

# 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

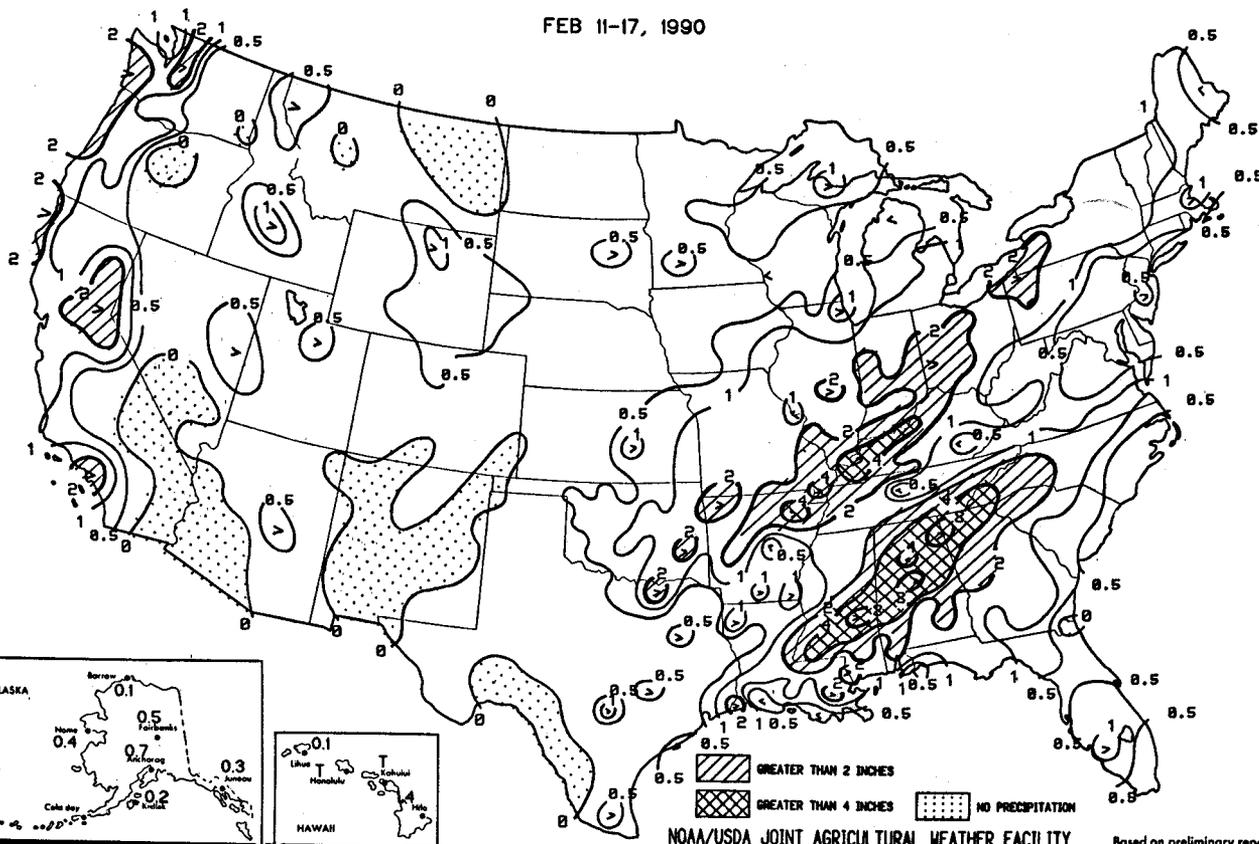
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February 21, 1990

## TOTAL PRECIPITATION, INCHES

FEB 11-17, 1990



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports

## HIGHLIGHTS

February 11-17, 1990

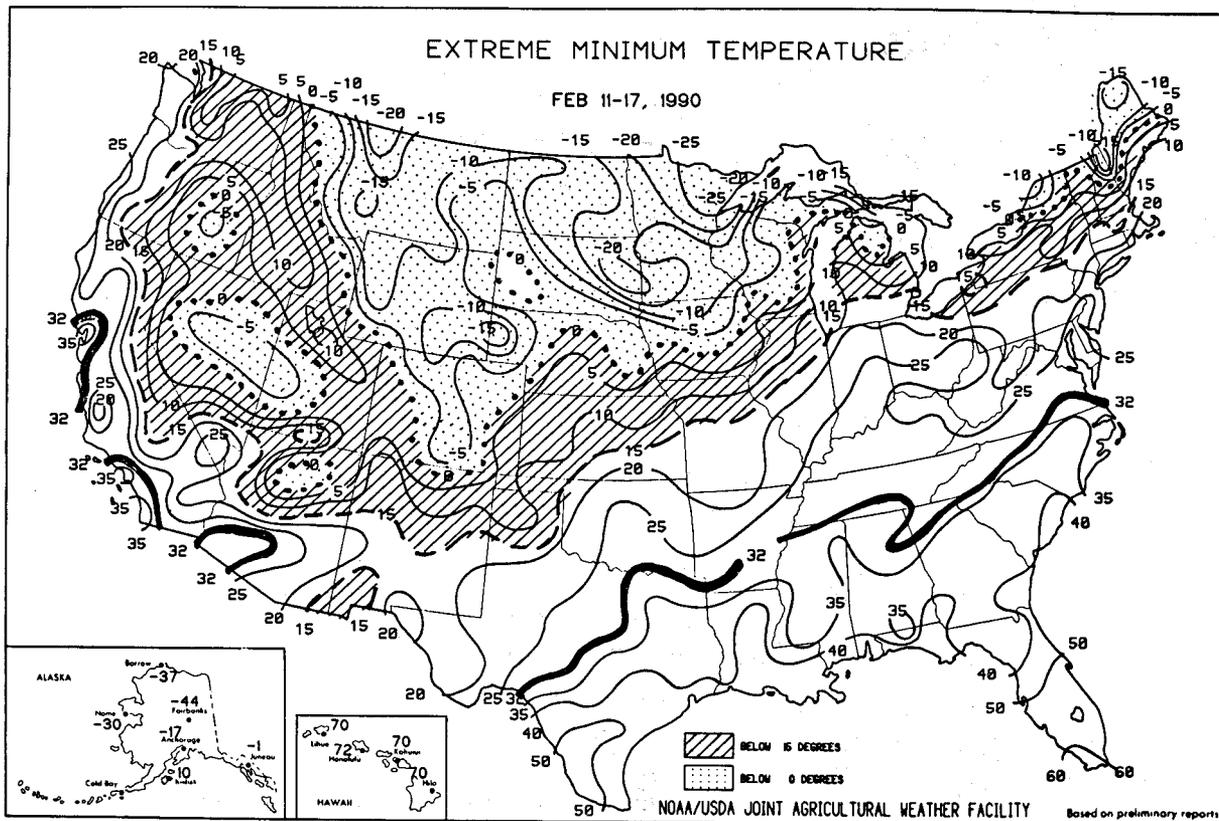
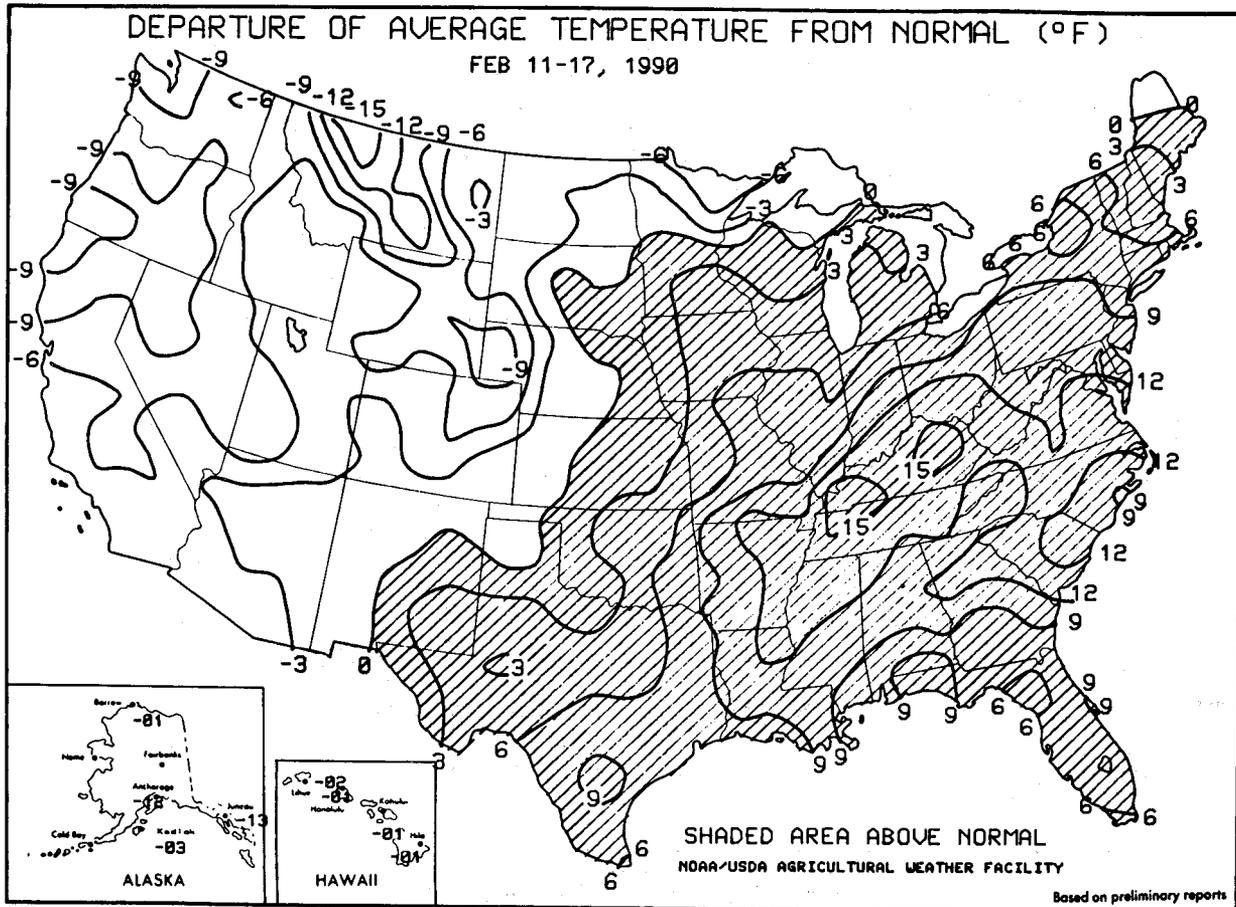
Winter returned to the **northern and central Plains** as Arctic air plunged south and reversed the warm spell of the last 2 months. The week started with above-normal temperatures throughout most parts of the country and heavy rains across portions of **Florida**. The cold air spread southward into the **central Plains** on Wednesday and spawned widespread precipitation across the **Mississippi Valley**. The **Plains** received 2-8 inches of snow, with higher amounts in **northern Illinois**. The snow cover protected much of the **Plains'** winter wheat from the subsequent low temperatures. Even **Arizona** and **California** remained unscathed as freezing temperatures were reported throughout that area. **San Francisco** reported light snow on Wednesday. Though the snow immediately melted, it was the first there since 1976. The temperature at **Fresno, CA**, on Thursday morning was 24° F, a record-low

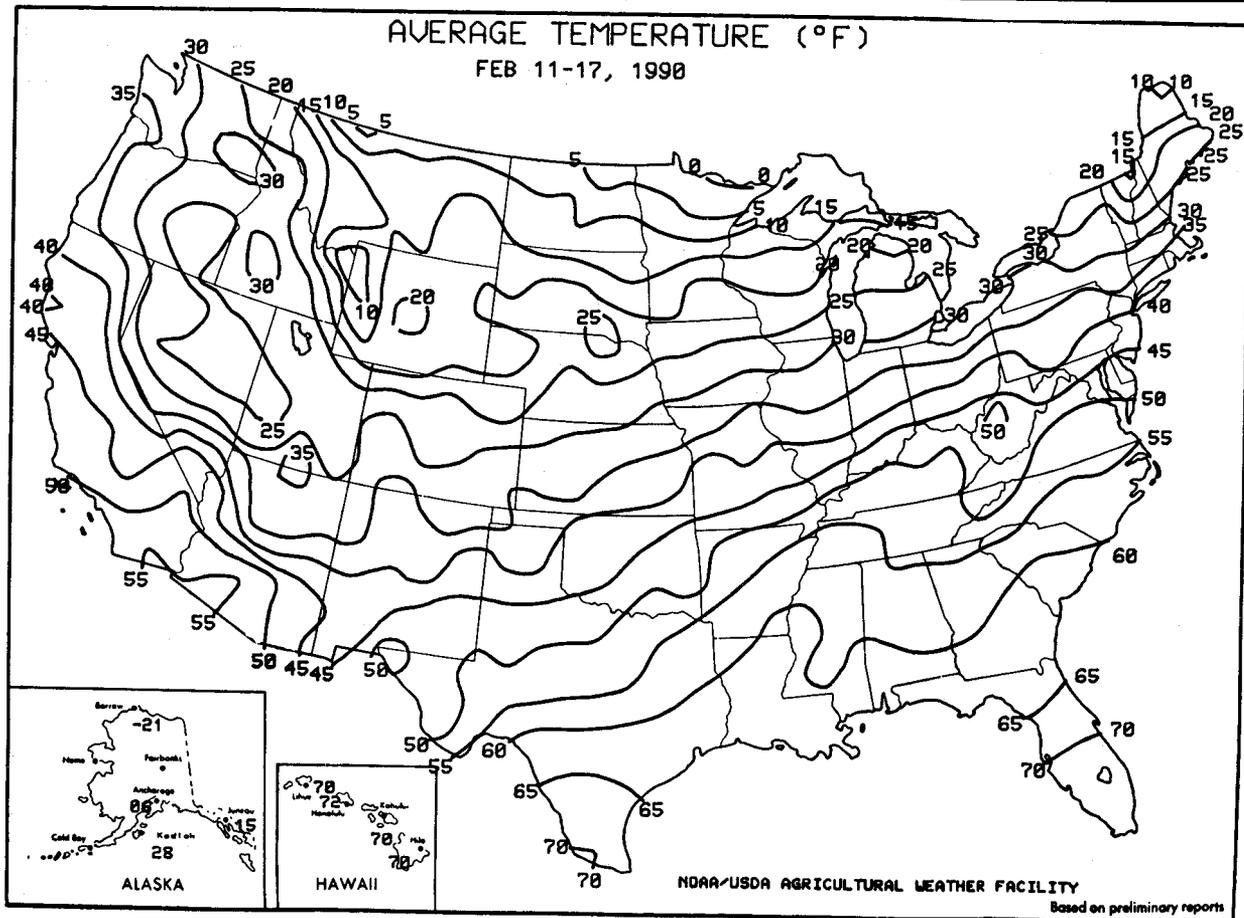
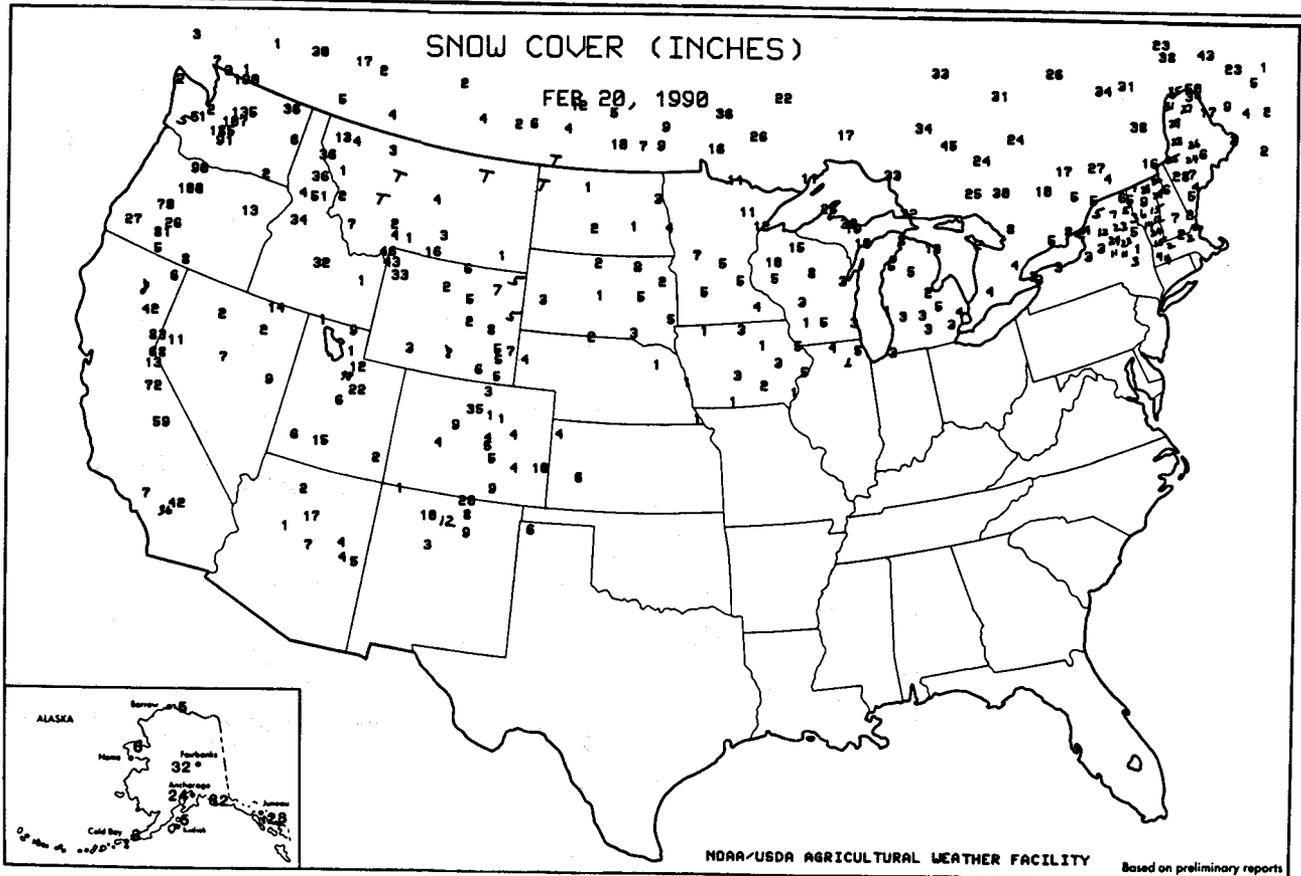
temperature for the date. Warm air overrunning the cold air produced a band of freezing rain from **Kansas** to **New England** on Thursday. Severe weather, heavy rain, and local flooding affected portions of the **lower Mississippi Valley** and the **Southeast** on Friday. Beneficial rain of 1-2 inches fell across **southern California** on Saturday.

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# National Weather Data for Selected Cities

## Weather Data for the Week Ending February 17, 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	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		01 INCH OR MORE	.50 INCH OR MORE	01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	69	46	74	32	57	11	3.9	2.8	2.8	17.3	134	13.9	175	94	51	0	1	3	2	2	
MOBILE	71	53	75	41	62	8	1.9	.7	1.3	19.3	151	12.1	164	93	50	0	0	3	2	1	
MONTGOMERY	70	46	77	36	58	9	1.9	.8	1.7	23.1	201	14.0	207	93	46	0	0	3	1	1	
AK ANCHORAGE	15	-2	22	-17	6	-12	.7	.5	.3	3.8	159	2.1	166	91	72	0	7	4	0	0	
BARROW	-13	-28	6	-37	-21	-1	.1	0	0	.3	62	.1	26	81	69	0	7	2	0	0	
FAIRBANKS	-3	-25	9	-44	-14	-10	.5	.3	.2	1.6	102	1.0	124	84	67	0	7	3	0	0	
JUNEAU	23	7	31	-1	15	-13	.7	.2	.4	11.2	106	4.9	82	91	48	0	7	2	0	0	
KODIAK	34	21	40	10	28	-3	.2	-1.1	.2	19.9	137	7.7	86	82	55	0	7	4	0	0	
NOME	4	-18	29	-30	-8	-11	.4	.3	.2	2.0	117	1.3	117	87	68	0	5	3	0	0	
AZ PHOENIX	65	41	77	32	53	-3	.7	.1	.1	1.3	72	1.2	111	59	20	0	2	0	0	0	
PRESCOTT	52	25	68	8	38	-1	.7	.4	.4	2.2	51	1.9	71	67	26	0	4	1	0	0	
TUCSON	65	36	78	23	50	-3	.1	-1.1	.1	1.7	81	1.5	130	78	22	0	4	1	0	0	
YUMA	67	42	81	32	55	-5	0	-1	0	.1	16	.1	27	44	18	0	1	0	0	0	
AR FORT SMITH	62	36	76	22	49	7	1.7	1.1	1.0	10.6	175	9.8	307	93	43	0	3	2	2	0	
LITTLE ROCK	65	45	75	27	55	11	.4	-5	.4	9.6	92	8.0	131	69	45	0	1	2	0	0	
CA BAKERSFIELD	57	35	68	25	46	-7	.2	-1	.2	1.5	67	1.5	93	87	36	0	3	1	0	0	
EUREKA	47	35	53	27	41	-8	2.1	.8	.7	12.6	76	11.8	115	85	57	0	2	5	2	0	
FRESNO	54	35	64	24	45	-6	.4	0	.3	4.1	85	4.1	128	85	39	0	2	2	0	0	
LOS ANGELES	58	45	68	38	52	-5	2.2	1.6	2.2	3.7	60	3.7	81	82	49	0	0	2	1	0	
REDDING	49	31	63	25	40	-11	.6	-9	.3	9.5	48	9.5	76	79	38	0	5	2	0	0	
SACRAMENTO	53	36	62	27	44	-6	2.0	1.3	1.9	7.9	90	7.9	134	81	42	0	1	3	1	1	
SAN DIEGO	60	49	73	38	54	-2	.7	.3	.7	4.4	89	3.4	111	76	42	0	0	1	1	1	
SAN FRANCISCO	52	40	57	34	46	-5	1.7	.9	1.4	5.4	52	5.3	79	82	50	0	0	3	1	1	
CO DENVER	40	13	66	-4	27	-7	.2	0	.1	1.8	131	1.0	115	83	41	0	5	3	0	0	
GRAND JUNCTION	42	22	57	4	32	-2	.2	.1	.2	1.2	79	1.1	119	80	41	0	6	2	0	0	
PUEBLO	46	13	72	-6	30	-5	.2	.2	.2	1.3	197	.8	213	85	36	0	7	2	0	0	
CT BRIDGEPORT	45	31	56	24	38	7	.3	-5	.1	5.6	64	4.7	93	78	51	0	5	3	0	0	
HARTFORD	43	25	53	17	34	6	.7	-1	.4	7.4	77	5.9	109	86	50	0	6	2	0	0	
DC WASHINGTON	59	38	73	31	49	11	.1	-5	.1	6.0	80	3.7	88	83	45	0	2	3	0	0	
FL APALACHICOLA	72	55	76	43	63	9	1.3	.4	1.2	11.2	122	4.1	71	97	57	0	0	2	1	0	
DAYTONA BEACH	77	57	85	47	67	9	.2	-6	.2	6.7	104	2.8	66	92	50	0	0	1	0	0	
JACKSONVILLE	78	52	86	40	64	9	T	-9	T	6.3	83	3.0	58	95	49	0	0	0	0	0	
KEY WEST	80	70	83	65	75	5	T	-5	T	1.9	40	T	1	82	60	0	0	1	0	0	
MIAMI	81	67	84	59	74	6	.2	-4	.2	1.2	24	.6	18	81	52	0	0	1	0	0	
ORLANDO	81	59	87	50	70	9	.7	-1	.7	5.8	99	1.3	34	93	44	0	0	1	1	0	
TALLAHASSEE	74	48	77	37	61	8	1.6	.4	1.6	12.2	101	7.6	101	99	46	0	0	1	1	0	
TAMPA	79	59	84	49	69	9	.3	-4	.3	8.2	136	3.5	89	91	48	0	0	1	0	0	
WEST PALM BEACH	81	67	85	57	74	8	.1	-6	.1	3.3	50	1.3	31	81	51	0	0	1	0	0	
GA ATLANTA	68	47	75	37	58	13	2.5	1.4	2.4	20.3	174	15.8	211	83	40	0	0	2	1	1	
AUGUSTA	75	45	82	32	60	13	1.0	0	1.0	8.8	93	4.1	65	94	29	0	1	1	1	1	
MACON	72	47	79	38	59	11	1.4	.3	1.4	15.6	143	6.8	99	93	39	0	0	1	1	1	
SAVANNAH	74	52	83	39	63	11	.6	-2	.6	11.1	143	5.9	118	93	42	0	0	1	1	1	
HI HILO	80	61	85	57	70	-1	1.4	-2	1.3	34.9	116	31.3	181	91	51	0	0	4	1	1	
HONOLULU	81	63	83	58	72	-1	T	-6	T	5.9	66	4.5	83	88	52	0	0	4	1	1	
KAHULUI	81	60	84	56	70	-2	T	-7	T	8.4	98	4.2	71	93	57	0	0	0	0	0	
LIHUE	77	62	80	59	70	-1	.1	-8	.1	12.6	90	9.7	114	90	63	0	0	1	0	0	
ID BOISE	39	22	58	8	30	-6	T	-2	T	1.6	43	1.5	64	86	41	0	6	1	0	0	
LEWISTON	39	24	64	12	32	-7	T	-2	T	.8	23	.6	30	74	46	0	6	0	0	0	
POCATELLO	34	16	51	4	25	-5	.1	-1	0	.8	33	.8	48	81	39	0	7	3	0	0	
IL CHICAGO	38	23	54	12	31	6	1.0	.8	.8	4.0	86	3.5	157	92	57	0	7	3	1	1	
MOLINE	41	21	66	4	31	6	1.2	.9	1.1	4.0	94	3.2	138	93	61	0	7	3	1	1	
PEORIA	42	26	63	13	34	7	1.3	1.0	1.2	4.9	112	4.1	172	96	57	0	7	3	1	1	
QUINCY	47	29	69	14	38	9	1.6	1.3	1.4	4.5	118	3.8	182	85	56	0	3	2	1	1	
ROCKFORD	37	20	55	10	28	5	.5	.2	.4	2.9	74	2.4	119	93	58	0	7	3	0	0	
SPRINGFIELD	44	28	64	18	36	7	1.1	.7	.6	4.2	91	3.7	147	95	66	0	7	3	2	0	
IN EVANSVILLE	57	39	66	28	48	13	2.1	1.4	2.1	10.7	132	9.3	199	92	58	0	3	2	1	1	
FORT WAYNE	42	27	65	23	35	8	1.9	1.4	1.5	7.1	125	5.9	183	94	64	0	6	4	1	1	
INDIANAPOLIS	48	31	65	24	40	10	2.0	1.4	1.5	7.9	113	5.8	143	91	61	0	3	4	1	1	
SOUTH BEND	39	23	57	20	31	5	1.0	.5	.5	5.8	88	3.9	109	91	55	0	7	5	1	1	
IA DES MOINES	39	19	70	-1	29	4	.6	.4	.4	2.9	112	2.3	149	88	56	0	6	4	0	0	
SIOUX CITY	35	14	63	-3	25	1	.2	-1	.2	1.0	53	.6	51	81	49	0	7	2	0	0	
WATERLOO	36	14	63	-8	25	5	.2	0	.1	1.0	43	.8	64	89	55	0	7	3	0	0	
KS CONCORDIA	41	22	70	9	32	0	.2	0	.1	.9	54	.5	50	78	43	0	5	2	0	0	
DODGE CITY	46	22	70	10	34	-1	.1	-1	.1	2.1	180	1.7	250	81	38	0	5	1	0	0	
GOODLAND	41	17	64	6	29	-3	T	-1	T	1.0	108	.7	136	87	41	0	6	2	0	0	
TOPEKA	46	23	73	11	34	2	.8	.6	.5	3.4	125	2.8	194	89	47	0	6	2	1	0	
WICHITA	49	26	71	17	37	2	.6	.4	.4	3.1	150	2.6	245	81	41	0	5	2	1	0	
KY BOWLING GREEN	62	43	73	27	53	15	1.5	.6	1.5	14.2	124	12.0	173	87	49	0	2	1	1	1	
LEXINGTON	58	40	69	24	49	15	1.4	.6	1.3	9.2	100	7.4	137	84	50	0	3	3	1	1	
LOUISVILLE	58	40	69	28	49	14	3.7	2.9	3.7	11.8	136	10.3	199	79	49	0	2	1	1	1	
LA ALEXANDRIA	75	54	82	42	65	11	.5	-7	.3	17.4	144	15.4	213	78	42	0	0	3	0	0	
BATON ROUGE	73	52	79	40	62	9	.9	-4	.6	21.6	171	15.3	202	89	50	0	0	3	1	1	
LAKE CHARLES	70	53	76	39	62	9	.2	-6	.1	13.2	112	11.0	164	95	53	0	0	3	1	0	
NEW ORLEANS	72	56	79	43	64	10	3.0	1.7	2.6	19.8	148	13.5	166	89	54	0	0	4	1	1	

Based on 1951-80 normals



Weather Data for the Week Ending February 17, 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	51	31	65	24	41	12	2.3	1.8	1.5	9.3	149	7.5	197	89	61	0	5	4	2
TOLEDO	40	25	65	18	33	7	1.3	.9	.9	5.8	102	4.4	146	95	57	0	6	3	1
YOUNGSTOWN	47	26	63	13	36	11	1.9	1.4	1.7	7.4	110	6.0	151	94	59	0	6	5	2
OK OKLAHOMA CITY	55	33	77	25	44	3	.9	.5	.5	4.6	140	3.7	217	77	41	0	4	2	0
TULSA	56	34	75	23	45	5	.9	.5	.5	4.4	107	4.1	179	80	40	0	4	2	0
OR ASTORIA	42	30	50	22	36	-8	2.1	.2	.8	34.4	126	27.0	173	95	67	0	4	6	2
BURNS	33	8	58	-5	21	-13	.1	-1	-1	.9	25	.9	39	91	43	0	7	1	1
MEDFORD	42	26	51	14	34	-8	.6	0	.5	4.7	37	4.0	84	92	53	0	6	0	0
PRIDLETON	37	22	54	10	30	-10	.2	-1	-1	1.3	31	1.1	43	88	52	0	6	4	0
PORTLAND	40	29	51	20	35	-9	.9	-1	-1	14.2	94	11.1	128	94	64	0	6	5	0
SALEM	39	29	48	18	34	-9	1.3	.2	.7	17.6	103	13.7	137	93	68	0	6	5	0
PA ALLENTOWN	49	29	58	19	39	10	.4	.3	.2	7.3	83	6.0	117	89	44	0	4	5	1
ERIE	40	26	63	16	33	9	2.5	2.0	2.1	9.3	137	6.2	173	92	60	0	7	4	1
HARRISBURG	50	32	60	24	41	10	.4	-2	.2	6.0	77	4.7	103	90	51	0	4	4	0
PHILADELPHIA	55	34	67	27	45	12	.1	-6	.1	6.7	81	4.9	103	90	49	0	4	3	0
PITTSBURGH	52	29	64	20	40	12	1.2	.6	.1	6.6	124	6.0	143	90	59	0	4	4	1
SCRANTON	46	27	59	16	36	10	.5	-2	.4	6.6	112	5.6	164	90	53	0	4	4	0
RI PROVIDENCE	46	28	60	20	37	8	.8	-2	.2	8.5	79	6.8	108	80	47	0	6	4	0
SC CHARLESTON	73	53	79	42	63	13	.3	-6	.2	9.4	113	4.6	88	97	47	0	5	2	0
COLUMBIA	74	47	84	34	60	14	.7	-2	.7	9.0	88	3.7	55	95	32	0	0	1	0
FLORENCE	72	45	81	38	58	12	0	-8	0	8.0	77	2.1	39	91	32	0	0	2	0
GREENVILLE	67	42	73	32	55	12	2.5	1.4	2.5	13.0	120	8.2	121	89	39	0	1	1	0
SD ABERDEEN	25	2	46	-17	14	-1	.2	.1	.2	.6	46	.5	55	86	54	0	7	2	0
HURON	29	6	50	-21	18	0	.5	.1	.2	.8	60	.6	74	79	45	0	7	2	0
RAPID CITY	31	10	68	-2	20	-6	.4	.3	.5	.6	122	.6	82	88	56	0	7	2	0
SIOUX FALLS	33	7	63	-18	20	1	.3	.1	.2	1.4	37	.4	37	79	44	0	7	2	0
TN CHATTANOOGA	66	44	73	32	55	13	4.6	3.4	2.6	20.2	154	16.5	207	92	44	0	1	2	2
KNOXVILLE	64	43	73	30	53	13	2.3	1.3	1.9	14.6	126	11.9	169	91	45	0	1	2	1
MEMPHIS	68	47	77	31	57	14	1.6	.5	.4	14.1	117	12.0	168	87	44	0	1	1	0
NASHVILLE	65	45	75	28	55	14	.4	-6	.4	9.1	80	7.5	110	84	47	0	2	1	0
TX ABILENE	65	38	81	27	52	4	.7	-2	.7	2.8	113	2.6	162	73	29	0	3	2	0
AMARILLO	54	22	80	7	38	-1	.1	0	.1	1.8	144	1.4	171	76	30	0	6	2	0
AUSTIN	73	50	81	42	62	9	.7	-6	.7	2.9	56	2.8	89	86	40	0	0	2	0
BEAUMONT	71	54	77	41	62	7	1.9	-8	.9	15.6	134	12.3	183	92	52	0	0	2	2
BROWNSVILLE	79	57	92	47	68	5	.1	-3	.1	2.5	76	.8	36	94	42	1	0	1	0
CORPUS CHRISTI	77	54	91	40	66	8	.2	-1	.1	2.2	59	.7	28	96	42	1	0	4	0
DEL RIO	74	49	86	39	62	6	0	-2	0	1.1	71	.8	79	59	22	0	0	0	0
EL PASO	64	35	76	23	50	1	.7	-1	.1	.5	53	.4	59	50	17	0	4	0	0
FORT WORTH	64	40	76	31	52	4	.1	-4	.1	8.2	181	7.9	280	88	43	0	1	1	0
GALVESTON	68	57	73	48	63	7	.4	-2	.4	5.3	66	4.7	104	95	62	0	0	2	0
HOUSTON	71	51	83	37	61	6	.2	-7	.1	6.3	68	5.5	99	88	42	0	0	2	0
LUBBOCK	61	32	79	22	47	4	.3	.2	.3	1.4	132	1.1	157	73	21	0	5	1	0
MIDLAND	68	32	85	20	50	3	.1	-1	.1	.7	56	.5	70	72	20	0	4	2	0
SAN ANGELO	70	36	83	25	53	4	.7	-2	.7	2.1	116	1.8	158	73	23	0	2	1	0
SAN ANTONIO	74	50	85	40	62	8	.4	0	.4	2.5	61	2.1	78	82	31	0	0	1	0
VICTORIA	73	53	87	43	63	7	.1	-4	.1	3.1	58	2.0	61	90	44	0	0	2	0
WACO	67	41	78	32	54	4	.7	-5	.7	4.7	99	4.2	145	89	44	0	1	2	0
WICHITA FALLS	61	33	81	24	47	2	.1	-1	.1	3.4	128	3.1	214	82	34	0	4	2	0
UT CEDAR CITY	37	16	51	-3	26	-8	.4	.2	.3	2.1	123	2.1	196	93	46	0	7	3	0
SALT LAKE CITY	36	21	53	11	29	-5	.1	-2	.1	1.0	29	.9	42	87	47	0	6	3	0
VT BURLINGTON	37	17	44	4	27	9	1.2	.7	.9	5.8	111	4.7	167	88	51	0	7	5	1
VA NORFOLK	65	46	77	32	56	15	.6	-3	.6	9.1	103	5.2	93	85	40	0	1	1	1
RICHMOND	64	41	77	31	53	14	.4	-4	.4	7.5	89	4.6	90	88	41	0	2	1	0
ROANOKE	62	39	73	26	51	13	.6	-2	.5	6.7	89	4.1	89	84	44	0	4	3	0
WA QUILLAYUTE	38	27	48	20	32	-10	1.5	-1.5	.6	40.4	103	31.7	145	96	61	0	7	5	1
SEATTLE-TACOMA	38	28	50	22	33	-10	1.3	.2	.8	17.4	116	12.7	145	92	63	0	6	6	1
SPOKANE	31	16	46	9	23	-9	.3	-1	.2	4.3	73	3.4	97	91	56	0	7	3	0
YAKIMA	38	18	57	8	28	-8	.1	-1	.1	1.8	56	1.6	83	89	47	0	7	3	0
WV BECKLEY	55	37	71	22	46	14	1.1	.3	.9	9.1	108	6.7	126	80	48	0	3	3	1
CHARLESTON	62	39	77	24	51	15	.9	.1	.4	7.6	89	6.0	113	88	43	0	2	4	0
HUNTINGTON	61	37	73	25	49	14	.9	.2	.6	8.3	103	6.0	123	83	40	0	2	4	1
PARKERSBURG	57	33	71	25	45	11	.7	.1	.5	7.8	110	6.2	141	88	49	0	3	3	0
WI GREEN BAY	29	10	45	2	20	2	.3	.1	.2	1.7	53	1.1	64	91	61	0	7	3	0
LACROSSE	34	13	55	-2	24	4	.2	0	.2	1.7	67	1.2	86	83	51	0	7	1	0
MADISON	34	15	53	-1	25	4	.5	.3	.2	2.5	78	2.2	135	89	54	0	7	3	0
MILWAUKEE	36	18	52	10	27	4	.6	.3	.3	3.9	90	3.5	147	91	60	0	7	5	0
WAUSAU	28	4	43	-9	16	1	.5	.2	.4	1.9	70	1.5	103	86	58	0	7	3	0
WY CASPER	28	7	54	-6	18	-10	.6	.5	.3	1.3	101	1.0	124	84	52	0	6	4	0
CREYENNE	31	10	58	-5	21	-9	.6	.5	.4	1.6	173	1.0	167	95	56	0	6	3	0
LANDER	32	11	53	-1	21	-4	.1	-1	.1	.4	33	.1	11	76	40	0	7	2	0
SHERIDAN	25	3	57	-12	14	-12	.6	.4	.5	2.9	149	1.2	100	84	48	0	6	2	1

## National Agricultural Summary

February 12-18, 1990

**HIGHLIGHTS:** Rain and warm weather promoted winter wheat growth in portions of the **central and southern Great Plains**, while some snow fell in the **northern Great Plains**. Additional moisture was needed, especially in the **northern Great Plains** and **western Corn Belt**. In the Delta, heavy rains added to already surplus soil moisture supplies and caused flooding in low-lying areas. Rain improved soil moisture supplies in the **eastern Corn Belt** and **Southeast**. Cold weather caused some crop damage in **California**, while warm dry weather prevailed in **Florida's** citrus and vegetable producing areas.

**SMALL GRAIN:** Rain benefited winter wheat in portions of the central and southern Great Plains. Additional moisture was needed in Kansas. Producers were topdressing winter wheat in Oklahoma. In Texas, warm weather improved small grains in the Plains and Cross Timbers areas, but additional moisture was needed. In the Blacklands, greenbugs were a problem in many fields. Rain slowed fertilizer application in Arkansas. In Missouri, some winter wheat fields showed signs of earlier freeze damage. The northern Great Plains received some snow, but additional moisture was needed. In Montana, crop condition was fair to good. Winter wheat was mostly good in the Corn Belt and Southeast. The crop received new snow cover in central and southern Michigan. Rain slowed topdressing in Georgia. In Arizona, early seeded fields were heading in the central and western areas. Cool weather slowed small grain growth in California. Winter wheat was good to excellent in western Oregon. In eastern Oregon, crop condition was fair to good. Additional moisture was needed.

**OTHER FIELD CROPS:** In the Delta, heavy rains virtually halted land preparation for spring planting and caused localized flooding in low-lying areas. Tornadoes damaged some farms in Alabama and Georgia. Corn planting was underway in Florida and Texas. Sugarcane harvest continued in Florida. Land preparation for the 1990 cotton crop continued in Arizona and California. In California, sugarbeet seeding was underway. Tobacco plant bed preparation and seeding were active in North Carolina and Virginia. In Georgia, tobacco plants were in good condition.

**FRUIT AND NUTS:** In Florida, another warm, dry week forced citrus producers to continue irrigating. New growth was abundant and trees were blooming in all areas. Some new fruit was beginning to form. Grapefruit, temple, honey, and tangerine harvests were active. Fruit trees were blooming in Georgia. Fruit trees were budding in the South. In the Hill

Country of Texas, peach producers were concerned about trees blooming without sufficient chilling hours. In the Rio Grande Valley, some citrus producers were pruning trees, but most were waiting for additional regrowth. Grapefruit, tangerine, and Valencia orange harvests were active in central and western Arizona. In the central area, navel and lemon harvests continued. In California, almonds were beginning to bud and early nectarines and peaches were in the bud swell stage. Cold weather caused minimal citrus crop damage in the lower San Joaquin Valley and southern areas. Avocados also suffered some damage, but the extent was unknown. Tangelo harvest was nearly complete in Tulare County. Lemon harvest was active in Imperial County.

**VEGETABLES:** Nearly ideal growing weather prevailed in Florida's major vegetable producing areas. Harvest volumes were still light for most crops. The first post-freeze snap beans were harvested in the Homestead and East Coast areas. In Texas, melon planting continued in the Rio Grande Valley. Wet field conditions slowed vegetable planting in east Texas. Vegetable planting was expected to begin soon in the High Plains. Cold weather damaged desert asparagus and artichokes in California. Freezing temperatures halted strawberry harvest in Ventura, Orange, and San Diego Counties. Harvest was expected to resume in 2 weeks. In the central coast area, some early tomato fields may have to be replanted.

**PASTURES AND LIVESTOCK:** Blizzard-like conditions stressed newborn calves and lambs in portions of the Pacific Northwest and northern Great Plains. Fluctuating temperatures caused additional livestock stress. In the South, pastures continued to improve, reducing the amount of supplemental feeding needed. In the Blacklands of Texas, livestock producers removed cattle from winter wheat pasture intended to be harvested for grain.

## 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 mostly 2.00 to 5.00 in.; 5.00 to 10:00 in. west central, northeast. Temperatures 8 to 12° above normal.

Little to no fieldwork accomplished due to continued wet conditions. Heavy rains caused significant topsoil erosion, flooding in low lying areas. High winds, tornadoes damaged barns, poultry houses, extent of losses unknown. Primary activities: Routine care of livestock, poultry, catfish; working farm records.

**ARIZONA:** High pressure, sunny skies 9th, 10th, 11th. Cloudiness covered State 12th, 13th. Cold storm, strong northerly winds, some rains, snow 14th. Clear skies, very dry air 15th, 16th, 17th. Temperatures varied normal to 6° below.

Cotton field preparation continued with pre-plant herbicides, pre-irrigation, mulching, fertilizer application. Wheat, barley crops 28% jointing. Earlier planted fields heading west, central. Small grains good statewide. Alfalfa cuttings continued west. Weeds, disease, insect infestations light across State. Fertilization, early irrigation central. Grapefruit, tangerines, valencia oranges harvested west. Harvest, shipping head lettuce, broccoli, cauliflower, boston, leaf, romaine lettuce, bok choy, napa, escarole, kale, endive, spinach, anise, celery, green onions, asparagus continued west. Valencia oranges, kinnow tangerines, grapefruit, navels, lemons harvested central. Mixed vegetables including broccoli, cauliflower, napa, leeks, kale, mixed greens, bok choy, carrots, beets, spinach, green onions, rapini, cabbage, parsley harvested central.

**ARKANSAS:** Temperatures again above normal. Scattered thunderstorms middle of week, heaviest rainfall northeast. Extremes 17°; 80°. Rainfall 0.13 to 5.11 in.

Soil moisture adequate to surplus. Wheat crop good, fertilizer application behind schedule due to wet fields. Fruit potentials could be affected by warm weather. Livestock good.

**CALIFORNIA:** High pressure, strong northerly flow dried State out early in week allowing temperatures to cool significantly. Major winter storm hit State late in week cold, wet lower elevations with snow in foothills, mountains.

General rains weekend interrupted field activities. Most small grains good, cool weather slowed growth. Some fertilizer, broadleaf weed controls applied small grains. Safflower seeding southern portions San Joaquin Valley. Some sugarbeets seeded. Sheep grazed alfalfa. Cotton growers pre irrigated, applied weed controls seed beds. Land preparations other spring crops active. Orchard floor work continued; pruning, spray applications. Pruning, weed control active, vineyards. Bees moved as almonds pushed buds. Buds swell; early nectarines, peaches. Kiwifruit movement steady, domestic markets. Cold weather caused damage to some citrus; lower San Joaquin Valley, southern area, minimal crop loss. Avocados damaged, no reports on crop loss. Minneolas packed, domestic, European markets. Volumes of lemons, navel oranges exported Japan. Navels domestic movement good, increased grade out due to rind puff. Tangelo season about completed, light crop, Tulare County. Lemons picked, Imperial County. Desert asparagus, artichokes

received some tip burn from low temperatures. Strawberry harvest Ventura, Orange, San Diego counties will be restarted approximately two weeks due freezing temperatures. Artichokes, asparagus, broccoli, cauliflower, celery light supplies, central coast. Early tomato fields nipped by freeze, may require replanting. Livestock good condition, statewide. Range, pasture conditions slowly improving, except parts of San Joaquin Valley, shallow soil, lack of moisture caused rangeland to brown. Supplemental feeding continued most areas.

**COLORADO:** Two weather systems affected the State during week. First storm left 1.00 to 3.00 in. of new snow at the lower elevations, up to 11.00 in. at higher elevations. Southern mountains received substantial snow towards the weekend, snowpack continues to be of major concern as the spring approaches. Moisture amounts from the snow 0.10 to 0.30 in. for the northern two thirds of State, over 1.00 in. portions of the southern third. Temperatures for the period 1 to 3° above normal in the west, San Luis Valley 2 to 4° below normal elsewhere.

**FLORIDA:** Warm, wet across north; warm, mostly dry, Peninsula. Rain totals, north mostly between 1.00 to 3.00 in. except nearer Atlantic Coast with mostly under 0.10 in. Few scattered showers, Peninsula provided amounts generally under 0.10 in. Temperatures 7 to 13° above normal. Warmest highs mid upper 70s Panhandle to mid upper 80s northeast, Peninsula. Lows only cooled to upper 30s Panhandle, Big Bend to around 40° near Atlantic Coast. Lows into mid 40s, central Peninsula to upper 40s southern interior.

Panhandle soil moisture adequate to surplus; Peninsula short to adequate. Land preparation active spring planted crops. Corn planting underway. Tobacco growers making preparations to start transplanting. Sugarcane harvest continued active. Warm temperatures continued promoting growth permanent pastures, forage crops. Weekend rains Panhandle, upper northern Peninsula also stimulated growth. Pastures mostly fair to good except some northern areas continued poor. Cattle, calves improved noticeably, condition continued to vary from fair to good statewide. Supplemental feeding decreased with more grazing available. Warm dry week citrus areas. Irrigating all areas. Abundant new growth, trees blooming everywhere; some petal drop with little new green fruit. Early orange harvest almost complete. Salvaging valencias continued. Grapefruit movement active East Coast. Temple, Honey Tangerine harvest southern counties. Near ideal growing weather continued over major vegetable producing areas. Planting spring crops slowed southern areas. Harvest continued light most crops. Volume leaders: Celery, squash, cabbage, strawberries, radishes, carrots. Also available: Escarole, peppers, tomatoes, lettuce, eggplant. First post freeze snap beans picked, Homestead, east Coast.

**GEORGIA:** Warm, wet week across State. Excessive rains 5.00 to 10.00 in. northwest areas, considerable flooding late in week. Severe thunderstorms, few tornadoes also. Central, south rain 1.00 to 3.00 in. Temperatures 8 to 12° above normal. Warmest near 70 mountains to upper 70s to

low 80s central, south. Coolest near freezing mountains, mostly upper 30s to low 40s elsewhere. Heavy rains, flooding north late in period, 17th, 18th. Soil moisture surplus all areas, land preparation limited. Fruit trees blooming northern counties. Pruning peach trees. Tobacco plants good. Small grain top dressing slow. Small grains good. Pastures mostly fair. Cattle, hogs good.

**HAWAII:** Fair weather returns to islands. Sunny, warm days with clear, cool nights prevailed. Rainfall light. Winds variable 5 to 20 mph with temperatures upper 50s to mid 80s. Rainfall none to 1.70 in. Days suitable for farm work 7.0. Papaya production declining further due to fruit gap. Pineapple harvesting continuous, while sugar harvesting on Maui not expected before March.

**IDAHO:** Temperatures up to 10° below normal statewide. Precipitation fell in all areas of the State, levels still below normal.

Livestock good to excellent. Calving, lambing in full swing. Calving, lambing good in all area except north. Hay, roughage supplies mostly adequate. Major farm activities: Caring for livestock, preparing taxes, repairing equipment, some marketing of potatoes. Some tree pruning, land leveling in southwest.

**ILLINOIS:** Temperatures 3 to 7° above normal north, central; 7 to 10° above normal south. Rainfall 1.00 to 2.00 in. across State, 2.00 in. or more far south.

Winter wheat 8% excellent, 82% good, 10% fair. Soil moisture 49% short, 35% adequate, 16% short. Livestock mostly good to excellent.

**INDIANA:** Temperatures 6 to 10° above normal. Lows mid 20s to upper 30s, highs near 40° to mid 50s. Precipitation 1.00 to 3.00 in.

Rain, ice storm limited fieldwork. Other activities: Hauling grain, repairing machinery, pruning trees, spreading manure, processing tobacco, attending meetings, tax preparation, purchasing supplies, care of livestock. Hay supplies adequate. Livestock mostly good. Fields muddy, ponding.

**IOWA:** Highly variable temperatures 1° below normal west to 6° above normal east. Extremes -15°; 71°. Precipitation 0.09 to 1.32 in.; average 0.39 in. Livestock mostly good. Variable temperatures stressing livestock. Farmers repairing equipment getting ready for spring planting. High hopes mounting for good early spring rains.

**KANSAS:** Temperatures near normal west, little above normal east. Readings 30° northwest to near 40° southeast. Readings 1° below west to 4° above southeast.

Rain, sleet, snow received most areas. Amounts varied less than 0.10 to over 1.00 in. Soil moisture improved, more moisture needed development wheat crop after dormancy. Supplemental feeding increased short period ice, snow covered pastures.

**KENTUCKY:** Rainfall excessive, 3.00 to 5.00 in. west, north central, 1.00 to 3.00 in. remainder. Considerable flooding west, central. Unseasonably mild temperatures gave way to cooler temperatures late week. Temperatures 10 to 15° above normal. Lows upper 30s, highs upper 50s.

Low lying areas were flooded by heavy rain, some fall seeded grains were submerged, livestock was driven to higher ground. Continued warm temperatures caused some small grain, pasture growth. Unusual warmth has resulted in fruit

trees dehardening prematurely. Producers concerned about return to cold temperatures. Only four burley tobacco markets remain open for sales.

**LOUISIANA:** Temperatures 8 to 9° above normal. Extremes 33°; 84°. Rainfall 0.17 in. north central to 1.81 in. east central.

Main activities: Caring for livestock, routine chores, crawfishing.

**MARYLAND & DELAWARE:** **MARYLAND:** Precipitation 0.66 in. Temperature 47°, normal 34°. Extremes 18°; 76°.

**DELAWARE:** Precipitation 0.50 in. Temperature 48°, normal 35°. Extremes 25°; 74°.

**MICHIGAN:** Temperatures 2° below to 6° above normal. Extremes -3°; 65°. Precipitation 0.25 to 1.48 in. across State. Heavy snow, rain, freezing rain, central, southern Lower Peninsula mid week.

New snowcover protected winter wheat from cold temperatures. Major activities: Caring for livestock, repairing equipment, cleaning barns, preparing income tax returns, planning for spring fieldwork. Adverse weather limited fieldwork. Icy roads slowed marketing of grain, hay. Livestock very good. Excellent feed supplies. Snow, icy conditions made livestock chores difficult.

**MINNESOTA:** Temperatures 4 to 6° below normal. Extremes 29°; 63°. Precipitation 0.17 to 0.39 in. Greatest weekly total 0.67 in.

**MISSISSIPPI:** Warm, wet. Temperatures 10° above normal. Extremes 29°; 82°. Rainfall 1.95 in., 0.75 above normal.

Days suitable for fieldwork 1.0. Soil moisture surplus. Low areas flooded statewide. Wheat good to fair; farmers applying nitrogen where possible. Pastures fair; livestock fair to good. Hay, roughage supplies adequate. Activities: Livestock chores, some aerial application of nitrogen on wheat. Spring tillage delayed by rain. Year to date rainfall 6.50 in. (84%) above normal.

**MISSOURI:** Temperatures 3° above normal northwest to 14° above normal southeast. Precipitation widespread, 3.00 to 5.00 in. with some flooding Bootheel, over 2.00 in. other southern counties, 1.50 in. across central, 0.50 in. far north.

Recent moisture improving outlook for pastures, stock ponds, particularly southern counties. Wheat making growth, some stands with freeze damage. Farm work mainly livestock, preparation for spring.

**MONTANA:** Warm temperatures first of week, falling to below zero by midweek over entire State. On 17th temperatures 12 to 16° below normal in north central, central, south central. East temperatures 3 to 4° below normal. Precipitation mainly snow in mountain areas. Little or no snow in northeast, southeast.

Winter wheat 2% very poor, 15% poor, 44% fair, 39% good. Snowcover protection 65% poor, 20% fair, 13% good, 1% excellent. Wind damage to winter wheat 10% none, 43% light, 29% moderate, 18% heavy. Virtually all livestock receiving supplemental feed. Grazing 87% open, 10% difficult, 3% closed. Calving 12% complete. Lambing 5% complete.

**NEBRASKA:** First day of the week produced record breaking high temperatures; followed by a cold snap. Snow fell mid week with precipitation 0.25 to 0.75 in. Temperatures 1° below normal in east to 16° below in the west. Extremes -18°; 73°.

**NEVADA:** High pressure, temperatures recovering from cold north flow previous week. By mid week an upper low developed over central sections accompanied by cooler airmass, scattered snow over north, central valleys. Low pressure system end of period produced blizzard conditions west with 12.0 to 18.0 in. snow extreme western areas, 3 to 6 ft. snow Sierras. Temperatures remained cold last half period. Temperatures 6 to 8° below normal north half, 2° below normal south. Extremes -16°; 74°.

Blizzard conditions extremely hard on newborn calves, lambs. Movement potatoes to market curtailed by snowstorms, below normal temperatures. Snowcover helpful winter grain fields.

**NEW ENGLAND:** Precipitation (rainfall and water equivalent of snow) 1.00 to 1.50 in. Vermont, New Hampshire, Massachusetts, 0.50 to 1.00 in. remainder. Temperatures upper teens near Canadian border to mid 30s along south coast. Temperatures below normal north, near normal south.

Major farm activities: Repairing machinery, tending livestock, moving crops from storage. Sugar maples being tapped south with some syrup being made; tapping beginning north.

**NEW JERSEY:** Temperatures much above normal, 36° north, 41° south, 45° coastal. Extremes 11°; 74°. Precipitation below normal; 0.25 in. north, 0.08 in. south, coastal. Heaviest 24 hour total 0.33 in. on 15th, 16th.

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

**NEW MEXICO:** Temperatures for most of the State a few degrees below normal. Extremes -12°; 82°. Light precipitation fell 14th, 15th.

**NEW YORK:** Temperatures fluctuate greatly. Extremes -19°; 62°. Week began with mild temperatures, turned cold at midweek, mild again by weekend. Major winter storm on 15th dumped snow, freezing rain, sleet across St. Lawrence Valley. Snow 5.00 in. Massena, 8.00 in. Glen Falls.

Major activities: Moving crops from storage, tending livestock machinery repair, attending meetings. Winter storm made outside activities difficult. Some producers took advantage of mild weather, tapped maple trees for the upcoming maple syrup season.

**NORTH CAROLINA:** Temperatures 7 to 14° above normal across the State. Extremes 23°; 82°. Precipitation 0.02 to 6.62 in.

Days suitable for fieldwork 4.2. Soil moisture, 70% adequate, 30% surplus. Pasture 13% poor, 35% fair, 51% good, 1% excellent. Livestock feed from pasture 33%. Crop condition: Wheat, 22% fair, 75% good, 3% excellent; oats 1% poor, 23% fair, 75% good, 1% excellent; barley 21% fair, 78% good, 1% excellent; rye 1% poor, 24% fair, 72% good, 3% excellent; tobacco plant beds 3% poor, 19% fair, 76% good, 2% excellent. Hay, roughage supplies 2% short, 93% adequate, 5% surplus. Feed grain supplies 7% short, 93% adequate. Major activities: Tobacco bed preparation, seeding, tending livestock, land preparation. Other activities included: Spraying small grains, pruning fruit trees, cutting wood, general farm maintenance.

**NORTH DAKOTA:** Temperatures 6° below normal southwest to 1° below normal southeast. Precipitation mostly below normal, 0.02 in. northwest to 0.17 in. east central. Snowfall trace to 6.00 in., heaviest south central, east central. Soil moisture below normal. Cold temperatures prior to weeks snowfall caused concern for winter

grain producers. Livestock good, receiving supplemental forages. Feed supplies mostly adequate.

**OHIO:** High temperatures 40s to mid 50s; low temperatures mid 20s to 30s. Most reading 5 to 12° above normal. Precipitation mostly 1.50 to 2.20 in; 1.00 to 1.60 in. above normal.

Topsoil thawed across most of State; little or no snowcover. No fieldwork; too wet.

**OKLAHOMA:** Temperatures 1° below normal Panhandle to 5° above normal southeast. Precipitation 0.11 in. Panhandle to 2.20 in. southeast.

Additional moisture, warm weather improved wheat pasture. Farmers applying nitrogen. Fed cattle prices steady to slightly lower than preceding week. Fruit trees holding up despite recent cold snap.

**OREGON:** Snow storms during the week increased snow depths in mountains, will ease drought concerns. At least 1.00 in. precipitation most of west; a few coastal locations received over 2.00 in. Eastern stations had less than 0.50 in. Temperatures well below normal across entire State; 6° below normal at Enterprise to 12° below at Lakeview.

Soil moisture surplus west, short to adequate east. Winter wheat good to excellent west, fair to good east. Wheat started early growth north Willamette Valley. Grape, caneberry, fruit tree pruning continued. Some dormant pest, disease sprays applied. Cranberry beds were covered with less than 1.00 in. snow south coast, show typical dormant red color. Livestock mostly good. Hay feeding continued Klamath Basin. Calving, lambing continued. Range, pasture condition good west; many areas of east frozen, snow covered.

**PENNSYLVANIA:** Warm, wet week across the Commonwealth. Temperature 37°, 11° above normal. Extremes 6°; 68°. Precipitation 0.92 in., 0.29 in. above normal.

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

**SOUTH CAROLINA:** Temperatures above normal. Rainfall 3.00 in. in the mountains to 0.50 in. along the coast.

Farm activities: Tobacco seed beds growing at a fast pace, applying nitrogen to small grain, general farm maintenance.

**SOUTH DAKOTA:** Temperatures 2° above to 9° below normal. Extremes -27°; 68°. Precipitation generally above normal across State, only four locations less than 0.10 in. below normal. Weekly melted precipitation 0.05 in. to 0.71 in. Yearly precipitation below normal except 4 locations. Range 0.62 in. below normal to 0.13 in. above normal. Snowcover mostly limited to Black Hills, drifted areas. Range 0.50 to 10.0 in.

**TENNESSEE:** Strong low pressure system moving out of the Rockies produced southerly winds over State through 15th. Extremely warm air moved into State with record temperatures in western areas 12th. Cold front moved from west to east across State 16th, 17th, bringing cooler, damp conditions to region. Temperatures 10 to 15° above normal for the week due to unusually warm weather 12th through 15th. Highs generally in the upper 50s to mid 60s. Lows in the upper 30s to mid 40s. Rainfall varied across State during week. West almost 2.00 in. above normal with eastern sections 1.00 to 4.00 in. above normal. The Plateau, Middle sections were relatively dry with rainfall about 0.50 in. below normal.

Soil moisture mostly surplus east, west; adequate Plateau, Middle. Winter wheat continues to grow because of above normal temperatures. Little disease noted. Fruit looks good, much of the crop is budding out quite early. Fruit has escaped light freezes so far with no damage reported. Adequate hay, roughage supplies. Some pastures beginning to green due to warm, moist weather. Cattlemen report herds good. Primary activities: Preparing plant beds; soil testing; pruning fruit trees; spraying fruit trees on cold nights; repairing fences, equipment; record keeping; tax preparation; attending meetings; routine care of livestock.

**TEXAS:** Weather not available.

**Crops:** Small grains Plains, Cross Timbers responded to warmer temperatures. Increased growth, greening occurred many wheat fields. Irrigated fields made best progress. Some producers Blacklands top dressed wheat first of week. Greenbugs problem many fields. Cattle pulled off wheat for grain. Progress good Blacklands, central. Surviving oat fields improving. Corn planting underway some parts Valley, Coastal Bend. Pre-watering continued Valley. Grain sorghum planting begin soon Valley, Coastal Bend.

**Commercial Vegetables:** Rio Grande Valley, early melon fields up to good stands. Cabbage, carrot harvest slow. Onion harvest begin soon. Melon planting continued. Some producers pruning citrus trees; most wait for additional regrowth. Not much irrigation occurring. San Antonio Winter Garden, warmer weather caused bolting problems some fields spinach, cabbage. Harvest spinach, cabbage continued. Other vegetables good progress. East area, some planting occurred; many fields too wet for activity. High Plains, land preparations winding down. Planting begin soon, weather permitting. Some potatoes planted Knox Haskell areas. Trans Pecos, producers put out onion sets. Land preparation melons continued. Peach producers Hill Country concerned about trees blooming without sufficient chilling hours. Other low chill varieties full bloom many areas. Pruning, dormant oil applications continued some areas.

**Range and Livestock:** Permanent pastures improved last week. Some small grain pastures providing increased forage. Lambing, calving activities remained good. Some livestock producers Blacklands pull cattle off of wheat. Supplemental feeding continued most areas.

**UTAH:** Precipitation light southern third, moderate middle third, heavy northern third. Temperatures 4° below normal western two thirds, 1° above eastern third.

Snowcover for fall grains remains light. Soil moisture mostly short to adequate. Calving, lambing progressing steadily, with some disease reported in dairy calves. Winter range feed supplies are inadequate in some southern areas.

**VIRGINIA:** Temperatures 14° above normal. Rainfall was slightly above normal.

Days suitable for fieldwork 3.3. Topsoil 37% surplus, 63% adequate. Winter grains, grazing crops 7% excellent, 59% good, 32% fair, 2% poor. Forage from pastures, dairy cattle 7%, beef cattle 20%, sheep 18%. Livestock care, calving, lambing, pruning fruit trees, top dressing, maple syrup production, soil testing, seeding tobacco plantbeds.

**WASHINGTON:** Temperatures 9° below normal to 4° above normal, east; 3° to 7° below normal, west. Precipitation none to 0.48 in., east; 0.73 to 5.48 in., west.

Days suitable for fieldwork 0.6. Soil moisture 43% short, 55% adequate, 2% surplus. Range, pasture 65% short, 35% adequate. Hay, other roughage 15% very short, 30% short, 50% adequate, 5% surplus. Winter weather across the State diminished field activity. Pruning of caneberries, fruit trees continued during weather breaks. Calving, lambing continued across the State. Winter wheat 1% poor, 29% fair, 70% good.

**WEST VIRGINIA:** Temperatures 45°, 12 to 16° above normal. Extremes 11°; 76°. Precipitation 0.59 in.; 0.56 in. below to 0.17 in. above normal.

Days suitable for fieldwork 2.6. Soil moisture 9% short, 48% adequate, 43% surplus. Livestock good. Calving 27% complete; lambing 29% complete. Feed supplies adequate to surplus. Wheat fair to good. Barley good. Farm activities: Feeding cattle, calving, lambing, spreading manure.

**WISCONSIN:** Temperature 23°. Extremes -25°; 59°. Precipitation 0.40 to 0.60. Snowfall 3.00 to 10.0 in. throughout State 14th, 15th, 15.0 in. Hurley area.

**WYOMING:** Most temperatures below normal. Precipitation well above normal.

Winter wheat fair to good, benefitting from snowcover, moisture. Livestock mostly good. Calving underway. Mid week snowstorm increased calving stress, newborn losses. Lambing, shearing farm flocks underway.

## International Weather and Crop Summary

### HIGHLIGHTS

February 11-17, 1990

**WESTERN USSR** ... Widespread snow accompanies a cooling trend. Overwintering conditions for winter grains continue favorable.

**NORTHWESTERN AFRICA** ... Dry weather continues to cover winter grains in Morocco, Algeria, and Tunisia.

**EUROPE** ... Rain helps reduce dryness in sections of the south. Storminess continues in the northwest.

**SOUTH ASIA** ... Rain benefits immature wheat in Pakistan and northern India. Unseasonable rain in central India helps local moisture reserves.

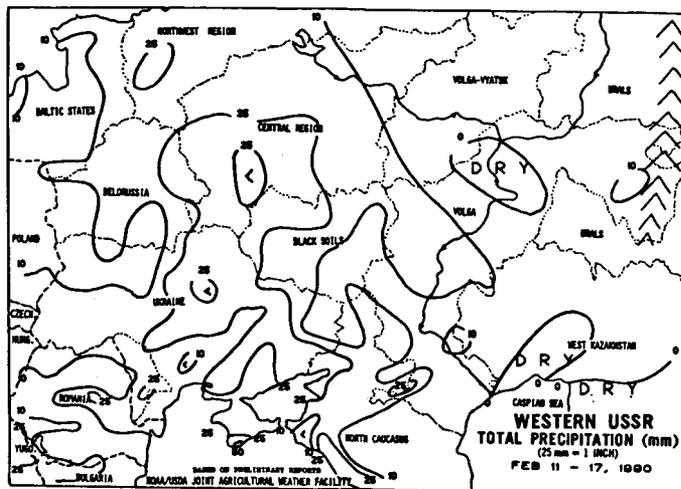
**EASTERN ASIA** ... Much warmer-than-normal temperatures cover most crop areas. Heavy rain continues in sections of the Yangtze Valley.

**SOUTHEAST ASIA** ... Unusually heavy rain falls in Indochina. Drier weather persists in the eastern Philippines.

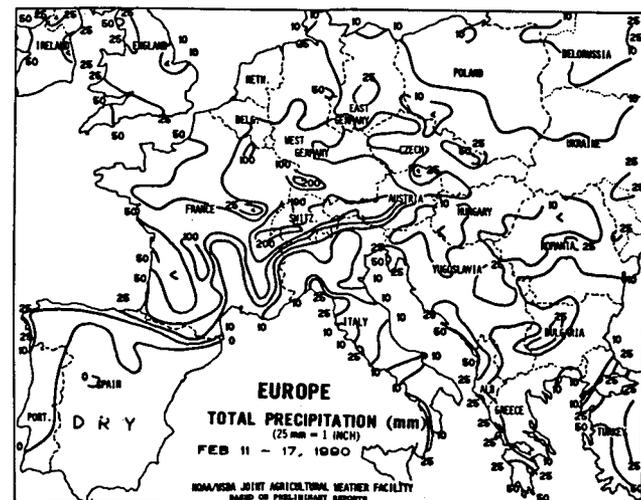
**SOUTH AFRICA** ... Widespread showers benefit immature crops but come too late for most crops in the western Maize Triangle.

**SOUTH AMERICA** ... Light showers help grain filling crops in Argentina. Widespread rain benefits soybeans and coffee in south-central Brazil.

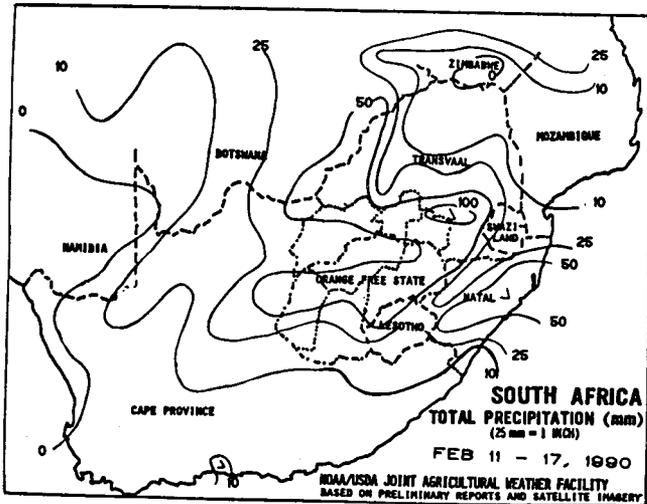
**AUSTRALIA** ... Beneficial rain continues in sections of the east. Northeastern sugarcane areas remain unfavorably dry.



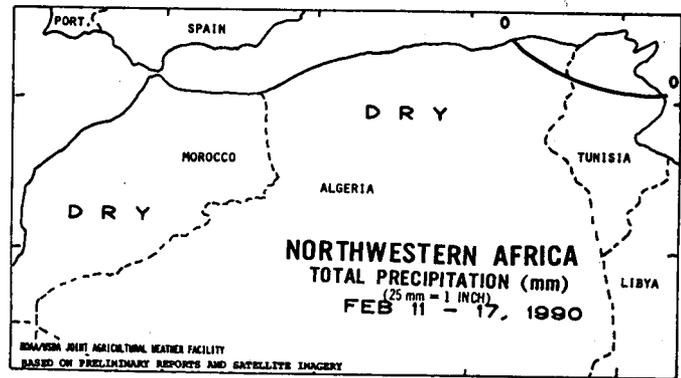
**WESTERN USSR** ... Although the sixth consecutive week of unseasonably warm weather continued over the region, seasonably colder weather accompanied widespread snow by week's end. Weekly average temperatures were 3-6 degrees Celsius (C) above normal in the south and 6-9 degrees C above normal in the north. Precipitation increased during the week, with greatest amounts (25-43mm) occurring in a narrow band which stretched southward from the southwestern portion of the Central Region, through the north-central Ukraine, and into the southern Ukraine. Precipitation amounts over the remainder of the region generally ranged from 10 to 20mm. Snow cover increased in the Baltic States, Belorussia, the northern Ukraine, and the north-central North Caucasus.



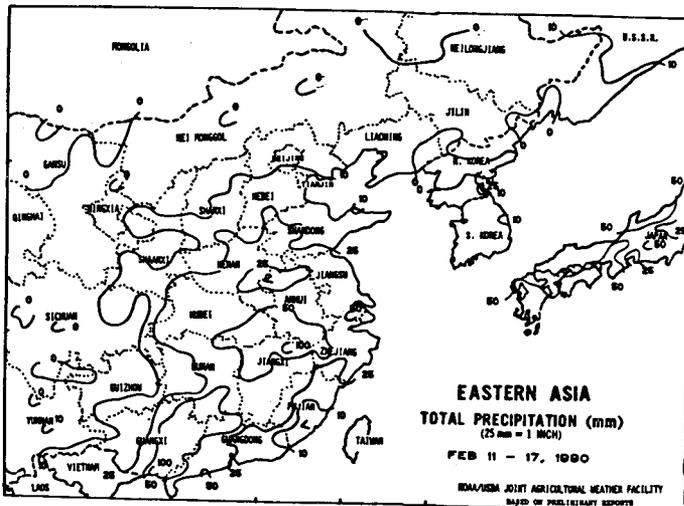
**EUROPE** ... Much needed rain (5-60mm, with scattered amounts in excess of 60mm) fell across southern France, Italy, and the Balkans, helping to reduce the effects of long-term dryness. More rain will be needed soon, however, to meet the increasing moisture demands of winter crops which are becoming actively vegetative. In the northwest, storminess continued early in the week, bringing further high winds and widespread rain (10-50mm, with scattered amounts greater than 50mm) from Great Britain and northern France eastward to West Germany. Light to moderate rain and snow (5-20mm, with isolated amounts greater than 30mm) fell in the northeast. Mean weekly temperatures remained above normal (1-4 degrees C above normal) in most crop areas, although cooler, more seasonable temperatures covered all but southern sections by week's end.



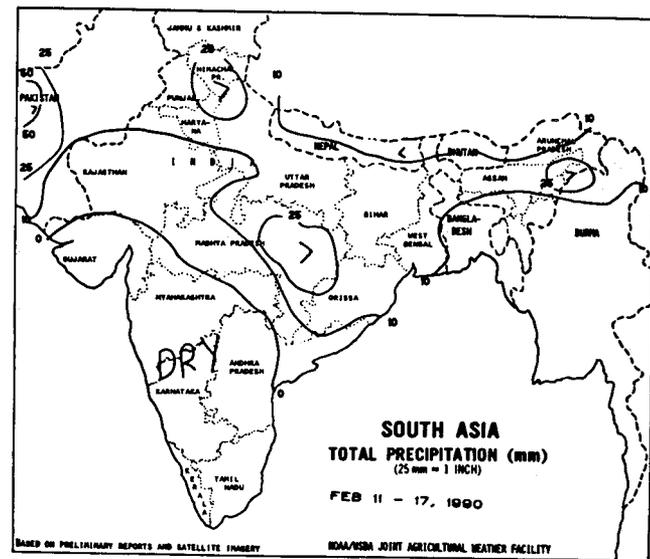
**SOUTH AFRICA** ... Moderate to heavy rain (25-50mm or more) covered South Africa's primary crop regions, benefiting immature crops but causing local flooding. Rainfall totaled 44-129mm over most of the Maize Triangle, benefiting late-planted corn but coming too late to help crops in the western Triangle affected by earlier periods of unfavorable weather. Excessive rain (102-129mm) was limited to local areas of the northwest and eastern Maize Triangle. Moderate to heavy rain (25-52mm) continued over most sugarcane regions in Natal. Temperatures across South Africa averaged 1-5 degrees C below normal.



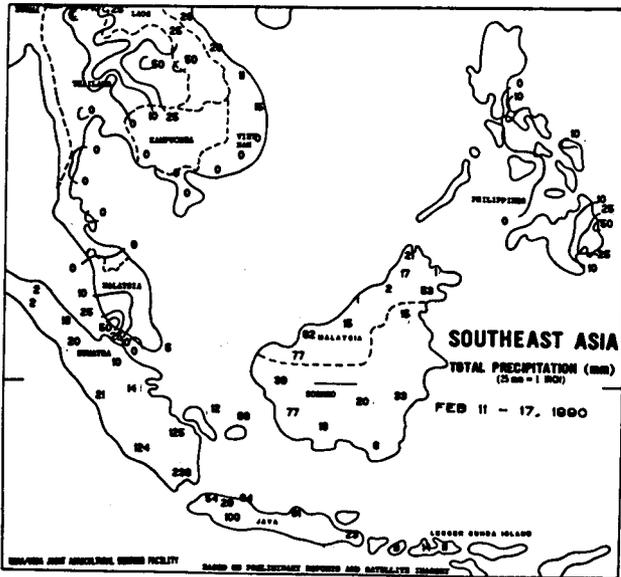
**NORTHWESTERN AFRICA** ... Dry weather continued to cover winter grains in Morocco, Algeria, and Tunisia. As a result, winter grains had to rely on marginal subsoil moisture supplies to meet increasing crop-moisture requirements. Weekly average temperatures, ranging from 2 to 4 degree C above normal over most of the region, increased evaporation rates and caused further reduction of soil moisture. Winter grains were in the jointing stage and usually advance through reproduction in March and April, the period in the crop's growth cycle which is the most weather sensitive.



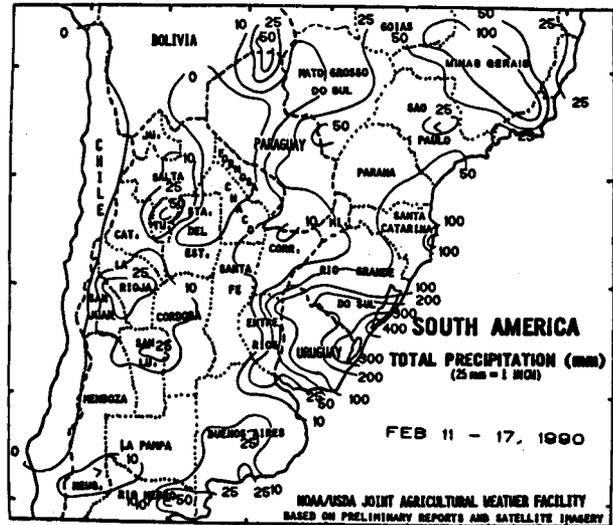
**EASTERN ASIA** ... Much warmer-than-normal temperatures (3-10 degrees C above normal) covered nearly all crop areas, reducing snow cover in southern Manchuria and causing greening of winter crops in southern growing areas. Heavy rain (25-60mm, with scattered amounts in excess of 60mm) continued across middle and lower sections of the Yangtze Valley, keeping soils at saturation. Very heavy rain (50-100mm) in sections of southern Hubei, northern Jiangxi, and southern Anhui may have caused localized flooding. Above-normal precipitation has persisted across sections of the Yangtze Valley since early January. Elsewhere, beneficial moderate to heavy rain and snow (10-50mm) fell across the North China Plain, while light snow (less than 10mm) covered Manchuria.



**SOUTH ASIA** ... Moderate rain (10-25mm or more) swept across Pakistan and northern India, boosting irrigation reserves for immature winter wheat. The rain was especially timely for rainfed crops in far northern growing areas. Unseasonable rain (5-47mm) over much of central India improved local moisture reserves, but the heaviest rain (28-47mm) fell in eastern Madhya Pradesh, missing primary winter wheat areas. Winter wheat ranged from filling to mature over central India, so rain at this point would benefit only a portion of the crop. Elsewhere, moderate rain (10-36mm) from Orissa to the eastern states improved irrigation reserves for immature rice. Dry, warm weather dominated India's cotton region, favoring harvesting. Temperatures averaged 1-2 degrees C below normal in Pakistan and northwest India and near to above normal elsewhere.

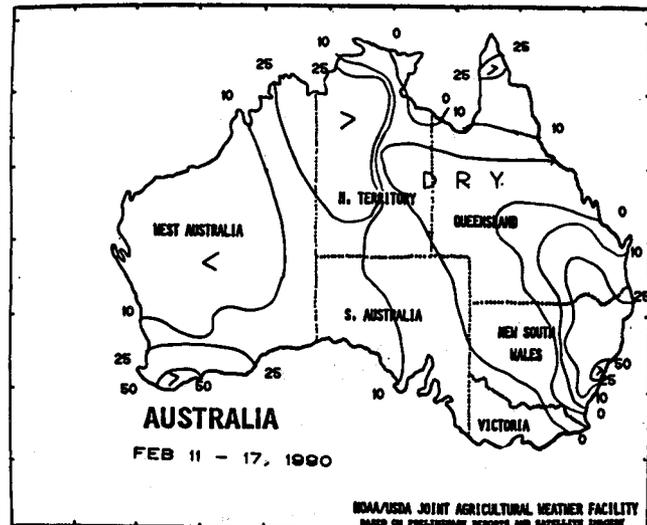


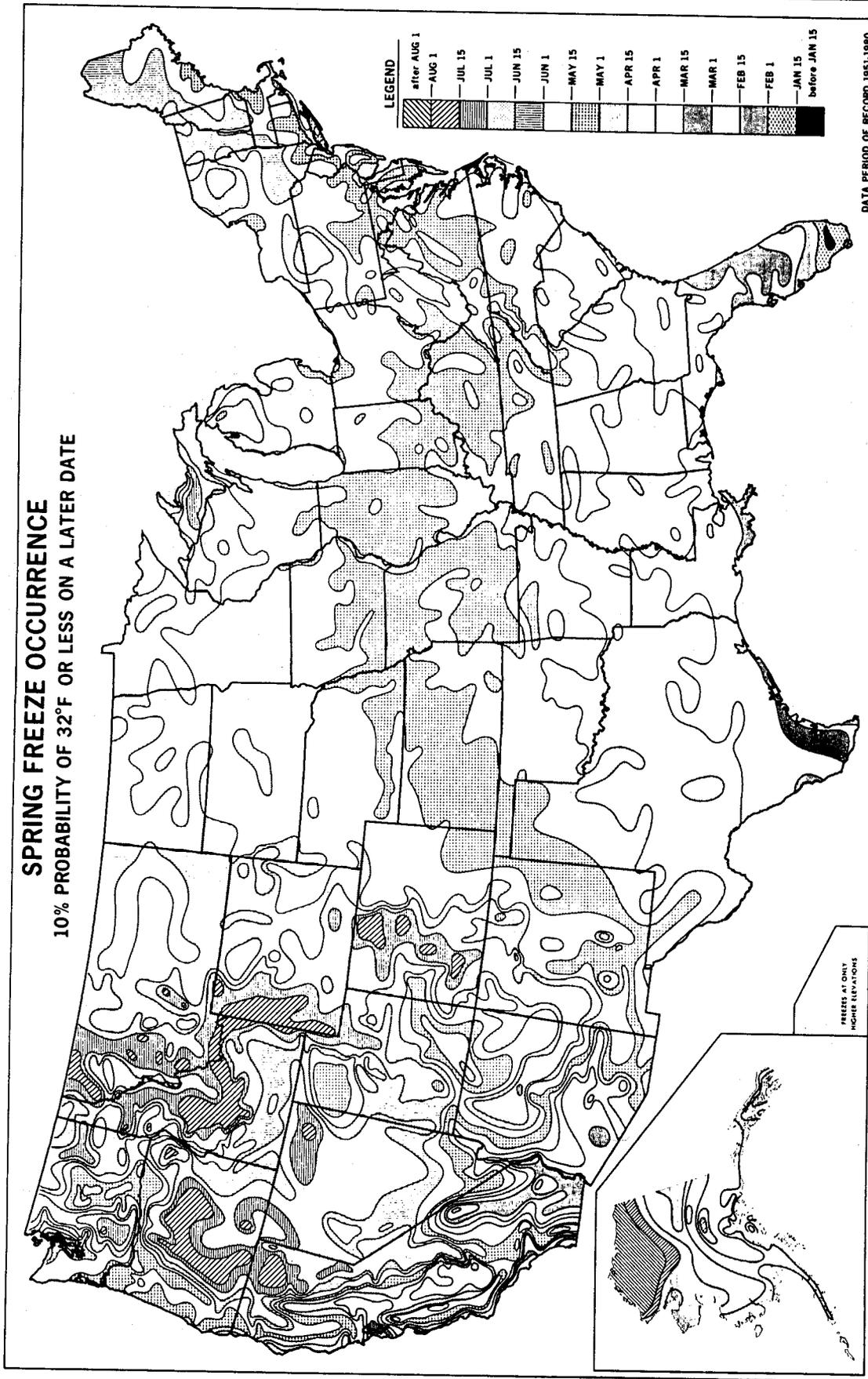
**SOUTHEAST ASIA** ... Unseasonable rain (15-53mm) covered large portions of northern and eastern Thailand, as well as northern Vietnam and, as depicted by satellite imagery, southern Laos. The rain improved local moisture reserves and benefited secondary crops along the Chao Phraya and Mekong rivers, but temperatures continued above normal, maintaining high evaporation rates. Dry weather continued over peninsular Thailand. Further south, rainfall continued to be below normal, with only local areas of Malaysia and northern Indonesia receiving 50mm or more. Heavy rain (100-200mm or more), however, fell from southern Sumatra to western Java, causing local flooding. In the Philippines, light to moderate rain (10-25mm or more) fell over local areas of southern Luzon and eastern Mindanao as dry weather persisted elsewhere.



**SOUTH AMERICA** ... In Argentina, mostly light showers (2-8mm) fell over the primary corn and soybean areas of southern Santa Fe, northwestern Buenos Aires, northeastern La Pampa, and southeastern Cordoba. Heavier showers (10-36mm) benefited sorghum and other summer crops in west-central Cordoba and scattered portions of southern and eastern Buenos Aires. Mostly dry weather prevailed in northern cotton areas. Summer crops are primarily in the grain and pod filling stages. Locally inundating rain (100-200mm or more) drenched much of Uruguay and southeastern Rio Grande do Sul, Brazil. Widespread showers (19-59mm) fell over most soybean areas of south-central Brazil, providing favorable moisture for flowering and pod filling. Locally heavy rain (50-169mm) soaked coffee areas of Minas Gerais, breaking long-term dryness. Mostly light rain (16mm or less) fell in Mato Grosso do Sul.

**AUSTRALIA** ... Beneficial rain (10-25mm, with scattered amounts in excess of 25mm) continued across crop areas of northern New South Wales and spread into southeastern Queensland late in the week, further reducing moisture stress in filling summer crops. The rain also favored vegetative sorghum, which was planted much later than normal due to extended dryness in December and January. In coastal eastern Queensland, however, unfavorable dryness persisted across most sugarcane growing areas. In the southwest, a frontal system brought widespread rain (10-60mm) to winter grain growing areas of Western Australia. Mean weekly temperatures ranged from much below normal in the west to near normal in the east.





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