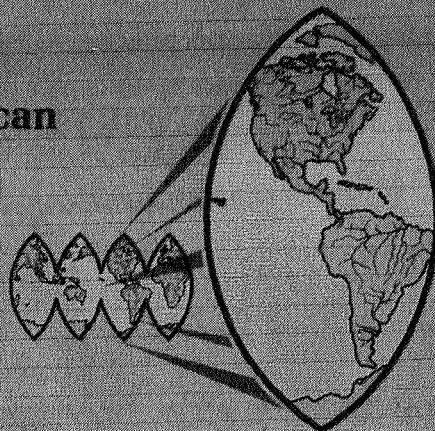


**CASE FILE
COPY**

EXAMETNET DATA REPORT SERIES

**Experimental InterAmerican
Meteorological
Rocket
Network**



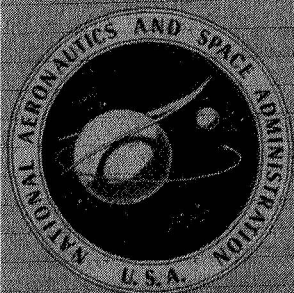
ANNUAL REPORT, 1966

**Sponsored by the EXAMETNET Executive Committee
of the participating national scientific organizations**

ARGENTINA *Comisión Nacional de Investigaciones
Espaciales*

BRAZIL *Comissão Nacional de Atividades
Espaciais*

UNITED STATES *National Aeronautics and Space
Administration*



EXAMETNET DATA REPORT SERIES

ANNUAL REPORT, 1966

Prepared under contract for NASA's Wallops
Station and the Exametnet Executive Committee
by Shellenger Research Laboratories, University of
Texas at El Paso



Scientific and Technical Information Division
OFFICE OF TECHNOLOGY UTILIZATION
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
Washington, D.C.

1968

FOREWORD

The Experimental InterAmerican Meteorological Rocket Network (EXAMETNET) is a cooperative program among the national space organizations of Argentina, Brazil, and the United States of America with potential for growth and participation by other countries and national space organizations. The purpose of this program is to establish and demonstrate the capabilities of an interhemispheric network of meteorological sounding rocket launch sites. The EXAMETNET provides scientific measurements of the state of the upper atmosphere. These measurements will facilitate research into structure and circulation of the atmosphere in both the Northern and Southern Hemisphere and the interrelation of the atmospheric behavior in both hemispheres. The data from this network, when combined with data from other networks and launching sites, will furnish upper-air observational coverage extending from the Antarctic to the Arctic regions.

Each participating national space organization has provided personnel, facilities, and equipment to carry out the functions necessary for successful operation of this program. One such function is the preparation and dissemination of scientific and technical data. This annual EXAMETNET data report is a compilation of the Quarter Data Reports that have been disseminated to the network participants for their early review and editing. Broader dissemination is then possible by this annual presentation of quality controlled network data. The EXAMETNET reports contain wind and temperature data from each observation and the additional information needed for proper evaluation and interpretation of the soundings.

PROLOGO

La Red Interamericana Experimental de Investigaciones Meteorológicas con Cohetes (Experimental InterAmerican Meteorological Rocket Network, EXAMETNET) constituye un programa cooperativo entre las organizaciones nacionales espaciales de la Argentina, Brasil y los Estados Unidos de América con capacidad para desarrollarlo y admitir la participación de otros países y otras organizaciones nacionales espaciales. El objetivo de este programa es demostrar las posibilidades de una red interhemisférica de bases de lanzamiento de cohetes sonda meteorológicos. Por medio de la red EXAMETNET se obtienen mediciones científicas del estado de la alta atmósfera. Estos datos facilitarán la investigación de la estructura y circulación atmosféricas en los hemisferios norte y sur y la interrelación del comportamiento atmosférico en los mismos. Al considerarse en conjunto con los datos suministrados por otras redes y bases de lanzamiento y al materializarse el crecimiento potencial existente, los resultados de las mediciones proporcionarán información sobre la alta atmósfera desde una a otra región polar.

Cada organización nacional participante ha designado y proporcionado personal, instalaciones y equipos para llevar a cabo las funciones y cumplir con las responsabilidades necesarias para la operación exitosa de la red. Una de dichas funciones es la preparación y distribución de datos científicos y técnicos. Este Informe EXAMETNET Anual es una compilación de los Informes de Datos Trimestrales que han sido distribuidos a los participantes de la red para su revisión y corrección. Por medio de esta presentación anual de información de alta calidad se hace posible una distribución en mayor escala. Los informes de EXAMETNET contienen datos de viento y temperatura de cada una de las observaciones e información adicional para una correcta evaluación e interpretación de los sondeos.

PREFÁCIO

A Rede Experimental InterAmericana de Foguetes Meteorológicos (EXAMETNET) é um programa cooperativo entre as organizações espaciais nacionais da Argentina, Brasil e Estados Unidos da América, com potencial para crescer e para ter a participação de outros países e respectivas organizações espaciais. Sua finalidade é estabelecer e demonstrar as capacidades de uma rede interhemisférica de campos de lançamento de foguetes meteorológicos. A EXAMETNET obtém, na alta atmosfera, medições de interesse científico. Tais medições facilitarão as pesquisas sobre a estrutura e a circulação da atmosfera, tanto no hemisfério norte, como no hemisfério sul, e também a interrelação do comportamento atmosférico nos dois hemisférios. Os dados desta rede, se combinados com os dados fornecidos por outras redes e campos de lançamento, permitirão uma cobertura observacional das camadas superiores da atmosfera, desde a Antártica até o Ártico.

Cada organização participante tem provido o pessoal, as facilidades e o equipamento destinados às funções necessárias ao êxito das operações. Uma das referidas funções é o preparo e a disseminação dos dados científicos e técnicos. Este relatório anual de dados da EXAMETNET é uma compilação dos Relatórios Trimestrais de Dados, que têm sido distribuídos aos participantes da rede para conhecimento e revisão. Uma disseminação mais ampla fica sendo possível por esta apresentação anual de dados de qualidade controlada. As sondagens EXAMETNET contêm dados de ventos e temperatura de cada observação, e as informações adicionais necessárias a adequada avaliação e interpretação das sondagens.

INTRODUCTION

EXAMETNET meteorological rocket launchings and data dissemination are conducted synoptically from launch sites at Chamical, Argentina; Natal, Brazil; and Wallops Island, Virginia, U. S. A. The reduced data from the launchings for each quarter are checked, further reduced, compiled and published in the EXAMETNET Data Report Series by Schellenger Research Laboratories of the University of Texas at El Paso. These network data reports, after being reviewed and edited by all participants of the EXAMETNET, are then compiled into the annual publication for broad dissemination.

This annual publication contains, for the year 1966, the meteorological rocket observational data acquired by each participant. Appendixes concerning related activities of the EXAMETNET are also included in the annual reports. The appendix for this report contains the special 1965 firing series from Wallops Island, Virginia, for the months of September through November. The 1967 annual publication will list all EXAMETNET and related publications that describe the data, as well as the technical and scientific activities of the EXAMETNET and participants.

CONTENTS

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METEOROLOGICAL ROCKET OBSERVATIONAL DATA

METEOROLOGICAL ROCKET SUMMARY

Page No.	Date of Launch (GMT)	Time of Launch (GMT)	Flight System			Temp. Profile (Tens of Meters MSL)	Wind Profile (Tens of Meters MSL)
			Motor Type	Payload Type	Sensor Type 1. Wind 2. Temp.		

CHAMICAL, ARGENTINA

Lat. 30° 22'S Long. 66° 17'W

28	27 Apr 66	2154	Judi	Chaff	1. Chaff	N.A.	5700-3000
36	18 May 66	1842	Judi	Chaff	1. Chaff	N.A.	6000-3200
38	18 May 66	2022	Judi	WOX-1A	1. Chute	3180-1611	3200-1800
					2. Bead Therm		
50	15 Jun 66	1943	Judi	WOX-1A	1. Chute	NONE	5000-2400
					2. Bead Therm		
58	13 Jul 66	2244	Judi	WOX-1A	1. Chute	5700-1637	5500-1700
					2. Bead Therm		
60	14 Jul 66	1517	Judi	WOX-1A	1. Chute	NONE	5500-2000
					2. Bead Therm		
70	17 Aug 66	1630	Judi	WOX-1A	1. Chute	4410-1785	5400-2000
					2. Bead Therm		
76	8 Sep 66	1841	Judi	WOX-1A	1. Chute	5130-2038	5000-2200
					2. Bead Therm		
80	14 Sep 66	1915	Judi	WOX-1A	1. Chute	NONE	5700-1700
					2. Bead Therm		
84	21 Sep 66	1640	Judi	WOX-1A	1. Chute	5200-1570	6000-1700
					2. Bead Therm		
88	28 Sep 66	1805	Arcas	Arcasonde-2B	1. Chute	NONE	6700-1700
					2. Bead Therm		
92	6 Oct 66	0040	Judi	Chaff	1. Chaff	N.A.	6700-2600
98	13 Oct 66	2350	Judi	Chaff	1. Chaff	N.A.	6400-2700
104**	16 Nov 66	1530	Judi	WOX-1A	1. Chute	5700-1815	NONE
					2. Bead Therm		
108	14 Dec 66	2025	Judi	WOX-1A	1. Chute	3225-0976	3000-1600
					2. Bead Therm		

*NOT APPLICABLE

**Tartagal, Argentina

METEOROLOGICAL ROCKET SUMMARY

Page No.	Date of Launch (GMT)	Time of Launch (GMT)	Flight System			Temp. Profile (Tens of Meters MSL)	Wind Profile (Tens of Meters MSL)
			Motor Type	Payload Type	Sensor Type 1. Wind 2. Temp.		

NATAL, BRAZIL

Lat. 05°55'S Long. 35°10'W

6	12 Jan 66	1500	Judi	Chaff	1. Chaff	N.A.	5800-2400
10	16 Feb 66	1405	Judi	Chaff	1. Chaff	N.A.	5800-1800
14	2 Mar 66	1548	Judi	Chaff	1. Chaff	N.A.	6000-1800
18	16 Mar 66	1500	Judi	Chaff	1. Chaff	N.A.	6200-1800
24	13 Apr 66	1547	Judi	WOX-1A	1. Chute	NONE	5200-1800
					2. Bead Therm		
32	2 May 66	0155	Judi	WOX-1A	1. Chute	5374-1960	5200-1800
					2. Bead Therm		
34	18 May 66	1550	Judi	WOX-1A	1. Chute	5238-2068	5200-1800
					2. Bead Therm		
44	1 Jun 66	1631	Arcas	Arcasonde-1A	1. Chute	5285-2103	5400-1800
					2. Bead Therm		
46	15 Jun 66	1532	Arcas	Arcasonde-1A	1. Chute	4139-1920	5700-1800
					2. Bead Therm		
54	29 Jun 66	1619	Arcas	Arcasonde-1A	1. Chute	4368-1902	4000-1800
					2. Bead Therm		
62	15 Jul 66	1605	Arcas	Arcasonde-1A	1. Chute	6096-1890	5200-1800
					2. Bead Therm		
66	7 Aug 66	0758	Arcas	Arcasonde-1A	1. Chute	6218-1876	5800-1800
					2. Bead Therm		
68	17 Aug 66	1537	Arcas	Arcasonde-1A	1. Chute	NONE	5600-1800
					2. Unknown		
78	14 Sep 66	1539	Arcas	Arcasonde-1A	1. Chute	5529-3063	5600-1800
					2. Bead Therm		
96	12 Oct 66	1500	Judi	WOX-1A	1. Chute	3429-1646	5100-1800
					2. Bead Therm		
102	16 Nov 66	1505	Arcas	Arcasonde-1A	1. Chute	5075-1817	5200-1800
					2. Bead Therm		

* NOT APPLICABLE

METEOROLOGICAL ROCKET SUMMARY

Page No.	Date of Launch (GMT)	Time of Launch (GMT)	Flight System			Temp. Profile (Tens of Meters MSL)	Wind Profile (Tens of Meters MSL)
			Motor Type	Payload Type	Sensor Type 1. Wind 2. Temp.		

WALLOPS ISLAND, VIRGINIA, U.S.A.

Lat.37° 51'N Long.75° 29'W

8	12 Jan 66	1523	Judi	Chaff	1. Chaff	N.A.	4000-3000
12	17 Feb 66	1815	Judi	Chaff	1. Chaff	N.A.	6200-2600
16	2 Mar 66	1915	Judi	WOX-1A	1. Chute 2. Bead Therm	5346-4548	5000-2000
20	16 Mar 66	1623	Judi	WOX-1A	1. Chute 2. Bead Therm	5447-1832	5400-2000
22	30 Mar 66	1603	Judi	Chaff	1. Chaff	N.A.	6000-3200
26	14 Apr 66	1509	Judi	WOX-3A	1. Chute 2. Bead Therm	5410-1844	5100-1900
30	2 May 66	0153	Judi	WOX-3A	1. Chute 2. Bead Therm	4770-1838	5100-1900
40	19 May 66	1701	Judi	Chaff	1. Chaff	N.A.	5500-2500
42	1 Jun 66	1607	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm	4779-1829	4900-1900
48	15 Jun 66	1814	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm	NONE	5700-1900
52	29 Jun 66	1436	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm	5486-2000	5300-1800
56	13 Jul 66	1914	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm	5831-2000	6000-2000
64	7 Aug 66	0736	Judi	WOX-3A	1. Chute 2. Bead Therm	5297-2000	5400-2000
72	17 Aug 66	2340	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm	5425-2000	5400-2000
74	7 Sep 66	1534	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm	5547-1798	5600-2000
82	16 Sep 66	1935	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm	5505-1814	5600-2000
86	23 Sep 66	1848	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm	5032-2000	5100-2000
90	1 Oct 66	0033	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm	5282-1844	5400-2000
94	6 Oct 66	1440	Judi	Chaff	1. Chaff	N.A.	6400-1900
100	13 Oct 66	1938	Judi	WOX-1A	1. Chute 2. Bead Therm	3536-1789	5100-2900
106	16 Nov 66	1606	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm	5197-1829	5200-1900
110	14 Dec 66	2039	Judi	Robinette	1. Chute 2. N.A.	N.A.	5400-2300

*NOT APPLICABLE

RP	STATION NAME	DATE	ROCKET LAUNCH TIME	RAWINSONDE RELEASE TIME
	(CNAE) NATAL, BRAZIL	Z	Z	Z
82599	05° 55' S 35° 10' W ALT. 43 M	JANUARY 12, 1966	1500	1130

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS						RAWINSONDE										
TIME FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP
TENTHS OF A MINUTE	M/S	KM	DEG	KTS	COMPONENTS N-S E-W	TENS OF METERS	DEG C	MB	G/M	M/S	DEG	KTS	COMPONENTS N-S E-W	MB	METERS	DEG	KTS	COMPONENTS N-S E-W	%	DEG C		
019	063	58	292	082	-016 +039										0004	090	010	+000 -005				
022	053	57	305	074	-022 +031										0200	116	024	+005 -011				
025	056	56	307	070	-022 +029										0400	006	006	-003 +000				
028	063	55	308	045	-014 +018										0600	354	014	-007 +001				
031	050	54	008	030	-015 -002										0800	293	030	-006 +014				
035	049	53	077	035	-004 -018										1000	258	051	+005 +025				
038	047	52	123	041	+013 -017										1200	250	053	+009 +025				
042	042	51	124	044	+013 -019										1400	236	040	+012 +017				
046	045	50	102	028	+003 -014										1600	258	024	+003 +012				
049	040	49	076	050	-006 -024										1800	106	022	+003 -011				
054	038	48	091	088	+001 -045										2000	091	043	+000 -022				
058	038	47	101	096	+009 -048										2200	097	057	+004 -029				
063	038	46	095	063	+003 -032										2400	100	064	+006 -032				
067	030	45	085	091	-004 -047										2600	090	043	+000 -022				
074	028	44	087	100	-003 -052																	
079	031	43	103	084	+010 -042																	
085	028	42	106	084	+012 -041																	
091	025	41	093	067	-002 -034																	
098	024	40	092	061	+001 -031																	
MISSING DATA (SEE REMARKS)																						
191	023	32	116	035	+008 -016																	
201	014	31	111	028	+005 -013																	
214	014	30	094	024	+001 -012																	
225	013	29	080	022	-002 -011																	
239	013	28	080	012	-001 -006																	
252	014	27	071	019	-003 -009																	
263	012	26	072	043	-007 -021																	
280	014	25	085	045	-002 -023																	
296	020	24	098	055	+004 -028																	

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. CHAFF
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 67.5 DEG. AZIMUTH 75.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION.. 6 SECONDS 6,984 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 90 SECONDS 58,674 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 90 SECONDS 58,674 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1,797 SECONDS 23,592 METERS ALTITUDE
 APOGEE.. 90 SECONDS 58,674 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH 5 BAND CHAFF
 TEMPERATURE SENSOR.. N.A.
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. N.A.
 TELEMETRY FREQUENCY.. N.A.
 TELEMETRY QUALITY.. N.A.
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

MISSING DATA FROM 32 TO 40 KM. DUE TO DISPERSION OF CHAFF.
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. UNKNOWN
 RADIOSONDE TYPE.. UNKNOWN
 TEMPERATURE ELEMENT TYPE.. UNKNOWN
 PRESSURE SENSOR TYPE.. UNKNOWN
 GROUND EQUIPMENT TYPE.. UNKNOWN
 BALLOON TYPE.. UNKNOWN
 BALLOON SIZE.. 990 GRAMS
 FREE LIFT.. UNKNOWN
 ASCENSION RATES.. SFC-400 MB = UNKNOWN
 400 MB-TOP = UNKNOWN

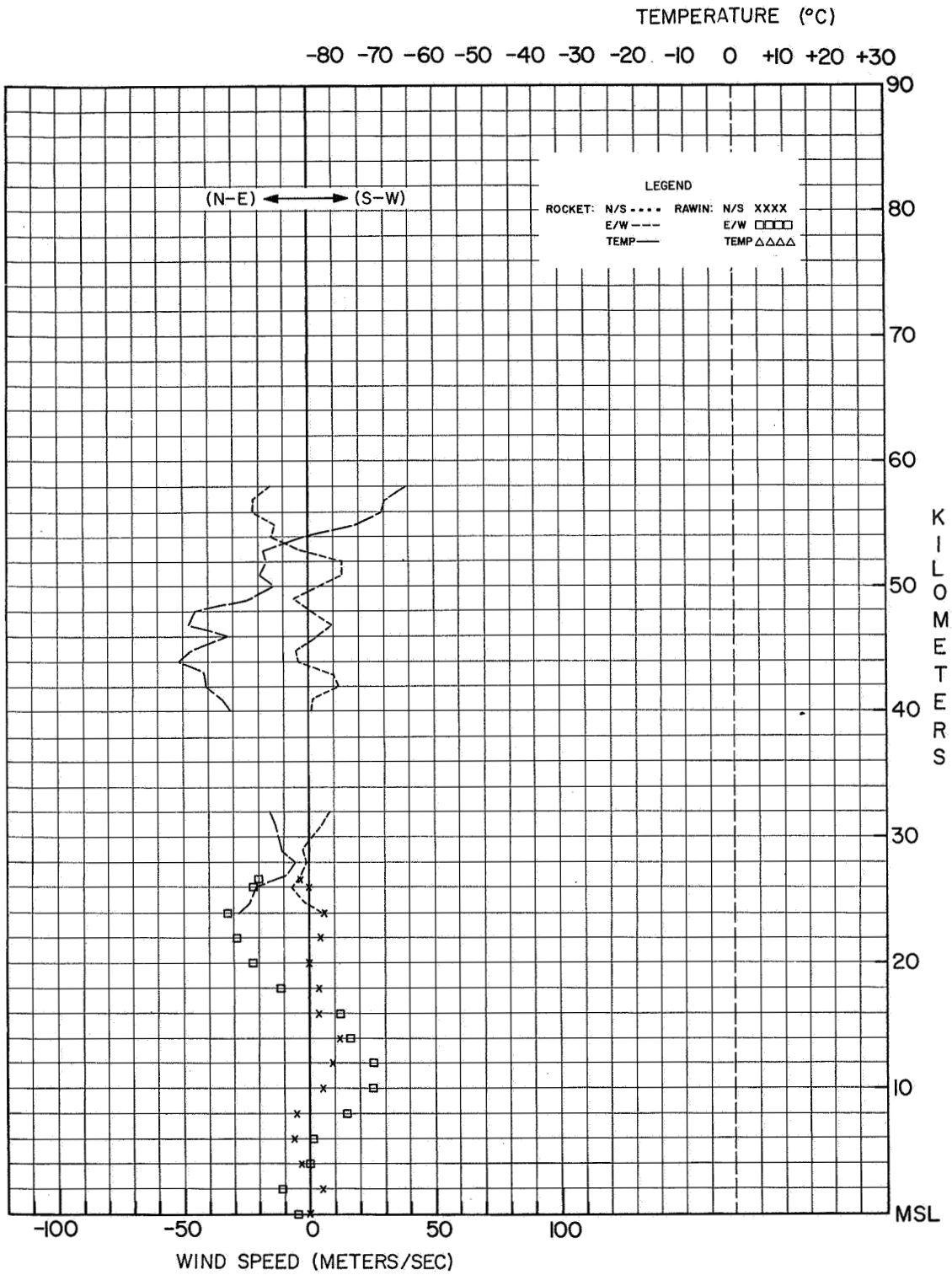
WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. UNKNOWN
 TEMPERATURE.. UNKNOWN
 RELATIVE HUMIDITY.. UNKNOWN
 VISIBILITY.. UNKNOWN
 SURFACE WIND.. UNKNOWN
 CLOUD TYPE AND AMOUNT.. TOTAL.. UNKNOWN
 LOW.. UNKNOWN
 MIDDLE.. UNKNOWN
 HIGH.. UNKNOWN

TYPE OF PRECIPITATION.. UNKNOWN
 OBSTRUCTIONS TO VISION.. UNKNOWN

WIND AT ROCKET LAUNCH

21 FT. 090 DEG/10 KTS



STATION: (CNAE) NATAL, BRAZIL
DATE: 12 JANUARY, 1966

ROCKET TIME: 1200 1500
LST GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
RADIOSONDE TYPE: UNKNOWN

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(NASA) WALLOPS ISLAND, VIRGINIA Z Z
72402 37° 51' N 75° 29' W ALT. 3 M JANUARY 12, 1966 1523 1115

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE								
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	RH %	TEMP DEG C
042	019	40	257	125	+014 +063											1031.0	0000	320	008	-003 +003	62	-06.7
052	016	39	261	121	+010 +062											0795.0	0200	311	028	-009 +011	26	-09.4
063	015	38	265	119	+006 +062											0612.0	0400	307	050	-019 +025	18	-13.6
074	017	37	263	118	+007 +061											0469.0	0600	304	074	-021 +032	23	-24.1
082	017	36	262	114	+008 +059											0354.0	0800	298	081	-019 +037	31	-40.1
093	014	35	263	118	+007 +061											0262.0	1000	306	103	-031 +043		-54.5
107	014	34	264	120	+006 +062											0192.0	1200	273	062	-001 +032		-54.0
117	015	33	268	109	+002 +056											0140.0	1400	281	043	-004 +022		-59.0
128	014	32	274	096	-003 +050											0101.0	1600	270	056	+000 +029		-63.5
141	012	31	275	093	-004 +048											0073.6	1800	258	029	+003 +015		-61.1
155	012	30	278	089	-006 +046											0053.3	2000	274	039	-001 +020		-62.3
																0038.6	2200	258	041	+004 +021		-62.0
																0028.0	2400	274	035	-001 +018		-57.5
																0020.6	2600	260	033	+003 +017		-58.3
																0015.1	2800					-51.0

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. UNKNOWN
PAYLOAD TYPE.. CHAFF
PAYLOAD PERFORMANCE.. UNKNOWN
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 12 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPQ-6
MOTOR ACQUISITION.. NO TRACK
MOTOR TRACK DROPPED.. NO TRACK
PAYLOAD ACQUISITION.. 210 SECONDS 40,721 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.030 SECONDS 28,950 METERS ALTITUDE
APOGEE.. UNKNOWN

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
TEMPERATURE SENSOR.. N.A.
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. N.A.
TELEMETRY FREQUENCY.. N.A.
TELEMETRY QUALITY.. N.A.
TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

NO RADAR TRACK ON ROCKET OR PAYLOAD EJECTION DUE TO EXTREME
FLIGHT AZIMUTH DEVIATION CONTRARY TO ALL PREVAILING WINDS.
THERMODYNAMICS BASE DATA.. PRESSURE N.A.
ALTITUDE N.A.
TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

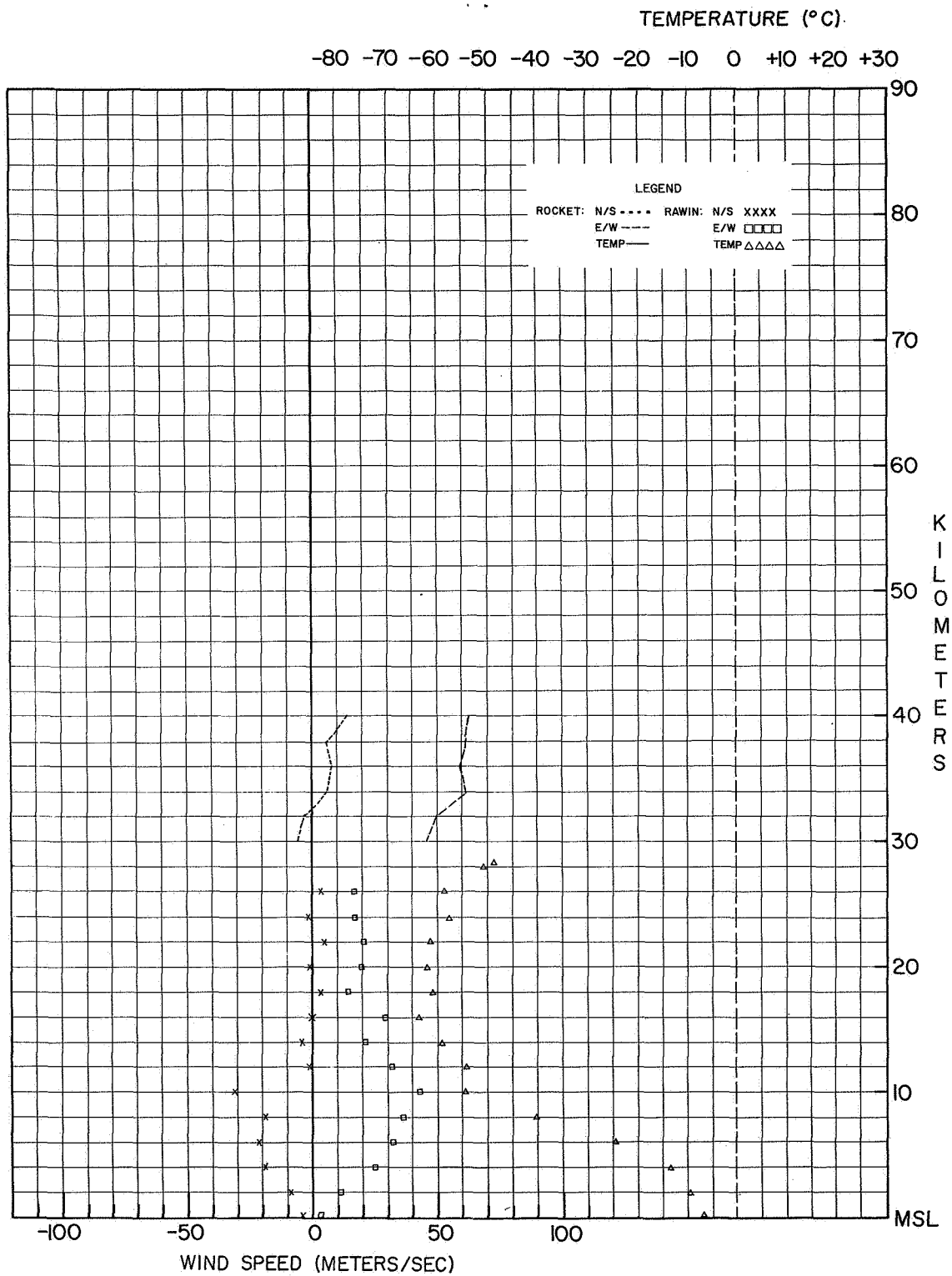
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B AND TMQ-5
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,400 GRAMS
ASCENSION RATES.. SFC-400 MB = 310 M/MINUTE
400 MB-TOP = 331 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1031.0 MB
TEMPERATURE.. -6.7 DEG. C
RELATIVE HUMIDITY.. 62%
VISIBILITY.. 7 KM
SURFACE WIND.. 320 DEG. 8 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. NONE

WIND AT ROCKET

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE
LAUNCH
50 FT. 350 DEG/14 KTS, 100 FT. 350 DEG/14 KTS,
150 FT. 355 DEG/16 KTS, 200 FT. 344 DEG/17 KTS,
250 FT. 344 DEG/17 KTS



STATION: (NASA) WALLOPS IS., VA
DATE: 12 JANUARY, 1966

ROCKET TIME: 10231523GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
RADIOSONDE TYPE: 1680 MHZ

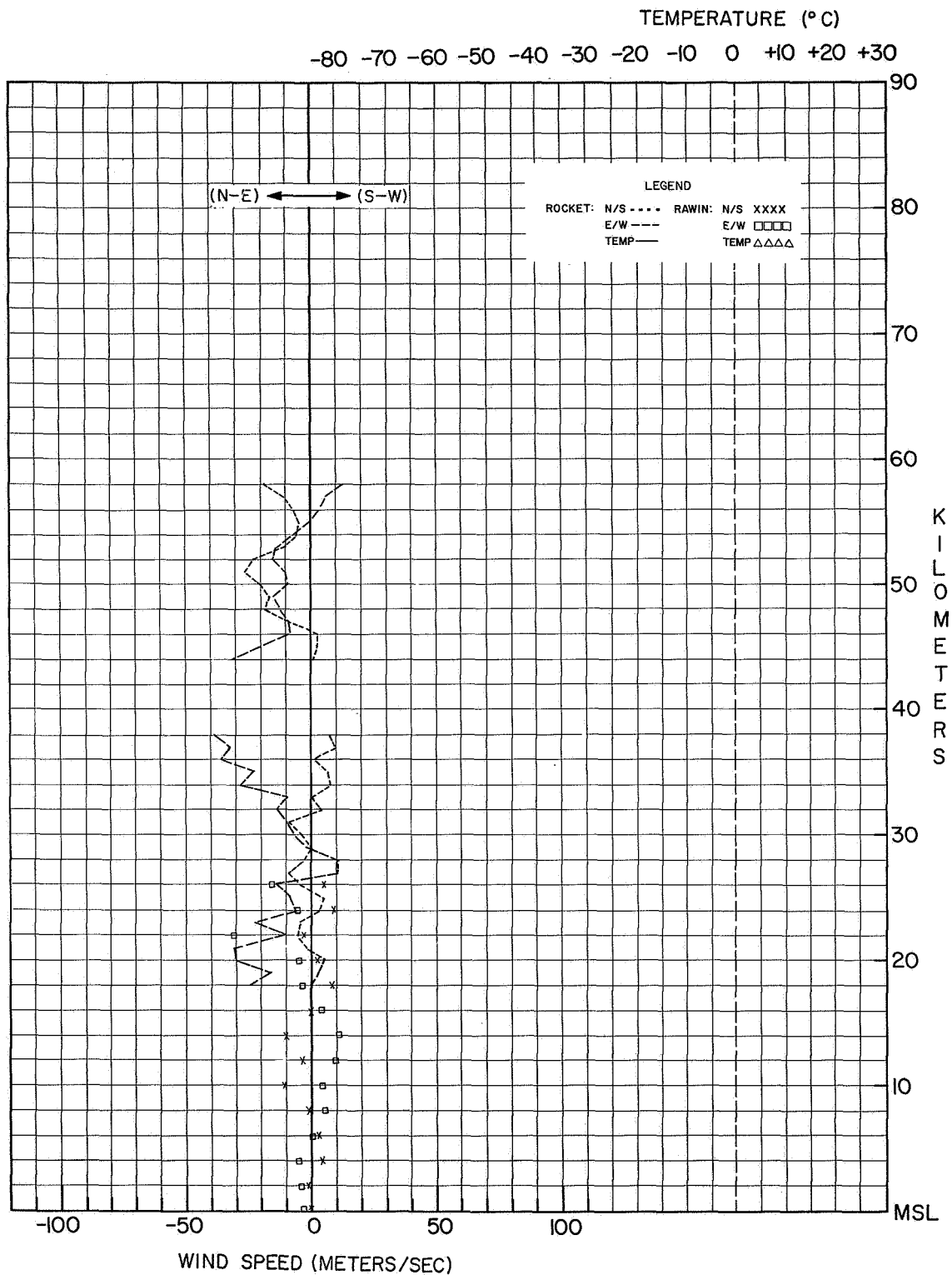
RP	STATION NAME	DATE	ROCKET LAUNCH TIME Z	RAWINSONDE RELEASE TIME Z
	(CNAE) NATAL, BRAZIL	Z	Z	Z
82599	05° 55' S 35° 10' W ALT. 43 M	FEBRUARY 16, 1966	1405	1130

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE						RH	TEMP
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M ⁻³	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	%	DEG C			
021	067	58	324	042	-018 +013										0004	090	005	+000 -003					
024	057	57	331	025	-011 +006										0200	072	006	-001 -003					
027	059	56	330	016	-007 +004										0400	129	014	+004 -005					
030	061	55	360	010	-005 +000										0600	192	006	+003 +001					
033	050	54	050	018	-006 -007										0800	284	010	-001 +005					
036	050	53	052	034	-011 -014										1000	339	023	-011 +004					
039	047	52	033	053	-023 -015										1200	286	020	-003 +010					
043	044	51	021	054	-026 -010										1400	312	030	-010 +011					
047	042	50	023	044	-021 -009										1600	286	004	+000 +004					
051	038	49	043	042	-016 -015										1800	161	016	+008 -003					
056	039	48	036	042	-018 -013										2000	115	012	+003 -005					
060	036	47	045	016	-008 -008										2200	085	061	-003 -031					
065	036	46	110	017	+003 -008										2400	149	020	+009 -005					
069	036	45	098	038	+003 -020																		
074	034	44	092	062	+001 -032																		
MISSING DATA (SEE REMARKS)																							
120	022	38	100	073	+007 -038																		
127	020	37	107	067	+010 -033																		
136	018	36	093	069	+002 -036																		
146	017	35	115	046	+006 -023																		
156	016	34	104	056	+007 -028																		
166	016	33	095	018	+001 -009																		
176	016	32	106	028	+004 -014																		
187	015	31	048	023	-008 -009																		
199	014	30	056	013	-004 -006																		
211	013	29	090	006	+000 -003																		
224	013	28	286	022	-003 +011																		
236	013	27	306	026	-008 +011																		
251	011	26	070	029	-005 -014																		
266	011	25	122	018	+005 -008																		
281	011	24	116	014	+003 -006																		
297	010	23	080	044	-004 -023																		
314	010	22	066	024	-005 -011																		
332	009	21	082	058	-002 -030																		
351	009	20	099	059	+005 -030																		
371	008	19	101	032	+003 -016																		
391	008	18	090	048	+000 -025																		

TECHNICAL DATA

VEHICLE DATA * MOTOR TYPE.. JUDI - MOTOR PERFORMANCE.. GOOD - PAYLOAD TYPE.. CHAFF - PAYLOAD PERFORMANCE.. GOOD - FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC - FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN - TYPE OF LAUNCHER.. 8.5 FT. TUBULAR - LAUNCHER SETTING.. 050 DEG. AZIMUTH 75.0 DEG. ELEVATION RADAR DATA - RADAR TYPE.. MPS-19 - MOTOR ACQUISITION.. 7 SECONDS 4,724 METERS ALTITUDE - MOTOR TRACK DROPPED.. 71 SECONDS 59,802 METERS ALTITUDE - PAYLOAD ACQUISITION.. 71 SECONDS 59,802 METERS ALTITUDE - PAYLOAD TRACK DROPPED.. 2.468 SECONDS 17,008 METERS ALTITUDE - APOGEE.. 71 SECONDS 59,802 METERS ALTITUDE SENSOR AND TELEMETRY DATA - WIND SENSOR.. 0.005 INCH S BAND CHAFF - TEMPERATURE SENSOR.. N.A. - SENSOR FALL RATE.. NOMINAL - GROUND EQUIPMENT TYPE.. N.A. - TELEMETRY FREQUENCY.. N.A. - TELEMETRY QUALITY.. N.A. - TELEMETRY DATA RECEIVED FROM.. N.A. REMARKS - MISSING DATA BETWEEN 38 AND 44 KILOMETERS DUE TO DISPERSION. - THERMODYNAMICS BASE DATA.. PRESSURE N.A. - ALTITUDE N.A. - TEMPERATURE N.A.	RADIOSONDE AND BALLOON DATA - RADIOSONDE MANUFACTURER.. UNKNOWN - RADIOSONDE TYPE.. UNKNOWN - TEMPERATURE ELEMENT TYPE.. UNKNOWN - PRESSURE SENSOR TYPE.. UNKNOWN - GROUND EQUIPMENT TYPE.. UNKNOWN - BALLOON TYPE.. UNKNOWN - BALLOON SIZE.. UNKNOWN - FREE LIFT.. UNKNOWN - ASCENSION RATES.. SFC-400 MB = UNKNOWN 400 MB-TOP = UNKNOWN WEATHER OBSERVATION AT RAWINSONDE RELEASE - STATION PRESSURE.. UNKNOWN - TEMPERATURE.. UNKNOWN - RELATIVE HUMIDITY.. UNKNOWN - VISIBILITY.. UNKNOWN - SURFACE WIND.. UNKNOWN - CLOUD TYPE AND AMOUNT.. TOTAL.. UNKNOWN - LOW.. UNKNOWN - MIDDLE.. UNKNOWN - HIGH.. UNKNOWN TYPE OF PRECIPITATION.. UNKNOWN OBSTRUCTIONS TO VISION.. UNKNOWN WIND AT ROCKET LAUNCH 21 FT. 080 DEG/07 KTS, 29 FT. 070 DEG/08 KTS, 51 FT. 070 DEG/08 KTS, 82 FT. 070 DEG/08 KTS, 133 FT. 090 DEG/08 KTS
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STATION: (CNAE) NATAL, BRAZIL
DATE: 16 FEBRUARY, 1966

ROCKET TIME: 1105 LST 1405 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
RADIOSONDE TYPE: NONE

RP STATION NAME
(NASA) WALLOPS ISLAND, VIRGINIA
72402 37° 51' N 75° 29' W ALT. 3 M

ROCKET RAWINSONDE
LAUNCH RELEASE
TIME TIME
Z Z
FEBRUARY 17, 1966 1815 1715

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		RH %	TEMP DEG C			
027	105	62	273	106	-003	+055										1015.8	0000	340	024	-012	+005	38	+05.6			
029	080	61	268	136	+002	+070										0789.0	0200	281	041	-004	+021	18	-03.6			
031	067	60	265	162	+007	+083										0610.0	0400	262	073	+005	+038	18	-12.4			
034	067	59	259	151	+014	+077										0468.0	0600	258	105	+011	+053	18	-24.1			
036	061	58	253	144	+022	+071										0354.0	0800					22	-33.0			
039	053	57	252	144	+021	+071										0264.0	1000						-46.3			
043	049	56	254	144	+020	+072										0195.0	1200						-50.4			
046	044	55	252	144	+021	+069										0143.0	1400						-57.8			
050	045	54	251	134	+022	+066										0104.0	1600						-64.4			
053	040	53	252	125	+019	+060										0075.0	1800						-64.3			
058	036	52	252	110	+017	+054										0054.2	2000						-63.3			
063	036	51	255	105	+014	+053										0039.2	2200						-58.0			
068	034	50	258	104	+011	+053										0028.6	2400						-57.9			
073	029	49	262	105	+008	+054										0021.2	2600						-52.6			
079	027	48	264	106	+006	+055										0015.5	2800						-50.9			
085	028	47	263	098	+006	+050										0011.5	3000						-49.1			
091	027	46	262	088	+006	+045										0008.5	3200						-44.5			
097	026	45	264	078	+004	+041																				
104	026	44	267	071	+002	+037																				
110	025	43	270	072	+000	+037																				
117	025	42	273	071	-002	+037																				
123	022	41	275	067	-003	+034																				
132	018	40	280	062	-005	+032																				
142	018	39	272	053	-001	+027																				
150	020	38	266	044	+002	+023																				
158	020	37	270	043	+000	+022																				
167	019	36	273	043	-001	+022																				
176	018	35	275	043	-002	+022																				
185	017	34	280	043	-004	+022																				
195	016	33	280	043	-004	+022																				
206	016	32	280	043	-004	+022																				
217	014	31	276	039	-002	+020																				
228	013	30	268	036	+001	+019																				
240	013	29	262	031	+002	+016																				
253	012	28	261	027	+002	+014																				
268	011	27	262	028	+002	+014																				
283	011	26	261	028	+002	+014																				

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. CHAFF
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 12 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 20 SECONDS 21,793 METERS ALTITUDE
MOTOR TRACK DROPPED.. 94 SECONDS 66,294 METERS ALTITUDE
PAYLOAD ACQUISITION.. 94 SECONDS 66,294 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1,860 SECONDS 24,201 METERS ALTITUDE
APOGEE.. 110 SECONDS 67,391 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH 5 BAND CHAFF
TEMPERATURE SENSOR.. N.A.
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. N.A.
TELEMETRY FREQUENCY.. N.A.
TELEMETRY QUALITY.. N.A.
TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

THERMODYNAMICS BASE DATA.. PRESSURE N.A.
ALTITUDE N.A.
TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

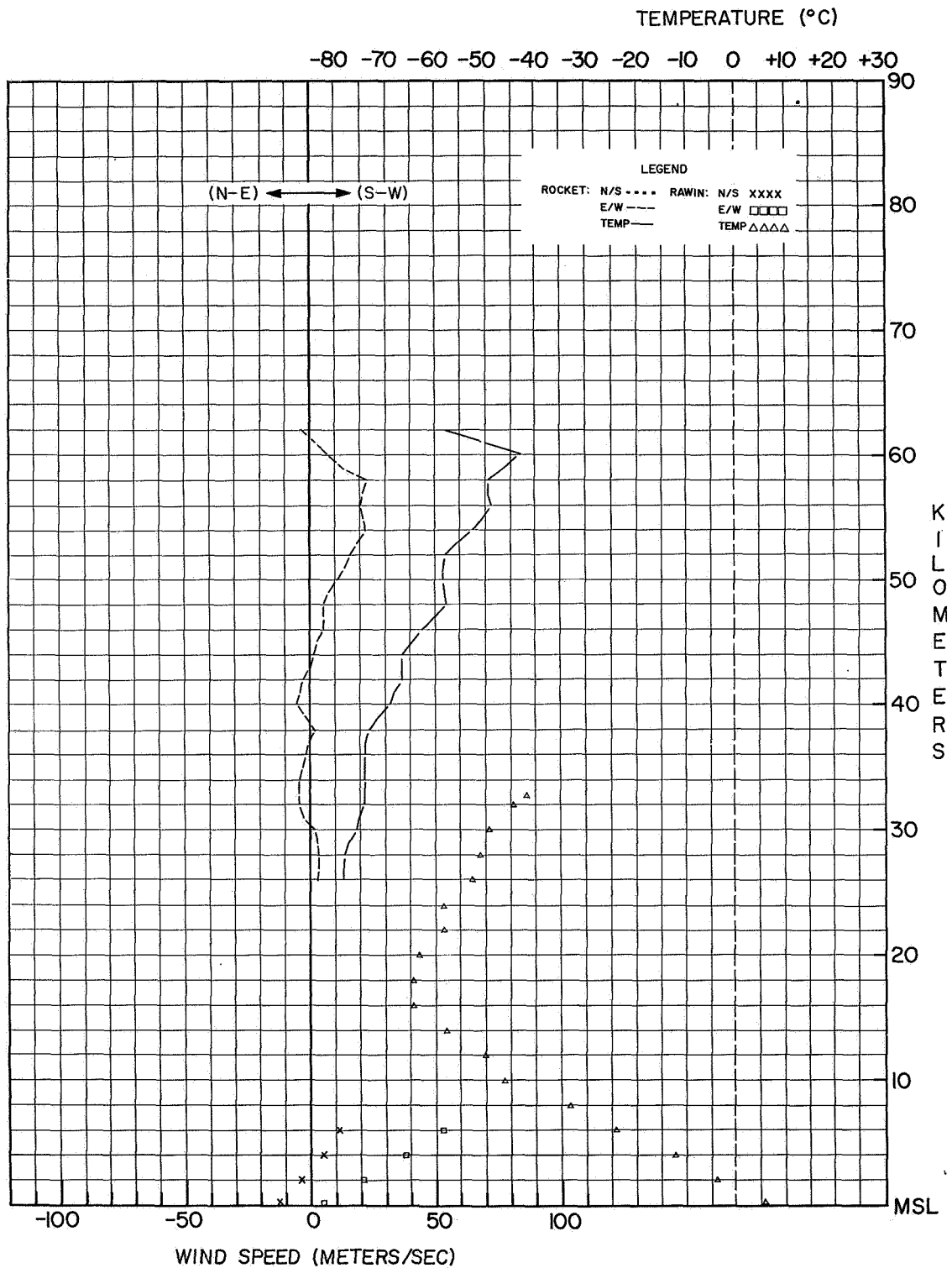
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B AND TMQ-5
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,600 GRAMS
ASCENSION RATES.. SFC-400 MB = 290 M/MINUTE
400 MB-TOP = 353 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1015.8 MB
TEMPERATURE.. 5.6 DEG. C
RELATIVE HUMIDITY.. 38%
VISIBILITY.. 8 KM
SURFACE WIND.. 340 DEG. 24 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 8 OCTAS/CS

WIND AT ROCKET LAUNCH

50 FT. 311 DEG/17 KTS, 100 FT. 342 DEG/12 KTS,
150 FT. 344 DEG/13 KTS, 200 FT. 349 DEG/14 KTS,
250 FT. 339 DEG/15 KTS, 300 FT. 342 DEG/12 KTS



STATION: (NASA) WALLOPS IS., VA.
 DATE: 17 FEBRUARY, 1966

ROCKET TIME: 1315ST1815GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
 RADIOSONDE TYPE: 1680 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME	RAWINSONDE RELEASE TIME
	(CNAE) NATAL, BRAZIL	Z	Z	Z
82599	05° 55' S 35° 10' W ALT. 43 M	MARCH 2, 1966	1548	1351

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE									
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP
TENTHS	VEL		POLAR	COMPONENTS			TENS				OF	POLAR	COMPONENTS				TENS	POLAR	COMPONENTS			%	
OF A				MPS			OF				SOUND		MPS				OF		MPS				
MINUTE	M/S	KM	DEG	KTS	N-S	E-W	METERS	DEG C	MB	G M	M/S	DEG	KTS	N-S	E-W	MB	METERS	DEG	KTS	N-S	E-W		DEG C
018	083	60	234	078	+023	+032											0004	110	008	+001	-004		
021	063	59	232	062	+010	+030											0200	078	012	-001	-006		
024	059	58	265	052	+002	+027											0400	063	010	-002	-004		
027	063	57	270	064	+000	+033											0600	041	008	-003	-003		
029	065	56	272	074	-002	+038											0800	222	006	+002	+002		
032	061	55	271	076	-001	+039											1000	246	025	+005	+012		
035	053	54	271	078	-001	+040											1200	234	049	+015	+020		
038	048	53	274	058	-002	+030											1400	241	051	+013	+023		
042	047	52	279	040	-003	+020											1600	248	018	+003	+008		
045	043	51	281	031	-003	+016											1800	022	006	-003	-001		
049	042	50	285	025	-003	+012																	
053	036	49	295	024	-005	+011																	
058	035	48	302	026	-007	+011																	
063	036	47	331	034	-016	+009																	
068	038	46	354	039	-020	+002																	
072	031	45	024	034	-016	-007																	
078	031	44	053	029	-009	-012																	
083	031	43	079	069	-007	-035																	
089	026	42	088	094	-001	-048																	
095	026	41	093	101	+003	-052																	
102	027	40	093	092	+001	-046																	
108	036	39	091	106	+002	-055																	
MISSING DATA (SEE REMARKS)																							
375	008	20	100	041	+004	-020																	
395	008	19	106	034	+005	-017																	
415	008	18	323	008	-003	+002																	

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. CHAFF
 PAYLOAD PERFORMANCE.. FAIR (SEE REMARKS.)
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 070 DEG. AZIMUTH 75.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION.. 5 SECONDS 6,096 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 102 SECONDS 60,350 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 102 SECONDS 60,350 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 2.727 SECONDS 16,154 METERS ALTITUDE
 APOGEE.. 102 SECONDS 60,350 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
 TEMPERATURE SENSOR.. N.A.
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. N.A.
 TELEMETRY FREQUENCY.. N.A.
 TELEMETRY QUALITY.. N.A.
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

MISSING DATA FROM 20 TO 39 KILOMETERS DUE TO DISPERSION.
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

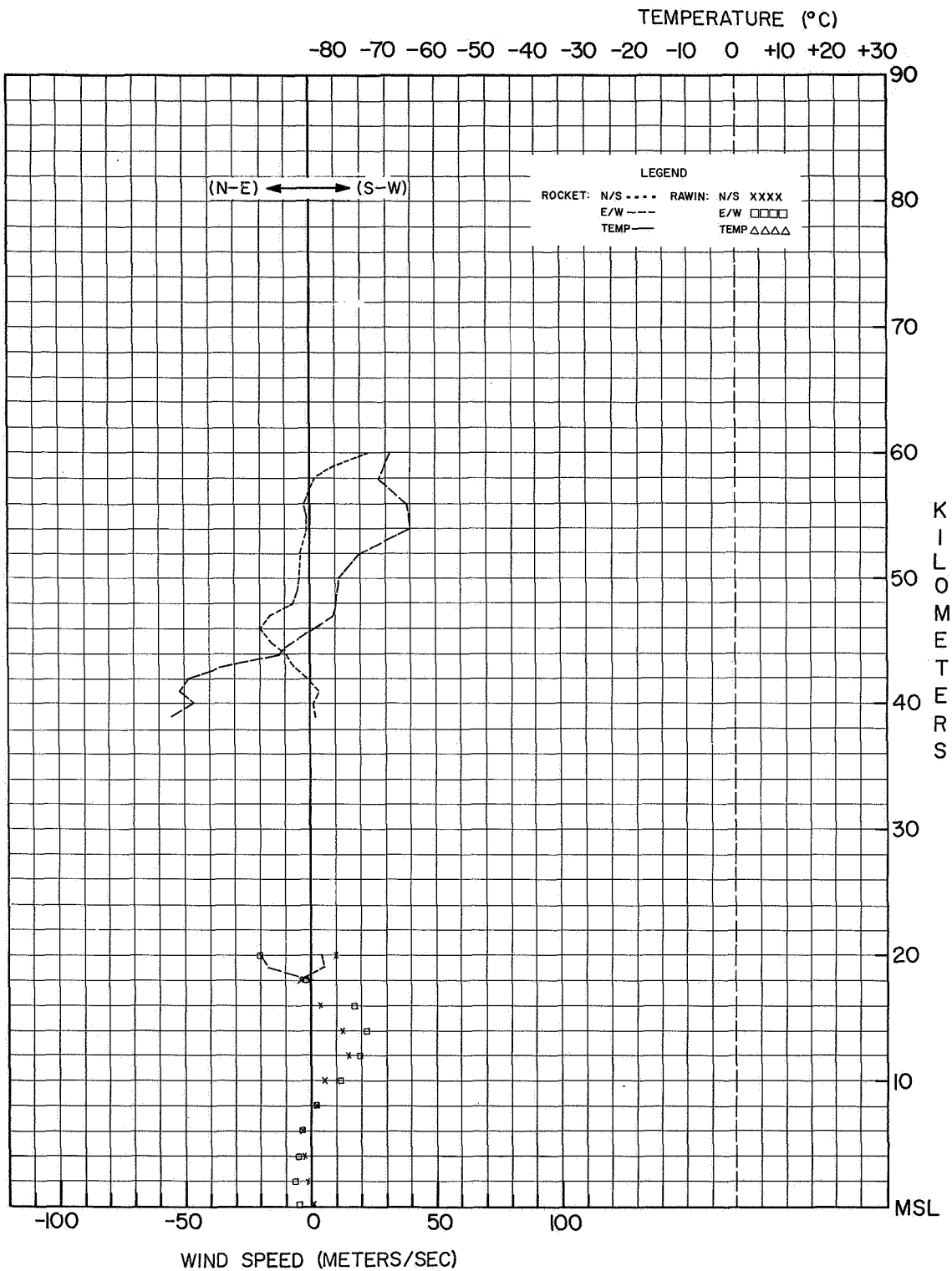
RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. UNKNOWN
 RADIOSONDE TYPE.. UNKNOWN
 TEMPERATURE ELEMENT TYPE.. UNKNOWN
 PRESSURE SENSOR TYPE.. UNKNOWN
 GROUND EQUIPMENT TYPE.. UNKNOWN
 BALLOON TYPE.. UNKNOWN
 BALLOON SIZE.. 1,200 GRAMS
 FREE LIFT.. UNKNOWN
 ASCENSION RATES.. SFC-400 MB = UNKNOWN
 400 MB-TOP = UNKNOWN

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. UNKNOWN
 TEMPERATURE.. UNKNOWN
 RELATIVE HUMIDITY.. UNKNOWN
 VISIBILITY.. UNKNOWN
 SURFACE WIND.. UNKNOWN
 CLOUD TYPE AND AMOUNT.. TOTAL.. UNKNOWN
 LOW.. UNKNOWN
 MIDDLE.. UNKNOWN
 HIGH.. UNKNOWN

TYPE OF PRECIPITATION.. UNKNOWN
 OBSTRUCTIONS TO VISION.. UNKNOWN
 WIND AT ROCKET LAUNCH
 21 FT. 110 DEG/10 KTS



STATION: (CNAE) NATAL, BRAZIL
DATE: 2 MARCH, 1966

ROCKET TIME: 1248 LST 1548 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
RADIOSONDE TYPE: NONE

RP STATION NAME DATE ROCKET RAWINSONDE
 (NASA) Wallops Island, Virginia Z LAUNCH RELEASE
 72402 37° 51' N 75° 29' W ALT. 3 M MARCH 2, 1966 1915 1715

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS						RAWINSONDE						RH	TEMP
TIME	FALL	ALT	POLAR		WIND	ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR		WIND	PRESSURE	ALT	POLAR		WIND	
TENTHS	VEL		DEG	KTS	COMPONENTS	TENS	DEG C	MB	g M	OF	DEG	KTS	COMPONENTS	MB	METERS	DEG	KTS	COMPONENTS	%
OF A	M/S	KM			MPS	OF				SOUND			MPS					MPS	DEG C
MINUTE					E-W	METERS				M/S			E-W					E-W	
030	068	50	257	078	+009 +039	5346	+04.5							1023.0	0000	285	012	-002 +006	23 +13.9
032	065	49	258	091	+010 +046	5300	+00.1							0802.0	0200	318	041	-016 +014	31 +00.6
035	062	48	257	100	+011 +050	5243	+00.8							0623.0	0400	282	053	-006 +027	17 -07.4
037	067	47	257	101	+011 +050	5160	+00.8							0479.0	0600	280	068	-006 +035	18 -21.0
040	058	46	257	101	+011 +050	4904	-06.8							0363.0	0800	269	070	+000 +036	27 -36.6
043	050	45	262	105	+007 +055	4862	-06.0				258	090	+010 +045	0270.0	1000	272	086	-001 +044	-52.3
046	050	44	268	114	+003 +059	4791	-06.0				258	095	+010 +048	0197.0	1200	283	101	-012 +051	+51.4
050	050	43	266	112	+003 +058	4627	-01.0				257	100	+011 +050	0145.0	1400	286	092	-013 +046	-58.1
053	048	42	267	111	+003 +057	4548	-04.1				257	101	+011 +051	0105.0	1600	290	098	-017 +048	-63.9
057	044	41	272	112	-002 +057						260	103	+009 +053	0075.9	1800	258	034	+002 +017	-64.2
061	040	40	277	111	-007 +057									0054.7	2000	271	047	+000 +024	-61.0
065	036	39	276	109	-006 +057									0040.0	2200	272	078	-001 +040	-55.8
070	036	38	275	110	-005 +057									0029.3	2400	262	038	+003 +020	-56.0
075	033	37	272	112	-001 +058									0021.6	2600	259	034	+003 +017	-52.1
080	032	36	267	114	+003 +059									0015.8	2800	262	056	+004 +029	-48.2
085	029	35	264	104	+006 +053									0011.7	3000	254	053	+007 +027	-46.3
092	026	34	259	091	+009 +046														
098	025	33	257	085	+009 +043														
105	022	32	257	079	+009 +040														
113	020	31	258	070	+007 +036														
121	020	30	261	063	+005 +032														
130	017	29	263	063	+004 +032														
140	016	28	264	063	+003 +033														
150	015	27	262	058	+004 +030														
162	014	26	259	050	+005 +026														
175	013	25	263	049	+003 +025														
189	012	24	266	048	+002 +025														
205	010	23	272	050	-001 +026														
221	010	22	279	052	-004 +027														
238	009	21	277	051	-003 +026														
258	008	20	277	049	-003 +025														

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. WOX-1A
 PAYLOAD PERFORMANCE.. GOOD (SEE REMARKS)
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 12 FT. TUBULAR
 LAUNCHER SETTING.. 135 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 10 SECONDS 10,363 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 100 SECONDS 56,632 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 100 SECONDS 56,632 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1,680 SECONDS 18,837 METERS ALTITUDE
 APOGEE.. 99 SECONDS 56,662 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
 TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
 TELEMETRY FREQUENCY.. 402.5 MHZ
 TELEMETRY QUALITY.. GOOD
 TELEMETRY DATA RECEIVED FROM.. 135 SEC. 53,460 METERS ALTITUDE
 TO 249 SEC. 45,480 METERS ALTITUDE

REMARKS

TELEMETRY SIGNAL ENDED ABRUPTLY AT 249 SECONDS. REASON UNKNOWN.
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
 GROUND EQUIPMENT TYPE.. GMD-1B
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1,200 GRAMS
 FREE LIFT.. 1,500 GRAMS
 ASCENSION RATES.. SFC-400 MB = 285 M/MINUTE
 400 MB-TOP = 361 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

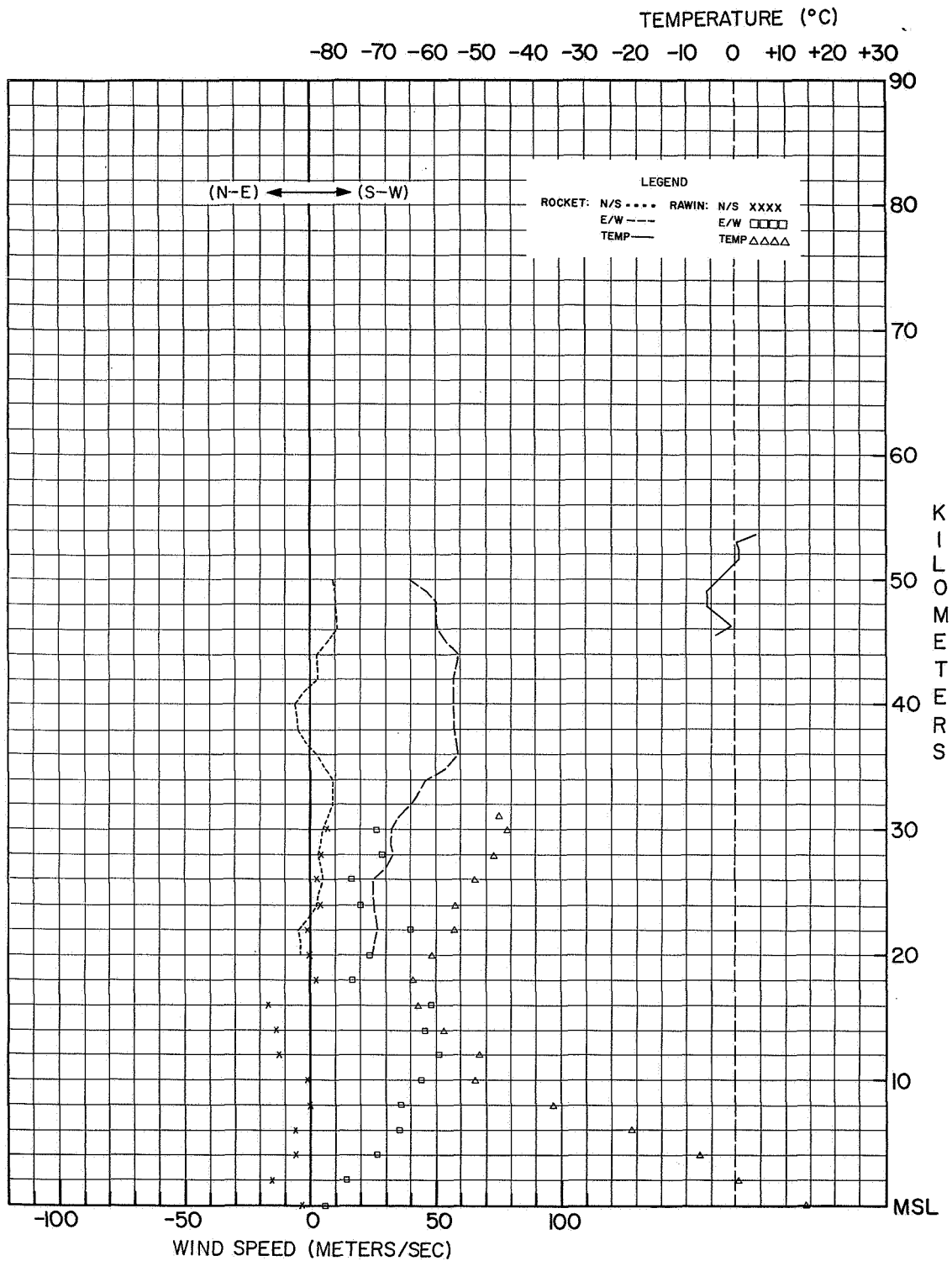
STATION PRESSURE.. 1023.0 MB
 TEMPERATURE.. 13.9 DEG. C
 RELATIVE HUMIDITY.. 23%
 VISIBILITY.. 10 KM
 SURFACE WIND.. 285 DEG. 12 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS

LOW.. NONE
 MIDDLE.. NONE
 HIGH.. 8 OCTAS/CS

TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET

LAUNCH
 50 FT. 249 DEG/10 KTS, 100 FT. 253 DEG/10 KTS,
 150 FT. 250 DEG/11 KTS, 200 FT. 255 DEG/11 KTS,
 250 FT. 274 DEG/20 KTS



STATION: (NASA)WALLOPS IS., VA.
 DATE: 2 MARCH, 1966

ROCKET TIME: 1415 ST 1915 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
 RADIOSONDE TYPE: 1680 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME Z	RAWINSONDE RELEASE TIME Z
	(CNAE) NATAL, BRAZIL	Z	Z	Z
82599	05° 55' S 35° 10' W ALT. 43 M	MARCH 16, 1966	1500	1500

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										ROCKET RAWINSONDE										RH	TEMP
TIME TENTHS OF A MINUTE	FALL VEI M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS								
					N-S	E-W								N-S	E-W					N-S	E-W	%	DEG C					
026	105	62	263	124	+008	+064											0004	120	007	+002	-003							
027	087	61	276	074	-005	+039											0200	083	010	-001	-005							
030	074	60	291	086	-016	+041											0400	109	006	+001	-003							
032	074	59	291	070	-013	+034											0600	109	026	+004	-012							
034	069	58	286	054	-008	+027											0800	067	009	-002	-005							
037	063	57	292	056	-011	+027											1000	209	008	+004	+002							
040	056	56	282	057	-006	+028											1200	250	016	+003	+008							
043	057	55	277	050	-003	+026											1400	243	016	+004	+007							
045	051	54	293	050	-010	+024											1600	284	023	-003	+012							
049	044	53	272	060	-001	+031											1800	104	014	-002	-007							
053	043	52	259	063	+006	+032											2000	079	033	-003	-017							
057	042	51	254	063	+009	+031											2200	095	062	+003	-032							
062	041	50	261	065	+005	+033											2400	133	018	+006	-007							
065	041	49	274	056	-002	+029																						
069	037	48	283	052	-006	+026																						
074	033	47	280	055	-005	+028																						
079	033	46	291	054	-010	+026																						
084	031	45	304	034	-010	+015																						
090	030	44	325	009	-004	+003																						
095	030	43	270	002	+000	+001																						
101	023	42	116	014	+003	-006																						
128	022	41	100	024	+002	-012																						
137	020	40	086	029	-001	-015																						
145	019	39	095	046	+002	-024																						
154	019	38	096	053	+003	-027																						
162	020	37	103	041	+005	-021																						
172	017	36	108	031	+005	-015																						
182	017	35	108	024	+004	-012																						
191	017	34	108	018	+003	-009																						
201	016	33	106	013	+002	-007																						
212	016	32	083	017	-001	-009																						
222	014	31	055	023	-007	-010																						
235	014	30	041	021	-008	-007																						
246	014	29	026	017	-008	-004																						
260	013	28	013	017	-009	-002																						
272	012	27	021	016	-008	-003																						
287	012	26	068	021	-004	-010																						
300	012	25	095	021	+001	-011																						
315	011	24	106	020	+003	-010																						
332	010	23	104	023	+003	-012																						
348	010	22	105	023	+003	-011																						
366	009	21	090	027	+000	-014																						
386	008	20	079	031	-003	-016																						
406	008	19	095	023	+001	-012																						
427	008	18	106	013	+003	-006																						

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. 6000
PAYLOAD TYPE.. CHAFF
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 070 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 5 SECONDS 6,096 METERS ALTITUDE
MOTOR TRACK DROPPED.. 134 SECONDS 64,008 METERS ALTITUDE
PAYLOAD ACQUISITION.. 134 SECONDS 64,008 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2,765 SECONDS 16,459 METERS ALTITUDE
APOGEE.. 134 SECONDS 64,008 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
TEMPERATURE SENSOR.. N.A.
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. N.A.
TELEMETRY FREQUENCY.. N.A.
TELEMETRY QUALITY.. N.A.
TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

TEST WAS SUCCESSFUL.
THERMODYNAMICS BASE DATA.. PRESSURE N.A.
ALTITUDE N.A.
TEMPERATURE N.A.

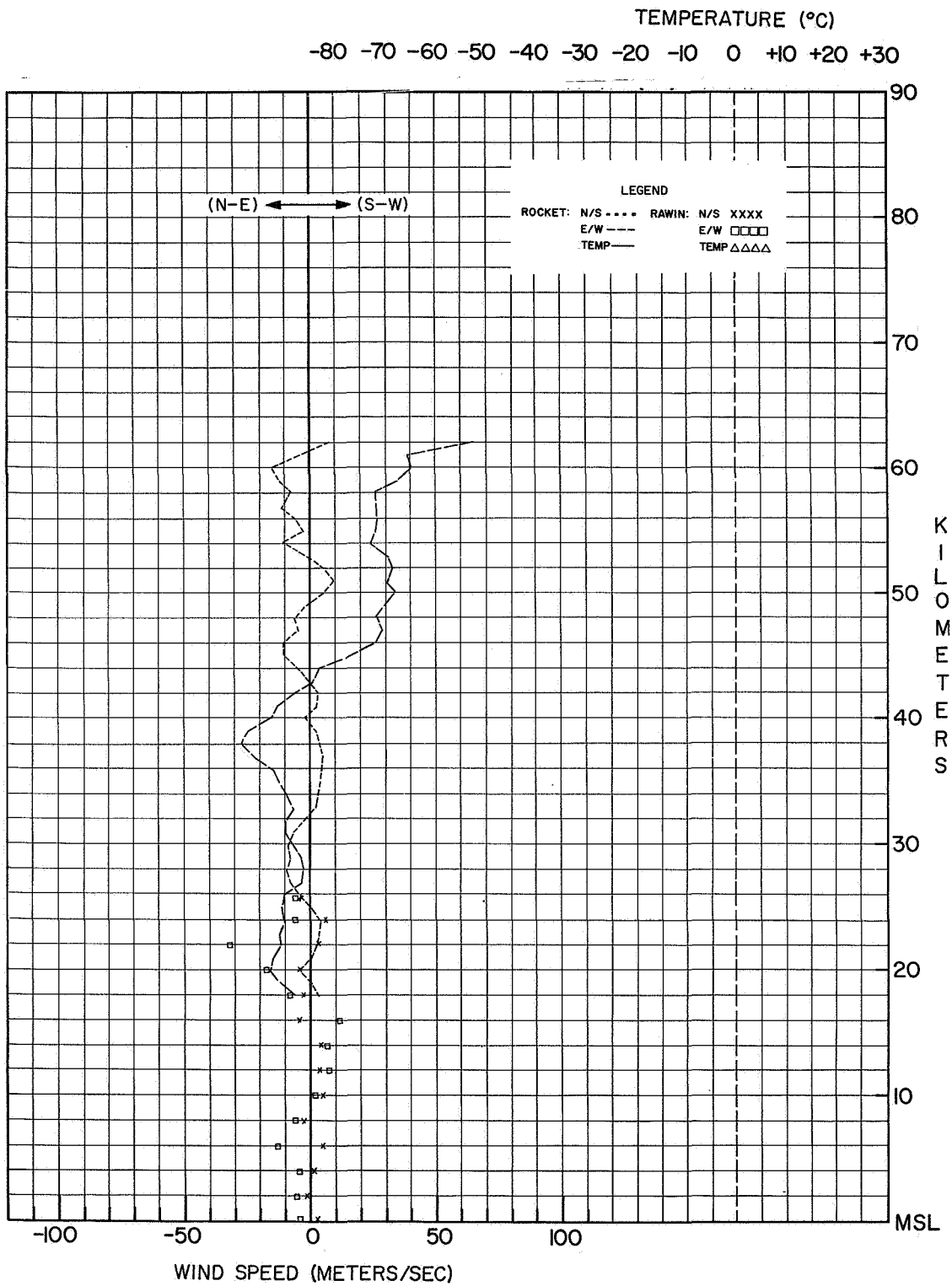
RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. UNKNOWN
RADIOSONDE TYPE.. UNKNOWN
TEMPERATURE ELEMENT TYPE.. UNKNOWN
PRESSURE SENSOR TYPE.. UNKNOWN
GROUND EQUIPMENT TYPE.. UNKNOWN
BALLOON TYPE.. UNKNOWN
BALLOON SIZE.. 600 GRAMS
FREE LIFT.. UNKNOWN
ASCENSION RATES.. SFC-400 MB = UNKNOWN
400 MB-TOP = UNKNOWN

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. UNKNOWN
TEMPERATURE.. UNKNOWN
RELATIVE HUMIDITY.. UNKNOWN
VISIBILITY.. UNKNOWN
SURFACE WIND.. 120 DEG. 07 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. UNKNOWN
LOW.. UNKNOWN
MIDDLE.. UNKNOWN
HIGH.. UNKNOWN

TYPE OF PRECIPITATION.. UNKNOWN
OBSTRUCTIONS TO VISION.. UNKNOWN
WIND AT ROCKET LAUNCH
UNKNOWN



STATION: (CNAE) NATAL, BRAZIL
 DATE: 16 MARCH, 1966

ROCKET TIME: 1200 LST 1500 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
 RADIOSONDE TYPE: NONE

RP STATION NAME DATE ROCKET RAWINSONDE
 (NASA) WALLOPS ISLAND, VIRGINIA Z LAUNCH RELEASE
 Z Z
 72402 37° 51' N 75° 29' W ALT. 3 M MARCH 16, 1966 1623 1715

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND		COMPONENTS		ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND		COMPONENTS		PRESSURE	ALT	WIND		COMPONENTS		RH	TEMP			
TENTHS	VEL		POLAR		N-S	E-W	TENS	DEG C	MB	G M	OF	POLAR		N-S	E-W	MB	TENS	POLAR		N-S	E-W	%	DEG C			
OF A	M/S	KM	DEG	KTS			OF				SOUND	DEG	KTS				OF	DEG	KTS							
MINUTE							METERS				M/S						METERS									
022	077	54	283	068	-008	+034	5447	+11.6	00.490	00.613	338					1027.4	0000	050	021	-007	-009	51	+05.0			
024	077	53	282	074	-008	+037	5258	+06.8	00.614	00.781	336	281	079	-008	+040	0798.0	0200					17	-06.7			
026	083	52	280	086	-008	+044	4816	+06.8	01.043	01.328	336	275	104	-004	+054	0617.0	0400					34	-12.5			
028	074	51	277	098	-006	+050	4462	-09.1	01.617	02.182	326	269	102	+001	+053	0474.0	0600					18	-22.9			
031	071	50	277	106	-006	+054	4404	-08.7	01.741	02.346	326	267	113	+003	+058	0358.0	0800	304	041	-012	+018	18	-39.3			
033	074	49	275	104	-004	+053	4063	-17.7	02.710	03.779	321	262	107	+008	+054	0264.0	1000	288	041	-006	+020		-54.7			
035	069	48	275	104	-004	+053	3956	-19.5	03.123	04.385	319	262	102	+007	+052	0193.0	1200	268	049	+001	+025		-53.4			
038	063	47	276	106	-005	+055	3831	-26.3	03.696	05.333	315	262	092	+007	+048	0141.0	1400	269	051	+002	+026		-57.0			
040	059	46	275	105	-004	+054	3764	-26.7	04.051	05.855	315	263	088	+006	+045	0103.0	1600	280	051	-004	+026		-59.9			
043	056	45	270	094	+000	+048	3658	-29.3	04.688	06.848	313	265	084	+004	+043	0074.9	1800	275	041	-002	+021		-59.8			
046	053	44	267	114	+003	+059	3475	-20.9	06.046	08.890	312	264	070	+004	+036	0054.4	2000	263	037	+002	+019		-59.6			
050	050	43	265	113	+005	+058	3383	-34.2	06.880	10.256	310	265	067	+003	+034	0039.6	2200	274	037	-001	+019		-56.0			
053	045	42	264	113	+006	+058	3331	-33.9	07.405	11.024	310	267	065	+002	+033	0029.3	2400	244	043	+010	+020		-51.3			
057	043	41	262	109	+007	+055	3252	-38.2	08.288	12.565	307	267	051	+001	+026	0021.6	2600	258	035	+004	+018		-50.6			
061	042	40	262	105	+007	+054	3206	-37.8	08.855	13.401	308	266	041	+001	+021											
065	038	39	261	098	+008	+050	3103	-43.7	10.287	15.969	304	266	035	+002	+018											
070	037	38	262	090	+006	+046	3048	-44.7	11.158	17.397	303	261	030	+002	+015											
074	034	37	265	085	+004	+044	2935	-41.4	13.175	20.250	305	263	029	+002	+015											
079	030	36	266	082	+003	+042	2868	-42.6	14.534	22.454	305	265	033	+002	+017											
085	030	35	264	070	+004	+036	2774	-50.9	16.728	26.808	299	260	032	+003	+016											
090	027	34	264	068	+004	+035	2716	-52.6	18.280	29.522	298	261	033	+003	+017											
097	026	33	268	063	+001	+032	2542	-48.2	23.818	37.714	301	262	036	+003	+019											
103	023	32	266	039	+002	+020	2405	-51.1	29.319	47.030	299	245	037	+008	+017											
110	020	31	266	035	+002	+018	2329	-49.3	32.912	52.369	300	244	036	+009	+017											
120	017	30	257	026	+003	+013	2003	-60.9				269	037	+000	+019											
129	018	29	267	034	+001	+018	1832	-60.5																		
138	017	28	259	031	+003	+016																				
148	217	27	261	034	+003	+018																				
158	015	26	259	034	+003	+017																				
170	013	25	264	038	+002	+020	2059	-58.9	50.000	83.124	294	268	038	+001	+019											
183	013	24	244	037	+008	+017	2382	-50.8	30.000	48.042	299	244	037	+008	+016											
196	012	23	244	035	+008	+016	2650	-51.2	20.000	32.035	299	260	034	+003	+017											
211	011	22	264	035	+002	+018	3108	-42.5	10.000	15.454	305	266	035	+001	+018											
228	010	21	267	038	+001	+020	3371	-46.1	07.000	10.433	310	265	067	+001	+034											
246	009	20	269	037	+000	+019	3595	-29.7	05.000	07.317	313	266	062	+001	+042											
			4283	-11.1	02.000	02.729	325	265	113	+005	+058															
			4823	+06.8	01.000	01.273	336	275	104	-004	+054															

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2059	-58.9	50.000	83.124	294	268	038	+001	+019
2382	-50.8	30.000	48.042	299	244	037	+008	+015
2650	-51.2	20.000	32.035	299	260	034	+003	+017
3108	-42.5	10.000	15.454	305	266	035	+001	+018
3371	-34.1	07.000	10.433	310	265	067	+001	+034
3595	-29.7	05.000	07.317	313	266	082	+001	+042
4283	-11.1	02.000	02.729	325	265	113	+005	+058
4823	+06.8	01.000	01.273	336	275	104	-004	+054

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. WOX-1A
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 12 FT. TUBULAR
 LAUNCHER SETTING.. 140 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 8 SECONDS 8.351 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 92 SECONDS 55.596 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 92 SECONDS 55.596 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1.680 SECONDS 18.288 METERS ALTITUDE
 APOGEE.. 98 SECONDS 56.053 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
 TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
 TELEMETRY FREQUENCY.. 406 MHZ
 TELEMETRY QUALITY.. EXCELLENT
 TELEMETRY DATA RECEIVED FROM.. 117 SEC. 55.800 METERS ALTITUDE
 TO 1.713 SEC. 32.850 METERS ALTITUDE

REMARKS

TEST WAS SUCCESSFUL.
 THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
 ALTITUDE 20.590 METERS
 TEMPERATURE -58.9 DEG. C

RADIOSONDE AND BALLOON DATA

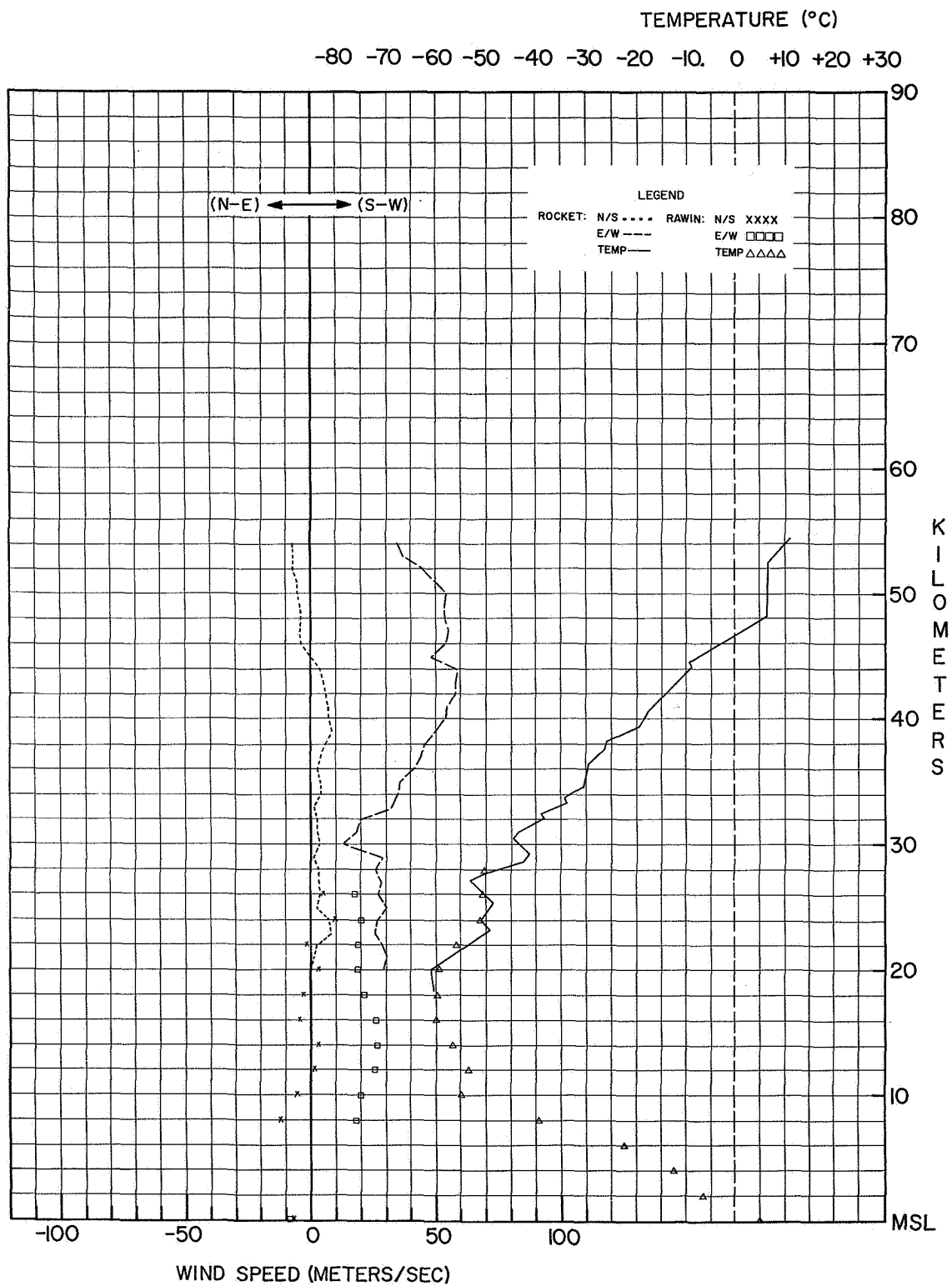
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
 GROUND EQUIPMENT TYPE.. GMD-18
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1.200 GRAMS
 FREE LIFT.. 1.600 GRAMS
 ASCENSION RATES.. SFC-400 MB = 301 M/MINUTE
 400 MB-TOP = 318 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1027.4 MB
 TEMPERATURE.. 5.0 DEG. C
 RELATIVE HUMIDITY.. 51%
 VISIBILITY.. 10 KM
 SURFACE WIND.. 50 DEG. 21 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 2 OCTAS
 LOW.. 2 OCTAS/SC
 MIDDLE.. NONE
 HIGH.. NONE

WIND AT ROCKET

LAUNCH
 50 FT. 052 DEG/16 KTS, 100 FT. 049 DEG/20 KTS,
 150 FT. 056 DEG/21 KTS, 200 FT. 052 DEG/22 KTS,
 250 FT. 045 DEG/20 KTS



STATION: (NASA) WALLOPS IS., VA.
 DATE: 16 MARCH, 1966

ROCKET TIME: 1123 LST 1623 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
 (NASA) Wallops Island, Virginia Z LAUNCH RELEASE
 TIME TIME
 72402 37° 51' N 75° 29' W ALT. 3 M MARCH 30, 1966 1603 1115

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE										RH	TEMP
TIME	FALL	ALT	POLAR	WIND		ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR	WIND		PRESSURE	ALT	POLAR	WIND										
TENTHS	VEL			COMPONENTS		TENS				OF		COMPONENTS			TENS		COMPONENTS			%	DEG C						
OF A				MPS	E-W	OF	DEG C	MB	G M	N/S	DEG	KTS	N-S	E-W	MB	METERS	DEG	KTS	N-S	E-W		DEG C					
MINUTE	M/S	KM	DEG	KTS		METERS				M/S																	
023	053	60	260	071	+007	+036									1005.0	0000	200	010	+005	+002	79	+06.7					
026	045	59	269	076	+001	+039									0786.0	0200	237	024	+007	+010	41	-04.3					
030	043	58	272	080	-001	+040									0607.0	0400	237	048	+014	+021	89	-16.5					
034	041	57	261	072	+006	+038									0460.0	0600	245	047	+010	+022	76	-31.3					
038	038	56	256	074	+009	+037									0356.0	0800	241	073	+018	+033		-44.2					
043	033	55	252	089	+014	+043									0254.0	1000	244	087	+020	+041		-57.5					
048	032	54	253	088	+013	+043									0181.0	1200	255	069	+009	+035		-51.4					
053	030	53	255	092	+012	+045									0137.0	1400	267	045	+001	+023		-44.4					
060	029	52	251	101	+017	+049									0100.0	1600	261	061	+005	+031		-56.3					
065	027	51	250	092	+016	+044									0073.4	1800	249	054	+010	+026		-54.4					
072	025	50	260	092	+008	+047									0053.7	2000	266	018	+001	+009		-52.5					
078	023	49	261	095	+007	+048									0039.6	2200	250	031	+005	+015		-48.3					
086	025	48	265	091	+004	+047									0029.3	2400	247	004	+001	+002		-46.0					
092	024	47	271	094	-001	+048									0021.8	2600	250	016	+003	+008		-45.7					
100	022	46	274	103	-003	+053									0015.2	2800	238	021	+006	+009		-44.9					
107	022	45	271	111	-001	+057									0012.1	3000	231	027	+009	+011		-43.2					
115	020	44	264	110	+007	+057									0009.0	3200	258	053	+006	+027		-41.6					
123	020	43	264	097	+005	+049																					
132	020	42	278	076	-005	+039																					
140	019	41	288	080	-013	+039																					
149	018	40	288	088	-013	+044																					
158	016	39	284	088	-009	+044																					
170	016	38	276	086	-005	+044																					
179	017	37	273	086	-002	+044																					
190	016	36	274	079	-004	+041																					
200	015	35	277	067	-004	+034																					
212	014	34	267	060	+002	+032																					
224	014	33	258	048	+005	+024																					
235	013	32	255	040	+006	+019																					

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. CHAFF
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 12 FT. TUBULAR
 LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 10 SECONDS 10.272 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 92 SECONDS 60.960 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 100 SECONDS 61.692 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1.530 SECONDS 30.632 METERS ALTITUDE
 APOGEE.. 100 SECONDS 61.692 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
 TEMPERATURE SENSOR.. N.A.
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. N.A.
 TELEMETRY FREQUENCY.. N.A.
 TELEMETRY QUALITY.. N.A.
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

AT 1.530 SECONDS CHAFF DISPERSION EXTENDED 5.486 METERS
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

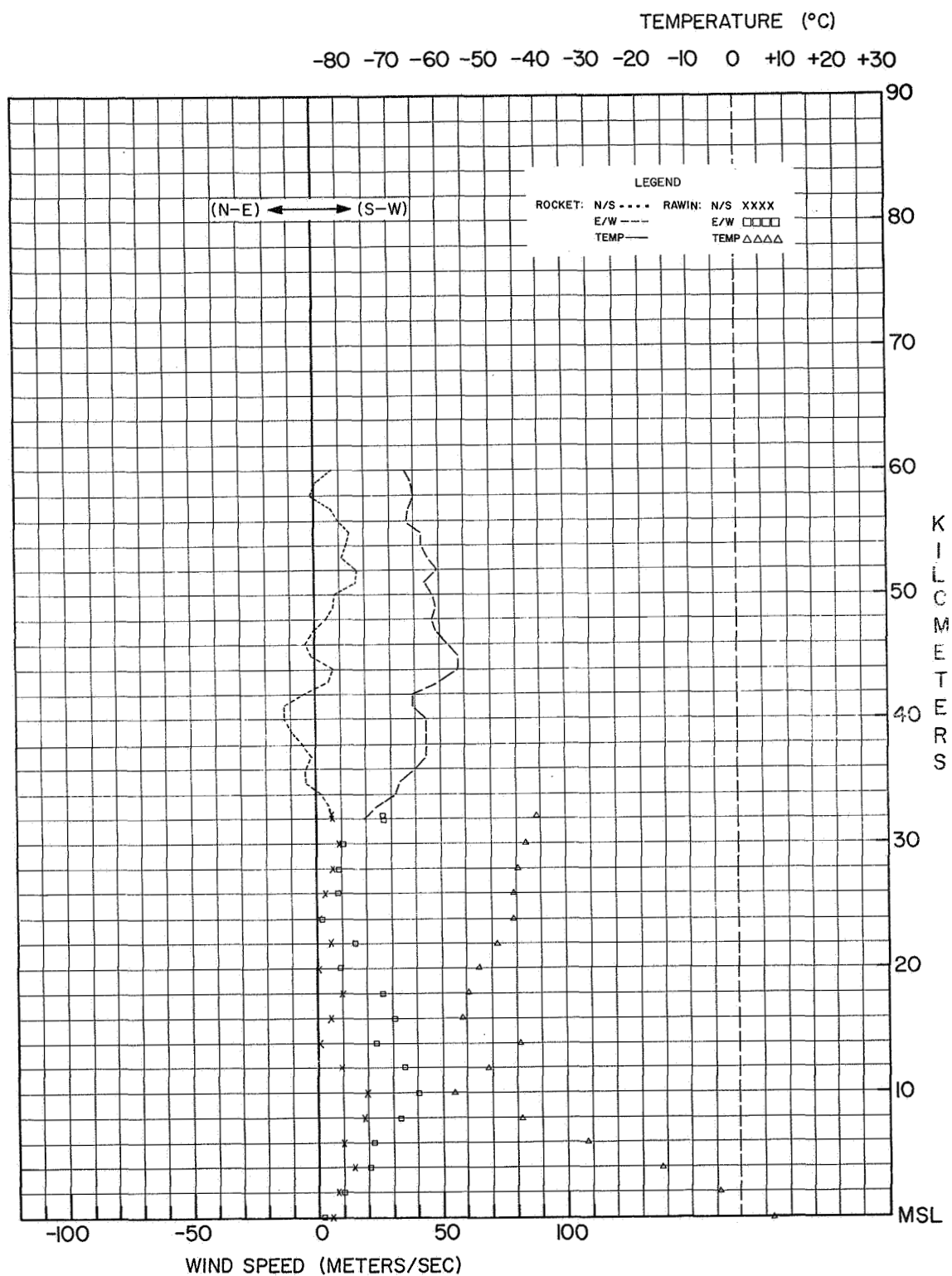
RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
 GROUND EQUIPMENT TYPE.. GMD-18
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1.200 GRAMS
 FREE LIFT.. 1.600 GRAMS
 ASCENSION RATES.. SFC-400 MB = 272 M/MINUTE
 400 MB-TOP = 338 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1005.0 MB
 TEMPERATURE.. 6.7 DEG. C
 RELATIVE HUMIDITY.. 79 %
 VISIBILITY.. 7 KM
 SURFACE WIND.. 200 DEG. 10 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
 LOW.. NONE
 MIDDLE.. 8 OCTAS/AS
 HIGH.. NONE

TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. HAZE
 WIND AT ROCKET LAUNCH
 50 FT. 175 DEG/10 KTS, 100 FT. 184 DEG/11 KTS,
 150 FT. 187 DEG/14 KTS, 200 FT. 201 DEG/15 KTS,
 250 FT. 204 DEG/15 KTS



STATION: (NASA)Wallops IS., VA.
 DATE: 30 MARCH, 1966

ROCKET TIME: 1103LST 160.8CT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
 RADIOSONDE TYPE: 1680 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME	RAWINSONDE RELEASE TIME
	(CNAE) NATAL, BRAZIL	Z	Z	Z
82599	05° 55' S 35° 10' W ALT. 43 M	APRIL 13, 1966	1547	1240

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS						RAWINSONDE						RH	TEMP
TIME	FALL	ALT	POLAR	WIND	COMPONENTS	ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR	WIND	COMPONENTS	PRESSURE	ALT	POLAR	WIND		
TENTHS	VEL					TENS				OF								%	DEG C
OF A	M/S	KM	DEG	KTS	N-S	OF	DEG C	MB	G M	SOUND	DEG	KTS	N-S	MB	METERS	DEG	KTS		
MINUTE					E-W	METERS				M/S			E-W						
020	083	52	259	066	+006	+033								1008.0	0004	000	000	+000	+000
022	083	51	267	060	+002	+030								1000.0	0007	000	000	+000	+000
024	069	50	274	053	-002	+027								0850.0	0149	000	000	+000	+000
027	059	49	272	050	-001	+026								0700.0	0315	040	010	-004	-003
030	059	48	269	047	+001	+024								0500.0	0588	290	009	-002	+005
033	054	47	270	049	+000	+025								0400.0					
036	044	46	270	050	+000	+026								0300.0	MISSING				
040	040	45	259	051	+005	+026								0250.0					
044	043	44	248	053	+010	+025								0200.0	1243	100	005	+001	-003
048	041	43	255	049	+007	+024								0150.0	1423	260	012	+001	+006
053	036	42	261	045	+004	+023								0100.0	1664	070	015	-003	-008
057	040	41	259	037	+004	+019								0070.0	1870	120	015	+004	-007
061	042	40	256	028	+004	+014								0050.0	2066	080	032	-003	-016
065	038	39	223	015	+005	+005								0030.0	2391	270	020	+000	+010
070	036	38	190	002	+001	+000								0020.0	2661	300	032	-008	+014
074	034	37	236	007	+002	+003													
079	031	36	242	011	+003	+005													
085	031	35	256	022	+002	+011													
090	029	34	270	033	+000	+017													
097	025	33	287	023	-002	+012													
104	023	32	303	013	-004	+006													
111	022	31	316	013	-005	+005													
119	020	30	329	013	-006	+003													
127	019	29	316	008	-003	+003													
137	017	28	239	004	+001	+002													
147	017	27	270	016	+000	+008													
157	017	26	273	028	-001	+014													
167	016	25	264	023	+001	+011													
179	013	24	254	017	+002	+008													
193	011	23	090	006	+000	-003													
210	010	22	082	028	-002	-014													
228	009	21	084	030	-002	-015													
246	008	20	085	032	-002	-016													
267	008	19	093	023	+000	-012													
289	010	18	101	014	+001	-007													

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. X01-1A
 PAYLOAD PERFORMANCE.. NO SIGNAL
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 050 DEG. AZIMUTH 75.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION.. 5 SECONDS 6.096 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 92 SECONDS 54,193 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 92 SECONDS 54,193 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1.811 SECONDS 17,496 METERS ALTITUDE
 APOGEE.. 92 SECONDS 54,193 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
 TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
 TELEMETRY FREQUENCY.. 403 MHZ
 TELEMETRY QUALITY.. POOR
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

NO SIGNAL RECEIVED FROM PAYLOAD.
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. UNKNOWN
 RADIOSONDE TYPE.. UNKNOWN
 TEMPERATURE ELEMENT TYPE.. UNKNOWN
 PRESSURE SENSOR TYPE.. UNKNOWN
 GROUND EQUIPMENT TYPE.. UNKNOWN
 BALLOON TYPE.. UNKNOWN
 BALLOON SIZE.. 1.200 GRAMS
 FREE LIFT.. UNKNOWN
 ASCENSION RATES.. SFC-400 MB = UNKNOWN
 400 MB-TOP = UNKNOWN

WEATHER OBSERVATION AT RAWINSONDE RELEASE

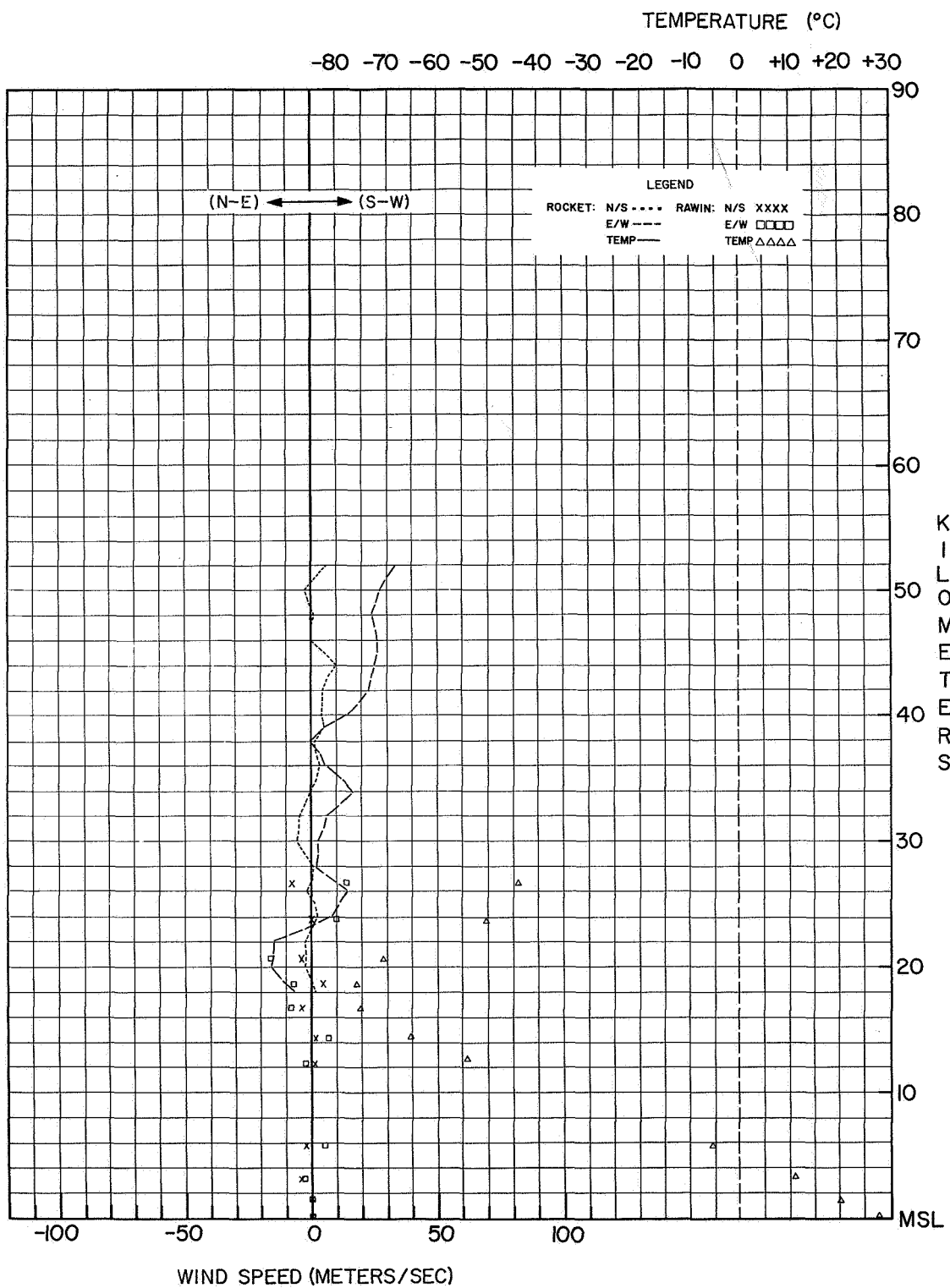
STATION PRESSURE.. 1008.0 MB
 TEMPERATURE.. 28.2 DEG. C
 RELATIVE HUMIDITY.. 76 %
 VISIBILITY.. UNKNOWN
 SURFACE WIND.. CALM

CLOUD TYPE AND AMOUNT.. TOTAL.. UNKNOWN
 LOW.. UNKNOWN
 MIDDLE.. UNKNOWN
 HIGH.. UNKNOWN

TYPE OF PRECIPITATION.. UNKNOWN
 OBSTRUCTIONS TO VISION.. UNKNOWN

WIND AT ROCKET LAUNCH

21 FT.. 000 DEG/00 KTS, 29 FT.. 000 DEG/00 KTS,
 51 FT.. 000 DEG/00 KTS, 82 FT.. 000 DEG/00 KTS,
 133 FT.. 000 DEG/00 KTS



STATION: (CNAE) NATAL, BRAZIL
 DATE: 13 APRIL, 1966

ROCKET TIME: 1247LST1547GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
 RADIOSONDE TYPE: UNKNOWN

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WALLOPS ISLAND, VIRGINIA Z LAUNCH RELEASE
TIME TIME
72402 37° 51' N 75° 29' W ALT. 3 M APRIL 14, 1966 1509 1115

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE												
TIME	FALL	ALT	WIND			ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND			PRESSURE	ALT	WIND			RH	TEMP						
TENTHS	VEL		POLAR	COMPONENTS		TENS	DEG	MB	G M	OF	POLAR	COMPONENTS		MB	TENS	POLAR	COMPONENTS		%	DEG						
OF A				N-S	E-W	METERS	C			SOUND		KTS	N-S	E-W	METERS		KTS	N-S	E-W		C					
MINUTE	M/S	KM	DEG	KTS						M/S	DEG	KTS					KTS									
026	056	51	286	043	-006	+022	5410	-413.5	00.517	00.643	340				1022.3	0000	360	010	-005	+000	87	+03.6				
029	043	50	281	048	-005	+025	5139	+07.5	00.713	00.905	336				0798.0	0200	002	014	-007	+000	100	-03.0				
033	042	49	279	063	-005	+032	4718	-01.7	01.192	01.563	330	284	078	-009	+037	0619.0	0400	283	041	-005	+021	77	-11.3			
037	040	48	281	069	-007	+035	4462	-04.9	01.640	02.178	328	290	072	-013	+035	0473.0	0600	281	041	-004	+021		-24.1			
042	040	47	285	075	-010	+038	4039	-13.7	02.815	03.865	323	290	078	-013	+037	0357.0	0800	275	053	-002	+027		-40.3			
046	040	46	278	071	-005	+036	3816	-26.5	03.791	05.474	315	294	067	-014	+031	0264.0	1000	279	090	-007	+046		-50.3			
050	034	45	289	068	-011	+033	3475	-36.8	06.107	09.203	308	284	057	-007	+028	0195.0	1200	280	078	-007	+040		-53.7			
055	033	44	292	077	-015	+037	3368	-42.2	07.129	10.995	305	279	050	-004	+026	0142.5	1400	274	049	-002	+025		-54.2			
060	029	43	287	077	-012	+038	3338	-41.5	07.449	11.453	305	281	050	-005	+025	0104.5	1600	271	041	+000	+021		-58.3			
067	025	42	282	076	-008	+039	3078	-45.7	10.925	17.109	302	278	041	-003	+021	0075.7	1800	282	033	-003	+017		-60.5			
073	025	41	287	078	-012	+039	3040	-43.7	11.422	17.730	304	279	039	-003	+020	0055.1	2000	274	031	-001	+016		-57.7			
080	024	40	291	072	-013	+035	2911	-45.7	13.992	21.911	302	270	028	+000	+014	0040.2	2200	282	018	-002	+009		-51.0			
087	024	39	290	068	-012	+033	2780	-42.7	16.983	26.249	304	276	022	-001	+011	0029.8	2400	282	018	-002	+009		-48.4			
094	025	38	294	065	-014	+031	2688	-46.0	19.461	30.516	302	270	020	+000	+010	0022.2	2600	275	020	-001	+010		-45.7			
101	022	37	293	064	-013	+030	2603	-46.3	22.093	34.689	302	262	016	+001	+008	0016.4	2800	257	006	+001	+003		-43.4			
109	019	36	291	065	-012	+032	2487	-50.0	26.311	41.997	300	235	018	+005	+007											
118	021	35	286	057	-008	+028	2408	-49.0	29.658	47.128	300	255	014	+002	+007											
125	023	34	280	050	-004	+026	2380	-49.0	30.941	49.167	300	255	014	+002	+007											
133	016	33	282	048	-005	+024	2231	-54.6	38.877	63.360	296	280	010	-001	+005											
146	015	32	280	053	-005	+027	2185	-52.9	41.743	67.506	298	292	010	-002	+005											
155	017	31	278	040	-003	+021	2082	-53.2	48.927	79.232	297	280	012	-001	+006											
165	017	30	278	037	-003	+019	2054	-56.7				280	016	-001	+008											
175	016	29	270	026	+000	+013	1981	-57.3				275	020	-001	+010											
186	013	28	274	023	-001	+012	1887	-61.6																		
200	012	27	270	020	+000	+010	1862	-60.6																		
214	012	26	266	015	+001	+008	1844	-61.7																		
227	011	25	235	017	+005	+007																				
245	011	24	251	014	+002	+007	CONSTANT PRESSURE LEVEL DATA										(HEIGHT IN GEOPOTENTIAL METERS)									
258	011	23	254	013	+002	+007	2061	-55.1	50.000	81.675	296	279	014	-001	+007											
275	010	22	282	010	-002	+005	2392	-49.0	30.000	47.671	300	254	014	+002	+007											
293	009	21	282	010	-001	+005	2660	-46.1	20.000	31.371	302	180	020	+000	+010											
313	008	20	274	019	-001	+010	3132	-44.6	10.000	15.603	303	280	043	-004	+022											
330	008	19	270	020	+000	+010	3364	-41.5	07.000	10.769	305	279	050	-004	+026											
							3617	-31.9	05.000	07.420	312	289	060	-010	+029											
							4313	-06.1	02.000	02.695	328	290	073	-013	+036											
							4850	+02.0	01.000	01.297	333	279	064	-005	+033											

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-3A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 12 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 46 SECONDS 38,496 METERS ALTITUDE
MOTOR TRACK DROPPED.. 95 SECONDS 55,108 METERS ALTITUDE
PAYLOAD ACQUISITION.. 100 SECONDS 54,803 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2,100 SECONDS 18,135 METERS ALTITUDE
APOGEE.. 96 SECONDS 55,321 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 400 MHZ
TELEMETRY QUALITY.. EXCELLENT
TELEMETRY DATA RECEIVED FROM.. 112 SEC. 54,200 METERS ALTITUDE
TO 2,100 SEC. 18,135 METERS ALTITUDE

REMARKS

THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 20,680 METERS
TEMPERATURE -55.1 DEG. C

RADIOSONDE AND BALLOON DATA

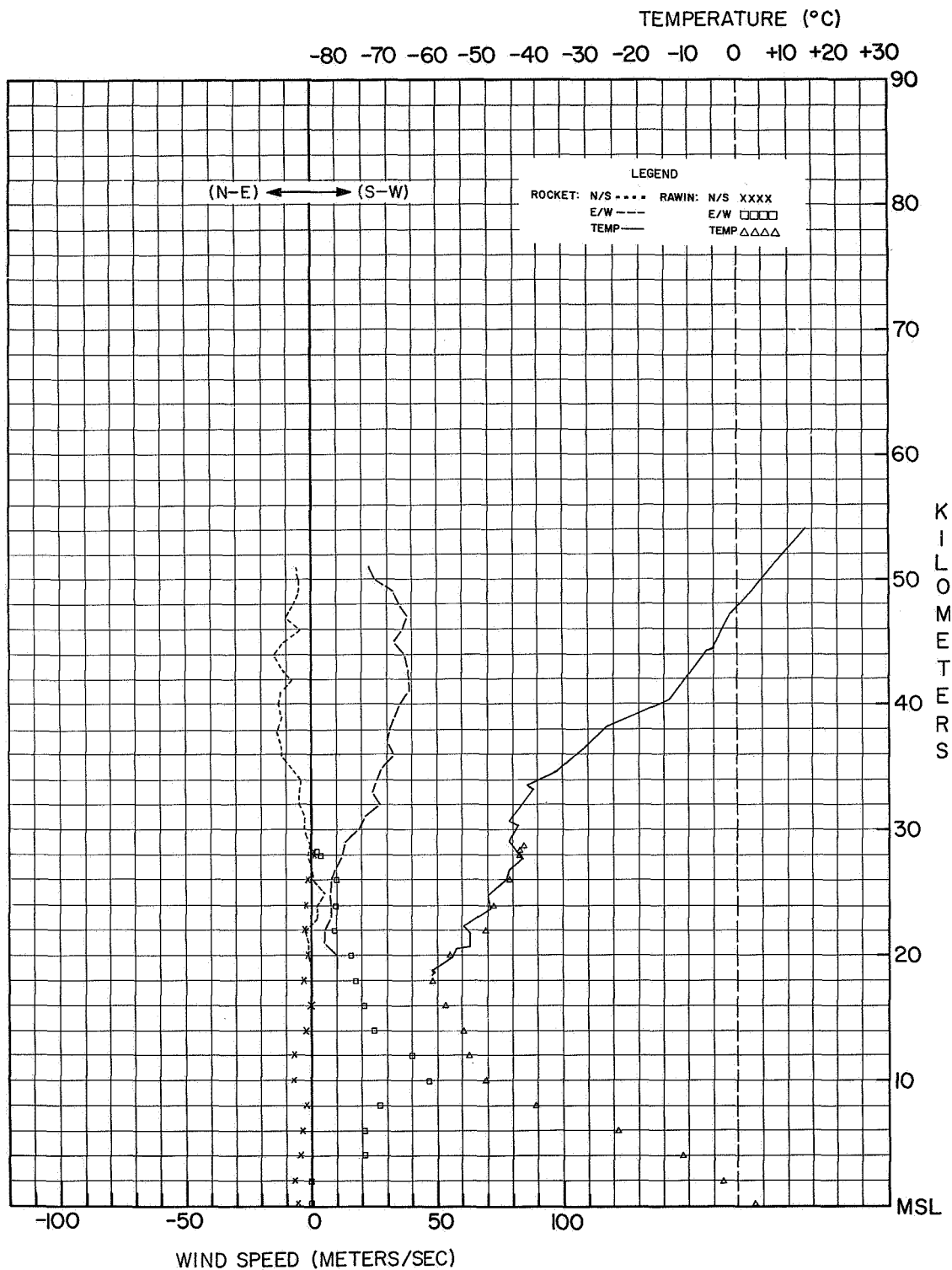
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,500 GRAMS
ASCENSION RATES.. SFC-400 MB = 287 M/MINUTE
400 MB-TOP = 291 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1022.0 MB
TEMPERATURE.. 3.6 DEG. C
RELATIVE HUMIDITY.. 87%
VISIBILITY.. 4 KM
SURFACE WIND.. 360 DEG. 10 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. 8 OCTAS/FC
MIDDLE.. UNKNOWN
HIGH.. UNKNOWN

WIND AT ROCKET

TYPE OF PRECIPITATION.. LIGHT RAIN
OBSTRUCTIONS TO VISION.. LIGHT RAIN AND HAZE
LAUNCH
50 FT. 018 DEG/12 KTS, 100 FT. 023 DEG/13 KTS,
150 FT. 021 DEG/15 KTS, 200 FT. 021 DEG/15 KTS,
250 FT. 003 DEG/16 KTS



STATION: (NASA)WALLOPS IS., VA.
 DATE: 14 APRIL, 1966

ROCKET TIME: 1009 LST 1509 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-3A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(CNIE) CHAMICAL, ARGENTINA Z Z Z
87320 30° 22' S 66° 17' W ALT.457 M APRIL 27, 1966 2154 1940

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE							RH	TEMP
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		
041	050	57	274	152	-007 +078											0959.7	0046	120	008	+002 -003	60	+22.0
045	051	56	272	156	-003 +080											0800.0	0200	108	005	+002 -002	82	+10.0
048	045	55	276	163	-008 +084											0627.0	0400	311	019	-006 +006	15	+04.0
052	043	54	280	170	-015 +086											0489.0	0600	263	017	+001 +008	12	-08.0
056	042	53	277	151	-010 +078											MISSING DATA (SEE REMARKS)						
060	038	52	273	131	-003 +078											0260.0	1000	300	110	-028 +048	51	-40.0
064	038	51	269	128	+003 +066											0148.0	1200	289	085	-014 +040		-60.0
069	034	50	264	125	+007 +064											0116.0	1400	287	061	-009 +029		-63.0
074	033	49	264	127	+007 +065											0085.0	1600	285	022	-003 +011		-68.0
079	029	48	264	130	+007 +067											0057.0	1800	267	017	+000 +008		-67.0
085	026	47	266	120	+004 +062											0036.2	2000	296	011	-002 +005		-64.0
091	030	46	267	110	+003 +056											0030.4	2200	239	017	+004 +007		-62.0
097	029	45	269	111	+002 +057											0023.3	2400	275	017	-001 +008		-56.0
103	024	44	270	111	+000 +057																	
111	023	43	274	133	-005 +068																	
117	026	42	277	155	-010 +079																	
124	025	41	275	128	-006 +066																	
131	022	40	272	101	-002 +052																	
139	024	39	271	087	-001 +045																	
145	024	38	269	073	+000 +038																	
152	020	37	274	067	-003 +037																	
162	019	36	279	060	-005 +031																	
170	019	35	280	054	-005 +028																	
179	020	34	280	048	-004 +024																	
187	016	33	278	046	-003 +024																	
200	014	32	275	043	-002 +022																	
211	017	31	268	034	+000 +018																	
220	018	30	260	024	+002 +012																	

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. CHAFF
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 030 DEG. AZIMUTH 83.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. UNKNOWN
MOTOR TRACK DROPPED.. 130 SECONDS 59,131 METERS ALTITUDE
PAYLOAD ACQUISITION.. 130 SECONDS 59,131 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1,440 SECONDS 28,194 METERS ALTITUDE
APOGEE.. UNKNOWN

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
TEMPERATURE SENSOR.. N.A.
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. N.A.
TELEMETRY FREQUENCY.. N.A.
TELEMETRY QUALITY.. N.A.
TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

TEST WAS SUCCESSFUL. WINDS TAKEN BY THEODOLITE UP TO 6,000 METERS AND BY MPS-19 RADAR FROM 10,000 METERS TO BALLOON BURST. INCREASING PRESSURE ERROR WITH HEIGHT. ALTITUDES FOR METEOROLOGICAL PARAMETERS TAKEN FROM RADAR. THERMODYNAMICS BASE DATA.. PRESSURE N.A. ALTITUDE N.A. TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

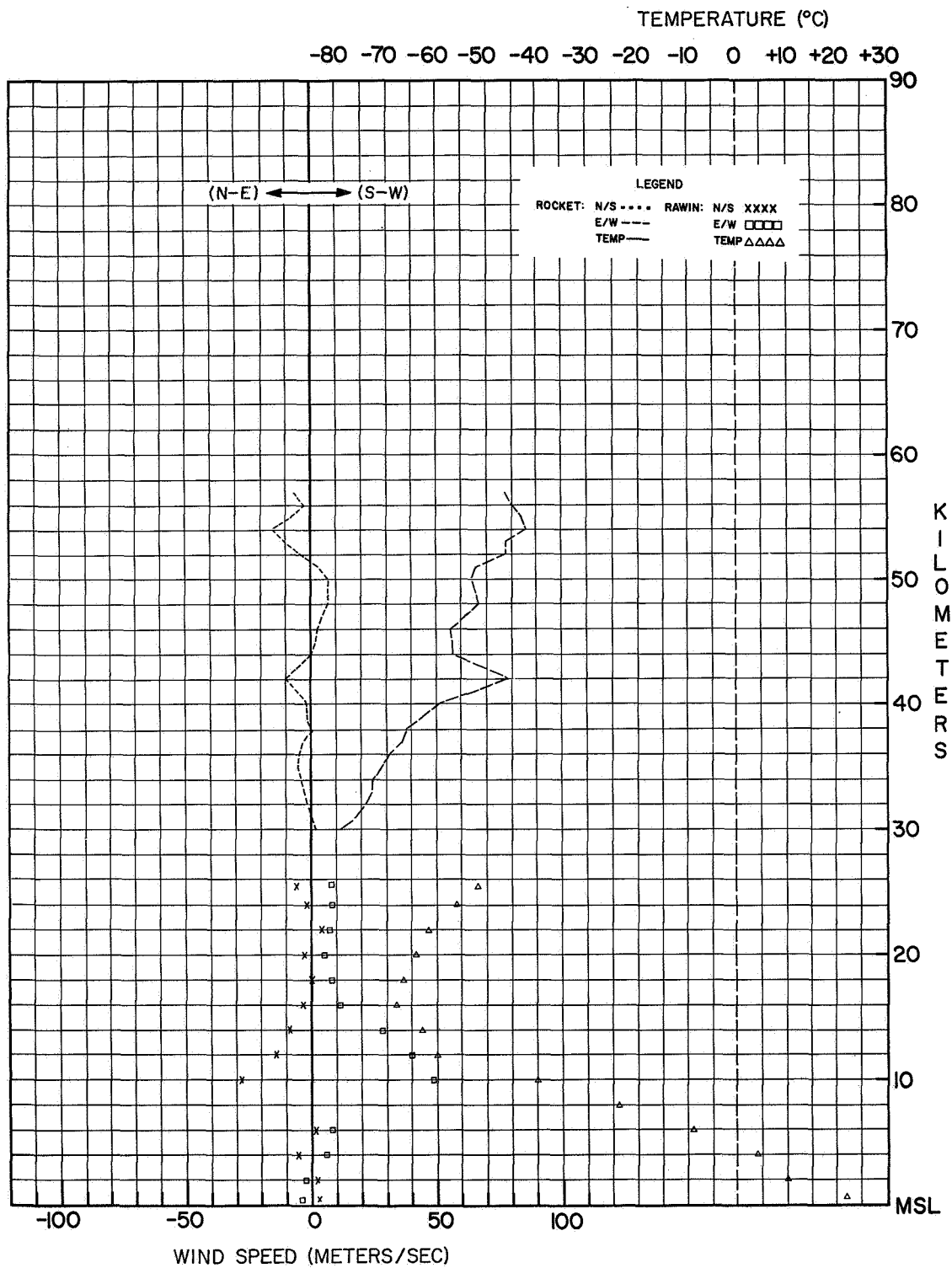
RADIOSONDE MANUFACTURER.. VAISALA
RADIOSONDE TYPE.. VAISALA
TEMPERATURE ELEMENT TYPE.. BIMETAL
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. VAISALA
BALLOON TYPE.. TOTEX
BALLOON SIZE.. 800 GRAMS
FREE LIFT.. 2,300 GRAMS
ASCENSION RATES.. SFC-400 MB = 350 M/MINUTE
400 MB-TOP = 377 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 959.7 MB
TEMPERATURE.. 22.0 DEG. C
RELATIVE HUMIDITY.. 60 %
VISIBILITY.. 50 KM
SURFACE WIND.. 120 DEG. 8 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 7 OCTAS
LOW.. CU/SC
MIDDLE.. AS/AC
HIGH.. CS

WIND AT ROCKET

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE
LAUNCH
SFC. 120 DEG/08 KTS



STATION: (CNIE) CHAMICAL, ARGENTINA ROCKET TIME 1654 LST 2154 GCT
DATE: 27 APRIL, 1966 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
RADIOSONDE TYPE: VAISALA

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(NASA) WALLOPS ISLAND, VIRGINIA Z Z
72402 27° 51' N 75° 29' W ALT. 3 M MAY 2, 1966 0153 2315

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	POLAR	WIND	RH	TEMP		RH	TEMP		
TENTHS	VEL	OF A	POLAR	DEG	KTS	COMPONENTS	TENS	DEG	MB	G M	OF SOUND	POLAR	DEG	KTS	COMPONENTS	MB	TENS	DEG	KTS							
MINUTE	M/S	KM				N-S E-W	METERS	C			M/S				N-S E-W		METERS									
020	077	51	226	018	+006	+006	4770	-04.3	01.141	01.512	329	200	020	+009	+003	1019.6	0000	080	008	-001	-004	88	+12.8			
023	069	50	173	020	+010	-002	4322	-08.5	02.009	02.704	326	242	020	+005	+009	0804.0	0200	240	014	+004	+006	98	+09.2			
025	074	49	180	018	+009	+000	4209	-08.5	02.320	03.123	326	224	022	+008	+008	0630.0	0400	239	029	+008	+013	97	-01.9			
027	059	48	194	015	+009	+003	4030	-16.1	02.925	04.052	322	248	022	+004	+010	0487.0	0600	253	047	+007	+023	68	-14.2			
031	077	47	215	018	+007	+005	3975	-20.7	03.166	04.438	319	252	026	+004	+012	0372.0	0800	263	066	+004	+034	30	-26.2			
032	059	46	257	015	+000	+009	3859	-25.7	03.679	05.295	315	262	041	+003	+021	0280.0	1000	266	066	+002	+034		-43.0			
036	049	45	288	029	-001	+012	3755	-22.9	04.236	06.030	317	267	045	+001	+023	0205.0	1200	282	070	-007	+035		-60.7			
039	067	44	268	022	+002	+012	3688	-26.3	04.640	06.695	315	267	041	+001	+021	0148.0	1400	269	062	+001	+032		-64.9			
041	053	43	234	020	+006	+008	3584	-29.1	05.354	07.814	313	246	033	+007	+015	0108.0	1600	271	039	+000	+020		-65.9			
045	050	42	239	021	+008	+008	3514	-34.0	05.904	08.794	310	256	033	+004	+017	0078.0	1800	281	019	-002	+010		-63.1			
048	051	41	234	020	+006	+008	3420	-34.1	06.743	10.047	310	244	032	+007	+014	0055.0	2000	266	016	+001	+008		-58.7			
051	045	40	257	030	+004	+015	3316	-36.5	07.817	11.766	309	234	024	+007	+010	0041.0	2200	272	014	+000	+007		-54.4			
053	045	39	262	037	+003	+019	3185	-36.0	09.425	14.155	309	246	024	+005	+011	0030.0	2400	266	008	+000	+004		-52.5			
059	033	38	265	046	+002	+024	3106	-42.6	10.566	16.323	305	240	020	+005	+009	0022.2	2600	278	006	+000	+003		-50.8			
063	037	37	270	040	+000	+021	3042	-42.5	11.606	17.923	305	245	016	+003	+007											
068	032	36	245	031	+007	+015	2957	-41.7	13.145	20.229	305	255	016	+002	+008											
074	029	35	257	035	+004	+017	2743	-47.6	18.049	28.503	301	260	014	+001	+007											
079	029	34	240	029	+007	+013	2627	-49.9	21.504	34.308	300	280	010	+001	+005											
085	027	33	234	024	+007	+010	2588	-51.7	22.821	36.705	298	285	008	+001	+004											
092	026	32	244	023	+005	+011	2493	-51.3	26.388	42.367	299	330	008	+003	+002											
098	023	31	245	020	+005	+009	2374	-52.2	31.663	51.042	298	335	010	+004	+002											
106	022	30	248	011	+002	+006	2246	-56.4	38.610	63.447	295	290	006	+001	+003											
113	024	29	264	020	+001	+010	2170	-54.5	43.464	70.804	297	270	008	+000	+004											
120	019	28	264	015	+001	+008	2103	-55.5	48.239	78.943	296	260	012	+001	+006											
131	015	27	262	014	+001	+007	2063	-55.5				260	012	+001	+006											
142	016	26	288	009	-001	+004	2042	-57.8				250	012	+002	+006											
152	015	25	325	008	-003	+002	1999	-60.1				250	012	+002	+006											
164	014	24	324	007	-004	+002	1945	-57.9				260	012	+001	+006											
177	013	23	330	010	-002	+002	1911	-62.3				270	012	+000	+006											
189	011	22	268	008	+000	+004	1856	-62.8																		
207	010	21	260	012	+001	+006	1838	-63.4																		
223	010	20	255	013	+002	+003																				
240	013	19	268	014	+000	+006																				
CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																										
2073	-55.5	50.000	81.825	296	260	012	+001	+006																		
2403	-51.9	30.000	48.307	298	333	009	-004	+002																		
2666	-48.9	20.000	31.781	300	271	012	+000	+006																		
3130	-39.3	10.000	15.248	307	243	022	+005	+010																		
3447	-31.0	07.000	10.458	310	239	019	+002	+013																		
3615	-27.7	05.000	07.259	314	256	037	+004	+018																		
4297	-08.5	02.000	02.702	326	242	020	+005	+009																		

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2073	-55.5	50.000	81.825	296	260	012	+001	+006
2403	-51.9	30.000	48.307	298	333	009	-004	+002
2666	-48.9	20.000	31.781	300	271	012	+000	+006
3130	-39.3	10.000	15.248	307	243	022	+005	+010
3377	-34.7	07.000	10.458	310	239	030	+007	+013
3615	-27.7	05.000	07.259	314	256	037	+004	+018
4297	-08.5	02.000	02.702	326	242	020	+005	+009

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-3A
PAYLOAD PERFORMANCE.. GOOD
FUZE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUZE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 12 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 9 SECONDS 9,114 METERS ALTITUDE
MOTOR TRACK DROPPED.. 90 SECONDS 52,700 METERS ALTITUDE
PAYLOAD ACQUISITION.. 100 SECONDS 52,791 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1,500 SECONDS 18,471 METERS ALTITUDE
APOGEE.. 94 SECONDS 53,005 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 402.7 MHZ
TELEMETRY QUALITY.. EXCELLENT
TELEMETRY DATA RECEIVED FROM.. 171 SEC. 47,700 METERS ALTITUDE
TO 1,507 SEC. 18,380 METERS ALTITUDE

REMARKS

THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 20,000 METERS
TEMPERATURE -55.5 DEG. C

RADIOSONDE AND BALLOON DATA

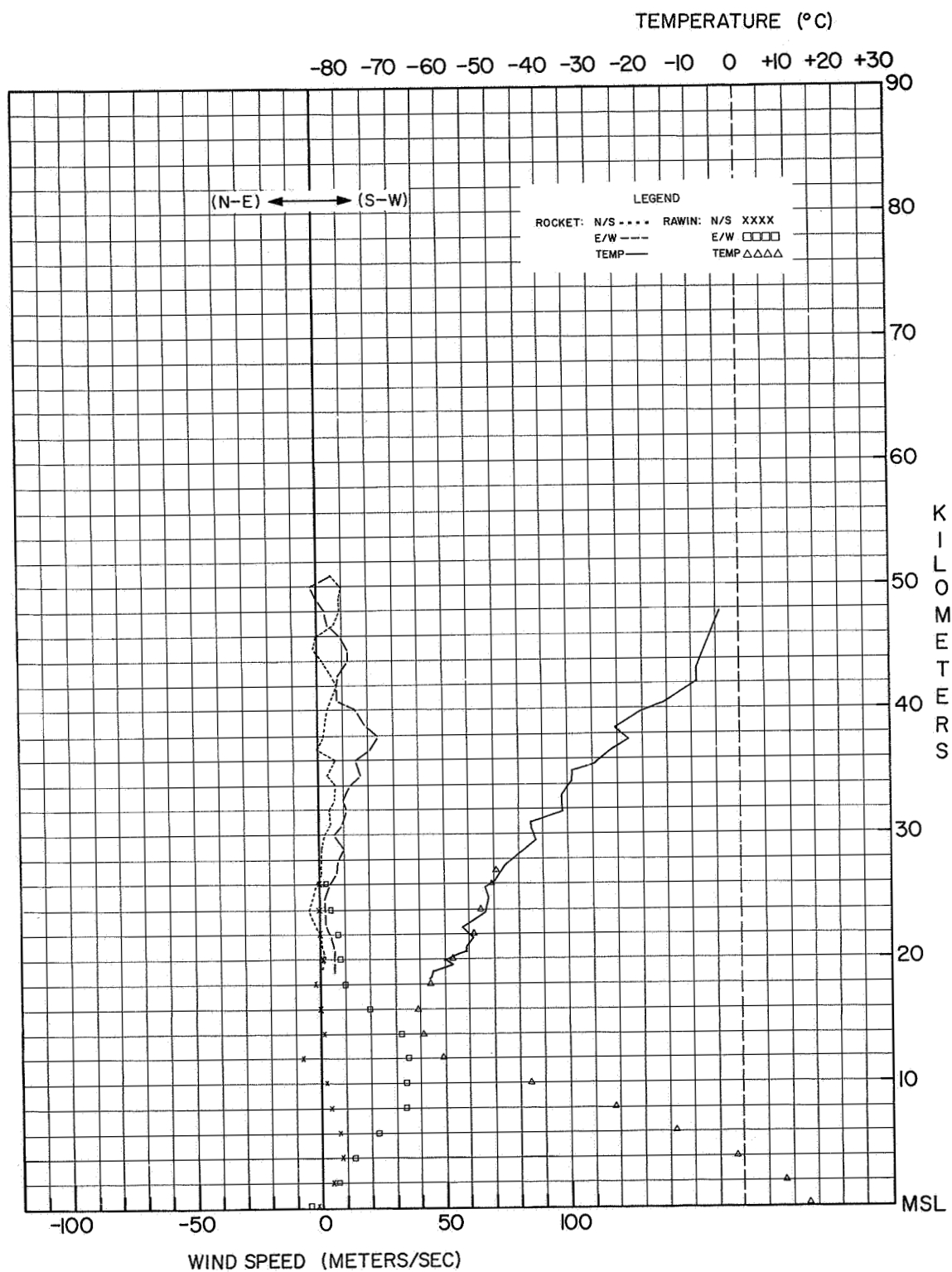
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-18
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,500 GRAMS
ASCENSION RATES.. SFC-400 MB = 285 M/MINUTE
400 MB-TOP = 305 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1019.6 MB
TEMPERATURE.. 12.8 DEG. C
RELATIVE HUMIDITY.. 88%
VISIBILITY.. 4 KM
SURFACE WIND.. 80 DEG. 8 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. 8 OCTAS/SC
MIDDLE.. 2 OCTAS/AC
HIGH.. UNKNOWN
TYPE OF PRECIPITATION.. VERY LIGHT RAIN
OBSTRUCTIONS TO VISION.. FOG

WIND AT ROCKET LAUNCH

90 FT. 020 DEG/03 KTS, 100 FT. 027 DEG/03 KTS,
150 FT. 022 DEG/03 KTS, 200 FT. 021 DEG/04 KTS,
250 FT. 020 DEG/05 KTS



STATION: (NASA)WALLOPS IS., VA.
DATE: 2 MAY, 1966

01/2053
ROCKET TIME: LST 0153 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-3A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(CNAE) NATAL, BRAZIL Z LAUNCH RELEASE
TIME TIME
82599 05° 55' S 35° 10' W ALT. 43 M MAY 2, 1966 0155 0330

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS		RH %	TEMP DEG C		
					N-S	E-W									N-S	E-W					N-S	E-W			
018	080	52	272	109	-002	+056	4374	-15.2					262	057	+004	+029	1005.5	0004	180	008	+004	+000	77	+24.2	
020	074	51	278	081	-006	+042	4292	-16.5					266	057	+002	+029	0798.0	0200	107	014	+002	-007	87	+11.8	
022	071	50	288	059	-009	+029	4191	-16.5					268	057	+001	+029	0626.0	0400	097	013	+001	-007	30	+07.2	
025	063	49	280	063	-006	+031	4133	-16.0					268	053	+001	+027	0489.0	0600	097	020	+001	-010	29	-05.5	
028	061	48	276	068	-003	+032	4078	-19.2					268	053	+001	+027	0375.0	0800	054	014	-004	-006	27	-18.0	
030	063	47	274	065	-002	+033	3981	-18.1					268	045	+001	+023	0284.0	1000	053	008	-002	-003	40	-35.4	
033	057	46	273	065	-001	+033	3929	-16.8					270	037	+000	+019	0211.0	1200	303	018	-005	+008		-50.7	
036	047	45	268	061	+001	+031	3856	-18.3					270	028	+000	+010	0154.0	1400	289	037	-006	+018		-65.9	
040	047	44	263	056	+004	+029	3810	-19.2					270	020	+000	+010	0110.0	1600	305	036	-011	+015		-74.6	
043	048	43	266	056	+002	+029	3761	-20.1					215	018	+007	+005									
047	041	42	269	057	+001	+029	3725	-26.4					192	020	+010	+002									
052	036	41	268	052	+001	+027	3700	-25.9					118	020	+005	+009									
056	036	40	273	047	+001	+024	3572	-33.4					115	018	+004	-008									
061	033	39	271	033	+000	+017	3548	-33.5					112	016	+003	-007									
066	032	38	269	019	+000	+010	3520	-36.2					110	006	+001	-003									
071	030	37	193	020	+010	+002	3380	-37.8					030	008	-003	-002									
077	026	36	118	020	+005	-009	3298	-36.7					360	006	-003	+000									
084	025	35	112	013	+003	-007	3261	-35.5					295	014	-003	+006									
091	024	34	105	006	+001	-003	3106	-37.8					270	020	+000	+010									
098	022	33	034	007	-003	-002	3002	-42.0					284	018	-002	+009									
106	021	32	327	008	-003	-002	2935	-40.8					284	018	-002	+009									
114	020	31	298	013	-003	+006	2899	-41.1					284	018	-002	+009									
123	020	30	269	019	+000	+010	2874	-42.5					290	020	-003	+009									
131	019	29	285	018	-002	+009	2768	-43.1					282	020	-002	+010									
141	018	28	297	017	-004	+008	2701	-44.9					276	022	-001	+011									
150	017	27	280	020	-002	+010	2637	-44.8					276	022	-001	+011									
160	016	26	274	022	-001	+011	2582	-48.3					276	022	-001	+011									
171	016	25	277	020	-001	+010	2454	-47.8					276	018	-001	+009									
182	014	24	281	017	-002	+008	2432	-50.0					285	016	-002	+008									
195	012	23	290	008	-001	+004	2399	-50.8					285	016	-002	+008									
209	012	22	321	003	-001	+001	2384	-53.1					285	016	-002	+008									
224	010	21	028	022	-010	-005	2353	-54.6					290	012	-002	+006									
241	009	20	099	041	+003	-021	2320	-57.8					282	010	-001	+005									
260	009	19	090	031	+000	-016	2240	-57.2					300	004	-001	+002									
279	008	18	079	022	-002	-011	2198	-56.3					315	002	-001	+001									
							2109	-63.3					026	022	-010	-005									
							2067	-66.8					066	024	-005	-011									
							2048	-64.5					076	026	-003	-013									
							2018	-67.3					093	035	-001	-018									
							1966	-68.9					096	037	+002	-019									
							1960	-72.2					096	037	+002	-019									

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 060 DEG. AZIMUTH 75.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 6 SECONDS 5,182 METERS ALTITUDE
MOTOR TRACK DROPPED.. 95 SECONDS 52,548 METERS ALTITUDE
PAYLOAD ACQUISITION.. 95 SECONDS 52,548 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1,800 SECONDS 16,947 METERS ALTITUDE
APOGEE.. 95 SECONDS 52,548 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 403 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 245 SEC. 43,735 METERS ALTITUDE
TO 1,493 SEC. 19,570 METERS ALTITUDE

REMARKS

TEST WAS SUCCESSFUL.
THERMODYNAMICS BASE DATA.. PRESSURE N.A.
ALTITUDE N.A.
TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

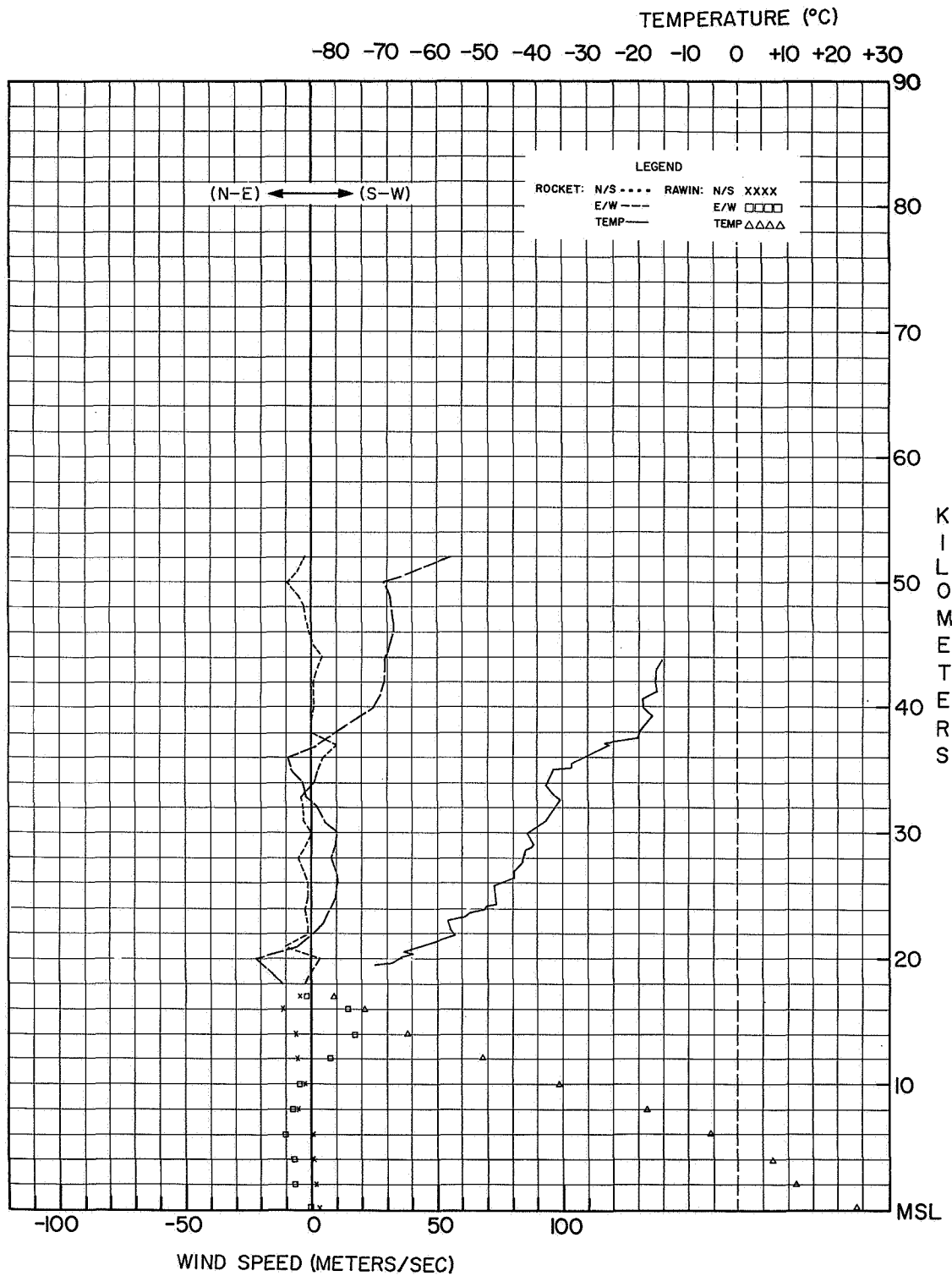
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 403 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. UNKNOWN
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
BALLOON TYPE.. KAYSAM
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,200 GRAMS
ASCENSION RATES.. SFC-400 MB = 269 M/MINUTE
400 MB-TOP = 282 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1005.5 MB
TEMPERATURE.. 24.2 DEG. C
RELATIVE HUMIDITY.. 77 %
VISIBILITY.. 20 KM
SURFACE WIND.. 180 DEG. 8 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 6 OCTAS
LOW.. CU/SC
MIDDLE.. NONE
HIGH.. CI

WIND AT ROCKET LAUNCH

21 FT. 180 DEG/07 KTS, 29 FT. 180 DEG/09 KTS,
51 FT. 180 DEG/09 KTS, 82 FT. 170 DEG/09 KTS,
133 FT. 180 DEG/09 KTS



STATION: (CNAE) NATAL, BRAZIL
DATE: 2 MAY, 1966

ROCKET TIME: 01/2255 LST 0155 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: 403 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(CNAE) NATAL, BRAZIL Z LAUNCH RELEASE
TIME TIME
82599 05° 55' S 35° 10' W ALT. 43 M MAY 18, 1966 1550 1300

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS. FALL	ALT	POLAR		WIND COMPONENTS		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR	WIND COMPONENTS		PRESSURE MB	ALT TENS OF METERS	POLAR	WIND COMPONENTS		RH %	TEMP DEG C					
OF A MINUTE	M/S	KM	DEG	KTS	N-S E-W	MPS					DEG	KTS	N-S E-W		METERS	DEG	KTS	N-S E-W							
021	077	52	274	028	-001	+014	5238	+11.2	00.709	00.888	338	287	014	-002	+007	1006.0	0004	160	013	+006	-002	68	+29.3		
023	069	51	286	014	-002	+007	5091	+06.7	00.845	01.076	335	297	013	-003	+006	0798.0	0200	190	006	+003	+001	41	+11.6		
026	061	50	314	014	-005	+005	5005	+07.1	00.887	01.125	336	289	025	-004	+012	01059.0	0400	038	001	-001	-001		+00.0		
029	056	49	325	016	-007	+005	4673	+03.7	01.399	01.800	334	270	034	+000	+018	0487.0	0600	025	005	-002	-001		-09.0		
032	056	48	318	024	-009	+008	4566	+03.7	01.593	02.050	334	264	040	+003	+021	0375.0	0800	147	009	+004	-003		-19.0		
035	051	47	295	024	-005	+011	4499	+05.1	01.728	02.213	335	282	048	-005	+025	0284.0	1000	330	007	-003	+002		-34.1		
038	048	46	274	030	-001	+015	4314	-03.5	02.170	02.867	329	279	050	-004	+026	0211.0	1200	224	015	+006	+006		-51.9		
042	043	45	262	042	+003	+021	4222	-03.3	02.434	03.213	329	284	050	-006	+025	0154.0	1400	268	024	+000	+012		-66.8		
046	042	44	267	042	+001	+022	4098	-05.1	02.844	03.779	328	278	040	-003	+021	0119.0	1600	290	008	-001	+004		-78.9		
050	042	43	283	051	-006	+025	3972	-10.1	03.338	04.519	325	273	038	-001	+020	0077.0	1800	087	017	+000	-008		-72.7		
054	040	42	283	051	-006	+025	3896	-10.9	03.680	04.998	325	264	036	+002	+019	0055.0	2000	107	014	+002	-007		-66.8		
058	036	41	279	051	-004	+026	3839	-18.0	03.964	05.534	320	255	036	+005	+018	0040.0	2200	051	017	-005	-006		-54.5		
063	037	40	285	054	-007	+026	3780	-17.6	04.286	05.973	321	248	033	+007	+017	0029.0	2400	263	028	+002	+014		-49.4		
067	038	39	278	041	-003	+021	3739	-19.9	04.525	06.365	319	236	021	+006	+009	0022.0	2600	278	034	-002	+017		-45.0		
072	037	38	267	040	+001	+020	3719	-19.0	04.647	06.513	320	277	017	-001	+009	0016.0	2800	267	030	+001	+015		-42.5		
076	033	37	243	036	+008	+016	3685	-20.4	04.863	06.853	319	280	021	-002	+011	0012.0	3000	287	037	-006	+018		-41.0		
082	029	36	232	022	+007	+009	3649	-21.0	05.103	07.208	318	284	023	-003	+012	0009.0	3200	275	022	-001	+011		-36.8		
088	028	35	270	016	+000	+008	3586	-24.1	05.555	07.944	316	283	025	-003	+013										
096	026	34	280	024	-002	+012	3519	-24.8	06.084	08.726	316	287	026	-004	+013										
101	022	33	287	027	-004	+013	3468	-26.8	06.523	09.432	315	293	025	-005	+012										
109	021	32	293	026	-005	+012	3413	-26.2	07.034	10.145	315	287	026	-004	+013										
117	019	31	287	027	-004	+013	3367	-28.9	07.493	10.928	313	283	033	-004	+017										
126	018	30	283	034	-004	+017	3336	-27.2	07.821	11.326	315	282	029	-003	+015										
135	018	29	278	028	-002	+014	3262	-27.5	08.659	12.555	314	274	029	-001	+015										
145	016	28	270	032	+000	+016	3208	-31.6	09.333	13.762	312	273	034	-001	+018										
156	014	27	274	035	-001	+018	3100	-35.4	10.870	16.285	309	274	033	-001	+017										
168	016	26	278	032	-002	+016	2999	-36.4	12.554	18.887	309	277	032	-002	+016										
177	017	25	274	031	-001	+016	2935	-34.6	13.752	20.533	310	274	032	-001	+016										
188	012	24	276	021	-001	+011	2843	-37.3	15.682	23.683	308	276	021	-001	+011										
204	011	23	282	028	-003	+014	2713	-36.1	18.891	28.385	309	280	023	-002	+012										
218	011	22	014	008	-004	-001	2673	-35.6	20.231	30.334	309	283	025	-003	+013										
235	010	21	090	027	+000	-014	2572	-43.9	23.155	35.976	304	360	007	-004	+000										
251	010	20	100	024	+002	-012	2550	-43.9	23.920	37.165	304	026	009	-004	-002										
270	009	19	096	018	+001	-009	2514	-47.8	25.239	39.893	301	063	013	-003	-006										
290	008	18	084	022	-001	-011	2470	-48.6	26.969	42.779	301	084	019	-001	-010										
							2405	-47.2	29.741	46.884	301	084	021	-001	-011										
							2366	-50.5	31.547	50.468	299	094	025	+001	-013										
							2290	-47.2	35.389	55.787	301	096	017	+001	-009										
							2213	-52.6	39.781	64.246	298														
							2191	-52.4	41.150	66.397	298														
							2165	-55.2	42.839	70.009	296														
							2132	-53.8	45.090	73.218	297														
							2121	-58.2	45.872	76.012	294														
							2068	-62.7	49.919	84.488	291														
CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																									
2060	-62.7	50.000	84.625	291																					
2390	-47.7	30.000	47.398	301	085	022	-001	-011																	
2664	-35.7	20.000	29.969	309	282	025	-003	+013																	
3145	-33.2	10.000	14.857	311	274	033	-001	+017																	
3399	-26.2	07.000	10.098	315	287	026	-004	+013																	
3643	-20.7	05.000	07.056	318	282	022	-003	+012																	
4355	-00.2	02.000	02.615	331	280	049	-004	+026																	
4930	+06.7	01.000	01.274	334	285	027	-003	+013																	

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 070 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 7 SECONDS 7.925 METERS ALTITUDE
MOTOR TRACK DROPPED.. 97 SECONDS 53,523 METERS ALTITUDE
PAYLOAD ACQUISITION.. 97 SECONDS 53,523 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.992 SECONDS 16,154 METERS ALTITUDE
APOGEE.. 97 SECONDS 53,523 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 403 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 120 SEC. 52,380 METERS ALTITUDE
TO 1.992 SEC. 16,154 METERS ALTITUDE

REMARKS

TEST WAS SUCCESSFUL.
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 20670 METERS
TEMPERATURE -62.7 DEG. C

RADIOSONDE AND BALLOON DATA

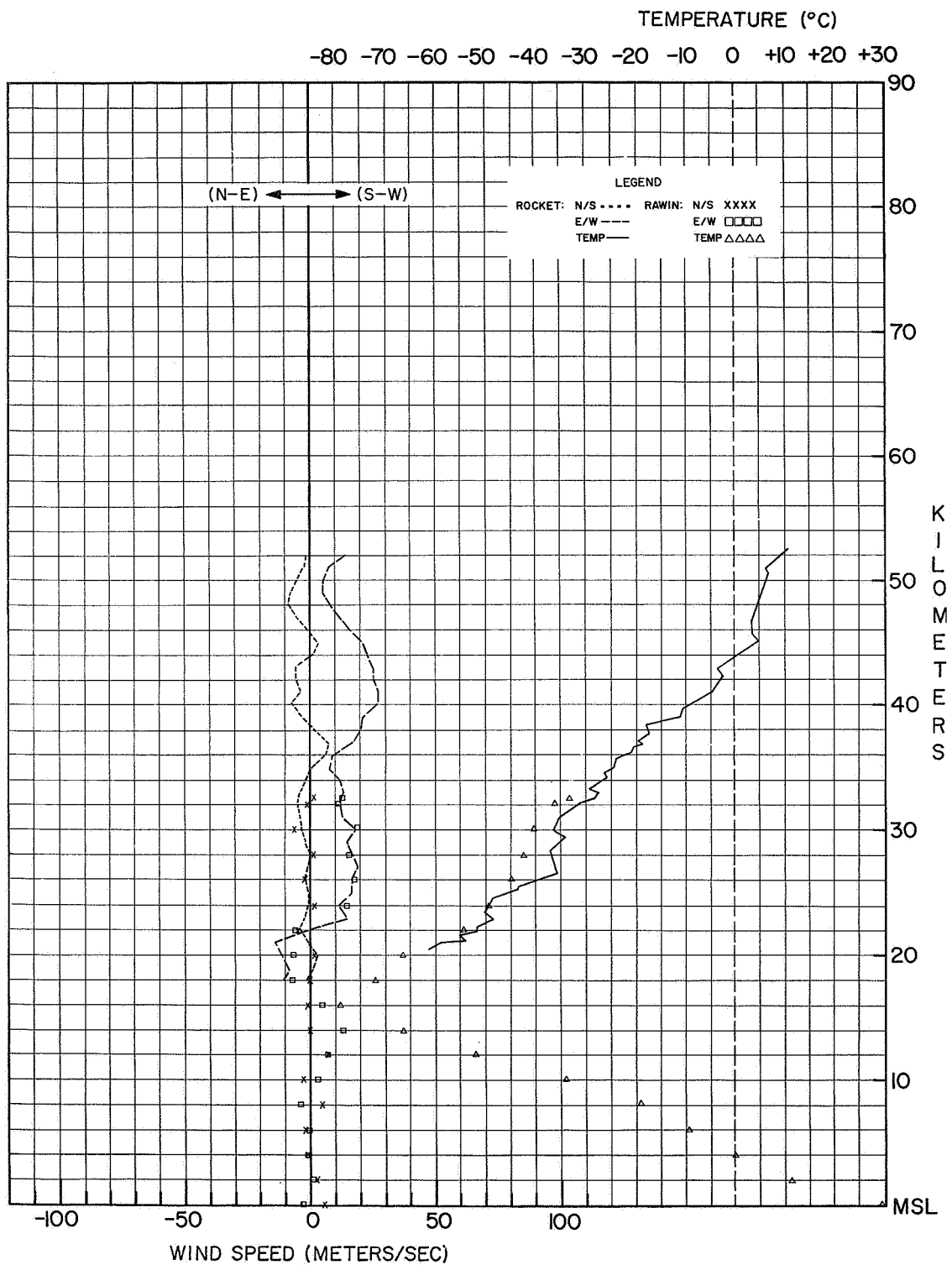
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 403 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. UNKNOWN
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
BALLOON TYPE.. UNKNOWN
BALLOON SIZE.. 1.200 GRAMS
FREE LIFT.. 1.200 GRAMS
ASCENSION RATES.. SFC-400 MB = 310 M/MINUTE
400 MB-TOP = 355 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1006.0 MB
TEMPERATURE.. 29.3 DEG. C
RELATIVE HUMIDITY.. 68%
VISIBILITY.. 20 KM
SURFACE WIND.. 160 DEG. 13 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 4 OCTAS
LOW.. CU
MIDDLE.. NONE
HIGH.. CI

WIND AT ROCKET LAUNCH

21 FT. 120 DEG/10 KTS, 29 FT. 110 DEG/10 KTS,
51 FT. 120 DEG/10 KTS, 82 FT. 120 DEG/14 KTS,
133 FT. 120 DEG/14 KTS



STATION: (CNAE) NATAL, BRAZIL
DATE: 18 MAY, 1966

ROCKET TIME: 1250-1550 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: 403 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME Z	RAWINSONDE RELEASE TIME Z
87320	(CNIE) CHAMICAL, ARGENTINA 30° 22' S 66° 17' W ALT+457 M	MAY 18, 1966	1842	1231

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE							RH	TEMP
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	%	DEG C		
033	063	60	260	111	+010 +057									0959.4	0046	160	006	+003 -001	67	+17.2		
035	069	59	258	128	+014 +064									0800.0	0200	100	002	+000 -001	44	+11.9		
037	057	58	256	140	+017 +070									0625.0	0400	010	003	-003 -001	26	+00.6		
041	054	57	260	136	+011 +068									0487.0	0600	320	010	-008 +007	37	-16.9		
044	054	56	265	128	+005 +065									0369.0	0800	310	002	-001 +001	43	-31.0		
047	044	55	270	128	+000 +066									0277.0	1000	310	002	-001 +001	31	-44.3		
051	040	54	274	128	-005 +066									0205.0	1200	260	014	+001 +007		+54.2		
055	043	53	274	125	-004 +066									0148.5	1400	250	042	+008 +021		-57.8		
059	038	52	272	130	-003 +067									0107.5	1600	280	039	-003 +020		-63.8		
064	032	51	274	125	-004 +065									0077.3	1800	270	030	+000 +015		-67.1		
069	031	50	274	120	-005 +062																	
074	032	49	276	121	-006 +062																	
080	033	48	275	118	-006 +061																	
084	031	47	276	112	-006 +058																	
091	027	46	276	105	-006 +054																	
097	027	45	279	098	-007 +050																	
103	028	44	279	091	-008 +046																	
109	026	43	283	085	-010 +042																	
116	024	42	285	076	-011 +038																	
123	024	41	283	070	-008 +035																	
130	022	40	278	065	-005 +033																	
138	024	39	280	057	-005 +029																	
143	022	38	279	050	-005 +026																	
153	021	37	275	044	-002 +023																	
159	024	36	266	036	+001 +019																	
166	024	35	252	031	+005 +015																	
173	018	34	236	033	+010 +015																	
MISSING DATA (SEE REMARKS)																						
199	014	32	281	021	-002 +011																	

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. CHAFF
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 040 DEG. AZIMUTH 02.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION.. NO TRACK
 MOTOR TRACK DROPPED.. NO TRACK
 PAYLOAD ACQUISITION.. 120 SECONDS 67,970 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1+260 SECONDS 30+480 METERS ALTITUDE
 APOGEE.. UNKNOWN

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
 TEMPERATURE SENSOR.. N.A.
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. N.A.
 TELEMETRY FREQUENCY.. N.A.
 TELEMETRY QUALITY.. N.A.
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

NO TRACK IN ASCENT. NO WIND DATA FOR 33 KM.
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

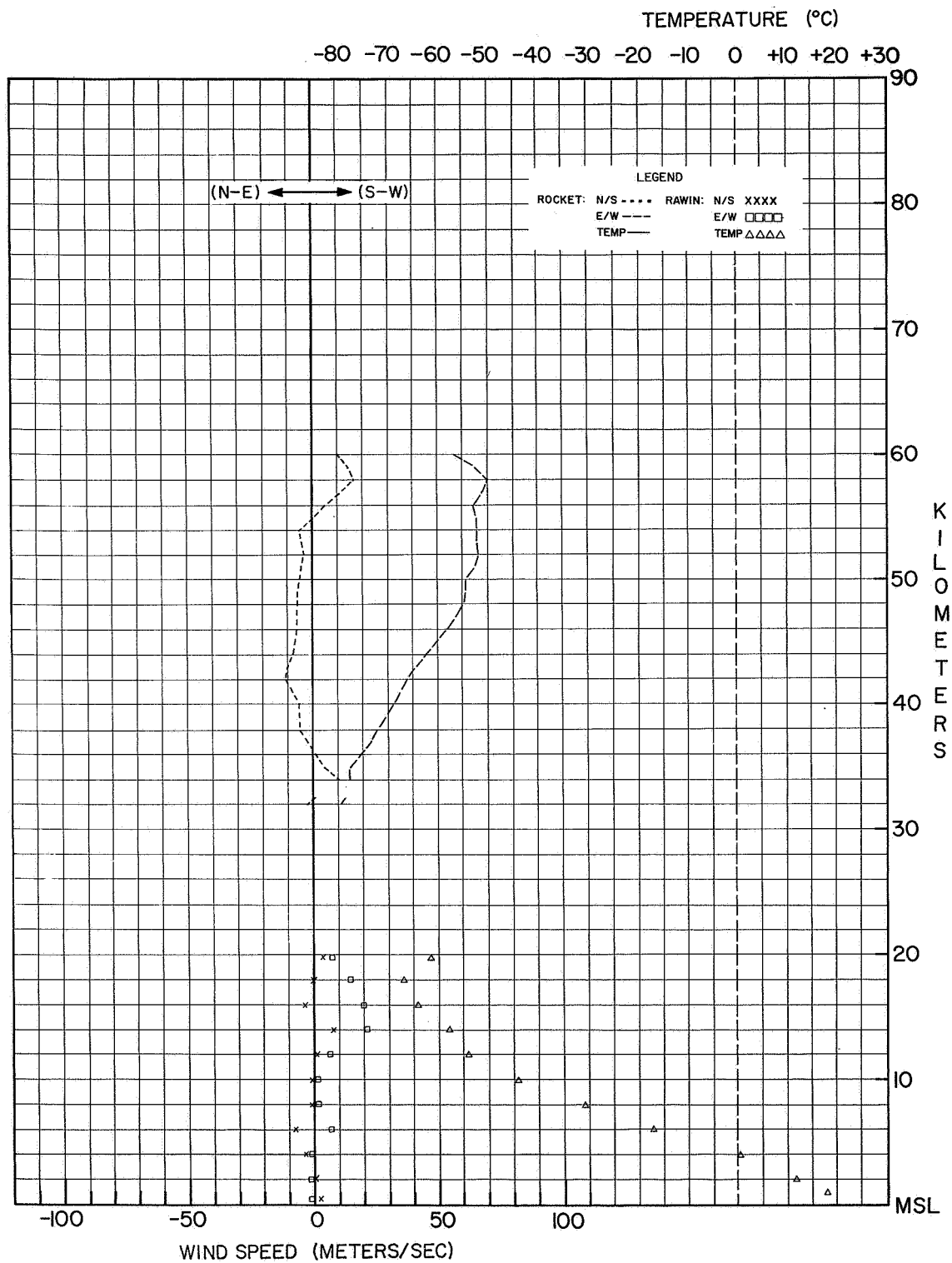
RADIOSONDE MANUFACTURER.. VAISALA
 RADIOSONDE TYPE.. VAISALA
 TEMPERATURE ELEMENT TYPE.. BIMETAL
 PRESSURE SENSOR TYPE.. ANEROID
 GROUND EQUIPMENT TYPE.. VAISALA
 BALLOON TYPE.. TOTEX
 BALLOON SIZE.. 800 GRAMS
 FREE LIFT.. 800 GRAMS
 ASCENSION RATES.. SFC-400 MB = UNKNOWN
 400 MB-TOP = UNKNOWN

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 959.4 MB
 TEMPERATURE.. 17.2 DEG. C
 RELATIVE HUMIDITY.. 67%
 VISIBILITY.. 30 KM
 SURFACE WIND.. 160 DEG. 6 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 2 OCTAS
 LOW.. NONE
 MIDDLE.. 1 OCTAS/AC
 HIGH.. 1 OCTAS/CI

WIND AT ROCKET

LAUNCH
 SFC. 160 DEG./06 KTS



STATION: (CNIE) CHAMICAL, ARGENTINA ROCKET TIME: 1442 LST 1842 GCT
DATE: 18 MAY, 1966 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
RADIOSONDE TYPE: VALSALA

RP STATION NAME DATE ROCKET RAWINSONDE
(CNIE) CHAMICAL, ARGENTINA Z LAUNCH RELEASE
TIME TIME
87320 30° 22' S. 66° 17' W ALT.457 M MAY 18, 1966 2022 2135

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE												
TIME	FALL	ALT	POLAR		WIND		COMPONENTS		ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND		COMPONENTS		PRESSURE	ALT	POLAR		WIND		COMPONENTS		RH	TEMP		
TENTHS	VEL		DEG	KTS	N-S	E-W	MPS		TENS	OF	DEG C	MB	G M	OF	DEG KTS	N-S	E-W	MB	TENS	OF	DEG	KTS	N-S	E-W	MPS	%	DEG C		
OF A	M/S	KM							METERS					SOUND															
MINUTE														M/S															
102	022	32	294	043	-009	+020			3100	-39.2	09.440	14.373	307	290	040	-007	+019	0955.6	0046	160	003	+003	-001	49	+23.3				
109	023	31	268	031	+001	+016			3000	-41.9	12.266	18.892	305	263	032	+002	+016	0795.0	0200					43	+11.9				
116	024	30	263	031	+002	+016			2963	-40.9	12.947	19.855	306	266	032	+001	+016	0625.0	0400					10	+00.0				
124	020	29	270	033	+000	+017			2899	-45.2	14.225	22.227	303	270	034	+000	+017	0483.0	0600					26	-17.2				
132	018	28	292	017	-003	+008			2632	-49.4	21.229	33.794	300	280	022	-002	+011	0368.0	0800					10	-31.8				
142	016	27	315	020	-007	+007			2385	-49.4	30.862	49.129	300	300	024	-006	+010	0275.0	1000						-44.8				
153	017	26	266	019	+001	+010			2135	-59.1	45.464	75.653	293					0202.0	1200						-56.0				
162	014	25	270	027	+000	+014			2027	-58.9				282	018	-002	+009	0147.0	1400						-61.6				
177	016	24	310	026	-009	+010			1968	-62.4				389	018	-003	+009	0106.0	1600						-65.8				
183	015	23	302	024	-006	+010			1891	-60.4				305	024	-007	+010	0076.1	1800						-67.6				
197	011	22	287	020	-003	+010			1851	-64.5				307	024	-007	+010	0055.4	2000						-64.9				
213	010	21	289	020	-003	+009			1740	-62.1								0040.0	2200						-62.6				
231	008	20	275	017	-001	+009			1632	-68.4								0028.9	2400						-59.5				
251	008	19	305	024	-007	+010			1611	-62.1								0021.1	2600						-54.0				
272	008	18	309	025	-008	+010												0015.6	2800						-52.4				
										CONSTANT PRESSURE LEVEL DATA																			
										(HEIGHT IN GEOPOTENTIAL METERS)																			
										2068										-59.0 50.000 83.162 293 289 020 -003 +009									
										2398										-49.4 30.000 47.757 300 298 024 -006 +011									
										2987										-48.7 20.000 31.764 301 278 054 -002 +012									
										3129										-39.7 10.000 15.273 307 284 038 -005 +020									

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2068	-59.0	50.000	83.162	293	289	020	-003	+009
2398	-49.4	30.000	47.757	300	298	024	-006	+011
2668	-48.7	20.000	31.764	301	278	024	-002	+012
3129	-39.7	10.000	15.273	307	284	038	-005	+020

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 040 DEG. AZIMUTH 82.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. NO TRACK
MOTOR TRACK DROPPED.. NO TRACK
PAYLOAD ACQUISITION.. 566 SECONDS 32.000 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2.100 SECONDS 16.977 METERS ALTITUDE
APOGEE.. UNKNOWN

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 402.3 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 566 SEC. 32.000 METERS ALTITUDE
TO 2.100 SEC. 16.977 METERS ALTITUDE

REMARKS

APOGEE UNDETERMINED AND TOP TELEMETRY ALTITUDE MISSING
BECAUSE OF NO RADAR ACQUISITION UNTIL 566 SECONDS.
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 20.750 METERS
TEMPERATURE -59.0 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. VAISALA
RADIOSONDE TYPE.. VAISALA
TEMPERATURE ELEMENT TYPE.. BIMETAL
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. VAISALA
BALLOON TYPE.. TOTEX
BALLOON SIZE.. UNKNOWN
FREE LIFT.. 1.400 GRAMS
ASCENSION RATES.. SFC-400 MB = UNKNOWN
400 MB-TOP = UNKNOWN

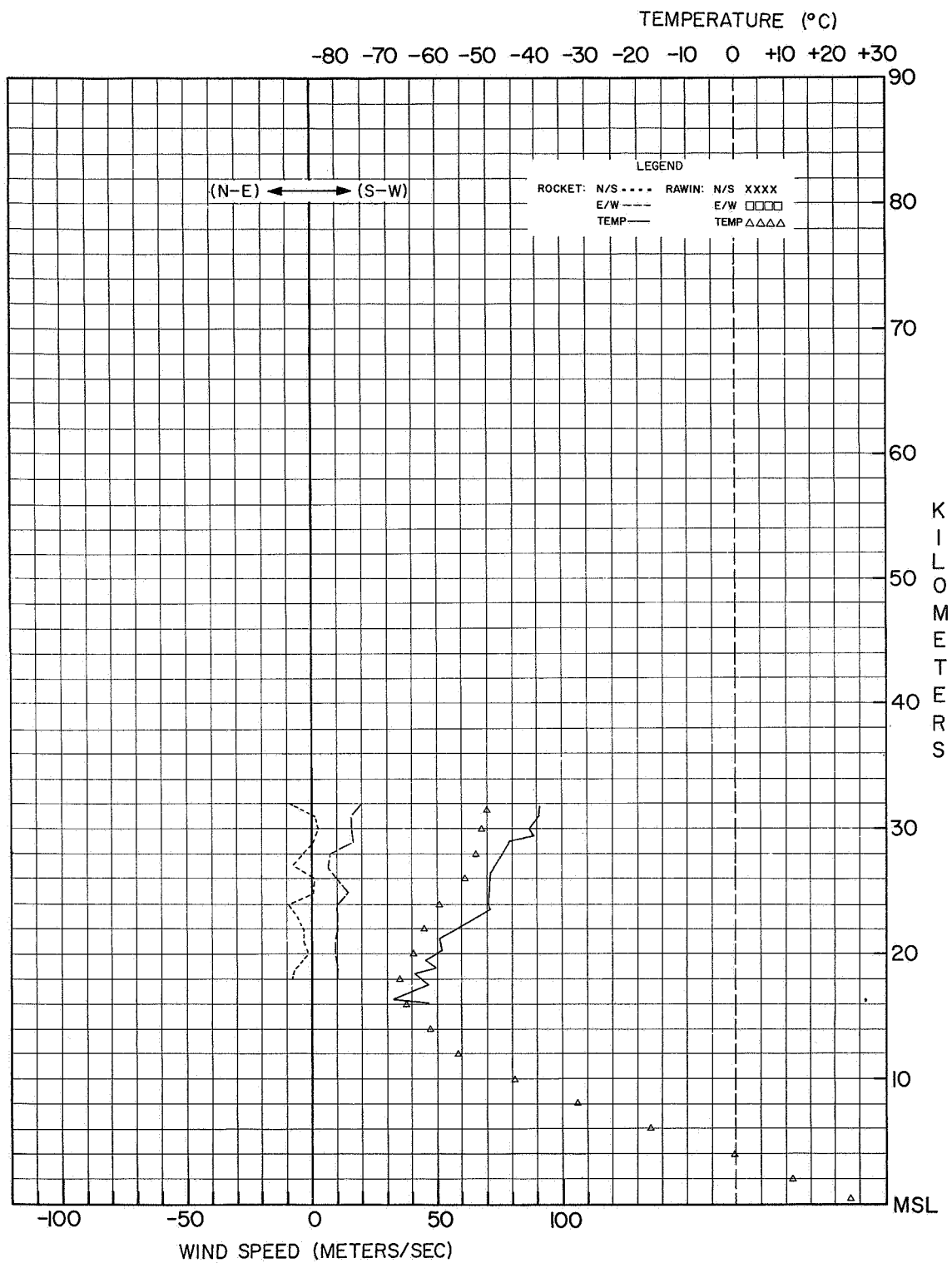
WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 956.6 MB
TEMPERATURE.. 23.3 DEG. C
RELATIVE HUMIDITY.. 49 %
VISIBILITY.. 50 KM
SURFACE WIND.. 160 DEG. 3 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 3 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 3 OCTAS/CI

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

SFC. 160 DEG./03 KTS



STATION (CNIE) CHAMICAL, ARGENTINA ROCKET TIME 1622 LST 2022 GCT
DATE: 18 MAY, 1966 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: VAISALA

RP STATION NAME DATE ROCKET RAWINSONDE
 (NASA) Wallops Island, Virginia Z LAUNCH TIME Z RELEASE TIME Z
 72402 37° 51' N 75° 29' W ALT. 3 M MAY 19, 1966 1701 1715

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND COMPONENTS MPS			ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND COMPONENTS MPS			PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND COMPONENTS MPS			RH %	TEMP DEG C			
				N-S	E-W								N-S	E-W					N-S	E-W						
052	048	55	109	064	+011	-032									1014.6	0000	180	010	+005	+000	90	+16.1				
058	030	54	109	053	+009	-026									0803.0	0200	234	029	+009	+013	59	+11.4				
063	030	53	106	048	+007	-024									0628.0	0400	240	021	+005	+009	49	+00.0				
068	028	52	108	039	+006	-019									0487.0	0600	242	039	+009	+018	25	-11.9				
075	027	51	113	040	+008	-019									0372.0	0800	260	035	+003	+018	27	-26.1				
082	028	50	119	038	+010	-018									0281.0	1000	250	040	+007	+020		-43.0				
088	026	49	118	037	+009	-017									0206.5	1200	267	046	+001	+024		-57.9				
095	024	48	119	035	+009	-016									0150.0	1400	251	040	+006	+020		-62.0				
102	021	47	120	032	+008	-014									0128.0	1600	266	027	+001	+014		-61.0				
110	024	46	120	029	+007	-013									0079.2	1800	276	027	-001	+014		-61.3				
116	024	45	134	026	+009	-009									0057.2	2000	171	006	+003	+000		-59.9				
123	020	44	149	022	+010	-006									0041.6	2200	216	008	+003	+002		-55.9				
133	020	43	154	026	+012	-006									0030.7	2400	118	014	+003	-006		-52.0				
143	017	42	158	029	+014	-006									0022.8	2600	156	010	+005	-002		-47.0				
152	017	41	146	032	+013	-009									0016.8	2800	218	006	+002	+002		-45.3				
163	017	40	138	035	+013	-012									0012.5	3000	193	010	+005	+001		-46.2				
172	017	39	132	026	+009	-010									0009.3	3200	213	010	+004	+003		-39.9				
182	017	38	126	020	+006	-008																				
192	017	37	130	017	+006	-007																				
202	015	36	141	014	+006	-005																				
213	014	35	160	012	+006	-002																				
225	013	34	192	012	+006	+001																				
238	013	33	190	008	+004	+001																				
250	014	32	220	006	+002	+002																				
263	012	31	230	002	+001	+001																				
280	011	30	243	002	+000	+001																				
293	012	29	230	002	+001	+001																				
307	011	28	195	003	+002	+000																				
323	010	27	130	008	+003	-003																				
340	010	26	126	014	+004	-006																				
358	010	25	123	015	+004	-007																				

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. CHAFF
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 12 FT. TUBULAR
 LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION.. 18 SECONDS 19.020 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 92 SECONDS 64.252 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 94 SECONDS 64.435 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 2.280 SECONDS 23.583 METERS ALTITUDE
 APDCEE.. 103 SECONDS 65.288 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
 TEMPERATURE SENSOR.. N.A.
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. N.A.
 TELEMETRY FREQUENCY.. N.A.
 TELEMETRY QUALITY.. N.A.
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

TEST WAS SUCCESSFUL. NO WINDS RECORDED ABOVE 55,000 METERS.
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

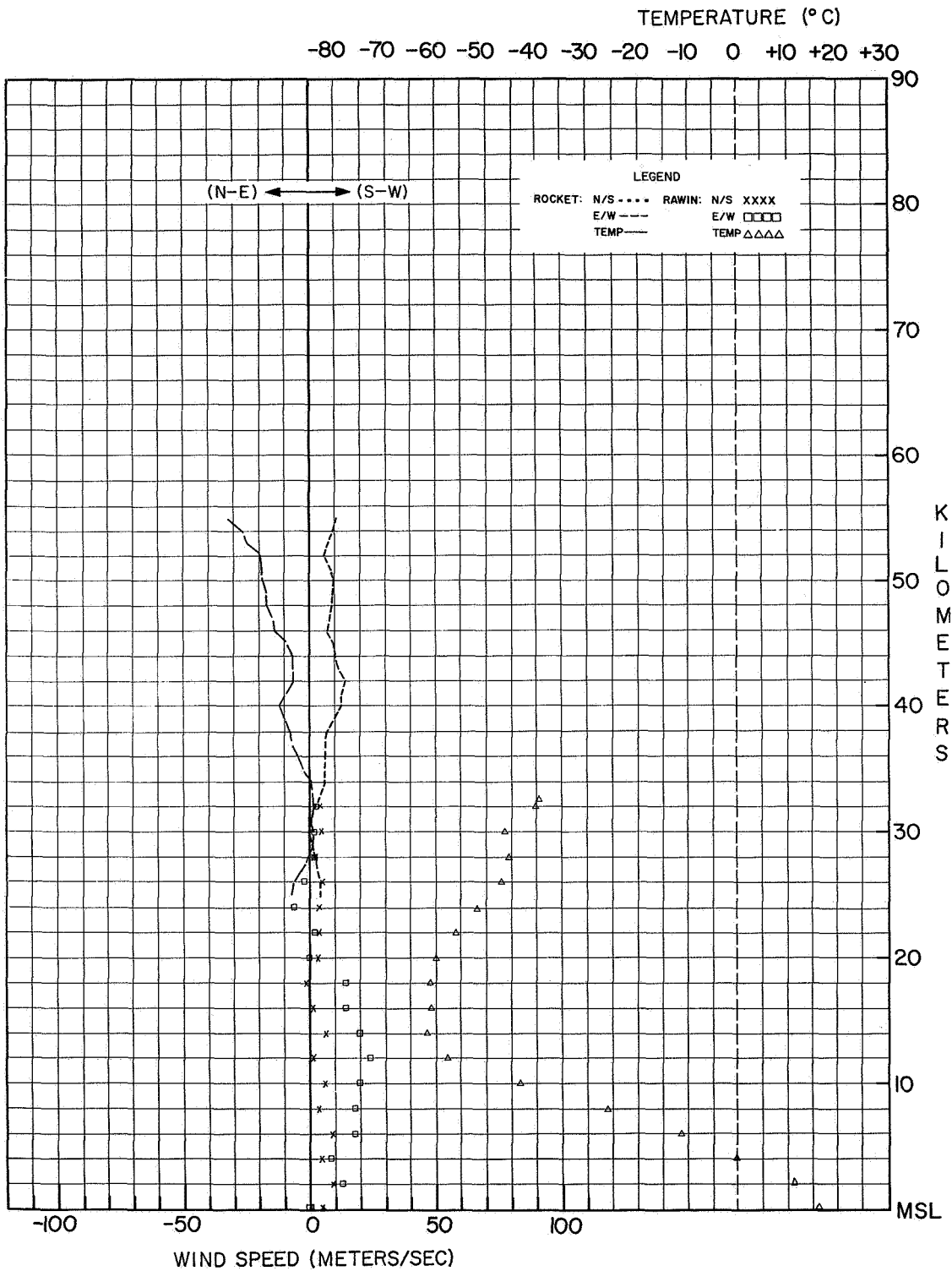
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
 GROUND EQUIPMENT TYPE.. GMD-18
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1.200 GRAMS
 FREE LIFT.. 1.400 GRAMS
 ASCENSION RATES.. SFC=400 MB = 258 M/MINUTE
 400 MB-TOP = 337 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1014.6 MB
 TEMPERATURE.. 16.1 DEG. C
 RELATIVE HUMIDITY.. 90 %
 VISIBILITY.. 2 KM
 SURFACE WIND.. 180 DEG. 10 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS/5F
 LOW.. 8 OCTAS/5F
 MIDDLE.. NONE
 HIGH.. NONE
 TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. FOG

WIND AT ROCKET LAUNCH

50 FT. 185 DEG/09 KTS, 100 FT. 192 DEG/10 KTS,
 150 FT. 191 DEG/13 KTS, 200 FT. 194 DEG/14 KTS,
 250 FT. 192 DEG/16 KTS



STATION: (NASA) WALLOPS IS., VA.
 DATE: 19 MAY, 1966

ROCKET TIME: 1201 LST 1701 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
 (NASA) WALLOPS ISLAND, VIRGINIA Z LAUNCH RELEASE
 TIME TIME
 72402 37° 51' N 75° 29' W ALT. 3 M JUNE 1, 1966 1607 1715

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS						RAWINSONDE											
TIME FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP	
TENTHS	VEL	POLAR				TENS	DEG C	MB	G M	OF	POLAR				MB	METERS	POLAR				%	DEG C	
OF A		DEG	KTS	N-S	E-W	OF				SOUND	DEG	KTS	N-S	E-W			DEG	KTS	N-S	E-W			
MINUTE	M/S					METERS				M/S													
029	056	49	083	012	-001	-006	4779	+04.0	01.197	01.538	334	094	024	+001	-012	1018.3	0000	150	008	+004	-002	73	+14.4
032	053	48	095	020	+001	-010	4572	+05.0	01.538	01.969	334	095	046	+002	-023	0799.0	0200	300	014	-004	+006	89	-02.1
036	052	47	096	040	+002	-020	4484	+02.6	01.712	02.211	333	093	048	+001	-024	0618.0	0400	214	029	+012	+008	34	-15.0
039	048	46	100	046	+004	-023	4429	+03.5	01.830	02.357	334	093	048	+001	-024	0471.0	0600	218	069	+028	+022	32	-23.9
043	046	45	092	048	+001	-024	4276	-05.2	02.212	02.940	328	090	046	+000	-023	0358.0	0800	214	108	+046	+032	32	-32.3
046	043	44	092	048	+001	-024	4243	-05.4	02.306	03.067	328	092	046	+001	-023	0269.0	1000	217	095	+039	+030		-42.7
050	040	43	090	048	+000	-024	4075	-16.2	02.862	03.967	321	086	036	+001	-018	0199.0	1200	218	075	+031	+024		-50.0
055	036	42	090	044	+000	-022	3923	-21.8	03.501	04.962	319	086	034	+001	-018	0145.0	1400	227	043	+015	+016		-50.4
060	031	41	087	038	+001	-019	3847	-20.4	03.876	05.463	319	084	022	+001	-011	0107.8	1600	215	033	+014	+010		-55.0
065	030	40	085	036	+001	-018	3764	-24.2	04.334	06.202	316	082	016	+001	-008	0078.7	1800	207	015	+007	+004		-55.4
071	029	39	086	028	+001	-014	3664	-24.7	04.965	07.118	316	077	010	+001	-005	0057.6	2000	198	016	+008	+003		-55.0
077	027	38	081	016	+001	-008	3566	-27.5	05.677	08.231	314	070	006	+001	-003	0042.2	2200	198	014	+001	+007		-54.6
083	027	37	081	016	+001	-008	3533	-25.5	05.939	08.542	316	070	006	+001	-003	0031.0	2400	098	012	+001	-006		-51.7
089	024	36	084	006	+000	-003	3328	-31.9	07.885	11.642	311	080	014	+001	-007	0022.9	2600	098	010	+001	-005		-48.5
097	021	35	122	007	+002	-003	3188	-35.2	09.608	14.382	309	075	008	+001	-004	0017.0	2800	080	006	+001	-003		-45.4
106	019	34	107	010	+002	-005	3130	-33.9	10.431	15.529	310	090	010	+000	-005								
114	019	33	090	016	+000	-008	2981	-40.6	12.917	19.784	306	045	002	+001	-001								
123	017	32	091	012	+000	-006	2894	-41.8	14.665	22.578	305	090	006	+000	-003								
133	015	31	070	005	+001	-003	2853	-45.0	15.578	24.321	303	090	004	+000	-002								
146	014	30	096	002	+000	-001	2743	-44.0	18.335	28.499	304	090	010	+000	-005								
158	014	29	090	002	+000	-001	2560	-51.0	24.132	38.693	299	080	014	+001	-007								
170	012	28	091	006	+000	-003	2371	-51.0	32.200	51.628	299	080	014	+001	-007								
187	009	27	090	012	+000	-006	2210	-55.3	41.272	67.479	296	080	014	+001	-007								
206	008	26	090	014	+000	-007	1993	-56.4				115	004	+001	-002								
228	008	25	082	016	+001	-008	1829	-56.0															
249	007	24	095	013	+001	-007																	
274	007	23	081	013	+001	-007																	
300	006	22	096	013	+001	-007																	
328	006	21	103	008	+001	-004	2080	-55.9	50.000	81.976	296	103	008	+001	-004								
360	005	20	119	005	+001	-002	2414	-51.0	30.000	48.101	299	080	014	+001	-007								
393	005	19	134	004	+001	-001	2679	-46.0	20.000	31.427	303	087	011	+000	-006								
							3144	-34.6	10.000	14.928	309	082	009	+001	-004								
							3403	-29.0	07.000	10.232	313	076	010	+001	-005								
							3638	-24.8	05.000	07.173	316	077	010	+001	-005								
							4331	-00.4	02.000	02.616	331	092	047	+001	-024								

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. ARCASONDE-1A
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
 FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
 LAUNCHER SETTING.. 129 DEG. AZIMUTH 81.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 5 SECONDS 1,219 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 140 SECONDS 51,145 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 170 SECONDS 49,378 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 2,460 SECONDS 18,288 METERS ALTITUDE
 APOGEE.. 120 SECONDS 52,700 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
 TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. GMD-18
 TELEMETRY FREQUENCY.. 1677 MHZ
 TELEMETRY QUALITY.. GOOD
 TELEMETRY DATA RECEIVED FROM.. 196 SEC. 47,950 METERS ALTITUDE
 TO 2,460 SEC. 18,288 METERS ALTITUDE

REMARKS

NONE
 THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
 ALTITUDE 20,870 METERS
 TEMPERATURE -55.9 DEG. C

RADIOSONDE AND BALLOON DATA

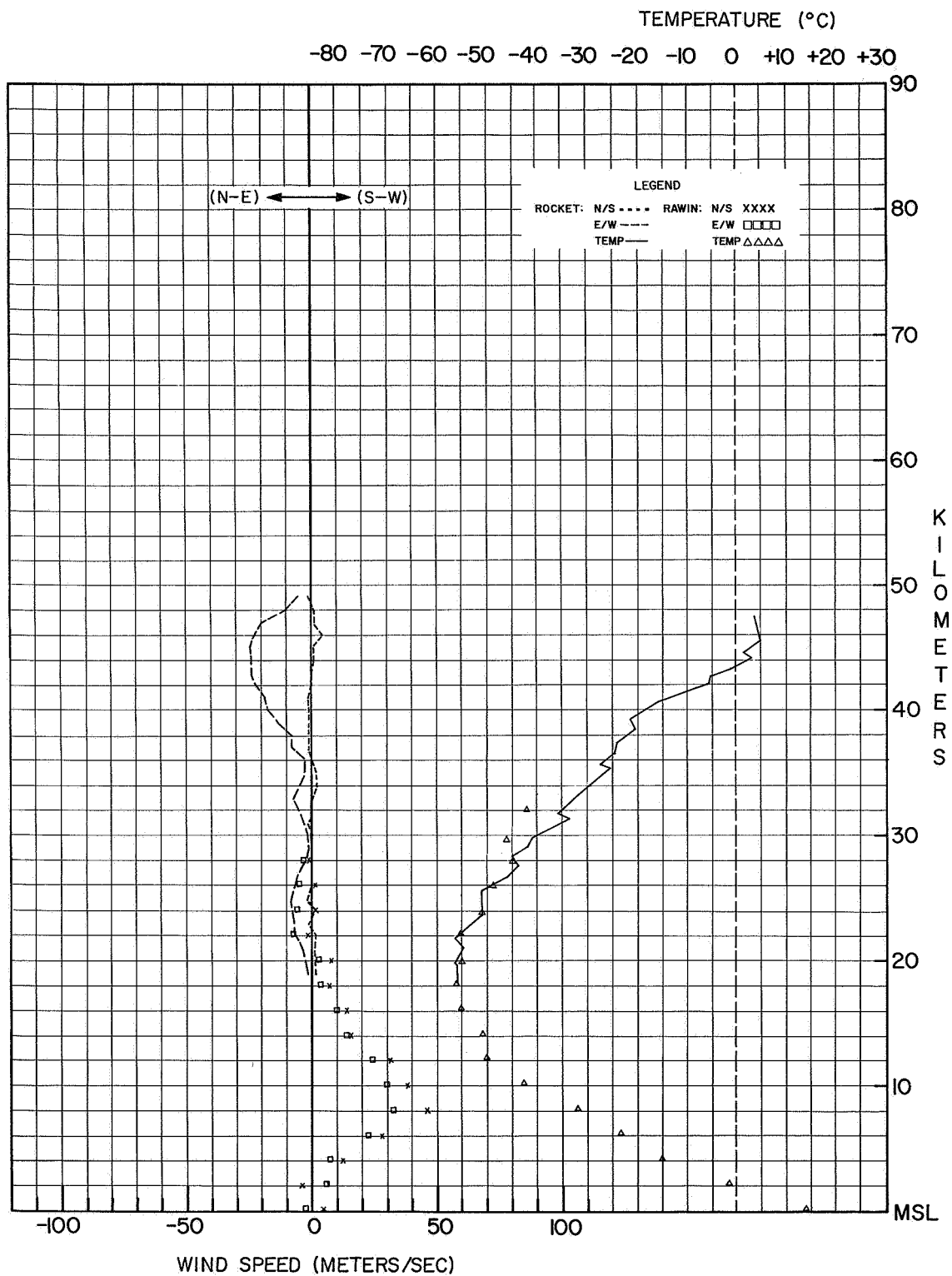
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
 GROUND EQUIPMENT TYPE.. GMD-18
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1,200 GRAMS
 FREE LIFT.. 1,500 GRAMS
 ASCENSION RATES.. SFC-400 MB = 314 M/MINUTE
 400 MB-TOP = 336 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1018.3 MB
 TEMPERATURE.. 14.4 DEG. C
 RELATIVE HUMIDITY.. 73%
 VISIBILITY.. 6 KM
 SURFACE WIND.. 150 DEG. 8 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 7 OCTAS
 LOW.. 7 OCTAS/AS/CU
 MIDDLE.. NONE
 HIGH.. NONE
 TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET

LAUNCH
 50 FT. 120 DEG/02 KTS, 100 FT. 132 DEG/03 KTS,
 150 FT. 135 DEG/02 KTS, 200 FT. 132 DEG/03 KTS,
 250 FT. 145 DEG/02 KTS



STATION: (NASA) WALLOPS IS. VA.
 DATE: 1 JUNE, 1966

ROCKET TIME: 1107 LST 1607 GCT
 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(CNAE) NATAL, BRAZIL Z LAUNCH TIME Z RELEASE TIME Z
82599 05° 55' S 35° 10' W ALT. 43 M JUNE 1, 1966 1631 1310

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE										RH	TEMP
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS. MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	%	DEG C							
024	065	54	278	092	-007 +047	5285	+04.6				126	030	-012 +009	1007.0	0000	150	009	+004 -002	67	+26.0							
026	074	53	314	033	-012 +012	5060	-01.9				016	030	-015 -004	0797.0	0200	118	018	+004 -008									
028	074	52	026	032	-014 -007	4685	-00.2				272	043	-001 +022	0622.0	0400	069	007	-001 -004	88	-00.3							
031	077	51	022	032	-015 -006	4526	+03.8				283	022	-003 +011	0482.0	0600	028	013	-006 -003	78	-14.2							
033	071	50	004	032	-016 -001	4289	-08.5				291	027	-004 +010	0367.0	0800	058	010	-003 -004		-28.4							
035	067	49	010	024	-012 -002	4124	-11.6				256	024	+003 +012	0276.0	1000	007	014	-007 -001		-43.0							
038	065	48	263	033	+002 +017	3987	-11.2				246	029	+005 +011	0202.0	1200	354	020	-010 +001		-63.0							
041	059	47	270	047	+000 +024	3850	-18.4				225	012	+004 +004	0144.0	1400	320	026	-010 +008		-81.5							
044	051	46	300	028	-007 +012	3706	-18.4				240	004	+001 +002	0099.0	1600	314	020	-007 +007		-93.0							
047	047	45	281	022	-002 +011	3664	-19.5				210	004	+002 +001	0069.0	1800	090	015	+000 -008		-89.8							
050	056	44	295	024	-005 +011	3618	-26.2				170	008	+004 -001	0048.0	2000	097	021	+001 -011		-75.0							
054	045	43	295	024	-005 +011	3551	-27.6				160	006	+003 -001	0034.0	2200	182	004	+002 +000		-66.8							
057	037	42	270	018	+000 +009	3527	-30.7				130	002	+001 -001	0025.0	2400	268	046	+001 +021		-59.0							
062	039	41	252	026	+004 +012	3414	-31.7				335	014	-006 +003														
066	036	40	247	026	+005 +012	3383	-30.0				325	014	-006 +004														
072	032	39	229	018	+005 +007	3246	-29.5				280	014	-001 +007														
077	029	38	244	010	+002 +004	3185	-32.9				260	020	+002 +010														
083	028	37	244	004	+001 +002	3155	-29.9				256	024	+003 +012														
089	026	36	158	010	+005 -002	3109	-29.8				254	030	+004 +014														
095	024	35	360	000	+000 +000	3094	-27.7				254	030	+004 +014														
102	023	34	330	016	-007 +004	3048	-31.2				262	032	+002 +016														
110	022	33	309	012	-004 +005	MISSING DATA (SEE REMARKS)																					
118	019	32	257	018	+002 +009	2597	-43.2	18.658	28.901	304	268	039	+001 +020														
127	017	31	254	030	+004 +014	2463	-47.1	22.771	35.880	302	267	043	+001 +022														
137	017	30	267	033	+001 +017	2377	-47.4	25.908	40.877	301	270	037	+000 +019														
149	015	29	279	037	-003 +019	2286	-51.4	29.739	47.769	299	270	030	+000 +015														
160	013	28	290	035	-006 +017	2246	-56.9	31.640	52.114	295	270	022	+000 +011														
175	012	27	280	042	-004 +022	2204	-55.6	33.788	55.320	296	270	014	+000 +007														
190	010	26	267	038	+001 +020	2134	-63.4				310	010	-003 +004														
207	010	25	265	044	+002 +023	2103	-60.9				330	010	-004 +002														
224	008	24	270	038	+000 +020	CONSTANT PRESSURE LEVEL DATA																					
246	008	23	270	032	+000 +016	(HEIGHT IN GEOPOTENTIAL METERS)																					
271	007	22	270	014	+000 +007	2273	-52.2	30.000	48.366	298	270	028	+000 +014														
296	006	21	334	010	-004 +002	2543	-44.5	20.000	31.178	304	268	040	+001 +021														
327	005	20	071	012	-002 -006																						
357	005	19	080	012	-001 -006																						
391	005	18	080	012	-001 -006																						

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 073 DEG. AZIMUTH 81.6 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 15 SECONDS 457 METERS ALTITUDE
MOTOR TRACK DROPPED.. 120 SECONDS 55,004 METERS ALTITUDE
PAYLOAD ACQUISITION.. 130 SECONDS 54,559 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2,550 SECONDS 16,999 METERS ALTITUDE
APOGEE.. 120 SECONDS 55,004 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1A
TELEMETRY FREQUENCY.. 1680 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 130 SEC. 54,559 METERS ALTITUDE
TO 2,550 SEC. 16,999 METERS ALTITUDE

REMARKS

MISSING THERMODYNAMICS DATA DUE TO POWER FAILURE.
THERMODYNAMICS BASE DATA.. PRESSURE 34.0 MB
ALTITUDE 22,000 METERS
TEMPERATURE -56.0 DEG. C

RADIOSONDE AND BALLOON DATA

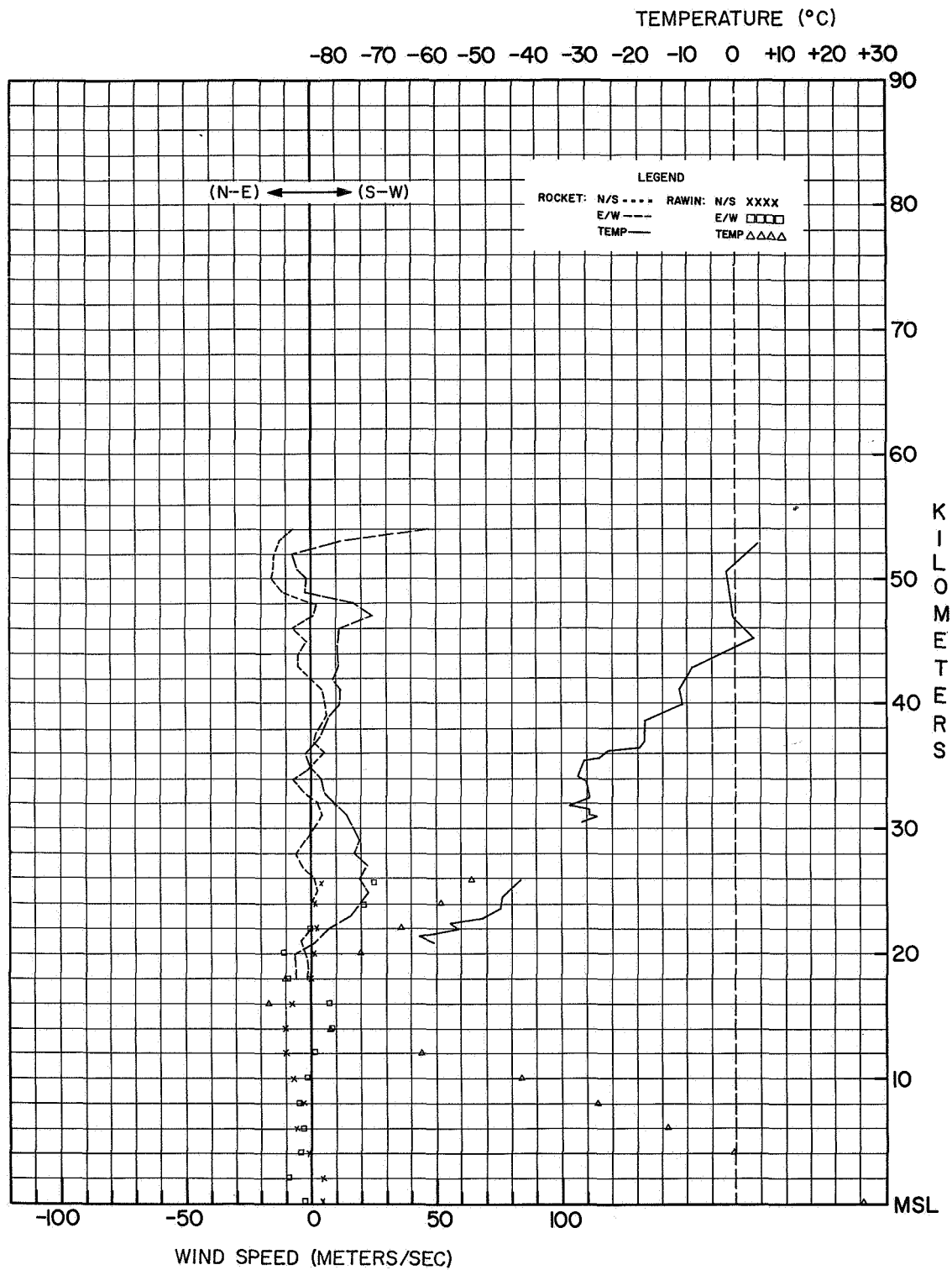
RADIOSONDE MANUFACTURER.. BENDIX
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. GMD-1A
BALLOON TYPE.. UNKNOWN
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,300 GRAMS
ASCENSION RATES.. SFC-400 MB = 269 M/MINUTE
400 MB-TOP = 468 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1007.0 MB
TEMPERATURE.. 26.0 DEG. C
RELATIVE HUMIDITY.. 78%
VISIBILITY.. 20 KM
SURFACE WIND.. 150 DEG. 9 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 4 OCTAS
LOW.. 4 OCTAS/CU
MIDDLE.. NONE
HIGH.. NONE

WIND AT ROCKET LAUNCH

21 FT. 140 DEG/11 KTS, 29 FT. 130 DEG/11 KTS,
51 FT. 140 DEG/11 KTS, 82 FT. 140 DEG/11 KTS,
133 FT. 140 DEG/12 KTS



STATION: (CNAE) NATAL, BRAZIL
 DATE: 1 JUNE, 1966

ROCKET TIME: 1331 ST 1631 GCT
 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(CNAE) NATAL, BRAZIL Z Z
82599 05° 55' S 35° 10' W ALT. 43 M JUNE 15, 1966 1532 1532

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND			ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND			PRESSURE	ALT	WIND			RH	TEMP					
TENTHS	VEL		POLAR	COMPONENTS		TENS				OF	POLAR	COMPONENTS		TENS	POLAR	COMPONENTS		%	DEG C						
OF A		KM	DEG	KTS	N-S	OF	DEG C	MB	G M	SOUND	DEG	KTS	N-S	MB	METERS	DEG	KTS	N-S							
MINUTE	M/S			MPS	E-W	METERS				N/S		MPS	E-W				MPS	E-W							
025	100	57	255	089	+012	+045	4139	-09.7	02.651	03.585	326	295	016	-003	+007	1006.0	0000	150	013	+003	-004	83	+27.0		
027	105	56	266	081	+003	+042	3984	-15.2	03.240	04.474	322	340	006	+003	+001	0802.0	0200	143	024	+010	-007	82	+12.9		
028	100	55	263	065	+004	+033	3947	-17.4	03.402	04.737	321	180	008	+004	+000	0630.0	0400	087	008	+000	-004		+04.2		
030	083	54	273	046	-001	+024	3871	-21.8	03.764	05.333	318	135	008	+003	-003	0491.0	0600	087	018	-001	-009				
032	080	53	299	040	-010	+018	3810	-19.7	04.084	05.739	319	080	012	-001	-006	0353.0	0800	272	028	-001	+014		-23.3		
034	083	52	350	046	-023	+014	3688	-25.0	04.810	06.904	316	090	012	-000	-006	0286.0	1000	261	018	+001	+009		-34.5		
036	074	51	336	049	-023	+010	3520	-22.2	06.038	08.570	318	040	012	-005	-004	0213.0	1200	153	011	+005	-003		-50.8		
039	069	50	304	043	-012	+018	3295	-28.2	08.233	11.971	314	330	012	-005	+003	0155.0	1400	249	024	+004	+011		-63.8		
041	063	49	323	037	-015	+011	3277	-30.7	08.441	12.401	312	330	012	-005	+003	0111.0	1600	261	016	+001	+008		-75.0		
044	063	48	341	031	-014	+005	3239	-31.7	08.926	13.168	312	340	006	-003	+001	0078.0	1800	071	023	-004	-011		-77.0		
047	059	47	010	022	-011	+002	3170	-31.7	09.804	14.464	312	335	004	-002	+001	0056.0	2000	090	015	+000	-008		-63.3		
050	054	46	039	012	-005	-004	3094	-39.4	10.925	16.647	307	315	002	-001	+001		2200	304	015	-004	+006				
053	051	45	103	010	+001	-005	3033	-34.9	11.923	17.826	310	270	002	+000	+001		2400	270	023	+000	+012				
056	049	44	178	008	+004	+000	2957	-34.2	13.280	19.796	310	270	002	+000	+001		2600	290	020	-004	+010				
060	045	43	252	014	+002	+007	2825	-40.7	16.953	24.598	306	270	004	+000	+002										
064	040	42	325	019	-008	+006	2460	-48.8	27.586	43.797	300	270	024	+000	+012										
068	038	41	275	014	-001	+007	2271	-50.2	36.740	58.697	299	270	026	+000	+013										
072	036	40	211	008	+003	+002	2237	-53.0	38.704	62.619	298	276	022	-001	+011										
077	036	39	157	010	+005	-002	2173	-51.2	42.698	68.522	299	290	012	-002	+006										
083	030	38	084	012	-001	-006	2094	-53.2	48.206	78.065	297	045	002	-001	-001										
088	029	37	088	012	+000	-006	2063	-60.6	50.610	84.810	292	080	010	-001	-005										
095	026	36	093	014	+000	-007	2027	-62.2	53.616	90.530	291	084	022	-001	-011										
101	025	35	030	016	-007	-004	1920	-64.1			290	094	024	+001	-012										
108	022	34	334	018	-008	+004	CONSTANT PRESSURE LEVEL DATA																		
116	021	33	333	011	-005	+003	(HEIGHT IN GEOPOTENTIAL METERS)																		
124	019	32	330	004	-002	+001	2074	-58.7	50.000	83.099	294	060	005	-001	-003										
134	017	31	312	003	-001	+001	2401	-49.2	30.000	49.935	300	270	024	+000	+012										
144	016	30	293	001	+000	+001	2690	-43.4	20.000	31.169	304	270	011	+000	+006										
154	014	29	279	002	+000	+001	3140	-33.1	10.000	14.846	311	331	004	-002	+001										
167	013	28	264	003	+000	+002	3393	-29.1	07.000	10.215	314	352	013	-007	+001										
180	012	27	264	011	+001	+006	3639	-24.5	05.000	07.162	316	082	012	-001	-006										
196	010	26	264	020	+001	+010																			
213	009	25	265	024	+001	+012																			
232	008	24	279	025	+002	+013																			
252	008	23	086	030	+001	+015																			
275	006	22	283	018	-002	+009																			
304	006	21	045	002	-001	-001																			
333	005	20	087	028	-001	-014																			
365	006	19	094	024	+001	-012																			
392	005	18	087	040	-001	-020																			

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 080 DEG. AZIMUTH 85.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 15 SECONDS 4,420 METERS ALTITUDE
MOTOR TRACK DROPPED.. 123 SECONDS 59,436 METERS ALTITUDE
PAYLOAD ACQUISITION.. 123 SECONDS 59,436 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2,620 SECONDS 16,999 METERS ALTITUDE
APOGEE.. 123 SECONDS 59,436 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 1S FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1A
TELEMETRY FREQUENCY.. 1680 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 399 SEC. 41,390 METERS ALTITUDE
TO 2,135 SEC. 19,200 METERS ALTITUDE

REMARKS

TEST WAS SUCCESSFUL.
THERMODYNAMICS BASE DATA.. PRESSURE 56.0 MB
ALTITUDE 20,000 METERS
TEMPERATURE -63.3 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 403 MHZ
TEMPERATURE ELEMENT TYPE.. UNKNOWN
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
BALLOON TYPE.. DAREX
BALLOON SIZE.. 600 GRAMS
FREE LIFT.. 1,000 GRAMS
ASCENSION RATES.. SFC-400 MB = 258 M/MINUTE
400 MB-TOP = 297 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

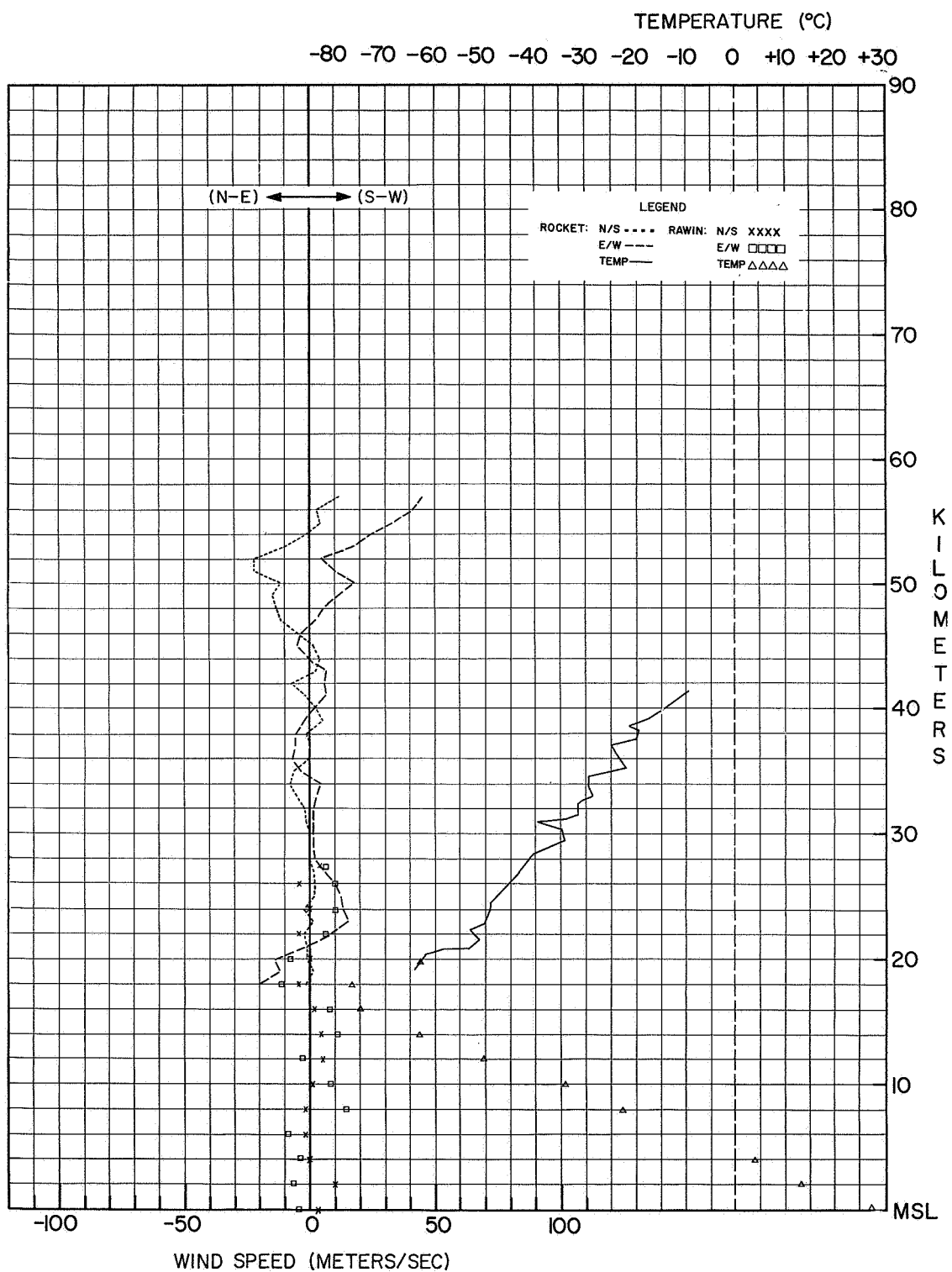
STATION PRESSURE.. 1006.0 MB
TEMPERATURE.. 27.5 DEG. C
RELATIVE HUMIDITY.. 83%
VISIBILITY.. 20 KM
SURFACE WIND.. 150 DEG. 13 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 5 OCTAS
LOW.. SC
MIDDLE.. AS
HIGH.. NONE

TYPE OF PRECIPITATION.. NONE

OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

21 FT. 120 DEG/08 KTS, 29 FT. 130 DEG/09 KTS,
51 FT. 120 DEG/11 KTS, 82 FT. 130 DEG/11 KTS,
133 FT. 130 DEG/12 KTS



STATION: (CNAE) NATAL, BRAZIL
DATE: 15 JUNE, 1966

ROCKET TIME 1232 LST 1532 GCT
ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
RADIOSONDE TYPE: 403 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME	RAWINSONDE RELEASE TIME
	(NASA) WALLOPS ISLAND, VIRGINIA	Z	Z	Z
72402	37° 51' N 75° 29' W ALT. 3 M	JUNE 15, 1966	1814	1600

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS						RAWINSONDE						RH		TEMP	
TIME	FALL	ALT	WIND			ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND			PRESSURE	ALT	WIND			%	DEG	C
TENTHS	VEL		POLAR	COMPONENTS		TENS					POLAR	COMPONENTS		MB	TENS	POLAR	COMPONENTS				
OF A				N-S	E-W	OF	DEG	MB	G M	OF	DEG	N-S	E-W		OF	DEG	N-S	E-W			
MINUTE	M/S	KM	DEG	KTS		METERS	DEG C			SOUND	KTS				METERS	DEG	KTS				
025	100	57	088	048	-001	-025								1017.0	0000	190	010	+005	+001	79	+19.4
027	111	56	091	059	+000	-031								0804.0	0200	285	014	-002	+007	38	+08.7
028	111	55	094	054	+002	-028								0629.0	0400	270	033	+000	+017	17	-01.3
030	095	54	104	051	+006	-026								0488.0	0600	266	054	+002	+028	17	-11.7
032	087	53	103	068	+008	-034								0371.0	0800	262	054	+004	+028	20	-28.9
034	074	52	106	061	+008	-031								0280.0	1000	273	068	-002	+035		-45.0
036	074	51	106	070	+010	-034								0206.0	1200	252	053	+008	+026		-56.6
038	083	50	106	074	+010	-037								0150.0	1400	246	047	+010	+022		-55.9
040	077	49	101	072	+007	-037								0109.0	1600	231	028	+009	+011		-58.6
043	067	48	097	079	+005	-041								0079.5	1800	203	020	+009	+004		-57.9
045	063	47	095	068	+003	-035								0058.1	2000	170	016	+008	-001		-54.5
048	057	46	091	054	+000	-028								0042.6	2200	167	010	+005	-001		-52.6
051	050	45	093	043	+001	-022								0031.4	2400	083	022	-001	-011		-50.8
055	053	44	097	036	+002	-019								0023.3	2600	086	022	-001	-011		-47.6
058	050	43	099	036	+003	-019								0017.4	2800	126	010	+003	-004		-43.3
061	043	42	100	038	+003	-020								0012.9	3000	078	018	-002	-009		-36.2
065	038	41	100	035	+003	-018								0009.7	3200	072	016	-003	-008		-35.6
070	036	40	101	034	+003	-018															
075	034	39	096	036	+002	-019															
080	033	38	093	035	+001	-018															
085	032	37	082	031	-002	-016															
090	031	36	079	024	-002	-012															
095	025	35	082	016	-001	-008															
103	022	34	089	017	+000	-009															
110	021	33	102	018	+002	-009															
119	019	32	100	017	+002	-009															
128	019	31	104	015	+002	-008															
137	017	30	113	008	+002	-004															
147	017	29	108	011	+002	-006															
156	015	28	107	015	+002	-007															
168	014	27	107	019	+003	-009															
180	012	26	087	008	+000	-004															
195	010	25	084	019	-001	-010															
215	009	24	088	019	+000	-010															
234	009	23	075	015	-002	-008															
250	008	22	116	008	+002	-004															
276	006	21	140	015	+006	-005															
303	006	20	175	006	+003	+000															
330	006	19	200	011	+005	+002															

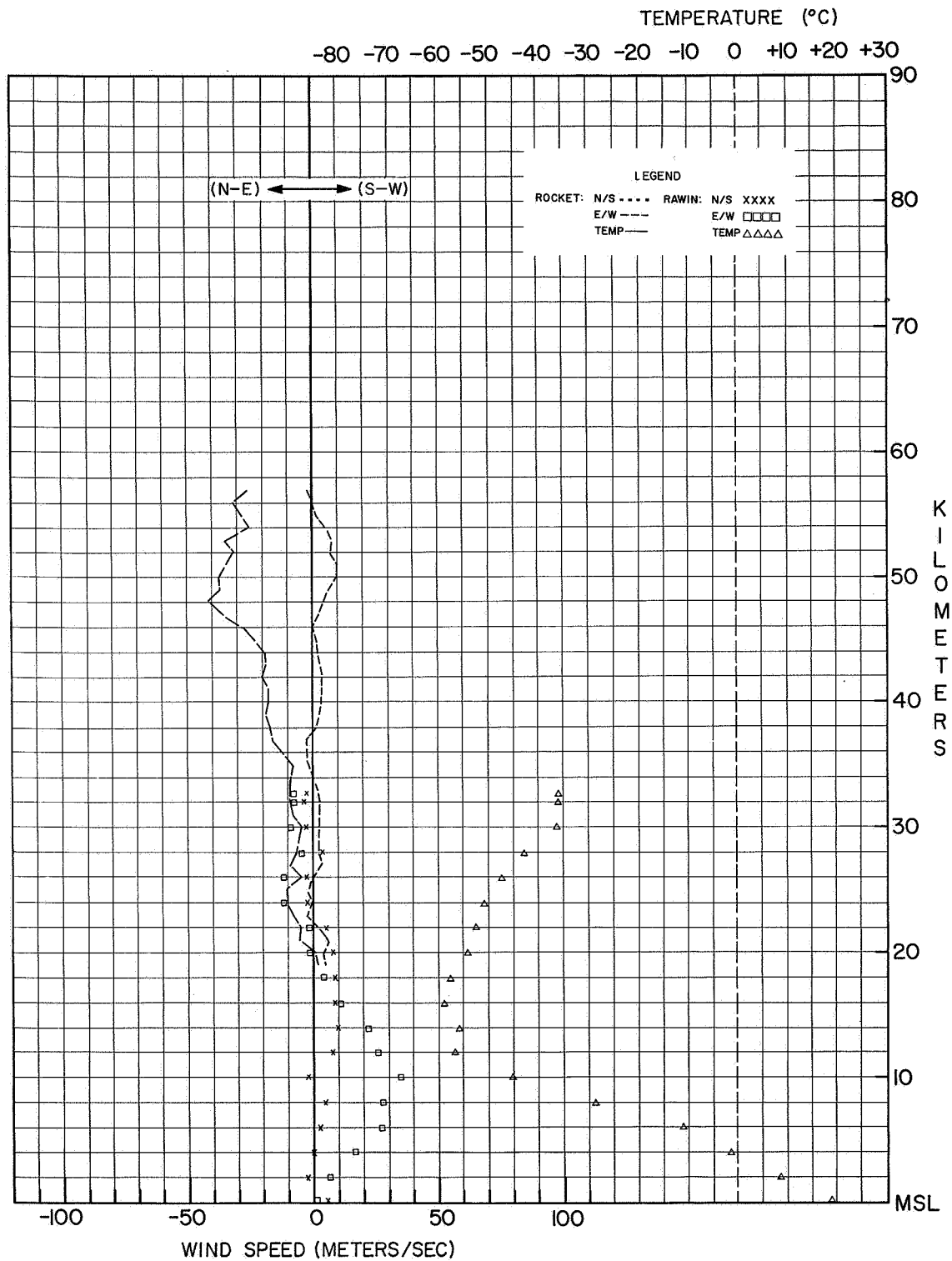
TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. ARCASONDE-1A
 PAYLOAD PERFORMANCE.. NO SIGNAL
 FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
 FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
 LAUNCHER SETTING.. 077 DEG. AZIMUTH 77.6 DEG. ELEVATION
 RADAR DATA
 RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 5 SECONDS 1,524 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 129 SECONDS 58,674 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 129 SECONDS 58,674 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 2+160 SECONDS 17,800 METERS ALTITUDE
 APOGEE.. 126 SECONDS 58,887 METERS ALTITUDE
 SENSOR AND TELEMETRY DATA
 WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
 TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. GMD-18
 TELEMETRY FREQUENCY.. 1680 MHZ
 TELEMETRY QUALITY.. NO SIGNAL
 TELEMETRY DATA RECEIVED FROM.. N.A.
 REMARKS
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
 GROUND EQUIPMENT TYPE.. GMD-18
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1+200 GRAMS
 FREE LIFT.. 1+500 GRAMS
 ASCENSION RATES.. SFC=400 MB = 281 M/MINUTE
 400 MB-TOP = 362 M/MINUTE
 WEATHER OBSERVATION AT RAWINSONDE RELEASE
 STATION PRESSURE.. 1017.0 MB
 TEMPERATURE.. 19.4 DEG. C
 RELATIVE HUMIDITY.. 79%
 VISIBILITY.. 6 KM
 SURFACE WIND.. 190 DEG. 10 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
 LOW.. NONE
 MIDDLE.. NONE
 HIGH.. NONE
 TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. NONE
 WIND AT ROCKET LAUNCH
 50 FT. 173 DEG/09 KTS, 100 FT. 180 DEG/12 KTS,
 150 FT. 177 DEG/15 KTS, 200 FT. 180 DEG/16 KTS,
 250 FT. 183 DEG/15 KTS



STATION: (NASA)WALLOPS IS., VA.
 DATE: 15 JUNE, 1966

ROCKET TIME: 1314 LST 1814GCT
 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
 RADIOSONDE TYPE: 1680 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME Z	RAWINSONDE RELEASE TIME Z
	(CNIE) CHAMICAL, ARGENTINA	Z		
87320	30° 22' S 66° 17' W ALT.457 M	JUNE 15, 1966	1943	1627

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	POLAR		WIND		ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR		WIND		PRESSURE	ALT	POLAR		WIND		RH	TEMP						
TENTHS	VEL						TENS				OF					MB	TENS												
OF A			DEG	KTS	N-S	E-W	OF	DEG C	MB	G M	M/S	DEG	KTS	N-S	E-W		OF	DEG	KTS	N-S	E-W	%	DEG C						
MINUTE	M/S	KM					METERS										METERS												
031	065	50	261	145	+013	+075										0959.1	0046	070	006	-001	-003	60	+12.1						
034	063	49	262	162	+012	+083										0797.0	0200	078	031	-003	-016	90	+02.3						
037	067	48	265	178	+010	+092										0622.0	0400	300	055	-014	+024	10	-02.3						
039	063	47	267	169	+005	+087										0481.0	0600	280	051	-005	+026	13	-15.5						
042	059	46	270	160	+000	+082										0366.0	0800	279	067	-006	+034	19	-30.7						
045	057	45	276	164	-009	+084										0273.0	1000	278	090	-007	+046	37	-46.4						
048	056	44	282	166	-017	+085										0200.0	1200	286	075	-011	+037		-60.7						
051	056	43	279	156	-011	+080										0146.0	1400	279	080	-007	+041		-60.6						
054	049	42	275	144	-006	+074										0105.0	1600	285	052	-007	+026		-64.3						
058	045	41	276	140	-007	+072										0076.0	1800	268	012	+000	+006		-61.7						
061	043	40	275	132	-007	+069										0055.0	2000	303	039	-011	+017		-60.9						
065	038	39	277	130	-007	+067										0040.0	2200	300	013	-003	+006		-58.8						
070	035	38	275	126	-006	+065										0029.0	2400	289	041	-007	+020		-53.6						
075	036	37	273	130	-004	+067																							
079	032	36	268	131	-002	+068																							
085	028	35	274	125	-003	+064																							
091	030	34	274	115	-004	+059																							
096	027	33	276	104	-006	+054																							
104	022	32	277	096	-008	+049																							
111	022	31	280	086	-007	+044																							
119	023	30	278	079	-006	+040																							
126	018	29	279	063	-005	+032																							
138	017	28	276	045	-003	+023																							
145	019	27	276	041	-002	+021																							
155	016	26	273	036	-001	+019																							
167	014	25	274	036	-001	+019																							
180	015	24	272	036	-001	+019																							

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. WOX-1A
 PAYLOAD PERFORMANCE.. FAIR (SEE REMARKS)
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 040 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION.. NO TRACK
 MOTOR TRACK DROPPED.. NO TRACK
 PAYLOAD ACQUISITION.. 140 SECONDS 52,883 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1.170 SECONDS 21,336 METERS ALTITUDE
 APOGEE.. UNKNOWN

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
 TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
 TELEMETRY FREQUENCY.. 405 MHZ
 TELEMETRY QUALITY.. POOR
 TELEMETRY DATA RECEIVED FROM.. 140 SEC. 52,883 METERS ALTITUDE
 TO 1.170 SEC. 21,336 METERS ALTITUDE

REMARKS

NO PAYLOAD COMMUTATION
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

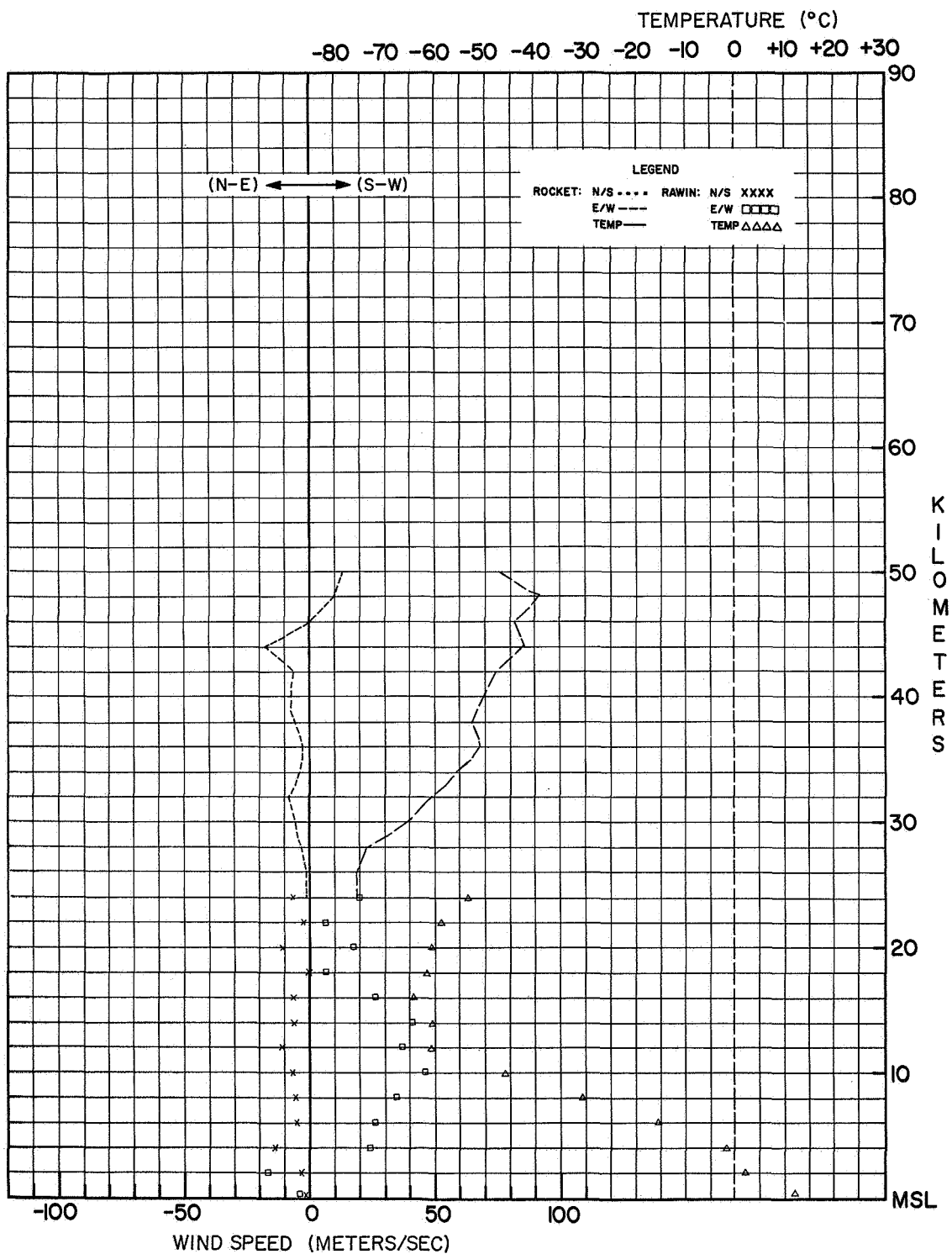
RADIOSONDE MANUFACTURER.. VAISALA
 RADIOSONDE TYPE.. VAISALA
 TEMPERATURE ELEMENT TYPE.. BIMETAL
 PRESSURE SENSOR TYPE.. ANEROID
 GROUND EQUIPMENT TYPE.. VAISALA
 BALLOON TYPE.. TUTEX
 BALLOON SIZE.. 800 GRAMS
 FREE LIFT.. 1,600 GRAMS
 ASCENSION RATES.. SFC-400 MB = 246 M/MINUTE
 400 MB-TOP = 292 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 959.1 MB
 TEMPERATURE.. 12.1 DEG. C
 RELATIVE HUMIDITY.. 60%
 VISIBILITY.. 30 KM
 SURFACE WIND.. 70 DEG. 6 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
 LOW.. SC
 MIDDLE.. NONE
 HIGH.. CI

WIND AT ROCKET

TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. NONE
 LAUNCH
 SFC. 070 DEG./06 KTS.



STATION: (CNIE) CHAMICAL, ARGENTINA ROCKET TIME: 1543 LST 1943 GCT
DATE: 15 JUNE, 1966 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: VAISALA

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WALLOPS ISLAND, VIRGINIA LAUNCH TIME RELEASE TIME
72402 37° 51' N 75° 29' W ALT 3 M JUNE 29, 1966 1436 1115

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP		
TENTHS	VEL		POLAR	COMPONENTS		TENS	DEG	MB	G M	-3	OF	POLAR	COMPONENTS		MB	TENS	POLAR	COMPONENTS			DEG				
OF A	M/S	KM	DEG	KTS	MPS	OF	C				SOUND	DEG	KTS	N-S	E-W	OF	DEG	KTS	N-S	E-W	DEG				
MINUTE					E-W	METERS					M/S					METERS					C				
030	083	53	084	108	-006 -055	5486	+08.0	00.534	00.662	336		088	109	-002 -056	1014.6	0000	230	006	+002 +002	87	+20.6				
032	083	52	087	113	-003 -058	5127	-02.0	00.827	01.063	330		086	095	-003 -049	0804.0	0200	271	010	-000 +005	62	+13.3				
034	083	51	088	107	-002 -055	4877	-03.0	01.129	01.655	329		086	095	-003 -049	0631.0	0400	284	020	-002 +010	63	+01.1				
036	083	50	086	103	-004 -053	4767	-00.9	01.294	01.655	331		091	084	+001 -043	0490.0	0600	281	018	-002 +009	62	-09.8				
038	067	49	087	097	-003 -050	4465	-01.6	01.880	02.412	330		108	068	+011 -033	0376.0	0800	292	020	-004 +010	41	-22.1				
041	056	48	089	088	-001 -045	4090	-07.5	03.010	03.948	327		092	062	+001 -032	0285.0	1000	282	008	-001 +004	21	-37.0				
044	067	47	096	078	+004 -040	3929	-06.0	03.691	04.813	328		090	056	+000 -029	0210.5	1200	271	012	-000 +006		-54.0				
046	067	46	103	072	+008 -036	3810	-09.0	04.294	05.663	326		090	045	+000 -023	0153.5	1400	280	016	-001 +008		-64.3				
049	048	45	106	069	+010 -034	3645	-22.2	05.331	07.400	318		087	041	-001 -021	0111.0	1600	329	014	-006 +004		-64.8				
053	048	44	111	066	+012 -032	3517	-28.0	06.346	09.018	314		087	037	-001 -019	0080.1	1800	012	013	-007 -001		-61.6				
056	048	43	112	063	+012 -030	3371	-27.1	07.758	10.984	314		086	031	-001 -016	0058.3	2000	089	014	-000 -007		-54.6				
060	048	42	100	065	+006 -033	3069	-33.4	11.813	17.165	310		090	029	+000 -015	0042.7	2200	074	016	-002 -008		-52.4				
063	042	41	092	062	+001 -032	3039	-37.6	12.329	18.233	308		090	029	+000 -015	0031.4	2400	096	020	+001 -010		-50.1				
068	037	40	090	058	+000 -030	2914	-41.2	14.775	22.190	305		090	027	+000 -014	0023.3	2600	075	029	-004 -014		-47.0				
072	037	39	090	056	+000 -029	2835	-39.7	16.574	24.733	306		094	025	+001 -013	0017.3	2800	076	027	-003 -013		-41.2				
077	030	38	090	043	+000 -022	2755	-43.3	18.631	28.237	304		099	026	+002 -013	0013.0	3000	083	021	-001 -011		-38.4				
083	028	37	090	043	+000 -022	2664	-42.0	21.297	32.096	305		094	027	+001 -014	0009.7	3200	079	029	-003 -015		-38.4				
089	028	36	087	041	-001 -021	2402	-50.0	31.484	49.151	299		085	023	-001 -012	0007.3	3400	073	035	-005 -017		-36.2				
095	026	35	087	035	-001 -018	2332	-49.5	35.014	54.539	300		090	019	+000 -010	0005.5	3600					-34.0				
102	026	34	086	031	-001 -016	2304	-52.2	36.542	57.615	298		096	018	+001 -009											
108	026	33	086	031	-001 -016	2207	-50.7	42.389	66.383	299		095	021	+001 -011											
115	021	32	094	029	+001 -015	2179	-52.7	44.247	69.921	298		095	021	+001 -011											
124	019	31	090	029	+000 -015	2006	-53.0	57.761	91.401	297		074	014	-002 -007											
133	018	30	090	029	+000 -015	2000	-55.0	58.300	93.100	296		074	014	-002 -007											
143	016	29	090	027	+000 -014	CONSTANT PRESSURE LEVEL DATA																			
154	014	28	099	026	+002 -013	(HEIGHT IN GEOPOTENTIAL METERS)																			
166	013	27	094	025	+001 -013	2098	-52.8	50.000	79.059	298		090	017	+000 -009											
179	012	26	098	029	+002 -015	2431	-48.8	30.000	46.591	300		085	023	-001 -012											
194	010	25	081	026	-002 -013	2697	-42.6	20.000	30.225	304		094	025	+001 -013											
212	009	24	089	029	-001 -012	3188	-30.6	10.000	14.362	312		094	029	+001 -015											
230	008	23	096	018	+001 -009	3430	-27.6	07.000	09.930	314		087	033	-001 -017											
252	008	22	095	021	+001 -011	3677	-18.0	05.000	06.827	320		090	043	-000 -022											
273	007	21	090	017	+000 -009	4394	-02.2	02.000	02.572	330		110	068	+012 -033											
299	007	20	074	014	-002 -007	4945	-02.6	01.000	01.288	330		086	103	-004 -053											
323	006	19	124	007	+002 -003																				
352	005	18	063	009	-002 -004																				

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 112 DEG. AZIMUTH 77.8 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPQ-6
MOTOR ACQUISITION.. 8 SECONDS 5.029 METERS ALTITUDE
MOTOR TRACK DROPPED.. 120 SECONDS 56.998 METERS ALTITUDE
PAYLOAD ACQUISITION.. 160 SECONDS 56.693 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2+220 SECONDS 16.764 METERS ALTITUDE
APOGEE.. 120 SECONDS 56.998 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1B
TELEMETRY FREQUENCY.. 1681 MHZ
TELEMETRY QUALITY.. EXCELLENT
TELEMETRY DATA RECEIVED FROM.. 157 SEC. 54+860 METERS ALTITUDE
TO 1+800 SEC. 20+000 METERS ALTITUDE

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 21+060 METERS
TEMPERATURE -53.4 DEG. C

RADIOSONDE AND BALLOON DATA

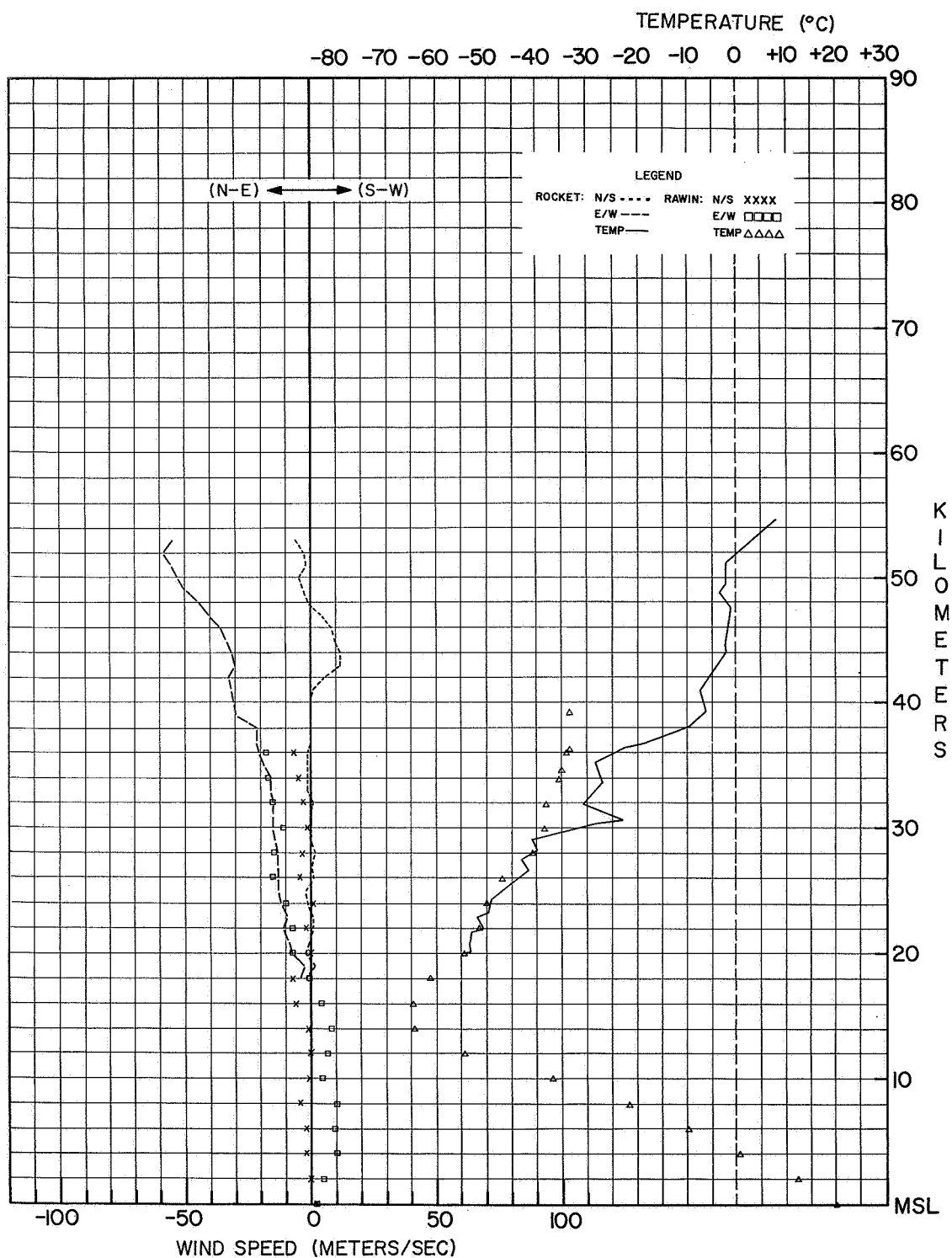
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSOMETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1+200 GRAMS
FREE LIFT.. 1+500 GRAMS
ASCENSION RATES.. SFC+400 MB = 265 M/MINUTE
400 MB+TOP = 357 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1014.6 MB
TEMPERATURE.. 20.6 DEG. C
RELATIVE HUMIDITY.. 87%
VISIBILITY.. 5 KM
SURFACE WIND.. 230 DEG. 6 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 7 OCTAS
LOW.. NONE
MIDDLE.. 7 OCTAS/AC
HIGH.. NONE

WIND AT ROCKET

LAUNCH
50 FT. 257 DEG/07 KTS, 100 FT. 258 DEG/08 KTS,
150 FT. 258 DEG/08 KTS, 200 FT. 258 DEG/08 KTS,
250 FT. 251 DEG/09 KTS



STATION: (NASA)WALLOPS IS., VA.
DATE: 29 JUNE, 1966

ROCKET TIME: 0936LST-1436GCT
ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(CNAE) NATAL, BRAZIL Z LAUNCH RELEASE
TIME TIME
82599 05° 55' S 35° 10' W ALT. 43 M JUNE 29, 1966 1619 1818

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE						
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP
TENTHS	VEL		POLAR	COMPONENTS			TENS	DEG C	MB	G M	OF	POLAR	COMPONENTS			MB	TENS	POLAR	COMPONENTS			%	DEG C
OF A		KM	DEG	KTS	N-S	E-W	OF				SOUND	DEG	KTS	N-S	E-W		OF	DEG	KTS	N-S	E-W		
MINUTE	M/S			MPS			METERS				M/S						METERS						
082	035	40	316	010	-004	+004	4368	-04.3	02.056	02.724	329					1005.0	0004	130	012	+005	-004	75	+27.8
085	042	39	297	014	-003	+007	4130	-04.1	02.770	03.668	329					0801.0	0200	119	015	+004	-007	78	+14.5
090	032	38	278	018	-001	+009	4069	-08.7	02.993	04.031	326					0630.0	0400	175	010	+000	-005		+05.7
096	027	37	308	015	-004	+006	4008	-13.0	03.237	04.432	323					0490.0	0600	118	010	+004	-002		-06.5
102	026	36	337	011	-005	+002	3901	-15.9	03.722	05.153	322	297	014	-003	+007	0377.0	0800	168	020	+010	-002		-18.1
109	026	35	310	010	-003	+004	3731	-17.4	04.655	06.483	321	287	014	-002	+007	0286.0	1000	222	008	+003	+003		-34.3
115	023	34	136	009	+003	-003	3572	-14.9	05.736	07.912	322	325	010	-004	+003	0213.0	1200	332	028	-012	+007		-50.8
123	020	33	177	011	+006	+000	3444	-19.0	06.791	09.518	320	180	002	+001	+000	0154.0	1400	308	020	+006	+008		-65.6
132	018	32	217	012	+005	+004	3347	-26.7	07.742	11.189	315	152	008	+004	-002	0111.0	1600	276	023	-001	+012		-74.9
141	018	31	261	013	+001	+007	3249	-29.9	08.864	12.979	313	199	012	+006	+002	0078.0	1800	314	004	-001	+002		-70.9
151	015	30	305	013	-004	+006	3170	-27.8	09.888	14.355	314	232	012	+004	+005	0056.0	2000	295	012	-003	+006		-59.6
163	014	29	284	015	-002	+008	3146	-31.2	10.223	15.050	312	243	012	+003	+006	0041.0	2200	254	028	+004	+014		-57.4
175	013	28	263	017	+001	+009	3057	-34.8	11.589	17.318	310	279	014	-001	+007	0030.0	2400	276	037	-002	+019		-50.4
189	012	27	271	024	+000	+012	2926	-37.0	13.970	21.071	308	291	016	-003	+008	0022.0	2600	287	024	-003	+012		-46.3
204	010	26	278	031	-002	+014	2863	-36.0	14.856	22.313	309	285	016	-002	+008	0016.0	2800	299	014	-003	+006		-43.1
222	009	25	274	034	-001	+018	2850	-41.3	15.581	23.937	305	278	016	-001	+008	0012.0	3000	242	017	+004	+008		-44.8
241	008	24	269	037	+001	+019	2752	-42.2	17.984	27.736	305	265	020	+001	+010	0009.0	3200	186	017	+009	+001		-32.2
262	008	23	269	026	+000	+013	2697	-45.8	19.507	30.561	302	270	024	+000	+012								
285	006	22	269	015	+000	+008	2551	-45.1	24.240	37.860	303	274	032	-001	+016								
314	006	21	239	010	+002	+004	2426	-51.5	29.267	47.031	299	267	037	+001	+019								
343	006	20	209	004	+003	+001	2332	-50.3	33.780	53.991	299	270	028	+000	+014								
374	005	19	163	004	+002	+000	2268	-55.9	37.282	61.124	296	270	022	+000	+011								
410	005	18	116	003	+001	-001	2161	-55.8	44.060	72.294	296	260	012	+001	+006								
							2042	-55.8				225	007	+003	+003								
							1981	-58.2				197	006	+003	+001								
							1902	-63.2				180	004	+002	+000								
CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																							
2073			-55.8		50.000	81.938	296	240	008	*002	*003												
2402			-51.3		30.000	48.159	299	267	036	+001	+019												
2671			-45.7		20.000	31.320	303	270	025	+000	+013												
3146			-28.9		10.000	14.587	314	266	012	+003	+005												
3405			-20.7		07.000	09.886	319	174	003	-002	+000												
3659			-16.6		05.000	06.939	321	299	013	-004	+006												

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2073	-55.8	50.000	81.938	296	240	008	+002	+003
2402	-51.3	30.000	48.159	299	267	036	+001	+019
2671	-45.7	20.000	31.320	303	270	025	+000	+013
3146	-28.9	10.000	14.587	314	236	012	+003	+005
3405	-20.7	07.000	09.886	319	174	003	+002	+000
3659	-16.6	05.000	06.939	321	299	013	-004	+006

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD (SEE REMARKS)
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 030 DEG. AZIMUTH 84.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 10 SECONDS 1.951 METERS ALTITUDE
MOTOR TRACK DROPPED.. 260 SECONDS 43.129 METERS ALTITUDE
PAYLOAD ACQUISITION.. 407 SECONDS 42.855 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2.670 SECONDS 16.999 METERS ALTITUDE
APOGEE.. 129 SECONDS 63.551 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1A
TELEMETRY FREQUENCY.. 1680 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 407 SEC. 42.855 METERS ALTITUDE
TO 2.241 SEC. 19.020 METERS ALTITUDE

REMARKS

1680 MHZ SIGNAL STRENGTH VERY WEAK FROM 125 SECONDS TO 384 SECONDS (43.678 METERS). USEFUL DATA OBTAINED ONLY AFTER 384 SECONDS.
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 20.800 METERS
TEMPERATURE -55.8 DEG. C

RADIOSONDE AND BALLOON DATA

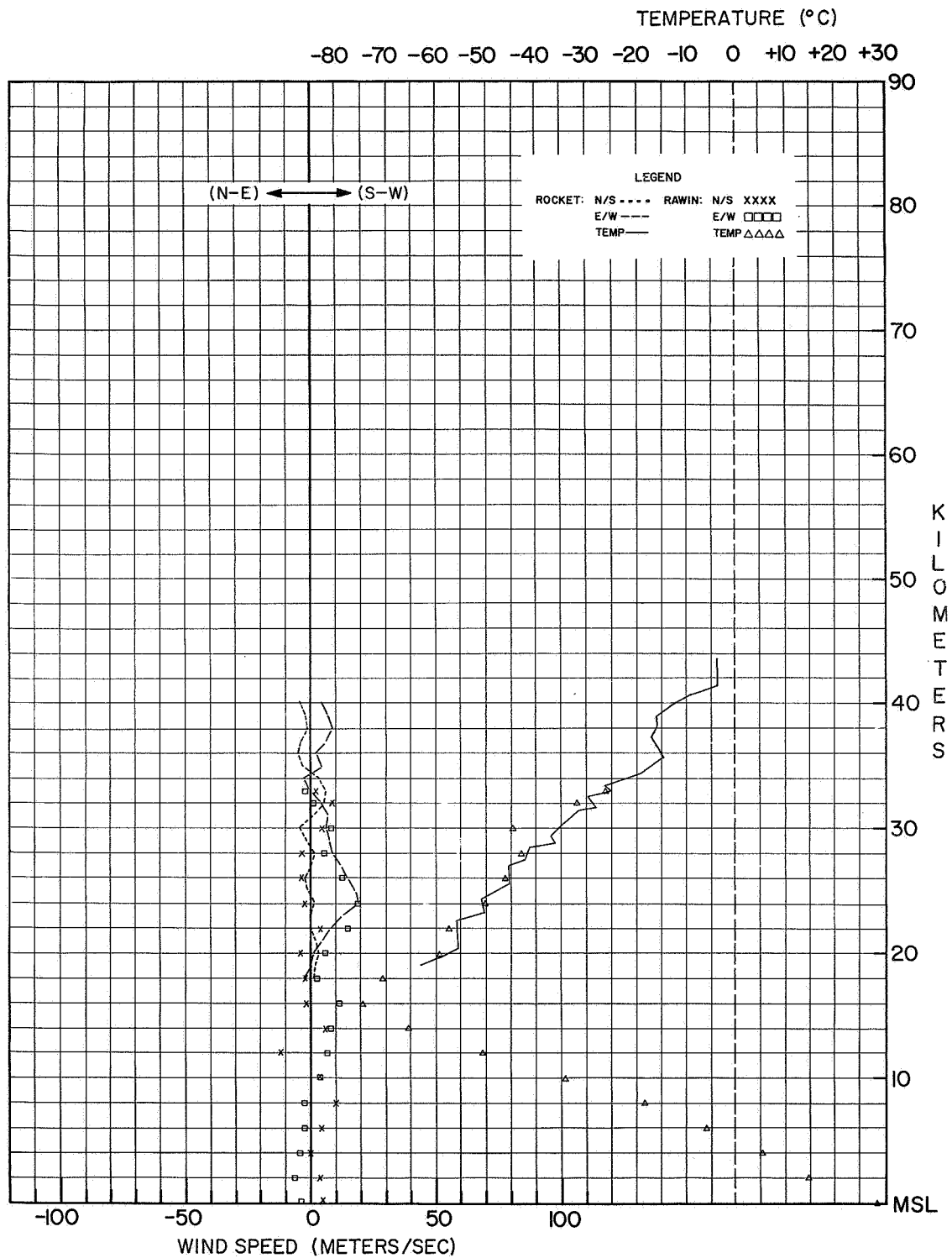
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 403 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
BALLOON TYPE.. UNKNOWN
BALLOON SIZE.. 1,000 GRAMS
FREE LIFT.. 1,300 GRAMS
ASCENSION PATES.. SFC-400 MB = 285 M/MINUTE
400 MB-TOP = 305 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1005.0 MB
TEMPERATURE.. 27.8 DEG. C
RELATIVE HUMIDITY.. 75%
VISIBILITY.. 15 KM
SURFACE WIND.. 130 DEG. 12 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 5 OCTAS
LOW.. CU
MIDDLE.. AC
HIGH.. NONE
TYPE OF PRECIPITATION.. RAIN
OBSTRUCTIONS TO VISION.. RAIN

WIND AT ROCKET

LAUNCH
21 FT. 170 DEG/14 KTS, 29 FT. 160 DEG/14 KTS,
51 FT. 160 DEG/14 KTS, 82 FT. 164 DEG/16 KTS,
133 FT. 160 DEG/16 KTS



STATION: (CNAB) NATAL, BRAZIL
DATE: 29 JUNE, 1966

ROCKET TIME: 1319 LST 1619 GCT
ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
RADIOSONDE TYPE: 403 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WOLLOPS ISLAND, VIRGINIA LAUNCH RELEASE
Z Z TIME
72402 37°51' N 75°29' W ALT. 3 M JULY 13, 1966 1914 1715

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR		WIND COMPONENTS MPS		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR		WIND COMPONENTS MPS		PRESSURE MB	ALT TENS OF METERS	POLAR	WIND COMPONENTS MPS		RH %	TEMP DEG C							
			DEG	KTS	N-S	E-W						DEG	KTS	N-S	E-W			DEG	KTS	N-S	E-W								
028	083	60	102	095	+010	-048	5831	-04.1	00.343	00.444	329	098	100	+007	-051	1011.6	0900	180	015	+008	-000	76	+25.6						
030	083	59	099	098	+008	-050	5377	+04.4	00.599	00.751	334	094	095	+003	-049	0804.0	0200	265	010	+000	+005	51	+16.5						
032	083	58	097	102	+006	-052	5212	+00.1	00.732	00.933	331	102	100	+011	-050	0632.0	0400	306	012	-004	+005	46	+04.6						
034	083	57	096	096	+005	-049	5057	+00.8	00.886	01.126	332	101	089	+009	-045	0493.0	0600	034	010	-004	-003	20	-03.9						
036	083	56	094	088	+003	-045	4865	+01.1	01.121	01.424	332	114	083	+017	-039	0380.0	0800	356	037	-019	+001	21	-20.3						
038	083	55	094	092	+003	-047	4721	+04.6	01.336	01.676	334	111	077	+014	-037	0287.5	1000	013	056	-028	-006	23	-34.7						
040	083	54	092	095	+002	-049	4676	+04.7	01.411	01.769	334	105	075	+010	-037	0204.0	1200	354	043	-022	+002		-49.0						
042	067	53	098	092	+007	-047	4587	+00.9	01.573	02.000	332	095	074	+003	-038	0156.5	1400	339	037	-018	+007		-61.2						
045	067	52	103	100	+012	-050	4511	+01.1	01.727	02.194	332	092	072	+001	-037	0113.0	1600	344	017	-008	+002		-67.3						
047	067	51	102	093	+010	-047	4231	-10.9	02.455	03.261	325	086	057	+002	-029	0081.5	1800	064	014	-003	-006		-62.3						
050	056	50	101	085	+008	-043	4103	-14.1	02.897	03.896	323	097	049	+003	-025	0059.2	2000	106	019	+003	-009		-56.0						
053	056	49	111	083	+015	-040	3993	-15.7	03.345	04.526	322	110	046	+008	-022	0043.5	2200	108	015	+002	-007		-49.9						
056	056	48	120	081	+021	-036	3962	-15.3	03.483	04.706	322	105	044	+006	-022	0032.1	2400	070	017	-003	-008		-48.5						
059	048	47	108	076	+012	-037	3901	-18.9	03.775	05.172	320	100	043	+004	-022														
063	048	46	095	074	+003	-038	3773	-20.1	04.476	06.162	319	085	041	+002	-021														
066	048	45	092	072	+001	-037	3609	-27.0	05.588	07.908	315	078	038	+004	-019														
070	042	44	088	070	+001	-036	3392	-27.6	07.530	10.683	314	087	033	+001	-017														
074	042	43	088	062	+001	-032	3292	-31.7	08.651	12.482	311	097	031	+002	-016														
078	037	42	086	053	+002	-027	3182	-32.3	10.094	14.600	311	108	031	+005	-015														
083	033	41	097	049	+003	-025	3091	-36.7	11.484	16.920	308	101	030	+003	-015														
088	030	40	110	046	+008	-022	2978	-42.4	13.526	20.421	305	097	031	+002	-016														
094	028	39	100	043	+004	-022	2798	-41.5	17.606	26.477	305	083	033	+002	-017														
100	028	38	085	041	+002	-021	2722	-46.1	19.697	30.222	302	090	031	+000	-016														
106	024	37	081	039	+003	-020	2426	-51.4	30.799	48.385	299	098	014	+001	-007														
114	021	36	078	038	+004	-019	2301	-49.1	37.250	57.919	300	108	012	+002	-006														
122	022	35	081	035	+003	-018	2207	-52.3	42.992	67.815	298	120	016	+004	-007														
129	021	34	087	033	+001	-017	2134	-52.4	48.095	75.900	298	117	013	+003	-006														
138	018	33	097	031	+002	-016	2000	-58.5																					
148	017	32	108	031	+005	-015																							
158	015	31	101	030	+003	-015																							
170	014	30	097	031	+002	-016																							
181	013	29	090	031	+000	-016																							
195	011	28	083	033	+002	-017																							
211	010	27	090	031	+000	-016																							
230	009	26	098	027	+002	-014																							
250	007	25	096	020	+001	-010																							
276	006	24	099	012	+001	-006																							
302	006	23	108	012	+002	-006																							
328	006	22	120	016	+004	-007																							
358	005	21	117	013	+003	-006																							
390	004	20	101	010	+001	-005																							

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 078 DEG. AZIMUTH 78.7 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 9 SECONDS 1,768 METERS ALTITUDE
MOTOR TRACK DROPPED.. 126 SECONDS 63,398 METERS ALTITUDE
PAYLOAD ACQUISITION.. 140 SECONDS 62,941 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2,550 SECONDS 18,898 METERS ALTITUDE
APOGEE.. 126 SECONDS 63,398 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1B AND TMQ-5
TELEMETRY FREQUENCY.. 1680MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 187 SECONDS 58,310 METERS ALTITUDE
TO 2,340 SECONDS 20,000 METERS ALTITUDE

REMARKS

TEST WAS SUCCESSFUL.
THERMODYNAMICS BASE DATA.. PRESSURE 59.2 MB
ALTITUDE 20,000 METERS
TEMPERATURE -58.5 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,500 GRAMS
ASCENSION RATES.. SFC-400MB = 231 M/MINUTE
400MB-TOP = 346 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1011.6 MB
TEMPERATURE.. 25.6 DEG. C
RELATIVE HUMIDITY.. 76%
VISIBILITY.. 11 KM
SURFACE WIND.. 180 DEG. 15 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 2 OCTAS
LOW.. 2 OCTAS/CU
MIDDLE.. NONE
HIGH.. NONE
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. HAZE

WIND AT ROCKET LAUNCH

SFC. 180 DEG/12KTS, 50 FT. 174 DEG/10KTS,
100 FT. 184 DEG/14KTS, 150 FT. 177 DEG/20KTS,
200 FT. 183 DEG/22KTS, 250 FT. 185 DEG/22KTS

RP STATION NAME DATE ROCKET RAWINSONDE
 (CNIE) CHAMICAL, ARGENTINA Z LAUNCH TIME Z RELEASE TIME Z
 87320 30° 22' S 66° 17' W ALT. 457 M JULY 13, 1966 2244 0000

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	POLAR		WIND		ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR		WIND		PRESSURE	ALT	POLAR	WIND		COMPONENTS		RH	TEMP		
TENTHS	VEL						TENS				OF						TENS									
OF A							OF				SOUND						OF									
MINUTE	M/S	KM	DEG	KTS	N-S	E-W	METERS	DEG C	MB	G M	M/S	DEG	KTS	N-S	E-W	MB	METERS	DEG	KTS	N-S	E-W	%	DEG C			
028	139	55	298	103	-025	+047	5700	-15.0																		
030	111	54	297	096	-022	+044	5471	-25.8					298	101	-024	+046										
031	083	53	301	099	-026	+044	5304	-22.5					301	099	-026	+044										
034	067	52	312	089	-031	+034	4999	-17.6					237	081	+023	+035										
036	067	51	290	058	-010	+028	4755	-11.4					275	131	-006	+067										
039	056	50	237	081	+023	+035	4673	-14.6					298	145	-035	+066										
042	067	49	236	115	+033	+049	4542	-13.6					297	074	-017	+034										
044	083	48	257	124	+014	+062	4450	-17.2					256	048	+006	+024										
046	067	47	292	155	-030	+074	4328	-23.8					256	040	+005	+020										
049	048	46	317	127	-048	+044	MISSING DATA										MISSING DATA									
053	037	45	257	052	+006	+026	3024	-36.1					273	101	-003	+052										
MISSING DATA							2960	-49.0					274	111	-004	+057										
140	022	29	274	121	-004	+062	2853	-57.0					277	112	-007	+057										
148	019	28	282	103	-011	+052	2825	-58.3					279	108	-009	+055										
158	017	27	291	086	-016	+041	2515	-48.8					298	075	-018	+034										
168	015	26	302	076	-021	+033	2475	-49.7					293	076	-015	+036										
180	012	25	297	074	-017	+034	2384	-61.2					278	082	-006	+042										
195	013	24	280	081	-007	+041	2195	-69.0					282	067	-007	+034										
205	019	23	274	090	-003	+046	2149	-70.0					284	058	-007	+029										
213	011	22	282	067	-007	+034	2073	-65.5					284	048	-006	+024										
235	008	21	286	050	-007	+025	1923	-67.8					276	061	-003	+031										
256	008	20	282	046	-005	+023	1753	-64.0					274	062	-002	+032										
278	008	19	275	086	-003	+034																				
300	008	18	274	057	-002	+029	1637	-71.2																		
321	008	17	272	068	-001	+035																				

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. WOX-1A
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 12 FT. TUBULAR
 LAUNCHER SETTING.. 035 DEG. AZIMUTH, 81.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION.. 4 SECONDS, 3,139 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 70 SECONDS, 51,820 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 103 SECONDS, 60,655 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 2,031 SECONDS, 16,370 METERS ALTITUDE
 APOGEE.. UNKNOWN

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
 TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. 403 MHZ PORTABLE RECEIVER - RECORDER
 TELEMETRY FREQUENCY.. 404 MHZ
 TELEMETRY QUALITY.. GOOD
 TELEMETRY DATA RECEIVED FROM.. 103 SECONDS 60,655 METERS ALTITUDE
 TO 2,031 SECONDS, 16,370 METERS ALTITUDE

REMARKS

RADAR PLOTTING SYSTEM OUT OF COMMISSION BETWEEN MINUTES
 6-13. SUPPORT RADIOSONDE OBSERVATION NOT TAKEN.
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

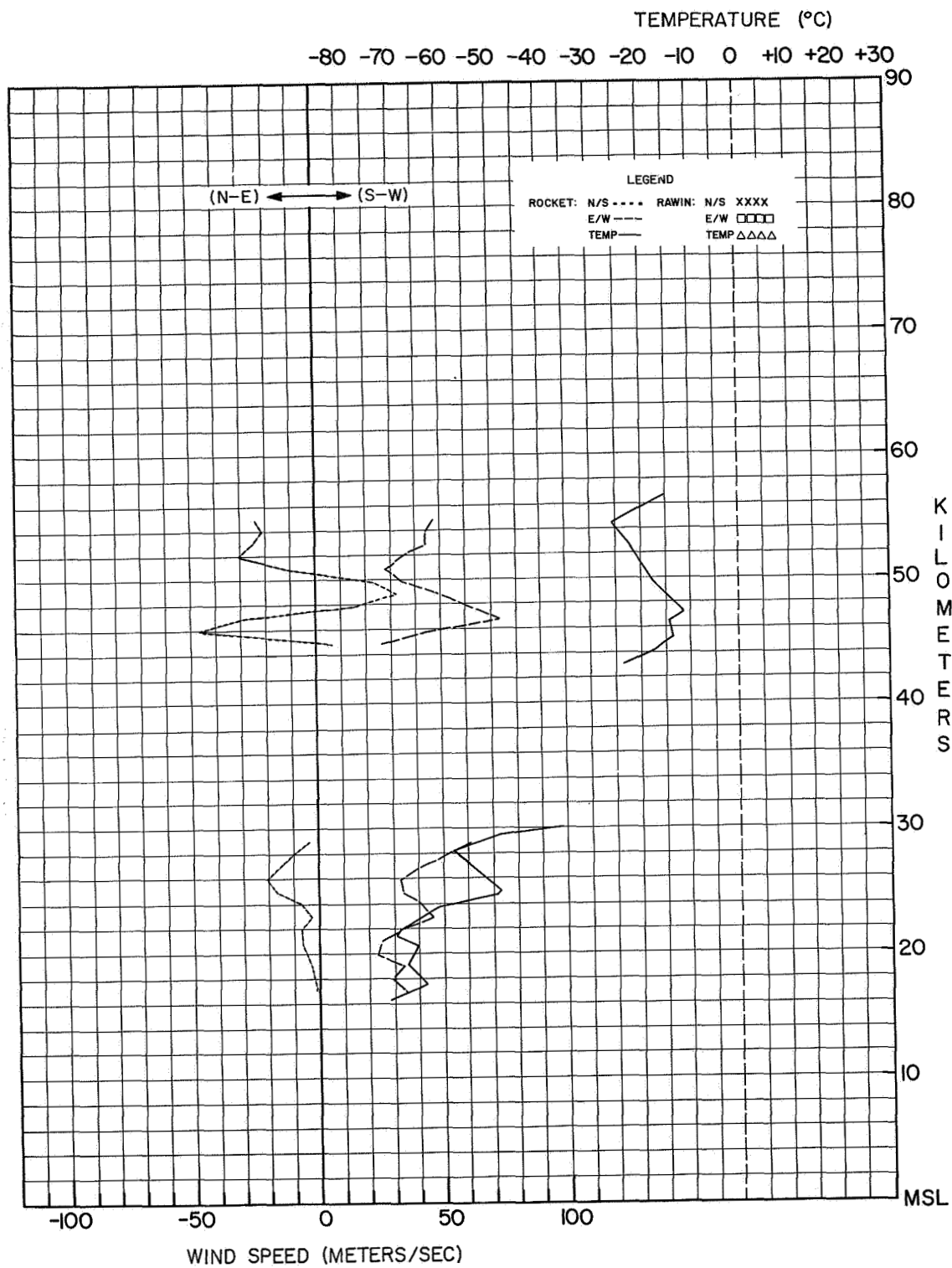
RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. NONE (SEE REMARKS)
 RADIOSONDE TYPE.. NONE
 TEMPERATURE ELEMENT TYPE.. NONE
 PRESSURE SENSOR TYPE.. NONE
 GROUND EQUIPMENT TYPE.. NONE
 BALLOON TYPE.. NONE
 BALLOON SIZE.. NONE
 FREE LIFT.. NONE
 ASCENSION RATES.. SFC=400 MB NONE
 400 MB-TOP NONE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. NONE
 TEMPERATURE.. NONE
 RELATIVE HUMIDITY.. NONE
 VISIBILITY.. NONE
 SURFACE WIND.. NONE
 CLOUD TYPE AND AMOUNT.. TOTAL.. NONE
 LOW.. NONE
 MIDDLE.. NONE
 HIGH.. NONE

TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. NONE
 WIND AT ROCKET LAUNCH
 NONE



STATION: (CNIE) CHAMICAL, ARGENTINA ROCKET TIME: 1844 LST 2244 GCT
DATE: 13 JULY, 1966 ROCKET MOTOR TYPE: JUDI I

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: NONE

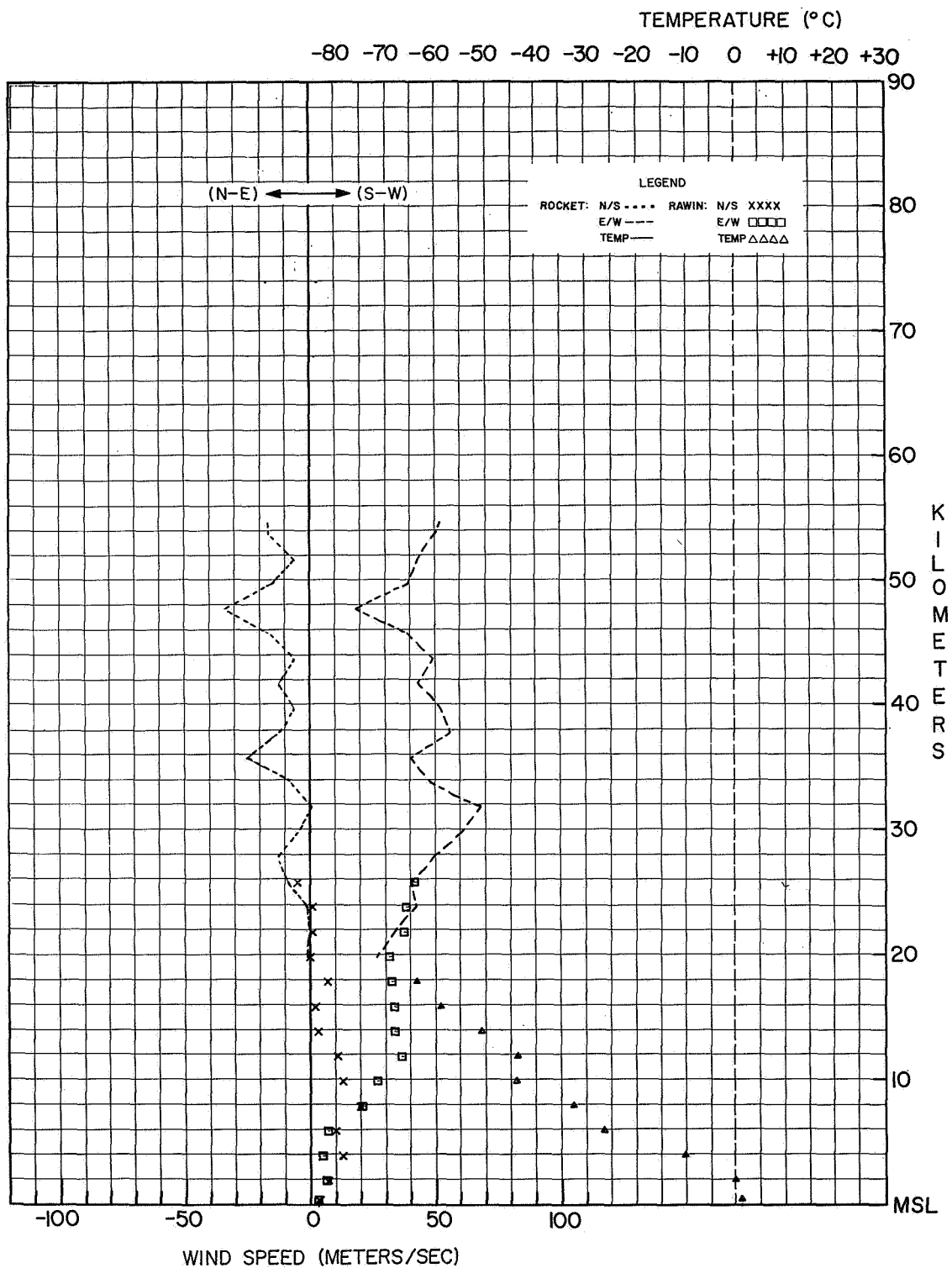
RP STATION NAME DATE ROCKET RAWINSONDE
(CNIE) CHAMICAL ARGENTINA LAUNCH RELEASE
Z Z
87320 30° 22' S 66° 17' W ALT. 457 M JULY 14, 1966 1517 1106

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S	E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M ⁻³	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S	E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S	E-W	RH %	TEMP DEG C			
031	111	55	291	104	-019	+050										0972.9	0046	000	000	-000	-000	80	-00.2			
033	111	54	292	100	-019	+048										0804.0	0200	220	010	+004	+003	48	-01.5			
034	111	53	288	090	-014	+044										0622.0	0400	191	020	+010	+002	43	-11.6			
036	083	52	282	082	-009	+041										0476.0	0600	207	016	+007	+004	23	-27.9			
038	067	51	288	080	-013	+039										0351.0	0800	228	048	+017	+018	10	-34.0			
041	067	50	296	080	-018	+037										0268.0	1000	246	050	+010	+024	08	-45.5			
043	067	49	316	073	-027	+026										0198.0	1200	257	067	+008	+034		-45.2			
046	067	48	337	078	-037	+016										0142.6	1400	270	060	+000	+031		-52.6			
048	056	47	317	074	-028	+026										0106.5	1600	271	061	-001	+031		-60.7			
052	056	46	297	081	-019	+037										0077.2	1800	263	059	+004	+030		-65.5			
054	067	45	288	086	-014	+042											2000	275	057	-003	+029					
057	056	44	281	093	-009	+047											2200	274	069	-002	+035					
060	048	43	285	089	-012	+044											2400	273	070	-002	+036					
064	048	42	290	085	-015	+041											2600	281	078	-008	+039					
067	048	41	285	092	-012	+046																				
071	042	40	280	099	-009	+050																				
075	042	39	283	104	-012	+052																				
079	042	38	286	109	-015	+054																				
083	037	37	296	099	-022	+046																				
088	030	36	306	092	-028	+038																				
094	028	35	294	090	-019	+042																				
100	030	34	282	092	-010	+046																				
105	030	33	276	109	-006	+056																				
111	028	32	272	128	-002	+066																				
117	021	31	275	121	-005	+062																				
127	019	30	278	114	-008	+058																				
135	021	29	283	106	-012	+053																				
143	019	28	289	097	-016	+047																				
153	016	27	288	088	-014	+043																				
164	014	26	288	077	-012	+038																				
176	013	25	282	077	-008	+039																				
189	013	24	276	078	-004	+040																				
201	011	23	277	068	-004	+035																				
218	011	22	276	061	-003	+031																				
232	010	21	278	055	-004	+028																				
251	009	20	279	047	-004	+024																				

TECHNICAL DATA

VEHICLE DATA MOTOR TYPE.. JUDI MOTOR PERFORMANCE.. GOOD PAYLOAD TYPE.. WOX-1A PAYLOAD PERFORMANCE.. FAIR FUSE TYPE.. PYROTECHNIC FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN TYPE OF LAUNCHER.. 12 FT. TUBULAR LAUNCHER SETTING.. 035 DEG. AZIMUTH 82.0 DEG. ELEVATION RADAR DATA RADAR TYPE.. MPS-19 MOTOR ACQUISITION.. 6 SECONDS 5,334 METERS ALTITUDE MOTOR TRACK DROPPED.. 110 SECONDS 62,179 METERS ALTITUDE PAYLOAD ACQUISITION.. 170 SECONDS 55,169 METERS ALTITUDE PAYLOAD TRACK DROPPED.. 1,631 SECONDS 18,593 METERS ALTITUDE APOGEE.. 110 SECONDS 62,179 METERS ALTITUDE SENSOR AND TELEMETRY DATA WIND SENSOR.. 6 FT. SQUARE PARACHUTE TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR SENSOR FALL RATE.. NOMINAL GROUND EQUIPMENT TYPE.. 403 MHZ- PORTABLE RECEIVER RECORDER TELEMETRY FREQUENCY.. NONE TELEMETRY QUALITY.. N.A. TELEMETRY DATA RECEIVED FROM.. N.A. REMARKS NO THERMODYNAMIC DATA DUE TO NO RECEPTION OF THE SIGMA THERMODYNAMICS BASE DATA.. PRESSURE N.A. ALTITUDE N.A. TEMPERATURE N.A.	RADIOSONDE AND BALLOON DATA RADIOSONDE MANUFACTURER.. VAISALA RADIOSONDE TYPE.. VAISALA TEMPERATURE ELEMENT TYPE.. BIMETAL PRESSURE SENSOR TYPE.. ANEROID GROUND EQUIPMENT TYPE.. VAISALA BALLOON TYPE.. TOTEX BALLOON SIZE.. 800 GRAMS FREE LIFT.. 2,100 GRAMS ASCENSION RATES.. SFC=400MB= 336 M/MINUTE 400MB-TOP= 384 M/MINUTE WEATHER OBSERVATION AT RAWINSONDE RELEASE STATION PRESSURE.. 972.9 MB TEMPERATURE.. 0.2 DEG. C RELATIVE HUMIDITY.. 80% VISIBILITY.. 50 KM SURFACE WIND.. CALM CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTASCTAS LOW.. NONE MIDDLE.. NONE HIGH.. NONE TYPE PRECIPITATION.. NONE OBSTRUCTIONS TO VISION.. NONE WIND AT ROCKET LAUNCH SFC. 000 DEG/00 KTS
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STATION: (CNIE) CHAMICAL, ARGENTINA
 DATE: 14 JULY, 1966
 ROCKET TIME: 1117 LST 1517 GCT
 ROCKET MOTOR TYPE: JUDI I

PAYLOAD TYPE: WOX-1A
 RADIOSONDE TYPE: VAISALA

RP STATION NAME DATE ROCKET LAUNCH TIME RELEASE TIME
(CNAE) NATAL, BRAZIL Z Z Z
82599 5°55' S 35°10' W ALT. 43 M JULY 15, 1966 1605 1309

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE											
TIME	FALL	ALT	WIND		COMPONENTS		ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND		COMPONENTS		PRESSURE	ALT	WIND		COMPONENTS		RH	TEMP					
TENTHS	VEL		POLAR		N-S	E-W	TENS	DEG	MB	G M	OF	POLAR		N-S	E-W	MB	TENS	POLAR		N-S	E-W	%	DEG					
OF A							OF				METERS						METERS											
MINUTE	M/S	KM	DEG	KTS			METERS	DEG C	MB	G M		DEG	KTS					DEG	KTS									
040	099	52	128	057	+018	-023	6096	-26.1	00.206	00.291	315					1008.0	0004	130	008	+003	-003	75	+27.7					
041	083	51	107	073	+011	-036	5913	-17.1	00.263	00.356	321					0803.0	0200	123	019	+005	-008	63	+13.9					
044	067	50	084	096	-005	-049	5389	-05.5	00.515	00.670	328					0631.0	0400	340	006	-003	+001	29	+03.8					
046	083	49	105	076	+010	-038	4999	-00.1	00.836	01.067	331	084	096	-005	-049	0491.0	0600	088	018	-000	-009		-06.4					
048	067	48	121	061	+016	-027	4868	-05.5	00.984	01.281	328	109	070	+012	-034	0377.0	0800	359	011	-006	+000		-19.2					
051	056	47	113	051	+010	-024	4514	-04.4	01.535	01.990	329	093	035	+001	-018	0286.0	1000	344	020	-010	+003		-36.0					
054	067	46	079	040	-004	-020	4249	-08.6	02.145	02.825	326	087	037	-001	-019	0212.0	1200	318	029	-011	+010		-54.6					
056	056	45	096	035	+002	-018	4142	-21.9	02.468	03.421	318	087	035	-001	-018	0153.0	1400	295	018	-004	+008		-66.1					
060	048	44	093	033	+001	-017	3941	-18.4	03.226	04.412	320	087	033	-001	-017	0109.0	1600	265	025	+001	+013		-79.4					
063	048	43	090	035	+000	-018	3816	-18.4	03.807	05.206	320	088	047	-001	-024	0077.0	1800	094	019	+001	-010		-77.5					
067	042	42	087	039	-001	-020	3740	-23.0	04.214	05.869	317	077	050	-006	-025	0055.0	2000	022	008	-004	-002		-59.9					
071	037	41	086	031	-001	-016	3500	-29.6	05.853	08.372	313	067	065	-013	-031	0040.0	2200	273	014	-000	+007		-52.8					
076	033	40	081	026	-002	-013	3481	-30.1	06.009	08.613	313	069	066	-012	-032	0029.0	2400	272	024	-000	+012		-53.2					
081	030	39	087	037	-001	-019	3389	-36.2	06.840	10.057	309	081	071	-006	-036	0022.0	2600	306	008	-002	+003		-45.0					
087	030	38	088	049	-001	-025	3267	-38.4	08.148	12.091	307	094	051	+002	-026	0016.0	2800	139	004	+002	-001		-46.8					
092	030	37	068	052	-010	-025	3215	-42.0	08.787	13.242	305	093	043	+001	-022													
098	026	36	051	062	-020	-025	3164	-40.9	09.466	14.198	306	096	039	+002	-020													
105	037	35	067	065	-013	-031	3097	-44.3	10.444	15.898	303	100	034	+003	-017													
107	021	34	079	073	-007	-037	3048	-42.3	11.225	16.939	305	105	030	+004	-015													
121	014	33	096	057	+003	-029	2981	-44.3	12.389	18.859	303	113	025	+005	-012													
130	020	32	093	041	+001	-021	2953	-41.6	12.909	19.422	305	114	023	+005	-011													
138	019	31	100	034	+003	-017	2895	-45.6	14.062	21.528	302	122	018	+005	-008													
148	017	30	111	027	+005	-013	2853	-43.8	14.965	22.731	304	135	014	+005	-005													
158	014	29	122	018	+005	-008	2752	-48.6	17.399	26.993	300	162	006	+003	-001													
171	013	28	158	010	+005	-002	2664	-47.7	19.864	30.695	301	315	003	-001	+001													
183	012	27	180	002	+001	+000	2453	-52.6	27.374	43.238	298	276	018	-001	+009													
199	010	26	323	010	-004	+003	2362	-53.1	31.489	49.852	297	270	019	-000	+010													
215	010	25	286	014	-002	+007	2316	-55.6	33.817	54.151	296	276	018	-001	+009													
233	009	24	270	021	+000	+011	2182	-54.6	41.655	66.398	296	286	014	-002	+007													
254	008	23	276	018	-001	+009	2073	-59.6	49.434	80.642	293	284	008	-001	+004													
275	007	22	284	016	-002	+008	1984	-58.1	56.918	92.204	294	270	006	-000	+003													
299	007	21	281	010	-001	+005	1890	-65.6				292	010	-002	+005													
325	006	20	270	006	+000	+003																						
355	005	19	292	010	-002	+005																						
386	004	18	291	017	-003	+008																						
CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																												
2059	-59.5	50.000	81.522	293	284	008	-001	*004																				
2386	-52.9	30.000	47.455	297	270	021	-000	+011																				
2649	-47.8	20.000	30.916	301	315	003	-001	+001																				
3112	-42.8	10.000	15.121	304	048	035	-002	-018																				
3356	-36.5	07.000	10.303	308	083	068	-018	-025																				
3604	-26.2	05.000	07.052	315	054	060	-018	-025																				
4283	-07.6	02.000	02.624	327	090	035	-000	-018																				
4821	-05.5	01.000	01.301	328	112	069	+013	-033																				

CONSTANT PRESSURE LEVEL DATA									
(HEIGHT IN GEOPOTENTIAL METERS)									
2059	-59.5	50.000	81.522	293	284	008	-001	+004	
2386	-52.9	30.000	47.455	297	270	021	-000	+011	
2649	-47.8	20.000	30.916	301	315	003	-001	+001	
3112	-42.8	10.000	15.121	304	096	035	+002	-018	
3356	-36.5	07.000	10.303	308	083	068	-004	-035	
3604	-26.2	05.000	07.052	315	054	060	-018	-025	
4283	-07.6	02.000	02.624	327	090	035	+000	-018	
4821	-05.5	01.000	01.301	328	112	069	+013	-033	

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE 1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 110 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 030 DEG. AZIMUTH, 85.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 12 SECONDS 1,981 METERS ALTITUDE
MOTOR TRACK DROPPED.. UNKNOWN
PAYLOAD ACQUISITION.. 154 SECONDS 59,131 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. UNKNOWN
APOGEE.. UNKNOWN

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1A
TELEMETRY FREQUENCY.. 1680 MHZ
TELEMETRY QUALITY.. EXCELLENT
TELEMETRY DATA RECEIVED FROM.. 154 SECONDS 59,131 METERS ALTITUDE
TO 2,147 SECONDS, 18,900 METERS ALTITUDE

REMARKS

TEST WAS SUCCESSFUL.
THERMODYNAMICS BASE DATA.. PRESSURE 67.1 MB
ALTITUDE 18,900 METERS
TEMPERATURE -65.6 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. BENDIX
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. GMD-1A
BALLOON TYPE.. KAYSAM
BALLOON SIZE.. 1,000 GRAMS
FREE LIFT.. 1,300 GRAMS
ASCENSION RATES.. SFC-400MB= 282 M/MINUTE
400MB-TOP= 305 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

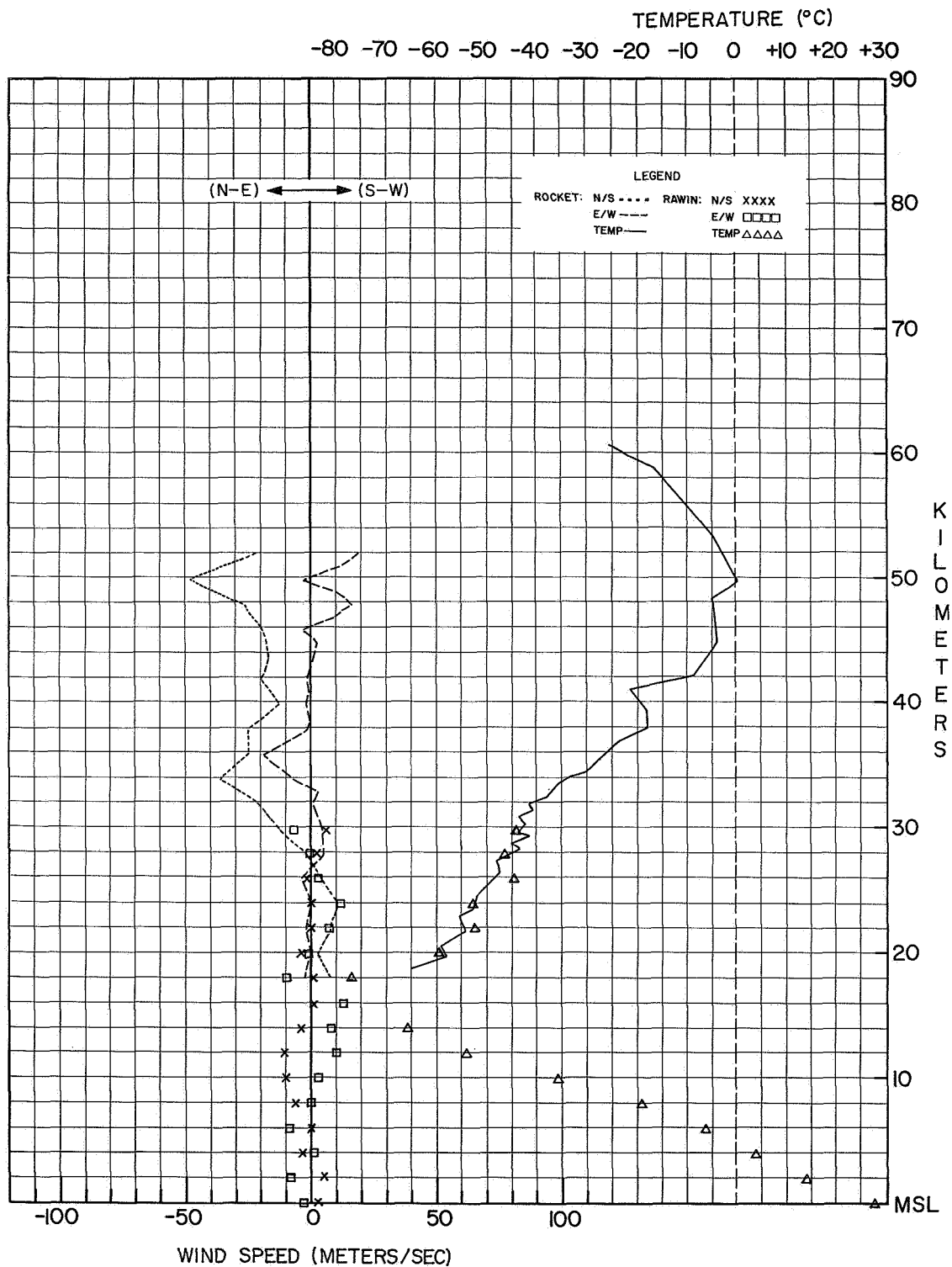
STATION PRESSURE.. 1008.0 MB
TEMPERATURE.. 27.7 DEG. C
RELATIVE HUMIDITY.. 75%
VISIBILITY.. 20 KM
SURFACE WIND.. 130 DEG, 8 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 5 OCTAS
LOW.. CU
MIDDLE.. NONE
HIGH.. NONE

TYPE PRECIPITATION.. NONE

OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

21 FT. 130 DEG/10KTS, 29 FT. 140 DEG/10KTS,
51 FT. 110 DEG/4KTS, 82 FT. 120 DEG/12KTS
133 FT. 130 DEG/12KTS



STATION: (CNAE) NATAL, BRAZIL
DATE: 15 JULY, 1966

ROCKET TIME: 1305 LST 1605 GCT
ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCASONDE 1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
 (NASA) WALLOPS ISLAND, VIRGINIA Z LAUNCH RELEASE
 TIME TIME
 Z Z
 72402 37°51' N 75°29' W ALT. 3 M AUGUST 7, 1966 0736 0515

TABULATED DATA

ROCKET WINDS											ROCKET THERMODYNAMICS											RAWINSONDE										
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS N-S E-W	RH %	TEMP DEG C												
021	099	54	087	078	-002 -040	5297	-04.3	00.611	00.792	329	088	090	-002 -046	1017.2	0000	160	006	+003 -001	90	+20.0												
023	083	53	088	090	-002 -046	5243	-03.3	00.654	00.844	329	087	097	-003 -050	0806.0	0200	117	008	+002 -004	41	+13.3												
025	067	52	087	103	-003 -053	4999	-07.0	00.888	01.162	327	078	101	-011 -051	0633.0	0400	157	008	+004 -002	24	+00.9												
028	067	51	082	102	-007 -052	4840	-08.1	01.086	01.427	326	077	092	-011 -046	0492.0	0600	208	014	+006 +003	29	-10.6												
030	067	50	078	101	-011 -051	4615	-13.6	01.449	01.945	323	085	062	-003 -032	0377.0	0800	233	025	+008 +010	93	-23.6												
033	083	49	078	095	-010 -048	4487	-14.6	01.712	02.306	322	090	051	+000 -026	0285.0	1000	247	051	+010 +024	70	-39.4												
034	083	48	076	090	-011 -045	4298	-13.1	02.188	02.931	323	093	043	+001 -022	0211.0	1200	262	037	+003 +019		-51.2												
037	056	47	080	075	-007 -038	4145	-13.1	02.668	03.575	323	098	043	+003 -022	0112.0	1400	276	025	-001 +013		-58.7												
040	067	46	086	060	-002 -031	3987	-15.4	03.278	04.431	322	102	046	+005 -023	0111.0	1600	323	010	-004 +003		-62.3												
042	067	45	090	052	+000 -027	3871	-18.0	03.819	05.214	320	099	051	+004 -026	0081.3	1800	169	004	+002 -000		-61.2												
045	056	44	092	045	+001 -023	3743	-25.2	04.535	06.371	316	095	049	+002 -025	0059.2	2000	069	006	-001 -003		-57.4												
048	048	43	093	043	+001 -022	3511	-30.2	06.240	08.948	312	090	037	+000 -019	0043.4	2200	100	016	+001 -008		-54.9												
052	037	42	095	041	+002 -021	3405	-34.7	07.241	10.579	310	087	035	-001 -018	0031.7	2400	097	025	+002 -013		-52.0												
057	042	41	098	043	+003 -022	3216	-41.2	09.502	14.271	305	094	029	+001 -015	0023.5	2600	094	023	+001 -012		-48.6												
060	042	40	102	046	+005 -023	2993	-41.9	13.161	19.827	305	097	033	+002 -017																			
065	033	39	099	049	+004 -025	2832	-44.8	16.684	25.453	303	090	025	+000 -013																			
070	030	38	096	053	+003 -027	2667	-46.8	21.333	32.834	302	090	021	+000 -011																			
076	026	37	092	047	+001 -024	2469	-48.6	28.729	44.570	300	090	019	+000 -010																			
083	028	36	090	041	+000 -021	2399	-49.1	31.935	49.655	300	090	019	+000 -010																			
088	030	35	090	037	+000 -019	2316	-50.8	36.228	56.760	299	090	019	+000 -010																			
094	028	34	087	035	-001 -018	2268	-51.2	38.982	61.186	299	090	019	+000 -010																			
100	026	33	090	031	+000 -016	2256	-51.9	39.705	62.517	298	090	019	+000 -010																			
107	023	32	094	029	+001 -015	2225	-53.6	41.646	66.080	297	095	021	+001 -011																			
115	022	31	094	031	+001 -016	2204	-52.5	43.016	67.914	298	095	021	+001 -011																			
122	024	30	097	033	+002 -017	2143	-54.8	47.269	75.416	296	090	017	+000 -009																			
129	021	29	094	029	+001 -015	2118	-57.3	49.153	79.330	295	090	017	+000 -009																			
138	019	28	090	023	+000 -012	2042	-57.2	55.391	89.356	295	090	012	+000 -006																			
147	017	27	090	021	+000 -011	2000	-60.3																									
158	017	26	090	019	+000 -010																											
167	015	25	090	019	+000 -010																											
180	013	24	090	019	+000 -010																											
193	013	23	090	019	+000 -010																											
205	011	22	095	021	+001 -011	2432	-48.8	30.000	46.583	300	090	019	+000 -010																			
222	010	21	090	016	+000 -008	2702	-46.2	20.000	30.704	302	090	021	+000 -011																			
237	009	20	090	008	+000 -004	3170	-41.3	10.000	15.025	305	094	029	+001 -015																			
						3413	-33.6	07.000	10.180	310	087	035	-001 -018																			
						3659	-26.6	05.000	07.064	319	092	045	+000 -023																			
						4343	-13.7	02.000	02.685	323	092	045	+001 -023																			
						4871	-07.6	01.000	01.312	327	078	095	-010 -048																			

CONSTANT PRESSURE LEVEL DATA

(HEIGHT IN GEOPOTENTIAL METERS)

2101	-57.3	50.000	80.692	295	090	016	+000	-008
2432	-48.8	30.000	46.583	300	090	019	+000	-010
2702	-46.2	20.000	30.704	302	090	021	+000	-011
3170	-41.3	10.000	15.025	305	094	029	+001	-015
3413	-33.6	07.000	10.180	310	087	035	-001	-018
3659	-26.6	05.000	07.064	315	092	045	+001	-023
4343	-13.7	02.000	02.685	323	092	045	+001	-023
4871	-07.6	01.000	01.312	327	078	095	-010	-048

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. WOK-3A
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL .. 84 SEC.
 TYPE OF LAUNCHER.. 12 FT. TUBULAR
 LAUNCHER SETTING.. 100 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 10 SECONDS 10.424 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 84 SECONDS 55.169 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 84 SECONDS 55.169 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1.800 SECONDS 17.038 METERS ALTITUDE
 APOGEE.. 91 SECONDS 56.388 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
 TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NORMAL
 GROUND EQUIPMENT TYPE.. W 8 PORTABLE 403 MHZ RECORDER-RECEIVER
 TELEMETRY FREQUENCY.. 395 MHZ
 TELEMETRY QUALITY.. GOOD
 TELEMETRY DATA RECEIVED FROM 140 SECONDS 52.970 METERS ALTITUDE
 TO 1.436 SECONDS 20.000 METERS ALTITUDE

REMARKS

NONE
 THERMODYNAMICS BASE DATA.. PRESSURE 59.2 MB
 ALTITUDE 20.000 METERS
 TEMPERATURE -57.4 DEG. C

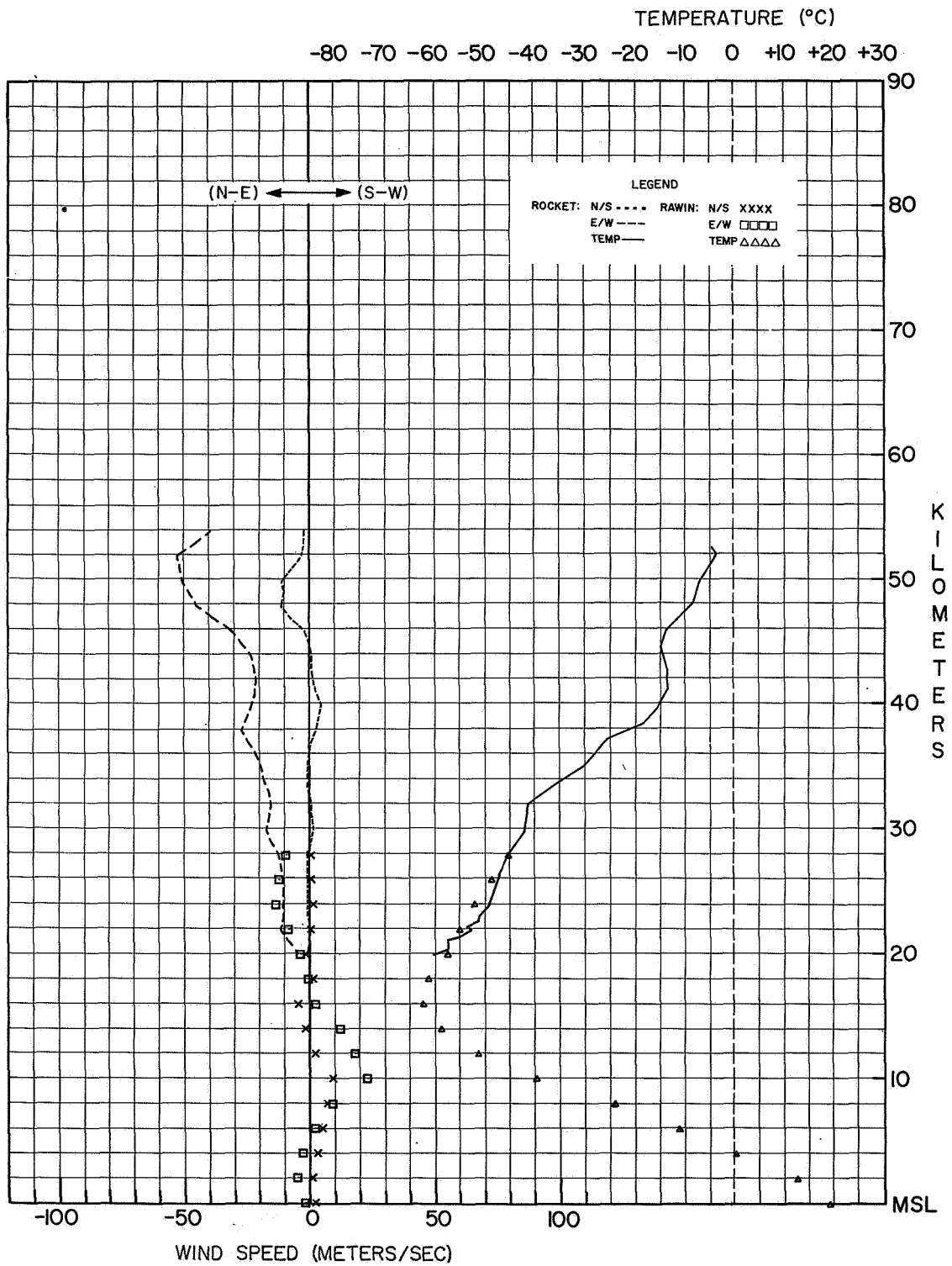
RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
 GROUND EQUIPMENT TYPE.. GMD-18
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1.200 GRAMS
 FREE LIFT.. 1.300 GRAMS
 ASCENSION RATES.. SFC-400MB = 260 M/MINUTE
 400MB-TOP = 294 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1017.2 MB
 TEMPERATURE.. 20.6 DEG. C
 RELATIVE HUMIDITY.. 90 %
 VISIBILITY.. 4 KM
 SURFACE WIND.. 160 DEG 6 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 4 OCTAS
 LOW.. NONE
 MIDDLE.. 1 OCTAS/AC
 HIGH.. 5 OCTAS/C1
 TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. GROUND FOG
 WIND AT ROCKET LAUNCH

SFC. 175 DEG/2KTS, 50 FT. 162 DEG/3KTS
 100 FT. 180 DEG/4KTS, 200 FT. 166 DEG/8KTS,
 250 FT. 162 DEG/9KTS.



STATION (NASA) WALLOPS ISLAND, VA. ROCKET TIME: 0236 LST 0736 GCT
 DATE: 7 AUGUST, 1966 ROCKET MOTOR TYPE: JUDI I

PAYLOAD TYPE: WOX-3A
 RADIOSONDE TYPE: 1680 MHZ

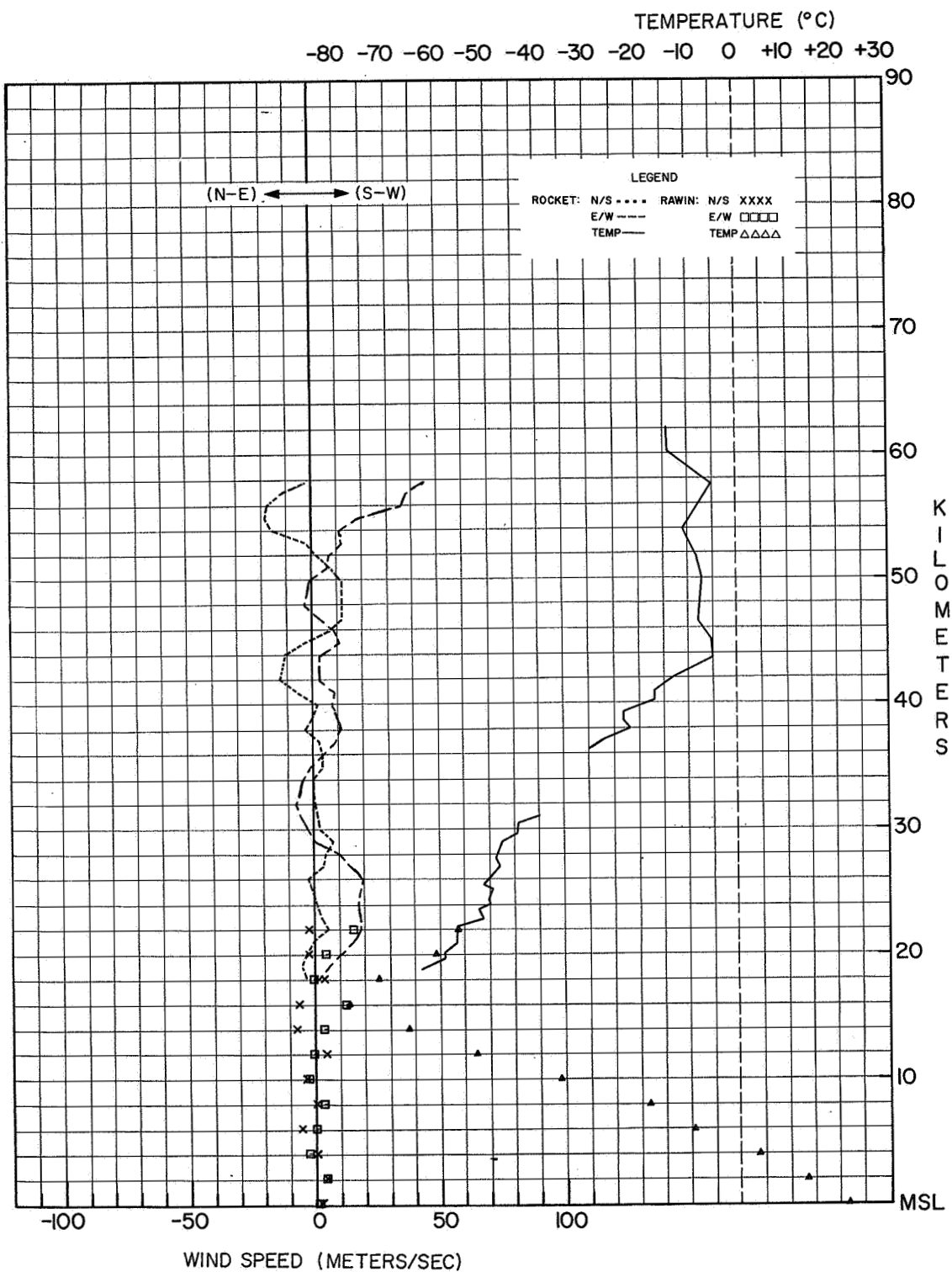
RP STATION NAME DATE ROCKET RAWINSONDE
(CNAE) NATAL, BRAZIL Z LAUNCH TIME Z RELEASE TIME
82599 9°55' S 35°10' W ALT. 43 M. AUGUST 7, 1966 0758 0250

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	POLAR		WIND		ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR		WIND		PRESSURE	ALT	POLAR		WIND		RH	TEMP						
TENTHS	VEL	TENS	DEG	KTS	N-S	E-W	OF	DEG C	MB	G M	OF	DEG	KTS	N-S	E-W	MB	TENS	DEG	KTS	N-S	E-W	%	DEG C						
MINUTE	M/S	OF					METERS				SOUND						METERS												
030	111	58	273	088	-002	+045	6218	-14.6	00.173	00.234	322					1007.0	0004	210	004	+002	+001	83	+21.7						
032	111	57	289	076	-013	+037	6044	-14.3	00.217	00.292	323					0802.0	0200	220	011	+004	+004	72	+13.3						
033	111	56	298	077	-019	+035	5782	-05.6	00.303	00.395	328	275	086	-004	+044	0630.0	0400	100	005	+000	-003	49	+03.7						
035	083	55	320	051	-020	+017	5419	-11.3	00.481	00.640	324	329	041	-018	+011	0489.0	0600	360	012	-006	+000		-09.5						
037	083	54	330	038	-017	+010	5206	-08.6	00.631	00.831	326	261	012	-001	+006	0377.0	0800	270	005	+000	-003		-18.5						
039	083	53	285	022	-003	+011	5023	-07.5	00.796	01.044	327	180	019	+010	-000	0285.0	1000	040	009	-004	-003		-36.3						
041	083	52	261	012	+001	+006	4679	-08.2	01.231	01.619	326	197	020	+010	+003	0211.0	1200	170	008	+004	-001		-53.2						
043	067	51	216	017	+007	+005	4535	-05.7	01.477	01.924	328	276	018	-001	+009	0153.0	1400	340	017	-008	+003		-66.8						
046	067	50	170	022	+011	-002	4383	-05.3	01.789	02.327	328	351	024	-012	+002	0109.0	1600	300	028	-007	+012		-78.8						
048	067	49	165	022	+011	-003	4218	-13.6	02.209	02.965	323	352	027	-014	+002	0077.0	1800	160	006	+003	-001		-72.8						
051	067	48	160	023	+011	-004	4115	-17.1	02.528	03.439	321	319	021	-008	+007	0055.0	2000	310	009	-003	+004		-61.3						
053	067	47	190	022	+011	+002	4045	-17.1	02.772	03.771	321	293	019	-003	+007	0040.0	2200	280	029	-003	+015		-56.8						
056	048	46	233	019	+006	+008	3950	-23.4	03.146	04.389	317	270	016	+000	+008														
060	048	45	292	021	-004	+010	3886	-23.4	03.430	04.785	317	276	018	-001	+009														
063	056	44	351	024	-012	+002	3816	-21.9	03.770	05.227	318	292	021	-004	+010														
066	048	43	351	026	-013	+002	3728	-27.2	04.248	06.018	314	270	017	+000	+009														
070	042	42	352	027	-014	+002	3594	-32.3	05.117	07.401	311	225	008	+003	+003														
074	042	41	311	021	-007	+005	3530	-31.8	05.597	08.078	311	162	006	+003	-001														
078	037	40	262	014	+001	+007	MISSING DATA																						
083	030	39	276	018	-001	+009	3118	-39.9	10.066	15.034	306	099	012	+001	-006														
089	030	38	292	021	-004	+010	3051	-44.7	11.105	16.934	303	101	010	+001	-005														
094	030	37	256	016	+002	+008	2969	-44.8	12.539	19.130	303	153	009	+004	-002														
100	028	36	225	008	+003	+003	2902	-48.0	13.858	21.443	301	180	014	+007	-000														
106	026	35	146	007	+003	-002	2774	-49.2	16.809	26.147	300	250	023	+004	+011														
113	022	34	079	010	-001	-005	2710	-48.3	18.514	28.684	301	258	028	+003	+014														
121	020	33	081	012	-001	-006	2557	-51.7	23.355	36.741	298	276	037	-002	+019														
130	019	32	090	016	+000	-008	2524	-49.9	24.560	38.324	300	273	035	-001	+018														
139	018	31	099	012	+001	-006	2448	-50.7	27.570	43.176	299	270	033	-000	+017														
149	016	30	124	007	+002	-003	2405	-50.3	29.436	46.015	299	270	033	-000	+017														
160	014	29	180	014	+007	+000	2362	-52.7	31.437	49.679	298	267	033	+001	+017														
173	013	28	248	021	+004	+010	2286	-51.7	35.327	55.574	298	264	035	+002	+018														
185	012	27	258	028	+003	+014	2225	-57.0	38.831	62.584	295	257	036	+004	+018														
201	010	26	279	037	-003	+019	2088	-57.1	48.151	77.641	295	274	027	-001	+014														
218	010	25	273	035	-001	+018	2009	-59.6	54.554	88.995	293	292	021	-004	+010														
236	008	24	270	033	+000	+017	1963	-59.5	58.692	95.701	293	302	018	-005	+008														
258	008	23	264	035	+002	+018	1876	-64.2				326	014	-006	+004														
280	007	22	254	036	+005	+018	CONSTANT PRESSURE LEVEL DATA																						
306	006	21	274	029	-001	+015	(HEIGHT IN GEOPOTENTIAL METERS)																						
333	006	20	292	021	-004	+010	2058	-57.8	50.000	80.892	294	279	026	-002	+013														
361	006	19	320	015	-006	+005	2384	-51.0	30.000	47.040	299	270	033	+000	+017														
393	006	18	346	008	-004	+001	2652	-49.3	20.000	31.131	300	266	031	+001	+016														
							3109	-39.8	10.000	14.928	306	099	012	+001	-006														
							3383	-34.3	07.000	10.212	310	079	010	-001	-005														
							3592	-31.6	05.000	07.212	312	233	010	+003	+004														
							4271	-09.5	02.000	02.642	326	351	026	-013	+002														
							4825	-07.8	01.000	01.313	327	165	022	+011	-003														

TECHNICAL DATA

VEHICLE DATA		RADIOSONDE AND BALLOON DATA	
MOTOR TYPE.. ARCAS		RADIOSONDE MANUFACTURER.. BENDIX	
MOTOR PERFORMANCE.. GOOD		RADIOSONDE TYPE.. 1680 MHZ	
PAYLOAD TYPE.. ARCASONDE-1A		TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR	
PAYLOAD PERFORMANCE.. GOOD		PRESSURE SENSOR TYPE.. ANEROID	
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE		GROUND EQUIPMENT TYPE.. GMD-1A	
FUSE DELAY TIME.. PREDICTED.. 110SEC. ACTUAL.. UNKNOWN		BALLOON TYPE.. KAYSAM	
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR		BALLOON SIZE.. 1.000 GRAMS	
LAUNCHER SETTING.. 050 DEG. AZIMUTH 86.0 DEG. ELEVATION		FREE LIFT.. 1.300 GRAMS	
		ASCENSION RATES.. SFC-400MB= 289 M/MINUTE	
		400MB-TOP= 262 M/MINUTE	
RADAR DATA		WEATHER OBSERVATION AT RAWINSONDE RELEASE	
RADAR TYPE.. MPS-19		STATION PRESSURE.. 1.007.0 MB	
MOTOR ACQUISITION.. 10 SECONDS 2.134 METERS ALTITUDE		TEMPERATURE.. 21.7 DEG. C	
MOTOR TRACK DROPPED.. 131 SECONDS 63.794 METERS ALTITUDE		RELATIVE HUMIDITY.. 83%	
PAYLOAD ACQUISITION.. 140 SECONDS 62.423 METERS ALTITUDE		VISIBILITY.. 20 KM	
PAYLOAD TRACK DROPPED.. 2.550 SECONDS 16.996 METERS ALTITUDE		SURFACE WIND.. 210 DEG. 4 KTS	
APOGEE.. 131 SECONDS, 63.794 METERS ALTITUDE		CLOUD TYPE AND AMOUNT.. TOTAL.. 1 OCTAS	
SENSOR AND TELEMETRY DATA		LOW.. SC	
WIND SENSOR.. 15 FT. DIAMETER PARACHUTE		MIDDLE.. NONE	
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR		HIGH.. NONE	
SENSOR FALL RATE.. NOMINAL		TYPE PRECIPITATION.. NONE	
GROUND EQUIPMENT TYPE.. GMD-1A		OBSTRUCTIONS TO VISION.. NONE	
TELEMETRY FREQUENCY.. 1680 MHZ		WIND AT ROCKET LAUNCH	
TELEMETRY QUALITY.. GOOD		21 FT. 190 DEG/06KTS, 51 FT. 190 DEG/06KTS,	
TELEMETRY DATA RECEIVED FROM.. 146 SECONDS 62.180 METERS ALTITUDE		82 FT. 180 DEG/08KTS, 133 FT. 190 DEG/12KTS,	
TO 2.218 SECONDS 18.760 METERS ALTITUDE			
REMARKS			
MISSING TEMPERATURE DATA BETWEEN 31 AND 35 KM DUE TO POWER FAILURE.			
THERMODYNAMICS BASE DATA.. PRESSURE 66.6 MB			
ALTITUDE 18.760 METERS			
TEMPERATURE -64.2 DEG. C			



STATION: (CNAE) NATAL, BRAZIL
DATE: 7 AUGUST, 1966

ROCKET TIME: 0458 LST 0758 GCT
ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCASONDE 1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
 (CNAE) NATAL, BRAZIL Z LAUNCH TIME RELEASE TIME
 02599 5°55' S 35°10' W ALT. 43 M AUGUST 17, 1966 1537 1240

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE											
TIME	FALL	ALT	WIND		COMPONENTS		ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND		COMPONENTS		PRESSURE	ALT	WIND		COMPONENTS		RH	TEMP					
TENTHS	VEL		POLAR		N-S	E-W	TENS	DEG	MB	G M	OF	POLAR		N-S	E-W	MB	TENS	DEG	KTS	N-S	E-W	%	DEG C					
OF A							OF				SOUND						OF											
MINUTE	M/S	KM	DEG	KTS			METERS	DEG			M/S	DEG	KTS				METERS											
032	139	56	279	079	-006	+040										1009.0	0004	130	013	+004	-005	66	+27.2					
033	111	55	277	047	-003	+024										0803.0	0200	162	008	+004	-001	77	+10.6					
035	083	54	097	016	+001	-008										0630.0	0400	220	005	+002	+002	39	+00.0					
037	083	53	096	020	+001	-010										0490.0	0600	103	013	+002	-007		-07.2					
039	083	52	095	023	+001	-012										0377.0	0800	106	037	+005	-018		-20.1					
041	083	51	124	028	+008	-012										0285.0	1000	118	020	+005	-009		-36.5					
043	067	50	043	037	-014	-013										0211.0	1200	220	009	+004	+003		-53.4					
046	067	49	057	039	-011	-017										0153.0	1400	292	008	-002	+004		-66.8					
048	083	48	069	044	-008	-021										0109.0	1600	180	005	+003	-000		-76.8					
050	042	47	073	041	-006	-020										0078.0	1800	170	014	+007	-001		-66.4					
056	048	46	079	040	-004	-020										0056.0	2000	354	013	-007	+001		-62.7					
057	111	45	106	036	+005	-018										0040.0	2200	222	015	+006	+005		-57.4					
059	056	44	111	033	+006	-016										0029.0	2400	255	018	+002	+009		-52.7					
063	048	43	112	031	+006	-015										0022.0	2600	338	007	-003	+001		-49.3					
066	048	42	108	031	+005	-015										0016.0	2800	165	005	+002	-001		-50.1					
070	042	41	106	034	+005	-017										0012.0	3000	052	016	-005	-006		-47.4					
074	037	40	102	038	+004	-019										0009.0	3200	058	031	-008	-014		-40.8					
079	033	39	097	033	+002	-017																						
084	033	38	087	035	-001	-018																						
089	030	37	082	041	-003	-021																						
095	030	36	103	050	+006	-025																						
100	024	35	101	051	+005	-026																						
109	021	34	098	055	+004	-028																						
116	022	33	095	041	+002	-021																						
124	021	32	086	027	-001	-014																						
132	019	31	068	021	-004	-010																						
142	017	30	045	016	-006	-006																						
152	016	29	045	011	-004	-004																						
163	014	28	315	003	-001	+001																						
175	012	27	342	006	-003	+001																						
190	010	26	333	009	-004	+002																						
207	010	25	239	011	+003	+005																						
225	009	24	247	015	+003	+007																						
244	008	23	231	012	+004	+005																						
265	008	22	219	012	+005	+004																						
286	007	21	202	010	+005	+002																						
313	006	20	346	008	-004	+001																						
340	006	19	202	010	+005	+002																						
368	006	18	207	013	+006	+003																						

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. ARCASONDE-1A
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
 FUSE DELAY TIME.. PREDICTED.. 110 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
 LAUNCHER SETTING.. 020 DEG. AZIMUTH, 83.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION.. 10 SECONDS 7,162 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 121 SECONDS 62,789 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 137 SECONDS 61,417 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 2,760 SECONDS 15,240 METERS ALTITUDE
 APOGEE.. OCCURRED.. 131 SECONDS 63,550 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
 TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. GMD-1A
 TELEMETRY FREQUENCY.. 1680 MHZ
 TELEMETRY QUALITY.. POOR
 TELEMETRY DATA RECEIVED FROM.. SEE REMARKS

REMARKS

PAYLOAD TELEMETRY RECEIVED LATE AND INTERMITTANTLY
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. BENDIX
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID
 GROUND EQUIPMENT TYPE.. GMD-1A
 BALLOON TYPE.. KAYSAM
 BALLOON SIZE.. 1,000 GRAMS
 FREE LIFT.. 1,300 GRAMS
 ASCENSION RATES.. SFC-400MB= 292 M/MINUTE
 400MB-TOP= 292 M/MINUTE

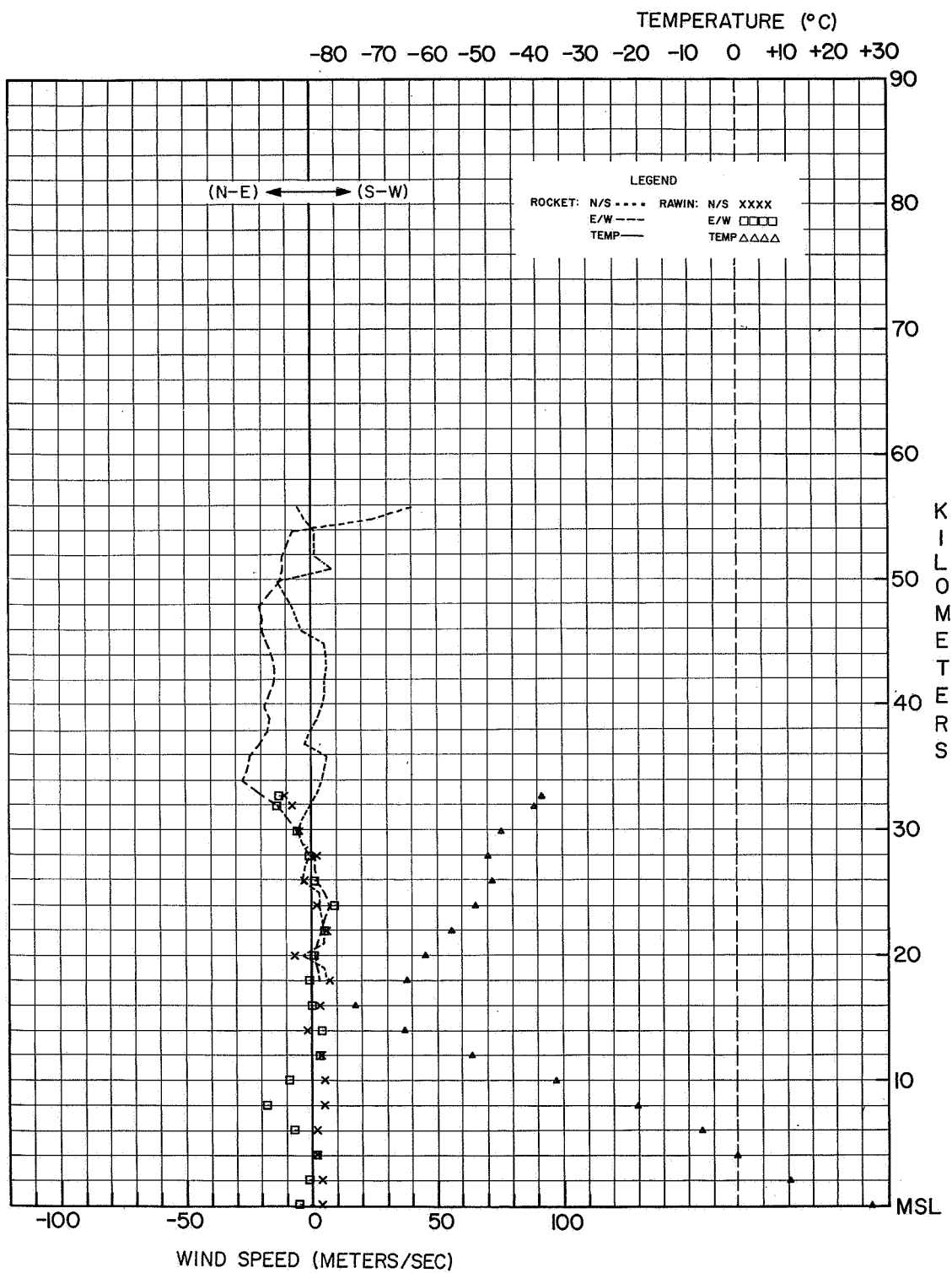
WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1009.0 MB
 TEMPERATURE.. 27.2 DEG C
 RELATIVE HUMIDITY.. 66%
 VISIBILITY.. 20 KM
 SURFACE WIND.. 130 DEG 13 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 3 OCTAS
 LOW.. SC
 MIDDLE.. NONE
 HIGH.. NONE

TYPE PRECIPITATION.. NONE
 OBSTRUCTION TO VISION.. NONE

WIND AT ROCKET LAUNCH

21 FT. 130 DEG/14KTS, 29 FT. 150 DEG/15KTS,
 51 FT. 140 DEG/16KTS, 82 FT. 120 DEG/23KTS,
 133 FT. 150 DEG/23KTS



STATION: (CNAE) NATAL, BRAZIL
DATE: 17 AUGUST, 1966

ROCKET TIME: 1237 LST 1537 GCT
ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCASONDE 1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(CNIE) CHAMICAL ARGENTINA LAUNCH RELEASE
Z TIME Z
87320 30°22' S 66°17' W ALT. 457 M AUGUST 17, 1966 1630 1515

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	RH %	TEMP DEG C					
031	139	54	243	063	+015 +029	4410	-01.5	01.828	02.344	330	266	060	+002 +031	0958.3	0046	090	008	-000 -004	35	+14.2					
032	111	53	241	073	+018 +033	4160	-11.5	02.507	03.338	324	264	039	+002 +020	0797.0	0200	280	009	-001 +005	34	+10.9					
034	083	52	259	040	+004 +020	4080	-16.0	02.782	03.769	321	267	039	+001 +020	0626.0	0400	330	013	-006 +003	10	+00.9					
036	083	51	270	035	+000 +018	4020	-14.8	03.009	04.058	322	265	041	+002 +021	0486.0	0600	318	040	-015 +014	10	-13.7					
038	083	50	264	053	+003 +027	3945	-20.7	03.323	04.585	319	260	043	+004 +022	0352.0	0800	300	070	-018 +031	13	-34.8					
040	056	49	256	070	+009 +035	3865	-21.3	03.698	05.116	318	255	046	+006 +023	0277.0	1000	296	131	-030 +061	15	-40.8					
044	048	48	258	074	+008 +037	3640	-33.0	05.036	07.306	311	251	041	+007 +020	0205.0	1200	298	098	-024 +045		-52.0					
047	056	47	270	064	+000 +033	3600	-31.5	05.327	07.679	312	253	041	+006 +020	0151.0	1400	300	084	-022 +037		-59.9					
050	067	46	267	066	+002 +034	3525	-34.1	05.919	08.626	310	255	038	+005 +019	0108.1	1600	280	073	-007 +037		-67.2					
052	056	45	263	067	+004 +034	3395	-29.5	07.101	10.153	313	245	032	+007 +015	0078.2	1800	330	020	-009 +005		-64.0					
056	048	44	266	060	+002 +031	3385	-30.2	07.200	10.325	312	245	032	+007 +015	0056.7	2000	278	026	-002 +013		-59.5					
059	048	43	270	045	+000 +023	3320	-25.6	07.875	11.083	315	254	034	+005 +017	0032.8	2200	290	033	-006 +016		-56.2					
063	042	42	264	039	+002 +020	3175	-25.4	09.600	13.498	316	262	053	+004 +027	0029.8	2400					-55.9					
067	037	41	267	039	+001 +020	2955	-32.3	13.019	18.832	311	265	062	+003 +032	0021.9	2600					-52.6					
072	033	40	265	041	+002 +021	2920	-32.3	13.676	19.781	311	267	064	+002 +033	0016.2	2800					-49.2					
077	037	39	258	046	+005 +023	2730	-43.2	17.975	27.231	304	274	055	-002 +028												
081	033	38	249	050	+009 +024	2690	-42.6	19.064	28.806	304	276	053	-003 +027												
087	028	37	245	041	+009 +019	2635	-45.3	20.679	31.616	303	279	047	-004 +024												
093	026	36	253	041	+006 +020	2500	-45.0	25.274	38.591	303	285	038	-005 +019												
100	028	35	255	038	+005 +019	2455	-50.3	27.043	42.274	299	282	038	-004 +019												
105	026	34	245	032	+007 +015	2365	-50.9	31.017	48.618	299	281	032	-003 +016												
113	020	33	257	036	+004 +018	2315	-56.8	33.510	53.959	295	286	028	-004 +014												
122	021	32	263	047	+003 +024	2245	-57.7	37.406	60.483	294	285	022	-003 +011												
129	021	31	261	073	+006 +037	2075	-52.9	48.746	77.102	298	264	020	-001 +010												
138	019	30	263	061	+004 +031	2015	-60.5	53.556	87.736	292	275	023	-001 +012												
147	020	29	267	064	+002 +033	1737	-60.1																		
155	018	28	272	058	-001 +030																				
166	014	27	276	053	-003 +027																				
179	013	26	282	046	-005 +023																				
191	012	25	285	038	-005 +019	2052	-54.9	50.000	79.602	296	270	019	+000 +010												
206	011	24	276	035	-002 +018	2379	-50.7	30.000	46.991	299	277	033	-002 +017												
220	012	23	287	026	-004 +013	2647	-44.2	20.000	30.427	303	279	049	-004 +025												
234	011	22	283	018	-002 +009	3134	-26.2	10.000	14.107	315	261	061	+005 +031												
249	010	21	257	018	-002 +009	3388	-29.9	07.000	10.025	313	245	032	+007 +015												
267	009	20	279	024	-002 +012	4318	-32.7	05.000	07.244	311	251	041	+007 +020												
							-04.0	02.000	02.589	329	268	053	+001 +027												

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. 92 SEC.
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 040 DEG AZIMUTH, 85.0 DEG ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 7 SECONDS 6,096 METERS ALTITUDE
MOTOR TRACK DROPPED.. 92 SECONDS 61,448 METERS ALTITUDE
PAYLOAD ACQUISITION.. 108 SECONDS 60,960 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1,875 SECONDS 17,370 METERS ALTITUDE
APOGEE.. 99 SECONDS, 61,570 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ PORTABLE RECEIVER RECORDER
TELEMETRY FREQUENCY.. 403 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM 108 SECONDS, 60,960 METERS ALTITUDE
TO 1,875 SECONDS, 17,370 METERS ALTITUDE

REMARKS

15 KM OF TM DATA MISSED FROM TOP DUE TO PAYLOAD OUT OF REGIME.
GOOD TEMPERATURE INFORMATION FROM 45 KM TO LOW LEVELS
THERMODYNAMICS BASE DATA.. PRESSURE 87.7 MB
ALTITUDE 17,370 METERS
TEMPERATURE -60.1 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. VAISALA
RADIOSONDE TYPE.. VAISALA
TEMPERATURE ELEMENT TYPE.. BIMETAL
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. VAISALA
BALLOON TYPE.. TOTEX
BALLOON SIZE.. 800 GRAMS
FREE LIFT.. 2,200 GRAMS
ASCENSION RATES.. SFC-400MB = 400 M/MINUTE
400MB-TOP = 508 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

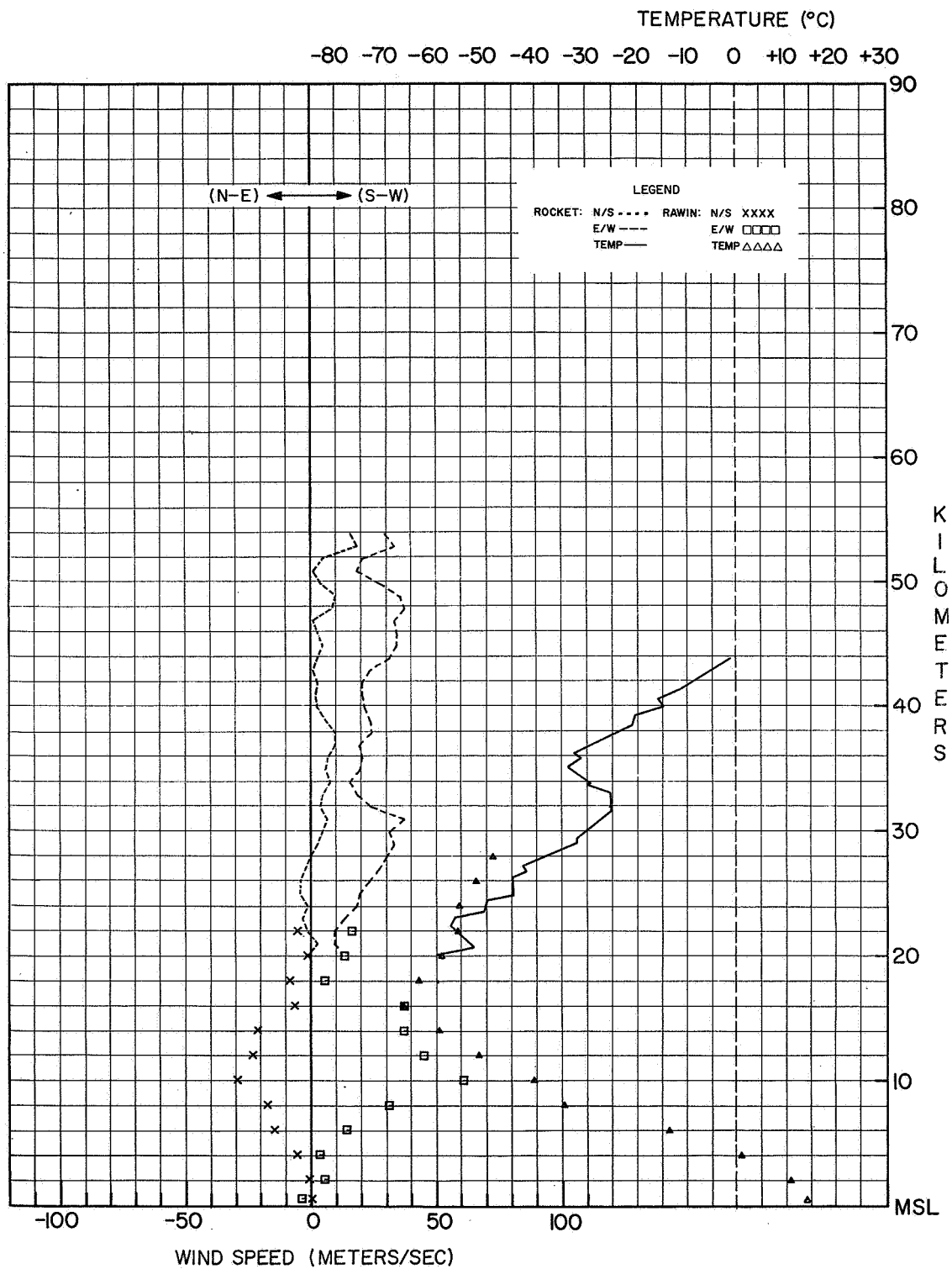
STATION PRESSURE.. 958.3 MB
TEMPERATURE.. 14.2 DEG. C
RELATIVE HUMIDITY.. 35%
VISIBILITY.. 10 KM
SURFACE WIND.. 90 DEG. 8 KTS.
CLOUD TYPE AND AMOUNT.. TOTAL.. 2 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. C1

TYPE PRECIPITATION.. NONE

OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

SFC. 90 DEG/8KTS



STATION: CNIE CHAMICAL, ARGENTINA ROCKET TIME: 1230 LST 1630 OCT
DATE: 17 AUGUST, 1966 ROCKET MOTOR TYPE: JUDI I

PAYLOAD TYPE: MOX-1A
RADIOSONDE TYPE: VAISALA

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WALLOPS ISLAND, VIRGINIA LAUNCH TIME RELEASE TIME
Z Z
72402 37°51' N 75°29' W ALT. 3 M AUGUST 17, 1966 2340 0155-18

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S	E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M ⁻³	SPEED OF SOUND	POLAR DEG	WIND KTS	COMPONENTS MPS N-S	E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S	E-W	RH %	TEMP DEG C						
029	083	54	097	098	+006	-050	5425	-00.4	00.556	00.721	329					1016.0	0000	240	006	+002	+003	79	+21.1						
031	083	53	095	090	+004	-046	5182	+00.2	00.751	00.957	331	087	080	-002	-041	0808.0	0200	315	010	-004	+004	23	+15.6						
033	083	52	087	082	-002	-042	5032	-00.4	00.904	01.154	331	085	066	-003	-034	0635.0	0400	280	010	-001	+005	15	+07.7						
035	067	51	087	072	-002	-037	4822	+02.5	01.169	01.477	333	083	045	-003	-023	0494.0	0600	290	020	-004	+010	16	-06.1						
038	067	50	085	062	-003	-032	4654	+00.2	01.437	01.831	331	083	049	-003	-025	0382.0	0800	294	023	-005	+011	19	-20.7						
040	067	49	084	053	-003	-027	4426	-00.2	01.903	02.429	331	083	061	-004	-031	0288.0	1000	293	024	-005	+011	20	-37.0						
043	048	48	083	043	-003	-022	4316	-05.8	02.183	02.844	328	092	053	+001	-027	0214.0	1200	321	029	-012	+009		-54.1						
046	048	47	083	047	-003	-024	4218	-03.8	02.469	03.193	329	090	041	+000	-021	0156.0	1400	292	020	-004	+010		-62.8						
050	048	46	083	051	-003	-026	3871	-23.8	03.877	05.417	317	085	043	-002	-022	0113.0	1600	315	017	-006	+006		-62.4						
053	056	45	084	057	-003	-029	3633	-27.4	05.364	07.604	314	077	026	-003	-013	0083.0	1800	061	009	-002	-004		-61.4						
056	048	44	083	063	-004	-032	3572	-29.3	05.835	08.336	313	081	024	-002	-012	0059.0	2000	080	011	-001	-006		-56.1						
060	042	43	094	051	+002	-026	3469	-26.8	06.725	09.510	315	099	024	+002	-012	0043.6	2200	079	020	-002	-010		-53.4						
064	042	42	090	039	+000	-020	3267	-34.5	08.912	13.010	310	090	029	+000	-015	0032.0	2400	084	021	-001	-011		-51.1						
068	037	41	090	045	+000	-023	3085	-38.3	11.559	17.146	307	086	031	-001	-016	0023.7	2600	085	027	-001	-014		-49.0						
073	033	40	090	049	+000	-025	2926	-39.7	14.545	21.706	306	086	031	-001	-016	0017.5	2800	080	026	-002	-013		-46.9						
078	028	39	088	045	-001	-023	2835	-44.0	16.618	25.263	303	090	025	-000	-013	0013.0	3000	086	031	-001	-016		-44.0						
085	028	38	081	039	-003	-020	2469	-49.0	28.720	44.636	300	085	023	-001	-012	0009.7	3200	090	038	-000	-020		-39.0						
090	028	37	079	032	-003	-016	2000	-55.3								0007.3	3400												
097	026	36	076	024	-003	-012	CONSTANT PRESSURE LEVEL DATA																						
103	024	35	099	024	+002	-012	(HEIGHT IN GEOPOTENTIAL METERS)																						
111	021	34	104	024	+003	-012	2132	-53.4	50.000	79.274	297	090	016	-000	-008														
119	020	33	094	027	+001	-014	2440	-49.3	30.000	46.681	300	081	024	-002	-012														
137	017	31	086	031	-001	-016	2721	-45.4	20.000	30.592	303	090	025	+000	-013														
148	016	30	087	033	-001	-017	3176	-36.1	10.000	14.694	309	086	031	-001	-016														
158	014	29	086	029	-001	-015	3425	-27.8	07.000	09.938	314	104	024	+003	-012														
171	012	28	090	023	+000	-012	3670	-26.5	05.000	07.063	315	079	032	-003	-016														
186	010	27	090	025	+000	-013	4358	-02.1	02.000	02.571	330	084	061	-003	-031														
203	009	26	086	027	-001	-014	4918	+00.7	01.000	01.272	332	084	059	-003	-030														
222	009	25	086	025	-001	-013																							
241	008	24	080	022	-002	-011																							
263	007	23	079	020	-002	-010																							
287	007	22	077	018	-002	-009																							
310	006	21	098	014	+001	-007																							
343	005	20	101	010	+001	-005																							

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 120 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 100 DEG. AZIMUTH 76.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 6 SECONDS 6.709 METERS ALTITUDE
MOTOR TRACK DROPPED.. 126 SECONDS 57.455 METERS ALTITUDE
PAYLOAD ACQUISITION.. 150 SECONDS 55.778 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2.280 SECONDS 18.593 METERS ALTITUDE
APOGEE.. 126 SECONDS 57.455 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1B-TMGS
TELEMETRY FREQUENCY.. 1680 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 170 SECONDS 54,254 METERS ALTITUDE
TO 2,060 SECONDS 20,000 METERS ALTITUDE

REMARKS

TEST WAS SUCCESSFUL
THERMODYNAMICS BASE DATA.. PRESSURE 59.0 MB
ALTITUDE 20,000 METERS
TEMPERATURE -56.1 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
PRESSURE EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,500 GRAMS
ASCENSION RATES.. SFC-400MB = 284 M/MINUTE
400MB-TOP = 375 M/MINUTE

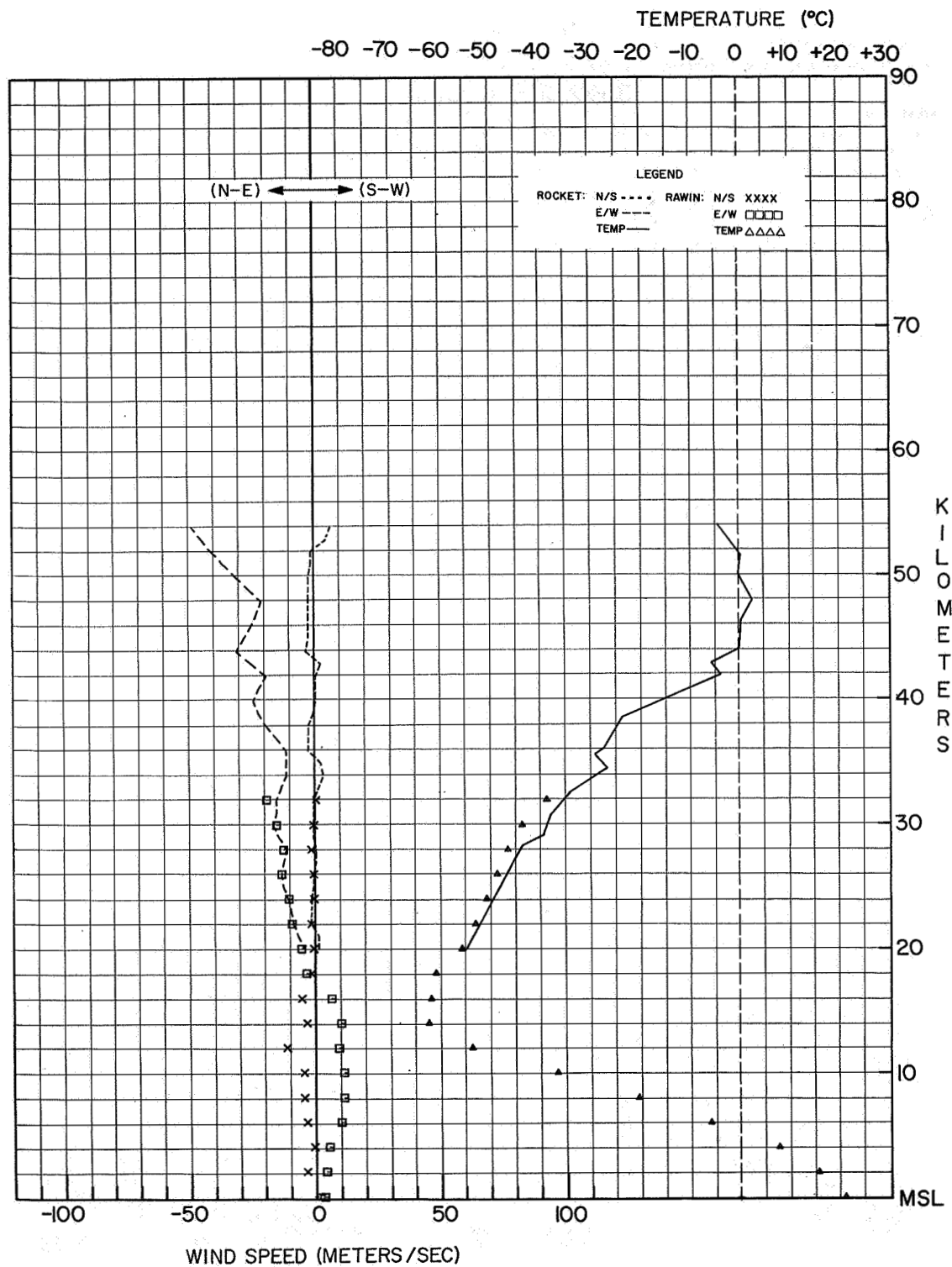
WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1016.0 MB
TEMPERATURE.. 21.1 DEG. C
RELATIVE HUMIDITY.. 79%
VISIBILITY.. 5 KM
SURFACE WIND.. 240 DEG. 6 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. NONE

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. HAZE

WIND AT ROCKET LAUNCH

50 FT. 248 DEG/7KTS,
100 FT. 243 DEG/7KTS, 150 FT. 243 DEG/7KTS,
200 FT. 254 DEG/8KTS, 250 FT. 254 DEG/8KTS,



STATION: (NASA) WALLOPS ISLAND, VA. ROCKET TIME: 1840 LST 2340 GCT
 DATE: 17 AUGUST, 1966 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCASONDE 1A
 RADIOSONDE TYPE: 1680 MHZ

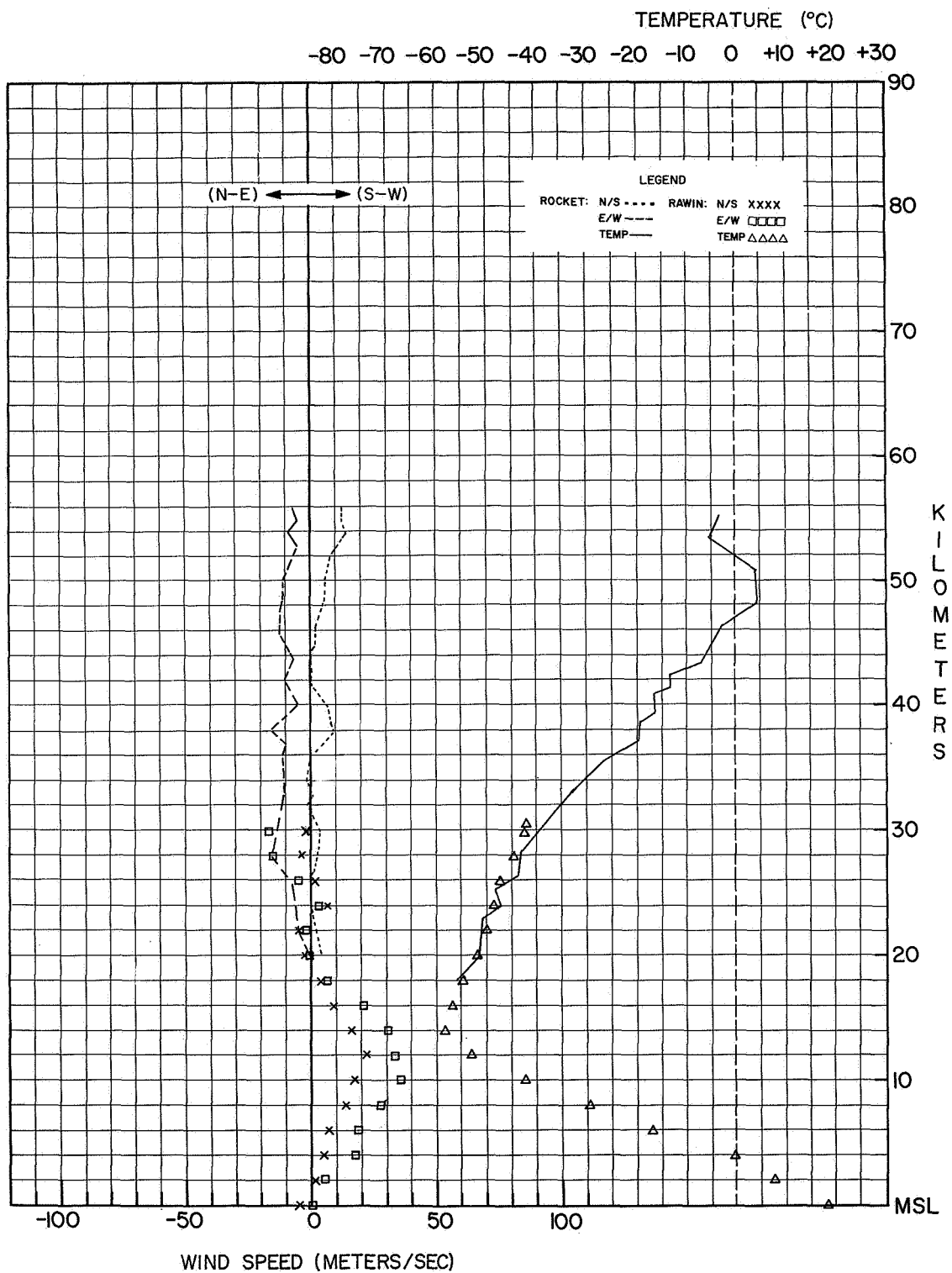
RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WOLLOPS ISLAND, VIRGINIA Z LAUNCH TIME Z RELEASE TIME
72402 37°51' N 75°29' W ALT. 3 M SEPTEMBER 7, 1966 1534 1115

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND		COMPONENTS		ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND		COMPONENTS		PRESSURE	ALT	WIND		COMPONENTS		RH	TEMP						
TENTHS	VEL		POLAR		N-S	E-W	TENS	DEG C	MB	G M	OF	POLAR		N-S	E-W	MB	TENS	POLAR		N-S	E-W	%	DEG C						
OF A		KM	DEG	KTS			OF				SOUND	DEG	KTS				METERS	DEG	KTS				DEG C						
MINUTE	M/S						METERS				M/S																		
030	083	56	146	028	+012	-008	5547	-04.2	00.461	00.597	329	150	027	+012	-007	1020.6	0000	345	010	-005	+001	61	+18.3						
032	083	55	153	026	+012	-006	5371	-05.8	00.575	00.749	328	143	029	+012	-009	0806.0	0200	255	012	+002	+006	66	+07.6						
034	083	54	142	032	+013	-010	5121	+03.4	00.783	00.986	333	121	023	+006	-010	0628.0	0400	254	037	+005	+018	29	-00.4						
036	083	53	149	023	+010	-006	4849	+04.1	01.089	01.369	334	107	026	+004	-013	0485.0	0600	249	040	+007	+019	30	-16.8						
038	083	52	131	021	+007	-008	4663	-02.8	01.369	01.764	330	099	026	+002	-013	0370.0	0800	243	062	+014	+028	27	-29.6						
040	083	51	121	023	+006	-010	4371	-07.4	01.976	02.591	327	083	016	+001	-008	0277.0	1000	244	077	+017	+036		-42.6						
042	067	50	113	025	+005	-012	4273	-13.4	02.241	03.005	323	090	019	-000	-010	0205.0	1200	238	079	+022	+034		-53.2						
045	056	49	113	025	+005	-012	4176	-13.3	02.541	03.407	323	090	019	-000	-010	0149.0	1400	242	068	+016	+031		-56.7						
048	067	48	107	026	+004	-013	4115	-16.8	02.752	03.740	321	104	016	+002	-008	0109.0	1600	247	045	+009	+021		-57.0						
050	067	47	099	026	+002	-013	3965	-16.6	03.353	04.553	321	189	012	+006	+001	0078.0	1800	239	016	+004	+007		-54.9						
053	056	46	094	025	+001	-013	3883	-19.6	03.737	05.134	319	221	018	+007	+006	0058.5	2000	010	006	-003	-001		-52.2						
056	048	45	096	020	+001	-010	3749	-19.8	04.467	06.142	319	118	029	+007	-013	0043.5	2200	020	010	-005	-002		-50.1						
060	042	44	083	016	+001	-008	3581	-26.8	05.606	07.928	315	085	023	+001	-012	0032.0	2400	027	012	+006	+003		-48.8						
064	042	43	090	017	+000	-009	3322	-33.5	08.037	11.683	310	090	021	-000	-011	0023.5	2600	102	010	+001	-005		-47.7						
068	037	42	085	021	+001	-011	2835	-43.5	16.221	24.606	304	097	031	+002	-016	0017.5	2800	076	031	-004	-015		-44.8						
073	037	41	111	017	+003	-008	2652	-43.9	21.251	32.294	304	090	021	+000	-011	0014.0	3000	082	033	-002	-017		-42.8						
077	033	40	140	015	+006	-005	2545	-49.0	24.937	38.757	300	090	016	-000	-008														
083	030	39	238	025	+007	-011	2414	-47.5	30.381	46.904	301	082	014	-001	-007														
088	030	38	119	036	+009	-016	2316	-50.9	35.241	55.239	299	099	012	+001	-006														
094	028	37	117	022	+005	-010	2000	-52.0	57.162	90.044	298																		
100	024	36	085	023	+001	-012	1798	-56.5																					
108	021	35	085	023	+001	-012																							
116	020	34	080	022	+002	-011																							
125	017	33	090	021	+000	-011																							
136	018	32	081	024	+002	-012																							
144	018	31	094	025	+001	-013																							
155	016	30	102	028	+003	-014																							
165	014	29	101	030	+003	-015																							
178	012	28	097	031	+002	-016																							
193	011	27	095	023	+001	-012																							
208	011	26	084	018	-001	-009																							
223	008	25	090	016	+000	-008																							
250	007	24	082	014	-001	-007																							
272	007	23	099	012	+001	-006																							
297	007	22	112	010	+002	-005																							
323	006	21	135	008	+003	-003																							
355	005	20	166	008	+004	-001																							

TECHNICAL DATA

VEHICLE DATA		RADIOSONDE AND BALLOON DATA	
MOTOR TYPE.. ARCAS		RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.	
MOTOR PERFORMANCE.. GOOD		RADIOSONDE TYPE.. 1680 MHZ	
PAYLOAD TYPE.. ARCASONDE-1A		TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR	
PAYLOAD PERFORMANCE.. GOOD		PRESSURE SENSOR TYPE.. HYPSONOMETER AND ANEROID	
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE		GROUND EQUIPMENT TYPE.. GMD-1B	
FUSE DELAY TIME.. PREDICTED.. 100 SECONDS ACTUAL.. UNKNOWN		BALLOON TYPE.. NEOPRENE	
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR		BALLOON SIZE.. 1,200 GRAMS	
LAUNCHER SETTING.. 135 DEG, AZIMUTH 76.0 DEG, ELEVATION		FREE LIFT.. 1,800 GRAMS	
		ASCENSION RATES.. SFC-400 MB= 272 M/MINUTE	
		400 MB-TOP= 382 M/MINUTE	
RADAR DATA		WEATHER OBSERVATION AT RAWINSONDE RELEASE	
RADAR TYPE.. FPS-16		STATION PRESSURE.. 1020.6 MB	
MOTOR ACQUISITION.. 5 SECONDS 2,133 METERS ALTITUDE		TEMPERATURE.. 18.3 C	
MOTOR TRACK DROPPED.. 148 SECONDS 59,740 METERS ALTITUDE		RELATIVE HUMIDITY.. 61%	
PAYLOAD ACQUISITION.. 150 SECONDS 58,826 METERS ALTITUDE		VISIBILITY.. 13 KM	
PAYLOAD TRACK DROPPED.. 2,520 SECONDS 17,980 METERS ALTITUDE		SURFACE WIND.. 345 DEG, 10 KTS	
APOGEE.. 128 SECONDS 60,350 METERS ALTITUDE		CLOUD TYPE AND AMOUNT.. TOTAL.. 5 OCTAS	
SENSOR AND TELEMETRY DATA		LOW.. 4 OCTAS/SC	
WIND SENSOR.. 15 FT. DIAMETER PARACHUTE		MIDDLE.. 1 OCTAS/AC	
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR		HIGH.. NONE	
SENSOR FALL RATE.. NOMINAL		TYPE OF PRECIPITATION.. NONE	
GROUND EQUIPMENT TYPE.. GMD-1B		OBSTRUCTIONS TO VISION.. NONE	
TELEMETRY FREQUENCY.. 1682 MHZ		WIND AT ROCKET LAUNCH	
TELEMETRY QUALITY.. GOOD		SFC. 360 DEG/12KTS, 50 FT. 354 DEG/10KTS,	
TELEMETRY DATA RECEIVED FROM.. 186 SECONDS 55,470 METERS ALTITUDE		100 FT. -MSG 150 FT. 360 DEG/12KTS,	
TO 2,520 SECONDS 17,980 METERS ALTITUDE		200 FT. 360 DEG/13KTS, 250 FT. 356 DEG/13KTS	
REMARKS			
THERMODYNAMIS BASE DATA..			
PRESSURE 78.2 MB			
ALTITUDE 17,980 METERS			
TEMPERATURE -56.5 DEG. C			



STATION: (NASA)WALLOPS ISLAND, VA. ROCKET TIME: 1034 LST 1534 GCT
DATE: 7 SEPTEMBER, 1966 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCASONDE 1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
 (CNIE) CHAMICAL, ARGENTINA Z LAUNCH TIME Z RELEASE TIME Z
 87320 30°22' S 66°17' W ALT. 457 M SEPTEMBER 8, 1966 1841 1945

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND		COMPONENTS		ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND		COMPONENTS		PRESSURE	ALT	WIND		COMPONENTS		RH	TEMP						
TENTHS	VEL		POLAR		N-S	E-W	TENS	DEG C	MB	G M	OF	POLAR		N-S	E-W	MB	TENS	POLAR		N-S	E-W	%	DEG C						
OF A	M/S	KM	DEG	KTS			OF				SOUND	DEG	KTS				OF	DEG	KTS				DEG C						
MINUTE							METERS				M/S						METERS												
039	056	50	279	132	-011	+067	5130	-02.1	00.776	00.998	330					0963.8	0046	090	008	-000	-004	43	+19.8						
042	056	49	270	103	+000	+053	4920	-00.2	01.006	01.284	331	272	109	-002	+056	0801.0	0200	043	015	-006	-005	65	+05.2						
045	056	48	272	138	-002	+071	4560	-06.2	01.576	02.057	328	270	136	+000	+070	0625.0	0400	338	019	-009	+004	27	-03.4						
048	056	47	272	138	-002	+071	4475	-13.7	01.757	02.360	323	273	130	-003	+067	0482.0	0600	295	046	-010	+021	18	-18.5						
051	056	46	270	138	+000	+071	4225	-16.5	02.436	03.307	321	277	108	-007	+055	0366.0	0800	278	069	-005	+035	15	-30.8						
054	056	45	270	132	+000	+068	4135	-10.9	02.738	03.638	325	278	104	-007	+053	0274.0	1000	274	130	-005	+067	15	-40.6						
057	056	44	282	125	-013	+063	4040	-19.4	03.101	04.257	319	279	102	-008	+052	0202.5	1200	278	106	-008	+054		-52.8						
060	056	43	284	116	-014	+058	3957	-18.4	03.462	04.734	320	277	096	-006	+049	0148.3	1400	292	072	-014	+034		-61.0						
063	048	42	275	105	-005	+054	3823	-25.7	04.145	05.835	315	271	086	-001	+044	0106.5	1600	272	052	-001	+027		-67.4						
067	037	41	279	104	-008	+053	3685	-29.7	05.011	07.171	313	269	080	+001	+041	0077.0	1800	240	013	+003	+006		-62.7						
072	037	40	279	100	-008	+051	3615	-29.0	05.521	07.878	313	264	080	+004	+041	0056.1	2000	311	008	-003	+003		-60.3						
076	042	39	274	092	-003	+047	3480	-32.5	06.664	09.648	311	273	070	-002	+036	0040.7	2200	200	014	+007	+002		-57.9						
080	037	38	271	084	-001	+043	3374	-32.1	07.733	11.176	311	275	064	-003	+033	0029.7	2400						-54.0						
085	030	37	270	080	+000	+041	3354	-34.0	07.954	11.587	310	275	064	-003	+033														
091	030	36	263	080	+005	+041	3291	-32.5	08.693	12.584	311	272	060	-001	+031														
096	028	35	272	072	-001	+037	3002	-41.4	13.150	19.767	305	272	047	-001	+024														
103	026	34	277	067	-004	+034	2697	-41.5	20.535	30.881	305	264	035	+002	+018														
109	024	33	272	060	-001	+031	2643	-45.2	22.236	33.983	303	270	033	+000	+017														
117	022	32	274	053	-002	+027	2544	-47.2	25.779	39.745	301	281	030	-003	+015														
124	021	31	272	053	-001	+027	2455	-46.3	29.453	45.230	302	294	023	-005	+011														
133	020	30	272	047	-001	+024	2302	-52.9	37.147	58.755	298	297	013	-003	+006														
141	019	29	275	043	-002	+022	2092	-56.6	51.476	82.810	295																		
151	016	28	270	039	+000	+020	2038	-54.5																					
162	015	27	264	035	+002	+018																							
173	015	26	273	033	-001	+017																							
184	013	25	290	029	-005	+014																							
198	011	24	307	019	-006	+008																							
215	010	23	297	013	-003	+006																							
230	009	22	261	012	+001	+006																							

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2107	-56.2	50.000	80.294	295
2435	-46.8	30.000	46.166	302
2707	-41.5	20.000	30.076	305
3190	-35.1	10.000	14.635	309
3428	-32.4	07.000	10.128	311
3666	-29.6	05.000	07.153	313
4356	-14.7	02.000	02.696	322
4888	-00.3	01.000	01.277	331

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. WOX 1A
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 040 DEG. AZIMUTH, 86.0 DEG ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION AT 6 SECONDS 7.022 METERS ALTITUDE
 MOTOR TRACK DROPPED.. UNKNOWN
 PAYLOAD ACQUISITION.. UNKNOWN
 PAYLOAD TRACK DROPPED AT 2.160 SECONDS 19.964 METERS ALTITUDE
 APOGEE.. UNKNOWN

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
 TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. 403 MHZ PORTABLE RECORDER-RECEIVER
 TELEMETRY FREQUENCY.. 403 MHZ
 TELEMETRY QUALITY.. GOOD
 TELEMETRY DATA RECEIVED FROM.. 210 SEC. 51,300 METERS ALTITUDE
 TO 1,509 SECONDS 20,380 METERS ALTITUDE

REMARKS

THERMODYNAMICS BASE DATA.. PRESSURE 53.2 MB
 ALTITUDE 20,380 METERS
 TEMPERATURE -54.5 DEG. C

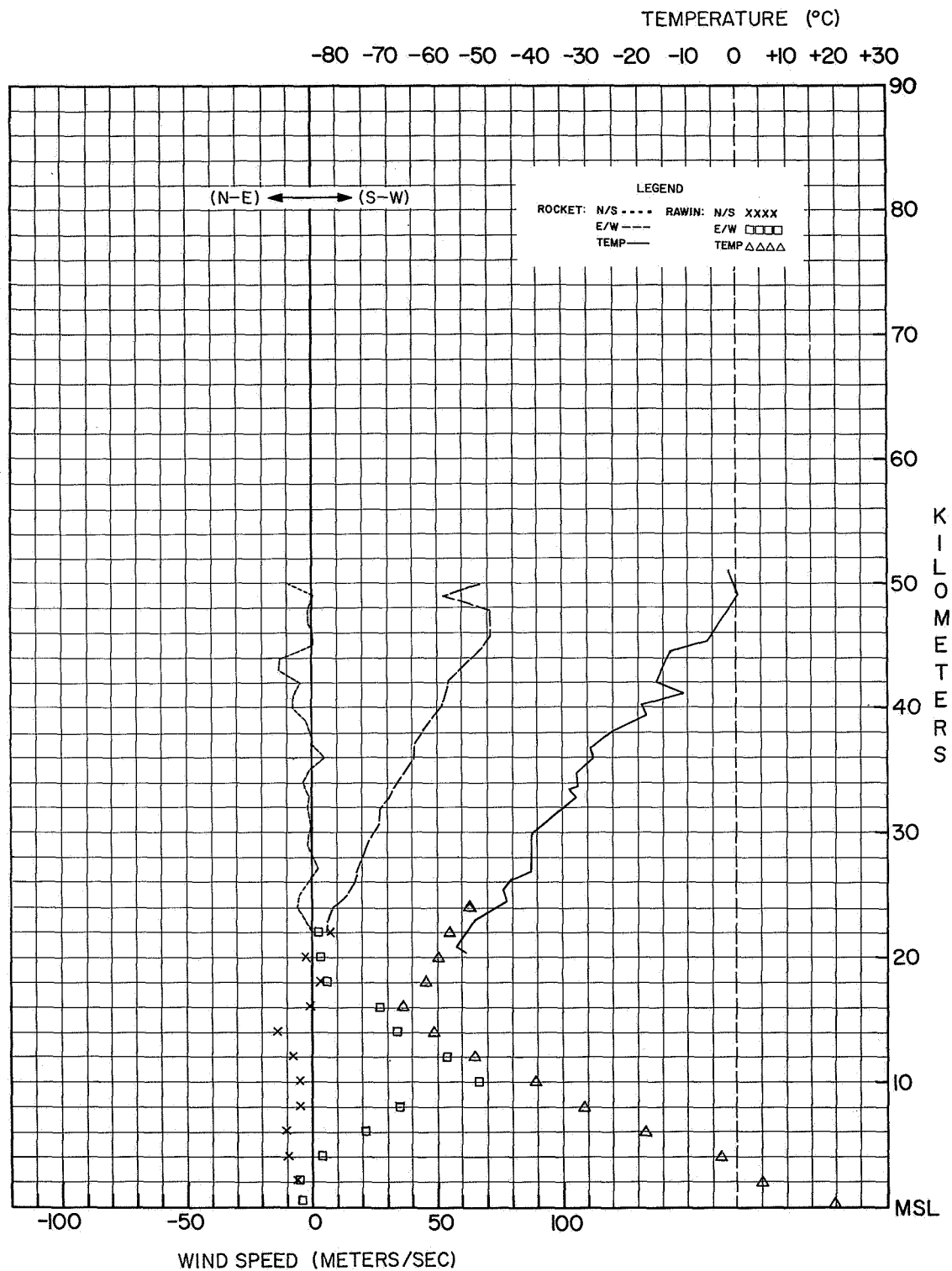
RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. VAISALA
 RADIOSONDE TYPE.. VAISALA
 TEMPERATURE ELEMENT TYPE.. BIMETAL
 PRESSURE SENSOR TYPE.. ANEROID
 GROUND EQUIPMENT TYPE.. VAISALA
 BALLOON TYPE.. TOTEX
 BALLOON SIZE.. 800 GRAMS
 FREE LIFT.. 1,200 GRAMS
 ASCENSION RATES.. SFC-400MB= 379 M/MINUTE
 400MB-TOP= 375 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 963.8 MB
 TEMPERATURE.. 19.8 DEG C
 RELATIVE HUMIDITY.. 43%
 VISIBILITY.. 15 KM
 SURFACE WIND.. 90 DEG. 8 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
 LOW.. SC
 MIDDLE.. AC
 HIGH.. NONE

TYPE PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. NONE
 WIND AT ROCKET LAUNCH
 UNKNOWN



STATION: (CNIE) CHAMICAL, ARGENTINA ROCKET TIME: 14411841GCT
 DATE: 8 SEPTEMBER, 1966 ROCKET MOTOR TYPE: JUDI I

PAYLOAD TYPE: WOX-1A
 RADIOSONDE TYPE: VAISALA

RP STATION NAME DATE ROCKET RAWINSONDE
(CNAE) NATAL, BRAZIL Z LAUNCH TIME Z RELEASE TIME Z
82599 5°55' S 35°10' W ALT. 43 M SEPTEMBER 14, 1966 1539 1218

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE							RH	TEMP
TIME	FALL	ALT	POLAR		WIND		ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR		WIND		PRESSURE	ALT	POLAR		WIND		
TENTHS	VEL		DEG	KTS	N-S	E-W	TENS	DEG C	MB	G M	OF	DEG	KTS	N-S	E-W	MB	TENS	DEG	KTS	N-S	E-W	
OF A		KM					OF				SOUND						OF					
MINUTE	M/S						METERS				M/S						METERS					
037	083	56	260	055	+005	+028										1008.0	0004	140	014	+006	-005	
039	083	55	281	051	-005	+026										0803.0	0200	128	015	+005	-006	
041	083	54	300	054	-014	+024										0631.0	0400	051	017	-006	-007	
043	083	53	293	044	-009	+021										0490.0	0600	332	006	-003	+001	
045	083	52	285	038	-005	+019										0378.0	0800	222	019	+007	+007	
047	083	51	286	028	-004	+014										0286.0	1000	280	027	-002	+014	
049	067	50	292	021	-004	+010										0212.0	1200	287	032	-005	+016	
052	056	49	254	014	+002	+007										0154.0	1400	256	028	+003	+014	
055	067	48	210	016	+007	+004										0110.0	1600	283	003	-000	+002	
057	067	47	191	010	+005	+001										0078.0	1800	171	013	+007	-001	
060	056	46	153	009	+004	-002										0056.0	2000	259	007	+001	+004	
063	048	45	198	012	+006	+002										0041.0	2200	282	020	-002	+010	
067	048	44	216	017	+007	+005										0030.0	2400	257	017	+002	+009	
070	048	43	304	007	-002	+003										0022.0	2600	280	010	-001	+005	
074	037	42	350	022	-011	+002										0016.0	2800	347	009	-005	+001	
079	037	41	000	016	-008	+000										0012.0	3000	210	002	+001	+001	
083	037	40	009	012	-006	-001										0009.0	3200	088	042	-001	-022	
088	033	39	098	014	+001	-007																
093	030	38	120	027	+007	-012																
099	028	37	118	033	+008	-015																
105	028	36	115	037	+008	-017																
111	026	35	099	039	+003	-020																
118	022	34	087	043	-001	-022																
126	020	33	097	031	+002	-016																
135	019	32	110	023	+004	-011																
144	018	31	117	013	+003	-006																
154	015	30	180	006	+003	+000																
166	014	29	270	004	+000	+002																
178	012	28	297	009	-002	+004																
193	011	27	301	011	-003	+005																
207	010	26	297	013	-003	+006																
226	009	25	284	016	-002	+008																
244	009	24	276	018	-001	+009																
265	007	23	281	020	-002	+010																
289	007	22	280	022	-002	+011																
315	006	21	263	016	+001	+008																
344	006	20	243	013	+003	+006																
375	005	19	207	009	+004	+002																
408	004	18	169	010	+005	-001																

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. POOR
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 110 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 014 DEG. AZIMUTH, 84.4 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 10 SECONDS 2,134 METERS ALTITUDE
MOTOR TRACK DROPPED.. 120 SECONDS 66,294 METERS ALTITUDE
PAYLOAD ACQUISITION.. 136 SECONDS 66,294 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2,760 SECONDS 17,000 METERS ALTITUDE
APOGEE.. 128 SECONDS 66,568 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1A
TELEMETRY FREQUENCY.. UNKNOWN
TELEMETRY QUALITY.. POOR
TELEMETRY DATA RECEIVED FROM.. UNKNOWN

REMARKS

DEFECTIVE TM SIGNAL. NO USABLE DATA RECEIVED
THERMODYNAMICS BASE DATA.. PRESSURE N.A.
ALTITUDE N.A.
TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. BENDIX
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. GMD-1A
BALLOON TYPE.. KAYSAH
BALLOON SEIZE.. 1,000 GRAMS
FREE LIFT.. 1,300 GRAMS
ASCENSION RATES.. SFC-400MB= 273 M/MINUTE
400MB-TOP= 312 M/MINUTE

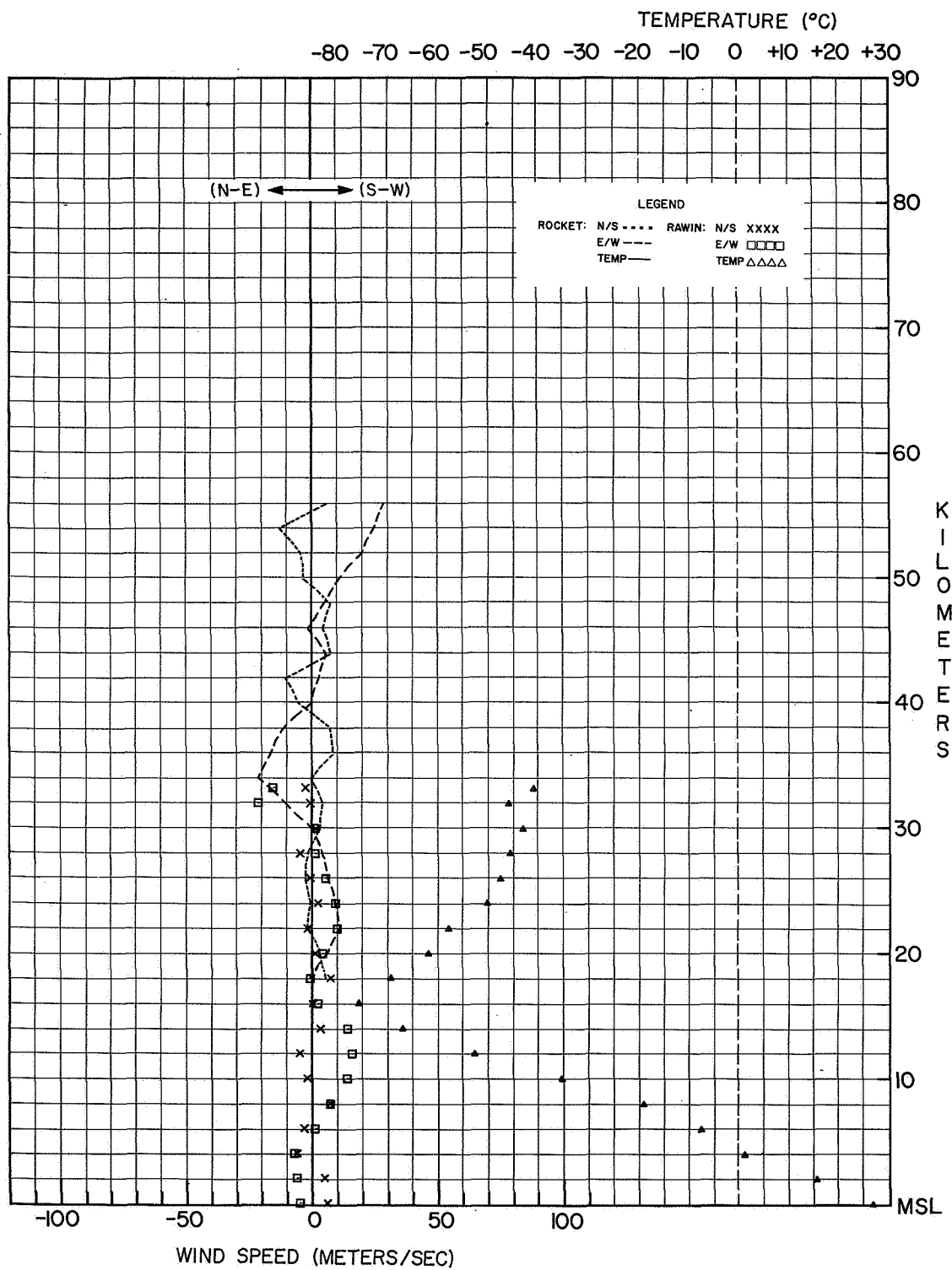
WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1008.0 MB
TEMPERATURE.. 27.2 DEG. C
RELATIVE HUMIDITY.. 72%
VISIBILITY.. 20 KM
SURFACE WIND.. 140 DEG, 14 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 2 OCTAS
LOW.. 2 OCTAS/CU
MIDDLE.. NONE
HIGH.. NONE

TYPE PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

21 FT. 150 DEG/9KTS, 29 FT. 130 DEG/14KTS,
51 FT. 120 DEG/16KTS, 82 FT. 130 DEG/16KTS,
133 FT. 140 DEG/18KTS,



STATION: (CNAE) NATAL, BRAZIL
DATE: 14 SEPTEMBER, 1966

ROCKET TIME: 1239 LST 1539 GCT
ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCASONDE 1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME
(CNIE) CHAMICAL ARGENTINA
BT320 30° 22' S 66° 17' W ALT. 457 M

DATE
Z
SEPTEMBER 14, 1966 1915 1515

ROCKET RAWINSONDE
LAUNCH TIME
RELEASE TIME
Z

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	POLAR		WIND COMPONENTS		ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR		WIND COMPONENTS		PRESSURE	ALT	POLAR		WIND COMPONENTS		RH	TEMP						
TENTHS	VEL		DEG	KTS	N-S	E-W	TENS	DEG C	MB	G M	OF	DEG	KTS	N-S	E-W	MB	METERS	DEG	KTS	N-S	E-W	%	DEG C						
OF A	M/S	KM					OF				SOUND																		
MINUTE							METERS				M/S																		
025	223	57	264	137	+007	+070										0960.0	0046	999	999	-080	+508	29	+26.4						
026	167	56	272	163	-003	+084										0802.0	0200	090	002	-000	-001	45	+12.0						
027	111	55	276	184	-010	+094										0628.0	0400	999	999	-080	+508	17	+00.6						
029	083	54	276	176	-010	+090										0484.0	0600	999	999	-080	+508	10	-16.0						
031	083	53	284	174	-022	+087										0370.0	0800	260	073	+007	+037	10	-31.0						
033	083	52	297	156	-036	+072										0275.0	1000	270	085	+000	+044		-46.1						
035	067	51	283	134	-016	+067										0202.6	1200	264	105	+006	+054		-52.7						
038	067	50	274	131	-005	+067										0148.0	1400	273	088	-002	+045		-59.8						
040	067	49	268	132	+002	+068										0108.0	1600	274	082	-003	+042		-63.0						
043	067	48	265	127	+006	+065										0078.0	1800	293	028	-006	+013		-58.5						
045	056	47	267	130	+003	+067										0056.0	2000	255	029	+004	+014		-61.1						
049	042	46	271	124	-001	+064										0042.0	2200	270	014	+000	+007		-52.2						
053	042	45	270	119	+000	+061																							
057	042	44	279	118	-010	+060																							
061	042	43	293	116	-023	+055																							
065	042	42	284	104	-013	+052																							
069	048	41	279	098	-008	+050																							
072	042	40	276	096	-005	+049																							
077	042	39	270	091	+000	+047																							
080	042	38	278	092	-007	+047																							
085	028	37	279	089	-007	+045																							
092	028	36	278	092	-007	+047																							
097	030	35	281	101	-010	+051																							
103	030	34	278	092	-007	+047																							
108	026	33	284	082	-010	+041																							
116	022	32	288	084	-013	+041																							
123	021	31	285	075	-010	+037																							
132	020	30	286	071	-010	+035																							
140	020	29	283	076	-009	+038																							
149	017	28	281	061	-006	+031																							
160	016	27	284	058	-007	+029																							
170	017	26	288	051	-008	+025																							
180	013	25	287	041	-006	+020																							
195	011	24	277	033	-002	+017																							
209	011	23	263	033	+002	+017																							
224	010	22	274	025	-001	+013																							
241	010	21	270	025	+000	+013																							
257	009	20	274	027	-001	+014																							
278	008	19	290	023	-004	+011																							
301	008	18	276	020	-001	+010																							
320	008	17	275	043	-002	+022																							

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. UNKNOWN
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. 90 SEC. ACTUAL.. 78 SEC.
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 040 DEG. AZIMUTH, 86.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 7 SECONDS 9.448 METERS ALTITUDE
MOTOR TRACK DROPPED.. 80 SECONDS 60.960 METERS ALTITUDE
PAYLOAD ACQUISITION.. 90 SECONDS 61.112 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2.100 SECONDS 16.916 METERS ALTITUDE
APOGEE.. 89 SECONDS 61.173 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ PORTABLE RECEIVER-RECORDER
TELEMETRY FREQUENCY.. 403 MHZ
TELEMETRY QUALITY.. NONE
TELEMETRY DATA RECEIVED.. SEE REMARKS

REMARKS

NO TEMPERATURE DATA RECEIVED
THERMODYNAMICS BASE DATA.. PRESSURE N.A.
ALTITUDE N.A.
TEMPERATURE N.A.

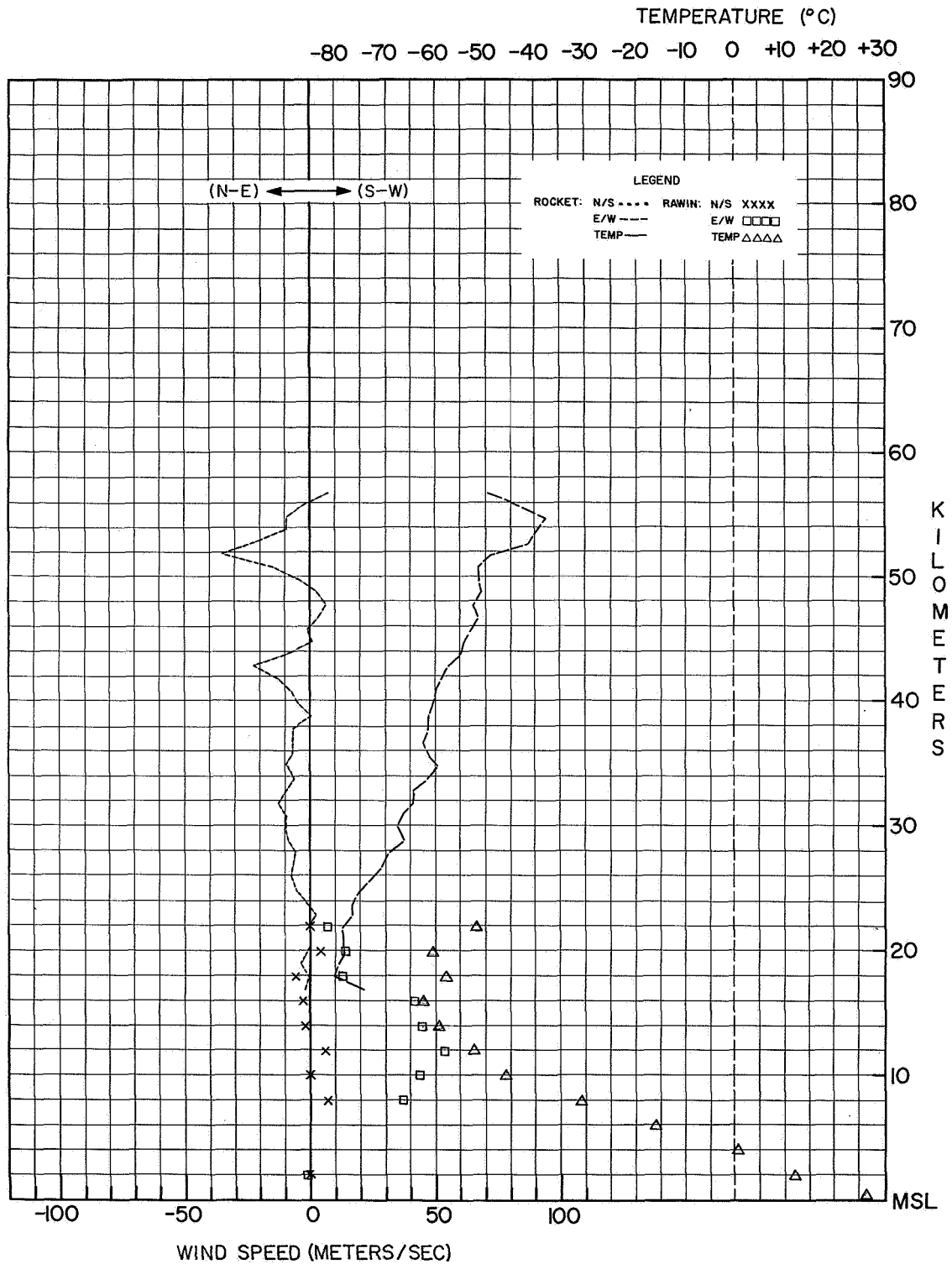
RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. VAISALA
RADIOSONDE TYPE.. VAISALA
TEMPERATURE ELEMENT TYPE.. BIMETAL
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. VAISALA
BALLOON TYPE.. TOTEX
BALLOON SIZE.. 800 GRAMS
FREE LIFT.. 1,600 GRAMS
ASCENSION RATES.. SFC-400 MB= UNKNOWN
400 MB-TOP= UNKNOWN

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 960.0 MB
TEMPERATURE.. 26.4 DEG C
RELATIVE HUMIDITY.. 29%
VISIBILITY.. 15 KM
SURFACE WIND.. CALM
CLOUD TYPE AND AMOUNT.. TOTAL.. 2 OCTAS
LOW.. NONE
MIDDLE.. 2 OCTAS/AC
HIGH.. NONE

TYPE PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE
WIND AT ROCKET LAUNCH
UNKNOWN



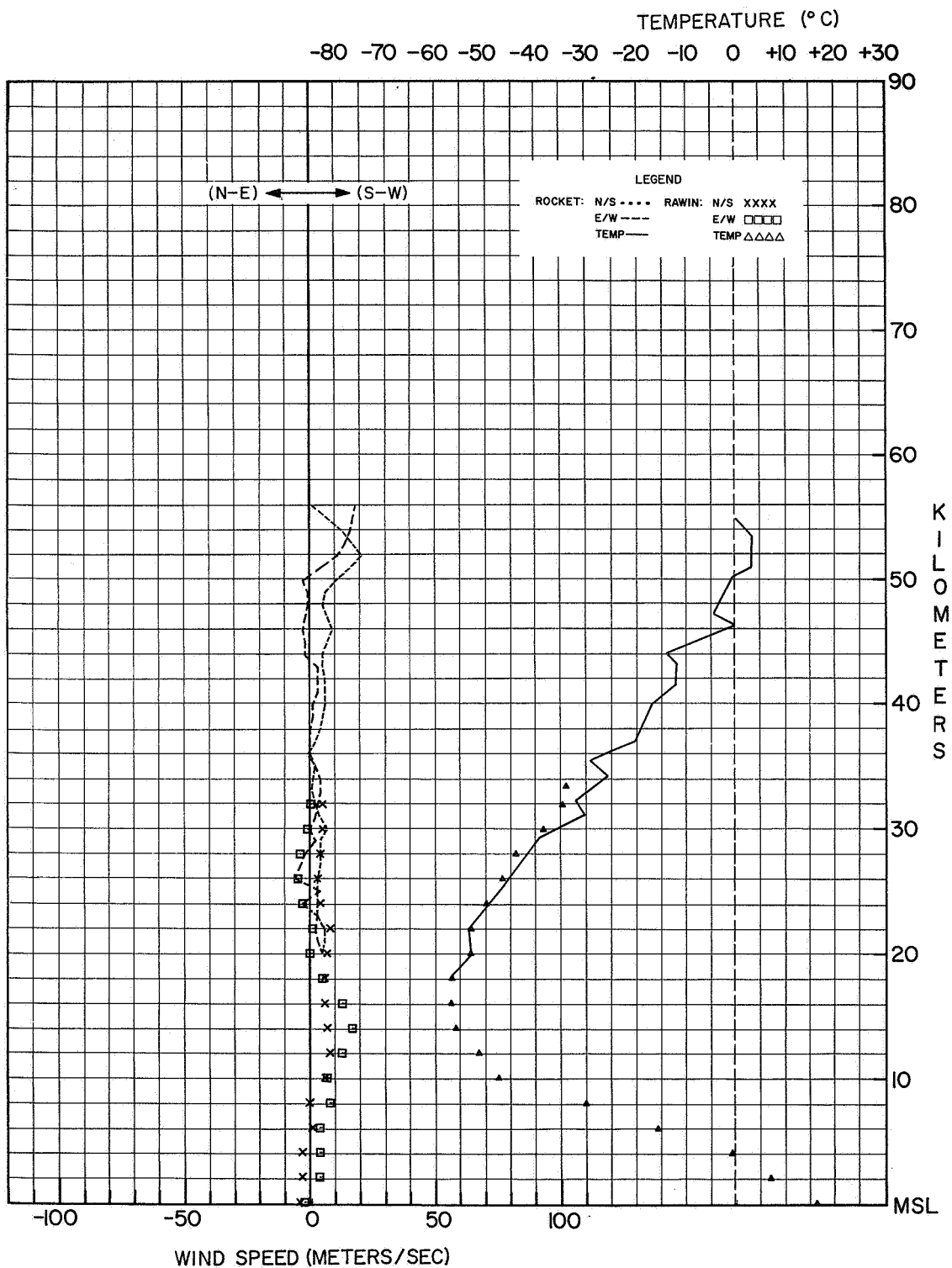
STATION: (CNIE) CHAMICAL, ARGENTINA ROCKET TIME 1515 LST 1915 GCT
DATE: 14 SEPTEMBER, 1966 ROCKET MOTOR TYPE: JUDI 1

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: VAISALA

TABULATED DATA

TECHNICAL DATA

RADIOSONDE AND BALLOON DATA...
 RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MMZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
 GROUND EQUIPMENT TYPE.. GMB-18
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 7.000 GRAMS
 FREE LIFT.. UNKNOWN
 ASCENSION RATES.. SFC-400MB = 301 M/MINUTE
 400MB-TOP = 393 M/MINUTE
 WEATHER OBSERVATION AT RAWINSONDE RELEASE
 STATION PRESSURE.. 1016.6 MB
 TEMPERATURE.. 16.1 DEG. C
 RELATIVE HUMIDITY.. 56%
 VISIBILITY.. 1 KM
 SURFACE WIND.. 30 DEG. 11 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 7 OCTAS
 LOW.. NONE
 MIDDLE.. NONE
 HIGH.. 7 OCTAS/CS
 TYPE PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. NONE
 WIND AT ROCKET LAUNCH
 SFC. 65 DEG/10KTS; 50 FT. 72 DEG/13KTS;
 100 FT. 72 DEG/13KTS; 150 FT. 65 DEG/14KTS;
 200 FT. 72 DEG/13KTS; 250 FT. 63 DEG/13KTS;



STATION: (NASA) WALLOPS ISLAND, VA.
DATE: 16 SEPTEMBER, 1966

ROCKET TIME: 1435 LST 1935 GCT
ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCASONDE 1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
 (CNIE) CHAMICAL ARGENTINA Z LAUNCH RELEASE
 TIME TIME
 87320 30° 22' S 66° 17' W ALT. 457 M SEPTEMBER 21, 1966 1640 1415

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE							RH	TEMP
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	%	DEG C					
021	111	60	270	093	+000 +048	5200	-01.9	00.067	00.086	330	293	104	-021 +049	0975.0	0046	070	005	-001 -002	37	+16.4					
023	111	59	261	167	+013 +085	5066	-01.7	00.079	00.101	330	286	109	-015 +054	0809.0	0200	053	010	-003 -004	70	+02.1					
024	111	58	264	172	+017 +097	4648	-03.2	00.133	00.171	329	278	108	-008 +055	0630.0	0400	236	018	+005 +008	23	-02.2					
026	111	57	261	141	+008 +072	4450	-06.5	00.170	00.222	327	289	089	-015 +043	0486.0	0600	217	032	+013 +010	30	-18.9					
027	111	56	272	160	-003 +082	4349	-09.8	00.193	00.256	325	285	083	-011 +041	0370.0	0800	231	046	+015 +018	50	-34.4					
029	111	55	277	149	-009 +076	4180	-07.3	00.240	00.314	327	289	084	-014 +041	0275.0	1000	235	052	+015 +022		-49.0					
030	111	54	277	112	-007 +057	3950	-13.8	00.322	00.433	323	278	086	-006 +044	0199.8	1200	229	065	+022 +025		-58.9					
032	111	53	286	109	-015 +054	3790	-22.3	00.398	00.553	317	279	079	-006 +040	0146.0	1400	261	060	+005 +031		-61.3					
033	093	52	293	104	-021 +049	3652	-25.2	00.480	00.674	316	268	072	+001 +037	0105.8	1600	248	040	+008 +019		-60.6					
036	067	51	288	114	-018 +056	3580	-32.5	00.530	00.768	311	262	067	+005 +034	0097.0	1800	246	019	+004 +009		-60.3					
038	067	50	279	098	-008 +050	3490	-36.7	00.602	00.887	308	252	057	+009 +028	0056.0	2000	100	007	+001 -004		-56.9					
041	067	49	270	105	+000 +054	3400	-39.8	00.686	01.024	306	244	050	+011 +023	0040.8	2200	049	010	-003 -004		-55.2					
043	067	48	272	117	-002 +060	3242	-45.7	00.864	01.324	302	243	039	+009 +018												
046	056	47	274	113	-004 +058	2943	-44.1	01.347	02.048	303	238	018	+005 +008												
049	056	46	283	106	-012 +053	2842	-47.6	01.565	02.418	301	231	012	+004 +005												
052	056	45	292	094	-018 +045	2622	-45.7	02.175	03.331	302	326	007	-003 +002												
055	056	44	287	081	-012 +040	2525	-50.3	02.517	03.935	299	027	004	-002 -001												
058	056	43	285	084	-011 +042	2415	-48.4	02.973	04.609	301	000	004	-002 -000												
061	048	42	288	086	-014 +042	2315	-52.9	03.463	05.477	298	014	008	-004 -001												
065	042	41	287	079	-012 +039	2160	-57.9	04.409	07.135	294	045	008	-003 -003												
069	042	40	278	088	-006 +045	2026	-58.2	05.447	08.827	294	027	004	-002 -001												
073	037	39	277	084	-005 +043	1850	-59.4	07.198	11.731	293	259	010	+001 +005												
078	037	38	280	079	-007 +040	1835	-64.0	07.374	12.282	290	259	010	+001 +005												
082	033	37	271	076	-001 +039	1715	-62.7	08.955	14.824	291	248	021	+004 +010												
088	028	36	263	068	+004 +035	1665	-61.7	09.706	15.991	292															
094	028	35	253	059	+009 +029	1570	-59.8																		
100	026	34	244	050	+011 +023																				
107	022	33	242	042	+010 +019																				
115	022	32	245	037	+008 +017																				
122	022	31	247	030	+006 +014																				
130	020	30	243	022	+005 +010																				
139	017	29	230	015	+005 +006																				
150	016	28	239	011	+003 +005																				
160	015	27	281	010	-001 +005																				
172	014	26	342	006	-003 +001																				
184	013	25	027	004	-002 -001																				
198	011	24	000	004	-002 -000																				
213	011	23	014	008	-004 -001																				
228	010	22	045	008	-003 -003																				
246	009	21	056	007	-002 -003																				
264	008	20	000	004	-002 -000																				
288	008	19	270	004	+000 +002																				
308	008	18	254	014	+002 +007																				
332	008	17	250	023	+004 +011																				

CONSTANT PRESSURE LEVEL DATA
 (HEIGHT IN GEOPOTENTIAL METERS)

1643	-61.3	10.000	16.448	292
1865	-59.3	07.000	11.401	293
2077	-58.1	05.000	08.099	294
2674	-46.2	02.000	03.071	302
3142	-45.3	01.000	01.529	303

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. WOX-1A
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 040 DEG. AZIMUTH. ELEVATION UNKNOWN

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION.. 4 SECONDS 3.048 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 100 SECONDS 62.383 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 100 SECONDS 62.383 METERS ALTITUDE
 PAYLOAD TRACK DEOPPED.. 2.242 SECONDS 15.700 METERS ALTITUDE
 APOGEE.. 100 SECONDS 62.383 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
 TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. BELOW NOMINAL
 GROUND EQUIPMENT TYPE.. 403 MHZ PORTABLE RECEIVER-RECORDER
 TELEMETRY FREQUENCY.. UNKNOWN
 TELEMETRY QUALITY.. GOOD
 TELEMETRY DATA RECEIVED FROM 200 SECONDS, 52.000 METERS ALTITUDE
 TO 2.242 SECONDS, 15.700 METERS ALTITUDE

REMARKS

NONE
 THERMODYNAMICS BASE DATA.. PRESSURE 111.9 MB
 ALTITUDE 15.700 METERS
 TEMPERATURE -59.8 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. VAISALA
 RADIOSONDE TYPE.. VAISALA
 TEMPERATURE ELEMENT TYPE.. BIMETEL
 PRESSURE SENSOR TYPE.. ANEROID
 GROUND EQUIPMENT TYPE.. VAISALA
 BALLOON TYPE.. TOTEX
 BALLOON SIZE.. 800 GRAMS
 FREE LIFT.. 1.800 GRAMS
 ASCENSION RATES.. SFC-400MB= 296 M/MINUTE
 400MB-TOP= 356 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

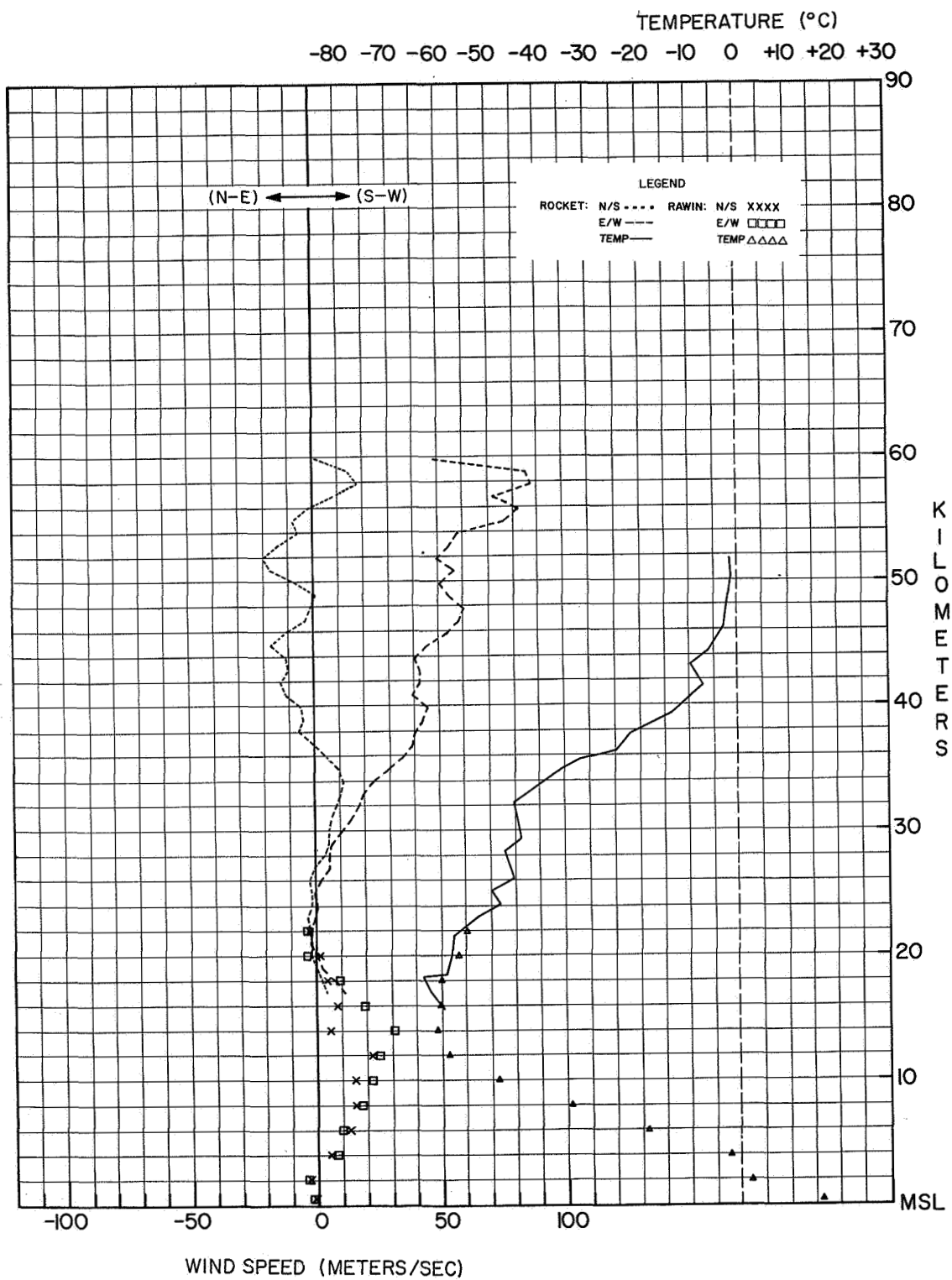
STATION PRESSURE.. 975.0 MB
 TEMPERATURE.. 16.4 DEG C
 RELATIVE HUMIDITY.. 37%
 VISIBILITY.. 30 KM
 SURFACE WIND.. 70 DEG. 5 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 3 OCTAS
 LOW.. NONE
 MIDDLE.. NONE
 HIGH.. 3 OCTAS/OI

TYPE PRECIPITATION.. NONE

OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

UNKNOWN



STATION: (CNIE) CHAMICAL, ARGENTINA ROCKET TIME: 1240 LST 1640 GCT
DATE: 21 SEPTEMBER, 1966 ROCKET MOTOR TYPE: JHDI I

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: VAISALA

R/ STATION NAME DATE ROCKET RAWINSONDE
(NASA) Wallops Island, Virginia Z LAUNCH TIME RELEASE TIME
72402 37°51' N 75°29' W ALT. 3 M SEPTEMBER 23, 1966 1848 1615

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	WIND				ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M ⁻³	SPEED OF SOUND M/S	WIND				PRESSURE MB	ALT TENS OF METERS	WIND				RH %	TEMP DEG C			
			POLAR DEG	COMPONENTS KTS	N-S MPS	E-W						POLAR DEG	COMPONENTS KTS	N-S MPS	E-W			POLAR DEG	COMPONENTS KTS	N-S MPS	E-W					
041	083	51	239	041	+011	+018	5032	-01.4	00.861	01.103	330	240	038	+010	+017	1008.0	0000	290	015	-003	+007	46	+20.8			
043	083	50	242	037	+009	+017	4743	+03.2	01.227	01.547	333	228	023	+008	+009	0792.0	0200	301	033	-009	+015	42	+03.9			
045	083	49	237	032	+009	+014	4493	-04.6	01.671	02.168	329	236	014	+004	+006	0619.0	0400	273	052	-001	+027	28	-07.1			
047	067	48	231	028	+009	+011	4432	-15.7	01.807	02.445	322	243	013	+003	+006	0477.0	0600	264	086	+005	+044	16	-12.0			
050	056	47	225	022	+008	+008	4310	-19.1	02.122	02.910	320	225	008	+003	+003	0356.0	0800	263	094	+006	+048	17	-27.4			
053	067	46	225	016	+006	+006	4228	-15.5	02.364	03.197	322	194	008	+004	+001	0274.0	1000	249	098	+018	+047		-42.7			
055	056	45	236	014	+004	+006	4157	-08.1	02.591	03.406	326	180	008	+004	+000	0204.0	1200	254	080	+011	+040		-49.2			
059	056	44	252	012	+002	+006	4118	-18.3	02.726	03.726	320	198	006	+003	+001	0149.5	1400	252	066	+010	+032		-57.1			
061	056	43	225	008	+003	+003	4039	-26.1	03.031	04.274	315	243	004	+001	+002	0109.0	1600	252	046	+007	+023		-60.1			
065	048	42	180	010	+005	+000	3941	-17.6	03.457	04.713	320	243	004	+001	+002	0078.7	1800	247	024	+005	+011		-54.9			
068	048	41	207	004	+002	+001	3466	-31.4	06.590	09.497	312	333	004	+002	+001	0057.8	2000	248	030	+006	+014		-54.0			
072	033	40	270	006	+000	+003	3173	-38.6	09.990	14.837	307	225	003	+001	+001	0042.7	2200	060	019	-005	-008		-54.1			
078	030	39	225	003	+001	+001	2914	-43.2	14.569	22.072	304	288	006	-001	+003	0031.4	2400	253	013	+002	+006		-48.1			
083	033	38	153	004	+002	-001	2841	-40.9	16.214	24.320	306	284	008	-001	+004	0023.3	2600	270	004	+000	+002		-47.3			
088	030	37	180	002	+001	+000	2630	-46.9	22.145	34.098	302	225	003	+001	+001	0017.2	2800	241	008	+002	+004		-47.1			
094	026	36	014	008	-004	-001	2396	-47.2	31.451	48.491	301	270	014	+000	+007	0012.8	3000	234	003	+001	+001		-43.2			
101	024	35	333	004	-002	+001	2103	-55.7	49.242	78.889	246	239	011	+003	+005											
108	024	34	297	004	-001	+002	2000	-54.2																		
115	022	33	270	004	+000	+002																				
123	019	32	243	004	+001	+002																				
133	016	31	180	002	+001	+000																				
144	016	30	270	004	+000	+002																				
154	015	29	288	006	-001	+003																				
166	013	28	284	008	-001	+004																				
180	011	27	270	004	+000	+002																				
197	009	26	225	003	+001	+001																				
217	008	25	256	008	+001	+004																				
240	008	24	270	014	+000	+007																				
259	007	23	243	009	+002	+004																				
287	006	22	207	009	+004	+002																				
316	007	21	239	011	+003	+005																				
336	008	20	252	018	+003	+009																				

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2087	-55.6	50.000	80.054	296	239	011	+003	+005
2423	-47.2	30.000	46.244	301	270	012	+000	+006
2695	-44.7	20.000	30.502	303	270	004	+000	+002
3156	-38.6	10.000	14.853	307	225	003	+001	+001
3413	-32.3	07.000	10.124	311	297	004	-001	+002
3686	-24.4	05.000	07.002	316	180	002	+001	-000
4327	-17.8	02.000	02.728	320	248	010	+002	+005
4884	+00.4	01.000	01.274	332	239	034	+009	+015

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. FAIR
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 100 DEG AZIMUTH, 73.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 8 SECONDS 1,219 METERS ALTITUDE
MOTOR TRACK DROPPED.. 140 SECONDS 62,697 METERS ALTITUDE
PAYLOAD ACQUISITION.. 140 SECONDS 62,697 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2,015 SECONDS 20,000 METERS ALTITUDE
APOGEE.. 132 SECONDS 62,941 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1B
TELEMETRY FREQUENCY.. 1689 MHZ
TELEMETRY QUALITY.. FAIR
TELEMETRY DATA RECEIVED FROM 252 SECONDS, 50,320 METERS ALTITUDE TO 2,015 SECONDS 20,000 METERS ALTITUDE

REMARKS

LOW SIGNAL STRENGTH AND FREQUENT SIGNAL DROP QUT
THERMODYNAMICS BASE DATA.. PRESSURE 57.8 MB
ALTITUDE 20,000 METERS
TEMPERATURE -54.0 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,800 GRAMS
ASCENSION RATES.. SFC-400MB = 277 M/MINUTE
400MB-TOP = 423 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

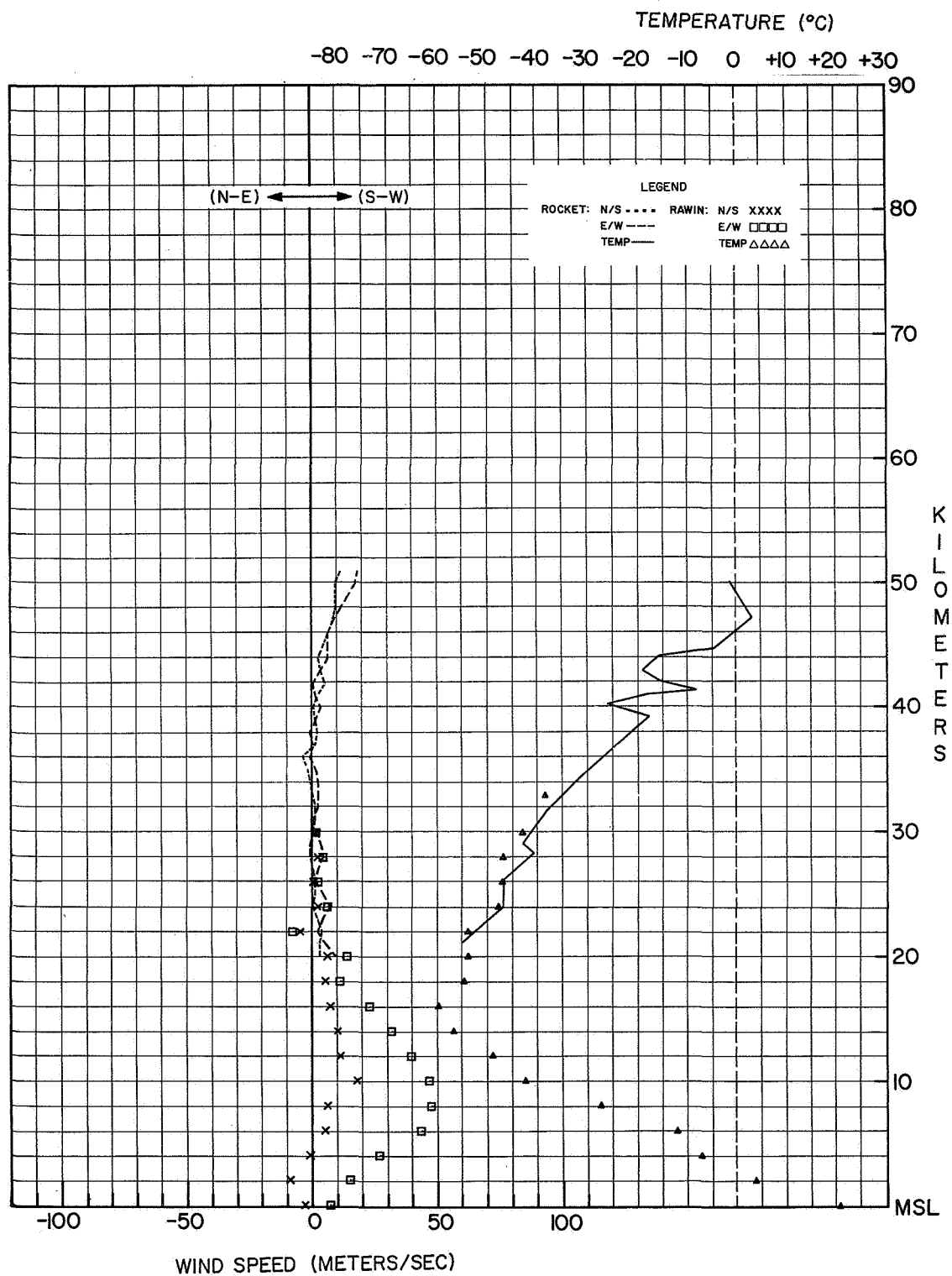
STATION PRESSURE.. 1008.0 MB
TEMPERATURE.. 20.8 DEG. C
RELATIVE HUMIDITY.. 46%
VISIBILITY.. 16 KM
SURFACE WIND.. 290 DEG, 15 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. NONE

TYPE OF PRECIPITATION.. NONE

OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

SFC. 298 DEG/15KTS, 50 FT. 257 DEG/15KTS,
100 FT. 264 DEG/12 KTS, 150 FT. 257 DEG/19KTS,
200 FT. 257 DEG/20KTS, 250 FT. 257 DEG/21KTS,



STATION: (NASA) WALLOPS ISLAND, VA. ROCKET TIME: 1348 LST 1848 GCT
DATE: 23 SEPTEMBER, 1966 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCASONDE 1A
RADIOSONDE TYPE: 1680 MHZ

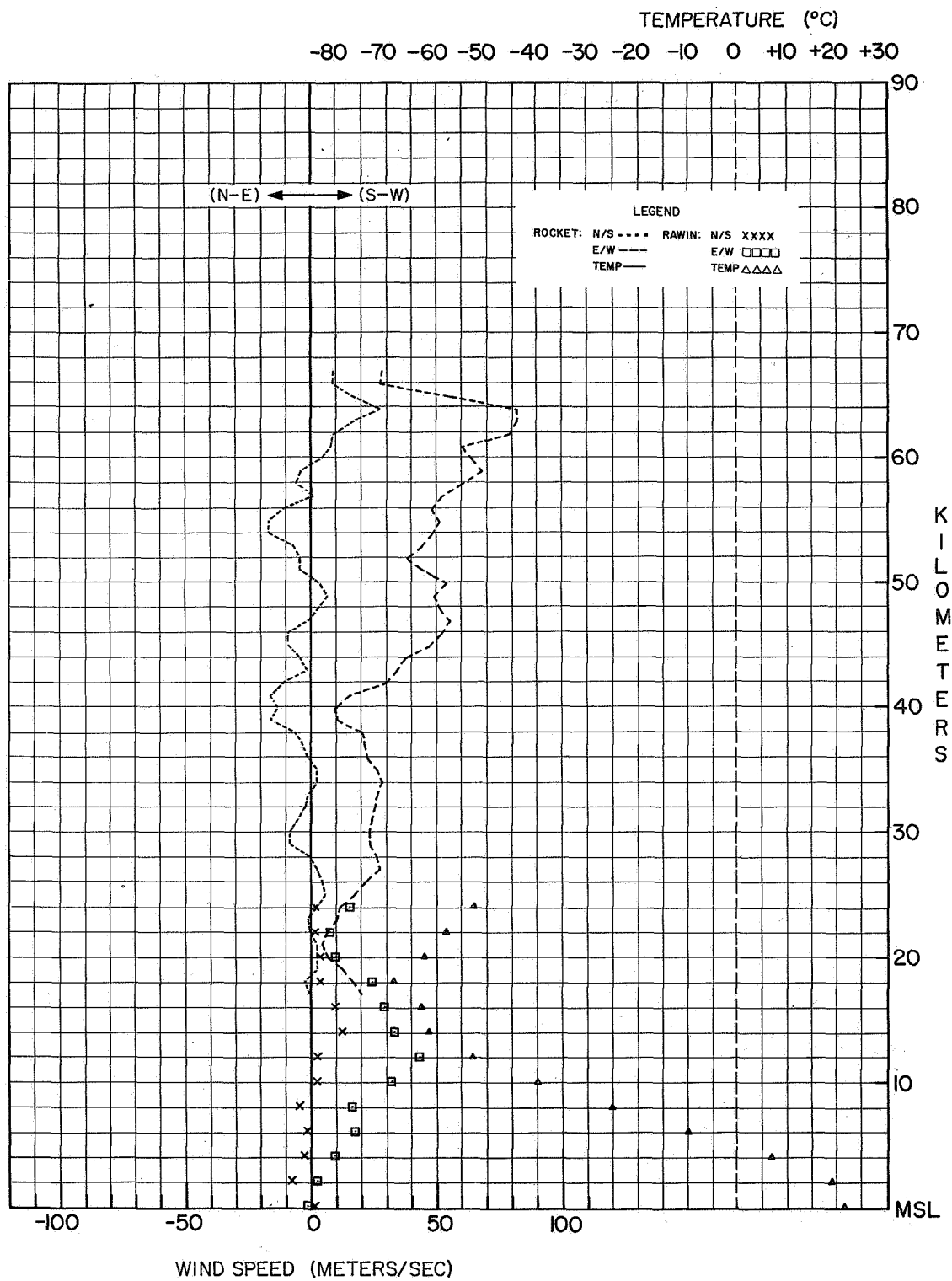
RP STATION NAME DATE LAUNCH RELEASE
(CNIE) CHAMICAL ARGENTINA Z Z Z
87320 30°22' S 66°17' W ALT. 457 M SEPTEMBER 28, 1966 1805 1405

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE											
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND COMPONENTS KTS N-S	E-W		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M ⁻³	SPEED OF SOUND M/S	POLAR DEG	WIND COMPONENTS KTS N-S	E-W		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND COMPONENTS KTS N-S	E-W		RH %	TEMP DEG C					
028	167	67	254	057	+008	+028										0955.0	0000	120	005	+001	-002	52	+21.4					
029	167	66	253	055	+008	+027										0799.6	0200	348	015	-008	+002	28	+19.0					
030	167	65	254	113	+016	+056										0630.0	0400	287	019	-003	+009	10	+07.0					
031	167	64	252	168	+027	+082										0490.0	0600	275	034	-002	+017	10	-10.0					
032	167	63	259	162	+016	+082										0375.2	0800	288	033	-005	+016	10	-25.2					
033	167	62	264	154	+008	+079										0282.7	1000	267	063	+002	+032		-40.2					
034	167	61	263	117	+007	+060										0208.0	1200	268	084	+002	+043		-53.3					
035	111	60	267	125	+003	+064										0152.8	1400	250	068	+012	+033		-62.0					
037	111	59	274	133	-005	+068										0111.7	1600	252	059	+009	+029		-63.5					
038	111	58	277	117	-007	+060										0079.3	1800	263	046	+003	+024		-69.1					
040	111	57	270	101	+000	+052										0057.9	2000	253	019	+003	+009		-62.9					
041	111	56	284	096	-012	+048										0042.0	2200	263	013	+001	+007		-58.6					
043	083	55	289	105	-018	+051										0030.4	2400	267	030	+001	+015		-53.0					
045	111	54	291	100	-018	+048																						
046	111	53	280	087	-008	+044																						
048	083	52	277	075	-005	+038																						
050	083	51	276	088	-005	+045																						
052	067	50	267	105	+003	+054																						
055	067	49	263	096	+006	+049																						
057	056	48	268	099	+002	+051																						
061	056	47	272	107	-002	+055																						
063	067	46	281	103	-010	+052																						
066	048	45	282	093	-010	+047																						
070	048	44	278	073	-005	+037																						
073	048	43	273	066	-002	+034																						
077	042	42	292	063	-012	+030																						
081	042	41	319	044	-017	+015																						
085	037	40	327	032	-014	+009																						
090	033	39	330	038	-017	+010																						
095	033	38	289	041	-007	+020																						
100	030	37	281	042	-004	+021																						
106	028	36	275	043	-002	+022																						
112	028	35	266	051	+002	+026																						
118	024	34	266	055	+002	+028																						
126	021	33	274	051	-002	+026																						
134	021	32	277	049	-003	+025																						
142	020	31	284	048	-006	+024																						
151	018	30	291	048	-009	+023																						
161	017	29	291	048	-009	+023																						
171	014	28	272	051	-001	+026																						
185	011	27	266	053	+002	+027																						
200	011	26	259	042	+004	+021																						
215	010	25	254	034	+005	+017																						
233	009	24	260	022	+002	+011																						
252	008	23	281	020	-002	+010																						
276	007	22	279	012	-001	+006																						
300	006	21	243	009	+002	+004																						
329	006	20	252	012	+002	+006																						
359	006	19	261	024	+002	+012																						
389	005	18	281	032	-003	+016																						
423	004	17	273	039	-001	+020																						

TECHNICAL DATA

VEHICLE DATA MOTOR TYPE.. ARCAS MOTOR PERFORMANCE.. GOOD PAYLOAD TYPE.. ARCASONDE-2B PAYLOAD PERFORMANCE.. BAD FUSE TYPE.. GAS GENERATED SEPARATION DEVICE FUSE DELAY TIME.. PREDICTED.. 110 SEC. ACTUAL.. UNKNOWN TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR LAUNCHER SETTING.. 040 DEG. AZIMUTH, 85.0 DEG ELEVATION RADAR DATA RADAR TYPE.. MPS-19 MOTOR ACQUISITION.. 7 SECONDS 2,133 METERS ALTITUDE MOTOR TRACK DROPPED.. 85 SECONDS 57,912 METERS ALTITUDE PAYLOAD ACQUISITION.. 145 SECONDS 69,342 METERS ALTITUDE PAYLOAD TRACK DROPPED.. 2,700 SECONDS 15,850 METERS ALTITUDE APOGEE.. UNKNOWN SENSOR AND TELEMETRY DATA WIND SENSOR.. 15 FT. DIAMETER PARACHUTE TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR SENSOR FALL RATE.. NOMINAL GROUND EQUIPMENT TYPE.. GMD-2 TELEMETRY FREQUENCY.. NONE TELEMETRY QUALITY.. N.A. TELEMETRY DATA RECEIVED FROM.. NO SIGNAL RECEIVED REMARKS TRANSMITTER FAILURE THERMODYNAMICS BASE DATA.. PRESSURE N.A. ALTITUDE N.A. TEMPERATURE N.A.	RADIOSONDE AND BALLOON DATA RADIOSONDE MANUFACTURER.. VAISALA RADIOSONDE TYPE.. VAISALA TEMPERATURE ELEMENT TYPE.. BIMETEL PRESSURE SENSOR TYPE.. ANEROID GROUND EQUIPMENT TYPE.. VAISALA BALLOON TYPE.. TOTEX BALLOON SIZE.. 800 GRAMS FREE LIFT.. 1,200 GRAMS ASCENSION RATES.. SFC-400MB = 310 M/MINUTE 400MB-TOP = 370 M/MINUTE WEATHER OBSERVATION AT RAWINSONDE RELEASE STATION PRESSURE.. 955.0 MB TEMPERATURE.. 21.4 DEG C RELATIVE HUMIDITY.. 52% VISIBILITY.. 6 KM SURFACE WIND.. 120 DEG, 5 KTS CLOUD TYPE AND AMOUNT.. TOTAL.. 5 OCTAS LOW.. NONE MIDDLE.. NONE HIGH.. 5 OCTAS/CS TYPE PRECIPITATION.. NONE OBSTRUCTIONS TO VISION.. DUST WIND AT ROCKET LAUNCH UNKNOWN
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STATION: (CNIE)CHAMICAL, ARGENTINA ROCKET TIME 1405 LST 1805 GCT
 DATE: 28 SEPTEMBER, 1966 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCASONDE 2B
 RADIOSONDE TYPE: VAISALA

RP STATION NAME DATE ROCKET RAWINSONDE
 (NASA) WALLOPS ISLAND, VIRGINIA LAUNCH RELEASE
 Z TIME Z TIME
 72402 37°51' S 75°29' W ALT. 3 M OCTOBER 1, 1966 0033 1829

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE										
TIME	FALL	ALT	POLAR		WIND		COMPONENTS		ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR		WIND		COMPONENTS		PRESSURE	ALT	POLAR		WIND		COMPONENTS		RH	TEMP	
TENTHS	VEL	OF	DEG	KTS	N-S	E-W	MPS	MPS	TENS	DEG C	MB	G M	OF	DEG	KTS	N-S	E-W	MPS	MPS	MB	TENS	DEG	KTS	N-S	E-W	MPS	MPS	%	DEG C	
MINUTE	M/S	KM							METERS				SOUND								METERS									
029	083	54	262	027	+002	+014		5282	-11.2	00.612	00.814	324	277	051	-003	+026			1009.0	0000	270	010	+000	+005	61	+26.1				
031	083	53	270	049	+000	+025		5054	-03.4	00.817	01.055	329	290	058	-010	+028			0800.0	0200	246	033	+007	+016	45	+11.0				
033	083	52	296	067	-015	+031		4834	-09.4	01.078	01.424	326	256	032	+004	+016			0626.0	0400	260	049	+004	+025	32	+01.5				
035	083	51	293	064	-013	+030		4743	-07.3	01.210	01.585	327	243	026	+006	+012			0486.0	0600	254	058	+008	+029	16	-09.8				
037	067	50	283	050	-006	+025		4639	-08.1	01.380	01.814	326	247	025	+005	+012			0373.0	0800	244	070	+016	+032	17	-24.7				
040	067	49	277	045	-003	+023		4474	-06.1	01.701	02.219	328	274	029	-001	+015			0282.0	1000	250	060	+011	+029		-40.7				
042	067	48	242	029	+007	+013		4328	-11.9	02.049	02.733	324	283	036	-004	+018			0207.0	1200	247	068	+014	+032		-55.1				
045	056	47	243	026	+006	+012		4282	-10.4	02.174	02.883	325	282	038	-004	+019			0152.0	1400	246	086	+018	+040		-63.3				
048	067	46	247	025	+005	+012		4218	-14.7	02.362	03.184	322	286	036	-005	+018			0109.0	1600	250	047	+008	+023		-61.7				
050	067	45	270	029	+000	+015		4097	-13.2	02.765	03.705	323	315	011	-004	+004			0079.0	1800	249	039	+007	+019		-60.7				
053	048	44	281	030	-003	+015		4036	-19.3	02.995	04.111	319	304	007	-002	+003			0058.0	2000	238	021	+006	+009		-53.3				
057	042	43	282	038	-004	+019		3911	-26.3	03.545	05.003	315	180	004	+002	+000			0042.5	2200	249	009	+002	+004		-51.4				
061	037	42	286	036	-005	+018		3862	-23.4	03.789	05.285	317	180	004	+002	-000			0031.6	2400	217	014	+006	+004		-49.6				
066	037	41	315	011	-004	+004		3639	-29.8	05.142	07.362	313	090	006	+000	-003			0023.4	2600	315	006	-002	+002		-47.6				
070	037	40	297	004	-001	+002		3581	-28.8	05.573	07.945	313	090	006	+000	-003			0017.4	2800	045	016	-006	-006		-44.7				
075	033	39	180	004	+002	+000		3447	-33.9	06.720	09.785	310	045	005	-002	-002			0012.8	3000	078	010	-001	-005		-41.7				
080	033	38	162	006	+003	-001		3331	-34.4	07.918	11.554	310	072	006	-001	-003			0009.6	3200							-39.7			
085	028	37	090	008	+000	-004		3304	-36.4	08.228	12.108	308	072	006	-001	-003														
092	026	36	090	006	+000	-003		3179	-37.8	09.842	14.569	308	072	006	-001	-003														
098	026	35	063	004	-001	-002		3018	-43.7	12.442	18.890	304	031	011	-005	-003														
105	022	34	045	005	-002	-002		3005	-41.2	12.681	19.046	305	031	011	-005	-003														
113	021	33	072	006	-001	-003		2944	-44.9	13.872	21.172	303	037	010	-004	-003														
121	020	32	072	006	-001	-003		2914	-41.6	14.439	21.813	305	045	008	-003	-003														
130	018	31	045	008	-003	-003		2835	-46.0	16.292	24.986	302	076	008	-001	-004														
140	017	30	031	011	-005	-003		2566	-49.2	24.402	37.959	300	056	007	-002	-003														
150	014	29	045	008	-003	-003		2234	-51.9	40.463	63.711	298	236	007	+002	+003														
163	012	28	090	008	+000	-004		2051	-57.0	53.750	86.629	295	240	016	+004	+007														
177	011	27	090	008	+000	-004		2000	-56.0	58.222	93.404	295																		
192	010	26	076	008	-001	-004		1844	-58.2	74.400		294																		
210	009	25	027	009	-004	-002																								
228	008	24	243	004	+001	+002																								
250	007	23	252	006	+001	+003																								
273	006	22	236	007	+002	+003																								
310	006	21	231	012	+004	+005																								
330	006	20	241	020	+005	+009																								
								CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																						
								2096	-55.6	50.000	80.052	296	231	012	+004	+005														
								2441	-50.1	30.000	46.864	299	000	004	-002	+000														
								2701	-47.5	20.000	30.872	301	090	009	+000	-004														
								3153	-38.2	10.000	14.825	307	056	007	-002	-003														
								3402	-34.0	07.000	10.198	310	045	005	-002	-002														
								3641	-29.1	05.000	07.138	313	090	008	+000	-004														
								4320	-11.1	02.000	02.659	325	283	034	-004	+017														
								4863	-07.6	01.000	01.312	327	277	045	-003	+023														

CONSTANT PRESSURE LEVEL DATA

(HEIGHT IN GEOPOTENTIAL METERS)

2096	-55.6	50.000	80.052	296	231	012	+004	+005
2441	-50.1	30.000	46.864	299	000	004	-002	+000
2701	-47.5	20.000	30.872	301	090	008	+000	-004
3153	-38.2	10.000	14.825	307	056	007	-002	-003
3402	-34.0	07.000	10.198	310	045	005	-002	-002
3641	-29.1	05.000	07.138	313	090	008	+000	-004
4320	-11.1	02.000	02.659	325	283	034	-004	+017
4863	-07.6	01.000	01.312	327	277	045	-003	+023

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. ARCASONDE-1A
 PAYLOAD PERFORMANCE.. FAIR
 FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
 FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. 100 SEC.
 TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
 LAUNCHER SETTING.. 078 DEG. AZIMUTH 79.2 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 10 SECONDS 2,133 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 140 SECONDS 58,582 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 140 SECONDS 58,582 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 2,280 SECONDS 18,440 METERS ALTITUDE
 APOGEE.. 123 SECONDS 59,588 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
 TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. GMD-18 AND FPS-16
 TELEMETRY FREQUENCY.. 1682 MHZ
 TELEMETRY QUALITY.. FAIR
 TELEMETRY DATA RECEIVED FROM.. 188 SECONDS 54,193 METERS ALTITUDE
 TO 2,280 SECONDS 18,440 METERS ALTITUDE

REMARKS

NONE
 THERMODYNAMIC BASE DATA.. PRESSURE 74.4 MB
 ALTITUDE 18,440 METERS
 TEMPERATURE -58.2 DEG. C.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
 GROUND EQUIPMENT TYPE.. GMD-18
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1,200 GRAMS
 FREE LIFT.. 1,500 GRAMS
 ASCENSION RATES.. SFC-400 MB= 280 M/MINUTE
 400 MB-TOP= 334 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

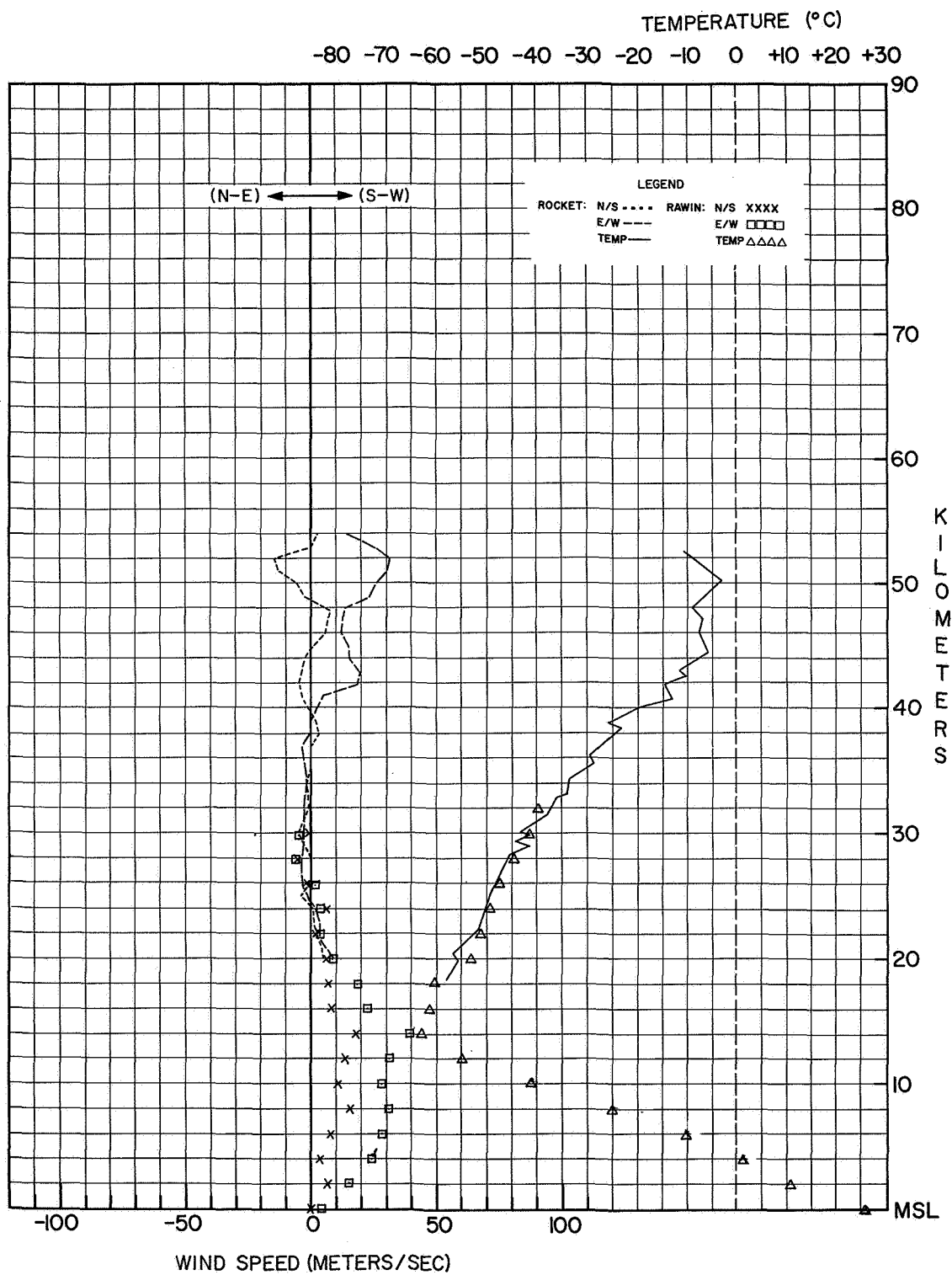
STATION PRESSURE.. 1009.0 MB
 TEMPERATURE.. 26.1 DEG. C.
 RELATIVE HUMIDITY.. 61%
 VISIBILITY.. 5 KM
 SURFACE WIND.. 270 DEG. 10 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS

LOW.. NONE
 MIDDLE.. NONE
 HIGH.. NONE

TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. HAZE

WIND AT ROCKET LAUNCH

SFC. 195 DEG/10KTS, 50 FT. 167 DEG/13KTS,
 100 FT. 173 DEG/16KTS, 150 FT. 173 DEG/20KTS,
 200 FT. 175 DEG/21KTS, 250 FT. 178 DEG/22KTS,



STATION: (NASA)WALLOPS ISLAND, VA. ROCKET TIME 1933 LST 0033 GCT
 DATE: 1 OCTOBER, 1966 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCASONDE 1A
 RADIOSONDE TYPE: 1680 MHZ

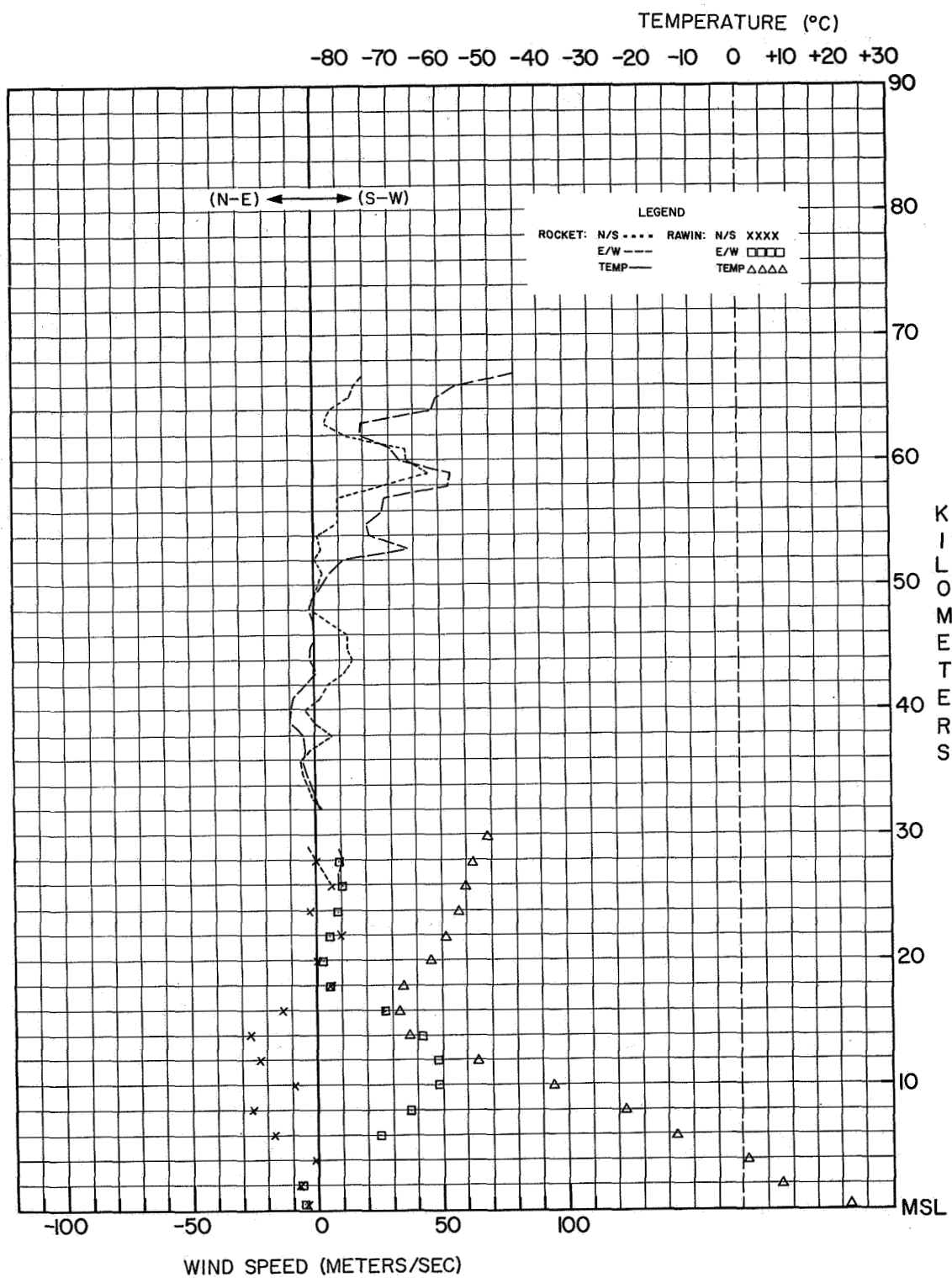
RP STATION NAME DATE ROCKET RAWINSONDE
(CNIE) CHAMICAL, ARGENTINA Z LAUNCH TIME Z RELEASE TIME
87320 30°22' S 66°17' W ALT. 457 M OCTOBER 6, 1966 0040 2200

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE							RH	TEMP	
TIME	FALL	ALT	WIND		COMPONENTS	ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND		COMPONENTS	PRESSURE	ALT	WIND							
TENTHS OF A MINUTE	VEL M/S	KM	POLAR DEG	KTS		N-S MPS	E-W	TENS OF METERS	DEG C	MB	-3 G M	OF SOUND M/S		POLAR DEG	KTS	N-S MPS	E-W	MB	TENS OF METERS	POLAR DEG			KTS
022	223	67	256	160	+020	+080								0961.5	0046	050	013	-004	-005	30	+21.8		
023	167	66	254	113	+016	+056								0800.0	0200	042	018	-007	-006	67	+08.0		
024	111	65	254	099	+014	+049								0626.0	0400	278	020	-001	+010	45	+01.2		
026	083	64	263	092	+006	+047								0487.0	0600	303	060	-017	+026	55	-13.2		
028	067	63	258	038	+004	+019								0372.0	0800	305	089	-026	+038	24	-23.6		
031	083	62	236	045	+013	+019								0281.0	1000	280	097	-009	+049	23	-36.0		
032	083	61	220	094	+037	+031								0216.0	1200	295	104	-023	+049		-53.0		
035	056	60	223	099	+037	+035								0152.0	1400	302	098	-027	+043		-66.8		
038	056	59	230	139	+046	+055								0108.5	1600	296	061	-014	+028		-68.9		
041	056	58	243	117	+027	+054								0077.8	1800	230	015	+005	+006		-68.0		
044	048	57	250	058	+010	+028								0056.3	2000	266	006	+000	+003		-62.5		
048	037	56	250	056	+010	+027								0040.8	2200	211	022	+010	+006		-59.5		
053	037	55	247	044	+009	+021								0029.7	2400	287	019	-003	+009		-56.9		
057	042	54	267	043	+001	+022								0022.0	2600	240	024	+006	+011		-55.7		
061	037	53	265	074	+003	+038								0016.2	2800	268	019	+000	+010		-54.0		
066	033	52	270	021	+000	+011								0011.7	3000						-51.0		
071	033	51	243	013	+003	+006																	
076	033	50	252	006	+001	+003																	
081	030	49	090	002	+000	-001																	
087	026	48	063	004	-001	-002																	
094	026	47	180	012	+006	+000																	
100	028	46	180	025	+013	+000																	
106	026	45	171	026	+013	-002																	
113	026	44	172	029	+015	-002																	
119	024	43	180	023	+012	+000																	
127	021	42	141	012	+005	-004																	
135	022	41	103	018	+002	-009																	
142	021	40	068	021	-004	-010																	
151	020	39	090	019	+000	-010																	
159	021	38	144	017	+007	-005																	
167	020	37	076	008	-001	-004																	
176	018	36	040	015	-006	-005																	
186	016	35	039	012	-005	-004																	
197	017	34	034	007	-003	-002																	
206	016	33	000	002	-001	+000																	
218	014	32	214	007	+003	+002																	
MISSING DATA																							
253	013	29	288	018	-003	+009																	
267	012	28	270	019	+000	+010																	
281	012	27	252	018	+003	+009																	
295	012	26	236	021	+006	+009																	

TECHNICAL DATA

VEHICLE DATA	MOTOR TYPE.. JUDI	RADIOSONDE AND BALLOON DATA	RADIOSONDE MANUFACTURER.. VAISALA
	MOTOR PERFORMANCE.. GOOD		RADIOSONDE TYPE.. VAISALA
RADAR DATA	PAYLOAD TYPE.. CHAFF		TEMPERATURE ELEMENT TYPE.. BIMETAL
	PAYLOAD PERFORMANCE.. GOOD		PRESSURE SENSOR TYPE.. ANEROID
SENSOR AND TELEMETRY DATA	FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC		GROUND EQUIPMENT TYPE.. VAISALA
	FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN		BALLOON TYPE.. TOTEX
REMARKS	TYPE OF LAUNCHER.. 8.5 FT. TUBULAR		BALLOON SIZE.. 800 GRAMS
	LAUNCHER SETTING.. 040 DEG. AZIMUTH 87.0 DEG. ELEVATION		FREE LIFT.. 1,500 GRAMS
	RADAR TYPE.. MPS-19		ASCENSION RATES.. SFC-400 MB= 334 M/MINUTE
	MOTOR ACQUISITION.. 3 SECONDS 4,767 METERS ALTITUDE		400 MB-TOP= 364 M/MINUTE
	MOTOR TRACK DROPPED.. 100 SECONDS 67,056 METERS ALTITUDE		WEATHER OBSERVATION AT RAWINSONDE RELEASE
	PAYLOAD ACQUISITION.. 100 SECONDS 67,056 METERS ALTITUDE		STATION PRESSURE.. 961.5 MB
	PAYLOAD TRACK DROPPED.. 1,856 SECONDS 25,908 METERS ALTITUDE		TEMPERATURE.. 21.8 DEG. C.
	APOSEE.. 105 SECONDS 67,818 METERS ALTITUDE		RELATIVE HUMIDITY.. 30%
	WIND SENSOR.. 0.005 INCH S BAND CHAFF		VISIBILITY.. 10 KM
	TEMPERATURE SENSOR.. N.A.		SURFACE WIND.. 050 DEG. 13 KTS
	SENSOR FALL RATE.. NOMINAL		CLOUD TYPE AND AMOUNT.. TOTAL.. 6 OCTAS
	GROUND EQUIPMENT TYPE.. MPS-19		LOW.. NONE
	TELEMETRY FREQUENCY.. N.A.		MIDDLE.. AC AS
	TELEMETRY QUALITY.. N.A.		HIGH.. CI
	TELEMETRY DATA RECEIVED FROM.. N.A.		TYPE OF PRECIPITATION.. NONE
	NONE		OBSTRUCTIONS TO VISION.. NONE
	THERMODYNAMICS BASE DATA.. PRESSURE N.A.		WIND AT ROCKET LAUNCH
	ALTITUDE N.A.		SFC. 040 DEG/10KTS
	TEMPERATURE N.A.		



STATION: (CNIE) CHAMICAL, ARGENTINA
DATE: 6 OCTOBER, 1966

ROCKET TIME: 2040 LST 0040 GCT
ROCKET MOTOR TYPE: JUDI I

PAYLOAD TYPE: CHAFF
RADIOSONDE TYPE: VAISALA

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WALLOPS ISLAND, VIRGINIA Z LAUNCH TIME Z RELEASE TIME Z
7240Z 37°51' N 75°29' W ALT. 3 M OCTOBER 6, 1966 1440 1115

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE											
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP					
TENTHS	VEL		POLAR	COMPONENTS			TENS				OF	POLAR	COMPONENTS				TENS	POLAR	COMPONENTS									
OF A				N-S	MPS		OF				SOUND		N-S	MPS			OF		N-S	MPS								
MINUTE	M/S	KM	DEG	KTS	E-W		METERS	DEG C	MB	G M	M/S	DEG	KTS	E-W		MB	METERS	DEG	KTS	E-W	%	DEG C						
021	083	64	273	037	-001	+019										1018.0	0000	320	008	-003	+003	79	+07.2					
023	083	63	268	066	+001	+034										0798.0	0200	305	027	-008	+011	17	+02.0					
025	083	62	268	058	+001	+030										0620.0	0400	293	049	-010	+023	15	-05.4					
027	067	61	257	054	+006	+027										0479.0	0600	274	062	-002	+032	19	-16.2					
030	056	60	248	046	+009	+022										0364.0	0800	267	076	+002	+039	22	-31.2					
033	056	59	234	036	+011	+015										0273.0	1000	270	080	+000	+041		-41.8					
036	056	58	238	044	+012	+019										0203.0	1200	269	048	+000	+025		-48.9					
039	048	57	243	039	+009	+018										0148.0	1400	278	080	-006	+041		-57.5					
043	042	56	223	034	+013	+012										0108.0	1600	276	035	-002	+018		-61.3					
047	042	55	219	028	+011	+005										0092.0	1800	303	018	-005	+008		-62.8					
051	042	54	256	016	+002	+008										0057.0	2000	283	012	-001	+006		-56.1					
055	037	53	286	014	-002	+007										0042.0	2200	250	010	+002	+005		-53.8					
060	033	52	279	012	-001	+006										0031.0	2400	070	008	-001	-004		-50.0					
065	033	51	236	007	+002	+003										0022.8	2600	091	012	+000	-006		-48.0					
070	033	50	180	012	+006	+000										0017.0	2800	186	012	+006	+001		-42.6					
075	030	49	162	018	+009	-003																						
081	028	48	158	010	+005	-002																						
087	028	47	180	002	+001	+000																						
093	028	46	090	006	+000	-003																						
099	026	45	090	006	+000	-003																						
106	024	44	063	009	-002	-004																						
113	022	43	063	013	-003	-006																						
121	021	42	059	011	-003	-005																						
129	022	41	034	007	-003	-002																						
136	022	40	000	008	-004	+000																						
144	020	39	034	007	-003	-002																						
153	019	38	117	009	+002	-004																						
162	019	37	135	011	+004	-004																						
171	019	36	135	008	+003	-003																						
180	017	35	117	009	+002	-004																						
191	015	34	112	010	+002	-005																						
202	016	33	108	006	+001	-003																						
212	016	32	072	006	-001	-003																						
223	014	31	342	006	-003	+001																						
235	014	30	135	003	+001	-001																						
247	013	29	180	004	+002	+000																						
261	013	28	180	006	+003	+000																						
273	012	27	180	008	+004	+000																						
288	011	26	149	011	+005	-003																						
303	011	25	135	011	+004	-004																						
318	010	24	101	010	+001	-005																						
335	010	23	090	002	+000	-001																						
353	010	22	270	006	+000	+003																						
369	009	21	259	010	+001	+005																						
389	009	20	270	010	+000	+005																						
408	009	19	270	014	+000	+007																						

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. CHAFF
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. 100 SEC.
TYPE OF LAUNCHER.. 12 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 4 SECONDS 3.474 METERS ALTITUDE
MOTOR TRACK DROPPED.. 100 SECONDS 65.623 METERS ALTITUDE
PAYLOAD ACQUISITION.. 100 SECONDS 65.623 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2.580 SECONDS 17.983 METERS ALTITUDE
APOGEE.. 105 SECONDS 65.837 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH COPPER CHAFF
TEMPERATURE SENSOR.. N.A.
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. FPS-16
TELEMETRY FREQUENCY.. N.A.
TELEMETRY QUALITY.. N.A.
TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

50 FOOT WIND VELOCITY MISSING
THERMODYNAMICS BASE DATA.. PRESSURE N.A.
ALTITUDE N.A.
TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1.200 GRAMS
FREE LIFT.. 1.500 GRAMS
ASCENSION RATES.. SFC=400 MB= 267 M/MINUTE
400 MB=TOP= 324 M/MINUTE

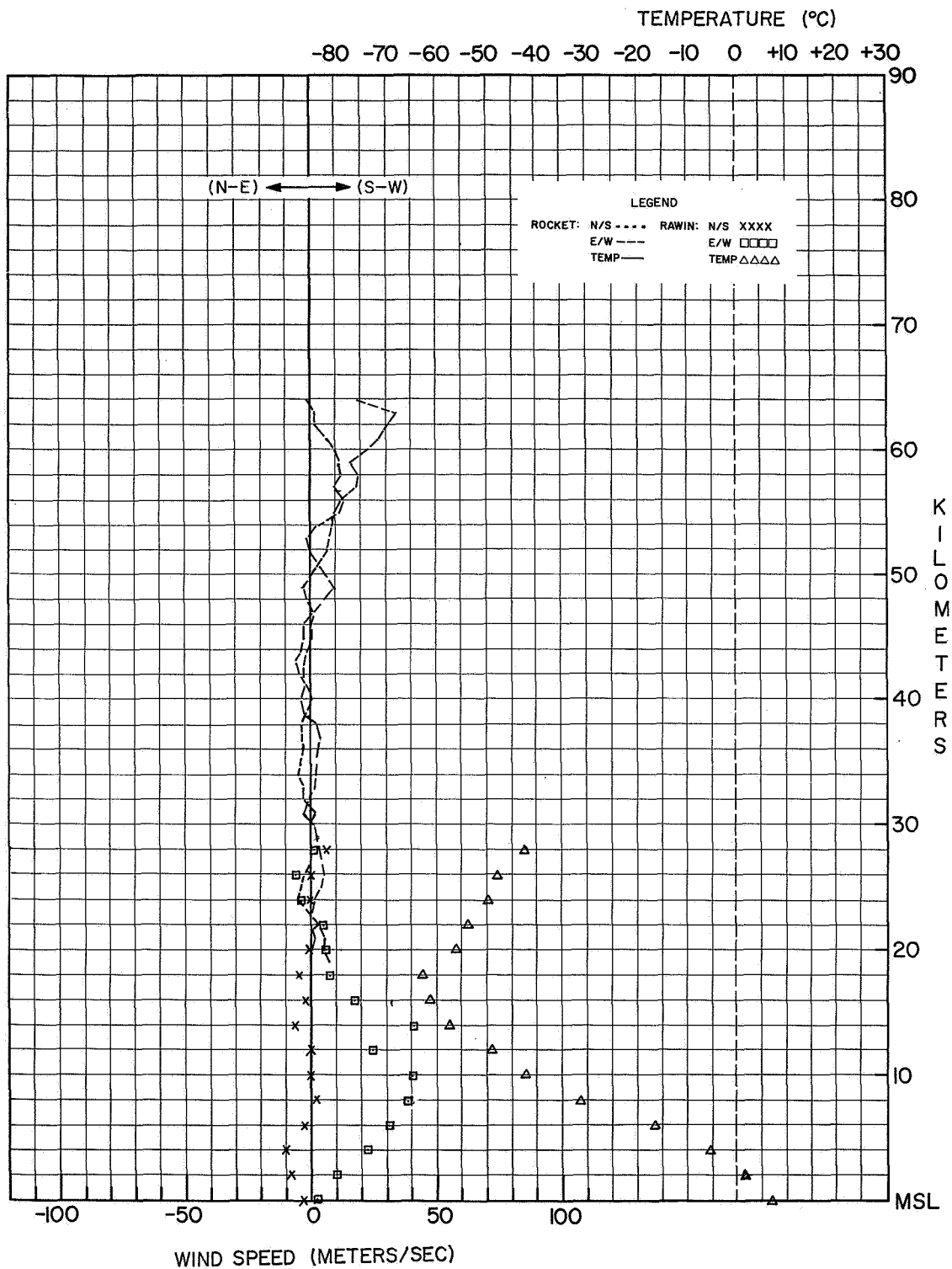
WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1018.0 MB
TEMPERATURE.. 7.2 DEG. C
RELATIVE HUMIDITY.. 79%
VISIBILITY.. 10 KM
SURFACE WIND.. 320 DEG. 8 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. NONE

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

SFC. 334 DEG/20KTS, 50 FT. M5G, 100 FT. 315 DEG/11KTS
150 FT. 315 DEG/11KTS, 200 FT. 312 DEG/14KTS
250 FT. 307 DEG/15KTS



STATION: (NASA)Wallops Island, VA. ROCKET TIME 0940 LST 1440 GCT
DATE: 6 OCTOBER, 1966 ROCKET MOTOR TYPE: JUDI I

PAYLOAD TYPE: CHAFF
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(CNAE) NATAL, BRAZIL Z Z Z
82599 5°55' S 35°10' W ALT. 43 M OCTOBER 12, 1966 1500 1217

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	WIND		COMPONENTS		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	WIND		COMPONENTS		PRESSURE MB	ALT TENS OF METERS	WIND		COMPONENTS		RH %	TEMP DEG C			
			POLAR DEG	KTS	N-S	E-W				-3		POLAR DEG	KTS	N-S	E-W			POLAR DEG	KTS	N-S	E-W					
025	223	51	243	030	+007	+014	3429	-26.0	07.136	10.058	315	104	056	+007	-028	1007.0	0004	130	013	+004	-005	63	+28.5			
026	167	50	263	033	+002	+017	3246	-36.0	09.213	13.534	309	090	045	+000	-023	0802.0	0200	078	015	+002	-008	34	+14.4			
027	111	49	270	039	+000	+020	3158	-39.4	10.454	15.581	306	076	040	+005	-020	0628.0	0400	095	007	+000	-004	19	+03.2			
029	111	48	303	032	+009	+014	3048	-36.0	12.245	17.987	309	065	032	+007	-015	0489.0	0600	086	027	+001	-014		-06.3			
030	083	47	026	050	-023	-011	2950	-39.4	14.097	21.009	306	060	016	-004	-007	0376.0	0800	008	006	-003	-000		-20.2			
033	083	46	018	037	-018	-006	2899	-37.8	15.174	22.460	308	045	003	-001	-001	0285.0	1000	343	005	-002	+001		-36.3			
034	083	45	330	027	-012	+007	2798	-39.4	17.556	26.164	306	297	009	-002	+004	0211.0	1200	267	013	+000	+007		-51.8			
037	067	44	343	047	-023	+007	2774	-39.4	18.177	27.090	306	297	009	-002	+004	0153.2	1400	215	020	+008	+006		-70.0			
039	067	43	351	024	-012	+002	2728	-42.0	19.437	29.293	305	297	009	-002	+004	0108.3	1600	340	016	-008	+003		-75.3			
042	056	42	342	012	-006	+002	2673	-40.8	21.064	31.582	306	301	011	-003	+005	0076.6	1800	018	014	-007	-002		-73.2			
045	048	41	027	009	-004	-002	2573	-42.0	24.380	36.744	305	307	019	-006	+008	0054.8	2000	328	010	-004	+003		-60.5			
049	042	40	101	020	+002	-010	2518	-42.0	26.428	39.830	305	299	020	-005	+009	0039.7	2200	268	019	+000	+010		-56.9			
053	037	39	117	026	+006	-012	2487	-43.2	27.660	41.904	304	299	020	-005	+009	0029.2	2400	292	011	-002	+005		-53.5			
058	033	38	113	030	+006	-014	2362	-45.6	33.290	50.966	302	288	012	-002	+006	0021.4	2600	311	020	-007	+008		-46.6			
063	030	37	096	035	+002	-018	2207	-48.8	42.012	65.236	300	270	021	+000	+011	0015.8	2800	291	015	-003	+007		-46.4			
069	028	36	106	049	+007	-024	2100	-47.0	49.360	76.036	301	270	014	+000	+007	0011.7	3000	094	024	+001	-012		-42.0			
075	026	35	109	060	+010	-029	2018	-50.8	55.883	87.556	299	288	006	-001	+003	0008.8	3200	094	041	+001	-021		-40.7			
082	024	34	103	054	+006	-027	1969	-49.0	60.207	93.572	300	270	002	-000	+001											
089	024	33	097	049	+003	-025	1935	-52.3	63.413		298	090	002	+000	-001											
096	022	32	085	041	-002	-021	1840	-54.6	73.444		296	124	007	+002	-003											
104	021	31	063	039	-009	-018	1807	-64.4	77.400		290	135	008	+003	-003											
112	021	30	063	026	-006	-012	1722	-68.3	89.000		287															
120	019	29	045	003	-001	-001	1646	-66.2																		
130	017	28	297	009	-002	+004																				
140	016	27	297	009	-002	+004																				
151	015	26	307	019	-006	+008																				
162	014	25	299	020	-005	+009					301	270	014	-000	+007											
174	014	24	297	013	-003	+006					303	300	016	-004	+007											
186	013	23	270	014	+000	+007					305	299	009	-002	+004											
199	012	22	270	021	+000	+011					307	082	041	-003	-021											
213	011	21	270	014	+000	+007																				
229	010	20	297	004	-001	+002																				
247	009	19	117	004	+001	-002																				
265	008	18	135	008	+003	-003																				

CONSTANT PRESSURE LEVEL DATA
(HEIGHT IN GEOPOTENTIAL METERS)

2085	-47.4	50.000	77.149	301	270	014	-000	+007
2426	-44.2	30.000	45.647	303	300	016	-004	+007
2698	-41.6	20.000	30.088	305	297	009	-002	+004
3174	-38.2	10.000	14.825	307	082	041	-003	-021

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI I
MOTOR PERFORMANCE.. 6000
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. FAIR
FUSE TYPE.. PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SECONDS ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 045 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 5 SECONDS 5.334 METERS ALTITUDE
MOTOR TRACK DROPPED.. 90 SECONDS 54.711 METERS ALTITUDE
PAYLOAD ACQUISITION.. 90 SECONDS 54.711 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.778 SECONDS 16.460 METERS ALTITUDE
APOGEE.. 98 SECONDS 54.864 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. MPS-19 PORTABLE 403 MHZ RECEIVER-RECORDER
TELEMETRY FREQUENCY.. 403 MHZ
TELEMETRY QUALITY.. BAD
TELEMETRY DATA RECEIVED FROM.. 480 SECONDS 34.290 METERS ALTITUDE
TO 1.778 SECONDS 16.460 METERS ALTITUDE

REMARKS

TRANSMITTER FAILED UNTIL T+8 MINUTES
THERMODYNAMIC BASE DATA.. PRESSURE 101.1 MB
ALTITUDE 16.460 METERS
TEMPERATURE -66.2 DEG. C.

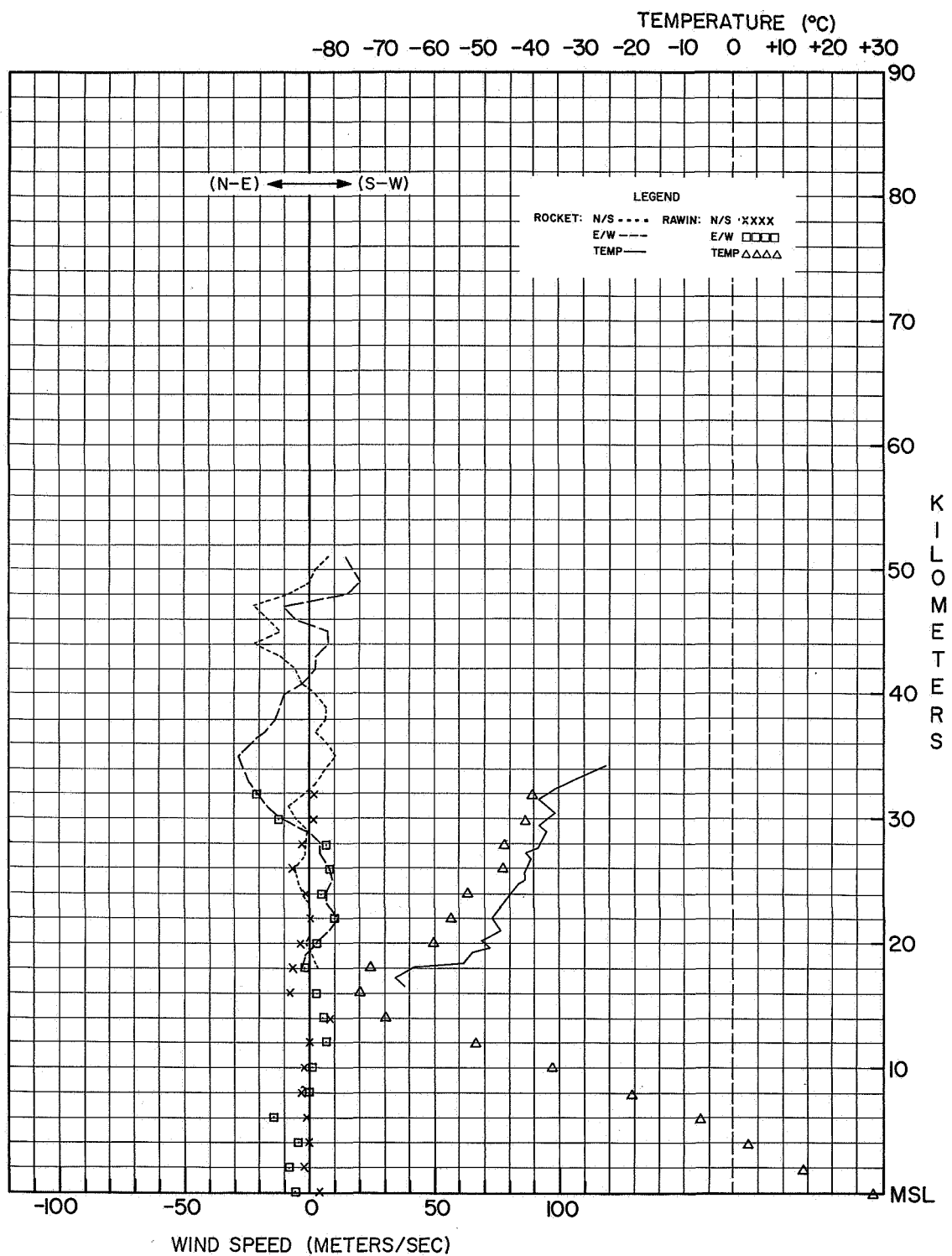
RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. BENDIX
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. 1680 MHZ-RECEIVER
BALLOON TYPE.. KAYSAM
BALLOON SIZE.. 1.000 GRAMS
FREE LIFT.. 1.200 GRAMS
ASCENSION RATES.. SFC-400 MB=290 M/MINUTE
400 MB-TOP=342 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1007.0 MB
TEMPERATURE.. 28.5 DEG. C
RELATIVE HUMIDITY.. 63%
VISIBILITY.. 20 KM
SURFACE WIND.. 130 DEG. 13 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 4 OCTAS
LOW.. 4 OCTAS/CU
MIDDLE.. NONE
HIGH.. NONE

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE
WIND AT ROCKET LAUNCH
SFC. 120 DEG/13KTS.



STATION: (CNAE) NATAL, BRAZIL
DATE: 12 OCTOBER, 1966

ROCKET TIME: 1200 LST 150 GCT
ROCKET MOTOR TYPE: JIIDI I

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
 (CNIE) CHAMICAL, ARGENTINA Z LAUNCH TIME RELEASE TIME
 87320 30°22' S 66°17' W ALT. 457 M OCTOBER 13, 1966 2350 2000

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE							
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M ⁻³	SPEED OF SOUND M/S	POLAR DEG	WIND COMPONENTS MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND COMPONENTS MPS N-S E-W	RH %	TEMP DEG C						
031	110	64	233	058 +018 +024								0953.0	0046	140	005 +002 -002	18	+30.8						
032	083	63	243	035 +008 +016								0798.7	0200	079	010 -001 -005	32	+15.6						
035	056	62	274	025 -001 +013								0628.2	0400	285	040 -005 +020	10	+05.5						
038	056	61	330	031 -014 +008								0490.0	0600	265	048 +002 +025	10	-09.2						
041	067	60	324	026 -011 +008								0373.8	0800	260	065 +006 +033	10	-25.5						
043	067	59	264	020 +001 +010								0280.6	1000	257	083 +010 +042	10	-40.8						
046	048	58	217	019 +008 +006								0206.9	1200	279	114 -009 +058		-53.5						
050	048	57	193	026 +013 +003								0151.8	1400	273	098 -003 +050		-66.3						
053	042	56	180	027 +014 +000								0110.0	1600	271	056 -001 +029		-72.7						
058	037	55	202	021 +010 +004								0079.5	1800	350	020 -010 +002		-61.2						
062	037	54	220	015 +006 +005								0056.7	2000	285	022 -003 +011		-54.0						
067	037	53	198	018 +009 +003								0041.3	2200	290	010 -002 +005		-49.1						
071	037	52	184	025 +013 +001								0030.3	2400	090	004 -000 -002		-47.8						
076	030	51	186	018 +009 +001								0022.8	2600	225	005 +002 +002		-50.5						
082	030	50	180	004 +002 +000								0016.6	2800				-50.3						
087	030	49	127	010 +003 -004																			
093	028	48	163	020 +010 -003																			
099	026	47	153	013 +006 -003																			
106	024	46	090	004 +000 -002																			
113	026	45	011	010 -005 -001																			
119	026	44	000	010 -005 +000																			
126	022	43	017	020 -010 -003																			
134	020	42	040	041 -016 -014																			
143	021	41	070	029 -005 -014																			
150	022	40	073	026 -004 -013																			
158	020	39	086	029 -001 -015																			
167	019	38	096	020 +001 -010																			
176	019	37	082	014 -001 -007																			
185	018	36	083	016 -001 -008																			
195	017	35	081	024 -002 -012																			
205	016	34	095	023 +001 -012																			
216	016	33	130	015 +005 -006																			
226	017	32	117	009 +002 -004																			
236	015	31	083	016 -001 -008																			
248	013	30	090	017 +000 -009																			
262	012	29	090	016 +000 -008																			
275	012	28	099	012 +001 -006																			
289	012	27	135	008 +003 -003																			

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. CHAFF
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 040 DEG. AZIMUTH 87.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION.. 3 SECONDS 3,657 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 114 SECONDS 70,303 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 114 SECONDS 70,303 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1,819 SECONDS 28,908 METERS ALTITUDE
 APOGEE.. 114 SECONDS 70,303 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH COPPER CHAFF
 TEMPERATURE SENSOR.. N.A.
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. MPS-19
 TELEMETRY FREQUENCY.. N.A.
 TELEMETRY QUALITY.. N.A.
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

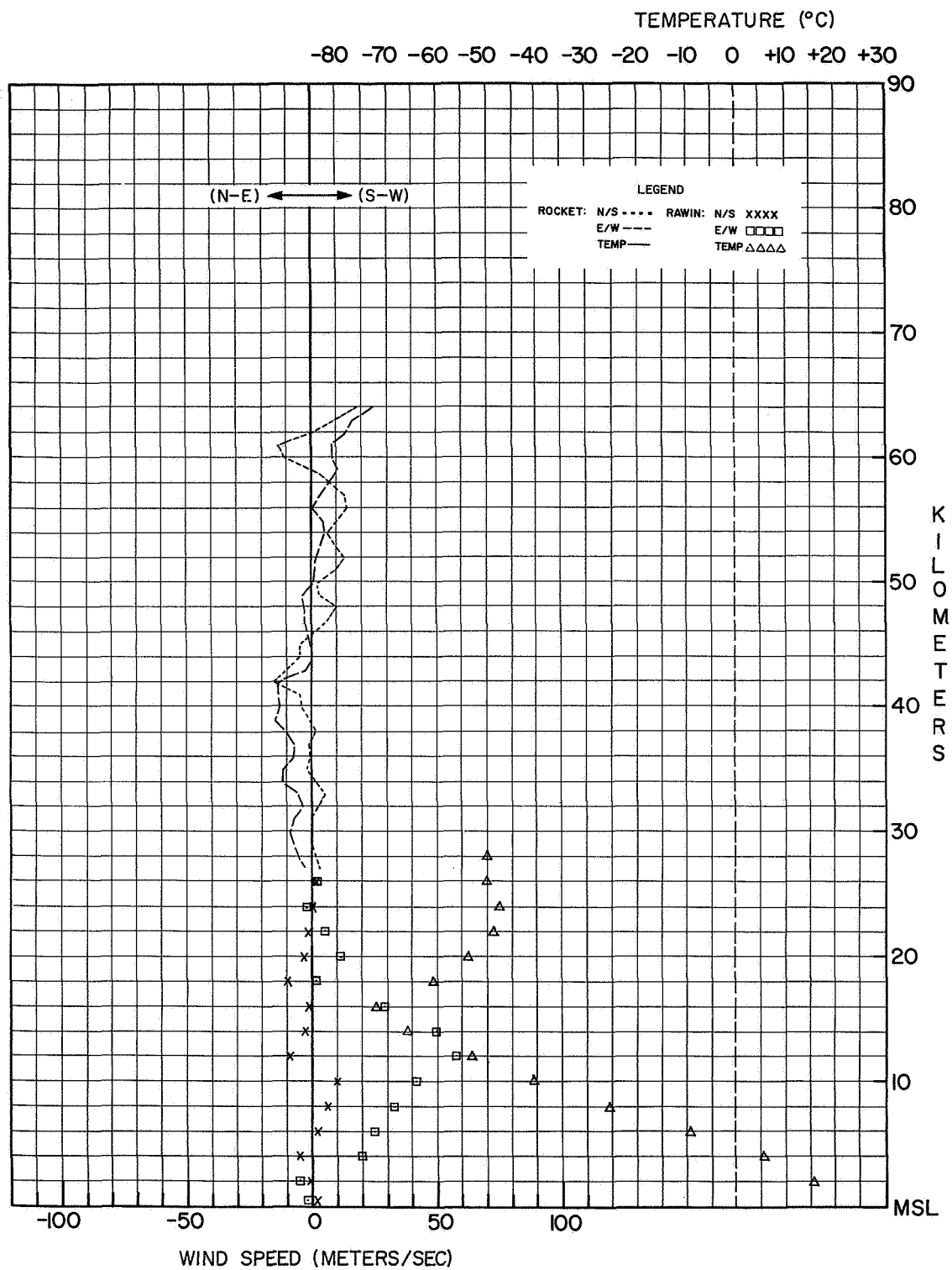
NONE
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. VAISALA
 RADIOSONDE TYPE.. VAISALA
 TEMPERATURE ELEMENT TYPE.. BIMETAL
 PRESSURE SENSOR TYPE.. ANEROID
 GROUND EQUIPMENT TYPE.. VAISALA
 BALLOON TYPE.. TOTEX
 BALLOON SIZE.. 800 GRAMS
 FREE LIFT.. 1,600 GRAMS
 ASCENSION RATES.. SFC-400 MB= 311 M/MINUTE
 400 MB-TOP= 373 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 953.0 MB
 TEMPERATURE.. 30.8 DEG. C
 RELATIVE HUMIDITY.. 18%
 VISIBILITY.. 20 KM
 SURFACE WIND.. 140 DEG. 5 KTS
 CLOUD TYPE AND AMOUNT .. TOTAL.. 0 OCTAS
 LOW.. NONE
 MIDDLE.. NONE
 HIGH.. NONE
 TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. NONE
 WIND AT ROCKET LAUNCH
 SFC. 090 DEG/08KTS



STATION: (CNIE) CHAMICAL, ARGENTINA ROCKET TIME: 1950 LT 2350 GCT
 DATE: 13 OCTOBER, 1966 ROCKET MOTOR TYPE: JUDI I

PAYLOAD TYPE: CHAFF
 RADIOSONDE TYPE: VAISALA

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) Wallops Island, Virginia Z LAUNCH TIME RELEASE TIME
72402 37°51' N 75°29' W ALT. 3 M OCTOBER 13, 1966 1938 1841

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE										RH	TEMP
TIME	FALL	ALT	POLAR	WIND	COMPONENTS	ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR	WIND	COMPONENTS	PRESSURE	ALT	POLAR	WIND	COMPONENTS	RH	TEMP							
TENTHS	VEL					TENS	DEG					OF			KTS		MPS				METERS	TENS	DEG	KTS	MPS		
OF A					E-W	OF		MB	G M	SOUND			E-W	MB				E-W									
MINUTE	M/S	KM	DEG	KTS	N-S	METERS				M/S	DEG	KTS	N-S														
023	067	51	256	074	+009 +037	3536	-29.5	05.895	08.429	313	270	021	-000 +011	1024.0	0000	165	006	+003 -001	73	+08.9							
025	067	50	265	066	+003 +034	3414	-35.3	06.996	10.247	309	270	017	+000 +009	0807.0	0200	330	008	-004 +002	20	+07.9							
028	067	49	266	055	+002 +028	3109	-40.2	10.843	16.215	306	236	007	+002 +003	0630.0	0400	310	010	-003 +004	38	-03.9							
030	067	48	270	052	+000 +027	2960	-39.3	13.457	20.048	307	198	006	+003 +001	0485.0	0600	284	029	-004 +014	58	-16.2							
033	056	47	274	058	-002 +030	2795	-42.2	17.114	25.815	305				0372.0	0800	275	031	-001 +016	21	-29.7							
036	056	46	272	064	-001 +033	2673	-44.6	20.487	31.227	303				0277.0	1000	281	029	-003 +015		-45.3							
039	048	45	265	064	+003 +033	2624	-47.6	22.041	34.043	301				0204.0	1200	286	043	-006 +021		-57.0							
043	042	44	264	066	+003 +034	2478	-51.6	27.501	43.244	298				0149.0	1400	300	049	-013 +022		-59.7							
047	042	43	259	069	+007 +035	2323	-50.5	34.844	54.518	299				0108.0	1600	300	045	-012 +020		-61.7							
051	037	42	252	061	+010 +030	2134	-54.9	46.606	74.392	296				0078.4	1800	302	023	-006 +010		-62.8							
056	033	41	256	048	+006 +024	2070	-53.4	51.466	81.588	297				0057.2	2000	201	006	+003 +001		-58.1							
061	033	40	281	042	-004 +021	2000	-55.3	57.370	91.741	296				0041.5	2200	144	010	+004 -003		-54.7							
066	030	39	289	041	-007 +020	1923	-58.7	64.746		294				0030.8	2400	123	008	+002 -003		-52.0							
072	030	38	280	043	-004 +022	1844	-58.2	73.364		294				0022.7	2600	134	008	+003 -003		-50.2							
077	030	37	275	041	-002 +021	1789	-62.7	80.100		291																	
083	026	36	274	029	-001 +015																						
090	024	35	270	016	+000 +008	CONSTANT PRESSURE LEVEL DATA																					
097	022	34	270	017	+000 +009	(HEIGHT IN GEOPOTENTIAL METERS)																					
105	022	33	257	018	+002 +009	2082	-53.9	50.000	79.428	297																	
112	022	32	239	011	+003 +005	2416	-51.2	30.000	47.093	299																	
120	021	31	236	007	+002 +003	2680	-44.3	20.000	30.439	303																	
128	021	30	198	006	+003 +001	3160	-39.1	10.000	14.886	307	239	011	+003 +005														
136	021	29	180	004	+002 +000	3396	-35.3	07.000	10.253	309	270	017	+000 +009														

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-3A
PAYLOAD PERFORMANCE.. FAIR
FUSE TYPE.. PYROTECHNIC
FUSE DELAY TIME.. PREDICTED..90 SEC. ACTUAL.. 85 SEC.
TYPE OF LAUNCHER.. 12 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 7 SECONDS 7,162 METERS ALTITUDE
MOTOR TRACK DROPPED.. 85 SECONDS 53,157 METERS ALTITUDE
PAYLOAD ACQUISITION.. 85 SECONDS 53,157 METERS ALTITUDE
PAYLOAD TRACK DROPPED..1,140 SECONDS 17,891 METERS ALTITUDE
APOGEE.. 100 SECONDS 54,711 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. SPECIAL CROSSPATCH PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. ABOVE NOMINAL
GROUND EQUIPMENT TYPE.. PORTABLE 403 MHZ RECEIVER-RECORDER
TELEMETRY FREQUENCY.. 402 MHZ
TELEMETRY QUALITY.. FAIR
TELEMETRY DATA RECEIVED FROM.. 526 SEC. 35,360 METERS ALTITUDE
TO 1,140 SECONDS 17,891 METERS ALTITUDE

REMARKS

TELEMETRY SIGNAL UNUSABLE UNTIL 526 SECS. FALL RATE EXCESSIVE
AFTER 870 SECS.
THERMODYNAMIC BASE DATA.. PRESSURE 80.1 MB
ALTITUDE 17,890 METERS
TEMPERATURE -62.7 DEG. C.

RADIOSONDE AND BALLOON DATA

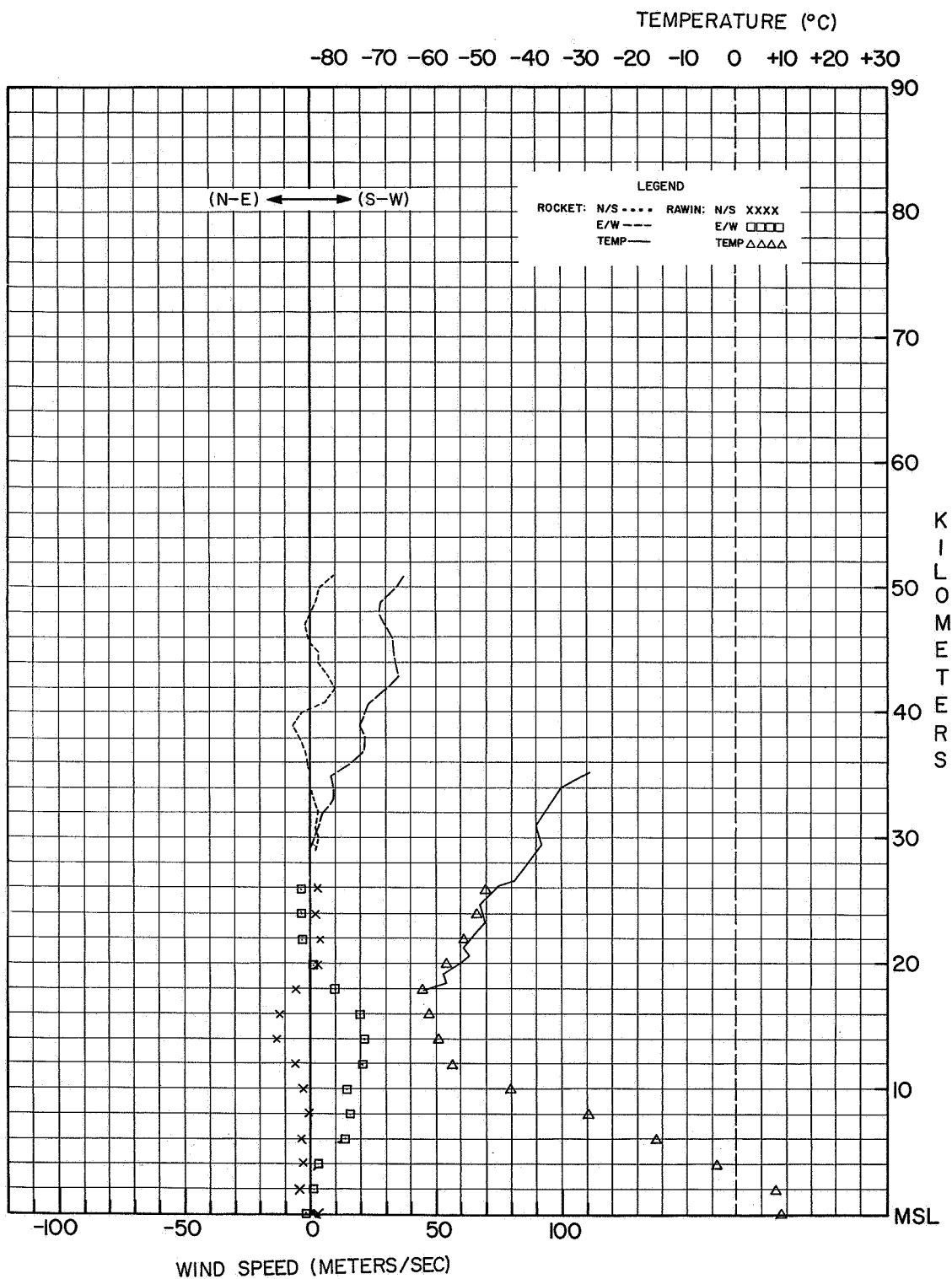
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 2,400 GRAM
FREE LIFT.. 1,300 GRAM
ASCENSION RATES.. SFC-400 MB= 271 M/MINUTE
400 MB-TOP= 403 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1024.0 MB
TEMPERATURE .. 18.9 DEG. C
RELATIVE HUMIDITY.. 73%
VISIBILITY.. 16 KM
SURFACE WIND.. 165 DEG. 6 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 8 OCTAS/CI
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

SFC. 179 DEG/12KTS, 50 FT. 182 DEG/09KTS,
100 FT. 169 DEG/10KTS, 150 FT. 175 DEG/11KTS,
200 FT. 181 DEG/11KTS, 250 FT. 175 DEG/11KTS,



STATION: (NASA) WILLOPS ISLAND, VA. ROCKET TIME: 1438 LST 1938 GCT
 DATE: 13 OCTOBER, 1966 ROCKET MOTOR TYPE: JUDI 1

PAYLOAD TYPE: WOX-3A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
 (CNAE) NATAL, BRAZIL Z TIME TIME
 82599 5°55' S 35°10' W ALT. 43 M NOVEMBER 16, 1966 1505 1049

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	RH %	TEMP DEG C						
030	067	52	029	024	-011 -006	5075	+04.2	00.823	01.033	334	029	024	-011 -006	1005.0	0004	100	009	+001 -005	77	+27.5						
032	067	51	027	022	-010 -005	4935	+10.2	00.973	01.197	337	043	032	-012 -011	0802.0	0200	090	016	-000 -008	72	+13.2						
035	067	50	033	032	-014 -009	4791	+04.5	01.157	01.451	334	070	039	-007 -019	0629.0	0400	100	013	+001 -007	26	+05.3						
037	067	49	047	032	-011 -012	4645	+06.0	01.380	01.722	335	094	031	+001 -016	0489.0	0600	260	009	+001 +005	42	-10.1						
040	067	48	067	040	-008 -019	4496	+05.7	01.652	02.064	335	121	011	+003 -005	0376.0	0800	250	031	+005 +015		-20.8						
042	067	47	084	039	-002 -020	4249	-07.0	02.242	02.935	327	262	014	+001 +007	0285.0	1000	270	033	+000 +017		-34.0						
045	048	46	104	024	+003 -012	4228	-09.0	02.303	03.037	326	263	016	+001 +008	0211.3	1200	260	025	+002 +013		-52.2						
049	048	45	121	011	+003 -005	4039	-11.0	02.934	03.899	325	240	016	+004 +007	0153.5	1400	290	036	+006 +017		-69.3						
052	048	44	162	006	+003 -001	3938	-07.0	03.338	04.369	327	193	018	+009 +002	0108.9	1600	220	018	+007 +006		-80.3						
056	042	43	243	009	+002 +004	3825	-09.1	03.854	05.085	326	146	014	+006 -004	0076.7	1800	110	036	+006 -017		-73.5						
060	042	42	264	018	+001 +009	3761	-09.0	04.183	05.517	326	084	018	-001 -009													
064	042	41	275	021	-001 +011	3694	-12.5	04.560	06.094	324	058	037	-010 -016													
068	030	40	207	017	+008 +004	3545	-13.0	05.532	07.408	323	090	062	-000 -032													
075	030	39	186	018	+009 +001	3502	-23.0	05.856	08.156	317	096	070	+004 -036													
079	037	38	135	014	+005 -005	3432	-25.2	06.440	09.048	316	094	078	+003 -040													
084	030	37	056	035	-010 -015	3255	-38.2	08.251	12.234	307	088	068	-001 -035													
090	026	36	080	055	-005 -028	3133	-35.8	09.826	14.422	309	088	054	-001 -028													
097	024	35	096	070	+004 -036	2917	-43.0	13.434	20.334	304	090	016	-000 -008													
104	022	34	094	082	+003 -042	2713	-48.2	18.199	28.184	301	255	030	+004 +015													
112	021	33	090	072	+000 -037	2573	-46.4	22.452	34.494	302	220	015	+006 +005													
120	020	32	087	064	-002 -033	2283	-59.0	35.072	57.053	293	263	016	+001 +008													
129	018	31	088	049	-001 -025	2231	-56.8	38.067	61.296	295	263	016	+001 +008													
139	016	30	082	029	-002 -015	2198	-62.0	40.114	66.182	291	263	016	+001 +008													
150	013	29	090	012	+000 -006	2069	-59.2	49.288	80.254	293	279	012	-001 +006													
164	012	28	236	014	+004 +006	1926	-66.0	62.070		289	351	012	-006 +001													
177	012	27	256	032	+004 +016	1817	-65.5	74.200		289	076	024	-003 -012													
192	010	26	207	013	+006 +003																					
210	009	25	241	024	+006 +011																					
228	009	24	252	018	+003 +009																					
248	007	23	263	016	+001 +008																					
273	006	22	263	016	+001 +008																					
301	006	21	270	014	+000 +007																					
329	005	20	292	010	-002 +005																					
363	005	19	008	014	-007 -001																					
395	005	18	082	027	-002 -014																					
CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																										
2054	+59.6	50.000	81.558	293	279	012	*001	*006																		
2391	-53.9	30.000	47.675	297	252	018	+003	+009																		
2643	-47.4	20.000	30.868	301	243	022	+005	+010																		
3108	-36.1	10.000	14.699	309	088	053	-001	-027																		
3159	-29.2	07.000	09.997	313	093	080	+002	-041																		
3689	-12.7	05.000	06.889	314	076	048	+006	-024																		
4321	-01.8	02.000	02.568	330	214	007	+003	+002																		
4876	+09.4	01.000	01.233	337	047	032	-011	-012																		

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2054	-59.6	50.000	81.558	293	279	012	+001	+006
2391	-53.9	30.000	47.675	297	252	018	+003	+009
2643	-47.4	20.000	30.868	301	243	022	+005	+010
3108	-36.1	10.000	14.699	309	088	053	-001	-027
3359	-29.2	07.000	09.997	313	093	080	+002	-041
3606	-12.7	05.000	06.689	324	076	048	-006	-024
4321	-01.8	02.000	02.568	330	214	007	+003	+002
4876	+09.4	01.000	01.233	337	047	032	-011	-012

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. ARCADESONE 1-A
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. GAS GENERATOR WITH SEPARATION DEVICE
 FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
 LAUNCHER SETTING.. 070 DEG. AZIMUTH 86.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
 MOTOR ACQUISITION.. 6 SECONDS 8,229 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 145 SECONDS 58,034 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 145 SECONDS 58,034 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 2,640 SECONDS 16,764 METERS ALTITUDE
 APOGEE.. 136 SECONDS 59,131 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
 TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. GMD-18
 TELEMETRY FREQUENCY.. 1680 MHZ
 TELEMETRY QUALITY.. FAIR
 TELEMETRY DATA RECEIVED FROM.. 197 SECONDS 50,750 METERS ALTITUDE
 TO 2,324 SECONDS 18,170 METERS ALTITUDE

REMARKS

THERMODYNAMICS BASE..
 PRESSURE.. 74.2 MB
 ALTITUDE.. 18,170 METERS
 TEMPERATURE.. -73.0 DEG. C.

RADIOSONDE AND BALLOON DATA

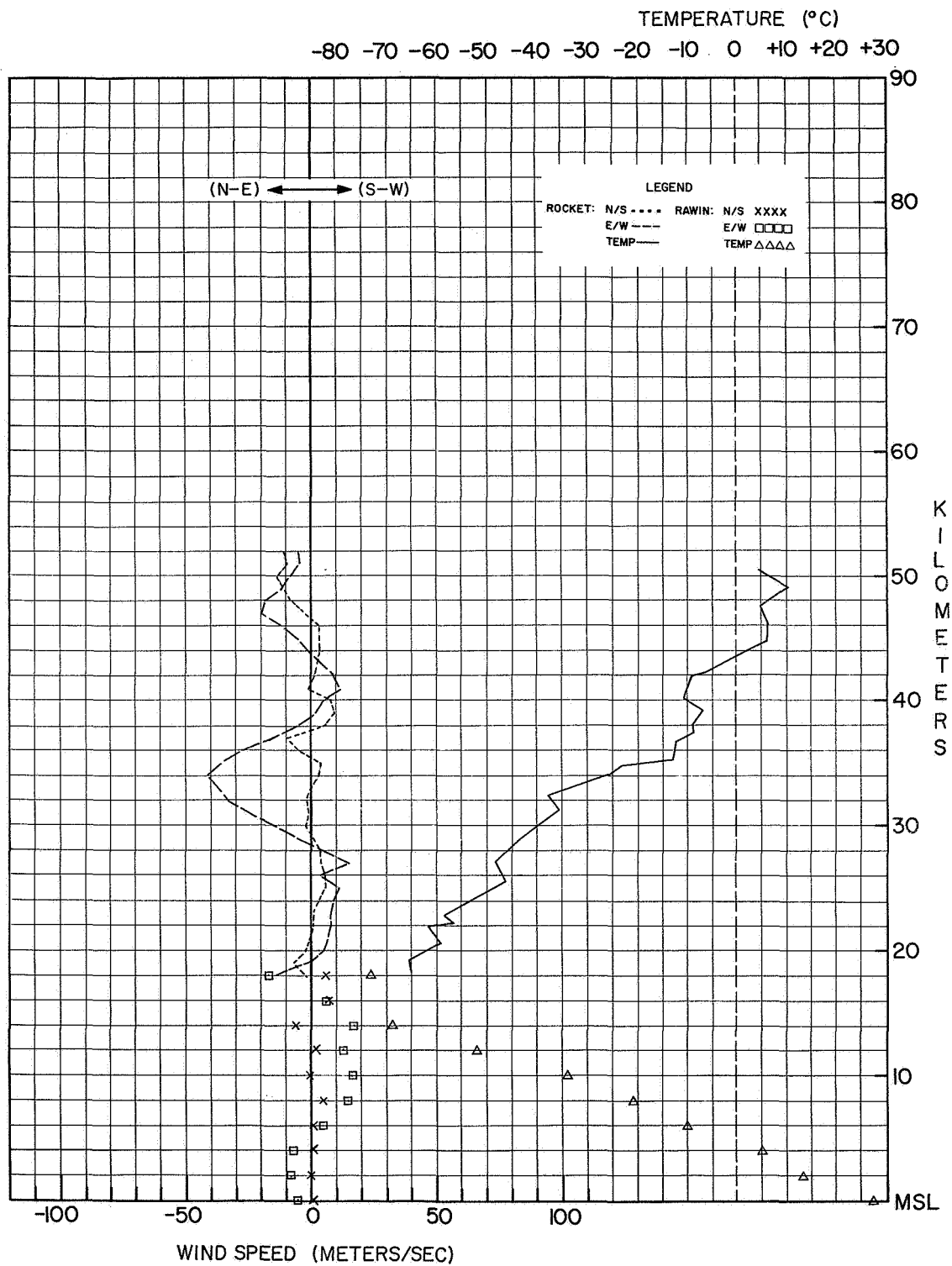
RADIOSONDE MANUFACTURER.. BENDIX
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID
 GROUND EQUIPMENT TYPE.. 1680 MHZ
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1,000 GRAMS
 FREE LIFT.. 1,200 GRAMS
 ASCENSION RATES.. SFC-400 MB= 274 M/MINUTE
 400 MB-TOP= 325 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1005.0 MB
 TEMPERATURE.. 27.5 DEG. C
 RELATIVE HUMIDITY.. 77%
 VISIBILITY.. 20 KM
 SURFACE WIND.. 100 DEG. 9 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
 LOW.. CU
 MIDDLE.. AC
 HIGH.. NONE
 TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

29 FT. 130 DEG/12KTS, 51 FT. 130 DEG/14KTS,
 82 FT. 120 DEG/18KTS, 133 FT. 125 DEG/18KTS



STATION: (CNAE) NATAL, BRAZIL
DATE: 16 NOVEMBER, 1966

ROCKET TIME: 1205 LST 1505 GCT
ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCAS ONDE 1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
LAUNCH TIME RELEASE TIME
Z Z Z
52601 22°46' S 63°49' W ALT. 450 M NOVEMBER 16, 1966 1530

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS						RAWINSONDE						RH	TEMP		
TIME FALL	ALT	POLAR	WIND	COMPONENTS	ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR	WIND	COMPONENTS	PRESSURE	ALT	POLAR	WIND	COMPONENTS	RH	TEMP		
TENTHS VEL					TENS				OF					TENS							
OF A					OF			-3	SOUND					OF				%	DEG C		
MINUTE M/S	KM	DEG	KTS	MPS	METERS	DEG C	MB	G M	M/S	DEG	KTS	N-S	E-W	METERS	DEG	KTS	N-S	E-W			
				N-S	E-W																
						5700	+12.0	00.427	00.521	339				0967.1	0045	180	006	+003	-000	52	+24.0
						4900	+09.2	01.100	01.357	337				0805.0	0200	192	020	+010	+002	88	+14.5
						4800	+03.6	01.241	01.562	333				0628.0	0400	279	011	-001	+006	18	+04.5
						4600	+05.0	01.582	01.981	334				0491.0	0600	261	038	+003	+019	12	-07.4
						4375	+02.7	02.079	02.026	333				0377.0	0800	251	043	+007	+021	11	-22.4
						4250	+03.9	02.422	03.045	334				0285.0	1000	292	062	-012	+030		-35.3
						4050	-01.3	03.096	03.968	331				0212.0	1200	308	062	-020	+025		-50.7
						4025	-01.1	03.194	04.090	331				0155.0	1400	290	060	-011	+029		-65.5
						3675	-10.3	04.968	06.584	325				0111.0	1600	281	031	-003	+016		-75.2
						3600	-17.1	05.477	07.452	321				0078.5	1800	295	030	-007	+014		-73.2
						3540	-17.7	05.929	08.086	320				0052.7	2000	046	009	-003	-003		-63.8
						3150	-31.0	10.073	14.491	312				0040.9	2200	048	024	-008	-009		-54.6
						2975	-30.5	12.860	18.463	312				0030.2	2400	090	010	-000	-005		-47.8
						2725	-34.9	18.287	26.739	309											
						2600	-38.0	21.870	32.399	307											
						2355	-48.6	31.388	48.696	300											
						2147	-57.4	43.248	69.832	294											
						2040	-63.2	51.294	85.111	290											
						1848	-62.0	69.910		291											
						1815	-70.3	73.800		286											

CONSTANT PRESSURE LEVEL DATA
(HEIGHT IN GEOPOTENTIAL METERS)

2050	-62.3	50.000	82.597	291
2382	-47.1	30.000	46.224	301
2654	-36.4	20.000	29.427	308
3141	-30.8	10.000	14.373	312
3421	-21.1	07.000	09.676	318
3649	-10.7	05.000	06.638	325
4381	+03.1	02.000	02.522	333
4960	+09.6	01.000	01.232	337

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUNI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. 90 SEC.
LAUNCHER SETTING.. 140 DEG. AZIMUTH 87.0 DEG. ELEVATION
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 140 DEG. AZIMUTH 87.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. UNKNOWN
MOTOR TRACK DROPPED.. UNKNOWN
PAYLOAD ACQUISITION.. UNKNOWN
PAYLOAD TRACK DROPPED.. UNKNOWN
APOGEE.. UNKNOWN

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ PORTABLE RECEIVER-RECORDER
TELEMETRY FREQUENCY.. 404.5 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 130 SECONDS 57,000 METERS ALTITUDE
TO 1.843 SECONDS 18,150 METERS ALTITUDE

REMARKS

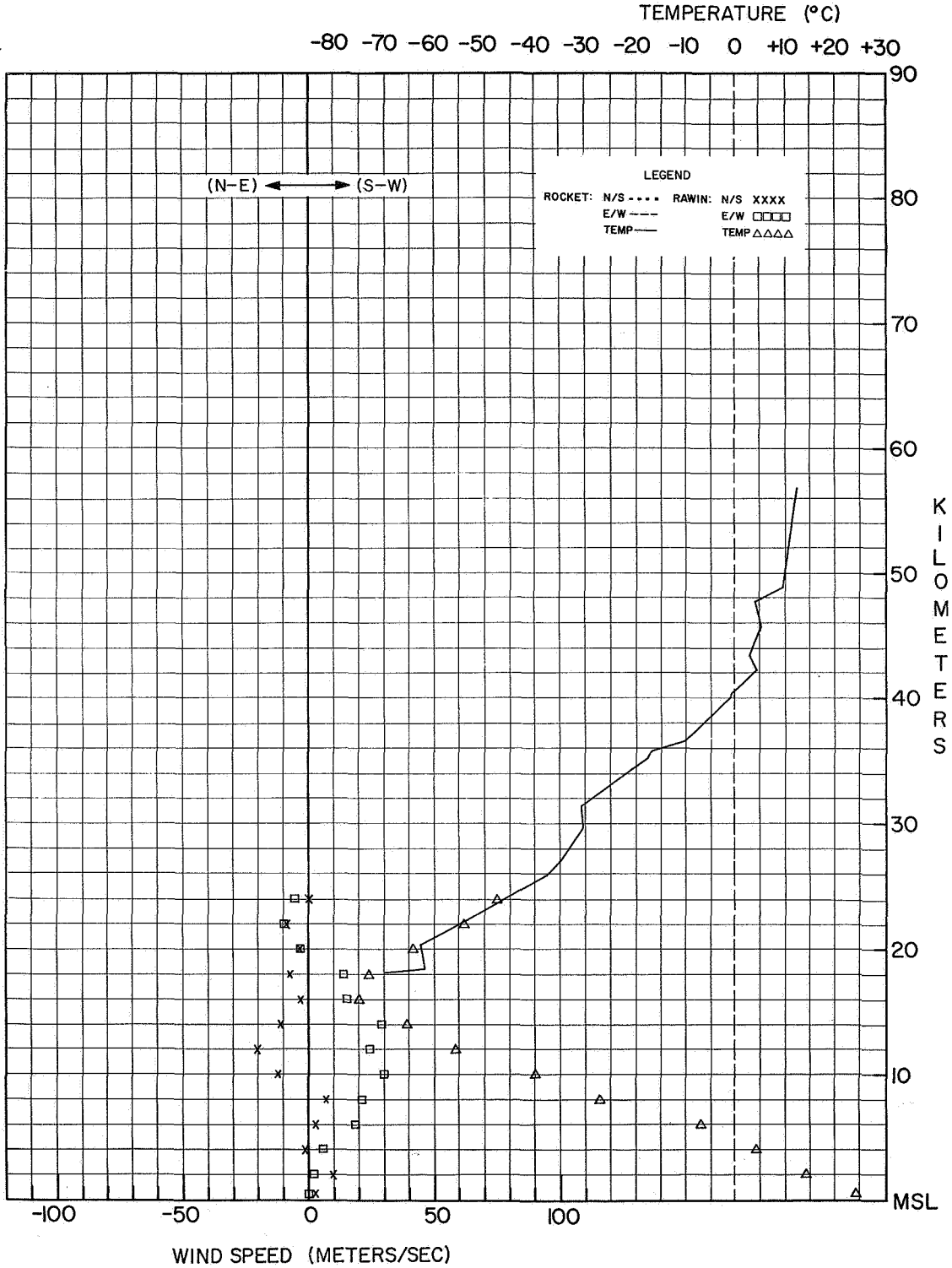
NO RADAR PRINTOUTS IN ASCENT. TRACK OF PAYLOAD MISSED UPON
EJECTION DOWN TO GROUND. ALTITUDE READ FROM INDICATOR DIALS
DURING TRACK.
THERMODYNAMICS BASE DATA.. PRESSURE 73.8 MB
ALTITUDE 18,150 METERS
TEMPERATURE -72.5 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. VAISALA
RADIOSONDE TYPE.. VAISALA
TEMPERATURE ELEMENT TYPE.. BIMETAL
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. VAISALA
BALLOON TYPE.. TOTEX
BALLOON SIZE.. 800 GRAMS
FREE LIFT.. 1,300 GRAMS
ASCENSION RATES.. SFC-400 MB = 300 M/MINUTE
400 MB-TOP = 344 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE
STATION PRESSURE.. 967.1 MB
TEMPERATURE.. 24.0 DEG. C
RELATIVE HUMIDITY.. 52%
VISIBILITY.. 20 KM
SURFACE WIND.. 180 DEG. 6 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. NONE
MIDDLE.. AC/AS
HIGH.. NONE

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE
LAUNCH
SFC. 180 DEG/06 KTS



STATION: TARTAGAL, ARGENTINA
DATE: 16 NOVEMBER, 1966

ROCKET TIME: 1130 LST 1530 GCT
ROCKET MOTOR TYPE: JUDI I

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: VAISALA

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WALLOPS ISLAND, VIRGINIA Z LAUNCH TIME Z RELEASE TIME Z
72402 37°51' N 75°29' W ALT. 3 M NOVEMBER 16, 1966 1606 1800

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	RH %	TEMP DEG C						
026	067	52	252	207	+033 +101	5197	-02.3	00.572	00.736	330	252	207	+033 +101	1030.6	0000	180	010	+005 -000	61	+11.7						
028	067	51	249	226	+041 +109	5115	+00.4	00.633	00.806	332	250	224	+040 +108	0807.0	0200	271	015	-000 +008	29	+03.3						
031	067	50	251	231	+039 +112	4871	-03.1	00.856	01.104	329	250	215	+038 +104	0627.0	0400	281	023	-002 +012	24	-08.2						
033	067	49	249	214	+039 +103	4755	+00.2	00.988	01.260	331	248	216	+041 +103	0481.0	0600	275	025	-001 +013	22	-20.9						
036	067	48	251	218	+037 +106	4587	-12.0	01.221	01.629	324	242	200	+048 +091	0365.0	0800	295	029	-006 +014	24	-35.9						
038	067	47	246	213	+045 +100	4261	-14.0	01.863	02.504	323	250	173	+030 +084	0271.0	1000	327	037	-016 +010		-51.7						
041	056	46	242	201	+049 +091	4218	-23.2	01.972	02.749	317	250	165	+029 +080	0197.0	1200	304	037	-011 +016		-62.3						
044	048	45	247	190	+038 +090	4106	-29.2	02.298	03.282	313	252	141	+022 +069	0143.0	1400	276	031	-002 +016		-57.2						
048	048	44	249	181	+033 +087	4014	-32.0	02.612	03.773	311	256	138	+017 +069	0104.0	1600	269	019	+000 +010		-61.6						
051	048	43	251	181	+031 +088	3941	-31.7	02.892	04.173	311	259	141	+014 +071	0076.0	1800	259	029	+003 +015		-61.2						
055	037	42	250	162	+029 +078	3834	-37.3	03.365	04.970	308	260	140	+012 +071	0054.0	2000	251	021	+004 +010		-60.2						
060	037	41	252	139	+022 +068	3587	-43.0	04.813	07.286	304	257	120	+014 +060	0039.0	2200	245	023	+005 +011		-59.2						
064	037	40	257	138	+016 +069	3453	-43.2	05.860	08.878	304	253	118	+018 +058	0028.0	2400	240	031	+008 +014		-55.8						
069	030	39	260	142	+013 +072	3301	-49.5	07.351	11.450	300	260	097	+009 +049	0021.5	2600	250	045	+008 +022		-52.7						
075	030	38	261	138	+011 +070	3200	-47.8	08.558	13.231	301	260	093	+008 +047	0015.5	2800	258	062	+007 +031		-49.0						
080	028	37	263	135	+009 +069	3078	-50.7	10.291	16.116	299	257	088	+010 +044													
087	024	36	258	119	+013 +060	2987	-49.4	11.814	18.394	300	258	077	+008 +039													
094	022	35	251	121	+020 +059	2926	-52.7	12.965	20.488	298	255	068	+009 +034													
102	021	34	254	115	+016 +057	2600	-56.4	21.485	34.531	295	252	045	+007 +022													
110	020	33	260	097	+009 +049	2518	-53.6	24.404	38.722	297	250	039	+007 +019													
119	018	32	260	093	+008 +047	2155	-61.8	43.213	71.227	291	255	022	+003 +011													
129	017	31	257	090	+010 +045	2000	-60.3	55.377	90.635	292	250	023	+004 +011													
139	016	30	259	079	+008 +040	1935	-63.3	61.473		290	248	021	+004 +010													
150	016	29	253	065	+010 +032	1829	-60.7	72.900		292																
160	014	28	249	044	+008 +021																					
173	012	27	249	033	+006 +016																					
187	011	26	252	045	+007 +022																					
203	010	25	249	038	+007 +018	2062	-61.0	50.000	82.090	292	248	021	+004 +010													
220	010	24	252	031	+005 +015	2401	-56.0	30.000	48.137	295	252	031	+005 +015													
238	010	23	262	029	+002 +015	2646	-55.8	20.000	32.049	296	252	039	+006 +019													
253	009	22	256	024	+003 +012	3083	-50.2	10.000	15.626	299	257	090	+010 +045													
277	007	21	248	021	+004 +010	3320	-48.0	07.000	10.632	301	257	104	+012 +052													
303	006	20	250	023	+004 +011	3543	-43.0	05.000	07.569	304	255	121	+016 +060													
330	005	19	248	021	+004 +010	4190	-23.7	02.000	02.793	317	250	164	+029 +079													
						4712	-00.4	01.000	01.277	331	248	216	+041 +103													

CONSTANT PRESSURE LEVEL DATA

(HEIGHT IN GEOPOTENTIAL METERS)

2062	-61.0	50.000	82.090	292	248	021	+004	+010
2401	-56.0	30.000	48.137	295	252	031	+005	+015
2646	-55.8	20.000	32.049	296	252	039	+006	+019
3083	-50.2	10.000	15.626	299	257	090	+010	+045
3320	-48.0	07.000	10.832	301	257	104	+012	+052
3543	-43.0	05.000	07.569	304	255	121	+016	+060
4180	-23.7	02.000	02.793	317	250	164	+029	+079
4712	-00.4	01.000	01.277	331	248	216	+041	+103

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. 106 SEC.
TYPE OF LAUNCHER.. ARCAS W/GAS GENERATOR
LAUNCHER SETTING.. 118 DEG. AZIMUTH 79.5 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 9 SECONDS 1,341 METERS ALTITUDE
MOTOR TRACK DROPPED.. 134 SECONDS 53,583 METERS ALTITUDE
PAYLOAD ACQUISITION.. 134 SECONDS 53,583 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2+100 SECONDS 18,290 METERS ALTITUDE
APOGEE.. 122 SECONDS 54,254 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. SPECIAL DISC-GAP-BAND PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD-THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1B AND TMO5
TELEMETRY FREQUENCY.. 1684 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 158 SECONDS 51,970 METERS ALTITUDE
TO 2+100 SECONDS 18,290 METERS ALTITUDE

REMARKS

THERMODYNAMIC BASE DATA.. PRESSURE 72.9 MB
ALTITUDE 18,290 METERS
TEMPERATURE -60.7 DEG. C.

RADIOSONDE AND BALLOON DATA

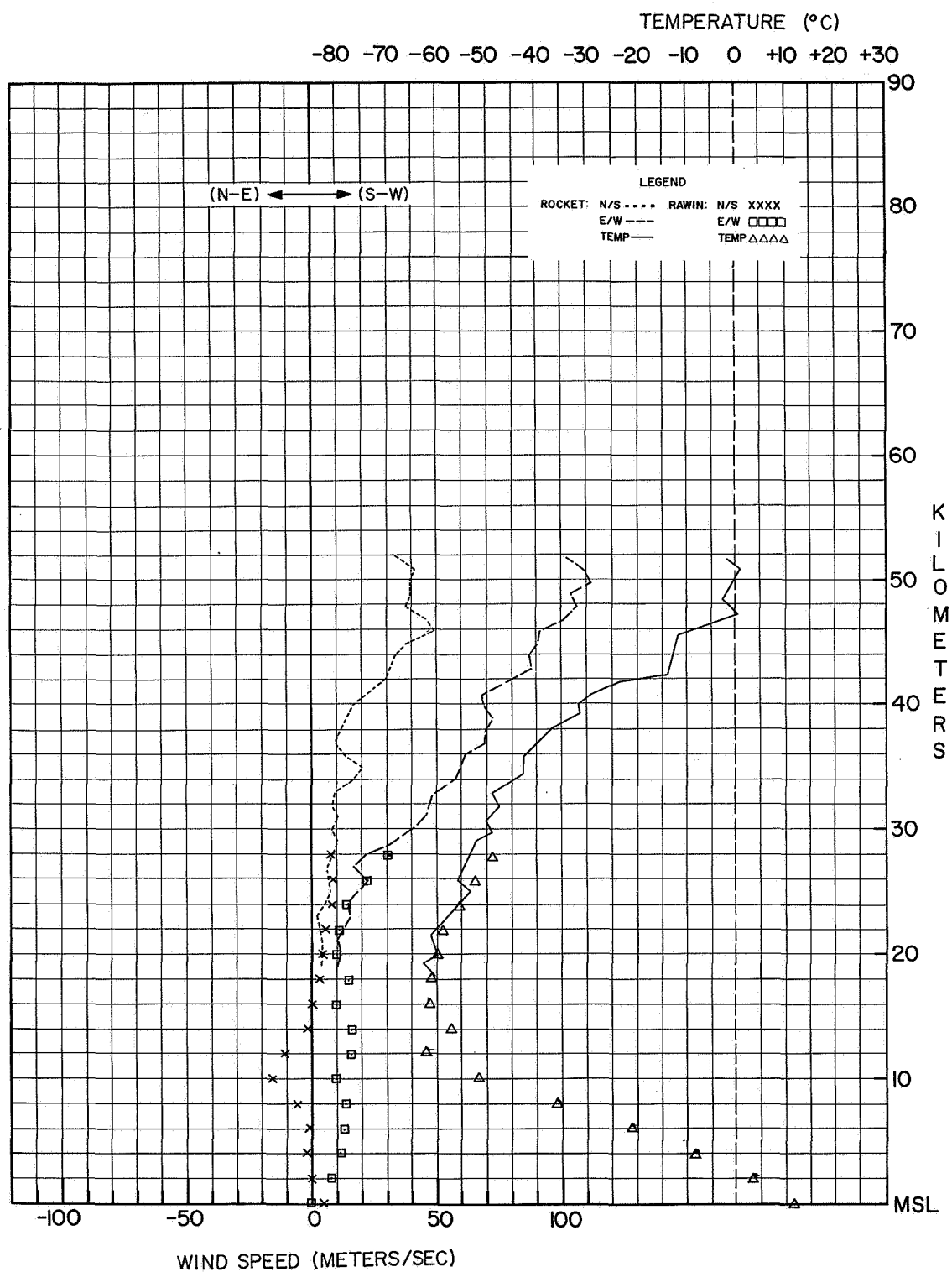
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAM
FREE LIFT.. 1,400 GRAM
ASCENSION RATES.. SFC-400 MB= 284 M/MINUTE
400 MB-TOP= 369 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1030.6 MB
TEMPERATURE.. 11.7 DEG. C
RELATIVE HUMIDITY.. 61%
VISIBILITY.. 16 KM
SURFACE WIND.. 180 DEG. 10 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 3 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 3 OCTAS/CI
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

SFC. 192 DEG/6KTS, 50 FT. 175 DEG/5KTS,
100 FT. 188 DEG/6KTS, 150 FT. 202 DEG/6KTS,
200 FT. 210 DEG/7KTS, 250 FT. 218 DEG/7KTS



STATION: (NASA)WALLOPS ISLAND, VA. ROCKET TIME: 1106 LST 1606 GCT
DATE: 16 NOVEMBER, 1966 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: ARCASONDE 1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE 'ROCKET RAWINSONDE
(CNIE) CHAMICAL, ARGENTINA LAUNCH TIME RELEASE TIME
Z Z Z
87320 30°22' S 66°17' W ALT. 457 M DECEMBER 14, 1966 2025 1725

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE										RH	TEMP DEG C
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W								
090	018	30	069	027	-005 -013		3235	-32.3	09.269	13.407	311					0958.6	0046	140	007	+003 -002	48	+23.7						
099	018	29	124	028	+008 -012		2958	-32.3	13.679	19.785	311	090	025	+000 -013		0798.0	0200	229	012	+004 +005	46	+10.9						
109	018	28	103	018	+002 -009		2900	-33.8	14.844	21.606	310	124	028	+008 -012		0627.0	0400	287	032	-005 +016	05	+08.3						
118	014	27	101	020	+002 -010		2805	-39.0	17.005	25.299	307	103	018	+002 -009		0491.0	0600	265	034	+002 +017	05	-05.8						
132	013	26	101	020	+002 -010		2742	-40.2	18.631	27.862	306	101	020	+002 -010		0377.0	0800	295	046	-010 +021	17	-19.5						
143	011	25	045	011	-004 -004		2691	-39.0	20.062	29.848	307	101	020	+002 -010		0266.5	1000	290	056	-010 +027		-31.0						
161	010	24	045	011	-004 -004		2580	-45.5	23.611	36.131	302	096	018	+001 -009		0213.5	1200	276	050	-003 +026		-45.3						
176	012	23	110	023	+004 -011		2415	-47.3	30.216	46.607	301	045	011	-004 -004		0157.3	1400	290	052	-009 +025		-59.3						
188	011	22	103	018	+002 -009		2365	-46.5	32.567	50.056	302	081	012	-001 -006		0113.5	1600	297	039	-009 +018		-72.4						
206	009	21	082	014	-001 -007		2359	-50.3	32.863	51.373	299	082	014	-001 -007		0080.8	1800	177	012	+006 -000		-80.6						
226	007	20	124	007	+002 -003		2205	-50.7	41.553	65.073	299	103	018	+002 -009		0056.8	2000	144	015	+006 -005		-81.3						
251	007	19	135	003	+001 -001		2068	-58.4	51.400	83.381	294	090	012	-000 -006		0040.8	2200					-70.9						
275	006	18	315	003	-001 +001		1980	-57.3				124	007	+002 -003		0029.2	2400					-62.4						
303	006	17	299	020	-005 +009		1837	-74.7								0021.2	2600					-60.2						
328	006	16	300	038	-010 +017		1680	-70.5				299	024	-006 +011		0015.6	2800					-58.2						
							1530	-69.7								0011.2	3000					-56.3						
							1416	-62.3																				
							1385	-63.5																				
							1243	-55.1																				
							0976	-33.0																				
CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																												
							2080	-57.3	50.000	80.009	295	081	012	-001 -006														
							2411	-47.2	30.000	46.262	301	005	011	-004 -004														
							2682	-39.1	20.000	29.763	307	101	020	+002 -010														
							3173	-32.3	10.000	14.464	311																	

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2080 -57.3 50.000 80.699 295 081 012 -001 -006
2411 -47.2 30.000 46.262 301 045 011 -004 -004
2682 -39.1 20.000 29.763 307 101 020 +002 -010
3173 -32.3 10.000 14.464 311

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. 83 SEC.
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 015 DEG. AZIMUTH 83.5 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. UNKNOWN
MOTOR TRACK DROPPED.. UNKNOWN
PAYLOAD ACQUISITION.. 420 SECONDS 33,530 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 3,420 SECONDS 8,382 METERS ALTITUDE
APOGEE.. UNKNOWN

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. .014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ PORTABLE RECEIVER-RECORDER
TELEMETRY FREQUENCY.. 403 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 440 SECONDS 32,350 METERS ALTITUDE
TO 3,120 SECONDS 9,760 METERS

REMARKS

RADAR LOST TRACE FROM LAUNCH TO T+7 MINUTES
TEMP. VS. ALT. AVAILABLE TO 110 K FT.
THERMODYNAMIC BASE DATA..

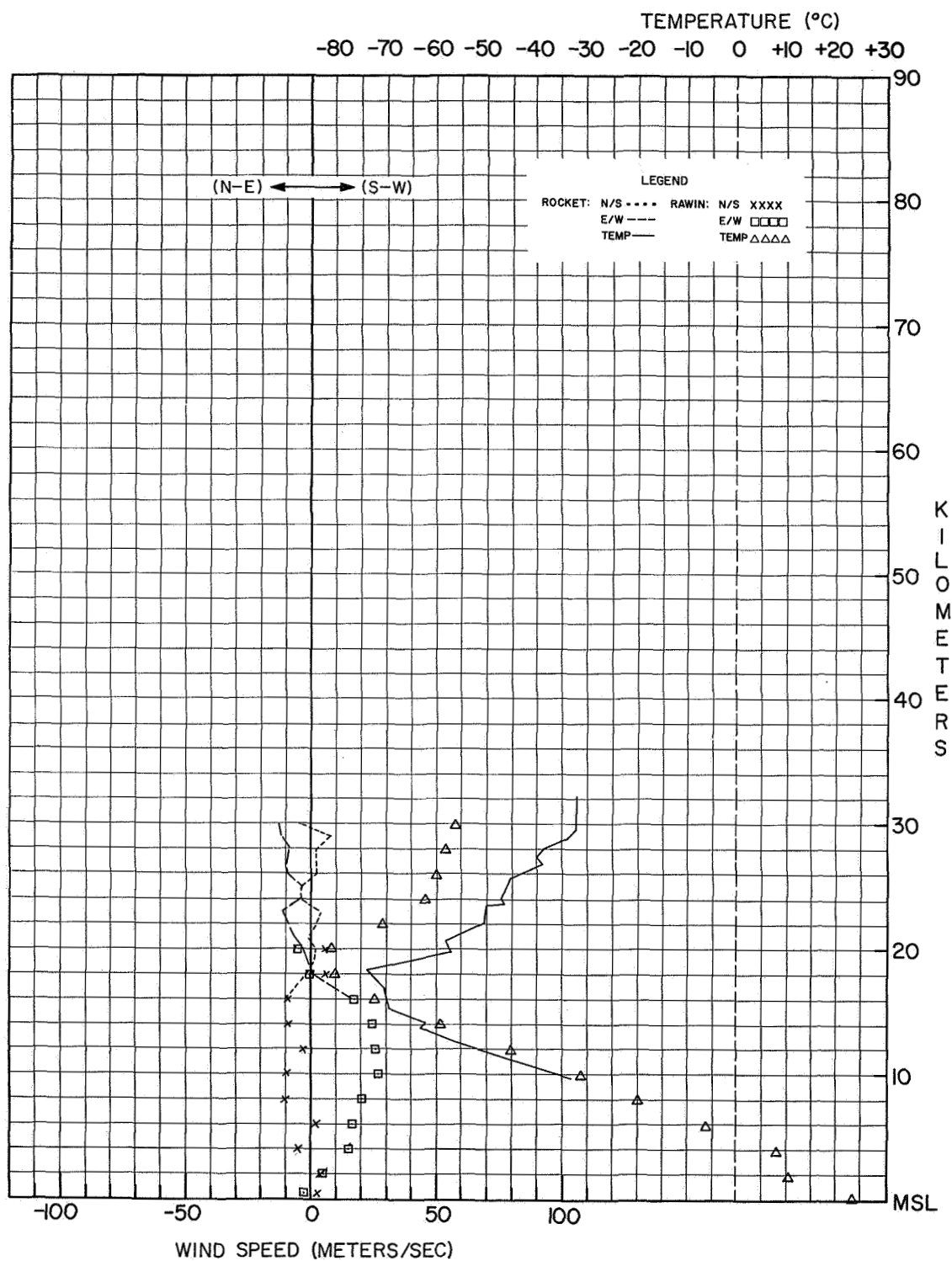
PRESSURE 335.1 MB
ALTITUDE 9,760 METERS
TEMPERATURE -33.0 DEG. C.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. VAISALA
RADIOSONDE TYPE.. VAISALA
TEMPERATURE ELEMENT TYPE.. BIMETAL
PRESSURE SENSOR TYPE.. ANEROID
GROUND EQUIPMENT TYPE.. VAISALA
BALLOON TYPE.. TOTEX
BALLOON SIZE.. 800 GRAMS
FREE LIFT.. 1,800 GRAMS
ASCENSION RATES.. SFC-400 MB= 346 M/MINUTE
400 MB-TOP= 536 M/MINUTE.

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 958.6 MB
TEMPERATURE.. 23.7 DEG. C
RELATIVE HUMIDITY.. 48%
VISIBILITY.. 15 KM
SURFACE WIND.. 140 DEG 7 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. SC
MIDDLE.. NONE
HIGH.. CS
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE
WIND AT ROCKET LAUNCH
SFC. 135 DEG/09KTS



STATION: (CNIE) CHAMICAL, ARGENTINA
 DATE: 14 DECEMBER, 1966

ROCKET TIME: 1625 LST 2025 GCT
 ROCKET MOTOR TYPE: JUDI 1

PAYLOAD TYPE: WOX-1A
 RADIOSONDE TYPE: VAISALA

RP STATION NAME DATE ROCKET RAWINSONDE
 (NASA) WALLOPS ISLAND, VIRGINIA Z LAUNCH TIME RELEASE
 72402 37°51' N 75°29' W ALT. 3 M DECEMBER 14, 1966 2039 1716

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE						
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP
TENTHS	VEL		POLAR	COMPONENTS			TENS				OF	POLAR	COMPONENTS				TENS		POLAR	COMPONENTS		%	
OF A			DEG	MPS	N-S	E-W	OF	DEG	MB	G M	SOUND	DEG	KTS	N-S	E-W	MB	METERS	DEG	KTS	N-S	E-W		DEG
MINUTE	M/S	KM					METERS	C			M/S												C
033	139	54	269	263	+003	+135										1016.4	0000	305	016	-005	+007	86	+02.8
034	111	53	269	257	+003	+132										0791.0	0200	294	016	-003	+008	71	-03.8
036	083	52	268	263	+005	+135										0811.0	0400	239	035	+009	+015	22	-11.9
038	083	51	266	289	+011	+148										0468.0	0600	236	029	+008	+012	23	-26.7
040	083	50	265	263	+011	+135										0353.5	0800	218	065	+026	+021	23	-34.7
042	083	49	264	262	+013	+134										0264.5	1000	234	077	+023	+032		-39.4
044	067	48	263	251	+015	+128										0197.5	1200	229	081	+027	+031		-45.0
047	067	47	266	252	+010	+129										0145.5	1400	234	079	+024	+033		-57.0
049	067	46	267	241	+007	+124										0105.5	1600	240	083	+021	+037		-63.6
052	056	45	265	222	+009	+114										0076.2	1800	251	033	+006	+016		-62.3
055	056	44	267	212	+006	+109										0055.1	2000	256	025	+003	+012		-61.0
058	048	43	266	191	+006	+098										0040.1	2200	241	025	+006	+011		-59.7
062	048	42	269	187	+002	+096										0029.2	2400	252	040	+006	+020		-58.5
065	042	41	269	183	+002	+094										0021.4	2600	264	035	+002	+018		-57.2
070	030	40	267	173	+005	+089										0015.8	2800	267	040	+001	+021		-56.0
076	024	39	265	166	+007	+085										0011.4	3000	258	074	+008	+037		-50.0
084	020	38	264	157	+009	+080																	
093	021	37	262	151	+011	+077																	
100	021	36	265	143	+007	+073																	
109	019	35	265	125	+006	+064																	
118	015	34	263	110	+007	+056																	
131	013	33	262	096	+007	+049																	
144	014	32	261	085	+007	+043																	
154	015	31	260	075	+007	+038																	
166	011	30	263	061	+004	+031																	
183	008	29	265	068	+003	+035																	
207	007	28	261	035	+003	+018																	
228	007	27	265	023	+001	+012																	
255	006	26	270	029	+000	+015																	
280	006	25	263	031	+002	+016																	
310	006	24	266	029	+001	+015																	
340	006	23	262	029	+002	+015																	

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. ROBINETTE
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. 87 SEC.
 TYPE OF LAUNCHER.. 12 FT. TUBULAR
 LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 5 SECONDS 5,273 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 87 SECONDS 64,617 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 87 SECONDS 64,617 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 2,160 SECONDS 22,219 METERS ALTITUDE
 APOGEE.. 101 SECONDS 65,836 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. ROBINETTE (1 METER SPHERE)
 TEMPERATURE SENSOR.. N.A.
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. FPS-16
 TELEMETRY FREQUENCY.. N.A.
 TELEMETRY QUALITY.. N.A.
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

NONE
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLOED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
 GROUND EQUIPMENT TYPE.. GMD-18
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1,200 GRAMS
 FREE LIFT.. 1,800 GRAMS
 ASCENSION RATES.. SFC-400 MB= 296 M/MINUTE
 400 MB-TOP= 328 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

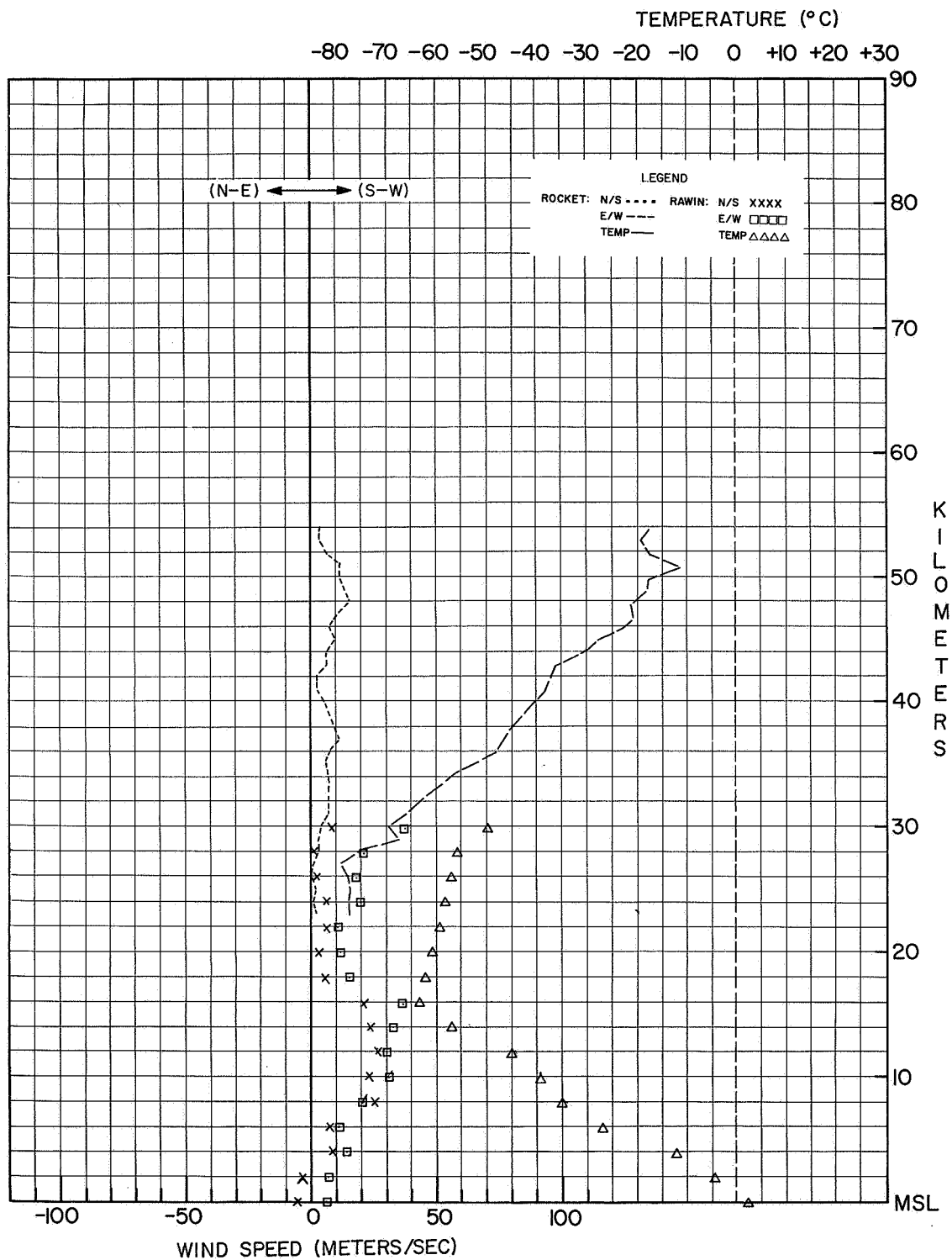
STATION PRESSURE.. 1016.4 MB
 TEMPERATURE.. 2.8 DEG. C.
 RELATIVE HUMIDITY.. 86%
 VISIBILITY.. 11 KM
 SURFACE WIND.. 305 DEG. 16 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
 LOW.. 8 OCTAS/SC
 MIDDLE.. NONE
 HIGH.. NONE

TYPE OF PRECIPITATION.. NONE

OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

SFC. 308 DEG/13KTS, 50 FT. 303 DEG/13KTS,
 100 FT. 308 DEG/14KTS, 150 FT. 306 DEG/14KTS,
 200 FT. 308 DEG/14KTS, 250 FT. 307 DEG/14KTS



STATION: (NASA)WALLOPS ISLAND, VA.
 DATE: 14 DECEMBER, 1966

ROCKET TIME: 1539LST2039GCT
 ROCKET MOTOR TYPE: JUDI I

PAYLOAD TYPE: ROBINETTE
 RADIOSONDE TYPE: 1680 MHZ

APPENDIX A

EXAMETNET DATA REPORT SERIES
OF SPECIAL LAUNCHINGS

SEPTEMBER, OCTOBER, NOVEMBER, 1965

METEOROLOGICAL ROCKET SUMMARY

Page No.	Date of Launch (GMT)	Time of Launch (GMT)	Flight System			Temp. Profile (Tens of Meters MSL)	Wind Profile (Tens of Meters MSL)
			Motor Type	Payload Type	Sensor Type 1. Wind 2. Temp.		

WALLOPS ISLAND, VIRGINIA, U.S.A.

Lat. 37° 51'N Long. 75° 29'W

A-4	8 Sep 65	2145	Judi	WOX-1A	1. Chute 2. Bead Therm.	4980-1886	5100-1900
A-6	8 Sep 65	2236	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm.	5084-3109	5000-3000
A-8	8 Sep 65	2307	Judi	WOX-1A	1. Chute 2. Bead Therm.	5569-1829	5400-2000
A-10	9 Sep 65	0047	Judi	WOX-1A	1. Chute 2. Bead Therm.	4730-1902	5000-1900
A-12	9 Sep 65	0126	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm.	4615-2006	4500-1900
A-14	9 Sep 65	0141	Judi	WOX-1A	1. Chute 2. Bead Therm.	4895-1829	4800-1900
A-16	9 Sep 65	0225	Judi	WOX-1A	1. Chute 2. Bead Therm.	5322-1908	5000-2000
A-18	9 Sep 65	0501	Judi	WOX-1A	1. Chute 2. Bead Therm.	5063-1932	5000-2000
A-20	9 Sep 65	0805	Judi	WOX-1A	1. Chute 2. Bead Therm.	5468-1800	5200-1900
A-22	9 Sep 65	1201	Judi	WOX-1A	1. Chute 2. Bead Therm.	5390-1890	5200-2000
A-24	9 Sep 65	1630	Judi	WOX-1A	1. Chute 2. Bead Therm.	NONE	5200-4400
A-26	9 Sep 65	1648	Judi	WOX-1A	1. Chute 2. Bead Therm.	5179-1921	4900-2000
A-28	9 Sep 65	2234	Judi	WOX-1A	1. Chute 2. Bead Therm.	5620-2045	5300-2100
A-30	10 Sep 65	0115	Judi	WOX-1A	1. Chute 2. Bead Therm.	5063-1884	4900-1900
A-32	10 Sep 65	0500	Judi	WOX-1A	1. Chute 2. Bead Therm.	5154-1902	4900-1900
A-34	10 Sep 65	0800	Judi	WOX-1A	1. Chute 2. Bead Therm.	5322-1911	5100-1900
A-36	10 Sep 65	1238	Judi	WOX-1A	1. Chute 2. Bead Therm.	5337-1865	5100-1900

METEOROLOGICAL ROCKET SUMMARY

Page No.	Date of Launch (GMT)	Time of Launch (GMT)	Flight System			Temp. Profile (Tens of Meters MSL)	Wind Profile (Tens of Meters MSL)
			Motor Type	Payload Type	Sensor Type 1. Wind 2. Temp.		

WALLOPS ISLAND, VIRGINIA, U.S.A.

Lat. 37° 51'N Long. 75° 29'W

A-38	5 Oct 65	1851	Judi	Chaff	1. Chaff	N.A.	6000-4600
A-40	8 Oct 65	1934	Judi	Chaff	1. Chaff	N.A.	5900-4000
A-42	12 Oct 65	1849	Judi	Chaff	1. Chaff	N.A.	6300-4200
A-44	14 Oct 65	1929	Judi	Chaff	1. Chaff	N.A.	4400-3400
A-46	15 Oct 65	2016	Judi	Chaff	1. Chaff	N.A.	6200-4600
A-48	19 Oct 65	1827	Judi	Chaff	1. Chaff	N.A.	5500-4600
A-50	20 Oct 65	1832	Judi	Chaff	1. Chaff	N.A.	6400-4200
A-52	25 Oct 65	1938	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm.	5767-2234	5600-2200
A-54	26 Oct 65	0015	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm.	NONE	5400-2600
A-56	26 Oct 65	1834	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm.	4694-2221	5000-2200
A-58	27 Oct 65	1942	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm.	5167-2053	5200-2000
A-60	27 Oct 65	2331	Judi	WOX-1A	1. Chute 2. Bead Therm.	5063-2213	5400-2300
A-62	29 Oct.65	1845	Judi	WOX-1A	1. Chute 2. Bead Therm.	5383-1972	5800-2000
A-64	3 Nov 65	1927	Judi	WOX-1A	1. Chute 2. Bead Therm.	4535-1829	4500-2000
A-66	4 Nov 65	1911	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm.	5179-1838	5200-2000
A-68	8 Nov 65	1905	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm.	NONE	5400-2800
A-70	8 Nov 65	2013	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm.	5904-2643	5800-2600
A-72	10 Nov 65	1819	Arcas	Arcasonde-1A	1. Chute 2. Bead Therm.	5380-1777	5000-2000

*NOT APPLICABLE

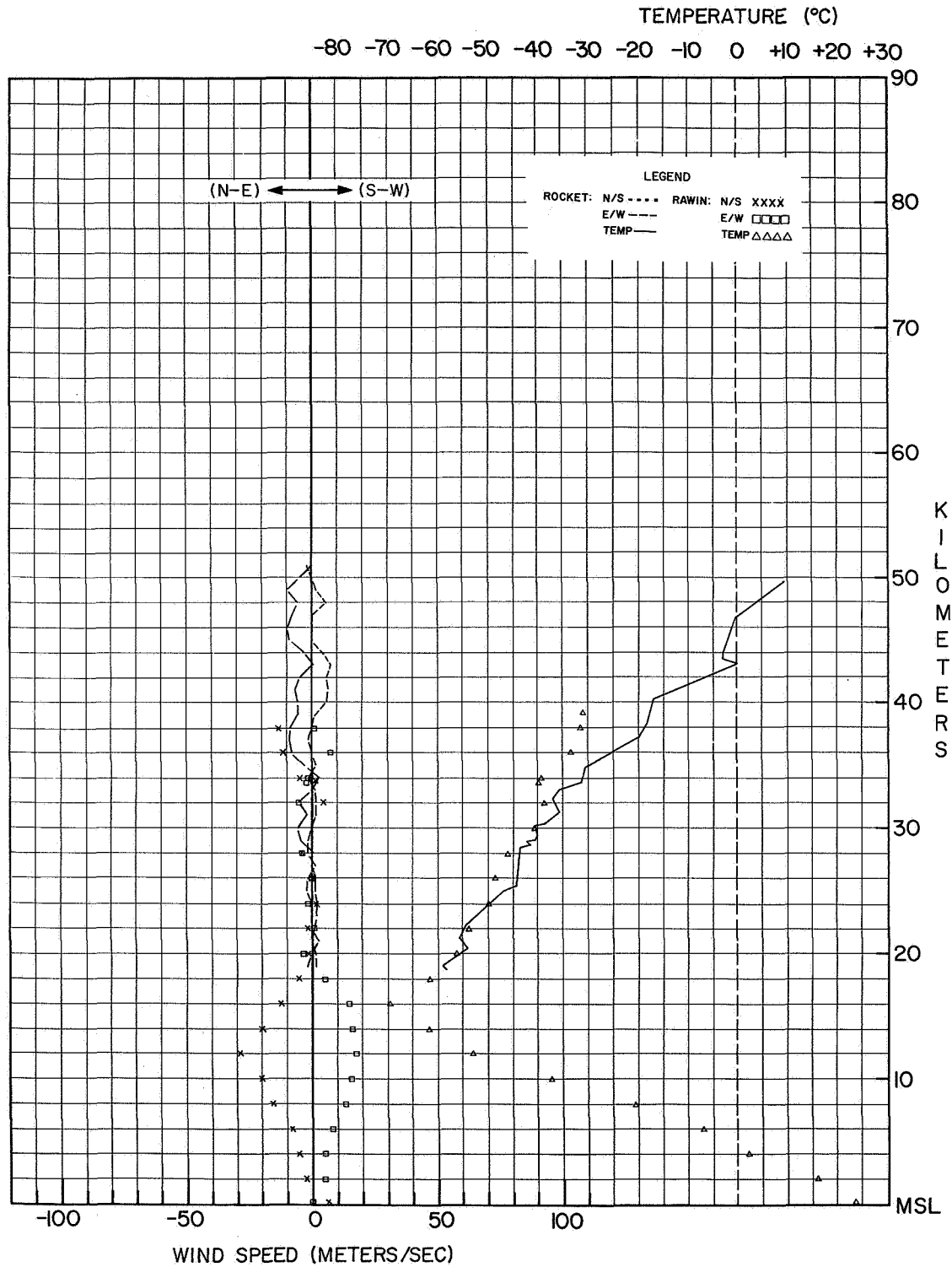
RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(NASA) WOLLOPS ISLAND, VIRGINIA Z Z
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 8, 1965 2145 2015

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS													RAWINSONDE						
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND COMPONENTS MPS			ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G/M	SPEED OF SOUND M/S	POLAR DEG	WIND COMPONENTS MPS			PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND COMPONENTS MPS			RH %	TEMP DEG C			
				N-S	E-W					-3			N-S	E-W					N-S	E-W						
021	071	51	000	004	-002	+000	4980	+09.0	00.961	01.213	337	090	012	+000	-006	1018.0	0000	180	012	+006	+000	74	+22.8			
023	083	50	090	010	+000	-005	4663	+00.0	01.411	01.840	331	090	018	+000	-009	0807.0	0200	296	010	-002	+005	17	+16.3			
025	080	49	102	020	+002	-010	4335	-02.8	02.119	02.792	330	170	014	+007	-001	0631.0	0400	321	016	-006	+005	52	+02.3			
027	068	48	136	018	+006	-006	4320	+00.0	02.159	02.815	331	170	014	+007	-001	0493.0	0600	317	022	-008	+008	26	-07.0			
030	066	47	090	016	+000	-008	4015	-17.0	03.184	04.428	321	135	017	+006	-006	0379.0	0800	322	039	-016	+013	32	-20.9			
032	064	46	090	020	+000	-010	3820	-17.8	04.119	05.745	320	090	016	+000	-008	0286.0	1000	321	049	-020	+016	23	-37.0			
035	062	45	090	018	+000	-009	3721	-20.0	04.697	06.609	319	085	018	+001	-009	0203.0	1200	328	066	-029	+018		-52.7			
038	057	44	150	012	+000	-003	3490	-30.6	06.435	09.450	312	135	006	+002	-002	0154.0	1400	321	049	-020	+016		-62.0			
041	051	43	180	016	+008	+000	3380	-31.2	07.503	11.045	312	295	004	+001	+002	0112.0	1600	312	035	-012	+014		-69.5			
044	050	42	140	016	+006	-005	3317	-35.7	08.200	12.300	309	230	002	+001	+001	0079.5	1800	320	014	-006	+005		-61.7			
048	044	41	130	018	+006	-007	3232	-36.9	09.258	13.958	308	110	006	+001	-003	0057.5	2000	066	006	-001	-003		-56.3			
052	041	40	135	017	+006	-006	3125	-35.7	10.786	16.180	309	123	008	+002	-003	0042.0	2200	320	002	-001	+001		-52.9			
055	040	39	100	012	+001	-006	3036	-38.0	12.252	18.559	308	100	010	+001	-005	0031.0	2400	147	002	+001	-001		-49.8			
060	034	38	090	018	+000	-009	3020	-40.1	12.539	19.164	306	090	010	+000	-005	0023.0	2600	360	000	+000	+000		-48.0			
065	033	37	084	018	-001	-009	2940	-40.0	14.083	21.515	306	080	010	+001	-005	0017.0	2800	042	008	-003	-003		-46.0			
070	031	36	090	016	+000	-008	2908	-40.4	14.754	22.578	306	075	008	+001	-004	0012.5	3000						-46.5			
076	030	35	125	008	+002	-003	2900	-42.4	14.927	23.041	305	075	008	+001	-004	0009.4	3200	133	012	+004	-005		-38.0			
081	023	34	290	006	-001	+003	2873	-41.3	15.529	23.857	305	070	006	+001	-003	0007.3	3390	127	004	+001	-002		-39.2			
090	023	33	180	002	+001	+000	2853	-43.1	15.991	24.759	304	070	004	+001	-002	0007.1	3400	007	010	-005	-001		-38.5			
095	027	32	100	010	+001	-005	2547	-44.3	25.123	39.101	303	335	004	+002	+001	0005.3	3600	324	025	-011	+008		-33.0			
102	022	31	130	006	+002	-002	2510	-47.2	26.547	41.848	301	335	004	+002	+001	0003.9	3800	355	025	-013	+001		-31.0			
110	018	30	090	012	+000	-006	2220	-54.1	41.301	67.157	297	270	002	+000	+001											
120	017	29	075	008	-001	-004	2140	-55.3	46.765	76.461	296	180	004	+002	+000											
129	017	28	000	002	-001	+000	2041	-54.1				180	002	+001	+000											
139	016	27	180	002	+001	+000	1911	-58.9				335	004	+002	+001											
149	016	26	320	002	-001	+001	1886	-57.9																		
160	014	25	335	004	-002	+001																				
172	014	24	270	004	+000	+002																				
183	012	23	270	004	+000	+002																				
198	011	22	270	002	+000	+001	2090	-54.7	50.000	81.526	296	180	003	+002	+000											
213	010	21	180	006	+003	+000	2433	-48.8	30.000	45.431	300	335	004	+002	+001											
230	009	20	360	000	+000	+000	2707	-43.6	20.000	31.055	304	045	003	+001	-001											
247	010	19	335	004	-002	+001	3164	-36.3	10.000	15.037	309	123	008	+002	-003											
							3414	-30.9	07.000	10.294	312	360	000	+000	+000											
							3660	-21.8	05.000	07.104	318	090	016	+000	-008											
							4357	-02.4	02.000	02.639	330	162	012	+006	-002											
							4915	+08.2	01.000	01.260	337	090	012	+000	-006											

TECHNICAL DATA

VEHICLE DATA	MOTOR TYPE.. JUOI	RADIOSONDE AND BALLOON DATA	RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
	MOTOR PERFORMANCE.. GOOD		RADIOSONDE TYPE.. 1680 MHZ
RADAR DATA	PAYLOAD TYPE.. WOX-1A	WEATHER OBSERVATION AT RAWINSONDE RELEASE	TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
	PAYLOAD PERFORMANCE.. GOOD		PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
SENSOR AND TELEMETRY DATA	FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC	TYPE OF PRECIPITATION.. NONE	GROUND EQUIPMENT TYPE.. GMD-1B
	FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN		BALLOON TYPE.. NEOPRENE
REMARKS	TYPE OF LAUNCHER.. 8.5 FT. TUBULAR	OBSTRUCTIONS TO VISION.. NONE	BALLOON SIZE.. 7,000 GRAMS
	LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION		FREE LIFT.. 1,800 GRAMS
		LAUNCH	ASCENSION RATES.. SFC-400 MB 253 M/MINUTE
			400 MB-TOP 315 M/MINUTE
		50 FT. 193 DEG/15 KTS, 100 FT. 192 DEG/16 KTS,	STATION PRESSURE.. 1018.0 MB
			TEMPERATURE.. 22.8 DEG. C
		150 FT. 190 DEG/21 KTS, 200 FT. 200 DEG/19 KTS,	RELATIVE HUMIDITY.. 74%
			VISIBILITY.. GOOD
		250 FT. 193 DEG/22 KTS	SURFACE WIND.. 180 DEG. 12 KTS
			CLOUD TYPE AND AMOUNT.. TOTAL.. 2 OCTAS
			LOW.. NONE
			MIDDLE.. NONE
			HIGH.. 2 OCTAS/CI
			TYPE OF PRECIPITATION.. NONE
			OBSTRUCTIONS TO VISION.. NONE
			LAUNCH
			50 FT. 193 DEG/15 KTS, 100 FT. 192 DEG/16 KTS,
			150 FT. 190 DEG/21 KTS, 200 FT. 200 DEG/19 KTS,
			250 FT. 193 DEG/22 KTS



STATION: (NASA)WALLOPS IS., VA.
DATE: 8 SEP 1965

ROCKET TIME 1645 LST 2145 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: NOX-1A
RADIOSONDE TYPE: 1680 MHZ

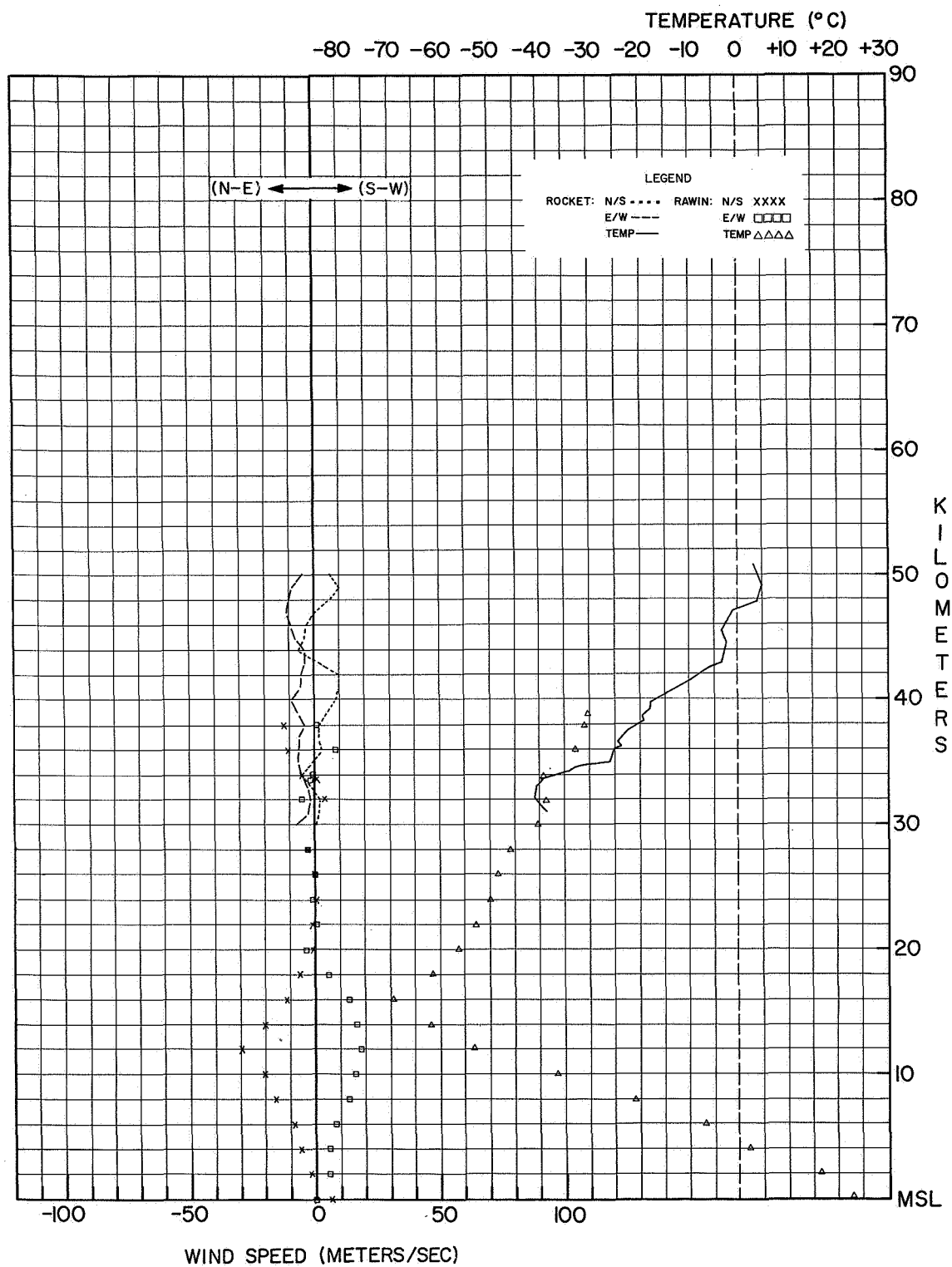
RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WOLLOPS ISLAND, VIRGINIA Z LAUNCH TIME Z RELEASE TIME
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 8, 1965 2235 2015

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS						RAWINSONDE						RH	TEMP		
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	%	DEG C	
029	067	50	140	015	+006 -005	5084	+03.4	00.813	01.048	333				1018.0	0000	180	012	+006 +000	74	+22.8	
031	063	49	141	025	+010 -008	4919	+05.2	00.993	01.271	335	142	022	+009 -007	0807.0	0200	296	010	-002 +005	17	+16.3	
034	063	48	121	023	+006 -010	4785	+03.7	01.169	01.504	334	116	022	+005 -010	0631.0	0400	321	016	-006 +005	52	+02.3	
037	063	47	090	021	+000 -011	4706	-00.8	01.288	01.684	331	090	022	+000 -011	0493.0	0600	317	022	-008 +008	26	-07.0	
040	056	46	071	019	-003 -009	4560	-03.5	01.544	02.039	329	070	018	-003 -008	0379.0	0800	322	039	-016 +013	32	-20.9	
043	049	45	061	016	-004 -007	4429	-02.2	01.817	02.389	330	045	014	-005 -005	0286.0	1000	321	049	-020 +016	23	-37.0	
046	047	44	034	014	-006 -004	4301	-02.6	02.131	02.806	330	121	009	+003 -004	0203.0	1200	328	066	-029 +018		-52.7	
049	045	43	121	009	+003 -004	4270	-06.1	02.216	02.955	328	140	012	+005 -004	0154.0	1400	321	049	-020 +016		-62.0	
052	043	42	153	021	+010 -005	4161	-09.4	02.545	03.437	326	153	022	+010 -005	0112.0	1600	312	035	-012 +014		-69.5	
056	043	41	153	021	+010 -005	3968	-17.6	03.270	04.558	321	131	022	+007 -008	0079.5	1800	320	014	-006 +005		-61.7	
061	037	40	131	024	+008 -009	3917	-17.5	03.498	04.873	321	130	018	+006 -007	0057.5	2000	066	006	-001 -003		-56.3	
065	034	39	126	017	+005 -007	3865	-19.2	03.747	05.255	320	124	014	+004 -006	0042.0	2200	320	002	-001 +001		-52.9	
071	029	38	117	010	+002 -004	3828	-18.3	03.935	05.500	320	120	012	+003 -005	0031.0	2400	147	002	+001 -001		-49.8	
076	026	37	109	012	+002 -006	3783	-22.1	04.179	05.929	318	116	008	+002 -004	0023.0	2600	360	000	+000 +000		-48.0	
081	027	36	116	013	+003 -006	3658	-24.4	04.948	07.085	316	110	012	+002 -006	0017.0	2800	042	008	-003 -003		-46.0	
090	024	35	080	012	-001 -006	3621	-23.6	05.203	07.426	317	115	014	+003 -006	0012.5	3000	MISSING DATA					-40.5
096	022	34	045	014	-005 -005	3615	-25.1	05.245	07.532	316	115	014	+003 -006	0009.4	3200	133	012	+004 -005		-38.0	
105	022	33	070	006	-001 -003	3548	-25.6	05.747	08.269	316	100	012	+001 -006	0007.3	3390	127	004	+001 -002		-39.2	
113	019	32	135	005	+002 -002	3481	-30.6	06.303	09.256	312	070	012	-002 -006	0007.1	3400	007	010	-005 -001		-38.5	
122	018	31	122	009	+002 -003	3466	-33.3	06.437	09.559	311	070	012	-002 -006	0005.3	3600	324	025	-011 +008		-33.0	
133	015	30	097	014	+001 -007	3426	-34.4	06.811	10.161	310	049	012	-004 -005	0003.9	3800	355	025	-013 +001		-31.0	
						3365	-39.5	07.432	11.330	307	045	011	-004 -004								
						3319	-40.8	07.945	12.180	306	055	008	-002 -003								
						3206	-41.3	09.367	14.390	305	136	006	+002 -002								
						3109	-37.6				120	008	+002 -003								
CONSTANT PRESSURE LEVEL DATA																					
(HEIGHT IN GEOPOTENTIAL METERS)																					
						3145	-39.6	10.000	15.251	306	135	005	+002 -002								
						3089	-36.0	07.000	10.517	309	048	012	+004 -005								
						3629	-24.2	05.000	07.155	316	111	012	+002 -006								
						4324	-02.4	02.000	02.633	330	047	012	-004 -004								
						4876	+05.1	01.000	01.281	335	141	022	+009 -007								

TECHNICAL DATA

VEHICLE DATA	MOTOR TYPE.. ARCAS	RADAR DATA	SENSOR AND TELEMETRY DATA	REMARKS	RADIOSONDE AND BALLOON DATA
	MOTOR PERFORMANCE.. 6000 PAYLOAD TYPE.. ARCASONDE-1A PAYLOAD PERFORMANCE.. 6000 FUSE TYPE.. GAS GENERATED SEPARATION DEVICE FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR LAUNCHER SETTING.. 082 DEG. AZIMUTH 77.4 DEG. ELEVATION				
VEHICLE DATA	MOTOR ACQUISITION.. 10 SECONDS 17.069 METERS ALTITUDE MOTOR TRACK DROPPED.. 138 SECONDS 51.816 METERS ALTITUDE PAYLOAD ACQUISITION.. 138 SECONDS 51.816 METERS ALTITUDE PAYLOAD TRACK DROPPED.. 870 SECONDS 28.651 METERS ALTITUDE APOGEE.. 120 SECONDS 53.334 METERS ALTITUDE	RADAR DATA	SENSOR AND TELEMETRY DATA	REMARKS	RADIOSONDE AND BALLOON DATA
	WIND SENSOR.. 15 FT. DIAMETER PARACHUTE TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR SENSOR FALL RATE.. NOMINAL GROUND EQUIPMENT TYPE.. GMD-1B TELEMETRY FREQUENCY.. 1672 MHZ TELEMETRY QUALITY.. 6000 TELEMETRY DATA RECEIVED FROM.. 138 SEC. 51.816 METERS ALTITUDE TO 742 SEC. 32.918 METERS ALTITUDE				
VEHICLE DATA	WIND SENSOR.. 15 FT. DIAMETER PARACHUTE TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR SENSOR FALL RATE.. NOMINAL GROUND EQUIPMENT TYPE.. GMD-1B TELEMETRY FREQUENCY.. 1672 MHZ TELEMETRY QUALITY.. 6000 TELEMETRY DATA RECEIVED FROM.. 138 SEC. 51.816 METERS ALTITUDE TO 742 SEC. 32.918 METERS ALTITUDE	RADAR DATA	SENSOR AND TELEMETRY DATA	REMARKS	RADIOSONDE AND BALLOON DATA
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STATION: (NASA)Wallops Is., VA.
 DATE: 8 SEP 1965

ROCKET TIME: 1735 LST 235 GCT
 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WALLOPS ISLAND, VIRGINIA Z LAUNCH RELEASE
TIME TIME
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 8, 1965 2307 2015

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE										RH	TEMP
TIME	FALL	ALT	POLAR		WIND	ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR		WIND	PRESSURE	ALT	POLAR	WIND										
TENTHS	VEL		DEG	KTS	COMPONENTS	TENS	DEG C	MB	G M	OF	DEG	KTS	COMPONENTS	MB	METERS	DEG	KTS	COMPONENTS									
OF A					N-S E-W	OF				SOUND			N-S E-W					N-S E-W									
MINUTE	M/S	KM				METERS				M/S																	
019	095	54	315	031	-011 +011	5569	+14.7							1018.0	0000	180	012	+006 +000									
022	105	53	342	019	-009 +003	5206	+06.3							0807.0	0200	296	010	-002 +005									
024	095	52	322	035	-014 +011	5054	+04.5				323	034	-014 +011	0631.0	0400	321	016	-006 +005									
025	083	51	270	006	+000 +003	4895	+02.4				122	035	+002 +002	0493.0	0600	317	022	-008 +008									
027	080	50	180	010	+005 +000	4776	-02.1				135	024	+006 -010	0379.0	0800	322	039	-016 +013									
030	077	49	135	013	+005 -005	4727	-06.0				101	024	+002 -012	0286.0	1000	321	049	-020 +016									
032	067	48	132	023	+008 -009	MISSING DATA (SEE REMARKS)										0203.0	1200	328	066	-029 +018							
034	063	47	090	026	+000 -013	3414	-24.6	07.149	10.245	316				0154.0	1400	321	049	-020 +016									
037	063	46	108	031	+005 -015	3365	-26.6	07.644	11.043	315				0112.0	1600	312	035	-012 +014									
040	053	45	044	007	-002 -002	3338	-29.4	07.934	11.593	313				0079.5	1800	320	014	-006 +005									
043	043	44	053	010	-003 -004	3243	-32.6	09.059	13.414	311				0057.5	2000	066	006	-001 -003									
048	039	43	116	004	+001 -002	3185	-39.5	09.840	15.001	307	092	005	+000 -003	0042.0	2200	320	002	-001 +001									
052	039	42	128	012	+004 -006	3106	-39.5	11.034	16.821	307	091	006	+000 -003	0031.0	2400	147	002	+001 -001									
056	041	41	135	016	+006 -006	3030	-41.5	12.324	18.949	305	094	006	+000 -003	0023.0	2600	000	000	+000 +000									
MISSING DATA (SEE REMARKS)						3014	-40.6	12.615	19.321	306	092	006	+000 -003	0017.0	2800	042	008	-003 -003									
108	021	32	090	005	+000 -003	2999	-41.2	12.893	19.799	305	090	006	+000 -003	0012.5	3000	MISSING DATA											
117	020	31	103	007	+001 -004	2987	-42.6	13.122	20.272	305	088	006	+000 -003	0009.4	3200	133	012	+004 -005									
125	019	30	090	006	+000 -003	2954	-43.3	13.774	21.345	304	076	005	+000 -003	0007.1	3400	007	010	-005 -001									
135	017	29	060	004	-001 -002	2899	-41.5	14.931	22.959	305	060	004	-001 -002	0005.3	3600	324	025	-011 +008									
144	016	28	041	003	-001 -001	2841	-41.5	16.252	24.990	305	051	003	-001 -001	0003.9	3800	355	025	-013 +001									
155	015	27	041	003	-001 -001	2819	-43.0	16.785	25.977	304	047	003	-001 -001														
166	014	26	360	002	-001 +000	2804	-42.0	17.159	26.441	305	046	003	-001 -001														
179	012	25	360	008	-004 +000	2755	-44.8	18.444	28.770	303	044	003	-001 -001														
193	011	24	033	007	-003 -002	2676	-44.1	20.734	32.242	304	033	003	-001 -001														
207	012	23	305	007	-002 +003	2582	-47.1	23.848	37.578	302	360	006	-003 +000														
224	010	22	300	000	-001 +002	2454	-49.4	28.923	46.041	300	015	008	-004 -001														
241	009	21	352	000	+000 +000	2405	-50.2	31.156	49.774	299	031	007	-003 -002														
261	008	20	045	004	-001 -001	2316	-49.6	35.665	56.826	300	320	006	-002 +002														
282	007	19	315	011	-004 +004	2176	-54.9	44.220	72.167	296	304	006	-002 +003														
						2118	-54.5	48.389	78.826	297	336	001	+000 +000														
						2109	-55.9	49.071	80.453	296	345	000	+000 +000														
						2024	-55.9			296	032	003	-001 -001														
						1987	-59.4																				
						1929	-61.4																				
						1871	-59.4																				
						1829	-61.6																				
CONSTANT PRESSURE LEVEL DATA																											
(HEIGHT IN GEOPOTENTIAL METERS)																											
2090	-55.9	50.000	81.976	296	000	000	+000	+000																			
2420	-49.4	30.000	47.854	300	031	008	-003	-002																			
2689	-44.4	20.000	31.128	304	032	003	-001	-001																			
3158	-39.5	10.000	15.244	307	090	006	+000	-003																			

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPO-6
MOTOR ACQUISITION.. 9 SECONDS 9,387 METERS ALTITUDE
MOTOR TRACK DROPPED.. 78 SECONDS 54,254 METERS ALTITUDE
PAYLOAD ACQUISITION.. 78 SECONDS 54,254 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1,740 SECONDS 18,288 METERS ALTITUDE
APOGEE.. 95 SECONDS 56,176 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 402 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 78 SEC. 54,254 METERS ALTITUDE
TO 1,380 SEC. 21,545 METERS ALTITUDE

REMARKS

MISSING WIND DATA FROM 40 THROUGH 33 KM. MISSING TEMPERATURE
DATA FROM 47 TO 34 KM.
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 20,968 METERS
TEMPERATURE -55.9 DEG. C

RADIOSONDE AND BALLOON DATA

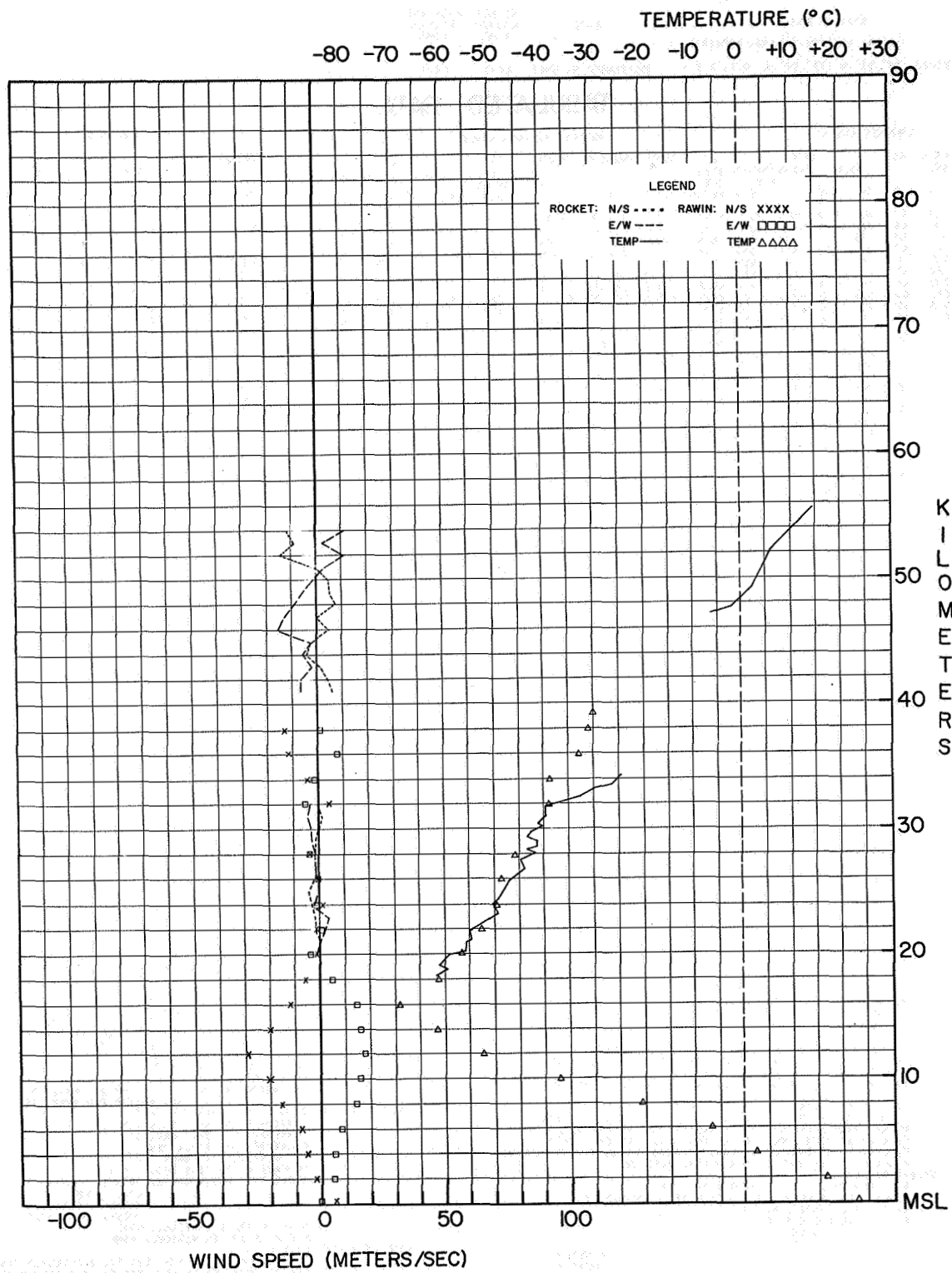
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-18
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 7,000 GRAMS
FREE LIFT.. 1,800 GRAMS
ASCENSION RATES.. SFC-400 MB 253 M/MINUTE
400 MB-TOP 315 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1018.0 MB
TEMPERATURE.. 22.8 DEG. C
RELATIVE HUMIDITY.. 74%
VISIBILITY.. GOOD
SURFACE WIND.. 180 DEG. 12 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 2 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 2 OCTAS/CI

WIND AT ROCKET

LAUNCH
50 FT. 196 DEG/09 KTS, 100 FT. 200 DEG/10 KTS,
150 FT. 200 DEG/13 KTS, 200 FT. 210 DEG/14 KTS,
250 FT. 208 DEG/14 KTS



STATION: (NASA) WALLOPS IS., VA.
DATE: 8 SEP 1965

ROCKET TIME: 1807 LST 230 ZGCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: NOX-1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(NASA) WALLPOSS ISLAND, VIRGINIA Z Z Z
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 9, 1965 .0047 0236

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE										RH	TEMP
TIME	FALL	ALT	POLAR		WIND		COMPONENTS		ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR		WIND		COMPONENTS		PRESSURE	ALT	POLAR		WIND		COMPONENTS		%	TEMP		
TENTHS	VEL	KM	DEG	KTS	N-S	E-W	MPS	OF	TENS	DEG C	MB	G M	-3	OF	DEG	KTS	N-S	E-W	MPS	MB	METERS	DEG	KTS	N-S	E-W	MPS	E-W		DEG C		
OF A	MINUTE	M/S							OF					SOUND																	
022	036	50	263	016	+001	+008	4730		-01.9	01.235	01.622	330	131	017	+005	-007			1019.0	0000	190	005	+003	+000	91	+19.7					
024	030	49	225	011	+004	+004	4660		-05.6	01.348	01.795	328	103	021	+002	-011			0808.0	0200	345	012	-006	+002	27	+13.7					
028	027	48	170	012	+006	-001	4554		-06.0	01.541	02.054	328	077	026	-003	-013			0633.0	0400	306	017	-005	+007	90	+01.2					
031	025	47	114	019	+004	-009	4444		-09.3	01.772	02.391	326	067	023	-004	-011			0491.0	0600	315	031	-011	+011	45	-08.0					
034	023	46	086	025	-001	-013	4319		-09.0	02.087	02.802	326	068	013	-002	-006			0378.0	0800	319	037	-014	+013	26	-21.5					
038	022	45	069	027	-005	-013	4258		-16.0	02.249	03.114	322	074	013	-002	-007			0287.0	1000	330	047	-021	+012	33	-37.0					
042	022	44	066	019	-004	-009	4228		-15.2	02.339	03.228	322	084	015	-001	-008			0211.0	1200	318	059	-022	+020		-54.0					
046	021	43	068	011	-002	-005	4093		-15.5	02.790	03.857	322	098	010	+001	-005			0154.0	1400	329	047	-020	+012		-64.4					
050	020	42	090	016	+000	-008	4008		-19.5	03.121	04.383	319	101	010	+001	-005			0111.0	1600	328	029	-013	+008		-68.7					
054	019	41	098	014	+001	-007	3981		-19.2	03.235	04.538	320	103	010	+001	-005			0079.0	1800	329	012	-005	+003		-63.5					
058	018	40	101	010	+001	-005	3898		-21.1	03.614	05.107	318	112	011	+002	-005			0058.0	2000	045	004	-001	-001		-57.2					
063	016	39	112	011	+002	-005	3822		-26.2	04.005	05.777	315	119	011	+003	-005			0042.0	2200	032	010	-004	-003		-55.6					
069	016	38	121	011	+003	-005	3725		-26.5	04.574	06.605	315	121	011	+003	-005			0030.8	2400	068	002	+000	-001		-54.0					
074	015	37	121	011	+003	-005	3709		-28.0	04.675	06.793	314	121	011	+003	-005			0222.7	2600	112	002	+000	-001		-51.7					
080	014	36	113	015	+003	-007	3676		-28.2	04.893	07.115	314	119	012	+003	-005			0016.6	2800	096	010	+001	-005		-48.3					
086	013	35	096	018	+001	-009	3658		-26.6	05.016	07.246	315	106	016	+002	-008			0012.5	3000	090	008	+000	-004		-45.2					
092	013	34	067	015	-003	-007	3609		-27.9	05.365	07.791	314	114	015	+003	-007			0009.1	3200	108	010	+002	-005		-42.0					
099	011	33	051	013	-004	-005	3578		-26.8	05.598	08.094	315	109	016	+003	-007			0006.8	3400	092	013	+000	-007		-36.3					
107	010	32	053	010	-003	-004	3548		-27.0	05.833	08.441	315	104	017	+002	-009															
115	010	31	090	008	+000	-004	3517		-28.7	06.088	08.871	314	099	017	+001	-009															
124	009	30	124	007	+002	-003	3453		-30.7	06.653	09.775	312	082	016	-001	-008															
133	009	29	135	006	+002	-002	3313		-37.5	08.110	12.258	308	053	013	-004	-005															
143	008	28	090	006	+000	-003	3286		-39.9	08.432	12.876	306	051	013	-004	-005															
154	007	27	056	007	-002	-003	3222		-41.0	09.254	14.198	306	053	010	-003	-004															
165	007	26	045	006	-002	-002	3158		-39.5	10.155	15.481	307	069	009	-002	-004															
178	006	25	063	004	-001	-002	3124		-41.5	10.670	16.406	305	090	008	-002	-004															
193	006	24	090	004	+000	-002	3094		-41.0	11.147	17.103	306	092	008	-002	-004															
208	005	23	360	007	+002	+000	3011		-44.6	12.592	19.625	303	120	007	+002	-003															
224	005	22	341	006	-003	+001	2920		-44.5	14.409	22.446	303	133	006	+002	-002															
240	004	21	315	003	-001	+001	2835		-45.7	16.347	25.599	303	105	006	+001	-003															
							2825		-46.8	16.592	26.110	302	101	006	+001	-003															
							2813		-45.8	16.892	26.465	303	096	006	+000	-003															
							2716		-45.8	19.518	30.579	303	061	007	-002	-003															
							2621		-48.6	22.506	35.700	301	047	006	-002	-002															
							2515		-49.9	26.423	42.156	300	060	004	-001	-002															
							2481		-51.8	27.829	44.780	299	068	004	-001	-002															
							2438		-50.1	29.715	47.452	300	080	004	+000	-002															
							2411		-51.8	30.965	49.828	299	087	004	+000	-002															
							2301		-49.8	36.621	58.401	300	359	004	-002	+000															
							2262		-53.5	38.875	63.039	297	354	004	-002	+000															
							2249		-52.9	39.662	64.141	298	350	005	-003	+001															
							2231		-55.0	40.782	66.587	296	347	006	-003	+001															
							2188		-55.4	43.605	71.328	296	338	006	-003	+001															
							2149		-54.3	46.330	75.404	297	328	004	-002	+001															
							2109		-55.3	49.302	80.609	296	315	003	-001	+001															
							2088		-54.4																						
							2070		-56.2																						
							2030		-55.6																						
							1978		-58.7																						
							1932		-58.6																						
							1902		-59.4																						

ROCKET THERMODYNAMICS (CONTINUED)

ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR		WIND	
TENS	OF			OF	DEG	KTS	N-S	E-W
METERS	DEG C	MB	G M	M/S	DEG	KTS	N-S	E-W
2093	-56.3	50.000	82.203	295				
2422	-50.5	30.000	47.994	299	082	004	+000	-01
2688	-46.3	20.000	31.424	302	059	007	-002	-01
3161	-39.8	10.000	15.216	307	066	009	-002	-01
3402	-32.3	07.000	10.366	311	075	015	-002	-01
3639	-26.8	05.000	07.229	315	108	015	+002	-01
4324	-09.1	02.000	02.689	326	068	016	-003	-01

CONSTANT PRESSURE LEVEL DATA
(HEIGHT IN GEOPOTENTIAL METERS)

2093	-56.3	50.000	82.203	295
2422	-50.5	30.000	47.994	299
2688	-46.3	20.000	31.424	302
3161	-39.8	10.000	15.216	307
3402	-32.3	07.000	10.366	311
3639	-26.8	05.000	07.229	315
4324	-09.1	02.000	02.689	326

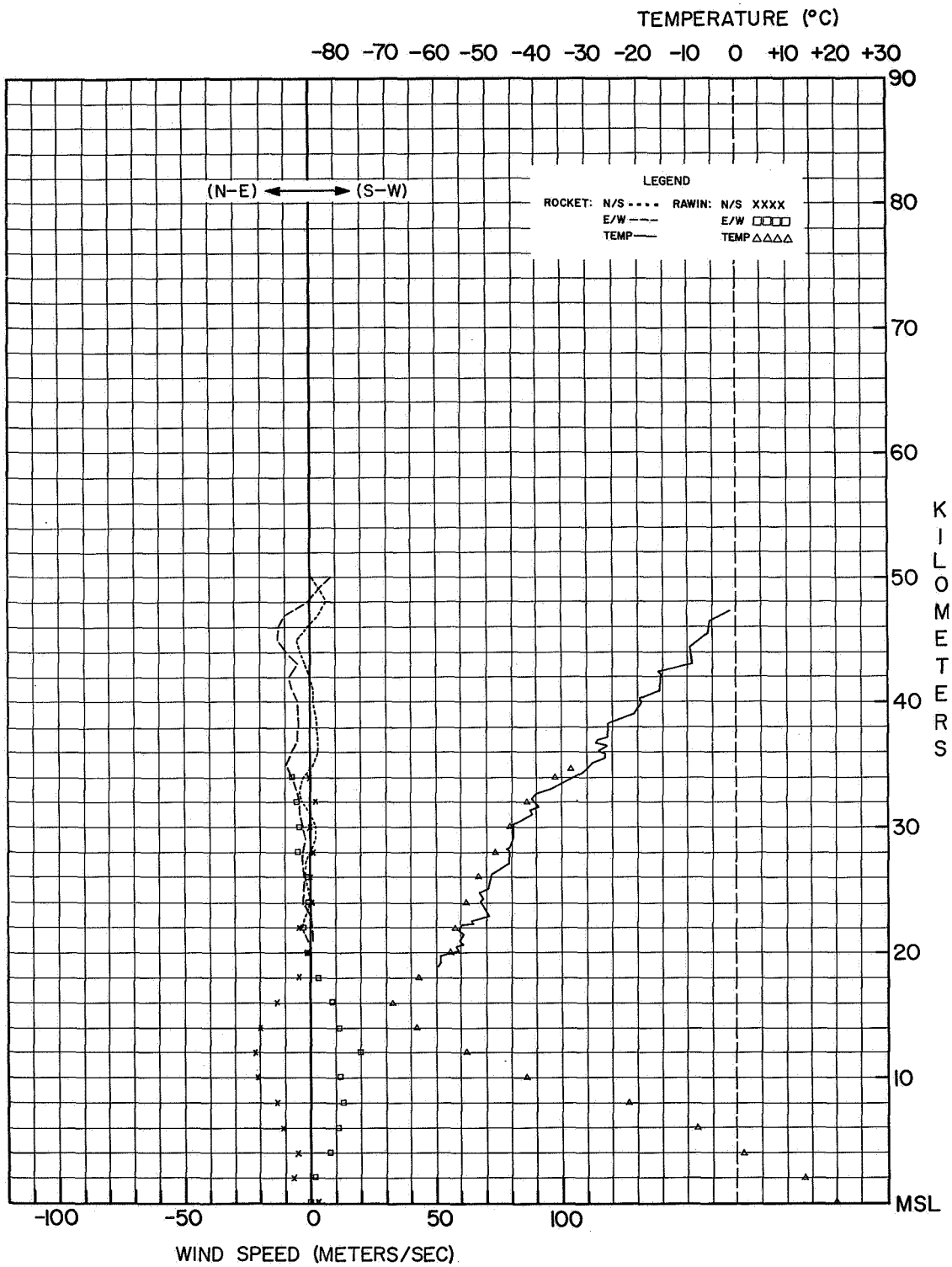
TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPO-6
MOTOR ACQUISITION.. 14 SECONDS 14.630 METERS ALTITUDE
MOTOR TRACK DROPPED.. 78 SECONDS 51.816 METERS ALTITUDE
PAYLOAD ACQUISITION.. 78 SECONDS 51.816 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.660 SECONDS 19.006 METERS ALTITUDE
APOGEE.. 90 SECONDS 52.730 METERS ALTITUDE



STATION: (NASA)WALLOPS IS.,VA.
DATE: 9 SEP 1965

ROCKET TIME: 08/1947 LST 0047 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE LAUNCH RELEASE
(NASA) WALLOPS ISLAND, VIRGINIA Z Z Z
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 9, 1965 0126 0236

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS											RAWINSONDE						
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND COMPONENTS MPS			ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND COMPONENTS MPS			PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND COMPONENTS MPS			RH %	TEM DEG	
				N-S	E-W				-3				N-S	E-W					N-S	E-W				
031	053	45	090	024	+000	-012	4615	-05.2	01.399	01.860	328				1019.0	0000	190	005	+003	+001	91	+19.		
035	047	44	076	026	-003	-013	4557	-04.8	01.505	01.997	329				0808.0	0200	345	012	-006	+002	27	+13.		
038	045	43	069	020	-004	-010	4520	-07.4	01.577	02.113	327				0633.0	0400	306	017	-005	+007	90	+01.		
042	041	42	074	014	+002	-007	4444	-09.5	01.737	02.346	326	081	026	-002	-013	0491.0	0600	315	031	-011	+012	45	-08.	
046	036	41	109	012	+002	-006	4316	-06.3	02.043	02.727	328	070	020	-004	-010	0378.0	0800	319	037	-014	+013	26	-21.	
051	038	40	080	014	-001	-007	4292	-08.3	02.106	02.833	326	070	020	-004	-010	0287.0	1000	330	047	-021	+012	33	-37.	
056	033	39	075	016	-002	-008	4264	-14.4	02.184	03.006	323	077	018	-002	-009	0211.0	1200	318	059	-022	+020		-54.	
061	029	38	106	008	+001	-004	4130	-15.7	02.602	03.599	322	070	012	+002	-006	0154.0	1400	329	047	-021	+013		-64.	
067	028	37	090	002	+000	-001	4017	-21.5	03.022	04.277	318	090	014	+000	-007	0111.0	1600	328	029	-013	+017		-68.	
073	025	36	120	008	+003	-004	3865	-21.4	03.705	05.242	318	081	014	-001	-007	0079.0	1800	329	012	-005	+003		-63.	
080	024	35	121	016	+005	-008	3840	-22.4	03.831	05.442	318	090	012	+000	-006	0058.0	2000	045	004	-002	-002		-57.	
087	024	34	112	020	+004	-010	3825	-23.8	03.910	05.585	317	090	010	+000	-005	0042.0	2200	032	010	-004	-003		-55.	
092	020	33	061	008	-002	-004	3810	-23.6	03.990	05.695	317	080	008	+001	-004	0030.8	2400	068	002	+000	-001		-54.	
103	018	32	050	010	-004	-005	3728	-25.9	04.460	06.425	315	090	004	+000	-002	0022.7	2600	112	002	+000	-001		-51.	
113	017	31	080	012	-001	-006	3697	-29.7	04.655	06.810	313	090	002	+000	-001	0016.6	2800	096	010	+001	-005		-48.	
124	015	30	118	008	+002	-004	3648	-29.1	04.982	07.270	313	122	004	+002	-003	0012.5	3000	090	008	+000	-004		-45.	
134	014	29	071	008	+001	-004	3630	-31.3	05.108	07.523	312	122	004	+002	-003	0009.1	3200	108	010	+002	-005		-42.	
152	009	28	115	004	+001	-002	3578	-28.5	05.490	07.993	314	120	006	+003	-005	0006.8	3400	092	013	+000	-007		-36.	
167	009	27	110	006	+000	-003	3502	-30.6	06.101	08.959	312	122	016	+005	-008									
186	011	26	090	004	+000	-002	3420	-30.2	06.838	10.026	313	112	020	+004	-010									
203	009	25	090	004	+000	-002	3408	-32.3	06.954	10.284	311	112	020	+004	-010									
218	010	24	090	006	+000	-003	3359	-35.0	07.452	11.145	309	097	014	+001	-007									
241	008	23	049	002	-001	-001	3277	-42.8	08.388	12.970	304	062	008	-002	-004									
269	006	22	049	002	-001	-001	3152	-41.8	10.074	15.509	305	059	010	-003	-005									
288	006	21	090	002	+000	-001	3121	-43.9	10.543	16.381	304	069	012	-002	-006									
317	006	20	090	004	+000	-002	3033	-44.0	12.006	18.661	304	102	010	+001	-005									
347	005	19	042	004	-002	-002	3018	-46.4	12.276	19.283	302	105	008	+001	-004									
							2858	-47.7	15.645	24.718	301	110	006	+001	-003									
							2832	-49.9	16.222	25.882	300	110	006	+001	-003									
							2792	-49.5	17.236	27.450	300	119	004	+001	-002									
							2731	-48.2	18.899	29.925	301	090	006	+000	-003									
							2585	-51.8	23.589	37.957	298	090	004	+000	-002									
							2368	-54.3	32.949	53.626	297	090	004	+000	-002									
							2280	-52.5	37.742	60.925	298	068	002	-001	-001									
							2259	-55.1	38.988	63.686	296	040	002	-001	+000									
							2039	-58.4				090	004	+000	-002									
							2006	-57.5				090	004	+000	-002									

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2093	-57.5	50.000	82.584	295	090	002	+000	-001
2426	-53.5	30.000	48.691	297	090	004	+000	-002
2685	-49.0	20.000	31.813	300	090	006	+000	-003
3141	-41.8	10.000	15.400	305	060	012	-003	-005
3384	-32.6	07.000	10.365	311	112	020	+004	-010
3624	-31.0	05.000	07.255	312	122	004	+002	-003
4304	-06.7	02.000	02.674	328	070	020	-004	-010

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 085 DEG. AZIMUTH 77.5 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 10 SECONDS 1.524 METERS ALTITUDE
MOTOR TRACK DROPPED.. 140 SECONDS 50.048 METERS ALTITUDE
PAYLOAD ACQUISITION.. 140 SECONDS 50.048 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2.135 SECONDS 18.803 METERS ALTITUDE
APOGEE.. 120 SECONDS 51.816 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1B
TELEMETRY FREQUENCY.. 1680 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 140 SEC. 50.048 METERS ALTITUDE
TO 1.980 SEC. 19.497 METERS ALTITUDE

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 21.000 METERS
TEMPERATURE -57.5 DEG. C

RADIOSONDE AND BALLOON DATA

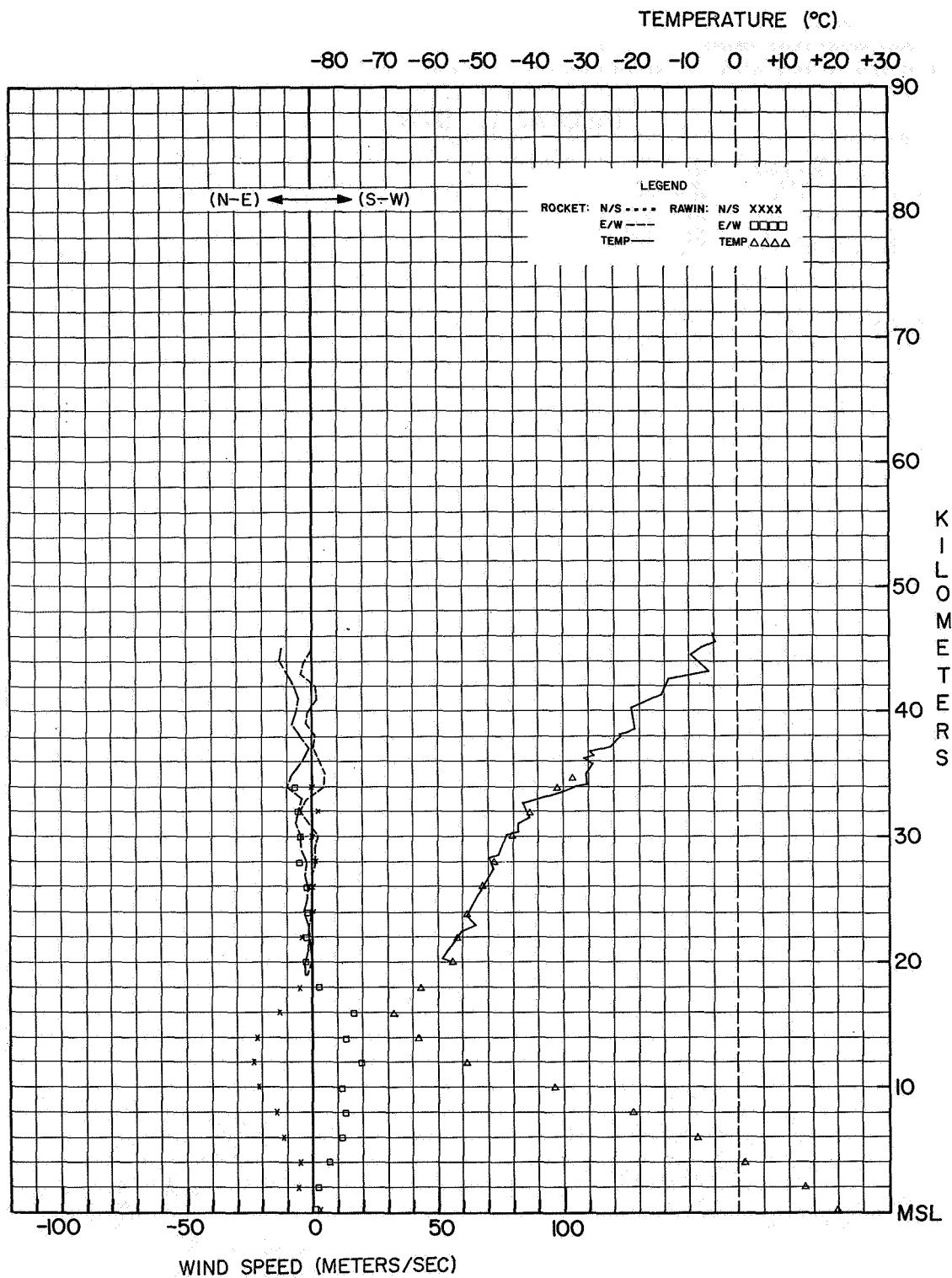
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1.200 GRAMS
FREE LIFT.. 1.500 GRAMS
ASCENSION RATES.. SFC-400 MB 270 M/MINUTE
400 MB-TOP 292 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1019.0 MB
TEMPERATURE.. 19.7 DEG. C
RELATIVE HUMIDITY.. 91%
VISIBILITY.. GOOD
SURFACE WIND.. 190 DEG. 5 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 8 OCTAS/CI
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

50 FT. 199 DEG/11 KTS, 100 FT. 204 DEG/11 KTS,
150 FT. 199 DEG/15 KTS, 200 FT. 207 DEG/15 KTS,
250 FT. 203 DEG/17 KTS



STATION: (NASA)WALLOPS IS.,VA.
 DATE: 9 SEP 1965

ROCKET TIME: 08/2026 LST 0126GCT
 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WOLLOPS ISLAND, VIRGINIA Z LAUNCH TIME Z RELEASE TIME
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 9, 1965 0141 0236

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS N-S E-W	RH %	TEMP DEG C						
021	056	48	060	004	-001 -002	4895	+06.8							1019.0	0000	190	005	+003 +000	91	+19.7						
024	056	47	090	022	+000 -011	4648	-03.2				082	016	-001 -008	0808.0	0200	345	012	-006 +002	27	+13.7						
027	053	46	074	014	-002 -007	4572	-03.2				078	020	-002 -010	0633.0	0400	306	017	-005 +007	90	+01.2						
030	051	45	086	032	-001 -016	4508	-08.7				086	030	-001 -015	0491.0	0600	315	031	-011 +012	45	-08.0						
033	050	44	072	028	-004 -013	4420	-08.7				078	028	-003 -014	0378.0	0800	319	037	-014 +013	26	-21.5						
037	050	43	165	008	+004 -001	4365	-06.0				085	018	-001 -009	0287.0	1000	330	047	-021 +012	33	-37.0						
040	045	42	115	008	+002 -004	4301	-06.6				165	008	+004 -001	0211.0	1200	318	059	-023 +020		-54.0						
044	043	41	090	014	+000 -007	4179	-11.7				110	010	+002 -005	0154.0	1400	329	047	-021 +013		-64.4						
048	041	40	090	014	+000 -007	3968	-20.8				090	014	+000 -007	0111.0	1600	328	029	-013 +008		-68.7						
052	036	39	184	020	-001 -008	3895	-22.0				082	016	-001 -008	0079.0	1800	329	012	-005 +003		-63.5						
057	033	38	060	012	-003 -005	3676	-29.2				060	004	-001 -002	0058.0	2000	045	004	-001 -001		-57.2						
062	032	37	360	002	-001 +000	3667	-27.0				090	006	+000 -003	0042.0	2200	032	010	-004 -003		-55.8						
068	030	36	096	016	+001 -008	3642	-28.9				090	010	+000 -005	0030.8	2400	068	002	+000 -001		-54.0						
073	029	35	106	020	+003 -010	3627	-28.0				090	012	+000 -006	0022.7	2600	112	002	+000 -001		-51.7						
080	025	34	114	016	+002 -008	3572	-28.8				100	018	+002 -009	0016.5	2800	096	010	+001 -005		-48.3						
087	022	33	068	010	-002 -005	MISSING DATA (SEE REMARKS)										0012.5	3000	090	008	+000 -004		-45.2				
094	023	32	075	008	-001 -004	3310	-41.2	10.126	12.479	305	065	010	-002 -005	0009.1	3200	108	010	+002 -005		-42.0						
102	022	31	062	010	-002 -004	3164	-39.0	10.044	15.278	307	075	008	-001 -004	0006.8	3400	092	013	+000 -007		-36.3						
111	018	30	101	008	+001 -004	3133	-40.6	10.505	16.090	306	060	010	-002 -004													
119	017	29	135	006	-002 -002	3109	-40.9	10.879	16.684	306	060	010	-002 -004													
129	018	28	115	004	+001 -002	3088	-41.9	11.217	17.278	305	074	008	-001 -004													
139	016	27	055	007	-002 -003	3048	-42.0	11.894	18.327	305	090	008	+000 -004													
148	014	26	135	008	-003 -003	3018	-43.3	12.429	19.261	304	090	008	+000 -004													
162	013	25	055	007	-002 -003	2947	-44.1	13.801	21.462	304	070	006	-001 -003													
176	012	24	055	007	-002 -003	2926	-43.7	14.236	22.099	304	070	006	-001 -003													
191	011	23	033	008	-003 -002	2911	-44.8	14.555	22.704	303	045	006	-002 -002													
207	010	22	360	006	-003 +000	2859	-45.0	15.722	24.546	303	060	004	-001 -002													
223	010	21	290	006	-001 +003	2835	-46.9	16.295	25.653	302	090	004	+000 -002													
243	008	20	335	005	-002 +000	2789	-47.7	17.458	27.582	301	060	004	+001 -002													
261	008	19	335	009	-004 +002	2758	-46.6	18.289	28.754	302	090	004	+000 -002													
						2633	-50.3	22.081	35.292	299	046	008	-003 -003													
						2536	-48.9	25.578	40.627	300	055	006	-002 -003													
						2469	-51.8	28.323	45.576	298	055	006	-002 -003													
						2417	-51.9	30.672	49.378	298	055	006	-002 -003													
						2316	-49.8	35.781	57.061	300	035	008	-003 -002													
						2301	-52.2	36.609	59.017	298	035	008	-003 -002													
						2237	-54.3	40.408	65.765	297	020	006	-003 -001													
						2210	-55.1	42.138	68.833	296	000	006	-003 +000													
						2158	-54.3	45.683	74.350	297	335	004	-002 +001													
						2088	-56.5				290	006	-001 +003													
						2006	-56.1				360	004	-002 +000													
						1981	-58.8				360	004	-002 +000													
						1905	-58.6				335	010	-004 +002													
						1829	-63.1																			
CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																										
						2093	-56.1	50.000	82.051	295	290	006	-001 +003													
						2447	-51.9	30.000	48.148	299	055	008	-002 -003													
						2690	-48.3	20.000	31.702	301	060	004	-001 -002													
						3151	-39.0	10.000	15.213	307	075	008	-001 -004													

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPQ-6
MOTOR ACQUISITION.. 13 SECONDS 13.381 METERS ALTITUDE
MOTOR TRACK DROPPED.. 82 SECONDS 49.225 METERS ALTITUDE
PAYLOAD ACQUISITION.. 82 SECONDS 49.225 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.800 SECONDS 17.221 METERS ALTITUDE
APOGEE.. 82 SECONDS 49.225 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 408.2 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 82 SEC. 49.225 METERS ALTITUDE
TO 1.800 SEC. 17.221 METERS ALTITUDE

REMARKS

MISSING TEMPERATURE DATA FROM 36 TO 33 KM.
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 21.000 METERS
TEMPERATURE -56.1 DEG. C

RADIOSONDE AND BALLOON DATA

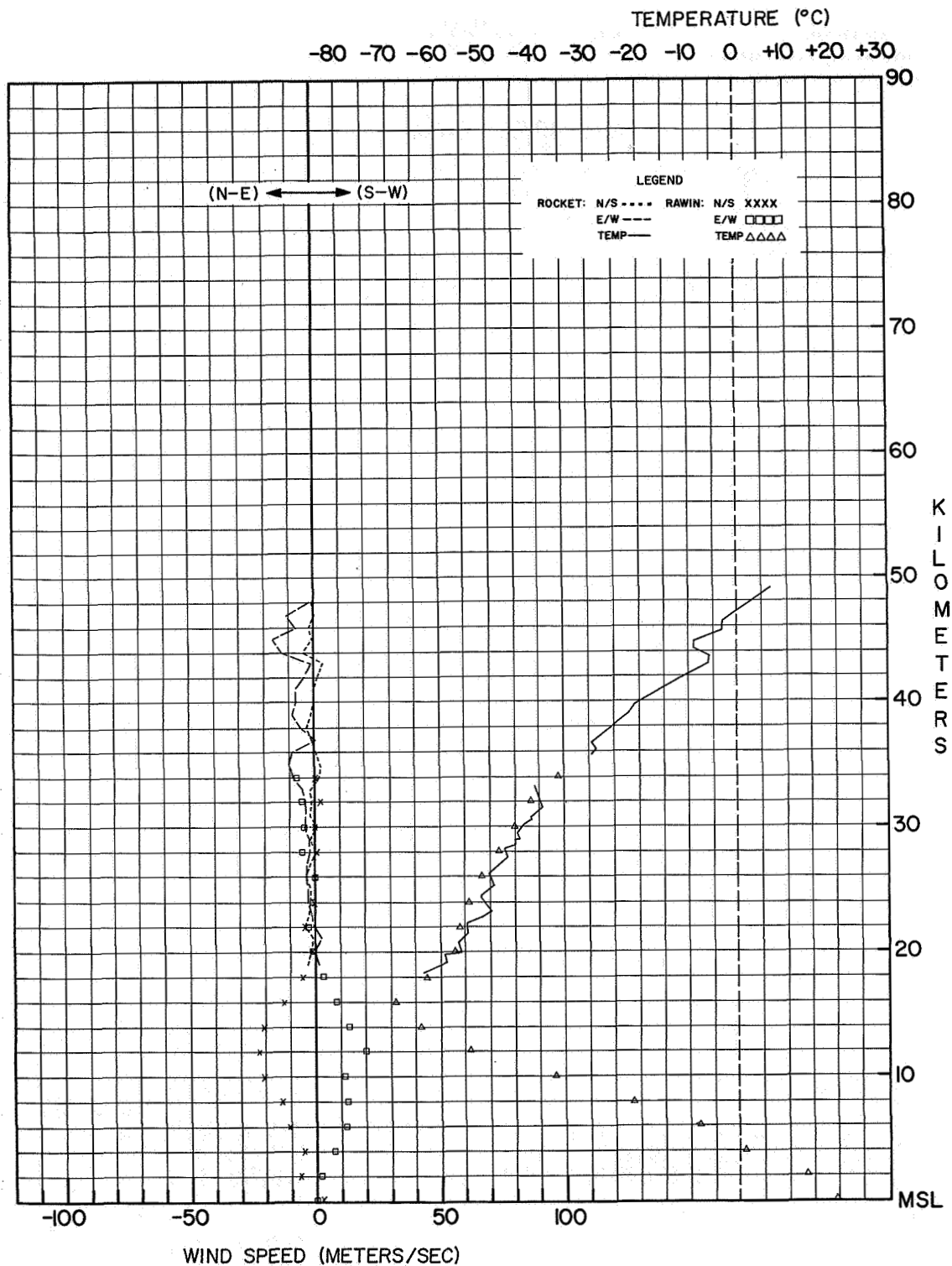
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSOMETER
GROUND EQUIPMENT TYPE.. GMD-18
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,500 GRAMS
ASCENSION RATES.. SFC-400 MB 270 M/MINUTE
400 MB-TOP 292 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1019.0 MB
TEMPERATURE.. 19.7 DEG. C
RELATIVE HUMIDITY.. 91%
VISIBILITY.. GOOD
SURFACE WIND.. 190 DEG. 5 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 8 OCTAS/C1
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

50 FT. 194 DEG/10 KTS, 100 FT. 200 DEG/10 KTS,
150 FT. 200 DEG/14 KTS, 200 FT. 210 DEG/14 KTS,
250 FT. 200 DEG/17 KTS



STATION: (NASA) Wallops Is., VA.
 DATE: 9 SEP 1965

ROCKET TIME: 08/204 LST 0141GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE, ROCKET RAWINSONDE
(NASA) Wallops Island, Virginia Z LAUNCH RELEASE
TIME Z TIME
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 9, 1965 0225 0236

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS		RH %	TEMP DEG C						
					N-S	E-W				-3				N-S	E-W					N-S	E-W								
024	071	50	278	014	-001	+007	5322	+21.7	00.606	00.731	344					1019.0	0000	190	005	+003	+000	91	+19.7						
026	063	49	243	004	+001	+002	5057	+04.8	00.826	01.059	334					0808.0	0200	345	012	-006	+002	27	+13.7						
029	057	48	129	013	+004	-005	4977	-00.4	00.911	01.190	331	280	012	-001	+006	0633.0	0400	306	017	-005	+007	90	+01.2						
032	054	47	105	022	+003	-011	4758	-04.2	01.196	01.584	329	116	018	+004	-008	0491.0	0600	315	031	-011	+012	45	-08.0						
035	053	46	090	029	+000	-015	4679	-08.0	01.321	01.775	327	100	024	+002	-012	0378.0	0800	319	037	-014	+013	26	-21.5						
038	053	45	079	030	-003	-015	4581	-06.7	01.496	02.000	327	086	030	-001	-015	0287.0	1000	330	047	-021	+013	33	-37.0						
041	050	44	066	024	-005	-011	4465	-12.2	01.735	02.368	324	074	029	-004	-014	0211.0	1200	318	059	-023	+021		-54.0						
045	050	43	059	011	-003	-005	4398	-09.7	01.891	02.557	326	065	024	-005	-011	0154.0	1400	329	047	-021	+013		-64.4						
048	048	42	090	010	+000	-005	4368	-09.8	01.965	02.658	325	065	020	-004	-009	0111.0	1600	328	029	-013	+014		-68.7						
052	044	41	090	014	+000	-007	4276	-06.2	02.202	02.947	328	067	011	-002	-005	0079.0	1800	329	012	-005	+003		-63.5						
056	040	40	084	018	-001	-009	4203	-11.0	02.424	03.294	325	090	010	+000	-005	0058.0	2000	045	004	-001	-001		-57.2						
061	036	39	090	012	+000	-006	4170	-10.7	02.529	03.432	325	090	012	+000	-006	0042.0	2200	032	010	-004	-003		-55.8						
066	034	38	112	006	+001	-003	4121	-12.6	02.694	03.683	324	090	014	+000	-007	0030.8	2400	068	002	+000	-001		-54.0						
070	032	37	090	004	+000	-002	4081	-13.0	02.837	03.885	323	090	014	+000	-007	0022.7	2600	112	002	+000	-001		-51.7						
076	030	36	128	011	+002	-005	4063	-14.7	02.904	04.003	322	090	016	+000	-008	0016.6	2800	096	010	+001	-005		-48.3						
082	028	35	097	016	+001	-008	4029	-15.2	03.036	04.193	322	082	016	-001	-008	0012.5	3000	090	008	+000	-004		-45.2						
088	026	34	082	014	-001	-007	3999	-17.2	03.158	04.395	321	083	018	-001	-009	0009.1	3200	108	010	+002	-005		-42.0						
095	024	33	072	012	-002	-006	3968	-16.6	03.290	04.573	321	082	016	-001	-009	0006.6	3400	092	013	+000	-007		-36.3						
102	022	32	090	010	+000	-005	3911	-20.6	03.548	05.005	319	090	012	+000	-006														
110	021	31	101	010	+001	-005	3880	-20.5	03.698	05.214	319	090	010	+000	-005														
118	019	30	101	010	+001	-005	3825	-23.7	03.982	05.686	317	103	008	+001	-004														
128	018	29	135	006	+002	-002	3813	-23.8	04.048	05.782	317	110	006	+001	-003														
138	017	28	135	006	+002	-002	3795	-24.6	04.148	05.944	316	110	006	+001	-003														
149	015	27	109	006	+001	-003	3728	-26.1	04.544	06.551	315	090	004	+000	-002														
161	013	26	071	006	-001	-003	3688	-29.7	04.801	07.025	313	090	006	+000	-003														
174	012	25	063	004	-001	-002	3655	-28.6	05.026	07.320	314	110	006	+001	-003														
189	011	24	063	004	-001	-002	3639	-30.6	05.138	07.546	312	103	008	+001	-004														
203	010	23	063	004	-001	-002	3609	-30.7	05.358	07.871	312	067	011	+002	-005														
220	010	22	063	004	-001	-002	3533	-31.9	05.958	08.796	311	105	014	+002	-007														
238	009	21	360	000	+000	+000	3496	-30.6	06.274	09.213	312	097	016	+001	-008														
257	008	20	270	004	+000	+000	3478	-32.2	06.433	09.510	311	097	016	+001	-008														
							3447	-31.3	06.719	09.895	312	090	014	+000	-007														
							3429	-32.8	06.891	10.211	311	080	014	-001	-007														
							3362	-32.7	07.571	11.215	311	080	014	-001	-007														
							3304	-34.6	08.217	12.269	310	070	013	-002	-006														
							3258	-39.2	08.776	13.662	307	080	012	-001	-006														
							3146	-39.0	10.318	15.696	307	100	010	+001	-005														
							3115	-41.4	10.793	16.588	305	100	010	+001	-005														
							3030	-41.4	12.219	18.780	305	100	010	+001	-005														
							3005	-43.3	12.675	19.642	304	100	010	+001	-005														
							2935	-44.4	14.055	21.885	303	123	007	+002	-003														
							2911	-43.1	14.562	22.546	304	135	006	+002	-002														
							2905	-45.1	14.692	22.946	303	135	006	+002	-002														
							2850	-46.0	15.944	25.001	302	135	006	+002	-002														
							2734	-46.5	18.958	29.792	302	105	003	+001	-002														
							2691	-47.3	20.218	31.886	301	110	006	+001	-003														
							2633	-48.7	22.062	35.011	300	090	006	+000	-003														
							2597	-50.3	23.299	37.239	299	070	006	-001	-003														
							2509	-50.0	26.633	42.510	300	060	003	-001	-002														
							2463	-52.6	28.572	46.143	298	060	003	-001	-002														
							2326	-52.6	35.270	56.961	298	060	003	-001	-002														
							2298	-50.0	36.813	58.759	300	060	003	-001	-002														
							2274	-53.4	38.191	61.902	297	060	003	-001	-002														
							2228	-52.6	40.996	66.208	298	060	003	-001	-002														
							2225	-53.8	41.186	66.879	297	060	003	-001	-002														
							2164	-54.5	45.268	73.743	297	045	003	-001	-001														
							2137	-53.6	47.201	76.577	297	090	001	+000	-001														
							2115	-55.8	48.842	80.041	296	360	000	+000	+000														
							1996	-56.1																					
							1972	-59.0																					
							1908	-59.4																					

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION
RADAR DATA
RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 5 SECONDS 4,663 METERS ALTITUDE
MOTOR TRACK DROPPED.. 82 SECONDS 54,426 METERS ALTITUDE
PAYLOAD ACQUISITION.. 82 SECONDS 54,426 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1,740 SECONDS 18,288 METERS ALTITUDE
APOGEE.. 90 SECONDS 53,297 METERS ALTITUDE
SENSOR AND TELEMETRY DATA
WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 402.5 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 82 SEC. 52,426 METERS ALTITUDE
TO 1,740 SEC. 18,288 METERS ALTITUDE

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 21,000 METERS
TEMPERATURE -55.9 DEG. C

RADIOSONDE AND BALLOON DATA

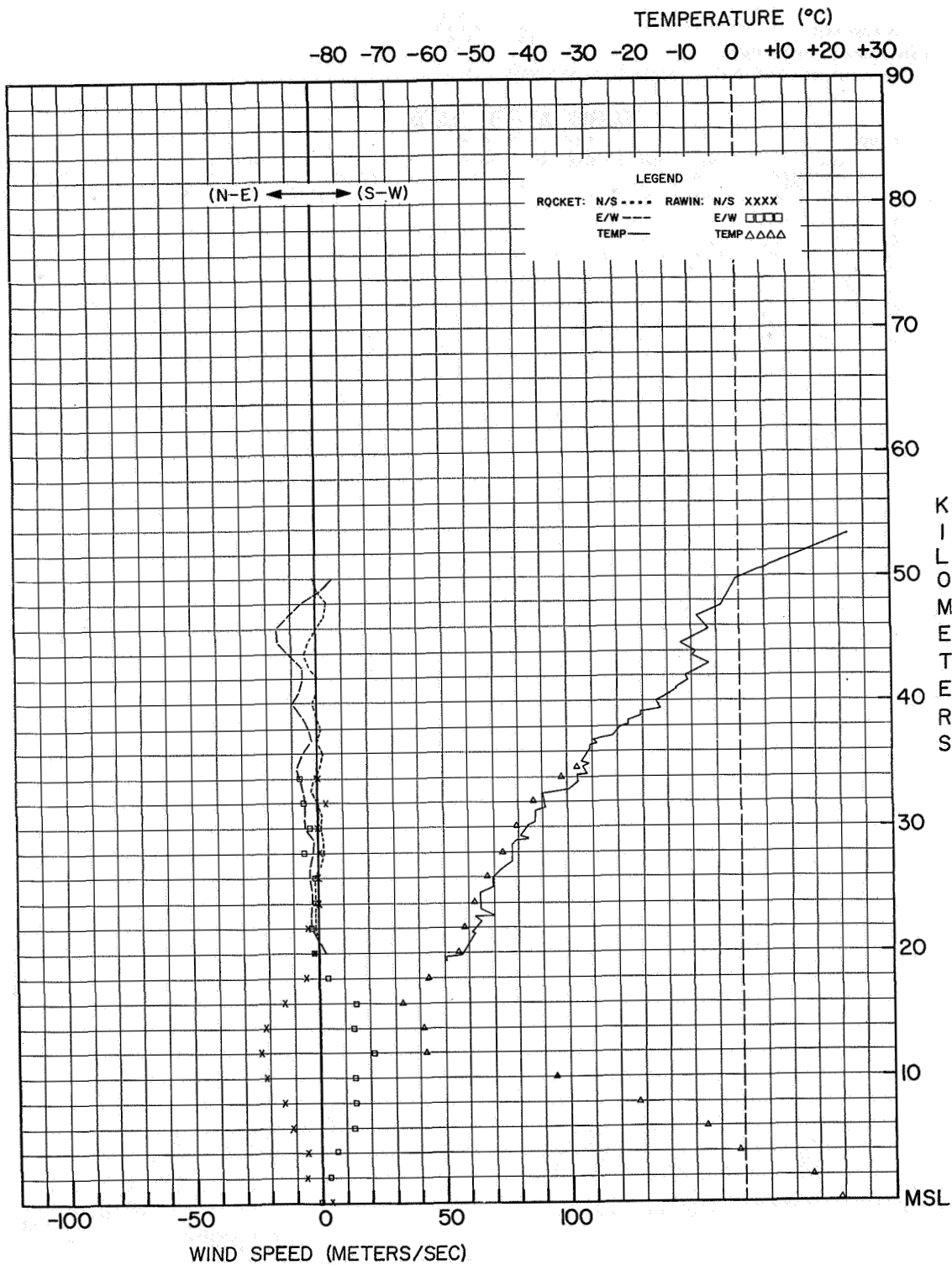
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,500 GRAMS
ASCENSION RATES.. SFC-400 MB 270 M/MINUTE
400 MB-TOP 292 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1019.0 MB
TEMPERATURE.. 19.7 DEG. C
RELATIVE HUMIDITY.. 91%
VISIBILITY.. GOOD
SURFACE WIND.. 190 DEG. 5 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 8 OCTAS/CI
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

50 FT. 208 DEG/10 KTS, 100 FT. 205 DEG/09 KTS,
150 FT. 202 DEG/15 KTS, 200 FT. 208 DEG/17 KTS,
250 FT. 205 DEG/19 KTS



STATION: (NASA) WALLOPS IS., VA.
DATE: 9 SEP 1965

ROCKET TIME: 2125 LST 0225 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(NASA) WALLOPS ISLAND, VIRGINIA Z Z
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 9, 1965 0501 0236

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	POLAR	WIND	RH	TEMP					
TENTHS	VEL	TENS	POLAR	COMPONENTS			TENS	DEG	MB	G M	OF	POLAR	COMPONENTS			TENS	POLAR	COMPONENTS			DEG C					
OF A	M/S	OF	DEG	N-S	E-W	METERS	DEG C				M/S	DEG	KTS	N-S	E-W	MB	METERS	DEG	KTS	N-S	E-W	%	DEG C			
MINUTE																										
023	083	50	341	012	-006	+002	5063	-03.4	00.809	01.044	329					1019.0	0000	190	005	+003	+000	91	+19.7			
025	067	49	326	007	-003	+002	4791	-03.4	01.135	01.466	329	270	004	+000	+002	0808.0	0200	345	012	-006	+002	27	+13.7			
028	067	48	270	004	+000	+002	4621	-02.1	01.403	01.803	330	122	018	+005	-008	0633.0	0400	306	017	-005	+007	90	+01.2			
030	063	47	158	011	+005	-002	4599	-05.1	01.442	01.874	328	119	020	+005	-009	0491.0	0600	315	031	-011	+012	45	-08.0			
033	059	46	119	020	+005	-009	4484	-04.2	01.666	02.157	329	094	029	+001	-015	0378.0	0800	319	037	-014	+013	26	-21.5			
036	057	45	097	029	+002	-015	4435	-12.4	01.773	02.368	324	086	029	-001	-015	0287.0	1000	330	047	-021	+012	33	-37.0			
040	050	44	079	030	-003	-015	4410	-12.4	01.831	02.446	324	079	030	-003	-015	0211.0	1200	318	059	-022	+020		-54.0			
043	048	43	061	024	-006	-011	4365	-13.5	01.941	02.604	323	074	028	-004	-014	0154.0	1400	329	047	-021	+013		-64.4			
047	044	42	065	019	-008	-008	4273	-11.7	02.186	02.913	324	055	024	-007	-010	0111.0	1600	328	029	-013	+008		-68.7			
052	039	41	062	017	-004	-008	4221	-15.0	02.339	03.156	322	048	023	-008	-009	0079.0	1800	329	012	-005	+004		-63.5			
056	038	40	090	015	+000	-008	4179	-16.5	02.471	03.354	321	049	021	-007	-008	0058.0	2000	045	004	-001	-001		-57.2			
061	034	39	125	024	+007	-010	4020	-17.6	03.047	04.153	320	083	016	-001	-008	0042.0	2200	032	010	-004	-003		-55.8			
066	030	38	124	021	+006	-009	3840	-24.6	03.877	05.434	316	124	021	+006	-009	0030.8	2400	068	002	+000	-001		-54.0			
071	027	37	116	013	+003	-006	3740	-29.3	04.447	06.352	313	120	016	+004	-007	0022.7	2600	112	002	+000	-001		-51.7			
077	028	36	116	009	+002	-004	3569	-30.6	05.638	08.098	312	124	007	+002	-003	0016.6	2800	096	010	+001	-005		-48.3			
084	024	35	135	006	+002	-002	3478	-34.4	06.407	09.349	310	135	005	+002	-002	0012.5	3000	090	008	+000	-004		-45.2			
092	019	34	116	009	+002	-004	3429	-33.7	06.866	09.990	310	124	007	+002	-003	0009.1	3200	108	010	+002	-005		-42.0			
100	020	33	112	010	+002	-005	3225	-37.2	09.178	13.551	308	117	009	+002	-004	0006.8	3400	092	013	+000	-007		-36.3			
109	021	32	116	009	+002	-004	3197	-36.5	09.353	14.063	308	117	009	+002	-004											
120	017	31	099	012	+001	-006	3057	-42.6	11.700	17.680	304	099	012	+001	-006											
129	014	30	090	012	+000	-006	3005	-41.4	12.626	18.979	305	090	012	+000	-006											
141	013	29	090	004	+000	-002	2926	-46.2	14.187	21.777	302	090	006	+000	-003											
153	015	28	090	000	+000	+000	2789	-48.2	17.420	26.978	301															
161	022	27	090	001	+000	-001	2734	-47.0	18.920	29.145	301	090	002	+000	-001											
168	026	26	135	003	+001	-001	2548	-50.5	25.055	37.202	299	153	004	+002	-001											
172	029	25	161	006	+003	-001	2310	-53.3	36.082	57.174	297	090	004	+000	-002											
177	028	24	135	006	+002	-002	2243	-57.7	40.853	64.763	294	063	004	-001	-002											
185	023	23	090	004	+000	-002	2201	-53.0	42.761	67.665	297	063	004	-001	-002											
192	019	22	063	004	-001	-002	2079	-56.4	51.684	83.068	295	090	002	+000	-001											
202	018	21	090	002	+000	-001	2021	-57.1	56.606	91.274	295	270	002	+000	+001											
211	016	20	270	002	+000	+001	1993	-55.4	59.142	94.619	296															
CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																										
2095 -55.8 50.000 80.124 296 090 002 -000 -001																										
2432 -51.8 30.000 47.206 298 135 005 +002 -002																										
2690 -47.6 20.000 30.893 301 090 002 +000 -001																										
3152 -37.8 10.000 14.800 308 112 010 +002 -005																										
3399 -33.9 17.000 10.193 310 117 009 +000 -004																										
3640 -29.9 05.000 07.161 313 121 011 +003 -005																										
4314 -13.1 02.000 02.679 323 069 027 -005 -013																										
4867 -03.4 01.000 01.291 329 326 007 -003 +002																										

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2095	-55.8	50.000	80.124	296	090	002	-000	-001
2432	-51.8	30.000	47.206	298	135	005	+002	-002
2690	-47.6	20.000	30.893	301	090	002	+000	-001
3152	-37.8	10.000	14.800	308	112	010	+002	-005
3399	-33.9	07.000	10.193	310	117	009	+002	-004
3640	-29.9	05.000	07.161	313	121	011	+003	-005
4314	-13.1	02.000	02.679	323	069	027	-005	-013
4867	-03.4	01.000	01.291	329	326	007	-003	+002

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 120 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 5 SECONDS 4.618 METERS ALTITUDE
MOTOR TRACK DROPPED.. 78 SECONDS 51.786 METERS ALTITUDE
PAYLOAD ACQUISITION.. 78 SECONDS 51.786 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.305 SECONDS 19.312 METERS ALTITUDE
APOGEE.. 90 SECONDS 53.340 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 401 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 78 SEC. 51.786 METERS ALTITUDE
TO 1.305 SEC. 19.312 METERS ALTITUDE

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE 65.1 MB
ALTITUDE 19.320 METERS
TEMPERATURE -59.3 DEG. C

RADIOSONDE AND BALLOON DATA

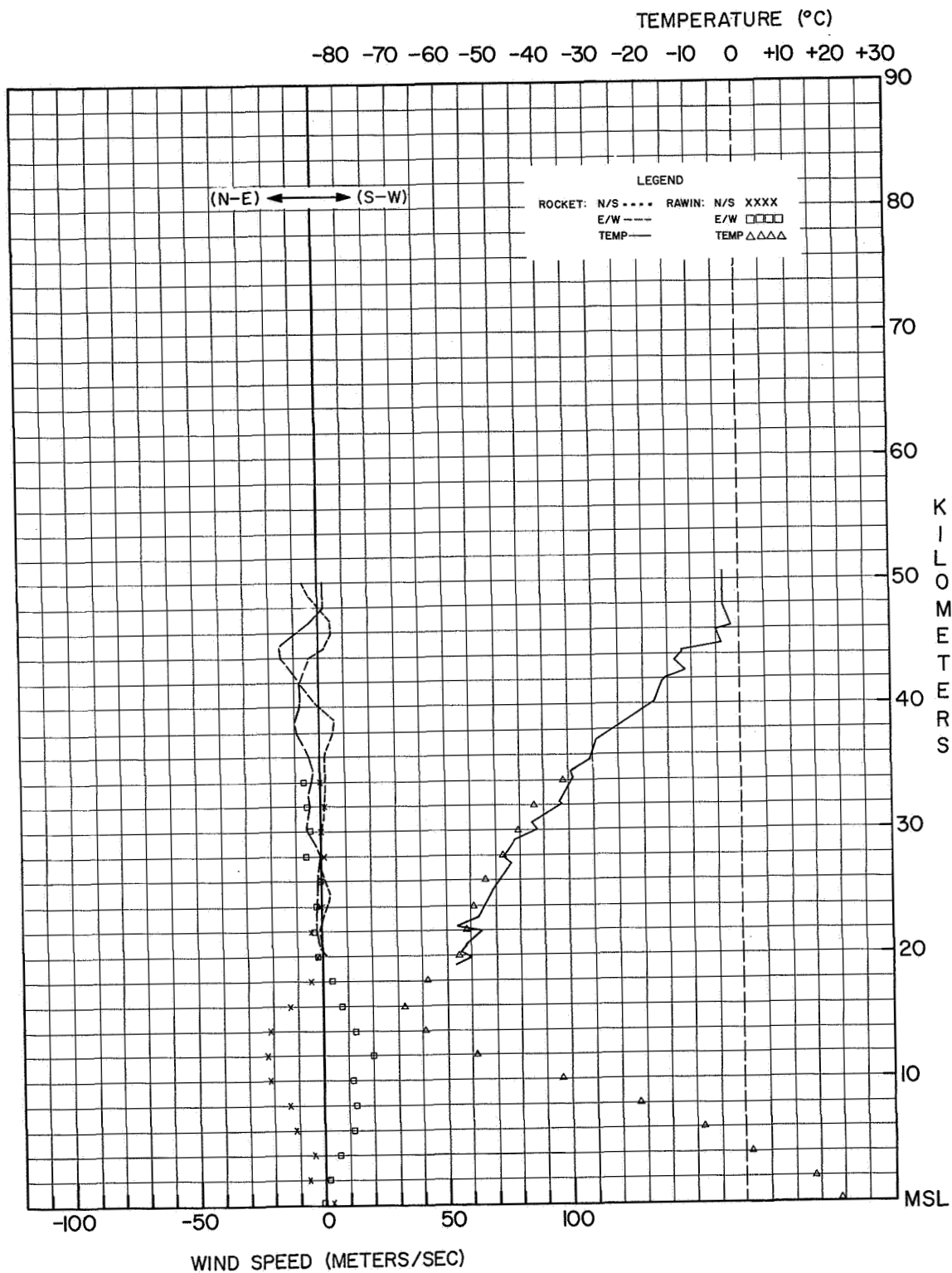
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,500 GRAMS
ASCENSION RATES.. SFC-400 MB 270 M/MINUTE
400 MB-TOP 292 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1019.0 MB
TEMPERATURE.. 19.7 DEG. C
RELATIVE HUMIDITY.. 91%
VISIBILITY.. GOOD
SURFACE WIND.. 190 DEG. 5 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 8 OCTAS/CI

WIND AT ROCKET LAUNCH

50 FT. 210 DEG/07 KTS, 100 FT. 220 DEG/08 KTS,
150 FT. 212 DEG/11 KTS, 200 FT. 222 DEG/13 KTS,
250 FT. 222 DEG/14 KTS



STATION: (NASA)Wallops IS., VA.
DATE: 9 SEP 1965

ROCKET TIME: 0001 LT 0501 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(NASA) WALLOPS ISLAND, VIRGINIA Z Z
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 9, 1965 0805 0840

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE											
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR		WIND COMPONENTS MPS		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR		WIND COMPONENTS MPS		PRESSURE MB	ALT TENS OF METERS	POLAR		WIND COMPONENTS MPS		RH %	TEMP DEG C					
			DEG	KTS	N-S	E-W						DEG	KTS	N-S	E-W			DEG	KTS	N-S	E-W							
023	047	52	078	018	-002	-009	5468	+20.5	00.488	00.592	344					1019.0	0000	224	006	+002	+002	93	+17.5					
026	069	51	066	024	-005	-011	5383	+09.9	00.539	00.678	337					0807.0	0200	335	008	-004	+002	75	+12.4					
028	067	50	053	029	-009	-012	5331	+06.0	00.574	00.732	335					0632.0	0400	294	018	-004	+008	77	+01.0					
031	065	49	054	026	-008	-011	5072	-03.0	00.788	01.038	330	062	025	-006	-011	0591.0	0600	309	025	-008	+010	43	-08.3					
033	061	48	081	012	-001	-006	5044	-02.5	00.816	01.073	330	058	027	-007	-012	0377.0	0800	317	033	-013	+012	32	-21.7					
036	056	47	180	010	+005	+000	4938	-07.3	00.931	01.248	327	054	027	-008	-011	0285.0	1000	319	046	-017	+016	43	-37.1					
039	053	46	190	012	+006	+001	4767	-07.6	01.157	01.551	327	110	011	+002	-006	0211.0	1200	316	047	-017	+017		-54.5					
042	050	45	173	018	+009	-002	4709	-06.8	01.245	01.665	327	170	010	+005	-001	0153.0	1400	326	036	-015	+011		-64.3					
046	048	44	152	018	+008	-005	4596	-09.8	01.437	01.944	325	190	012	+006	+001	0110.0	1600	330	033	-015	+009		-69.7					
049	042	43	135	017	+005	-007	4508	-06.2	01.607	02.144	328	175	017	+009	-002	0078.5	1800	350	010	-005	+001		-65.0					
054	037	42	121	016	+004	-007	4377	-13.0	01.900	02.601	323	149	018	+007	-005	0057.0	2000	360	008	-004	+000		-59.0					
058	036	41	119	020	+005	-009	4337	-13.6	02.001	02.746	323	142	017	+006	-006	0041.5	2200	339	002	+001	-001		-56.0					
063	036	40	101	020	+002	-010	4191	-11.0	02.417	03.284	325	121	016	+004	-007	0033.0	2357	346	003	-001	+000		-55.9					
068	036	39	104	016	+002	-008	4167	-13.2	02.493	03.416	323	120	017	+004	-008	0030.3	2400	346	003	-001	+000		-52.0					
072	034	38	121	011	+003	-005	4093	-16.8	02.811	03.915	321	117	020	+005	-009	0022.5	2600	010	004	-002	+000		-50.0					
077	033	37	127	010	+003	-004	4063	-16.0	02.856	03.956	322	112	020	+004	-009	0016.6	2800	082	004	+000	-002		-45.8					
082	031	36	174	008	+004	-001	3892	-22.8	03.585	05.101	317	107	016	+002	-008	0012.5	3000	088	004	+000	-002		-44.6					
088	029	35	180	008	+004	-000	3853	-25.6	03.780	05.439	316	113	014	+003	-007	0009.1	3200	092	002	+000	-001		-41.5					
094	030	34	135	011	+004	-004	3822	-26.6	03.944	05.697	315	118	012	+003	-006													
099	031	33	131	013	+004	-005	3752	-25.0	04.339	06.228	316	124	011	+003	-005													
105	028	32	135	008	+003	-003	3719	-26.9	04.539	06.566	315	126	010	+003	-004													
111	024	31	135	006	+002	-002	3645	-26.0	05.033	07.239	315	153	009	+003	-002													
119	020	30	117	004	+001	-002	3624	-27.5	05.169	07.496	314	163	008	+004	-001													
127	019	29	090	006	+000	-003	3484	-30.0	06.273	09.190	313	173	009	+004	-001													
136	017	28	076	008	-001	-004	3392	-36.9	07.142	10.768	308	135	011	+004	-004													
146	016	27	090	004	+000	-002	3371	-37.0	07.360	11.101	308	134	012	+004	-004													
157	016	26	360	002	-001	+000	3331	-35.0	07.792	11.654	309	132	013	+004	-005													
168	014	25	292	006	-001	+003	3313	-36.2	07.994	12.017	309	131	013	+004	-005													
180	014	24	225	006	+002	+002	3155	-40.4	10.036	15.359	306	135	007	+003	-003													
192	013	23	100	006	+003	+000	3139	-42.2	10.273	15.844	305	135	007	+003	-003													
205	013	22	123	004	+001	-002	2978	-39.9	12.991	19.838	306	112	004	+001	-002													
218	011	21	090	002	+000	-001	2935	-41.2	13.830	21.237	305	101	006	+001	-003													
234	010	20	303	004	-001	+002	2920	-40.9	14.136	21.679	306	095	006	+000	-003													
251	010	19	270	004	+000	+002	2896	-42.8	14.641	22.639	304	090	006	+000	-003													
							2880	-42.3	14.989	23.127	305	087	006	+000	-003													
							2777	-47.5	17.464	27.566	301	079	007	-001	-004													
							2728	-46.3	18.793	29.507	302	086	005	+000	-003													
							2649	-48.9	21.160	33.610	300	045	003	-001	-001													
							2576	-48.2	23.624	37.406	301	348	003	-002	+000													
							2502	-50.8	26.427	42.334	299	292	006	-001	+003													
							2423	-52.5	29.823	48.143	298	238	006	+002	+002													
							2295	-54.0	36.331	59.049	297	270	006	+003	+000													
							2164	-55.4	44.528	72.836	296	110	003	+001	-002													
							2039	-55.1				175	003	+002	+000													
							2012	-57.6				303	004	-001	+002													
							1913	-59.9				270	004	+000	+002													
							1828	-62.8																				
							1800	-62.7																				

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)									
2083	-57.6	50.000	82.622	294	090	002	+000	-001	
2410	-52.5	30.000	48.440	298	239	006	+002	+002	
2676	-47.6	20.000	31.599	301	065	004	-001	-002	
3142	-40.3	10.000	15.300	306	135	007	+003	-003	
3389	-35.8	07.000	10.510	309	141	011	+004	-004	
2628	-26.0	05.000	07.205	316	152	009	+004	-002	
4308	-13.6	02.000	02.740	323	142	017	+006	-006	
4849	-07.4	01.000	01.336	327	071	022	+005	-009	

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 120 DEG. AZIMUTH 80.0 DEG. ELEVATION
RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 9 SECONDS 9.327 METERS ALTITUDE
MOTOR TRACK DROPPED.. 82 SECONDS 53.035 METERS ALTITUDE
PAYLOAD ACQUISITION.. 82 SECONDS 53.035 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.540 SECONDS 18.645 METERS ALTITUDE
APOGEE.. 106 SECONDS 54.680 METERS ALTITUDE
SENSOR AND TELEMETRY DATA
WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH READ THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 402 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 82 SEC. 53.035 METERS ALTITUDE
TO 1.540 SEC. 18.645 METERS ALTITUDE

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 20.900 METERS
TEMPERATURE -57.6 DEG. C

RADIOSONDE AND

BALLOON DATA

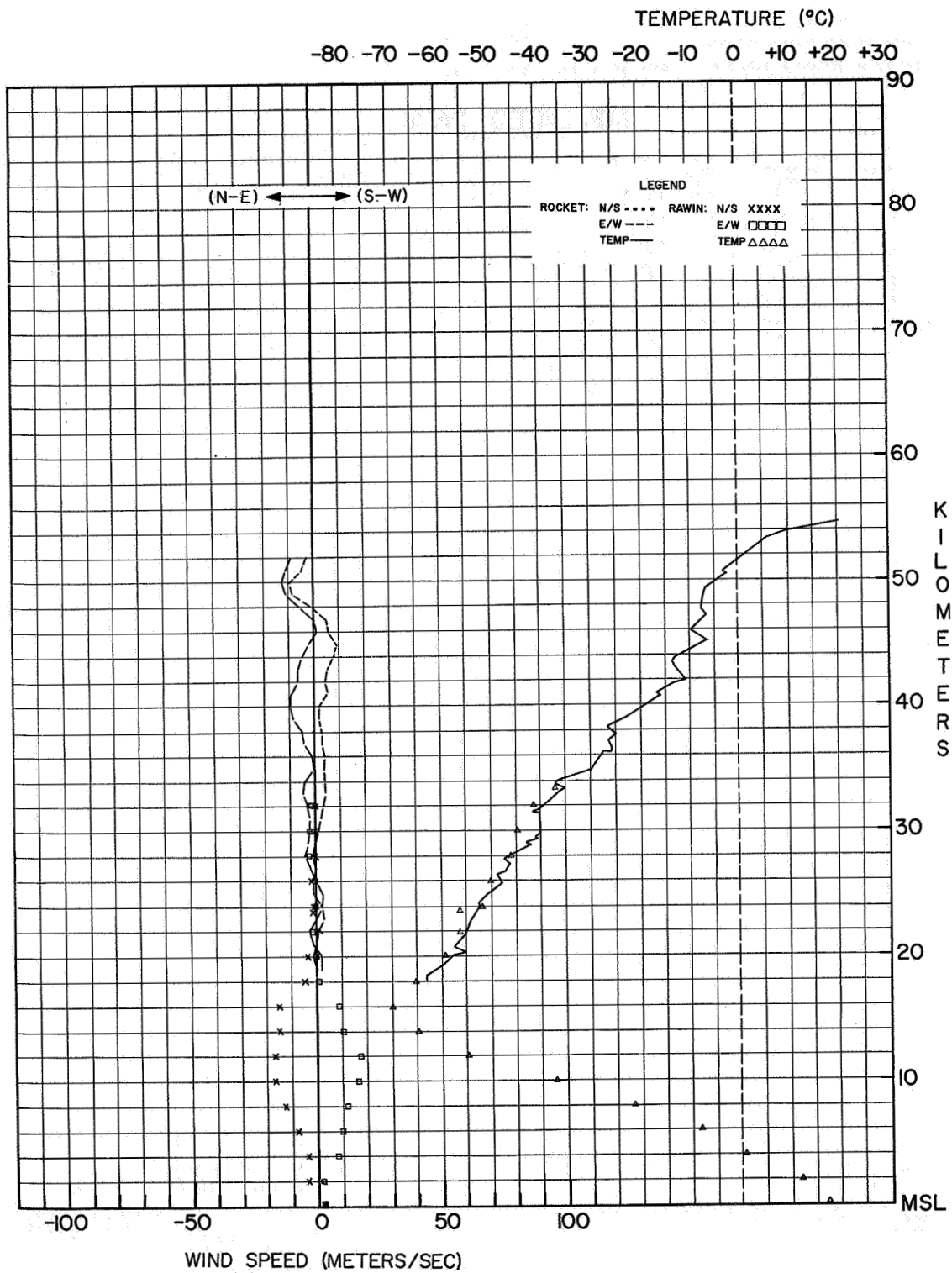
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-18
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,500 GRAMS
ASCENSION RATES.. SFC-400 MB 277 M/MINUTE
400 MB-TOP 306 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1019.0 MB
TEMPERATURE.. 17.5 DEG. C
RELATIVE HUMIDITY.. 93%
VISIBILITY.. UNKNOWN
SURFACE WIND.. 224 DEG. 5 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 3 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 3 OCTAS/CI

WIND AT ROCKET

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE
LAUNCH
50 FT. 238 DEG/04 KTS, 100 FT. 240 DEG/05 KTS,
150 FT. 241 DEG/07 KTS, 200 FT. 240 DEG/09 KTS,
250 FT. 246 DEG/11 KTS



STATION: (NASA)WALLOPS IS., VA.
DATE: 9 SEP 1965

ROCKET TIME: 0305 LST 0805 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: NOX-1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(NASA) WALLOPS ISLAND, VIRGINIA Z Z Z
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 9, 1965 1201 1105

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	RH %	TEMP DEG C									
020	074	52	180	020	+010 +000	5390	+25.0	00.569	00.679	346				1019.8	0000	210	004	+002 +001	93	+17.8									
023	069	51	153	022	+010 -005	5150	+14.2	00.749	00.928	340				0808.0	0200	335	006	-003 +001	72	+12.5									
025	067	50	111	037	+007 -018	4730	-02.0	01.242	01.632	330	110	024	+004 -011	0633.0	0400	300	015	-004 +007	64	+01.2									
028	061	49	104	040	+005 -020	4590	-05.7	01.480	01.971	328	140	012	+005 -004	0493.0	0600	320	019	-007 +006	35	-07.9									
030	057	48	102	028	+003 -014	4430	-05.9	01.810	02.413	328	155	018	+008 -004	0377.0	0800	315	038	-014 +014	43	-21.7									
033	054	47	114	019	+004 -009	4390	-05.9	01.904	02.537	328	150	018	+008 -005	0285.0	1000	324	038	-016 +012	28	-37.0									
037	053	46	141	013	+005 -004	4310	-13.5	02.109	02.893	323	120	020	+005 -009	0211.0	1200	330	054	-024 +014		-53.4									
040	053	45	157	015	+007 -003	4190	-11.4	02.463	03.351	324	100	020	+002 -010	0154.0	1400	320	033	-013 +011		-63.3									
043	051	44	148	018	+008 -005	4090	-16.4	02.805	03.891	321	095	018	+001 -009	0111.0	1600	328	033	-015 +009		-68.4									
046	049	43	119	020	+005 -009	4040	-14.3	02.995	04.121	323	105	014	+002 -007	0079.0	1800	004	010	-005 +000		-64.1									
049	045	42	101	020	+002 -010	3990	-16.0	03.197	04.428	322	110	012	+002 -006	0057.0	2000	006	006	-003 +000		-58.9									
054	043	41	096	018	+001 -009	3920	-22.8	03.509	04.992	317	145	008	+003 -002	0041.9	2200	076	006	-001 -003		-53.8									
058	040	40	109	012	+002 -006	3690	-25.2	04.792	06.884	316	170	010	+005 -001	0030.9	2400	080	004	+000 -002		-49.7									
062	036	39	161	006	+003 -001	3560	-27.6	05.725	08.305	314	116	008	+002 -004	0022.8	2600	080	004	+000 -002		-49.6									
067	033	38	202	011	+005 +002	3500	-30.3	06.221	09.124	313	070	006	-001 -003	0016.8	2800	080	004	+000 -002		-44.8									
072	031	37	168	010	+005 -001	3380	-32.0	07.356	10.864	311	135	002	+001 -001	0012.7	3000	080	004	+000 -002		-40.8									
077	029	36	117	009	+002 -004	3360	-33.7	07.565	11.254	310	135	002	+001 -001	0009.3	3200	080	004	+000 -002		-36.2									
084	027	35	072	006	-001 -003	3290	-32.8	08.350	12.374	311	115	004	+001 -002	0007.0	3400	303	008	-002 +004		-32.0									
089	026	34	135	003	+001 -001	3160	-38.7	10.049	15.266	307	055	008	-002 -003	0005.3	3600	049	010	-003 -004		-28.6									
096	024	33	117	004	+001 -002	2990	-43.0	12.872	19.921	304	135	002	+001 -001	0004.0	3800	133	019	+007 -007		-32.1									
103	022	32	056	007	-002 -003	2940	-41.7	13.851	21.316	305	135	006	+002 -002																
111	020	31	045	006	-002 -002	2910	-43.6	14.475	22.460	304	120	008	+002 -003																
120	019	30	135	003	+001 -001	2830	-42.5	16.283	25.145	305	105	008	+001 -004																
129	018	29	124	007	+002 -003	2680	-49.0	20.359	32.352	300	090	008	+000 -004																
139	017	28	090	008	+000 -004	2520	-49.4	25.936	41.287	300	090	006	+000 -003																
149	015	27	090	008	+000 -004	2440	-48.7	29.272	46.452	300	030	004	-002 -001																
160	014	26	104	008	+001 -004	2280	-53.0	37.363	60.451	298	318	006	-002 +002																
173	013	25	090	006	+000 -003	2160	-56.3	45.015	73.940	295	090	002	+000 -001																
187	012	24	360	006	-003 +000	2020	-57.7				000	004	-002 +000																
201	011	23	315	008	-003 +003	1950	-61.2																						
217	010	22	000	000	+000 +000	1910	-59.0																						
234	009	21	090	006	+000 -003	1890	-58.7																						
253	008	20	360	004	-002 +000																								
CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																													
2086 -57.0 50.000 82.393 295 090 006 +000 -003																													
2413 -49.2 30.000 48.027 300 025 004 -002 -001																													
2682 -48.4 20.000 31.717 301 090 008 +000 -004																													
3134 -38.8 10.000 15.540 307 055 008 -002 -003																													
3382 -31.7 07.000 10.615 312 135 002 +001 -001																													
3625 -26.0 05.000 07.100 316 135 008 +003 -003																													

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 120 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. PPS-16
MOTOR ACQUISITION.. 10 SECONDS 11.083 METERS ALTITUDE
MOTOR TRACK DROPPED.. 79 SECONDS 53.304 METERS ALTITUDE
PAYLOAD ACQUISITION.. 79 SECONDS 53.304 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.660 SECONDS 18.893 METERS ALTITUDE
APOGEE.. 90 SECONDS 54.214 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 402.3 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 79 SEC. 53.304 METERS ALTITUDE
TO 1.660 SEC. 18.893 METERS ALTITUDE

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 20.930 METERS
TEMPERATURE -57.0 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-18
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 6.630 GRAMS
FREE LIFT.. 1.900 GRAMS
ASCENSION RATES.. SFC-400 MB 244 M/MINUTE
400 MB-TOP 330 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

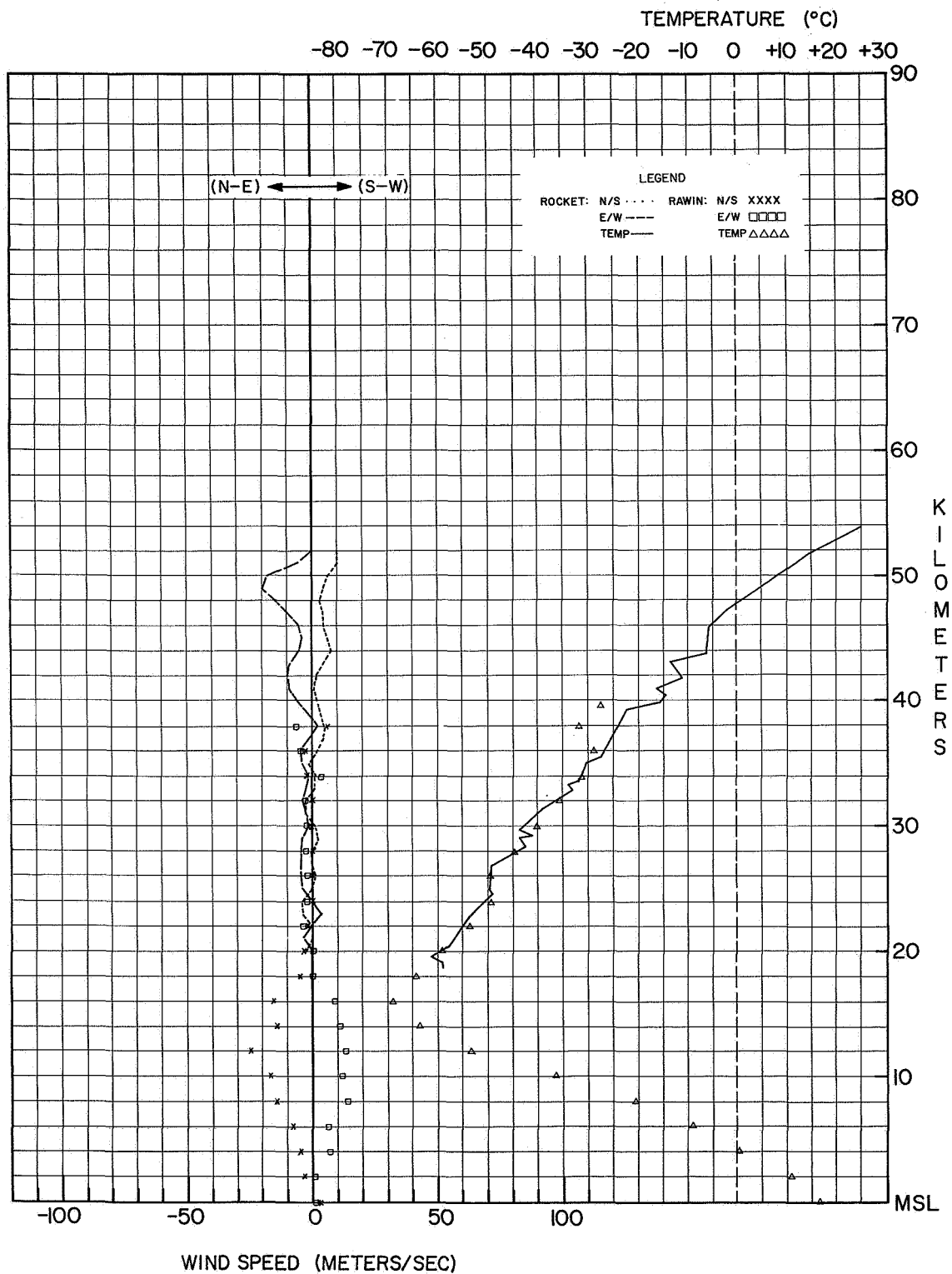
STATION PRESSURE.. 1019.8 MB
TEMPERATURE.. 17.8 DEG. C
RELATIVE HUMIDITY.. 93%
VISIBILITY.. UNLIMITED
SURFACE WIND.. 210 DEG. 4 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 5 OCTAS
LOW.. NONE
MIDDLE.. 4 OCTAS/AC
HIGH.. 1 OCTAS/CI

TYPE OF PRECIPITATION.. NONE

OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

50 FT. 225 DEG/03 KTS. 100 FT. 238 DEG/05 KTS.
150 FT. 232 DEG/08 KTS. 200 FT. 255 DEG/08 KTS.
250 FT. 255 DEG/13 KTS



STATION: (NASA) WALLOPS IS., VA.
 DATE: 9 SEP 1965

ROCKET TIME: 0701 LST 1201 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
 (NASA) WALLOPS ISLAND, VIRGINIA Z Z Z
 72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 9, 1965 1630 1506

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE								
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	RH %	TEMP DEG C
021	057	52	170	023	+012 -002											1021.0	0000	175	010	+005 +001	83	+21.9
024	053	51	170	036	+019 -003											0809.0	0200	340	008	-004 +001	53	+13.6
027	053	50	161	054	+027 -009											0636.0	0400	290	017	-003 +008	30	+03.7
031	050	49	146	049	+021 -014											0594.0	0600	305	018	-005 +008	27	-06.1
035	043	48	118	036	+009 -017											0380.0	0800	310	035	-011 +014	28	-20.1
038	043	47	104	033	+004 -017											0288.0	1000	331	026	-012 +007	18	-35.4
042	042	46	074	021	-003 -010											0214.0	1200	339	052	-025 +010		-52.3
046	040	45	060	023	-006 -010											0155.0	1400	318	030	-011 +010		-62.9
051	038	44	100	010	+001 -005											0112.0	1600	336	026	-012 +006		-70.8
																0080.0	1800	360	000	+000 +000		-66.1
																0057.5	2000	355	012	-006 +001		-60.0
																0042.3	2200	160	006	+003 -001		-54.2
																0030.9	2400	045	002	-001 -001		-53.0
																0022.8	2600	168	004	+002 +000		-47.0
																0017.1	2800	099	004	+000 -002		-46.4

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. WOX-1A
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8-5 FT. TUBULAR
 LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 12 SECONDS 12,253 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 82 SECONDS 51,511 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 82 SECONDS 51,511 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1,740 SECONDS 18,000 METERS ALTITUDE
 APOGEE.. 90 SECONDS 51,968 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
 TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
 TELEMETRY FREQUENCY.. 402.2 MHZ
 TELEMETRY QUALITY.. GOOD
 TELEMETRY DATA RECEIVED FROM.. 82 SEC. 51,511 METERS ALTITUDE
 TO 1,740 SEC. 18,000 METERS ALTITUDE

REMARKS

MISSING TEMPERATURE DATA 50.54 KM. TO 44.74 KM.
 REASON UNKNOWN.
 THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
 ALTITUDE 20,990 METERS
 TEMPERATURE -57.1 DEG. C

RADIOSONDE AND BALLOON DATA

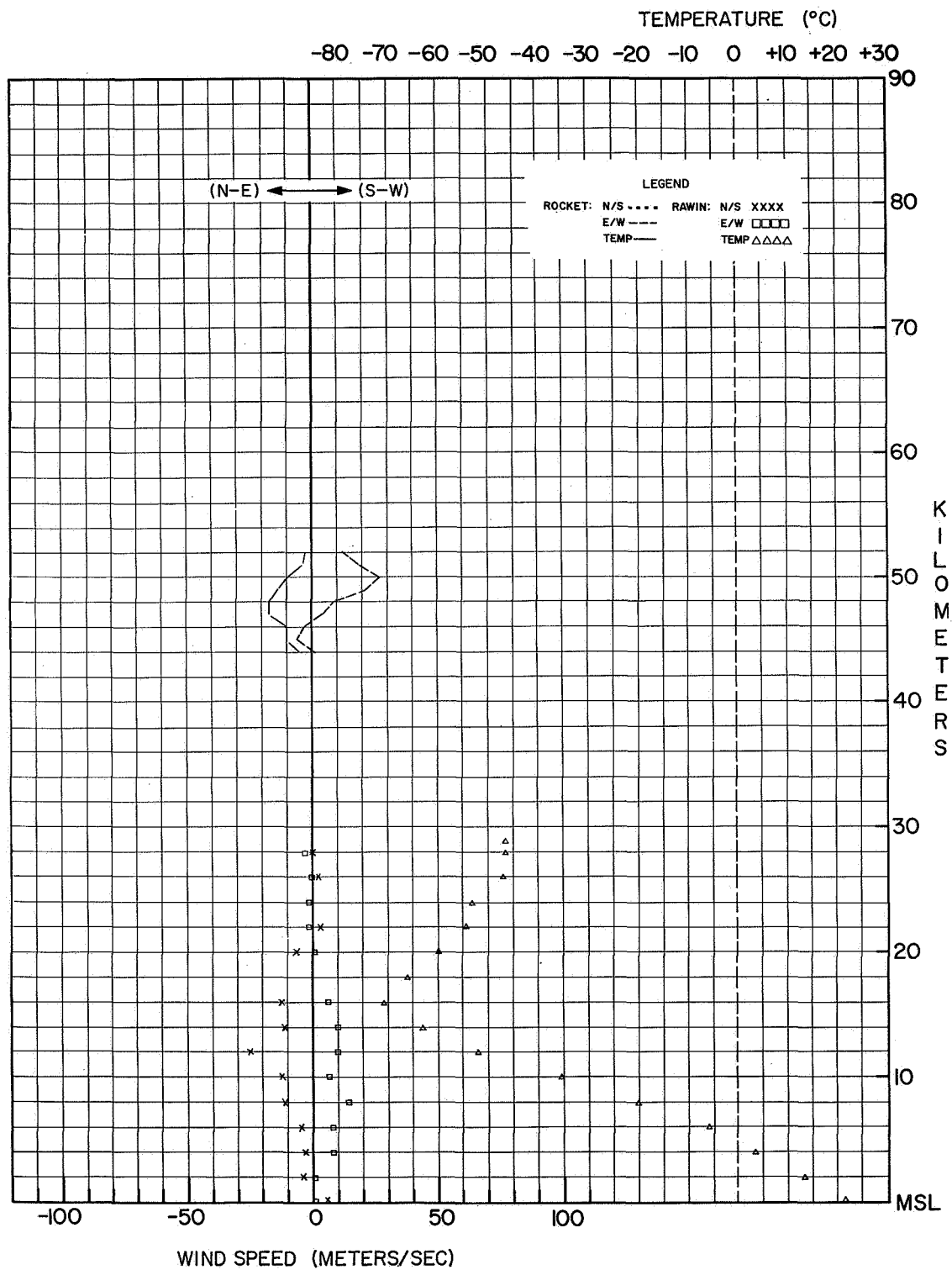
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
 GROUND EQUIPMENT TYPE.. GMD-1B
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1,200 GRAMS
 FREE LIFT.. 1,500 GRAMS
 ASCENSION RATES.. SFC-400 MB 258 M/MINUTE
 400 MB-TOP 336 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1020.8 MB
 TEMPERATURE.. 21.9 DEG. C
 RELATIVE HUMIDITY.. 83%
 VISIBILITY.. FAIR
 SURFACE WIND.. 170 DEG. 10 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
 LOW.. NONE
 MIDDLE.. NONE
 HIGH.. NONE

WIND AT ROCKET LAUNCH

TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. HAZE
 50 FT. 183 DEG/17 KTS, 100 FT. 184 DEG/16 KTS,
 150 FT. 186 DEG/19 KTS, 200 FT. 196 DEG/17 KTS,
 250 FT. 192 DEG/15 KTS



STATION: (NASA) WALLOPS IS., VA.
DATE: 9 SEP 1965

ROCKET TIME: 1130 LST 1630 GCT
ROCKET MOTOR TYPE: JIUDI

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: 1680 MHZ

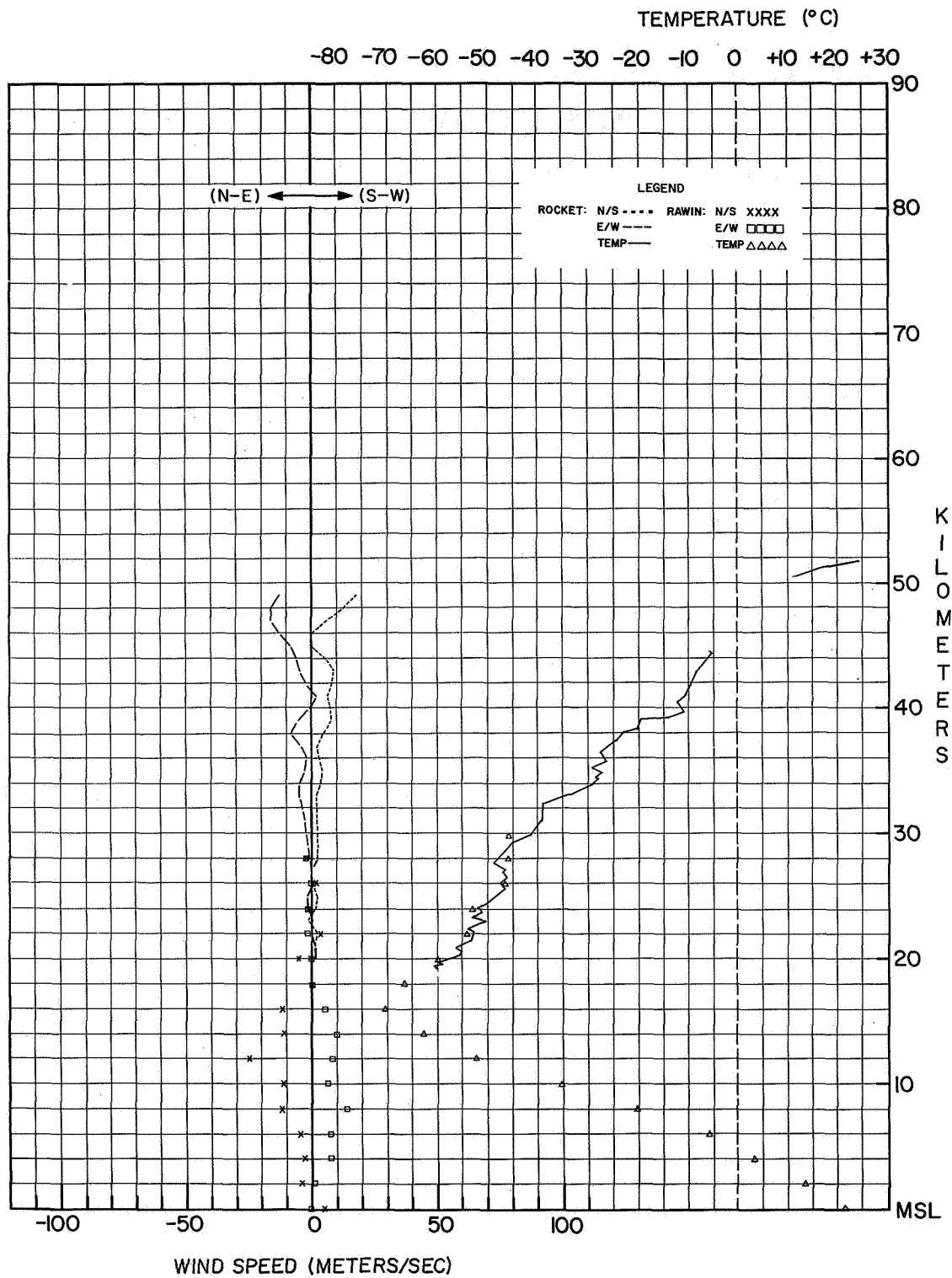
TABULATED DATA

CONSTANT PRESSURE LEVEL DATA
(HEIGHT IN GEOPOTENTIAL METERS)

HEIGHT IN GEOPOLITICAL MEIERS)							
2092	-57*	1	50.000	82*31	295	225 003	*001 *001
2424	-50.7	30.000	48.091	299	152 003	*001	*001
2686	-46.2	20.000	31.394	302	360 000	*000	*000
3157	-38.5	10.000	15.183	307	119 008	*002	*004
3405	-28.1	07.000	10.177	314	133 012	*004	*004
3648	-26.7	05.000	07.496	315	127 010	*003	*004
4342	-07.0	02.000	02.677	327	131 016	*006	*005

TECHNICAL DATA

A-26



STATION: (NASA)WALLOPS IS.,VA.
DATE: 9 SEP 1965

ROCKET TIME: 1148LST1648GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: NOX-1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WOLLOPS ISLAND, VIRGINIA Z LAUNCH RELEASE
TIME TIME
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 9, 1965 2234 2031

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND		ALT		TEMP	PRESSURE	DENSITY	SPEED	WIND		PRESSURE		ALT	WIND		RH		TEMP									
TENTHS	VEL		POLAR	COMPONENTS	TENS		DEG C	MB	G M	OF	POLAR	COMPONENTS	MB	METERS	DEG	POLAR	COMPONENTS	%	DEG C										
OF A	M/S	KM	DEG	KTS	N-S	E-W				SOUND	DEG	KTS	N-S	E-W															
MINUTE										M/S																			
024	091	53	360	020	-010	+000	5620	+10.0	00.443	00.557	337				1020.4	0000	170	012	+006	-001	76	+22.2							
026	077	52	330	024	-010	+006	5553	+06.1	00.480	00.612	335				0809.0	0200	311	002	-001	+001	50	+13.2							
028	068	51	302	018	-005	+008	5498	+06.5	00.513	00.653	335				0636.0	0400	305	021	-006	+009	32	+03.6							
030	065	50	292	010	-002	+005	5313	+02.0	00.642	00.831	333				0495.0	0600	299	019	-005	+009	44	-07.6							
033	057	49	250	017	+003	+008	4971	+02.2	00.974	01.260	333	280	012	-001	+006	0381.0	0800	293	025	-005	+012	20	-19.9						
036	056	48	209	020	+009	+005	4947	+04.4	01.003	01.287	334	270	014	+000	+007	0288.0	1000	326	025	-011	+007	18	-35.0						
039	053	47	209	024	+011	+006	4804	-02.5	01.196	01.574	330	210	020	+009	+005	0215.0	1200	335	031	-015	+007		-51.6						
043	051	46	194	024	+012	+003	4627	+02.0	01.487	01.925	333	199	024	+011	+004	0157.0	1400	322	023	-009	+007		-63.2						
046	045	45	146	021	-009	-006	4450	-03.9	01.852	02.449	329	130	020	+007	-008	0114.0	1600	330	022	-010	+006		-68.9						
050	041	44	114	019	+004	-009	4322	-04.6	02.174	02.883	329	109	018	+003	-009	0081.0	1800	316	008	-003	+003		-67.9						
054	038	43	108	018	+003	-009	4270	-09.2	02.322	03.133	326	107	017	+002	-009	0058.0	2000	324	008	-003	+002		-59.0						
059	036	42	104	016	+002	-008	4212	-09.1	02.500	03.372	326	104	016	+002	-008	0042.5	2200	319	001	+000	+000		-55.6						
063	039	41	082	014	-001	-007	4154	-12.2	02.693	03.676	324	094	015	+001	-008	0039.0	2400	319	001	+000	+000		-52.2						
067	041	40	068	011	-002	-005	4115	-12.3	02.833	03.868	324	085	014	-001	-007	0028.0	2600	319	001	+000	+000		-49.0						
071	038	39	112	011	+002	-005	4011	-18.4	03.246	04.538	320	070	011	-002	-006	0018.2	2800	319	001	+000	+000		-45.5						
076	035	38	127	010	-003	-004	3962	-18.1	03.463	04.836	320	085	011	-001	-006	0013.7	3000	076	017	-002	-009		-41.0						
081	033	37	167	004	+002	-001	3941	-19.5	03.561	05.000	319	094	011	+000	-006	0009.6	3200	172	004	+002	+000		-36.9						
086	030	36	207	004	+002	+001	3883	-17.6	03.845	05.360	321	115	011	+003	-006	0007.2	3400	145	006	+003	-002		-33.4						
092	027	35	207	009	+004	+002	3825	-20.5	04.153	05.855	319	123	011	+003	-005	0005.4	3600	233	010	+003	+004		-30.0						
098	025	34	207	009	+004	+002	3789	-24.3	04.360	06.240	316	131	009	+003	-004														
105	024	33	180	004	+002	+000	3636	-23.8	05.364	07.663	317	193	004	+002	+001														
112	023	32	071	006	-001	-003	3533	-26.0	06.172	08.894	315	207	008	+008	+003														
120	021	31	074	014	-002	-007	3475	-30.1	06.685	09.797	313	207	009	+004	+002														
128	019	30	070	017	-003	-008	3392	-29.6	07.502	10.972	313	205	009	+005	+002														
137	018	29	063	009	-002	-004	3371	-30.7	07.725	11.348	312	199	008	+004	+001														
147	016	28	360	004	-002	+000	3338	-29.0	08.087	11.798	313	190	006	+003	+001														
158	015	27	360	004	-002	+000	3133	-39.8	10.812	16.503	306	073	011	-002	-006														
169	014	26	045	003	-001	-001	3075	-40.7	11.762	18.023	306	073	015	-002	-008														
195	012	24	000	000	+000	+000	3054	-40.0	12.127	18.526	306	072	015	-002	-008														
209	011	23	090	004	+000	-002	3027	-41.4	12.613	19.385	305	071	016	-002	-008														
226	010	22	090	002	+000	-001	2984	-40.4	13.428	20.550	306	069	016	-003	-008														
243	010	21	180	004	+002	+000	2975	-42.5	13.606	21.011	305	065	011	-002	-006														
							2929	-41.1	14.553	22.339	305	065	011	-002	-006														
							2868	-42.6	15.912	24.584	305	043	007	-003	-003														
							2841	-42.3	16.556	25.544	305	026	006	-003	-001														
							2801	-43.9	17.560	27.282	304	360	004	-002	+000														
							2740	-43.1	19.212	29.746	304	360	004	-002	+000														
							2670	-46.8	21.316	33.543	302	013	004	-002	+000														
							2627	-45.9	22.730	35.627	302	033	003	-002	-001														
							2572	-49.6	24.689	39.338	300	013	002	-001	+000														
							2487	-48.8	28.079	44.579	300	000	000	+000	+000														
							2457	-51.0	29.387	47.118	299	000	000	+000	+000														
							2374	-51.3	33.359	53.558	299	023	001	-001	+000														
							2347	-54.4	34.774	56.622	297	048	002	-001	-001														
							2274	-54.7	38.945	63.500	296	090	003	+000	-002														
							2207	-56.8	43.236	71.182	295	090	002	+000	-001														
							2185	-55.0	44.748	73.062	296	103	002	+000	-001														
							2149	-56.2	47.332	77.709	295	135	003	+001	-001														
							2045	-55.5																					

ROCKET THERMODYNAMICS (CONTINUED)

ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND			
TENS				OF	COMPONENTS			
OF				SOUND	MPS			
METERS	DEG C	MB	G M	M/S	N-S	E-W		
CONSTANT PRESSURE LEVEL DATA								
(HEIGHT IN GEOPOTENTIAL METERS)								
2107	-56.9	50.000	82.355	295	000	000	+000	+000
2434	-51.0	30.000	48.109	299	000	000	+000	+000
2702	-44.5	20.000	31.166	303	360	004	-002	+000
3099	-36.6	10.000	15.100	309	075	008	-001	-004
3424	-29.9	07.000	10.249	313	202	010	+005	+002
3670	-24.0	05.000	07.146	317	171	006	+003	-001
4360	-04.2	02.000	02.648	329	120	019	+005	-008
4910	+04.2	01.000	01.284	334	269	014	+000	+007

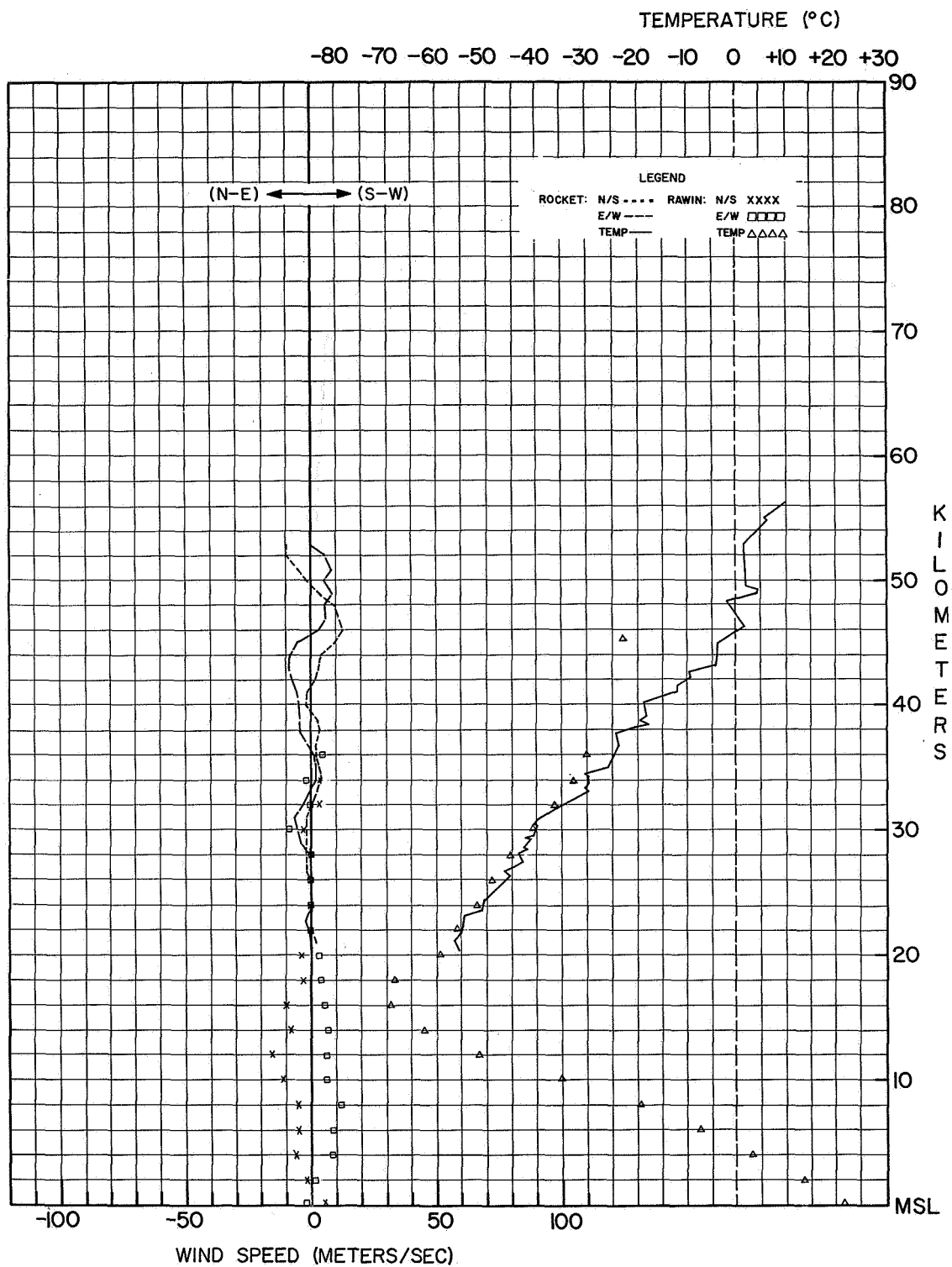
TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 135 DEG. AZIMUTH 80.0 DEG. ELEVATION
RADAR TYPE.. FPQ-6
MOTOR ACQUISITION.. 10 SECONDS 11.125 METERS ALTITUDE
MOTOR TRACK DROPPED.. 78 SECONDS 53.645 METERS ALTITUDE
PAYLOAD ACQUISITION.. 78 SECONDS 53.645 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.545 SECONDS 20.239 METERS ALTITUDE
APOGEE.. 105 SECONDS 56.236 METERS ALTITUDE
SENSOR AND TELEMETRY DATA
WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 402 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 78 SEC. 53.645 METERS ALTITUDE
TO 1.545 SEC. 20.239 METERS ALTITUDE

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 21



STATION: (NASA)WALLOPS IS., VA.
 DATE: 9 SEP 1965

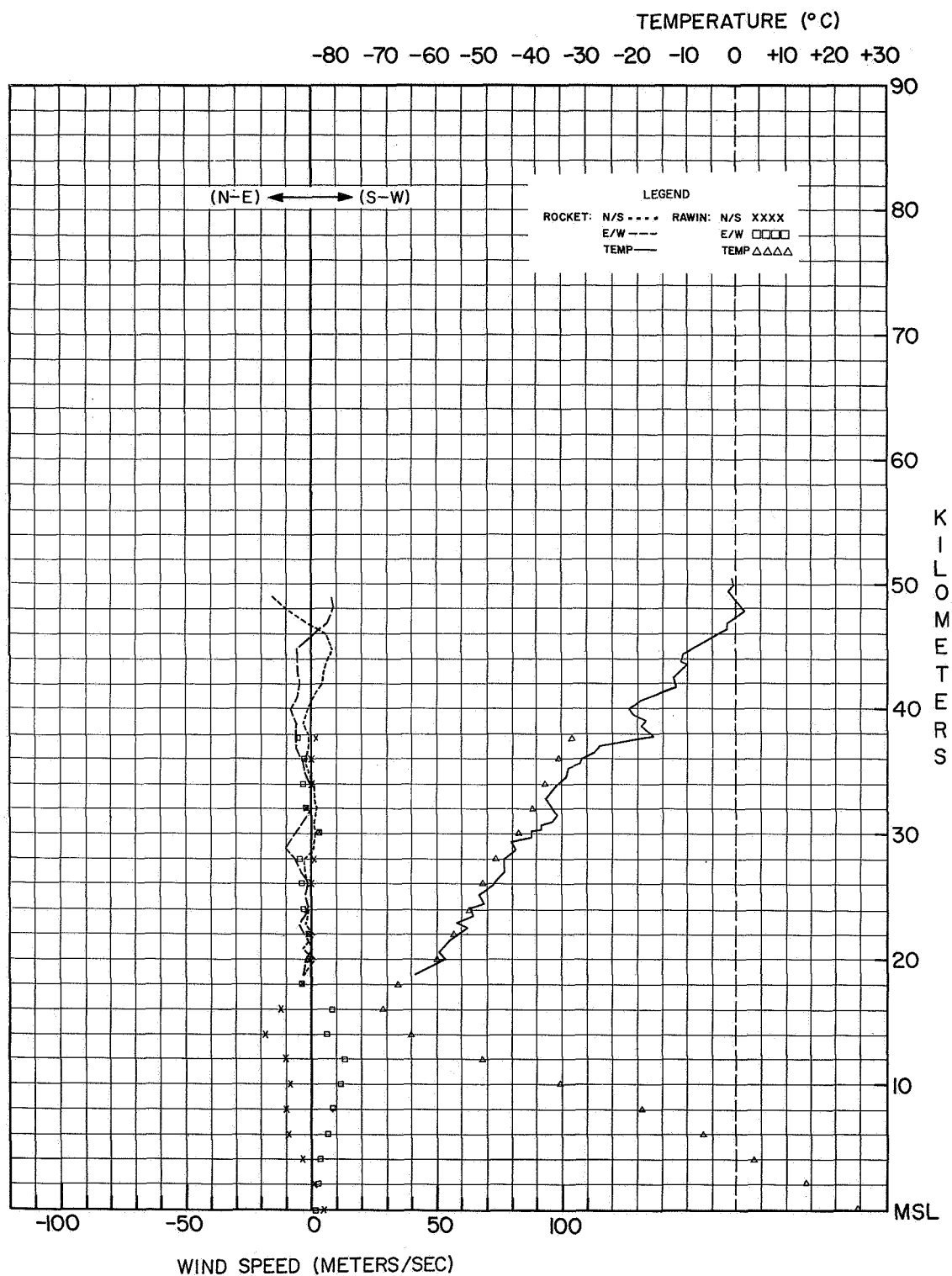
ROCKET TIME: 1734 LST 2234 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: NOX-1A
 RADIOSONDE TYPE: 1680 MHZ

TABULATED DATA

ROCKET THERMODYNAMICS (CONTINUED)

CONSTANT PRESSURE LEVEL DATA
(HEIGHT IN GEOPOTENTIAL METERS)



STATION: (NASA)WALLOPS IS., VA.
DATE: 10 SEP 1965

09/2015
ROCKET TIME: 150115GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
 (NASA) WALLOP'S ISLAND, VIRGINIA Z LAUNCH TIME Z RELEASE TIME Z
 72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 10, 1965 0500 0330

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE							
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP	
TENTHS	VEL		POLAR	COMPONENTS			TENS	DEG	MB	G M	OF	POLAR	COMPONENTS			MB	TENS	POLAR	COMPONENTS		%	DEG C		
OF A		KM	DEG	KTS	N-S	E-W	OF	C			SOUND	DEG	KTS	N-S	E-W		METERS	DEG	KTS	N-S	E-W			
MINUTE	M/S						METERS				M/S													
023	067	49	035	041	-017	-012	5154	+16.6	00.693	00.852	341					1020.1	0000	200	010	+005	+002	93	+19.7	
025	061	48	018	033	-016	-005	5047	+01.2	00.787	01.022	332					0811.0	0200	255	004	+001	+002	43	+14.2	
028	057	47	029	020	-009	-005	4907	-04.1	00.936	01.230	329					0639.0	0400	327	010	-004	+003	72	+03.1	
031	056	46	090	002	+000	-001	4831	-04.2	01.029	01.363	329	048	051	-017	-009	0494.0	0600	324	022	-009	+007	57	-07.0	
034	054	45	207	013	+006	+003	4758	-07.3	01.128	01.512	327	022	028	-013	-005	0381.0	0800	321	024	-010	+008	35	-19.4	
037	050	44	194	016	+008	+002	4599	-07.3	01.380	01.849	327	090	002	+000	-001	0289.0	1000	303	027	-008	+012	23	-35.3	
041	048	43	150	016	+007	-004	4551	-09.6	01.467	01.982	326	200	006	+003	+001	0214.5	1200	307	031	-010	+013		-51.4	
044	045	42	119	020	+005	-009	4419	-07.1	01.735	02.323	327	255	016	+008	+002	0156.0	1400	342	036	-018	+006		-65.0	
048	043	41	108	025	+004	-012	4343	-09.4	01.911	02.581	326	170	014	+007	-001	0112.0	1600	326	027	-012	+008		-71.3	
052	041	40	105	022	+003	-011	4285	-08.4	02.058	02.769	326	145	018	+007	-005	0079.5	1800	045	010	-004	-004		-67.8	
056	038	39	104	016	+002	-008	4231	-11.6	02.205	03.003	324	130	018	+006	-007	0057.0	2000	050	002	-001	-001		-60.0	
061	035	38	098	014	+001	-007	4081	-14.7	02.679	03.692	322	108	025	+004	-012	0042.0	2200	050	002	-001	-001		-56.9	
066	033	37	082	004	-001	-007	4036	-19.8	02.843	03.996	319	105	023	+003	-011	0030.5	2400	057	008	-002	-003		-53.8	
071	030	36	066	011	-002	-005	3981	-19.9	03.059	04.302	319	106	021	+003	-010	0022.5	2600	088	008	+000	-004		-50.8	
077	028	35	057	007	-002	-003	3959	-21.1	03.150	04.451	318	106	021	+003	-010	0016.8	2800	100	008	+001	-004		-47.9	
083	026	34	076	008	-001	-004	3926	-21.0	03.292	04.650	318	102	018	+002	-009	0012.4	3000	230	008	+003	+003		-44.3	
090	025	33	078	010	-001	-005	3837	-26.3	03.713	05.358	315	098	014	+001	-007	0009.1	3200	042	006	-002	-002		-40.9	
097	023	32	090	002	+000	-001	3804	-24.8	03.884	05.571	316	098	014	+001	-007	0006.8	3400	091	006	+000	-003		-38.2	
104	021	31	270	006	+000	+003	3679	-29.6	04.611	06.744	313	080	014	-001	-007	0005.1	3600	082	005	+000	-003		-35.4	
112	019	30	225	006	+002	+002	3636	-28.5	04.894	07.125	314	070	013	-002	-006									
121	018	29	135	008	+003	-003	3456	-32.2	06.287	09.293	311	055	008	-002	-003									
131	017	28	127	010	+003	-004	3398	-34.9	06.823	10.200	310	075	008	-001	-004									
141	016	27	104	008	+001	-004	3365	-36.8	07.151	10.777	308	075	008	-001	-004									
152	014	26	090	008	+000	-004	3310	-35.7	07.735	11.603	309	077	010	-001	-005									
164	013	25	076	008	-001	-004	3252	-37.4	08.403	12.696	308	070	006	-001	-003									
178	012	24	072	006	-001	-003	3212	-37.8	08.900	13.470	308	090	004	+000	-002									
192	011	23	090	004	+000	-002	MISSING DATA (SEE REMARKS)																	
208	010	22	090	006	+000	-003	2313	-53.6				090	004	+000	-002									
225	009	21	117	004	+001	-002	2289	-55.1				090	004	+000	-002									
244	009	20	135	003	+001	-001	2185	-57.7				090	006	+000	-003									
264	012	19	135	003	+001	-001	2067	-59.1				135	003	+001	-001									
							1969	-60.7				135	003	+001	-001									
							1902	-60.8				135	003	+001	-001									
CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																								
2093	-58.6	50.000	83.007	294	135	003	+001	-001																
3380	-35.9	07.000	10.515	309	075	008	-001	-004																
3602	-28.7	05.000	07.290	314	027	011	-002	-005																
4279	-08.8	02.000	02.695	326	155	016	+007	+003																
4818	-04.2	01.000	01.324	329																				

CONSTANT PRESSURE LEVEL DATA
 (HEIGHT IN GEOPOTENTIAL METERS)

2093	-58.6	50.000	83.007	294	135	003	+001	-001
3380	-35.9	07.000	10.515	309	075	008	-001	-004
3602	-28.7	05.000	07.290	314	067	011	-002	-005
4279	-08.8	02.000	02.695	326	155	016	+007	-003
4818	-04.2	01.000	01.324	329				

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. WOX-1A
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPQ-6
 MOTOR ACQUISITION.. 8 SECONDS 7.925 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 82 SECONDS 51.206 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 82 SECONDS 51.206 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1.680 SECONDS 18.288 METERS ALTITUDE
 APOGEE.. 93 SECONDS 51.816 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
 TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
 TELEMETRY FREQUENCY.. 401.5 MHZ
 TELEMETRY QUALITY.. GOOD
 TELEMETRY DATA RECEIVED FROM.. 82 SEC. 51.206 METERS ALTITUDE
 TO 1.680 SEC. 18.288 METERS ALTITUDE

REMARKS

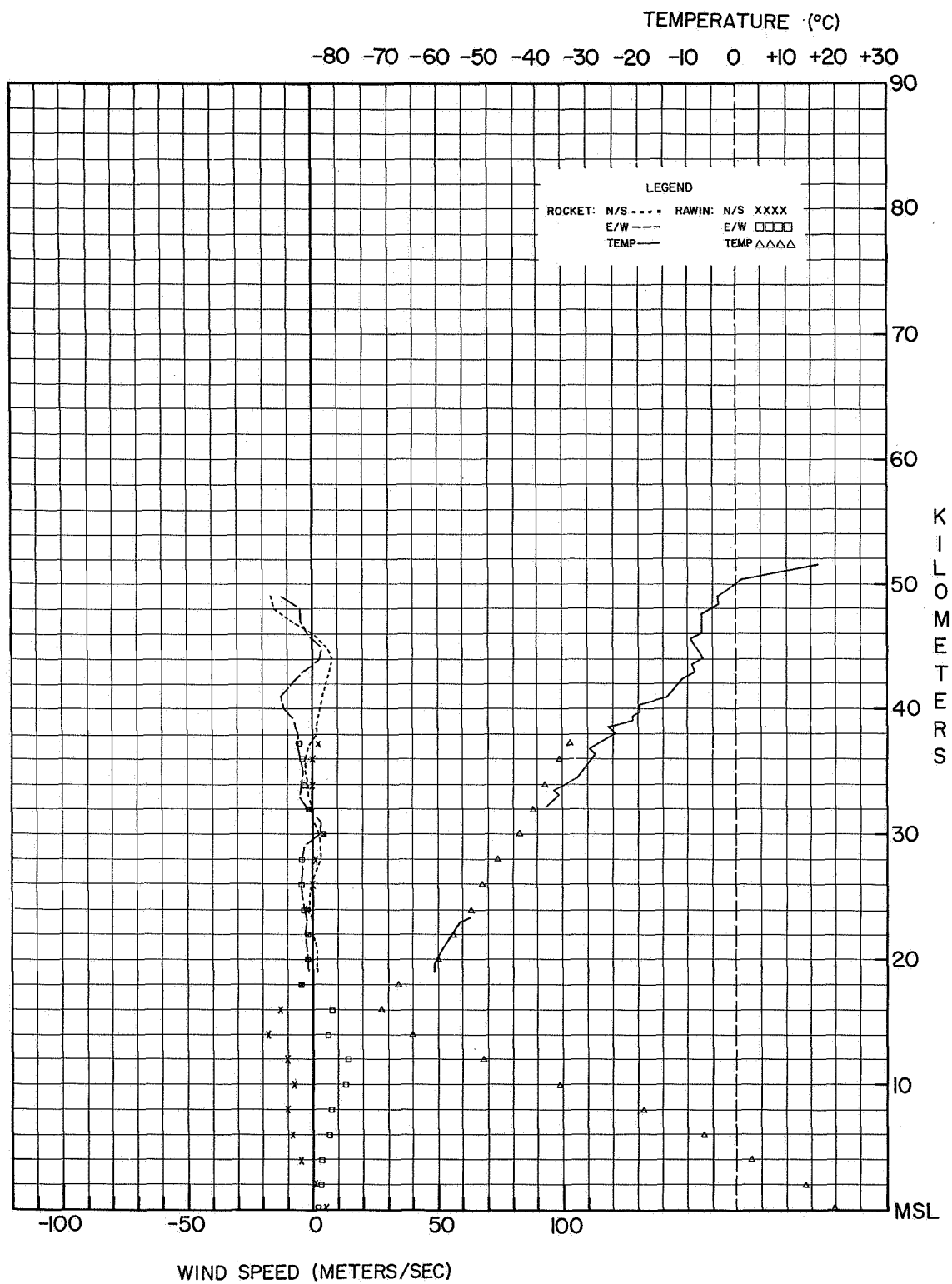
MISSING TEMPERATURE DATA FROM 32.12 KM. TO 23.23 KM.
 REASON UNKNOWN
 THERMODYNAMICS BASE DATA.. PRESSURE 8.9 MB
 ALTITUDE 32.120 METERS
 TEMPERATURE -37.8 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
 GROUND EQUIPMENT TYPE.. GMD-1B
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1.200 GRAMS
 FREE LIFT.. 1.400 GRAMS
 ASCENSION RATES.. SFC-400 MB 254 M/MINUTE
 400 MB-TOP 324 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1020.1 MB
 TEMPERATURE.. 19.7 DEG. C
 RELATIVE HUMIDITY.. 93%
 VISIBILITY.. FAIR
 SURFACE WIND.. 200 DEG. 10 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
 LOW.. NONE
 MIDDLE.. NONE
 HIGH.. NONE
 TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. HAZE
 WIND AT ROCKET LAUNCH
 50 FT. 193 DEG/10 KTS, 100 FT. 197 DEG/13 KTS,
 150 FT. 198 DEG/15 KTS, 200 FT. 207 DEG/15 KTS,
 250 FT. 240 DEG/17 KTS



STATION: (NASA)WALLOPS IS.,VA.
DATE: 10 SEP 1965

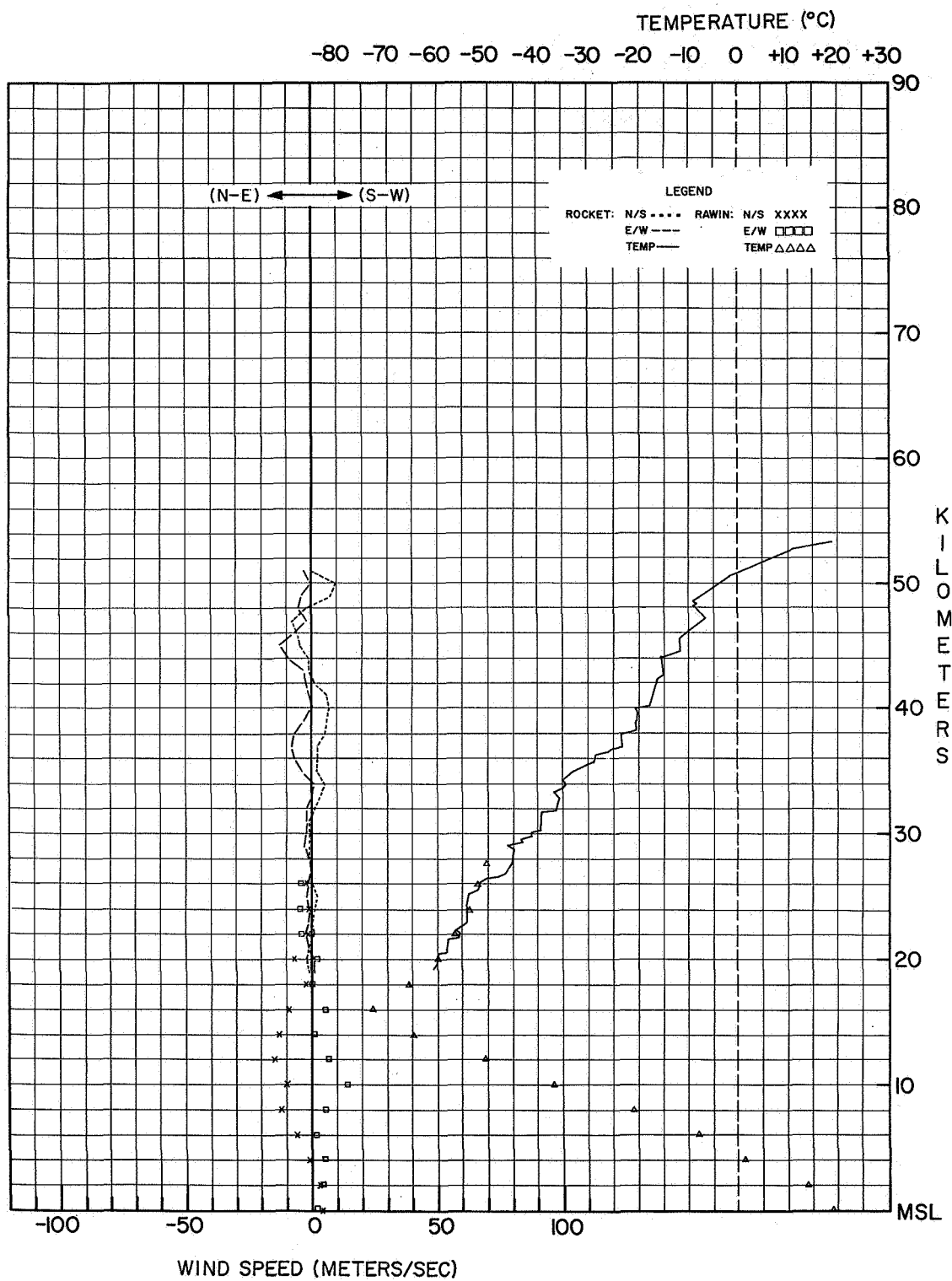
ROCKET TIME: 0000 0500 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: 1680 MHZ

TABULATED DATA

TECHNICAL DATA

50 FT. 203 DEG/07 KTS, 100 FT. 210 DEG/07 KTS,
150 FT. 204 DEG/09 KTS, 200 FT. 218 DEG/09 KTS,
250 FT. 211 DEG/11 KTS



STATION: (NASA)Wallops IS., VA.
 DATE: 10 SEP 1965

ROCKET TIME: 0300 LST 0800 GCT
 ROCKET MOTOR TYPE: JUD1

PAYLOAD TYPE: WOX-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WOLLOPS ISLAND, VIRGINIA Z LAUNCH RELEASE
TIME TIME
72402 37° 51' N 75° 29' W ALT. 3 M SEPTEMBER 10, 1965 1238 1045

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND		ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR	WIND	COMPONENTS		PRESSURE	ALT	POLAR	WIND	RH	TEMP										
TENTHS	VEL	OF A	COMPONENTS		TENS	DEG C	MB	G M	OF	DEG KTS	COMPONENTS	COMPONENTS		MB	TENS	DEG	COMPONENTS	%	DEG C										
OF A	MINUTE	M/S	DEG	KTS	N-S	E-W			METERS		N-S	E-W			METERS	DEG	N-S	E-W											
023	067	51	194	008	+004	+001	5337	+16.0						1020.2	0000	210	008	+004	+002	95	+18.9								
025	069	50	180	004	+002	+000	5331	+15.6						0809.0	0200	226	008	+003	+003	24	+15.0								
028	061	49	180	004	+002	+000	5139	+03.4						0635.0	0400	291	012	-002	+006	48	+03.3								
030	049	48	124	007	+002	-003	MISSING DATA (SEE REMARKS)																						
033	061	47	108	012	+002	-006	4776	+01.5	01.182	01.533	332	120	008	+002	-003	0380.0	0800	325	021	-009	+006	15	-20.7						
035	087	46	096	018	+001	-009	4676	+00.0	01.336	01.743	331	105	013	+002	-007	0287.0	1000	345	016	-008	+002	16	-35.7						
038	074	45	090	020	+000	-010	4584	-07.1	01.499	02.007	327	095	018	+001	-009	0213.0	1200	340	025	-012	+005		-49.3						
041	056	44	097	016	+001	-008	4447	-11.3	01.785	02.429	325	094	018	+001	-009	0156.0	1400	325	021	-009	+006		-63.3						
045	048	43	104	016	+002	-008	4398	-15.4	01.903	02.629	322	097	016	+001	-008	0112.0	1600	321	014	-006	+004		-70.8						
048	044	42	116	009	+002	-004	4276	-14.4	02.231	03.071	323	107	014	+002	-007	0080.0	1800	246	008	+002	+004		-67.2						
053	041	41	135	006	+002	-002	4176	-15.4	02.542	03.513	322	121	008	+002	-003	0057.5	2000	040	002	-001	-001		-60.7						
056	039	40	117	004	+001	-002	4103	-13.0	02.795	03.827	323	134	006	+002	-002	0042.2	2200	075	004	-001	-002		-54.9						
061	036	39	070	006	+001	-003	4042	-14.5	03.026	04.167	323	124	006	+002	-002	0030.5	2400	075	004	-001	-002		-55.0						
065	033	38	063	004	+001	-002	3993	-13.0	03.225	04.416	323	114	004	+001	-002	0022.5	2600	275	004	+000	+002		-48.0						
070	032	37	160	006	+003	-001	3783	-20.1	04.251	05.984	319	079	004	+000	-002	0016.7	2800	072	008	-001	-004		-42.2						
076	030	36	168	010	+005	-001	3764	-19.5	04.360	06.123	319	098	005	+000	-003	0012.5	3000	351	006	+003	+000		-41.2						
081	028	35	153	008	+004	-002	3703	-22.9	04.732	06.735	317	157	006	+003	-001	0009.3	3200	131	006	+002	-002		-41.5						
088	026	34	135	006	+002	-002	3648	-24.9	05.098	07.314	316	164	008	+004	-001	0006.9	3400	107	008	+001	-004		-33.9						
094	024	33	090	006	+000	-003	3633	-27.3	05.203	07.539	314	166	009	+005	-001	0005.2	3600	149	014	+006	-004		-29.7						
101	022	32	090	004	+000	-002	3615	-27.3	05.334	07.728	314	167	009	+005	-001	0003.9	3800	150	006	+003	-002		-23.5						
109	020	31	090	002	+000	-001	3603	-28.6	05.423	07.898	314	168	010	+005	-001	0003.0	4000	049	010	-003	-004		-21.3						
118	019	30	090	004	+000	-002	3578	-27.7	05.613	08.145	314	165	010	+005	-001														
127	017	29	108	006	+001	-003	3508	-37.0	06.192	09.340	308	154	008	+004	-002														
136	017	28	124	007	+002	-003	3429	-28.5	06.919	10.074	314	140	007	+003	-002														
147	015	27	045	003	-001	-001	3322	-32.2	08.031	11.872	311	100	006	+000	-003														
158	015	26	090	006	+000	-003	3298	-35.0	08.307	12.425	309	090	006	+000	-003														
171	014	25	104	008	+001	-004	3185	-40.0	09.770	14.926	306	090	004	+000	-002														
184	011	24	090	010	+000	-005	3109	-41.9	10.914	16.810	305	090	002	+000	-001														
198	011	23	031	011	-005	-003	3063	-41.9	11.674	17.981	305	090	003	+000	-002														
215	010	22	299	004	+001	+002	3042	-42.7	12.039	18.607	304	090	003	+000	-002														
232	009	21	123	007	+002	-003	2981	-44.3	13.171	20.499	303	093	004	+000	-002														
252	008	20	118	004	+001	-002	2868	-40.6	15.546	23.811	306	113	006	+001	-003														
272	011	19	000	004	-002	+000	2841	-42.4	16.172	24.963	305	118	007	+002	-004														
							2792	-41.3	17.375	26.692	305																		
							2746	-41.3	18.582	28.547	305																		
							2728	-43.7			122	007	+002	-003	-001														
							2607	-55.9			121	006	+003	-002	-002														
							2048	-58.7			121	006	+003	-002	-002														
							2021	-58.2			119	005	+001	-003	-003														
							1990	-62.4			106	004	+001	-002	-002														
							1942	-62.3			050	004	-001	-002	-002														
							1865	-67.9																					

ROCKET THERMODYNAMICS (CONTINUED)

ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND
TENS				OF	COMPONENTS
OF				SOUND	MPS
METERS	DEG C	MB	G M	M/S	DEG KTS
CONSTANT PRESSURE LEVEL DATA					
(HEIGHT IN GEOPOTENTIAL METERS)					
2091	-57.8	50.000	82.699	295	122 004 +002 -003
2421	-52.2	30.000	48.400	298	087 009 +001 -004
2687	-44.2	20.000	31.125	304	149 008 +003 -002
3154	-40.4	10.000	15.305	306	090 004 +000 -002
3403	-28.8	07.000	10.205	314	137 007 +003 -002
3642	-24.4	05.000	07.158	317	162 007 +003 -001
4359	-15.1	02.000	02.760	322	108 006 +001 -003

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 120 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPQ-6
MOTOR ACQUISITION.. 15 SECONDS 15.819 METERS ALTITUDE
MOTOR TRACK DROPPED.. 79 SECONDS 51.511 METERS ALTITUDE
PAYLOAD ACQUISITION.. 79 SECONDS 51.511 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.700 SECONDS 18.525 METERS ALTITUDE
APOGEE.. 90 SECONDS 53.370 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 398.5 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 79 SEC. 51.511 METERS ALTITUDE
TO 1.700 SEC. 18.525 METERS ALTITUDE

REMARKS

MISSING TEMPERATURE DATA FROM 51.39 KM. TO 47.76 KM.
REASON UNKNOWN.
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 20.980 METERS
TEMPERATURE -57.8 DEG. C

RADIOSONDE AND BALLOON DATA

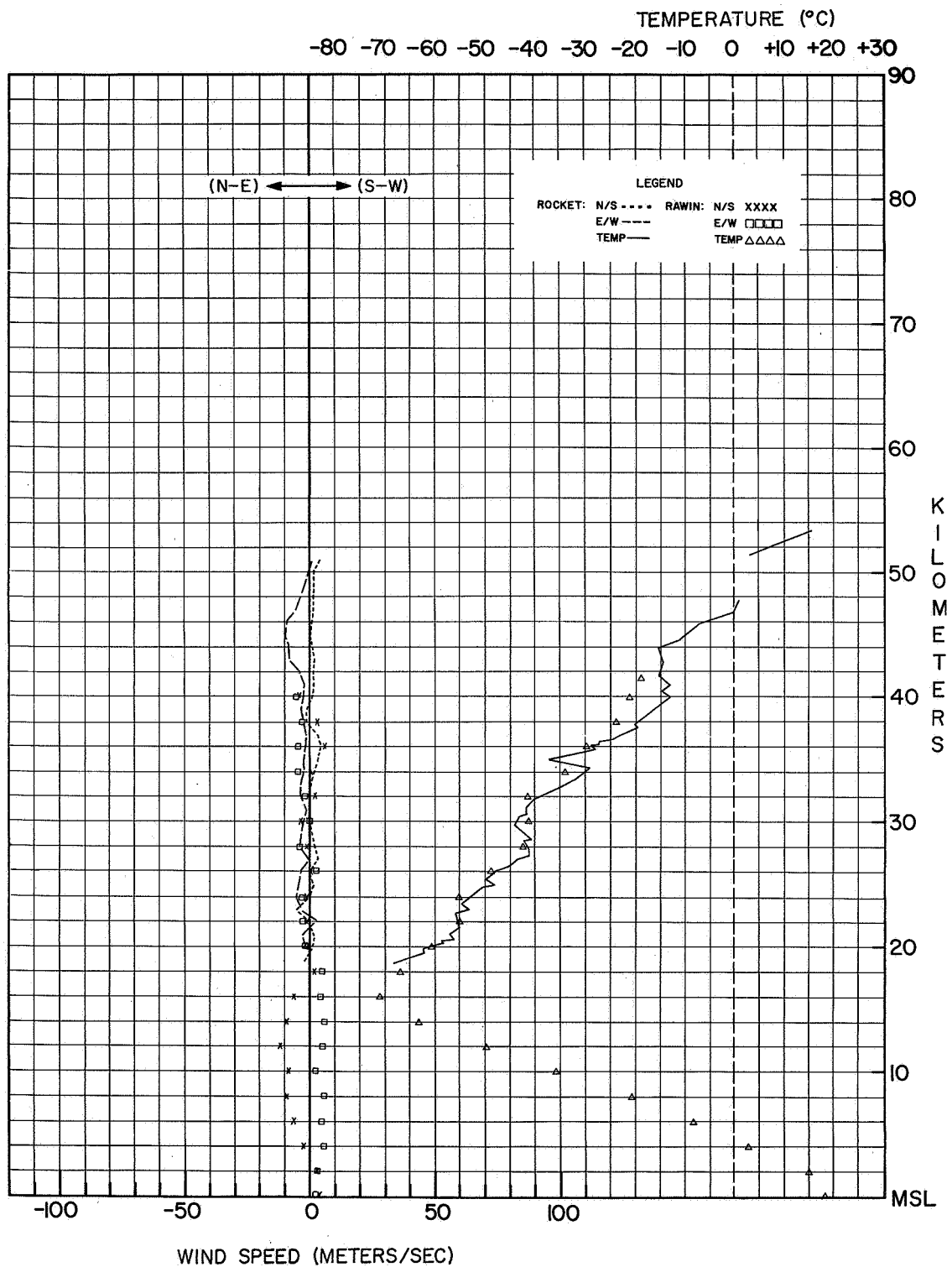
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 7.000 GRAMS
FREE LIFT.. 1.900 GRAMS
ASCENSION RATES.. SFC-400 MB 252 M/MINUTE
400 MB-TOP 344 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1020.2 MB
TEMPERATURE.. 18.9 DEG. C
RELATIVE HUMIDITY.. 95%
VISIBILITY.. FAIR
SURFACE WIND.. 210 DEG. 8 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. NONE

WIND AT ROCKET

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. HAZE
LAUNCH
50 FT. 225 DEG/10 KTS, 100 FT. 231 DEG/08 KTS,
150 FT. 225 DEG/11 KTS, 200 FT. 232 DEG/11 KTS,
250 FT. 225 DEG/11 KTS



STATION: (NASA) WALLOPS IS., VA.
DATE: 10 SEP 1965

ROCKET TIME: 0738 LST 1238 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: NOX-1A
RADIOSONDE TYPE: 1680 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME	RAWINSONDE RELEASE TIME
	(NASA) Wallops Island, Virginia	Z	Z	Z
72402	37° 51' N 75° 29' W ALT. 3 M	OCTOBER 5, 1965	1851	1715

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE						RH	TEMP DEG C
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W					
026	061	60	255	045	+006 +022									1021.9	0000	300	016	-004 +007	38	+11.1			
029	044	59	262	042	+003 +022									0797.0	0200	314	029	-011 +011	19	+01.3			
033	035	58	263	021	+001 +021									0620.0	0400	265	043	-010 +021	22	-06.8			
038	036	57	270	042	+000 +022									0477.0	0600	299	058	-015 +026	26	-19.0			
042	041	56	271	004	-001 +023									0361.0	0800	289	070	-012 +034	25	-32.7			
046	039	55	265	044	+002 +023									0270.0	1000	284	118	-015 +059		-46.1			
051	033	54	247	026	+005 +022									0199.0	1200	284	169	-021 +085		-55.8			
057	030	53	246	031	+003 +016									0145.0	1400	281	147	-014 +074		-56.1			
062	029	52	263	018	+001 +009									0103.0	1600	281	106	-010 +054		-60.9			
068	026	51	270	024	+000 +012									0077.0	1800	234	012	+004 +005		-58.2			
075	025	50	274	028	-001 +014									0056.0	2000	256	021	+003 +011		-52.6			
082	024	49	256	026	+003 +013									0041.0	2200	232	027	+009 +011		-49.6			
089	024	48	238	025	+007 +011									0030.0	2400	223	020	+008 +007		-47.5			
096	024	47	236	022	+006 +009									0023.1	2600	174	016	+008 -001		-46.7			
104	024	46	239	014	+004 +006									0016.6	2800	295	018	-004 +008		-42.4			
														0012.3	3000	192	021	+011 +002		-44.4			
														0008.6	3200	278	014	-001 +007		-40.4			
														0006.8	3400	236	018	+005 +008		-35.5			

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. CHAFF
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 8 SECONDS 8,900 METERS ALTITUDE
MOTOR TRACK DROPPED.. 90 SECONDS 62,057 METERS ALTITUDE
PAYLOAD ACQUISITION.. 90 SECONDS 62,057 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 810 SECONDS 42,428 METERS ALTITUDE
APOGEE.. 100 SECONDS 63,033 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
TEMPERATURE SENSOR.. N.A.
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. N.A.
TELEMETRY FREQUENCY.. N.A.
TELEMETRY QUALITY.. N.A.
TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE N.A.
ALTITUDE N.A.
TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
GROUND EQUIPMENT TYPE.. GMD-18
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,300 GRAMS
ASCENSION RATES.. SFC-400 MB UNKNOWN
400 MB-TOP UNKNOWN

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1021.9 MB
TEMPERATURE.. 11.1 DEG. C
RELATIVE HUMIDITY.. 38%
VISIBILITY.. 12 KM
SURFACE WIND.. 300 DEG. 16 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. NONE

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET

LAUNCH
50 FT. 305 DEG/19 KTS, 100 FT. 303 DEG/21 KTS,
150 FT. 289 DEG/22 KTS, 200 FT. 300 DEG/23 KTS,
250 FT. 289 DEG/23 KTS

RP	STATION NAME	DATE	ROCKET LAUNCH TIME	RAWINSONDE RELEASE TIME
	(NASA) WALLOPS ISLAND, VIRGINIA	Z	Z	Z
72402	37° 51' N 75° 29' W ALT. 3 M	OCTOBER 8, 1965	1934	1715

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS						RAWINSONDE					
TIME	FALL	ALT	POLAR	WIND		ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND	PRESSURE	ALT	WIND		RH	TEMP
TENTHS	VEL			COMPONENTS		TENS				OF	COMPONENTS		TENS	COMPONENTS		%	DEG C
OF A			DEG	MPS	E-W	OF	DEG C	MB	G M	SOUND	DEG KTS	MB	METERS	DEG KTS	N-S		
MINUTE	M/S	KM				METERS				M/S							
021	053	59	270	075	+000	+039						1001.0	0000	250	020	+004	+010
025	044	58	268	075	+001	+039						0789.0	0200	240	043	+011	+020
029	042	57	270	062	+000	+032						0612.0	0400	241	096	+024	+044
033	037	56	270	060	+000	+031						0474.0	0600	227	098	+035	+037
038	036	55	268	064	+001	+033						0360.0	0800	229	104	+035	+041
042	033	54	269	068	+001	+035						0271.0	1000				
048	030	53	260	065	+006	+033						0200.0	1200				
054	029	52	251	052	+009	+026						0146.0	1400				
060	026	51	259	039	+004	+020						0106.0	1600				
066	024	50	272	033	-001	+017						0077.0	1800				
073	023	49	264	034	+002	+018						0056.0	2000				
081	023	48	253	036	+005	+018						0041.0	2200				
088	024	47	256	032	+004	+016						0030.0	2400				
095	021	46	260	026	+002	+014						0022.0	2600				
104	021	45	270	027	+000	+014						0016.4	2800				
111	020	44	276	024	-001	+013											
120	021	43	259	020	+002	+010											
127	019	42	244	017	+004	+008											
138	017	41	230	015	+005	+006											
147	017	40	214	017	+007	+005											

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. CHAFF
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 110 DEG. AZIMUTH 75.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 13 SECONDS 13,105 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 87 SECONDS 59,223 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 87 SECONDS 59,223 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 806 SECONDS 40,611 METERS ALTITUDE
 APOGEE.. 97 SECONDS 60,019 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
 TEMPERATURE SENSOR.. N.A.
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. N.A.
 TELEMETRY FREQUENCY.. N.A.
 TELEMETRY QUALITY.. N.A.
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

RAWINSONDE WINDS MISSING ABOVE 8,000 METERS DUE TO
 LIMITING ANGLES.
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

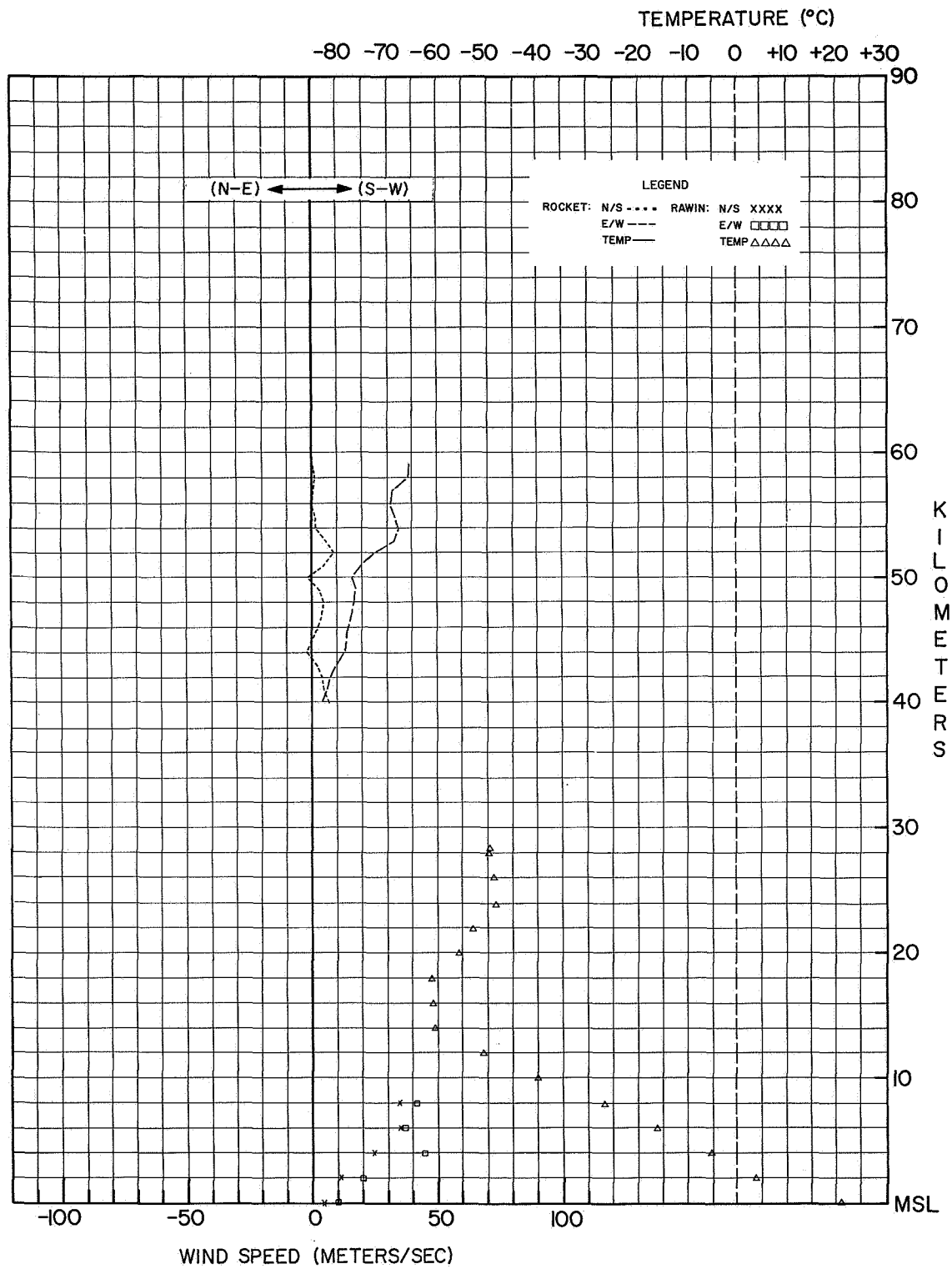
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
 GROUND EQUIPMENT TYPE.. GMD-1B
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1,200 GRAMS
 FREE LIFT.. 1,300 GRAMS
 ASCENSION RATES.. SFC-400 MB 259 M/MINUTE
 400 MB-TOP 329 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1001.0 MB
 TEMPERATURE.. 21.1 DEG. C
 RELATIVE HUMIDITY.. 49%
 VISIBILITY.. 9 KM
 SURFACE WIND.. 250 DEG. 20 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
 LOW.. NONE
 MIDDLE.. NONE
 HIGH.. NONE
 TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET

LAUNCH
 100 FT. 234 DEG/25 KTS; 150 FT. 235 DEG/25 KTS;
 200 FT. 244 DEG/27 KTS; 250 FT. 241 DEG/28 KTS



STATION: (NASA) WALLOPS IS., VA.
 DATE: 8 OCT 1965

ROCKET TIME: 1434 LST 1934 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
 RADIOSONDE TYPE: 1680 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME Z	RAWINSONDE RELEASE TIME Z
	(NASA) WALLOPS ISLAND, VIRGINIA	Z	Z	Z
72402	37° 51' N 75° 29' W ALT. 3 M	OCTOBER 12, 1965	1849	1729

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE										
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP	
TENTHS	VEL		POLAR	COMPONENTS			TENS				OF	POLAR	COMPONENTS			MB	TENS	POLAR	COMPONENTS					
OF A				N-S	E-W		OF	DEG C	MB	G M	SOUND	DEG	KTS	N-S	E-W		OF		KTS	N-S	E-W		DEG C	
MINUTE	M/S	KM	DEG	KTS			METERS				M/S						METERS	DEG	KTS					
023	095	63	265	081	+004	+042											1016.0	0000	120	002	+001	-001	62	+16.7
025	080	62	266	076	+003	+039											0802.0	0200	250	027	+005	+014	35	+10.4
027	067	61	264	080	+004	+041											0526.0	0400	227	045	+016	+017	49	-03.5
030	069	60	263	083	+005	+042											0483.0	0600	234	056	+017	+024	47	-17.9
032	069	59	272	088	-002	+045											0367.0	0800	250	074	+013	+036	17	-31.3
035	057	58	280	093	-008	+047											0275.0	1000	243	103	+024	+048		-44.1
038	057	57	276	090	-005	+046											0203.0	1200	253	094	+014	+047		-52.8
040	045	56	273	086	-002	+044											0148.0	1400	241	064	+016	+029		-57.7
045	047	55	271	072	-001	+037											0108.0	1600	217	035	+015	+011		-59.3
048	043	54	269	058	+001	+030											0077.0	1800	240	060	+016	+027		-55.8
053	022	53	272	057	-001	+029											0057.5	2000	241	045	+011	+021		-54.7
062	018	52	277	053	-003	+027											0042.2	2200	241	019	+005	+009		-51.3
072	023	51	276	057	-003	+029											0031.0	2400	263	006	+000	+003		-51.0
077	025	50	274	060	-002	+031																		
085	024	49	284	057	-007	+028																		
091	024	48	294	054	-011	+025																		
099	023	47	280	045	-004	+023																		
106	022	46	262	039	+003	+020																		
115	020	45	247	035	+007	+017																		
122	020	44	235	033	+010	+014																		
132	021	43	244	026	+006	+012																		
138	020	42	262	018	+001	+009																		

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. CHAFF
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 9 SECONDS 9,449 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 89 SECONDS 63,720 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 89 SECONDS 63,720 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 649 SECONDS 45,316 METERS ALTITUDE
 APOGEE.. 103 SECONDS 65,152 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
 TEMPERATURE SENSOR.. N.A.
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. N.A.
 TELEMETRY FREQUENCY.. N.A.
 TELEMETRY QUALITY.. N.A.
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

DOUBTFUL DATA BELOW 56 KM. DUE TO POSSIBLE
 RADAR MALFUNCTION.
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
 GROUND EQUIPMENT TYPE.. GMD-18
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1,200 GRAMS
 FREE LIFT.. 1,300 GRAMS
 ASCENSION RATES.. SFC-400 MB 245 M/MINUTE
 400 MB-TOP 311 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

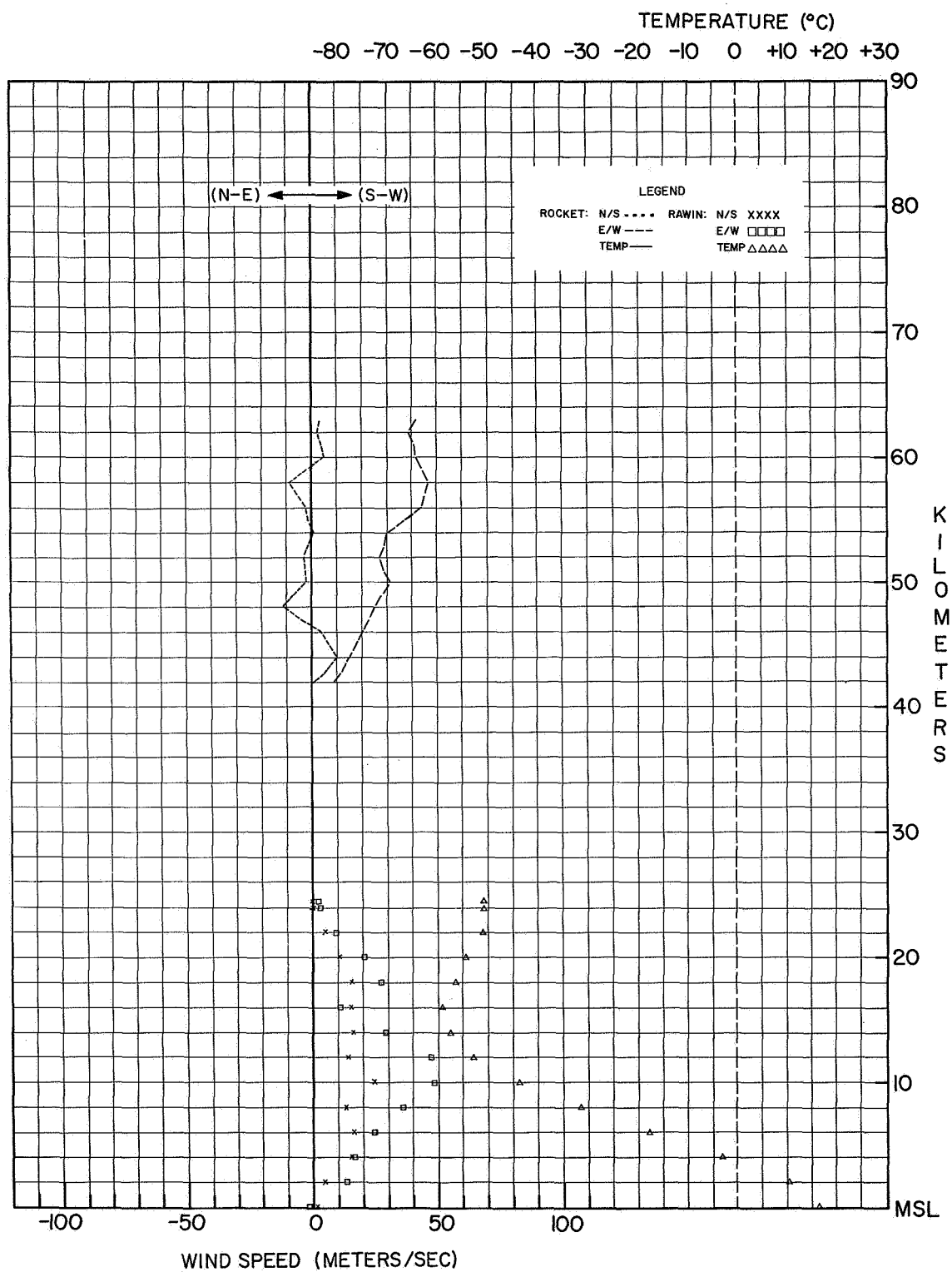
STATION PRESSURE.. 1016.0 MB
 TEMPERATURE.. 16.7 DEG. C
 RELATIVE HUMIDITY.. 62%
 VISIBILITY.. 11 KM
 SURFACE WIND.. 120 DEG. 2 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 7 OCTAS
 LOW.. 1 OCTAS/SC
 MIDDLE.. 1 OCTAS/AC
 HIGH.. 5 OCTAS/CI

TYPE OF PRECIPITATION.. NONE

ORSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

50 FT. 305 DEG/10 KTS, 100 FT. 311 DEG/10 KTS,
 150 FT. 315 DEG/11 KTS, 200 FT. 318 DEG/10 KTS,
 250 FT. 315 DEG/09 KTS



STATION: (NASA)WALLOPS IS.,VA.
DATE: 12 OCT 1965

ROCKET TIME 1349 LST 1849 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
RADIOSONDE TYPE: 1680 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME	RAWINSONDE RELEASE TIME
	(NASA) WALLOPS ISLAND, VIRGINIA	Z	Z	Z
72402	37° 51' N 75° 29' W ALT. 3 M	OCTOBER 14, 1965	1929	1715

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE								
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS N-S E-W		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS N-S E-W		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS N-S E-W	RH %	TEMP DEG C
051	019	44	262	032	+002 +017											1025.0	0000	070	006	-001 -003	90	+16.7
060	018	43	248	030	+005 +014											0807.0	0200	237	021	+006 +009	92	+05.0
069	018	42	234	028	+009 +012											0629.0	0400	275	023	-001 +012	36	-05.2
079	018	41	244	021	+005 +010											0485.0	0600	274	034	-001 +018	25	-15.9
088	018	40	254	013	+002 +006											0369.0	0800	268	036	+001 +019	26	-31.2
099	015	39	277	016	-001 +008											0276.0	1000	270	044	+000 +023		-47.5
110	014	38	300	019	-005 +009											0202.0	1200	260	069	+006 +035		-59.5
121	014	37	270	019	+000 +009											0136.0	1400	266	075	+003 +039		-63.6
133	015	36	240	018	+005 +008											0106.0	1600	261	048	+004 +025		-61.6
145	014	35	276	024	-001 +012											0077.0	1800	263	034	+002 +018		-59.5
157	014	34	312	029	-010 +011											0056.0	2000	256	018	+002 +009		-55.6
																0041.0	2200	253	032	+005 +016		-51.7
																0030.0	2400	267	019	+001 +010		-50.1
																0022.0	2600	264	019	+001 +010		-48.9
																0016.4	2800					-47.6

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. CHAFF
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 140 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 15 SECONDS 15,240 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 67 SECONDS 53,340 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 210 SECONDS 45,062 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 980 SECONDS 32,918 METERS ALTITUDE
 APOGEE.. UNKNOWN

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
 TEMPERATURE SENSOR.. N.A.
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. N.A.
 TELEMETRY FREQUENCY.. N.A.
 TELEMETRY QUALITY.. N.A.
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

RADAR TRACK LOST AT 67 SECONDS, REACQUIRED
 AT 210 SECONDS. NO EJECTION INFORMATION
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

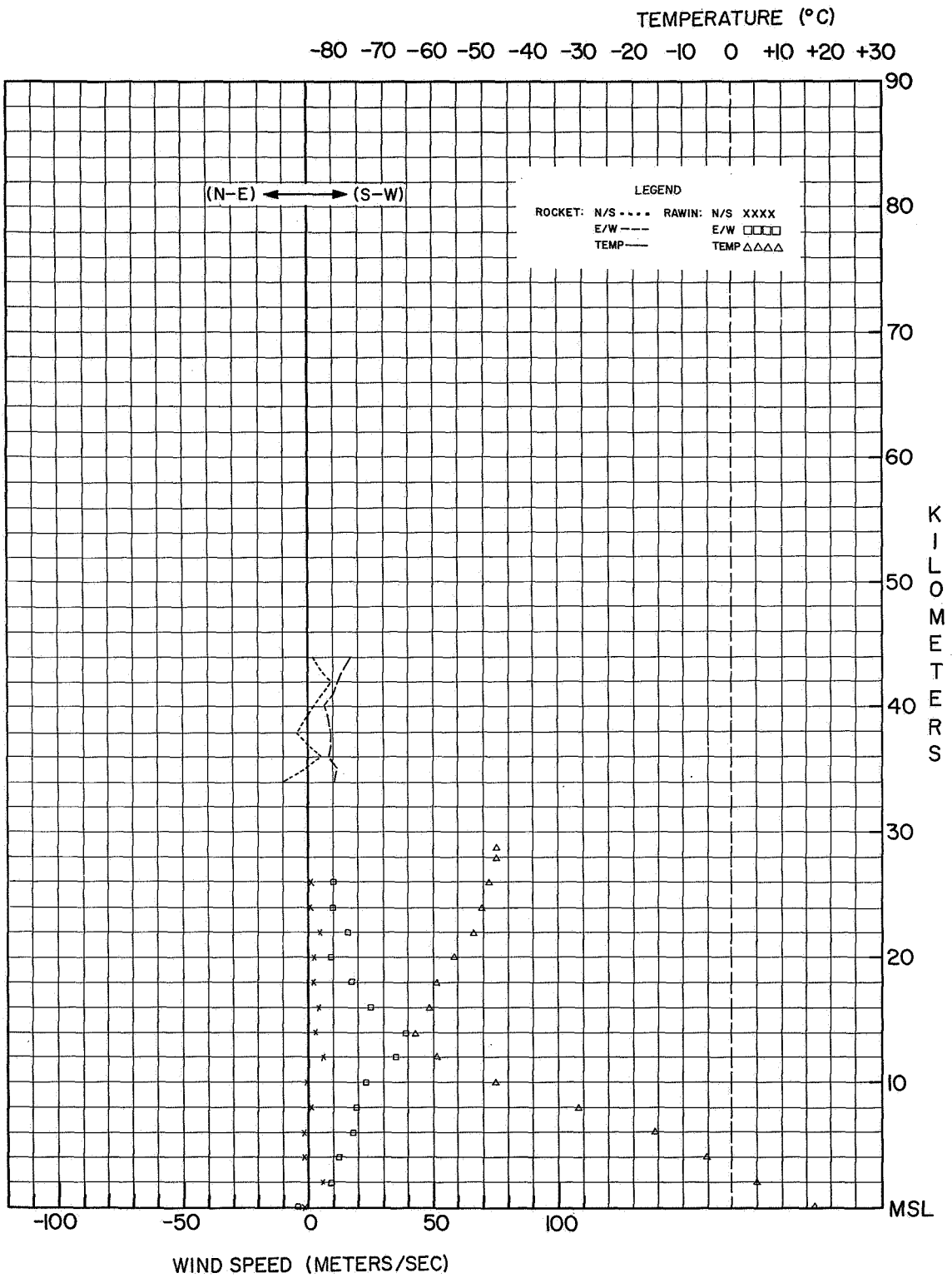
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
 GROUND EQUIPMENT TYPE.. GMD-1B
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1,200 GRAMS
 FREE LIFT.. 1,300 GRAMS
 ASCENSION RATES.. SFC-400 MB 320 M/MINUTE
 400 MB-TOP 377 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1025.0 MB
 TEMPERATURE.. 16.7 DEG. C
 RELATIVE HUMIDITY.. 90%
 VISIBILITY.. 8 KM
 SURFACE WIND.. 70 DEG. 6 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
 LOW.. 2 OCTAS/CU
 MIDDLE.. 6 OCTAS/AC
 HIGH.. NONE
 TYPE OF PRECIPITATION.. VERY LIGHT RAIN
 OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

50 FT. 098 DEG/06 KTS, 100 FT. 106 DEG/06 KTS,
 150 FT. 118 DEG/06 KTS, 200 FT. 103 DEG/07 KTS,
 250 FT. 118 DEG/08 KTS, 300 FT. 118 DEG/08 KTS



STATION: (NASA) WALLOPS IS., VA.
 DATE: 14 OCT 1965

ROCKET TIME 1429 LST 1929 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(NASA) WALLOPS ISLAND, VIRGINIA Z Z Z
72402 37° 51' N 75° 29' W ALT. 3 M OCTOBER 15, 1965 2016 1715

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE								
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	RH %	TEMP DEG C
022	080	62	271	095	+001 +049											1023.0	0000	150	008	+004 -002	78	+20.0
025	069	61	272	093	+001 +047											0809.0	0200	229	014	+005 +005	68	+08.5
027	057	60	271	086	+001 +045											0631.0	0400	248	014	+003 +007	25	-04.1
030	056	59	265	086	+004 +044											0427.0	0600	242	021	+005 +010	25	-21.0
033	057	58	259	086	+008 +044											0371.0	0800	238	050	+014 +022	25	-28.7
036	050	57	259	082	+007 +042											0279.0	1000	224	073	+027 +027		-43.5
040	047	56	261	080	+006 +041											0205.0	1200	228	077	+027 +030		-60.0
043	043	55	257	085	+010 +042											0148.0	1400	253	046	+007 +023		-62.9
048	036	54	252	090	+014 +045											0107.0	1600	277	039	-002 +020		-64.5
052	034	53	253	082	+011 +040											0077.4	1800	274	023	-001 +012		-62.9
057	031	52	258	070	+008 +036											0055.8	2000	284	014	-002 +007		-59.6
062	031	51	260	070	+006 +036											0041.0	2200	260	018	+001 +009		-55.0
068	031	50	263	071	+004 +037											0029.8	2400	260	010	+001 +005		-53.0
073	030	49	264	070	+004 +036											0017.0	2600	272	019	+000 +010		-51.8
079	029	48	263	067	+004 +035																	
085	029	47	261	062	+005 +032																	
091	027	46	258	056	+006 +029																	

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. CHAFF
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 8 SECONDS 8,382 METERS ALTITUDE
MOTOR TRACK DROPPED.. 89 SECONDS 61,757 METERS ALTITUDE
PAYLOAD ACQUISITION.. 89 SECONDS 61,757 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 513 SECONDS 46,021 METERS ALTITUDE
APOGEE.. 111 SECONDS 63,398 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH 5 BAND CHAFF
TEMPERATURE SENSOR.. N.A.
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. N.A.
TELEMETRY FREQUENCY.. N.A.
TELEMETRY QUALITY.. N.A.
TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE N.A.
ALTITUDE N.A.
TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

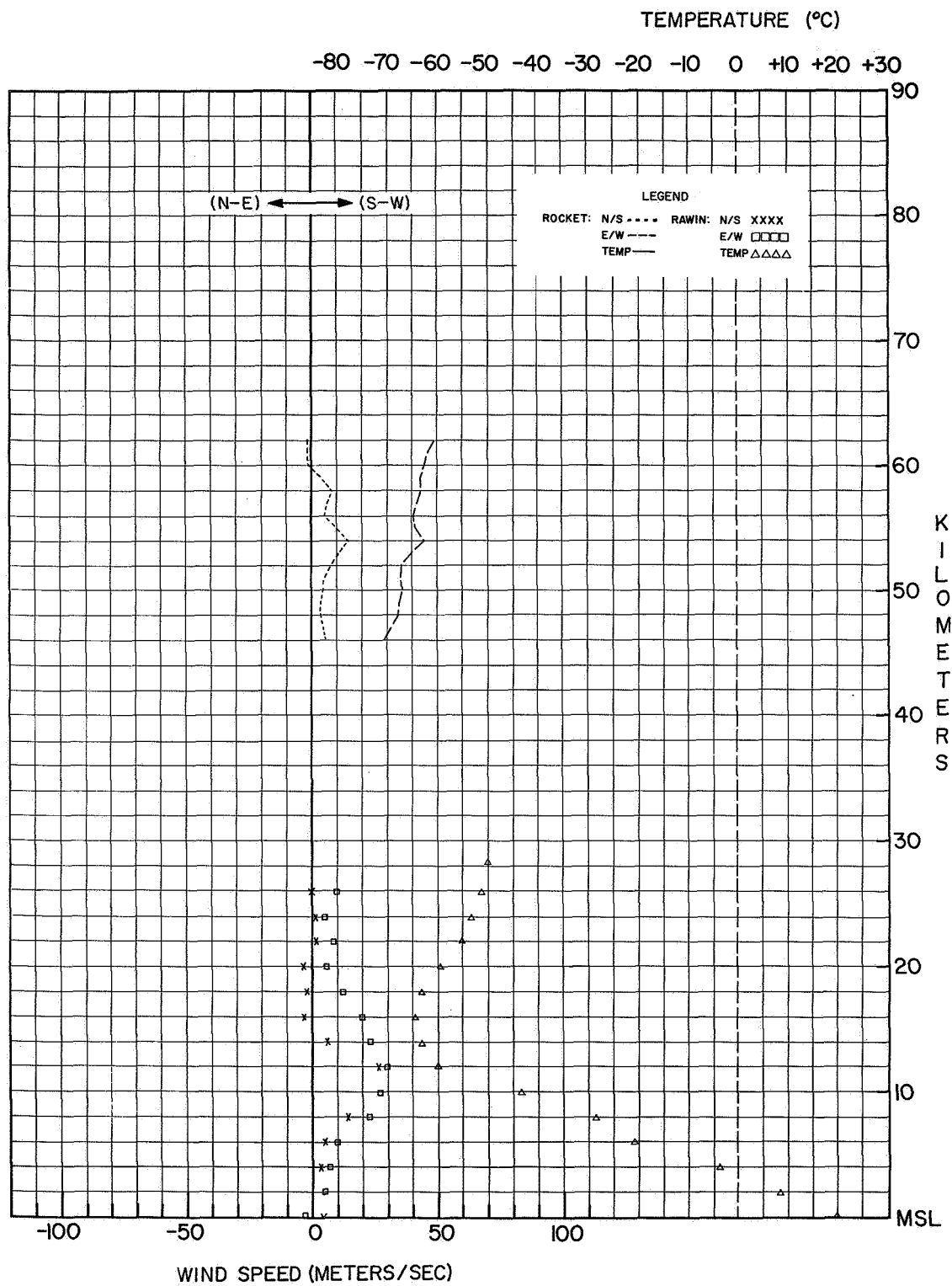
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 600 GRAMS
FREE LIFT.. 1,300 GRAMS
ASCENSION RATES.. SFC-400 MB 283 M/MINUTE
400 MB-TOP 322 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1023.0 MB
TEMPERATURE.. 20.0 DEG. C
RELATIVE HUMIDITY.. 78%
VISIBILITY.. 10 KM
SURFACE WIND.. 150 DEG. 8 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. 2 OCTAS/SC
MIDDLE.. NONE
HIGH.. 6 OCTAS/CS
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

50 FT. 170 DEG/04 KTS, 100 FT. 162 DEG/05 KTS,
150 FT. 158 DEG/07 KTS, 200 FT. 162 DEG/09 KTS,
250 FT. 159 DEG/10 KTS



STATION: (NASA)WALLOPS IS., VA.
 DATE: 15 OCT 1965

ROCKET TIME: 1516 LST 2016 GCT
 ROCKET MOTOR TYPE: JUNY

PAYLOAD TYPE: CHAFF
 RADIOSONDE TYPE: 1680 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME	RAWINSONDE RELEASE TIME
	(NASA) WALLOPS ISLAND, VIRGINIA	Z	Z	Z
72402	37° 51' N 75° 29' W ALT. 3 M	OCTOBER 19, 1965	1827	1709

TABULATED DATA

ROCKET WINDS										ROCKET THERMODYNAMICS										RAWINSONDE									
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR		WIND COMPONENTS MPS		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR		WIND COMPONENTS MPS		PRESSURE MB	ALT TENS OF METERS	POLAR		WIND COMPONENTS MPS		RH %	TEMP DEG C						
			DEG	KTS	N-S	E-W						DEG	KTS	N-S	E-W			DEG	KTS	N-S	E-W								
032	036	55	272	116	-002	+059										1028.8	0000	050	012	-004	-005	59	+18.9						
037	030	54	271	113	-001	+059										0812.0	0200	130	017	+006	-007	16	+14.3						
043	029	53	269	113	+001	+058										0635.0	0400	078	012	-001	-006	17	+01.1						
048	027	52	268	113	+002	+057										0593.0	0600	064	011	-002	-005	19	-13.7						
055	028	51	266	109	+004	+056										0377.0	0800	137	014	+005	-005	20	-28.4						
060	025	50	265	108	+005	+055										0282.0	1000	235	012	+004	+005		-43.5						
068	024	49	262	101	+007	+052										0207.0	1200	230	023	+008	+010		-56.7						
074	025	48	259	100	+008	+049										0150.5	1400	166	006	+003	-001		-63.7						
082	023	47	267	101	+003	+052										0108.5	1600	182	003	+002	+000		-64.7						
088	022	46	273	107	-003	+055										0077.8	1800	335	006	-003	+001		-64.8						
																0056.7	2000	233	002	+001	+001		-61.0						
																0041.2	2200	322	015	-006	+005		-57.6						
																0030.2	2400	276	016	-001	+008		-54.0						

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. CHAFF
 PAYLOAD PERFORMANCE.. GOOD
 FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
 FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
 LAUNCHER SETTING.. 130 DEG. AZIMUTH 75.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 19 SECONDS 19,202 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 87 SECONDS 57,912 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 87 SECONDS 57,912 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 690 SECONDS 42,672 METERS ALTITUDE
 APOGEE.. 95 SECONDS 58,826 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
 TEMPERATURE SENSOR.. N.A.
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. N.A.
 TELEMETRY FREQUENCY.. N.A.
 TELEMETRY QUALITY.. N.A.
 TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

NONE
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
 GROUND EQUIPMENT TYPE.. GMD-1B
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 600 GRAMS
 FREE LIFT.. 1,300 GRAMS
 ASCENSION RATES.. SFC-400 MB 322 M/MINUTE
 400 MB-TOP 366 M/MINUTE

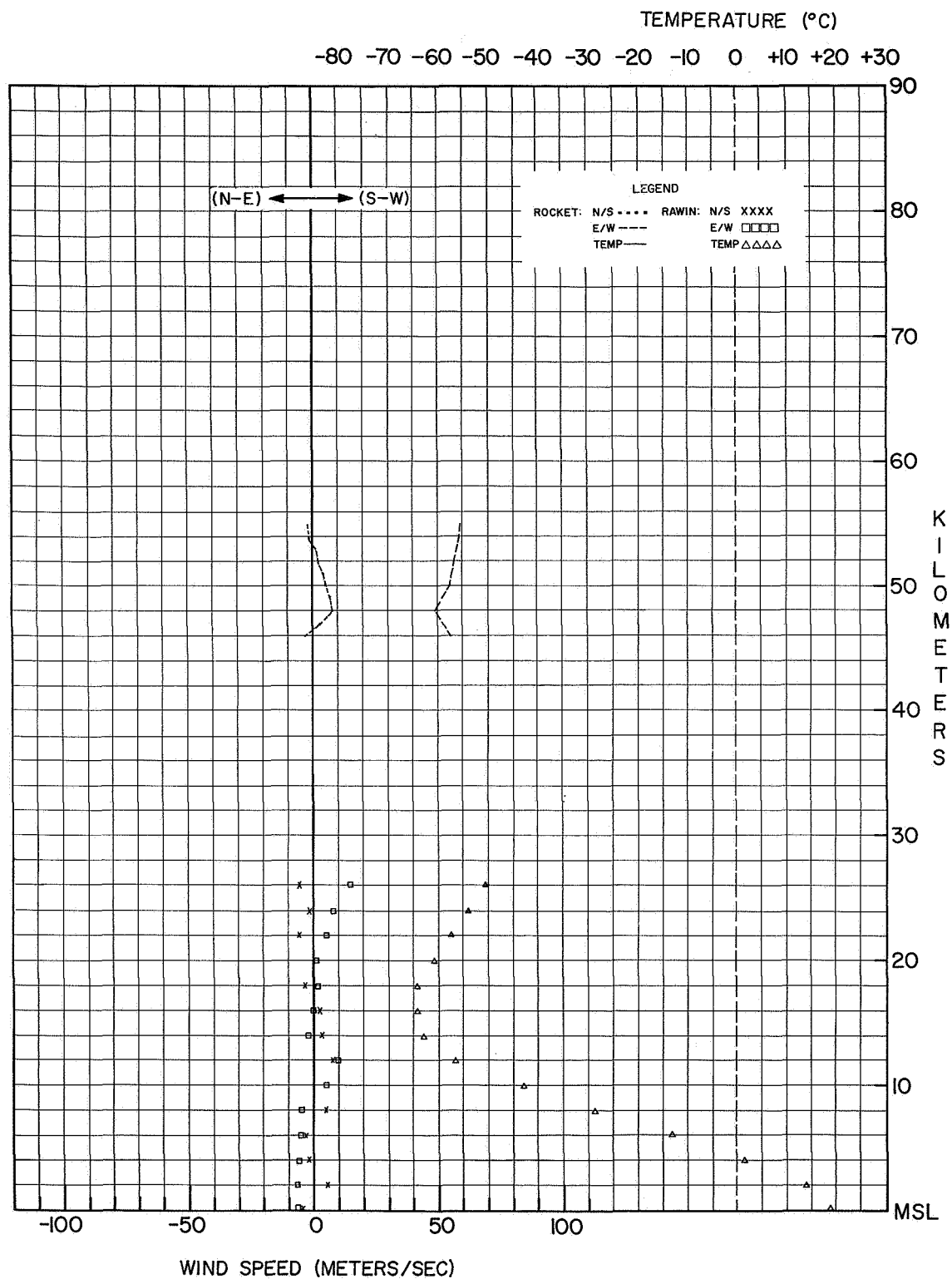
WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1028.8 MB
 TEMPERATURE.. 18.9 DEG. C
 RELATIVE HUMIDITY.. 59%
 VISIBILITY.. 10 KM
 SURFACE WIND.. 50 DEG. 12 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 1 OCTAS
 LOW.. 1 OCTAS/SC
 MIDDLE.. NONE
 HIGH.. NONE

TYPE OF PRECIPITATION.. NONE
 OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

50 FT. 057 DEG/12 KTS, 100 FT. 057 DEG/12 KTS,
 150 FT. 050 DEG/12 KTS, 200 FT. 055 DEG/12 KTS,
 250 FT. 060 DEG/14 KTS



STATION: (NASA)WALLOPS IS., VA.
DATE: 19 OCT 1965

ROCKET TIME: 1327 LST 1827 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
RADIOSONDE TYPE: 1680 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME Z	RAWINSONDE RELEASE TIME Z
	(NASA) WALLOPS ISLAND, VIRGINIA	Z	Z	Z
72402	37° 51' N 75° 29' W ALT. 3 M	OCTOBER 20, 1965	1832	1715

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE									
TIME	FALL	ALT	POLAR	WIND			ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR	WIND			PRESSURE	ALT	POLAR	WIND			RH	TEMP
TENTHS	VEL			COMPONENTS		TENS	DEG	DEG	MB	G M	OF	DEG	KTS	COMPONENTS		MB	TENS	DEG	KTS	COMPONENTS		%	DEG C
OF A				N-S	E-W	OF		C			SOUND			N-S	E-W		OF			N-S	E-W		
MINUTE	M/S	KM	DEG	KTS		METERS					M/S						METERS						
021	091	64	258	118	+013	+060										1023.7	0000	050	012	-004	-005	63	+18.9
023	111	63	251	109	+017	+052										0807.0	0200	137	027	+011	-010	47	+10.4
024	083	62	245	096	-021	+045										0632.0	0400	132	018	+006	-007	27	-00.7
027	080	61	253	105	+016	+052										0489.0	0600	166	012	+006	-002	19	-11.9
028	067	60	259	114	+011	+058										0374.0	0800	243	004	+001	+002	15	-24.9
032	054	59	259	125	+011	+063										0281.0	1000	242	026	+006	+012		-42.2
034	051	58	260	136	+012	+069										0207.0	1200	250	022	+004	+011		-58.0
038	056	57	256	139	+017	+069										0150.0	1400	300	012	-003	+005		-64.8
040	049	56	252	139	+022	+069										0107.8	1600	256	006	+001	+003		-68.4
045	044	55	254	131	+018	+066										0077.3	1800	274	008	+000	+004		-66.6
048	043	54	255	123	+016	+062										0055.7	2000	295	008	-002	+004		-63.7
053	039	53	258	132	+014	+066										0040.3	2200	299	004	-001	+002		-60.8
056	035	52	260	138	+012	+070										0029.2	2400	281	012	-001	+006		-57.9
062	034	51	261	125	+009	+064										0021.6	2600	271	029	+000	+015		-53.3
066	032	50	264	114	+006	+059										0015.9	2800	272	037	-001	+019		-48.1
071	029	49	262	085	+006	+044																	
078	029	48	263	096	+006	+049																	
085	027	47	263	090	+006	+046																	
090	028	46	261	083	+007	+043																	
096	028	45	259	080	+008	+042																	
102	024	44	257	076	+009	+039																	
110	024	43	258	074	+007	+036																	
116	024	42	260	065	+006	+033																	

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. CHAFF
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 10 SECONDS 10,363 METERS ALTITUDE
MOTOR TRACK DROPPED.. 87 SECONDS 62,473 METERS ALTITUDE
PAYLOAD ACQUISITION.. 87 SECONDS 62,473 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 609 SECONDS 43,453 METERS ALTITUDE
APOGEE.. 112 SECONDS 65,197 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 0.005 INCH S BAND CHAFF
TEMPERATURE SENSOR.. N.A.
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. N.A.
TELEMETRY FREQUENCY.. N.A.
TELEMETRY QUALITY.. N.A.
TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE N.A.
ALTITUDE N.A.
TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

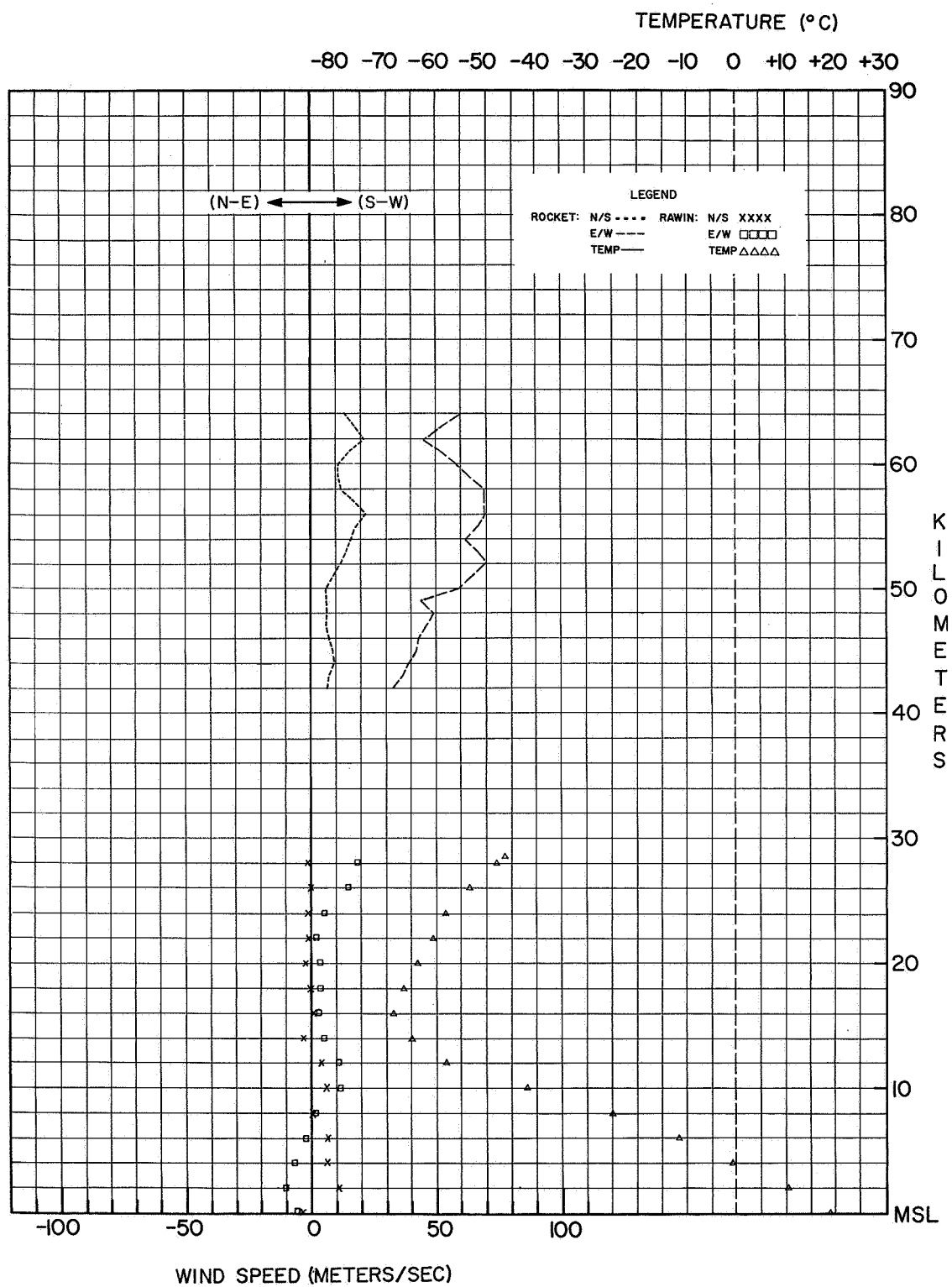
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-18
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 600 GRAMS
FREE LIFT.. 2+200 GRAMS
ASCENSION RATES.. SFC-400 MB 259 M/MINUTE
400 MB-TOP 320 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1023.7 MB
TEMPERATURE.. 18.9 DEG. C
RELATIVE HUMIDITY.. 63%
VISIBILITY.. 10 KM
SURFACE WIND.. 50 DEG. 12 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 3 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 3 OCTAS/CI
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

50 FT. 062 DEG/11 KTS, 100 FT. 059 DEG/13 KTS,
150 FT. 050 DEG/16 KTS, 200 FT. 062 DEG/17 KTS,
250 FT. 060 DEG/16 KTS



STATION: (NASA)WALLOPS IS., VA.
 DATE: 20 OCT 1965

ROCKET TIME: 1332 ST1832 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: CHAFF
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WALLOPS ISLAND, VIRGINIA Z LAUNCH TIME RELEASE TIME
72402 37° 51' N 75° 29' W ALT. 3 M OCTOBER 25, 1965 1938 2103

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	POLAR	WIND				RH	TEMP		
TENTHS	VEL		POLAR	COMPONENTS			TENS	DEG C	MB	G M	OF	POLAR	COMPONENTS			TENS	DEG	POLAR	COMPONENTS		%	DEG C				
OF A		KM	DEG	KTS	N-S	E-W	METERS				SOUND	DEG	KTS	N-S	E-W		METERS	DEG	KTS	N-S	E-W					
MINUTE	M/S										M/S															
027	118	56	259	084	+008	+042	5767	+04.6	00.349	00.447	334					1022.7	0000	250	006	+001	+003	46	+11.1			
029	105	55	268	101	+002	+052	5258	+06.4	00.644	00.820	335	266	117	+004	+060	0802.0	0200	315	019	+007	+007	19	+06.0			
030	111	54	265	111	+005	+060	4898	+02.5	00.995	01.286	333	267	129	+003	+066	0625.0	0400	311	018	+006	+007	21	+03.0			
031	091	53	266	117	+004	+060	4816	+02.8	01.100	01.420	333	265	127	+006	+065	0482.0	0600	302	035	+010	+016	27	-18.3			
034	083	52	267	118	+003	+061	4615	-01.0	01.408	01.843	331	268	115	+002	+059	0367.0	0800	276	059	+003	+031	27	-31.0			
035	091	51	270	124	+000	+064	4218	-11.3	02.324	03.161	325	255	090	+012	+045	0274.0	1000	271	051	+001	+027		-46.8			
037	083	50	272	130	+002	+067	3853	-21.6	03.755	05.316	318	239	065	+017	+029	0202.0	1200	275	037	+002	+019		-54.6			
039	074	49	267	129	+003	+066	3819	-21.3	03.930	05.558	318	238	062	+017	+027	0106.0	1400	283	031	+004	+016		-62.5			
042	071	48	264	127	+007	+065	3792	-23.9	04.075	05.824	317	239	059	+016	+026		1600	271	020	+000	+010		-63.3			
044	080	47	266	121	+004	+062	3734	-25.9	04.410	06.353	315	242	053	+013	+024											
046	059	46	268	113	+002	+058	3682	-24.8	04.734	06.789	316	250	051	+009	+024											
050	054	45	268	109	+002	+056	3645	-26.7	04.979	07.196	315	255	047	+006	+023											
052	061	44	268	105	+002	+054	3597	-26.6	05.317	07.682	315	262	043	+003	+022											
055	051	43	261	097	+007	+049	3557	-30.7	05.619	08.256	312	261	047	+004	+024											
059	045	42	253	089	+013	+044	3499	-33.9	06.096	09.075	310	257	052	+006	+026											
063	042	41	248	085	+015	+040	3469	-33.6	06.359	09.456	310	256	057	+007	+028											
067	040	40	245	077	+017	+036	3271	-41.1	08.447	12.965	305	248	063	+012	+030											
071	038	39	241	068	+017	+031	3222	-40.4	09.071	13.882	306	245	065	+014	+030											
076	036	38	238	059	+017	+026	3112	-42.6	10.651	16.456	305	244	057	+013	+026											
080	033	37	247	051	+010	+024	3094	-41.3	10.936	16.800	305	243	054	+013	+025											
085	030	36	261	043	+003	+022	2932	-42.5	13.861	21.406	305	247	055	+011	+026											
091	028	35	257	052	+006	+026	2883	-43.9	14.898	23.147	304	251	053	+009	+026											
097	026	34	254	061	+008	+030	2786	-43.3	17.190	26.638	304	260	053	+005	+027											
104	024	33	250	063	+011	+030	2694	-45.8	19.700	30.864	302	250	051	+009	+025											
111	022	32	244	065	+014	+030	2606	-44.1	22.450	34.910	304	238	051	+014	+022											
120	020	31	242	054	+013	+025	2310	-45.1	34.824	54.391	303	263	031	+002	+016											
128	022	30	240	053	+014	+024	2234	-49.9	39.039	62.285	300	262	029	+002	+015											
135	019	29	251	054	+009	+026																				
145	017	28	260	054	+005	+027																				
155	016	27	250	053	+009	+025																				
166	013	26	238	052	+014	+022																				
181	011	25	252	042	+007	+021																				
196	011	24	267	033	+001	+017																				
212	010	23	264	031	+002	+016																				
229	011	22	261	028	+002	+014																				

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 101 DEG. AZIMUTH 75.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 17 SECONDS 4.724 METERS ALTITUDE
MOTOR TRACK DROPPED.. 129 SECONDS 58.948 METERS ALTITUDE
PAYLOAD ACQUISITION.. 129 SECONDS 58.948 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.470 SECONDS 20.879 METERS ALTITUDE
APOGEE.. 129 SECONDS 58.948 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1B
TELEMETRY FREQUENCY.. 1680 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 147 SEC. 57.670 METERS ALTITUDE
TO 1.470 SEC. 20.879 METERS ALTITUDE

REMARKS

TARGET LOST AFTER 22 KILOMETERS.
THERMODYNAMICS BASE DATA.. PRESSURE 80.0 MB
ALTITUDE 17.720 METERS
TEMPERATURE -59.2 DEG. C

RADIOSONDE AND

BALLOON DATA

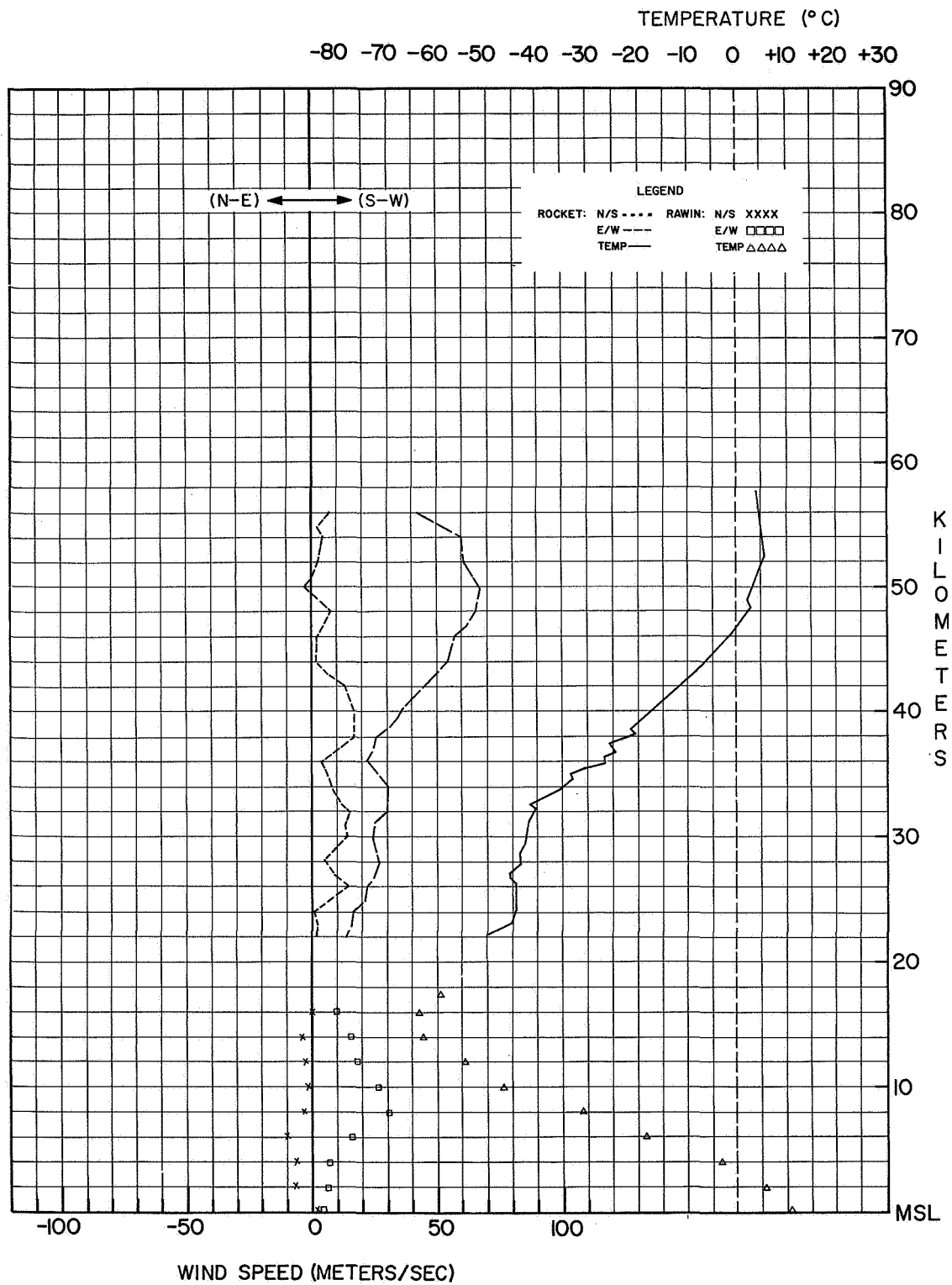
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1+200 GRAMS
FREE LIFT.. 1.300 GRAMS
ASCENSION RATES.. SFC-400 MB 254 M/MINUTE
400 MB-TOP 182 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1022.7 MB
TEMPERATURE.. 3.9 DEG. C
RELATIVE HUMIDITY.. 46%
VISIBILITY.. 10 KM
SURFACE WIND.. 250 DEG. 6 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. NONE

WIND AT ROCKET

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE
LAUNCH
50 FT. 282 DEG/09 KTS, 100 FT. 300 DEG/10 KTS,
150 FT. 285 DEG/09 KTS, 200 FT. 300 DEG/10 KTS,
250 FT. 293 DEG/09 KTS



STATION: (NASA)WALLOPS IS.,VA.
 DATE: 25 OCT 1965

ROCKET TIME: 1438 LST 1938 GCT
 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
 (NASA) WALLQPS ISLAND, VIRGINIA Z Z Z
 72402 37° 51' N 75° 29' W ALT. 3 M OCTOBER 26, 1965 0015 2103

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE								
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP		
TENTHS	VEL		POLAR	COMPONENTS			TENS	DEG	MB	G M	OF	POLAR	COMPONENTS			MB	TENS	POLAR	COMPONENTS		%	DEG			
OF A		KM	DEG	KTS	N-S	E-W	OF	DEG			SOUND	DEG	KTS	N-S	E-W		METERS	DEG	KTS	N-S	E-W		DEG		
MINUTE	M/S						METERS	C			M/S											C			
032	087	54	263	110	+007	+057										1022.7	0000	250	006	+001	+003	46	+11.1		
034	083	53	268	119	+002	+061										0802.0	0200	315	019	-007	+007	19	+06.0		
036	077	52	272	128	-002	+066										0625.0	0400	311	018	-006	+007	21	-03.0		
038	077	51	270	126	+000	+065										0482.0	0600	302	035	-010	+016	27	-18.3		
040	074	50	269	123	+001	+064										0367.0	0800	276	059	-003	+031	27	-31.0		
042	074	49	275	123	-005	+062										0274.0	1000	271	051	-001	+027		-46.8		
045	067	48	280	122	-011	+062										0202.0	1200	275	037	-002	+019		-54.6		
047	063	47	277	120	-007	+061										0146.0	1400	283	031	-004	+016		-62.5		
050	059	46	274	118	-004	+061										0106.0	1600	271	020	+000	+010		-63.3		
053	056	45	261	114	+009	+060																			
056	054	44	268	098	+002	+051																			
059	050	43	262	094	+007	+047																			
063	044	42	256	089	+011	+045																			
067	040	41	254	083	+012	+041																			
071	038	40	252	077	+012	+038																			
076	034	39	252	067	+011	+032																			
081	029	38	252	056	+009	+028																			
087	027	37	246	047	+010	+022																			
093	028	36	239	038	+010	+017																			
100	026	35	250	054	+010	+026																			
107	022	34	261	070	+006	+036																			
115	020	33	254	065	+009	+032																			
123	019	32	248	061	+012	+030																			
133	016	31	254	053	+007	+026																			
143	015	30	261	045	+004	+023																			
154	015	29	262	047	+003	+024																			
166	014	28	262	049	+004	+025																			
179	012	27	251	042	+007	+021																			
194	010	26	240	035	+009	+016																			

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
 MOTOR PERFORMANCE.. GOOD
 PAYLOAD TYPE.. ARCASONDE-1A
 PAYLOAD PERFORMANCE.. POOR (SEE REMARKS)
 FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
 FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
 TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
 LAUNCHER SETTING.. 090 DEG. AZIMUTH 77.5 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
 MOTOR ACQUISITION.. 23 SECONDS 9,791 METERS ALTITUDE
 MOTOR TRACK DROPPED.. 134 SECONDS 58,979 METERS ALTITUDE
 PAYLOAD ACQUISITION.. 134 SECONDS 58,979 METERS ALTITUDE
 PAYLOAD TRACK DROPPED.. 1,197 SECONDS 26,024 METERS ALTITUDE
 APOGEE.. 127 SECONDS 59,183 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
 TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
 SENSOR FALL RATE.. NOMINAL
 GROUND EQUIPMENT TYPE.. GMD-1B
 TELEMETRY FREQUENCY.. 1680 MHZ
 TELEMETRY QUALITY.. POOR (SEE REMARKS)
 TELEMETRY QUALITY.. N.A.

REMARKS

SIGNAL LOST AT APOGEE. REASON UNKNOWN.
 THERMODYNAMICS BASE DATA.. PRESSURE N.A.
 ALTITUDE N.A.
 TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

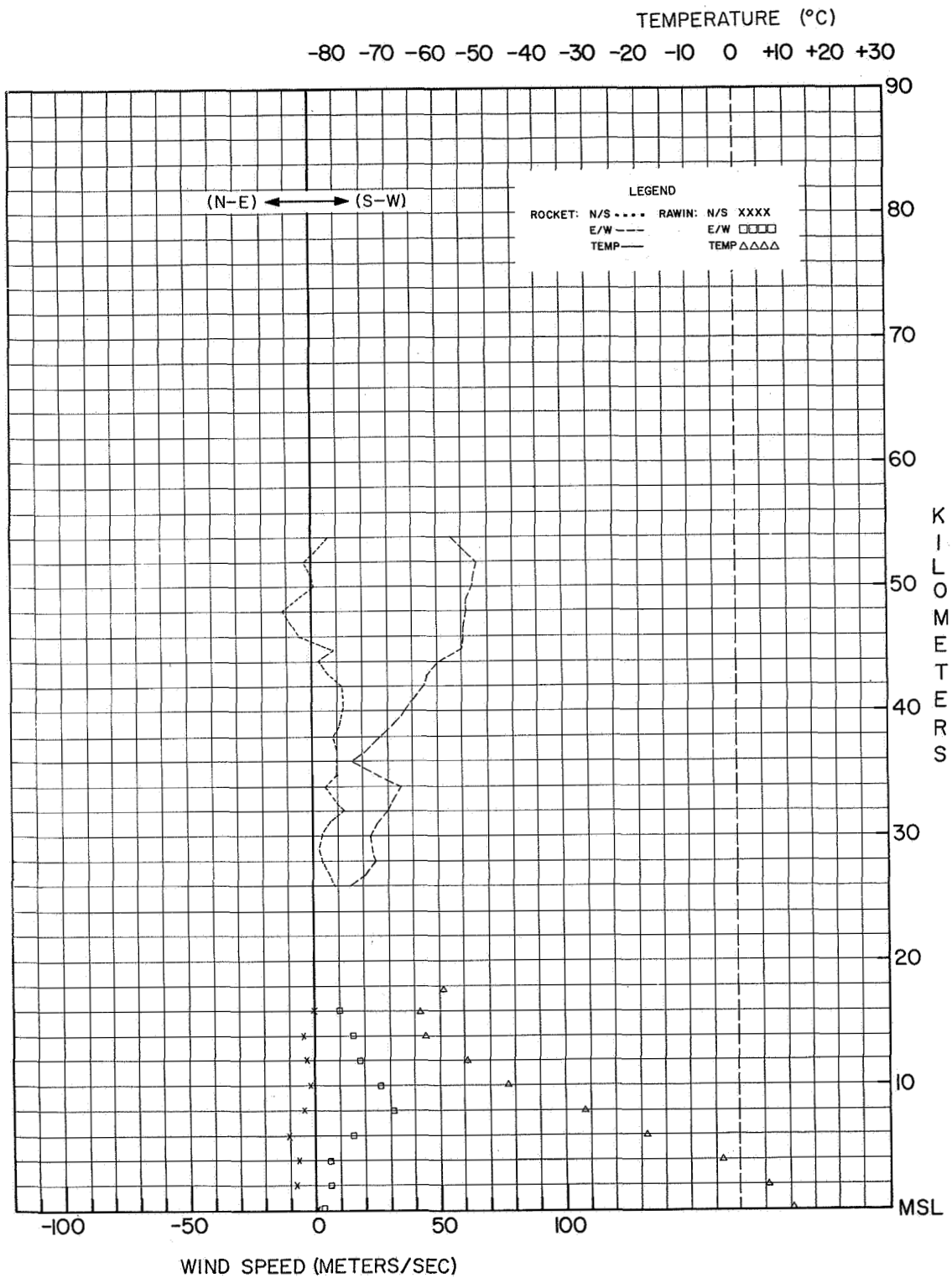
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
 RADIOSONDE TYPE.. 1680 MHZ
 TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
 PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
 GROUND EQUIPMENT TYPE.. GMD-1B
 BALLOON TYPE.. NEOPRENE
 BALLOON SIZE.. 1,200 GRAMS
 FREE LIFT.. 1,300 GRAMS
 ASCENSION RATES.. SFC-400 MB 254 M/MINUTE
 400 MB-TOP 182 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1022.7 MB
 TEMPERATURE.. 3.9 DEG. C
 RELATIVE HUMIDITY.. 45%
 VISIBILITY.. 10 KM
 SURFACE WIND.. 250 DEG. 6 KTS
 CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS
 LOW.. NONE
 MIDDLE.. NONE
 HIGH.. NONE

WIND AT ROCKET LAUNCH

50 FT. 205 DEG/05 KTS, 100 FT. 211 DEG/07 KTS,
 150 FT. 313 DEG/08 KTS, 200 FT. 203 DEG/09 KTS,
 250 FT. 201 DEG/09 KTS



STATION: (NASA)WALLOPS IS., VA.
 DATE: 26 OCT 1965

ROCKET TIME: 25/1915 LST 0015 GCT
 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
 RADIOSONDE TYPE: 1680 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME	RAWINSONDE RELEASE TIME
	(NASA) WALLOPS ISLAND, VIRGINIA	Z	Z	Z
72402	37° 51' N 75° 29' W ALT. 3 M	OCTOBER 26, 1965	1834	1715

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS						RAWINSONDE						RH	TEMP	
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS			COMPONENTS MPS N-S E-W
029	087	50	267	160	+004 +082	4694	+00.0	01.172	01.528	331	258	148	+016 +074	1020.2	0000	180	012	+006 +000	53	+15.0
031	079	49	260	143	+012 +072	4642	-02.4	01.249	01.644	330	260	156	+014 +079	0802.0	0200	260	025	+002 +013	15	+05.8
033	071	48	253	125	+019 +062	4419	-04.5	01.651	02.189	329	264	124	+007 +064	0624.0	0400	260	031	+003 +016	21	-04.0
036	068	47	258	145	+016 +073	4358	-06.5	01.782	02.381	327	264	110	+006 +057	0482.0	0600	238	041	+011 +018	24	-17.9
038	065	46	262	164	+012 +083	4340	-06.3	01.823	02.434	328	263	106	+007 +055	0465.0	0800	243	059	+014 +028	26	-33.6
041	060	45	263	143	+009 +073	4230	-11.2	02.098	02.853	325	261	086	+007 +043	0272.0	1000	238	084	+023 +037		-46.4
044	054	44	264	122	+006 +062	4200	-10.6	02.180	02.958	325	260	078	+007 +040	0201.0	1200	242	071	+017 +033		-52.3
047	049	43	262	101	+007 +051	4142	-15.2	02.351	03.246	322	261	078	+006 +040	0146.0	1400	241	049	+012 +022		-59.7
051	043	42	260	080	+007 +040	4002	-16.8	02.824	03.924	321	263	078	+005 +040	0106.0	1600	245	041	+009 +020		-63.7
055	044	41	261	080	+006 +040	3974	-18.5	02.931	04.099	320	263	076	+005 +039	0076.6	1800	237	039	+011 +017		-61.6
058	044	40	262	079	+005 +040	3970	-19.6	03.191	04.482	319	263	076	+005 +039	0055.6	2000	256	037	+005 +019		-56.8
063	041	39	262	074	+005 +037	3727	-29.7	04.091	05.986	313	263	062	+004 +032	0040.6	2000	245	031	+007 +015		-54.6
066	038	38	262	068	+005 +034	3715	-29.5	04.160	06.081	313	264	061	+003 +031	0029.7	2400	252	029	+005 +015		-53.5
071	034	37	266	060	+003 +031	3511	-41.0	05.557	08.527	306	264	055	+003 +028	0021.8	2600	276	016	+001 +008		-51.5
077	029	36	269	052	+000 +027	3438	-45.3	06.187	09.671	303	262	054	+004 +028	0016.1	2800	252	039	+006 +020		-49.4
083	027	35	265	054	+003 +028	3343	-45.4	07.123	11.140	303	256	054	+007 +027	0013.0	2937	246	039	+008 +019		-51.0
089	024	34	260	055	+005 +028	3249	-42.4	08.182	12.630	305	249	054	+010 +026	0011.8	3000	246	039	+008 +019		-49.5
097	024	33	251	005	+008 +027	3224	-43.4	08.488	13.160	304	249	054	+010 +026							
104	024	32	241	055	+011 +026	3188	-40.9	08.948	13.723	306	247	054	+011 +026							
111	021	31	248	051	+009 +025	2752	-52.3				266	050	+002 +026							
120	018	30	255	047	+006 +023	2453	-48.0				253	040	+006 +020							
129	017	29	261	049	+004 +025	2401	-52.4				252	036	+006 +018							
138	016	28	266	051	+001 +026	2221	-54.1				262	028	+002 +014							
150	015	27	261	051	+004 +026															
162	013	26	256	051	+006 +025															
176	012	25	255	044	+006 +022															
192	011	24	253	037	+006 +018						304	248	051	+009 +025						
207	011	23	257	032	+004 +016						303	257	054	+006 +027						
224	010	22	261	027	+002 +014						309	264	057	+003 +029						
						4241	-09.5	02.000	02.704	326	262	093	+007 +048							

CONSTANT PRESSURE LEVEL DATA
(HEIGHT IN GEOPOTENTIAL METERS)

3097	-42.9	10.000	15.470	304	248	051	+009 +025
3337	-45.4	07.000	10.948	303	257	054	+006 +027
3572	-36.4	05.000	07.551	309	264	057	+003 +029
4241	-09.5	02.000	02.704	326	262	093	+007 +048

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 085 DEG. AZIMUTH 77.5 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 23 SECONDS 17,643 METERS ALTITUDE
MOTOR TRACK DROPPED.. 128 SECONDS 54,315 METERS ALTITUDE
PAYLOAD ACQUISITION.. 128 SECONDS 54,315 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1171 SECONDS 25,630 METERS ALTITUDE
APOGEE.. 116 SECONDS 54,620 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH READ THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-18
TELEMETRY FREQUENCY.. 1680 MHZ
TELEMETRY QUALITY.. FAIR
TELEMETRY DATA RECEIVED FROM.. 128 SEC. 54,315 METERS ALTITUDE
TO 1.332 SEC. 22,210 METERS ALTITUDE

REMARKS

INTERMITTENT TELEMETRY SIGNAL
THERMODYNAMICS BASE DATA.. PRESSURE 10.0 MB
ALTITUDE 31,120 METERS
TEMPERATURE -42.9 DEG. C

RADIOSONDE AND BALLOON DATA

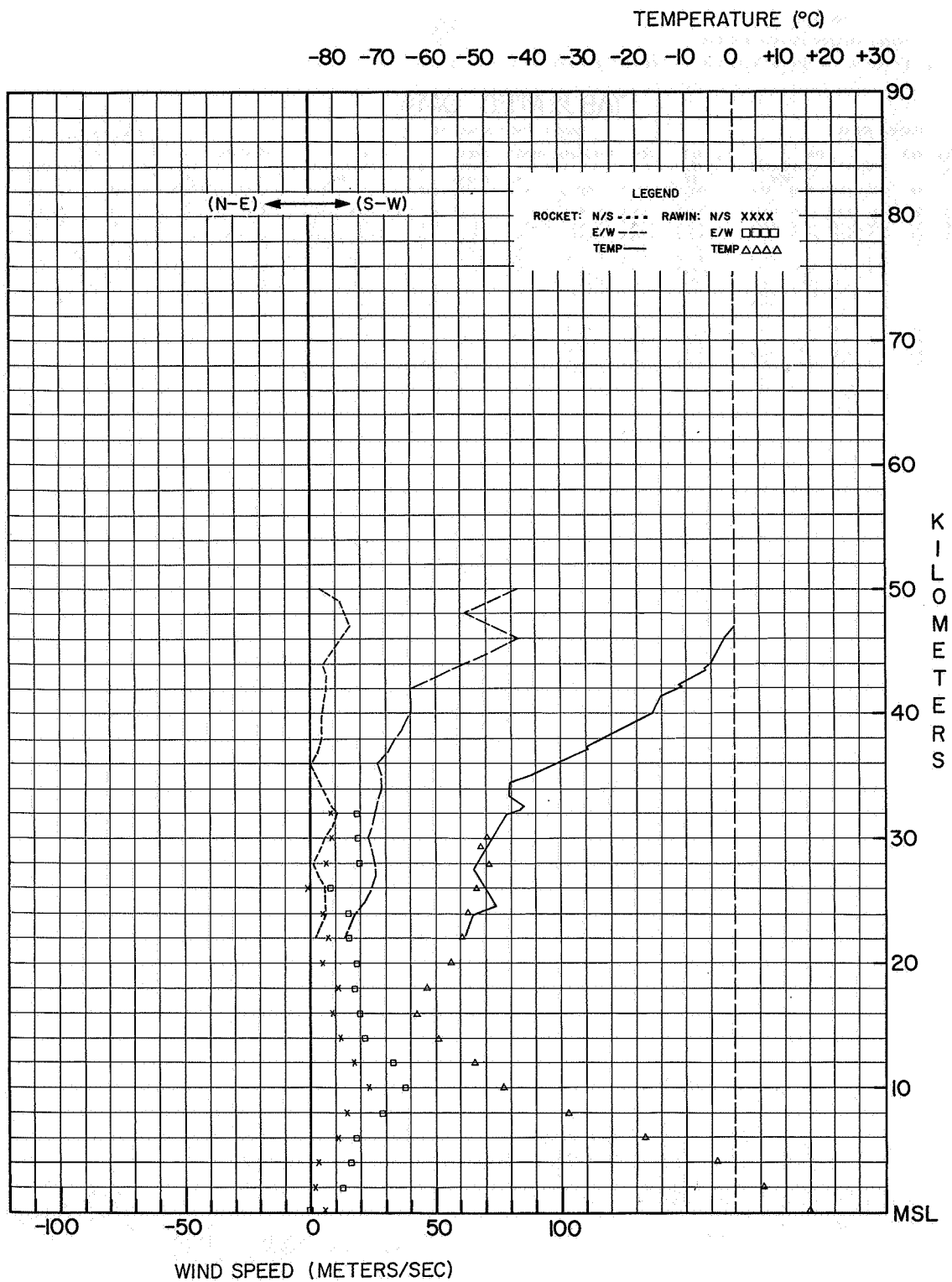
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSOMETER
GROUND EQUIPMENT TYPE.. GMD-18
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,300 GRAMS
ASCENSION RATES.. SFC-400 MB 280 M/MINUTE
400 MB-TOP 381 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1020.2 MB
TEMPERATURE.. 15.0 DEG. C
RELATIVE HUMIDITY.. 53%
VISIBILITY.. 10 KM
SURFACE WIND.. 180 DEG. 12 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 1 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 1 OCTAS/CI

WIND AT ROCKET LAUNCH

50 FT. 180 DEG/14 KTS, 100 FT. 195 DEG/14 KTS,
150 FT. 196 DEG/17 KTS, 200 FT. 205 DEG/16 KTS,
250 FT. 200 DEG/17 KTS



STATION: (NASA) WALLOPS IS., VA.
 DATE: 26 OCT 1965

ROCKET TIME: 1334 LST 1834 GCT
 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
 RADIOSONDE TYPE: 1680 MHZ

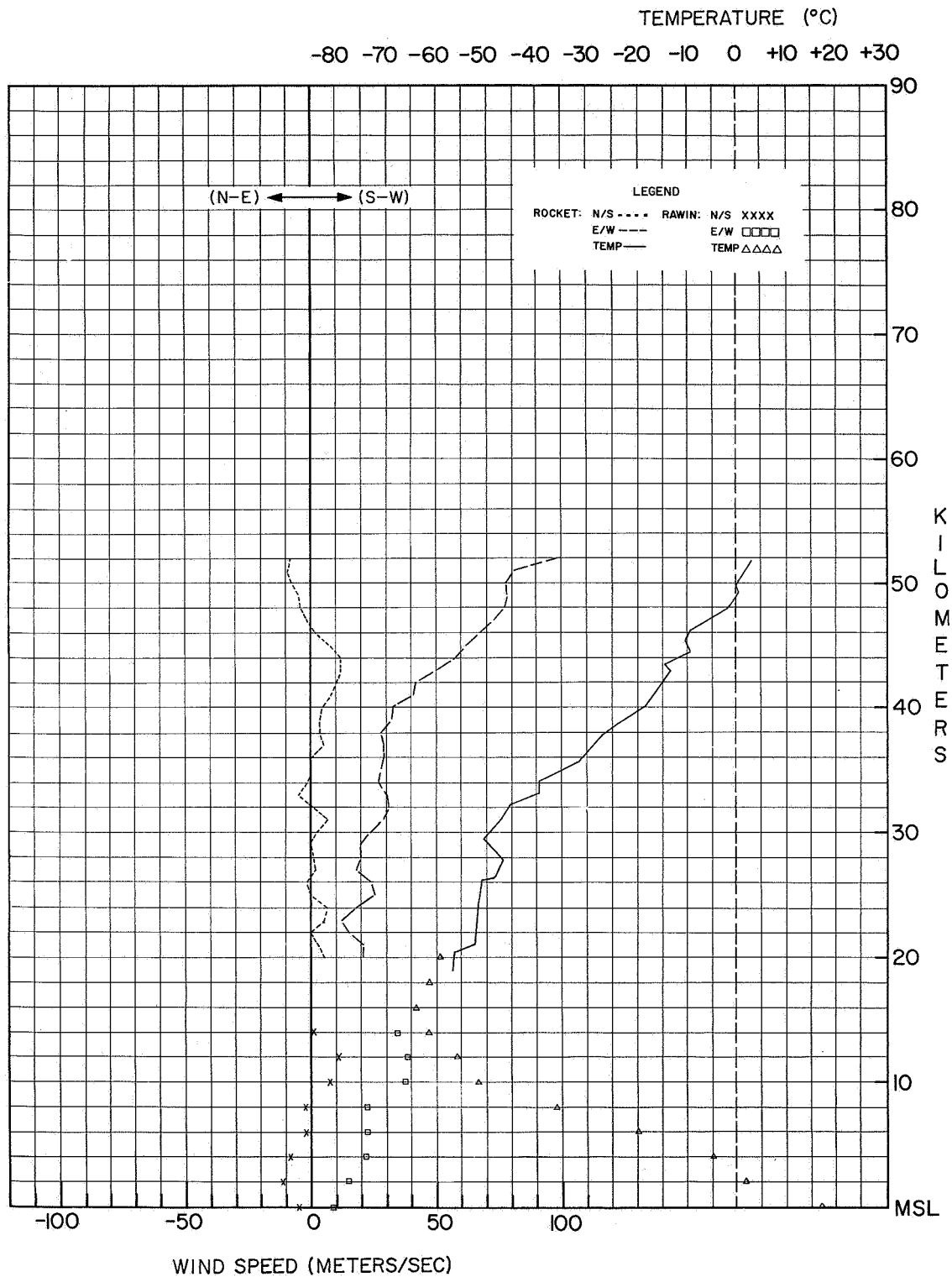
RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WOLLOPS ISLAND, VIRGINIA Z LAUNCH TIME Z RELEASE TIME Z
72402 37° 51' N 75° 29' W ALT. 3 M OCTOBER 27, 1965 1942 1715

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND			ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND			PRESSURE	ALT	WIND			RH	TEMP					
TENTHS	VEL		POLAR	COMPONENTS		TENS	DEG	MB	G M	OF	POLAR	COMPONENTS		MB	TENS	POLAR	COMPONENTS		%	DEG C					
OF A	M/S	KM	DEG	KTS	N-S	E-W	OF	DEG C	MB	G M	SOUND	DEG	KTS	N-S	E-W	MB	OF METERS	DEG	KTS	N-S	E-W	%	DEG C		
MINUTE					MPS		METERS				M/S			MPS											
026	125	52	275	192	-008	+099	5167	+03.0	00.648	00.836	333	275	180	-008	+093	1017.7	0000	300	019	-005	+009	37	+17.2		
027	100	51	276	158	-009	+081	4981	+00.1	00.814	01.061	332	276	151	-007	+078	0797.0	0200	305	035	-011	+015	37	+02.3		
029	091	50	275	135	-007	+078	4920	+00.9	00.878	01.141	332	276	151	-005	+078	0619.0	0400	291	045	-008	+022	39	-04.8		
031	087	49	274	153	-005	+078	4621	-09.2	01.276	01.722	326	268	136	+001	+069	0476.0	0600	276	045	-002	+023	36	-19.7		
033	083	48	273	149	-004	+077	4538	-10.1	01.419	01.921	325	265	124	+006	+064	0361.0	0800	275	045	-002	+023	39	-36.2		
035	080	47	271	142	-001	+073	4447	-09.2	01.594	02.151	326	260	116	+010	+059	0267.0	1000	259	075	+007	+038		-52.1		
037	074	46	268	130	+002	+067	4346	-14.4	01.815	02.499	323	257	104	+012	+053	0195.0	1200	254	077	+011	+039		-55.9		
040	065	45	263	123	+008	+062	4294	-12.9	01.942	02.658	324	257	101	+012	+049	0142.0	1400	268	067	+001	+035		-61.7		
043	061	44	258	112	+012	+057	4002	-18.2	02.846	03.976	320	261	064	+005	+033	0102.7	1600						-63.9		
045	059	43	257	101	+012	+050	3864	-23.9	03.424	04.893	317	263	061	+004	+031	0074.0	1800						-61.4		
046	059	42	256	086	+010	+042	3782	-26.6	03.828	05.530	315	262	054	+004	+028										
051	053	41	259	082	+008	+041	3556	-31.6	05.234	07.718	312	270	056	+000	+029										
055	044	40	261	066	+005	+033	3419	-39.3	06.359	09.686	307	272	052	-001	+027										
059	041	39	263	063	+004	+032	3325	-39.3	07.285	11.095	307	278	056	-004	+029										
063	038	38	262	055	+004	+028	3230	-45.1	08.372	13.075	303	272	060	-001	+031										
067	033	37	260	057	+005	+029	2934	-50.6	13.057	20.898	299	267	040	+001	+021										
073	027	36	269	059	+000	+029	2776	-47.0	16.573	26.103	302	267	034	+001	+018										
080	029	35	270	055	+000	+028	2644	-48.3	20.208	32.011	301	270	040	+000	+021										
084	029	34	273	053	-001	+027	2623	-51.3	20.862	33.494	299	271	045	+000	+023										
091	025	33	280	059	-005	+030	2105	-52.4	46.139	74.446	298	262	042	+003	+021										
098	024	32	268	061	+001	+031	2053	-56.2	50.014	82.112	295	259	042	+004	+021										
105	020	31	257	056	+007	+029																			
114	018	30	263	048	+003	+024	CONSTANT PRESSURE LEVEL DATA																		
123	018	29	270	038	+000	+020	(HEIGHT IN GEOPOTENTIAL METERS)																		
133	016	28	268	038	+001	+020	2046	-56.2	50.000	82.081	296	259	042	+004	+022										
144	015	27	264	034	+002	+018	2426	-51.7	30.000	48.319	299	268	044	+001	+023										
156	014	26	274	047	-001	+024	2641	-48.2	20.000	31.674	301	270	040	+000	+021										
168	013	25	270	049	+000	+025	3112	-47.0	10.000	15.790	302	270	053	+000	+027										
181	011	24	251	037	+006	+018	3336	-39.3	07.000	10.661	307	276	055	-003	+028										
198	010	23	248	024	+005	+012	3574	-30.8	05.000	07.355	312	269	056	+000	+029										
215	010	22	271	030	+000	+015	4247	-13.2	02.000	02.742	324	261	099	+008	+050										
232	009	21	262	042	+003	+021	4792	-02.2	01.000	01.319	330	274	146	-006	+076										
252	008	20	256	042	+005	+021																			

TECHNICAL DATA

VEHICLE DATA	MOTOR TYPE.. ARCAS	RADIOSONDE AND BALLOON DATA	RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
	MOTOR PERFORMANCE.. GOOD		RADIOSONDE TYPE.. 1680 MHZ
RADAR DATA	PAYLOAD TYPE.. ARCASONDE-1A	WEATHER OBSERVATION AT RAWINSONDE RELEASE	TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
	PAYLOAD PERFORMANCE.. GOOD		PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
SENSOR AND TELEMETRY DATA	FUSE TYPE.. GAS GENERATED SEPARATION DEVICE	WIND AT ROCKET LAUNCH	GROUND EQUIPMENT TYPE.. GMD-1B
	FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN		BALLOON TYPE.. NEOPRENE
REMARKS	TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR		BALLOON SIZE.. 1x200 GRAMS
	LAUNCHER SETTING.. 105 DEG. AZIMUTH 74.0 DEG. ELEVATION		FREE LIFT.. 1x300 GRAMS
	RADAR TYPE.. MPS-19		ASCENSION RATES.. SFC-400 MB 293 M/MINUTE
	MOTOR ACQUISITION.. 17 SECONDS 4.389 METERS ALTITUDE		400 MB-TOP 317 M/MINUTE
	MOTOR TRACK DROPPED.. 150 SECONDS 54.803 METERS ALTITUDE		STATION PRESSURE.. 1017.7 MB
	PAYLOAD ACQUISITION.. 150 SECONDS 54.803 METERS ALTITUDE		TEMPERATURE.. 17.2 DEG. C
	PAYLOAD TRACK DROPPED.. 1.640 SECONDS 19.202 METERS ALTITUDE		RELATIVE HUMIDITY.. 37%
	APOGEE.. 150 SECONDS 54.803 METERS ALTITUDE		VISIBILITY.. 10 KM
	WIND SENSOR.. 15 FT. DIAMETER PARACHUTE		SURFACE WIND.. 300 DEG. 19 KTS
	TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR		CLOUD TYPE AND AMOUNT.. TOTAL.. 2 OCTAS
	SENSOR FALL RATE.. NOMINAL		LOW.. NONE
	GROUND EQUIPMENT TYPE.. GMD-1B		MIDDLE.. NONE
	TELEMETRY FREQUENCY.. 1680 MHZ		HIGH.. 2 OCTAS/CI
	TELEMETRY QUALITY.. GOOD		TYPE OF PRECIPITATION.. NONE
	TELEMETRY DATA RECEIVED FROM.. 160 SEC. 51.670 METERS ALTITUDE		OBSTRUCTIONS TO VISION.. NONE
	TO 1.640 SEC. 19.202 METERS ALTITUDE		
	NONE		
	THERMODYNAMICS BASE DATA.. PRESSURE 54.0 MB		
	ALTITUDE 20.040 METERS		
	TEMPERATURE -56.3 DEG. C		



STATION: (NASA)Wallops IS., VA.
 DATE: 27 OCT 1965

ROCKET TIME: 1442 LST 1942 GCT
 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
 RADIOSONDE TYPE: 1680 MHz

RP STATION NAME DATE ROCKET LAUNCH RAWINSONDE
(NASA) WALLOPS ISLAND, VIRGINIA Z TIME Z
72402 37° 51' N 75° 29' W ALT. 3 M OCTOBER 27, 1965 2331 2318

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE												
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP						
TENTHS	VEL		POLAR	COMPONENTS			TENS	DEG	MB	G M	OF	POLAR	COMPONENTS			MB	TENS	POLAR	COMPONENTS			%	DEG						
OF A	M/S	KM	DEG	KTS	N-S	E-W	OF	DEG			M/S	DEG	KTS	N-S	E-W		OF	DEG	KTS	N-S	E-W		DEG						
MINUTE							METERS	-C									METERS												
020	091	54	286	164	-023	+082	5063	-05.0	00.679	00.902	328	284	136	-017	+069	1016.8	0000	200	004	+002	+001	61	+12.2						
022	087	53	285	150	-020	+076	4770	-07.8	00.983	01.319	327	299	140	-012	+072	0797.0	0200	298	025	-006	+012	52	-00.8						
023	087	52	283	136	-016	+069	4636	-11.4	01.166	01.587	324	278	128	-010	+065	0621.0	0400	280	039	-003	+020	35	-05.1						
026	077	51	284	136	-017	+069	4535	-11.0	01.328	01.804	325	275	121	-005	+062	0476.0	0600	272	045	-001	+023	26	-19.4						
028	071	50	284	135	-017	+068	4438	-14.3	01.505	02.071	323	271	114	-001	+059	0361.0	0800	257	043	+005	+022	39	-36.0						
030	067	49	282	139	-015	+071	4298	-16.2	01.807	02.505	321	264	110	+006	+056	0268.0	1000	263	051	+003	+026		-51.4						
033	063	48	279	142	-012	+073	4243	-15.8	01.942	02.688	322	260	108	+009	+055	0196.0	1200	254	079	+011	+040		-57.6						
036	056	47	279	134	-011	+069	4136	-22.7	02.239	03.184	317	257	097	+010	+049	0143.0	1400	256	082	+010	+041		-61.1						
039	051	46	278	125	-009	+064	3944	-28.2	02.908	04.229	314	260	069	+007	+035	0103.5	1600	263	055	+003	+028		-62.1						
042	048	45	273	118	-003	+061	3908	-27.7	03.056	04.434	314	261	067	+005	+034	0075.0	1800	258	055	+006	+028		-62.4						
046	045	44	269	112	+001	+058	3871	-30.9	03.216	04.729	312	264	054	+004	+033	0054.3	2000	271	033	+000	+017		-58.1						
050	045	43	264	110	+006	+056	3709	-34.0	04.037	06.012	310	268	057	+001	+030	0039.3	2200	256	037	+005	+019		-57.6						
053	047	42	258	107	+011	+054	3673	-37.5	04.249	06.422	308	268	056	+001	+029	0028.8	2400	260	019	+002	+010		-53.2						
057	044	41	257	090	+010	+046	3618	-35.7	04.596	06.894	309	267	055	+001	+028	0021.3	2600	263	041	+003	+021		-54.7						
060	042	40	256	073	+009	+037	3450	-43.6	05.861	09.094	304	278	060	-004	+031	0015.5	2800	282	019	-002	+010		-53.8						
065	038	39	262	066	+005	+034	3423	-42.5	06.098	09.416	305	280	061	-006	+032	0011.5	3000	268	053	+001	+028		-52.7						
068	036	38	268	059	+001	+031	3389	-46.4	06.412	10.072	302	281	061	-007	+032	0008.3	3200	273	077	-002	+040		-50.6						
074	033	37	268	057	+001	+030	3139	-52.3	09.355	15.087	298	266	047	+001	+025	0006.1	3400	273	079	-002	+041		-47.7						
078	031	36	267	055	+001	+028	2902	-48.0	13.403	21.204	301	271	041	+000	+022														
085	028	35	274	058	-002	+030	2682	-49.8	18.685	29.798	300	268	040	+001	+021														
090	026	34	282	062	-007	+032	2509	-53.6	24.348	39.501	297	272	033	-001	+017														
098	024	33	274	056	-002	+029	2338	-52.1																					
105	022	32	265	049	+002	+026	2274	-55.4																					
112	021	31	267	046	+001	+024	2213	-56.0																					
120	019	30	269	042	+000	+022	CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																						
130	019	29	271	041	+000	+022																							
138	019	28	273	040	-001	+021																							
147	016	27	269	040	+001	+021																							
158	014	26	265	040	+002	+021	2631	-50.7	20.000	32.052	299	267	040	+001	+021														
171	013	25	273	032	-001	+017	3086	-51.6	10.000	16.062	299	267	046	+001	+024														
185	013	24	281	024	-003	+013	3322	-47.6	07.000	11.074	301	275	058	-003	+030														
197	013	23	270	039	+000	+020	3544	-38.2	05.000	07.597	308	270	056	+000	+029														
							4194	-17.1	02.000	02.705	321	259	108	+011	+055														
							4723	-08.1	01.000	01.344	327	279	139	-011	+071														

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI I
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. UNKNOWN

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 18 SECONDS 18,105 METERS ALTITUDE
MOTOR TRACK DROPPED.. 90 SECONDS 55,656 METERS ALTITUDE
PAYLOAD ACQUISITION.. 90 SECONDS 55,656 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1,260 SECONDS 22,128 METERS ALTITUDE
APOGEE.. 90 SECONDS 55,656 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH READ THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 403 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 99 SEC. 54,650 METERS ALTITUDE
TO 1,260 SEC. 22,128 METERS ALTITUDE

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE 28.8 MB
ALTITUDE 24,000 METERS
TEMPERATURE -53.2 DEG. C

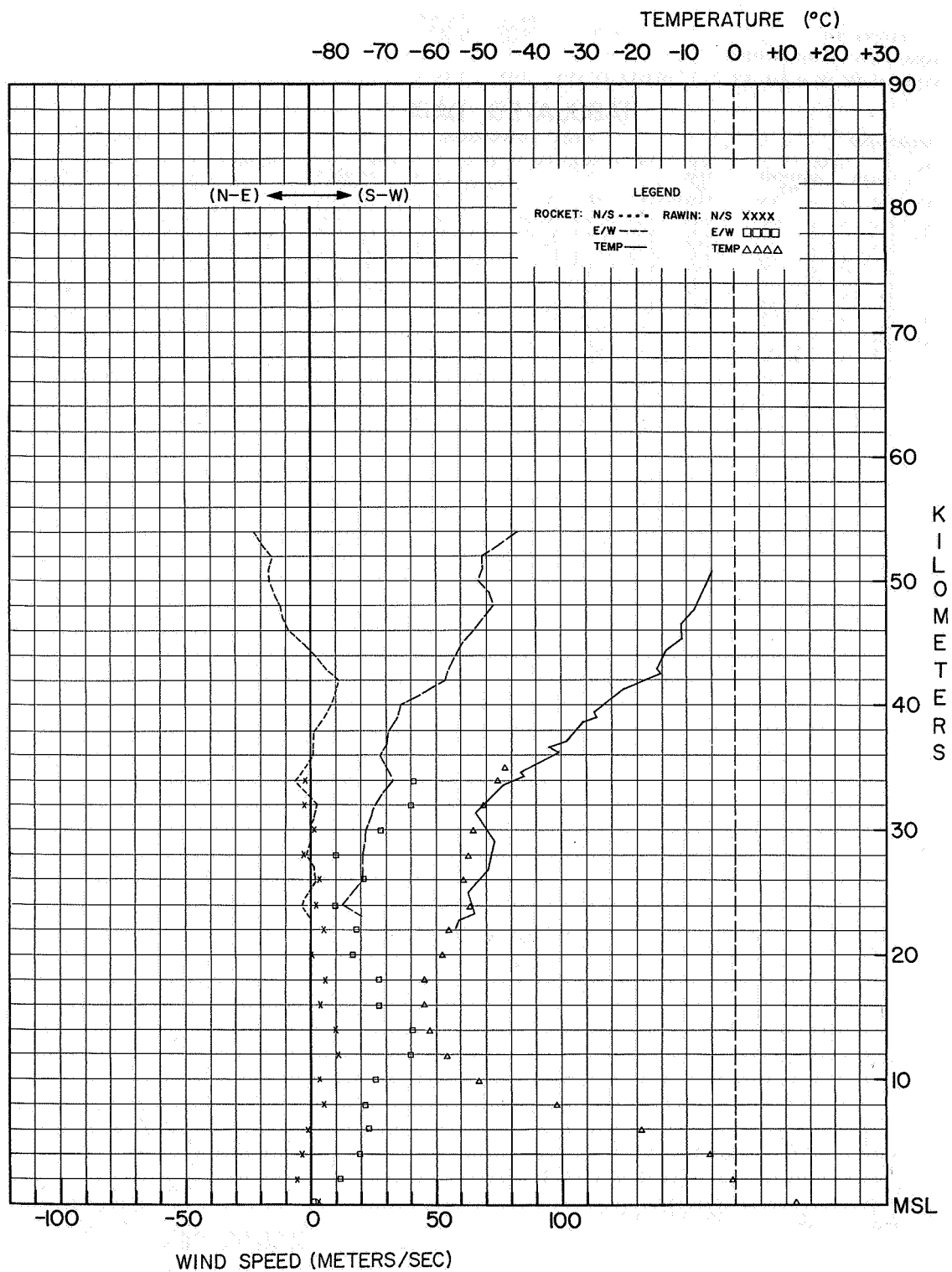
RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,300 GRAMS
ASCENSION RATES.. SFC-400 MB 280 M/MINUTE
400 MB-TOP 346 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1016.8 MB
TEMPERATURE.. 12.2 DEG. C
RELATIVE HUMIDITY.. 61%
VISIBILITY.. 10 KM
SURFACE WIND.. 200 DEG. 4 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 2 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 2 OCTAS
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE
LAUNCH
UNKNOWN

WIND AT ROCKET



STATION: (NASA) WALLOPS IS., VA.
 DATE: 27 OCT 1965

ROCKET TIME: 1831 LST 2331 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WALLOPS ISLAND, VIRGINIA LAUNCH TIME RELEASE TIME
Z Z Z
72402 37° 51' N 75° 29' W ALT. 3 M OCTOBER 29, 1965 1845 1715

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS											RAWINSONDE										
TIME	FALL	ALT	WIND			ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND			PRESSURE	ALT	WIND			RH	TEMP							
TENTHS	VEL		POLAR	COMPONENTS		TENS	DEG C	MB	G M	OF	POLAR	COMPONENTS		MB	TENS	POLAR	COMPONENTS		%	DEG C							
OF A	M/S	KM	DEG	KTS	MPS	OF				SOUND	DEG	KTS	N-S	E-W	METERS	DEG	KTS	N-S	E-W								
MINUTE						METERS				M/S																	
020	115	58	272	119	+002	5383	+07.8	00.503	00.638	336	265	139	+007	+072	1034.0	0000	330	010	-004	+003	36	+06.7					
022	111	57	270	119	+000	4651	+02.0	01.219	01.579	333	263	134	+018	+069	0803.0	0200	346	015	-008	+002	27	-03.6					
023	113	56	267	119	+003	4206	-13.6	02.137	02.932	323	266	102	+009	+053	0621.0	0400	304	039	-011	+017	25	-09.4					
025	101	55	266	130	+004	3968	-25.2	02.932	04.211	316	250	069	+013	+036	0476.0	0600	323	050	-021	+016	24	-23.5					
026	091	54	265	140	+006	3691	-33.4	04.302	06.391	311	256	048	+007	+025	0360.0	0800	320	094	-037	+031	32	-40.0					
028	091	53	262	142	+010	3618	-32.1	04.766	07.043	311	260	044	+004	+023	0267.0	1000	320	057	-023	+019		-52.3					
030	091	52	259	143	+014	3572	-37.2	05.087	07.679	308	262	042	+003	+022	0196.0	1200	282	059	-006	+030		-53.0					
032	083	51	258	148	+016	3472	-33.8	05.864	08.727	310	267	046	+001	+024	0142.0	1400	265	069	+003	+036		-59.3					
034	074	50	256	152	+019	3432	-38.7	06.209	09.432	307	267	046	+001	+024	0104.0	1600	301	035	-009	+016		-63.4					
037	068	49	255	150	+016	3222	-46.0	08.445	13.242	302	267	046	+001	+024	0075.0	1800	295	032	-007	+015		-58.6					
039	061	48	253	148	+023	3040	-48.0	11.204	17.725	301	256	039	+005	+020	0054.0	2000	280	021	-002	+011		-58.8					
042	063	47	255	142	+020	2807	-46.9	15.725	24.755	302	259	031	+003	+016	0039.5	2200	298	017	-004	+008		-54.5					
045	065	46	257	133	+016	2655	-52.5	19.799	31.960	298	262	029	+002	+015	0029.0	2400	286	023	-003	+012		-56.5					
048	061	45	259	118	+012	2591	-49.9	21.831	34.830	300	262	027	+002	+014	0021.3	2600	286	026	-004	+013		-54.7					
050	057	44	262	102	+007	2524	-53.7	24.189	39.261	297	270	027	+000	+014	0015.6	2800	278	025	-002	+013		-52.6					
053	051	43	261	103	+009	2420	-52.3	28.390	45.787	298	270	025	+000	+013	0011.7	3000	275	039	-002	+020		-50.7					
056	045	42	260	104	+009	2323	-55.4	32.984	53.954	296	270	023	+000	+012	0008.6	3200	277	045	-003	+023		-47.5					
060	044	41	256	091	+011	2146	-53.0	43.391	70.204	298	274	027	-001	+014	0006.3	3400						-43.5					
064	042	40	251	078	+013	2033	-58.7				273	033	-001	+017													
068	040	39	248	069	+013	1972	-58.8																				
072	038	38	245	059	+013																						
077	033	37	254	051	+007																						
082	032	36	262	042	+003																						
088	029	35	266	044	+002																						
093	026	34	269	047	+000																						
100	026	33	268	047	+001																						
106	025	32	266	046	+001																						
114	023	31	259	042	+004																						
122	020	30	251	037	+006																						
131	019	29	255	034	+004																						
140	017	28	258	031	+003																						
151	016	27	263	029	+002																						
162	014	26	268	027	+002																						
175	013	25	269	026	+000																						
188	012	24	269	024	+000																						
192	011	23	272	023	+000																						
216	010	22	275	022	+001																						
236	009	21	275	029	-001																						
255	008	20	275	036	-001																						

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. WOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 130 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 23 SECONDS 27.358 METERS ALTITUDE
MOTOR TRACK DROPPED.. 114 SECONDS 53.830 METERS ALTITUDE
PAYLOAD ACQUISITION.. 114 SECONDS 53.830 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.720 SECONDS 18.440 METERS ALTITUDE
APOGEE.. 104 SECONDS 66.446 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 403 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 114 SEC. 53.830 METERS ALTITUDE
TO 1.720 SEC. 18.440 METERS ALTITUDE

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 20.550 METERS
TEMPERATURE -57.6 DEG. C

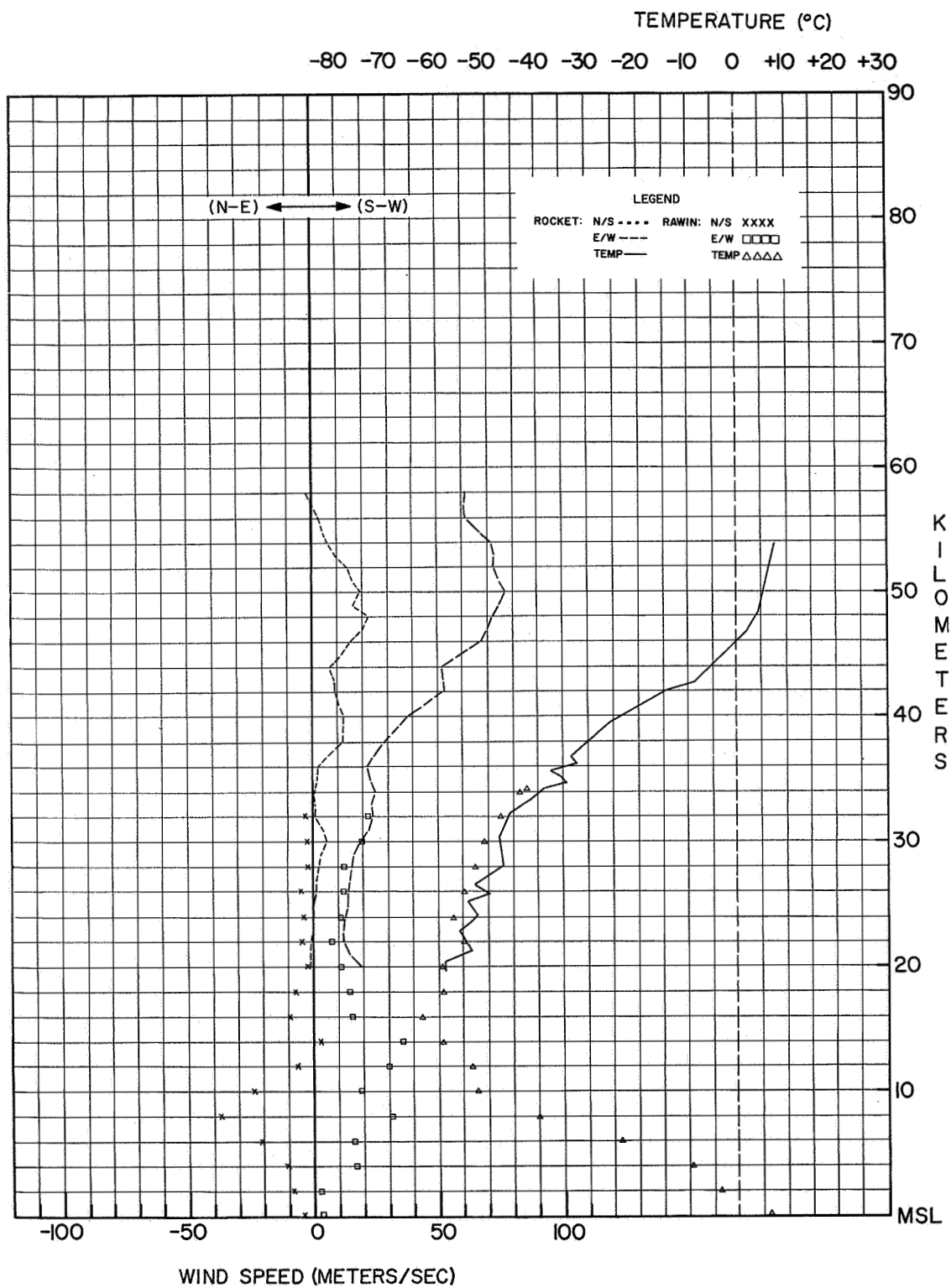
RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. AMERIOD AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1.290 GRAMS
FREE LIFT.. 1.600 GRAMS
ASCENSION RATES.. SFC-400 MR 292 M/MINUTE
400 MB-TOP 355 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1034.0 MB
TEMPERATURE.. 6.7 DEG. C
RELATIVE HUMIDITY.. 36 %
VISIBILITY.. 12 KM
SURFACE WIND.. 330 DEG. 10 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 2 OCTAS
LOW.. NONE
MIDDLE.. NONE
HIGH.. 2 OCTAS/CI
TYPE OF PRECIPITATION.. NONE
OBSERVATIONS TO VISION.. NONE

WIND AT ROCKET



STATION: (NASA) WALLOPS IS., VA.
DATE: 29 OCT 1965

ROCKET TIME: 1345 LST 1845 GCT
ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) Wallops Island, Virginia Z LAUNCH TIME Z RELEASE TIME Z
T2402 37° 51' N 75° 29' W ALT. 3 M NOVEMBER 3, 1965 1927 1700

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS							RAWINSONDE							RH	TEMP
TIME TENTHS OF A MINUTE	FALL VEL M/S	ALT KM	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		ALT TENS OF METERS	TEMP DEG C	PRESSURE MB	DENSITY G M	SPEED OF SOUND M/S	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W		PRESSURE MB	ALT TENS OF METERS	POLAR DEG	WIND KTS	COMPONENTS MPS N-S E-W	%	DEG C
028	083	45	260	151	+014 +077		4535	-06.1	01.419	01.892	328					1029.9	0000	185	018	+009 +001	67	+15.0
030	059	44	263	143	+009 +074		4441	-06.8	01.597	02.136	327	262	147	+011 +075		0810.0	0200	276	021	-001 +011	54	+05.4
033	054	43	258	123	+013 +063		4261	-18.0	02.016	02.814	320	257	116	+014 +059		0631.0	0400	315	027	-010 +010	23	-05.8
036	049	42	251	106	+018 +052		4206	-17.8	02.168	03.024	320	251	106	+018 +052		0487.0	0600	302	025	-007 +011	26	-18.8
040	041	41	256	094	+012 +047		4072	-23.5	02.592	03.699	317	257	091	+011 +046		0369.0	0800	300	030	-008 +014	24	-34.3
045	035	40	260	082	+007 +042		3831	-27.4	03.600	05.218	314	266	076	+003 +039		0275.0	1000	276	029	-001 +015		-50.0
050	031	39	263	078	+005 +040		3716	-35.0	04.227	06.321	309	265	067	+003 +034		0200.0	1200	280	037	-003 +019		-61.9
055	029	38	267	073	+002 +038		3505	-39.9	05.719	08.733	306	260	049	+004 +025		0144.5	1400	293	052	-011 +025		-63.7
061	032	37	265	065	+003 +033		3319	-38.7	07.483	11.368	307	258	047	+005 +023		0105.0	1600	284	034	-004 +017		-62.4
066	027	36	260	054	+005 +028		3010	-45.4	11.762	18.395	303	254	035	+005 +017		0076.2	1800	293	023	-005 +011		-60.9
073	025	35	260	049	+004 +025		2774	-46.2	16.714	26.232	302	270	028	+000 +014		0055.3	2000	286	016	-002 +008		-59.1
079	028	34	260	045	+004 +023		1985	-56.7								0040.0	2200	242	010	+002 +005		-55.1
085	026	33	258	047	+005 +023		1829	-60.1								0029.6	2400	264	015	+001 +008		-53.8
092	024	32	255	044	+006 +022											0021.7	2600	230	021	+007 +008		-53.7
099	022	31	253	039	+006 +019											0016.0	2800	263	025	+001 +013		-52.5
107	020	30	254	035	+005 +017											0011.8	3000	269	040	+000 +021		-50.7
115	020	29	263	032	+002 +016																	
123	017	28	273	028	-001 +014																	
135	018	27	258	026	+003 +013																	
142	022	26	252	023	+004 +012																	
150	030	25	248	022	+004 +011																	
153	047	24	245	021	+005 +010																	
157	047	23	235	018	+005 +007																	
161	043	22	230	013	+004 +005																	
164	042	21	252	012	+002 +006																	
169	038	20	280	014	-001 +007																	

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2650	-47.7	20.000	31.618	301	255	025	+003 +013
3122	-42.6	10.000	15.499	305	256	040	+005 +020
3352	039.0	07.000	10.646	307	259	048	+005 +025
3587	-37.5	05.000	07.570	308	262	058	+004 +030
4240	-17.6	02.000	02.787	321	257	117	+014 +058

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. JUDI
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. MOX-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. ELECTRICALLY ACTIVATED PYROTECHNIC
FUSE DELAY TIME.. PREDICTED.. 90 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. 8.5 FT. TUBULAR
LAUNCHER SETTING.. 136 DEG. AZIMUTH 80.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. MPS-19
MOTOR ACQUISITION.. 23 SECONDS 8,289 METERS ALTITUDE
MOTOR TRACK DROPPED.. 89 SECONDS 45,350 METERS ALTITUDE
PAYLOAD ACQUISITION.. 89 SECONDS 45,350 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.061 SECONDS 18,290 METERS ALTITUDE
APOGEE.. 157 SECONDS 52,055 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 6 FT. SQUARE PARACHUTE
TEMPERATURE SENSOR.. 0.014 INCH BEAD THERMISTOR
SENSOR FALL RATE.. BELOW NOMINAL
GROUND EQUIPMENT TYPE.. 403 MHZ SYSTEM
TELEMETRY FREQUENCY.. 403 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 89 SEC. 45,350 METERS ALTITUDE
TO 1.061 SEC. 18,290 METERS ALTITUDE

REMARKS

NO RADAR TRACK DURING ASCENT. REASON FOR
VARIABLE FALL RATE UNKNOWN.
THERMODYNAMICS BASE DATA.. PRESSURE 21.7 MB
ALTITUDE 26,000 METERS
TEMPERATURE -53.7 DEG. C

RADIOSONDE AND BALLOON DATA

RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,300 GRAMS
ASCENSION RATES.. SFC-400 MB 273 M/MINUTE
400 MB-TOP 359 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

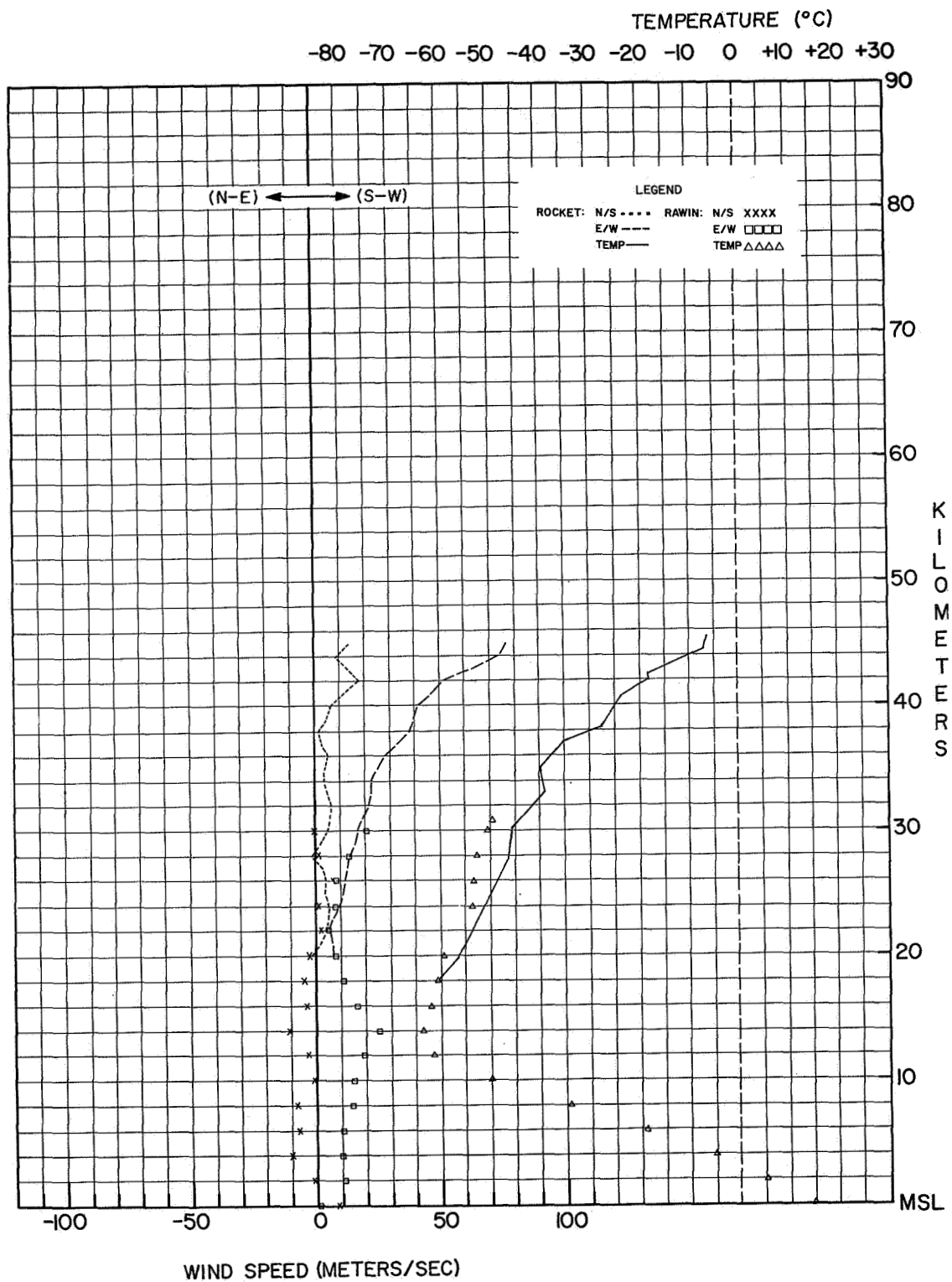
STATION PRESSURE.. 1029.9 MB
TEMPERATURE.. 15.0 DEG. C
RELATIVE HUMIDITY.. 67%
VISIBILITY.. 10 KM
SURFACE WIND.. 185 DEG. 18 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 0 OCTAS

LOW.. NONE
MIDDLE.. NONE
HIGH.. NONE

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET

LAUNCH
100 FT. 189 DEG/16 KTS, 150 FT. 191 DEG/18 KTS,
200 FT. 190 DEG/19 KTS, 250 FT. 190 DEG/20 KTS



STATION: (NASA)WALLOPS IS., VA.
 DATE: 3 NOV 1965

ROCKET TIME: 1427 LST 1927 GCT
 ROCKET MOTOR TYPE: JUDI

PAYLOAD TYPE: WOX-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET RAWINSONDE
(NASA) WALLOPS ISLAND, VIRGINIA LAUNCH TIME RELEASE TIME
Z Z Z
72402 37° 51' N 75° 29' W ALT. 3 M NOVEMBER 4, 1965 1911 1706

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND			ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND			PRESSURE	ALT	WIND			RH	TEMP					
TENTHS	VEL		POLAR	COMPONENTS		TENS				OF	POLAR	COMPONENTS			TENS	POLAR	COMPONENTS								
OF A			DEG	KTS	MPS	OF	DEG C	MB	G M	-3	DEG KTS	N-S	E-W	MB	METERS	DEG	KTS	N-S	E-W	DEG C					
MINUTE	M/S	KM				METERS				SOUND															
026	091	52	265	148	+007 +076	5179	-04.3	00.635	00.841	329	260	146	+007 +076	1025.0	0000	250	012	+002 +006	29	+21.1					
028	084	51	266	144	+007 +074	4965	-03.6	00.829	01.096	329	264	136	+007 +071	0808.0	0200	276	016	-001 +008	34	+07.3					
031	077	50	265	138	+006 +071	4907	-07.4	00.892	01.196	327	263	140	+009 +072	0630.0	0400	274	041	-001 +021	41	-07.7					
033	070	49	263	140	+009 +072	4724	-06.7	01.124	01.503	327	257	140	+016 +070	0484.0	0600	290	035	-006 +017	26	-21.5					
035	063	48	262	144	+011 +073	4609	-09.5	01.301	01.758	326	255	133	+018 +065	0368.0	0800	275	044	-002 +023	34	-34.9					
039	061	47	258	136	+015 +069	4365	-15.3	01.783	02.463	322	253	133	+019 +063	0273.0	1000	278	037	-003 +019		-50.0					
042	059	46	255	133	+018 +065	4304	-14.9	01.931	02.664	322	256	125	+016 +062	0200.0	1200	271	056	-001 +029		-61.0					
044	055	45	253	133	+020 +065	4191	-20.0	02.241	03.154	319	261	117	+010 +059	0144.0	1400	278	046	-003 +023		-69.7					
047	051	44	252	133	+021 +064	4014	-25.3	02.845	04.088	316	262	109	+007 +055	0105.0	1600	280	036	-003 +018		-63.4					
050	049	43	256	129	+016 +062	3962	-22.8	03.052	04.343	317	261	101	+007 +052	0076.0	1800	251	027	+005 +013		-61.7					
054	047	42	261	117	+010 +059	3877	-27.0	03.426	04.958	315	261	098	+007 +049	0055.0	2000	273	020	-001 +010		-58.6					
058	042	41	260	113	+009 +057	3712	-29.4	04.301	06.285	313	262	086	+005 +043	0040.4	2200	231	016	+005 +006		-55.6					
062	037	40	262	105	+007 +054	3676	-34.9	04.485	06.706	310	262	082	+005 +042	0029.5	2400	255	020	+002 +010		-52.6					
067	035	39	261	098	+007 +050	3606	-38.3	05.000	07.583	307	265	078	+003 +040	0021.8	2600	250	035	+006 +017		-51.4					
072	032	38	260	090	+007 +046	3533	-35.0	05.549	08.299	309	265	078	+004 +039	0016.0	2800	248	041	+008 +020		-51.0					
078	029	37	262	086	+005 +043	3484	-40.6	05.953	09.119	306	262	078	+005 +039	0011.8	3000	250	050	+009 +024		-50.5					
083	025	36	265	078	+003 +040	3432	-38.8	06.419	09.756	307	262	074	+006 +038	0008.7	3200	264	069	+004 +035		-47.7					
090	025	35	262	078	+005 +039	3225	-41.0	08.665	13.294	306	258	070	+008 +036												
097	025	34	258	074	+007 +038	3158	-40.0	09.551	14.592	306	257	068	+008 +034												
104	024	33	258	074	+008 +037	3057	-48.6	11.089	17.590	301	256	065	+008 +032												
112	022	32	258	070	+008 +035	3018	-50.9	11.764	18.854	299	257	063	+007 +031												
121	019	31	257	067	+008 +033	2914	-47.8	13.768	21.761	301	255	055	+007 +027												
130	015	30	257	061	+007 +030	2216	-53.0	39.815	64.418	298	244	022	+005 +010												
142	015	29	255	053	+007 +027	1975	-56.7																		
153	014	28	253	047	+007 +023	1838	-56.0																		
168	012	27	252	043	+007 +021																				
182	010	26	252	039	+006 +019																				
197	010	25	248	035	+007 +017																				
213	009	24	246	030	+006 +014																				
236	008	23	242	026	+006 +012																				
255	007	22	244	022	+005 +010																				
283	007	21	250	020	+003 +009																				
310	006	20	264	016	+001 +008																				
CONSTANT PRESSURE LEVEL DATA																									
(HEIGHT IN GEOPOTENTIAL METERS)																									
			2062	-55.3	50+000	81.750	296	257	018	+002 +009															
			2468	-51.2	30+000	48.344	299	250	034	+006 +016															
			2735	-49.1	20+000	31.967	300	253	048	+007 +023															
			3113	-42.5	10+000	15.678	305	256	068	+008 +033															
			3360	-39.4	07+000	10.463	307	261	076	+006 +038															
			3585	-38.3	05+000	07.593	308	265	090	+006 +040															
			4238	-16.0	02+000	02.774	322	256	126	+015 +061															
			4780	-07.1	01+000	01.340	327	260	140	+012 +070															

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2062	-55.3	50.000	81.750	296	257	018	+002 +009
2468	-51.2	30.000	48.344	299	250	034	+006 +016
2735	-49.1	20.000	31.967	300	253	048	+007 +023
3113	-42.5	10.000	15.468	305	256	068	+008 +033
3360	-39.4	07.000	10.673	307	261	076	+006 +038
3585	-38.3	05.000	07.583	308	266	080	+003 +040
4230	-16.0	02.000	02.774	322	256	126	+015 +061
4780	-07.1	01.000	01.340	327	260	140	+012 +070

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 095 DEG. AZIMUTH 75.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 7 SECONDS 5,182 METERS ALTITUDE
MOTOR TRACK DROPPED.. 128 SECONDS 54,376 METERS ALTITUDE
PAYLOAD ACQUISITION.. 128 SECONDS 54,376 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2,160 SECONDS 18,288 METERS ALTITUDE
APOGEE.. 122 SECONDS 54,590 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-18
TELEMETRY FREQUENCY.. 1680 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 157 SEC. 47,570 METERS ALTITUDE
TO 2,160 SEC. 18,288 METERS ALTITUDE

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE 72.0 MB
ALTITUDE 18,380 METERS
TEMPERATURE -61.1 DEG. C

RADIOSONDE AND BALLOON DATA

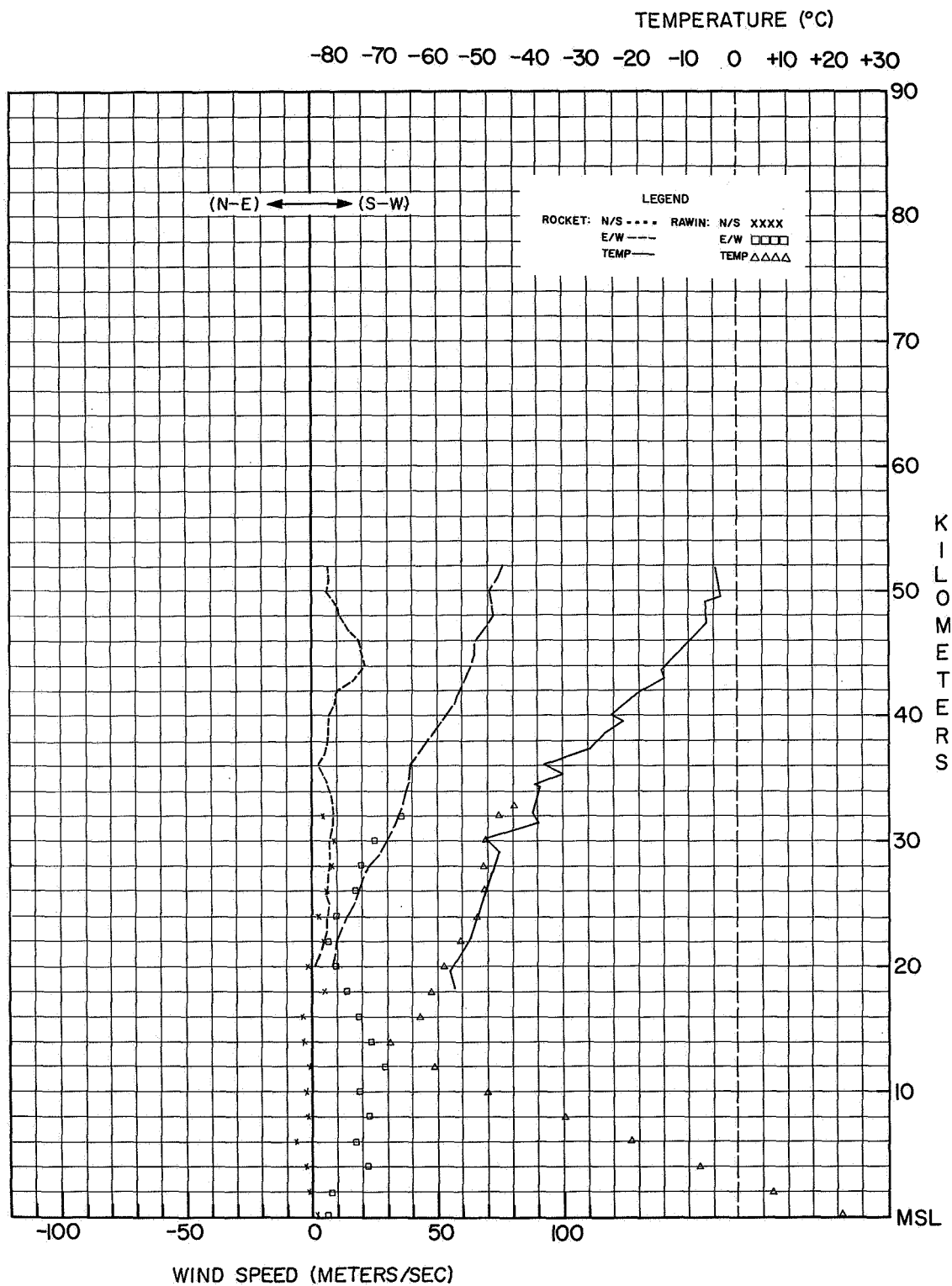
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1A
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,200 GRAMS
ASCENSION RATES.. SFC-400 MB 278 M/MINUTE
400 MB-TOP 364 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1025.0 MB
TEMPERATURE.. 21.1 DEG. C
RELATIVE HUMIDITY.. 29%
VISIBILITY.. 10 KM
SURFACE WIND.. 250 DEG. 12 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. NONE
MIDDLE.. 6 OCTAS/AC
HIGH.. 2 OCTAS/CI
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

100 FT. 270 DEG/09 KTS, 150 FT. 273 DEG/09 KTS,
200 FT. 275 DEG/09 KTS, 250 FT. 270 DEG/09 KTS,



STATION: (NASA)Wallops Is., VA.
DATE: 4 NOV 1965

ROCKET TIME: 1411 LST 1911 GCT
ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE, ROCKET RAWINSONDE
(NASA) WALLOPS ISLAND, VIRGINIA Z LAUNCH TIME Z RELEASE TIME Z
72402 37° 51' N 75° 29' W ALT. 3 M NOVEMBER 8, 1965 1905 1709

TABULATED DATA

ROCKET WINDS						ROCKET THERMODYNAMICS										RAWINSONDE										RH	TEMP
TIME	FALL	ALT	POLAR	WIND	COMPONENTS	ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR	WIND	COMPONENTS	PRESSURE	ALT	POLAR	WIND	COMPONENTS									
TENTHS	VEL																		TENS	DEG	OF	DEG	MB	G M	OF	DEG	KTS
OF A		KM		KTS	MPS	METERS				M/S					METERS												
MINUTE	M/S		DEG		E-W																						
029	080	54	258	194	+021	+098								1019.0	0000	160	006	+003	-001	77	+15.6						
031	080	53	255	213	+028	+106								0802.0	0200	248	018	+003	+009	63	+04.8						
033	071	52	253	196	+030	+097								0623.0	0400	260	031	+003	+016	31	-07.1						
036	067	51	254	192	+028	+095								0479.0	0600	258	046	+005	+024	18	-19.8						
038	065	50	255	191	+026	+095								0364.0	0800	268	051	+001	+027	30	-34.1						
041	061	49	255	180	+025	+090								0271.0	1000	267	061	+002	+032		-49.4						
044	061	48	256	178	+022	+089								0197.0	1200	274	066	-002	+034		-59.5						
047	053	47	258	178	+020	+090								0143.0	1400	280	076	-007	+039		-62.0						
050	053	46	260	176	+016	+090								0104.0	1600	286	057	-008	+029		-65.1						
053	051	45	264	171	+010	+088								0074.5	1800	278	048	-003	+025		-62.9						
057	043	44	266	173	+006	+089								0054.0	2000	246	036	+008	+017		-60.0						
061	041	43	266	167	+005	+086								0039.3	2200	252	043	+007	+022		-56.4						
065	038	42	266	156	+006	+080								0028.3	2400	255	048	+006	+024		-51.0						
070	033	41	267	148	+004	+076								0021.2	2600	237	081	+023	+036		-46.0						
075	032	40	266	140	+005	+072								0015.8	2800	237	080	+023	+035		-47.8						
080	030	39	265	123	+005	+063								0011.8	3000	248	086	+017	+042		-49.3						
086	029	38	263	112	+007	+058								0008.6	3200	261	101	+008	+052		-48.5						
092	026	37	260	103	+010	+053																					
098	025	36	255	097	+013	+049																					
105	022	35	254	085	+012	+042																					
113	022	34	253	096	+015	+048																					
120	022	33	256	098	+012	+049																					
129	018	32	251	092	+016	+045																					
139	016	31	247	093	+019	+044																					
150	015	30	240	080	+021	+036																					
162	013	29	236	072	+021	+031																					
173	013	28	236	070	+020	+030																					

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. POOR (SEE REMARKS)
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 086 DEG. AZIMUTH 77.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 9 SECONDS 1,707 METERS ALTITUDE
MOTOR TRACK DROPPED.. 128 SECONDS 57,729 METERS ALTITUDE
PAYLOAD ACQUISITION.. 128 SECONDS 57,729 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1,080 SECONDS 27,432 METERS ALTITUDE
APOGEE.. 126 SECONDS 57,912 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1B
TELEMETRY FREQUENCY.. 1680 MHZ
TELEMETRY QUALITY.. POOR (SEE REMARKS)
TELEMETRY DATA RECEIVED FROM.. N.A.

REMARKS

NO SIGNAL RECEIVED. OPEN THERMISTOR, NO
TEMPERATURE DATA.
THERMODYNAMICS BASE DATA.. PRESSURE N.A.
ALTITUDE N.A.
TEMPERATURE N.A.

RADIOSONDE AND BALLOON DATA

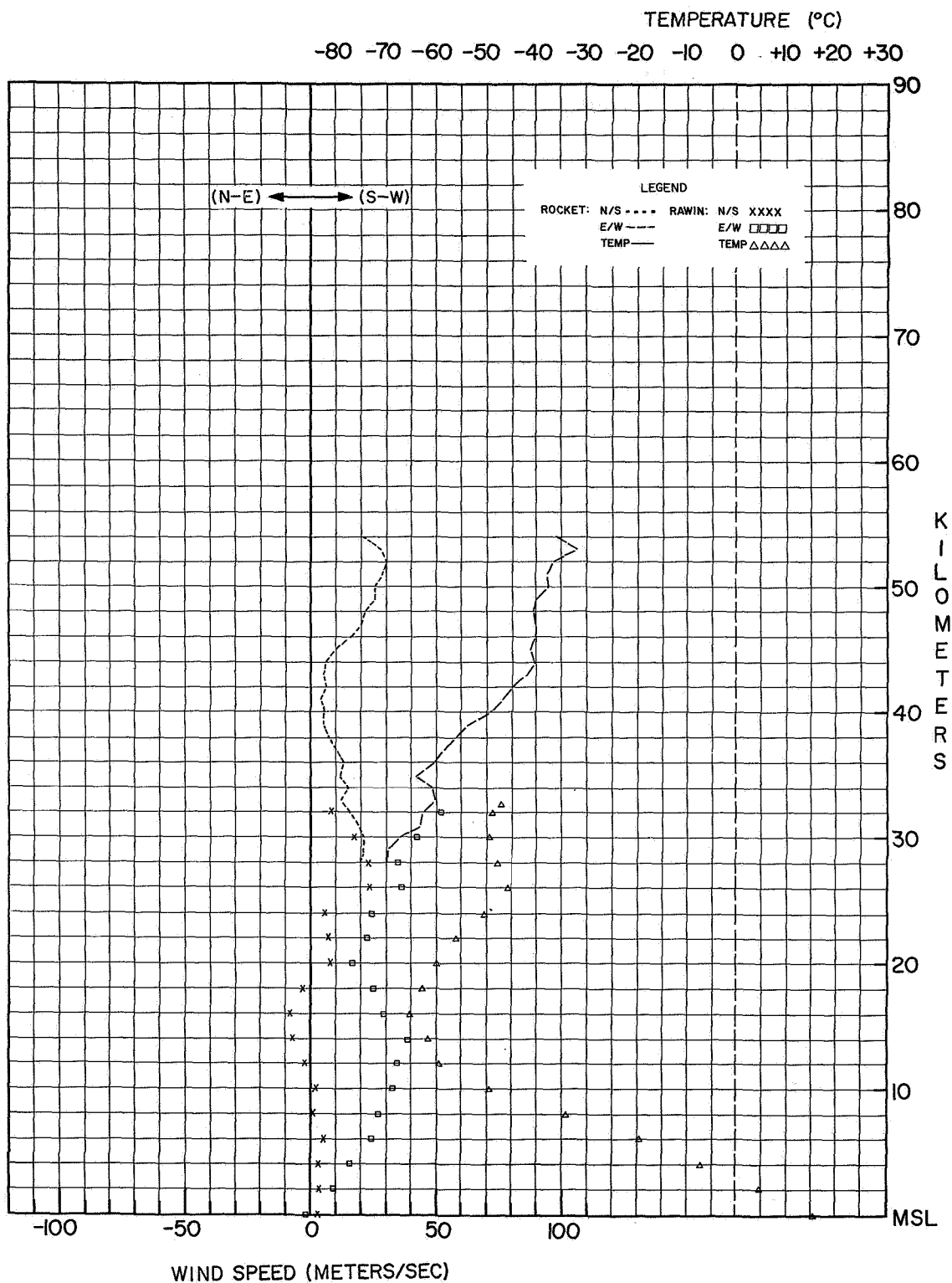
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,100 GRAMS
ASCENSION RATES.. SFC-400 MB 290 M/MINUTE
400 MB-TOP 379 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1019.0 MB
TEMPERATURE.. 15.6 DEG. C
RELATIVE HUMIDITY.. 77 %
VISIBILITY.. 8 KM
SURFACE WIND.. 160 DEG. 6 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. NONE
MIDDLE.. 2 OCTAS/AC
HIGH.. 7 OCTAS/CI

WIND AT ROCKET

TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE
LAUNCH
100 FT. 199 DEG/11 KTS, 150 FT. 199 DEG/14 KTS,
200 FT. 197 DEG/12 KTS, 250 FT. 192 DEG/12 KTS



STATION: (NASA)Wallops IS., VA.

DATE: 8 NOV 1965

ROCKET TIME: 1405 LST 19056CT

ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A

RADIOSONDE TYPE: 1680 MHZ

RP	STATION NAME	DATE	ROCKET LAUNCH TIME	RAWINSONDE RELEASE TIME
	(NASA) Wallops Island, Virginia	Z	Z	Z
72402	37° 51' N 75° 29' W ALT. 3 M	NOVEMBER 8, 1965	2013	1709

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	WIND				ALT	TEMP	PRESSURE	DENSITY	SPEED	WIND				PRESSURE	ALT	WIND				RH	TEMP			
TENTHS	VEL		POLAR	COMPONENTS			TENS	DEG	MB		OF	POLAR	COMPONENTS			TENS	POLAR	COMPONENTS		%	DEG					
OF A	M/S	KM	DEG	KTS	N-S	E-W	OF METERS	DEG C		G M	S/ND	DEG	KTS	N-S	E-W	MB	METERS	DEG	KTS	N-S	E-W		C			
MINUTE											M/S															
029	111	58	269	274	+002	+141	5904	-14.8	00.225	00.310	322					1019.0	0000	160	006	+003	-001	77	+15.6			
031	105	57	269	238	+003	+123	5686	-15.0	00.299	00.412	322	269	237	+003	+122	0802.0	0200	248	018	+003	+009	63	+04.8			
032	091	56	268	218	+004	+112	5614	-11.7	00.328	00.447	324	268	222	+004	+114	0623.0	0400	260	031	+003	+016	31	-07.1			
034	091	55	265	225	+010	+115	5154	-11.4	00.592	00.805	324	257	194	+023	+098	0479.0	0600	258	046	+005	+024	18	-19.8			
036	080	54	263	232	+014	+118	4852	-16.6	00.876	01.216	321	258	189	+020	+095	0364.0	0800	268	051	+001	+027	30	-34.1			
038	080	53	261	202	+017	+103	4581	-11.5	01.246	01.696	324	258	172	+019	+087	0271.0	1000	267	061	+002	+032		-49.4			
040	074	52	257	198	+023	+099	4490	-15.6	01.402	01.939	322	263	174	+011	+089	0197.0	1200	274	066	-002	+034		-59.5			
043	067	51	257	190	+022	+096	4362	-16.7	01.658	02.303	321	269	168	+002	+086	0143.0	1400	280	076	-007	+039		-62.0			
045	069	50	258	189	+020	+095	4139	-21.3	02.228	03.152	318	267	145	+004	+075	0104.0	1600	286	057	-008	+029		-65.1			
048	063	49	259	189	+019	+095	4054	-26.3	02.500	03.607	315	267	144	+004	+074	0074.5	1800	278	048	-003	+025		-62.9			
050	059	48	257	190	+022	+095	3667	-43.7	04.326	06.716	304	260	102	+009	+052	0054.0	2000	246	036	+008	+017		-60.0			
052	057	47	259	186	+019	+094	3587	-43.7	04.867	07.555	304	258	096	+010	+048	0039.3	2200	252	043	+007	+022		-56.4			
056	050	46	256	178	+021	+087	3514	-48.2	05.425	08.590	301	256	094	+012	+047	0028.3	2400	255	048	+006	+024		-51.0			
060	047	45	262	174	+012	+089	3222	-50.4	08.431	13.482	299	248	088	+017	+042	0021.2	2600	237	081	+023	+036		-46.0			
062	047	44	268	172	+003	+089	3191	-46.4	08.834	13.877	302	247	090	+018	+042	0015.8	2800	237	080	+023	+035		-47.8			
067	043	43	269	158	+001	+081	3149	-48.3	09.408	14.903	301	245	088	+019	+041	0011.8	3000	248	086	+017	+042		-49.3			
071	038	42	267	150	+004	+077	3097	-45.7	10.169	15.924	302	243	088	+020	+040	0008.6	3200	261	101	+008	+052		-48.5			
076	035	41	267	144	+004	+074	2993	-44.0	11.863	18.440	304	243	082	+019	+038											
081	032	40	267	140	+004	+072	2932	-47.3	12.990	20.487	301	241	080	+020	+036											
087	032	39	266	110	+005	+057	2786	-42.0				238	078	+021	+034											
091	032	38	263	112	+007	+057	2749	-43.0				240	078	+020	+034											
097	028	37	262	106	+008	+054	2728	-48.2				240	078	+020	+034											
103	026	36	258	096	+010	+048	2643	-46.2				237	082	+022	+035											
110	022	35	256	094	+012	+047																				
118	019	34	252	094	+015	+046																				
128	018	33	252	090	+014	+044																				
137	018	32	247	090	+018	+042																				
147	017	31	244	088	+020	+040																				
157	014	30	243	082	+019	+038																				
170	013	29	240	078	+020	+035																				
182	013	28	238	078	+021	+034																				
195	012	27	240	078	+020	+034																				
210	011	26	237	082	+023	+035																				

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 080 DEG. AZIMUTH 77.0 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. UNKNOWN SECONDS 1.829 METERS ALTITUDE
MOTOR TRACK DROPPED.. 128 SECONDS 61.112 METERS ALTITUDE
PAYLOAD ACQUISITION.. 128 SECONDS 61.112 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 1.310 SECONDS 25.298 METERS ALTITUDE
APOGEE.. 128 SECONDS 61.112 METERS ALTITUDE

SENSOR AND TELEMETRY DATA

WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH HEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1B
TELEMETRY FREQUENCY.. UNKNOWN
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 167 SEC. 58,550 METERS ALTITUDE
TO 1.196 SEC. 26,700 METERS ALTITUDE

REMARKS

NONE
THERMODYNAMICS BASE DATA.. PRESSURE 15.8 MB
ALTITUDE 28,000 METERS
TEMPERATURE -47.8 DEG. C

RADIOSONDE AND BALLOON DATA

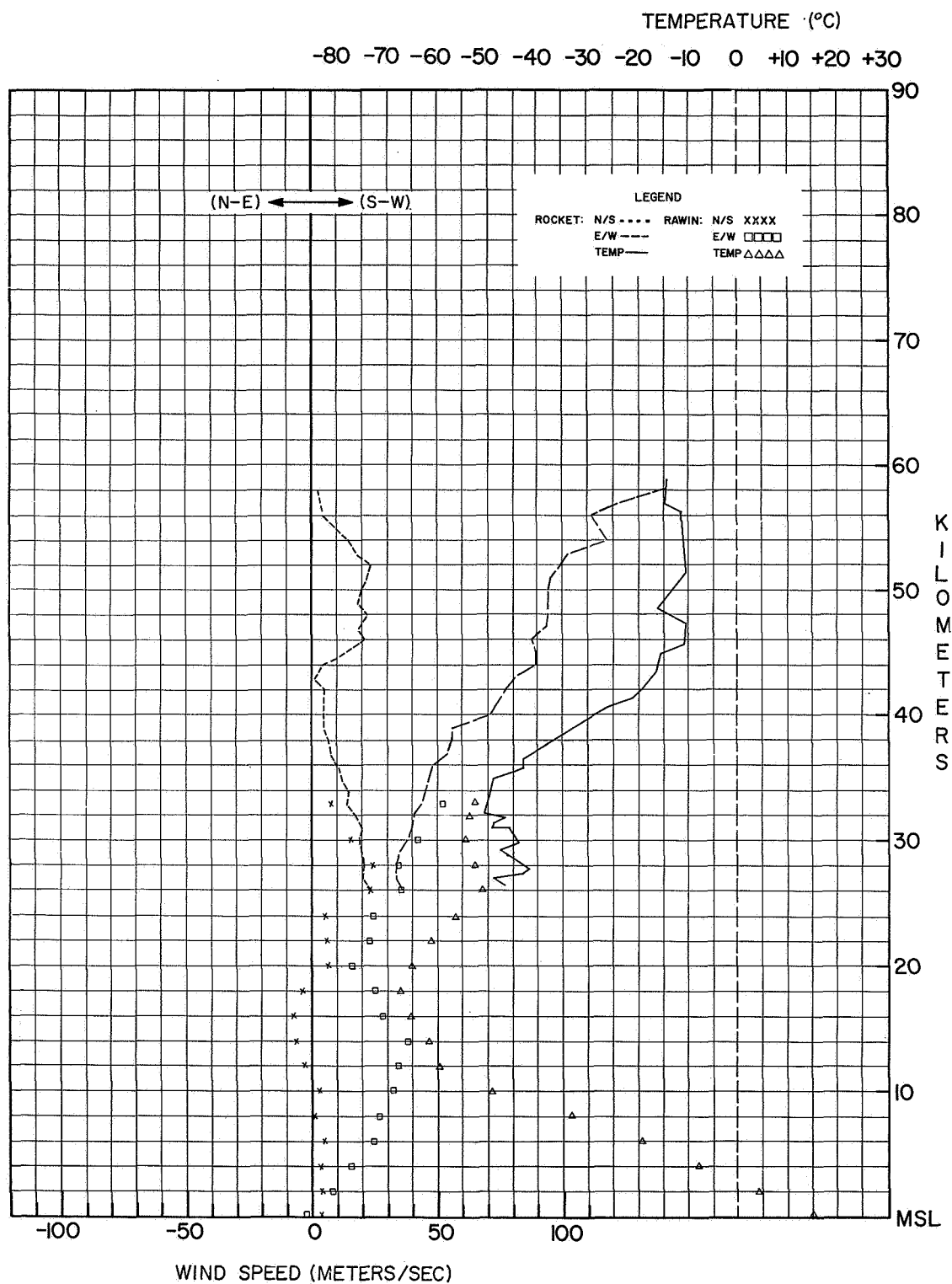
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONOMETER
GROUND EQUIPMENT TYPE.. GMD-1A
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1.100 GRAMS
ASCENSION RATES.. SFC-400 MB 290 M/MINUTE
400 MB-TOP 379 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1090.0 MB
TEMPERATURE.. 15.6 DEG. C
RELATIVE HUMIDITY.. 77%
VISIBILITY.. 8 KM
SURFACE WIND.. 160 DEG. 6 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 9 OCTAS
LOW.. NONE
MIDDLE.. 2 OCTAS/AC
HIGH.. 7 OCTAS/CI
TYPE OF PRECIPITATION.. NONE
OBSTRUCTIONS TO VISION.. NONE

WIND AT ROCKET LAUNCH

100 FT. 187 DEG/18 KTS, 150 FT. 189 DEG/18 KTS,
200 FT. 188 DEG/19 KTS, 250 FT. 186 DEG/18 KTS



STATION: (NASA)WALLOPS IS., VA.
 DATE: 8 NOV 1965

ROCKET TIME: 1513 LST 2013 GCT
 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
 RADIOSONDE TYPE: 1680 MHZ

RP STATION NAME DATE ROCKET LAUNCH TIME RAWINSONDE RELEASE TIME
(NASA) WALLOPS ISLAND, VIRGINIA Z Z Z
72402 37° 51' N 75° 29' W ALT. 3 M NOVEMBER 10, 1965 1819 1920

TABULATED DATA

ROCKET WINDS							ROCKET THERMODYNAMICS										RAWINSONDE									
TIME	FALL	ALT	POLAR		WIND		ALT	TEMP	PRESSURE	DENSITY	SPEED	POLAR		WIND		PRESSURE	ALT	POLAR	WIND	COMPONENTS		RH	TEMP			
TENTHS	VEL		DEG	KTS	N-S	E-W	TENS	DEG C	MB	G M	OF	DEG	KTS	N-S	E-W	MB	TENS	DEG	KTS	N-S	E-W	%	DEG C			
OF A	M/S	KM					METERS			-3	SOUND						OF			MPS		DEG C				
MINUTE											M/S						METERS									
033	071	50	254	207	+029	+103	5380	-11.0	00.473	00.643	325					1025.2	0000	060	010	-003	-005	59	+11.1			
035	069	49	260	189	+018	+097	4977	-03.2	00.788	01.039	329					0794.0	0200	295	022	-005	+010	64	+03.2			
037	067	48	266	178	+006	+091	4901	-05.6	00.866	01.153	328	260	189	+018	+097	0618.0	0400	257	018	+002	+009	34	-05.6			
041	059	47	268	172	+003	+089	4770	-06.0	01.022	01.362	327	266	175	+005	+090	0476.0	0600	247	031	+006	+015	66	-21.3			
043	059	46	270	168	+000	+087	4542	-15.2	01.369	01.890	322	270	171	+000	+088	0360.0	0800	247	044	+009	+021	27	-33.2			
046	050	45	269	171	+000	+088	4417	-23.4	01.616	02.304	317	269	175	+001	+090	0269.0	1000	240	058	+015	+026		-50.2			
050	050	44	269	174	+001	+090	4359	-21.3	01.747	02.470	318	269	175	+001	+090	0197.0	1200	253	050	+008	+025		-60.1			
053	049	43	270	175	+001	+091	4270	-24.6	01.969	02.822	316	269	177	+001	+091	0143.0	1400	258	065	+007	+033		-59.4			
057	043	42	271	180	+000	+093	4045	-22.3	02.668	03.789	318	276	166	-009	+085	0104.0	1600	265	065	+003	+034		-61.6			
062	039	41	274	170	-006	+088	3916	-24.6	03.176	04.552	316	277	140	-007	+072	0075.0	1800	265	050	+002	+026		-62.6			
065	036	40	278	172	-012	+083	3804	-31.8	03.706	05.470	312	270	133	-000	+068	0054.5	2000	260	041	+004	+021		-58.0			
070	038	39	275	136	-006	+070	3691	-38.5	04.351	06.604	307	266	121	+004	+062	0039.8	2200						-56.7			
074	034	38	271	131	+000	+068	3606	-42.4	04.922	07.698	305	262	111	+007	+057	0029.2	2400						-49.0			
080	030	37	266	122	+004	+063	3520	-37.6	05.575	08.430	308	255	103	+013	+053	0021.6	2600						-45.6			
085	029	36	263	110	+007	+057	3490	-41.9	05.823	08.968	305	253	105	+015	+051	0016.1	2800						-46.9			
092	026	35	255	103	+014	+052	3423	-41.9	06.422	09.891	305	250	101	+018	+047	0011.8	3000						-46.7			
098	023	34	248	096	+019	+046	3362	-47.4	07.028	11.089	301	246	094	+020	+044	0008.9	3200						-47.4			
107	022	33	241	090	+022	+040	3325	-46.9	07.428	11.694	302	245	090	+021	+042	0006.5	3400						-47.8			
113	022	32	235	083	+024	+035	3292	-49.8	07.806	12.448	300	241	090	+022	+039											
122	019	31	237	074	+021	+032	3206	-47.4	08.885	14.019	301	236	082	+024	+035											
132	016	30	239	066	+018	+030	3069	-49.4	10.920	17.383	300	237	072	+020	+031											
142	016	29	239	068	+018	+030	3039	-47.4	11.424	18.025	301	238	068	+019	+030											
152	015	28	238	067	+018	+030	2475	-45.5	26.532	41.512	303	232	057	+018	+023											
164	013	27	236	062	+018	+027	2417	-49.8	28.949	46.166	300	232	057	+018	+023											
178	012	26	234	055	+017	+023	2170	-51.7	42.192	67.862	298	256	049	+006	+024											
192	010	25	233	056	+018	+023	2051	-59.6																		
210	009	24	232	056	+018	+023	1908	-58.4																		
231	008	23	243	053	+012	+024	1829	-63.2																		
250	008	22	256	049	+006	+025	1777	-61.6																		
272	007	21	258	040	+005	+023																				
298	006	20	260	040	+004	+021																				
CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)																										
2054	-58.9	50.000	83.124	294	258	045	+005	+022																		
2388	-50.0	30.000	47.887	300	234	056	+017	+024																		
2707	-46.3	20.000	31.357	304	236	062	+018	+026																		
3115	-48.5	10.000	15.861	301	237	077	+022	+033																		
3347	-47.1	07.000	11.027	302	246	094	+020	+044																		
3575	-38.1	05.000	07.696	308	265	110	+009	+057																		
4013	-24.5	02.000	02.863	316	269	177	+002	+091																		
4742	-05.9	01.000	01.332	328	265	177	+008	+088																		

CONSTANT PRESSURE LEVEL DATA (HEIGHT IN GEOPOTENTIAL METERS)

2054	-58.9	50.000	83.124	294	258	045	+005	+022
2388	-50.0	30.000	47.887	300	234	056	+017	+024
2707	-46.3	20.000	31.357	304	236	062	+018	+026
3115	-48.5	10.000	15.861	301	237	077	+022	+033
3347	-47.1	07.000	11.027	302	246	094	+020	+044
3575	-38.1	05.000	07.696	308	261	110	+009	+057
4013	-24.5	02.000	02.863	316	269	177	+002	+091
4742	-05.9	01.000	01.332	328	265	177	+008	+088

TECHNICAL DATA

VEHICLE DATA

MOTOR TYPE.. ARCAS
MOTOR PERFORMANCE.. GOOD
PAYLOAD TYPE.. ARCASONDE-1A
PAYLOAD PERFORMANCE.. GOOD
FUSE TYPE.. GAS GENERATED SEPARATION DEVICE
FUSE DELAY TIME.. PREDICTED.. 100 SEC. ACTUAL.. UNKNOWN
TYPE OF LAUNCHER.. ARCAS WITH GAS GENERATOR
LAUNCHER SETTING.. 122 DEG. AZIMUTH 82.5 DEG. ELEVATION

RADAR DATA

RADAR TYPE.. FPS-16
MOTOR ACQUISITION.. 9 SECONDS 1.341 METERS ALTITUDE
MOTOR TRACK DROPPED.. 128 SECONDS 55.535 METERS ALTITUDE
PAYLOAD ACQUISITION.. 128 SECONDS 55.535 METERS ALTITUDE
PAYLOAD TRACK DROPPED.. 2.160 SECONDS 17.678 METERS ALTITUDE
APOGEE.. 125 SECONDS 55.778 METERS ALTITUDE
WIND SENSOR.. 15 FT. DIAMETER PARACHUTE
TEMPERATURE SENSOR.. 0.010 INCH BEAD THERMISTOR
SENSOR FALL RATE.. NOMINAL
GROUND EQUIPMENT TYPE.. GMD-1B
TELEMETRY FREQUENCY.. 1680 MHZ
TELEMETRY QUALITY.. GOOD
TELEMETRY DATA RECEIVED FROM.. 150 SEC. 53.550 METERS ALTITUDE
TO 2.160 SEC. 17.678 METERS ALTITUDE

REMARKS

MISSING WINDS ABOVE 20,000 METERS ON RAWINSONDE
DUE TO LIMITING ANGLES.
THERMODYNAMICS BASE DATA.. PRESSURE 50.0 MB
ALTITUDE 20,610 METERS
TEMPERATURE -58.9 DEG. C

RADIOSONDE AND BALLOON DATA

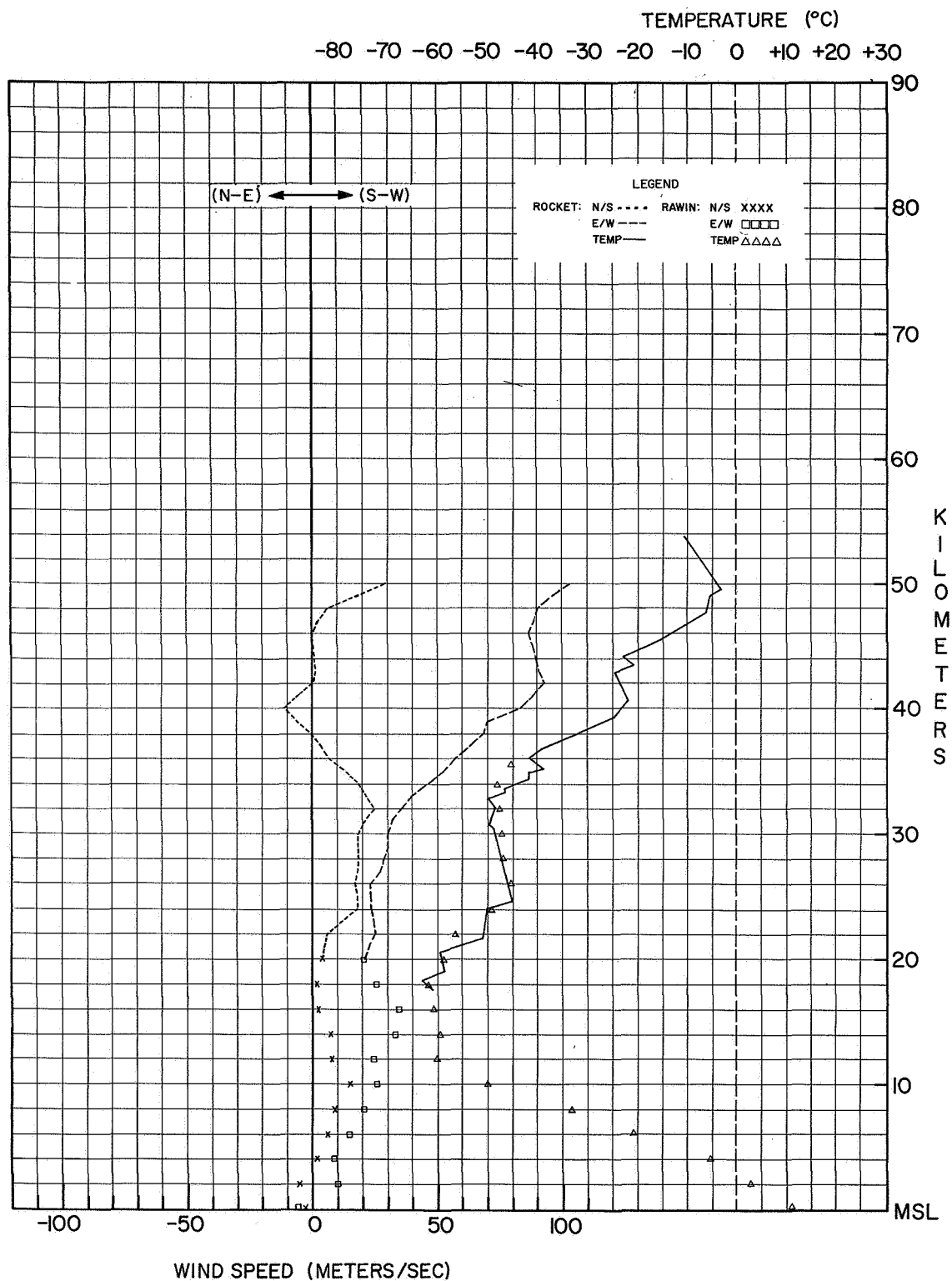
RADIOSONDE MANUFACTURER.. MOLDED INSULATION CO.
RADIOSONDE TYPE.. 1680 MHZ
TEMPERATURE ELEMENT TYPE.. ROD THERMISTOR
PRESSURE SENSOR TYPE.. ANEROID AND HYPSONETER
GROUND EQUIPMENT TYPE.. GMD-1B
BALLOON TYPE.. NEOPRENE
BALLOON SIZE.. 1,200 GRAMS
FREE LIFT.. 1,400 GRAMS
ASCENSION RATES.. SFC-400 MB 285 M/MINUTE
400 MB-TOP 331 M/MINUTE

WEATHER OBSERVATION AT RAWINSONDE RELEASE

STATION PRESSURE.. 1025.2 MB
TEMPERATURE.. 11.1 DEG. C
RELATIVE HUMIDITY.. 59%
VISIBILITY.. 6 KM
SURFACE WIND.. 60 DEG. 10 KTS
CLOUD TYPE AND AMOUNT.. TOTAL.. 8 OCTAS
LOW.. 6 OCTAS/CU
MIDDLE.. 2 OCTAS/AC
HIGH.. NONE

WIND AT ROCKET

LAUNCH
100 FT. 069 DEG/13 KTS; 150 FT. 061 DEG/14 KTS;
200 FT. 061 DEG/14 KTS; 250 FT. 060 DEG/16 KTS



STATION: (NASA)WALLOPS IS.,VA.
 DATE: 10 NOV 1965

ROCKET TIME: 1319 LST 1819 GCT
 ROCKET MOTOR TYPE: ARCAS

PAYLOAD TYPE: Arcasonde-1A
 RADIOSONDE TYPE: 1680 MHZ

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

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— NATIONAL AERONAUTICS AND SPACE ACT OF 1958

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