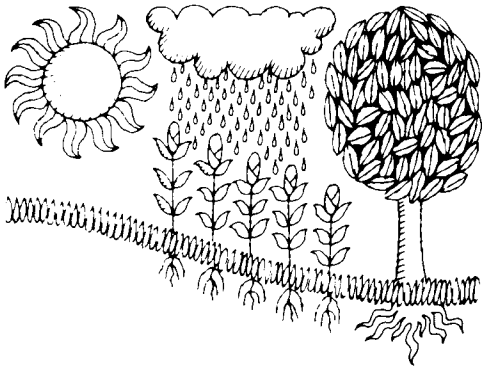
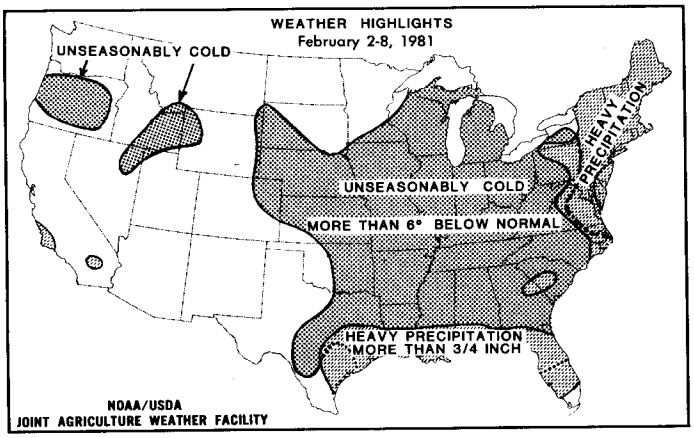


WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
Economics and Statistics Service
World Food and Agricultural Outlook and Situation Board

Volume 68, No. 6 | Washington, D.C. | Feb. 10, 1981



National Weather Summary

FEB. 2 - 8, 1981

HIGHLIGHTS...Significant rain and/or snow fell in some of the very dry areas along the gulf coast and northward along the east coast. Rain was heavy in the northeast and some flooding was reported along ice-clogged rivers. The major portion of the Nation's winter wheat in the central and southern Plains remained dry. Several outbreaks of bitterly cold air into the northern Plains spread eastward and westward. Average temperatures for the week were colder than normal over much of the Nation.

MONDAY...Much needed rain fell along the east coast from the Mid-Atlantic States through New England, changing to snow as much colder air moved in behind the storm. Record-high temperatures were recorded ahead of the cold air while sub-zero readings were spreading into the northern Plains.

TUESDAY...Snow showers and squalls continued around the Great Lakes and in the mountains of Virginia and West Virginia. Gusty winds swirled snow throughout the Appalachians and the eastern seaboard. Bitter cold air covered the East. Record-low temperatures were reached in the northern Great Lakes region: Sault Ste. Marie, Mich., -26°; Marquette, Mich., -21°. The western half of the Nation had mild, fair weather.

WEDNESDAY...Snow showers continued over the lower Great Lakes, the upper Ohio Valley, and the northern Appalachians. The warm weather along the east coast earlier in the week had been replaced by record cold air. Record-low temperatures included 2° at Atlantic City, N.J.; 15° at Cape Hatteras, N.C.; and 17° at Wilmington, N.C. Rain fell over central and southern Texas but generally fair conditions prevailed over the ramainder of the Nation.

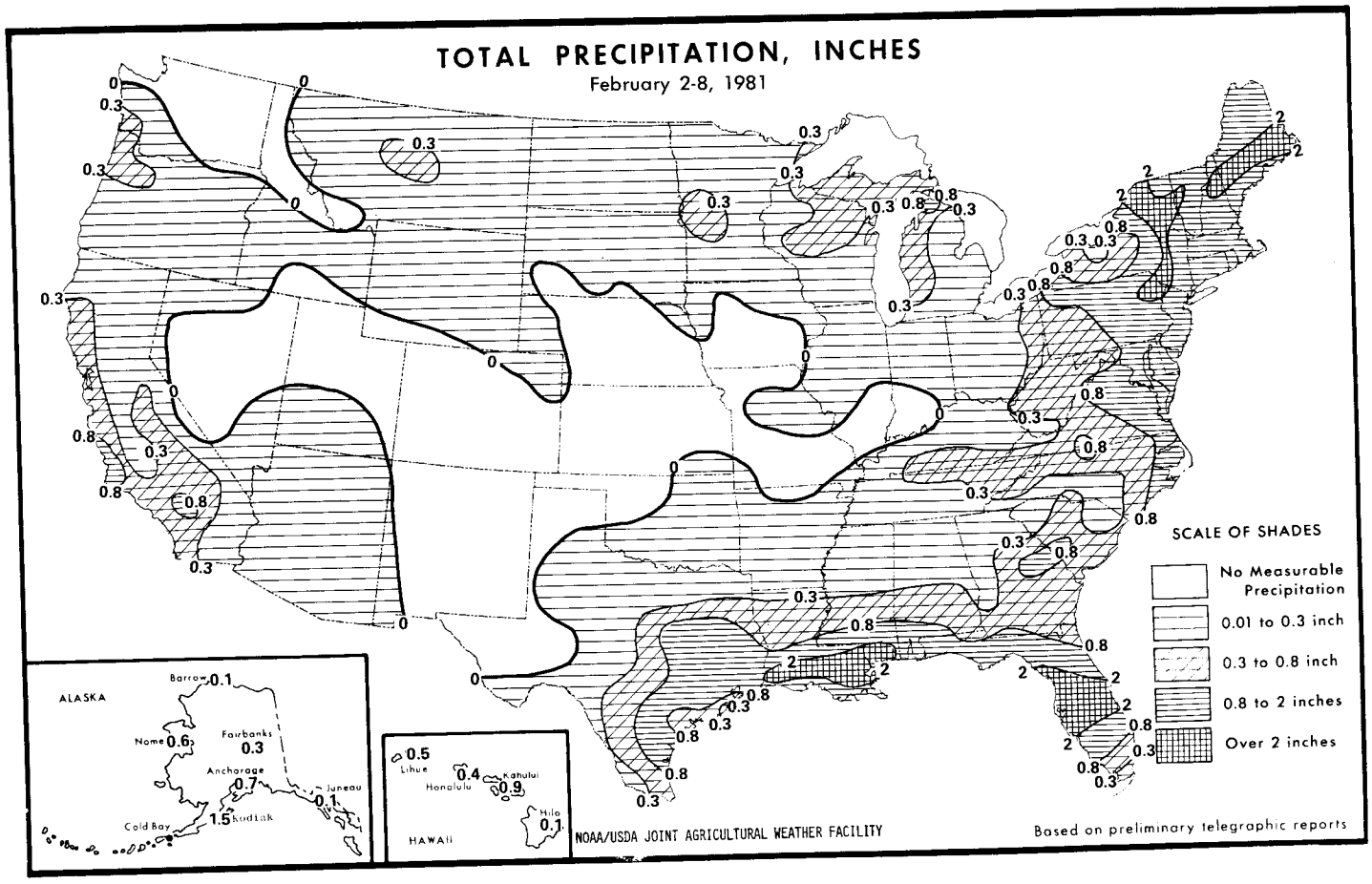
THURSDAY...Snow, sleet, and freezing rain in the lower Mississippi Valley changed to rain later in the day and spread eastward. Light snow fell in the middle and upper Mississippi Valley. By the end of the day, rainshowers reached from southeastern Texas to Georgia and South Carolina with snowshowers scattered across the northern part of the Gulf States. Widely scattered showers, with snow at higher elevations, were observed through the Pacific Northwest.

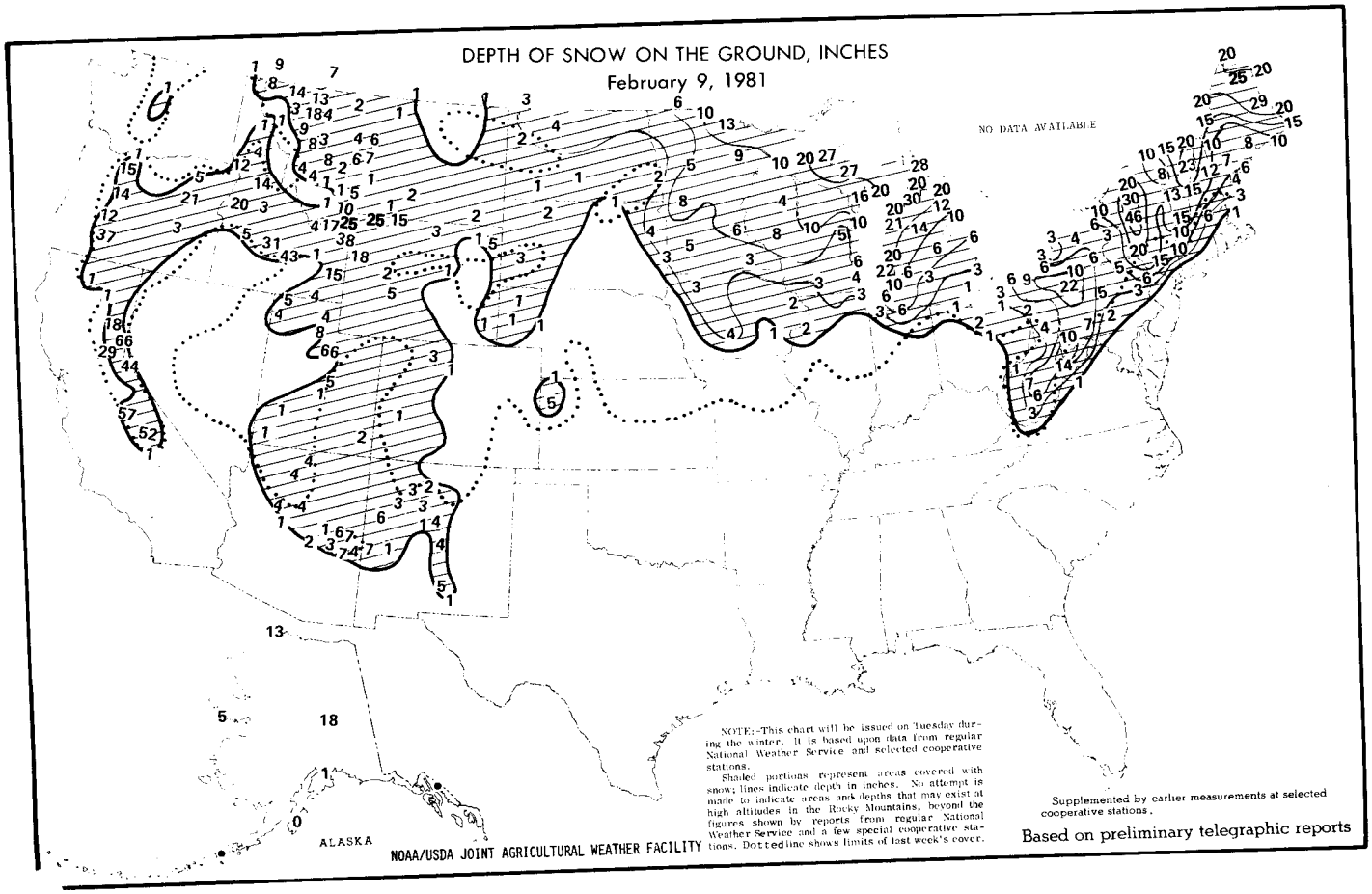
FRIDAY...Low pressure in the Gulf of Mexico spread light rain through northern Florida and the southern Atlantic coast. A mixture of light snow, sleet, and freezing rain fell in northern Alabama and into the southern Appalachians. Light snow covered the Great Lakes region and into Ohio. Late in the day, an arctic air mass pushed southward from central Canada. Snow and gusty wind accompanied the cold front from the northern Rockies into the northern Plains.

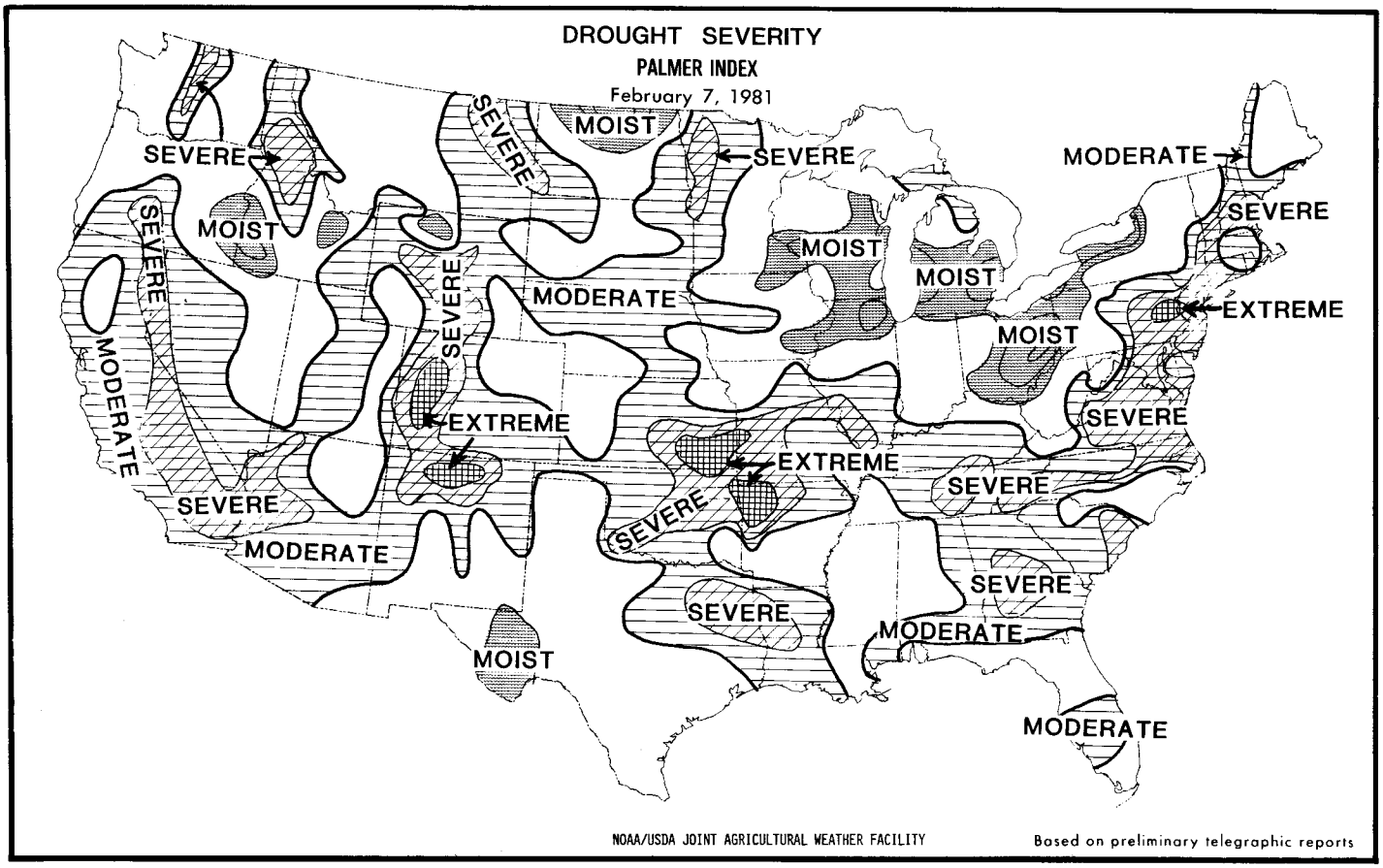
SATURDAY...A winter storm moving across the northern tier of States brought snow, high winds, and bitter cold weather to the central and northern Plains and the upper Mississippi Valley. Blowing snow, mixed with dust reduced visibility in the northern Plains. Elsewhere, scattered light snow reached from the lower Mississippi Valley to the Carolinas and northern Florida. In the West, some light snow fell in the northern Plateau region.

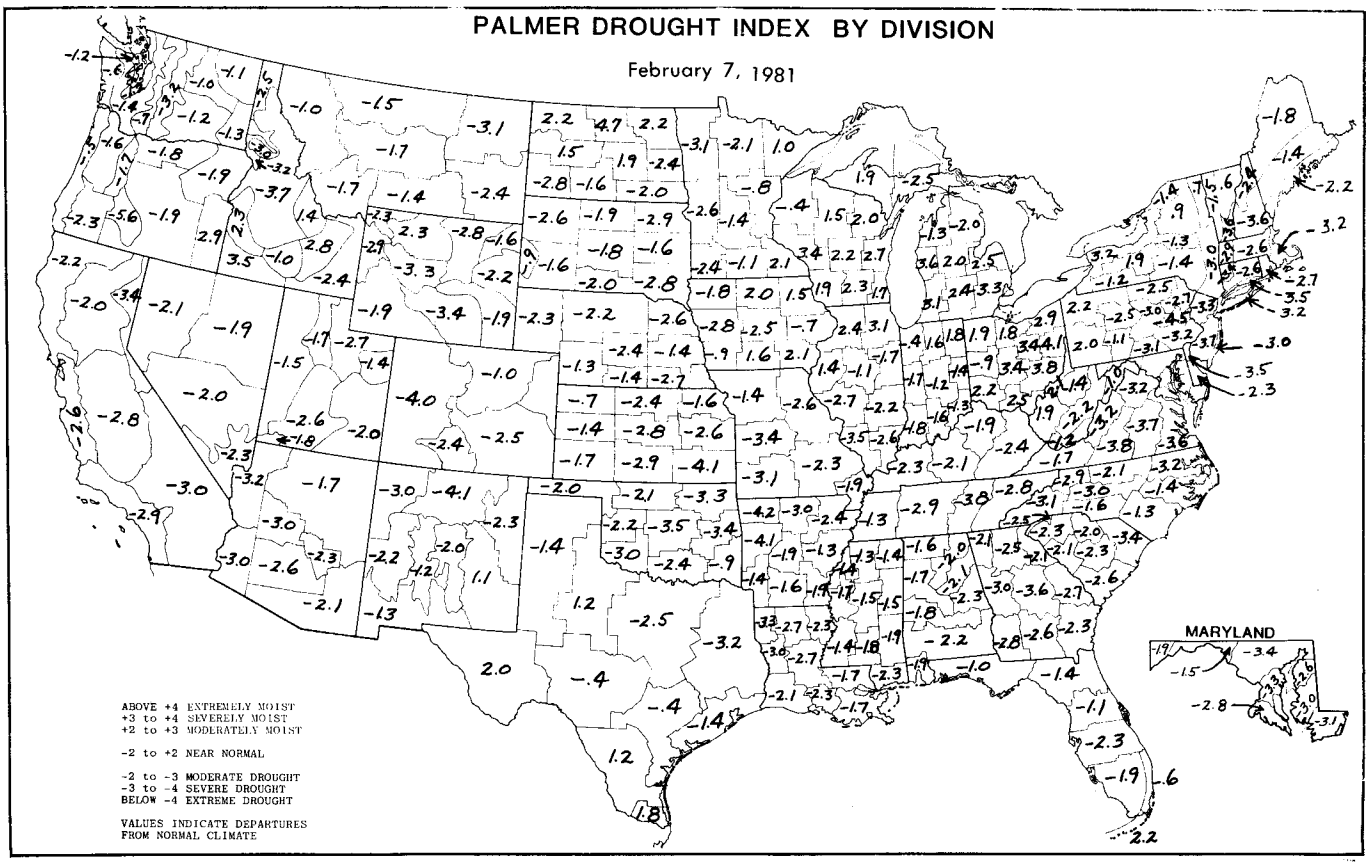
SUNDAY...Heavy snow fell through the western portion of New England early in the day. Later, a low pressure center moving northward brought heavy rain to the coastal sections. Showers and thunderstorms produced locally heavy rain through Florida. Still another winter weather system moved into Montana, spreading more snow across the western portion. Elsewhere, a cold front just off the California coast spread rain across the southern half of the State and into southern Nevada and western Arizona.

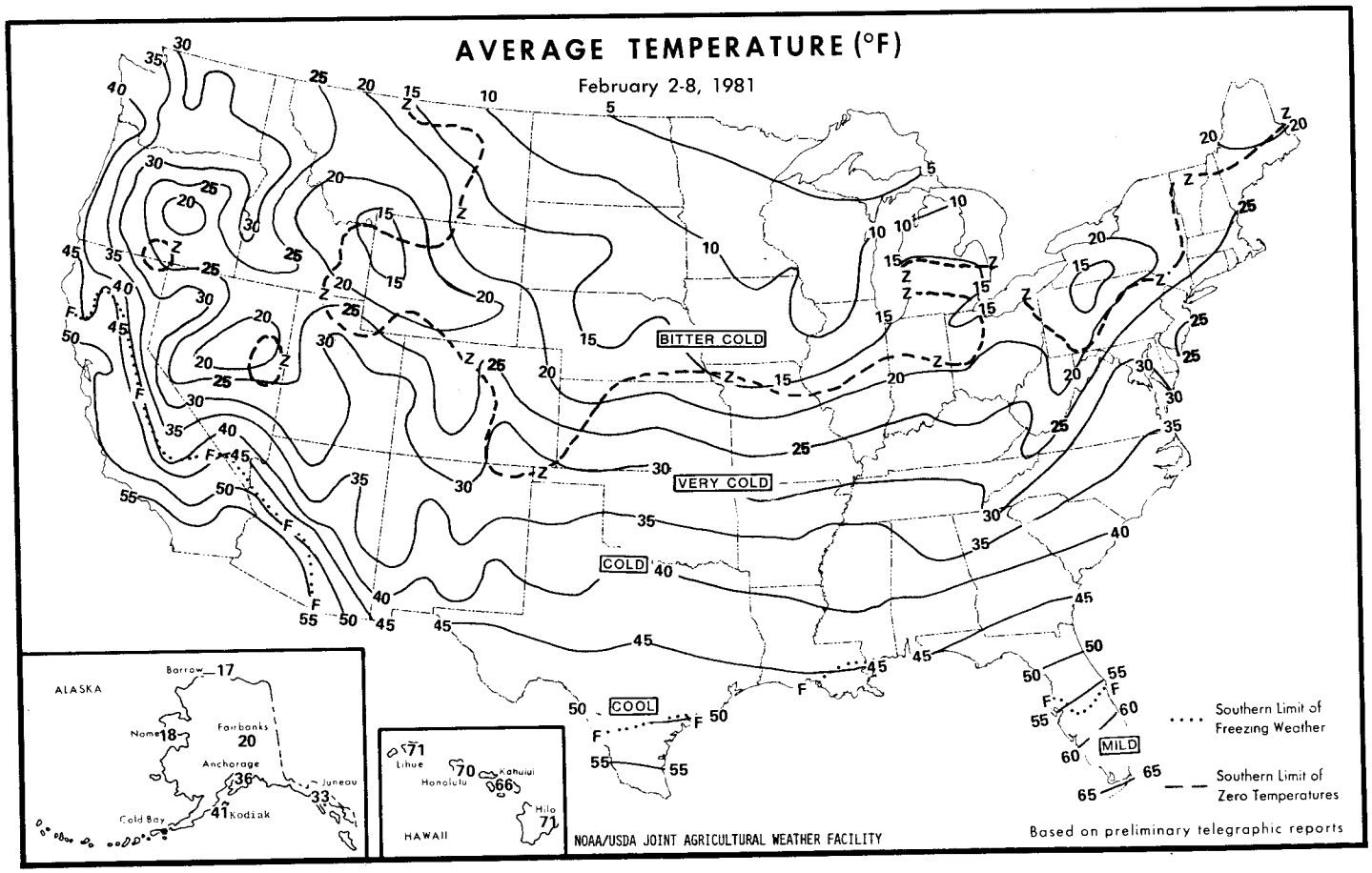
In This Issue

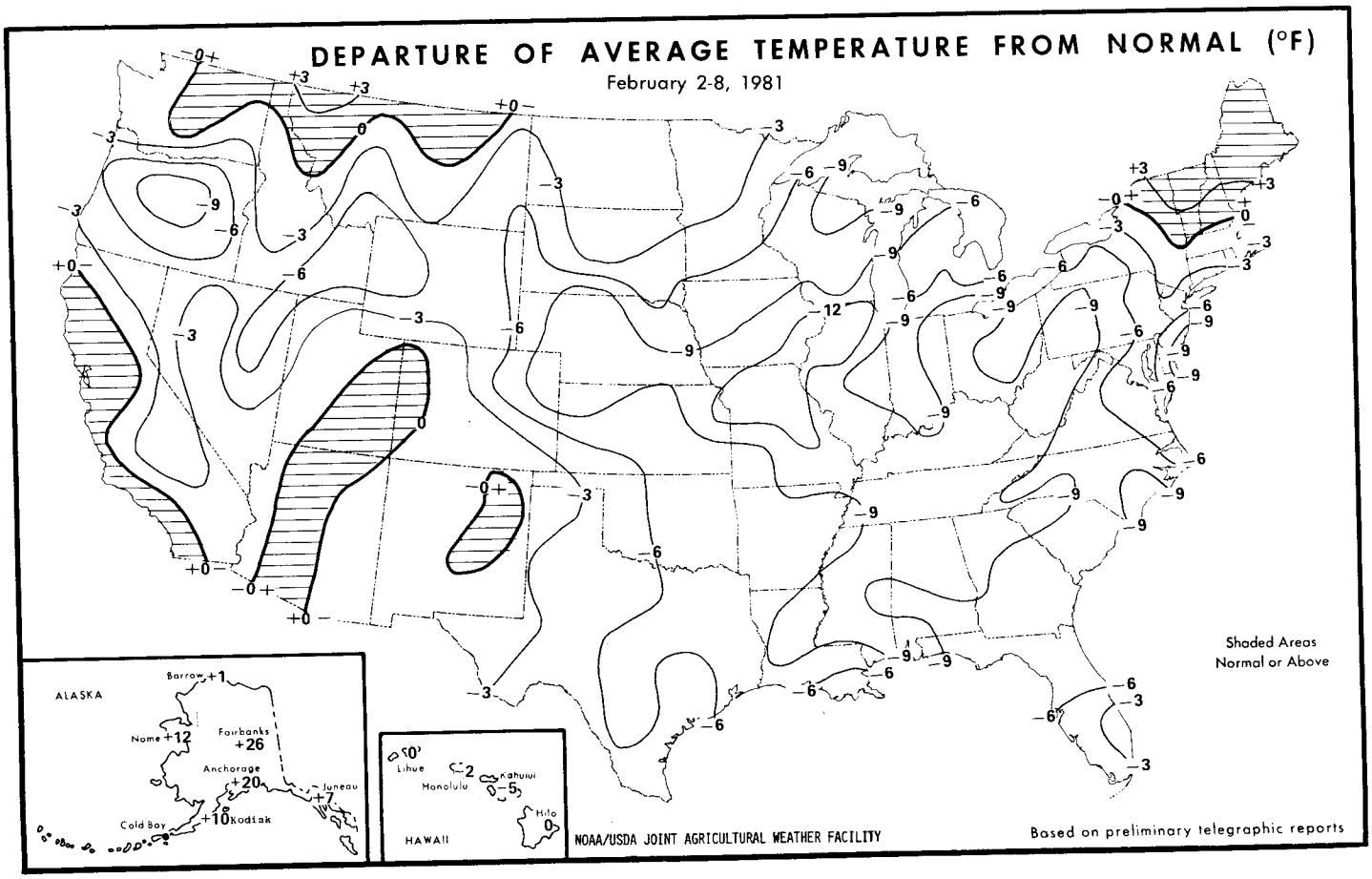

TOTAL PRECIPITATION, INCHES
February 2-8, 1981
SCALE OF SHADES
No Measurable Precipitation
0.01 to 0.3 inch
0.3 to 0.8 inch
0.8 to 2 inches
Over 2 inches
ALASKA
Barrow 0.1
Nome 0.6
Fairbanks 0.3
Anchorage 0.7
Juneau 0.1
Cold Bay 1.5
Kodiak
HAWAII
Lihue 0.5
Honolulu 0.4
Kahului 0.9
Hilo 0.1
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports

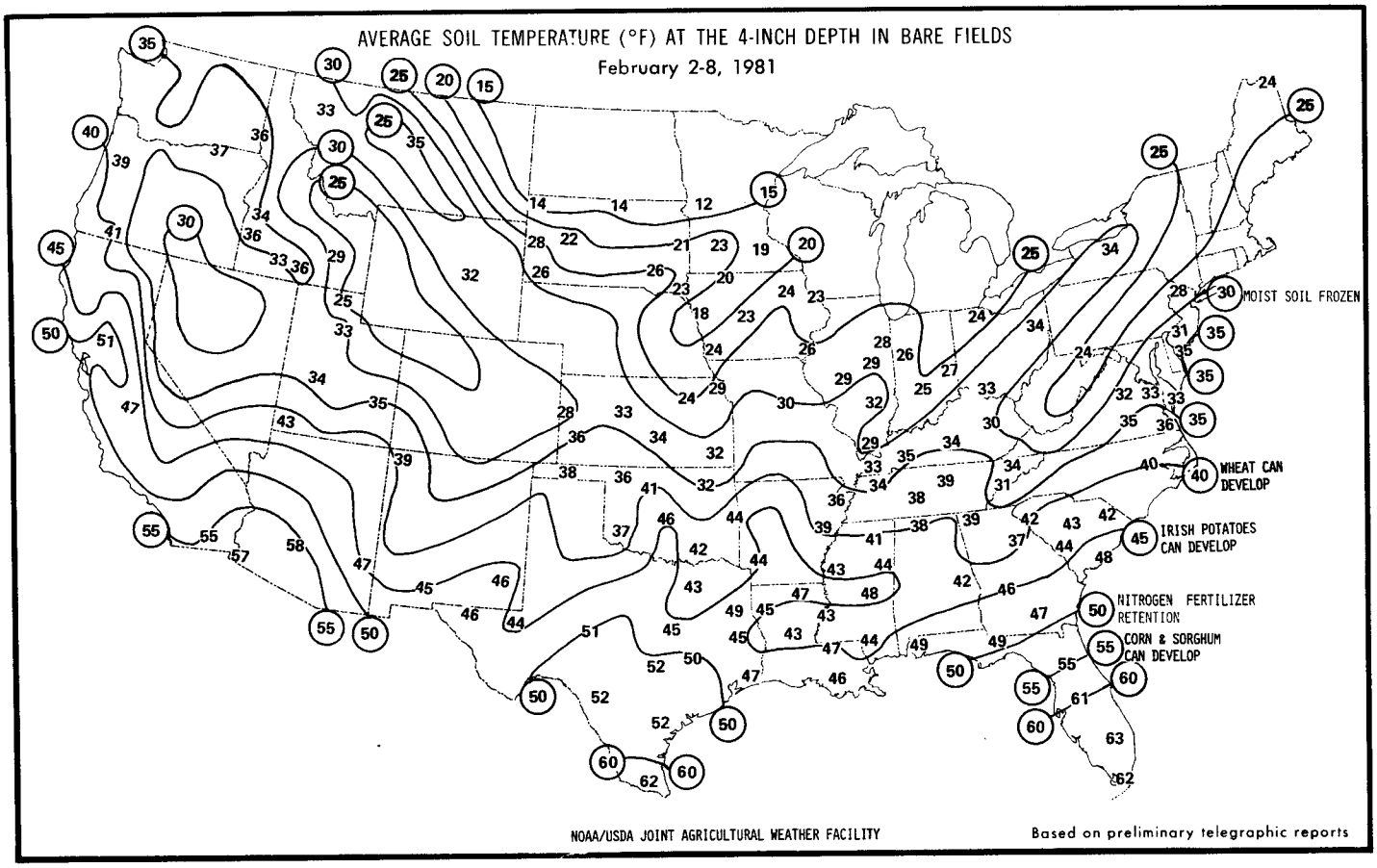

DEPTH OF SNOW ON THE GROUND, INCHES
February 9, 1981
NO DATA AVAILABLE
ALASKA
NOTE:-This chart will be issued on Tuesday during the winter. It is based upon data from regular National Weather Service and selected cooperative stations.
Shaded portions represent areas covered with snow; lines indicate depth in inches. No attempt is made to indicate areas and depths that may exist at high altitudes in the Rocky Mountains, beyond the figures shown by reports from regular National Weather Service and a few special cooperative stations. Dotted line shows limits of last week's cover.
Supplemented by earlier measurements at selected cooperative stations.
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


DROUGHT SEVERITY
PALMER INDEX
February 7, 1981
SEVERE
MOIST
SEVERE
SEVERE
MODERATE
MOIST
MOIST
MOIST
MODERATE
SEVERE
EXTREME
SEVERE
SEVERE
MODERATE
EXTREME
EXTREME
SEVERE
SEVERE
SEVERE
SEVERE
MODERATE
MOIST
MODERATE
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


PALMER DROUGHT INDEX BY DIVISION
February 7, 1981
MARYLAND
ABOVE +4 EXTREMELY MOIST
+3 to +4 SEVERELY MOIST
+2 to +3 MODERATELY MOIST
-2 to +2 NEAR NORMAL
-2 to -3 MODERATE DROUGHT
-3 to -4 SEVERE DROUGHT
BELOW -4 EXTREME DROUGHT
VALUES INDICATE DEPARTURES
FROM NORMAL CLIMATE


AVERAGE TEMPERATURE (°F)
February 2-8, 1981
BITTER COLD
VERY COLD
COLD
COOL
MILD
Southern Limit of Freezing Weather
Southern Limit of Zero Temperatures
ALASKA
Barrow 17
Nome 18
Fairbanks 20
Anchorage 36
Juneau 33
Cold Bay 41
Kodiak
HAWAII
Lihue 71
Honolulu 70
Kahului 66
Hilo 71
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
February 2-8, 1981
Shaded Areas Normal or Above
ALASKA
Barrow +1
Nome +12
Fairbanks +26
Anchorage +20
Juneau +7
Cold Bay +10
Kodiak
HAWAII
Lihue 0
Honolulu 2
Kahului 5
Hilo 0
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


AVERAGE SOIL TEMPERATURE (°F) AT THE 4-INCH DEPTH IN BARE FIELDS
February 2-8, 1981
MOIST SOIL FROZEN
WHEAT CAN DEVELOP
IRISH POTATOES CAN DEVELOP
NITROGEN FERTILIZER RETENTION
CORN & SORGHUM CAN DEVELOP
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports

Weather Data for the Week Ending Feb. 8, 1981

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION					RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
														TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec. 1	PCT. NORMAL SINCE Dec. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	45	25	53	18	35	-11	T	- 1.3	T	3.3	28	78	39	0	5	3	0
MOBILE	52	33	63	20	43	-10	1.5	.5	1.0	5.0	42	82	54	0	4	3	2
MONTGOMERY	48	31	56	22	40	-10	.5	- .4	.5	4.8	48	70	51	0	4	2	1
AK ANCHORAGE	41	32	45	29	36	20	.7	.4	.4	2.1	91	89	72	0	5	6	0
BARROW	-9	-25	5	-32	-17	1	.1	0	T	.4	67	82	74	0	7	2	0
FAIRBANKS	27	12	38	2	20	26	.3	.2	.2	.9	82	59	44	0	7	3	0
JUNEAU	35	30	40	22	33	7	.1	- .8	T	--	--	92	87	0	6	2	0
KODIAK	45	38	49	29	41	10	1.5	.2	.6	19.6	172	95	80	0	2	5	1
NOME	25	11	34	-21	18	12	.6	.4	.3	2.3	128	84	73	0	7	4	0
AZ FLAGSTAFF	45	17	49	9	31	2	.2	- .2	.2	2.9	63	--	22	0	7	1	0
PHOENIX	69	40	71	36	55	1	.2	0	.2	1.0	63	48	17	0	0	1	0
TUCSON	66	35	67	29	51	-1	.1	- .1	.1	1.6	89	47	18	0	1	1	0
WINSLOW	52	21	58	18	36	-1	.1	0	.1	1.0	100	--	--	0	7	1	0
YUMA	72	43	76	38	57	-1	T	- .1	T	.3	30	45	14	0	0	1	0
AR FORT SMITH	43	24	52	15	34	-8	.1	- .7	.1	2.9	47	72	52	0	6	1	0
LITTLE ROCK	41	26	47	17	34	-8	.1	- 1.0	.1	4.7	51	71	47	0	6	1	0
CA BAKERSFIELD	58	38	63	35	48	-2	.2	- .1	.2	1.3	65	--	68	0	0	1	0
EUREKA	56	41	60	36	48	0	.1	- 1.3	.1	13.9	89	92	66	0	0	1	0
FRESNO	54	38	60	32	46	-2	.5	0	.5	3.6	88	98	73	0	1	1	1
Los Angeles	65	48	72	45	57	2	.4	- .3	.3	3.5	69	80	50	0	0	1	0
RED BLUFF	61	36	64	31	49	0	T	- .9	T	8.1	86	99	43	0	1	1	0
SAN DIEGO	66	50	70	46	58	1	.7	.3	.7	2.5	63	80	58	0	0	1	1
SAN FRANCISCO	58	45	62	40	52	1	.6	- .3	.5	8.2	86	83	60	0	0	1	0
STOCKTON	59	38	63	33	49	1	.1	- .5	.1	5.6	89	--	65	0	0	1	0
CO DENVER	42	10	51	-3	26	-5	T	- .1	T	.4	40	75	34	0	7	0	0
GRAND JUNCTION	47	18	51	16	32	1	0	- .1	0	.3	27	69	23	0	7	0	0
PUEBLO	48	14	64	2	31	-2	0	- .1	0	.2	20	77	31	0	7	0	0
CT BRIDGEPORT	33	21	50	5	27	-3	1.2	.6	.7	2.6	38	35	58	0	6	2	2
HARTFORD	33	16	54	4	24	-1	1.4	.6	.9	2.7	33	60	39	0	7	3	2
DC WASHINGTON	43	25	60	18	34	-2	1.0	.5	.7	2.1	33	61	30	0	6	3	1
FL APALACHICOLA	58	37	68	26	47	-8	.9	0	.5	3.3	43	76	39	0	2	4	1
DAYTONA BEACH	63	44	79	29	53	-6	1.8	1.1	1.6	3.4	71	86	47	0	3	3	1
FORT MYERS	70	51	80	32	61	-3	1.4	1.0	1.0	2.6	72	85	46	0	1	2	1
JACKSONVILLE	60	34	76	23	47	-8	.6	- .3	.5	1.8	28	84	40	0	3	3	1
KEY WEST	71	60	78	51	65	-6	.3	- .2	.2	1.1	28	78	63	0	0	2	0
MIAMI	74	55	83	40	65	-2	.1	- .4	.1	.9	20	73	48	0	0	2	0
ORLANDO	67	43	80	31	55	-6	3.1	- 2.4	2.1	3.8	76	69	41	0	1	4	2
TALLAHASSEE	57	33	67	21	45	-8	1.9	.8	.9	4.7	51	82	49	0	3	3	2
TAMPA	65	44	73	34	55	-6	4.7	4.1	4.0	5.5	104	68	50	0	0	4	1
WEST PALM BEACH	73	51	82	38	63	-2	.7	.1	.5	2.6	46	70	47	0	0	3	0
GA ATLANTA	44	24	52	15	34	-10	.3	- .8	.1	3.0	30	67	43	0	6	2	0
AUGUSTA	50	28	62	19	39	-8	.9	.1	.6	2.6	33	67	32	0	4	3	1
MACON	52	33	63	21	43	-6	.7	- .3	.3	2.9	32	76	45	0	4	4	0
SAVANNAH	54	34	64	24	44	-7	.6	0	.4	2.9	42	74	39	0	3	5	0
HI HILO	--	--	--	--	71	0	.1	- 2.8	--	--	--	--	--	-	-	-	-
HONOLULU	79	63	84	58	71	-2	.4	- .3	.3	5.2	57	93	54	0	0	2	0
KAHULUI	--	--	--	--	66	-5	.9	.2	--	--	--	--	--	0	0	-	-
LIHUE	--	--	--	--	71	0	.5	- .6	--	6.1	44	--	--	0	0	-	-
ID BOISE	39	21	44	19	30	-3	T	- .3	T	2.7	82	85	54	0	7	1	0
LEWISTON	39	29	45	25	34	-2	0	- .2	0	1.8	62	85	60	0	5	0	0
POCATELLO	30	8	37	3	19	-8	T	- .2	T	1.2	52	89	68	0	7	1	0
IL CAIRO	34	22	24	17	28	-10	T	- .9	T	3.4	38	--	--	0	7	1	0
CHICAGO	21	5	35	-5	13	-11	.2	- .1	.1	3.9	98	70	55	0	7	3	0
MOLINE	19	-1	32	-12	9	-14	T	- .3	T	3.1	63	70	53	0	7	1	0
PEORIA	21	4	35	-3	13	-13	.1	- .3	.1	2.8	55	85	65	0	7	2	0
ROCKFORD	19	1	30	-11	10	-12	.1	- .2	T	3.1	79	75	60	0	7	2	0
SPRINGFIELD	28	11	42	4	19	-9	T	- .4	T	2.5	61	68	42	0	7	1	0
IN EVANSVILLE	32	15	43	7	24	-10	T	- .8	0	2.2	28	65	46	0	7	0	0
FORT WAYNE	22	9	34	0	16	-10	.2	- .3	.1	4.3	80	60	46	0	7	4	0
INDIANAPOLIS	27	11	39	2	19	-10	.1	- .5	T	2.0	32	73	52	0	7	3	0
SOUTH BEND	25	9	40	-2	17	-7	.3	- .2	.1	5.2	91	82	55	0	7	5	0
IA BURLINGTON	23	3	36	-5	13	-12	T	- .3	T	3.4	89	--	--	0	7	0	0
DES MOINES	23	3	33	-3	13	-9	T	- .2	0	1.4	56	64	45	0	7	0	0
DUBUQUE	17	1	28	-13	9	-11	.1	- .2	.1	2.2	56	77	57	0	7	3	0
SIOUX CITY	23	3	35	-4	13	-8	.1	- .1	T	.8	57	67	47	0	7	2	0
KS CONCORDIA	32	9	46	0	21	-9	0	- .2	0	1.0	63	69	46	0	7	0	0
DODGE CITY	43	12	62	4	28	-6	0	- .1	0	1.0	100	78	33	0	7	0	0
GOODLAND	33	4	43	-7	19	-11	T	- .1	T	1.0	100	86	54	0	7	0	0
TOPEKA	29	11	41	4	20	-11	T	- .2	T	4.2	150	80	51	0	7	0	0
WICHITA	41	16	50	10	28	-6	0	- .2	0	2.4	104	67	31	0	7	0	0
KY LEXINGTON	31	15	47	4	23	-11	T	- .8	T	3.7	44	74	47	0	7	1	0
LOUISVILLE	35	16	44	8	25	-9	T	- .8	T	3.1	39	67	44	0	7	0	0
LA BATON ROUGE	52	35	60	24	43	-9	3.3	2.2	3.0	8.0	75	76	55	0	1	2	1

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Feb. 8, 1981

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION					RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
														TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec. 1	PCT. NORMAL SINCE Dec. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	LAKE CHARLES	52	38	58	25	45	-9	2.4	1.3	2.3	7.1	65	72	64	0	2	1	1
	NEW ORLEANS	54	41	62	35	48	-7	2.0	.9	1.4	5.5	50	65	48	0	0	2	2
	SHREVEPORT	49	32	57	18	41	-8	.5	-.4	.5	3.3	35	79	54	0	3	2	1
ME	CARIBOU	25	6	48	-8	15	4	1.3	.8	.5	6.1	115	62	50	0	7	3	2
	PORTLAND	32	15	48	6	24	3	1.5	.7	.9	3.8	45	74	57	0	7	2	2
MD	BALTIMORE	37	17	52	12	27	-6	1.0	.4	.6	2.2	32	71	29	0	7	1	1
MA	BOSTON	36	20	54	13	28	-1	1.4	.6	.8	3.4	39	59	42	0	7	2	2
	CHATHAM	34	20	47	11	27	--	1.3	--	.6	--	--	65	56	0	6	4	1
MI	ALPENA	20	2	28	-11	11	-6	.1	-.3	.1	3.0	73	--	--	0	7	2	0
	DETROIT	24	8	36	1	16	-9	.2	-.3	.1	3.7	79	83	53	0	7	2	0
	FLINT	23	10	34	1	17	-6	.1	-.3	T	4.0	100	87	63	0	7	3	0
	GRAND RAPIDS	25	12	35	1	18	-5	.3	0	.1	4.7	107	86	61	0	7	7	0
	HOUGHTON LAKE	19	4	29	-10	11	-6	.2	-.1	.1	3.2	84	82	54	0	7	3	0
	LANSING	22	10	35	0	16	-7	.1	-.3	T	3.8	88	88	62	0	7	6	0
	MARQUETTE	14	-6	24	-21	4	-9	.7	.3	.5	5.1	119	81	60	0	7	6	1
	MUSKEGON	22	14	32	5	18	-5	.7	.3	.2	5.2	98	85	71	0	7	6	0
	SAULT STE. MARIE	16	-6	26	-26	5	-9	.6	.2	.5	5.8	126	75	59	0	7	4	1
MN	DULUTH	12	-3	23	-17	5	-5	.3	.1	.2	1.3	43	69	57	0	7	4	0
	INT'L FALLS	10	-7	20	-23	2	-2	T	-.1	T	.9	45	85	63	0	7	2	0
	MINNEAPOLIS	17	1	27	-8	9	-5	.2	.1	.1	.8	50	68	47	0	7	3	0
	ROCHESTER	16	-2	27	-13	7	-7	.1	0	T	.8	57	81	62	0	7	4	0
	SAINT CLOUD	16	-1	26	-10	7	-3	.2	0	.1	.9	47	77	--	0	7	3	0
MS	JACKSON	47	27	56	16	37	-11	.4	-.7	.3	4.1	37	80	57	0	5	2	0
	MERIDIAN	51	30	58	16	41	-8	.5	-.6	.4	4.5	38	79	45	0	4	3	0
MO	COLUMBIA	26	11	38	4	18	-13	T	-.4	T	2.1	53	71	47	0	7	1	0
	KANSAS CITY	26	5	37	-1	16	-15	0	-.3	0	6.0	182	64	44	0	7	0	0
	SAINT LOUIS	30	15	44	8	23	-11	T	-.5	T	1.6	36	79	50	0	7	1	0
	SPRINGFIELD	36	18	47	9	27	-8	T	-.5	T	3.1	63	71	41	0	7	0	0
MT	BILLINGS	35	14	41	4	24	-1	T	-.1	T	.5	38	70	40	0	7	2	0
	GLASGOW	21	5	30	-5	13	1	T	-.1	T	.2	20	79	67	0	7	1	0
	GREAT FALLS	33	11	36	5	22	-3	.3	.1	.2	1.0	56	82	54	0	7	3	0
	HAVRE	27	4	35	-5	16	1	T	-.1	T	.8	80	86	52	0	7	0	0
	HELENA	33	9	40	5	21	-2	T	-.1	T	.6	60	79	52	0	7	1	0
	KALISPELL	31	20	38	12	26	3	.1	-.2	.1	4.2	117	80	68	0	7	3	0
	MILES CITY	25	5	33	-4	15	-4	.1	0	T	.6	60	89	62	0	7	2	0
	MISSOULA	35	18	39	14	26	1	.1	-.1	.1	1.6	62	94	62	0	7	2	0
NE	GRAND ISLAND	29	4	44	-3	16	-9	0	-.1	0	.4	40	76	43	0	7	0	0
	LINCOLN	28	6	39	-4	17	-8	T	-.2	T	1.0	77	74	39	0	7	0	0
	NORFOLK	26	4	44	-3	15	-6	T	-.2	T	.3	25	70	42	0	7	0	0
	NORTH PLATTE	33	0	47	-8	16	-10	T	-.1	T	.1	10	73	37	0	7	0	0
	OMAHA	24	4	34	-3	14	-9	T	-.2	T	.6	38	70	54	0	7	0	0
	VALENTINE	27	-4	38	-9	12	-11	T	-.1	T	.6	60	88	47	0	7	0	0
NV	ELY	40	0	46	-7	28	-6	0	-.1	0	1.9	146	63	39	0	7	0	0
	LAS VEGAS	59	33	63	30	46	-2	.2	.2	.1	.3	33	45	20	0	4	1	0
	RENO	45	21	52	17	33	-3	.1	-.1	.1	1.5	56	92	41	0	7	1	0
	WINNEMUCCA	48	12	51	7	30	-3	T	-.2	T	.7	35	87	37	0	7	0	0
NH	CONCORD	32	12	52	0	22	1	1.5	.9	.8	2.8	42	74	43	0	7	2	2
NJ	ATLANTIC CITY	34	10	50	2	22	-11	1.2	.4	.7	2.6	31	71	51	0	7	3	2
	TRENTON	37	20	56	10	28	-4	1.1	.5	.9	2.0	30	--	--	0	7	2	1
NM	ALBUQUERQUE	55	20	60	12	37	-1	0	-.1	0	.8	80	52	16	0	7	0	0
	ROSWELL	55	26	67	15	41	-1	T	-.1	T	.5	50	--	--	0	6	0	0
NY	ALBANY	31	13	53	0	22	0	1.3	.8	.8	3.5	60	62	52	0	7	3	1
	BINGHAMTON	25	7	43	-6	16	-6	1.2	.7	.7	3.8	67	83	55	0	7	4	1
	BUFFALO	28	13	40	2	20	-3	.4	-.2	.2	4.7	71	76	51	0	7	6	0
	NEW YORK	34	20	51	7	27	-5	1.0	.3	.7	2.2	30	56	49	0	7	2	1
	ROCHESTER	27	9	39	-4	18	-6	.3	-.3	.1	4.1	76	83	51	0	7	4	0
	SYRACUSE	30	11	46	0	20	-3	.6	-.1	.4	5.8	88	76	47	0	7	4	0
NC	ASHEVILLE	42	16	51	8	29	-9	.3	-.6	.3	2.0	25	78	40	0	7	1	0
	CHARLOTTE	45	22	60	12	33	-10	.5	-.4	.4	1.8	22	74	37	0	7	2	0
	GREENSBORO	43	20	60	13	32	-8	.7	-.1	.5	2.1	29	68	35	0	7	2	1
	HATTERAS	48	29	64	15	39	-6	1.5	.5	.6	7.8	77	76	60	0	5	4	2
	RALEIGH	45	21	64	7	33	-8	.7	-.1	.5	3.0	41	75	39	0	7	3	0
	WILMINGTON	47	27	63	17	37	-10	1.0	.2	.8	7.5	99	72	47	0	5	3	1
ND	BISMARCK	20	1	28	-15	10	-1	.1	-.1	T	.5	45	81	55	0	7	2	0
	FARGO	15	-1	24	-8	7	-1	.2	.1	.2	.8	80	77	60	0	7	2	0
	WILLISTON	19	-2	28	-13	8	-3	.2	.1	.1	1.0	100	80	57	0	7	2	0
OH	AKRON-CANTON	27	8	40	1	18	-9	.4	-.2	.1	4.0	69	67	47	0	7	5	0
	CINCINNATI	28	11	42	1	20	-12	T	-.7	T	3.0	43	81	55	0	7	1	0
	CLEVELAND	26	9	39	2	18	-9	.2	-.3	.1	3.8	67	75	55	0	7	3	0
	COLUMBUS	29	13	42	3	21	-8	.1	-.4	T	4.1	69	76	56	0	7	5	0
	DAYTON	28	10	41	0	19	-10	T	-.6	T	2.7	47	81	53	0	7	2	0
	TOLEDO	23	8	35	0	16	-10	.1	-.4	T	3.7	74	69	46	0	7	2	0
	YOUNGSTOWN	25	7	39	-1	16	-10	.4	-.3	.2	3.1	48	80	48	0	7	5	0
OK	OKLAHOMA CITY	43	24	54	13	33	-6	T	-.3	T	1.8	64	76	51	0	7	1	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Feb. 8, 1981

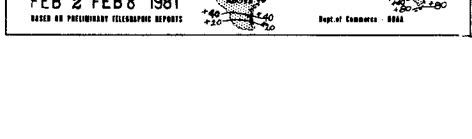
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION					RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
														TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec. 1	PCT. NORMAL SINCE Dec. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
TULSA	41	23	52	13	32	-7	T	- .4	T	2.1	55	77	45	0	6	1	0
OR ASTORIA	50	32	55	27	41	-2	.5	- 1.5	.4	15.4	68	91	66	0	4	2	0
BURNS	33	9	36	3	21	-8	.1	- .2	.1	2.3	59	93	63	0	7	1	0
MEDFORD	43	27	54	22	35	-4	.1	- .6	.1	3.3	42	99	71	0	7	1	0
PENDLETON	34	28	42	23	31	-5	T	- .3	T	2.1	55	89	81	0	7	0	0
PORTLAND	47	29	50	25	38	-4	.2	- .9	.2	11.5	87	93	60	0	6	1	0
SALEM	42	28	47	22	35	-7	.3	- 1.0	.3	12.9	86	96	81	0	5	2	0
PA ALLENTOWN	34	15	53	5	24	-4	1.2	.5	.9	2.8	38	70	45	0	7	2	1
ERIE	24	9	40	-11	17	-8	.9	.4	.6	4.7	78	--	--	0	7	5	1
HARRISBURG	34	16	50	11	25	-6	1.3	.7	1.0	2.9	45	65	41	0	7	2	1
PHILADELPHIA	37	17	54	9	27	-6	.9	.3	.6	2.2	32	62	41	0	7	2	1
PITTSBURGH	27	7	41	1	17	-11	.6	0	.3	3.3	55	74	50	0	7	6	0
SCRANTON	31	13	50	2	22	-4	2.0	1.5	1.6	5.0	98	63	49	0	7	3	1
RI PROVIDENCE	36	18	53	7	27	-1	1.6	.8	.9	4.0	47	59	42	0	7	3	2
SC CHARLESTON	52	32	66	24	42	-7	.4	- .3	.3	2.6	38	60	44	0	3	2	0
COLUMBIA	48	26	63	15	37	-9	.6	- .2	.5	2.8	35	68	40	0	5	2	1
GREENVILLE	45	21	59	12	33	-10	.2	- .8	.2	1.2	13	63	31	0	7	1	0
SD ABERDEEN	22	1	29	-11	12	-1	.1	- .1	.1	.4	36	63	37	0	7	2	0
HURON	24	0	35	-9	12	-3	T	- .1	T	.2	20	72	47	0	7	1	0
RAPID CITY	31	4	39	-4	18	-6	T	- .1	T	.8	80	81	36	0	7	0	0
SIOUX FALLS	21	0	34	-6	11	-6	T	- .2	T	.5	36	67	49	0	7	1	0
TN CHATTANOOGA	42	21	51	17	32	-10	.1	- 1.2	.1	4.3	36	69	36	0	7	2	0
KNOXVILLE	39	20	49	11	30	-12	.6	- .5	.4	4.4	42	83	42	0	7	2	0
MEMPHIS	42	28	50	21	35	-7	.2	- 1.0	.2	4.6	41	65	46	0	5	1	0
NASHVILLE	40	20	49	12	30	-9	.2	- .8	.1	5.0	47	70	34	0	7	2	0
TX ABILENE	49	32	56	21	41	-5	.2	0	.1	3.1	135	81	56	0	3	1	0
AMARILLO	50	20	61	8	35	-3	0	- .1	0	.5	42	66	24	0	7	0	0
AUSTIN	53	39	74	28	46	-6	.7	- .1	.4	3.8	73	83	66	0	2	2	0
BEAUMONT	54	39	63	27	46	-8	1.6	.5	1.6	8.0	78	82	65	0	2	2	1
BROWNSVILLE	66	52	77	46	59	-3	.4	0	.4	4.0	125	95	68	0	0	1	0
CORPUS CHRISTI	59	46	66	38	53	-6	1.6	1.1	1.5	4.5	115	84	69	0	0	3	1
DEL RIO	58	39	72	31	48	-5	.1	- .2	.1	1.7	131	85	54	0	1	3	0
EL PASO	61	30	67	22	45	-1	0	- .1	0	1.2	120	61	18	0	5	3	0
FORT WORTH	49	32	62	24	41	-6	.1	- .5	.1	2.2	51	81	53	0	3	2	0
GALVESTON	53	44	61	39	48	-7	.3	- .4	.1	4.6	62	77	69	0	0	3	0
HOUSTON	57	39	68	26	48	-6	.9	0	.7	4.9	56	91	57	0	2	2	1
LUBBOCK	52	23	67	13	37	-4	T	- .1	T	.9	90	71	35	0	7	1	0
MIDLAND	56	31	68	16	43	-3	T	- .1	T	1.7	170	81	38	0	3	0	0
SAN ANGELO	53	33	67	25	43	-6	T	- .2	T	3.3	206	83	54	0	3	1	0
SAN ANTONIO	54	38	68	24	46	-7	.8	.3	.8	3.5	88	94	55	0	2	2	1
VICTORIA	57	40	68	27	49	-6	.5	0	.4	3.6	82	87	65	0	2	2	0
WACO	50	35	66	24	43	-7	1.1	.5	.5	4.9	109	88	62	0	2	2	2
WICHITA FALLS	48	32	60	22	40	-4	T	- .3	T	2.2	79	64	45	0	3	0	0
UT BLANDING	46	17	49	13	32	2	0	- .3	0	.3	11	68	22	0	7	0	0
SALT LAKE CITY	40	20	49	16	30	-2	T	- .3	T	1.0	31	83	52	0	7	0	0
VT BURLINGTON	27	15	47	3	21	4	2.1	1.7	1.7	4.3	98	64	58	0	7	2	1
VA LYNCHBURG	40	19	49	8	30	-7	1.1	.5	1.0	2.1	31	69	--	0	7	2	1
NORFOLK	43	24	61	17	34	-7	1.0	.1	.5	4.5	59	69	40	0	5	3	2
RICHMOND	43	20	61	12	32	-6	1.0	.3	.7	2.0	29	76	30	0	7	3	1
ROANOKE	40	17	49	10	28	-9	.8	.1	.7	1.7	25	70	33	0	7	2	1
WA COLVILLE	36	22	39	17	29	1	0	- .4	0	4.3	91	--	--	0	7	0	0
OMAK	38	24	41	19	31	--	0	--	0	3.6	--	--	--	0	7	0	0
QUILLAYUTE	50	28	54	23	39	-2	0	- 3.1	0	22.6	67	94	65	0	6	0	0
SEATTLE-TACOMA	47	31	50	30	39	-2	0	- 1.1	0	9.9	77	87	59	0	6	0	0
SPOKANE	31	24	37	19	28	-2	T	- .5	0	4.7	84	92	79	0	7	0	0
WALLA-WALLA	35	31	38	27	33	-5	T	- .4	T	3.9	87	88	81	0	4	0	0
YAKIMA	39	30	43	20	34	1	T	- .2	T	3.7	132	84	66	0	4	0	0
WV BECKLEY	32	12	46	-1	22	-10	.5	- .3	.3	2.5	32	73	36	0	7	4	0
CHARLESTON	35	14	49	4	24	-11	.7	- .1	.4	4.5	58	82	44	0	7	3	0
HUNTINGTON	34	15	49	4	25	-10	.5	- .2	.3	4.8	69	79	43	0	7	3	0
PARKERSBURG	32	16	45	9	24	-9	.4	- .3	.2	3.6	55	79	57	0	7	4	0
WI GREEN BAY	16	1	28	-11	8	-8	.2	0	.1	1.9	68	73	56	0	7	3	0
LA CROSSE	18	3	29	-9	10	-8	.3	.1	.2	1.1	50	79	51	0	7	3	0
MADISON	19	2	30	-9	10	-8	.1	- .1	.1	2.0	64	74	55	0	7	4	0
MILWAUKEE	18	3	29	-7	10	-10	.2	0	.1	4.2	114	74	52	0	7	4	0
WY CASPER	32	10	37	1	21	-4	.1	0	.1	.9	90	79	42	0	7	1	0
CHEYENNE	36	11	40	8	24	-5	T	0	T	.5	56	82	43	0	7	1	0
LANDER	30	2	36	-7	16	-8	T	- .1	T	.9	90	85	44	0	7	1	0
SHERIDAN	30	6	37	-5	18	-6	.1	- .1	T	1.2	86	78	41	0	7	2	0
PR SAN JUAN	85	73	78	71	79	4	.3	- .4	.1	6.4	69	81	55	0	0	5	0

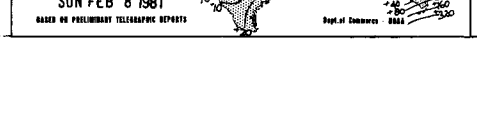
BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

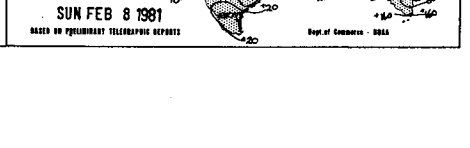
HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING FEB. 8, 1981.

BASED ON 1941-70 NORMALS. + ACCUMULATION FROM JULY 1, 1980.

STATES AND STATIONS	WEEKLY TOTAL	WEEKLY DEPARTURE*	SEASONAL ACCUMULATION + TOTAL	SEASONAL ACCUMULATION + DEPARTURE*	SEASONAL ACCUMULATION + DEPARTURE FROM 1979-80
ALA. BIRMINGHAM	208	69	2223	262	309
MOBILE	154	61	1452	259	285
MONTGOMERY	177	63	1832	234	386
ARIZ. FLAGSTAFF	235	14	3315	1003	984
PHOENIX	71	12	1179	591	251
TUCSON	99	8	905	294	41
WINSLOW	198	1	2774	348	241
YUMA	43	14	809	449	106
ARK. FORT SMITH	219	55	2109	113	9
LITTLE ROCK	219	53	2289	6	287
CALIF. BAKERSFIELD	114	14	1258	261	214
EUREKA	115	4	2444	247	362
FRESNO	130	13	1639	166	86
LOS ANGELES	56	14	494	486	31
RED BLUFF	113	2	1428	316	35
SAN DIEGO	46	17	371	477	22
SAN FRANCISCO	91	12	1637	144	155
STOCKTON	114	8	1670	154	182
COLO. DENVER	270	37	3014	641	750
GRAND JUNCTION	227	11	2648	756	615
PUEBLO	236	13	3006	440	555
CONN. BRIDGEPORT	265	20	3647	448	484
HARTFORD	282	2	4427	507	737
DEL. WILMINGTON	254	23	3391	300	426
D.C. WASHINGTON	214	11	2693	20	355
FLA. APALACHICOLA	112	35	1230	276	221
DAYTONA BEACH	86	30	885	271	241
FORT MYERS	44	9	433	109	195
JACKSONVILLE	124	47	1261	368	215
KEY WEST	18	11	173	132	125
LAKELAND	72	23	798	326	376
MIAMI	25	9	654	114	119
ORLANDO	71	22	753	255	296
TALLAHASSEE	137	48	1509	388	252
TAMPA	72	23	822	323	388
WEST PALM BEACH	31	7	313	103	73
GA. ATLANTA	215	67	2203	112	313
AUGUSTA	178	52	2107	336	252
MACON	155	42	1702	125	271
SAVANNAH	145	42	1668	296	342
IDAHO. BOISE	241	18	3511	182	35
LEWISTON	214	9	3006	459	220
POCATELLO	323	57	4206	182	10
ILL. CAIRO	262	73	2626	47	111
CHICAGO	359	73	4105	45	285
MOLINE	391	100	4224	144	159
PEORIA	366	90	4041	143	57
ROCKFORD	383	80	4310	10	91
SPRINGFIELD	318	62	3688	107	186
IND. EVANSVILLE	287	71	3191	146	90
FORT WAYNE	344	71	4163	253	130
INDIANAPOLIS	320	68	3865	200	220
SOUTH BEND	332	49	3973	93	309
IOWA. BURLINGTON	380	100	4080	141	145
DES MOINES	363	60	4051	223	140
DUBUQUE	395	77	4465	144	123
SIOUX CITY	361	52	4279	181	5
KANS. CONCORDIA	308	59	3301	314	184
DODGE CITY	259	39	2839	407	664
GOODLAND	321	77	3377	434	371
TOPEKA	312	75	3304	31	28
WICHITA	254	40	2904	182	118
KY. LEXINGTON	293	74	3401	342	267
LOUISVILLE	276	60	3073	56	160
LA. BATON ROUGE	151	58	1704	293	121
LAKE CHARLES	139	54	1428	364	232
NEW ORLEANS	119	35	1215	170	142
SHREVEPORT	169	56	1795	225	126
MAINE. CARIBOU	346	32	6237	408	825
PORTLAND	287	19	4891	407	561
MD. BALTIMORE	251	31	3286	289	495
MASS. BOSTON	256	4	3931	562	661
MICH. ALPENA	367	31	5150	111	270
DETROIT	340	60	4513	562	472
FLINT	338	53	4740	458	640
GRAND RAPIDS	358	53	4493	348	508
HOUGHTON LAKE	374	58	5322	290	420
LANSING	341	43	4600	389	558
MARQUETTE	428	62	5962	212	240
MUSKEGON	398	36	4520	399	352
S. STE. MARIE	419	72	6247	811	774
MINN. DULUTH	420	33	6069	108	385
INTERNATL FALLS	444	14	6596	188	358
MINNEAPOLIS	392	34	4952	124	169
ROCHESTER	404	50	5023	124	169
ST. CLOUD	397	15	5402	171	42
MISS. JACKSON	194	75	1998	396	131
MERIDIAN	169	50	1858	174	153
MO. COLUMBIA	325	91	3498	203	145
KANSAS CITY	344	100	3475	15	71
ST. LOUIS	295	73	3129	29	84
SPRINGFIELD	265	57	2983	6	244
MONT. BILLINGS	283	6	3617	833	373
GLASGOW	379	10	4785	818	310
GREAT FALLS	299	17	4188	466	72
HAVRE	342	8	4711	748	23
HELENA	307	13	4499	591	221
KALISPELL	274	21	4630	696	242
MILES CITY	351	29	4124	844	426
MISSOULA	270	11	4380	601	265
NEBR. GRAND ISLAND	339	62	3773	321	240
LINCOLN	334	57	3651	355	219
NORFOLK	347	43	4071	363	131
NORTH PLATTE	340	70	3880	363	4
OMAHA	365	89	4066	160	61
VALENTINE	355	59	4055	480	333
NEV. ELY	299	28	4122	544	20
LAS VEGAS	132	7	1278	556	271
RENO	223	17	3256	436	57
WINNEMUCCA	245	16	3557	516	34
N.H. CONCORD	299	9	5200	686	877
N.J. ATLANTIC CITY	297	73	3841	790	700
TRENTON	270	39	3547	478	646
N. MEX. ALBUQUERQUE	191	4	2772	100	105
ROSWELL	170	2	2393	186	54
N.Y. ALBANY	300	2	4901	638	902
BINGHAMTON	339	38	4974	576	746
BUFFALO	312	19	4369	249	514
NEW YORK	263	32	3549	569	661
ROCHESTER	327	39	4538	504	526
SYRACUSE	312	19	4638	619	762
N.C. ASHEVILLE	249	61	2927	177	329
CHARLOTTE	219	65	2566	400	330
GREENSBORO	232	53	2853	312	360
HATTERAS	182	42	2143	483	467
RALEIGH	223	55	2692	354	359
WILMINGTON	182	56	2087	446	392
N.DAK. BISMARCK	381	0	5023	657	417
FARGO	407	5	5676	158	25
WILLISTON	396	20	5081	682	256
OHIO. AKRON-CANTON	329	58	4155	320	319
CINCINNATI	314	83	3787	551	398
CLEVELAND	329	63	4261	516	484
COLUMBUS	307	55	3825	214	322
DAYTON	321	69	3983	421	364
TOLEDO	344	67	4571	603	571
YOUNGSTOWN	344	67	4566	632	624
OKLA. OKLAHOMA CITY	219	40	2439	49	63
TULSA	229	50	2418	70	111
OREG. ASTORIA	167	12	2454	616	166
BURNS	308	52	4270	152	115
MEDFORD	208	30	2767	289	120
PENDLETON	234	34	3151	218	406
PORTLAND	188	22	2341	598	233
SALEM	210	16	2728	195	92
PA. ALLENTOWN	282	23	3757	129	484
ERIE	334	47	4270	222	605
HARRISBURG	255	17	3652	314	362
PHILADELPHIA	266	39	3521	472	549
PITTSBURGH	332	73	4175	454	488
SCRANTON	298	25	4332	434	758
R.I. PROVIDENCE	265	6	4124	550	847
S.C. CHARLESTON	159	47	1796	315	282
COLUMBIA	191	60	2234	434	250
GREENVILLE	224	71	2506	368	404
S. DAK. ABERDEEN	371	0	4881	572	140
HURON	368	19	4668	431	23
RAPID CITY	329	44	3855	585	249
SIOUX FALLS	378	40	4708	264	18
TENN. CHATTANOOGA	230	64	2626	255	252
KNOXVILLE	245	78	2828	493	477
MEMPHIS	209	49	2065	141	28
NASHVILLE	242	64	2647	164	168
TEXAS. ABILENE	168	37	1806	7	47
AMARILLO	210	52	2769	45	151
AUSTIN	132	35	1280	43	63
BEAUMONT	124	40	1327	249	188
BROWNSVILLE	46	3	569	107	100
CORPUS CHRISTI	86	28	885	207	242
DEL RIO	119	37	1203	47	177
EL PASO	137	8	1924	20	18
FORT WORTH	169	43	1745	97	91
GALVESTON	115	39	1074	243	174
HOUSTON	116	33	1181	158	26
LUBBOCK	191	25	2297	88	14
MIDLAND	149	16	2136	291	264
SAN ANGELO	153	38	1703	105	43
SAN ANTONIO	129	41	1215	79	143
VICTORIA	110	37	1069	190	73
WACO	156	45	1552	103	83
WICHITA FALLS	172	26	1987	16	32
UTAH SALT LAKE CITY	244	9	3393	389	8
VT. BURLINGTON	303	34	5469	673	1048
VA. LYNCHBURG	239	43	3033	279	276
NORFOLK	217	44	2594	380	460
RICHMOND	233	44	2922	305	570
ROANOKE	253	57	3028	245	270
WASH. QUILLAYUTE	179	8	3031	441	102
SEATTLE-TACOMA	180	13	2669	455	165
SPOKANE	260	13	3916	394	208
WALLA WALLA	220	28	2855	312	315
YAKIMA	212	13	3235	696	217
W. VA. BECKLEY	298	67	3846	314	279
CHARLESTON	281	71	3367	387	350
HUNTINGTON	282	72	3330	443	382
PARKERSBURG	277	55	3414	324	282
WIS. GREEN BAY	395	52	5147	165	391
LACROSSE	376	44	4625	70	39
MADISON	381	54	4823	9	137
MILWAUKEE	380	69	4641	120	515
WYO. CASPER	304	28	4035	508	725
CHEYENNE	289	32	3699	588	599
LANDER	341	49	4213	648	693
SHERIDAN	326	40	4092	610	478







January Weather Summary

HIGHLIGHTS: Drought plagued much of the Nation during the month. Most of the area east of the Rockies had less than half of the normal amount of rain. Unusually dry weather was more spotty in the West, but most of the Pacific Northwest was much drier than normal. Warm weather depleted the sparse snowcover in the mountains but this had begun to rebuild at the end of the month. The average temperature for the month was warmer than normal west of the Mississippi River and colder to the east. Nearly continuous surges of cold air caused a hard freeze to spread into southern Florida on the 13th and 14th.

The new year got off to a wintry start with a storm system moving northeastward from the upper Ohio Valley and spreading snow from northern Virginia and Maryland through New England. Frigid arctic air moved in behind the storm and covered most of eastern United States by January 4th.

FIRST WEEK...The first calendar week of the month was much colder than normal in most of the East. Average temperatures were as much as 18° below normal in the central Appalachians and the upper Ohio Valley. The opposite extreme prevailed in the West where temperatures were 15° warmer than normal in Montana. Precipitation was generally light but some moderate amounts fell in the South. Light rain was welcomed in southern California, Arizona, and southern New Mexico.

SECOND WEEK...Almost daily surges of cold air into the northern Plains pushed further southward until almost unmodified arctic air covered the entire Florida Peninsula. One of the hardest freezes in Florida's history was recorded on Tuesday, January 13th. Freezing temperatures reached into the Everglades of southern Florida. Damage to citrus was heavy and much of the vegetable crop was wiped out. A hard freeze was recorded again on January 14th, causing further damage. There was little precipitation over most of the Nation but the Southwest received light to moderate amounts. Light snow fell along the eastern slopes of the Rockies. Only a little moisture was involved, but it will be helpful to winter wheat root systems when it melts.

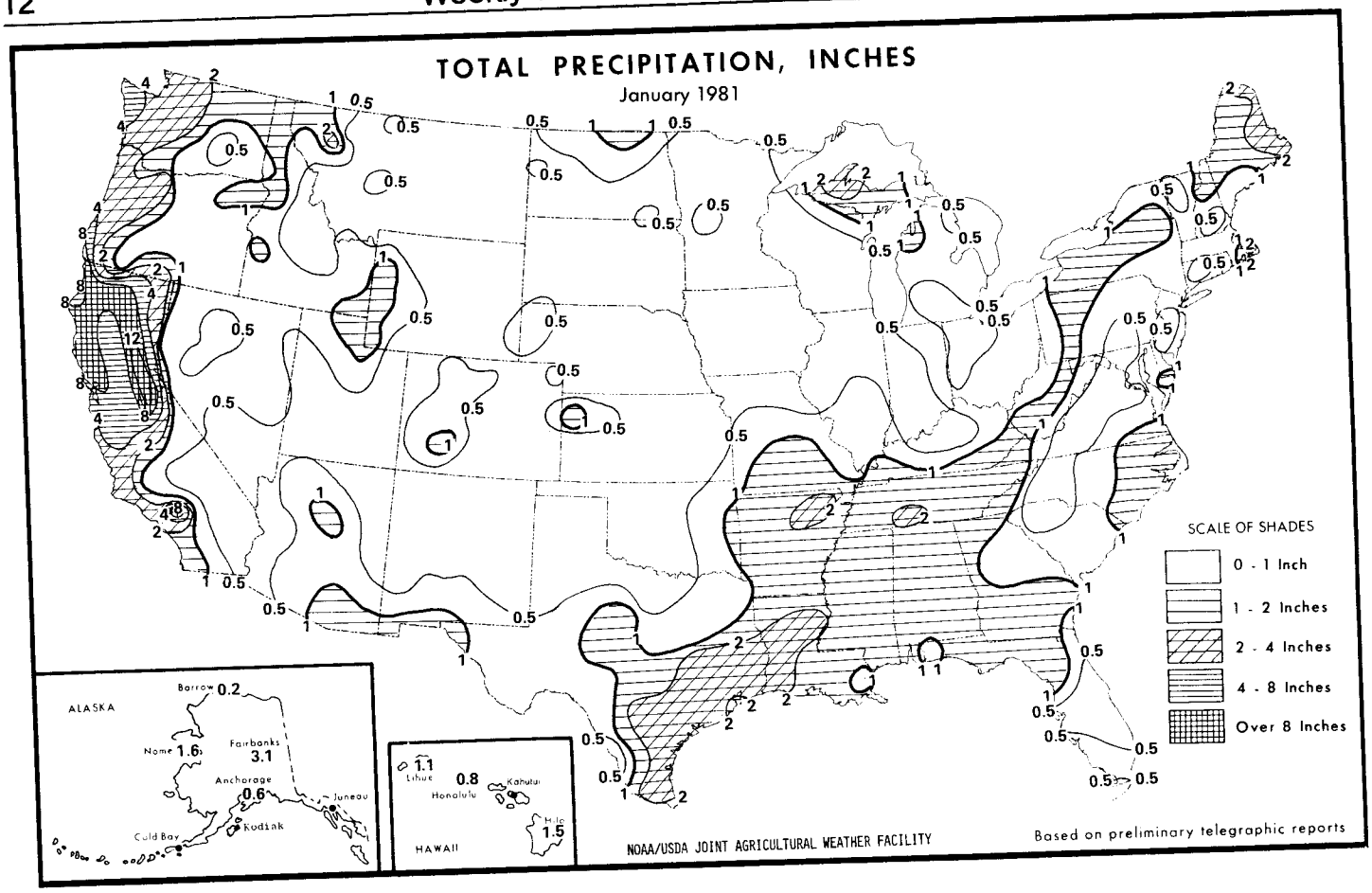
THIRD WEEK...Cold weather continued in the South early in the week and freezing temperatures again reached into southern Florida but were not as low as the previous week. The input of cold air stopped and warming began over the Nation. Temperatures in much of the northern Plains averaged 21° to 25° above normal. As the frigid weather moved out of the Southeast it was replaced by warm, moist air from the Gulf of Mexico. Rain began on the south coast of Texas and spread northeastward. Moderate amounts fell in Texas, the Tennessee Valley, and the mid-Atlantic coast. Elsewhere, another Pacific storm brought rain to the Pacific Northwest and western California with heavy amounts covering the northern part of the State.

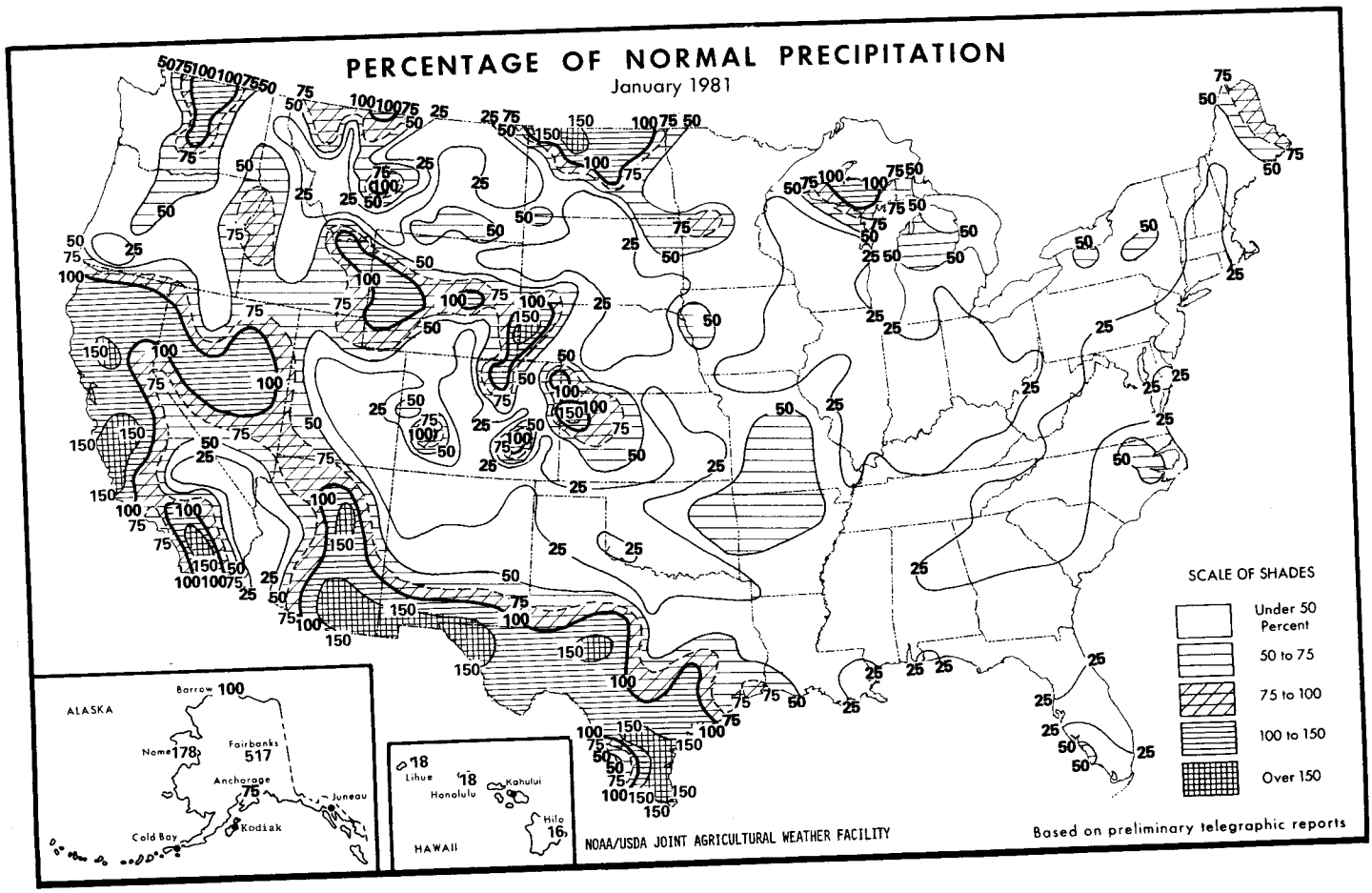
FOURTH WEEK...Precipitation spread over most of the Nation during the week. Only western Texas, the southern Rockies, and the extreme southern Plateau region remained dry. Drought-plagued areas from northern Louisiana to central Kentucky received amounts in excess of 2 inches and 1 to 2 inch amounts were widespread from the lower Mississippi Valley to the upper Ohio Valley. Much of the winter wheat in the central Plains was covered with 1 to 4 inches of snow. A low pressure system moved slowly into northern California during the week and brought another episode of heavy rain -- snow in the mountains -- to the area. Some heavy rains also occurred in the southern part of the State. Snow spread across the Plateau and the central and northern Rockies.

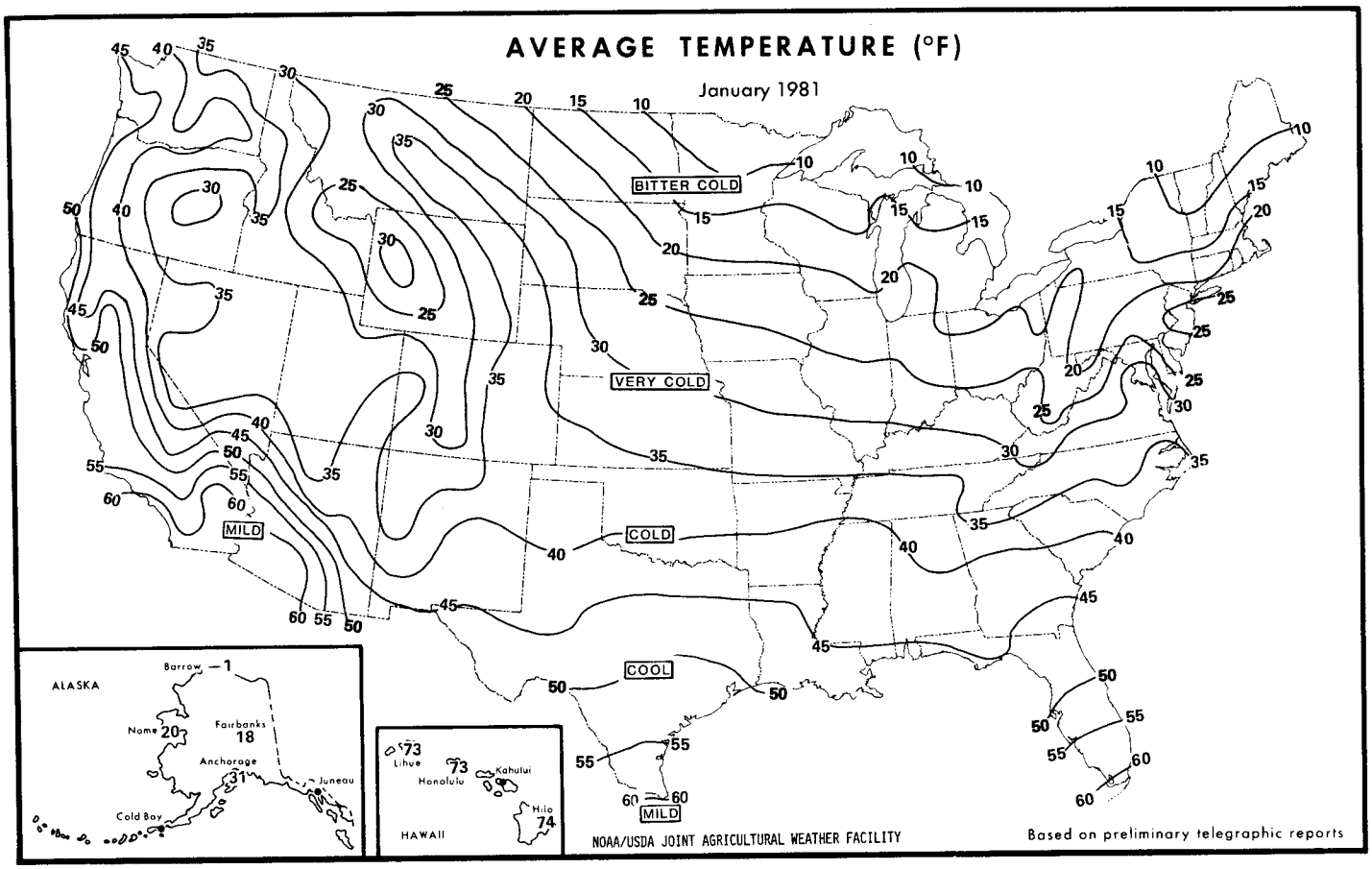
Temperature and Precipitation Data for January 1981

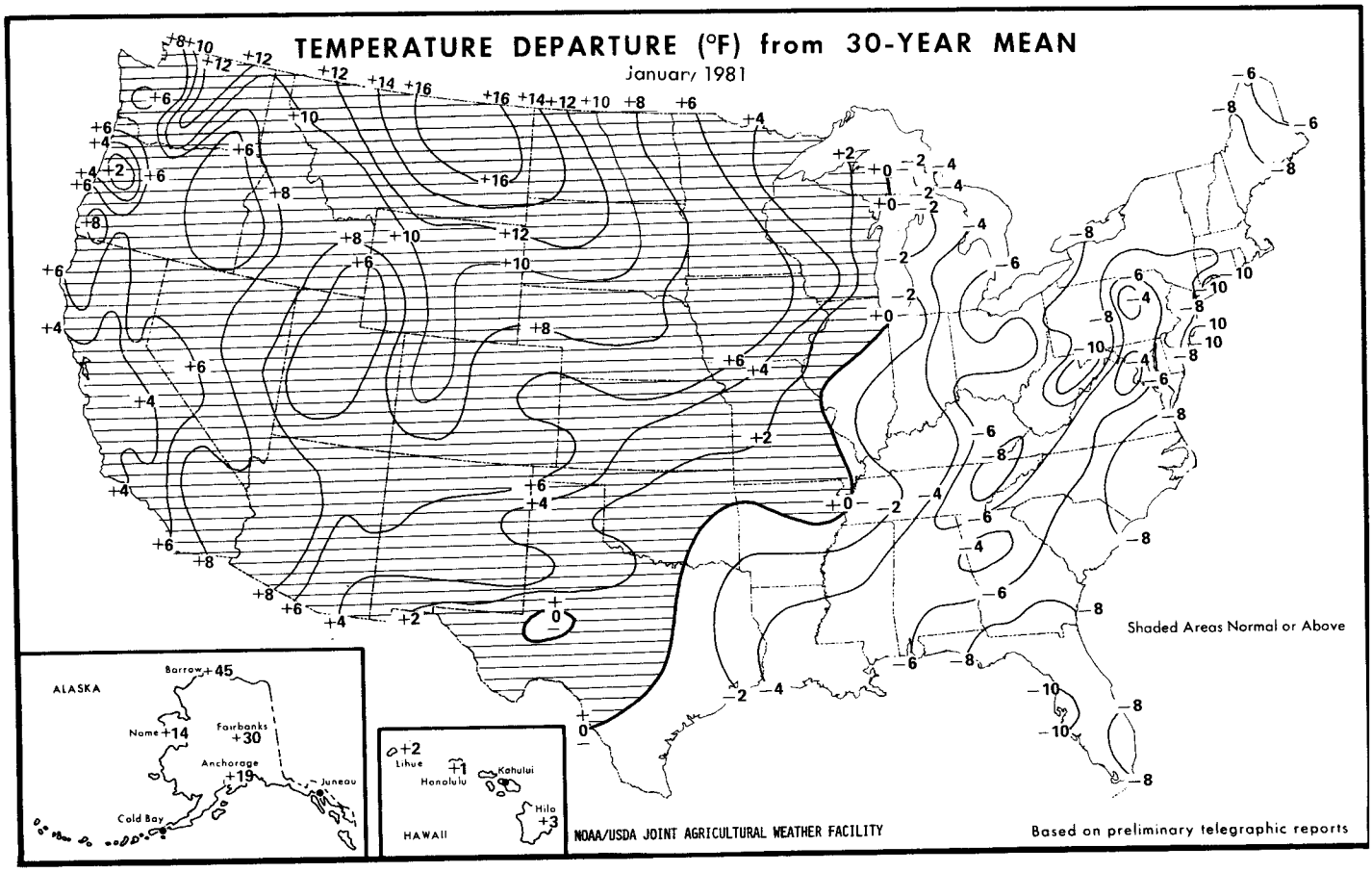
States and Stations	Temperature °F Average	Temperature °F Departure	Precipitation Inches Total	Precipitation Inches Departure
ALA.Birmingham	39	- 5	1.1	- 3.7
Moblie	46	- 5	1.2	- 3.5
Montgomery	43	- 5	1.2	- 2.8
ALASKA.Anchorage	31	+19	.6	- .2
Barrow	-1	+14	.2	0
Fairbanks	18	+30	3.1	+ 2.5
Juneau	--	---	---	----
Kodiak	--	---	---	----
Nome	20	+14	1.6	+ .7
ARIZ.Flagstaff	36	+ 8	1.3	- .6
Phoenix	59	+ 8	.7	0
Tucson	55	+ 4	1.3	+ .5
Winslow	39	+ 6	.7	+ .3
Yuma	63	+ 8	.2	- .2
ARK.Fort Smith	38	- 1	1.5	- .9
Little Rock	40	- 1	1.3	- 2.8
CALIF.Bakersfield	52	+ 4	.9	- .1
Eureka	53	+ 6	7.7	+ .3
Fresno	48	+ 3	2.7	+ .9
Los Angeles	60	+ 5	1.5	- 1.0
Red Bluff	49	+ 4	5.5	+ 1.0
San Diego	61	+ 6	1.5	- .4
San Francisco	51	+ 3	5.9	+ 1.5
Stockton	48	+ 3	4.3	+ 1.4
COLO.Denver	37	+ 7	.3	- .3
Grand Junction	37	+10	.4	- .2
Pueblo	37	+ 7	.1	- .2
CONN.Bridgeport	20	-10	.5	- 2.2
Hartford	18	- 7	.4	- 2.9
D.C.Washington	33	- 3	.4	- 2.2
FLA.Apalachicola	46	- 8	1.4	- 1.7
Daytona Beach	49	- 9	.3	- 1.8
Ft. Myers	56	- 8	.8	- .8
Jacksonville	47	- 8	.9	- 1.9
Key West	61	-10	.5	- 1.2
Lakeland	52	- 9	.3	- 2.0
Miami	60	- 7	.6	- 1.6
Orlando	51	- 9	.2	- 2.1
Tallahassee	44	- 9	1.8	- 1.9
Tampa	50	-10	.4	- 1.9
W.Palm Beach	59	- 7	.4	- 2.2
GA.Atlanta	40	- 2	.8	- 3.5
Augusta	40	- 6	.8	- 2.6
Macon	43	- 5	1.0	- 2.7
Savannah	44	- 6	1.0	- 1.9
HAWAII.Hilo	74	+ 3	1.5	- 7.6
Honolulu	73	+ 1	.8	- 3.6
Kahului	--	---	---	----
Lihue	73	+ 2	1.1	- 5.1
IDAHO.Boise	34	+ 5	1.2	- .3
Lewiston	39	+ 8	.9	- .4
Pocatello	29	+ 6	.7	- .4
ILL.Cairo	34	- 2	.8	- 3.2
Chicago	23	0	.1	- 1.6
Moline	23	+ 1	.3	- 1.4
Peoria	24	0	.5	- 1.3
Rockford	21	+ 1	.2	- 1.6
Springfield	26	- 1	.4	- 1.4
IND.Evansville	30	- 3	.5	- 2.9
Ft. Wayne	20	- 5	.6	- 1.9
Indianapolis	24	- 4	.4	- 2.5
South Bend	23	- 1	.7	- 1.7
IOWA.Burlington	26	+ 3	.3	- 1.3
Des Moines	26	+ 7	.3	- .8
Dubuque	22	+ 4	.3	- 1.4
Sioux City	24	+ 6	.4	- .3
KANS.Concordia	32	+ 6	.1	- .6
Dodge City	36	+ 5	.3	- .2
Goodland	33	+ 5	1.0	+ .6
Topeka	31	+ 3	.3	- .7
Wichita	34	+ 3	.3	- .6
KY.Lexington	28	- 5	.4	- 3.6
Louisville	30	- 3	.5	- 3.0
LA.Baton Rouge	46	- 5	1.2	- 3.2
Lake Charles	48	- 4	2.1	- 1.9
New Orleans	49	- 4	.9	- 3.6
Shreveport	45	- 2	1.4	- 2.6
MAINE.Caribou	6	- 5	1.7	- .3
Portland	14	- 8	.9	- 2.5
MD.Baltimore	28	- 5	.5	- 2.4
MASS.Boston	21	- 8	1.0	- 2.7
Chatham	23	--	2.0	----
MICH.Alpena	15	- 3	.5	- 1.2
Detroit	19	- 6	.6	- 1.2
Flint	18	- 4	.6	- 1.1
Grand Rapids	21	- 2	.5	- 1.4
Houghton Lake	15	- 2	.8	- .7
Lansing	18	- 5	.4	- 1.5
Marquette	14	+ 1	2.0	+ .3
Muskegon	21	- 3	.8	- 1.5
S. Ste. Marie	9	- 5	.7	- 1.2
MINN.Duluth	12	+ 3	.3	- .9
Internatl Falls	6	+ 4	.3	- .6
Minneapolis	18	+ 6	.3	- .4
Rochester	19	+ 6	.2	- .5
St. Cloud	15	+ 6	.4	- .4
MISS.Jackson	42	- 5	1.4	- 3.1
Meridian	43	- 4	1.6	- 2.7
MO.Columbia	29	0	.9	- .8
Kansas City	30	+ 3	.5	- .8
St. Louis	31	0	.6	- 1.3
Springfield	34	+ 1	1.1	- .6
MONT.Billings	36	+14	.2	- .5
Glasgow	25	+16	.1	- .3
Great Falls	34	+13	.3	- .6
Havre	28	+16	.1	- .4
Helena	28	+10	.2	- .4
Kalispell	30	+11	1.4	- .1
Miles City	31	+16	.1	- .4
Missoula	30	+ 9	.2	- 1.0
NEBR.Grand Island	29	+ 7	.2	- .3
Lincoln	28	+ 6	.2	- .4
Norfolk	27	+ 8	.1	- .5
N.Platte	30	+ 7	.1	- .4
Omaha	27	+ 7	.3	- .4
Valentine	29	+ 8	.1	- .2
NEV.Ely	32	+ 8	.8	+ .2
Las Vegas	51	+ 7	.1	- .4
Reno	36	+ 4	.9	- .3
Winnemucca	35	+ 7	.4	- .6
N.H.Concord	13	- 8	.5	- 2.2
N.J.Atlantic City	23	-10	.6	- 3.0
Trenton	26	- 6	.4	- 2.4
N.MEX.Albuquerque	38	+ 3	.1	- .2
Roswell	42	+ 4	.3	- .1
N.Y.Albany	14	- 8	.6	- 1.6
Binghamton	15	- 7	.9	- 1.4
Buffalo	19	- 5	1.1	- 1.8
New York	25	- 7	.5	- 2.4
Rochester	16	- 8	1.2	- 1.1
Syracuse	15	- 9	1.3	- 1.4
N.C.Asheville	33	- 5	.5	- 2.9
Charlotte	36	- 6	.5	- 3.0
Greensboro	34	- 5	.7	- 2.5
Hatteras	36	- 9	1.8	- 2.5
Raleigh	33	- 8	.9	- 2.3
Wilmington	38	- 9	1.1	- 2.1
N.DAK.Bismarck	20	+12	.1	- .4
Fargo	12	+ 6	.1	- .4
Williston	22	+14	.1	- .5
OHIO.Akron-Canton	21	- 5	.8	- 1.9
Cincinnati	24	- 7	.6	- 2.7
Cleveland	21	- 6	.8	- 1.8
Columbus	23	- 5	.7	- 2.2
Dayton	23	- 5	.3	- 2.5
Toledo	18	- 7	.5	- 1.6
Youngstown	18	- 8	.8	- 2.1
OKLA.Okla. City	38	+ 1	.2	- .9
Tulsa	38	+ 1	.7	- .7
OREG.Astoria	48	+ 7	2.6	- 7.1
Burns	30	+ 5	.8	- 1.0
Medford	42	+ 5	.5	- 3.0
Pendleton	36	+ 4	.9	- .7
Portland	44	+ 6	1.5	- 4.4
Salem	41	+ 2	2.1	- 4.8
PA.Allentown	23	- 5	.7	- 2.3
Erie	19	- 6	.9	- 1.6
Harrisburg	24	- 6	.4	- 2.2
Philadelphia	25	- 7	.5	- 2.3
Pittsburgh	21	- 7	.8	- 2.0
Scranton	20	- 7	.6	- 1.5
R.I. Providence	20	- 8	.8	- 2.7
S.C. Charleston	42	- 7	.9	- 2.0
Columbia	39	- 6	.8	- 2.6
Greenville	38	- 4	.3	- 3.8
S.D. Aberdeen	20	+10	.1	- .4
Huron	22	+ 9	.1	- .3
Rapid City	33	+11	.1	- .4
Sioux Falls	22	+ 8	.1	- .5
TENN.Chattanooga	35	- 5	1.9	- 3.5
Knoxville	33	- 8	1.1	- 3.6
Memphis	41	0	1.4	- 3.5
Nashville	36	- 2	1.6	- 3.2
TEX.Abilene	45	+ 1	1.2	+ .2
Amarillo	38	+ 2	.1	- .4
Austin	51	+ 1	1.6	- .3
Beaumont	50	- 2	3.3	- .8
Brownsville	60	0	1.8	+ .4
Corpus Christi	55	- 1	2.6	+ 1.0
Del Rio	52	+ 1	.7	+ .1
El Paso	45	+ 1	1.1	+ .7
Fort Worth	45	0	.6	- 1.2
Galveston	53	- 1	1.9	- 1.1
Houston	51	- 1	2.3	- 1.3
Lubbock	43	+ 4	.3	- .3
Midland	43	- 1	.6	0
San Angelo	46	0	1.2	+ .4
San Antonio	51	0	2.1	+ .4
Victoria	53	- 1	2.2	+ .4
Waco	47	0	.9	- 1.0
Wichita Falls	44	+ 2	.1	- 1.0
UTAH.Blanding	35	+ 7	.1	- 1.0
Salt Lake City	32	+ 4	.6	- .7
VT.Burlington	9	- 8	.5	- 1.2
VA.Lynchburg	31	- 6	.5	- 2.3
Norfolk	33	- 8	1.1	- 2.3
Richmond	31	- 7	.6	- 2.3
Roanoke	32	- 4	.3	- 2.4
WASH.Colville	33	+ 9	1.1	- 1.0
Omak	36	+15	1.5	+ .3
Quillayute	45	+ 6	4.5	-10.1
Seattle-Tacoma	44	+ 6	2.4	- 3.4
Spokane	33	+ 8	1.0	- 1.5
Walla Walla	38	+ 5	.9	- 1.2
Yakima	40	+12	1.0	- .3
W.VA.Beckley	24	- 7	.6	- 2.9
Charleston	28	- 7	1.1	- 2.3
Huntington	28	- 6	.6	- 2.6
Parkersburg	26	- 7	.2	- 2.9
WISC.Green Bay	15	0	.1	- 1.0
La Crosse	20	+ 4	.1	- .9
Madison	21	+ 4	.1	- 1.2
Milwaukee	19	0	.3	- 1.3
WYO.Casper	31	+ 8	.5	0
Cheyenne	33	+ 7	.3	- .2
Lander	29	+ 9	.7	+ .2
Sheridan	32	+11	.3	- .4
P.R.San Juan	80	+ 5	2.6	- 1.1

Based on 1941-70 normals


TOTAL PRECIPITATION, INCHES
January 1981
SCALE OF SHADES
0 - 1 Inch
1 - 2 Inches
2 - 4 Inches
4 - 8 Inches
Over 8 Inches
ALASKA
Barrow 0.2
Nome 1.6
Fairbanks 3.1
Anchorage 0.6
Juneau
Cold Bay
Kodiak
HAWAII
Lihue 1.1
Honolulu 0.8
Kahului
Hilo 1.5
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


PERCENTAGE OF NORMAL PRECIPITATION
January 1981
SCALE OF SHADES
Under 50 Percent
50 to 75
75 to 100
100 to 150
Over 150
ALASKA
Barrow 100
Nome 178
Fairbanks 517
Anchorage 75
Juneau
Cold Bay
Kodiak
HAWAII
Lihue 18
Honolulu 18
Kahului
Hilo 16
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


AVERAGE TEMPERATURE (°F)
January 1981
BITTER COLD
VERY COLD
COLD
COOL
MILD
ALASKA
Barrow −1
Nome 20
Fairbanks 18
Anchorage 31
Juneau
Cold Bay
HAWAII
Lihue 73
Honolulu 73
Kahului
Hilo 74
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


TEMPERATURE DEPARTURE (°F) from 30-YEAR MEAN
January 1981
Shaded Areas Normal or Above
ALASKA
Barrow +45
Nome +14
Fairbanks +30
Anchorage +19
Juneau
Cold Bay
HAWAII
Lihue +2
Honolulu +1
Kahului
Hilo +3
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports

National Agricultural Summary

February 2-8, 1981

HIGHLIGHTS: Temperatures averaged below normal over nearly all sections of the country as cold weather once again gripped the Nation. Light amounts of snow fell over northern areas but did not offer much potential relief for dry soil condition. Precipitation was heaviest in the extreme southeastern States providing some relief to dry condition, however, soil moisture was still rated as short to adequate. Snowcover through the Corn Belt receded from the area covered last week; cover generally extended northward from a line through mid-Nebraska and Iowa, across the bottom of Lake Michigan, across the top of Indiana, and through mid-Ohio. Kansas wheat fields were once again left unprotected. However, little or no wind damage was reported. Damage to winter wheat fields from greenbug occurred in southwest and south central Kansas, and many areas of Oklahoma. Oklahoma winter wheat also had some damage from winter grain mites. Feed supplies were generally rated adequate in northern areas while some southern States experienced hay shortages. Pruning of orchards, top dressing of small grains and farm maintenance operations, along with some soil preparation for spring crops in southern States were the major farm activities.

SMALL GRAINS: Winter wheat generally rated fair to good in major producing areas. Light amounts of snowfall added additional protection to some northern areas. However, the snowcover receded from last week, generally including the area north of a line through mid-Nebraska and Iowa, across the bottom of Lake Michigan, across the top of Indiana, and through mid-Ohio. Greenbug infestation caused some damage to grain fields in southwest and south central Kansas. The Oklahoma wheat crop also experienced damage from greenbugs and, in addition, several areas were infested with winter grain mites.

In Arizona, small grain planting was nearing completion and growing well. Earlier planted fields were in the jointing stage while the major portion of later planted fields were in the stem elongation stage. In the Texas High Plains, mild temperatures rapidly depleted soil moisture supplies, leaving dryland wheat fields in poor condition. Some wheat turned yellow, causing some producers to replant lost fields to oats and barley.

OTHER CROPS: In Florida, sugarcane harvest continued very active, while in the Lower Rio Grande Valley of Texas, sugarcane harvest was slowed by rains. In Arizona, sugarbeet top and top root development was well ahead of normal. Alfalfa haying was ahead of the seasonal norm, as recent warm conditions accelerated growth. In Oregon, grass seed fields were rated in good condition.

FRUITS AND NUTS: Freeze-damaged citrus trees in Florida continued to drop leaves. The lower east-coast area continued to look undamaged. Weekend rains proved very helpful to the trees; however, winds have caused some additional droppage. Fruit harvesting continued at a near record pace. Strawberry picking increased with peak harvest expected in early March. Planting of the spring watermelon crop continued. Grapefruit and early orange harvest continued in the Rio Grande Valley of Texas. Increasing quantities of Valencia oranges were harvested. Grapefruit movement is slow, but beginning to gain momentum in the Desert area of California. Lemon picking is active in all areas, with southern areas ahead of schedule. Navel orange and Orlando tangelo movement is increasing. Almond bloom is beginning. Beehive movement into these orchards continued.

VEGETABLES: A cold front moved through Florida vegetable area during the early part of the week. The front caused some light frost damage and additional foliage burns to tender crops in the northwest area. Harvest of snap beans, cabbage, cauliflower, chinese cabbage, and potatoes gained momentum. Volume of sweet corn, carrots, eggplant, parsley, green peppers and radishes declined while steady supplies were available for celery, cucumbers, escarole, lettuce, squash, and tomatoes. Overall shipments were down 4 percent from the previous week.

The harvest of cabbage, lettuce, bell pepper, cauliflower and carrots in the Rio Grande Valley of Texas slowed due to wet fields. Prices of cabbage and carrots declined while volumes were light. Harvest of cabbage and carrots continued in the San Antonio-Winter Garden area. Producers in the Trans-Pecos region continued to harvest carrots and chili peppers and prepare land for new plantings. Lettuce and onions were rated as being in good condition in New Mexico. Lettuce harvest in the Yuma, Arizona, area is making good progress. Planting of late winter and early spring crop is virtually complete, with stands rated as good. Harvest continues in California on artichokes, broccoli, carrots, cauliflower, celery, lettuce, and winter potatoes. Asparagus harvest is increasing in southern areas but very light in Delta area. Lettuce harvest is beginning in the Blythe area.

PASTURE AND LIVESTOCK: Pastures generally rated poor to fair across the South due to short moisture supplies. Recent rains have proved beneficial but continued moisture and warmer weather are needed to promote growth of freeze damaged permanent pastures. Feed supplies were generally rated adequate in northern areas while some southern States were starting to experience shortages of hay. Condition of cattle was declining in Florida somewhat. Supplemental feeding was very heavy. Sheep grazed alfalfa fields in the San Joaquin Valley of California where lambing was active.

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by ESS State offices in cooperation with the National Weather Service.

ALABAMA: Temperatures 10° below normal. Rain light statewide; heaviest coastal counties.

Soil moisture short to adequate. Fieldwork on schedule, 3.4 days suitable. Plowing 50% complete. Feed supply from pastures very short to short. Stored feed very short. Conditions: Wheat and livestock poor to fair; pasture poor. Activities: Care of livestock and poultry, plowing, soil testing, machinery and fence repairs, tax preparation, potato planting.

ARIZONA: Precipitation all sections. Amounts higher elevations mostly 0.50 to 0.75 in. Snow level around 4,500 ft.; amounts 2 to 7 in. above 6,000 ft.; Rainfall amounts west, southern sections mostly 0.10 in. Average temperatures ranged 3° below to 2° above normal.

Rainfall most cropping areas, interrupting field activities. Land cleanup, preparations cotton crop well underway. Small grain planting nearing completion, growing well, earlier plantings jointing stage, major portion later plantings stem elongation stage. Sugarbeet top, tap root development well ahead normal. Alfalfa haying underway, limited central, western areas, recent warm conditions accelerated growth, cutting ahead seasonal norms. Lettuce harvest Yuma area very good progress, planting late winter, early spring virtually complete, good stands. Mixed vegetable harvest very good progress. Dry onions, potatoes growing well. Harvest lemons, tangerines, grapefruit continued. Ranges very poor to poor deserts, fair higher elevations. Livestock fair. Water supplies short desert areas, adequate higher elevations.

ARKANSAS: A warm week with central rainfall toward the end. Highest normal 49°, lowest 39°. Highest mean 41°, lowest 27°. Highest temperature 58°, lowest 1°. All departures from normal ranged from -7 to -13°. Most rainfall 0.72 in., least zero.

Wheat in fair condition. Slightly improved due to recent rains. Pastures in poor condition. Rains helped; however northwest is still very dry. Livestock in fair to poor condition. Hay supplies being used up. Fieldwork slow.

CALIFORNIA: Weekly mean temperatures again clustered around normal; departures mostly a couple of degrees below or above. Greatest departure was 10° below normal extreme northeastern corner, first report of minimums below zero reported there also. Virtually no precipitation as blocking upper level high prevailed first of period, few hundredths of an in. of rain over isolated areas late in the week.

Small grain crop doing well. Herbicides for winter weeds are being applied. Sugarbeets doing well. Avocado harvest continued. Desert grapefruit movement slow, increasing. Picking lemons all areas, southern areas ahead of schedule. Navel oranges improved; better movement, sizes, quality. Minneola, Orlando tangelos moving. Almond bloom beginning. Harvest continues artichokes, broccoli, carrots, cauliflower, celery, lettuce, winter potatoes. Asparagus harvest increasing southern areas; very light harvest Delta. Lettuce harvest began Blythe area this week. Strawberry harvest light southern areas. Tomato planting moving northward into Southern San Joaquin Valley. Recent rains greatly improved range grass outlook. Additional moisture needed sustain growth. Supplemental feeding continues necessary. Sheep grazing alfalfa San Joaquin Valley. Lambing active. Beehive movement into almond orchards continues.

COLORADO: Another dry week with only a few snow flurries on 7th and 8th mostly east of the Continental Divide. Windy conditions 6th and 7th. Cool air moved southward from Canada on 4th and 8th, lowering temperatures from 3 to 9° below normal in most eastern locations. Temperatures west remained 1 to 5° above normal while near normal temperatures were recorded in the San Luis Valley.

FLORIDA: Rains fell on the 2nd and 3rd with many areas reporting 0.50 in. to 1.50 in. more than had fallen in the past six weeks. Cold air followed the rains with freezing temperatures mornings of the 3rd through 6th, and hard rains on the 4th. Freezing temperatures seeped south to the Immokalee area the 4th. Warm air returned by weekend, followed by heavy rains central to northeast with amounts of 2.00 to 5.00 in. Rains of 1.00 in. south except for 0.50 in. along lower east coast. Temperatures averaged 8° below normal north; 4 to 6° below normal, south. Rainfall much above normal all areas except lower east coast. Weekend rains improved topsoil moisture throughout most of State. Heaviest rains fell Central Peninsula. Early week rains also beneficial. However, with the extremely dry conditions earlier, more rain is needed to further replenish soil moisture and low water tables many areas.

Sugarcane harvest continues very active. Recent rains beneficial for small grains. Fieldwork for spring plantings slow due to cold, dry conditions earlier, will now accelerate considerably. Early week and heavier weekend rains very beneficial to pasture, forage crops. However, more warming temperatures needed to promote growth of freeze damaged permanent pastures and of winter annual forage crops. Cattle condition declining somewhat. Supplemental feeding very heavy. Freeze damaged citrus trees dropping leaves. Lower east coast continues to look undamaged. Weekend-long rain heavy and very helpful to trees. Winds may have caused additional droppage. Harvest continues at near record pace. A cold front moved through vegetable area early week. Light frost caused some additional foliage burn to tender crops southwest. Growth most crops slowed by cold. Rainfall light early week, moderate to heavy weekend most areas. Harvest gained snap beans, cabbage, cauliflower, chinese cabbage, potatoes, strawberries. Volume declined for sweet corn, carrots, eggplant, parsley, green peppers, radishes. Steady supplies available celery, cucumbers, escarole, lettuce, squash, tomatoes. Overall shipments down 4 percent from previous week. Digging new crop potatoes gained momentum. Strawberry picking increased; peak harvest expected early March. Planting spring watermelon crop continues. Some growers using potted plants.

GEORGIA: Rainfall 0.50 in. or more ranging 1.50 in. extreme northwest to 0.50 in. along the coast. Weekly temperatures 30° northeast to 50° southwest. This was about 10° below

normal north, near 17° below normal extreme southeast and near 7° below normal elsewhere.

Soil moisture dry. Soaking rain needed to replenish subsoil moisture. Small grain topdressing, harrowing and fertilizer application being done. Tobacco plants fair to good, slow to germinate and emerge. Small grains mostly fair to good. Pasture condition mostly fair to good, poor central. Cattle good, except poor to fair central and southeast.

HAWAII: Weather variable. Drought stricken south Kohala and Hamakua districts still in state of emergency. Water reservoirs very low. In the event drought continues for few weeks, water services will be terminated for the entire communities in the districts involved. Plantings geared to the 2-hr. irrigation schedule. Reports indicate milk production decreasing from inadequate forage feed for milking cows. Pastures higher elevation also affected. Elsewhere, rains were beneficial. Heavy rains some parts of Island of Maui caused washouts and affected crop progress. Vegetables: Supplies adequate. Head and chinese cabbage still heavy. Others light to moderate. Bananas: Supplies light. Showers beneficial. However, Hilo fields, Island of Hawaii, low in moisture. Papayas: Moderate supplies expected. Showers continue to be beneficial. Pineapples: Harvesting down. Very sporadic. Sugar: Harvesting minimal. Pastures: Generally fair to good. Poor in the drought areas.

IDAHO: Temperatures averaged in the mid 20's. Low of -17° at Fairfield, high of 48° at Lewiston. Precipitation below normal at most stations. Snow late in week blanketed many areas.

Calving and lambing proceeding well. Feed supplies remain adequate. Some spraying and plowing where weather permitted. Most areas limited to maintenance and manure spreading.

ILLINOIS: Temperatures 9° to 14° below normal. Precipitation 0.10 to 0.20 in. north, less than 0.10 in. other areas. 1 to 2 in. snow north and central midweek.

Winter wheat mostly good condition. Livestock mostly good condition. Activities: Machinery repair, livestock feeding, manure hauling, general farmwork.

INDIANA: Cold and dry. Temperatures averaged 7° below normal and ranged from -2 to 43°. Precipitation averaged 0.09 in. north, 0.02 in. central, and none south. Snowcover ranged from none south to 1 to 2 in. north.

Sunshine 56% of possible. Soils frozen from 6 in. south to over 12 in. central and north. Fieldwork nil. Hauling grain, cutting wood, readying equipment, hauling manure, finishing tobacco stripping, caring for livestock and usual chores.

IOWA: A cold, dry week. Temperatures averaged from 6° subnormal northwest to 12° subnormal southeast. Coldest early week with lows to -15° at Grinnell and -19° at Shenandoah. Little or no precipitation falling late week, mostly as snow flurries coupled with high winds. Measurable snow fell on the northeast. Snowcover mostly 1 to 2 in. at weekend but with many open fields blown bare.

KANSAS: Moisture limited, 0.10 in. to 0.20 in. form of snow southeast 6th. Temperatures averaged 21 to 25° north to 26 to 29° south, 5 to 10° below normal.

Wheat stands fair to good, northwest and southeast rated excellent. Recent snow provided temporary relief from short moisture supplies, more needed. Little or no wind damage has occurred and only light to moderate greenbug damage noted southwest and south central regions.

KENTUCKY: Temperatures averaged 9 to 12° below normal for the week with the coldest readings the first part of the week and near normal readings 6th and 7th. Precipitation averaged 0.25 to 0.50 in., 0.50 to 0.75 in. below weekly normal.

Market news reports 97% of estimated burley crop for the belt sold. Only a few markets remain open. Open, dry winter has permitted some field activity including spreading manure and other fertilizer. Considerable concern over low water levels. Livestock fair to good condition, generally wintering well.

LOUISIANA: Rains: Statewide. Temperatures: Near 10° below normal statewide. Extremes 16 and 64°.

Activities: Normal wintertime chores and caring for livestock.

MARYLAND & DELAWARE: Temperatures averaged 8° below normal. Highs ranged from the mid 30's, lows averaged in the teens. Precipitation was light. Western Maryland at Hagerstown received the most precipitation at 1.21 in. Lower Eastern Shore at Snow Hill received the least precipitation at 0.60 in., while the other parts of Maryland averaged 0.65 in.

MICHIGAN: Average temperatures ranged 4° to 10° below normal. Average precipitation Upper near 0.50 in. Average precipitation Lower about 0.50 in. along Lake Michigan, 0.15 in. to 0.30 in. remainder. Snowfall 2 to 7 in. Upper, trace to 10 in. Lower.

MINNESOTA: Temperatures averaged near normal to 3° above normal northwest; 1 to 3° below normal northcentral, westcentral and central districts; 5 to 8° below normal elsewhere.

Precipitation totals trace to 0.26 in. northcentral and northeast; 0.25 in. northwest; 0.25 to 0.40 in. central districts. Trace to 0.30 in. southern district. Snowfall 0 to 2 in. northern and southern districts; 1 to 4 in. central districts. Snowdepth 2 to 4 in. northwest; 6 to 8 in. westcentral; 2 to 3 in. southwest; 5 to 13 in. northcentral and northeast; 3 to 6 in. central and eastcentral; 2 to 7 in. southeast and southcentral.

MISSISSIPPI: Temperature continued well below normal. Extremes: 6° to 73°. Storm system brought significant rainfall to the southern two-thirds. Greatest 24-hour rainfall 2.61 in. Soil moisture adequate to short. Fieldwork: 3.0 days suitable. Wheat and pasture condition poor to fair. Livestock condition fair. Hay and roughage supplies short. Feed grain supplies short to adequate.

MISSOURI: Temperatures averaged 10° below normal. Below zero readings were common in the north. Precipitation was light, averaging 0.25 to 0.50 in. except in the Bootheel where an average of 1 in. fell.

MONTANA: Temperatures more near normal past week than for last 6 weeks. In west, temperatures averaged 2° above normal; over the southeast, most temperatures averaged 4° below normal. Elsewhere temperatures near normal. Highest 47° at Roundup and lowest 15 below zero at Monida. Precipitation light in valleys and plains areas. Moderate snow fell over some of the mountains.

Winter wheat condition generally fair to good. Wind damage light. Snowcover light to moderate most of State. Cattle and sheep condition good. Calving and lambing getting

started. Stockwater supply short to adequate eastern part, adequate elsewhere.

NEBRASKA: Temperatures: Averaged 10° below normal for most of week. Precipitation: Snow fell at start of week with only trace amounts during remainder. Heaviest amount of moisture. 0.85 in., reported in extreme southeast. Trace to 0.05 in. of moisture elsewhere.

NEVADA: Mostly dry. Weak front end of period dropped light showers north border. Temperatures averaged few degrees below normal due to snowcovered ground and clear skies. Extremes: 63 and -8°.

Caring for livestock main winter ranch activity.

NEW ENGLAND: Welcomed precipitation at beginning and end of period. Rain early week over all sections. Amounts from 0.50 in. along the southeast coast to 1.00 to 1.50 in. elsewhere. At week's end, a storm dropped rain south and snow north. Between 0.50 in. to 1.00 in. water equivalent fell. Temperatures averaged out near normal.

NEW JERSEY: Temperatures were 6° to 8° below normal averaging 22° north, 25° south and 27° coastal. Extremes were 0° at several stations and 56° at New Brunswick and Trenton. Precipitation slightly above normal averaging 1.26 in. north, 0.87 in. south and 0.79 in. coastal. Heaviest 24-hour total 0.96 in. at New Brunswick.

Farmers caring for livestock and tending to other normal winter chores.

NEW MEXICO: Temperatures warmed gradually through the week and averaged within a degree or two of early February normals.

Soil moisture continued short. Land preparation and supplemental feeding of livestock continuing. Winter wheat in fair to good condition. Approximately 65% of irrigated and 55% of dryland fields are being grazed. Barley is in fair to good condition with about 65% of fields being grazed. Lettuce and onions in good condition. Calving is in progress in some areas and shearing of sheep should begin this week.

NEW YORK: Precipitation above normal, with most stations reporting 1.25 to 1.50 in. Most fell on the 2nd when a major storm moved across the State. Temperatures were above normal early and late in the week with below normal readings during midweek.

NORTH CAROLINA: Temperatures: 10° below normal. Precipitation: Ranged from 0.17 to 1.48 in.

Soil moisture: short. Fieldwork: 3.9 days suitable. Conditions: Wheat, oats, barley, rye mostly fair to good. Pastures poor to mostly fair. Farm feed supplies: Hay and roughage, and feed grains mostly adequate. Major activities: Cutting firewood, tending livestock, preparing and seeding tobacco plant beds, topdressing small grains, pruning fruit trees, transplanting spring cabbage, plowing for spring. Planting a little behind normal schedule.

NORTH DAKOTA: Winter arrived in North Dakota last week with the first winter storm on the 7th. Snowfall amounts were generally light but blowing and drifting snow made outside activities difficult. Temperatures were near normal. Extremes: -23 to +35°. Greatest precipitation fell in the Northeast and East Central divisions. Most divisions had less than 0.01 in. Snowcover ranges from 6 in. to near 1 ft. in the North Central division to a trace over almost all of the southern half.

Most snow was mixed with windblown dirt and added to "snirt" accumulations in drifts. The return of cold weather increased energy requirements of cattle. Most livestock continue in excellent condition benefiting from previous mild temperatures. Marketing is slow. No new grain storage problems.

OHIO: Weekly average temperatures were from 7 to 14° below normal. Lowest temperatures -8° at Hoytville, highest 47° at Ripley. Precipitation ranged from 0 to 0.25 in., 0.25 to 0.50 in. below normal. At weekend only remaining snowcover was in northern third, where 1 to 2 in. were on the ground. Soil temperatures averaged from mid-20's to low 30's, colder than normal. During the coldest period soil freeze layers were from 6 to 12 in.

Hay supplies are low in some areas. Some plowing for spring crops was done.

OKLAHOMA: Temperatures averaged below normal all divisions, ranging 4° below normal southwest to over 8° below normal northeast. Light precipitation received midweek and over weekend, generally averaging less than 0.10 in. No precipitation received northwest 3 districts. Wheat and other small grains generally fair to poor. Greenbugs active in many areas. Wheat fields checked in the central district, one early planted ungrazed field averaged twice as many greenbugs per count row as two lightly grazed fields. Panhandle district, an occasional irrigated field showed heavy numbers and some damage. Infested fields have been treated and many continue to be treated. Winter grain mites also present in many fields. North central counties, fields heavily infested with winter grain mite have been treated. A few light infestations of winter grain mite have been reported in west central and southwest fields. Army cutworm present in most north central, southwest and west central fields but numbers are generally light.

Livestock are in good condition and feed supplies remain adequate. Weather continues favorable for calving, lambing and farrowing.

OREGON: Slightly cooler than normal weather prevailed. Average temperatures in the mid 40's reported along the Coast; Central Stations average temperatures in the 30's; Eastern Stations reported average temperatures in the high 20's. Most of the precipitation fell at the end of the week, with Coastal Stations receiving an average of almost 1.00 in.; 0.20 in. fell in the Willamette Valley; other stations reported 0.10 in. or less.

Soil moisture supplies mostly adequate. Winter wheat condition fair to mostly good. Grass seed fields in good condition. Feed supplies adequate.

PENNSYLVANIA: Weekly precipitation somewhat above normal but temperatures 8 degrees below normal. Light snow west and heavy rain extreme east on the 2nd followed by very cold temperatures and flurries at midweek. Weekend brought moderating temperatures with snow across the State except rain in the southeast. Extremes were 56 and -16°.

PUERTO RICO: Island average rainfall 0.77 in. or 0.08 in. above normal. Highest weekly total 4.35 in. Highest 24-hour total 4.05 in. Temperatures averaged about 76-77° on coasts and 70-74° interior divisions. Mean station temperatures ranged from 66° to 80°. Extreme 91 and 54.

SOUTH CAROLINA: Below normal temperatures, most severe cold during midweek including below 10° in north, west. Only light rainfall late in

week; all areas continue much drier than usual.

Weather permitting, peach and apple trees were pruned; tobacco beds and vegetable lands readied for spring crops. General farm maintenance.

SOUTH DAKOTA: Winter has finally arrived. Temperatures were below normal over the entire State this week. Northeast averaged 3° below zero, southeast 5° below and West of the River averaged 6° below zero. Minimum temperatures ranged from 4 to 15° below zero. Camp Crook and Lemon had the coldest readings of 15 and 13° below zero. Maximum temperatures ranged from the upper 20's to low 40's. Yankton and Pickstown had the highest with 42 and 41°. Precipitation varied as snow showers dropped 0.29 in. of moisture at Vermillion, 0.20 in. at Wentworth, 0.19 in. at Brookings, and 0.10 to 0.15 in. at several other locations over eastern areas and the Black Hills. Elsewhere, only a trace to 0.05 in.

TENNESSEE: Temperatures averaged in the 30's, 10° below normal. Precipitation for the week was generally from 0.25 to 0.50 in. over the middle and east with lighter amounts in the west. Some areas reported water levels reaching critical levels.

Farm activities: General farm chores, feeding livestock and some soil preparation.

TEXAS: Weather: High brought moist air from Gulf of Mexico, resulting cloudy skies, scattered rain. Temperatures 3 to 5° below normal except Lower Valley where near normal. Rainfall 0.10 in. above normal Southeast Texas; near normal elsewhere.

Commercial Vegetables: Rio Grande Valley harvest of cabbage, lettuce, bell peppers, cauliflower, carrots slowed due to wet fields. Prices of cabbage, carrots down, volumes light. Onions are progressing well. Harvest of grapefruit, early oranges continues, activity beginning on Valencia oranges. Coastal Bend, East Texas land preparation delayed by wet fields. Spring onions progressing well. San Antonio-Winter Garden area, harvest of cabbage, carrots continued. Land preparation at standstill. Onions making excellent progress. Trans-Pecos region harvest of carrots, chili peppers and land preparation continued. Spring onions making good progress.

Range and Livestock: Recent rain, snow helped alleviate dry pasture conditions. Most areas still need moisture. North, Central Texas small grain grazing limited supplemental feeding continues. Livestock in good condition.

Crops: Light rain, drizzle Low Plains southward interrupted field operations; provided much-needed topsoil moisture. Adequate subsoil moisture still lacking. Damp weather Trans-Pecos delayed stripping operations unharvested cotton fields. Stalk destruction, clean up operations other parts also delayed. High Plains producers cutting stalks, deep chiseling fields preparation spring planting. Small grain fields Low Plains southward responded light showers. Mild temperatures High Plains rapidly depleting short moisture supply; many dryland wheat fields poor condition. Some wheat fields turn yellow; some producers planting oats, barley as catch crop to wheat stands lost. Irrigated wheat in Panhandle making good progress. Cross-Timbers wheat fields grazing short. South Texas, cattle heavily grazing wheat fields, grasses. Reported wheat condition 3% excellent; 30% good; 43% fair, and 24% poor. Sugarcane harvest Lower Rio Grande Valley slowed by rain.

UTAH: Few scattered snow showers forepart period and southwest portion latter part. Accumulated amounts moisture generally light to moderate. Fog again developed some northern valleys mid-period. Average temperatures continued extremely variable ranging from 6° above normal to 9° below.

VIRGINIA: Mild, cloudy conditions first of week with first general rain in several weeks. Clearing and colder middle of week with moderating temperatures by the weekend along with more rain on the 8th. Temperatures averaged 8 to 10° below normal with southwest 10 to 15° below normal. Precipitation: Moderate averaging about 1.00 in. occurring on 2nd and on the 8th. Rainfall varied from less than 0.25 in. to over 2.00 in.

Topsoil moisture supply: Short to adequate. Fieldwork: 2.6 days available. Winter grains and grazing crops fair. Activities: Care and feeding of livestock; calving and lambing; preparing and marketing fire and sun-cured tobacco with last sales held February 2 and 5, respectively; pruning fruit trees; attending meetings; tax work; liming; and fertilizing.

WASHINGTON: West: Temperatures were near normal. Precipitation still well below normal. The heaviest fell on the coast south of Hoquiam and southwest interior south of Olympia. Frost was evident in outlying areas. Cane and blueberry pruning and tying continued. Forced rhubarb harvest progressed as did Christmas tree planting. Seeding of early lettuce began. Hay supplies are adquate with shipments arriving from eastern Washington.

East: Temperatures ranged from 2° above normal in the south portion to 6° above normal in the north portion. Precipitation remains below normal with only traces collected in the south part and none reported in the north part. Frost reported in some areas. Limited fieldwork underway with pasture fertilization. Pruning, lambing and calving continued. The main concern is will there be enough snow in the next few weeks for irrigation this summer. Hay supplies were adequate due to the open winter. Temperatures were near normal along the east slopes of the Cascades.

WEST VIRGINIA: Temperatures averaged below normal. High 55°, low -4°. Precipitation above normal in northwest, north central, southwest and northeast. Some of the drier areas received needed rainfall.

Soil moisture short to adequate. Days suitable for field work 2.6. Hay, grain, and other feed supplies adequate.

WISCONSIN: Temperatures well below normal, especially first half of week when highs were teens or less and lows were below zero. Highs moderated to 20's and 30's after midweek and lows were in teens and 20's. Extremes: 36° and 23° below. Warmest reading 6th and coldest 4th. Average temperatures ranged from around 6° north to 10° south. Several light to moderate snowfalls during week with heaviest amounts 6th and 7th. Weekly snowfall totals averaged 4 to 6 in., with greater amounts northern snowbelt and less southwest.

WYOMING: Temperatures below normal except Big Horn drainage. Lowest temperature -17°, warmest 48°. Nearly all stations reported precipitation. Most precipitation 0.29 in.

Winter wheat mostly good, many areas short topsoil moisture. Additional moisture would be beneficial. Livestock mostly good. Minimal supplemental feeding so far this season.

The Palmer Drought Index - A Management Tool

By
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The Palmer Drought Index (PDI) is a basic indicator of the amount of moisture in the soil. References to the PDI as a drought indicator are somewhat midleading, since the index represents a measure of the relative availability of soil-water supplies. Its most common use, however, is as a drought severity indicator. The PDI is the only soil moisture index for the entire United States and provides users with a record of calculations from about 1930 to the present, making it a reliable management tool.

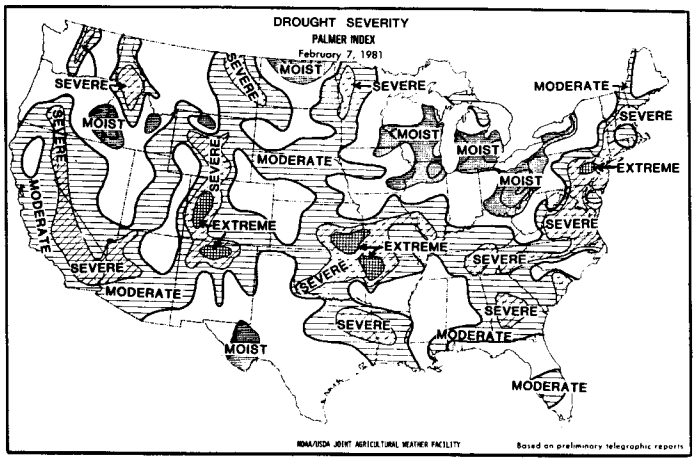
Drought is difficult to define--the definition depends on the user's primary interest. In this article, drought refers to a departure from the 30-year average soil-water supply of the area in question. The PDI accounts for the balance between soil moisture supply and demand. It is most accurate when used to reflect the average soil moisture status for a region the size of a crop reporting district, rather than for an individual field. Most states have 8-10 crop reporting districts.

The PDI best reflects moisture stress experienced by deep rooted crops, such as legumes, corn, and permanent pastures. It is also used as a hydrologic index to reflect changes in water levels of stock ponds and stream flow rates where most of the water is derived from local sources, i.e., springs, runoff, etc. The PDI generally is not a good indicator of moisture stress for shallow rooted crops because of relatively slow response to sudden changes in component variables. For this reason, a second index, the Crop Moisture Index (CMI), is used to complement the PDI. The CMI is published only during the growing season, early April to late October, and is more responsive to the change of moisture in the upper 2 feet of the soil.

In using the PDI, it is important to understand how fast it can change and also why in some cases it apparently changes so slowly. In part, the change is tied to the type of soil. Deep soil, capable of holding 10 inches of water in its total profile, will require a longer dry period to reach a negative value than will a more permeable soil that has, for example, a 3-4 inch water-holding capacity. The latter rapidly changes from wet to dry and, consequently, may have a faster impact on crop yields. Many of these droughty soils are found in semi-arid regions or in mountain areas where erosion rates are greater than the formation of the new soil. Within these constraints, the PDI is often used as a planning tool.

PDI applications in planning can be either for the short or long term. Summaries of the PDI, where available, provide insight into the frequency, intensity, and duration of drought by regions. When a farmer relocates his operation, the PDI information helps to identify the best areas, climatically speaking, for his type of agricultural program. If one of the more marginal farming regions is the choice for relocation, the PDI helps him evaluate the costs that may be incurred to reduce the risk of crop failures.

The PDI is also a tool for shorter range planning when used in conjunction with other climatic data and current weather forecasts. In 1981, this use will be particularly important because the extended period of heat and dry weather last summer, coupled with minimum fall and winter precipitation, has left soil moisture conditions short in many areas of the United States.



In general, adequate to excessive moisture as of February 7, 1981 is found in most of the Great Lakes - Ohio River Valley and portions of the central Dakotas. Elsewhere, soil moisture is less than adequate. These conditions are causing concern on the part of the agricultural production community as plans are made for the 1981 growing season. The individual farmer's options will vary with the type of crops and/or livestock produced and the reserves of feed on hand, as well as current soil moisture conditions. In 1980, good hay supplies in many areas allowed the livestock industry to avoid forced movement of cattle to market prematurely. This will not be the case in most areas in 1981. The PDI provides insight into those areas most likely to have short, late or limited grazing conditions in 1981. Similarly, it identifies regions where crops will have to depend on timely rains for successful growth during the 1981 growing season.

Farmers should integrate current PDI information with all other climatic probability data in order to obtain the most reliable indication of water likely to be available at the present time to grow a crop. This may influence the selection of seed to be planted in 1981. Due to the transient nature of weather patterns, alternative options may be needed if spring weather patterns and the 30- or 90-day National Weather Service outlooks suggest a change from the drought pattern is likely. The PDI is only a starting point in the decision-making process. Yet, it is on this base that agri-businesses begin their planning for the 1981 crop season. As additional detailed data and new outlooks are provided, the initial planning may be modified to ensure the maximum probability for providing a profitable operation. Thus, like all tools, the PDI can be a valuable aid to the decision-making process if understood and applied properly.

International Weather and Crop Summary

FEBRUARY 2 - 8, 1981

HIGHLIGHTS

WESTERN USSR: Temperatures far above-normal caused substantial snow melt in winter grain area. Many fields are now without cover.

EUROPE: Moderate precipitation fell in a broad band from the low countries to Greece, but conditions stayed dry in Spain and northern Italy. Some winter grain growth in the West.

NORTHWESTERN AFRICA: Dry weather in Morocco continued; winter grain prospects not bright. Tunisia and eastern Algeria remained beneficially moist.

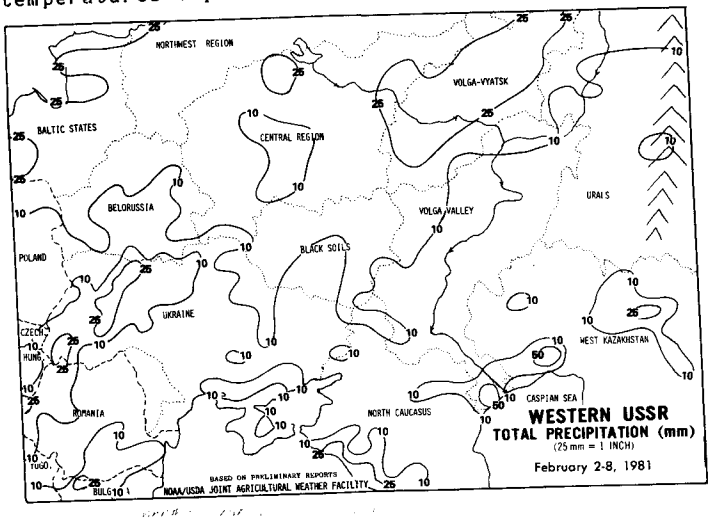
SOUTH AFRICA: Ample moisture and favorable temperatures improve prospects for corn entering early grain-filling period.

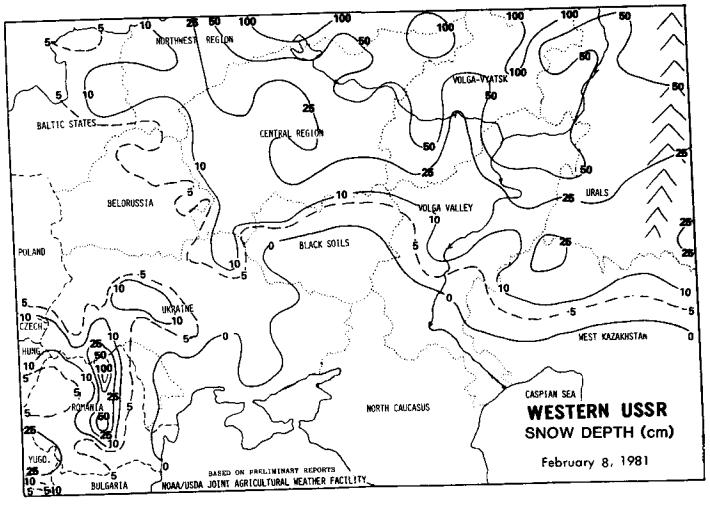
EASTERN ASIA: Moderate precipitation in the South improved moisture conditions, but winter grain areas remained dry, with the crop still dormant.

SOUTH ASIA: Above-normal precipitation continued to benefit winter grains in northern Pakistan and northwestern India. Some crop areas just to the South and East are a little drier, but conditions are not too unfavorable.

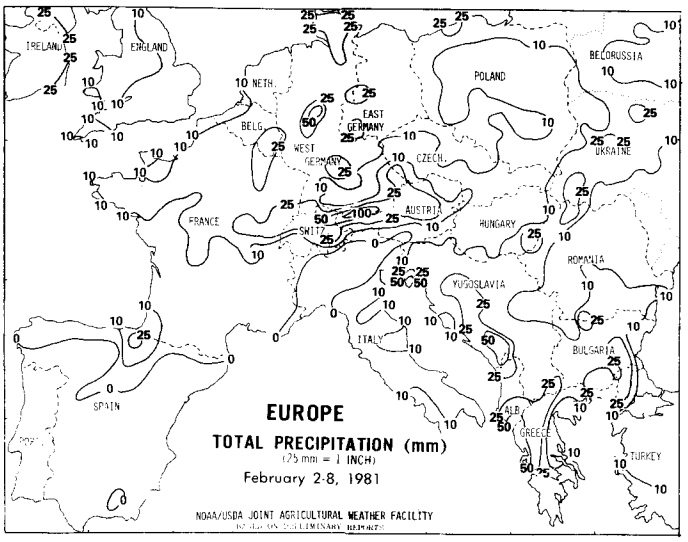
MEXICO: Mostly dry weather, except for light rains along the eastern coast and northwestern Baja California. Favorable conditions prevailed for vegetable development and harvest along the west coast.

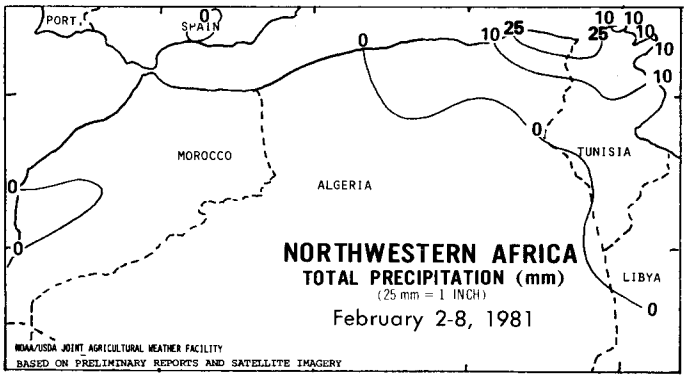
WESTERN USSR: Temperatures rose far above normal over the entire region, causing substantial snow melt over most of the winter grain belt. Extensive areas in the northeastern part of the belt, where temperatures are often the coldest, were without any snowcover by the week's end. Winter grains thus are susceptible to winterkill if temperatures dip substantially below normal before new snow arrives. Such cold temperatures are not uncommon in February. Precipitation fell mostly as rain in the winter grain belt, with amounts reaching above normal in the west, and staying below normal in the east. Spring grain areas to the northeast received additional snowfall, but the wet condition of the new snow added little to accumulated snow depths.





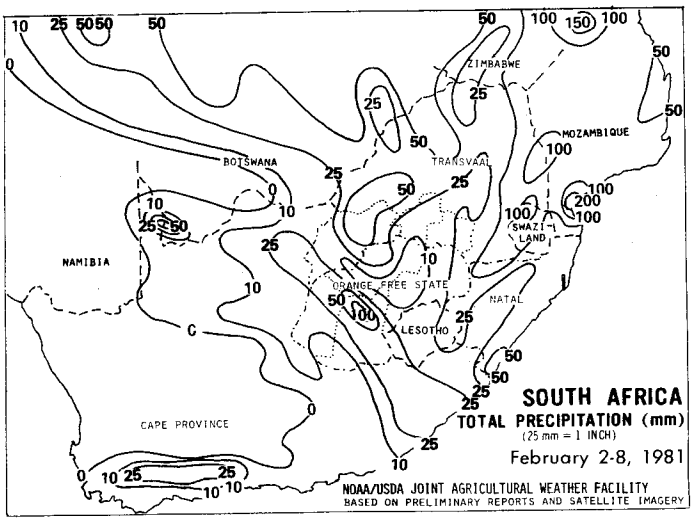
EUROPE: A weak front pushed through the region at mid-week, spreading moderate precipitation in a broad band from the Low Countries southeastward to Greece. Most other countries received light moisture amounts, but a notable dry pocket persisted in northern Italy. Nearly all agricultural areas in Spain failed to receive precipitation, with conditions for winter grains gradually becoming more serious. Snowcover in the eastern countries eroded as temperatures surged above normal. Temperatures in many western areas warmed enough for renewed winter grain growth, with readings near normal in the south and above normal in the north.



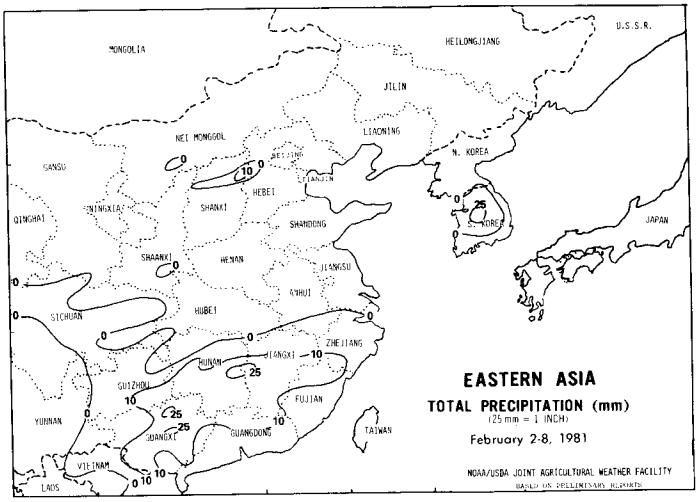


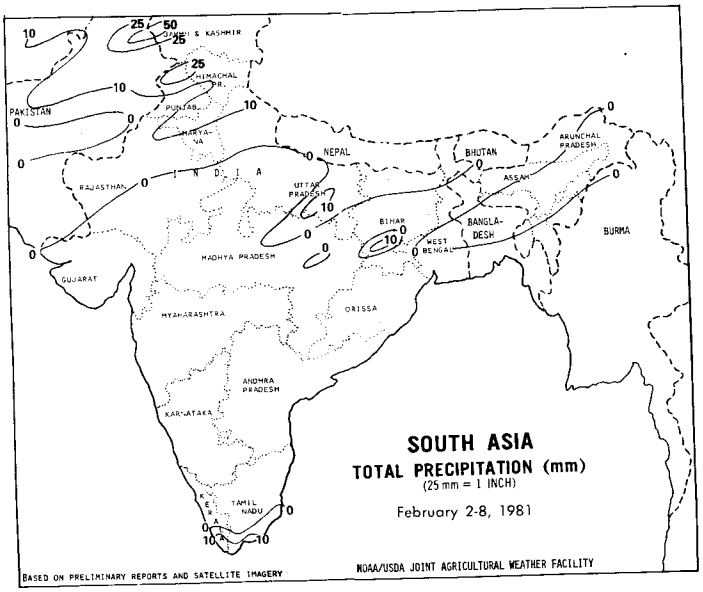
NORTHWESTERN AFRICA: No precipitation fell in Moroccan winter grain areas during the week. Soil moisture should remain marginally adequate in the north, but conditions continued to deteriorate in the south, and yield prospects are not bright. Western Algeria received no rainfall and central Algeria only light rains, but winter grains should remain in good condition. Eastern Algeria and northern Tunisia stayed beneficially moist as moderate rainfall occurred.

SOUTH AFRICA: Weekly rainfall generally ranged from 10 to 50 mm throughout the Maize Triangle with up to 100 mm concentrated in southern Orange Free State. Growing conditions for corn have been favorable since the delayed start of the wet season. The late onset caused delays in planting in some areas but beneficial rains since that time have improved crop prospects considerably. The corn crop is either tasseling or developing kernels with soil moisture in ample supply and temperatures generally reaching the low 30's during the day while falling to the mid-teens at night.



EASTERN ASIA: Widespread moderate precipitati south of the Yangtze River improved moistu conditions. Southern coastal areas missed most the precipitation. Winter grain areas in bo China and South Korea received virtually precipitation, with slightly below-normal tempe atures keeping the crops dormant.

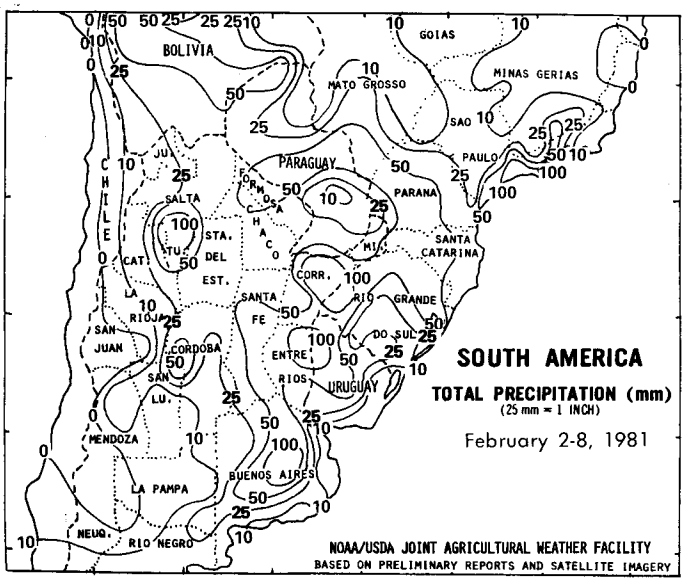




SOUTH ASIA: Above-normal precipitation continued in northern Pakistan and northwestern India, benefiting the heading of winter grains. Amounts became scattered in Uttar Pradesh and eastward, but soil moisture should remain adequate for winter grains, which should be in the grain-filling stage of development. Conditions were drier to the south in Madhya Pradesh, where much of the crop is unirrigated. But even there, where the crop is now nearly mature, winter season precipitation totals were not much below normal, with the crop now turning color.

MEXICO: Seasonally dry weather blanketed the country except along the eastern coast and northwestern Baja California where light rains fell. Nearly normal temperatures of 18 to 20° C and abundant sunshine favored vegetable development and harvest along the West Coast. Cooler weather returned to the northeastern citrus belt. Temperatures 2 to 4° C below normal should keep trees relatively dormant and buds not breaking except in southernmost orchards. Sunny, cool conditions over most of the Southern Plateau allowed the corn harvest to continue unimpeded.

SOUTH AMERICA: Brazil's soybean crop continues to make good progress with early-planted soybeans nearly mature in the north while the main crop in the south is beginning to set pods. Weekly rainfall was minimal in northern corn areas of Minas Gerais, and portions of Sao Paulo; but, further south, 50 to 90 mm fell during the week in major crop areas of Parana and Rio Grande do Sul. As in Brazil, frequent showers produced weekly rainfall amounts of 25 to 100 mm in principal crop areas of Argentina. The above-average rainfall was accompanied by seasonal temperatures. Favorable weather conditions have improved prospects for the corn crop which is advancing from the reproductive to the grain-filling stage of development in Argentina.



Heating Degree Days (Base 65° F.)

January 1981

ALA.Birmingham	795	MAINE,Caribou	1840	OKLA.Okla. City	839
Mobile	581	Portland	1578	Tulsa	843
Montgomery	682	MD.Baltimore	1145	OREG.Astoria	513
ALASKA,Anchorage	---	MASS.Boston	1344	Burns U.	1074
Barrow	---	Chatham	1296	Medford	715
Fairbanks	---	MICH.Alpena	1551	Pendleton	886
Juneau	---	Detroit	1418	Portland	640
Nome	---	Flint	1445	Salem	746
ARIZ.Flagstaff	886	Grand Rapids	1363	PA.Allentown	1290
Phoenix	181	Houghton Lake	1553	Erie	1400
Tucson	310	Lansing	1464	Harrisburg	1277
Winslow	789	Marquette U	1581	Philadelphia	1222
Yuma	84	S. Ste. Marie	1745	Pittsburgh	1372
ARK.Fort Smith	822	MINN.Duluth	1644	Scranton	1407
Little Rock	774	Internatl Falls	1818	R.I.Providence	1379
CALIF.Bakersfield	386	Minneapolis	1453	S.C.Charleston	719
Eureka U.	384	Rochester	1424	Columbia	809
Fresno	521	St. Cloud	1535	Greenville	829
Los Angeles U	164	MISS.Jackson	711	S.DAK.Aberdeen	1408
Red Bluff	486	Meridian	677	Huron	1322
Stockton	512			Rapid City	998
San Diego	113	MO.Columbia	1110	Sioux Falls	1318
San Francisco	424	Kansas City	1069	TENN.Chattanooga	907
COLO.Denver	853	St. Louis	1038	Knoxville	974
Grand Junction	864	Springfield	967	Memphis	739
Pueblo	871	MONT.Billings	891	Nashville	909
CONN.Bridgeport	1320	Glasgow	1225	TEX.Abilene	619
Hartford	1455	Great Falls	960	Amarillo	832
D.C.Washington	984	Havre	1136	Austin	443
FLA.Apalachicola	580	Helena	1127	Beaumont	448
Ft. Myers	282	Kalispell	1087	Brownsville	181
Jacksonville	570	Miles City	891	Corpus Christi	294
Key West	128	Missoula	1092	Dallas	---
Lakeland U.	---	NEBR.Grand Island	1113	Del Rio	388
Miami	168	Lincoln	1133	El Paso	607
Orlando	416	Norfolk	1180	Fort Worth	625
W. Palm Beach	193	North Platte	1089	Galveston U.	382
Tallahassee	636	Omaha	1161	Houston	416
Tampa	447	Valentine	1124	Lubbock	711
GA.Atlanta	757	NEV.Ely	1033	Midland	669
Augusta	773	Las Vegas	426	San Angelo	588
Macon	667	Reno	890	San Antonio	437
Savannah	659	Winnemucca	935	Victoria	362
IDAHO,Boise	957	N.H.Concord	1626	Waco	561
Lewiston	815	N.J.Atlantic City	1300	Wichita Falls	644
Pocatello	1125	Trenton U	1196	UTAH,Blanding R	---
ILL.Cairo U.	948	N.MEX.Albuquerque	827	Salt Lake City	1013
Chicago	1308	Roswell	719	VT.Burlington	1738
Moline	1281	N.Y.Albany	1575	VA.Lynchburg	1039
Peoria	1273	Binghamton	1537	Norfolk	994
Rockford	1346	Buffalo	1411	Richmond	1042
Springfield	1193	New York	1241	Roanoke	1016
IND.Evansville	1090	Rochester	1522	WASH.Colville	976
Fort Wayne	1385	Syracuse	1544	Omak	---
Indianapolis	1279	N.C.Asheville	978	Quillayute	601
South Bend	1282	Charlotte	889	Seattle-Tacoma	634
IOWA,Burlington	1193	Greensboro	970	Spokane	992
Des Moines	1214	Hatteras R.	884	Walla Walla U.	832
Dubuque	1337	Raleigh	973	Yakima	773
Sioux City	1253	Wilmington	846	W.VA.Beckley	1257
KANS.Concordia	1026	N.DAK.Bismarck	1402	Charleston	1138
Dodge City	889	Fargo	1645	Huntington	1132
Goodland	985	Williston U	1330	Parkersburg U.	1198
Topeka	1035	OHIO,Akron-Canton	1352	WIS.Green Bay	1530
Wichita	954	Cincinnati U.	1261	Madison	1373
KY.Lexington	1156	Cleveland	1385	Milwaukee	1423
Louisville	1065	Columbus	1286	WYO.Casper	1022
LA.Baton Rouge	576	Dayton	1829	Cheyenne	974
Lake Charles	523	Toledo	1464	Lander	1124
New Orleans	504	Youngstown	1438	Sheridan	1004
Shreveport	620				

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