UNCLASSIFIED

AD NUMBER

AD852134

NEW LIMITATION CHANGE

TO

Approved for public release, distribution unlimited

FROM

Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; MAR 1969. Other requests shall be referred to Army Atmospheric Sciences Office, White Sands Missile Range, NM. Export Control.

AUTHORITY

usaec notice, 13 sep 1971

THIS PAGE IS UNCLASSIFIED

THIS DOCUMENT IS SUBJECT TO SPECIAL EXPORT CONTROLS AND EACH TRANSMITTAL TO FOREIGN GOVERNMENTS OR FOREIGN NATIONALS MAY BE MADE ONLY WITH PRIOR APPROVAL OF ATMOSPHERIC SCIENCES OFFICE, WHITE SANDS MISSILE RANGE, NEW MEXICO.

DR-421
MARCH 1969

AD

AD852134

WHITE SANDS MISSILE RANGE

CLIMATE CALENDAR

BY

PAUL H. TAFT

A

ATMOSPHERIC SCIENCES OFFICE
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM
UNITED STATES ARMY ELECTRONICS COMMAND

35

WHITE SANDS MISSILE RANGE

CLIMATE CALENDAR

BY

PAUL H. TAFT

DR-421

REVISED, APRIL 1969

DA Task 1T665702D127-02

ATMOSPHERIC SCIENCES OFFICE
WHITE SANDS MISSILE RANGE, NEW MEXICO

ABSTRACT

This is the fourth edition of the White Sands Missile Range Climate Calendar, which was first published in May, 1963.

Mean daily maximum and minimum temperatures, and extreme temperatures for the period of record (1950-1968) are tabulated in calendar form for "A" Station, the weather center located at Headquarters, White Sands Missile Range, New Mexico. Averages of temperature, relative humidity, wind and cloudiness are included for each month, as well as maximum 24-hour and monthly rainfall.

Supplementary tables give monthly, seasonal and annual values of maximum winds, degree days, solar radiation, means and extremes of station pressure, the greatest monthly and single-storm snowfall, and the average six-hourly temperatures and relative humidities. Also included are the average number of days with the occurrence of precipitation, distant lightning, thunderstorms and visibility restrictions, as well as a summary of weather extremes for the State of New Mexico. Presented in graph form are weekly means of maximum and minimum temperatures, weekly values of precipitation, mean hourly and monthly wind speeds with prevailing directions, and average hourly variations from the mean station pressure.

CONTENTS

PAGE

ABSTRACT ---------- iii

INTRODUCTION ---------- 1

DISCUSSION ---------- 2

CLIMATE CALENDAR ---------- 10

REFERENCES ---------- 29

FIGURES

1. Weather Stations, White Sands Missile Range and Vicinity ---------- 8

2. Topographic Cross Sections, White Sands Missile Range ---------- 9

3. Smoothed Weekly Means of Maximum and Minimum Temperature, 1950-1968, "A" Station, WSMR ---------- 25

4. Smoothed Weekly Precipitation Means, 1950-1968, "A" Station, WSMR ---------- 26

5a. Mean Hourly Wind Speeds and Prevailing Direction, 1948-1960, "A" Station, WSMR ---------- 27

5b. Average Monthly Wind Speeds and Prevailing Directions With Strongest Gusts, 1950-1968, "A" Station ---------- 27

6. Diurnal Pressure Variations, 1948-1960, "A" Station ---------- 28

TABLES

I. Temperatures During Coldest Months, "A" Station ---------- 4

II. Temperatures During Warmest Months, "A" Station ---------- 4

III. Precipitation Extremes, WSMR and Vicinity ---------- 5

IV. New Minimum Temperature Records in Southern New Mexico Due to Severe Cold Spell of 10-11 January 1962 ---------- 6

V. New Mexico Temperature Extremes by Months ---------- 7

CONTENTS (CONT)

PAGE

VI. New Mexico Rainfall and Snowfall Extremes ---------- 7

VII. Monthly and Annual Climatological Data, "A" Station ------- 22

VIII. "A" Station Climatography--Seasonal Values, 1950-1968 ---- 23

IX. "A" Station 6-Hourly Mean Temperatures, 1948-1968 -------- 24

INTRODUCTION

The weather site designated as "A" Station is in the Headquarters area of White Sands Missile Range (WSMR). Its geographic coordinates are 32° 22.7' North and 106° 28.8' West (Fig. 1). The elevation of the Station Barometer is 4,238.4 feet above sea level. The climatological data in this report are for a period of 19 years, 1950 through 1968, unless otherwise indicated. (Daily temperature means and extremes only have been computed through February, 1969.) The station was initially operated by the Air Force, but since April 1961 it has been manned by U. S. Army personnel.

Temperature, wind, precipitation and relative humidity are measured with instruments mounted on the roof of the weather station building, No. 1510. (The elevation of the floor of the instrument shelter is 4252 feet.) However, since May 1955 wind measurements have been made by an Aerovane mounted on a 13-foot mast 0.5 mile west—279°—from the station, (elevation of Aerovane, 4,304.05 feet) with indicators and recorders for wind speed and direction installed in the weather station building.

Temperature extremes are the highest (maximum) and the lowest (minimum) temperatures which have occurred for each day of the year for the period of record. Temperatures are given in degrees Fahrenheit, wind speeds are in knots, and rainfall and snowfall are reported in inches. Daily temperature means were smoothed after comparison with weekly and monthly averages. (Fig. 3 and 4.)

The data in this report are considered to be representative of the Headquarters area. However, due to the great extent and extreme variations in elevation and topography of WSMR (4,000 square miles, from dry lake beds—"playas"—at 3,900 feet to mountain peaks near 9,000 feet, Fig. 1 and 2) conditions in other parts of the range may vary widely. For example, the record low temperature for this station is 6° below zero, while at White Sands National Monument it is 25° below zero, and both of these records occurred on the same date—11 January 1962. (See Table IV.) Also, severe local thunderstorms may produce torrential rainfall in a comparatively small area with little or no rainfall a few miles distant. On 4 July 1961, 1.80" of rain fell in 48 minutes at "A" Station and the 24-hour total was 2.31", while at Orogrande [1], 24 miles east, the total rainfall for that day was only 0.02".

The greatest 24-hour rainfall of record on the Range occurred at White Sands National Monument [2] on 21-22 September 1941, with a fall of 5.30". Of this amount, 4.28" fell in five hours—1430-1930 MST, 21 September. This, however, was a general storm, with rainfall totals at a few other stations on or near WSMR as follows: [2 & 3] Alamogordo, 2.60"; El Paso Airport, 3.42"; Las Cruces, 4.61"; Orogrande, 3.27", Tularosa, 4.75". The greatest 24-hour rainfall of record at "A" Station is 4.25", which fell on 23-24 August 1959. (See Table III.)

DISCUSSION

COLD SEASON (NOVEMBER-APRIL) WEATHER

December and January are coldest months, with identical mean temperatures. (See Table I.) February averages nearly 3° warmer, but it has the same low temperature record as December. The record low temperature, (-6°) occurred on 11 January 1962, when absolute record minima were established at most stations in southern New Mexico, during an extremely severe cold spell. (See Table IV.)

The average number of days with minimum temperatures at or below freezing is 38, and with 20° or less is only three. The earliest date of the last freezing temperature in spring occurred on 14 February 1950 (see Table VIII), while the earliest date of a 90° temperature was 14 April 1963. The record high temperature for the cold season—94°—was recorded on 22 April 1965. The average date of the last freezing temperature in the Spring is 14 March, and of the first freeze in the Fall is 20 November.

Mean maximum and minimum temperatures for April are within 0.2° of the annual means. A comparison of "A" Station with 141 Weather Bureau Climatological stations in New Mexico [4], shows that the mean minimum temperature of "A" Station for the coldest month (34.3°) is 0.4° higher than that of Carlsbad Caverns, which has the highest winter month minimum temperatures of any of the New Mexico Weather Bureau stations.

Only 30% of the annual rainfall occurs during the cold season, and April (the second driest month) and November (the third driest) altogether account for only 7% of the annual total. This 6-month period averages only three days with the occurrence of thunderstorms out of the annual total of 44 days. The three coldest months receive 77% of the annual snowfall total of 5.9 inches.

April, the windiest month of the year, has an average hourly wind speed of 8.5 knots. Visibility is reduced to 6 miles or less (by fog, snow, blowing dust, etc.) on an average of 23 days during this season. Five of these days occur in March and four in April, while the total for the year is 39 days. (See Table VII.)

WARM SEASON (MAY-OCTOBER) WEATHER

Although June and July are the warmest months, August is only slightly cooler (see Table II). The average number of days with a temperature of 100° or more is only 7, three each in June and July, and one in August. Only in occasional years do such high temperatures occur in May, and none have been recorded in September at this station. The greatest number of successive days with 100° or more is 8, from 26 June to 3 July 1960. However, 18 successive days with 99° or more occurred from 24 June to 11 July 1951. It was during these two periods that the absolute record high temperature of 106° occurred four times.

Maximum temperatures at Desert Station (near Army Block House) average about 1.2° higher than at "A" Station during the summer months, so that 100° temperatures can be expected in that area on an average of about 12 days each summer. At Orogrande, about 24 miles east of WSMR Headquarters, summer temperatures average about four degrees higher than at this station, and the absolute record high temperature for Orogrande--116°--equals the record high temperature for the entire state of New Mexico. (See Table V).

The lowest maximum temperature of occurrence for any year was in 1959 when 99° was recorded only twice. The average number of days with maximum temperatures of 90° or more is 84, sixty-seven of which occur during the three warmest months. The earliest date of a 95° reading was 11 May 1962, and the average date is 2 June. The latest occurrence of 95° in late summer was on 27 September 1951, and the average date is 4 September, while there are thirty-six days per year when a maximum of 95° or more is recorded. October mean temperatures are within two degrees of the annual means.

May (the driest month) and June are, on the average, quite dry. Collectively, they contribute only 11% of the total annual rainfall. July, August and September, the wettest months of the year, account for 50% of the average annual rainfall of 10.32", and for 66% of the thunderstorms. Seventy percent of the annual rainfall occurs during the warm season and all but three of the 44 days with thunderstorms. The greatest monthly rainfall of record at this station--7.42"--occurred in June, 1966. The driest year of record was 1956, with a rainfall total of only 3.92", (Table III).

October, with an average hourly wind speed of 4.6 knots, is the least windy month of the year, while the annual average is 6.1 knots. The prevailing wind direction for 11 of the 12 months is west, but for July it is southeast. Visibility of 6 miles or less occurs on 16 days during the warm season.

COLDEST PERIODS	TEMPERATURES (° F)				
	MEAN MAX	MEAN MIN	MEAN	HIGH-EST	LOW-EST
MONTH OF DECEMBER	55.7	34.4	45.1	77	8
MONTH OF JANUARY	55.9	34.3	45.1	73	-6
MONTH OF FEBRUARY	59.9	37.6	48.8	81	8
COLDEST 30 DAYS, 12/20 to 1/18	54.3	32.6	43.5	73	-6
COLDEST 15 DAYS, 1/3 to 1/17	54.1	32.2	43.2	73	-6
COLDEST 7 DAYS, 1/8 to 1/14	53.7	32.0	42.9	73	-6

TABLE I. TEMPERATURES DURING COLDEST MONTHS, "A" STATION

WARMEST PERIODS	TEMPERATURES (° F)				
	MEAN MAX	MEAN MIN	MEAN	HIGH-EST	LOW-EST
MONTH OF JUNE	92.9	69.2	81.1	106	50
MONTH OF JULY	93.2	70.5	82.0	106	59
MONTH OF AUGUST	91.1	68.9	80.0	102	55
WARMEST 30 DAYS, 6/18 to 7/17	94.4	71.0	82.7	106	59
WARMEST 15 DAYS, 6/19 to 7/3	95.2	71.5	83.4	106	59
WARMEST 7 DAYS, 6/22 to 6/28	95.5	72.2	83.9	106	62

TABLE II. TEMPERATURES DURING WARMEST MONTHS, "A" STATION

The following tabulations show the precipitation extremes (greatest and least) of record for White Sands Missile Range and vicinity:

PRECIPITATION EXTREMES, "A" STATION, WHITE SANDS MISSILE RANGE

0.38 inch	8 minutes	1412-1420MST, 27 July 1965
1.80 inch	48 minutes	1530-1618MST, 4 July 1961
2.92 inches	2½ hours	0050-0320MST, 24 August, 1959
3.17 inches	6 hours	2245-0445MST, 23-24 August, 1959
3.72 inches	12 hours	1645-0445MST, 23-24 August, 1959
4.25 inches	24 hours	2210-1925MST, 23-24 August, 1959

Greatest annual rainfall:	20.02 inches in 1958.
Least annual rainfall:	3.92 inches in 1956.
Longest dry spell (no measureable rainfall):	123 days, 2/11-6/11, 1956.
Second longest dry spell:	80 days, 10/8-12/26, 1954.
Greatest seasonal snowfall:	24.5 inches, 1967-1968.
Greatest annual snowfall:	18.5 inches, 1960.

HEAVIEST RAINFALL OF RECORD, WHITE SANDS NATIONAL MONUMENT [3]

0.95 inch	30 minutes	4.28 inches	5 hours
1.50 inch	1 hour	4.40 inches	6 hours
2.50 inches	2 hours	5.17 inches	12 hours
3.50 inches	3 hours	5.30 inches	24 hours, 9/21-22/41

PRECIPITATION EXTREMES, NEW MEXICO STATE UNIVERSITY, LAS CRUCES [8]

Extremely heavy rainfall occurred at the University station from 11:05pm 29 Aug. to 7:00am 30 Aug., 1935, measured as follows:

0.64 inch	5 minutes	2.77 inches	60 minutes
1.06 inch	10 minutes	4.15 inches	2 hours
1.50 inch	15 minutes	4.77 inches	3 hours
1.86 inch	20 minutes	5.91 inches	4 hours
2.48 inches	30 minutes	6.46 inches	7 hours 55 minutes

Greatest 24-hour rainfall:	6.49 inches, 29-30 August, 1935
Greatest monthly rainfall:	7.53 inches, September, 1941

WETTEST AND DRIEST YEARS, NEW MEXICO STATE UNIVERSITY

15.05 inches in 1881, La Mesilla	13.26 inches in 1931, NMSU
17.09 inches in 1905, NMSU	19.60 inches in 1941, NMSU
14.35 inches in 1926, NMSU	14.01 inches in 1958, NMSU
3.61 inches in 1860, Ft. Fillmore	4.02 inches in 1910, NMSU
3.49 inches in 1873, Ft. Selden	3.81 inches in 1953, NMSU
4.47 inches in 1892, NMSU	3.62 inches in 1964, NMSU

HEAVIEST SNOWFALL OF RECORD, NEW MEXICO STATE UNIVERSITY

	Greatest Monthly	Greatest 24-hours
January	4.7 inches in 1947	4.7 inches in 1947
February	10.4 inches in 1956	9.0 inches in 1956
March	2.7 inches in 1944	2.7 inches in 1944
November	5.0 inches in 1957	5.0 inches in 1957
December	10.3 inches in 1931	9.0 inches in 1931

TABLE III. PRECIPITATION EXTREMES, WSMR AND VICINITY

WEATHER EXTREMES IN NEW MEXICO

On rare occasions an extremely cold arctic air mass invades southern New Mexico, bringing record-breaking low temperatures. Such an event occurred on the 10th and 11th of January, 1962. It was the most severe outbreak of polar continental air in many years and tumbled old low temperature records for most stations in south-central New Mexico, some of which had stood for more than a half-century. Table IV lists these new absolute minimum temperature records.

STATION	TEMPERATURE, °F
"A" STATION, WHITE SANDS MISSILE RANGE	-6
ALAMOGORDO	-14
BINGHAM	-12
BOSQUE DEL APACHE	-18
CARRIZOZO	-12
CLOVERCROFT	-21
DESERT STATION (MSD), WSMR	-14
FLORIDA	-15
FORT STANTON	-28
HATCH	-17
HOLLOMAN AIR FORCE BASE	-11
LORDSBURG	-2
MESCALERO	-19
NEW MEXICO STATE UNIVERSITY, LAS CRUCES	-10
OROGRANDE	-13
SUNSPOT (SACRAMENTO PEAK) [7]	-23
SILVER CITY	-13
WHITE SANDS NATIONAL MONUMENT	-25

TABLE IV. NEW MINIMUM TEMPERATURE RECORDS IN SOUTHERN NEW MEXICO DUE TO SEVERE COLD SPELL OF 10-11 JANUARY, 1962 [4]

Tables V and VI are listings of weather extremes which give an indication of the great variations of climate which are encountered in New Mexico. Only twelve of the fifty states have recorded lower temperatures than New Mexico's -50°, while eighteen states have endured summer temperatures exceeding our record of 116°. With a seasonal snowfall record of 483 inches, New Mexico ranks seventh among the fifty states; Washington ranks first, with exactly one thousand inches. [9]

MONTH	HIGHEST TEMPERATURE				LOWEST TEMPERATURE			
	°F	DAY	YEAR	STATION	°F	DAY	YEAR	STATION
JAN	89	6	1938	Tularosa	-47	11	1962	Eagle Nest
FEB	100	24	1904	Carlsbad	-50	1	1951	Cavilan
MAR	99	31	1946	Roswell #2	-34	12	1948	Eagle Nest
APR	104	10	1934	Artesia	-36	5	1945	Eagle Nest
MAY	110	28	1896	Rincon	-2	1	1967	Eagle Nest
JUN	116	29	1918	Artesia	12	1	1946	E'town *
JUL	116	14	1934	Orogrande	19	5	1935	Therma
AUG	111	7	1934	Nara Visa	23	30	1944	Selnor Ranch
	111	23	1932	Rodeo				
SEP	112	7	1948	Orogrande	8	23	1912	E'town *
OCT	101	5	1934	Carlsbad	-15	24	1945	Red River
NOV	97	7	1903	Carlsbad	-36	24	1931	Cavilan
					-36	25	1931	Dulce
DEC	90	12	1933	Hagerman	-47	12	1961	Dulce

TABLE V. NEW MEXICO TEMPERATURE EXTREMES BY MONTHS, 1892-1968 [5]
* E'town = Elizabethtown (near Eagle Nest)

EXTREMES		INCHES	LOCATION	DATE
ANNUAL RAINFALL	Greatest	62.45	White Tail	1941
	Least	1.00	Hermanas	1910
GREATEST RAINFALL	1-Month	16.21	Portales 7 WNW	May 1941
	24-Hour	11.28	Lake Maloya	19 May 1955
	Seasonal	483.0	Anchor Mine	1911-1912
GREATEST SNOWFALL	Annual	415.7	Anchor Mine	1915
	1-Month	144.0	Anchor Mine	March 1912
	Single-Storm	40.0	Corona	14-16 Dec. 1959
	24-Hour	30.0	Sandia Crest	29 Dec. 1958
	Greatest Depth	90.0	Anchor Mine	28 Mar. 1912

TABLE VI. NEW MEXICO RAINFALL AND SNOWFALL EXTREMES, 1892-1968 [5]

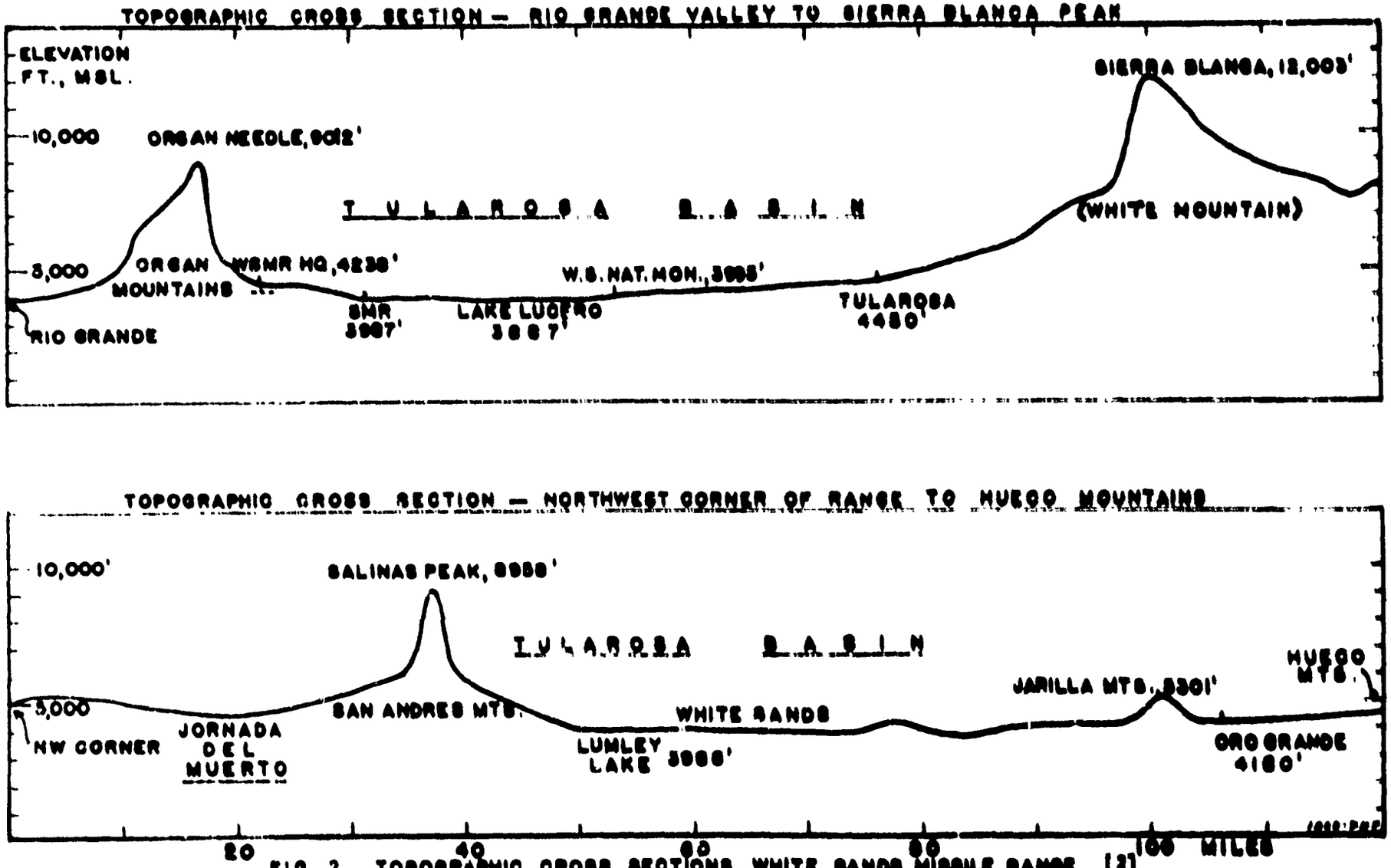

FIG. 2 TOPOGRAPHIC CROSS SECTIONS, WHITE SANDS MISSILE RANGE [2]

"A" STATION, WHITE SANDS MISSILE RANGE

DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES

JANUARY | **JANUARY**

AVG. HIGH 54	AVG. HIGH 54	AVG. HIGH 54	AVG. HIGH 54	AVG. HIGH 54	AVG. HIGH 54	AVG. HIGH 54
HIGHEST 62	HIGHEST 64	HIGHEST 61	HIGHEST 61	HIGHEST 67	HIGHEST 69	HIGHEST 71
YEAR 1956	YEAR 1964	YEAR 1954	YEAR 1965	YEAR 1965	YEAR 1965	YEAR 1969
1	**2**	**3**	**4**	**5**	**6**	**7**
AVG. LOW 33	AVG. LOW 33	AVG. LOW 33	AVG. LOW 33	AVG. LOW 32	AVG. LOW 32	AVG. LOW 32
LOWEST 23	LOWEST 26	LOWEST 21	LOWEST 22	LOWEST 24	LOWEST 21	LOWEST 20
YEAR 1954	YEAR 1958	YEAR 1967	YEAR 1967	YEAR 1952	YEAR 1964	YEAR 1950
AVG. HIGH 54	AVG. HIGH 54	AVG. HIGH 54	AVG. HIGH 54	AVG. HIGH 54	AVG. HIGH 54	AVG. HIGH 55
HIGHEST 70	HIGHEST 68	HIGHEST 73	HIGHEST 60	HIGHEST 72	HIGHEST 71	HIGHEST 70
YEAR 1969	YEAR 1953	YEAR 1953	YEAR 1953	YEAR 1953	YEAR 1953	YEAR 1969
8	**9**	**10**	**11** *	**12**	**13**	**14**
AVG. LOW 32	AVG. LOW 32	AVG. LOW 32	AVG. LOW 32	AVG. LOW 32	AVG. LOW 32	AVG. LOW 32
LOWEST 18	LOWEST 14	LOWEST -2	LOWEST -6	LOWEST +4	LOWEST +8	LOWEST 11
YEAR 1967	YEAR 1967	YEAR 1962	YEAR 1962	YEAR 1962	YEAR 1963	YEAR 1964
AVG. HIGH 55	AVG. HIGH 55	AVG. HIGH 56	AVG. HIGH 56	AVG. HIGH 56	AVG. HIGH 57	AVG. HIGH 57
HIGHEST 67	HIGHEST 69	HIGHEST 65	HIGHEST 68	HIGHEST 70	HIGHEST 70	HIGHEST 70
YEAR 1957	YEAR 1967	YEAR 1950	YEAR 1952	YEAR 1959	YEAR 1950	YEAR 1967
15	**16**	**17**	**18**	**19**	**20**	**21**
AVG. LOW 33	AVG. LOW 33	AVG. LOW 34	AVG. LOW 34	AVG. LOW 35	AVG. LOW 35	AVG. LOW 36
LOWEST 19	LOWEST 21	LOWEST 22	LOWEST 23	LOWEST 22	LOWEST 16	LOWEST 21
YEAR 1964	YEAR 1964	YEAR 1964	YEAR 1960	YEAR 1963	YEAR 1963	YEAR 1963
AVG. HIGH 57	AVG. HIGH 58	AVG. HIGH 58	AVG. HIGH 59	AVG. HIGH 59	AVG. HIGH 60	AVG. HIGH 60
HIGHEST 73	HIGHEST 73	HIGHEST 72	HIGHEST 72	HIGHEST 73	HIGHEST 68	HIGHEST 67
YEAR 1967	YEAR 1950	YEAR 1950	YEAR 1952	YEAR 1953	YEAR 1969	YEAR 1967
22	**23**	**24**	**25**	**26**	**27**	**28**
AVG. LOW 36	AVG. LOW 37	AVG. LOW 37	AVG. LOW 38	AVG. LOW 38	AVG. LOW 38	AVG. LOW 38
LOWEST 13	LOWEST 16	LOWEST 18	LOWEST 22	LOWEST 22	LOWEST 21	LOWEST 24
YEAR 1966	YEAR 1966	YEAR 1963	YEAR 1963	YEAR 1966	YEAR 1966	YEAR 1963
AVG. HIGH 60	AVG. HIGH 60	AVG. HIGH 60	AVG. MAXIMUM TEMPERATURE 55.9 °		AVG. WIND SPEED 5.7 KNOTS	
HIGHEST 73	HIGHEST 73	HIGHEST 72	AVG. MINIMUM TEMPERATURE 34.3 °		PREVAILING WIND DIR. WEST	
YEAR 1967	YEAR 1967	YEAR 1967	RECORD HIGH TEMPERATURE 75 °		AVERAGE RAINFALL 0.48 IN.	
29	**30**	**31**	RECORD LOW TEMPERATURE * -6 °		AVERAGE SNOWFALL 0.5 IN.	
AVG. LOW 38	AVG. LOW 38	AVG. LOW 38	AVG. RELATIVE HUMIDITY 46 %		AVERAGE CLOUDINESS 41 %	
LOWEST 28	LOWEST 20	LOWEST 16	GREATEST MONTHLY RAINFALL 1.50 IN., YEAR 1960			
YEAR 1955	YEAR 1951	YEAR 1951	GREATEST 24-HOUR RAINFALL 0.96 IN., YEAR 1960, DATE 11			

*ABSOLUTE RECORD LOW TEMPERATURE AT STATION. GREATEST JANUARY SNOWFALL: 5.5 in. in 1968. (SEE TABLE VII.)

DAILY OBSERVATION MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH EXTREME VALUES

FEBRUARY | **FEBRUARY**

AVG. HIGH 60 HIGHEST 79 YEAR 1963 **1*** AVG. LOW 37 LOWEST +8 YEAR 1951	AVG. HIGH 60 HIGHEST 71 YEAR 1963 **2** AVG. LOW 37 LOWEST +9 YEAR 1951	AVG. HIGH 59 HIGHEST 72 YEAR 1953 **3** AVG. LOW 37 LOWEST 13 YEAR 1956	AVG. HIGH 59 HIGHEST 76 YEAR 1963 **4** AVG. LOW 36 LOWEST 14 YEAR 1956	AVG. HIGH 59 HIGHEST 77 YEAR 1963 **5** AVG. LOW 36 LOWEST 24 YEAR 1955	AVG. HIGH 60 HIGHEST 76 YEAR 1963 **6** AVG. LOW 36 LOWEST 22 YEAR 1955	AVG. HIGH 60 HIGHEST 74 YEAR 1963 **7** AVG. LOW 37 LOWEST 22 YEAR 1964
AVG. HIGH 60 HIGHEST 78 YEAR 1957 **8** AVG. LOW 37 LOWEST 25 YEAR 1967	AVG. HIGH 60 HIGHEST 75 YEAR 1962 **9** AVG. LOW 37 LOWEST 18 YEAR 1967	AVG. HIGH 59 HIGHEST 76 YEAR 1962 **10** AVG. LOW 37 LOWEST 22 YEAR 1956	AVG. HIGH 59 HIGHEST 81 YEAR 1957 **11*** AVG. LOW 37 LOWEST 17 YEAR 1963	AVG. HIGH 59 HIGHEST 78 YEAR 1962 **12** AVG. LOW 37 LOWEST 16 YEAR 1963	AVG. HIGH 59 HIGHEST 77 YEAR 1957 **13** AVG. LOW 37 LOWEST 18 YEAR 1963	AVG. HIGH 59 HIGHEST 80 YEAR 1957 **14**** AVG. LOW 37 LOWEST 21 YEAR 1965
AVG. HIGH 59 HIGHEST 71 YEAR 1961 **15** AVG. LOW 37 LOWEST 20 YEAR 1951	AVG. HIGH 59 HIGHEST 72 YEAR 1959 **16** AVG. LOW 37 LOWEST 25 YEAR 1966	AVG. HIGH 59 HIGHEST 72 YEAR 1958 **17** AVG. LOW 37 LOWEST 24 YEAR 1966	AVG. HIGH 59 HIGHEST 74 YEAR 1958 **18** AVG. LOW 37 LOWEST 26 YEAR 1960	AVG. HIGH 59 HIGHEST 73 YEAR 1958 **19** AVG. LOW 37 LOWEST 22 YEAR 1955	AVG. HIGH 59 HIGHEST 73 YEAR 1968 **20** AVG. LOW 37 LOWEST 21 YEAR 1955	AVG. HIGH 60 HIGHEST 69 YEAR 1968 **21** AVG. LOW 37 LOWEST 20 YEAR 1964
AVG. HIGH 60 HIGHEST 75 YEAR 1954 **22** AVG. LOW 38 LOWEST 23 YEAR 1955	AVG. HIGH 60 HIGHEST 73 YEAR 1956 **23** AVG. LOW 38 LOWEST 24 YEAR 1965	AVG. HIGH 60 HIGHEST 73 YEAR 1968 **24** AVG. LOW 38 LOWEST 16 YEAR 1960	AVG. HIGH 61 HIGHEST 75 YEAR 1954 **25** AVG. LOW 39 LOWEST 14 YEAR 1960	AVG. HIGH 61 HIGHEST 72 YEAR 1961 **26** AVG. LOW 39 LOWEST 29 YEAR 1952	AVG. HIGH 62 HIGHEST 73 YEAR 1968 **27** AVG. LOW 40 LOWEST 33 YEAR 1964	AVG. HIGH 62 HIGHEST 72 YEAR 1950 **28** AVG. LOW 40 LOWEST 25 YEAR 1964

AVG. HIGH 62 HIGHEST 67 YEAR 1956 **29** AVG. LOW 40 LOWEST 29 YEAR 1956	AVERAGE MAXIMUM TEMPERATURE 59.9 ° AVERAGE MINIMUM TEMPERATURE 37.6 ° RECORD MAXIMUM TEMPERATURE 81 ° RECORD MINIMUM TEMPERATURE* +8 ° AVERAGE RELATIVE HUMIDITY 39 % GREATEST MONTHLY RAINFALL 1.44 IN., YEAR 1957 GREATEST 24-HOUR RAINFALL 1.01 IN., YEAR 1955, DATE 28th	AVERAGE MONTHLY WIND SPEED 6.5 K PREVAILING WIND DIRECTION West AVERAGE MONTHLY RAINFALL 0.60 IN. AVERAGE MONTHLY SNOWFALL 1.5 IN. AVERAGE MONTHLY CLOUDLINESS 36 %	ANNUAL 6.1 K ANNUAL West ANNUAL 10.32 IN. ANNUAL 5.9 IN. ANNUAL 37 %		

** 14th: EARLIEST DATE OF LAST FREEZING TEMPERATURE IN SPRING, 1950.

"A" STATION, WHITE SANDS MISSILE RANGE

DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES

MARCH | **MARCH**

AVG. HIGH 62 HIGHEST 73 YEAR 1959 **1** AVG. LOW 40 LOWEST 27 YEAR 1960	AVG. HIGH 62 HIGHEST 77 YEAR 1967 **2** AVG. LOW 40 LOWEST 24 YEAR 1965	AVG. HIGH 63 HIGHEST 75 YEAR 1967 **3** AVG. LOW 40 LOWEST 32 YEAR 1965	AVG. HIGH 63 HIGHEST 74 YEAR 1956 **4** * AVG. LOW 41 LOWEST 16 YEAR 1965	AVG. HIGH 64 HIGHEST 75 YEAR 1960 **5** AVG. LOW 41 LOWEST 22 YEAR 1966	AVG. HIGH 64 HIGHEST 81 YEAR 1960 **6** AVG. LOW 42 LOWEST 29 YEAR 1953	AVG. HIGH 64 HIGHEST 80 YEAR 1960 **7** AVG. LOW 42 LOWEST 31 YEAR 1959
AVG. HIGH 64 HIGHEST 81 YEAR 1960 **8** AVG. LOW 42 LOWEST 28 YEAR 1956	AVG. HIGH 64 HIGHEST 78 YEAR 1960 **9** AVG. LOW 42 LOWEST 30 YEAR 1964	AVG. HIGH 64 HIGHEST 77 YEAR 1966 **10** AVG. LOW 42 LOWEST 32 YEAR 1958	AVG. HIGH 64 HIGHEST 74 YEAR 1966 **11** AVG. LOW 42 LOWEST 31 YEAR 1968	AVG. HIGH 64 HIGHEST 77 YEAR 1967 **12** AVG. LOW 42 LOWEST 27 YEAR 1958	AVG. HIGH 65 HIGHEST 76 YEAR 1960 **13** AVG. LOW 42 LOWEST 30 YEAR 1951	AVG. HIGH 65 HIGHEST 78 YEAR 1966 **14** ** AVG. LOW 43 LOWEST 28 YEAR 1962
AVG. HIGH 65 HIGHEST 80 YEAR 1966 **15** AVG. LOW 43 LOWEST 21 YEAR 1962	AVG. HIGH 66 HIGHEST 77 YEAR 1966 **16** AVG. LOW 43 LOWEST 29 YEAR 1962	AVG. HIGH 66 HIGHEST 81 YEAR 1967 **17** AVG. LOW 43 LOWEST 32 YEAR 1960	AVG. HIGH 66 HIGHEST 82 YEAR 1967 **18** AVG. LOW 44 LOWEST 32 YEAR 1951	AVG. HIGH 66 HIGHEST 78 YEAR 1966 **19** AVG. LOW 44 LOWEST 23 YEAR 1965	AVG. HIGH 67 HIGHEST 79 YEAR 1966 **20** AVG. LOW 44 LOWEST 26 YEAR 1965	AVG. HIGH 67 HIGHEST 77 YEAR 1960 **21** AVG. LOW 44 LOWEST 29 YEAR 1955
AVG. HIGH 68 HIGHEST 80 YEAR 1967 **22** AVG. LOW 45 LOWEST 26 YEAR 1952	AVG. HIGH 68 HIGHEST 79 YEAR 1950 **23** AVG. LOW 45 LOWEST 28 YEAR 1952	AVG. HIGH 68 HIGHEST 80 YEAR 1950 **24** AVG. LOW 46 LOWEST 37 YEAR 1966	AVG. HIGH 69 HIGHEST 81 YEAR 1953 **25** AVG. LOW 46 LOWEST 32 YEAR 1957	AVG. HIGH 69 HIGHEST 80 YEAR 1956 **26** AVG. LOW 46 LOWEST 23 YEAR 1955	AVG. HIGH 70 HIGHEST 83 YEAR 1963 **27** AVG. LOW 47 LOWEST 23 YEAR 1955	AVG. HIGH 70 HIGHEST 86 YEAR 1967 **28** * AVG. LOW 47 LOWEST 28 YEAR 1955
AVG. HIGH 71 HIGHEST 80 YEAR 1967 **29** *** AVG. LOW 48 LOWEST 31 YEAR 1951	AVG. HIGH 71 HIGHEST 78 YEAR 1968 **30** AVG. LOW 48 LOWEST 40 YEAR 1961	AVG. HIGH 72 HIGHEST 82 YEAR 1963 **31** AVG. LOW 49 LOWEST 37 YEAR 1961				

AVG. MAXIMUM TEMPERATURE 66.1 °
AVG. MINIMUM TEMPERATURE 43.7 °
RECORD HIGH TEMPERATURE 86 °
RECORD LOW TEMPERATURE 16 °
AVG. RELATIVE HUMIDITY 31 %
GREATEST MONTHLY RAINFALL 3.00 IN., YEAR 1958
GREATEST 24-HOUR RAINFALL 1.46 IN., YEAR 1958, DATE 5-6th

AVG. WIND SPEED 8.0 KNOTS
PREVAILING WIND DIR. West
AVERAGE RAINFALL 0.58 IN.
AVERAGE SNOWFALL 0.5 IN.
AVERAGE CLOUDINESS 40 %

** AVERAGE DATE OF LAST FREEZING TEMPERATURE IN SPRING. ***LATEST DATE OF FREEZING TEMPERATURE IN SPRING.

"A" STATION, WHITE SANDS MISSILE RANGE

DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES

APRIL **APRIL**

1	**2**	**3**	**4**	**5**	**6**	**7**
AVG. HIGH 72	AVG. HIGH 72	AVG. HIGH 72	AVG. HIGH 73	AVG. HIGH 73	AVG. HIGH 73	AVG. HIGH 73
HIGHEST 80	HIGHEST 83	HIGHEST 86	HIGHEST 87	HIGHEST 86	HIGHEST 85	HIGHEST 86
YEAR 1950	YEAR 1966	YEAR 1954	YEAR 1967	YEAR 1959	YEAR 1954	YEAR 1963
AVG. LOW 49	AVG. LOW 49	AVG. LOW 49	AVG. LOW 49	AVG. LOW 49	AVG. LOW 49	AVG. LOW 49
LOWEST 40	LOWEST 35	LOWEST 35	LOWEST 37	LOWEST 41	LOWEST 36	LOWEST 41
YEAR 1955	YEAR 1956	YEAR 1960	YEAR 1964	YEAR 1966	YEAR 1966	YEAR 1964
8	**9**	**10**	**11**	**12**	**13**	**14**
AVG. HIGH 74	AVG. HIGH 74	AVG. HIGH 74	AVG. HIGH 74	AVG. HIGH 75	AVG. HIGH 75	AVG. HIGH 75
HIGHEST 86	HIGHEST 84	HIGHEST 86	HIGHEST 88	HIGHEST 82	HIGHEST 85	HIGHEST 90
YEAR 1963	YEAR 1954	YEAR 1960	YEAR 1960	YEAR 1963	YEAR 1962	YEAR 1963
AVG. LOW 50	AVG. LOW 50	AVG. LOW 50	* AVG. LOW 51	AVG. LOW 51	AVG. LOW 52	** AVG. LOW 52
LOWEST 40	LOWEST 41	LOWEST 41	LOWEST 34	LOWEST 37	LOWEST 36	LOWEST 38
YEAR 1964	YEAR 1964	YEAR 1956	YEAR 1951	YEAR 1953	YEAR 1959	YEAR 1958
15	**16**	**17**	**18**	**19**	**20**	**21**
AVG. HIGH 76	AVG. HIGH 76	AVG. HIGH 76	AVG. HIGH 77	AVG. HIGH 77	AVG. HIGH 77	AVG. HIGH 77
HIGHEST 89	HIGHEST 91	HIGHEST 89	HIGHEST 89	HIGHEST 88	HIGHEST 88	HIGHEST 92
YEAR 1962	YEAR 1962	YEAR 1962	YEAR 1954	YEAR 1962	YEAR 1965	YEAR 1965
AVG. LOW 53	AVG. LOW 53	AVG. LOW 54	AVG. LOW 54	AVG. LOW 55	AVG. LOW 55	AVG. LOW 55
LOWEST 42	LOWEST 43	LOWEST 43	LOWEST 42	LOWEST 43	LOWEST 42	LOWEST 45
YEAR 1956	YEAR 1961	YEAR 1960	YEAR 1960	YEAR 1956	YEAR 1968	YEAR 1959
22	**23**	**24**	**25**	**26**	**27**	**28**
AVG. HIGH 77	AVG. HIGH 77	AVG. HIGH 78	AVG. HIGH 78	AVG. HIGH 78	AVG. HIGH 78	AVG. HIGH 78
HIGHEST 94	HIGHEST 89	HIGHEST 88	HIGHEST 83	HIGHEST 89	HIGHEST 85	HIGHEST 84
YEAR 1965	YEAR 1965	YEAR 1959	YEAR 1956	YEAR 1950	YEAR 1953	YEAR 1961
AVG. LOW 55	AVG. LOW 55	AVG. LOW 55	AVG. LOW 55	AVG. LOW 56	AVG. LOW 56	AVG. LOW 56
LOWEST 46	LOWEST 41	LOWEST 36	LOWEST 45	LOWEST 43	LOWEST 43	LOWEST 49
YEAR 1952	YEAR 1968	YEAR 1968	YEAR 1961	YEAR 1964	YEAR 1965	YEAR 1961
29	**30**					
AVG. HIGH 78	AVG. HIGH 79					
HIGHEST 87	HIGHEST 89					
YEAR 1961	YEAR 1961					
AVG. LOW 56	AVG. LOW 56					
LOWEST 45	LOWEST 42					
YEAR 1951	YEAR 1951					

AVERAGE MAXIMUM TEMPERATURE	75.4 °	AVERAGE MONTHLY WIND SPEED	8.6 KNOTS
AVERAGE MINIMUM TEMPERATURE	52.6 °	PREVAILING WIND DIRECTION	West
RECORD MAXIMUM TEMPERATURE	94 °	AVERAGE MONTHLY RAINFALL	0.27 INCH
RECORD MINIMUM TEMPERATURE	* 34 °	AVERAGE MONTHLY SNOWFALL	Trace INCH
AVERAGE RELATIVE HUMIDITY	26 %	AVERAGE MONTHLY CLOUDINESS	35 %
GREATEST MONTHLY RAINFALL	1.37 IN.,	YEAR 1952	
GREATEST 24-HOUR RAINFALL	0.95 IN.,	YEAR 1952,	DATE 11th

**EARLIEST DATE OF ≥ 90° TEMPERATURE AT STATION.

"A" STATION, WHITE SANDS MISSILE RANGE
DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE
MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES

MAY

Day	AVG. HIGH	HIGHEST	YEAR	AVG. LOW	LOWEST	YEAR
1	79	90	1961	56	41	1951
2	80	87	1965	56	39	1967
3	80	89	1956	56	43	1953
4	81	91	1962	57	39	1953
5	81	92	1962	57	44	1950
6	82	92	1962	57	46	1950
7	82	93	1956	58	49	1960
8	82	93	1956	58	50	1964
9	83	93	1962	59	46	1965
10	83	94	1962	59	45	1953
11	83	95	1962	59	50	1953
12	84	93	1962	60	50	1955
13	84	93	1960	60	45	1953
14	84	95	1963	60	47	1953
15	84	94	1964	60	47	1957
16	84	93	1964	61	49	1967
17	84	93	1964	61	52	1965
18	84	93	1965	61	48	1968
19	84	93	1961	62	47	1952
20	85	93	1951	62	50	1960
21	85	92	1965	62	50	1967
22	86	93	1965	62	55	1962
23	86	94	1953	63	57	1963
24	86	99	1964	63	56	1959
25	87	95	1951	63	54	1954
26	87	100	1951	64	53	1967
27	88	102	1951	64	50	1950
28	88	103	1951	65	55	1952
29	89	98	1951	65	57	1962
30	89	99	1951	65	57	1962
31	89	97	1953	66	51	1964

AVG. MAXIMUM TEMPERATURE 84.3 °
AVG. MINIMUM TEMPERATURE 60.7 °
RECORD HIGH TEMPERATURE 103 °
RECORD LOW TEMPERATURE 39 °
AVG. RELATIVE HUMIDITY 24 %
GREATEST MONTHLY RAINFALL 0.95 IN., YEAR 1959
GREATEST 24-HOUR RAINFALL 0.82 IN., YEAR 1959, DATE 21st

AVG. WIND SPEED 7.9 KNOTS
PREVAILING WIND DIR. West
AVERAGE RAINFALL 0.24 IN.
AVERAGE SNOWFALL 0.0 IN.
AVERAGE CLOUDINESS 31 %

** EARLIEST DATE OF 100° TEMPERATURE AT STATION.

"A" STATION, WHITE SANDS MISSILE RANGE

DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES

JUNE

1	**2**	**3**	**4**	**5**	**6**	**7**
AVG. HIGH 89	AVG. HIGH 89	AVG. HIGH 89	AVG. HIGH 90	AVG. HIGH 90	AVG. HIGH 90	AVG. HIGH 90
HIGHEST 96	HIGHEST 96	HIGHEST 100	HIGHEST 99	HIGHEST 94	HIGHEST 97	HIGHEST 99
YEAR 1953 *	YEAR 1956	YEAR 1956	YEAR 1956	YEAR 1967	YEAR 1950	YEAR 1956
AVG. LOW 66	AVG. LOW 66	AVG. LOW 66	AVG. LOW 67	AVG. LOW 67	AVG. LOW 67	AVG. LOW 67
LOWEST 50	LOWEST 58	LOWEST 56	LOWEST 57	LOWEST 56	LOWEST 60	LOWEST 59
YEAR 1964	YEAR 1964	YEAR 1962	YEAR 1957	YEAR 1965	YEAR 1959	YEAR 1960
8	**9**	**10**	**11**	**12**	**13**	**14**
AVG. HIGH 91	AVG. HIGH 91	AVG. HIGH 91	AVG. HIGH 92	AVG. HIGH 92	AVG. HIGH 93	AVG. HIGH 93
HIGHEST 101	HIGHEST 98	HIGHEST 98	HIGHEST 98	HIGHEST 98	HIGHEST 101	HIGHEST 99
YEAR 1955	YEAR 1953	YEAR 1962	YEAR 1959	YEAR 1968	YEAR 1956	YEAR 1956
AVG. LOW 67	AVG. LOW 67	AVG. LOW 67	AVG. LOW 68	AVG. LOW 68	AVG. LOW 69	AVG. LOW 69
LOWEST 63	LOWEST 59	LOWEST 53	LOWEST 50	LOWEST 56	LOWEST 62	LOWEST 57
YEAR 1968	YEAR 1965	YEAR 1965	YEAR 1965	YEAR 1960	YEAR 1955	YEAR 1951
15	**16**	**17**	**18**	**19**	**20**	**21**
AVG. HIGH 93	AVG. HIGH 94	AVG. HIGH 94	AVG. HIGH 95	AVG. HIGH 95	AVG. HIGH 95	AVG. HIGH 96
HIGHEST 101	HIGHEST 99	HIGHEST 100	HIGHEST 103	HIGHEST 104	HIGHEST 103	HIGHEST 105
YEAR 1950	YEAR 1960	YEAR 1960	YEAR 1960	YEAR 1960	YEAR 1960	YEAR 1968
AVG. LOW 69	AVG. LOW 69	AVG. LOW 70	AVG. LOW 70	AVG. LOW 71	AVG. LOW 71	AVG. LOW 71
LOWEST 65	LOWEST 64	LOWEST 58	LOWEST 59	LOWEST 64	LOWEST 63	LOWEST 61
YEAR 1968	YEAR 1968	YEAR 1968	YEAR 1955	YEAR 1965	YEAR 1953	YEAR 1966
22	**23**	**24**	**25**	**26**	**27**	**28**
AVG. HIGH 96	AVG. HIGH 96	AVG. HIGH 96	AVG. HIGH 95	AVG. HIGH 95	AVG. HIGH 94	AVG. HIGH 94
HIGHEST 104	HIGHEST 102	HIGHEST 102	HIGHEST 102	HIGHEST 103	HIGHEST 103	HIGHEST 106
YEAR 1960	YEAR 1968	YEAR 1961	YEAR 1951	YEAR 1957	YEAR 1957	YEAR 1951
AVG. LOW 72	AVG. LOW 72	AVG. LOW 72	AVG. LOW 72	AVG. LOW 72	AVG. LOW 72	AVG. LOW 71
LOWEST 62	LOWEST 68	LOWEST 63	LOWEST 63	LOWEST 62	LOWEST 62	LOWEST 64
YEAR 1965	YEAR 1966	YEAR 1965	YEAR 1964	YEAR 1967	YEAR 1966	YEAR 1966
29 Ø	**30**					
AVG. HIGH 94	AVG. HIGH 95					
HIGHEST 106	HIGHEST 103					
YEAR 1951	YEAR 1960					
AVG. LOW 71	AVG. LOW 71					
LOWEST 61	LOWEST 62					
YEAR 1967	YEAR 1966					

AVERAGE MAXIMUM TEMPERATURE	92.9 °	AVERAGE MONTHLY WIND SPEED	6.8 KNOTS
AVERAGE MINIMUM TEMPERATURE	69.2 °	PREVAILING WIND DIRECTION	West
RECORD MAXIMUM TEMPERATURE Ø	106 °	AVERAGE MONTHLY RAINFALL	0.90 INCH
RECORD MINIMUM TEMPERATURE *	50 °	AVERAGE MONTHLY SNOWFALL	0.0 INCH
AVERAGE RELATIVE HUMIDITY	27 %	AVERAGE MONTHLY CLOUDINESS	[illegible] %
GREATEST MONTHLY RAINFALL	7.42 IN.,	YEAR 1966	
GREATEST 24-HOUR RAINFALL	2.40 IN.,	YEAR 1966,	DATE 29th

Ø ABSOLUTE RECORD MAXIMUM TEMPERATURE AT STATION.

"A" STATION, WHITE SANDS MISSILE RANGE

DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES

JULY

AVG. HIGH 95 HIGHEST 103 YEAR 1957 **1** AVG. LOW 71 LOWEST 65 YEAR 1959	AVG. HIGH 95 HIGHEST 106 YEAR 1960 **2** Ø AVG. LOW 71 LOWEST 65 YEAR 1956	AVG. HIGH 94 HIGHEST 105 YEAR 1960 **3** AVG. LOW 71 LOWEST 64 YEAR 1968	AVG. HIGH 94 HIGHEST 103 YEAR 1966 **4** AVG. LOW 70 LOWEST 62 YEAR 1968	AVG. HIGH 94 HIGHEST 99 YEAR 1966 **5** AVG. LOW 70 LOWEST 60 YEAR 1968	AVG. HIGH 93 HIGHEST 102 YEAR 1951 **6** AVG. LOW 70 LOWEST 62 YEAR 1968	AVG. HIGH 93 HIGHEST 104 YEAR 1951 **7** AVG. LOW 70 LOWEST 64 YEAR 1960
AVG. HIGH 93 HIGHEST 106 YEAR 1951 **8** Ø AVG. LOW 71 LOWEST 61 YEAR 1952	AVG. HIGH 93 HIGHEST 104 YEAR 1951 **9** * AVG. LOW 71 LOWEST 59 YEAR 1952	AVG. HIGH 93 HIGHEST 105 YEAR 1951 **10** AVG. LOW 71 LOWEST 64 YEAR 1960	AVG. HIGH 93 HIGHEST 104 YEAR 1958 **11** AVG. LOW 71 LOWEST 65 YEAR 1962	AVG. HIGH 93 HIGHEST 1965 YEAR 1965 **12** AVG. LOW 71 LOWEST 62 YEAR 1959	AVG. HIGH 93 HIGHEST 101 YEAR 1963 **13** AVG. LOW 71 LOWEST 63 YEAR 1964	AVG. HIGH 93 HIGHEST 104 YEAR 1958 **14** AVG. LOW 71 LOWEST 64 YEAR 1950
AVG. HIGH 94 HIGHEST 104 YEAR 1963 **15** AVG. LOW 71 LOWEST 67 YEAR 1952	AVG. HIGH 94 HIGHEST 101 YEAR 1963 **16** AVG. LOW 71 LOWEST 65 YEAR 1952	AVG. HIGH 94 HIGHEST 100 YEAR 1963 **17** AVG. LOW 71 LOWEST 66 YEAR 1959	AVG. HIGH 94 HIGHEST 99 YEAR 1963 **18** AVG. LOW 71 LOWEST 65 YEAR 1956	AVG. HIGH 94 HIGHEST 101 YEAR 1951 **19** AVG. LOW 71 LOWEST 63 YEAR 1962	AVG. HIGH 93 HIGHEST 101 YEAR 1961 **20** AVG. LOW 71 LOWEST 63 YEAR 1955	AVG. HIGH 93 HIGHEST 99 YEAR 1952 **21** AVG. LOW 70 LOWEST 62 YEAR 1955
AVG. HIGH 93 HIGHEST 100 YEAR 1966 **22** AVG. LOW 70 LOWEST 62 YEAR 1950	AVG. HIGH 92 HIGHEST 102 YEAR 1963 **23** AVG. LOW 70 LOWEST 61 YEAR 1955	AVG. HIGH 92 HIGHEST 105 YEAR 1963 **24** AVG. LOW 70 LOWEST 66 YEAR 1957	AVG. HIGH 92 HIGHEST 101 YEAR 1963 **25** AVG. LOW 70 LOWEST 63 YEAR 1956	AVG. HIGH 92 HIGHEST 99 YEAR 1966 **26** AVG. LOW 70 LOWEST 62 YEAR 1950	AVG. HIGH 92 HIGHEST 102 YEAR 1954 **27** AVG. LOW 70 LOWEST 62 YEAR 1962	AVG. HIGH 92 HIGHEST 102 YEAR 1954 **28** AVG. LOW 70 LOWEST 65 YEAR 1968
AVG. HIGH 92 HIGHEST 100 YEAR 1960 **29** AVG. LOW 70 LOWEST 63 YEAR 1962	AVG. HIGH 92 HIGHEST 99 YEAR 1957 **30** AVG. LOW 70 LOWEST 62 YEAR 1962	AVG. HIGH 92 HIGHEST 97 YEAR 1967 **31** AVG. LOW 70 LOWEST 63 YEAR 1968				

AVG. MAXIMUM TEMPERATURE	93.2 °	AVG. WIND SPEED	4.9 KNOTS
AVG. MINIMUM TEMPERATURE	70.5 °	PREVAILING WIND DIR.	SE
RECORD HIGH TEMPERATURE	Ø 106 °	AVERAGE RAINFALL	2.03 IN.
RECORD LOW TEMPERATURE	* 59 °	AVERAGE SNOWFALL	0.0 IN.
AVG. RELATIVE HUMIDITY	43 %	AVERAGE CLOUDINESS	47 %
GREATEST MONTHLY RAINFALL	5.63 IN., YEAR 1962		
GREATEST 24-HOUR RAINFALL	2.31 IN., YEAR 1961, DATE 4th		

Ø ABSOLUTE RECORD MAXIMUM TEMPERATURE AT STATION: 106° ON THREE DATES IN 1951 AND ONE IN 1960.

"A" STATION, WHITE SANDS MISSILE RANGE

DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES

AUGUST **AUGUST**

Day	AVG. HIGH	HIGHEST	YEAR	AVG. LOW	LOWEST	YEAR
1	92	102	1966	70	62	1965
2	92	100	1960	70	65	1965
3	92	98	1960	70	63	1965
4	92	98	1964	70	65	1956
5	93	97	1952	70	66	1963
6	93	100	1951	70	63	1963
7	93	101	1951	70	64	1964
8	93	101	1951	70	65	1966
9	93	100	1951	70	65	1967
10	93	100	1951	70	63	1967
11	92	101	1964	70	61	1960
12	92	98	1951	70	59	1966
13	92	97	1951	69	64	1960
14	91	100	1962	69	65	1967
15	91	100	1962	69	62	1965
16	91	97	1951	69	60	1967
17	90	101	1951	69	62	1968
18	90	99	1951	68	63	1967
19	90	98	1951	68	64	1965
20	90	98	1951	68	62	1967
21	90	100	1952	68	63	1968
22	90	97	1950	68	63	1967
23	90	96	1950	68	62	1966
24	90	97	1950	68	62	1954
25	90	97	1964	68	59	1966
26	90	96	1960	68	55	1966
27	90	98	1965	68	63	1966
28	90	98	1962	68	63	1952
29	90	98	1962	68	63	1967
30	90	98	1962	68	61	1967
31	90	98	1950	68	58	1967

AVG. MAXIMUM TEMPERATURE	91.1 °	AVG. WIND SPEED	4.6 KNOTS
AVG. MINIMUM TEMPERATURE	68.9 °	PREVAILING WIND DIR.	West
RECORD HIGH TEMPERATURE Ø	102 °	AVERAGE RAINFALL	1.75 IN.
RECORD LOW TEMPERATURE *	55 °	AVERAGE SNOWFALL	0.0 IN.
AVG. RELATIVE HUMIDITY	43 %	AVERAGE CLOUDINESS	44 %
GREATEST MONTHLY RAINFALL	6.32 IN., YEAR 1959		
GREATEST 24-HOUR RAINFALL	4.25 IN., YEAR 1959, DATE 23-24		

ØØ LATEST DATE OF ≥ 100° TEMPERATURE AT STATION, 1952.

"A" STATION, WHITE SANDS MISSILE RANGE

DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES

SEPTEMBER | **SEPTEMBER**

AVG. HIGH 89 HIGHEST 97 YEAR 1951 **1** AVG. LOW 67 LOWEST 57 YEAR 1967	AVG. HIGH 89 HIGHEST 98 YEAR 1951 **2** AVG. LOW 67 LOWEST 58 YEAR 1968	AVG. HIGH 89 HIGHEST 98 YEAR 1951 **3** AVG. LOW 66 LOWEST 61 YEAR 1963	AVG. HIGH 88 HIGHEST 97 YEAR 1951 **4** AVG. LOW 66 LOWEST 53 YEAR 1961	AVG. HIGH 88 HIGHEST 98 YEAR 1951 **5** AVG. LOW 65 LOWEST 56 YEAR 1961	AVG. HIGH 88 HIGHEST 97 YEAR 1951 **6** AVG. LOW 65 LOWEST 59 YEAR 1967	AVG. HIGH 87 HIGHEST 96 YEAR 1959 **7** AVG. LOW 65 LOWEST 58 YEAR 1968
AVG. HIGH 87 HIGHEST 94 YEAR 1968 **8** AVG. LOW 65 LOWEST 58 YEAR 1966	AVG. HIGH 87 HIGHEST 94 YEAR 1957 **9** AVG. LOW 65 LOWEST 59 YEAR 1966	AVG. HIGH 87 HIGHEST 95 YEAR 1951 **10** AVG. LOW 64 LOWEST 58 YEAR 1956	AVG. HIGH 87 HIGHEST 91 YEAR 1967 **11** AVG. LOW 64 LOWEST 57 YEAR 1956	AVG. HIGH 87 HIGHEST 93 YEAR 1951 **12** AVG. LOW 64 LOWEST 59 YEAR 1959	AVG. HIGH 87 HIGHEST 92 YEAR 1956 **13** AVG. LOW 64 LOWEST 55 YEAR 1968	AVG. HIGH 87 HIGHEST 93 YEAR 1960 **14** AVG. LOW 64 LOWEST 54 YEAR 1959
AVG. HIGH 87 HIGHEST 95 YEAR 1956 **15** AVG. LOW 64 LOWEST 58 YEAR 1961	AVG. HIGH 87 HIGHEST 98 YEAR 1956 **16** AVG. LOW 64 LOWEST 54 YEAR 1961	AVG. HIGH 87 HIGHEST 96 YEAR 1956 **17** AVG. LOW 64 LOWEST 55 YEAR 1968	AVG. HIGH 86 HIGHEST 95 YEAR 1953 **18** AVG. LOW 64 LOWEST 51 YEAR 1968	AVG. HIGH 86 HIGHEST 95 YEAR 1954 **19** AVG. LOW 64 LOWEST 57 YEAR 1968	AVG. HIGH 86 HIGHEST 95 YEAR 1954 **20** AVG. LOW 63 LOWEST 59 YEAR 1964	AVG. HIGH 85 HIGHEST 92 YEAR 1951 **21** AVG. LOW 63 LOWEST 51 YEAR 1965
AVG. HIGH 85 HIGHEST 92 YEAR 1956 **22** AVG. LOW 63 LOWEST 52 YEAR 1965	AVG. HIGH 85 HIGHEST 93 YEAR 1951 **23** AVG. LOW 62 LOWEST 56 YEAR 1965	AVG. HIGH 84 HIGHEST 94 YEAR 1951 **24** AVG. LOW 62 LOWEST 55 YEAR 1950	AVG. HIGH 84 HIGHEST 94 YEAR 1951 **25** AVG. LOW 61 LOWEST 51 YEAR 1957	AVG. HIGH 84 HIGHEST 96 YEAR 1951 **26** AVG. LOW 61 LOWEST 54 YEAR 1968	AVG. HIGH 84 HIGHEST 95 YEAR 1951 **27** ØØ AVG. LOW 60 LOWEST 53 YEAR 1968	AVG. HIGH 83 HIGHEST 92 YEAR 1956 **28** * AVG. LOW 60 LOWEST 49 YEAR 1964
AVG. HIGH 83 HIGHEST 93 YEAR 1951 **29** AVG. LOW 60 LOWEST 52 YEAR 1967	AVG. HIGH 83 HIGHEST 89 YEAR 1951 **30** AVG. LOW 60 LOWEST 51 YEAR 1965					

AVERAGE MAXIMUM TEMPERATURE	86.2 °	AVERAGE MONTHLY WIND SPEED	4.8 KNOTS
AVERAGE MINIMUM TEMPERATURE	63.5 °	PREVAILING WIND DIRECTION	West
RECORD MAXIMUM TEMPERATURE	Ø 98 °	AVERAGE MONTHLY RAINFALL	1.40 INCH
RECORD MINIMUM TEMPERATURE	* 49 °	AVERAGE MONTHLY SNOWFALL	0.0 INCH
AVERAGE RELATIVE HUMIDITY	41 %	AVERAGE MONTHLY CLOUDINESS	30 %
GREATEST MONTHLY RAINFALL	5.76 IN.,	YEAR 1958	
GREATEST 24-HOUR RAINFALL	2.96 IN.,	YEAR 1964,	DATE 11-12

ØØ LATEST DATE OF ≥ 95° TEMPERATURE AT STATION, 1951.

"A" STATION, WHITE SANDS MISSILE RANGE

DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES

OCTOBER **OCTOBER**

Day	AVG. HIGH	HIGHEST	YEAR	AVG. LOW	LOWEST	YEAR
1	83	91	1951	59	48	1965
2	83	88	1951	59	48	1965
3	82	88	1967	58	48	1961
4	82	88	1956	58	46	1961
5	82	90	1956	57	49	1953
6	82	90	1956	57	49	1968
7	81	87	1965	57	45	1952
8	81	90	1965	57	45	1952
9	81	92	1965	57	50	1959
10	80	89	1965	57	48	1951
11	80	88	1951	56	48	196
12	79	88	1951	56	50	1965
13	79	88	1968	55	50	1964
14	78	90	1968	55	46	1966
15	78	86	1951	54	45	1966
16	77	85	1950	54	44	1952
17	77	86	1952	53	41	1967
18	76	82	1955	53	38	1968
19	76	85	1950	52	43	1968
20	75	82	1954	52	40	1964
21	75	85	1961	51	43	1964
22	74	84	1950	51	46	1965
23	74	85	1959	50	44	1968
24	73	83	1950	50	43	1966
25	73	86	1950	50	44	1968
26	72	82	1968	50	42	1964
27	72	83	1950	49	41	1953
28	71	85	1950	49	41	1957
29	71	83	1950	48	40	1967
30	70	85	1950	48	36	1967
31	70	85	1950	47	34	1956

AVG. MAXIMUM TEMPERATURE 77.0 °
AVG. MINIMUM TEMPERATURE 53.5 °
RECORD HIGH TEMPERATURE ø 92 °
RECORD LOW TEMPERATURE * 34 °
AVG. RELATIVE HUMIDITY 38 %
GREATEST MONTHLY RAINFALL 2.99 IN., YEAR 1955
GREATEST 24-HOUR RAINFALL 1.91 IN., YEAR 1955, DATE 3-4

AVG. WIND SPEED 4.6 KNOTS
PREVAILING WIND DIR. West
AVERAGE RAINFALL 0.94 IN.
AVERAGE SNOWFALL 0.0 IN.
AVERAGE CLOUDINESS 24 %

ø LATEST DATE OF TEMPERATURE ≥ 90° AT STATION, 1965.

"A" STATION, WHITE SANDS MISSILE RANGE

DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES

NOVEMBER | **NOVEMBER**

	1	2	3	4 ***	5	6	7
AVG. HIGH	69	69	68	68	67	67	66
HIGHEST	84	77	74	75	76	79	83
YEAR	1950	1952	1960	1968	1962	1950	1950
AVG. LOW	46	46	45	45	44	44	43
LOWEST	39	33	33	32	36	29	29
YEAR	1966	1966	1951	1967	1964	1959	1959

	8	9	10	11 *	12	13	14
AVG. HIGH	66	66	65	65	65	65	64
HIGHEST	80	75	76	74	74	74	77
YEAR	1950	1964	1958	1963	1956	1965	1962
AVG. LOW	43	43	42	42	42	42	42
LOWEST	33	28	25	22	28	34	28
YEAR	1955	1955	1950	1950	1950	1961	1959

	15	16	17	18	19	20 **	21
AVG. HIGH	64	64	64	64	63	63	63
HIGHEST	77	80	81	77	74	73	73
YEAR	1966	1966	1966	1966	1965	1966	1955
AVG. LOW	42	41	41	41	40	40	40
LOWEST	30	26	28	26	27	28	25
YEAR	1961	1956	1959	1958	1958	1964	1956

	22	23	24	25	26	27	28
AVG. HIGH	62	62	62	61	61	61	60
HIGHEST	74	75	73	75	75	72	71
YEAR	1950	1965	1965	1965	1960	1950	1950
AVG. LOW	40	39	39	39	39	38	38
LOWEST	25	30	32	30	25	24	25
YEAR	1964	1964	1950	1956	1952	1952	1959

	29	30
AVG. HIGH	60	60
HIGHEST	71	72
YEAR	1950	1950
AVG. LOW	38	38
LOWEST	28	30
YEAR	1965	1963

AVERAGE MAXIMUM TEMPERATURE	64.1 °	AVERAGE MONTHLY WIND SPEED	5.2 KNOTS
AVERAGE MINIMUM TEMPERATURE	41.4 °	PREVAILING WIND DIRECTION	WEST
RECORD MAXIMUM TEMPERATURE	84 °	AVERAGE MONTHLY RAINFALL	0.47 INCH
RECORD MINIMUM TEMPERATURE	* 22 °	AVERAGE MONTHLY SNOWFALL	0.1 INCH
AVERAGE RELATIVE HUMIDITY	41 %	AVERAGE MONTHLY CLOUDINESS	30 %
GREATEST MONTHLY RAINFALL	2.40 IN.,	YEAR 1961	
GREATEST 24-HOUR RAINFALL	0.89 IN.,	YEAR 1961,	DATE 8th

*** EARLIEST DATE OF FIRST FREEZING TEMPERATURE, 1967. ** AVERAGE DATE OF FIRST FREEZING TEMPERATURE.

"A" STATION, WHITE SANDS MISSILE RANGE

DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES

DECEMBER | **DECEMBER**

AVG. HIGH 59 HIGHEST 73 YEAR 1961 **1** AVG. LOW 38 LOWEST 32 YEAR 1956	AVG. HIGH 59 HIGHEST 71 YEAR 1966 **2** AVG. LOW 38 LOWEST 25 YEAR 1957	AVG. HIGH 59 HIGHEST 71 YEAR 1954 **3** AVG. LOW 37 LOWEST 27 YEAR 1968	AVG. HIGH 58 HIGHEST 77 YEAR 1958 **4** AVG. LOW 37 LOWEST 28 YEAR 1963	AVG. HIGH 58 HIGHEST 73 YEAR 1958 **5** AVG. LOW 36 LOWEST 24 YEAR 1952	AVG. HIGH 58 HIGHEST 68 YEAR 1966 **6** AVG. LOW 36 LOWEST 19 YEAR 1950	AVG. HIGH 57 HIGHEST 70 YEAR 1954 **7** AVG. LOW 36 LOWEST 24 YEAR 1953
AVG. HIGH 57 HIGHEST 69 YEAR 1958 **8** AVG. LOW 36 LOWEST 25 YEAR 1968	AVG. HIGH 57 HIGHEST 73 YEAR 1950 **9** AVG. LOW 36 LOWEST 21 YEAR 1953	AVG. HIGH 56 HIGHEST 65 YEAR 1958 **10** AVG. LOW 35 LOWEST 20 YEAR 1951	AVG. HIGH 56 HIGHEST 72 YEAR 1950 **11** AVG. LOW 35 LOWEST 20 YEAR 1960	AVG. HIGH 56 HIGHEST 70 YEAR 1958 **12** ** AVG. LOW 35 LOWEST 22 YEAR 1953	AVG. HIGH 55 HIGHEST 69 YEAR 1950 **13** AVG. LOW 34 LOWEST 24 YEAR 1966	AVG. HIGH 55 HIGHEST 70 YEAR 1950 **14** AVG. LOW 34 LOWEST 21 YEAR 1964
AVG. HIGH 55 HIGHEST 67 YEAR 1950 **15** AVG. LOW 34 LOWEST 22 YEAR 1967	AVG. HIGH 55 HIGHEST 65 YEAR 1950 **16** AVG. LOW 33 LOWEST 26 YEAR 1963	AVG. HIGH 55 HIGHEST 65 YEAR 1957 **17** AVG. LOW 33 LOWEST 27 YEAR 1963	AVG. HIGH 55 HIGHEST 64 YEAR 1957 **18** AVG. LOW 33 LOWEST 24 YEAR 1964	AVG. HIGH 55 HIGHEST 63 YEAR 1955 **19** AVG. LOW 33 LOWEST 26 YEAR 1968	AVG. HIGH 55 HIGHEST 68 YEAR 1950 **20** AVG. LOW 33 LOWEST 26 YEAR 1963	AVG. HIGH 55 HIGHEST 67 YEAR 1955 **21** AVG. LOW 33 LOWEST 25 YEAR 1967
AVG. HIGH 55 HIGHEST 65 YEAR 1950 **22** AVG. LOW 33 LOWEST 22 YEAR 1967	AVG. HIGH 54 HIGHEST 71 YEAR 1955 **23** AVG. LOW 33 LOWEST 17 YEAR 1953	AVG. HIGH 54 HIGHEST 71 YEAR 1955 **24** * AVG. LOW 33 LOWEST +8 YEAR 1953	AVG. HIGH 54 HIGHEST 67 YEAR 1955 **25** AVG. LOW 33 LOWEST 20 YEAR 1953	AVG. HIGH 54 HIGHEST 67 YEAR 1955 **26** AVG. LOW 33 LOWEST 21 YEAR 1953	AVG. HIGH 54 HIGHEST 69 YEAR 1955 **27** AVG. LOW 33 LOWEST 24 YEAR 1953	AVG. HIGH 54 HIGHEST 70 YEAR 1955 **28** AVG. LOW 33 LOWEST 22 YEAR 1966
AVG. HIGH 54 HIGHEST 69 YEAR 1955 **29** AVG. LOW 33 LOWEST 18 YEAR 1966	AVG. HIGH 54 HIGHEST 73 YEAR 1951 **30** AVG. LOW 33 LOWEST 21 YEAR 1958	AVG. HIGH 54 HIGHEST 66 YEAR 1964 **31** AVG. LOW 33 LOWEST 21 YEAR 1958	AVG. MAXIMUM TEMPERATURE 55.7 ° AVG. MINIMUM TEMPERATURE 34.4 ° RECORD HIGH TEMPERATURE 77 ° RECORD LOW TEMPERATURE * +8 ° AVG. RELATIVE HUMIDITY 46 % GREATEST MONTHLY RAINFALL 2.43 IN., YEAR 1963 GREATEST 24-HOUR RAINFALL 1.02 IN., YEAR 1957, DATE 14-15		AVG. WIND SPEED 5.1 KNOTS PREVAILING WIND DIR. West AVERAGE RAINFALL 0.73 IN. AVERAGE SNOWFALL 0.3 IN. AVERAGE CLOUDINESS 36 %	

** LATEST DATE OF FIRST FREEZING TEMPERATURE IN FALL, 1954.

MONTH	1948-1968 [6]										1950-1968								1961-63
	STATION PRESSURE (INCHES OF MERCURY)			SIX-HOURLY RELATIVE HUMIDITY					AVERAGE NUMBER OF DAYS WITH:							AVG. DEGREE DAYS, BASE 65°F	GREATEST SNOWFALL		AVG. DAILY SOLAR RADIATION
											PRECIPITATION			VISIBILITY					
	MEANS	HIGHEST	LOWEST	5 AM	11 AM	5 PM	11 PM	MEANS	THUNDERSTORMS	4	T	.01"	.10"	+	++	∅	SINGLE STORM	MONTHLY	∅∅
JAN	25.777	26.240	25.210	55	43	38	48	46	-	*	5	3	1	2	1	610	5.5 7-8 ----1968	5.5	332
FEB	25.727	26.170	25.180	49	36	29	40	39	-	*	5	3	1	2	2	456	8.6 14-15----1952	8.6	410
MAR	25.677	26.180	25.180	40	28	22	33	31	1	1	6	4	2	1	4	313	3.5 11-12----1958	3.5	508
APR	25.666	26.080	25.190	35	23	18	27	26	1	1	4	2	1	-	4	93	T	T	624
MAY	25.671	26.080	25.290	34	21	16	25	24	3	2	5	2	1	-	3	15	0	0	679
JUN	25.676	25.970	25.370	38	24	18	28	27	7	4	8	3	2	-	3	0	0	0	692
JUL	25.750	26.050	25.470	58	36	31	46	43	13	8	15	7	4	1	3	0	0	0	632
AUG	25.769	26.010	25.525	59	37	32	45	43	11	7	14	8	4	1	1	0	0	0	584
SEP	25.754	26.040	25.410	55	35	30	44	41	5	7	8	5	3	1	1	1	0	0	538
OCT	25.774	26.220	25.300	50	33	29	41	38	2	1	5	3	2	1	1	65	T	T	485
NOV	25.770	26.240	25.290	51	34	34	44	41	-	1	4	2	1	2	1	362	6.2 14th ----1961	6.2	340
DEC	25.776	26.285	25.200	55	42	38	48	46	-	*	6	4	2	3	*	610	14.0 14-17----1967	14.9	331
YEAR	25.732	26.285	25.180	48	33	28	39	37	44	32	85	46	24	15	24	2525	14.0	14.9	513

* LESS THAN $\frac{1}{2}$. - LESS THAN $\frac{1}{2}$, BUT MAKING A TOTAL OF $\frac{1}{2}$. 4 DISTANT LIGHTNING--NO THUNDER HEARD.

\+ VISIBILITY REDUCED TO 6 MILES OR LESS DUE TO PRECIPITATION AND FOG. ∅ HEATING DEGREE DAYS.

++ VISIBILITY REDUCED TO 6 MILES OR LESS DUE TO HAZE, DUST AND BLOWING DUST. T TRACE OF PRECIPITATION.

∅∅ MEASUREMENTS IN LANGLEYS, MADE ON ROOF OF BUILDING 1744, WSMR HEADQUARTERS, BY CALIBRATION LABORATORY.

TABLE VII. MONTHLY AND ANNUAL CLIMATOLOGICAL DATA, "A" STATION, WSMR HEADQUARTERS

ITEM	∅ WINTER	SPRING	SUMMER	FALL	YEAR
TEMPERATURES (°F)					
Mean Maximum	57.2	75.3	92.4	75.8	75.2
Mean Minimum	35.4	52.3	69.5	52.8	52.5
Mean	46.3	63.8	81.0	64.3	63.9
Extremes of Record					
Highest	81	103	106	98	106
Date	2/11/57	5/28/51	*	9/16/51	*
Lowest	-6	16	50	22	-6
Date	1/11/62	3/4/65	6/11/65	11/11/50	1/11/62
DEGREE DAYS (Base 65°F)	1676	421	0	428	2525
RELATIVE HUMIDITY (%)	44	27	38	40	37
SURFACE WINDS (Knots) **					
Average Speed	W 5.8	W 5.2	W 5.4	W 4.9	W 6.1
Strongest Gusts	SW 82	W, WSW 74	S 60	W 61	SW 82
Month and Year	12/51	3/51,5/61	6/62	11/65	Dec. '51
RAINFALL (Inches) ●	1.81	1.07	4.68	2.76	10.32
Percent of Annual	18%	10%	45%	27%	100%
Greatest Monthly	2.43	3.00	7.42	5.76	7.42
Month and Year	12/65	3/58	6/66	9/58	6/66
Greatest 24-Hour	1.02	1.46	4.25	2.96	4.25
Dates	12/14-15/67	3/5-6/58	8/23-24/59	9/11-12/64	1959
SNOWFALL (Inches)	4.6	0.5	0.0	0.8	5.9
Greatest Monthly	14.9	3.5	0.0	6.2	14.9
Month and Year	12/67	3/58	- - -	11/61	1967
CLOUDINESS (%)	38	35	40	28	35
NUMBER OF DAYS WITH:					
Measureable Rainfall ●	10	8	18	10	46
Thunderstorms	1	5	31	7	44
Visibility ≤6 Miles	10	13	9	7	39
● 0.01" or more					
STATION PRESSURE					
Average (Inches of Hg)	25.758	25.671	25.732	24.766	24.732

∅ WINTER = Calendar Months of December, January, February.
SPRING = March, April, May. SUMMER = June, July, August.
FALL = September, October, November.

** With Prevailing Wind Directions. To convert knots to miles per hour, multiply knots by 1.15155.

* Four dates: June 28 & 29, 1951; July 8, 1951; July 2, 1960.

● "Rainfall" includes water content of snowfall.

TABLE VIII. "A" STATION CLIMATOGRAPHY--SEASONAL VALUES, 1950-1968

MONTH	0500H	1100H	1700H	2300H	MEANS
JAN.	37.7°	47.1°	50.6°	42.2°	44.4°
FEB.	41.2	51.7	56.0	46.3	48.8
MAR.	47.0	58.4	63.2	53.3	55.5
APR.	55.5	68.6	73.5	63.2	65.2
MAY	62.8	77.5	81.7	70.7	73.2
JUNE	71.0	86.3	90.4	78.8	81.6
JULY	72.0	86.4	89.4	79.0	81.7
AUG.	70.4	84.8	87.6	77.5	80.1
SEP.	65.4	80.0	83.0	72.3	75.2
OCT.	56.1	70.4	73.1	62.3	65.5
NOV.	44.7	56.8	58.3	49.7	52.4
DEC.	38.4	48.3	50.2	42.9	45.0
YEAR	55.2	68.0	71.4	61.5	63.0 *

* The Mean annual temperature, as derived from the annual mean maximum and annual mean minimum temperatures, is 63.9° (75.2 + 52.5 / 2 = 63.9°).

Note also that the 6-hourly and mean temperatures for April and October are very near the annual values.

TABLE IX. "A" STATION MEAN 6-HOURLY TEMPERATURES, 1948-1968 [6]

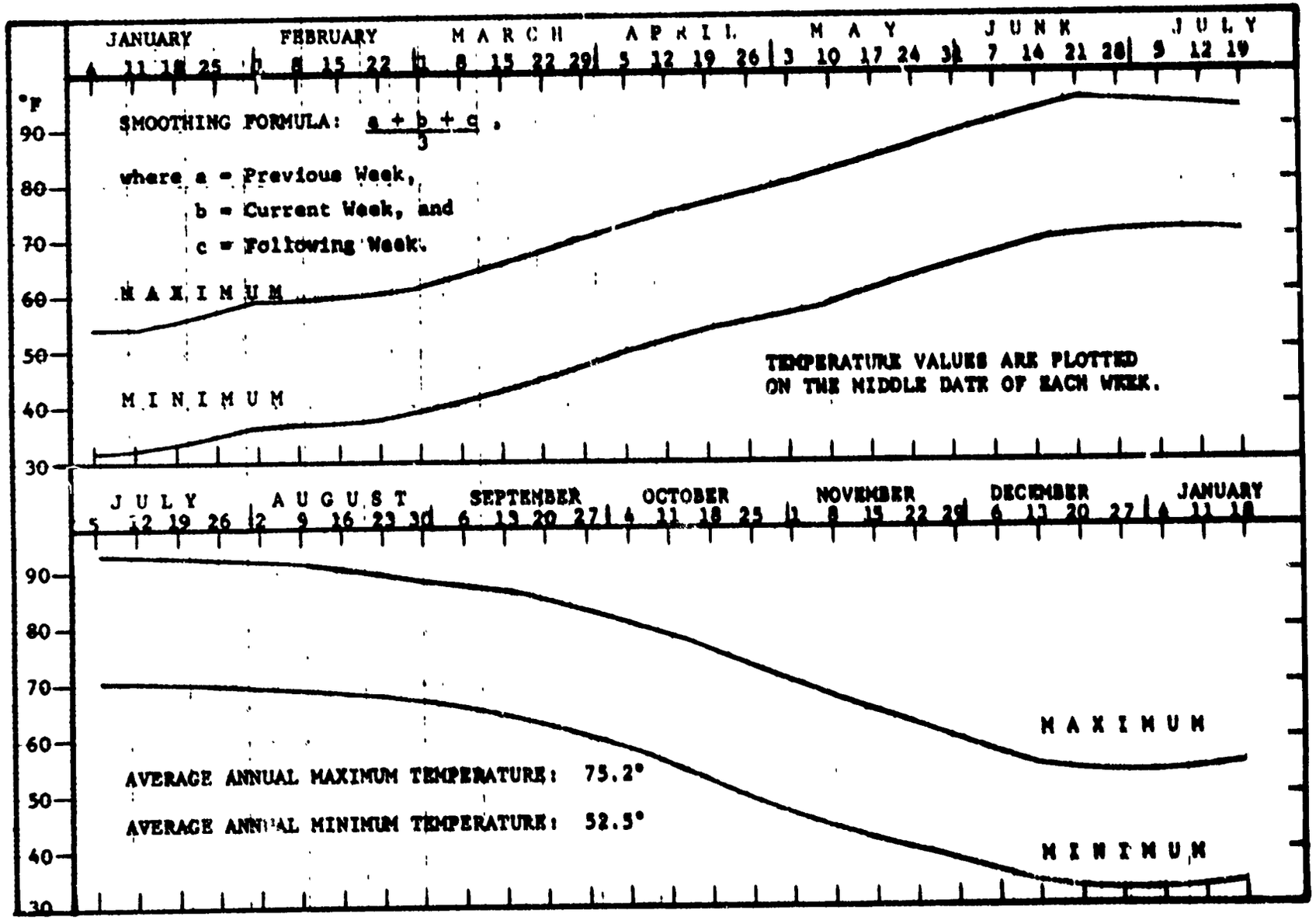

FIG. 3 SMOOTHED WEEKLY MEANS OF MAXIMUM AND MINIMUM TEMPERATURES, 1950-1968, "A" STATION, WSMR, N. M.

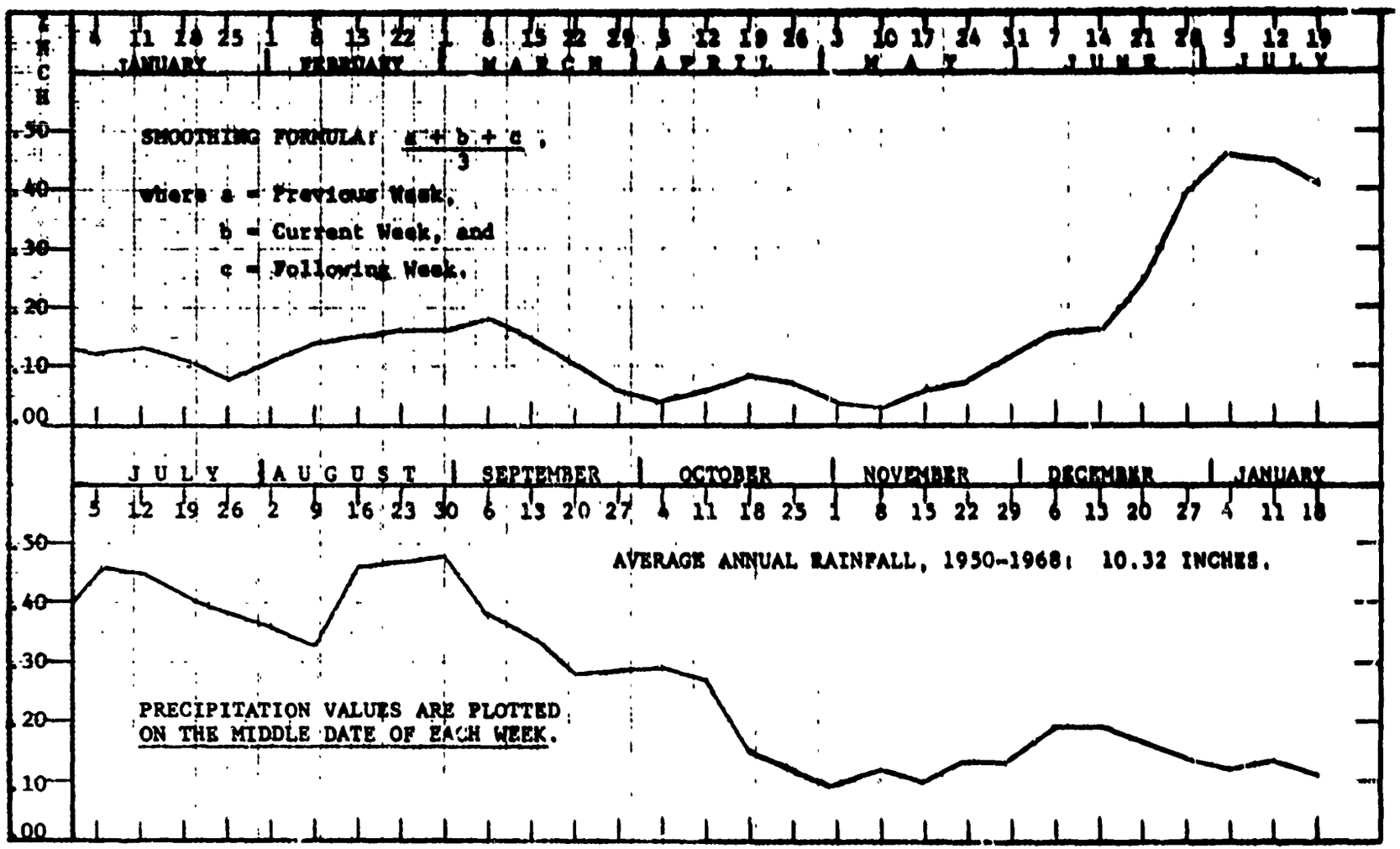

FIG. 4 SMOOTHED WEEKLY PRECIPITATION MEANS, 1950-1968, "A" STATION, WHITE SANDS MISSILE RANGE, N. M.

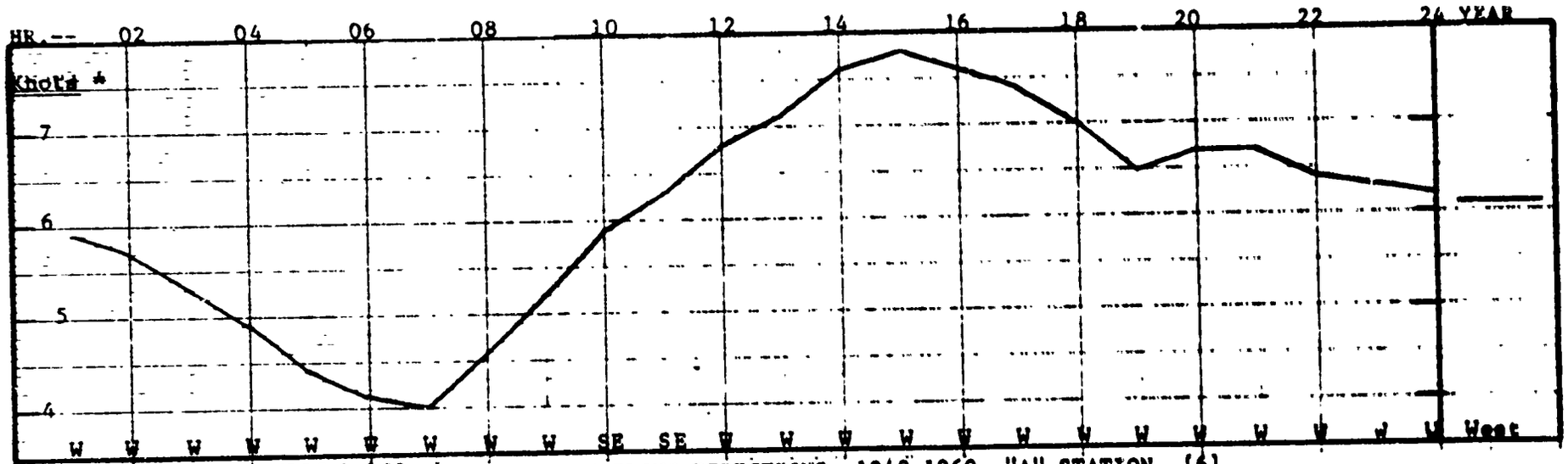

FIG. 5a MEAN HOURLY WIND SPEEDS AND PREVAILING DIRECTIONS, 1948-1960, "A" STATION [6]

*To convert knots to miles per hour, multiply knots by 1.15155.

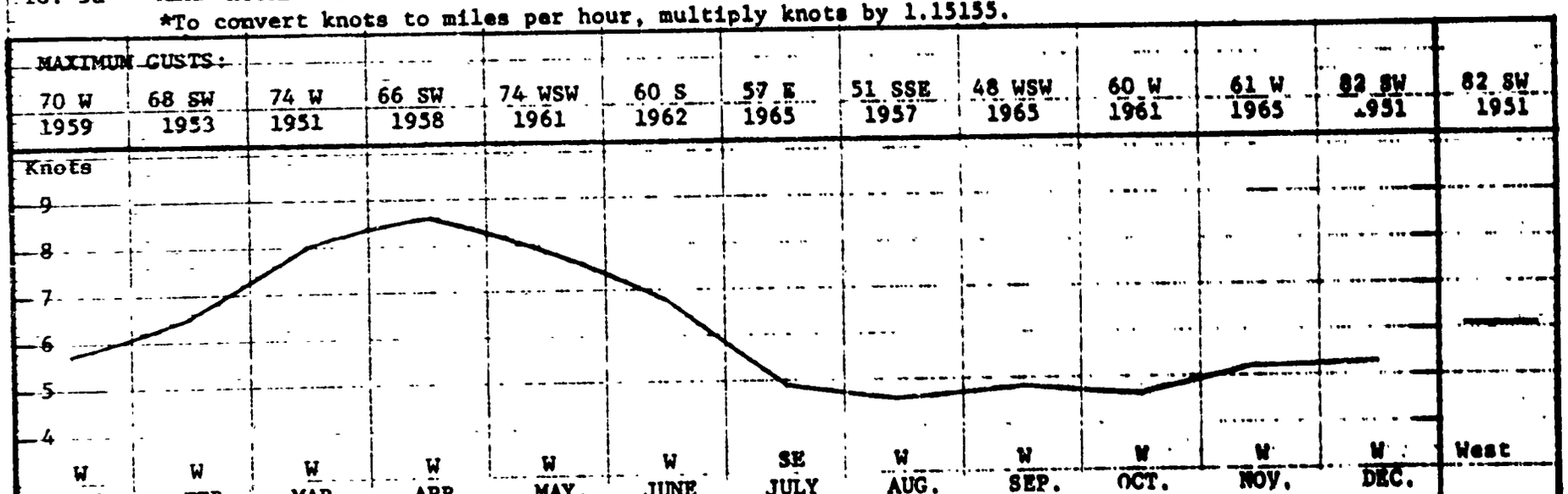

FIG. 5b AVERAGE MONTHLY WIND SPEEDS AND PREVAILING DIRECTIONS, WITH STRONGEST GUSTS, 1950-1968, "A" STATION

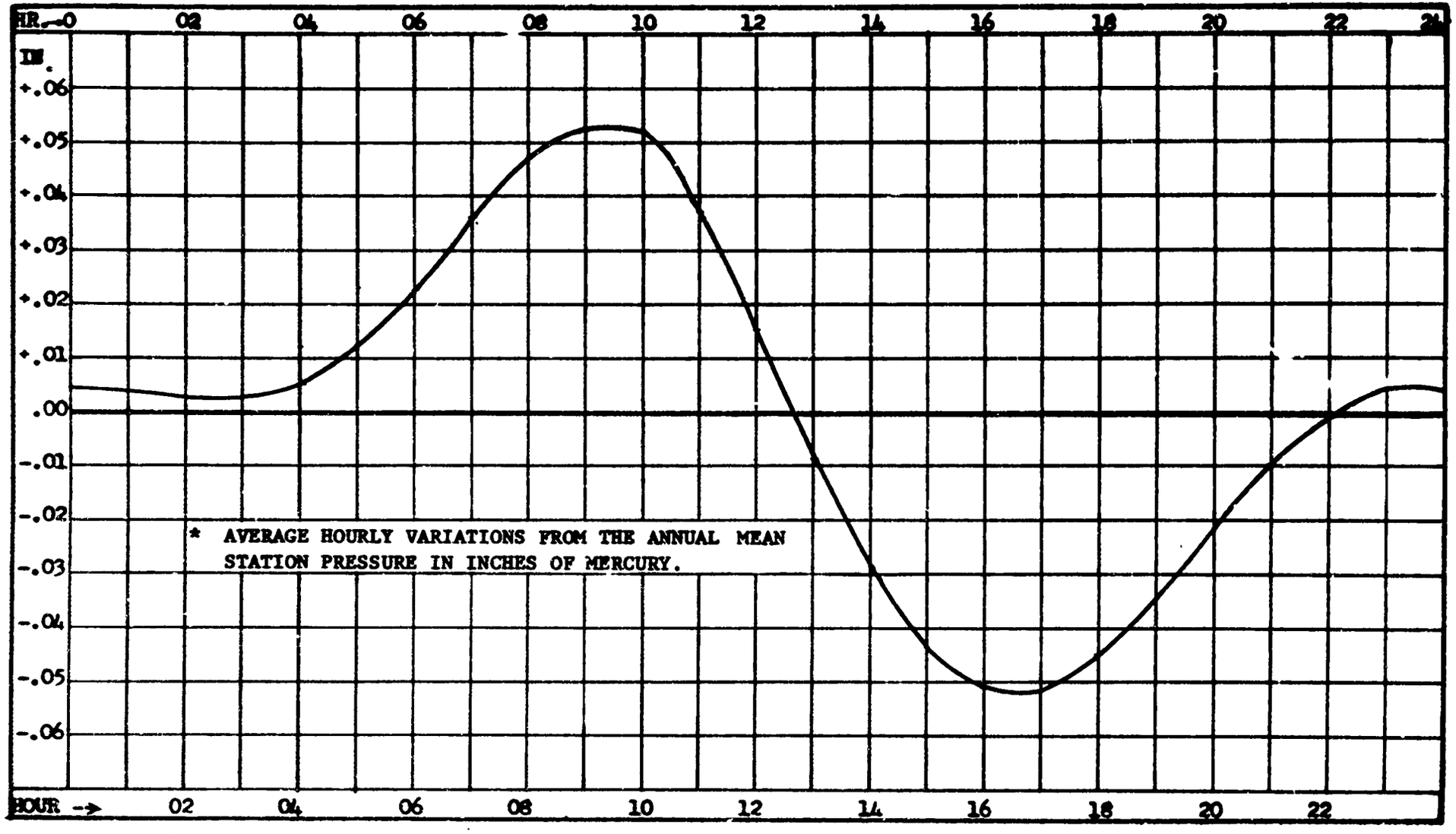

FIG. 6 DIURNAL PRESSURE VARIATIONS*, 1948-1960, "A" STATION, WHITE SANDS MISSILE RANGE, N. M. [6]

REFERENCES

1. "New Mexico Climatological Data," July 1961, U. S. Weather Bureau, Asheville, North Carolina.

2. Kenneth R. Jenkins and Paul H. Taft, "Weather Elements in the Tularosa Basin," Special Report No. 40, July 1960. U. S. Army Signal Missile Support Agency, White Sands Missile Range, New Mexico.

3. "Supplemental Bulletin, Daily and Hourly Precipitation, September 20-24, 1941." Hydrologic Network, Southwest District, Corps of Engineers, U. S. Army and U. S. Weather Bureau, Albuquerque, New Mexico.

4. "Climatography of the United States No. 86-25," New Mexico, 1965, and Monthly Climatological Data, New Mexico, U. S. Department of Commerce, Weather Bureau, Washington, D. C.

5. Records from "Climatological Data, New Mexico," monthly and annual issues, U. S. Department of Commerce, ESSA, Weather Bureau—courtesy of Frank Houghton, State Climatologist.

6. Marjorie M. Hoidale, "Atmospheric Structure, White Sands Missile Range, New Mexico, Part 2," ERDA-106, January 1964. (1948-1960 values from this source with 1961-1968 values added thereto in most cases.)

7. Howard L. DeMastus, "A General Summary of Sacramento Peak Weather," GRD Research Notes No. 82, U. S. Air Force, Bedford, Mass.

8. Paul H. Taft, and John C. Overpeck, "Climate Calendar, New Mexico State University, Las Cruces, New Mexico, 1851 to 1966," January, 1968. Agricultural Experiment Station Research Report 138, New Mexico State University.

9. "Weatherwise," December, 1962. American Meteorological Society, Boston, Mass.

UNCLASSIFIED
Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author)
U. S. Army Electronics Command
Ft. Monmouth, New Jersey

2a. REPORT SECURITY CLASSIFICATION
UNCLASSIFIED

2b. GROUP

3. REPORT TITLE
WHITE SANDS MISSILE RANGE CLIMATE CALENDAR

4. DESCRIPTIVE NOTES (Type of report and inclusive dates)

5. AUTHOR(S) (First name, middle initial, last name)
Taft, Paul H.

6. REPORT DATE
April 1969

7a. TOTAL NO. OF PAGES
37

7b. NO. OF REFS
9

8a. CONTRACT OR GRANT NO.

b. PROJECT NO.

c. DA Task 1T665702D127-02

d.

9a. ORIGINATOR'S REPORT NUMBER(S)
DR-421

9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)

10. DISTRIBUTION STATEMENT
[redacted]
Qualified requesters may obtain copies of this report from DDC.

11. SUPPLEMENTARY NOTES

12. SPONSORING MILITARY ACTIVITY
U. S. Army Electronics Command
Atmospheric Sciences Laboratory
White Sands Missile Range, New Mexico

13. ABSTRACT
This is the fourth edition of the White Sands Missile Range Climate Calendar, which was first published in May, 1963.

Mean daily maximum and minimum temperatures, and extreme temperatures for the period of record (1950-1968) are tabulated in calendar form for "A" Station, the weather center located at Headquarters, White Sands Missile Range, New Mexico. Averages of temperature, relative humidity, wind and cloudiness are included for each month, as well as maximum 24-hour and monthly rainfall.

Supplementary tables give monthly, seasonal and annual values of maximum winds, degree days, solar radiation, means and extremes of station pressure, the greatest monthly and single-storm snowfall, and the average six-hourly temperatures and relative humidities. Also included are the average number of days with the occurrence of precipitation, distant lightning, thunderstorms and visibility restrictions, as well as a summary of weather extremes for the State of New Mexico. Presented in graph form are weekly means of maximum and minimum temperatures, weekly values of precipitation, mean hourly and monthly wind speeds with prevailing directions, and average hourly variations from the mean station pressure.

DD FORM 1 NOV 65 1473 REPLACES DD FORM 1473, 1 JAN 64, WHICH IS OBSOLETE FOR ARMY USE.

UNCLASSIFIED
Security Classification

UNCLASSIFIED

Security Classification

14. KEY WORDS	LINK A ROLE	LINK A WT	LINK B ROLE	LINK B WT	LINK C ROLE	LINK C WT
1. Meteorology						
2. Climatology						
3. Means and Extremes						

UNCLASSIFIED

Security Classification