

# WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE  
National Agricultural Statistics Service and World Agricultural Outlook Board

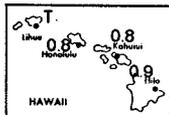
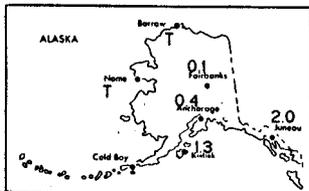
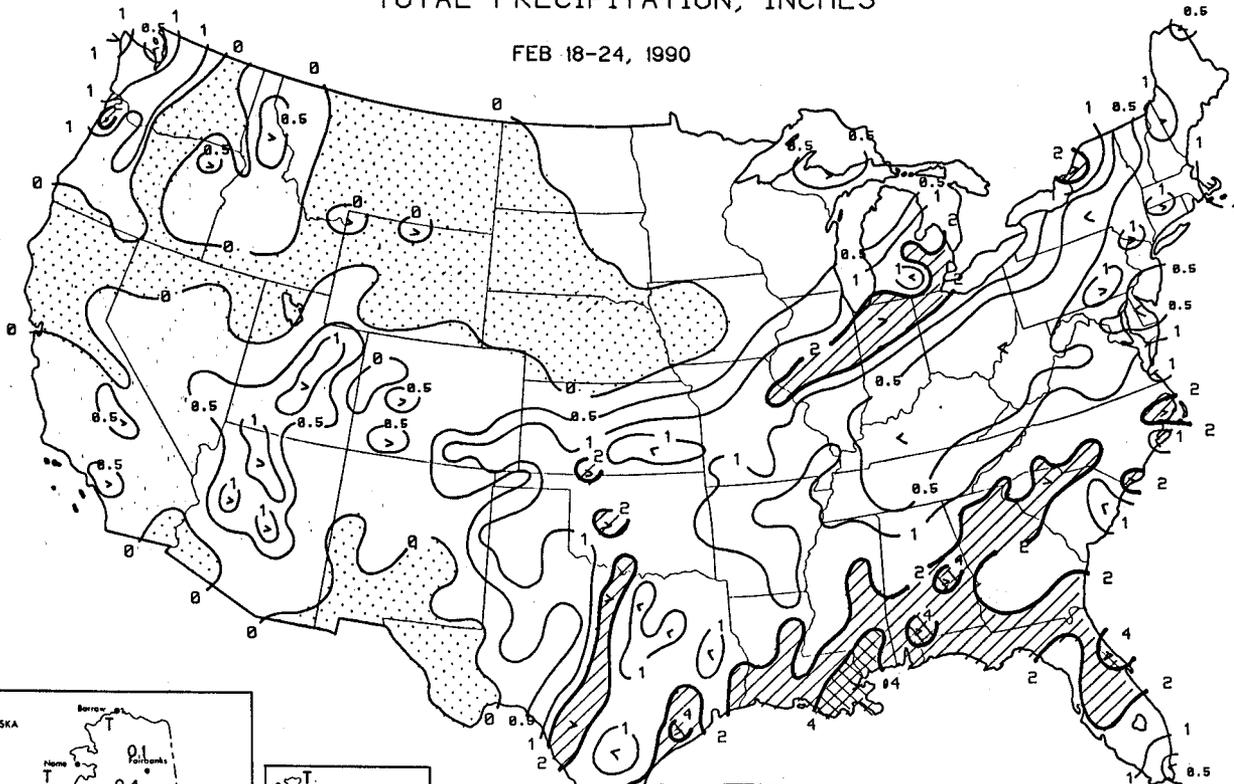
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February 27, 1990

## TOTAL PRECIPITATION, INCHES

FEB 18-24, 1990



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports

## HIGHLIGHTS

### February 18-24, 1990

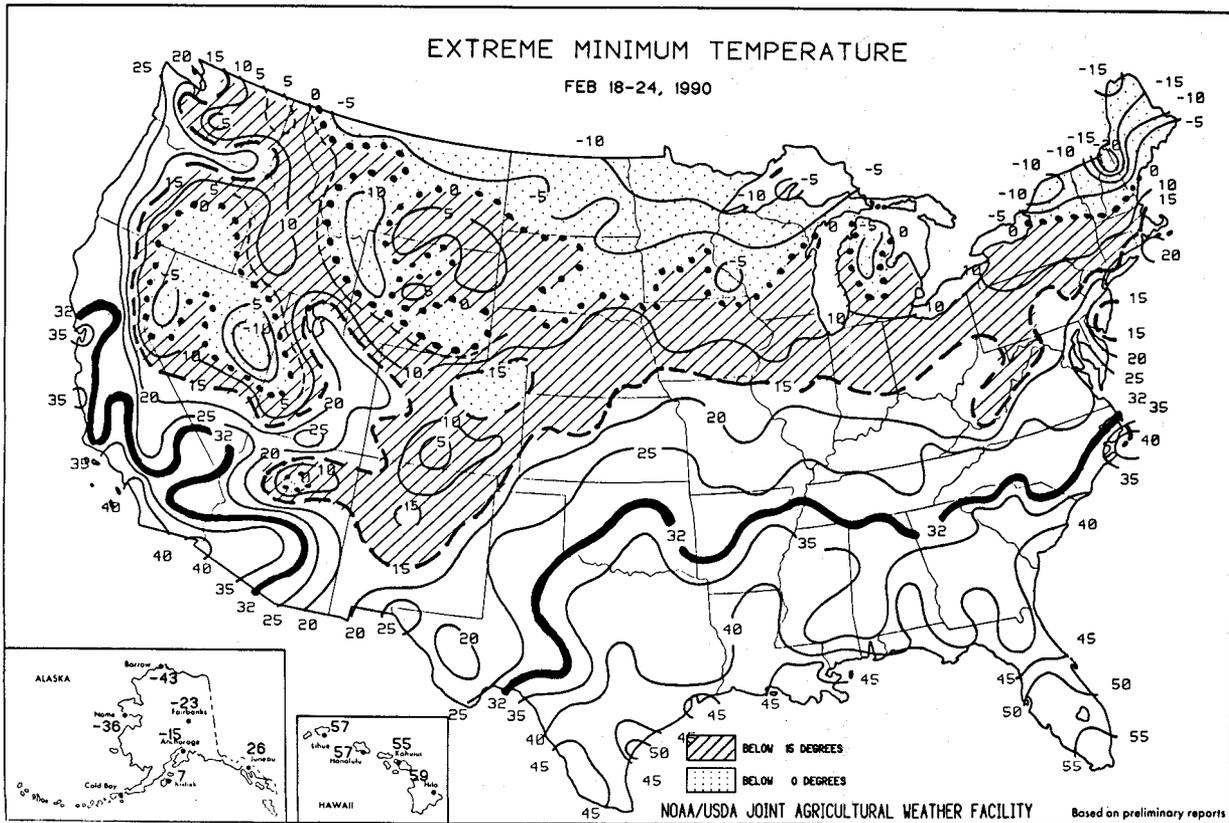
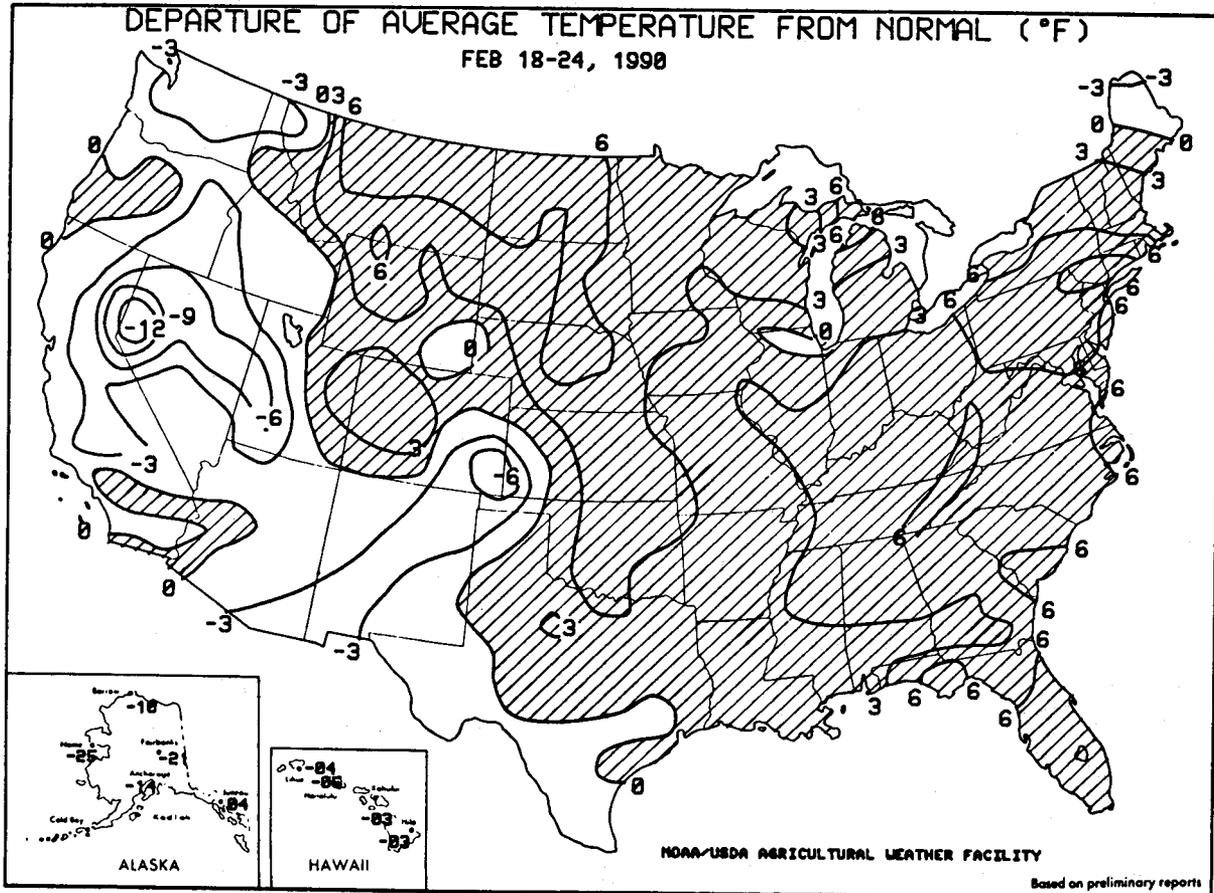
Early in the week, heavy rain fell across the **Delta and Southeast**, while a winter storm spread snow over the **central and southern Plateau, Rockies**, and into the **High Plains**. At midweek, showers gave beneficial precipitation to the hard red winter wheat regions in the **central and southern Plains**. Frontal systems then spread substantial rain and snow across the **lower and middle Mississippi Valley to the Atlantic seaboard**. Heavy rain caused local flooding in the **Gulf Coast States** and snow blanketed the **Great Lakes, eastern Corn Belt**, and **Northeast**. Record-low temperatures for the date were reported along the **Pacific Coast States** early in the week, while record-high temperatures occurred along the **Atlantic Coast States** during the latter part of the week. By Saturday, however, cold arctic air moved into the **eastern half of the Nation**, dumping heavy snow on much

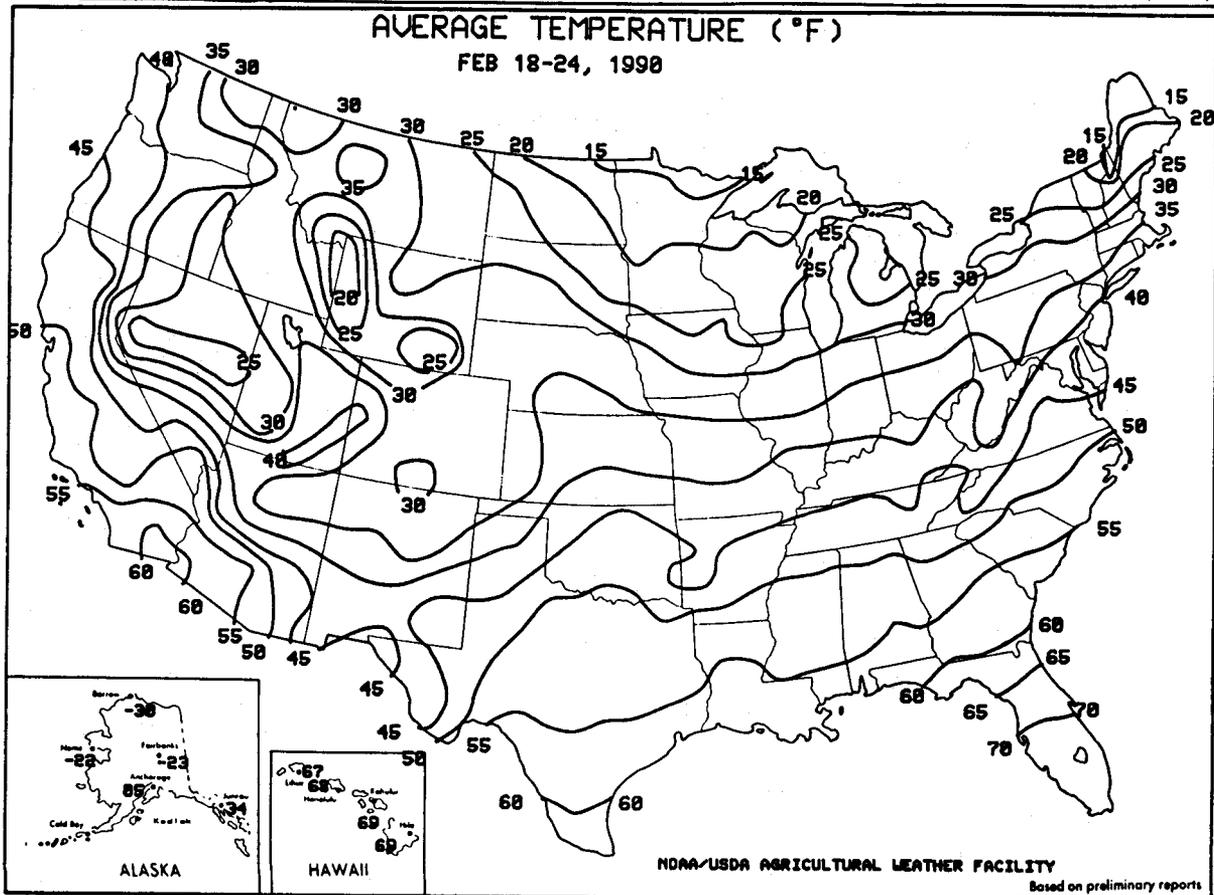
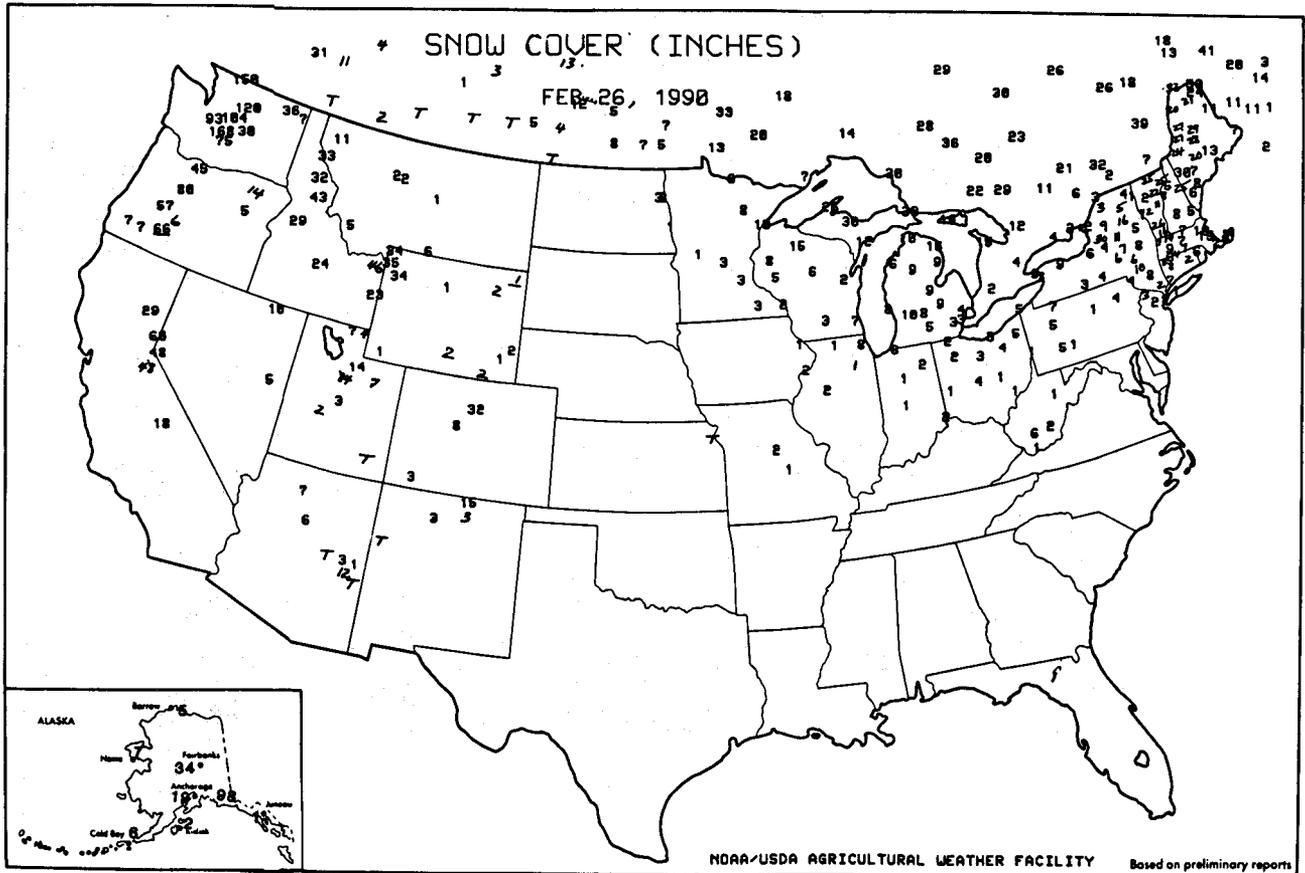
of the **Northeast** and bringing the lowest temperatures since December into the region. In **Boston**, thermometers registered a record high of 65° F on Friday, February 23. By the following Monday, highs remained in the teens, with 10 inches of snow on the ground.

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# National Weather Data for Selected Cities

## Weather Data for the Week Ending February 24, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	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	TOTAL IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	61	43	69	35	52	4	1.1	-1.1	.5	18.4	130	15.0	163	91	50	0	0	3	1
MOBILE	64	48	72	37	56	1	3.4	2.1	1.9	22.7	161	15.5	179	94	52	0	0	4	2
MONTGOMERY	62	44	71	34	53	2	3.8	2.6	2.3	27.0	212	17.8	224	93	56	0	0	3	2
AK ANCHORAGE	14	-3	28	-15	5	-14	1.4	1.1	1.1	4.1	159	2.5	166	88	56	0	0	2	0
BARROW	-26	-33	-22	-43	-30	-10	1.4	1.1	1.1	.3	58	.1	24	75	63	0	0	0	0
FAIRBANKS	-11	-35	8	-43	-23	-21	1.1	1.1	1.1	1.7	102	1.1	121	78	64	0	0	7	3
JUNEAU	36	31	42	26	34	7	2.0	1.1	1.3	13.2	115	6.9	100	99	85	0	0	4	4
KODIAK	32	19	43	7	26	4	1.3	1.1	1.1	21.2	135	8.9	88	83	57	0	0	6	4
NOME	-12	-32	-2	-36	-22	-25	1.4	1.1	1.1	2.0	110	1.3	107	80	66	0	0	7	1
AZ PHOENIX	70	44	85	37	57	4	1.4	1.1	1.1	1.7	85	1.5	126	72	24	0	0	1	1
PRESCOTT	54	26	68	22	40	0	1.6	1.1	1.1	2.8	61	2.5	83	81	32	0	0	6	2
TUCSON	69	35	85	30	52	3	1.1	1.1	1.1	1.9	82	1.7	127	77	19	0	0	2	1
YUMA	75	48	86	40	61	1	1.1	1.1	1.1	1.1	15	.1	24	47	16	0	0	0	0
AR FORT SMITH	58	33	66	28	46	2	1.4	1.1	1.1	10.9	163	10.2	262	89	39	0	0	2	2
LITTLE ROCK	56	37	62	33	46	0	1.8	1.1	1.1	10.4	91	8.8	124	75	43	0	0	3	3
CA BAKERSFIELD	62	37	73	32	50	1	1.1	1.1	1.1	1.9	74	1.9	98	99	51	0	0	1	2
EUREKA	59	39	64	31	49	0	1.3	1.1	1.1	12.6	71	11.8	103	91	61	0	0	1	0
FRESNO	61	36	71	30	48	1	1.1	1.1	1.1	4.2	80	4.2	114	95	47	0	0	2	1
LOS ANGELES	67	46	79	40	57	1	1.1	1.1	1.1	3.8	56	3.8	73	84	40	0	0	1	0
REDDING	65	32	74	27	49	1	1.1	1.1	1.1	9.5	45	9.5	68	90	30	0	0	4	0
SACRAMENTO	62	36	72	32	49	0	1.1	1.1	1.1	7.9	84	7.9	121	93	43	0	0	1	0
SAN DIEGO	67	47	79	42	57	1	1.1	1.1	1.1	4.6	86	3.6	104	81	36	0	0	2	0
SAN FRANCISCO	60	42	70	36	51	1	1.1	1.1	1.1	5.4	49	5.4	72	91	45	0	0	1	1
CO DENVER	46	25	57	20	36	0	1.1	1.1	1.1	2.0	124	1.1	108	85	38	0	0	7	1
GRAND JUNCTION	52	28	58	24	40	0	1.1	1.1	1.1	1.2	72	1.1	104	80	28	0	0	7	0
PUEBLO	47	20	59	13	34	1	1.1	1.1	1.1	1.7	232	1.2	269	92	39	0	0	7	1
CT BRIDGEPORT	44	27	57	17	36	1	1.1	1.1	1.1	6.1	64	5.1	89	77	44	0	0	6	3
HARTFORD	47	24	68	14	36	0	1.1	1.1	1.1	8.5	82	7.0	112	78	37	0	0	6	3
DC WASHINGTON	54	35	66	28	45	0	1.1	1.1	1.1	6.4	79	4.2	84	82	40	0	0	4	2
FL APALACHICOLA	69	54	74	41	62	0	1.1	1.1	1.1	13.5	133	6.3	96	96	67	0	0	0	2
DAYTONA BEACH	75	60	86	43	68	0	1.1	1.1	1.1	10.9	150	7.0	138	95	60	0	0	5	5
JACKSONVILLE	70	55	84	41	62	0	1.1	1.1	1.1	9.2	109	5.9	98	97	66	0	0	0	6
KEY WEST	81	72	84	64	76	0	1.1	1.1	1.1	2.8	54	1.0	28	87	64	0	0	0	2
MIAMI	82	68	86	55	75	7	1.1	1.1	1.1	2.0	36	1.4	37	89	54	0	0	0	2
ORLANDO	79	60	86	46	70	8	1.1	1.1	1.1	9.5	143	5.1	106	95	52	0	0	4	2
TALLAHASSEE	70	52	72	35	61	7	1.1	1.1	1.1	14.5	108	9.9	111	97	60	0	0	0	4
TAMPA	79	62	85	49	70	9	1.1	1.1	1.1	9.9	144	5.1	110	94	58	0	0	0	2
WEST PALM BEACH	83	66	88	52	74	8	1.1	1.1	1.1	4.5	63	2.6	52	92	51	0	0	0	3
GA ATLANTA	60	42	65	35	51	5	1.1	1.1	1.1	22.6	176	18.1	210	85	45	0	0	0	3
AUGUSTA	66	45	79	38	55	6	1.1	1.1	1.1	10.1	96	5.4	73	89	41	0	0	0	4
MACON	64	45	70	37	55	4	1.1	1.1	1.1	16.8	139	8.0	100	93	48	0	0	0	3
SAVANNAH	67	50	80	41	59	6	1.1	1.1	1.1	12.3	144	7.1	123	88	55	0	0	0	5
HI HILO	75	62	81	59	69	-3	1.1	1.1	1.1	35.8	106	32.2	155	83	58	0	0	1	1
HONOLULU	77	60	81	57	68	-5	1.1	1.1	1.1	6.7	70	5.3	87	85	47	0	0	0	1
KAHULUI	77	60	83	55	69	-3	1.1	1.1	1.1	9.2	99	5.0	76	92	54	0	0	0	3
LIHUE	74	60	76	57	67	-4	1.1	1.1	1.1	12.6	85	9.8	104	80	56	0	0	0	0
ID BOISE	46	24	56	14	35	-3	1.1	1.1	1.1	1.7	44	1.6	62	92	49	0	0	6	2
LEWISTON	52	31	63	18	42	2	1.1	1.1	1.1	.8	22	.6	26	77	44	0	0	3	0
POCATELLO	43	17	53	4	30	-2	1.1	1.1	1.1	.8	31	.8	43	89	39	0	0	7	0
IL CHICAGO	38	19	46	7	28	1	1.0	1.0	1.0	4.9	101	4.5	176	87	48	0	0	7	3
MOLINE	39	17	46	5	28	1	.6	1.0	1.0	4.6	100	3.8	143	89	50	0	0	7	2
PEORIA	40	22	53	10	31	2	1.3	1.0	1.1	6.2	130	5.3	193	87	53	0	0	7	3
QUINCY	44	25	55	19	34	3	1.1	1.0	1.0	5.6	131	4.9	194	83	51	0	0	7	3
ROCKFORD	34	15	39	3	25	-1	.6	1.0	1.0	3.4	81	3.0	127	88	52	0	0	7	3
SPRINGFIELD	45	24	55	16	35	3	2.6	2.2	2.4	6.8	134	6.3	213	89	56	0	0	6	3
IN EVANSVILLE	51	31	65	22	41	4	.4	1.0	1.0	11.1	124	9.7	177	90	43	0	0	5	4
FORT WAYNE	43	24	55	12	33	5	3.3	2.8	3.0	10.3	167	9.1	245	93	57	0	0	6	3
INDIANAPOLIS	47	25	62	12	36	4	1.0	1.0	1.0	8.9	116	6.7	144	88	49	0	0	6	4
SOUTH BEND	38	21	48	12	30	2	2.2	1.7	1.7	8.0	113	6.1	149	90	54	0	0	7	3
IA DES MOINES	39	19	50	10	29	2	1.0	1.0	1.0	2.9	100	2.3	124	79	49	0	0	7	0
SIOUX CITY	42	19	55	12	30	5	1.0	1.0	1.0	1.0	46	.6	41	86	43	0	0	7	0
WATERLOO	35	16	44	5	25	3	1.0	1.0	1.0	1.0	39	.8	53	87	51	0	0	7	1
KS CONCORDIA	48	25	63	18	37	3	1.0	1.0	1.0	1.1	56	.7	54	82	36	0	0	7	2
DODGE CITY	47	29	59	20	38	1	1.0	1.0	1.0	2.9	215	2.4	292	85	49	0	0	6	3
GOODLAND	43	24	56	14	33	0	.4	1.0	1.0	1.4	134	1.1	173	89	47	0	0	7	1
TOPEKA	48	26	59	21	37	2	1.0	1.0	1.0	4.1	138	3.5	203	87	42	0	0	6	2
WICHITA	53	30	66	27	42	5	1.0	1.0	1.0	4.0	173	3.6	269	83	38	0	0	6	2
KY BOWLING GREEN	55	30	69	23	43	4	.9	1.0	1.0	14.2	114	12.0	152	82	37	0	0	4	3
LEXINGTON	51	28	65	17	39	3	1.0	1.0	1.0	9.2	92	7.4	118	80	39	0	0	6	1
LOUISVILLE	53	31	69	20	42	4	.2	1.0	1.0	12.0	126	10.5	174	78	35	0	0	5	4
LA ALEXANDRIA	64	48	75	41	56	2	1.9	1.8	1.6	19.3	145	17.4	206	80	42	0	0	0	2
BATON ROUGE	64	49	75	45	57	2	3.1	1.8	1.6	24.7	178	18.4	208	88	48	0	0	0	3
LAKE CHARLES	64	47	76	41	56	1	2.4	1.6	1.3	15.5	124	13.4	178	94	54	0	0	0	3
NEW ORLEANS	65	52	73	44	58	2	5.6	4.3	3.4	25.3	173	19.1	203	90	54	0	0	0	4

Based on 1951-80 normals

Weather Data for the Week Ending February 24, 1990

STATES  AND  STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	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	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		01 INCH OR MORE	.50 INCH OR MORE		
SHREVEPORT	63	43	72	37	53	2	1.5	.6	1.4	18.5	170	16.6	237	86	37	0	0	2	1		
MR CARIBOU	22	0	52	-15	11	-3	.4	-.2	.1	7.7	106	5.2	126	71	50	0	7	4	0		
PORTLAND	41	15	61	-1	28	4	.8	-.1	.4	7.8	69	5.7	83	86	36	0	6	3	0		
MD BALTIMORE	53	31	65	22	42	6	.7	-.1	.3	7.0	79	4.8	88	86	40	0	5	3	0		
SALISBURY	54	32	66	21	43	5	.5	-.4	.3	8.6	87	6.0	97	92	59	0	4	4	0		
MA BOSTON	47	26	65	15	37	5	.8	-.1	.6	7.7	67	7.0	98	83	45	0	5	3	1		
CHATHAM	43	29	51	18	36	4	1.4	.4	.9	10.5	82	8.7	110	81	57	0	4	3	1		
MI ALPENA	36	14	48	-2	25	5	.6	.3	.3	4.9	102	3.4	121	83	44	0	7	2	0		
DETROIT	37	19	44	8	28	0	2.6	2.3	2.3	8.0	139	6.7	208	94	60	0	6	3	1		
FLINT	35	14	45	2	25	0	1.2	.8	.8	5.1	108	4.2	151	88	49	0	7	3	1		
GRAND RAPIDS	37	16	45	4	26	1	1.2	.8	1.0	5.4	93	4.5	138	83	43	0	7	3	1		
HOUGHTON LAKE	32	12	44	-7	22	3	.4	-.1	.4	2.9	65	2.3	91	83	51	0	7	2	0		
LANSING	35	13	44	-1	24	0	1.0	.6	.8	4.6	87	3.8	138	88	47	0	7	3	1		
MARQUETTE	30	8	46	-8	19	3	.5	-.1	.3	6.2	103	3.6	101	88	57	0	7	2	0		
MUSKOGON	37	18	44	5	27	2	.8	.4	.6	5.9	93	4.0	108	83	52	0	7	3	1		
SAULT ST. MARIE	31	12	42	-4	21	6	.3	-.1	.2	5.8	94	4.1	112	85	53	0	7	4	0		
MN ALEXANDRIA	29	8	44	-6	19	4	T	-.1	T	.7	30	.5	33	87	63	0	7	1	0		
DULUTH	28	8	40	-11	18	3	1	-.2	.1	1.6	49	.9	50	83	47	0	7	1	0		
INT'L FALLS	26	2	48	-11	14	4	.1	-.1	.1	1.0	42	.7	48	83	45	0	7	1	0		
MINNEAPOLIS	31	14	41	0	22	3	.3	-.1	.3	1.3	56	.9	59	82	49	0	7	1	0		
ROCHESTER	30	11	39	-6	21	2	.2	0	.2	1.7	75	1.3	92	88	60	0	7	2	0		
MS GREENWOOD	61	44	66	37	52	4	1.3	.1	1.0	17.1	119	13.6	152	85	40	0	0	4	1		
JACKSON	62	44	69	36	53	2	1.2	.1	.7	24.7	177	20.5	239	93	45	0	0	4	1		
MERIDIAN	62	43	72	35	53	3	2.3	1.1	1.3	33.6	232	27.0	306	94	47	0	0	3	2		
MO CAPE GIRARDEAU	52	31	62	25	42	-1	1.3	.4	.8	14.7	160	13.1	242	87	46	0	5	3	2		
COLUMBIA	49	25	61	19	37	2	1.4	.9	1.4	6.3	119	5.5	167	83	43	0	6	2	1		
KANSAS CITY	47	26	55	21	36	1	.7	.3	.6	3.9	106	3.3	151	81	44	0	6	2	1		
SAINT LOUIS	52	29	64	21	41	5	.9	.3	.7	5.6	98	4.9	140	81	36	0	5	3	1		
SPRINGFIELD	53	28	60	22	41	3	.7	.1	.5	10.9	185	10.1	302	84	37	0	6	2	0		
MT BILLINGS	45	24	57	5	35	4	0	-.2	0	2.1	91	.8	71	72	36	0	4	0	0		
GLASGOW	41	18	51	-7	29	11	T	-.1	T	.8	82	.4	67	83	42	0	7	0	0		
GREAT FALLS	51	25	61	9	38	9	T	-.2	0	1.5	62	.4	23	68	27	0	5	0	0		
HAVRE	44	19	53	-8	32	9	0	-.1	0	1.0	68	T	4	86	49	0	7	0	0		
HELENA	48	21	60	0	35	7	0	-.1	0	1.0	59	.5	48	75	28	0	5	0	0		
KALISPELL	37	16	50	-5	26	-2	.2	-.2	.2	4.8	118	2.7	105	93	68	0	7	1	0		
MILES CITY	47	23	52	3	35	10	T	-.1	T	.8	50	.1	12	79	37	0	6	0	0		
MISSOULA	42	21	55	6	32	1	T	-.2	T	1.8	56	1.2	58	95	48	0	7	1	0		
NE GRAND ISLAND	46	23	60	14	35	5	T	-.2	T	1.2	68	.8	73	84	36	0	7	0	0		
LINCOLN	45	21	61	11	33	5	0	-.3	0	1.3	59	.7	46	86	40	0	6	0	0		
NORFOLK	44	21	58	11	32	7	0	-.2	0	1.9	108	1.1	100	86	39	0	7	0	0		
NORTH PLATTE	48	23	58	12	36	6	T	-.2	T	6.6	52	.4	44	87	30	0	7	0	0		
OMAHA	41	22	56	16	32	2	0	-.3	0	1.6	70	1.1	72	74	50	0	7	0	0		
SCOTTSBLUFF	45	18	54	1	32	0	0	-.1	0	1.9	152	1.3	167	90	47	0	7	0	0		
VALENTINE	44	19	54	-3	31	6	0	-.1	0	.5	45	.3	43	79	44	0	7	0	0		
NV ELY	41	4	61	-13	22	-8	.2	-.1	.2	1.9	94	1.9	146	86	45	0	7	1	0		
LAS VEGAS	63	38	72	33	50	-1	.2	.1	.2	1.6	135	1.6	180	78	29	0	0	2	0		
RENO	37	6	49	-7	22	-16	T	-.2	T	1.9	58	1.9	92	93	50	0	6	1	0		
WINNEMUCCA	44	16	58	0	30	4	T	-.2	T	1.0	46	.9	63	86	44	0	7	0	0		
NH CONCORD	43	13	58	-2	28	4	.6	0	.3	6.3	76	5.4	110	79	35	0	7	3	0		
NJ ATLANTIC CITY	52	27	65	13	40	5	.2	-.6	.1	5.4	54	3.5	56	90	41	0	5	3	0		
NM ALBUQUERQUE	51	25	62	16	38	-4	.3	-.2	.2	1.0	84	.7	103	81	30	0	7	2	0		
CLOVIS	54	30	67	26	42	0	.8	-.6	.7	2.3	162	1.8	213	75	28	0	5	2	1		
ROSWELL	63	28	71	20	45	0	0	-.1	0	.5	49	.5	68	71	19	0	7	0	0		
NY ALBANY	42	19	61	9	31	6	.5	-.1	.3	8.2	113	7.4	174	76	34	0	6	3	0		
BINGHAMTON	41	18	55	6	29	6	.3	-.3	.1	8.1	111	6.5	146	85	36	0	6	3	0		
BUFFALO	39	21	56	6	30	4	1.8	1.2	1.2	10.8	129	8.5	169	91	50	0	6	4	1		
NEW YORK	50	32	65	21	41	7	.5	-.3	.2	6.3	67	5.4	95	76	41	0	4	3	0		
ROCHESTER	39	19	50	7	29	3	.9	-.3	.5	6.8	98	5.2	120	88	46	0	7	3	0		
SYRACUSE	44	20	60	9	32	7	.2	-.5	.1	7.9	99	5.8	120	87	44	0	6	4	0		
NC ASHEVILLE	54	33	61	26	43	3	1.4	.5	.8	14.6	162	11.3	194	90	39	0	3	3	2		
CHARLOTTE	61	40	74	32	50	6	1.4	.5	.5	13.3	129	9.6	138	83	36	0	1	4	1		
GREENSBORO	57	36	69	28	47	5	1.3	.5	.5	11.6	120	8.1	127	82	43	0	3	4	1		
HATTERAS	62	48	70	40	55	8	3.0	2.0	1.9	14.9	117	8.8	106	96	64	0	0	5	2		
NEW BERN	60	43	69	34	52	5	1.8	.9	.8	11.5	104	5.4	73	95	56	0	0	5	2		
RALEIGH	59	37	69	27	48	6	1.2	.3	.3	9.7	102	6.9	106	87	46	0	2	4	0		
WILMINGTON	63	44	69	33	53	5	1.2	.3	.6	11.3	113	4.4	67	94	60	0	0	4	1		
ND BISMARCK	36	10	47	-9	23	5	T	-.1	T	.8	59	.5	55	85	50	0	7	1	0		
FARGO	30	8	47	-7	19	5	.2	0	.2	.9	64	.7	81	91	63	0	7	1	0		
GRAND FORKS	30	5	55	-12	17	6	.1	0	.1	.6	33	.4	32	88	54	0	7	1	0		
WILLISTON	37	13	48	-9	25	7	T	-.1	T	.8	58	.4	45	82	45	0	7	0	0		
OH AKRON-CANTON	46	23	61	12	34	5	.7	-.1	.4	8.9	128	6.9	160	84	41	0	6	3	0		
CINCINNATI	50	27	66	15	39	5	.4	-.3	.3	10.1	120	8.2	152	80	39	0	6	3	0		
CLEVELAND	45	22	61	13	33	4	1.1	.5	.6	8.7	124	7.0	164	89	47	0	6	3	1		
COLUMBUS	48	25	67	14	36	5	.5	-.1	.3	9.2	129	7.4	163	89	42	0	6	3	0		

Based on 1951-80 normals

Weather Data for the Week Ending February 24, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT	NUMBER OF DAYS					
	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	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	46	25	64	13	35	4	.5	-.1	.2	9.8	144	7.9	184	84	45	0	6	3	0
TOLEDO	41	20	51	10	31	3	3.1	2.6	2.6	8.8	144	7.5	214	92	48	0	6	3	1
YOUNGSTOWN	46	22	62	13	34	7	.7	.2	.3	8.1	112	6.7	148	84	40	0	6	3	0
OK OKLAHOMA CITY	58	35	67	31	47	4	1.3	.9	.8	5.3	164	4.9	242	81	37	0	1	2	1
TULSA	58	34	65	31	46	4	1.3	.8	.9	5.7	124	5.4	195	83	35	0	3	2	1
OR ASTORIA	52	37	59	29	45	0	.8	-1.0	.6	35.2	121	27.8	159	94	66	0	2	5	1
BURNS	46	16	57	-1	31	-3	T	-2	T	.9	24	.9	36	94	40	0	7	1	0
MEADFORD	59	28	70	20	44	0	T	-5	0	4.7	54	4.0	76	92	36	0	6	0	0
FENDLETON	48	30	61	20	39	-2	T	-3	T	1.3	29	1.1	39	89	57	0	3	0	0
FORTLAND	51	34	62	23	42	-2	.2	-7	.2	14.4	90	11.3	119	97	62	0	2	2	0
SALEM	51	34	58	21	42	-1	.1	-9	.1	17.7	98	13.8	125	95	66	0	2	1	0
PA ALLENTOWN	49	24	65	14	37	6	1.0	-2	.5	8.3	86	6.9	118	82	34	0	6	3	1
ERIE	44	23	62	14	34	7	1.6	1.1	1.1	11.0	149	7.8	190	85	44	0	6	3	1
HARRISBURG	51	27	63	18	39	6	1.8	1.1	1.1	7.8	92	6.5	124	83	37	0	6	3	2
PHILADELPHIA	51	31	64	22	41	7	.4	-3	.3	7.1	80	5.3	97	83	35	0	5	3	0
PITTSBURGH	49	23	66	14	36	6	.3	-3	.2	8.7	118	6.3	131	80	38	0	6	3	0
SCRANTON	46	22	61	11	34	5	.8	.3	.4	7.5	116	6.5	164	82	36	0	6	3	0
RI PROVIDENCE	47	26	61	16	37	6	.8	-1	.4	9.3	80	7.6	106	82	41	0	6	3	0
SC CHARLESTON	65	49	78	41	57	6	1.0	-1	.4	10.4	113	5.6	91	91	61	0	0	5	0
COLUMBIA	64	43	80	36	54	5	1.3	.3	.5	10.3	92	5.0	65	89	43	0	0	3	1
FLORENCE	63	43	80	32	53	5	.7	-2	.2	7.2	77	2.8	44	97	56	0	1	4	0
GREENVILLE	58	37	64	29	48	3	1.5	.4	.8	14.5	121	9.7	122	83	35	0	2	3	2
SD ABERDEEN	36	11	48	-6	24	6	.1	-1	0	.7	45	.5	52	92	57	0	7	2	0
HURON	37	13	49	-4	25	5	T	-2	T	.8	55	.6	62	87	52	0	7	1	0
RAPID CITY	42	21	50	4	31	4	T	-2	T	1.4	107	.6	66	81	45	0	6	0	0
SIOUX FALLS	37	15	47	-2	26	5	T	-2	T	.7	33	.4	31	83	48	0	7	2	0
TN CHATTANOOGA	59	39	65	31	49	6	.7	-5	.4	20.9	146	17.2	188	90	41	0	2	3	0
KNOXVILLE	59	37	68	28	48	6	1.0	-1	.4	15.6	123	12.9	158	83	40	0	2	4	0
MEMPHIS	57	38	65	34	48	3	.8	-3	.6	14.9	114	12.8	155	86	40	0	0	3	1
NASHVILLE	59	34	70	26	47	5	T	-1	0	9.2	74	7.5	96	81	31	0	4	2	0
TX ABILENE	64	41	73	36	53	3	.2	-1	.2	3.0	110	2.7	151	81	34	0	0	1	0
AMARILLO	52	29	66	24	40	0	1.3	1.1	1.2	3.1	217	2.6	279	88	45	0	6	3	1
AUSTIN	64	47	78	43	56	1	1.6	1.0	.9	4.5	78	4.3	116	87	49	0	0	2	2
BEAUMONT	66	47	78	40	57	1	3.5	2.4	2.7	19.0	151	15.8	203	92	49	0	0	3	2
BROWNSVILLE	71	52	77	43	61	-3	.4	0	.3	2.9	78	1.1	44	97	56	0	0	3	0
CORPUS CHRISTI	69	49	78	42	59	-1	1.5	1.2	1.5	3.8	91	2.3	78	97	49	0	0	3	1
DEL RIO	67	47	74	39	57	0	.5	.3	.5	1.7	91	1.4	106	72	37	0	0	2	0
EL PASO	65	32	74	28	49	-1	0	-1	0	.5	48	.4	50	49	11	0	4	0	0
FORT WORTH	63	43	74	38	53	3	.9	.4	.9	9.1	181	8.7	267	86	37	0	0	1	1
GALVESTON	65	51	76	46	58	2	1.7	1.1	1.2	7.0	81	6.3	126	93	57	0	0	2	1
HOUSTON	66	45	77	38	56	-1	1.6	.8	1.0	7.9	78	7.1	112	93	47	0	0	2	2
LUBBOCK	58	31	70	27	45	1	1.2	1.0	1.2	2.6	214	2.2	273	90	32	0	5	2	2
MIDLAND	66	31	73	25	49	0	.2	-1	.2	.9	68	.7	85	85	21	0	5	1	0
SAN ANGELO	67	38	75	31	53	1	.2	-1	.2	2.2	111	2.0	146	83	32	0	1	1	0
SAN ANTONIO	66	44	76	36	55	-1	1.2	.8	1.1	3.7	82	3.3	106	90	45	0	0	2	1
VICTORIA	68	48	78	41	58	1	1.4	.8	1.3	4.5	76	3.4	89	93	49	0	0	2	1
WACO	63	42	76	38	52	0	.7	.2	.6	5.5	103	4.9	145	91	45	0	0	3	1
WICHITA FALLS	61	38	71	35	50	3	1.9	1.6	1.3	5.3	181	5.0	290	89	40	0	0	3	2
UT CEDAR CITY	42	16	51	4	29	-6	.7	.5	.5	2.8	143	2.8	215	99	57	0	7	2	0
SALT LAKE CITY	44	26	53	-1	35	0	T	-3	T	1.1	28	.9	38	90	51	0	7	1	0
VT BURLINGTON	34	12	48	-6	23	3	.4	0	.2	6.2	109	5.2	157	88	47	0	6	4	0
VA NORFOLK	56	39	69	27	48	6	.9	.1	.5	10.0	104	6.1	94	91	47	0	1	5	1
RICHMOND	56	34	66	24	45	5	.6	-2	.3	8.1	88	5.2	89	88	38	0	4	5	0
ROANOKE	53	32	65	22	43	4	1.0	-2	.4	7.8	92	5.2	94	85	35	0	4	5	0
WA QUILLAYUTE	51	34	59	21	42	0	1.2	-1.8	.7	41.6	98	32.8	132	97	62	0	2	2	0
SEATTLE-TACOMA	47	33	53	20	40	-4	.7	-3	.7	18.1	113	13.4	138	99	71	0	2	3	1
SPOKANE	39	18	48	2	29	-5	T	-3	T	4.4	69	3.4	88	98	75	0	7	1	0
YAKIMA	49	22	62	6	36	-2	0	-2	0	1.8	54	1.6	77	94	49	0	6	0	0
WV BECKLEY	49	26	63	12	38	4	.6	-2	.4	9.7	105	7.3	119	82	41	0	6	5	0
CHARLESTON	57	29	73	19	43	6	.3	-5	.1	7.8	84	6.3	103	78	35	0	4	3	0
HUNTINGTON	54	29	68	18	42	4	-2	-5	.2	8.5	97	6.2	111	78	32	0	4	3	0
PARKERSBURG	53	27	68	16	40	4	.2	-5	.1	8.0	103	6.4	126	82	35	0	5	2	0
WI GREEN BAY	33	14	41	1	23	4	1.1	-2	.1	1.8	52	1.2	61	84	44	0	7	2	0
LACROSSE	36	16	46	-2	26	4	.2	-1	.2	1.8	68	1.4	83	85	42	0	7	1	0
MADISON	35	14	43	1	25	2	.4	-1	.1	2.8	83	2.6	135	88	45	0	7	3	0
MILWAUKEE	37	18	46	5	28	3	1.0	-6	.6	4.9	103	4.4	163	85	45	0	7	3	1
WAUSAU	33	10	44	-5	21	3	.1	-2	0	1.9	65	1.5	90	88	49	0	7	2	0
WY CASPER	44	18	52	0	31	3	0	-2	0	1.3	81	1.0	104	81	34	0	7	0	0
CHEYENNE	40	20	50	7	30	0	T	-1	T	1.7	156	1.0	141	92	52	0	7	1	0
LANDER	47	18	55	5	32	5	0	-2	0	.4	29	.1	9	58	21	0	7	0	0
SHERIDAN	41	17	50	-1	29	1	0	-2	0	2.9	135	1.2	86	79	43	0	6	0	0

Based on 1951-80 normals

## National Agricultural Summary

February 19-25, 1990

**HIGHLIGHTS:** Moisture improved winter wheat growth in the central and southern Great Plains. The northern Great Plains remained dry. Rain continued to slow fieldwork in the Delta and Southeast and added to soil moisture supplies in the eastern Corn Belt. Beneficial rains fell in Florida's citrus and vegetable producing areas. Corn planting was underway in Florida, Georgia, and Texas. Cotton planting began in Arizona.

**SMALL GRAIN:** Rain and snow improved winter wheat prospects in the central and southern Great Plains. In Kansas, winter wheat was breaking dormancy in many areas. Additional moisture was needed in the north-central and northeastern areas. Rain and moderate temperatures promoted winter wheat growth in Oklahoma. Snow provided needed moisture in the northern High Plains of Texas. Rain fell from the southern High Plains southward, promoting small grain growth. Winter wheat was fair to good in Montana. In Oregon, winter wheat was good to excellent in the west and mostly fair in the east. Cool weather slowed small grain growth in California. New snow protected winter wheat from cold temperatures in Michigan. Winter wheat was good to fair in North Carolina and fair to good in Georgia.

**OTHER FIELD CROPS:** Rain again slowed fieldwork in the Delta and Southeast. Corn planting began in southwest Georgia and continued in Florida and Texas. In Texas, corn planting was 1 percent complete, 3 percentage points behind normal. Grain sorghum planting was underway in the Upper Coast, Coastal Bend, and Rio Grande Valley. Sugarcane harvest was active in Florida. In Arizona, cotton field preparation was slowed by rain, but a few fields were planted. Tobacco bed preparation and seeding continued in North Carolina and Virginia.

**FRUIT AND NUTS:** Rain fell in all of Florida's citrus producing areas. New growth was abundant and trees were blooming in all areas. Some new fruit set occurred following petal drop. Early orange harvest

was virtually complete. Grapefruit harvest was active in the east coast area. Cold temperatures may have damaged peaches in northern Georgia and portions of Tennessee. Peaches were blooming in Texas. Cold temperatures may have damaged peaches in the Cross Timbers area. Citrus harvests continued in Arizona. In California, early variety apricots, plums, nectarines, and peaches were blooming. Early variety almonds were in the pink bud to popcorn stage. Frost damaged early peaches and table grapes in Riverside County. Low temperatures required irrigation and operation of wind machines in citrus groves. In Oregon, blueberries were in the bud swell stage.

**VEGETABLES:** In Florida, harvest volumes for snap beans, squash, and strawberries were above normal. Harvest volumes for other crops were still light. Sweet corn harvest resumed in the Homestead area. In Texas, vegetable harvests continued in the Rio Grande Valley and melon planting activity increased. Rain slowed harvest in the San Antonio-Winter Garden area. Wet field conditions slowed vegetable planting in east Texas and the High Plains. In California, artichoke, broccoli, and cauliflower supplies were light and of variable quality in the central coast area. Several tomato fields damaged by frost were being replanted. Asparagus beds were being prepared for harvest in the Delta area.

**PASTURES AND LIVESTOCK:** Pastures were mostly good to fair in the Delta and Southeast. Moisture improved range and pasture conditions in most areas of Texas. Early calving was underway in Wyoming.

## 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 NASS State Statistical Offices in cooperation with the National Weather Service.

**ALABAMA:** Rainfall under 0.50 in. north, over 1.00 in. isolated areas; 1.00 in. to 1.50 in. central, southwest; under 0.75 in. extreme southeast. Temperatures 1 to 4° above normal.

Continued wet conditions brought further delays to land preparation, other field activities. Farmers still accessing extent of losses from previous week's heavy rains, storms. Primary activities: Routine care of livestock, poultry, catfish; soil testing; top dressing small grains, as weather permitted.

**ARIZONA:** Winter storm 18th, 19th, 20th with snow level down to 1,500 ft.; unseasonably cold statewide. Snowfall 0.06 in. low elevations to 25.0 in. mountains; clearing, warmer 21st through 24th; avg. temperatures 5° below to 1° above normal; precipitation none south to 1.42 in. north central.

Cotton field preparation delayed by weather; a few fields seeded. Wheat, barley 48% jointing, 38% 1989, 36% avg.; 10% heading, 4% 1989, 2% avg.; crop condition 75% good, 25% excellent. Alfalfa mostly good; new crop foliage suffered from cold; sheep continued grazing. Citrus, mixed vegetable harvests continued west, central; head lettuce harvested west.

**ARKANSAS:** Temperatures near normal. Scattered showers middle of week, lighter rainfall northwest. Extremes 20°; 71°. Rainfall 0.39 to 1.89 in.

Fields wet and muddy. Wheat crop good, no fertilizer applied due to wet fields. Fruit potentials good, slight damage from cold temperatures northwest. Pastures good. Livestock good. Hay supply good.

**CALIFORNIA:** Major cold, wet winter storm broadsides State over weekend; heavy rainfall, low snow levels. Cold temperatures followed. High pressure started building mid week, temperatures started climbing above normal with drying conditions.

General rains first part interrupted field activities. Cool weather slowed small grain growth, most good. Small grain irrigation, fertilization, weed control progressed. Some alfalfa treated weevil, weeds. Season's first cuttings desert alfalfa hay. Sheep grazed alfalfa. Seeding sugarbeets, safflower active southern San Joaquin Valley. Seeding preparations active cotton, corn, other crops. Orchard floor work ongoing, dormant spray applications wound down. Pruning, tying vines, weed control work continued, vineyards. Flower buds swell, orchards. Almonds pink bud to popcorn stages, early varieties. Fungicide treatment, bee movement almonds. Early variety apricots, plums, nectarines, peaches began blooming. Some fruit buds, upper San Joaquin Valley cold weather affected, no severe damage. Frost, Riverside County, damaged early desert peaches, table grapes. Low temperatures required operating wind machines, irrigation, citrus. Navel harvest ongoing, damage localized western county. Navel volumes exported, Japan, Philippines. Australian exports decline, tightened restrictions. Desert grapefruit, lemon harvests continued, slight damage valencias. Lemons packed, exported Japan. Artichokes, broccoli, cauliflower light supply central coast, variable quality. Asparagus beds,

Delta area being prepared for harvest. Carrot fields planted Huron area. Processing tomato planting continued. Several frosted desert tomato fields being replanted. Livestock good statewide. Range, pasture conditions continued to improve due to recent rains; remained fair to poor few areas. Supplemental feeding necessary most districts. Calving, lambing going well.

**COLORADO:** Precipitation during the period was on 21st night, 22nd. Precipitation at lower elevations greatest in the Arkansas Basin, with precipitation over the basin between 0.30 to 0.40 in. Elsewhere, 0.10 to 0.20 in. of moisture, with higher amounts in the mountains. Remainder of the period was mostly dry, except for spg showers in the mountains. Temperatures 1 to 3° above normal west of the Continental Divide, San Luis Valley. East, they were near normal along the eastern foothills, decreasing to 3 to 6° below normal near the Kansas border.

**FLORIDA:** Much needed rains fell across Peninsula; 1.00 to 4.00 in. common statewide, except southeast area where rains near 0.50 in. Warmest temperatures mostly in 80s, except 70s Panhandle. Belle Glade hottest reading of 90°. Coldest temperatures 30s north, to 50s lower southeast coast, with colder northern locations lows near freezing, weekend.

Soil moisture Panhandle adequate to surplus; northern, central Peninsula short to surplus; southern Peninsula mostly short. Wet soils Panhandle, northern Peninsula delayed fieldwork. Tobacco plant beds good. Corn planting, land preparation spring seeded crops active where conditions allowed. Sugarcane harvest continued active. Permanent pastures continued to improve, Peninsula as moisture supplies increased. However, more rain needed lower southern Peninsula to promote, sustain growth. Heavy rains temporarily lowered conditions some Panhandle areas with low ground or heavier soils. Panhandle grazing mostly fair; Peninsula generally fair to good. Cattle, calves continued fair to good; some improvement as grazing increased. Rain all citrus areas, irrigation discontinued. Full open bloom, some fruit set following petal drop. Abundant new foliage growth. Early orange harvest virtually complete. Valencia harvest active on freeze damaged crops. Grapefruit movement strong on east coast. Temple harvest active with most processed. Mild weather turned cool by weekend over major vegetable producing areas. Accompanying winds tossed around some crops; otherwise, no damage. Harvest snap beans, squash, strawberries very active; shipments above five year average for week. Harvest continued light most other crops. Also available, fair supply celery, cabbage, peppers, radishes, carrots, tomatoes. Less volume escarole, lettuce, eggplant, potatoes. Sweet corn harvest resumed, Homestead.

**GEORGIA:** Temperatures 1 to 4° above normal, coldest temperature at end of week, weekend, 24th, 25th. Warmest highs low 60s northeast mountains, mid 60s elsewhere north, low 70s central, southwest, low 80s southeast. Lows 24th, 25th dipped into low 20s north, teens in colder locations. Central low 30s, low to mid 30s south, upper 30s extreme southeast. Most rain 21st through 23rd, some severe weather western portion.

Amounts mostly under 0.75 in., local around 1.50 in.

Soil moisture surplus. Fair weather early permitted some limited fieldwork. Rain latter half stopped all field activity. Land preparation very slow. Corn planting began southwest. Peaches, other fruits possibly damaged by cold north, extent unknown. Peach development 2 to 4 weeks ahead of normal. Tobacco plant beds varied, fair to excellent. Small grains fair to good, fertilizer applications active early in fields supporting equipment. Diseases showing up in onions. Pastures good, livestock good.

**HAWAII:** Record low temperatures chill islands early in week. Through midweek skies mostly sunny with brief passing showers in mornings. Widespread rain drenched Islands over weekend. Northerly winds variable 5 to 30 mph. Temperatures upper 50s to low 80s. Rainfall 0.30 to 5.60 in.

Days suitable for farm work 7.0. Papaya production in seasonal decline. Pineapple harvesting continues. Weather beneficial to cool season crops.

**IDAHO:** Temperatures 3° above normal to 5° below normal. Precipitation fell over most areas of the State; light, spotty.

Lambing, calving continued, some areas beginning, some 55% complete. Livestock good to excellent. Major activities: Care, feeding of livestock; repairing equipment; planning crops; attending meetings. Some movement potatoes east, some ditch burning southwest.

**ILLINOIS:** Temperatures 1 to 6° below normal north, near normal central, south. Rainfall 0.50 to 2.50 in. northern two thirds, 0.50 to 1.00 in. southern third.

Livestock mostly good to excellent.

**INDIANA:** Temperatures 4° below normal to 11° above normal depending on location. Lows teens to low 20s, highs mid 30s to low 40s. Precipitation 0.30 to 3.00 in.

Muddy conditions limited fieldwork activities. Other activities: Hauling manure, repairing machinery, selling grain, tax preparation, processing tobacco, fence building, planting mint roots, purchasing supplies, attending meetings, care of livestock. Hay supplies adequate. Livestock mostly good. Wheat greening up. Flooding some areas.

**IOWA:** Temperatures 2° below normal east to 6° above normal northwest. Extremes -9°; 56°. Precipitation none to 0.91 in.; average 0.11 in.

Livestock mostly good. Main activities include: Tending livestock, machine repair, bookkeeping, spring plans for planting, spreading manure.

**KANSAS:** Temperatures normal southwest, 2 to 4° above normal elsewhere. Rainfall recorded most areas, 0.21 in. northwest to 1.25 in. south central.

Temperatures helping wheat break dormancy, start greening up. Rainfall increased surface moisture most areas, shortages noted north central, northeast. Subsurface moisture short most areas. Heavy concentrations chinch bugs north central, northeast counties. Calving, lambing favored by mild temperatures; feeding needs dropped off.

**KENTUCKY:** Temperatures 40 to 42°, 2 to 4° above normal. Warmest temperatures 21st, 22nd, high temperatures 60s. Cold front 24th, coldest since 12/89. On 25th temperatures low, mid teens. Precipitation 0.25 to 0.50 in. snow 24th, 25th, 1.00 in. or less, mainly east.

Wet soils limited field activity, some early plowing has been completed. Winter wheat green

and showing growth. Concern over early crop growth, breaking dormancy of fruit crops. Burley sales mostly finished, two markets remain open. Preparation tobacco beds continues. Ample moisture for pasture, hay crops.

**LOUISIANA:** Temperatures 1 to 2° above normal. Extremes 34°; 76°. Rainfall 1.10 to 4.88 in. Heaviest rainfall east central, southeastern areas.

Main activities: Caring for livestock, crawfishing, fertilizing wheat.

**MARYLAND & DELAWARE:** **MARYLAND:** Precipitation 0.28 in. Temperature 44°, normal 36°. Extremes 12°; 68°.

**DELAWARE:** Precipitation 0.21 in. Temperature 45°, normal 37°. Extremes 18°; 71°.

**MICHIGAN:** Temperatures 1 to 6° above normal. Extremes -14°; 51°. Precipitation 0.27 to 3.05 in. across State. Dry, sunny, weather early in the week was replaced by rain, freezing rain, heavy snow by weekend. Heavy snow accompanied by strong winds created blizzard conditions. New snowcover provided adequate protection for most winter wheat.

Major activities: Repairing equipment, pruning fruit orchards, cutting wood, marketing hay, grain, preparing tax returns, planning for spring fieldwork. Livestock excellent. Calving activity increasing. Good supplies of grain, hay, straw.

**MINNESOTA:** Temperatures near normal to 5° above normal. Extremes 30 to 48°. Precipitation 0.05 to 0.30. Greatest weekly total 0.50 in.

**MISSISSIPPI:** Warm statewide. Extremes 25°, 75°. Dry north, wet south. Rainfall 1.99 in., 0.75 above normal.

Days suitable for fieldwork 0.6. Soil moisture surplus to excessive. Wheat fair; jointing has begun, applying nitrogen where possible. Livestock good. Pastures fair to good. Hay, feed grain supplies adequate. Activities: Shopwork, livestock chores, limited applications of chemicals to wheat. Annual rainfall 8.6 in. (96%) above normal.

**MISSOURI:** Temperatures 2 to 4° above normal. Widespread precipitation around 1.00 in. except lessor amounts northwest.

Moisture supply improving, northern counties still need rain for subsoil moisture, run off for stock ponds. No fieldwork yet. Activities limited to livestock, other yard work.

**MONTANA:** Temperatures near normal in west; 3 to 12° above normal east. Mostly dry except small amount snow west.

Winter wheat mostly fair to good. Snowcover poor. Wind damage to winter wheat light to moderate. Livestock receiving supplemental feed. Grazing open. Calving over 15% done. Lambing near 10% complete.

**NEBRASKA:** Temperatures 2 to 7° above normal. Only traces of precipitation. Extremes -7°; 61°.

**NEVADA:** All precipitation early, heaviest amounts central area, next heaviest south. Temperatures warmed rapidly after low pressure system moved east. Temperatures near normal end of period.

Fieldwork south central, south delayed by heavy snowstorms. Livestock feeding operations also hampered by snowstorms central, south.

**NEW ENGLAND:** Precipitation (rainfall and water equivalent of snow) 0.50 to 1.00 in. Maine, New

Hampshire, Vermont, 1.00 to 1.50 in. Massachusetts, Connecticut, Rhode Island. Temperatures near 10° northern Maine to mid 30s south coast. Temperatures well above normal with record highs 22nd, 23rd, record lows 25th night. Major farm activities: Tending livestock, machinery repair, moving crops from storage, making maple syrup.

**NEW JERSEY:** Temperatures normal, 33° north, 36° south, 39° coastal. Extremes 1°; 67°. Precipitation above normal north, below normal south, coastal; 0.99 in. north, 0.48 in. south, coastal. Heaviest 24 hour 0.67 in. 23rd, 24th. Heaviest 24 hour snowfall 3.00 in. 24th, 25th. Depth of snow on ground 24th 2.00 in. north.

Farmers performed machinery maintenance, repair; livestock tending; normal winter chores.

**NEW MEXICO:** Winter storm brought significant snowfall to northern areas of the State. Temperatures a little below normal.

**NEW YORK:** Temperatures about average, warmed to well above average at midweek, cooled to well below average by weekend. Extremes -15°; 67°. Precipitation heavy midweek. Much rain fell, flood watches many areas. Snow fell in southern, eastern regions at weekend as arctic air moved in. Major activities: Caring for livestock, moving crops from storage, machinery repair, maintenance. Maple producers readying for upcoming season.

**NORTH CAROLINA:** Temperatures 3 to 6° above normal across the State. Precipitation 0.79 to 3.20 in.

Days suitable for fieldwork 2.6. Soil moisture, 43% adequate, 57% surplus. Pasture 2% very poor, 6% poor, 34% fair, 57% good, 1% excellent. Livestock feed from pasture 32%. Crop condition: Wheat, 1% poor, 23% fair, 73% good, 3% excellent; oats 2% poor, 24% fair, 73% good, 1% excellent; barley 1% poor, 25% fair, 73% good, 1% excellent; rye 3% poor, 22% fair, 73% good, 2% excellent; tobacco plant beds 3% poor, 32% fair, 62% good, 3% excellent. Hay, roughage supplies 6% short, 87% adequate, 7% surplus. Feed grain supplies 9% short, 90% adequate, 1% surplus. Major activities: Tobacco bed preparation, seeding, topdressing small grains, tending livestock. Other activities included: Land preparation, cutting wood, general farm maintenance.

**NORTH DAKOTA:** Temperatures 1° above normal north central to 7° above normal northwest. Precipitation mostly below normal, none to 0.17 in. Snowfall none to 3.00 in., heaviest northeast. Soil moisture below normal. Cold temperatures, inadequate snow cover has caused concern for winter grain producers. Livestock good, calving, lambing underway. Feed supplies mostly adequate.

**OHIO:** Temperatures mild to bitter cold. Early week 50s to 60s. Late week readings into single digits. Heavy rain northwest, 1.00 to 2.00 in. above normal; elsewhere up to 0.50 in. subnormal. Soil temperatures near to slightly above normal. Snow that came along with the bitter cold, wind provided some protection to overwintering crops.

**OKLAHOMA:** Temperatures normal Panhandle to 3° above normal southwest. Precipitation 0.68 in. Panhandle to 1.30 in. central. Rain, moderate temperatures benefitted wheat growth.

Wet fields curtailed top dressing, pesticide application. Pastures improved. Hay supplies remain ample. Fed cattle prices steady with preceding week. Cold temperatures

**OREGON:** Coast, southwest interior temperatures slightly above normal. The Willamette Valley 1 below normal. East of Cascades, Madras, Redmond above normal temperatures while remaining stations below normal. Klamath Falls 8° below normal. Little precipitation. North coast 0.50 to 1.00 in., Laurel Mountain 2.00 in. Rest of west less than 0.25 in. Most eastern stations less than 0.10 in.

Soil moisture surplus west, short to adequate east. Winter wheat good to excellent west, mostly fair east. Russian wheat aphid populations decreasing Columbia Basin. Some orchards received delayed dormant sprays. Buds swelling on blueberries. Livestock good to excellent, except central coast fair to good. Grass pastures still dormant in that region, poor to fair. Range mostly fair east. Hay stocks good due to mild winter, water outlook poor. Calving, lambing conditions have been good northeast.

**PENNSYLVANIA:** warm with near normal precipitation during week, however, a blast of arctic cold was spreading over State at weeks end. Temperature 34, 6° above normal. Extremes 2°; 66°. Precipitation 0.59 in., 0.06 in. below normal.

Activities: Spreading manure, caring for livestock, maintaining machinery, fixing fence, cutting fire wood.

**SOUTH CAROLINA:** Temperatures 3 to 4° above normal. Rainfall 2.00 in. western to 1.00 in. eastern portion of the State.

Farm activities: Continued applying nitrogen to small grains, land preparation for spring planting, general farm maintenance.

**SOUTH DAKOTA:** Temperatures normal to 11° above normal. Extremes -24°; 56°. Precipitation below normal with none in many locations. Range none to 0.06 in. Yearly precipitation below normal in all but 1 location. Range 0.07 in. above normal to 0.89 in. below normal. Snowcover limited to Black Hills, range none to 4.00 in.

**TENNESSEE:** Three cold fronts moved through State during week, on 19th, 24th, 25th. All fronts produced some rain with most occurring 24th. Cold air mass invaded over weekend. Temperatures 3 to 4° above normal east, middle, west; 2° below normal on the Plateau. High temperatures 50s, average lows 30s. Warmest reading 70° in Nashville on the 22nd, coldest reading 15° in Crossville on the 25th. Below average rainfall in all areas. Middle sections had least rainfall, West sections had most.

Soil moisture mostly adequate statewide. Some early budding peaches damaged by freezes, extent of damage not yet determined. Adequate hay, roughage supplies. Livestock mostly good. Main activities: Freeze prevention on fruit trees, general repairs, maintenance.

**TEXAS:** Early week, weak disturbance some showers High Plains, few south. Mid week, strong upper air disturbance, surface low pressure system triggered heavy snow over the northern Panhandle. Good rains rest of State, except Trans Pecos, northeastern counties. Temperatures varied across State, several degrees above normal Cross Timbers, south central counties to several degrees below normal southern High Plains, Coastal Bend, Lower Valley. Precipitation generally above normal, except Trans Pecos, Blacklands, north eastern States.

**Crops:** Small grain condition holding steady last week across State with added moisture, moderate temperatures. Heavy snow northern High Plains provided much needed relief dryland fields. Showers fell southern High Plains

southward, increasing growth, greening. Some stands remained thin. Insects light to moderate. Some topdressing occurred as fields dried. Corn, grain sorghum planting progress limited by wet conditions upper coast, Coastal Bend, parts of Valley. Many producers completed land preparations Blacklands, central, planting begin as fields dry out. Adequate moisture should be available for planting in many fields. Corn 1% planted; 1% 1989; 4% avg.

**Commercial Vegetables:** Rio Grande Valley, harvest cabbage, carrots slowed because demand, lower prices. Some lettuce, celery harvested. Melon planting increasing. Onion harvest may be delayed slightly. Conditions vary across Valley. San Antonio Winter Garden, rain delayed cabbage, spinach harvest. Demand slowed. Onions behind normal progress. Some stands thinned by freeze. Eastern State, continued wet conditions limited planting. High Plains, onion planting delayed by wet, cool conditions. Trans Pecos, onion sets continued to go out in fields. Land preparations melons continued under mostly open conditions. Increased budding, blooming peach trees continued many areas last week. Frost Cross Timbers may have nipped some early blooms.

**Range and Livestock:** Additional moisture improved grazing prospects most of State. Although many ranges, pastures still remained short, they were greening up. Producers still pulling cattle off fields Blacklands. Livestock conditions steady most areas. Feeding active, slow down if grazing conditions continue to improve. Good calf, lamb crops.

**UTAH:** Precipitation mostly heavy Dixie, south central, northern Mountains divisions; moderate western, north central, Uinta Basin; light southeast. Temperatures 6° below normal except southeast normal.

Above normal temperatures at the end of the week reduced the snowcover on fall seeded crops. Calving, lambing continuing as normal. Major farm, ranch activities include: Caring for livestock, farm maintenance, tax summarization.

**VIRGINIA:** Partly cloudy, warm at beginning of period, cooler during mid period, seasonable at end of period. Temperatures about 7° above normal. Extremes 75°; 14°. Precipitation about 0.75 in.

Days suitable for fieldwork 2.5. Topsoil 43% surplus, 57% adequate. Winter grains, grazing crops 9% excellent, 54% good, 33% fair, 4% poor. Pasture 14% excellent, 50% good, 28% fair, 8% poor. Forage from pastures, dairy cattle 5%, beef cattle 21%, sheep 17%. Activities included topdressing small grain, calving, lambing, soil testing, liming, fruit tree pruning, attending meetings. Few potatoes, peas planted, tobacco planted seeding continued.

**WASHINGTON:** Temperatures normal to 11° below normal, east; 2° to 11° below normal, west. Precipitation none to 0.88 in., east; 0.02 to 2.13 in., west.

Days suitable for fieldwork 2.3. Soil moisture 28% short, 70% adequate, 2% surplus. Range, pasture 65% short, 35% adequate. Hay, other roughage 20% very short, 20% short, 55% adequate, 5% surplus. Cooler, drier weather during the week allowed field activity again after the rain, snow the previous week. The main field activities weed control on alfalfa, fertilizer application, planting wheat. Wheat 1% poor, 29% fair, 70% good. Pruning of caneberrries, fruit trees continued. Calving, lambing activities continued.

**WISCONSIN:** Temperature 24°. Extremes -28°; 48°. Precipitation 0.10 to 0.80. Snowfall 1.00 to 4.00 in. central, 4.00 in. southeast on 22nd. One to 4.00 in. far southwest, far northeast on 23rd. One to 2.00 in. north on 25th.

Snow depth 5.7, avg. 9.4; frost 23.9, avg. 17.6 as 25th.

**WYOMING:** Temperatures below normal. Precipitation below normal. Winter wheat fair to good. Snowcover improving moisture conditions. Livestock mostly good. Supplemental feeding continues most areas. Early calving underway. Cold temperatures, snowcover increasing calving stress, newborn losses. Lambing, shearing farm flocks continues.

## International Weather and Crop Summary

### HIGHLIGHTS

February 18-24, 1990

**USSR** ... The seventh consecutive week of unseasonably warm weather prevails over winter grains.

**EUROPE** ... Unseasonably warm weather covers most crop areas. Dryness persists in the south.

**SOUTH ASIA** ... Unseasonable rain benefits immature winter wheat and rice.

**EASTERN ASIA** ... Heavy rain continues in the Yangtze Valley and spreads across southern China and Taiwan.

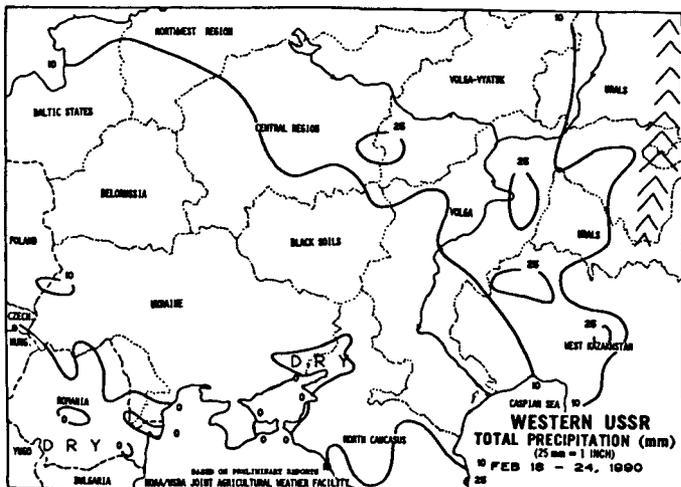
**SOUTHEAST ASIA** ... Unseasonable rain falls again over parts of Indochina. Scattered showers fall locally in the eastern Philippines.

**SOUTH AFRICA** ... Drier weather returns to the Maize Triangle.

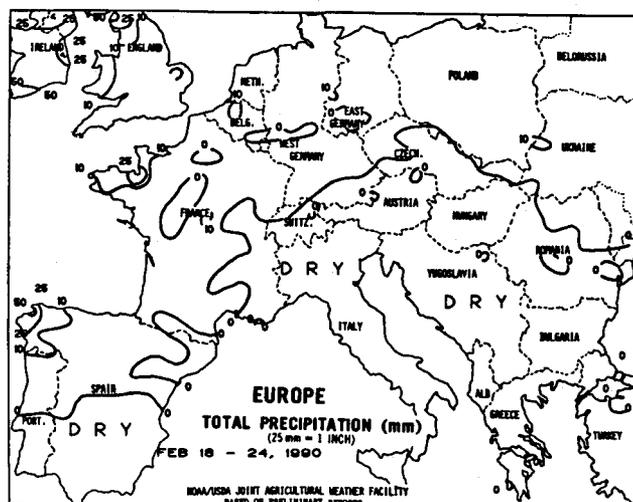
**SOUTH AMERICA** ... Widespread showers benefit immature grains and oilseeds in Argentina and south-central Brazil.

**AUSTRALIA** ... Rain provides relief to scattered areas in the east.

**NORTHWESTERN AFRICA** ... Continued unfavorably dry weather in Morocco, Algeria, and Tunisia covers winter grains in or nearing reproduction.

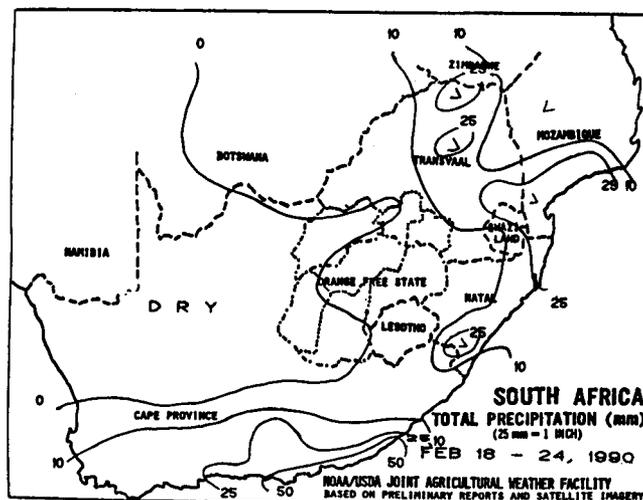


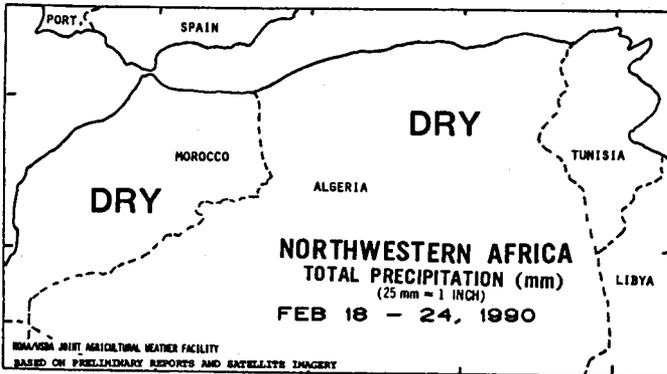
**WESTERN USSR** ... The seventh consecutive week of unseasonably warm weather continued over the region, melting most of last week's snowfall in the Baltic States, Belorussia, the northern Ukraine, and the northern North Caucasus. In addition, the warm weather reduced snow cover in the Central Region, Black Soils Region, the Volga Vyatsk, and the Volga. Weekly average temperatures were 6-10 degrees Celsius (C) above normal everywhere, except in the Volga and the North Caucasus where temperatures were 1-3 degrees C above normal. Although a narrow band of significant precipitation (20-39mm) fell southeastward from the eastern portion of the Central Region, through the middle Volga, and into extreme western Kazakhstan, rainfall over the remainder of the region was less than 10mm. Since the beginning of November, near- to above-normal precipitation has covered most winter grain areas, except for areas in the southern Ukraine where rainfall has been well below normal (less than 50 percent of normal).



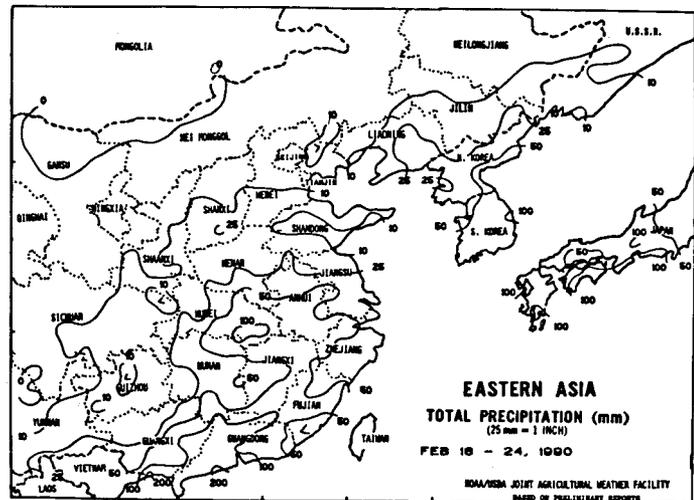
**EUROPE** ... Much warmer-than-normal temperatures (from 4 to 11 degrees C above normal) continued over much of Europe, melting protective snow cover in the east and causing winter grains to break dormancy in some central growing areas. Unseasonably warm weather since January has accelerated vegetative growth and development of winter grains in the southwest. In the southeast, unfavorably dry conditions persisted in Italy and sections of the Balkans. Moderate to heavy rain (10-35mm, with isolated amounts greater than 40mm) fell in Ireland and coastal western sections of the Iberian Peninsula, while light to moderate rain (5-20mm) fell from Great Britain eastward to Poland. Following the end of the reporting period, yet another powerful storm struck northwestern Europe over the 25th and 26th, spreading high winds and heavy rain from Great Britain eastward to southern Scandinavia.

**SOUTH AFRICA** ... Drier weather returned to the Maize Triangle, benefiting maturing crops in western growing areas. A band of light rain (3-13mm) fell from northern Orange Free State to south-central Transvaal, but the generally drier and somewhat warmer weather stimulated growth of immature, late planted crops that had received beneficial rain in recent weeks. Despite the dryness, however, temperatures averaged near to below normal across the Maize Triangle with highs from the upper 20's to low 30's C. Variable rain fell outside the Maize Triangle, with moderate rain (19-49mm) benefiting immature corn in fringe areas of central Transvaal. Light rain (1-17mm) returned to Natal's coastal sugarcane region, but further south, unseasonable rain (10-50mm or more) swept across the southern Cape Province, improving local moisture reserves.



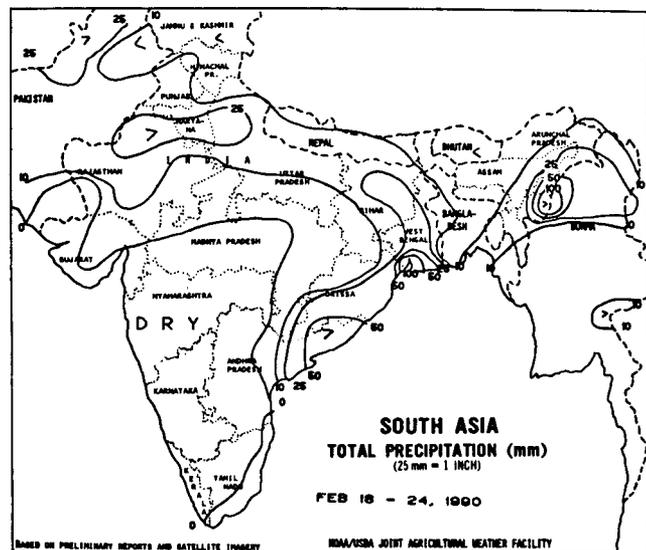


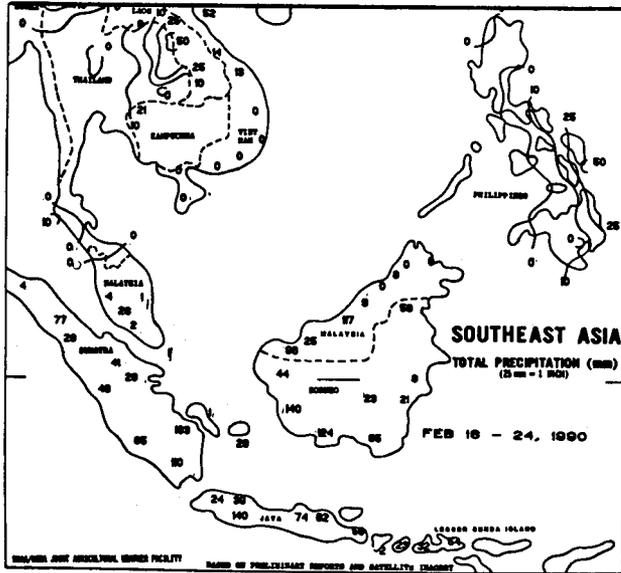
**NORTHWESTERN AFRICA** ... The third consecutive week of dry weather covered winter grains in Morocco, Algeria, and Tunisia. In addition, weekly average temperatures in these areas were 2-5 degrees C above normal. In Morocco, continued dry weather has depleted soil moisture reserves, and rain is needed soon to prevent the development of significant stress. In Algeria, insufficient moisture in central and eastern areas since the beginning of the growing season has likely stunted plant growth and accelerated crop development. In Tunisia, the fourth consecutive week of dry weather stressed winter grains, entering the reproductive phase of development. In general, throughout the region, the unseasonably warm, dry weather of recent weeks has depleted soil moisture reserves and accelerated crop development. Winter grains are in or nearing reproduction and rain is needed soon to prevent significant declines in potential crop yields.



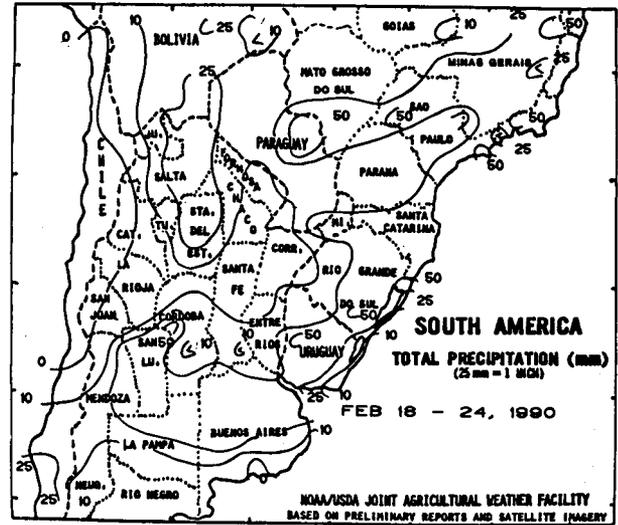
**EASTERN ASIA** ... Heavy rain (25-80mm, with isolated amounts in excess of 80mm) continued across middle and upper sections of the Yangtze Valley and spread into southern China from Guangxi eastward to Fujian and Taiwan where planting of early-crop rice is beginning. Heavy rain (25-60mm, with isolated amounts greater than 100mm) also fell across sections of South Korea, southern North Korea, and southern Japan. In the North China Plain, widespread rain and snow (10-30mm, with scattered amounts greater than 30mm) kept soil moisture levels high prior to vegetative growth of winter crops. In Manchuria, light to moderate snow and rain (5-20mm) fell over most crop areas. Above-normal weekly mean temperatures (2-6 degrees C above normal) covered all but northwestern crop areas, although colder, seasonable temperatures returned to northeastern and central crop areas by week's end.

**SOUTH ASIA** ... Unseasonable rain continued across the region, with amounts of 5-48mm over winter wheat regions of Pakistan and from Rajasthan to West Bengal, increasing irrigation reserves. Wheat ranges from reproductive to mature, with only northernmost crops benefiting from the recent rain. In the east, variable rain (10-50mm or more) from northern Andhra Pradesh to the eastern states improved irrigation reserves for immature rice, but excessive rain (102-157mm) in eastern Orissa and the far east likely caused local flooding. Dry, warm weather benefited India's maturing cotton. Temperatures averaged above normal over India's southeastern coast but near to below normal elsewhere, with departures of 2-5 degrees C below normal over much of central India.



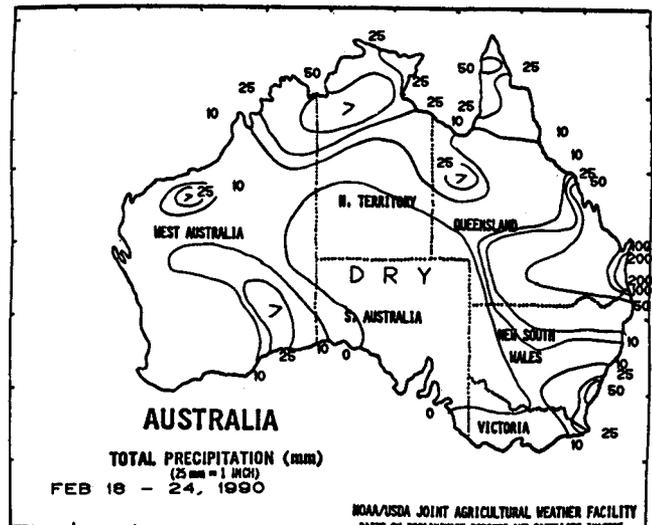


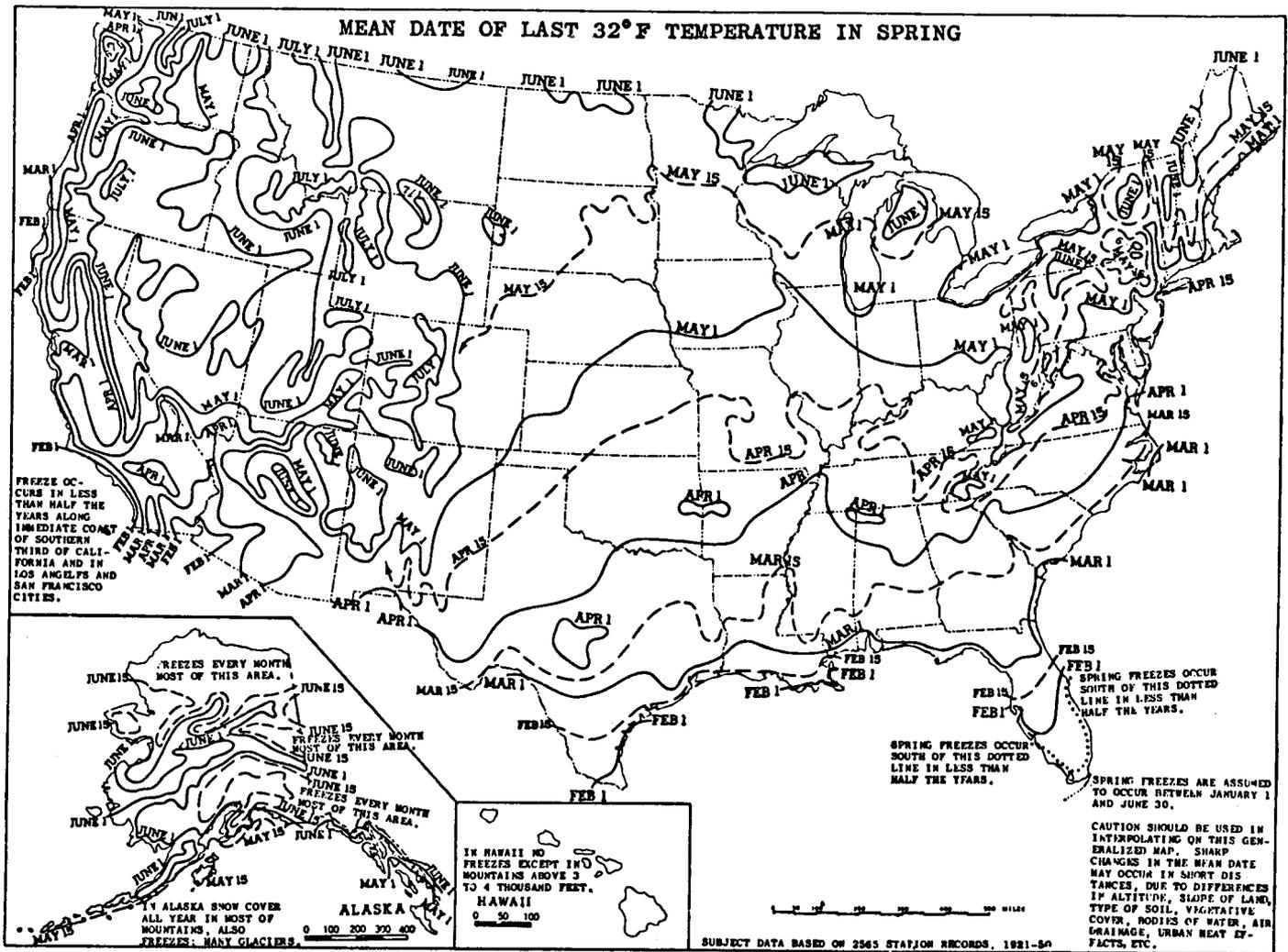
**SOUTHEAST ASIA** ... Unseasonable rain (10-50mm or more) continued locally over northern Thailand and from eastern Thailand to northern Vietnam. Hot weather (weekly temperatures averaging 1-2 degrees C above normal with daily highs in the mid 30's C) persisted, however, maintaining high evaporative losses. Dryness persisted over peninsular Thailand. Further south, rainfall increased from the previous week over Sumatra and portions of eastern Malaysia, where amounts ranged from 25 to 100mm or more. Heavy rain (110-183mm) in southern Sumatra exacerbated local flooding conditions. Variable showers (25-50mm or more) covered southern Indonesia. In the Philippines, moderate to heavy rain (25-75mm) covered local areas from southern Luzon to northeastern Mindanao, but mostly dry weather prevailed elsewhere.



**SOUTH AMERICA** ... In Argentina, widespread showers (10-25mm) covered the primary summer crop areas, with heavier rain (25-43mm) over much of Buenos Aires and northern La Pampa. The moisture benefited immature grains and oilseeds. Shower activity diminished over northern portions of Cordoba and Santa Fe, where less than 10mm of weekly rainfall caused only minor delays in early summer crop harvesting. Light rain (2-5mm) also fell over northern cotton areas. In south-central Brazil, showers continued to moisten pod-filling soybeans. Weekly rainfall averaged 14-65mm in Rio Grande do Sul, 10-40mm in Parana and, generally, 20-79mm throughout northern soybean and coffee areas. The heaviest shower activity tended toward eastern coastal areas, but nearly all crop areas benefited from rainfall.

**AUSTRALIA** ... Much needed rain (20-80mm, with isolated amounts greater than 80mm) fell over southern sugarcane growing areas of coastal southeastern Queensland and interior rangeland areas of south-central and southwestern Queensland, providing relief to crops following below-normal rainfall for several weeks. Only scattered light rain (mostly less than 10mm) fell over northern sugarcane and most summer crop areas, however, continuing abnormally low soil moisture levels. The dryness favored early maturing cotton in the region which is near harvest. In the south, scattered light showers (less than 10mm) fell in Western Australia and Victoria, while South Australia was mostly dry. Mean weekly temperatures ranged from above normal in northern Queensland to below normal in Western Australia.





This map replaces last issue's map of "Spring Freeze Occurrence," which did not photograph well, making it very difficult to interpret. So, for all those patient readers who squinted and stared and still could not make sense out of the 15 kinds of shading the map was supposed to depict, here is an older and simpler map that should better survive the ravages of our printer's cameras.

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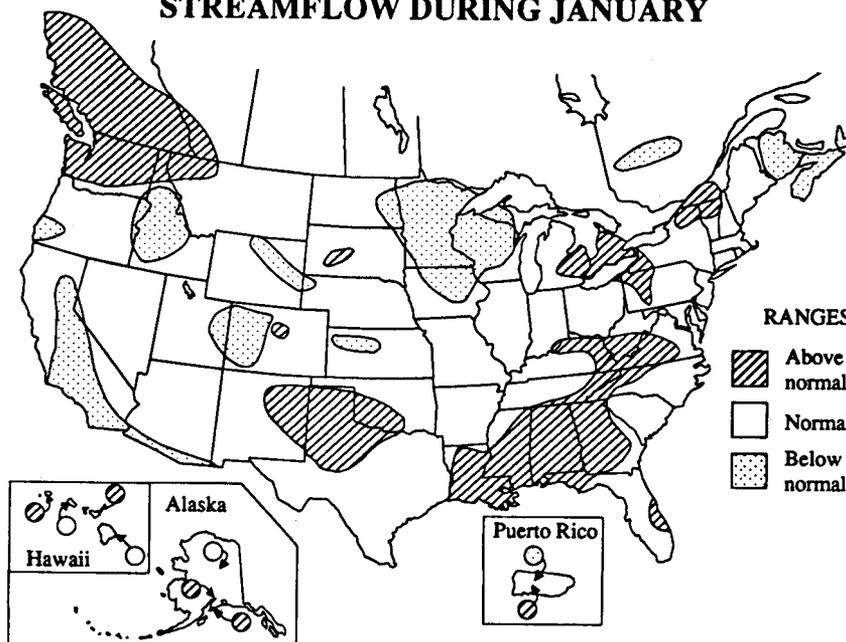
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