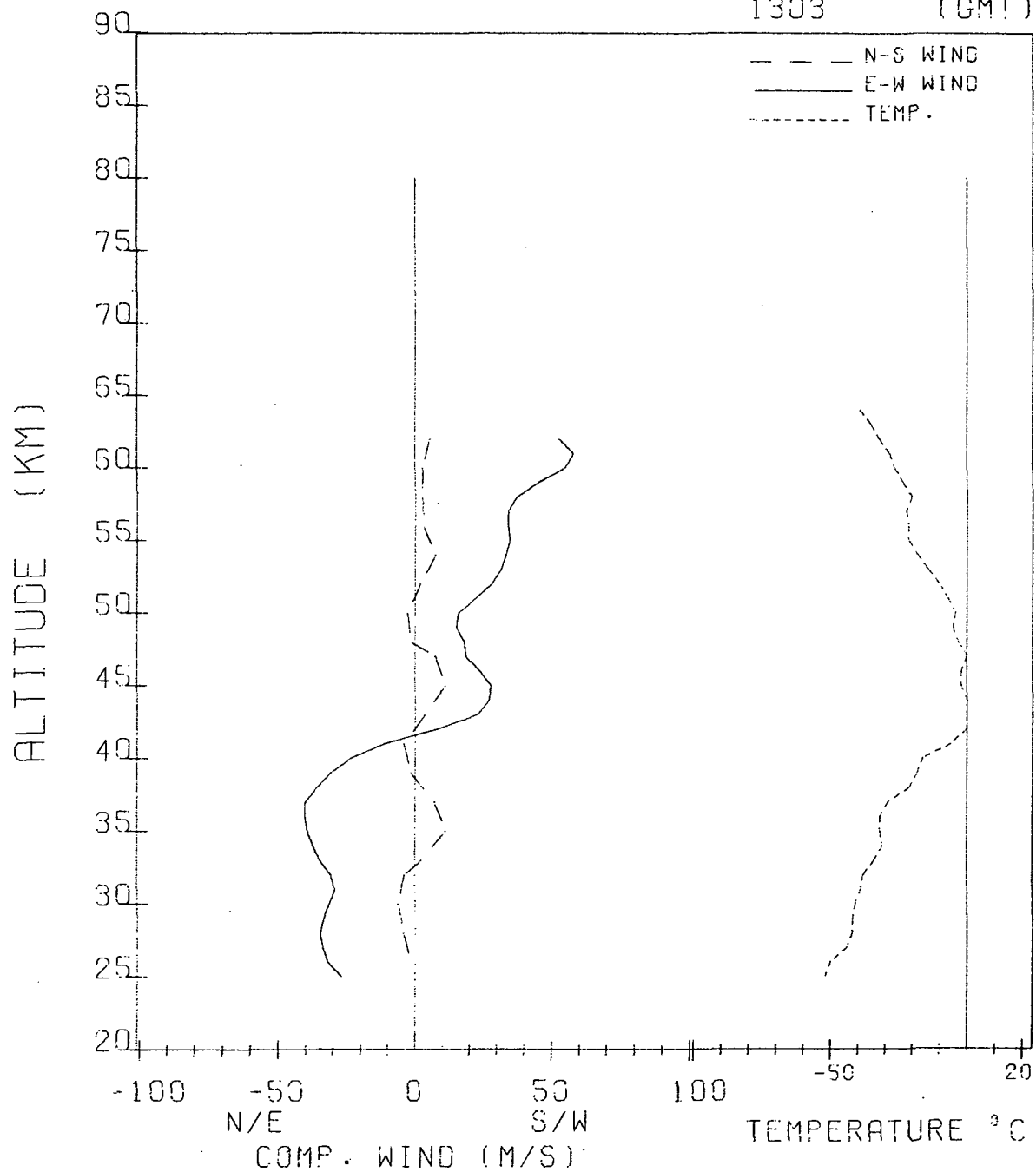
ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
64	-39	-11			118
63	-35	-9			111
62	-32	-8	6	53	106
61	-28	-7	5	57	100
60	-26	-6	2	55	93
59	-23	-5	1	45	87
58	-20	-5	3	37	80
57	-22	-5	3	34	72
56	-21	-4	3	33	69
55	-21	-4	6	34	65
54	-18	-3	7	33	62
53	-14	-2	7	32	57
52	-10	-2	2	28	55
51	-7	-2	-2	22	52
50	-4	-2	-3	16	49
49	-5	-2	-5	15	44
48	-3	-1	-2	18	42
47	0	-2	8	19	39
46	-2	-2	11	24	37
45	-2	-1	11	28	37
44	0	-1	7	27	32
43	0	-1	4	23	32
42	0	-1	-1	8	28
41	-6	-1	-4	-11	26
40	-16	-1	-4	-24	25
39	-18	-1	-1	-31	23
38	-21	-1	2	-36	21
37	-29	-1	7	-40	20
36	-32	-1	12	-41	18
35	-32	-1	11	-39	17
34	-31	-1	7	-38	15
33	-34	-1	2	-35	14
32	-38	-1	-4	-31	13
31	-39	-1	-7	-30	12
30	-41	-1	-6	-31	10
29	-42	-1	-5	-34	9
28	-42	-1	-4	-34	8
27	-44	-1	-3	-34	8
26	-50	-1	-2	-32	7
25	-52	0	-2	-27	6



ASCENSION ISLAND, AFB

MAR. 20, 1974

1303 (GMT)



LAUNCH SITE Ascension Island 61902 LAT. 8.0S LONG. 14.4W  
 DATE March 20, 1974 TIME (GMT) 1600  
 FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 10 ft. square starute  
 PWN-10A TEMP SENSOR 10 mil bead loop mount

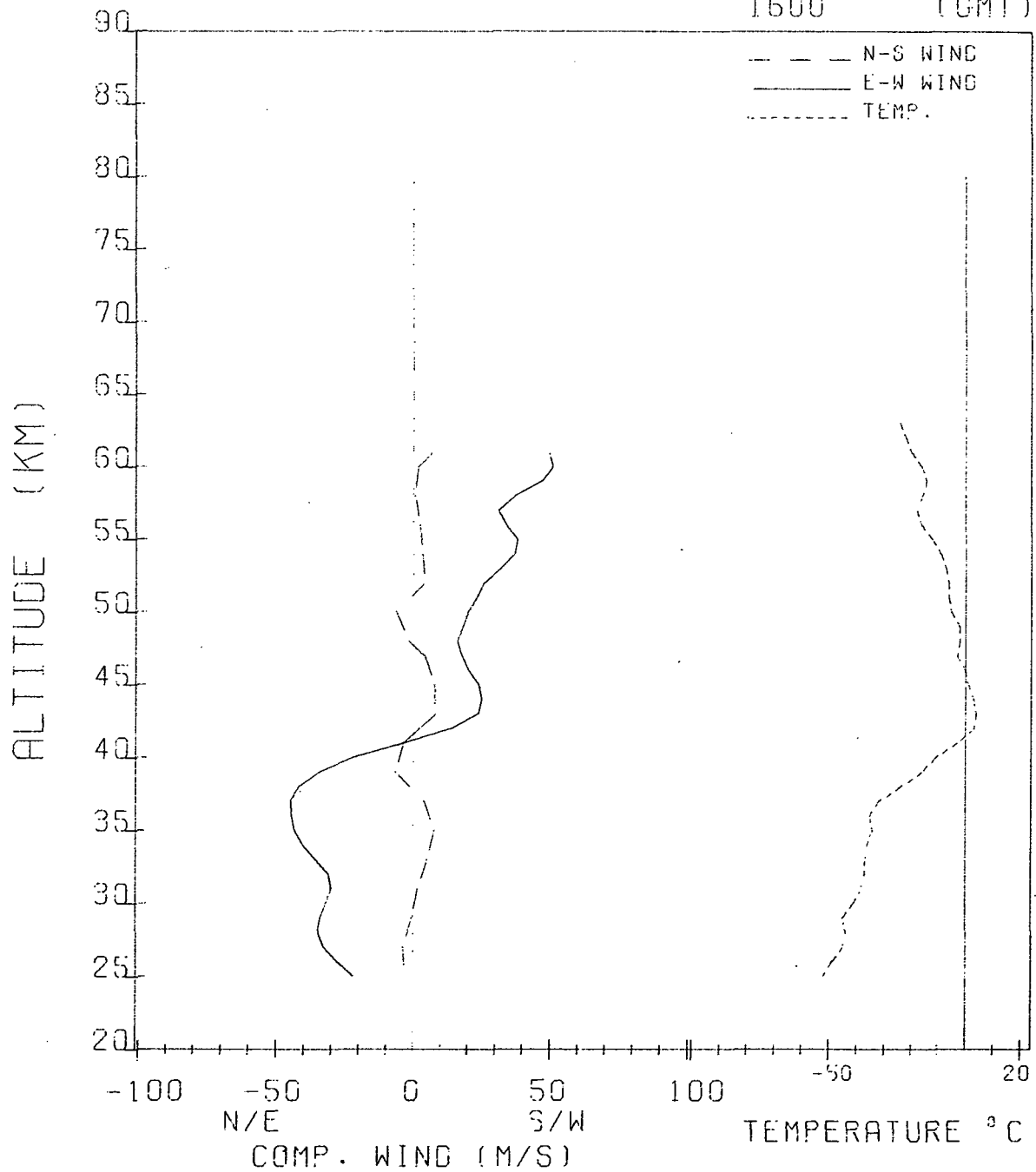
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
63	-24	-8			110
62	-22	-8			100
61	-20	-7	7	50	94
60	-16	-6	2	51	90
59	-14	-6	0	47	87
58	-16	-6	1	37	82
57	-18	-5	1	31	75
56	-16	-4	2	34	69
55	-12	-3	4	38	64
54	-9	-3	3	37	61
53	-7	-3	5	32	59
52	-6	-2	4	26	50
51	-6	-2	-1	23	50
50	-5	-2	-6	20	48
49	-2	-2	-6	18	44
48	-2	-2	-2	16	41
47	-3	-1	4	17	38
46	0	-1	6	20	36
45	1	-1	8	24	33
44	3	-1	8	25	31
43	4	-1	8	24	30
42	3	-1	2	14	27
41	-3	-1	-4	-3	27
40	-11	-1	-7	-22	25
39	-16	-1	-6	-34	23
38	-24	-1	-2	-42	21
37	-32	-1	4	-45	19
36	-35	-1	7	-45	17
35	-34	-1	8	-43	16
34	-36	-1	7	-41	15
33	-37	-1	5	-36	14
32	-37	-1	1	-31	12
31	-38	-1	1	-30	12
30	-41	-1	1	-32	11
29	-45	-1	0	-34	10
28	-44	-1	-2	-35	8
27	-45	-1	-4	-32	8
26	-49	-1	-4	-28	6
25	-52	-1	-3	-22	6

ASCENSION ISLAND, AFB

MAR. 20, 1974

1600

(GMT)



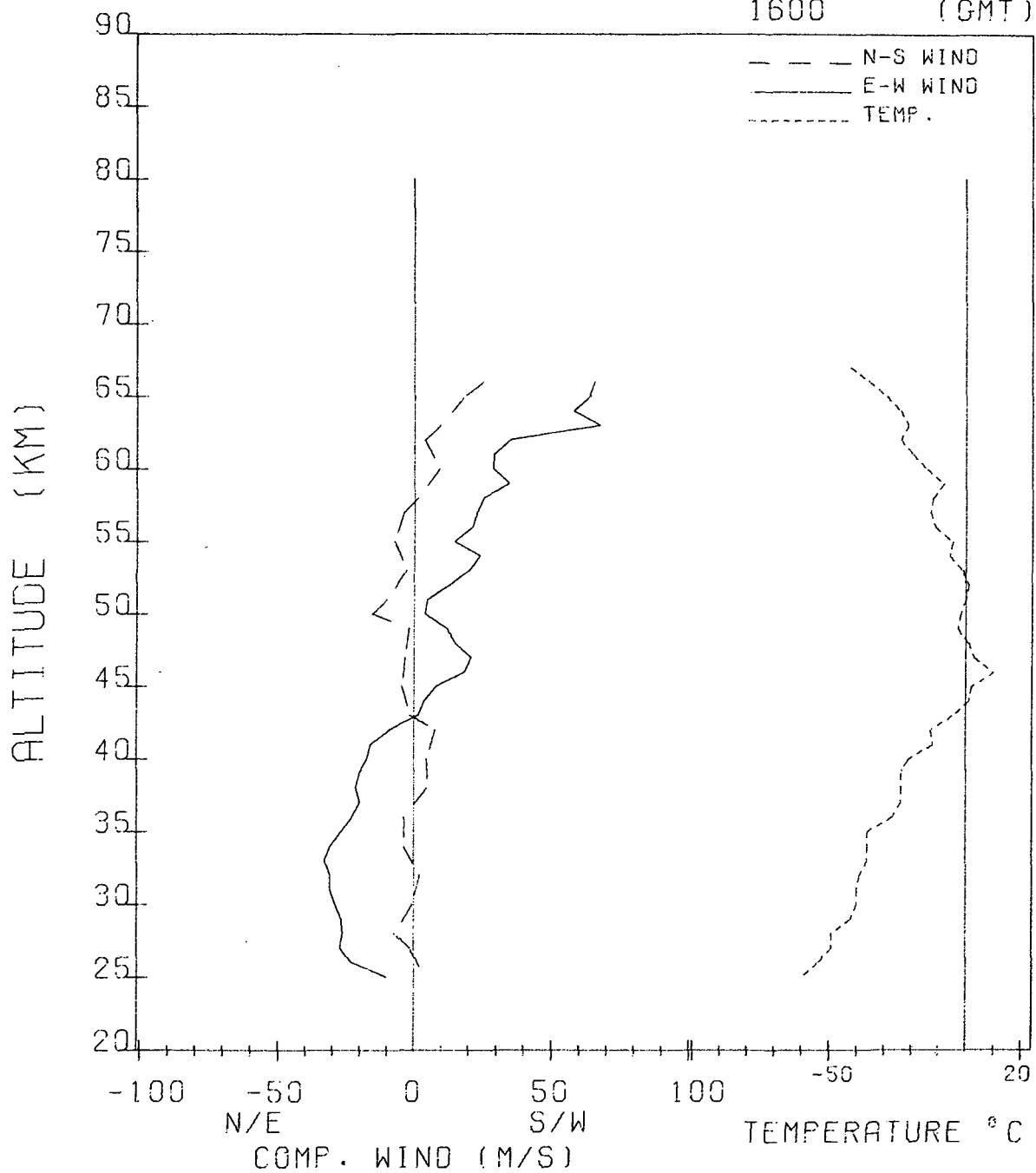
LAUNCH SITE Natal, Brazil 82599 LAT. 5.9S LONG. 35.2W  
 DATE March 19, 1974 TIME (GMT) 1600  
 FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute  
 PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
67	-42	-21			110
66	-35	-14			111
65	-29	-11			117
64	-24	-9	13	57	125
63	-21	-9	9	67	117
62	-24	-6	3	35	105
61	-19	-5	4	29	95
60	-14	-6	9	28	90
59	-8	-4	13	34	90
58	-12	-6	1	25	83
57	-13	-6	-4	23	76
56	-11	-4	-6	21	74
55	-5	-3	-7	15	71
54	-6	-3	-10	24	66
53	-1	-2	-3	20	60
52	1	-2	-3	13	57
51	0	-2	-10	5	54
50	-2	-2	-15	4	51
49	-3	-2	-2	12	46
48	1	-1	-2	15	43
47	3	-1	-3	21	41
46	10	-1	-5	19	40
45	2	-2	-5	8	36
44	1	-1	-4	4	33
43	-5	-1	-1	1	32
42	-13	-2	8	-9	28
41	-12	-1	8	-16	27
40	-21	-1	5	-17	27
39	-24	-1	5	-20	25
38	-24	-1	5	-22	23
37	-24	-1	2	-20	21
36	-27	-1	-4	-23	19
35	-36	-1	-4	-27	17
34	-36	-1	-4	-31	17
33	-36	-1	0	-33	15
32	-39	-1	2	-31	14
31	-40	-1	2	-31	13
30	-40	-1	0	-29	12
29	-42	-1	-5	-26	11
28	-49	-1	-7	-27	9
27	-49	-1	-1	-27	8
26	-54	-1	3	-23	8
25	-60	-1	4	-10	7

NATAL, BRAZIL

MAR. 19, 1974

1600 (GMT)

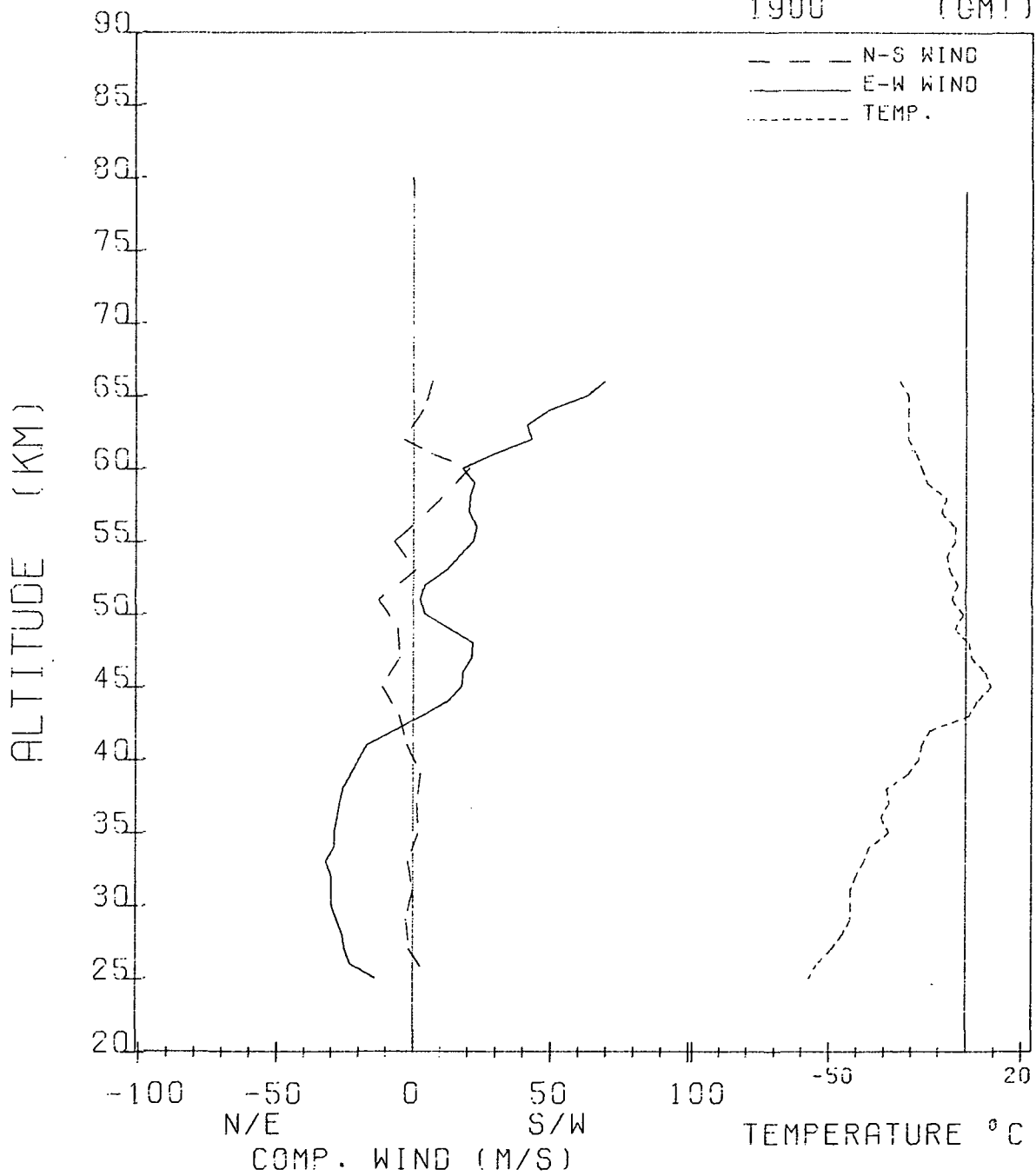


**LAUNCH SITE** Natal, Brazil 82599 **LAT.** 5.9S **LONG.** 35.2W  
**DATE** March 19, 1974 **TIME (GMT)** 1900  
**FLIGHT SYSTEM** Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-8B **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
66	-24	-10			125
65	-21	-10			125
64	-21	-11	4	49	133
63	-21	-11	3	41	111
62	-21	-10	-3	43	100
61	-18	-8	7	29	105
60	-16	-6	11	18	95
59	-14	-6	19	22	87
58	-7	-5	11	20	80
57	-9	-4	6	20	80
56	-4	-3	0	23	77
55	-4	-3	-7	22	69
54	-7	-4	-2	17	63
53	-6	-3	1	12	61
52	-3	-3	-4	4	59
51	-5	-3	-13	3	54
50	-1	-2	-11	4	53
49	-4	-2	-5	13	48
48	1	-1	-4	21	44
47	2	-2	-5	21	43
46	7	-1	-8	18	41
45	9	-1	-11	18	38
44	4	-2	-8	13	34
43	1	-1	-5	3	32
42	-13	-2	-2	-7	31
41	-16	-1	-1	-17	29
40	-17	-1	2	-20	26
39	-21	-1	3	-23	25
38	-29	-1	3	-25	24
37	-28	-1	1	-27	21
36	-31	-1	2	-28	20
35	-28	0	2	-29	20
34	-35	-1	-2	-29	17
33	-37	-1	-2	-32	16
32	-40	-1	0	-30	15
31	-42	-1	0	-30	13
30	-42	-1	-2	-30	13
29	-42	-1	-3	-28	11
28	-45	-1	-3	-26	9
27	-49	-1	-1	-25	9
26	-54	-1	0	-23	9
25	-57	-1	6	-14	8

NATAL, BRAZIL

MAR. 19, 1974  
1900 (GMT)



LAUNCH SITE Natal, Brazil 82599 LAT. 5.9S LONG. 35.2W  
 DATE March 19, 1974 TIME (GMT) 2218  
 FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute  
 PWN-8B TEMP SENSOR 10 mil bead loop mount

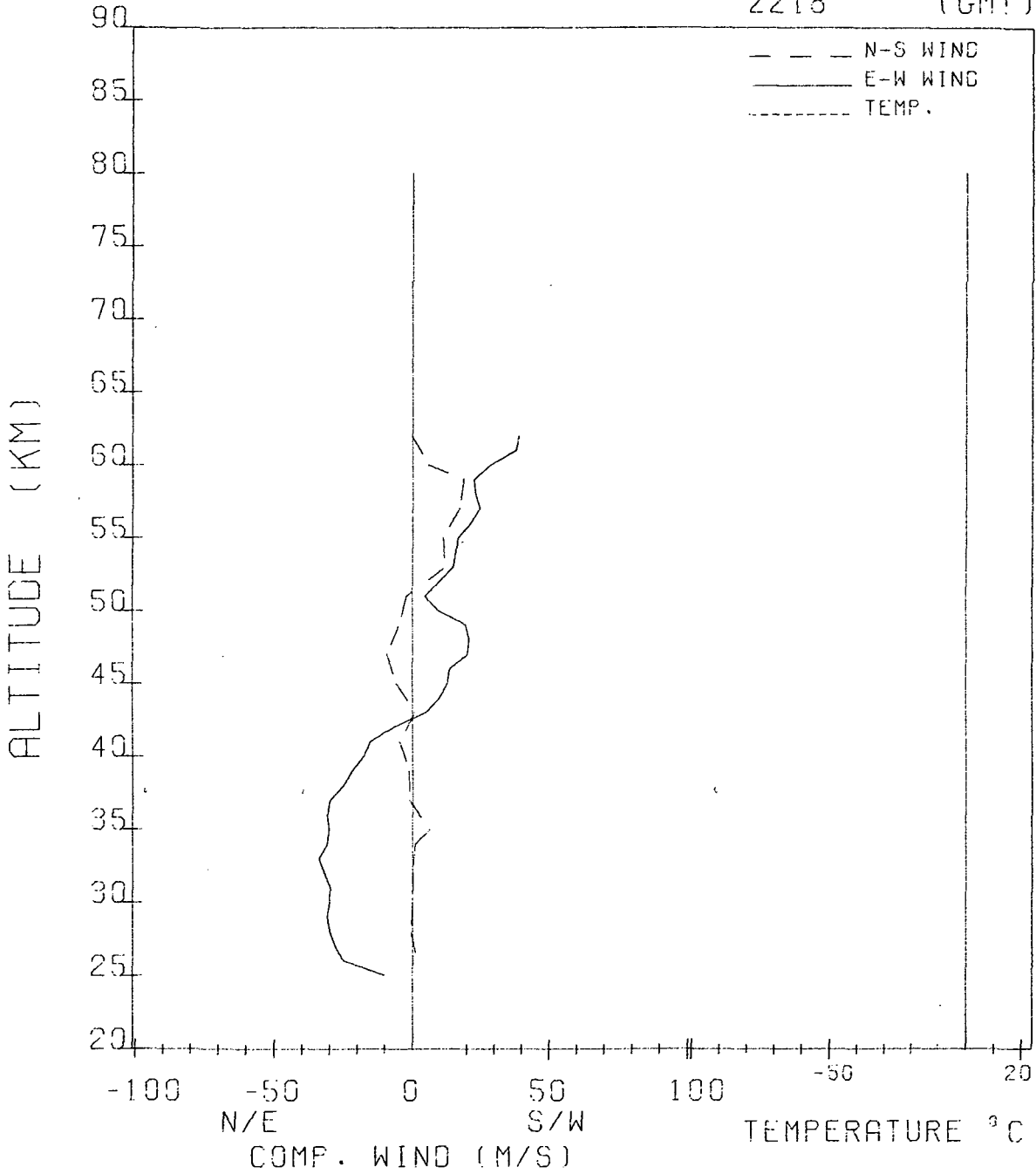
ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62			0	39	100
61			-3	38	83
60			6	28	91
59			19	22	91
58			16	23	77
57			17	24	77
56			15	21	74
55			11	17	71
54			9	16	67
53			12	15	61
52			7	10	54
51			-2	4	51
50			-6	9	51
49			-5	20	47
48			-8	21	45
47			-9	20	43
46			-6	14	38
45			-6	13	36
44			-1	10	31
43			1	5	31
42			-1	-7	32
41			-5	-15	29
40			-9	-18	26
39			-1	-22	25
38			0	-25	22
37			-1	-30	20
36			2	-31	19
35			6	-30	18
34			1	-31	17
33			0	-34	15
32			0	-32	14
31			1	-30	14
30			0	-30	13
29			1	-31	10
28			-1	-30	10
27			-1	-28	9
26			2	-25	8



NATAL, BRAZIL

MAR. 19, 1974

2218 (GMT)



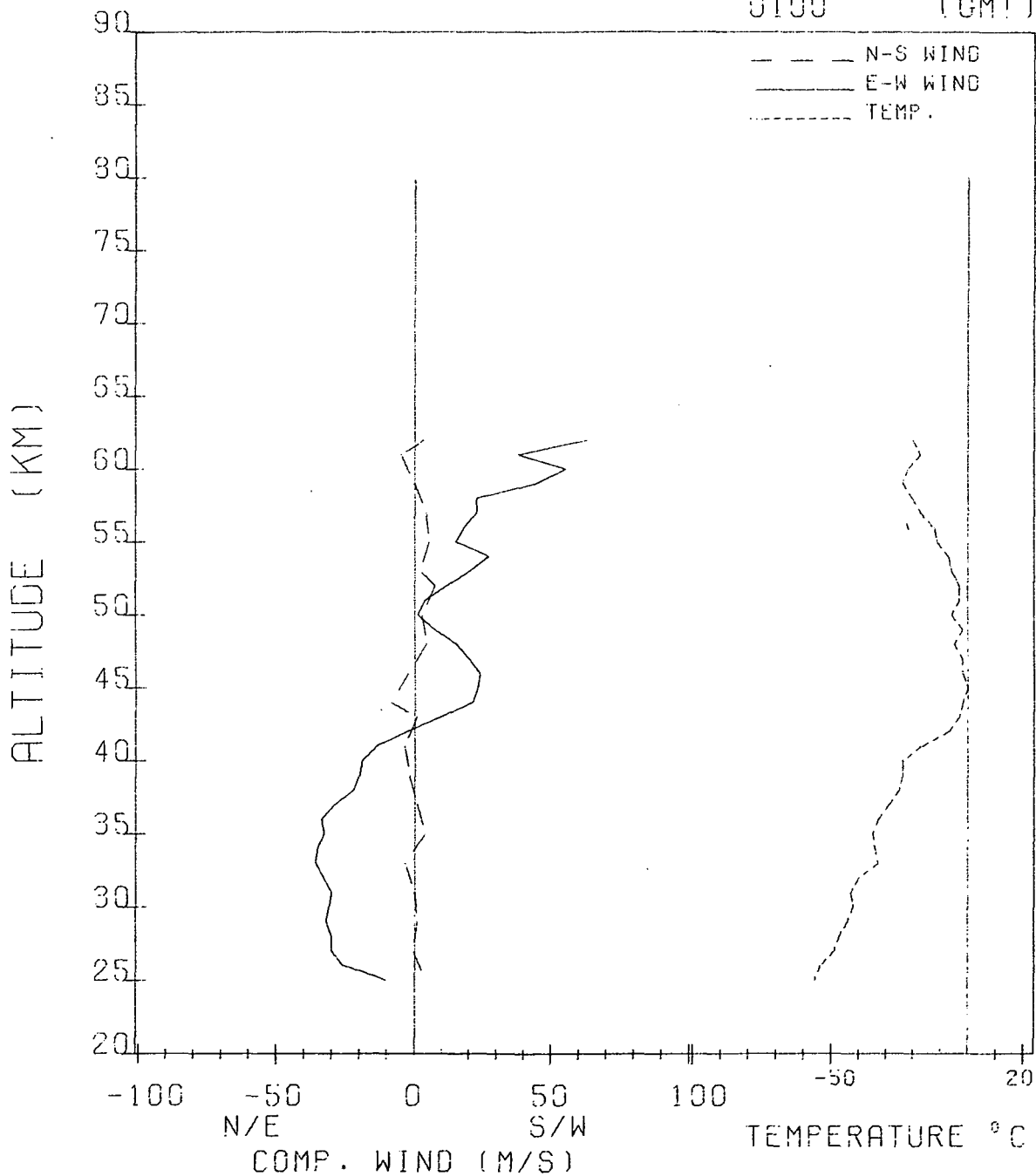
LAUNCH SITE Natal, Brazil 82599 LAT. 5.9S LONG. 35.2W  
DATE March 20, 1974 TIME (GMT) 0100  
FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute  
PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62	-20	-3	3	62	105
61	-17	-3	-4	37	100
60	-22	-6	-8	55	100
59	-24	-5	0	44	91
58	-20	-2	5	22	80
57	-17	-2	5	22	74
56	-12	-2	6	18	74
55	-11	-2	6	15	74
54	-7	-2	7	27	69
53	-6	-2	2	20	65
52	-3	-1	8	12	61
51	-3	-1	8	3	54
50	-6	-1	3	1	48
49	-2	-1	4	7	45
48	-5	-1	4	20	45
47	-2	-1	2	20	43
46	-2	-1	-2	24	40
45	0	0	-6	23	37
44	-2	-1	-8	21	36
43	-3	-1	1	10	33
42	-7	-1	4	-3	31
41	-17	-1	-4	-14	29
40	-24	-1	-6	-19	26
39	-24	-1	-2	-20	24
38	-25	-1	-1	-22	22
37	-29	0	1	-29	22
36	-33	0	4	-34	20
35	-35	0	4	-33	18
34	-34	0	-1	-35	17
33	-33	0	-3	-36	16
32	-40	0	-2	-33	15
31	-43	0	0	-30	14
30	-42	0	-1	-31	13
29	-44	0	1	-32	11
28	-47	0	0	-30	9
27	-49	0	-1	-30	9
26	-54	0	2	-26	8
25	-56	0	4	-10	8

NATAL, BRAZIL

MAR. 20, 1974

0100 (GMT)



LAUNCH SITE Natal, Brazil 82599 LAT. 5.9S LONG. 35.2W

DATE March 20, 1974 TIME (GMT) 0748

FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute

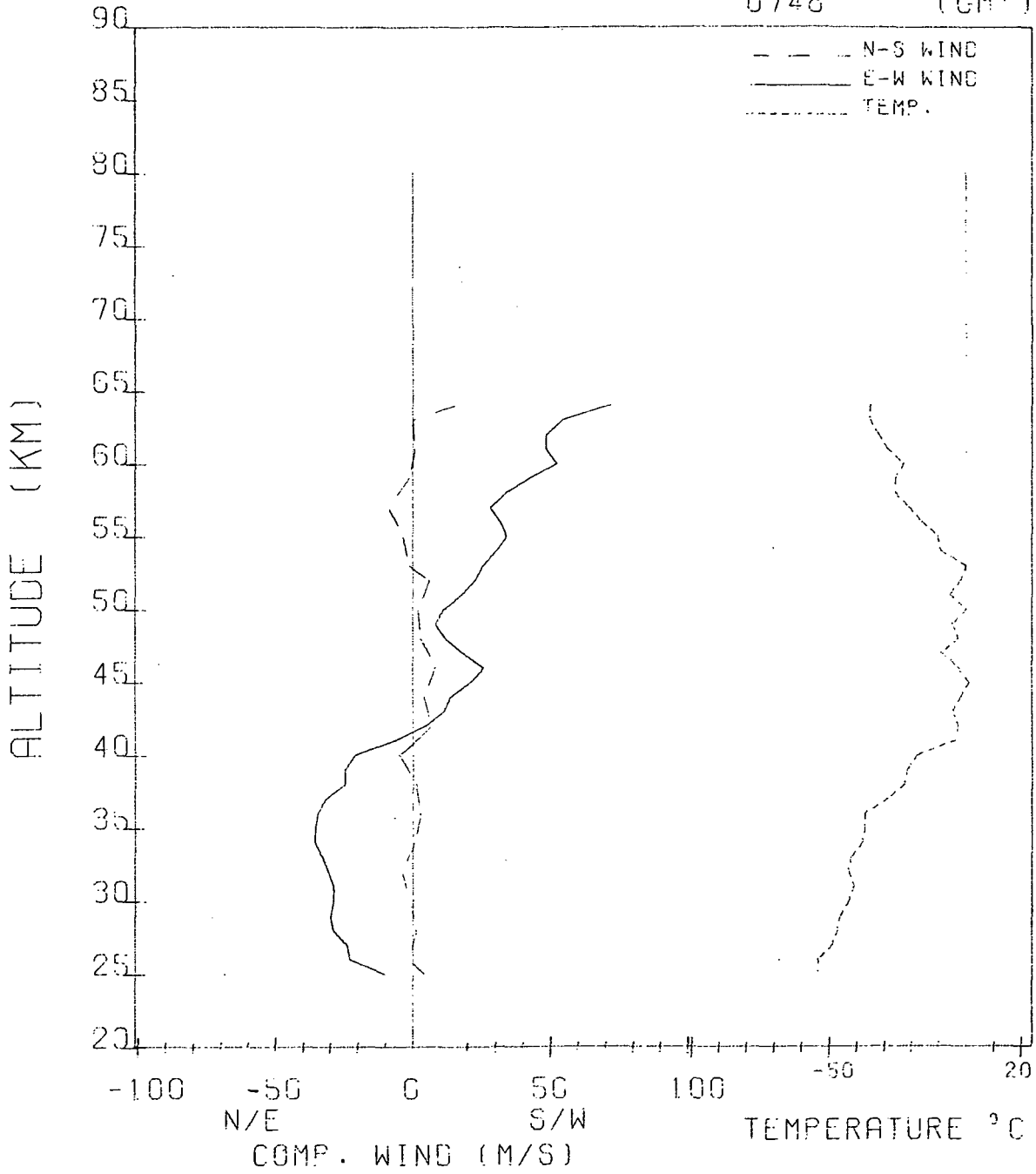
PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
64	-35	-5	15	71	133
63	-35	-6	0	54	117
62	-32	-5	0	48	111
61	-29	-5	1	48	111
60	-23	-3	-2	52	90
59	-26	-4	-1	42	86
58	-26	-3	-5	33	86
57	-21	-2	-9	27	76
56	-16	-1	-6	31	74
55	-10	-1	-3	32	71
54	-9	-2	-2	30	64
53	0	-1	-1	25	62
52	-2	-2	6	22	58
51	-6	-2	11	17	54
50	0	-1	2	10	51
49	-5	-1	0	8	47
48	-3	-1	3	11	46
47	-9	-1	6	18	43
46	-3	0	9	25	39
45	1	-1	7	20	35
44	-2	0	4	13	33
43	-5	0	5	11	32
42	-3	0	7	4	31
41	-4	-1	1	-7	29
40	-18	-1	-5	-21	26
39	-22	0	-2	-25	23
38	-23	0	1	-25	23
37	-29	0	-1	-32	21
36	-37	0	3	-35	18
35	-37	0	4	-36	17
34	-38	0	1	-36	16
33	-42	0	-2	-33	15
32	-43	0	-4	-31	14
31	-41	0	-4	-29	12
30	-43	0	-1	-29	11
29	-46	0	1	-31	10
28	-47	0	1	-29	9
27	-49	0	-2	-24	9
26	-54	0	-1	-23	8
25	-54	0	4	-10	7

NATAL, BRAZIL

MAR. 20, 1974

0748 (GMT)



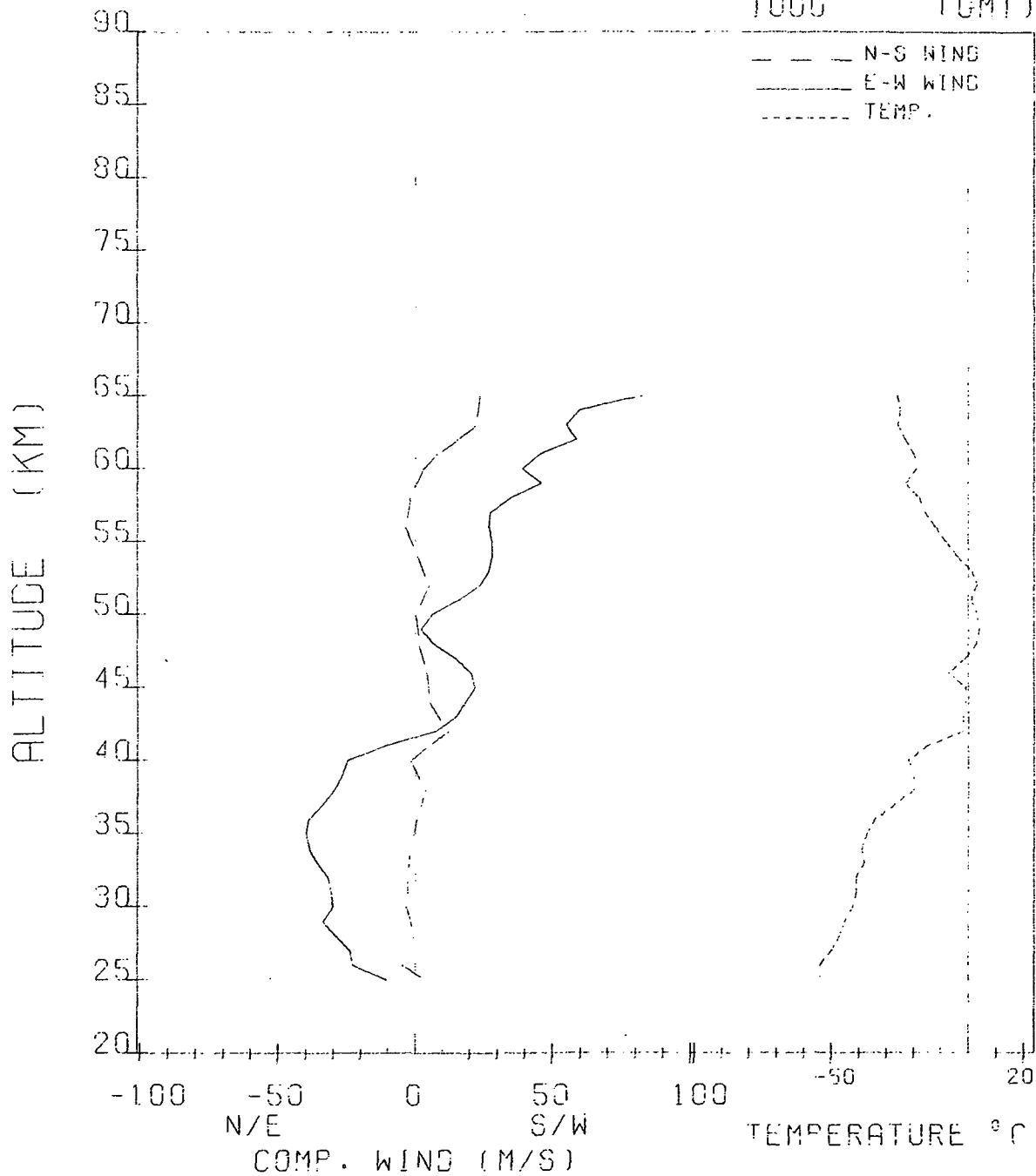
**LAUNCH SITE** Natal, Brazil 82599 **LAT.** 5.9S **LONG.** 35.2W  
**DATE** March 20, 1974 **TIME (GMT)** 1000  
**FLIGHT SYSTEM** Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-8B **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
65	-26	-9			111
64	-25	-10	21	59	118
63	-26	-11	22	54	118
62	-23	-9	16	58	105
61	-20	-7	9	45	100
60	-19	-7	3	39	95
59	-23	-7	1	46	91
58	-18	-5	-1	35	83
57	-16	-4	-6	27	77
56	-12	-4	-3	27	71
55	-8	-3	-1	28	67
54	-4	-3	1	28	65
53	1	-2	3	27	63
52	3	-3	5	23	57
51	1	-3	8	16	51
50	3	-2	0	6	50
49	4	-2	-3	2	48
48	3	-2	1	7	47
47	-1	-2	1	15	44
46	-7	-1	5	20	38
45	-1	-1	7	21	36
44	-1	-2	6	18	34
43	-2	-1	8	15	32
42	-2	-1	12	7	31
41	-15	-2	4	-11	29
40	-22	-1	-2	-25	26
39	-20	-1	2	-27	24
38	-20	-1	4	-30	23
37	-27	-1	0	-34	21
36	-34	-1	0	-39	19
35	-37	-1	0	-40	17
34	-39	-1	-2	-39	17
33	-38	-1	-3	-36	16
32	-41	-1	-3	-32	14
31	-41	-1	-3	-31	14
30	-42	-1	-3	-30	12
29	-45	-1	-3	-34	11
28	-47	-1	0	-29	10
27	-50	-1	-3	-24	9
26	-54	-1	-4	-23	8
25	-54	-1	4	-10	8

NATAL, BRAZIL

MAR. 20, 1974

1000 (GMT)



LAUNCH SITE Natal, Brazil 82599 LAT. 5.9S LONG. 35.2W  
 DATE March 20, 1974 TIME (GMT) 1321  
 FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute  
PWN-8B TEMP SENSOR 10 mil bead loop mount

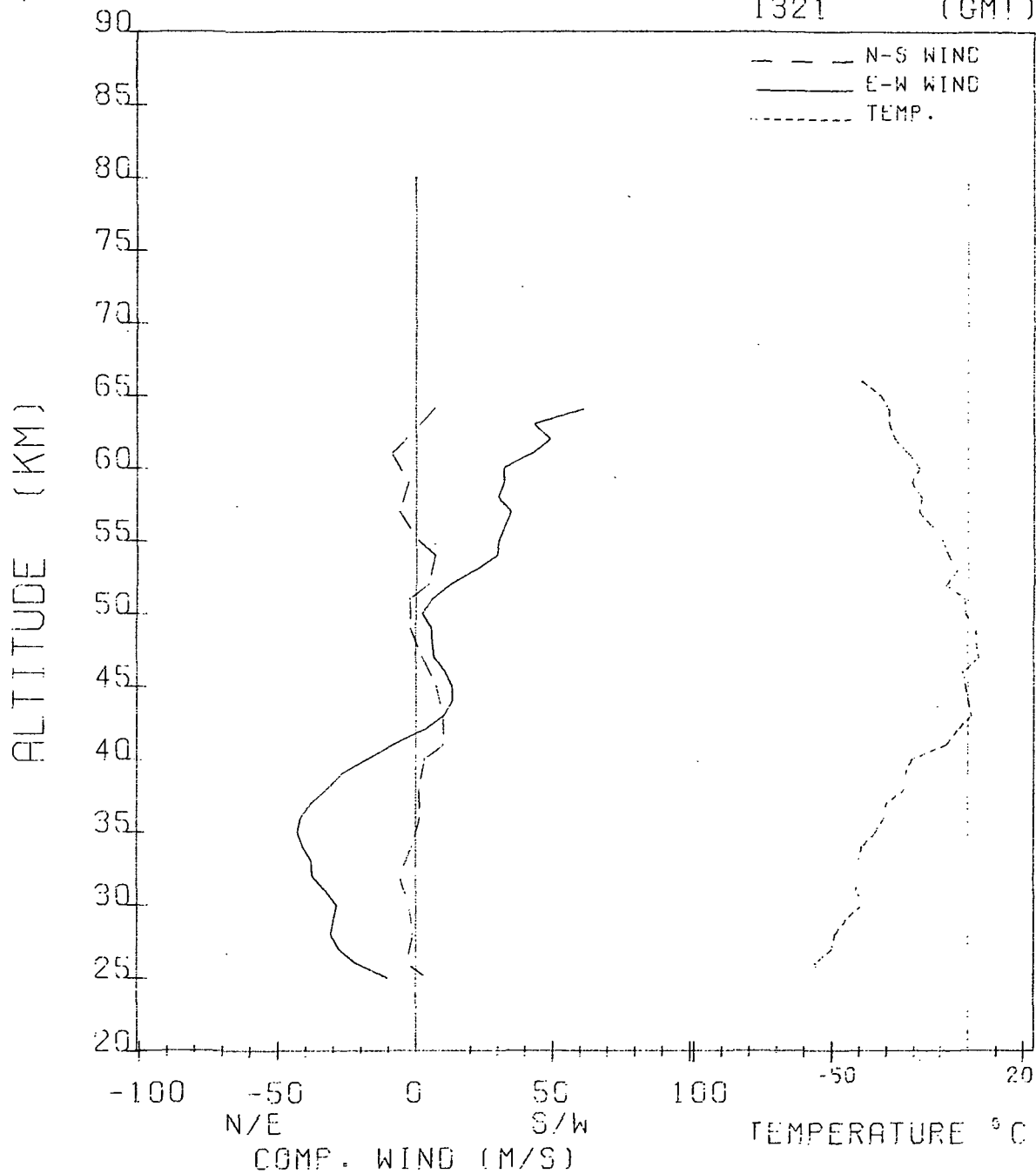
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED		FV (MPS)
			N-S (MPS)	E-W (MPS)	
66	-39	-18			111
65	-32	-12			118
64	-29	-11	6	60	118
63	-29	-10	2	43	111
62	-27	-9	-3	49	111
61	-22	-7	-9	42	105
60	-18	-6	-4	32	95
59	-21	-7	-3	32	87
58	-17	-5	-4	30	80
57	-18	-5	-6	35	77
56	-13	-4	-7	32	74
55	-9	-3	1	30	67
54	-7	-3	7	29	61
53	-4	-3	5	21	61
52	-8	-4	5	12	61
51	-1	-2	-2	6	57
50	-1	-2	-5	2	53
49	3	-2	-2	6	49
48	3	-2	1	6	45
47	4	-2	2	7	43
46	-2	-2	4	10	41
45	-1	-1	7	13	37
44	0	-1	7	13	34
43	1	-1	10	13	33
42	-4	-1	15	3	31
41	-8	-1	10	-8	29
40	-21	-2	3	-18	26
39	-23	-1	0	-27	24
38	-23	-1	1	-32	23
37	-30	-1	2	-38	23
36	-31	-1	1	-42	20
35	-34	-1	0	-43	18
34	-39	-1	-1	-41	17
33	-40	-1	-3	-38	16
32	-40	-1	-6	-37	15
31	-41	-1	-3	-33	13
30	-39	-1	-2	-29	12
29	-45	-1	-3	-30	11
28	-49	-1	-1	-31	10
27	-50	-1	-1	-28	9
26	-56	-1	-4	-21	8
25	-55	-1	4	-10	8



NATAL, BRAZIL

MAR. 20, 1974

1321 (GMT)



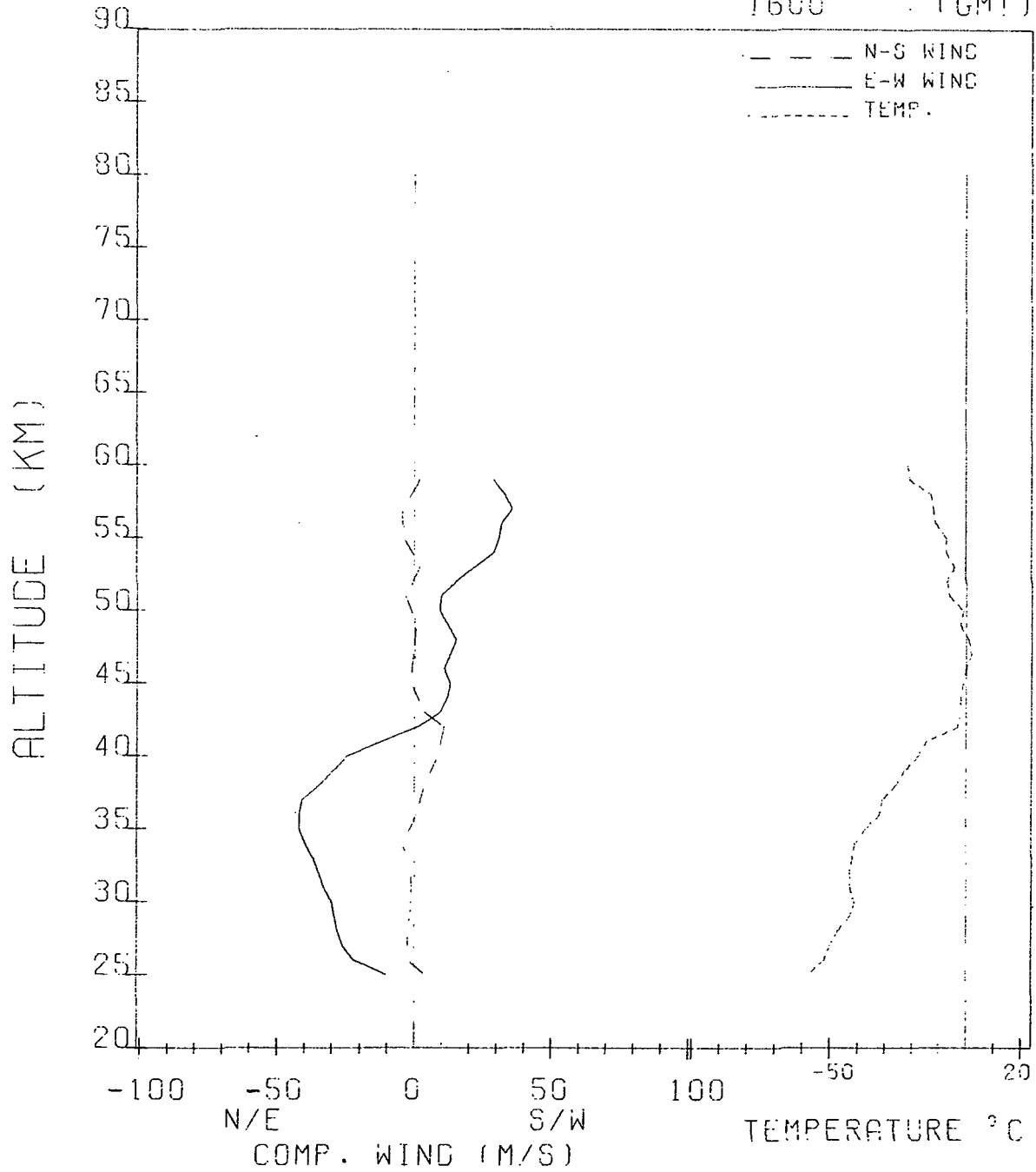
LAUNCH SITE Natal, Brazil 82599 LAT. 5.9S LONG. 35.2W  
 DATE March 20, 1974 TIME (GMT) 1600  
 FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute  
 PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
60	-22	-8	6	33	100
59	-21	-6	2	29	91
58	-13	-4	-2	33	80
57	-12	-4	-4	36	80
56	-11	-4	-4	32	77
55	-7	-4	-4	31	69
54	-7	-4	-1	29	63
53	-4	-3	3	22	57
52	-7	-3	0	15	56
51	-6	-3	-3	10	54
50	-1	-2	-1	9	51
49	-2	-2	1	12	48
48	1	-2	2	15	44
47	2	-2	0	13	42
46	0	-2	-2	11	39
45	-1	-1	-1	13	37
44	-2	-1	-1	12	35
43	-2	-2	4	9	34
42	-3	-1	11	1	31
41	-15	-2	12	-12	29
40	-18	-1	8	-25	28
39	-23	-1	4	-29	24
38	-26	-1	3	-34	21
37	-31	-1	2	-41	21
36	-32	-1	1	-42	20
35	-37	-1	-2	-42	19
34	-41	-1	-4	-40	17
33	-42	-1	-3	-36	16
32	-43	-1	-1	-35	15
31	-43	-1	-1	-33	13
30	-41	-1	-1	-30	12
29	-43	-1	-2	-29	11
28	-47	-1	-2	-28	10
27	-50	-1	-1	-26	8
26	-52	-1	-2	-22	8
25	-58	-1	4	-10	8

NATAL, BRAZIL

MAR. 20, 1974

1600 (GMT)



LAUNCH SITE Kourou, Fr. Guiana 81403 LAT. 5.1N LONG. 52.7W

DATE March 19, 1974 TIME (GMT) 1500

FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute

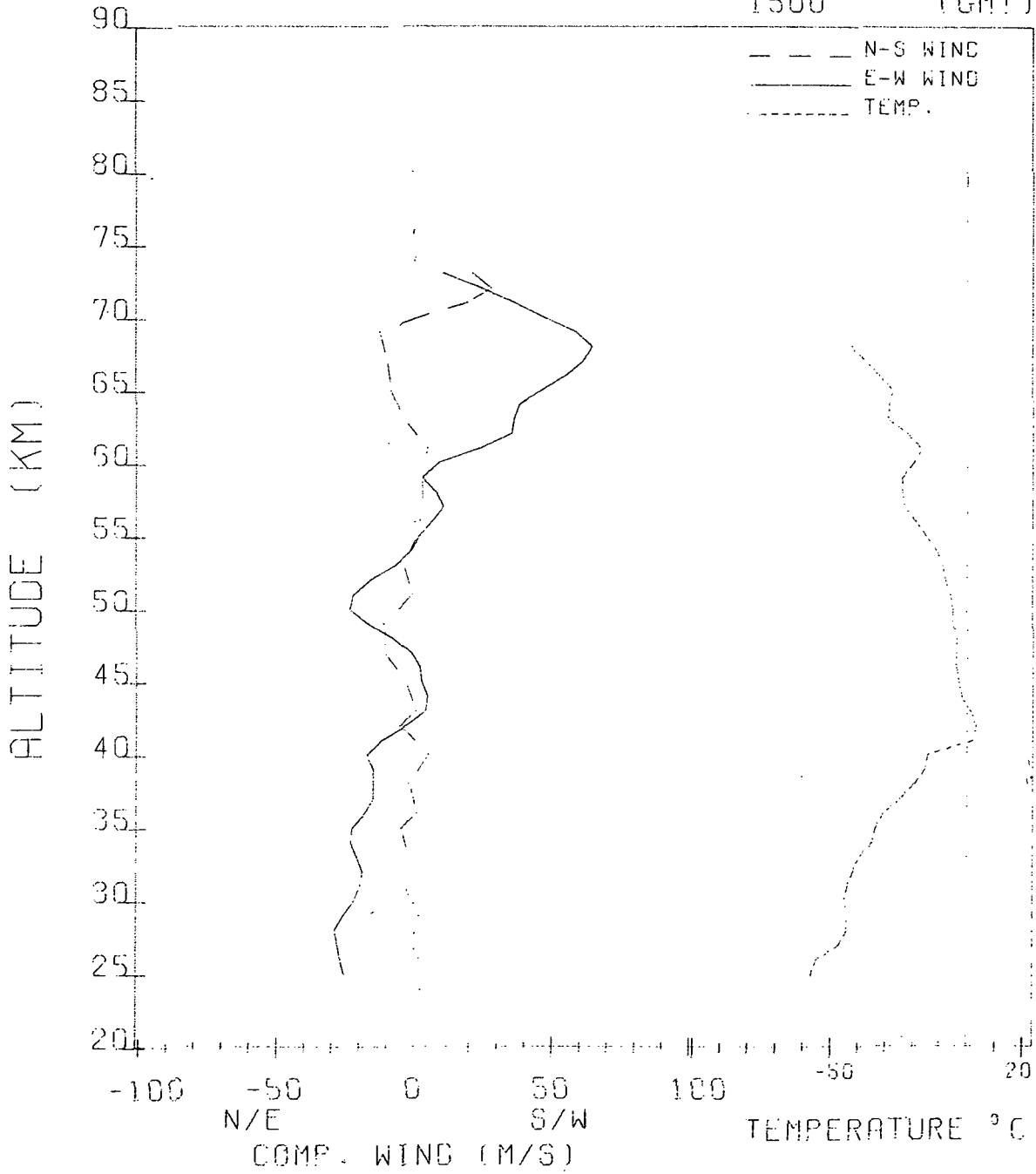
PWN-11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
73			21	11	235
72			28	24	224
71			19	36	210
70			2	47	195
69			-12	58	178
68	-42	-19	-13	65	165
67	-37	-17	-10	62	155
66	-32	-14	-10	55	146
65	-27	-12	-8	46	137
64	-29	-14	-5	38	129
63	-29	-12	-4	36	119
62	-22	-8	-1	35	112
61	-17	-7	4	24	106
60	-20	-9	5	8	100
59	-24	-8	3	3	91
58	-24	-6	1	8	85
57	-23	-5	3	11	79
56	-19	-4	3	7	74
55	-15	-3	1	2	69
54	-11	-3	-3	-1	66
53	-9	-3	-4	-7	62
52	-8	-3	0	-16	58
51	-6	-2	0	-22	54
50	-5	-2	-6	-24	51
49	-5	-2	-11	-17	48
48	-4	-2	-13	-8	45
47	-4	-2	-11	-1	42
46	-4	-2	-8	2	40
45	-3	-1	-3	3	37
44	-2	-1	2	5	34
43	1	-1	0	4	32
42	3	-1	-5	-3	31
41	2	-2	-1	-12	29
40	-15	-1	5	-17	26
39	-16	-1	1	-15	24
38	-20	-1	-2	-15	23
37	-25	-1	1	-15	21
36	-31	-1	1	-18	19
35	-34	-1	-5	-23	18
34	-35	-1	-6	-24	16
33	-40	-1	-2	-21	15
32	-42	-1	-3	-19	14
31	-44	-1	-3	-19	13
30	-45	-1	0	-22	12
29	-44	-1	2	-26	11
28	-44	-1	-1	-29	10
27	-47	-1	-1	-28	10
26	-55	-1	1	-27	8
25	-57	-1	5	-26	8

KOUROU; FR. GUIANA

MAR. 19, 1974

1500 (GMT)



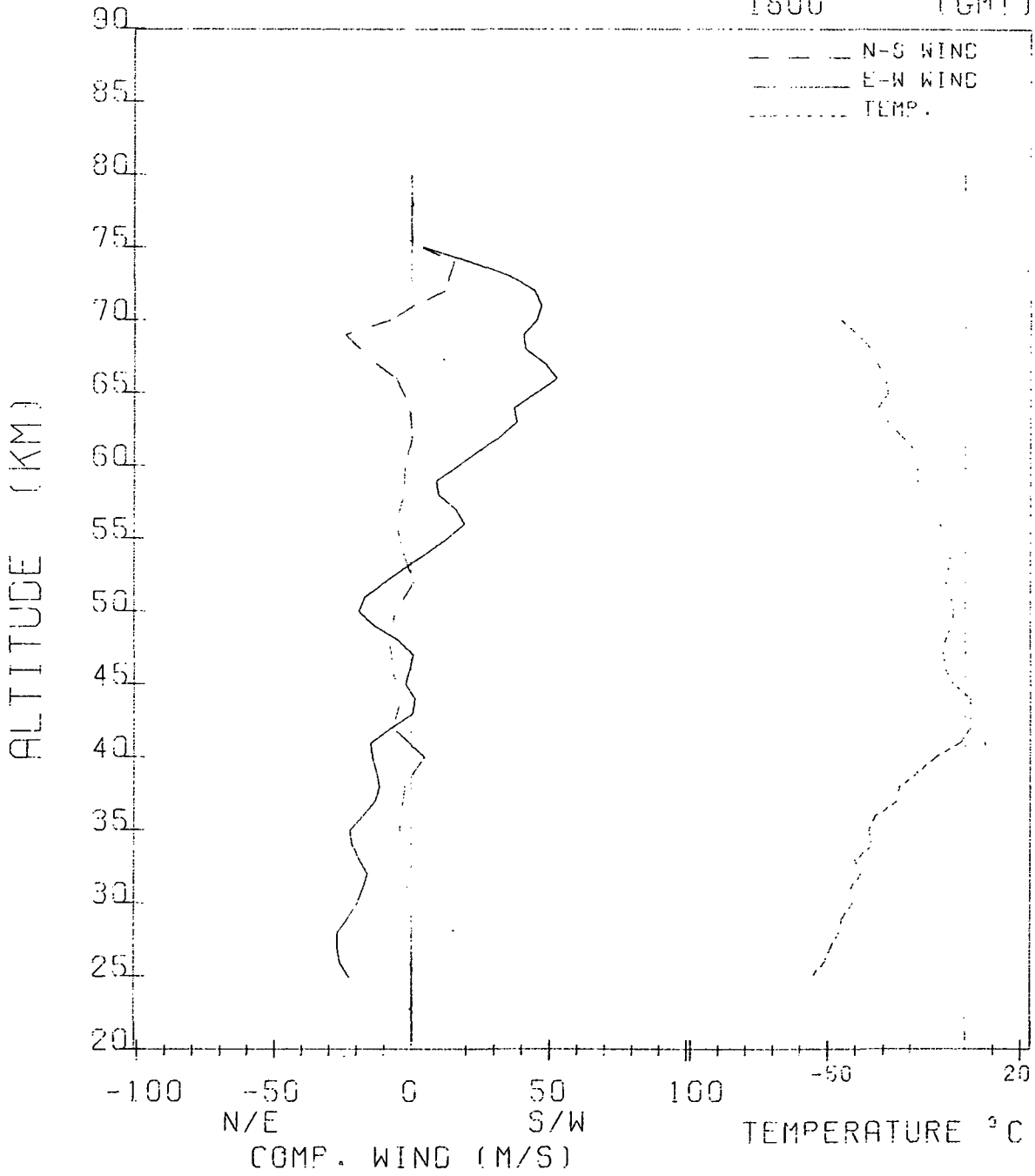
**LAUNCH SITE** Kourou, Fr. Guiana 81403 **LAT.** 5.1N **LONG.** 52.7W  
**DATE** March 19, 1974 **TIME (GMT)** 1800  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-11A **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
75			3	4	244
74			15	21	236
73			18	36	226
72			12	45	214
71			1	47	200
70	-45	-29	-8	45	189
69	-39	-24	-24	40	178
68	-34	-20	-25	42	166
67	-32	-19	-13	48	155
66	-29	-16	-5	52	147
65	-28	-16	-3	45	136
64	-32	-15	-1	37	125
63	-28	-9	2	38	117
62	-23	-8	0	32	110
61	-18	-7	-3	24	103
60	-17	-8	-2	17	99
59	-17	-7	2	9	91
58	-15	-5	-3	10	85
57	-12	-4	-8	16	80
56	-9	-4	-5	19	74
55	-7	-4	-3	13	71
54	-5	-3	-3	5	66
53	-6	-3	-3	-2	63
52	-7	-3	1	-10	58
51	-5	-2	0	-17	55
50	-4	-2	-6	-19	51
49	-5	-2	-8	-13	47
48	-7	-2	-8	-5	46
47	-8	-2	-5	1	41
46	-7	-2	-7	-1	39
45	-4	-1	-8	-2	38
44	2	-1	-4	1	37
43	2	-1	-4	1	33
42	2	-1	-7	-8	31
41	-2	-1	-1	-15	29
40	-11	-1	5	-14	27
39	-17	-1	2	-13	25
38	-24	-1	-2	-12	23
37	-25	-1	-4	-13	20
36	-33	-1	-4	-17	20
35	-35	-1	-5	-22	18
34	-34	-1	-5	-22	16
33	-40	-1	0	-19	14
32	-38	-1	-1	-16	14
31	-42	-1	-3	-18	13
30	-41	-1	-2	-20	12
29	-45	-1	-1	-23	11
28	-46	-1	-1	-27	10
27	-49	-1	-1	-27	10
26	-51	-1	-1	-26	8

KOUROU, FR. GUIANA

MAR. 19, 1974

1800 (GMT)



**LAUNCH SITE** Kourou, Fr. Guiana 81403 **LAT.** 5.1N **LONG.** 52.7W  
**DATE** March 19, 1974 **TIME (GMT)** 2100  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-11A **TEMP SENSOR** 10 mil bead loop mount

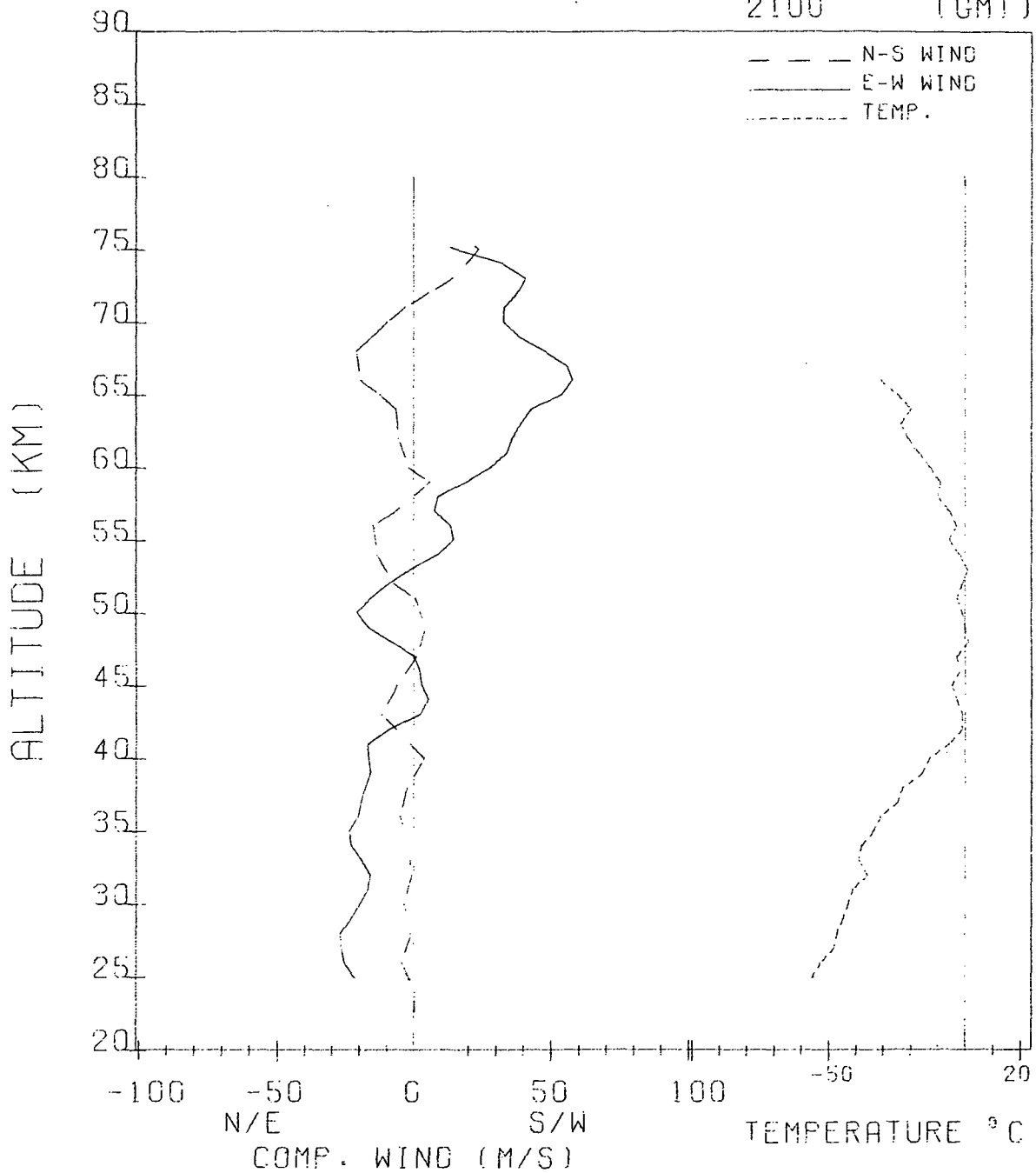
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
75			24	15	245
74			24	32	239
73			14	41	229
72			6	38	216
71			-3	32	204
70			-10	33	190
69			-15	38	177
68			-21	48	164
67			-23	55	152
66	-31	-13	-20	58	143
65	-25	-11	-12	53	135
64	-20	-10	-7	43	127
63	-24	-13	-5	39	119
62	-21	-8	-5	35	111
61	-17	-7	-5	33	103
60	-13	-6	-2	28	100
59	-9	-6	6	19	92
58	-10	-5	5	8	85
57	-6	-4	-7	7	80
56	-3	-4	-15	13	77
55	-6	-4	-14	14	70
54	-2	-3	-13	8	66
53	1	-3	-13	-1	63
52	-1	-4	-7	-9	59
51	-3	-2	0	-16	56
50	-1	-2	3	-21	52
49	0	-2	4	-17	48
48	1	-2	3	-8	47
47	-3	-2	0	0	43
46	-2	-2	-4	2	40
45	-5	-1	-6	3	38
44	-3	-1	-10	6	35
43	-1	-1	-12	2	34
42	-1	-1	-9	-9	31
41	-6	-1	-2	-17	35
40	-13	-1	4	-16	26
39	-16	-1	2	-16	25
38	-23	-1	-3	-18	23
37	-25	-1	-5	-19	21
36	-31	-1	-5	-20	19
35	-34	-1	-3	-24	18
34	-38	-1	-2	-23	17
33	-39	-1	1	-19	15
32	-36	-1	-1	-16	14
31	-41	-1	-3	-17	13
30	-43	-1	-3	-19	13
29	-45	-1	-1	-23	11
28	-47	-1	-1	-27	10
27	-48	-1	-4	-27	10



KOUROU, FR. GUIANA

MAR. 19, 1974

2100 (GMT)



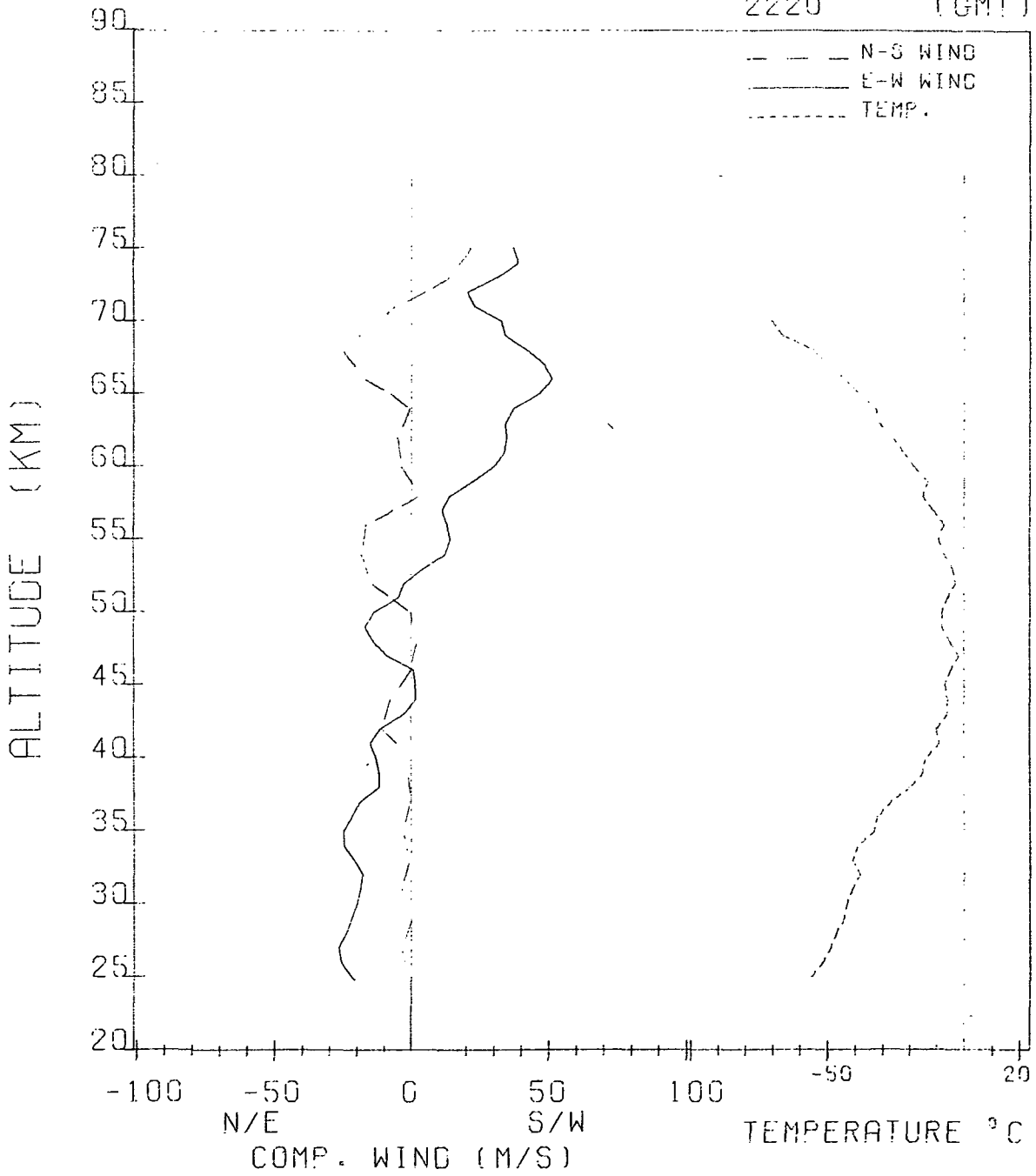
LAUNCH SITE Kourou, Fr. Guiana 81403 LAT. 5.1N LONG. 52.7W  
 DATE March 19, 1974 TIME (GMT) 2220  
 FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute  
 PWN-11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
75			22	37	251
74			20	39	242
73			14	31	232
72			5	21	220
71			-6	23	205
70	-70	-33	-13	33	190
69	-66	-28	-19	34	176
68	-55	-19	-25	41	163
67	-49	-16	-24	48	152
66	-43	-14	-17	51	144
65	-38	-12	-7	46	135
64	-32	-10	-1	37	127
63	-31	-11	-2	34	119
62	-26	-8	-5	35	111
61	-22	-7	-4	34	105
60	-18	-6	-4	30	100
59	-13	-5	1	22	94
58	-15	-7	3	13	88
57	-11	-4	-7	11	81
56	-7	-4	-17	13	78
55	-9	-5	-18	14	72
54	-7	-3	-18	12	68
53	-4	-3	-16	4	65
52	-6	-4	-7	-5	61
51	-8	-3	0	-14	56
50	-8	-2	2	-17	52
49	-5	-2	2	-14	48
48	-2	-2	1	-9	45
47	-3	-2	-1	-3	43
46	-5	-2	0	1	40
45	-7	-2	-2	2	38
44	-6	-1	-7	1	36
43	-6	-1	-11	-3	33
42	-10	-1	-11	-12	31
41	-9	-1	-6	-15	29
40	-14	-1	-1	-13	27
39	-15	-1	-1	-12	25
38	-20	-1	-2	-15	23
37	-27	-1	0	-19	21
36	-32	-1	-1	-22	19
35	-33	-1	-3	-25	19
34	-39	-1	-3	-25	17
33	-41	-1	-1	-21	15
32	-38	-1	-3	-18	14
31	-41	-1	-3	-18	13
30	-43	-1	-2	-20	12
29	-44	-1	1	-22	11
28	-47	-1	0	-26	10
27	-49	-1	-4	-27	10
26	-52	-1	-4	-25	9

KOUROU, FR. GUIANA

MAR. 19, 1974

2220 (GMT)



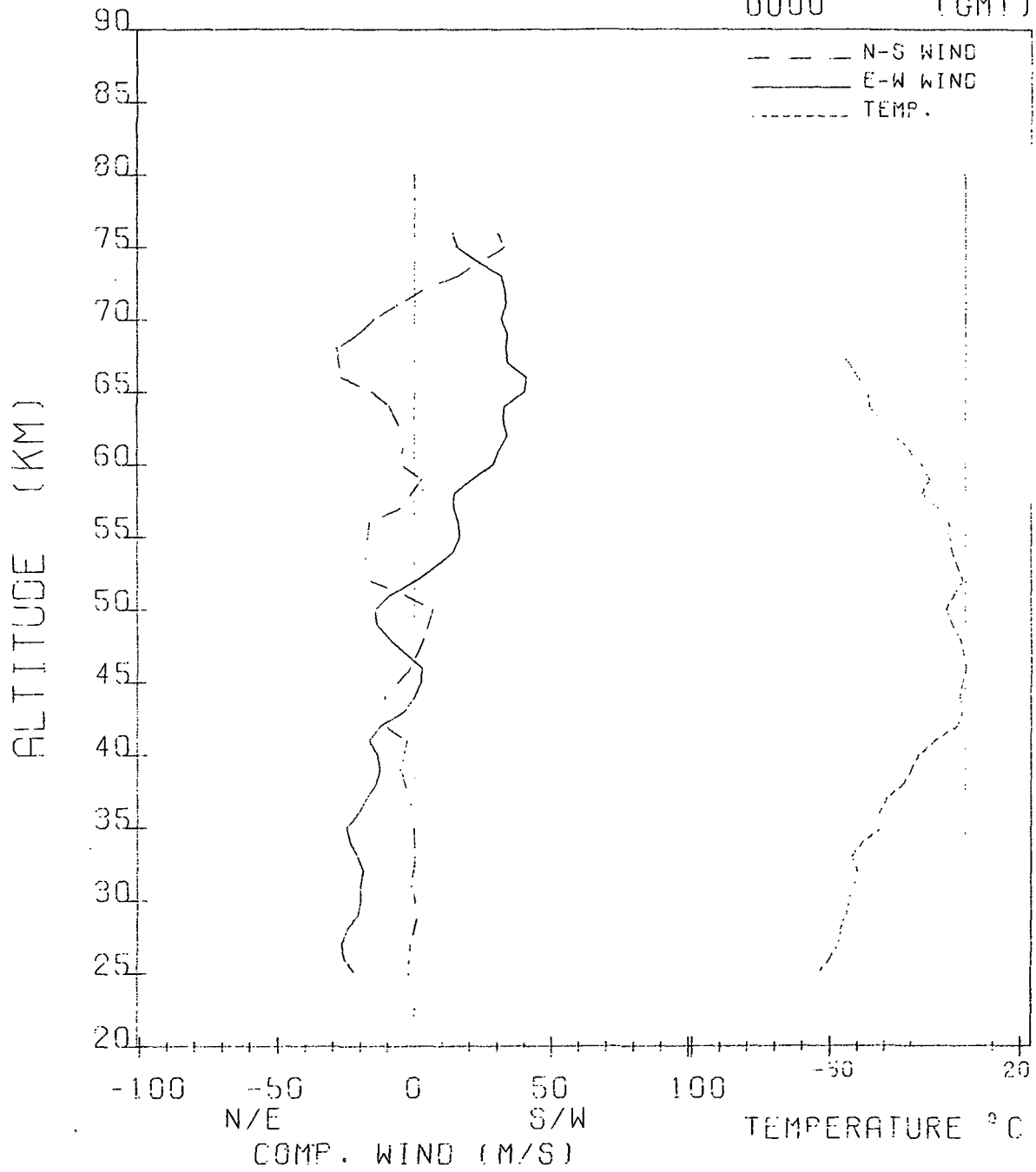
LAUNCH SITE Kourou, Fr. Guiana 81403 LAT. 5.1N LONG. 52.7W  
 DATE March 20, 1974 TIME (GMT) 0000  
 FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute  
 PWN - 11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
76			28	14	249
75			32	15	249
74			28	23	243
73			15	31	234
72			2	32	219
71			-7	33	206
70			-15	32	190
69			-21	34	178
68			-29	34	166
67	-43	-9	-34	34	153
66	-40	-8	-27	40	146
65	-36	-7	-16	39	137
64	-35	-7	-9	33	127
63	-31	-5	-7	32	119
62	-26	-4	-4	33	111
61	-21	-3	-5	31	105
60	-16	-3	-5	28	98
59	-13	-3	2	21	93
58	-16	-4	5	14	86
57	-10	-2	-6	14	81
56	-6	-2	-17	16	78
55	-6	-3	-19	16	72
54	-5	-2	-18	14	68
53	-3	-1	-21	7	63
52	-1	-1	-17	0	59
51	-4	-2	-4	-9	55
50	-7	-1	6	-15	52
49	-5	-1	7	-14	50
48	-2	-1	3	-9	48
47	-1	-1	-1	-3	44
46	0	-1	-2	2	42
45	-1	-1	-4	2	38
44	-2	0	-11	0	36
43	-1	0	-15	-4	35
42	-3	-1	-11	-13	32
41	-11	-1	-3	-17	31
40	-17	0	-1	-14	27
39	-20	0	-5	-13	25
38	-23	0	-7	-14	23
37	-29	0	-2	-18	21
36	-32	0	3	-21	19
35	-31	0	-1	-25	18
34	-38	0	-4	-24	16
33	-42	0	0	-21	15
32	-40	0	1	-19	14
31	-41	0	-1	-20	13
30	-43	0	-1	-20	12
29	-44	0	1	-21	11
28	-46	0	2	-25	10

KOUROU, FR. GUIANA

MAR. 20, 1974

0000 (GMT)



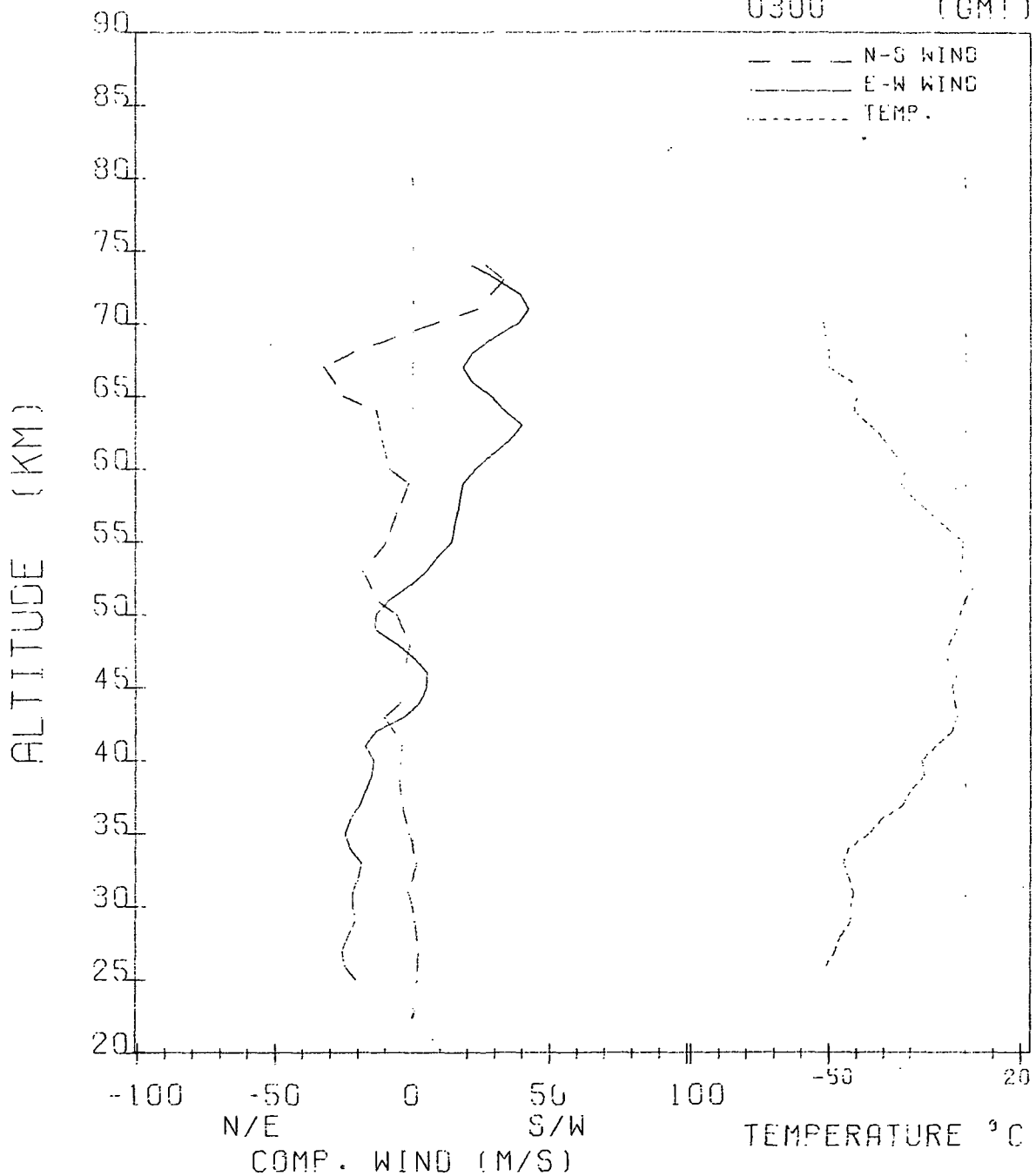
LAUNCH SITE Kourou, Fr. Guiana 81403 LAT. 5.1N LONG. 52.7W  
 DATE March 20, 1974 TIME (GMT) 0300  
 FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute  
 PWN-11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
74			27	22	242
73			33	31	236
72			31	39	225
71			23	42	213
70	-52	-24	8	38	198
69	-51	-21	-8	29	183
68	-50	-18	-22	21	169
67	-50	-15	-32	18	155
66	-42	-8	-34	22	143
65	-40	-8	-25	28	134
64	-41	-8	-14	34	125
63	-35	-4	-10	39	117
62	-30	-4	-12	36	109
61	-26	-4	-14	28	104
60	-22	-3	-9	23	96
59	-24	-6	-2	18	90
58	-19	-2	-2	17	84
57	-13	-1	-6	16	79
56	-7	-1	-8	15	75
55	-1	-1	-9	14	72
54	-1	-2	-13	9	68
53	-2	-2	-19	5	64
52	3	-1	-20	-1	59
51	0	-2	-13	-9	56
50	-2	-1	-6	-14	52
49	-3	-1	-2	-13	50
48	-6	-1	-1	-6	46
47	-7	0	-3	0	44
46	-3	-1	-3	5	41
45	-5	-1	-2	5	38
44	-4	0	-5	2	35
43	-3	0	-10	-3	33
42	-5	-1	-10	-14	31
41	-11	-1	-4	-18	29
40	-16	0	-3	-14	27
39	-15	0	-5	-15	25
38	-20	0	-5	-18	23
37	-23	0	-4	-20	21
36	-31	0	-3	-23	19
35	-36	0	-1	-25	18
34	-43	0	0	-23	16
33	-45	0	1	-19	15
32	-43	0	0	-20	14
31	-41	0	-1	-22	13
30	-42	0	-2	-22	12
29	-42	0	1	-21	11
28	-46	0	4	-24	10
27	-48	0	2	-26	9
26	-51	0	1	-25	9
25			1	-21	8

KOUROU, FR. GUIANA

MAR. 20, 1974

0300 (GMT)



LAUNCH SITE Kourou, Fr. Guiana 81403 LAT. 5.1N LONG. 52.7W  
 DATE March 20, 1974 TIME (GMT) 0600  
 FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute  
 PWN-11A TEMP SENSOR 10 mil bead loop mount

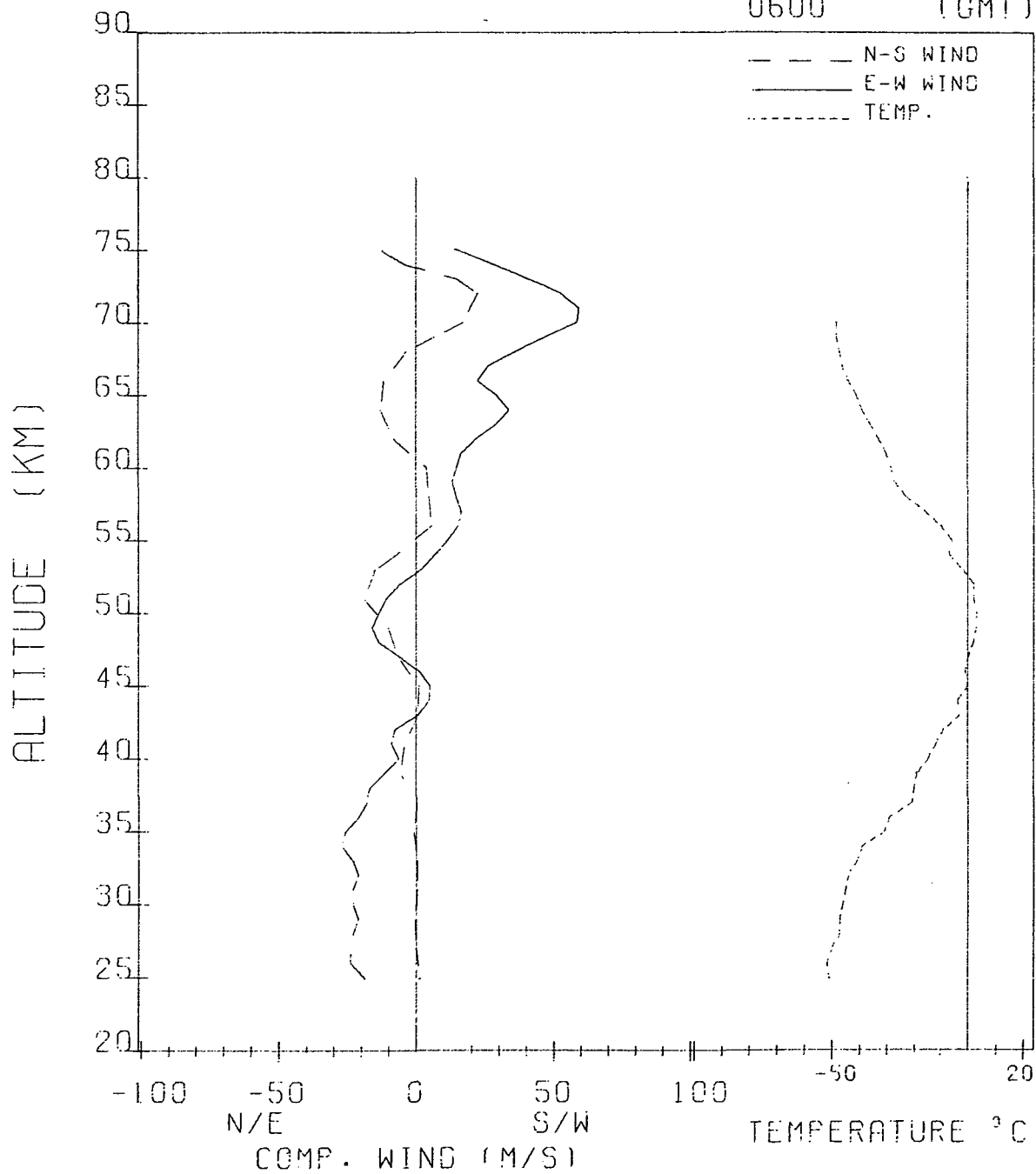
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
75			-19	14	244
74			-4	28	240
73			15	40	231
72			22	52	222
71			21	59	209
70	-48	-20	17	59	197
69	-48	-19	6	46	184
68	-47	-16	-4	36	171
67	-46	-14	-8	26	158
66	-44	-11	-12	22	147
65	-41	-9	-16	29	135
64	-39	-7	-13	33	125
63	-36	-6	-9	29	117
62	-33	-5	-8	21	109
61	-30	-4	-5	16	101
60	-28	-4	4	14	95
59	-27	-3	8	13	90
58	-23	-2	5	14	85
57	-16	-1	5	16	80
56	-10	-1	6	15	75
55	-6	-2	1	11	70
54	-7	-2	-8	6	67
53	-2	-1	-15	2	63
52	2	-1	-19	-6	60
51	2	-1	-19	-11	57
50	3	-1	-14	-14	54
49	3	-1	-10	-16	51
48	2	-1	-8	-13	48
47	0	-1	-7	-6	44
46	-1	-1	-4	1	41
45	0	-1	1	5	38
44	-4	0	4	5	36
43	-3	0	1	1	33
42	-9	-1	-4	-8	30
41	-12	0	-5	-9	28
40	-15	0	-5	-7	26
39	-19	0	-6	-12	24
38	-20	0	-2	-16	23
37	-21	0	0	-18	21
36	-29	0	0	-21	19
35	-31	0	-1	-26	18
34	-39	0	-1	-27	17
33	-41	0	0	-23	16
32	-44	0	0	-21	14
31	-45	0	1	-23	13
30	-46	0	-1	-23	12
29	-47	0	0	-21	11
28	-47	0	2	-23	10
27	-50	0	0	-24	9



KOUROU, FR. GUIANA

MAR. 20, 1974

0600 (GMT)



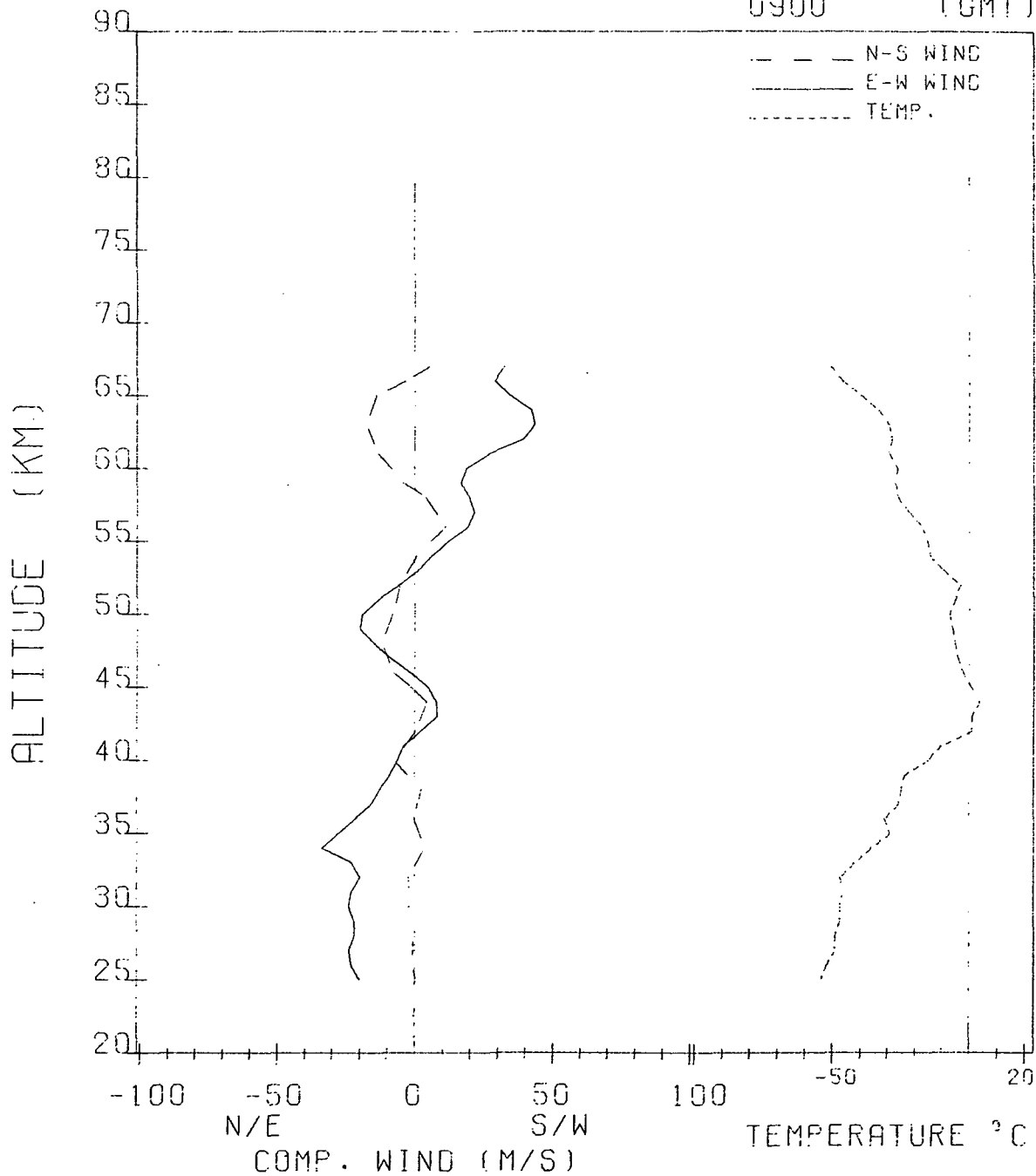
**LAUNCH SITE** Kourou, Fr. Guiana 81403 **LAT.** 5.1N **LONG.** 52.7W  
**DATE** March 20, 1974 **TIME (GMT)** 0900  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-11A **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
67	-50	-14	6	33	159
66	-46	-10	-4	29	146
65	-39	-6	-14	35	139
64	-33	-5	-18	43	129
63	-29	-5	-17	44	121
62	-28	-5	-15	40	114
61	-29	-6	-13	27	106
60	-26	-4	-10	18	99
59	-27	-5	-4	16	92
58	-26	-3	4	19	85
57	-22	-2	8	22	80
56	-17	-2	11	19	76
55	-15	-2	8	12	72
54	-14	-1	1	6	66
53	-9	-1	-4	1	64
52	-3	-1	-5	-6	60
51	-5	-2	-7	-14	57
50	-7	-1	-8	-20	53
49	-6	-1	-11	-20	49
48	-5	-1	-12	-14	47
47	-4	-1	-11	-9	44
46	-2	-1	-8	-2	41
45	1	0	-1	5	37
44	4	0	5	8	36
43	1	0	6	8	33
42	1	-1	0	2	31
41	-10	-1	-3	-4	29
40	-15	-1	-7	-6	28
39	-24	-1	-4	-9	25
38	-25	0	2	-13	23
37	-26	0	2	-16	21
36	-31	0	0	-22	19
35	-29	0	2	-28	19
34	-38	0	5	-28	17
33	-42	0	3	-23	16
32	-47	0	-2	-20	14
31	-46	0	-1	-23	13
30	-47	0	-2	-24	12
29	-47	0	-3	-22	11
28	-49	0	0	-22	10
27	-49	0	0	-24	9
26	-52	0	-1	-23	9
25	-54	0	0	-20	8

KOUROU, FR. GUIANA

MAR. 20, 1974

0900 (GMT)



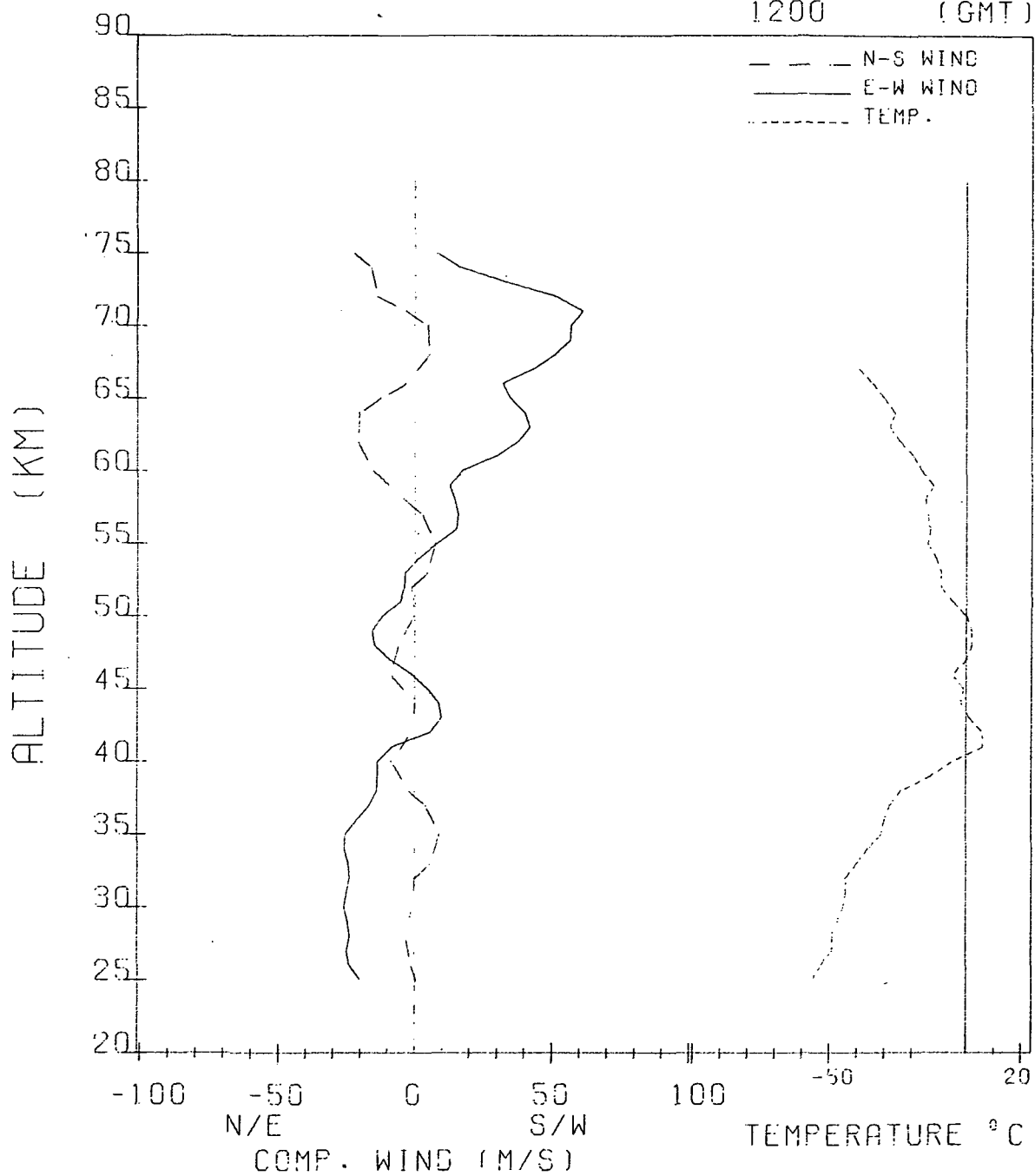
**LAUNCH SITE** Kourou, Fr. Guiana 81403 **LAT.** 5.1N **LONG.** 52.7W  
**DATE** March 20, 1974 **TIME (GMT)** 1200  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-11A **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
75			-23	8	231
74			-16	17	230
73			-18	33	226
72			-14	51	217
71			-3	61	208
70			6	59	196
69			7	55	183
68			5	51	169
67	-39	-18	4	43	157
66	-34	-15	-3	34	146
65	-30	-13	-13	35	135
64	-26	-11	-20	40	127
63	-28	-12	-24	42	119
62	-24	-8	-21	38	111
61	-19	-7	-17	29	105
60	-16	-6	-15	18	98
59	-12	-6	-11	12	92
58	-15	-7	-4	14	87
57	-14	-5	3	16	80
56	-13	-5	8	15	76
55	-14	-4	7	8	70
54	-11	-3	7	1	66
53	-9	-3	4	-3	62
52	-9	-3	-1	-4	58
51	-5	-2	-2	-5	55
50	0	-2	0	-12	52
49	2	-2	-3	-16	50
48	2	-2	-6	-14	46
47	0	-2	-8	-9	42
46	-5	-2	-9	-1	38
45	-1	-1	-5	5	37
44	-2	-1	0	8	35
43	1	-1	1	10	33
42	6	-1	-1	4	32
41	6	-1	-4	-9	29
40	-5	-1	-8	-14	27
39	-13	-1	-8	-14	24
38	-24	-1	-2	-13	22
37	-28	-1	4	-16	21
36	-30	-1	6	-21	20
35	-31	-1	9	-25	18
34	-36	-1	10	-26	16
33	-40	-1	6	-24	15
32	-44	-1	0	-24	14
31	-44	-1	1	-25	13
30	-45	-1	-1	-26	12
29	-47	-1	-5	-25	11
28	-49	-1	-3	-24	10
27	-49	-1	-2	-25	9
26	-53	-1	-1	-24	9

KOUROU, FR. GUIANA

MAR. 20, 1974

1200 (GMT)



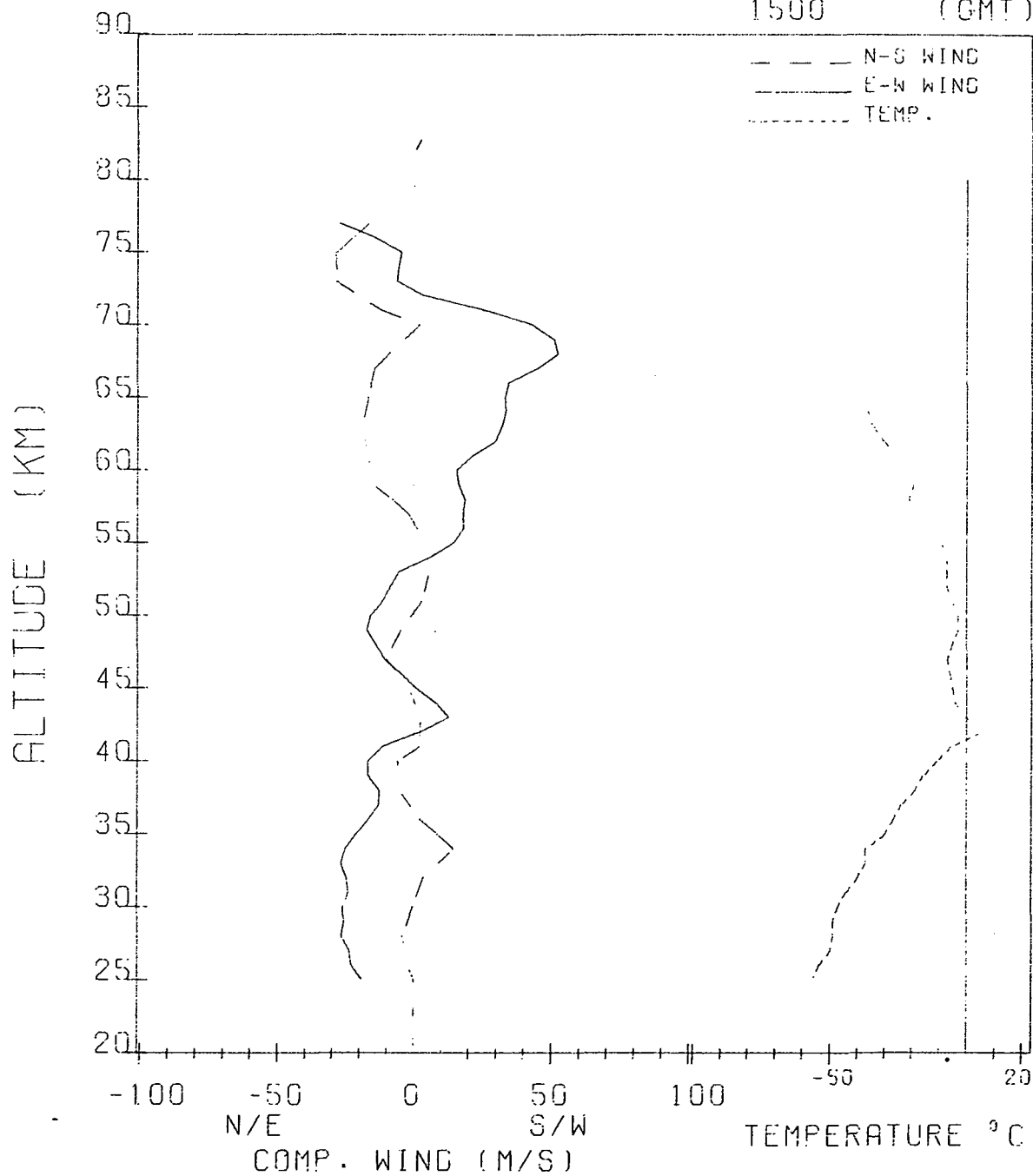
LAUNCH SITE Kourou, French Guiana 81403 LAT. 5.1N LONG. 52.7W  
 DATE March 20, 1974 TIME (GMT) 1500  
 FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute  
 PWN-11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
77			-17	-28	279
76			-23	-14	266
75			-26	-4	252
74			-26	-6	239
73			-29	-6	231
72			-26	3	229
71			-12	26	231
70			3	43	234
69			2	51	229
68			-9	52	215
67			-14	45	191
66			-15	36	169
65			-17	33	151
64	-36	-14	-19	33	137
63	-34	-12	-19	32	125
62	-30	-9	-19	29	116
61	-26	-8	-17	21	108
60	-22	-7	-17	16	102
59	-19	-7	-15	16	96
58	-21	-7	-8	18	90
57	-17	-5	-2	18	84
56	-13	-4	0	18	80
55	-9	-3	4	15	75
54	-7	-4	6	6	71
53	-7	-3	6	-6	67
52	-7	-3	7	-9	61
51	-5	-2	3	-11	58
50	-3	-2	0	-16	55
49	-3	-2	-5	-17	51
48	-5	-2	-8	-14	48
47	-7	-2	-10	-10	44
46	-6	-2	-8	-5	40
45	-5	-1	-2	1	38
44	-4	-1	1	8	36
43	0	-1	3	12	33
42	5	-1	5	2	32
41	-6	-2	2	-11	30
40	-11	-1	-6	-17	28
39	-16	-1	-10	-17	26
38	-19	-1	-6	-13	25
37	-24	-1	0	-13	24
36	-27	-1	2	-17	21
35	-30	-1	9	-21	20
34	-37	-1	15	-25	18
33	-37	-1	11	-27	18
32	-40	-1	3	-25	16
31	-44	-1	1	-24	15
30	-47	-1	0	-26	14
29	-49	-1	-3	-26	13

KOUROU, FR. GUIANA

MAR. 20, 1974

1500 (GMT)



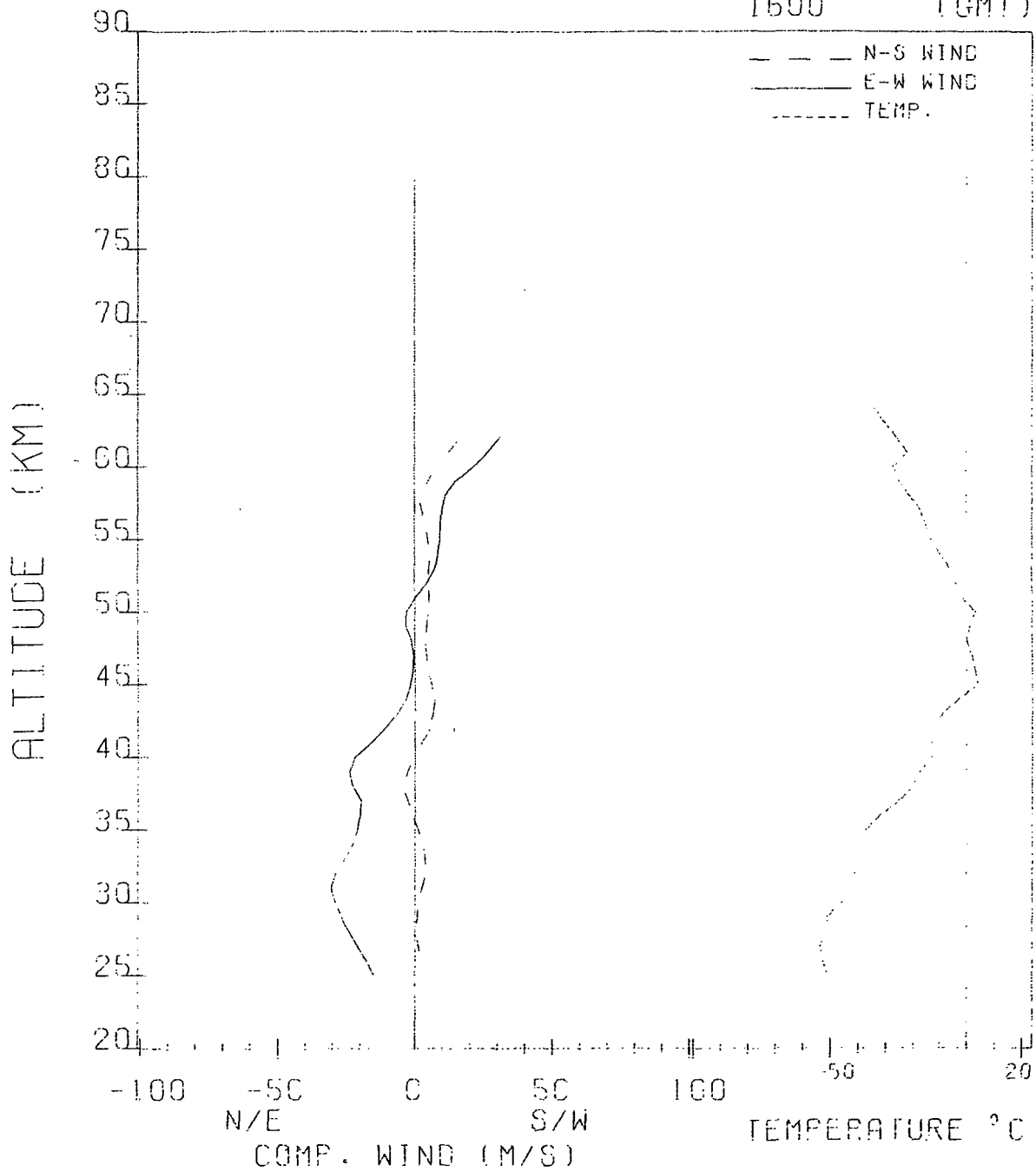
**LAUNCH SITE** Ft. Sherman, PCZ 78801 **LAT.** 9.3N **LONG.** 80.0W  
**DATE** March 19, 1974 **TIME (GMT)** 1600  
**FLIGHT SYSTEM** Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-8B **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
64	-34	-10			105
63	-30	-9			105
62	-26	-8	16	31	111
61	-22	-7	12	26	105
60	-27	-9	8	22	100
59	-25	-7	3	15	95
58	-21	-5	1	11	87
57	-17	-5	2	10	80
56	-15	-5	4	9	74
55	-13	-4	6	9	69
54	-10	-3	6	9	67
53	-6	-3	5	8	64
52	-4	-3	5	5	62
51	-2	-2	5	0	58
50	3	-2	5	-3	54
49	1	-2	4	-3	50
48	0	-2	4	-1	49
47	2	-2	4	-1	47
46	3	-2	5	-1	43
45	4	-1	5	-2	38
44	-3	-1	7	-3	34
43	-9	-1	8	-6	31
42	-12	-1	6	-10	30
41	-13	-1	2	-16	28
40	-13	-1	-1	-22	26
39	-17	-1	-3	-23	25
38	-20	-1	-4	-23	24
37	-25	-1	-4	-20	22
36	-32	-1	-1	-20	19
35	-37	-1	2	-21	18
34	-35	-1	3	-22	16
33	-37	-1	4	-26	15
32	-41	-1	4	-29	13
31	-44	-1	3	-31	12
30	-46	-1	1	-29	11
29	-51	-1	0	-27	10
28	-51	-1	1	-24	10
27	-54	-1	1	-21	9
26	-53	-1	2	-18	8
25	-51	-1	2	-15	8



FT. SHERMAN, C.Z.

MAR. 19, 1974  
1600 (GMT)



LAUNCH SITE Ft. Sherman, PCZ 78801 LAT. 9.3N LONG. 80.0W

DATE March 19, 1974 TIME (GMT) 1900

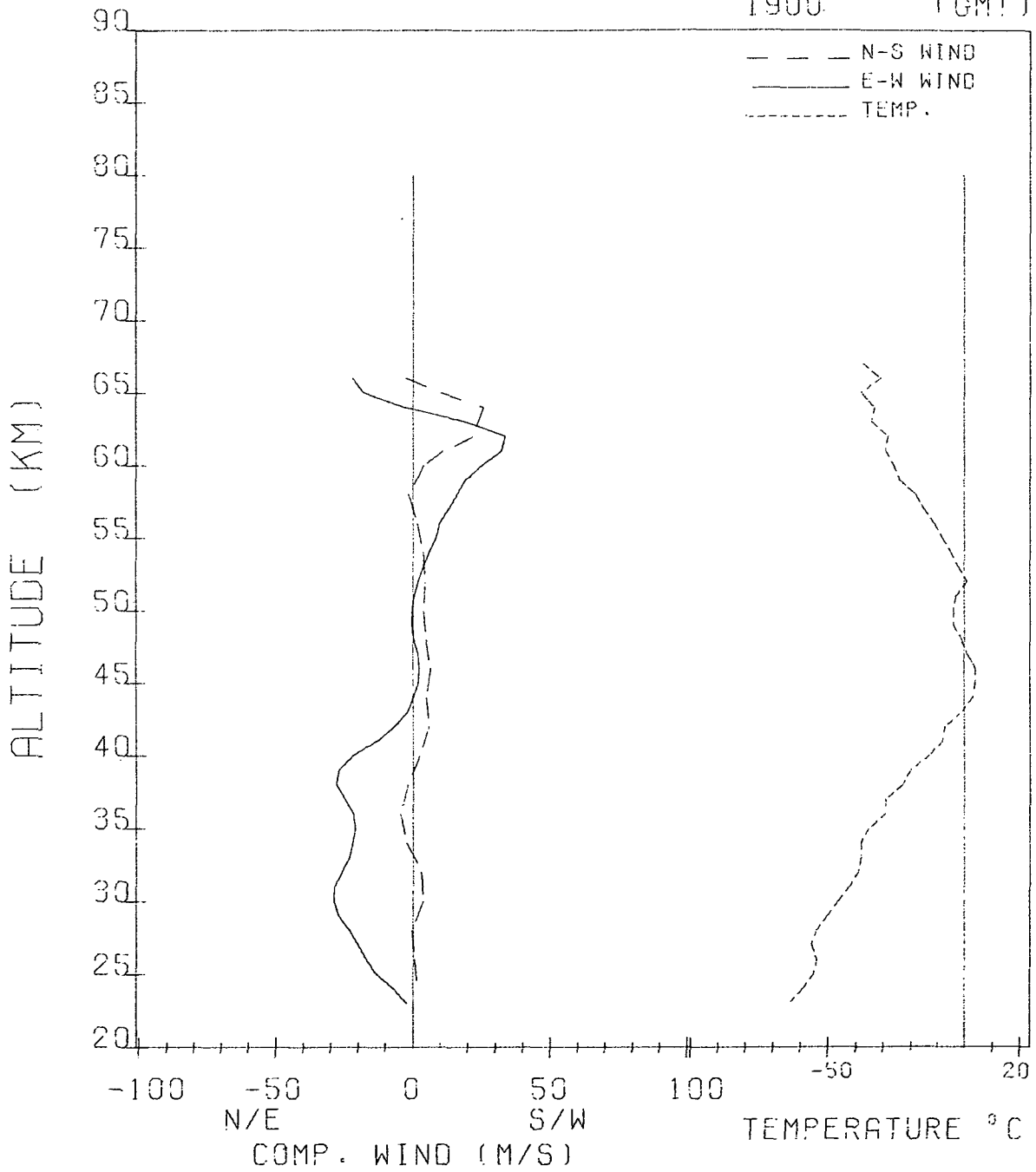
FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute

PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
67	-37	-20			154
66	-31	-14	-2	-22	143
65	-38	-17	10	-18	143
64	-33	-11	26	-3	137
63	-34	-12	30	19	126
62	-28	-8	22	33	112
61	-29	-9	11	32	101
60	-26	-7	4	25	94
59	-24	-7	0	19	91
58	-18	-4	-1	16	88
57	-15	-5	0	13	84
56	-11	-4	2	10	77
55	-8	-3	3	8	73
54	-5	-3	4	6	67
53	-2	-3	4	4	63
52	1	-2	5	2	58
51	-3	-3	4	1	56
50	-4	-2	3	-0	53
49	-4	-2	4	-1	50
48	-1	-2	5	0	47
47	1	-2	6	2	43
46	4	-1	7	2	41
45	4	-2	6	2	39
44	3	-1	5	0	37
43	-1	-2	5	-2	34
42	-7	-1	6	-7	31
41	-8	-1	5	-13	29
40	-13	-1	3	-22	26
39	-20	-1	0	-27	24
38	-23	-1	-2	-28	22
37	-29	-1	-4	-24	20
36	-29	-1	-4	-22	19
35	-35	-1	-4	-21	18
34	-38	-1	-2	-22	17
33	-38	-1	1	-23	15
32	-39	-1	3	-26	13
31	-42	-1	5	-29	12
30	-46	-1	4	-29	11
29	-50	-1	2	-27	11
28	-54	-1	0	-23	10
27	-56	-1	0	-20	9
26	-54	-1	1	-17	8
25	-55	-1	1	-13	7
24	-59	-1	2	-7	7
23	-64	-1	4	-2	6

FT. SHERMAN, C.Z.

MAR. 19, 1974  
1900 (GMT)



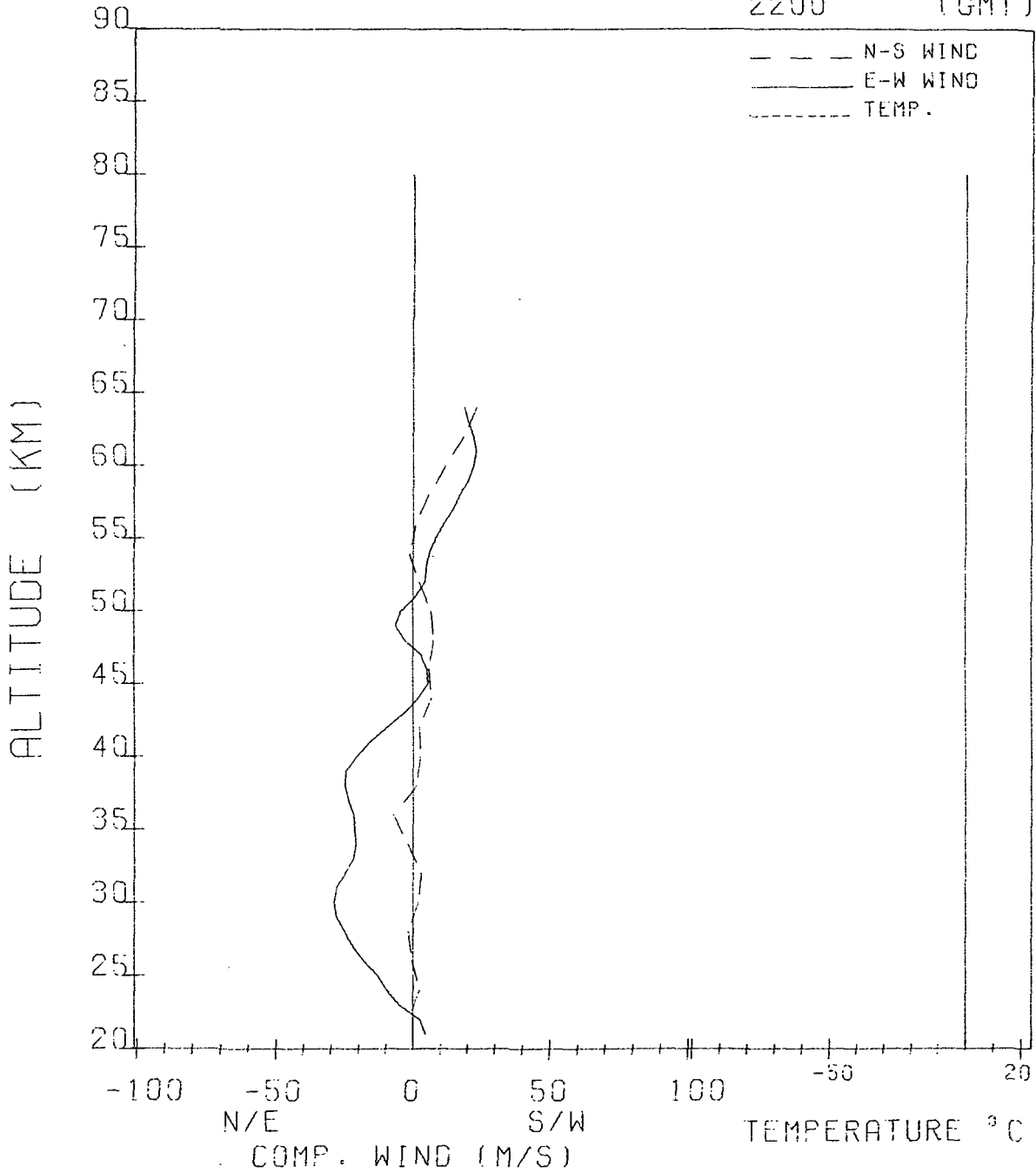
LAUNCH SITE Ft. Sherman, PCZ 78801 LAT. 9.3N LONG. 80.0W  
 DATE March 19, 1974 TIME (GMT) 2200  
 FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute  
 PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
64			24	19	143
63			22	20	143
62			19	22	143
61			16	23	143
60			12	22	143
59			9	20	137
58			6	17	126
57			3	14	112
56			1	11	98
55			-1	8	87
54			-2	6	77
53			-1	5	73
52			2	4	71
51			5	1	68
50			7	-5	66
49			8	-7	59
48			7	-3	54
47			7	3	48
46			6	6	47
45			5	5	45
44			7	2	42
43			5	-3	38
42			2	-10	34
41			1	-16	31
40			3	-21	28
39			4	-24	25
38			1	-25	23
37			-4	-23	21
36			-7	-22	20
35			-6	-21	19
34			-2	-21	18
33			2	-22	18
32			3	-25	16
31			3	-28	14
30			2	-29	13
29			-1	-28	12
28			-2	-25	11
27			-2	-22	10
26			0	-18	10
25			0	-14	9
24			2	-9	8
23			-1	-5	7
22			-1	-3	7
21			-2	-5	6

FT. SHERMAN, C.Z.

MAR. 19, 1974

2200 (GMT)



**LAUNCH SITE** Ft. Sherman, PCZ 78801    **LAT.** 9.3N    **LONG.** 80.0W  
**DATE** March 20, 1974    **TIME (GMT)** 0100  
**FLIGHT SYSTEM** Loki Datasonde    **WIND SENSOR** 7 ft. square starute  
**PWN-8B**    **TEMP SENSOR** 10 mil bead loop mount

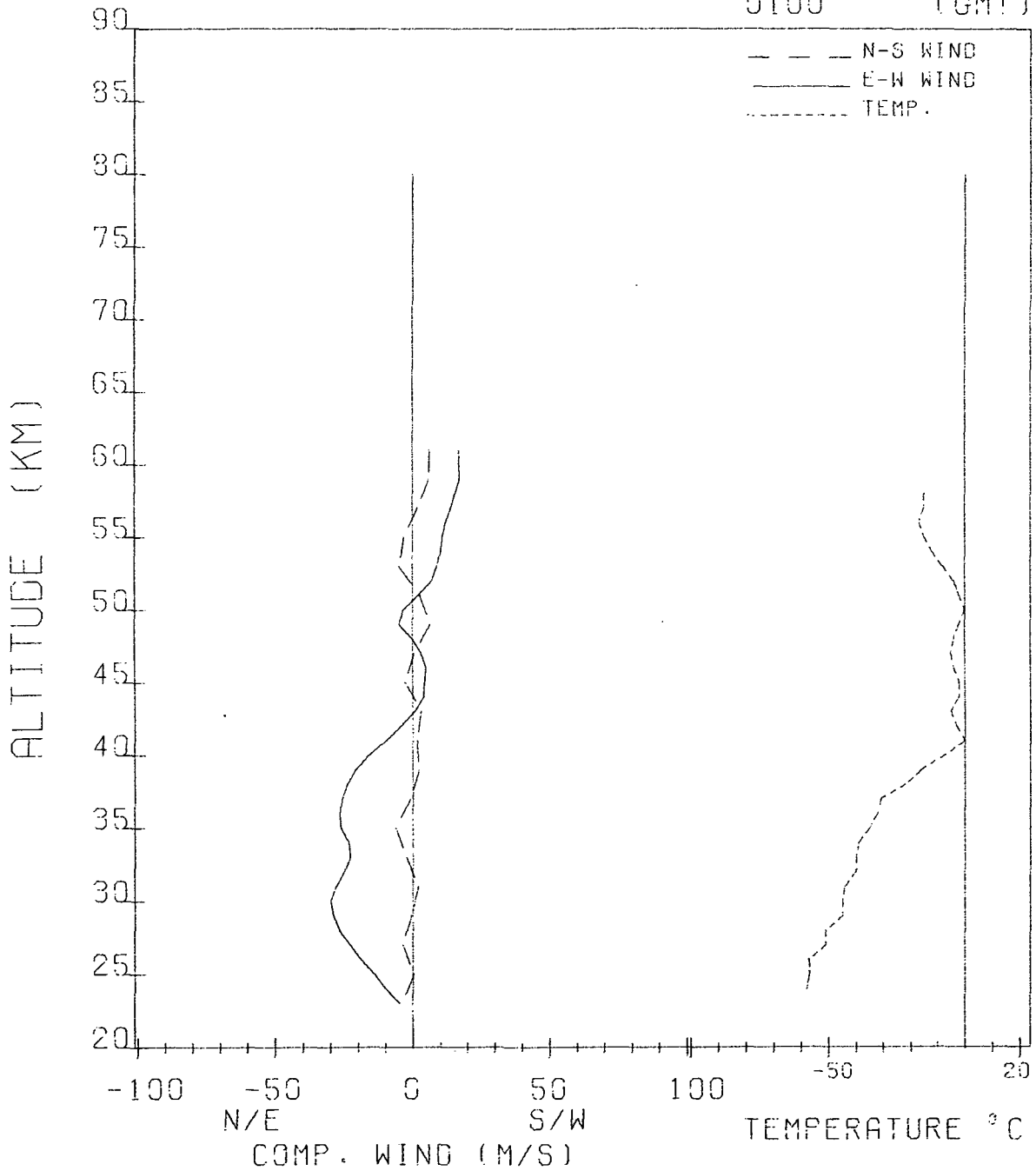
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
61			6	17	143
60			6	17	129
59			6	17	114
58	-15	-5	4	16	100
57	-15	-4	2	14	90
56	-17	-2	-1	12	81
55	-15	-2	-3	11	70
54	-12	-2	-5	10	68
53	-8	-1	-5	9	66
52	-4	-1	-1	7	63
51	-2	-1	3	2	58
50	0	-1	5	-3	55
49	-2	-1	6	-5	52
48	-4	-1	4	0	48
47	-5	-1	1	3	45
46	-4	-1	-4	5	42
45	-2	-1	-3	4	40
44	-2	-1	1	3	37
43	-5	-1	3	1	34
42	-3	-1	2	-5	31
41	0	-1	1	-10	29
40	-7	-1	1	-16	27
39	-16	0	2	-21	25
38	-22	-1	2	-24	23
37	-31	0	-1	-26	21
36	-32	0	-5	-27	20
35	-35	0	-6	-26	18
34	-39	0	-5	-24	16
33	-40	0	-2	-23	15
32	-40	0	0	-25	14
31	-44	0	2	-28	13
30	-45	0	2	-30	12
29	-45	0	-1	-29	11
28	-51	0	-3	-27	10
27	-51	0	-4	-23	9
26	-57	0	-2	-19	8
25	-57	0	0	-14	8
24	-58	0	-1	-10	7
23			-4	-4	6

FT. SHERMAN, C-Z.

MAR. 20, 1974

0100

(GMT)



LAUNCH SITE Ft. Sherman, PCZ 78801 LAT. 9.3N LONG. 80.0W  
 DATE March 20, 1974 TIME (GMT) 0400  
 FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute  
 PWN-8B TEMP SENSOR 10 mil bead loop mount

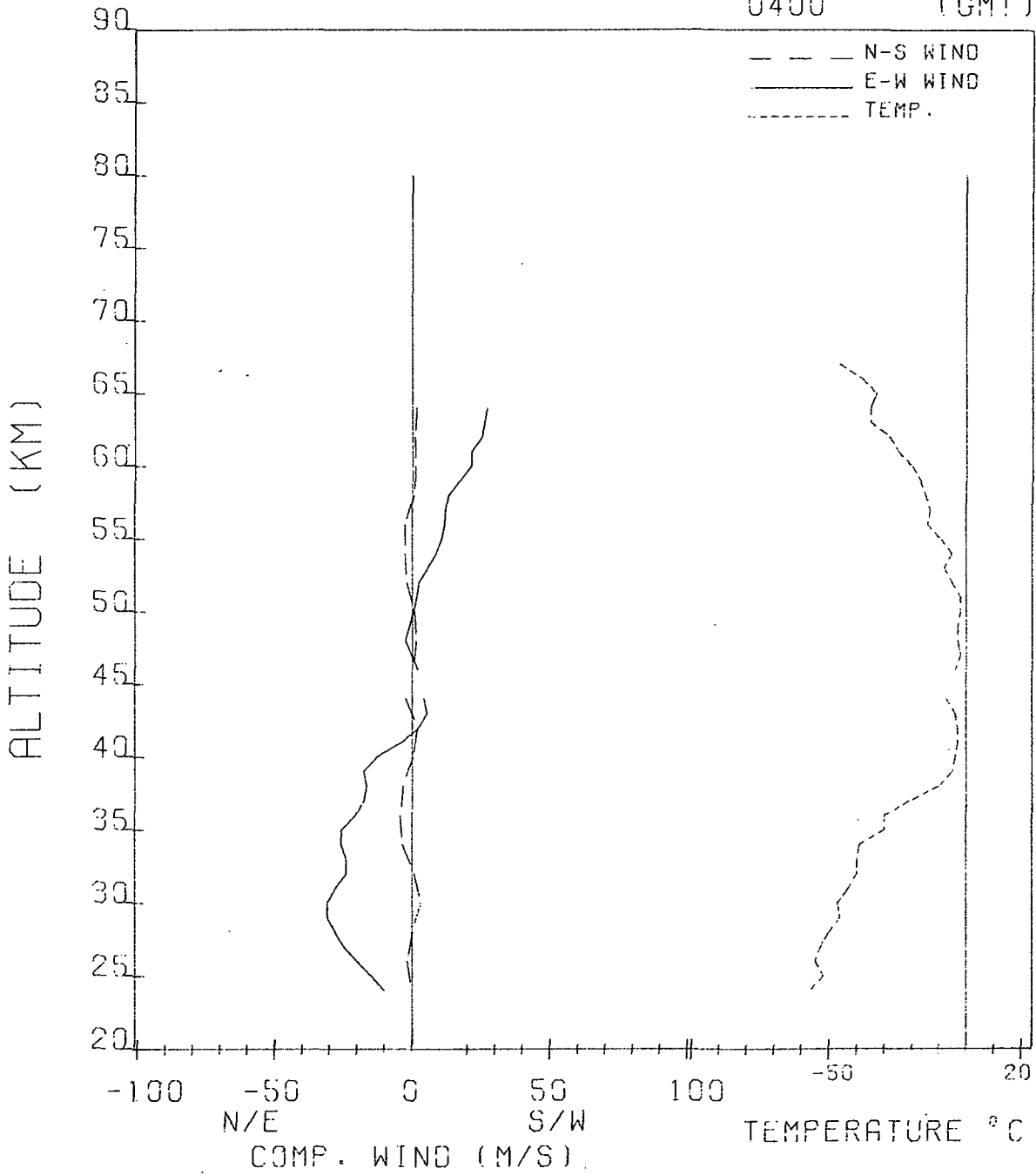
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
67	-46	-13			200
66	-38	-9			167
65	-33	-7			143
64	-35	-9	2	27	134
63	-35	-8	1	27	126
62	-28	-5	1	26	116
61	-25	-4	1	25	111
60	-20	-4	1	21	104
59	-17	-3	2	17	95
58	-15	-3	1	13	86
57	-13	-3	-1	12	83
56	-14	-3	-3	11	79
55	-9	-2	-3	10	75
54	-5	-1	-3	8	71
53	-8	-2	-2	5	66
52	-5	-1	-2	2	61
51	-2	-1	-1	1	56
50	-2	-2	1	0	56
49	-3	-1	0	-1	53
48	-3	-1	1	-2	50
47	-2	-1	1	0	44
46	-4	-1	0	2	41
45	-7	-1	-2	4	38
44	-4	0	-2	5	36
43	-3	-1	2	2	35
42	-3	0	1	-4	33
41	-4	0	0	-13	31
40	-5	-1	-3	-17	28
39	-10	0	-3	-17	26
38	-21	-1	-4	-17	23
37	-30	0	-4	-20	21
36	-30	0	-4	-25	20
35	-33	0	-5	-27	18
34	-39	0	-3	-25	17
33	-40	0	-1	-24	15
32	-40	0	1	-24	14
31	-43	0	3	-28	12
30	-47	0	3	-31	12
29	-46	0	2	-31	11
28	-50	0	0	-28	10
27	-53	0	-2	-25	9
26	-55	0	-2	-20	8
25	-52	0	0	-15	8
24	-57	0	0	-10	7



FT. SHERMAN, C.Z.

MAR. 20, 1974

0400 (GMT)



**LAUNCH SITE** Ft. Sherman, PCZ 78801 **LAT.** 9.3N **LONG.** 80.0W  
**DATE** March 20, 1974 **TIME (GMT)** 0700  
**FLIGHT SYSTEM** Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-8B **TEMP SENSOR** 10 mil bead loop mount

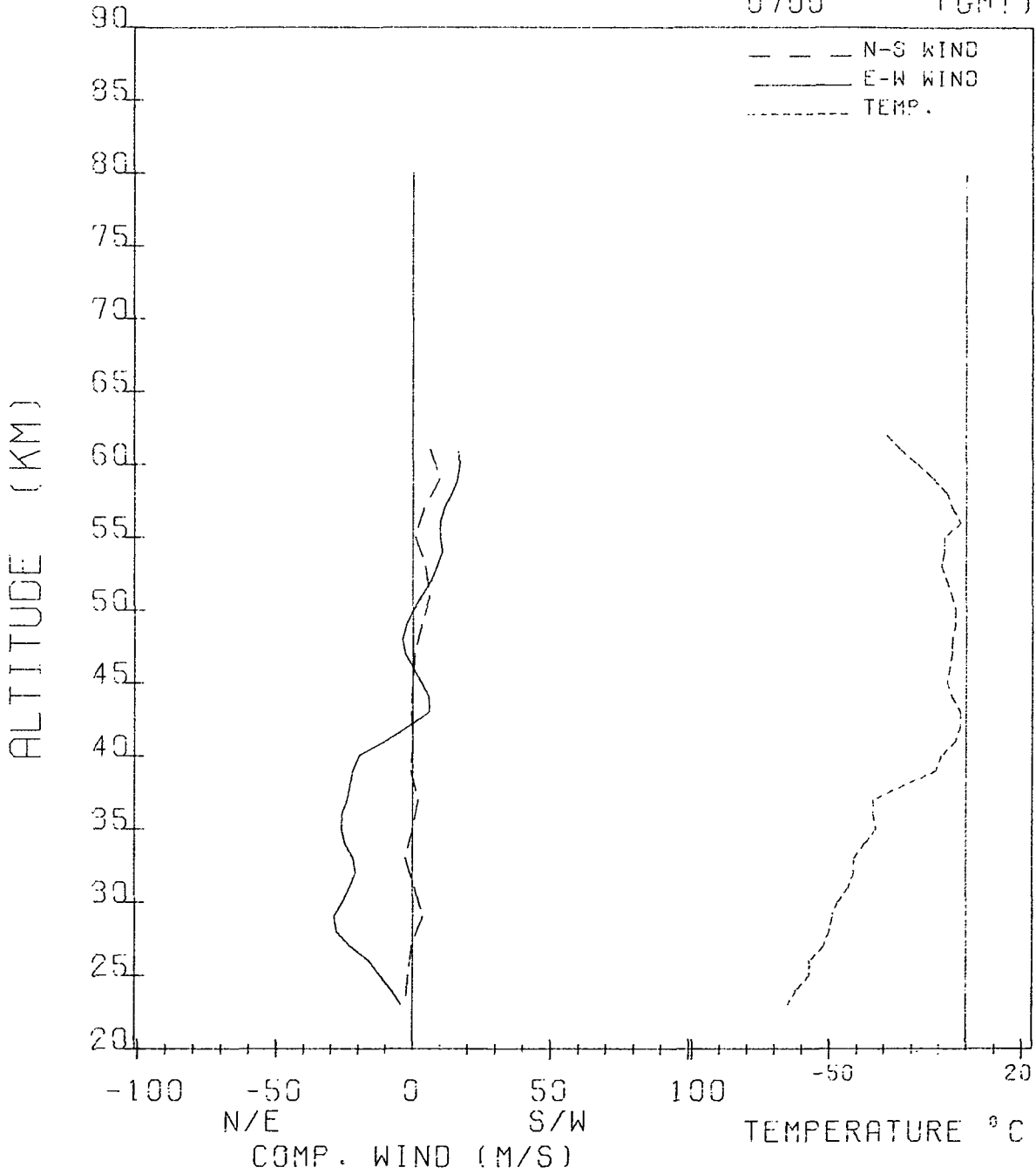
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62	-29	-2			100
61	-24	-2	7	17	95
60	-18	-2	8	17	91
59	-12	-1	10	16	86
58	-7	-1	8	14	83
57	-5	-2	4	11	81
56	-2	-2	1	10	79
55	-8	-3	1	10	75
54	-8	-2	3	11	70
53	-9	-2	5	9	63
52	-7	-2	6	7	58
51	-5	-1	6	3	55
50	-4	-1	5	0	53
49	-4	-1	3	-3	51
48	-5	-1	1	-4	48
47	-5	-1	1	-3	45
46	-6	-1	1	0	40
45	-7	-1	0	3	37
44	-5	0	-4	5	33
43	-2	0	-1	-6	32
42	-2	-1	-1	-2	30
41	-4	-1	0	-10	29
40	-9	-1	-3	-20	27
39	-11	-1	-1	-22	25
38	-23	-1	1	-23	22
37	-34	-1	2	-24	20
36	-34	0	2	-26	18
35	-33	0	0	-26	17
34	-37	0	-3	-24	16
33	-41	0	-3	-22	15
32	-41	0	-2	-20	13
31	-43	0	1	-23	12
30	-47	0	3	-26	11
29	-49	0	4	-29	10
28	-50	0	2	-28	9
27	-52	0	0	-23	9
26	-57	0	-1	-16	8
25	-57	0	-2	-12	7
24	-62	0	-2	-8	7
23	-65	0	-3	-4	6

FT. SHERMAN, C.Z.

MAR. 20, 1974

0700

(GMT)



LAUNCH SITE Ft. Sherman, PCZ 78801 LAT. 9.3N LONG. 80.0W

DATE March 20, 1974 TIME (GMT) 1015

FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute

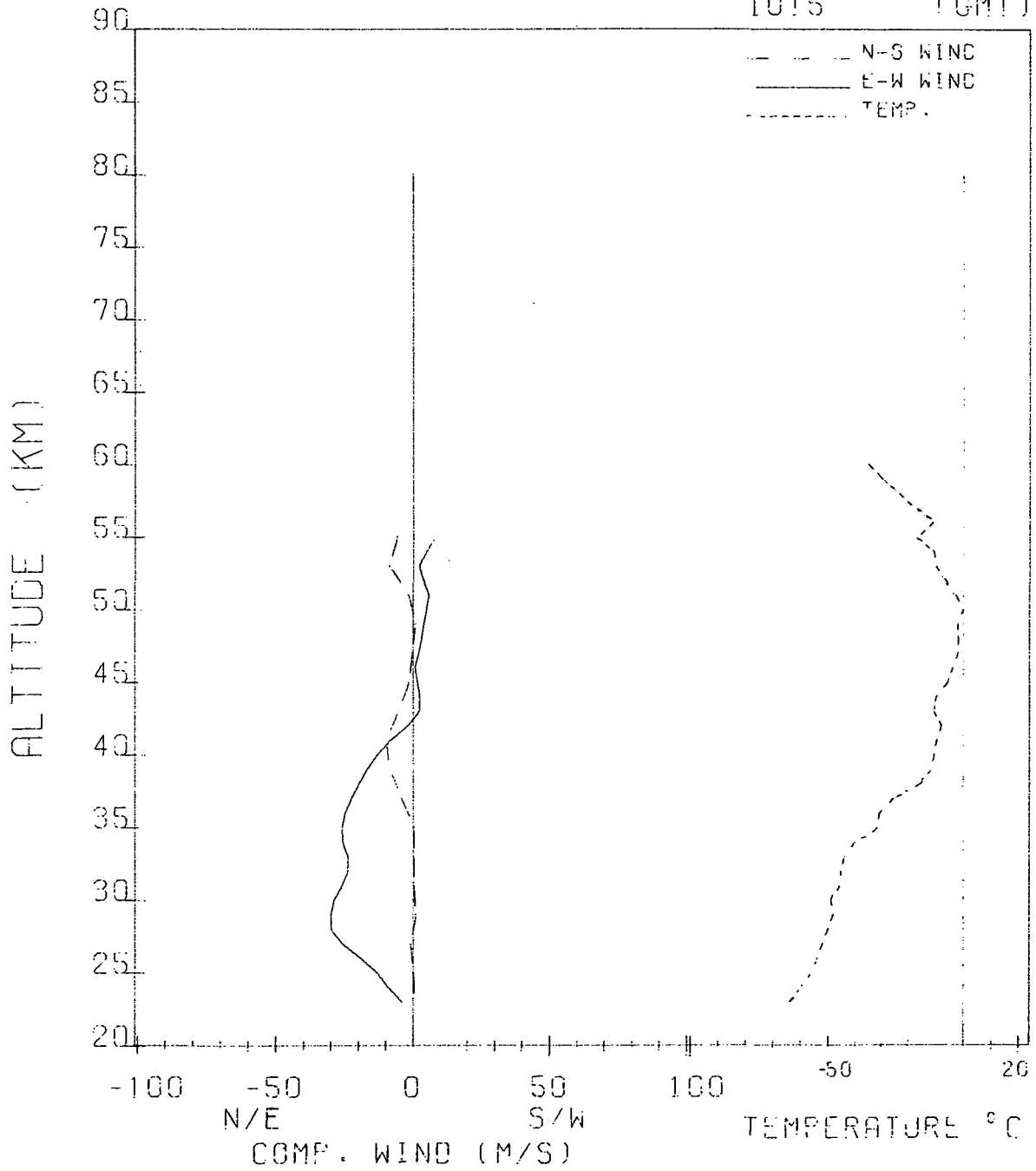
PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
60	-35	-9			105
59	-30	-7			100
58	-24	-6			95
57	-18	-5			90
56	-11	-4			80
55	-17	-6	-6	8	71
54	-11	-3	-7	5	67
53	-10	-3	-9	2	63
52	-7	-3	-5	4	59
51	-3	-2	-2	6	58
50	0	-2	1	5	54
49	-2	-2	1	4	51
48	-2	-2	0	3	47
47	-2	-2	0	2	45
46	-4	-2	-1	1	42
45	-6	-1	-1	1	39
44	-10	-2	-2	3	36
43	-11	-1	-5	2	34
42	-8	-1	-8	-2	31
41	-10	-1	-10	-8	30
40	-11	-1	-9	-13	27
39	-12	-1	-9	-17	25
38	-16	-1	-7	-20	24
37	-26	-1	-4	-22	22
36	-31	-1	-1	-25	20
35	-32	-1	1	-26	17
34	-40	-1	1	-26	16
33	-44	-1	1	-24	15
32	-45	-1	0	-24	14
31	-46	-1	0	-26	13
30	-49	-1	0	-29	11
29	-48	-1	1	-30	10
28	-50	-1	0	-30	10
27	-52	-1	-1	-26	9
26	-54	-1	-1	-19	8
25	-56	-1	0	-13	8
24	-60	-1	1	-9	7
23	-64	-1	0	-4	7

FT. SHERMAN, C.Z.

MAR. 20, 1974

1015 (GMT)



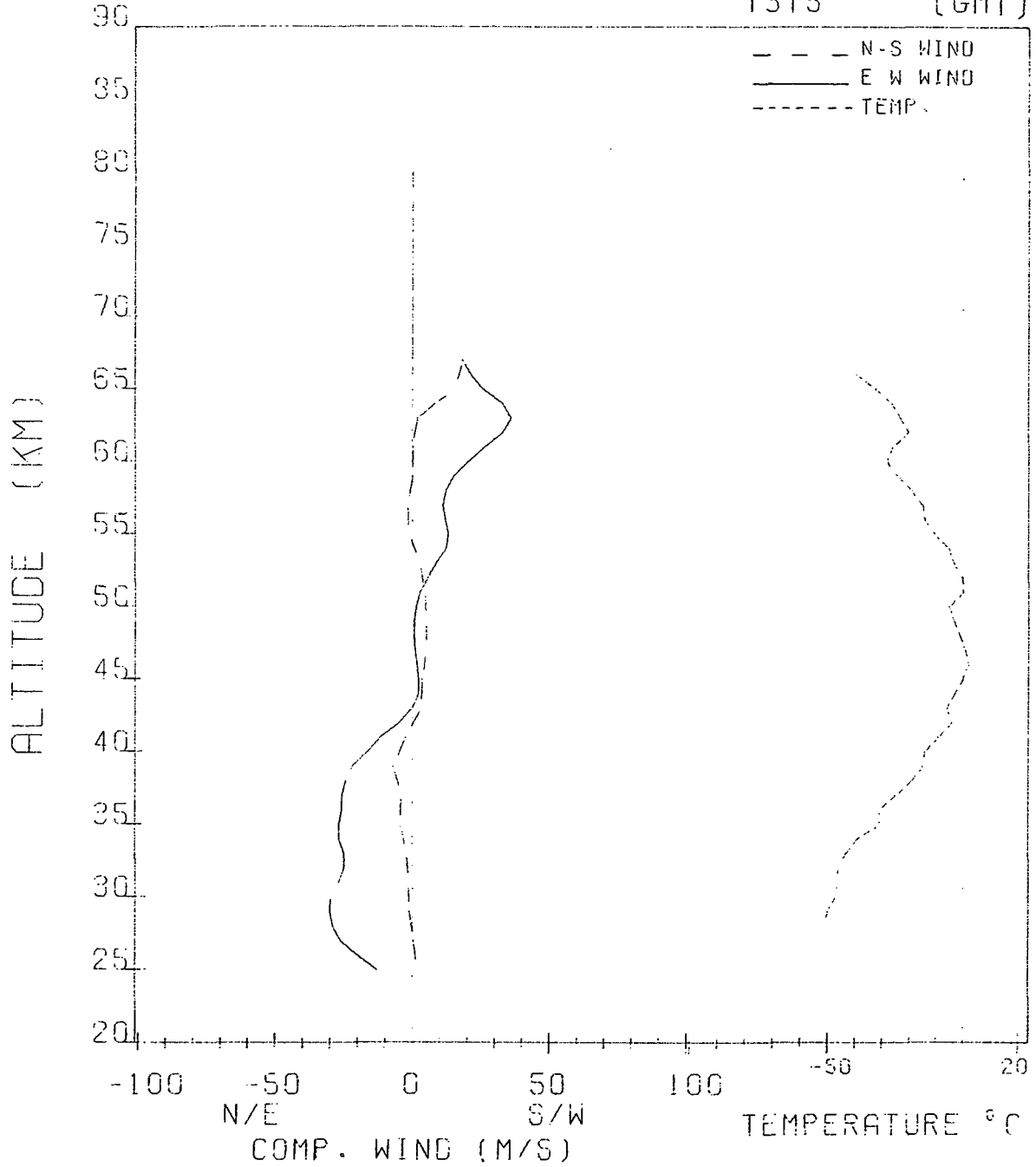
LAUNCH SITE Ft. Sherman, PCZ 78801 LAT. 9.3N LONG. 80.0W  
 DATE March 20, 1974 TIME (GMT) 1315  
 FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute  
 PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
67			19	18	125
66	-39	-8	19	22	118
65	-32	-8	16	26	111
64	-26	-8	8	33	111
63	-23	-10	2	36	111
62	-20	-8	-1	33	111
61	-26	-11	0	26	107
60	-28	-7	1	20	101
59	-24	-5	0	15	91
58	-19	-4	-1	12	84
57	-15	-5	-2	11	79
56	-14	-4	-2	12	77
55	-10	-4	-1	13	75
54	-5	-3	1	12	69
53	-3	-3	3	9	63
52	0	-3	4	6	58
51	0	-2	5	3	57
50	-5	-3	5	1	55
49	-3	-2	5	0	51
48	-1	-2	5	0	46
47	1	-1	5	1	43
46	2	-2	4	1	41
45	0	-2	3	2	39
44	-3	-2	2	2	36
43	-6	-1	3	0	34
42	-4	-1	1	-5	31
41	-9	-1	-3	-11	29
40	-14	-1	-7	-17	27
39	-15	-1	-7	-21	26
38	-19	-1	-5	-24	23
37	-25	-1	-4	-25	21
36	-31	-1	-3	-26	19
35	-31	-1	-4	-27	18
34	-39	-1	-4	-27	16
33	-43	-1	-2	-25	15
32	-46	-1	-1	-25	13
31	-46	-1	-1	-27	12
30	-47	-1	-2	-30	11
29	-50	-1	-1	-30	10
28	-51	-1	0	-29	9
27			1	-26	9
26			0	-20	8
25			2	-13	8

FT. SHERMAN, C.Z.

MAR. 20, 1974

1315 (GMT)



**LAUNCH SITE** Antigua, BWI 78861 **LAT.** 17.2N **LONG.** 61.8W  
**DATE** March 19, 1974 **TIME (GMT)** 1501  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-11A **TEMP SENSOR** 10 mil bead loop mount

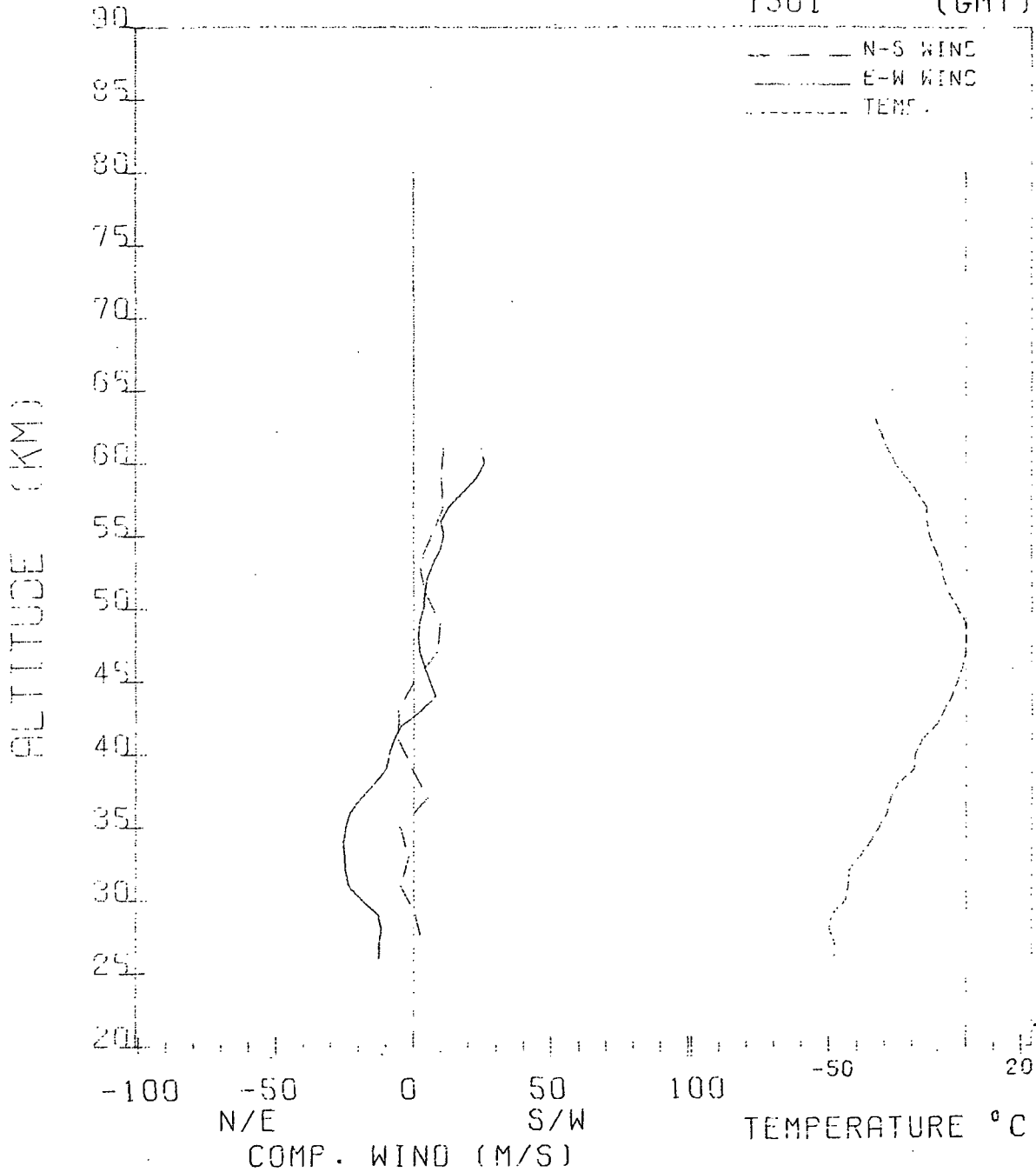
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
63	-33	-11			125
62	-31	-10			117
61	-29	-8	11	25	110
60	-26	-7	11	26	102
59	-22	-6	10	23	97
58	-18	-5	9	18	92
57	-14	-5	11	13	87
56	-14	-5	10	10	82
55	-13	-4	7	11	76
54	-11	-4	5	10	72
53	-9	-3	2	6	67
52	-8	-3	1	5	62
51	-6	-3	4	4	59
50	-3	-2	9	3	55
49	0	-2	10	2	52
48	0	-2	10	2	48
47	0	-2	9	2	45
46	-1	-2	4	4	42
45	-3	-2	0	6	39
44	-5	-1	-4	8	37
43	-8	-1	-6	3	34
42	-11	-1	-5	-4	33
41	-16	-1	-5	-7	30
40	-19	-1	-4	-9	28
39	-19	-1	0	-11	25
38	-25	-1	5	-14	24
37	-28	-1	5	-19	23
36	-29	-1	0	-23	21
35	-32	-1	-5	-25	20
34	-35	-1	-5	-26	19
33	-39	-1	-2	-25	17
32	-43	-1	-2	-25	16
31	-43	-1	-5	-24	15
30	-44	-1	-3	-18	14
29	-49	-1	1	-13	13
28	-50	-1	3	-12	12
27	-48	-1	3	-12	11
26	-48	-1	3	-12	10



ANTIGUA, B.W.I.

MAR. 19. 1974

1501 (GMT)



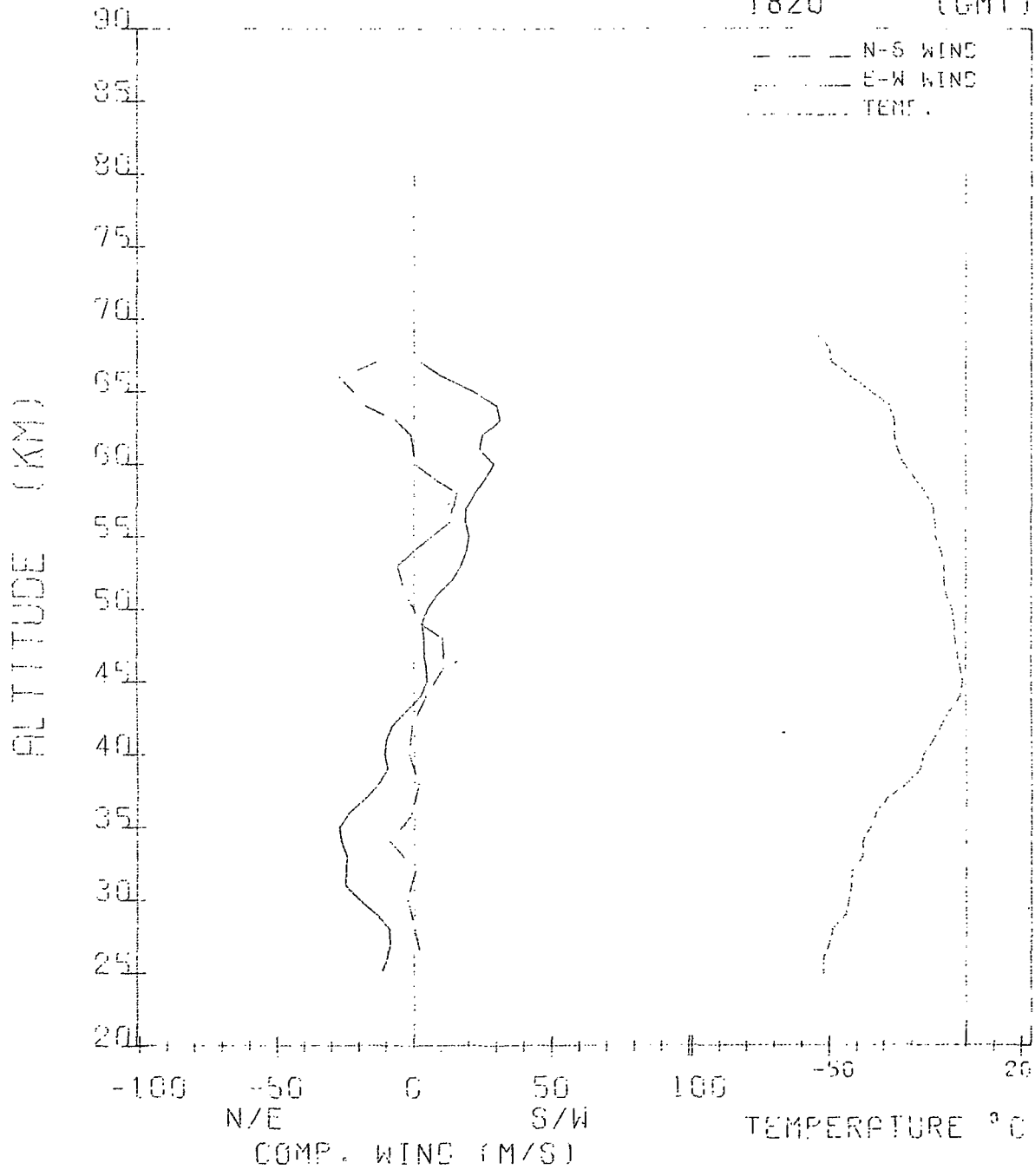
**LAUNCH SITE** Antigua, BWI 78861 **LAT.** 17.2N **LONG.** 61.8W  
**DATE** March 19, 1974 **TIME (GMT)** 1820  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-11A **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
69	-55	-28			184
68	-50	-24			171
67	-49	-21	-13	3	158
66	-42	-15	-27	10	146
65	-35	-11	-28	21	136
64	-28	-9	-17	30	129
63	-26	-11	-7	32	122
62	-26	-10	-1	25	113
61	-25	-9	-1	24	105
60	-23	-7	1	29	99
59	-19	-6	8	26	93
58	-15	-5	15	22	88
57	-12	-5	18	19	83
56	-11	-4	13	19	77
55	-11	-4	6	20	73
54	-9	-3	0	19	69
53	-8	-3	-6	16	65
52	-8	-3	-6	14	60
51	-7	-2	-3	9	56
50	-5	-2	-2	5	53
49	-4	-2	3	3	49
48	-4	-2	11	4	47
47	-3	-2	14	4	44
46	-2	-2	11	5	41
45	-1	-1	10	5	40
44	-2	-2	5	2	37
43	-6	-1	3	-3	33
42	-9	-1	-1	-8	31
41	-12	-1	-4	-10	29
40	-16	-1	-2	-10	27
39	-17	-1	1	-10	25
38	-22	-1	1	-12	23
37	-29	-1	1	-18	22
36	-33	-1	-1	-24	20
35	-35	-1	-6	-27	18
34	-38	-1	-9	-26	16
33	-38	-1	-5	-24	15
32	-42	-1	1	-25	15
31	-42	-1	1	-25	14
30	-43	-1	-3	-20	13
29	-44	-1	-3	-13	11
28	-49	-1	0	-9	10
27	-50	-1	2	-9	10
26	-52	-1	3	-10	9
25	-52	-1	2	-12	8

ANTIGUA, S.W.I.

MAR. 19. 1974

1820 (GMT)



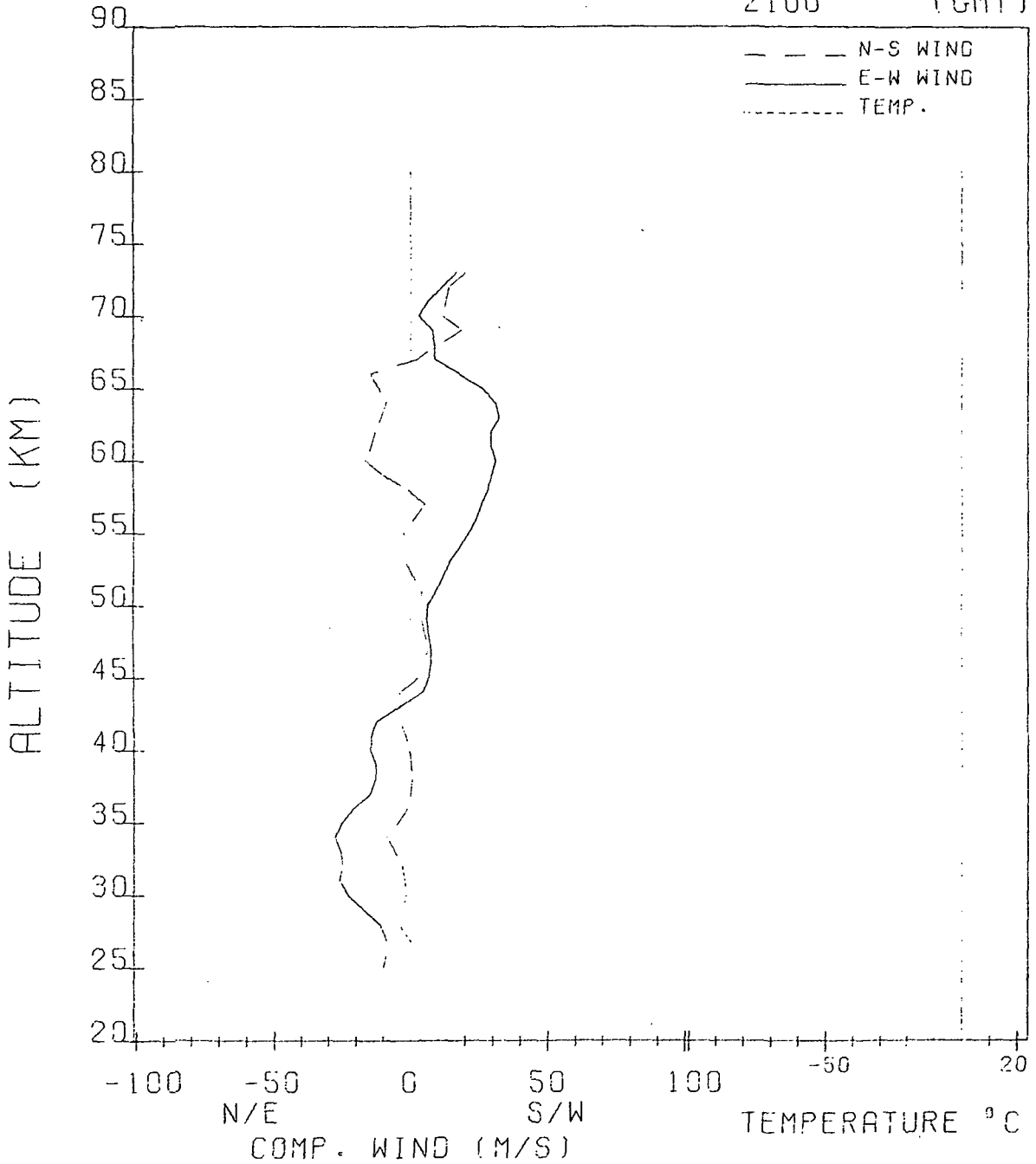
**LAUNCH SITE** Antigua, BWI 78861 **LAT.** 17.2N **LONG.** 61.8W  
**DATE** March 19, 1974 **TIME (GMT)** 2100  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-11A **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
73			20	17	260
72			14	11	242
71			12	6	228
70			11	3	216
69			18	8	207
68			18	9	204
67			2	9	204
66			-15	18	193
65			-15	26	174
64			-9	31	161
63			-11	32	150
62			-13	29	138
61			-15	29	129
60			-16	30	122
59			-10	30	113
58			-1	28	106
57			5	26	100
56			3	24	93
55			-2	21	87
54			-4	17	81
53			-2	14	76
52			2	12	70
51			4	9	66
50			5	6	62
49			4	6	58
48			5	7	55
47			7	8	52
46			5	8	48
45			3	7	45
44			-4	4	42
43			-7	-4	38
42			-3	-12	34
41			-3	-15	31
40			-1	-15	29
39			1	-13	27
38			1	-13	24
37			0	-15	22
36			-1	-20	22
35			-5	-26	20
34			-9	-27	18
33			-8	-25	17
32			-3	-25	15
31			0	-26	15
30			-2	-23	14
29			-5	-17	13
28			-4	-11	12
27			1	-9	11

ANTIGUA, B.W.I.

MAR. 19, 1974

2100 (GMT)



LAUNCH SITE Antigua, BWI 78861 LAT. 17.2N LONG. 61.8W

DATE March 20, 1974 TIME (GMT) 0300

FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute

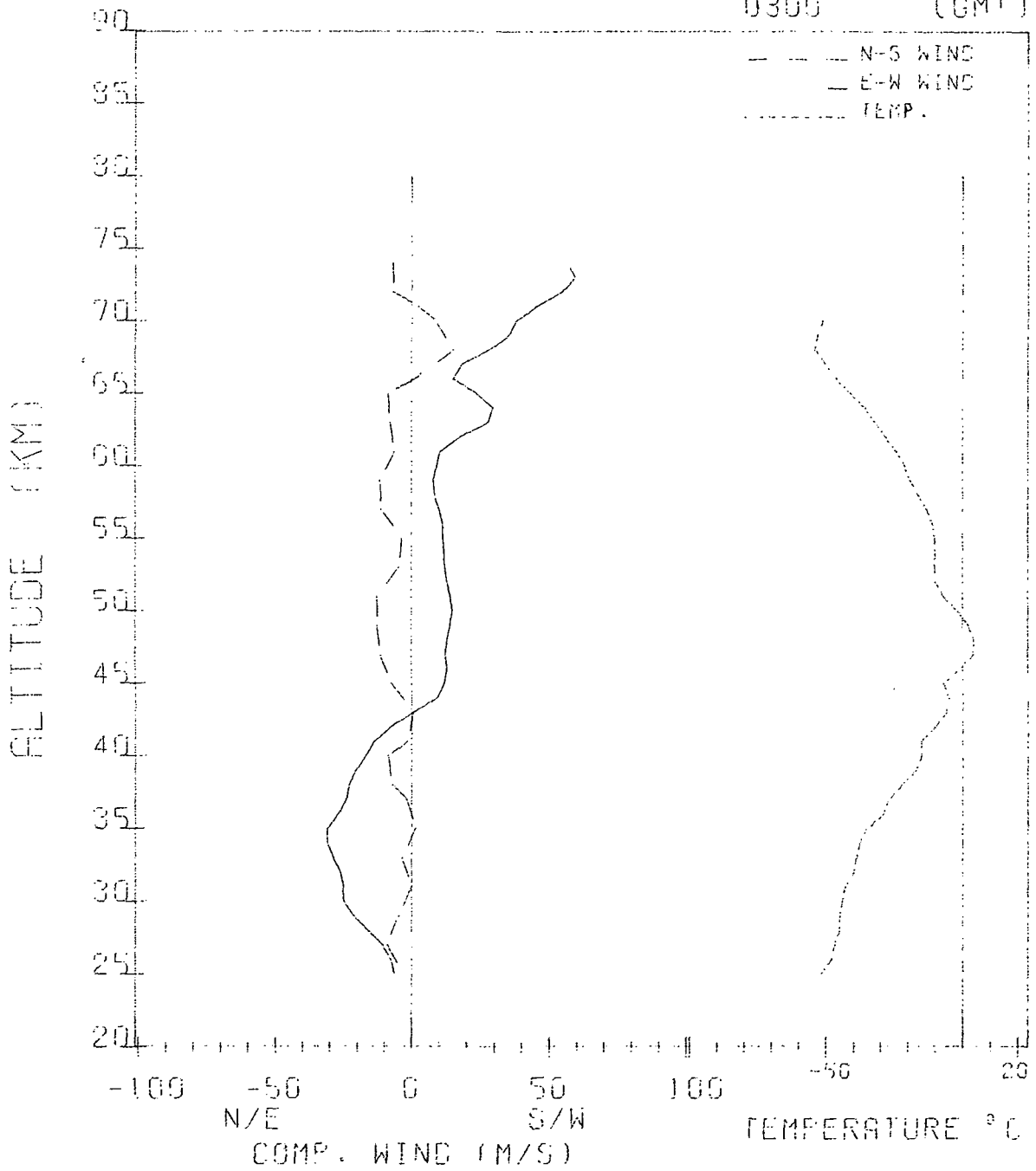
PWN-11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
74			-7	57	246
73			-9	59	238
72			-7	55	227
71			2	45	215
70	-51	-28	9	38	200
69	-53	-26	11	35	183
68	-54	-21	15	28	167
67	-50	-14	12	18	154
66	-46	-9	1	15	143
65	-41	-7	-8	23	132
64	-36	-6	-12	30	124
63	-32	-5	-8	28	117
62	-28	-4	-3	18	111
61	-24	-4	-6	10	104
60	-21	-4	-10	9	98
59	-19	-3	-12	8	93
58	-16	-3	-12	8	88
57	-13	-3	-11	10	83
56	-11	-2	-8	11	78
55	-10	-2	-4	11	73
54	-10	-2	-2	12	67
53	-10	-2	-5	12	64
52	-10	-1	-10	13	59
51	-7	-1	-13	14	55
50	-2	-1	-12	14	51
49	2	-1	-12	14	48
48	4	-1	-14	13	47
47	4	-1	-12	13	44
46	-1	-1	-9	13	41
45	-7	-1	-8	12	38
44	-5	0	-6	9	36
43	-6	-1	0	1	33
42	-10	-1	5	-8	30
41	-15	0	-2	-14	28
40	-15	0	-9	-17	26
39	-17	0	-10	-21	25
38	-22	0	-7	-23	23
37	-27	0	-2	-24	21
36	-29	0	3	-27	19
35	-35	0	2	-31	17
34	-38	0	-2	-31	16
33	-39	0	-3	-29	15
32	-40	0	-1	-26	14
31	-43	0	0	-25	13
30	-44	0	-2	-24	12
29	-45	0	-5	-21	11
28	-45	0	-8	-16	10
27	-47	0	-9	-11	9
26	-48	0	-7	-8	9
25	-52	0	-3	-6	8

ANTIGUA, B.W.I.

MAR. 20, 1974

0300 (GMT)



**LAUNCH SITE** Antigua, BWI 78861 **LAT.** 17.2N **LONG.** 61.8W  
**DATE** March 20, 1974 **TIME (GMT)** 0600  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 7 ft. square starute  
**PWN-11A** **TEMP SENSOR** 10 mil bead loop mount

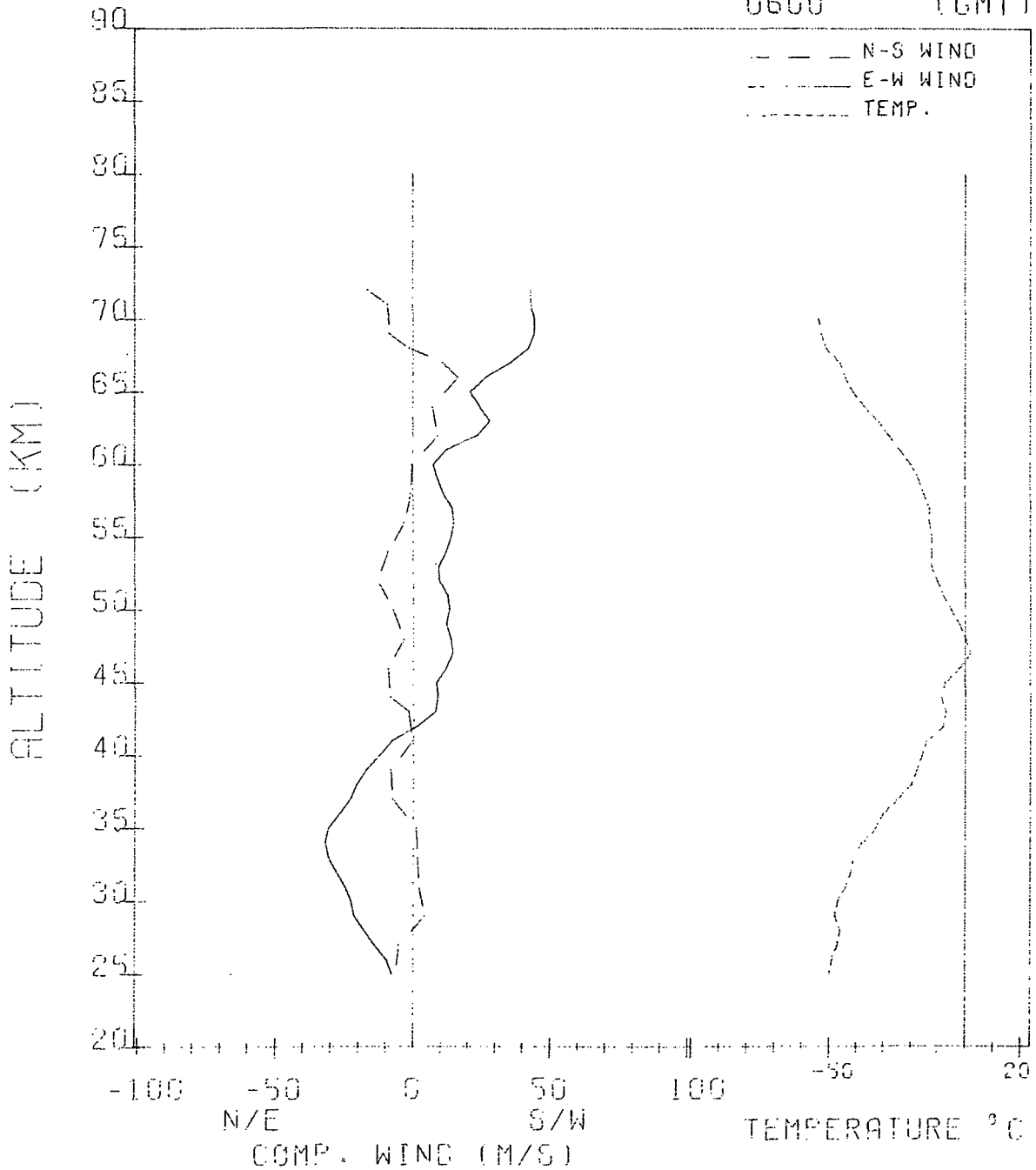
ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
72			-16	43	250
71			-9	43	238
70	-54	-28	-9	44	220
69	-53	-25	-9	45	200
68	-51	-19	-1	42	181
67	-46	-14	11	36	164
66	-44	-11	17	27	148
65	-41	-9	12	20	137
64	-37	-6	7	24	127
63	-32	-5	8	28	118
62	-28	-4	9	23	112
61	-24	-4	5	12	105
60	-20	-3	0	7	99
59	-17	-3	-2	9	93
58	-15	-3	-1	11	88
57	-13	-3	-1	14	83
56	-13	-3	-3	15	78
55	-12	-2	-6	14	71
54	-12	-2	-9	12	67
53	-12	-2	-12	9	63
52	-10	-1	-13	10	58
51	-8	-1	-11	12	56
50	-5	-1	-7	13	52
49	-2	-1	-5	12	49
48	0	-1	-3	14	46
47	2	-1	-4	14	44
46	-2	-1	-9	12	41
45	-7	-1	-12	8	38
44	-9	-1	-8	8	36
43	-7	0	-2	8	34
42	-8	-1	2	1	31
41	-14	-1	0	-8	29
40	-16	0	-4	-13	27
39	-18	0	-8	-17	25
38	-20	0	-10	-21	23
37	-25	0	-7	-23	21
36	-30	0	-3	-27	20
35	-33	0	1	-31	18
34	-38	0	2	-32	17
33	-41	0	2	-31	15
32	-42	0	1	-28	15
31	-44	0	2	-25	13
30	-47	0	5	-23	12
29	-48	0	4	-21	11
28	-46	0	-1	-18	10



ANTIGUA, B.W.I.

MAR. 20, 1974

0600 (GMT)



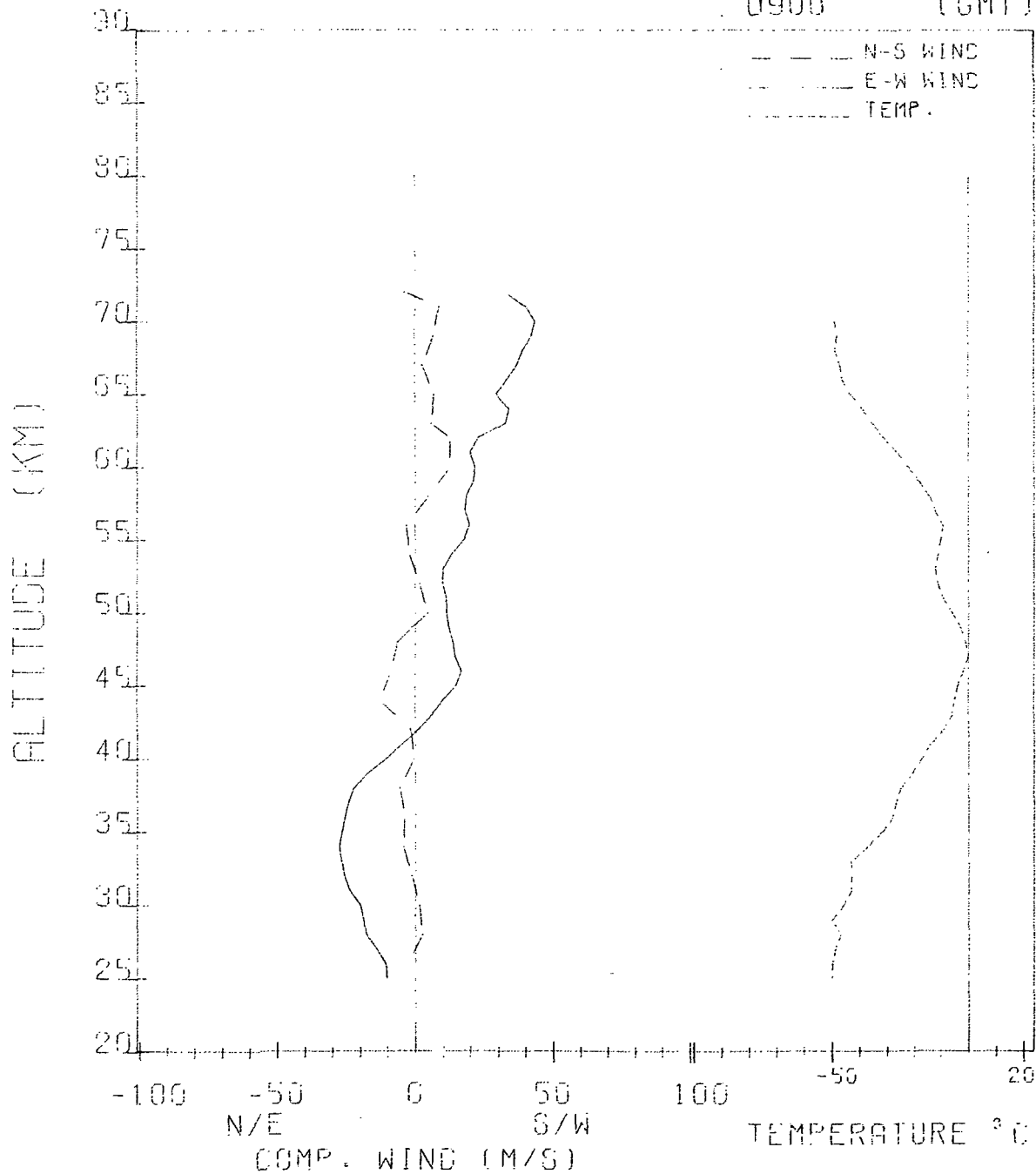
**LAUNCH SITE** Antigua, BWI 78861 **IAT.** 17.2N **LONG.** 61.8W  
**DATE** March 20, 1974 **TIME (GMT)** 0900  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-11A **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
72			-4	32	221
71			9	41	212
70	-49	-21	10	44	200
69	-48	-20	7	42	188
68	-49	-18	3	39	175
67	-47	-15	3	37	160
66	-46	-12	7	33	149
65	-43	-9	7	29	137
64	-39	-6	3	34	127
63	-35	-5	6	33	120
62	-31	-4	13	23	111
61	-26	-4	14	20	105
60	-22	-4	12	21	100
59	-18	-3	9	21	94
58	-14	-3	5	19	88
57	-12	-2	0	18	82
56	-9	-2	-3	20	77
55	-10	-3	-4	17	74
54	-11	-2	-2	13	69
53	-12	-2	-1	10	64
52	-11	-1	2	10	59
51	-9	-1	5	11	56
50	-6	-1	5	11	54
49	-3	-1	-1	12	50
48	-1	-1	-6	13	47
47	0	-1	-9	14	45
46	-2	-1	-9	16	41
45	-4	-1	-10	15	38
44	-5	-1	-13	10	36
43	-6	-1	-10	6	34
42	-9	-1	-1	1	31
41	-14	-1	3	-5	28
40	-17	-1	-1	-11	27
39	-21	0	-4	-17	25
38	-25	0	-6	-23	23
37	-27	0	-5	-25	21
36	-28	0	-4	-26	20
35	-32	0	-4	-27	19
34	-37	0	-5	-27	17
33	-43	0	-2	-27	16
32	-43	0	-2	-26	14
31	-43	0	-1	-24	13
30	-46	0	1	-20	12
29	-50	0	3	-19	11
28	-47	0	3	-18	10

ANTIGUA, B.W.I

MAR. 20 1974

0900 (GMT)



LAUNCH SITE Antigua, BWI 78861 LAT. 17.2N LONG. 61.8W

DATE March 20, 1974 TIME (GMT) 1200

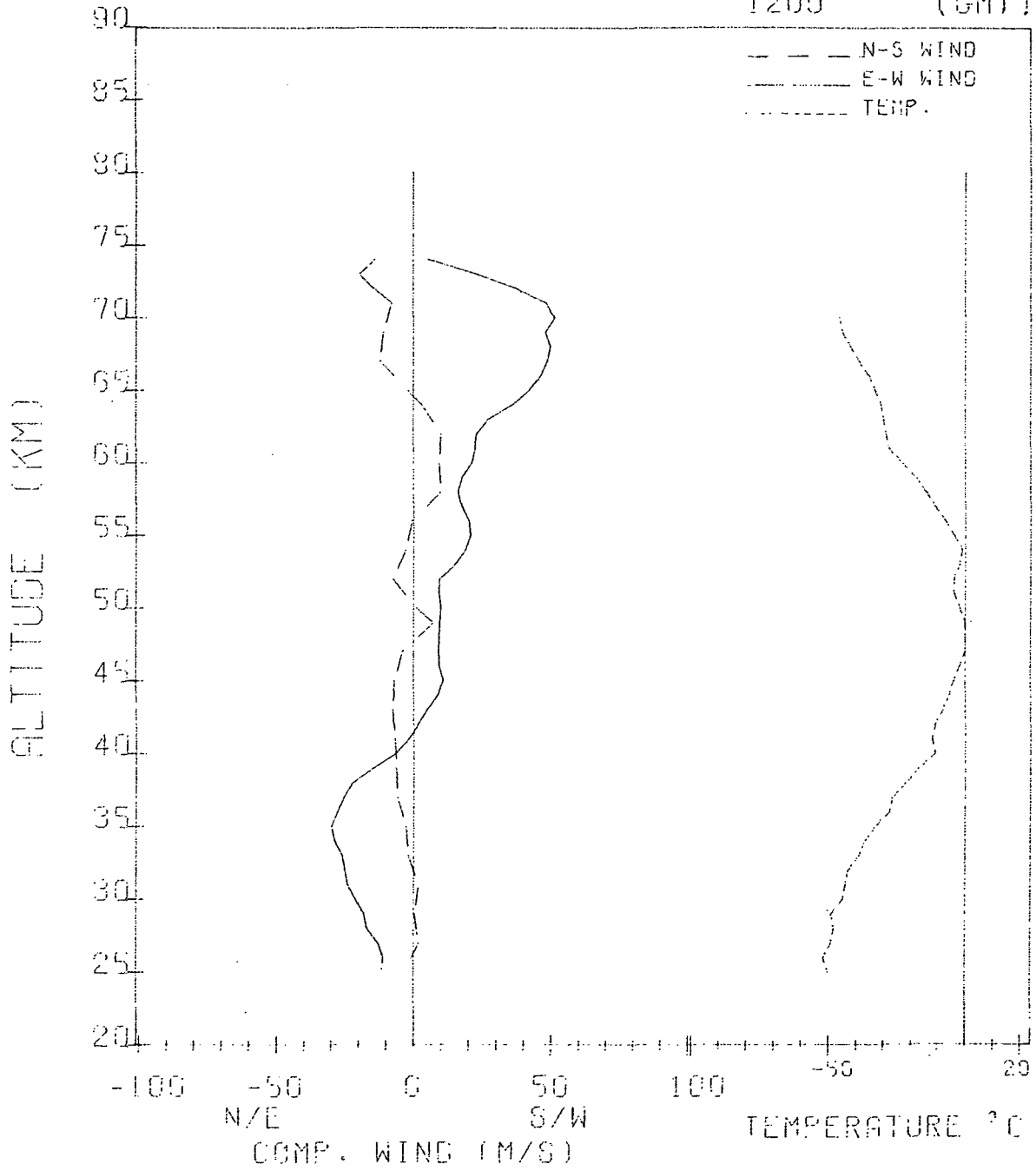
FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute

PWN-11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
74			-14	5	248
73			-20	23	236
72			-14	37	225
71			-8	48	214
70	-46	-34	-8	51	202
69	-45	-31	-11	48	188
68	-42	-26	-12	50	175
67	-39	-21	-12	49	161
66	-35	-17	-9	46	150
65	-33	-15	-2	42	140
64	-31	-13	3	36	129
63	-30	-11	7	27	120
62	-29	-10	10	22	111
61	-28	-8	11	22	104
60	-23	-6	9	21	97
59	-18	-5	7	18	93
58	-14	-5	10	16	87
57	-11	-4	8	17	82
56	-7	-4	-1	20	78
55	-4	-3	-4	21	73
54	-1	-3	-3	19	69
53	-2	-3	-6	15	64
52	-4	-3	-8	10	60
51	-4	-2	-6	9	55
50	-2	-2	1	10	52
49	0	-2	7	10	49
48	0	-2	4	9	47
47	0	-2	-4	9	43
46	-2	-2	-8	10	41
45	-4	-2	-7	11	39
44	-6	-1	-6	9	35
43	-8	-1	-7	5	34
42	-11	-1	-8	2	31
41	-12	-1	-7	-2	29
40	-11	-1	-6	-7	27
39	-17	-1	-6	-15	25
38	-22	-1	-6	-23	23
37	-27	-1	-6	-26	21
36	-28	-1	-4	-28	20
35	-33	-1	-3	-30	18
34	-37	-1	-4	-29	17
33	-39	-1	-2	-25	15
32	-43	-1	1	-25	14
31	-44	-1	2	-24	13
30	-45	-1	0	-21	12
29	-49	-1	0	-18	11
28	-48	-1	2	-17	10
27	-49	-1	2	-13	9

ANTIGUA, B.W.I.

MAR. 20, 1974  
1200 (GMT)



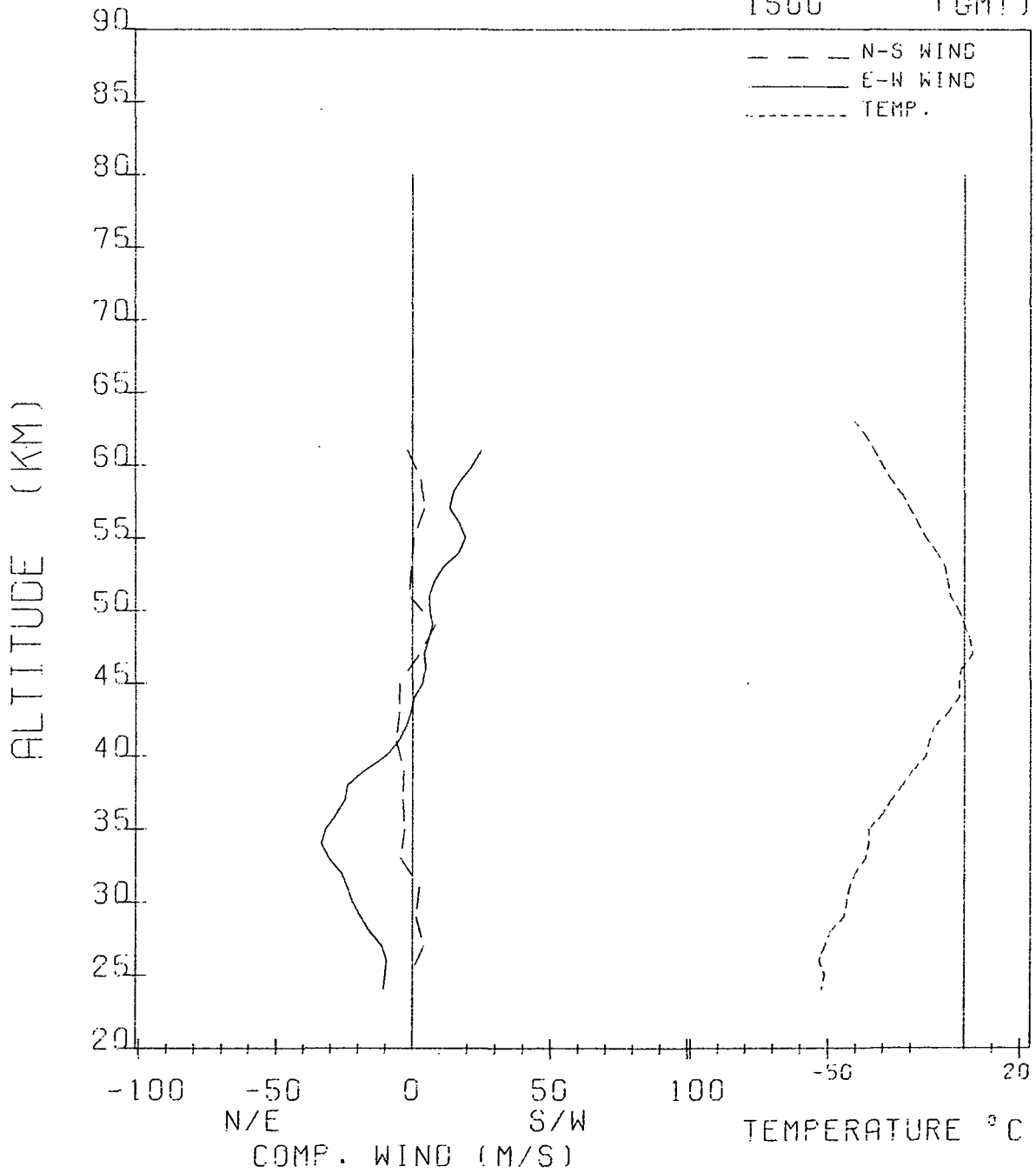
**LAUNCH SITE** Antigua, BWI 78861 **LAT.** 17.2N **LONG.** 61.8W  
**DATE** March 20, 1974 **TIME (GMT)** 1500  
**FLIGHT SYSTEM** Super Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-11A **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
63	-40	-11			119
62	-36	-9			109
61	-33	-7	-2	25	102
60	-30	-6	-2	21	95
59	-27	-6	3	18	90
58	-23	-5	7	14	85
57	-20	-4	4	13	79
56	-17	-4	2	17	74
55	-14	-3	1	19	71
54	-10	-3	1	17	67
53	-7	-3	-1	11	63
52	-6	-3	-2	7	60
51	-5	-2	-1	6	56
50	-2	-2	3	6	52
49	0	-2	8	7	48
48	2	-2	8	6	45
47	3	-2	3	5	43
46	-1	-2	-1	5	40
45	-2	-1	-5	4	38
44	-2	-1	-5	0	36
43	-6	-1	-5	-1	33
42	-11	-1	-5	-2	31
41	-13	-1	-6	-5	28
40	-14	-1	-5	-10	26
39	-19	-1	-3	-18	24
38	-23	-1	-2	-24	23
37	-27	-1	-3	-25	21
36	-30	-1	-3	-28	19
35	-35	-1	-3	-32	18
34	-35	-1	-6	-34	17
33	-36	-1	-4	-30	16
32	-40	-1	0	-26	14
31	-42	-1	3	-24	13
30	-43	-1	1	-22	12
29	-44	-1	1	-19	11
28	-49	-1	2	-16	10
27	-51	-1	4	-11	10
26	-53	-1	3	-9	9
25	-51	0	-1	-10	8
24	-52	0	-3	-11	7

ANTICUA, B.W.I.

MAR. 20, 1974

1500 (GMT)



LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W

DATE March 19, 1974 TIME (GMT) 1605

FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute

PWN-11A TEMP SENSOR 10 mil bead loop mount

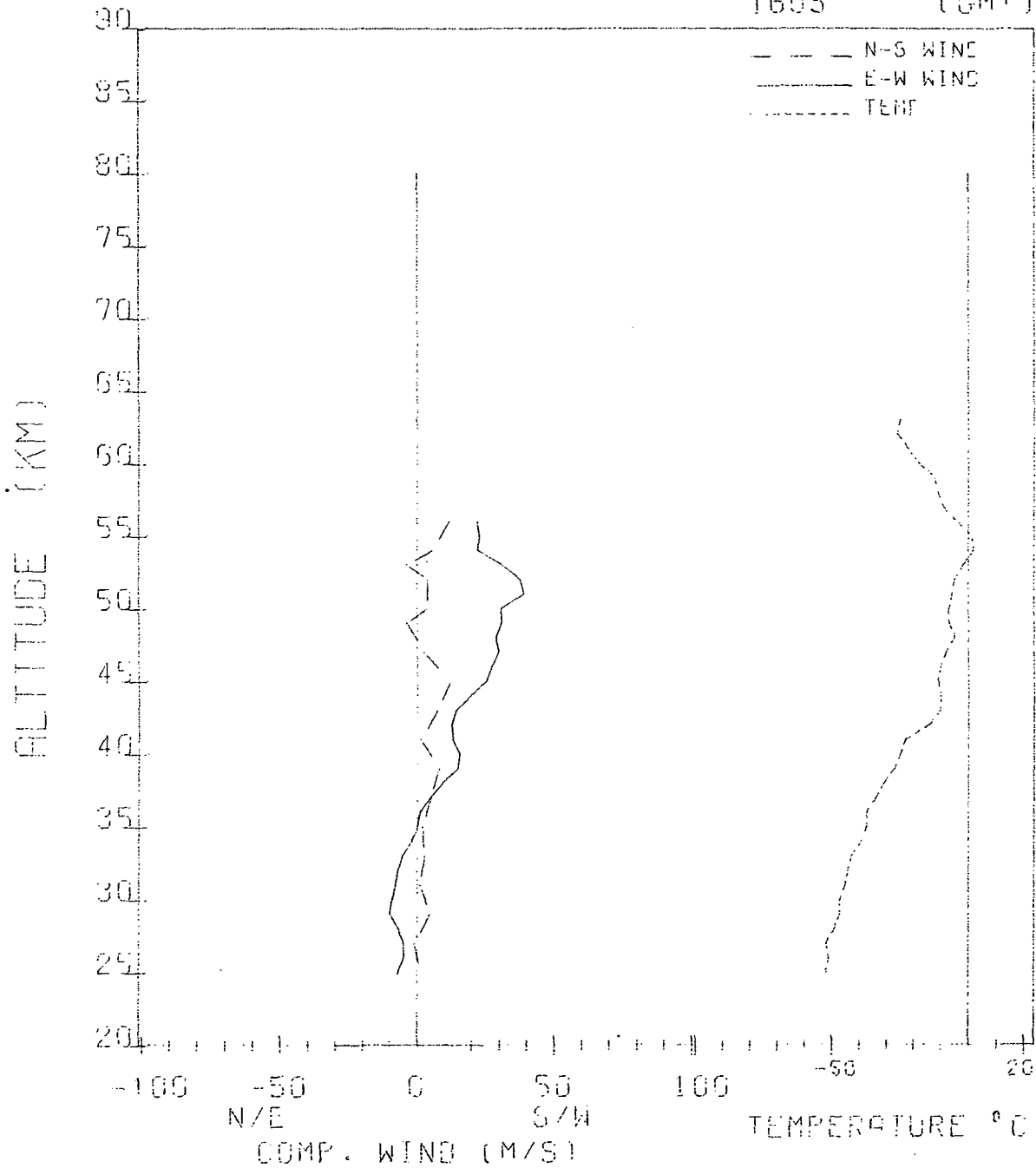
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
63	-25	-11			121
62	-26	-11			125
61	-22	-8			107
60	-18	-7			107
59	-12	-5			91
58	-11	-7			90
57	-9	-4			83
56	-4	-4	12	22	81
55	1	-4	14	23	76
54	2	-4	5	22	75
53	-2	-4	-4	31	67
52	-5	-3	4	38	55
51	-6	-3	8	39	56
50	-7	-3	4	31	57
49	-7	-2	-4	31	59
48	-5	-2	-4	29	45
47	-8	-2	3	29	51
46	-10	-2	6	27	36
45	-11	-2	12	25	47
44	-10	-2	12	19	39
43	-10	-1	8	14	33
42	-14	-1	3	12	27
41	-23	-1	1	13	34
40	-25	-1	4	16	30
39	-27	-1	8	15	20
38	-31	-1	7	9	21
37	-34	-1	5	5	22
36	-37	-1	3	1	20
35	-37	-1	2	0	18
34	-39	-1	3	-2	15
33	-43	-1	3	-6	16
32	-44	-1	0	-7	13
31	-45	-1	1	-8	15
30	-47	-1	4	-9	12
29	-47	-1	5	-10	11
28	-49	-1	1	-7	11
27	-52	-1	-1	-4	8
26	-51	-1	1	-5	9
25	-52	-1	1	-7	8



WALLOPS ISLAND, VA.

MAR. 19, 1974

1605 (GMT)



LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W

DATE March 19, 1974 TIME (GMT) 1954

FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft square starute

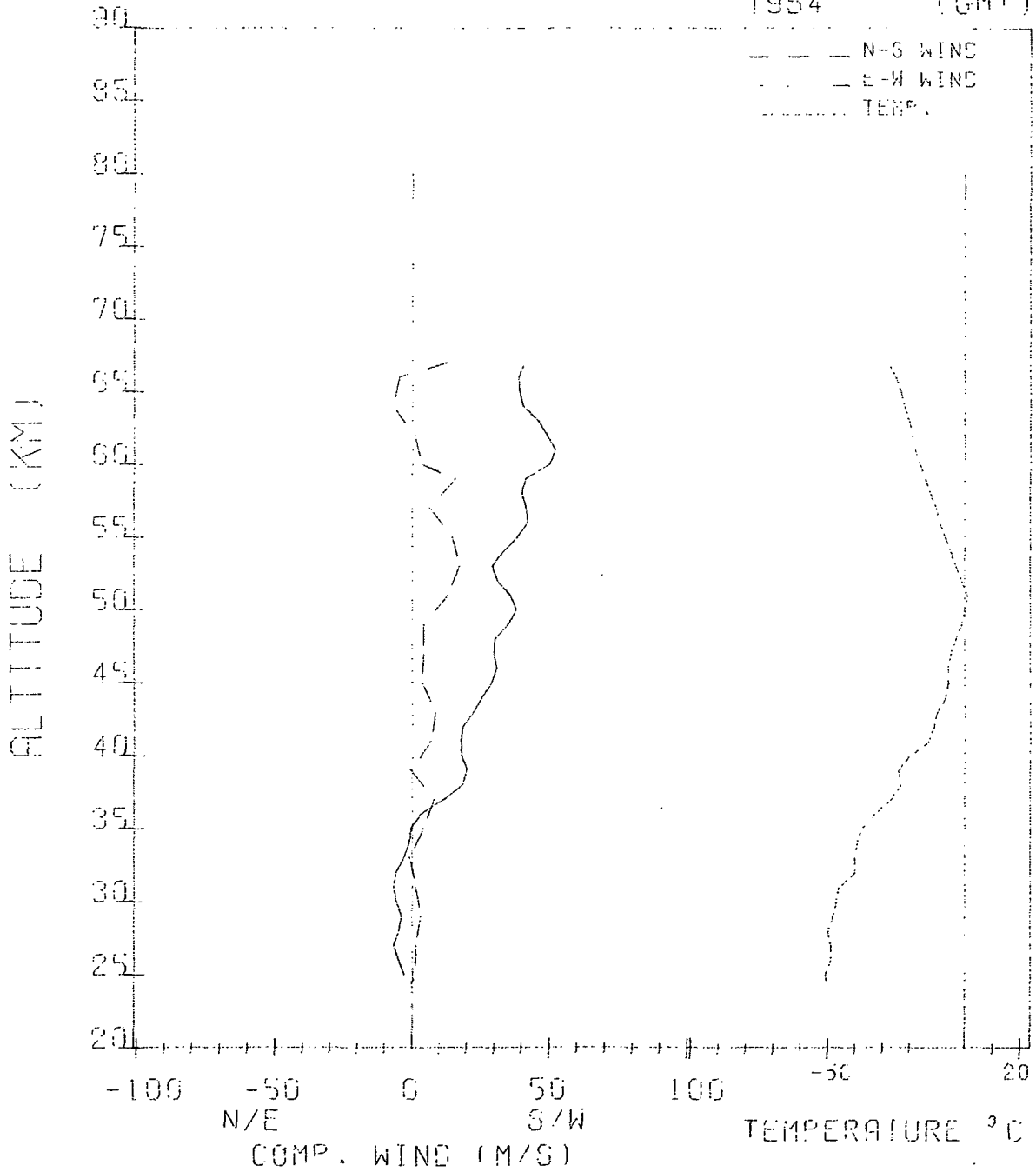
PWN-11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
67	-28	-20	13	41	165
66	-25	-18	-4	39	155
65	-23	-15	-9	39	144
64	-22	-13	-7	41	136
63	-20	-13	-3	46	127
62	-19	-10	1	49	116
61	-18	-9	0	52	109
60	-16	-7	4	49	101
59	-14	-6	16	41	94
58	-12	-5	15	40	87
57	-10	-5	6	42	83
56	-9	-4	9	42	79
55	-7	-4	14	38	74
54	-5	-3	19	33	70
53	-3	-3	17	29	65
52	-1	-3	14	31	61
51	1	-2	13	36	58
50	0	-3	9	38	54
49	-1	-2	5	35	50
48	-3	-2	7	30	47
47	-5	-2	4	30	44
46	-6	-2	3	31	42
45	-6	-2	3	29	38
44	-7	-2	6	25	37
43	-10	-1	8	22	34
42	-11	-1	10	19	31
41	-13	-1	7	18	29
40	-20	-1	2	18	27
39	-24	-1	0	20	25
38	-23	-1	4	19	23
37	-27	-1	8	11	22
36	-33	-1	7	3	20
35	-38	-1	4	-1	18
34	-39	-1	0	-1	17
33	-40	-1	-1	-3	15
32	-40	-1	1	-6	14
31	-46	-1	1	-7	13
30	-47	-1	1	-6	13
29	-48	-1	3	-4	11
28	-50	-1	4	-5	10
27	-49	-1	1	-7	10
26	-49	-1	1	-5	9
25	-51	0	1	-3	8

WALLOPS ISLAND, VA.

MAR. 19, 1974

1954 (GMT)



LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W

DATE March 19, 1974 TIME (GMT) 2200

FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute

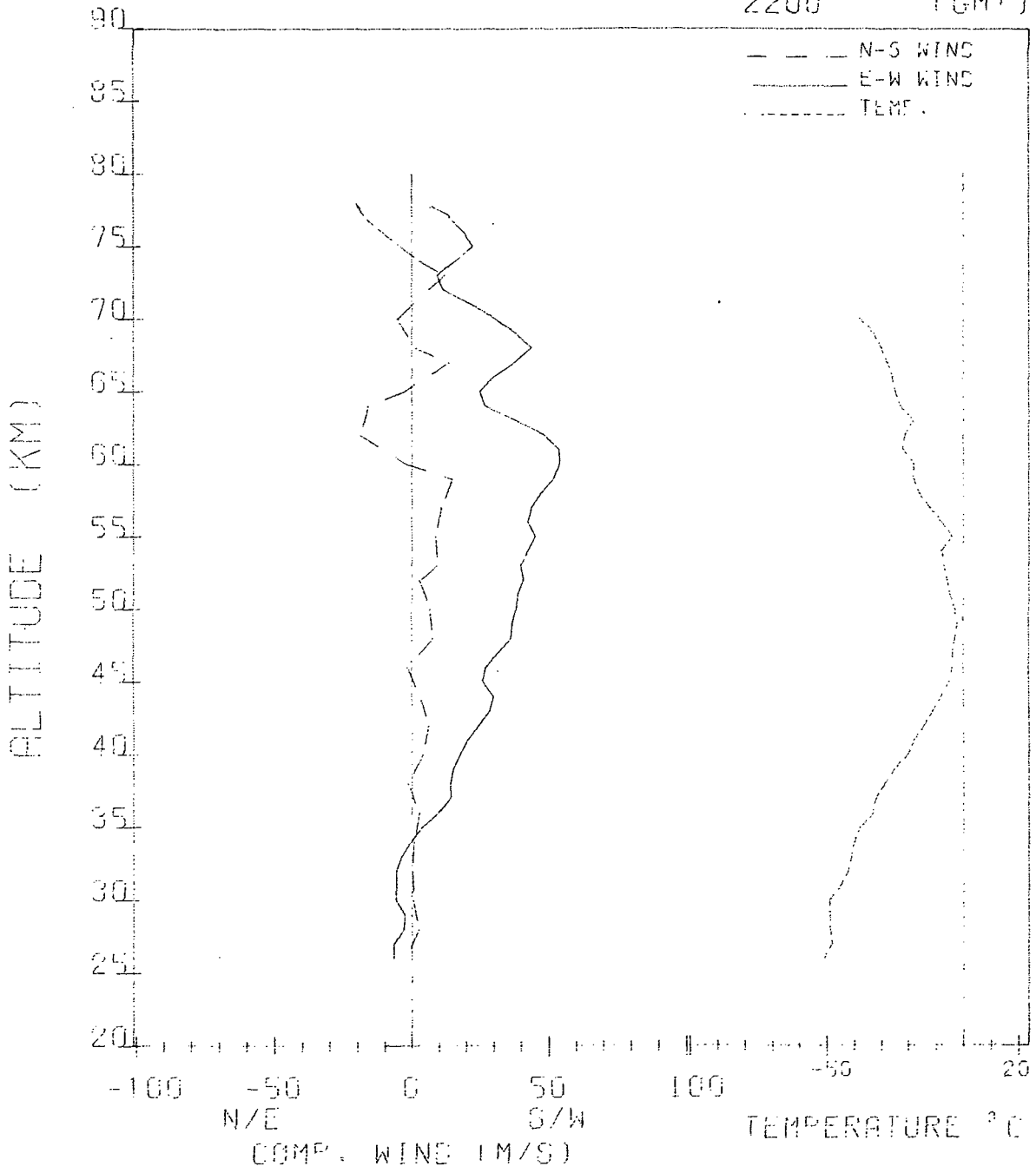
PWN-11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
78			-21	8	268
77			-17	14	267
76			-11	19	261
75			-4	23	256
74			3	16	249
73			12	9	239
72			8	11	227
71			0	22	215
70	-38	-34	-5	31	202
69	-33	-29	-6	38	188
68	-30	-25	1	44	177
67	-28	-22	13	38	168
66	-26	-19	12	30	159
65	-25	-17	-3	25	150
64	-23	-14	-16	27	140
63	-18	-11	-20	38	126
62	-21	-11	-19	48	116
61	-22	-9	-15	54	108
60	-18	-7	-2	54	100
59	-18	-7	15	51	92
58	-16	-5	19	47	86
57	-12	-4	11	43	81
56	-8	-4	7	43	78
55	-4	-4	9	45	74
54	-8	-4	12	42	68
53	-7	-3	9	40	65
52	-6	-3	3	41	61
51	-5	-3	5	39	56
50	-3	-2	7	39	53
49	-2	-2	4	36	51
48	-3	-2	8	36	47
47	-4	-2	7	32	44
46	-4	-2	-1	27	41
45	-5	-2	-3	26	39
44	-8	-2	3	29	37
43	-11	-1	6	29	34
42	-14	-1	6	24	31
41	-18	-1	6	20	29
40	-20	-1	4	17	27
39	-25	-1	1	15	25
38	-29	-1	-1	14	23
37	-32	-1	1	14	21
36	-33	-1	3	9	20
35	-38	-1	3	3	18
34	-40	-1	1	-1	16
33	-41	-1	0	-4	16
32	-42	-1	0	-6	14
31	-45	-1	1	-6	13
30	-49	-1	1	-6	12

WALLOPS ISLAND, VA.

MAR. 19, 1974

2200 (GMT)



LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W

DATE March 20, 1974 TIME (GMT) 0005

FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute

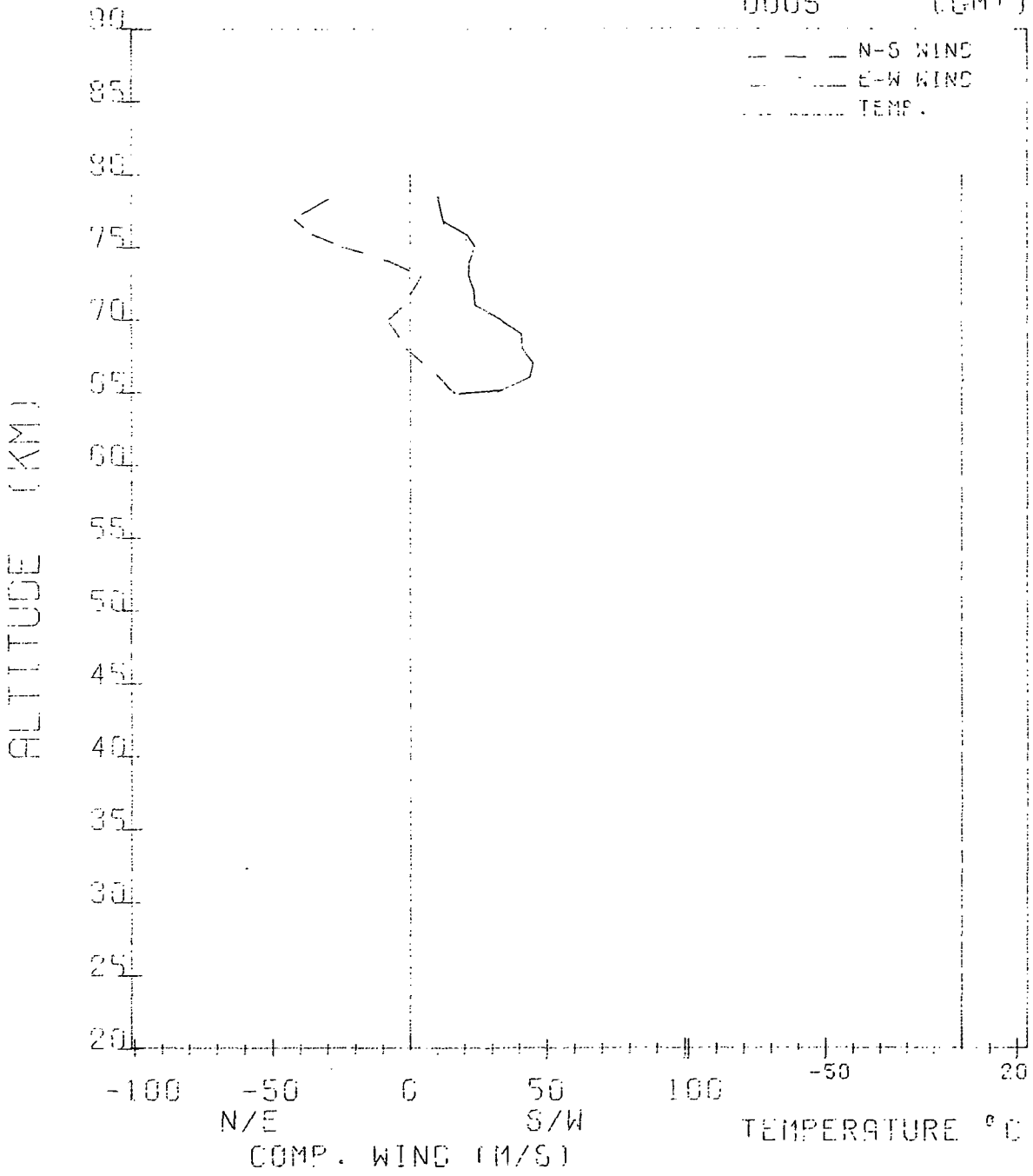
PWN-11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
78			-30	10	240
77			-43	12	250
76			-37	21	253
75			-25	24	253
74			-7	22	246
73			4	22	235
72			4	23	224
71			-3	24	214
70	-51	-25	-8	33	203
69	-50	-21	-5	41	188
68	-39	-11	3	45	178
67	-35	-10	11	44	167
66	-31	-9	15	32	160
65	-31	-11	15	15	173
64	-29	-12			175
63	-30	-16			198

WALLOPS ISLAND, VA.

MAR. 20, 1974

0005 (GMT)



LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W

DATE March 20, 1974 TIME (GMT) 0021

FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute

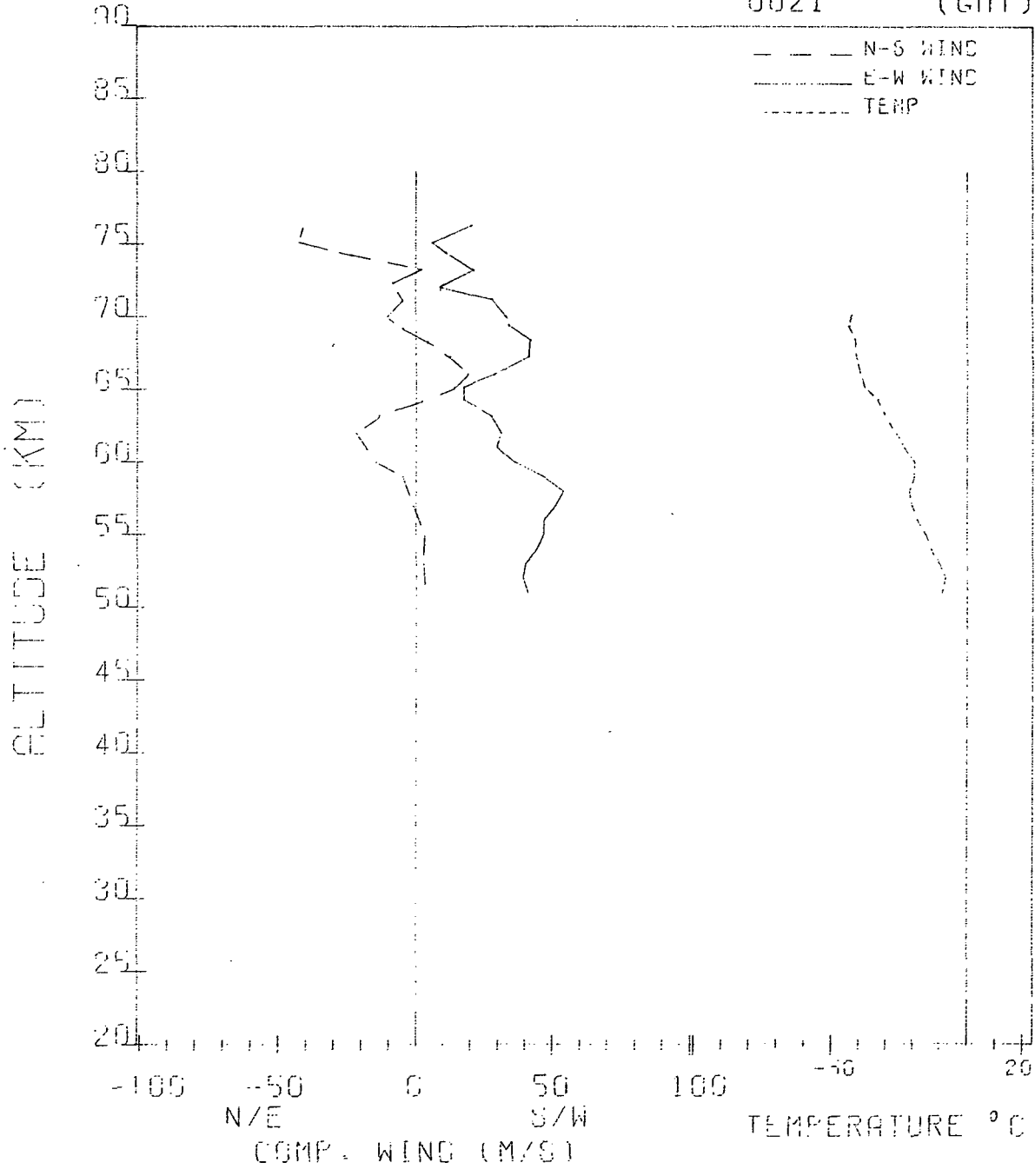
PWN-11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
76			-42	20	270
75			-44	5	269
74			-23	10	261
73			2	22	255
72			-8	9	247
71			-4	28	237
70	-43	-23	-10	33	226
69	-44	-23	-4	34	209
68	-41	-19	4	42	192
67	-40	-16	12	41	176
66	-39	-14	17	28	164
65	-38	-12	14	17	156
64	-33	-9	2	17	152
63	-30	-8	-13	26	144
62	-26	-7	-22	31	135
61	-23	-6	-24	30	127
60	-19	-5	-15	36	120
59	-19	-6	-5	47	110
58	-21	-5	0	54	103
57	-20	-4	-1	51	97
56	-18	-3	-4	46	90
55	-15	-3	3	46	84
54	-13	-2	8	44	79
53	-10	-2	3	40	74
52	-8	-2	-2	39	75
51	-9	-4	3	41	88



WALLOPS ISLAND, VA.

MAR. 20, 1974  
0021 (GMT)



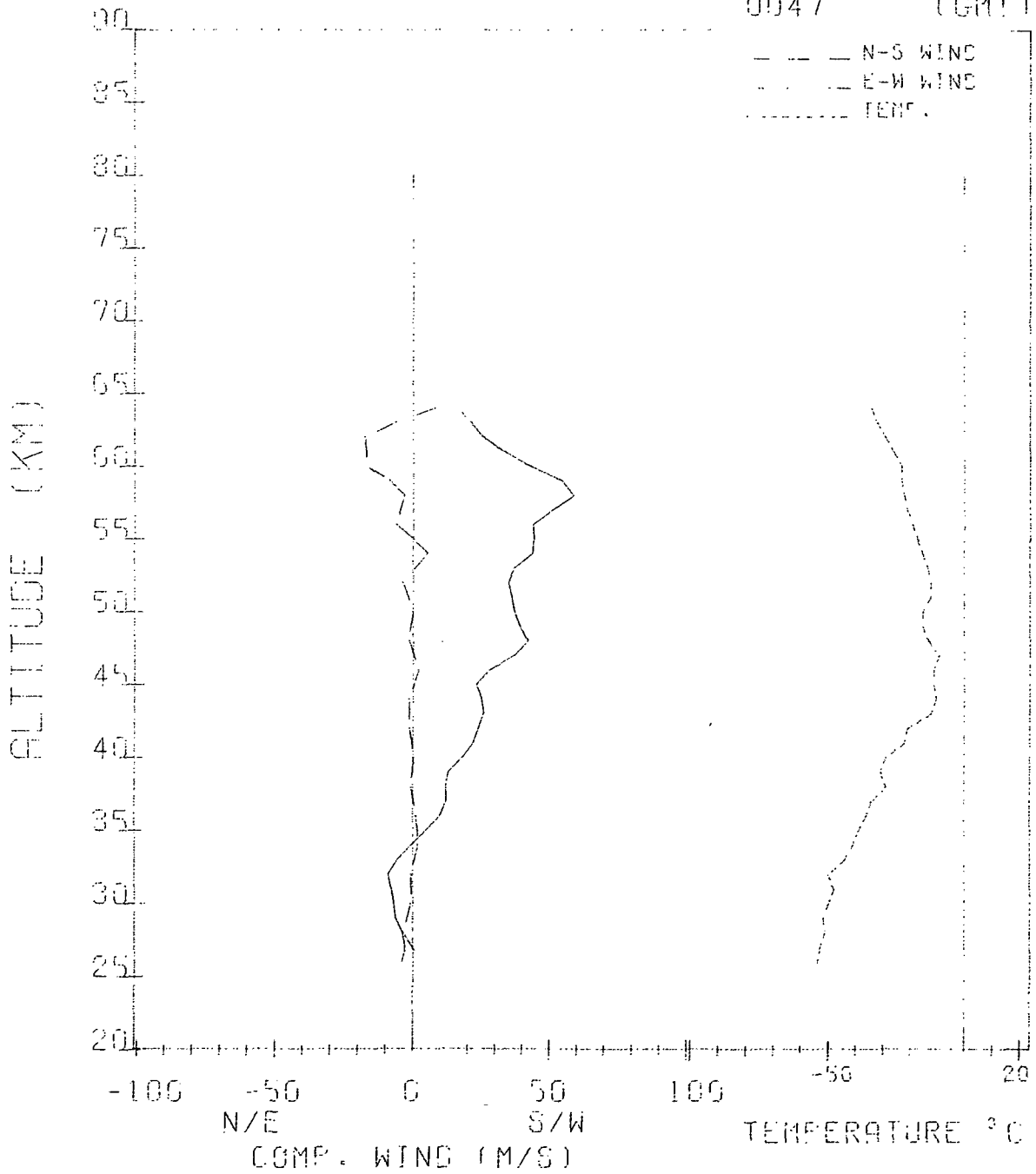
LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W  
 DATE March 20, 1974 TIME (GMT) 0047  
 FLIGHT SYSTEM Loki Walmet WIND SENSOR 7 ft. square starute  
 TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
64	-34	-4			101
63	-32	-5	-6	21	111
62	-29	-4	-17	26	108
61	-26	-4	-22	33	102
60	-23	-4	-17	43	96
59	-23	-4	-9	55	90
58	-22	-3	-3	58	84
57	-21	-3	-3	51	79
56	-19	-2	-6	44	74
55	-17	-2	0	44	70
54	-15	-2	5	43	66
53	-13	-2	1	37	62
52	-12	-1	-4	35	57
51	-12	-2	-2	36	54
50	-15	-1	0	37	50
49	-15	-1	0	39	46
48	-13	-1	-2	42	44
47	-9	-1	0	37	42
46	-11	-1	2	28	39
45	-11	-1	1	23	36
44	-10	-1	-2	25	33
43	-12	-1	-4	26	32
42	-21	-1	-1	24	30
41	-22	0	2	22	27
40	-29	-1	0	18	25
39	-31	0	-2	13	24
38	-29	0	-1	12	22
37	-34	0	1	12	20
36	-36	0	1	10	18
35	-39	0	2	5	17
34	-41	0	2	-1	16
33	-44	0	2	-6	14
32	-50	0	-1	-9	13
31	-48	0	-1	-8	12
30	-50	0	-1	-7	11
29	-52	0	-3	-6	10
28	-51	0	-3	-3	10
27	-53	0	1	-3	9
26	-54	0	3	-4	8

WALLOPS ISLAND, VA.

MAR. 20, 1974

0047 (GMT)



LAUNCH SITE Wallops Island, Va. LAT. 37.8N LONG. 75.5W

DATE March 20, 1974 TIME (GMT) 0108

FLIGHT SYSTEM Super Loki Datasonde WIND SENSOR 7 ft. square starute

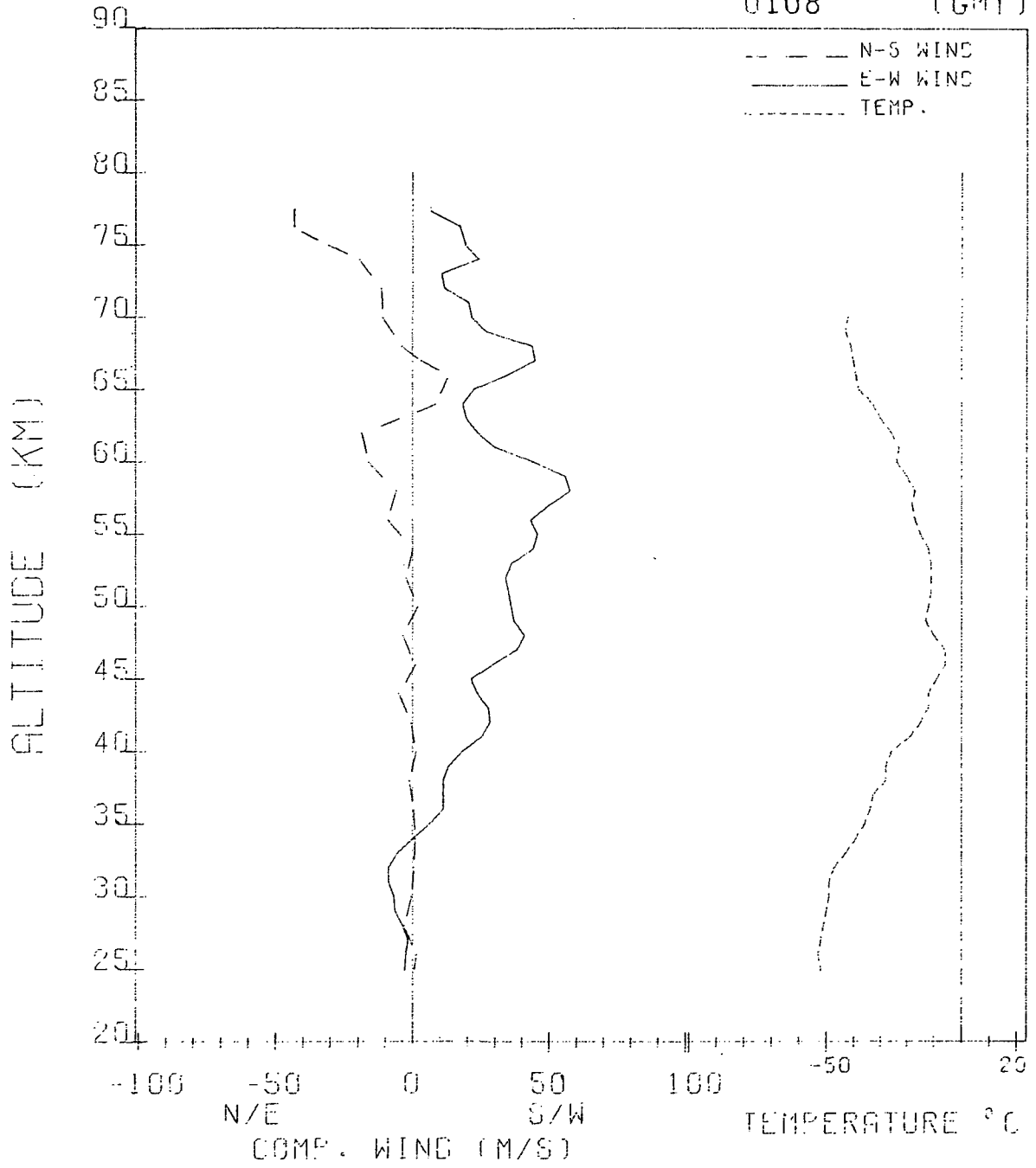
PWN-11A TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
77			-43	-8	302
76			-43	18	297
75			-31	19	287
74			-19	24	274
73			-15	10	261
72			-12	11	247
71			-15	20	234
70	-42	-22	-11	22	222
69	-43	-23	-7	27	208
68	-41	-20	-4	44	194
67	-40	-17	3	45	181
66	-39	-15	13	34	167
65	-38	-13	14	22	156
64	-33	-8	9	18	144
63	-30	-7	-5	19	135
62	-26	-6	-18	23	127
61	-23	-5	-21	30	119
60	-24	-5	-16	44	111
59	-20	-4	-11	56	103
58	-17	-3	-6	58	97
57	-18	-5	-5	49	90
56	-17	-3	-9	43	84
55	-15	-2	-6	46	80
54	-12	-2	0	44	74
53	-11	-2	0	36	70
52	-11	-2	-3	34	66
51	-11	-2	1	35	62
50	-12	-2	2	36	58
49	-13	-1	0	37	53
48	-10	-1	-3	40	50
47	-6	-1	-3	38	48
46	-6	-1	1	29	45
45	-9	-1	0	21	42
44	-12	-1	-5	23	39
43	-12	0	-5	27	36
42	-15	-1	-1	28	33
41	-19	-1	2	25	31
40	-26	-1	1	18	29
39	-28	0	-1	13	27
38	-28	0	-1	11	25
37	-33	0	0	11	23
36	-34	0	0	11	22
35	-36	0	1	6	20
34	-39	0	1	0	19
33	-43	0	2	-6	17
32	-47	0	1	-9	16
31	-49	0	-1	-8	15
30	-49	0	0	-7	14
29	-50	0	-2	-7	12

WALLOPS ISLAND, VA.

MAR. 20, 1974

0108 (GMT)



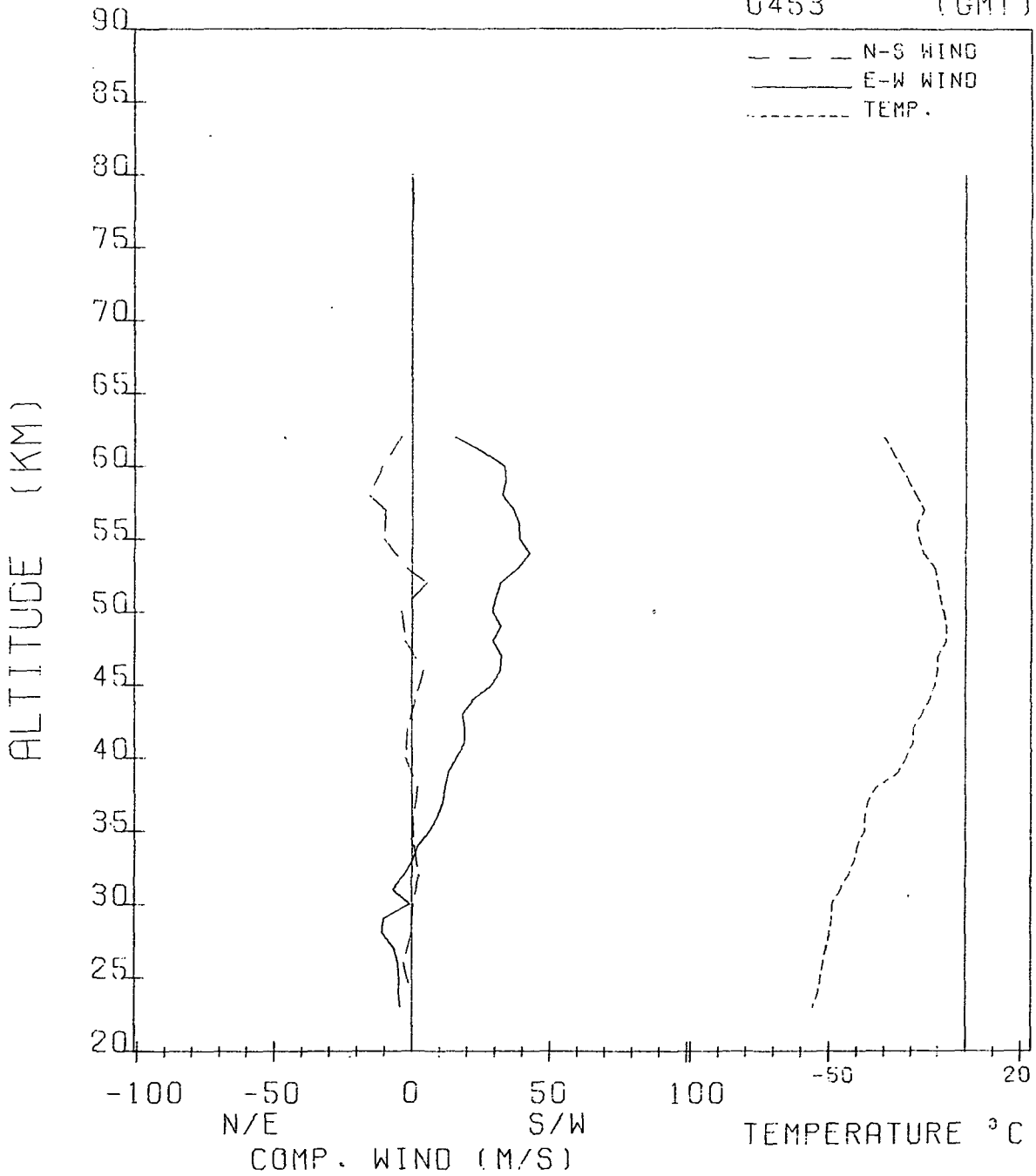
LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W  
 DATE March 20, 1974 TIME (GMT) 0453  
 FLIGHT SYSTEM Loki Walmet WIND SENSOR 7 ft. square starute  
 TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62	-30	-4	-4	16	103
61	-27	-4	-6	26	101
60	-24	-3	-11	33	95
59	-21	-3	-16	34	90
58	-18	-3	-16	33	85
57	-15	-2	-10	37	80
56	-18	-3	-6	39	74
55	-17	-2	-10	39	69
54	-15	-2	-11	42	65
53	-11	-1	-2	38	61
52	-10	-1	5	32	57
51	-9	-1	1	30	54
50	-8	-1	-4	29	50
49	-7	-1	-4	31	47
48	-7	-1	-2	29	44
47	-10	-1	1	32	41
46	-10	-1	4	32	38
45	-11	-1	4	29	35
44	-13	-1	1	22	33
43	-16	0	-1	18	31
42	-19	-1	-2	19	28
41	-19	0	-2	19	26
40	-22	-1	-3	16	25
39	-25	0	-2	13	23
38	-33	-1	2	12	21
37	-36	0	2	11	20
36	-37	0	0	9	17
35	-37	0	0	6	16
34	-40	0	1	2	16
33	-41	0	1	0	14
32	-43	0	2	-3	13
31	-46	0	4	-7	12
30	-49	0	4	-10	11
29	-49	0	3	-11	11
28	-50	0	0	-11	10
27	-51	0	-3	-7	9
26	-52	0	-3	-5	8
25	-53	0	-2	-5	8

WALLOPS ISLAND, VA.

MAR. 20, 1974

0453 (GMT)



LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W

DATE March 20, 1974 TIME (GMT) 0706

FLIGHT SYSTEM Loki Walmet WIND SENSOR 7 ft. square starute

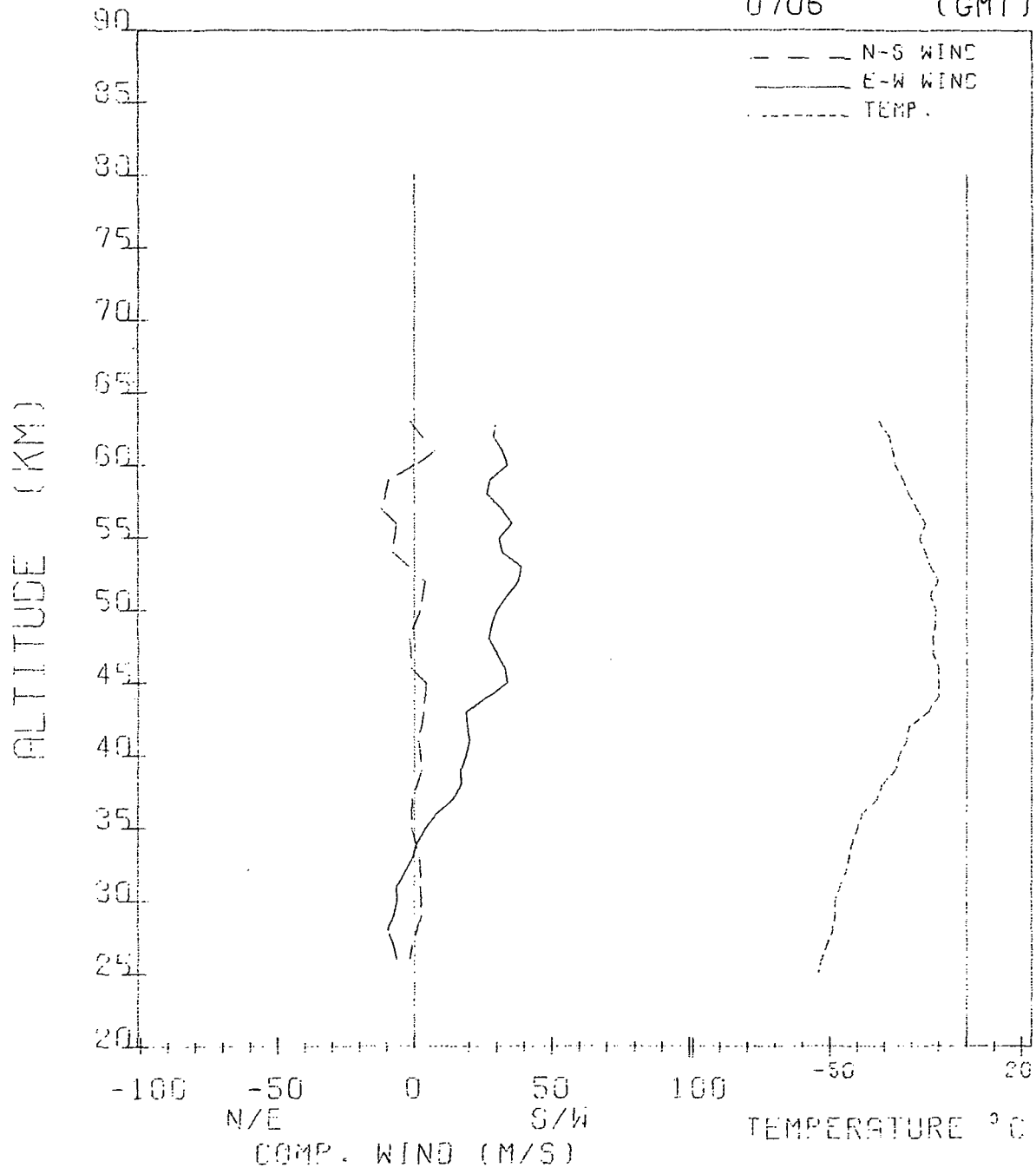
TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
63	-32	-3			104
62	-28	-3	4	29	107
61	-27	-5	7	32	103
60	-26	-4	0	34	97
59	-23	-3	-9	28	91
58	-21	-3	-12	26	87
57	-18	-2	-12	32	81
56	-15	-3	-7	35	76
55	-17	-2	-3	31	70
54	-15	-2	-8	32	67
53	-13	-1	-5	39	62
52	-10	-2	4	38	59
51	-13	-1	5	34	54
50	-11	-1	2	30	50
49	-11	-1	-1	28	47
48	-12	-1	-2	27	44
47	-12	-1	-3	30	41
46	-10	-1	-1	33	39
45	-10	-1	4	34	37
44	-10	0	7	26	35
43	-14	-1	3	19	32
42	-21	-1	-1	19	29
41	-22	0	1	20	26
40	-25	0	3	19	25
39	-26	-1	3	17	24
38	-31	0	1	17	22
37	-33	0	-1	14	20
36	-38	0	-1	8	19
35	-40	0	-1	4	17
34	-42	0	1	1	16
33	-43	0	2	-1	15
32	-44	0	2	-3	13
31	-46	0	2	-7	12
30	-48	0	3	-7	12
29	-48	0	3	-8	11
28	-49	0	1	-10	10
27	-51	0	-1	-8	9
26	-53	0	-2	-6	8
25	-54	0			



WALLOPS ISLAND, VA.

MAR. 20, 1974  
0706 (GMT)



LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W

DATE March 20, 1974 TIME (GMT) 1000

FLIGHT SYSTEM Loki Walmet WIND SENSOR 7 ft. square starute

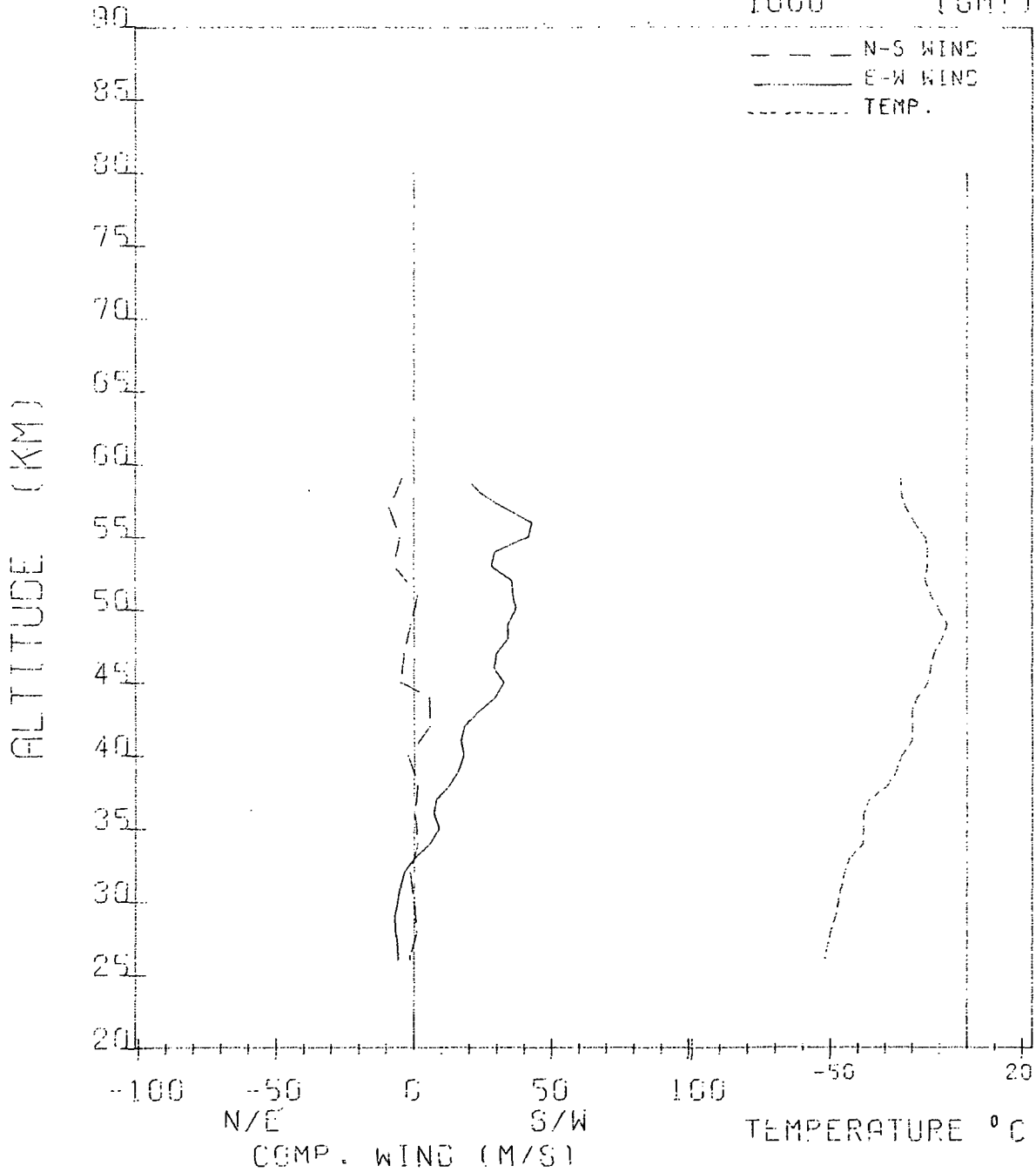
TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
59	-24	-4	-5	20	90
58	-24	-4	-6	25	86
57	-22	-2	-9	32	80
56	-19	-2	-10	43	74
55	-15	-2	-5	42	69
54	-14	-2	-5	29	65
53	-14	-2	-7	28	61
52	-15	-2	-6	35	58
51	-13	-1	1	36	54
50	-10	-1	3	36	51
49	-7	-1	-1	34	47
48	-9	-1	-1	34	44
47	-12	-1	-4	29	41
46	-13	-1	-7	29	39
45	-14	-1	-4	32	37
44	-18	-1	6	30	33
43	-20	-1	9	23	31
42	-20	0	6	18	29
41	-20	0	1	17	26
40	-24	0	-2	18	25
39	-26	0	1	16	23
38	-29	0	1	13	22
37	-36	0	1	8	20
36	-38	0	0	7	18
35	-38	0	1	9	17
34	-38	0	2	6	15
33	-43	0	0	0	14
32	-45	0	-1	-3	13
31	-46	0	0	-5	12
30	-47	0	0	-6	11
29	-48	0	0	-7	11
28	-50	0	1	-6	10
27	-51	0	0	-6	9
26	-52	0	-2	-6	8

WALLOPS ISLAND, VA.

MAR. 20, 1974

1000 (GMT)



LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W

DATE March 20, 1974 TIME (GMT) 1040

FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute

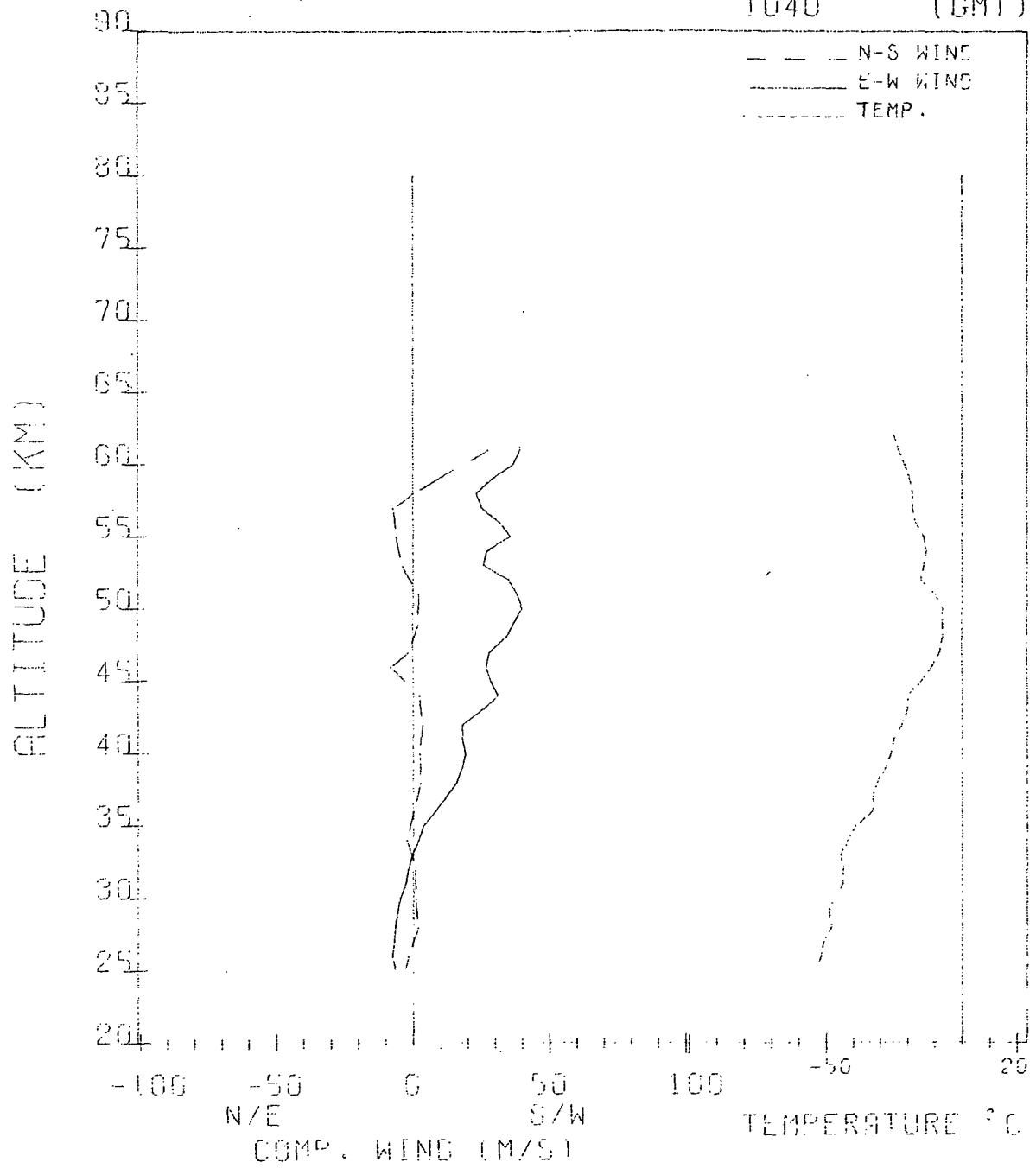
PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62	-25	-8			100
61	-23	-8	27	39	107
60	-21	-7	23	36	104
59	-19	-7	9	28	99
58	-18	-6	0	23	92
57	-18	-6	-7	25	87
56	-17	-4	-12	32	80
55	-14	-4	-6	35	76
54	-13	-4	-2	27	71
53	-14	-4	-4	26	66
52	-15	-3	-3	35	61
51	-10	-2	2	38	58
50	-7	-3	3	40	55
49	-7	-2	2	37	51
48	-7	-2	1	34	48
47	-8	-2	-1	28	46
46	-11	-2	-8	27	42
45	-15	-2	-10	28	39
44	-20	-2	2	31	35
43	-20	-1	7	25	33
42	-22	-1	3	18	31
41	-25	-1	2	18	29
40	-26	-1	2	19	26
39	-28	-1	3	17	25
38	-31	-1	3	16	23
37	-33	-1	2	12	21
36	-33	-1	0	8	20
35	-39	-1	-2	4	18
34	-42	-1	-2	2	17
33	-45	-1	1	0	16
32	-44	-1	1	-2	15
31	-44	-1	1	-3	13
30	-47	-1	1	-5	12
29	-49	-1	2	-6	11
28	-48	-1	2	-6	11
27	-51	-1	-1	-7	9
26	-52	-1	-2	-8	9
25	-54	-1	-2	-7	8

WALLOPS ISLAND, VA.

MAR. 20, 1974

1040 (GMT)



LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W  
 DATE March 20, 1974 TIME (GMT) 1240  
 FLIGHT SYSTEM Loki Walmet WIND SENSOR 7 ft. square starute  
 TEMP SENSOR 10 mil bead loop mount

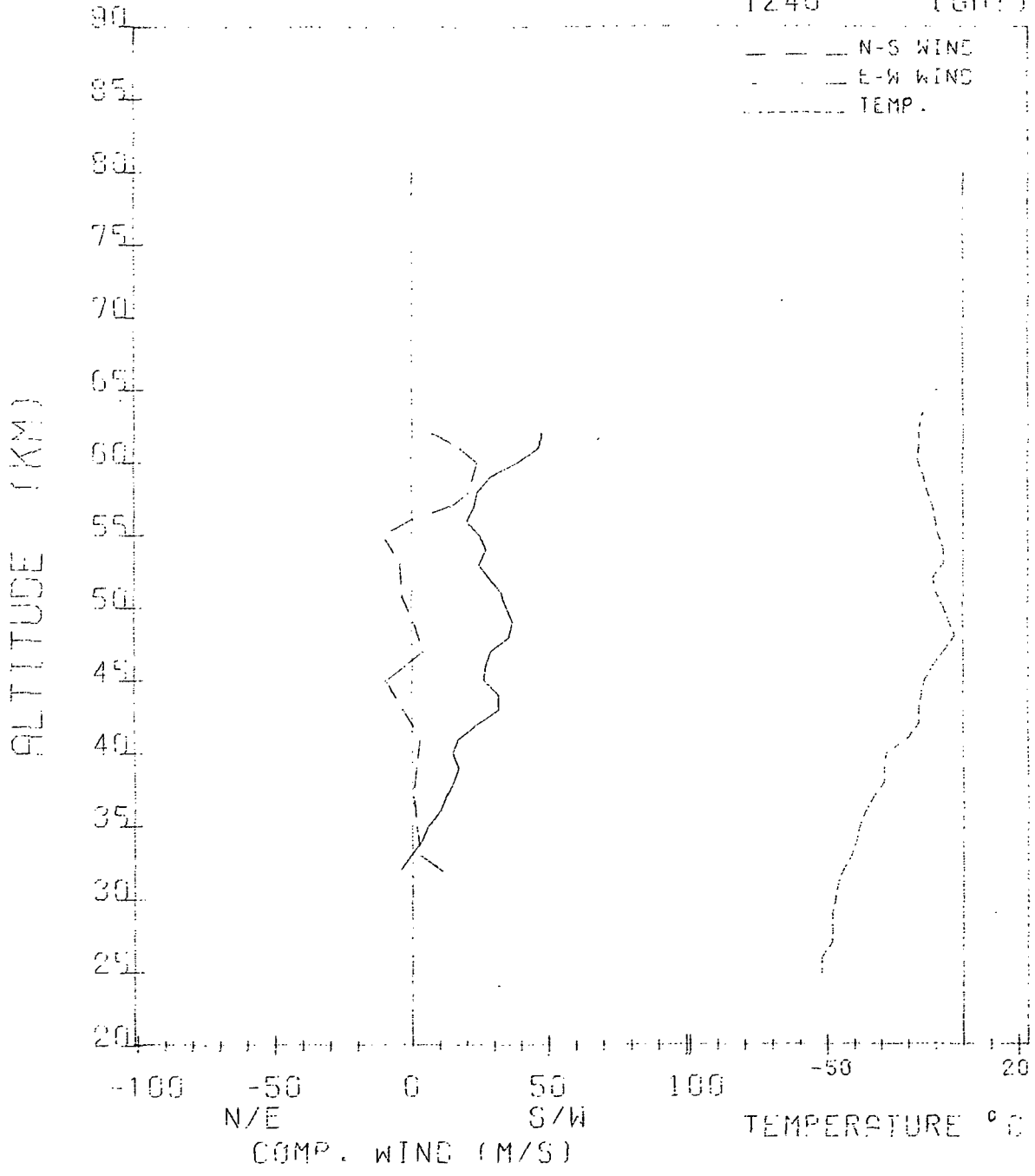
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
63	-14	-9			97
62	-16	-9	7	47	105
61	-16	-8	18	47	101
60	-16	-7	24	39	95
59	-14	-6	23	29	89
58	-13	-5	21	24	85
57	-11	-5	14	23	79
56	-10	-4	-1	20	74
55	-9	-4	-11	25	69
54	-7	-3	-7	27	66
53	-7	-3	-4	24	62
52	-11	-3	-6	28	57
51	-10	-2	-4	32	54
50	-7	-2	-3	35	51
49	-5	-2	0	37	47
48	-3	-2	4	35	44
47	-7	-2	4	28	41
46	-11	-2	-3	26	38
45	-14	-2	-10	27	35
44	-15	-1	-9	32	33
43	-16	-1	-3	32	30
42	-16	-1	2	24	29
41	-20	-1	3	16	26
40	-28	-1	2	15	25
39	-29	-1	1	17	23
38	-29	-1	-1	15	22
37	-33	-1	0	12	20
36	-36	-1	2	9	18
35	-38	-1	2	6	16
34	-39	-1	2	4	15
33	-41	-1	3	-1	15
32	-44	-1	2	-5	13
31	-46	-1			
30	-47	-1			
29	-48	-1			
28	-48	-1			
27	-48	-1			
26	-52	-1			
25	-52	-1			

WALLOPS ISLAND, VA.

MAR. 20, 1974

1240

(GMT)



LAUNCH SITE Wallops Island, Va. 72402 LAT. 37.8N LONG. 75.5W

DATE March 20, 1974 TIME (GMT) 1639

FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute

PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	CORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
61	-13	-9	13	49	104
60	-13	-8	18	47	101
59	-11	-6	16	42	95
58	-10	-6	15	39	90
57	-9	-5	16	36	85
56	-13	-6	12	27	79
55	-12	-4	5	25	74
54	-10	-3	6	30	69
53	-8	-3	7	31	65
52	-6	-3	2	30	61
51	-4	-2	3	31	57
50	-2	-2	4	30	54
49	-4	-2	1	30	50
48	-6	-2	-2	30	47
47	-4	-2	3	32	44
46	-3	-2	12	28	41
45	-6	-2	15	20	38
44	-10	-2	4	14	36
43	-13	-1	-2	17	34
42	-17	-1	0	21	31
41	-20	-1	2	21	28
40	-21	-1	1	18	26
39	-30	-1	2	15	24
38	-29	-1	3	11	23
37	-30	-1	2	8	21
36	-35	-1	-2	5	19
35	-40	-1	0	5	17
34	-42	-1	3	5	16
33	-41	-1	3	1	15
32	-42	-1	2	-2	14
31	-45	-1	3	-4	13
30	-48	-1	3	-7	12
29	-47	-1	1	-8	11
28	-48	-1	0	-8	10
27	-50	-1	0	-7	9
26	-50	-1	1	-4	9
25	-51	-1	3	-4	8

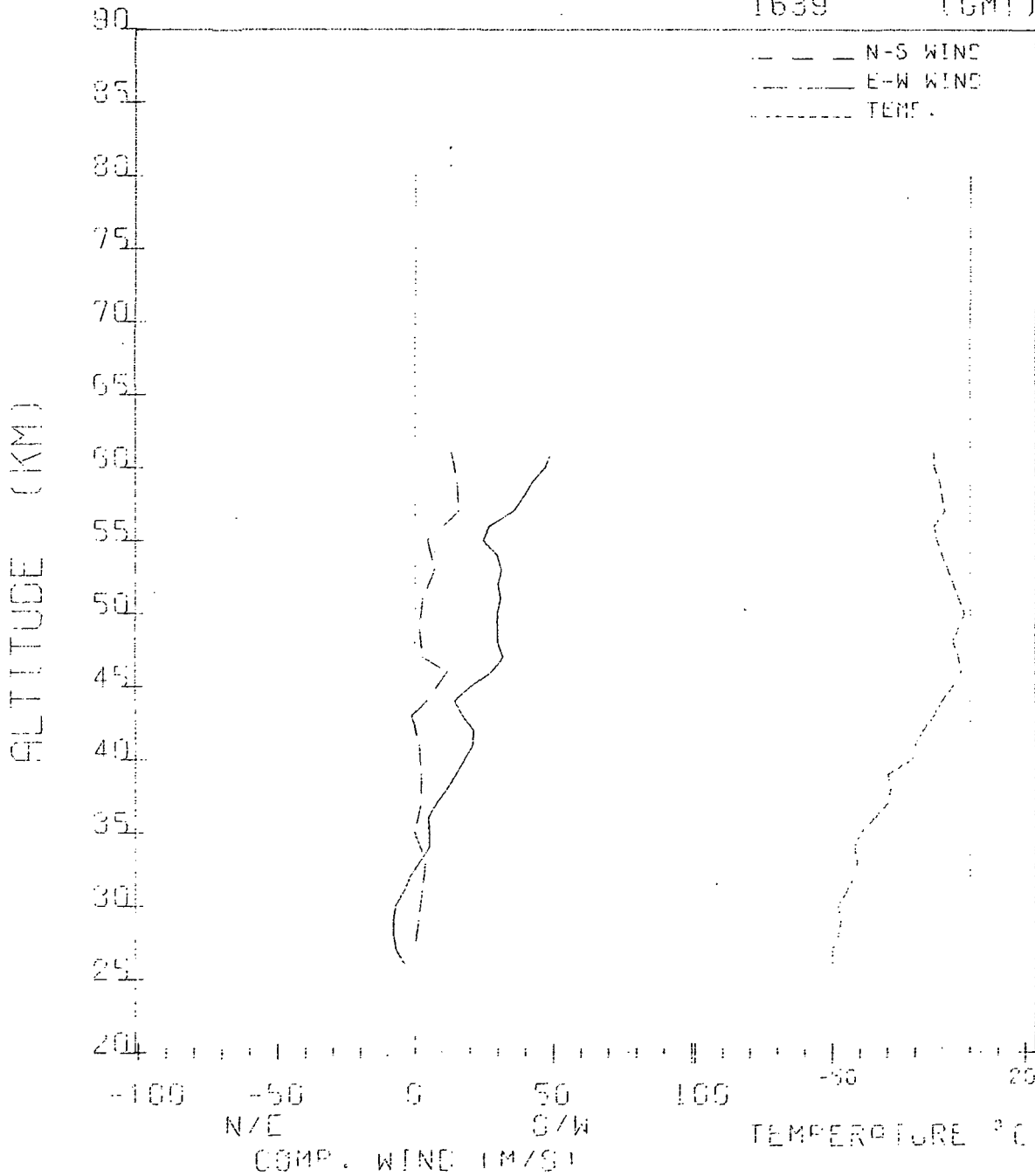


WALLOPS ISLAND, VA.

MAR. 20, 1974

1639

(GMT)



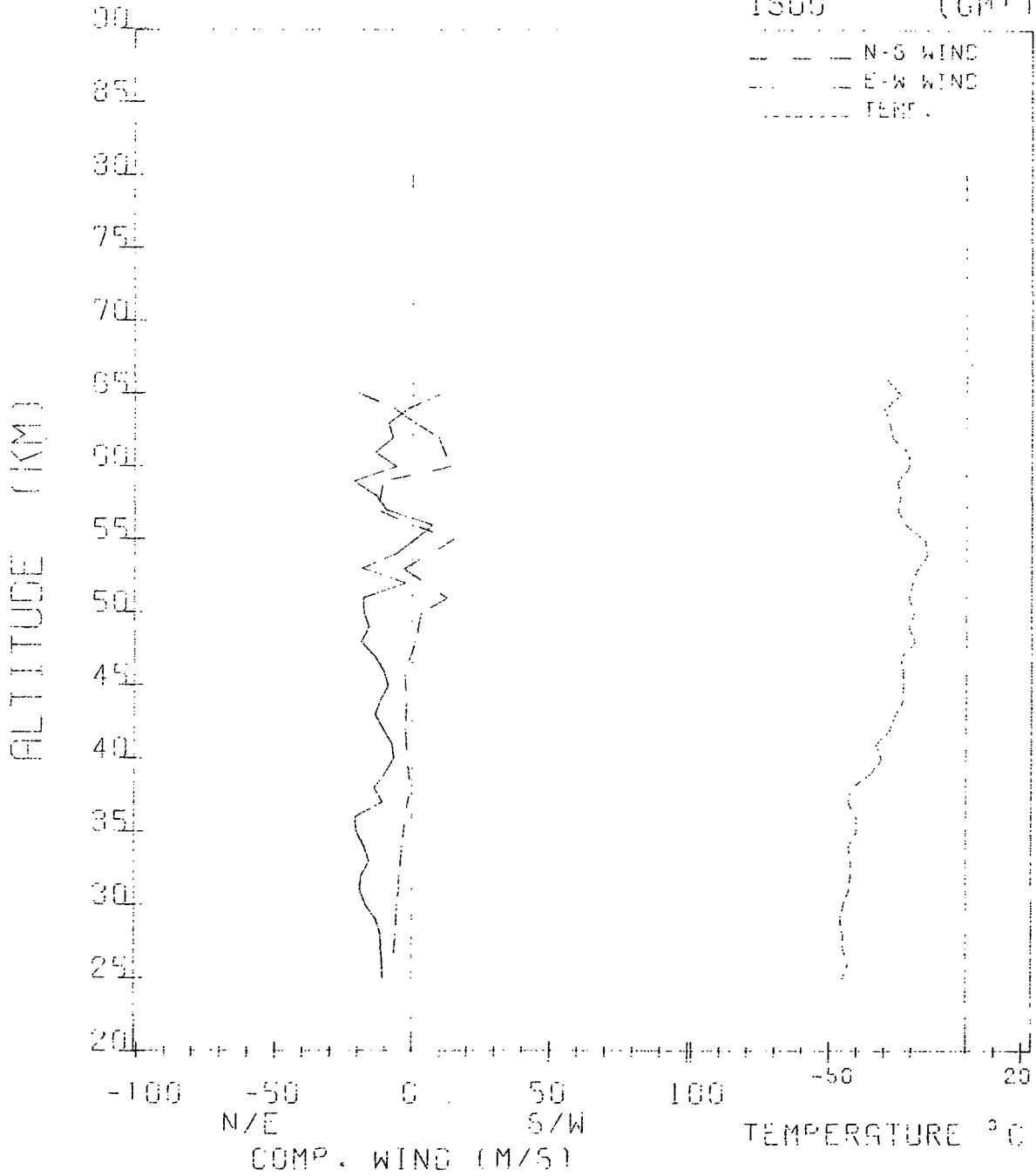
**LAUNCH SITE** Ft. Churchill, Canada 72913 **LAT.** 58.7N **LONG.** 93.8W  
**DATE** March 19, 1974 **TIME (GMT)** 1500  
**FLIGHT SYSTEM** Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-8B **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
66	-29	-15			125
65	-24	-13	-19	10	133
64	-30	-15	-7	-2	133
63	-28	-12	1	-9	125
62	-27	-11	10	-7	125
61	-21	-8	6	-14	118
60	-21	-8	14	-6	105
59	-25	-8	-11	-21	95
58	-24	-6	-12	-13	91
57	-25	-6	-13	-10	87
56	-22	-4	0	7	80
55	-15	-3	15	1	72
54	-14	-4	12	-6	67
53	-18	-4	-3	-19	65
52	-20	-3	2	-3	61
51	-21	-3	13	-18	57
50	-19	-2	3	-18	54
49	-21	-3	-1	-16	49
48	-19	-2	1	-19	43
47	-24	-2	-2	-14	41
46	-23	-2	-3	-11	40
45	-23	-2	-2	-9	38
44	-23	-1	-2	-12	36
43	-26	-2	-3	-14	33
42	-28	-1	-2	-11	29
41	-33	-1	-5	-7	27
40	-31	-1	-2	-7	25
39	-35	-1	0	-10	23
38	-42	-1	0	-14	21
37	-43	-1	-1	-11	20
36	-40	-1	-3	-21	20
35	-40	-1	-5	-20	17
34	-43	-1	-4	-18	15
33	-42	-1	-3	-16	14
32	-42	-1	-5	-18	14
31	-43	-1	-6	-19	13
30	-45	-1	-6	-17	11
29	-46	-1	-7	-13	10
28	-45	-1	-6	-11	10
27	-45	-1	-4	-11	9
26	-43	-1	-7	-11	9
25	-45	-1	-7	-11	8

FORT CHURCHILL, CANADA

MAR. 19, 1974

1500 (GMT)



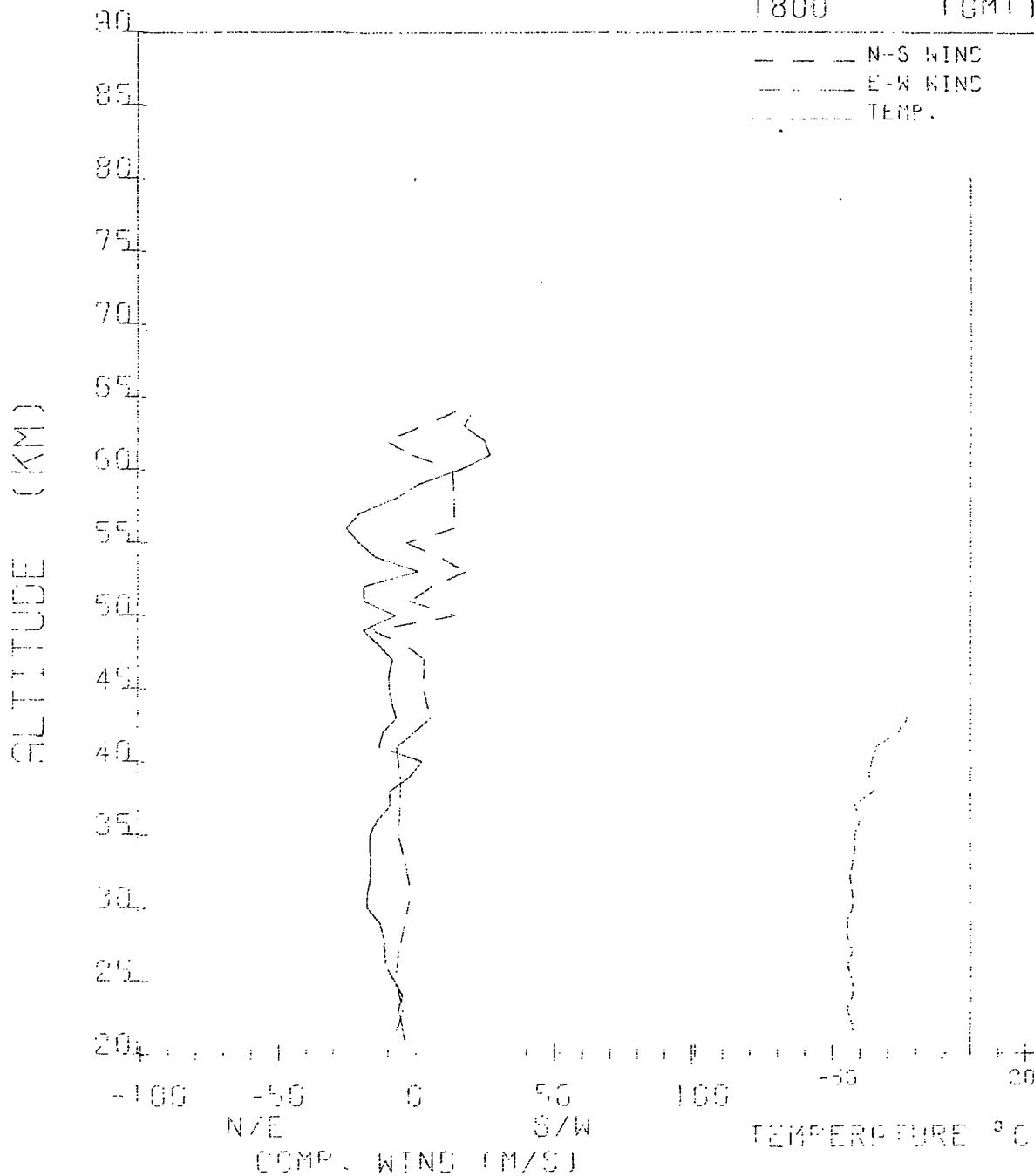
**LAUNCH SITE** Ft. Churchill, Canada 72913 **LAT.** 58.7N **LONG.** 93.8W  
**DATE** March 19, 1974 **TIME (GMT)** 1800  
**FLIGHT SYSTEM** Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-8B **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
64			14	20	165
63			10	17	165
62			-11	25	165
61			-1	27	160
60			13	16	155
59			11	1	150
58			14	-8	140
57			19	-21	130
56			14	-25	125
55			-4	-21	115
54			9	-15	105
53			17	1	98
52			6	-19	95
51			-2	-19	87
50			14	-7	75
49			-16	-19	65
48			-4	-14	60
47			3	-8	55
46			5	-10	52
45			3	-10	47
44			2	-9	43
43	-23	-2	5	-7	38
42	-26	-1	-1	-12	28
41	-34	-1	-7	-13	27
40	-36	-1	-10	2	25
39	-37	-1	-6	-2	22
38	-35	-1	-6	-10	20
37	-42	-1	-6	-9	20
36	-40	-1	-10	-14	19
35	-42	-1	-6	-17	17
34	-42	-1	-3	-17	16
33	-43	-1	-4	-17	14
32	-44	-1	-3	-17	14
31	-43	-1	-2	-18	13
30	-43	-1	-2	-18	11
29	-45	-1	-4	-13	10
28	-45	-1	-5	-12	10
27	-43	-1	-6	-11	9
26	-45	-1	-7	-11	9
25	-43	-1	-8	-8	8
24	-43	-1	-6	-5	7
23	-45	0	-5	-6	7
22	-43	0	-3	-5	7
21	-42	0	-8	-4	6

FORT CHURCHILL, CANADA

MAR. 19, 1974

1800 (GMT)



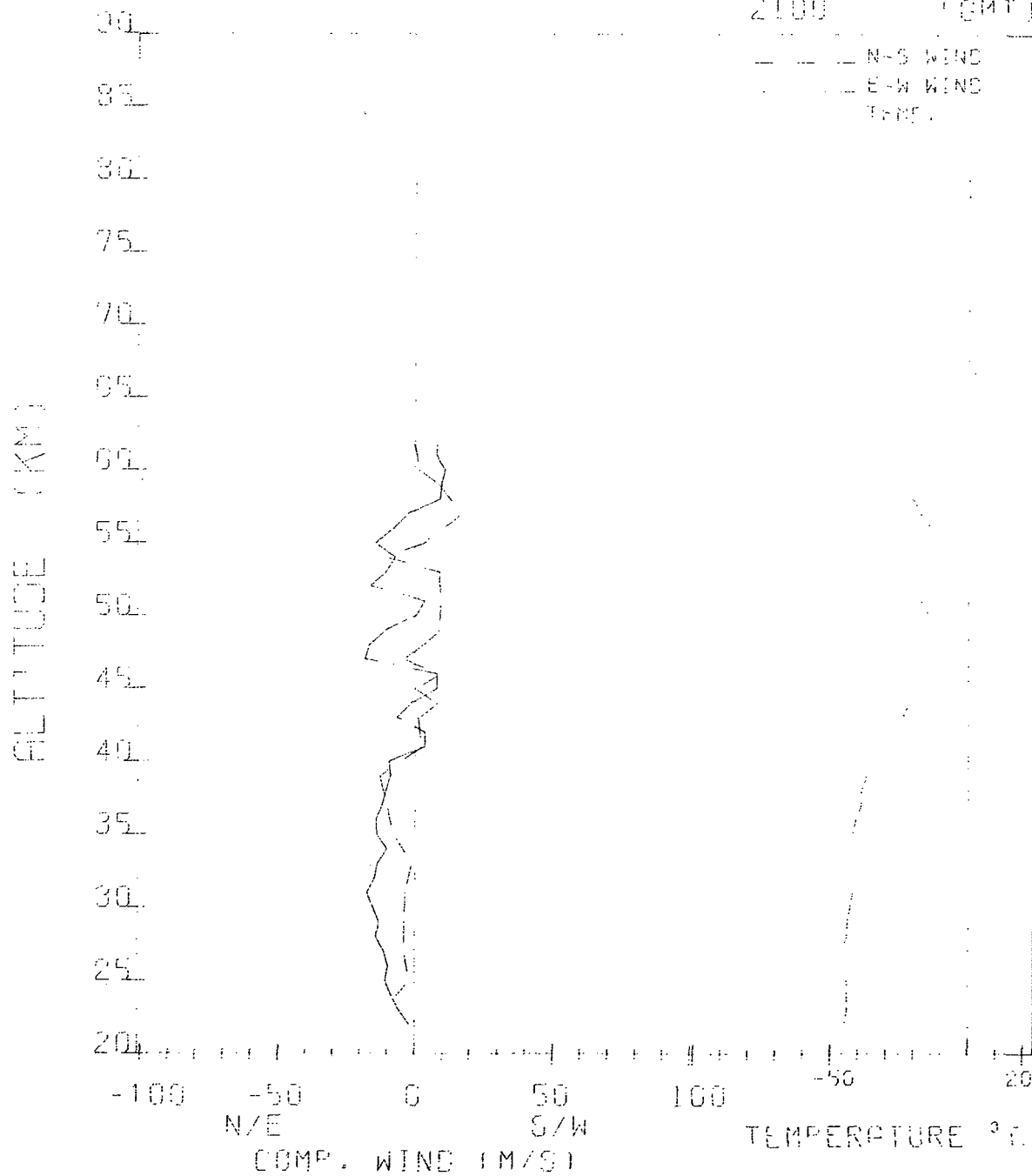
**LAUNCH SITE** Ft. Churchill, Canada 72913 **LAT.** 58.7N **LONG.** 93.8W  
**DATE** March 19, 1974 **TIME (GMT)** 2100  
**FLIGHT SYSTEM** Loki Datasonde **WIND SENSOR** 7 ft. square starute  
PWN-8B **TEMP SENSOR** 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62			-1	8	118
61			2	8	111
60			2	11	111
59	-24	-8	9	10	105
58	-20	-6	9	9	95
57	-17	-5	17	-3	87
56	-13	-4	16	-8	83
55			3	-15	74
54			-11	-7	67
53	-20	-4	9	-11	67
52			9	-16	63
51	-17	-3	9	3	57
50	-14	-3	13	0	57
49			9	-11	54
48			3	-17	48
47			-4	-19	43
46			9	8	38
45			0	8	36
44	-22	-1	8	-1	36
43	-24	-1	1	-7	33
42			4	3	31
41			2	3	31
40			5	-10	26
39	-37	-1	-14	-9	23
38	-39	-1	-12	-11	22
37	-39	-1	-10	-12	20
36	-41	-1	-9	-14	19
35	-42	-1	-8	-14	18
34			-4	-10	16
33			-1	-14	15
32			-2	-15	14
31	-42	-1	-4	-18	13
30	-43	-1	-4	-15	12
29	-44	-1	-4	-13	10
28	-44	-1	-5	-14	10
27	-46	-1	-4	-11	10
26			-2	-10	10
25	-44	-1	-2	-11	10
24	-44	-1	-5	-9	10
23	-44	0	-12	-6	9
22	-45	0	-7	-2	7

FORT CHURCHILL, CANADA

MAR. 19. 1974

2100 (GMT)



LAUNCH SITE Ft. Churchill, Canada 72913 LAT. 58.7N LONG. 93.8W  
 DATE March 20, 1974 TIME (GMT) 0000  
 FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute  
PWN-8B TEMP SENSOR 10 mil bead loop mount

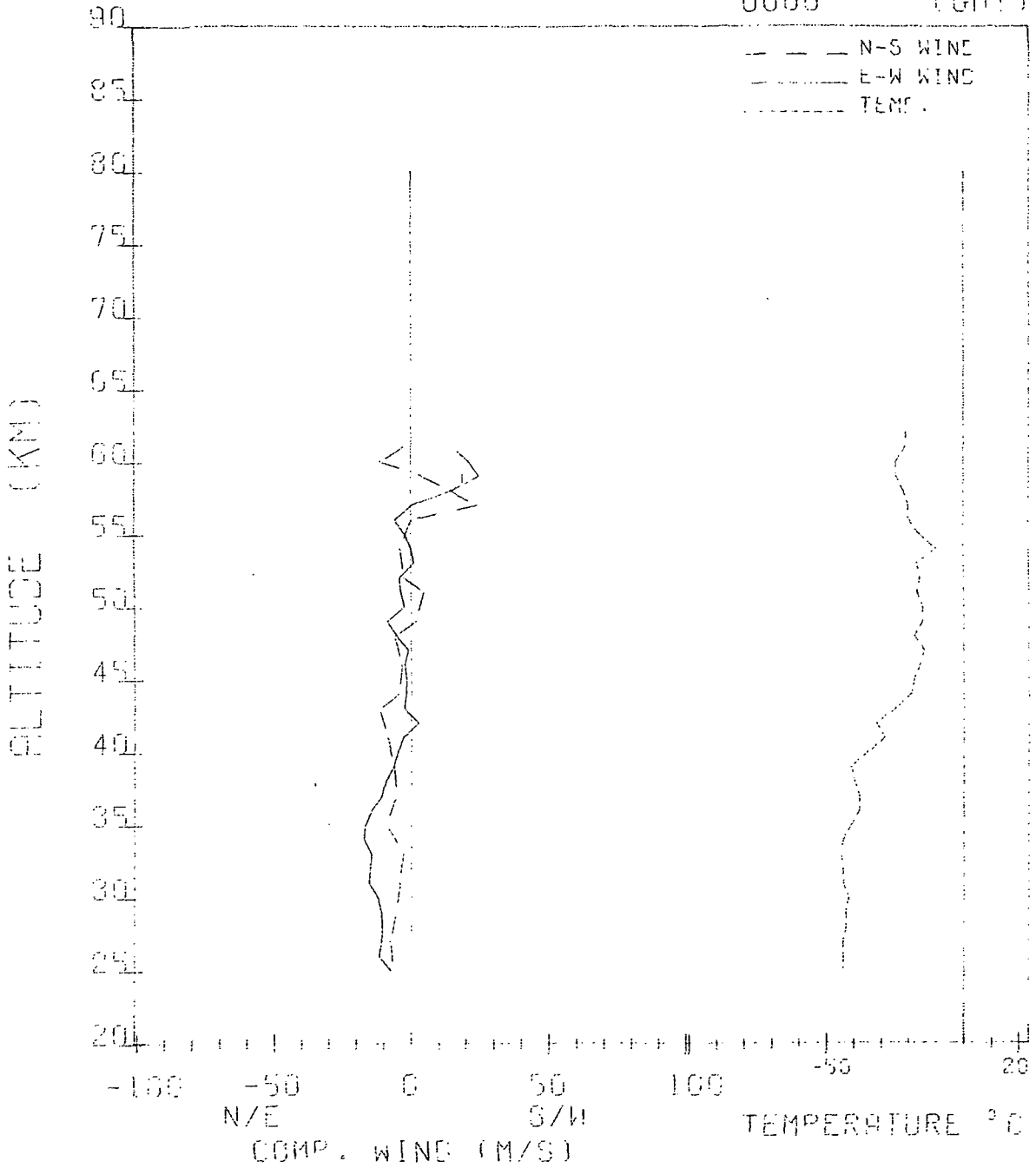
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62	-21	-4			111
61	-21	-5	-3	16	111
60	-25	-7	-11	21	111
59	-25	-5	4	25	95
58	-22	-3	15	15	83
57	-20	-3	24	0	80
56	-20	-3	0	-6	80
55	-16	-2	-3	-2	72
54	-10	-1	-4	1	67
53	-17	-3	-4	1	65
52	-16	-1	-3	-4	59
51	-17	-2	5	-4	56
50	-15	-1	7	-3	50
49	-15	-1	2	-9	48
48	-18	-2	-6	-5	47
47	-14	-1	-4	-1	42
46	-16	-1	-3	-3	40
45	-18	-1	-2	-2	38
44	-19	-1	-5	-2	34
43	-25	-1	-12	-3	31
42	-32	-1	-12	3	29
41	-29	0	-8	-3	27
40	-35	-1	-3	-5	24
39	-41	-1	-6	-6	22
38	-40	0	-3	-9	21
37	-38	0	-5	-11	20
36	-38	0	-7	-15	18
35	-41	0	-9	-17	17
34	-44	0	-8	-17	15
33	-45	0	-3	-15	14
32	-44	0	-2	-15	13
31	-44	0	-4	-15	12
30	-42	0	-7	-12	12
29	-43	0	-5	-11	11
28	-43	0	-3	-11	10
27	-44	0	-7	-11	10
26	-44	0	-6	-12	8
25	-44	0	-7	-7	8



FORT CHURCHILL, CANADA

MAR. 20, 1974

0000 (GMT)



LAUNCH SITE Ft. Churchill, Canada 72913 LAT. 58.7N LONG. 93.8W

DATE March 20, 1974 TIME (GMT) 0600

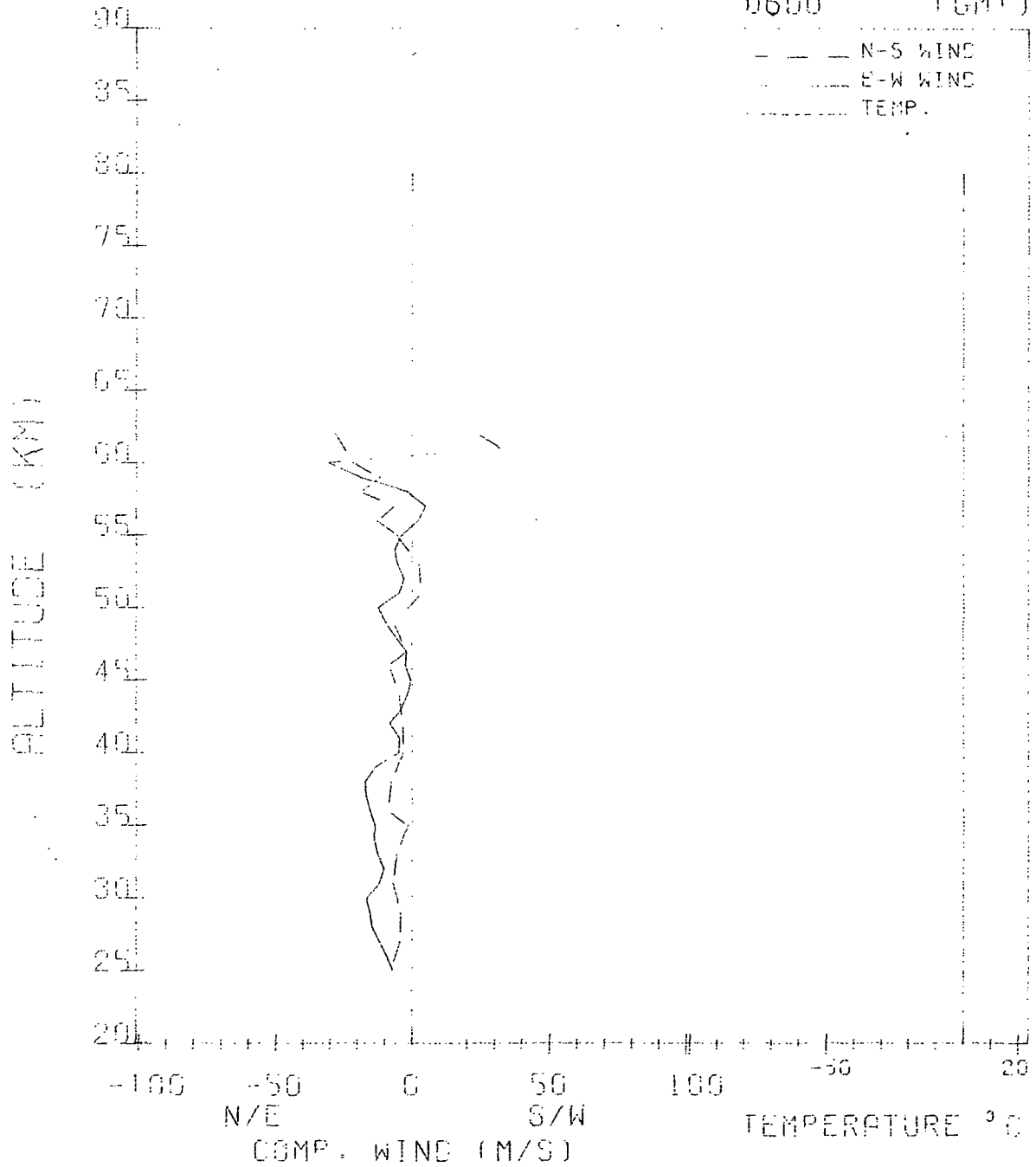
FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute

PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62			-28	24	115
61			-32	32	115
60			-22	-31	105
59			-12	-20	95
58			-19	-2	85
57			-6	5	80
56			-13	2	78
55			-6	-4	75
54			-6	-7	72
53			3	-5	65
52			0	-3	65
51			3	-5	61
50			2	-13	55
49			-7	-10	50
48			-8	-6	48
47			-2	-2	45
46			-9	-2	40
45			-9	-6	38
44			-5	-2	35
43			-3	-4	33
42			-3	-8	31
41			-8	-5	29
40			-3	-5	27
39			-8	-14	25
38			-8	-17	24
37			-8	-17	22
36			-9	-16	20
35			-2	-14	19
34			0	-14	17
33			-6	-13	16
32			-8	-10	15
31			-7	-12	14
30			-2	-17	12
29			-4	-15	11
28			-2	-15	11
27			-4	-12	10
26			-7	-10	9
25			-8	-7	8

FORT CHURCHILL, CANADA

MAR. 20 1974  
0600 (GMT)



LAUNCH SITE Ft. Churchill, Canada 72913 LAT. 58.7N LONG. 93.8W

DATE March 20, 1974 TIME (GMT) 0300

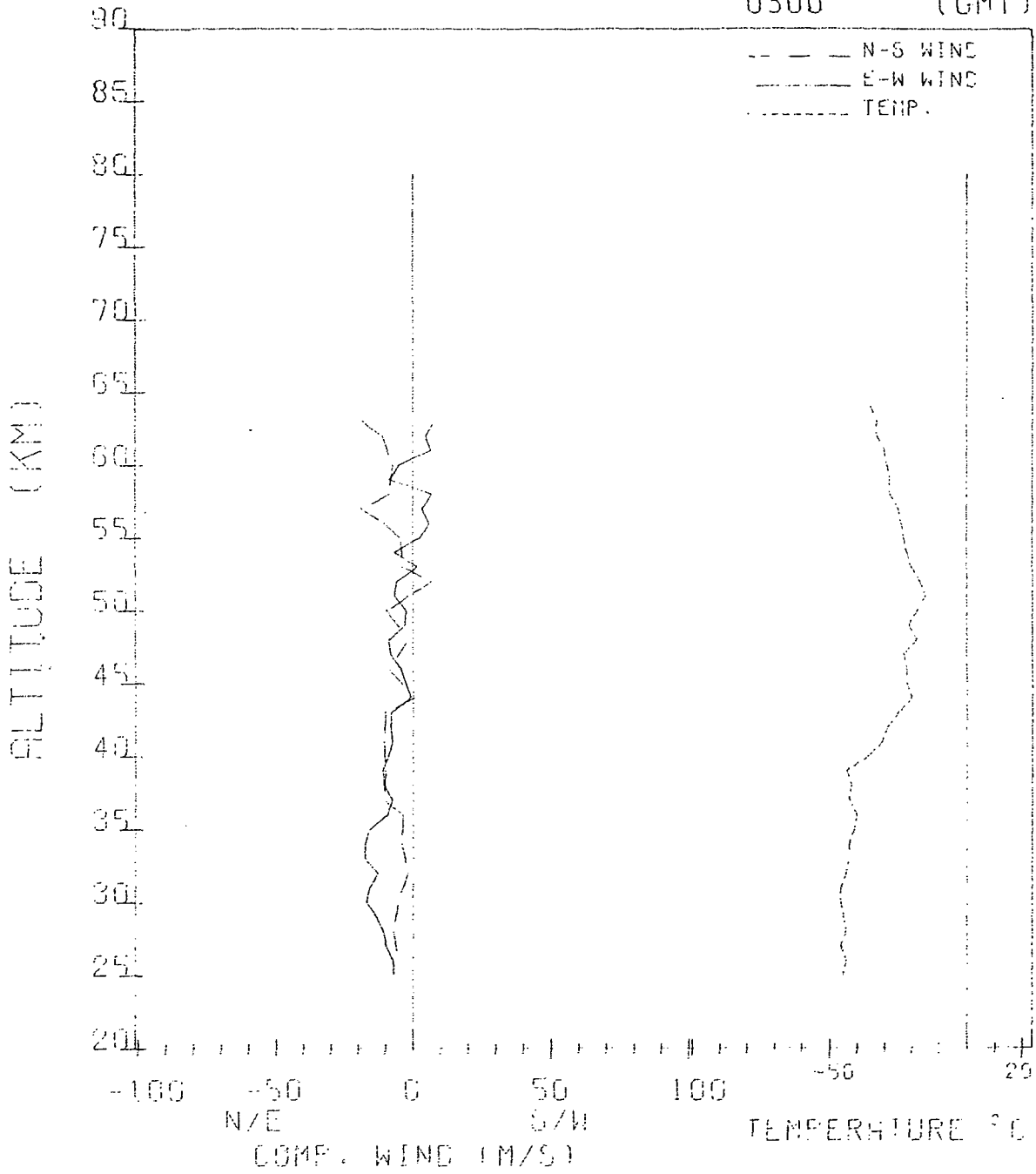
FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute

PWN-8B TEMP SENSOR 10 mil bead loop mount

ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
64	-35	-6			125
63	-33	-6	-18	8	125
62	-33	-7	-11	4	118
61	-30	-5	-8	6	105
60	-29	-6	-7	-5	100
59	-28	-5	-5	-9	100
58	-28	-4	-9	7	87
57	-25	-3	-19	3	80
56	-24	-3	-10	6	83
55	-23	-2	-4	3	74
54	-22	-1	-4	-7	67
53	-20	-2	-4	2	63
52	-17	-1	6	-6	63
51	-15	-1	-2	-7	54
50	-18	-1	-10	-3	51
49	-21	-2	-11	-3	51
48	-18	-1	-2	-9	43
47	-23	-1	-4	-8	41
46	-22	-1	-9	-5	42
45	-22	-1	-8	-3	38
44	-20	0	0	-1	33
43	-25	-1	-10	-8	33
42	-29	-1	-15	-8	31
41	-31	-1	-11	-8	27
40	-36	-1	-9	-9	24
39	-44	-1	-10	-11	22
38	-42	0	-11	-11	22
37	-43	0	-11	-8	21
36	-40	0	-4	-9	19
35	-41	0	-2	-16	16
34	-43	0	-4	-18	15
33	-43	0	-3	-18	14
32	-44	0	-2	-13	14
31	-46	0	-1	-16	13
30	-46	0	-6	-17	11
29	-45	0	-7	-13	10
28	-44	0	-7	-11	10
27	-46	0	-7	-10	9
26	-44	0	-5	-7	9
25	-45	0	-7	-7	8

FORT CHURCHILL, CANADA

MAR. 20, 1974  
0300 (GMT)



LAUNCH SITE Ft. Churchill, Canada 72913 LAT. 58.7N LONG. 93.8W

DATE March 20, 1974 TIME (GMT) 0900

FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute

PWN-8B TEMP SENSOR 10 mil bead loop mount

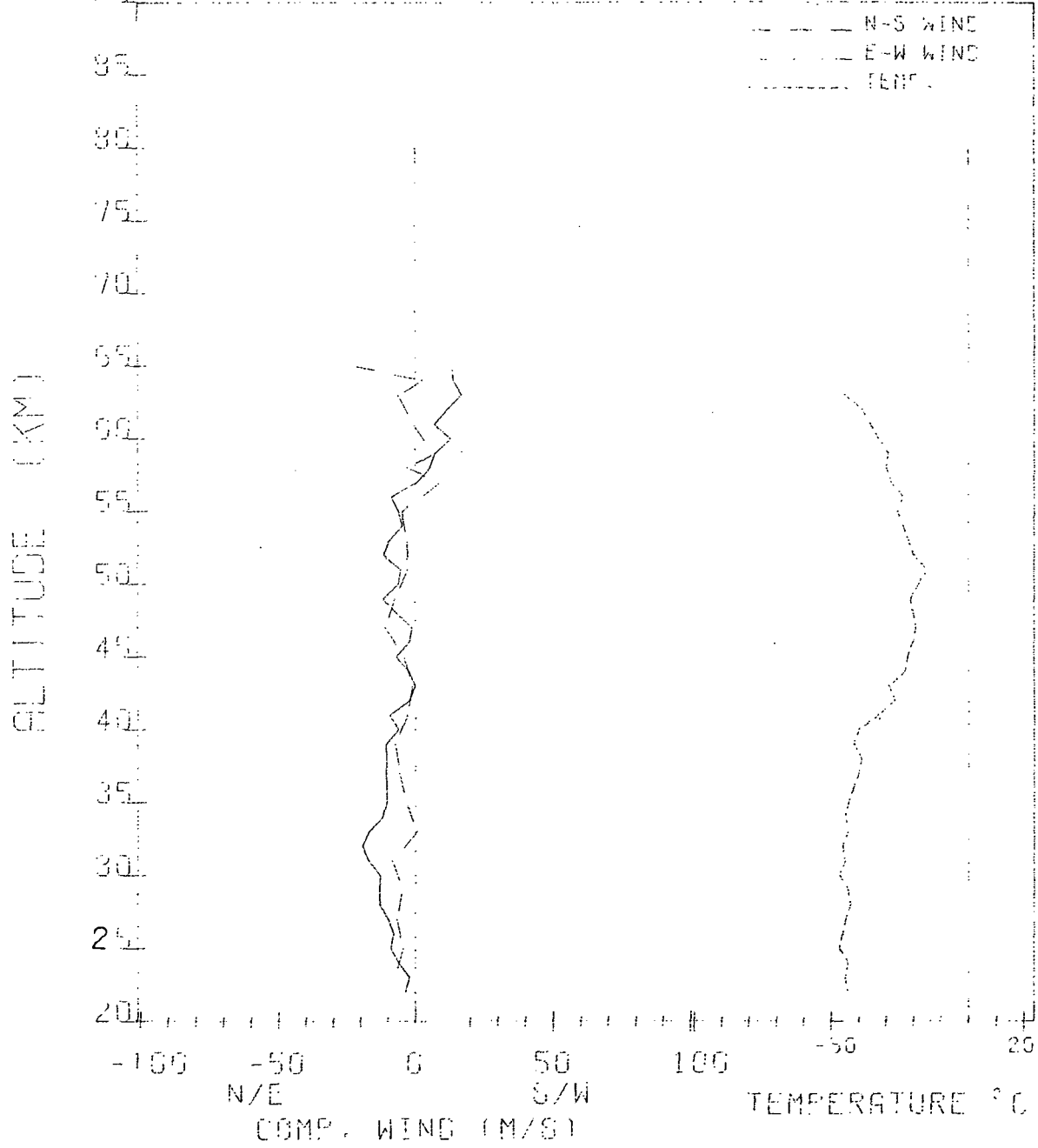
ALTITUDE (KM)	CORRECTED TEMPERATURE (°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
65			-22	13	143
64			2	14	133
63	-45	-12	-6	17	133
62	-39	-7	-10	11	125
61	-36	-5	-1	7	111
60	-33	-5	2	13	105
59	-29	-3	7	7	95
58	-30	-4	-3	5	91
57	-28	-4	9	1	87
56	-24	-3	12	-9	80
55	-26	-3	-5	-6	74
54	-24	-2	-8	-5	69
53	-22	-2	-3	-10	65
52	-20	-2	-6	-12	63
51	-15	-1	-3	-5	59
50	-18	-2	-4	-6	54
49	-21	-1	-7	-12	49
48	-20	-1	-11	-7	47
47	-19	-1	-11	-1	44
46	-20	-1	-11	-2	41
45	-22	-1	-4	-7	38
44	-23	-1	-7	-2	36
43	-29	-1	-1	-1	34
42	-27	-1	0	-2	30
41	-33	-1	-3	-10	28
40	-40	-1	-5	-6	26
39	-42	0	-7	-11	23
38	-39	0	-11	-11	22
37	-40	0	-6	-11	21
36	-42	0	-3	-10	20
35	-44	0	-3	-10	17
34	-45	0	-1	-12	16
33	-44	0	1	-17	16
32	-46	0	-4	-19	15
31	-45	0	-8	-17	14
30	-47	0	-8	-13	13
29	-44	0	-5	-13	11
28	-43	0	-6	-13	10
27	-45	0	-7	-10	10
26	-46	0	-6	-8	10
25	-47	0	-5	-9	8
24	-44	0	-5	-6	7
23	-45	0	-8	-2	7
22	-44	0	-5	-4	6

FORT CHURCHILL, CANADA

MAR. 20. 1974

09 00

(GMT)



LAUNCH SITE Ft. Churchill, Canada 72913 LAT. 58.7N LONG. 93.8W

DATE March 20, 1974 TIME (GMT) 1200

FLIGHT SYSTEM Loki Datasonde WIND SENSOR 7 ft. square starute

PWN-8B TEMP SENSOR 10 mil bead loop mount

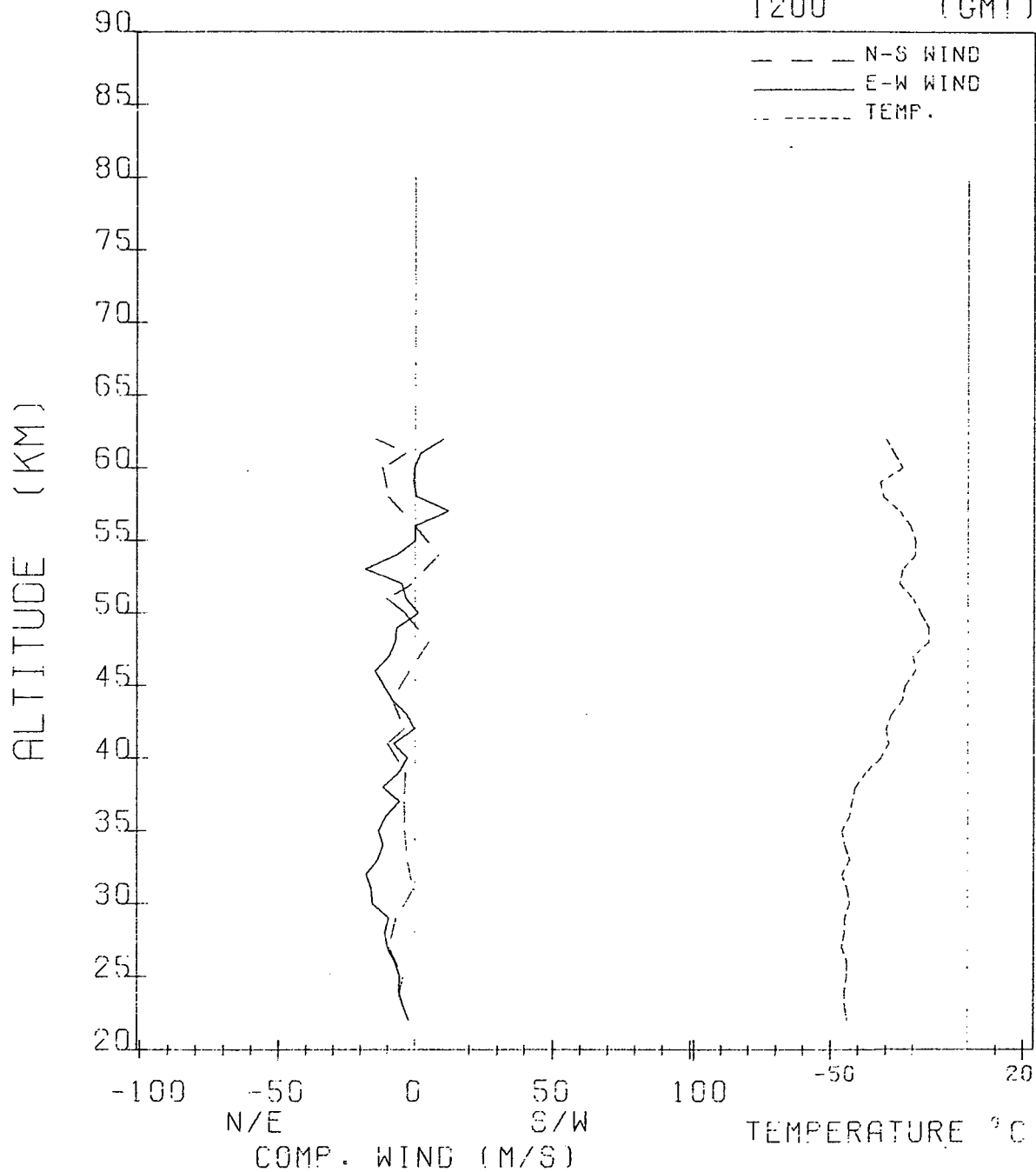
ALTITUDE (KM)	CORRECTED TEMPERATURE(°C)	CORRECTION (°C)	UNCORRECTED COMPONENT WIND		FV (MPS)
			N-S (MPS)	E-W (MPS)	
62	-30	-13	-15	10	143
61	-27	-11	-4	2	133
60	-24	-8	-11	0	111
59	-32	-10	-13	-1	105
58	-31	-8	-10	0	100
57	-25	-5	-13	12	87
56	-21	-5	0	0	87
55	-19	-4	0	0	77
54	-19	-4	8	-7	71
53	-24	-4	4	-19	65
52	-25	-3	-1	-5	57
51	-20	-2	-10	-3	51
50	-17	-2	-4	1	45
49	-14	-3	-1	-7	49
48	-14	-2	5	-7	48
47	-20	-2	2	-10	47
46	-19	-2	-2	-15	44
45	-23	-2	-3	-12	40
44	-24	-1	-8	-8	33
43	-28	-2	-8	-3	33
42	-30	-2	-4	0	32
41	-29	-1	-10	-8	29
40	-32	-1	-12	-3	25
39	-37	-1	-3	-6	22
38	-41	-1	-5	-12	22
37	-42	-1	-4	-6	22
36	-43	-1	-2	-11	18
35	-46	-1	-4	-13	16
34	-45	-1	-5	-12	15
33	-43	-1	-3	-14	15
32	-46	-1	1	-18	15
31	-44	-1	-1	-16	14
30	-43	-1	-4	-16	11
29	-45	-1	-7	-10	11
28	-45	-1	-7	-11	11
27	-46	-1	-10	-10	10
26	-44	-1	-5	-7	9
25	-44	-1	-4	-6	8
24	-45	-1	-8	-6	7
23	-45	0	-7	-4	7
22	-44	0	-7	-2	6



FORT CHURCHILL, CANADA

MAR. 20, 1974

1200 (GMT)



#### REFERENCES

1. Bollermann, Bruce, 1970: A study of 30 Km to 200 Km Meteorological Rocket Sounding Systems. NASA CR-1529, Vol. 1, Part 1, page 155.
2. Miller, A. J., and F. J. Schmidlin, 1971: Rocketsonde Repeatability and Stratosphere Variability. J. Atmos. Res., Vol. 10, No. 2, pp 320-327.
3. Beyers, N. J., and B. T. Miers, 1968: Diurnal Temperature Change in Atmosphere Between 30 and 60 Km Over White Sands Missile Range. J. Atmos. Sci., Vol. 22, pp 262-266.
4. Beyers, N. J., and B. T. Miers, and R. J. Reed, 1966: Diurnal Tidal Motions Near the Stratopause During 48 Hours At White Sands Missile Range. J. Atmos. Sci., Vol. 23, pp 325-333.
5. Beyers, N. J., and B. T. Miers, 1968: A Tidal Experiment In the Equatorial Stratosphere Over Ascension Island. J. Atmos. Sci., Vol. 25, pp 155-159.
6. Finger, Frederick G., and Harold M. Woolf, 1966: An Experiment Designed To Determine the Diurnal Temperature and Wind Variation and To Detect Possible Errors In Rocketsonde Temperature Measurements In the Upper Stratosphere. NASA TM-X-1298, 19 pages.
7. Groves, G. V., and S. H. Makarious, 1968: Diurnal S-N Wind Components Below 60 Km Derived From Rocket Observations For Various Seasons and Latitudes. Space Research VIII, North-Holland Publishing Co., Amsterdam, pp 857-864.
8. Reed, Richard J., Michael J. Oard, and Marya Sieminski, 1969: A Comparison of Observed and Theoretical Diurnal Tidal Motions Between 30 and 60 Km. Mon. Wea. Rev., Vol. 97, No. 6, pp 456-459.
9. Reed, Richard J., Donald J. McKenzie, and Joan C. Vyerberg, 1966: Further Evidence of Enhanced Diurnal Tidal Motions Near the Stratopause. J. Atmos. Sci., Vol. 23, pp 247-251.
10. Reed, Richard J., Donald J. McKenzie, and Joan C. Vyerberg, 1966: Diurnal Tidal Motions Between 30 and 60 Kilometers In Summer. J. Atmos. Sci., Vol. 23, pp 416-423.
11. Lindzen, R. S., 1967: Thermally Driven Diurnal Tide In the Atmosphere. Quart. J. Royal Meteor. Soc., Vol. 93, No. 395, pp 18-42.
12. Lindzen, R. S., 1965: Physical Processes In the Mesosphere. Proc. Intern. Symp., Dynamics Of Large-Scale In the Atmosphere. Moscow, pp 376-387.
13. Meyer, W. D., 1970: A Diagnostic Numerical Study Of the Semi-Annual Variation Of the Zonal Wind In the Tropical Stratosphere and Mesosphere. J. Atmos. Sci., Vol. 27, pp 820-830.
14. Federal Meteorological Handbook No. 10 (FMH-10), 1973: Rocketsonde Observations. GPO Washington, DC.
15. Krumins, M. V., and W. Carson Lyons, 1972: Corrections For the Upper Atmosphere Temperatures Using a Thin Film Loop Mount. NOLTR 72-152, Naval Ordnance Lab., White Oak, Silver Spring, MD.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
WASHINGTON, D.C. 20546

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

**SPECIAL FOURTH-CLASS RATE  
BOOK**

POSTAGE AND FEES PAID  
NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION  
451



POSTMASTER: If Undeliverable (Section 158  
Postal Manual) Do Not Return

*"The aeronautical and space activities of the United States shall be conducted so as to contribute . . . to the expansion of human knowledge of phenomena in the atmosphere and space. The Administration shall provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof."*

—NATIONAL AERONAUTICS AND SPACE ACT OF 1958

## NASA SCIENTIFIC AND TECHNICAL PUBLICATIONS

**TECHNICAL REPORTS:** Scientific and technical information considered important, complete, and a lasting contribution to existing knowledge.

**TECHNICAL NOTES:** Information less broad in scope but nevertheless of importance as a contribution to existing knowledge.

**TECHNICAL MEMORANDUMS:** Information receiving limited distribution because of preliminary data, security classification, or other reasons. Also includes conference proceedings with either limited or unlimited distribution.

**CONTRACTOR REPORTS:** Scientific and technical information generated under a NASA contract or grant and considered an important contribution to existing knowledge.

**TECHNICAL TRANSLATIONS:** Information published in a foreign language considered to merit NASA distribution in English.

**SPECIAL PUBLICATIONS:** Information derived from or of value to NASA activities. Publications include final reports of major projects, monographs, data compilations, handbooks, sourcebooks, and special bibliographies.

**TECHNOLOGY UTILIZATION PUBLICATIONS:** Information on technology used by NASA that may be of particular interest in commercial and other non-aerospace applications. Publications include Tech Briefs, Technology Utilization Reports and Technology Surveys.

*Details on the availability of these publications may be obtained from:*

**SCIENTIFIC AND TECHNICAL INFORMATION OFFICE  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
Washington, D.C. 20546**