

U. S. DEPARTMENT OF COMMERCE  
LUTHER H. HODGES, Secretary  
WEATHER BUREAU  
F. W. REICHELDERFER, Chief

# CLIMATOLOGICAL DATA

VIRGINIA

MARCH 1962  
Volume 72 No. 3



ASHEVILLE: 1962

VIRGINIA - MARCH 1962

TEMPERATURE AND PRECIPITATION EXTREMES

Highest Temperature: 83° on the 30th at Richmond WB AP

Lowest Temperature: 1° on the 8th at Monterey

Greatest Total Precipitation: 7.65 inches at Partlow 3 WNW

Least Total Precipitation: 2.05 inches at Speedwell

Greatest One-Day Precipitation: 2.91 inches on the 6th at Woodstock

Greatest Reported Total Snowfall: 45.0 inches at Big Meadows

Greatest Reported Depth of Snow on Ground: 28 inches on the 6th at  
Peaks of Otter

SPECIAL WEATHER SUMMARY

In proverbial fashion, this March was "in like a lion and out like a lamb", and will be long remembered for the severity of the weather produced in the first half of the month. In succession a statewide snowstorm was followed by a very destructive coastal storm, another snowstorm, then at mid-month by inland flooding of creeks and rivers (minor but widespread) over the James River and York River Basins.

Snow (March 4th-7th) began in western parts of Virginia the night of the 4th and spread rapidly over the entire state except was mostly as rain in the extreme southeast corner with a time of duration in excess of 48 hours in some localities. Hardest hit were the central mountains and northwestern counties, and just east of the Blue Ridge. Accumulations in excess of 40 inches were reported in some scattered communities in central and northern mountain sections, and depths generally ranged 15 to 30 inches throughout these sections. In Piedmont and Tidewater counties depths mostly ranged 7 to 20 inches, and mostly 6 to 12 inches in southwestern counties of Virginia. All transportation was crippled and nearly at a standstill. Most of the schools in the state were closed, some as long as a week. Widespread interruption of electric power and communications facilities resulted. The snow in most areas was exceptionally wet and heavy with a tendency to stick, which weighted down and broke power and telephone lines in addition to breaking tree limbs and even entire trees, which in turn fell across and broke transmission lines. Disruption of electric current, among many other factors, left large numbers of homes without heat for prolonged periods; some as long as 4 days. Two deaths were attributed to the snowstorm. The exceptionally heavy snow loads on numerous roofs throughout the state caused damage and a few caved in.

Many localities claimed new snow records for this storm; new total depth records were set at a number of localities in central mountain and northwestern counties and greatest snowfall for month of March resulted in a number of eastern localities and some in the west. With the inclusion of these March totals, new records for winter total snowfall were common throughout the state.

This widespread snowstorm was produced by a low pressure center in West Virginia, which moved eastward and combined with another low off the Carolina Coast at the time an upper low pressure trough was just west of the Appalachian Mountains and moving very slowly eastward. A number of thunderstorms occurred over the Piedmont area on the 5th accompanied by heavy snowfall; a combination that is a rarity in Virginia.

Statewide precipitation again on the 9th brought 3 to 8 inches of snowfall to the central and southern mountain areas and light snow to the remainder of the state, except as rain or mostly rain in the eastern counties. The heavier falls in the central mountain counties, on top of extensive accumulations, brought a declaration of a state of emergency for some counties and communities. The Red Cross declared Rockingham County a disaster area. Many rural families were isolated for many days. Emergency food supplies were distributed to over 100 families by helicopter in the Shenandoah Valley area.

Between the snows on the 5th and 9th, a severe extra tropical storm visited Virginia's coastal areas and caused greater tidal and wave damage than any previous storm or hurricane. Some heavy rains and high winds with gusts up to 65 to 70 miles per hour occurred in the area but damages were almost entirely from the pounding waves and flooding from extremely high tides. On the 7th high tide at Hampton Roads was 5.6 feet above normal (8.9 above MLW), the highest tide ever experienced from an extra tropical storm and was less than a foot below the record high tide experienced during a hurricane in 1933. Erosion of sand by waves and tides in many cases changed the configuration of the shoreline. Total damage estimate (revised downward from some preliminary estimates) is about 35 million dollars and 4 deaths from drowning were a direct result of the storm. The Islands of Chincoteague and Assateague were inundated and more than 1000 residents were evacuated.

High astronomical tides which occurred at the time of the storm contributed significantly to tidal flooding, and was in conjunction with the long fetch of onshore winds produced by the complexities of this unusual extra tropical storm and its erratic movement.

Warming temperatures on the 10th-11th increased the rate of snow-melt over Piedmont counties and in conjunction with rains on the night of 11th and 12th, caused extensive but minor flooding of creeks and small streams over the James and York River Basins and minor flooding in the Lower James River. Minor flooding in the Lower James River Basin occurred again 21st-24th, and March ended with very warm and dry weather.

Joseph T. Harden  
Weather Bureau Acting State Climatologist  
Byrd Field  
Sandston, Virginia



# CLIMATOLOGICAL DATA

VIRGINIA  
MARCH 1962

CONTINUED

Station	Temperature												Precipitation										
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet		No. of Days			
										90° or Above	32° or Above	32° or Below	0° or Below					Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
PIEDMONT FIELD STATION	51.4	32.1	41.8		79	31	11	2	716	0	1	15	0	4.76		2.76	6	20.0	20	7	7	3	1
WASHINGTON	52.1	28.5	40.3		80	31	10	4	756	0	1	20	0	4.17		1.97	6				6	3	1
WASHINGTON WB NAT AP	52.5	35.8	44.2	-.6	79	30	16	2	642	0	1	9	0	3.83	.62	1.00	6	4.0	2	7+	6	4	1
WAVERLY HILLS	53.5	34.4	44.0		80	30	14	2	647	0	0	12	0	4.12		1.40	6	11.0	6	7+	5	3	1
WINCHESTER 2 SSW	51.0	31.2	41.1	-1.9	78	30	9	8	733	0	1	16	0	5.22	2.06	2.30	6	31.0	27	7	6	4	1
WOODSTOCK	52.1	28.8	40.5	-3.1	78	30	8	8	754	0	1	21	0	5.12	2.26	2.91	6	31.0	24	6	5	3	1
DIVISION			41.4	-1.3										4.43	1.06			23.1					
CENTRAL MOUNTAIN																							
BALCONY FALLS	51.2	32.0	41.6		76	31	15	8	719	0	1	17	0	5.70	1.71	1.62	6	30.0	18	6	11	4	2
BUCHANAN	55.5	32.3	43.9	-2.3	79	30	12	8	647	0	0	18	0	4.58	.77	.95	21	20.0			10	3	0
CATAWBA SANATORIUM	52.4	30.7	41.6	-1.7	74	30	12	3	719	0	0	21	0	3.77	.16	1.17	21	17.5	8	6	10	2	0
COVINGTON FILT PLANT	55.5	31.4	43.5		76	30	16	3	660	0	0	18	0	3.18		.80	21	11.0	6	6	9	1	0
DALE ENTERPRISE	49.1	28.7	38.9	-3.3	76	30	8	8	802	0	0	21	0	2.89	.02	.89	21	38.0	24	9+	6	2	0
HOT SPRINGS	51.2	28.5	39.9	-.2	77	30	9	8	771	0	0	22	0	6.33	2.40	1.70	6	27.5	17	6	11	6	2
LEXINGTON	55.0	31.1	43.1	-2.0	78	30	11	8	673	0	0	18	0	5.27	1.66	1.33	21	26.0	10	6	10	5	1
MONTEREY	45.6	23.1	34.4		69	31	1	8	942	0	5	28	0	4.46		1.00	21+	25.0			7	3	2
ROANOKE	54.4	33.7	44.1	-2.1	77	30	18	3	642	0	0	16	0	4.25	.61	1.18	21	4.5			8	4	1
ROANOKE WB AIRPORT	52.9	34.1	43.5	-2.0	77	30	16	3	658	0	0	13	0	4.76	1.23	1.24	21	11.3	6	6	7	5	2
STAUNTON D AND B INST	49.7	30.2	40.0	-2.6	77	31	8	8	769	0	2	19	0	4.41	1.24	2.20	6	31.0			8	2	1
TIMBERVILLE	49.6	29.1	39.4		76	30	5	8	789	0	1	22	0	4.49	1.53	1.18	6	26.0	22	6	7	4	1
DIVISION			41.2	-2.1										4.51	1.02			22.3					
SOUTHWESTERN MOUNTAIN																							
BLACKSBURG 2	49.1	28.8	39.0		71	31	14	3	801	0	1	23	0	3.83		1.02	21	11.6	6	7+	10	2	1
BRISTOL	56.0M	33.2M	44.6M		75	31+	20	6	625	0	0	15	0	4.41		1.00	21	4.6	4	6	12	4	1
BURKES GARDEN	47.6M	27.1	37.4M	-2.2	67	30+	8	8	843	0	1	22	0	3.04	-1.37	1.18	21	11.5	7	5	8	2	1
CHILMOWIE 1 S	51.5	29.1	40.3		72	30	18	8	758	0	0	22	0	3.51		.89	21	5	6	6	9	2	0
FLOYD 2 NE	50.3	27.7	39.0		70	30	5	8	797	0	0	23	0	3.31		1.11	12				8	1	1
GALAX RADIO WBOB	53.0	28.5	40.8		73	30	12	3	745	0	0	23	0	3.29		1.13	12	4.5	5	5	6	3	1
GLEN LYN	55.5	33.5	44.5		76	30	18	3	628	0	0	17	0	2.62	-.91	.85	21	9.5	5	7	8	1	0
GRUNDY 3 NW	56.6	34.1	45.4		78	29	22	6+	602	0	0	13	0	3.32		.71	5				10	3	0
MARION EVAP STATION	51.6	30.9	41.3		71	30+	12	3	728	0	1	18	0	3.48		1.13	21	15.0	5	9	10	1	1
PENNINGTON GAP	51.8	29.7	40.8	-2.8	74	30	19	6	746	0	0	23	0	6.07	.59	1.61	21	4.5	0		7	2	0
PULASKI	48.8	31.4	40.1		72	30	12	3	762	0	1	18	0	2.96		.90	21				7	3	0
ROCKY KNOB	47.4M	28.7M	38.1M		67	31	10	3	826	0	1	20	0	3.38		1.24	31	14.6	14	6	5	4	1
ST PAUL	56.2	31.5	43.9		74	30+	20	17+	649	0	0	20	0	4.56		1.83	21				9	3	1
SALTVILLE 1 N	52.1	29.4	40.8	-2.9	75	30	18	8+	743	0	0	21	0	3.85	-.42	1.24	21	15.0	5	9	10	1	1
WISE 1 SE	49.5	30.5	40.0		68	29	14	8	766	0	2	19	0	2.98		.93	21	13.9	5	6	9	2	0
WYTHEVILLE	49.0	30.4M	39.7M	-3.2	69	29	20	6+	772	0	0	19	0	2.69	-.69	.95	21	4.0	4	6	9	1	0
DIVISION			41.0	-1.7										3.58	-.57			9.9					

## SUPPLEMENTAL DATA

Station	Wind direction		Wind speed m. p. h.				Relative humidity averages - percent				Number of days with precipitation									
	Prevailing	Percent of time from prevailing	Average	Fastest mile	Direction of fastest mile	Date of fastest mile	1:00 a EST	7:00 a EST	1:00 p EST	7:00 p EST	Trace	01-09	10-49	50-99	100-199	200 and over	Total	Percent of possible sunshine	Average sky cover	sunrise to sunset
LYNCHBURG WB AIRPORT	-	-	9.2	34	SW	30	-	74	55	59	2	3	3	4	1	0	13	49	7.4	
NORFOLK WB AIRPORT	NNE	17	12.2	41	NE	7	75	75	60	65	4	2	6	0	2	0	14	59	6.1	
RICHMOND WB AIRPORT	NNE	13	8.8	31	N	17	75	77	47	62	3	4	2	3	2	0	14	56	6.7	
ROANOKE WB AIRPORT	SE	11	9.9	35++	SSW	30	64	70	49	52	5	3	2	3	2	0	15	-	7.3	
WASHINGTON WB NAT AIRPORT	N	17	10.2	38	ENE	6	59	62	44	51	2	3	2	3	1	0	11	65	6.0	

See Reference Notes Following Station Index







DAILY TEMPERATURES

VIRGINIA MARCH 1962

Continued

Table with columns for Station, Day Of Month (1-31), and Average. Rows include various weather stations such as FREDERICKSBURG 2 S, GALAX RADIO WBOB, GLEN LYN, etc.

See reference notes following Station Index.



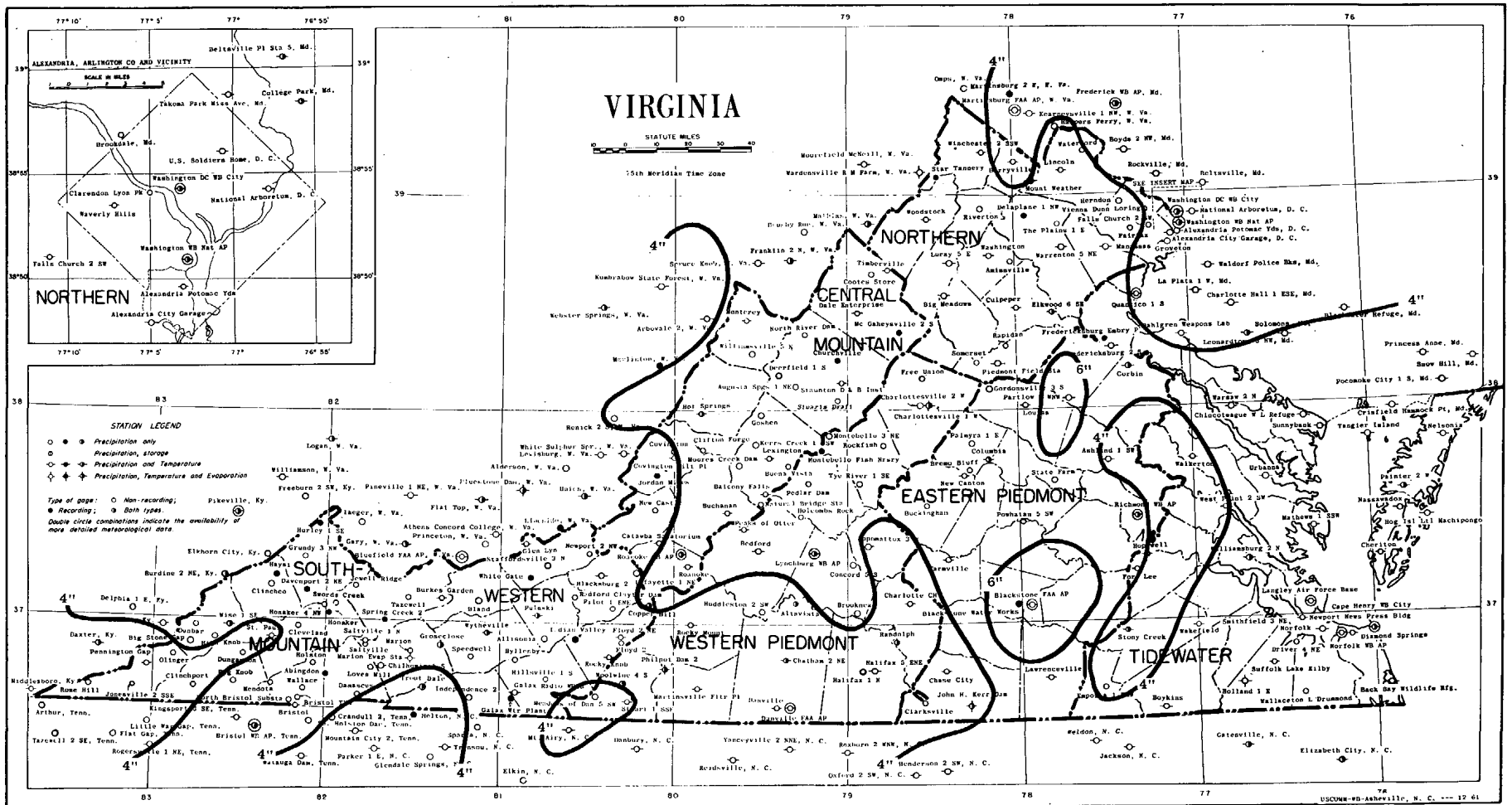


# SNOWFALL AND SNOW ON GROUND

VIRGINIA  
MARCH 1962

Station		Day of month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
BIG MEADOWS	SNOWFALL SN ON GND					33.0	9.0			39	30	33	24	-	-	-	-	-	-	-	15	13	12	10	10	10	9	8	6	4	1		
BLACKSTONE FAA AIRPORT	SNOWFALL SN ON GND				7.5	8.0	8.0		6	3.0	2																						
BOYKINS	SNOWFALL SN ON GND					T	2.0																										
BRISTOL	SNOWFALL SN ON GND	-	-	-	-	-	-	4																									
BURKES GARDEN	SNOWFALL SN ON GND	T			7.0	1.5		3	1	3.0	2	T		T			T	T		T													
CHARLOTTE COURT HOUSE	SNOWFALL SN ON GND	-	-	-	.5	6.0	2.0			T	2.0																						
CHASE CITY	SNOWFALL SN ON GND				1.7	3.3	.8			3.7	T	T																					
CHERITON	SNOWFALL SN ON GND						2.0	T																									
CORBIN	SNOWFALL SN ON GND					15.0	4.0			10	8	5	4	3	T	T	T	T	T														
DALE ENTERPRISE	SNOWFALL SN ON GND				8.0	24.0	3.0			3.0	T		T								T	T	T	T	T								
DANVILLE FAA AIRPORT	SNOWFALL SN ON GND				6.0	2.0	3.0			1.0	T																						
GALAX RADIO WBOB	SNOWFALL SN ON GND				4.5	T																											
GLEN LYN	SNOWFALL SN ON GND	T			T	5.0	3.0			1.0	.5																						
HOT SPRINGS	SNOWFALL SN ON GND				1.0	17.0	3.0			1.5	5.0		T	T			T					T											
LEXINGTON	SNOWFALL SN ON GND				9.0	11.0			6	5	6.0	4	3																				
LINCOLN	SNOWFALL SN ON GND				1.0	17.0			16	16	14	12	8	6	4	2	T																
LYNCHBURG WB AIRPORT	SNOWFALL SN ON GND WTR EQUIV			T	9.6	8.1	.2			5.3	6	3	1																				
MATHEWS 1 SSW	SNOWFALL SN ON GND						2.5																										
NEW CANTON	SNOWFALL SN ON GND				10.0	8.0	2.0			3.0	12	10	8	T	T																		
NORFOLK WB AIRPORT	SNOWFALL SN ON GND WTR EQUIV	T				.4	.8																										
QUANTICO 1 S	SNOWFALL SN ON GND				4.2	2.2	.2			T	T																						
RICHMOND WB AIRPORT	SNOWFALL SN ON GND WTR EQUIV	T			9.3	5.3	.6			1.0	3	1					T																
ROANOKE WB AIRPORT	SNOWFALL SN ON GND WTR EQUIV			T	5.2	.9	T			5.2	T	T			T																		
ROCKY MOUNT	SNOWFALL SN ON GND				2.0	3.0	1.0			1.0	3.5																						
SALTVILLE 1 N	SNOWFALL SN ON GND				2.0	3.0	2.0			5.0	3.0										T	T	T										
STAUNTON D AND B INST	SNOWFALL SN ON GND	-	-	-	4.0	22.0				1.0	4.0																						
WARSAW 2 N	SNOWFALL SN ON GND				T	6.0	2.0			4	2	T																					
WASHINGTON WB NAT AP	SNOWFALL SN ON GND WTR EQUIV				.7	3.1	.2			T																							
WINCHESTER 2 SSW	SNOWFALL SN ON GND					22.0	8.0			26	25	1.0																					
WISE 1 SE	SNOWFALL SN ON GND	1.1			4.3	4.6	T			3.9					T																		
WOODSTOCK	SNOWFALL SN ON GND					24.0	6.0			16	15	1.0																					

See reference notes following Station Index.



**TOTAL PRECIPITATION**

VIRGINIA  
MARCH 1962

Isohyets are drawn through points of approximately equal values. Hourly precipitation data from recorder substations will be available in the publication "Hourly Precipitation Data". Caution advised in using these maps for interpolation, particularly in mountainous areas.





REFERENCE NOTES

Additional information regarding the climate of Virginia may be obtained by writing to the State Climatologist at Weather Bureau Airport Station, Byrd Field, Sandston, Virginia, or to any Weather Bureau Office near you.

Figures and letters following the station name, such as 12 SSW, indicate distance in miles and direction from the post office.

Delayed data and corrections will be carried only in the June and December issues of this bulletin.

Monthly and seasonal snowfall and heating degree days for the 12 months ending with the preceding June data will be carried in the July issue of this bulletin.

Stations appearing in the Index, but for which data are not listed in the tables, either are missing or were received too late to be included in this issue.

Divisions, as used in "Climatological Data" Table and on the maps, became effective with data for November 1956.

Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in °F, precipitation and evaporation in inches and wind movement in miles. Monthly degree day totals are the sums of the negative departures of average daily temperatures from 65° F.

Evaporation is measured in the standard Weather Bureau type pan of 4 foot diameter unless otherwise shown by footnote following the "Evaporation and Wind" Table. Max and Min in "Evaporation and Wind" Table refer to extremes of temperature of water in pan as recorded during 24 hours ending at time of observation.

Normals for all stations are climatological standard normals based on the period 1931-1960.

Water equivalent values published in the "Snowfall and Snow on Ground" Table are the water equivalent of snow, sleet, or ice on the ground. Samples for obtaining measurements are taken from different points for successive observations; consequently occasional drifting and other causes of local variability in the snowpack may result in apparent inconsistencies in the record.

Entries of snowfall in the "Climatological Data" Table and the "Snowfall and Snow on Ground" Table, and in the "Seasonal Snowfall" Table include snow and sleet. Entries of snow on ground include snow, sleet and ice.

Data in the "Extremes Table"; "Daily Precipitation" Table; "Daily Temperature" Table; and "Evaporation and Wind" Table; and snowfall in the "Snowfall and Snow on Ground" Table; when published, are for the 24 hours ending at time of observation. The Station Index shows observation times in local standard time. During the summer months some observers take the observations on daylight saving time.

Snow on ground in the "Snowfall and Snow on Ground" Table is at observation time for all except Weather Bureau and FAA stations. For these stations snow on ground values are at 7:00 a.m., E.S.T.

In the Station Index the letters C, G, H, and J in the "Special" column under the heading "Observation Time and Tables", indicate the following:

- C Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in "Hourly Precipitation Data" Bulletin.
- G "Soil Temperature" Table.
- H "Snowfall and Snow on Ground" Table. Omission of data in any month indicates no snowfall and/or snow on ground in that month.
- J "Supplemental Data" Table.

OTHER REFERENCE NOTES

No record in the "Climatological Data" Table and "Daily Temperature" Table is indicated by no entry.

Interpolated values for monthly precipitation totals may be found in the annual issue of this publication.

- No record in the "Supplemental Data" Table; "Daily Precipitation" Table; "Evaporation and Wind" Table; "Snowfall and Snow on Ground" Table; and the Station Index.
- + And also on an earlier date or dates.
- ++ Fastest observed one minute wind speed. This station is not equipped with automatic wind instruments.
- \* Amount included in following measurement, time distribution unknown.
- # Thermometers are generally exposed in a shelter located a few feet above sod-covered ground; however, the reference indicates that the thermometers are exposed in a shelter located on the roof of a building.
- // Gage is equipped with a windshield.
- AR This entry in time of observation column in Station Index means after rain.
- B Adjusted to a full month.
- D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of new snowfall.
- M One or more days of record missing; if average value is entered, less than 10 days record is missing. See "Daily Temperature" Table for detailed daily record. Degree day data, if carried for this station, have been adjusted to represent the value for a full month.
- R Amounts from recording gage. (These amounts are essentially accurate but may vary slightly from the amounts to be published later in Hourly Precipitation Data.)
- SS This entry in time of observation column in Station Index means observation made near sunset.
- T Trace, an amount too small to measure.
- V Includes total for previous month.
- X Observation time is 1:00 a.m., E.S.T. of the following day.
- VAR This entry in time of observation column in Station Index means variable.

General weather conditions in the U. S. for each month are described in the publications MONTHLY WEATHER REVIEW, MONTHLY CLIMATOLOGICAL DATA-NATIONAL SUMMARY, and STORM DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

Information concerning the history of changes in locations, elevations, exposure, etc. of substations through 1955 may be found in the publication "Substation History" for this state. That publication may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. for 35 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data for the respective stations, obtained as indicated above, price 15 cents.

Subscription Price: 20 cents per copy, monthly and annual; \$2.50 per year. (Yearly subscription includes the Annual Summary). Checks and money orders should be made payable to the Superintendent of Documents. Remittance and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.