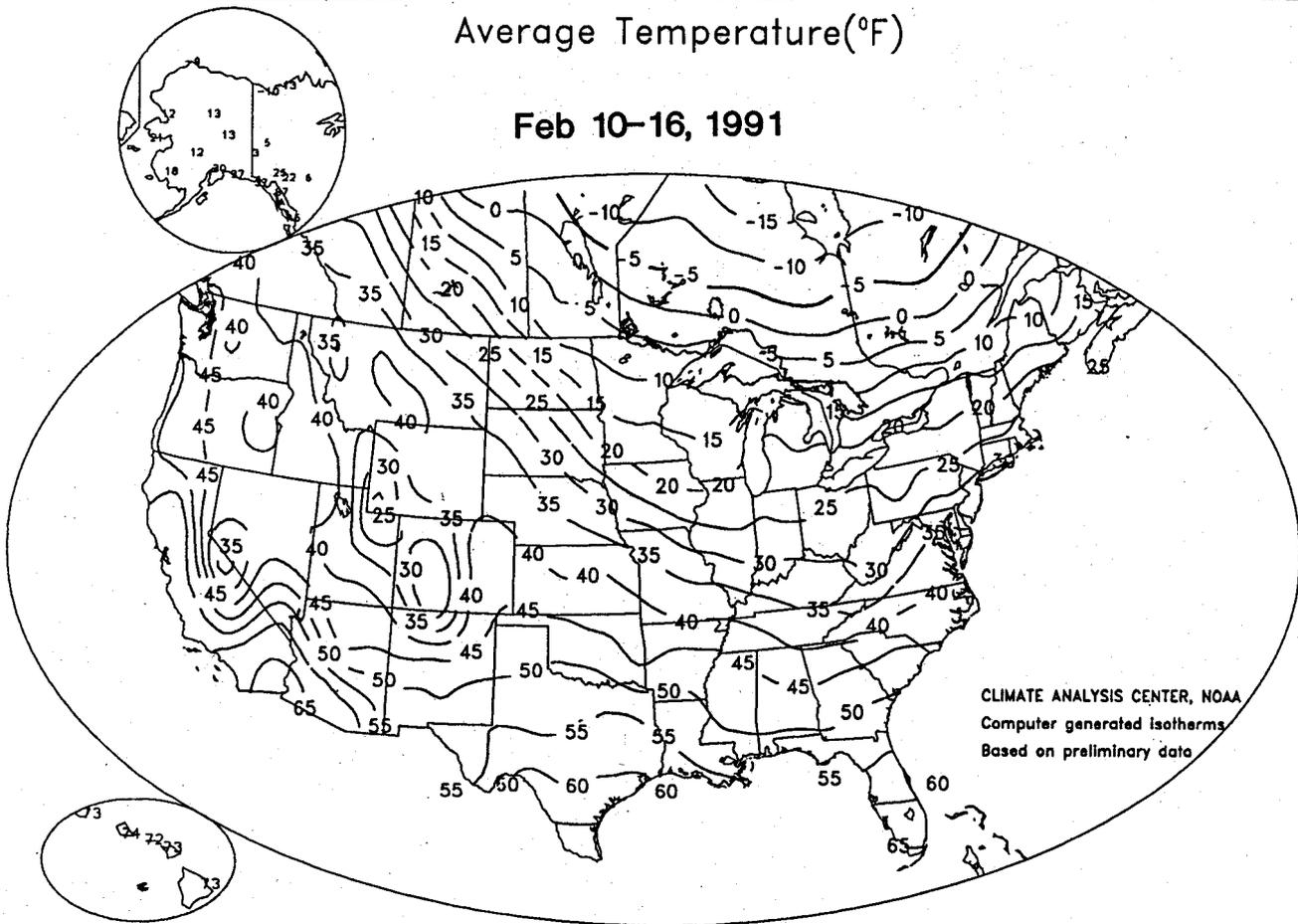


Average Temperature(°F)

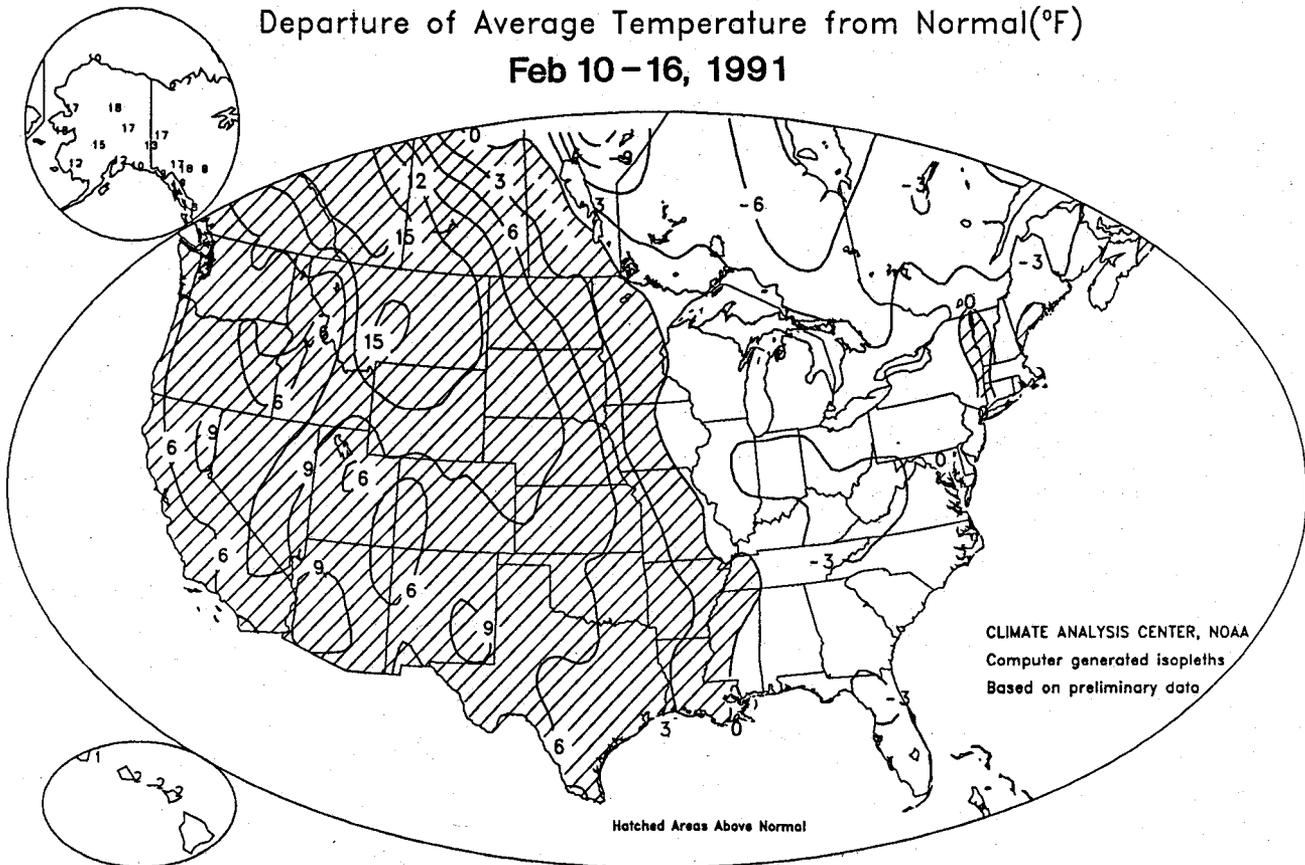
Feb 10-16, 1991



CLIMATE ANALYSIS CENTER, NOAA
Computer generated isotherms
Based on preliminary data

Departure of Average Temperature from Normal(°F)

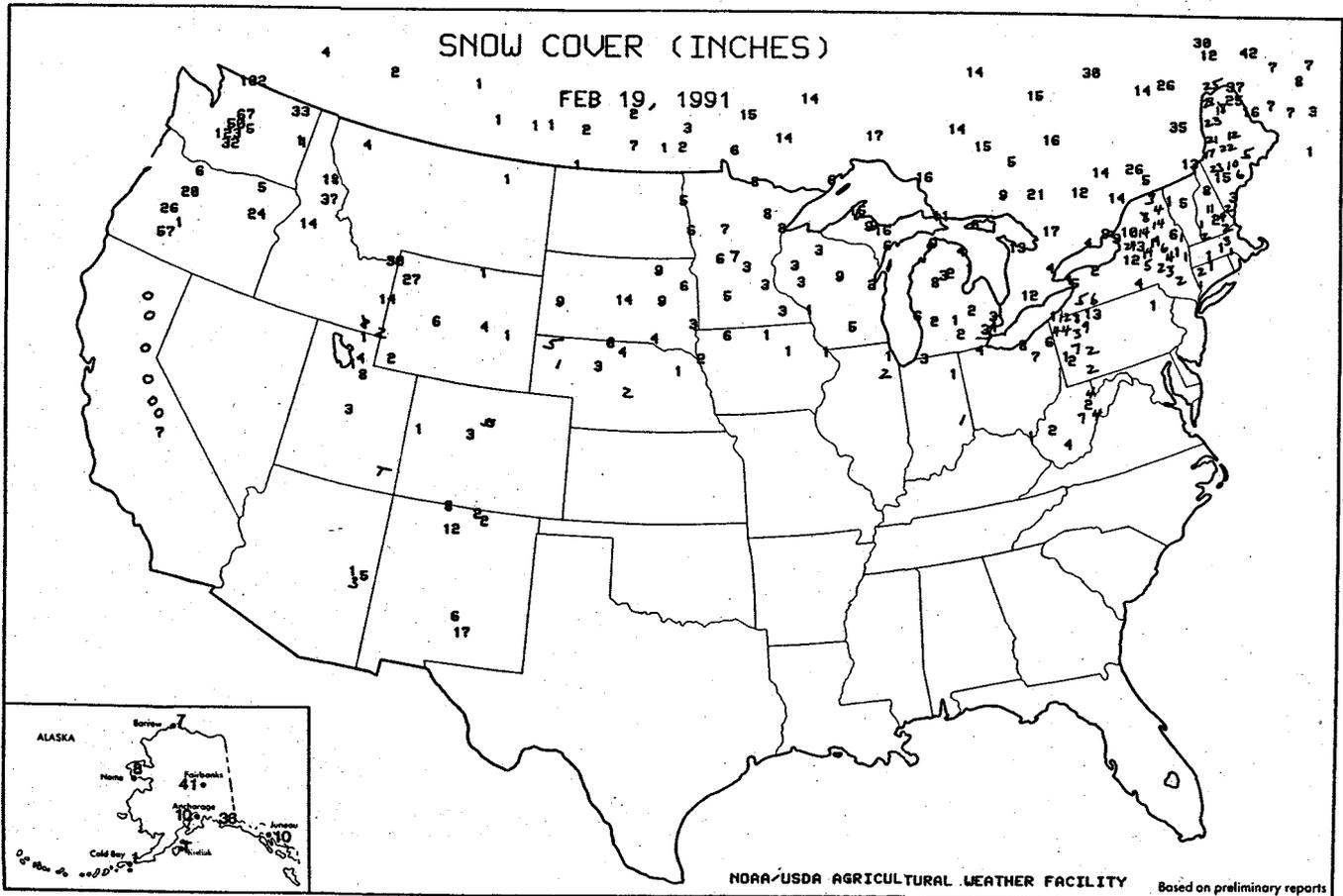
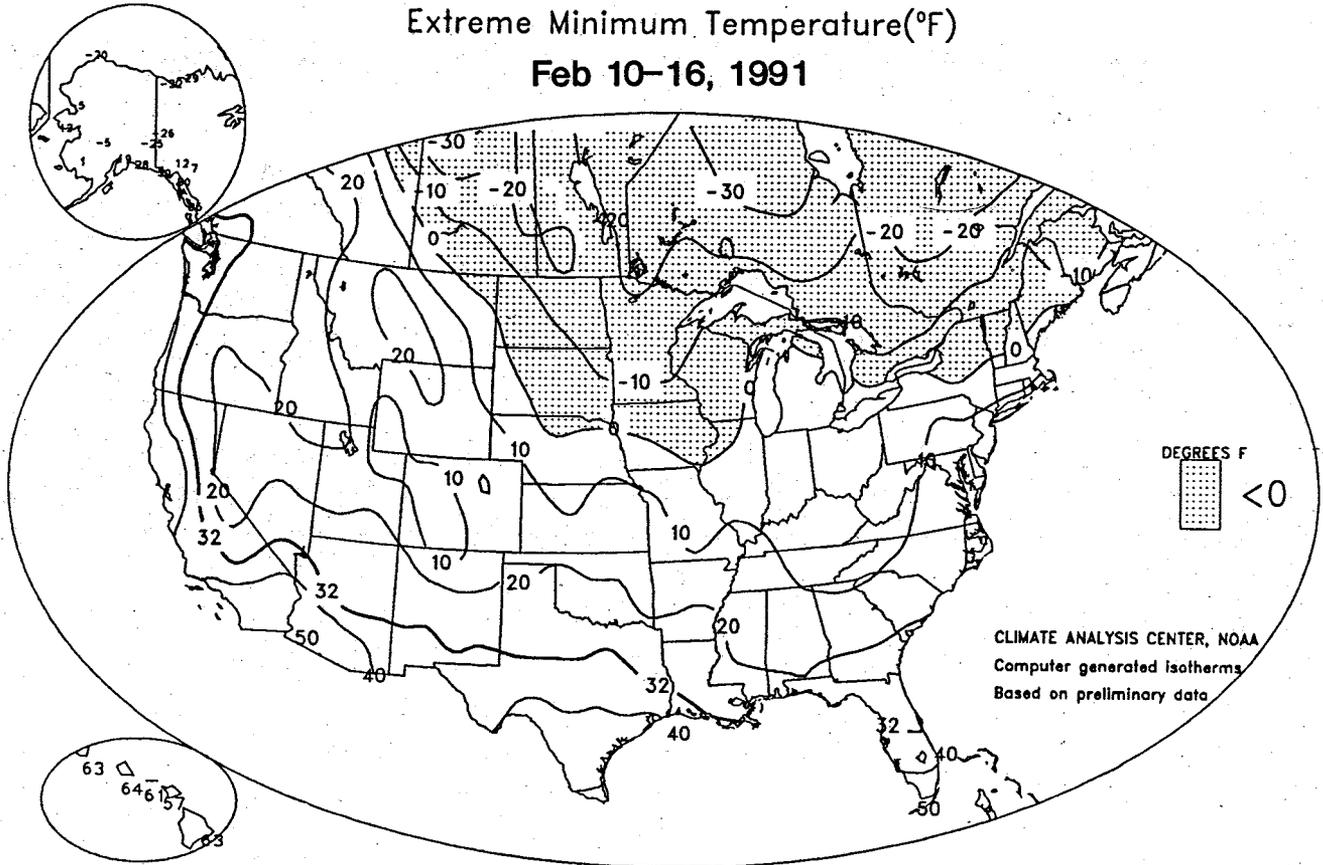
Feb 10-16, 1991



CLIMATE ANALYSIS CENTER, NOAA
Computer generated isopleths
Based on preliminary data

Hatched Areas Above Normal

Extreme Minimum Temperature(°F)
Feb 10-16, 1991



National Weather Data for Selected Cities

Weather Data for the Week Ending February 16, 1991

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		
AL BIRMINGHAM	57	31	69	12	44	-2	.5	-.7	.5	9.2	72	3.7	48	81	28	0	3	1	0	0	
MOBILE	63	38	71	22	51	-3	.4	-.8	.4	21.8	173	16.6	231	81	28	0	2	1	1	0	
MONTGOMERY	61	34	70	16	48	-2	.1	-1.0	.1	11.7	103	8.4	128	78	26	0	3	1	1	0	
AK ANCHORAGE	35	25	37	19	30	12	.1	-.2	.1	2.6	112	.8	66	94	74	0	7	3	0	0	
BARRON	-5	-14	1	-21	-9	10	.1	.0	.1	4.2	43	.1	21	82	67	0	7	0	0	0	
FAIRBANKS	22	4	33	-9	13	18	.1	-.1	.1	2.8	281	1.3	164	92	74	0	7	2	2	0	
JUNEAU	42	34	45	30	38	10	1.3	.4	1.3	13.7	131	8.2	141	100	86	0	1	1	5	3	
KODIAK	39	33	41	30	36	6	4.5	3.2	1.5	23.1	161	18.1	206	99	87	0	3	5	5	3	
NOME	29	15	33	12	22	19	4.5	1.0	1.1	2.6	155	1.4	125	92	73	0	0	3	3	3	
AZ PHOENIX	81	57	83	50	69	13	.2	-.1	.0	1.0	59	.6	62	54	19	0	0	0	0	0	
PRESCOTT	66	32	68	25	49	10	.0	-.4	.0	1.0	22	.7	27	69	22	0	0	0	0	0	
TUCSON	75	50	81	44	63	9	.6	.5	.6	3.3	159	1.8	153	76	27	0	0	0	0	1	
YUMA	83	57	89	52	70	10	.0	-.1	.0	.9	101	.8	162	52	19	0	0	0	0	0	
AR FORT SMITH	60	31	69	19	45	3	.2	-.4	.1	7.8	132	3.0	96	91	27	0	4	2	2	0	
LITTLE ROCK	59	38	77	23	48	5	.2	-.7	.1	14.5	142	6.5	107	59	33	0	3	3	3	0	
CA BAKERSFIELD	71	44	78	39	58	5	.0	-.3	.0	.9	40	.6	39	85	41	0	0	0	0	0	
EUREKA	57	47	61	46	52	3	.3	-1.3	.3	7.2	44	4.2	42	99	82	0	0	0	1	0	
FRESNO	68	44	75	39	56	6	.6	-.5	.6	1.2	25	.5	16	94	50	0	0	0	0	0	
LOS ANGELES	72	53	81	51	62	5	.0	-.6	.0	1.4	23	1.4	30	91	45	0	0	0	0	0	
REDDING	70	42	76	36	56	5	.0	-.6	.0	4.6	24	4.0	33	91	34	0	0	0	0	0	
SACRAMENTO	69	45	72	42	57	6	.0	-.7	.0	4.3	49	2.8	48	96	48	0	0	0	0	0	
SAN DIEGO	70	53	74	48	62	5	.1	-.4	.1	1.6	33	1.1	36	89	46	0	0	1	1	0	
SAN FRANCISCO	64	48	72	46	56	4	.7	-.8	.7	4.2	42	2.4	36	95	59	0	0	0	0	0	
CO DENVER	57	29	61	24	43	9	.0	-.2	.0	1.0	76	.8	92	71	22	0	6	0	0	0	
GRAND JUNCTION	46	20	53	13	33	0	.1	-.1	.1	2.0	131	1.0	105	89	49	0	7	1	0	0	
PUEBLO	61	20	67	14	40	6	.7	-.1	.7	.3	45	.1	22	71	18	0	7	0	0	0	
CT BRIDGEPORT	38	24	48	13	31	1	.5	-.2	.5	7.2	83	3.7	75	74	40	0	6	3	0	0	
HARTFORD	35	18	47	9	27	0	.8	-.1	.7	8.7	92	3.8	72	74	39	0	7	2	1	1	
DC WASHINGTON	44	28	60	17	36	-1	.3	-.3	.3	8.2	112	3.5	84	68	35	0	5	2	0	0	
FL APALACHICOLA	65	42	73	28	54	-1	.7	-.9	.7	25.7	283	24.0	432	82	29	0	1	2	0	0	
DAYTONA BEACH	69	42	78	28	55	-3	.5	-.3	.5	4.0	64	3.7	90	92	33	0	1	1	0	0	
JACKSONVILLE	66	40	76	25	53	-2	.8	-.2	.5	13.7	184	11.7	236	83	25	0	2	2	1	1	
KEY WEST	74	63	79	53	69	-1	.1	-.5	.1	3.9	83	2.5	87	78	49	0	0	1	0	0	
MIAMI	75	52	84	41	64	-4	.1	-.5	.1	4.0	79	3.0	91	89	33	0	0	1	0	0	
ORLANDO	71	46	81	32	58	-2	.5	-.2	.5	4.1	71	3.3	85	86	30	0	1	1	1	1	
TALLAHASSEE	65	36	75	24	50	-3	.3	-1.0	.2	24.2	202	19.7	266	89	22	0	3	2	0	0	
TAMPA	71	47	78	33	59	-2	.2	-.5	.2	2.9	49	2.7	72	85	35	0	0	1	0	0	
WEST PALM BEACH	73	51	83	37	62	-3	.3	-.4	.3	14.7	228	12.8	304	87	32	0	0	0	1	0	
GA ATLANTA	55	33	66	13	44	-1	.4	-.7	.3	8.1	70	5.0	69	77	35	0	2	2	0	0	
AUGUSTA	60	32	72	17	46	-1	.1	-.9	.1	10.7	114	8.7	141	77	22	0	2	1	0	0	
MACON	61	36	72	17	48	0	.1	-1.0	.1	14.7	137	11.2	167	80	26	0	3	2	0	0	
SAVANNAH	63	38	72	21	51	-1	.7	-.8	.7	11.3	148	9.2	189	71	23	0	2	0	0	0	
HI HILO	82	65	85	63	74	2	1.6	-1.8	1.3	35.5	120	5.4	32	92	56	0	0	2	1	1	
HONOLULU	81	68	85	65	75	2	.6	-.1	.4	7.1	81	2.1	40	87	58	0	0	3	0	0	
KAHULUI	83	64	85	58	73	2	.5	-.2	.4	10.4	122	4.4	76	92	55	0	0	2	0	0	
LIHUE	79	68	82	63	73	2	.5	-.3	.3	5.1	37	1.8	21	87	62	0	0	2	0	0	
ID BOISE	49	32	58	25	41	5	.4	-.2	.2	2.3	65	1.4	62	98	58	0	3	4	0	0	
LEWISTON	55	41	59	33	48	10	.1	-.1	.1	.7	20	.2	12	75	47	0	0	2	0	0	
POCATELLO	50	30	57	21	40	11	.1	-.1	.1	2.0	78	.8	52	90	52	0	4	2	0	0	
IL CHICAGO	30	14	38	1	22	-2	.2	-.1	.1	3.6	78	1.6	74	82	48	0	7	2	0	0	
MOLINE	32	13	39	-1	23	-2	.1	-.2	.1	4.3	104	1.3	56	87	53	0	7	1	0	0	
PEORIA	32	15	39	1	23	-3	.1	-.3	.1	5.0	114	1.3	54	86	55	0	7	1	0	0	
QUINCY	38	18	47	3	28	0	.7	-.3	.7	2.3	62	.6	30	84	49	0	6	1	0	0	
ROCKFORD	29	12	36	-1	20	-3	.1	-.2	.1	3.7	94	1.2	62	84	50	0	7	2	0	0	
SPRINGFIELD	36	19	48	5	27	-1	.3	-.1	.3	6.6	145	1.6	67	89	56	0	6	3	0	0	
IN EVANSVILLE	42	23	54	9	32	-2	1.0	-.3	.9	12.6	157	5.2	113	89	51	0	6	3	1	1	
FORT WAYNE	31	15	39	1	23	-3	.5	-.1	.2	10.1	181	2.5	81	89	59	0	7	4	0	0	
INDIANAPOLIS	35	16	46	2	26	-4	.2	-.4	.1	10.5	151	2.8	70	90	55	0	7	3	0	0	
SOUTH BEND	31	16	36	0	23	-3	1.4	-.9	.6	8.0	124	3.0	85	90	57	0	7	3	1	1	
IA DES MOINES	36	15	49	-1	26	1	.7	-.3	.7	3.1	122	1.0	62	81	45	0	7	0	0	0	
STOUC CITY	38	18	50	1	28	5	.7	-.2	.7	1.3	69	.5	44	83	47	0	7	0	0	0	
WATERLOO	28	9	37	-8	18	-2	.1	-.1	.1	2.1	89	.8	68	90	59	0	7	1	0	0	
KS CONCORDIA	51	24	63	11	37	6	.7	-.2	.7	1.0	61	.6	58	74	27	0	6	0	0	0	
DODGE CITY	60	26	73	12	43	8	.0	-.1	.0	.9	80	.3	48	64	22	0	5	0	0	0	
GOODLAND	60	23	72	15	41	10	.0	-.1	.0	.4	43	.3	48	67	21	0	7	0	0	0	
TOPEKA	52	25	66	13	38	6	.7	-.2	.7	1.8	67	.8	56	81	32	0	6	0	0	0	
WICHITA	56	27	68	17	42	7	.0	-.2	.0	1.1	55	.6	53	74	26	0	6	0	0	0	
KY BOWLING GREEN	45	24	61	8	35	-2	1.3	-.4	1.1	18.9	167	7.5	110	91	56	0	6	3	1	1	
LEXINGTON	41	21	51	4	31	-3	1.2	-.5	.9	15.6	171	5.4	102	86	51	0	6	3	1	1	
LOUISVILLE	43	23	53	7	33	-2	1.2	-.4	1.0	15.0	176	6.2	121	85	48	0	6	3	1	1	
LA ALEXANDRIA	64	42	72	30	53	0	.1	-1.1	.1	18.7	157	10.5	148	84	36	0	1	2	0	0	
BATON ROUGE	66	40	72	27	53	0	.1	-1.2	.1	16.5	133	11.7	158	85	32	0	2	2	0	0	
LAKE CHARLES	67	45	74	32	56	3	.7	-.8	.7	19.7	169	15.6	236	93	40	0	1	1	0	0	
NEW ORLEANS	66	43	74	30	55	1	.7	-1.3	.7	30.9	234	21.2	268	81	36	0	1	1	0	0	

Based on 1951-80 normals

Weather Data for the Week Ending February 16, 1991

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	.01 INCH OR MORE		.50 INCH OR MORE	
																			TEMP. °F	PRECIP.		
SHREVEPORT	65	41	77	26	53	4	.2	-.6	-.2	12.5	126	8.6	142	79	30	0	0	0	0	0	0	
ME CARIBOU	18	-4	32	-17	7	-5	.6	-.1	1.4	8.3	124	2.7	76	83	54	0	2	7	7	3	0	
PORTLAND	32	16	46	4	24	2	1.2	-.3	1.1	12.4	120	4.5	77	80	46	0	0	7	2	2	1	
MD BALTIMORE	43	25	58	16	34	0	.3	-.4	-.2	8.9	111	4.1	88	75	35	0	0	6	6	2	0	
SALISBURY	45	25	62	15	35	-1	.3	-.5	-.1	10.1	112	6.0	115	90	38	0	0	6	6	3	0	
MA BOSTON	36	21	50	9	29	-2	.6	-.5	-.5	7.7	73	4.5	74	79	44	0	0	6	6	3	0	
CHATHAM	38	23	47	13	30	0	.6	-.5	-.5	7.9	68	4.1	61	77	55	0	0	6	6	3	0	
MI ALPENA	25	10	30	0	18	0	.2	-.1	-.1	3.0	67	1.2	48	86	50	0	0	7	7	4	0	
DETROIT	29	16	38	2	23	-3	.6	-.5	-.4	6.4	123	2.1	75	83	50	0	0	7	7	4	0	
FLINT	27	14	34	5	20	-2	.4	-.2	-.3	4.3	100	1.9	79	84	50	0	0	7	7	3	0	
GRAND RAPIDS	27	15	33	7	21	-3	.3	-.2	-.1	4.5	84	1.6	57	86	53	0	0	7	7	3	0	
BOUGHTON LAKE	23	10	28	2	16	-1	.2	-.1	-.1	3.0	73	1.4	65	89	57	0	0	7	7	3	0	
LANSING	27	14	34	6	20	-1	.6	-.3	-.5	4.6	96	1.8	78	86	51	0	0	7	7	3	0	
MARQUETTE	19	3	27	-3	11	-3	1.0	-.6	-.6	3.7	67	2.0	65	84	65	0	0	7	7	5	1	
MUSKOGON	29	17	34	10	23	-1	.4	-.1	-.2	4.4	75	1.8	55	89	60	0	0	7	7	3	0	
SAULT ST. MARIE	19	0	27	-12	9	-4	.3	-.1	-.2	4.3	76	1.8	58	89	54	0	0	7	7	4	0	
MN ALEXANDRIA	24	4	36	-15	14	-3	.2	-.2	-.2	1.2	58	.6	51	79	50	0	0	7	7	1	0	
DULUTH	21	0	30	-15	11	-1	.2	-.0	-.1	1.2	42	.7	45	75	45	0	0	7	7	2	0	
INT'L FALLS	17	-3	26	-20	7	-1	.1	-.1	-.1	2.1	98	.9	71	78	48	0	0	7	7	2	0	
MINNEAPOLIS	28	7	37	-10	18	1	.3	-.1	-.2	1.7	85	.7	60	76	42	0	0	7	7	2	0	
ROCHESTER	25	6	32	-10	16	0	.2	-.0	-.1	2.5	124	.9	75	82	60	0	0	7	7	2	0	
MS GREENWOOD	58	35	69	18	47	0	.7	-.1	-.1	12.6	96	3.8	50	86	33	0	0	2	2	1	0	
JACKSON	62	35	71	18	49	0	.2	-.8	-.2	12.0	94	6.3	86	89	27	0	0	2	2	2	0	
MERIDIAN	61	33	71	16	47	-1	1.1	-.1	-.1	10.0	76	6.3	84	86	28	0	0	3	1	1	0	
MO CAPE GIRARDEAU	47	27	60	13	37	-1	1.1	-.3	1.1	14.7	179	5.6	126	88	47	0	0	5	5	1	1	
COLUMBIA	48	22	59	7	35	2	.7	-.4	-.4	5.1	109	1.6	59	81	34	0	0	6	6	2	0	
KANSAS CITY	48	23	62	9	36	3	.7	-.3	-.3	2.7	82	1.6	87	80	37	0	0	6	6	0	0	
SAINT LOUIS	45	23	57	8	34	1	.5	-.0	-.5	8.5	170	2.1	74	81	40	0	0	5	2	0	0	
SPRINGFIELD	53	26	70	13	39	4	.3	-.2	-.3	9.5	182	3.4	128	79	34	0	0	4	2	0	0	
MT BILLINGS	54	31	62	22	42	14	1.1	-.1	-.1	1.4	65	.9	66	76	32	0	0	4	1	0	0	
GLASGOW	38	19	48	5	29	14	1.1	-.0	-.1	.8	94	.3	49	89	58	0	0	7	7	3	0	
GREAT FALLS	51	30	59	26	41	14	1.4	-.1	-.1	1.4	66	.7	49	79	37	0	0	5	1	0	0	
HAVRE	44	23	51	15	34	13	1.1	-.1	-.1	.4	27	.5	5	90	54	0	0	6	0	0	0	
HELENA	51	28	55	18	39	13	1.3	-.1	-.1	.8	50	.3	31	86	40	0	0	4	0	0	0	
KALISPELL	40	26	42	14	33	6	.3	-.0	-.2	6.4	168	2.0	90	99	77	0	0	6	3	0	0	
MILES CITY	47	25	57	13	36	15	1.1	-.1	-.1	.9	56	.6	69	85	51	0	0	5	1	0	0	
MISSOULA	41	26	47	15	34	5	.1	-.1	-.0	1.8	59	.7	37	97	68	0	0	6	4	0	0	
NE GRAND ISLAND	48	23	60	5	35	9	.7	-.2	-.2	1.3	84	.5	60	81	33	0	0	7	7	0	0	
LINCOLN	46	22	57	8	34	8	.7	-.2	-.2	1.7	95	.9	81	78	37	0	0	7	7	0	0	
NORFOLK	42	19	53	2	31	7	.7	-.2	-.2	1.4	94	.9	101	83	40	0	0	7	7	0	0	
NORTH PLATTE	54	19	66	4	36	9	.7	-.1	-.1	.4	43	.4	56	88	27	0	0	7	7	1	0	
OMAHA	40	19	49	2	29	3	.7	-.2	-.2	1.7	88	.9	79	77	44	0	0	7	7	0	0	
SCOTTSBLUFF	56	21	65	12	39	9	.7	-.1	-.1	.8	73	.5	73	74	26	0	0	7	7	1	0	
VALENTINE	50	18	63	-3	34	11	1.1	-.1	-.1	.4	47	-.2	28	86	32	0	0	7	7	0	0	
NV ELY	56	21	60	16	39	10	1.1	-.1	-.1	.5	28	1.2	18	79	25	0	0	0	0	0	0	
LAS VEGAS	73	46	76	39	60	10	1.0	-.1	-.1	.2	21	.2	29	41	18	0	0	0	0	0	0	
RENO	63	31	66	24	47	9	.0	-.2	-.0	.6	19	.1	8	77	23	0	0	0	0	0	0	
WINNEMUCCA	59	27	64	17	43	7	1.1	-.0	-.1	1.1	53	.5	40	86	34	0	0	5	2	0	0	
NH CONCORD	30	14	44	2	22	1	.8	-.2	-.8	7.2	95	3.1	73	86	47	0	0	7	2	2	1	
NJ ATLANTIC CITY	42	23	57	15	32	-1	.4	-.5	-.2	9.3	105	5.7	108	86	38	0	0	7	3	0	0	
NM ALBUQUERQUE	61	32	65	27	47	7	.7	-.1	-.1	1.2	113	.6	105	68	22	0	0	5	0	0	0	
CLOVIS	64	35	70	25	49	8	.7	-.1	-.1	1.0	75	.6	79	68	27	0	0	7	7	3	0	
ROSWELL	66	40	75	32	53	10	1.0	-.1	-.1	.5	55	.2	35	58	24	0	0	1	0	0	0	
NY ALBANY	31	14	40	0	23	0	.6	-.1	-.6	6.9	106	3.4	96	79	46	0	0	7	7	3	1	
BINGHAMTON	27	12	36	0	19	-3	.9	-.4	-.4	8.7	130	3.4	90	92	56	0	0	7	7	6	0	
BUFFALO	28	16	35	3	22	-2	.6	-.0	-.3	11.5	149	2.8	65	91	59	0	0	7	7	3	0	
NEW YORK	39	26	53	16	33	0	.3	-.4	-.3	8.6	103	3.8	79	71	39	0	0	5	7	0	0	
ROCHESTER	29	14	36	4	22	-2	.6	-.0	-.2	6.7	107	2.5	69	91	58	0	0	7	7	4	0	
SYRACUSE	30	11	37	-4	20	-3	.6	-.0	-.3	8.6	119	3.3	82	91	54	0	0	7	7	5	0	
NC ASHEVILLE	47	24	60	4	36	-3	.8	-.1	-.6	8.7	108	4.2	87	86	39	0	0	6	3	1	0	
CHARLOTTE	53	31	64	13	42	-1	.2	-.7	-.1	9.8	106	6.5	112	73	25	0	0	2	2	0	0	
GREENSBORO	49	28	61	12	39	-1	.2	-.6	-.2	9.1	104	4.9	91	72	32	0	0	4	2	0	0	
HATTERAS	53	33	66	24	43	-2	.3	-.1	-.7	18.1	156	12.9	180	82	45	0	0	4	2	0	0	
NEW BERN	55	32	70	20	43	-2	.2	-.7	-.7	10.4	104	8.5	134	85	32	0	0	5	2	0	0	
RALEIGH	51	29	63	15	40	-1	.1	-.8	-.2	7.6	88	4.5	82	89	29	0	0	4	1	0	0	
WILMINGTON	58	33	73	20	46	-1	.4	-.5	-.4	14.0	155	11.3	203	94	28	0	0	3	2	0	0	
ND BISMARCK	33	4	41	-8	23	9	1.1	-.1	-.0	.7	59	.2	30	87	46	0	0	7	7	2	0	
FARGO	23	4	34	-15	13	3	.3	-.2	-.2	1.3	96	.5	72	81	52	0	0	7	7	2	0	
GRAND FORKS	21	2	29	-19	11	3	.5	-.4	-.4	1.3	79	.8	79	85	51	0	0	7	7	3	0	
WILLISTON	35	13	46	-2	24	10	1.1	-.0	-.1	.7	56	.3	39	89	49	0	0	7	7	3	0	
OH AKRON-CANTON	33	18	42	4	25	-1	.9	-.4	-.3	10.4	163	3.7	99	88	51	0	0	7	7	4	0	
CINCINNATI	39	18	49	3	28	-3	1.0	-.3	-.5	14.2	189	6.3	138	87	51	0	0	6	3	1	1	
CLEVELAND	32	19	40	5	26	-1	1.5	-.9	-.8	12.3	193	3.7	102	85	49	0	0	7	7	4	1	
COLUMBUS	37	18	46	4	28	-2	.7	-.2	-.3	10.6	163	3.6	92	87	51	0	0	7	7	4	0	

Based on 1951-80 normals

Weather Data for the Week Ending February 16, 1991

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	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
DAYTON	34	16	46	2	25	-4	.7	.2	.5	14.4	233	4.3	117	90	53	0	0	7	3	0	0	
TOLEDO	30	14	40	4	22	-3	.9	.5	.6	8.1	144	2.4	79	88	52	0	0	7	7	1	0	
YOUNGSTOWN	30	17	39	5	24	-3	.7	.1	.3	9.7	146	3.1	81	92	55	0	0	7	3	5	0	
OK OKLAHOMA CITY	59	35	69	22	47	6	T	T	T	2.4	85	.9	57	68	28	0	0	3	0	0	0	
TULSA	58	33	70	22	46	5	T	T	T	4.7	116	1.7	78	70	28	0	0	4	0	0	0	
OR ASTORIA	54	44	60	38	49	5	2.6	.7	1.4	17.0	63	11.9	77	99	80	0	0	0	0	2	2	
BURNS	49	29	58	20	39	6	.3	.0	.2	1.2	33	1.0	48	95	55	0	0	6	2	2	0	
MEDFORD	60	38	65	31	49	7	.3	.2	.3	4.1	51	3.0	64	98	53	0	0	1	1	0	0	
PENDLETON	47	38	52	31	43	4	.4	.2	.4	2.3	57	1.5	62	96	80	0	0	0	0	0	0	
PORTLAND	55	44	61	38	50	7	1.1	.1	.4	7.2	48	4.8	56	93	68	0	0	0	0	4	0	
SALEM	55	44	58	34	50	7	.8	.3	.3	8.4	50	5.6	57	97	75	0	0	0	0	0	0	
PA ALLENTOWN	36	21	46	12	29	0	.3	.4	.3	9.2	106	3.6	72	79	42	0	0	7	2	5	0	
ERIE	30	21	37	11	26	1	.9	.4	.4	10.1	149	3.2	91	90	58	0	0	7	4	5	0	
HARRISBURG	37	24	45	15	30	-1	.6	.1	.3	9.4	122	3.8	84	75	40	0	0	6	2	2	0	
PHILADELPHIA	41	26	53	17	33	1	.3	.4	.2	8.4	103	4.6	98	80	28	0	0	0	0	0	0	
PITTSBURGH	34	19	45	5	27	-2	.6	.0	.3	12.3	184	3.8	92	84	49	0	0	5	7	3	0	
SCRANTON	33	18	42	7	25	-1	.5	.0	.2	6.9	117	2.6	76	83	49	0	0	7	0	0	0	
RI PROVIDENCE	37	20	50	11	29	0	1.1	.2	1.0	10.6	100	5.1	84	79	40	0	0	6	6	3	1	
SC CHARLESTON	61	37	72	19	49	0	T	T	T	11.3	137	8.6	168	80	28	0	0	2	4	1	0	
COLUMBIA	59	31	72	18	45	-1	.1	.9	.1	7.8	77	6.1	93	79	24	0	0	0	0	0	0	
FLORENCE	57	33	67	17	45	-2	.1	.7	.1	8.9	107	6.4	119	76	25	0	0	2	1	1	0	
GREENVILLE	53	28	65	11	40	-3	.8	.3	.6	9.2	86	5.9	89	76	28	0	0	4	2	1	0	
SD ABERDEEN	30	11	48	-8	21	6	T	T	T	.5	39	.1	17	85	48	0	0	7	2	0	0	
HURON	37	13	54	-7	25	7	T	T	T	.5	41	.1	12	87	39	0	0	7	2	0	0	
RAPID CITY	52	22	65	3	37	11	T	T	T	.5	61	.4	51	84	32	0	0	7	0	0	0	
SIoux FALLS	35	12	51	-5	24	5	T	T	T	.8	51	.2	24	86	43	0	0	7	2	0	0	
TN CHATTANOOGA	53	27	68	11	40	0	1.4	.3	1.4	14.7	113	4.3	55	85	33	0	0	5	3	1	1	
KNOXVILLE	49	27	61	8	38	3	.9	.8	.8	12.5	109	3.5	51	84	40	0	0	5	2	2	0	
MEMPHIS	56	35	72	19	46	3	.3	.3	.3	16.0	135	5.4	77	71	34	0	0	3	1	0	0	
NASHVILLE	50	26	67	7	38	-2	1.1	.2	1.1	15.3	136	4.6	68	90	42	0	0	5	2	2	1	
TX ABILENE	65	42	76	31	54	6	T	T	T	3.6	150	2.8	181	73	29	0	0	1	1	0	0	
AMARILLO	64	30	76	18	47	8	.0	.1	.0	1.1	87	.9	112	63	20	0	0	5	0	0	0	
AUSTIN	69	50	82	40	59	7	T	T	T	11.1	221	10.4	347	69	28	0	0	0	1	0	0	
BEAUMONT	70	47	75	37	59	4	.1	.1	.1	20.7	180	16.8	256	92	41	0	0	0	0	1	0	
BROWNSVILLE	78	56	85	49	67	5	.0	.4	.0	3.0	90	3.0	136	95	46	0	0	0	0	0	0	
CORPUS CHRISTI	75	52	86	46	64	6	T	T	T	3.8	101	3.3	133	93	40	0	0	0	1	0	0	
DEL RIO	74	51	88	47	63	8	T	T	T	.8	52	.6	57	63	23	0	0	0	1	0	0	
EL PASO	65	44	73	36	55	6	.3	.2	.1	1.4	147	1.1	176	83	36	0	0	0	2	0	0	
FORT WORTH	65	43	80	32	54	6	T	T	T	5.3	118	3.8	140	74	28	0	0	2	0	0	0	
GALVESTON	68	55	74	50	62	6	T	T	T	17.1	214	15.3	348	83	48	0	0	0	0	0	0	
HOUSTON	71	48	77	37	60	5	.1	.8	.1	13.6	148	11.8	217	89	33	0	0	0	1	0	0	
LUBBOCK	66	36	76	26	51	9	T	T	T	1.6	158	1.2	183	66	23	0	0	2	1	0	0	
MIDLAND	68	41	78	33	55	8	T	T	T	2.5	217	1.8	255	71	25	0	0	0	0	0	0	
SAN ANGELO	68	40	79	36	54	5	T	T	T	2.3	131	2.1	188	79	28	0	0	0	0	0	0	
SAN ANTONIO	71	48	84	41	59	6	.1	.4	.1	7.1	180	6.9	265	83	28	0	0	0	0	1	0	
VICTORIA	73	51	83	44	62	7	.1	.5	.1	11.1	207	10.2	320	90	36	0	0	0	0	1	0	
WACO	66	44	79	35	55	5	T	T	T	5.2	110	3.9	137	83	29	0	0	0	1	0	0	
WICHITA FALLS	64	39	76	25	52	7	T	T	T	3.6	139	2.7	188	70	27	0	0	2	0	0	0	
UT CEDAR CITY	54	30	59	25	42	8	.1	.1	.1	2.0	116	.9	87	87	37	0	0	6	1	0	0	
SALT LAKE CITY	49	29	56	19	39	5	.5	.2	.4	2.2	65	1.7	81	96	59	0	0	4	2	0	0	
VT BURLINGTON	28	10	36	-2	19	2	.1	.3	.1	5.4	105	1.9	67	85	50	0	0	7	2	0	0	
VA NORFOLK	48	31	67	21	39	-1	.1	.7	.1	7.9	91	5.2	94	82	41	0	0	5	2	0	0	
RICHMOND	48	28	63	18	38	0	.2	.6	.2	7.5	90	4.0	81	76	33	0	0	5	2	0	0	
ROANOKE	44	25	53	9	34	-3	.4	.4	.3	8.1	108	4.3	94	66	32	0	0	6	2	0	0	
WA QUILLAYUTE	52	44	59	39	48	6	3.1	.0	1.4	42.7	110	25.9	121	100	88	0	0	0	6	2	0	
SEATTLE-TACOMA	53	44	63	37	49	6	1.0	.1	.5	11.0	74	7.4	86	99	79	0	0	0	6	0	0	
SPOKANE	43	33	48	26	38	6	.3	.1	.1	4.1	69	2.4	70	100	83	0	0	2	6	0	0	
YAKIMA	48	34	55	25	41	6	.1	.1	.0	.8	25	.6	30	99	65	0	0	4	2	0	0	
WV BECKLEY	37	19	48	0	28	-4	.9	.1	.6	10.9	131	5.6	108	88	51	0	0	6	3	1	1	
CHARLESTON	42	21	56	5	31	-4	.9	.1	.5	11.5	136	4.5	87	85	43	0	0	6	4	1	1	
HUNTINGTON	41	20	51	5	31	-5	1.0	.3	.5	12.6	159	4.5	94	82	42	0	0	7	3	1	1	
PARKERSBURG	38	20	47	6	29	-5	1.2	.5	.5	12.3	175	5.2	121	87	49	0	0	7	3	2	2	
WI GREEN BAY	23	9	29	-1	16	-1	.1	.2	.1	2.7	88	.7	38	76	51	0	0	7	1	0	0	
LACROSSE	26	9	32	-5	17	-2	.2	.0	.2	4.1	168	1.2	85	80	50	0	0	7	2	0	0	
MADISON	26	10	32	-2	18	-2	.3	.0	.2	4.9	157	1.4	89	80	48	0	0	7	2	0	0	
MILWAUKEE	28	14	35	2	21	-2	.2	.1	.1	4.4	102	1.7	74	71	44	0	0	7	2	0	0	
WAUSAU	22	4	28	-6	13	-2	.3	.1	.2	2.7	101	.7	51	87	58	0	0	7	2	0	0	
WY CASPER	51	28	59	21	39	12	T	T	T	1.2	94	.5	71	81	30	0	0	4	0	0	0	
CHEYENNE	52	28	59	21	40	10	T	T	T	.8	81	.4	64	71	24	0	0	5	0	0	0	
LANDER	48	25	54	21	36	11	.0	.1	.0	.8	61	.4	51	75	36	0	0	7	0	0	0	
SHERIDAN	49	28	58	19	38	12	.1	.1	.1	1.4	71	1.0	82	87	47	0	0	5	1	0	0	

Based on 1951-80 normals

National Agricultural Summary

February 11-17, 1991

HIGHLIGHTS: Most of the **Eastern half of the Nation** returned to winter weather. Freezing weather reached as far south as **northern Florida**. A portion of the **South's** peach crop may have been damaged by the cold weather. The extent of the damage will not be known until the trees bud fully. The winter wheat crop was mostly fair to good in most areas. Dry soil condition and lack of protective snow cover concerned producers in the **Plains** and **Western States**.

SMALL GRAINS: The wheat crop was mostly fair to good as topdressing of small grains continued in most areas. Winter wheat and barley in Arizona were in mostly good condition with 32 percent (%) of the crop jointed, 8 points ahead of the 5-year average. Snow cover protection for the winter wheat crop was lacking in Montana. Ice and water damage were reported in some Illinois wheat fields. Kentucky winter grains were beginning to green. High winds in Michigan caused the snow cover on the small grain crops to be spotty. Snow cover on winter wheat fields in Ohio provided protection from bitter cold weather. In the Texas High Plains, cutworm damage was a problem in some fields, but insect activity remained minimal in other areas. In Oklahoma, the winter wheat crop suffered from lack of moisture. Winter wheat was greening in eastern Oregon, but the extent of winter kill was not yet determined. Wheat producers in Washington began to replant a few winter-damaged fields.

OTHER FIELD CROPS: In California, cotton field preparation was slow because growers were uncertain of the availability of irrigation water. Winter sugarbeet harvest began. Florida sugarcane planting was complete, while harvest of this year's crop continued. Georgia tobacco plants were in fair condition. In Louisiana, limited corn and Irish potato planting began and bedding of sweetpotatoes continued.

FRUIT AND NUTS: Bitter cold temperatures and high winds may have damaged some low-chill peach varieties in southern Georgia. Overall, the Georgia peach crop was fair to good. Alabama

had light-freeze damage to the early variety peach crop. Florida citrus received virtually no freeze damage. Early and midseason orange harvests were winding down. Valencia orange harvest increased with good maturity tests. Arizona grapefruit, lemon, Valencia orange, and tangerine harvests continued. Hawaii's papaya production remained low, with a relatively high incidence of disease. In California, grapefruit and navel orange harvest continued. Bees continued to be moved into the almond orchards for pollination.

VEGETABLES: In central and southern Alabama, late winter and early spring vegetables were being planted. Arizona vegetable harvests continued. Florida vegetable harvests remained active. The Texas Rio Grande Valley onion harvest began, with promising yields. Spring watermelon planting was winding down. In the San Antonio Winter Garden area, the spinach harvest rapidly continued. Chinese and head cabbage production was moderate in Hawaii. California avocado, artichoke, lettuce, and strawberry harvests continued. Sweet corn planting continued in Riverside County.

PASTURES AND LIVESTOCK: Pasture and livestock were in mostly good condition. Hay and roughage supplies were adequate in most areas. In the Texas Cross Timbers, heavy tick infestations were reported in a few cattle herds. In North Dakota, calving was about 10% complete. Cattle in California were in good condition, but numbers are continually being reduced due to rising cost of supplemental feed.

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 2.00 to 5.00 in. locally, extreme north; near 1.00 in. isolated areas; 0.50 or less elsewhere. Temperatures 2 to 4° below normal most areas. Warm temperatures early week; hard freeze statewide weekend. Light snow accumulations north; central.

Wet conditions continued to hamper fieldwork north. Conditions suitable for fieldwork most of week other areas. Late winter, early spring vegetables planted central, south. Wheat conditions mostly good. Light freeze damage early variety peaches. Primary activities: Land preparation; planting vegetables; fertilizing small grain crops; applying lime; soil testing; purchasing chemicals; pruning orchards; general care of livestock, poultry, catfish.

ARIZONA: Sunny skies, above normal temperatures most of period; rain southeast 11th. Temperatures 6 to 13° above normal. Extremes 39°; 87° desert, 18°; 76° higher elevations. Precipitation none west to 1.06 in. southeast.

Cotton field preparation continued; activities incorporating herbicides, pre irrigation; early fields seeded southwest. Wheat, barley established 99%, 100% 1990, 99% avg.; jointing 32%, 27% 1990, 24% avg.; small grains good. Alfalfa clipping began west; light spraying alfalfa aphids, Egyptian alfalfa weevils west; harvest mostly light; grazing continued on decreasing scale; alfalfa good. Grapefruit, lemon, valencia orange harvests continued west, central; tangerine harvest west; State sweets harvest completed central. Mixed vegetable harvest continued west, central. Vegetable ground prepared; fruit, nut pruning east.

ARKANSAS: Temperatures slightly above normal. Light rain middle, end of week, heaviest in northeast. Extremes 8°; 79°. Rainfall 0.05 to 1.70 in.

Pastures, wheat continued to green. Nitrogen application was limited due to wet fields.

CALIFORNIA: Strong high pressure kept the State dry throughout the week. The only place reporting rain was the far north coast. Daytime temperatures warmed to much above normal accompanied by mild nights. The central valley had dense fog early in the week.

Field activities progressed, open weather. Small grain emergence, growth continued. Dryland fields need rain. Irrigation, herbicide application ongoing. Newly seeded alfalfa growth good. Established alfalfa received weed treatments, rodent controls, irrigation, fertilization. Ground preparation corn, dry beans active. Cotton field preparation slow; growers uncertain regarding water. Over wintered sugarbeet harvest underway. Orchard, vineyard work continued. Irrigation continued where water available. Early variety peaches, plums, nectarines, apricots, almonds had popcorn stage buds. Bees continued movement into almond orchards for pollination. Southern area peaches, nectarines, almonds blooming; Desert grape bud break nearly complete. Desert lemon bloom began. Riverside County: Grapefruit

harvest ongoing, Navel orange harvest slow. Avocado harvest continued. Artichoke harvest Imperial County. Lettuce harvest continued Blythe area. Sweet corn planting continued Riverside County. Vegetable plantings San Joaquin Valley covered with hot caps or long plastic tunnels to protect from possible cold temperatures. Potato shipping was steady Tulelake Butte Valley area. Winter potato crop harvest continued Hemet San Jacinto area. Harvest of strawberries increasing south coast counties. Cattle in good shape but numbers continued to be reduced due to rising costs supplemental feeding. Counties in northern third reported recent rains germinated grasses, very little growth evident; condition fair to poor. Lack of adequate range feed continued a concern in central, southern counties; conditions poor to very poor. Water supplies continued short most northern areas, very short central, southern areas. Water hauling continued. Lambs, calves good shape.

COLORADO: Continued warm, dry statewide until mid week. Northern, central mountain areas received moderate to heavy amounts of new snow on 12th to 13th, all mountain areas received an additional 4.00 to 6.00 in. of new snow on the average with up to a foot at some locations on 17th. Lower elevations received little or no moisture early in the week. Western areas received 0.10 to 0.30 in., eastern areas received only a trace to 0.10 in. from the late week storm front. Temperatures 6 to 9° above normal east of the Continental Divide, 1 to 3° above normal in the west.

FLORIDA: Above normal temperatures gave way to weekend record lows many localities. Panhandle lows in teens, 20s central Peninsula, 30s southern Peninsula. Very minimal crop damage. Rain totals generally under 0.75 in. over State.

Soil moisture adequate to surplus Panhandle, northern Peninsula; short to adequate central Peninsula; adequate southern Peninsula. No freeze damage to tobacco beds. Tobacco growers maintaining beds, making field preparations. Sugarcane harvesting continued active. Sugarcane planting virtually complete. Much of State received some frost. Pastures 10% poor, 40% fair, 35% good, 15% excellent. Cattle fair to good. Virtually no damage to citrus from freeze 16th to 17th; temperatures not low enough, long enough. Early mid orange harvest winding down. Valencia harvest increasing with good maturity tests. Grapefruit movement active. Caretakers prepared for freeze working irrigation equipment. Weekend cold inflicted only limited damage in major vegetable producing areas. Accompanying winds battered plants, scarred fruit, many areas. Ground preparation, planting continued. Harvest remained active. Volume leaders: Tomatoes, cabbage, peppers, potatoes, snap beans, carrots, celery, squash, strawberries. Also available sweet corn, eggplant, escarole, lettuce, radishes.

GEORGIA: Arctic air on 15th, accompanied by scattered snow showers. Light accumulations north, central. Hard freeze over entire State on 16th. Lowest temperatures in single digits north,

low 20s extreme south. Temperatures 3 to 6° below normal. Warmest temperatures low 60s north, low 70s south. Rain totals heaviest over extreme north, local totals 2.00 to 4.00 in. Local totals 1.00 to 3.00 in. Extreme south. Remainder mostly 0.50 in. or less.

Soil moisture adequate to mostly surplus. Bitter cold temperatures, high winds may have damaged onions, some peach varieties. Extent of damage unknown at present. Onions fair to good, disease problems still prevalent. Peaches fair to good, cold temperatures possibly damaged some low chill varieties in south. Cold temperatures beneficial to peaches in north. Fair weather early in week, fieldwork active. Top dressing of small grains nearing halfway, fair to good condition. Tobacco plants fair. Land preparation active early, less than 10% complete. Pastures poor to fair central, south, good north. Cattle, hogs fair to good.

HAWAII: Variable weather. Dry, hazy early in week. Frontal band began moving eastward through State on 12th. Windy, showery weather up to weekend. Light bruising on crops due to winds. Rainfall beneficial for crops. Temperatures mid 60s to low 80s. Rainfall 0.10 to 3.10 in.

Days suitable for farm work 7.0. Papaya production remains low, relatively high incidence of disease. Ginger root harvesting active; farmers preparing fields for next crop. Chinese, head cabbage production moderate.

IDAHO: Temperatures above normal. Precipitation slightly above normal in southwest, below normal for the rest of State.

Soil moisture adequate in north with rest of State reporting short. Main agricultural activities included livestock care, hauling grain, hay, attending meetings. Most livestock in good condition. Lambing, calving continuing across the State. Hay, roughage supplies remained adequate.

ILLINOIS: Temperatures 4° below normal to normal. Precipitation generally 0.20 to 0.60 in. north, central; 1.00 to 2.00 in. south.

Soil moisture 2% short, 56% adequate, 42% surplus. Winter wheat 6% poor, 52% fair, 42% good. Ice, water damage to wheat reported. Livestock mostly good to excellent.

INDIANA: Temperatures 2 to 5° below normal. Lows zero to mid teens, highs 30s to low 40s. Precipitation 0.15 to 1.86 in. south. Wet soils limited fieldwork. Other activities:

Hauling manure, cleaning fence rows, attending farm auctions, pesticide training, selling grain, machinery maintenance, purchasing supplies, attending meetings, urea application, tax preparation, care of livestock. Livestock mostly good. Wheat fair to good. Strong winter storm late in period.

IOWA: Temperatures 2 below east 5° above normal west. Extremes -9; 50°. Precipitation trace to 0.44 in.; average 0.14 in. Cold temperatures stressing livestock. Grain to market movement light. Livestock grazing limited from snow cover.

KANSAS: Temperatures 9° above normal across State. Virtually no precipitation during week. High winds near end week caused some erosion western districts, further depleted soil moisture. Major activity, top dressing wheat fields.

KENTUCKY: Normal temperatures, high, low extremes. Daytime highs averaged lower 40s, lows mid 20s, both near normal. Precipitation heavy; average 2.00 in., more than 1.00 in. above normal.

Soil moisture surplus with considerable standing water. Little or no field activity. Winter grains are beginning to green. Burley markets closing for Season, final sales this week at Horse Cave, Carrollton, Danville, Lexington. Hay other feed supplies adequate. Muddy lots hampering livestock gains, overall condition satisfactory.

LOUISIANA: Temperatures 0.4° below normal east central to 3.10° above normal northwest. Extremes 20°; 77°. Rainfall 0.10 in. southeast to 0.33 in. northeast, west central.

Main farm activities: Wet fields in many areas limited fieldwork. Top dressing wheat, winter pastures as ground permits. Machinery repairs, maintenance was common. Livestock care, planning for spring plantings. Limited Irish potato and corn planting began as well as bedding sweet potatoes. Fruit tree pruning, spraying, vegetable spraying was underway. Water leveling of rice fields, levee preparation, crawfishing.

MARYLAND & DELAWARE: MARYLAND: Precipitation 0.34 in. Temperature 38.1°, normal 32.9°. Extremes 11; 64°.

Activities for the week: Repairing fence; hauling manure; spreading fertilizer; maintaining machinery; tax preparation; caring for livestock.

DELAWARE: Precipitation 0.25 in. Temperature 37.1°, normal 33.5°. Extremes 19; 63°.

Activities for the week: Repairing fence; hauling manure; spreading fertilizer; maintaining machinery; tax preparation; caring for livestock.

MICHIGAN: Temperatures 3° below to 1° above normal. Extremes -9; 40°. Precipitation 0.10 to 1.38 in. across the State. Warm temperatures the first part of the week melted most remnants of previous snow cover before heavy snow during the latter part of the week brought snow cover back.

However because of heavy winds, snow cover in some areas rather spotty. Livestock in good shape benefitting from warm temperatures. Feed supplies in good shape. Major activities included: fruit tree pruning, tax preparation, purchasing seed for spring planting, caring for and marketing livestock.

MINNESOTA: Temperatures near normal for the State. Extremes 23° Warroad; 48° above at Lamberton. Precipitation 0.10 to 0.20 below normal for the State. Greatest precipitation for the week was 0.46 in. at Crookston.

MISSISSIPPI: Temperatures 5° below normal. Extremes 8; 75°. Temperatures 47°. Dry statewide. Rainfall 0.42 in., 0.77 in. below normal. Soil temperature 49°.

Days suitable for fieldwork 2.1, 1.0 1990, 1.8 avg. Soil moisture 61% adequate, 39% surplus. Pasture 20% poor, 32% fair, 32% good, 16% excellent. Livestock 51% fair, 33% good, 16% excellent. Hay supply 63% short, 25% adequate, 12% surplus. Feed grain 12% short, 75% adequate, 13% surplus. Wheat 6% very poor, 60% poor, 12% fair, 14% good, 8% excellent. Activities: Feeding livestock, shop work.

MISSOURI: Temperatures 3° above normal. Precipitation less than 0.25 in. most northern counties, about 0.60 in. east central, south central, 1.30 in. southeast.

Farmers doing farmyard work, preparing for spring. Livestock doing well.

MONTANA: Temperatures 6 to 16° above normal with most locations more than 10° above. Some moisture most locations but amounts below normal.

Winter wheat condition remains about 30% very poor to poor, 40% fair, 30% good. Crop breaking dormancy due to abnormally warm days. Soils still mostly dry. Snow cover protection lacking. Grazing mostly open. Majority of livestock receiving supplemental feed. Calving, lambing weather ideal. Almost 15% lambing, calving complete.

NEBRASKA: Temperatures 5 to 9° above normal. Precipitation varied from traces northeast to 0.25 in. northwest.

NEVADA: Temperatures well above normal. Extremes 15°; 81°. Precipitation none to 0.23.

Continued above normal temperatures eased livestock stress. Feeding, caring for livestock remain major farm, ranch activities.

NEW ENGLAND: Precipitation 0.10 to 1.50 in. Temperatures 5° northern Maine, low teens to low 20s elsewhere north, low to high 20s south. Maximum temperatures high 20s north to low 50s south; minimum temperatures -23° north to 13° south.

Major farm activities: General repairs, maintenance, tending livestock, moving crops from storage.

NEW JERSEY: Temperatures above normal, 26° south, 31° north, 34° coastal. Extremes 4°; 61°. Precipitation below normal, 0.49 in. north, 0.36 in. south, 0.42 in. coastal. Heaviest 24 hour total 0.40 in. on 13th, 14th.

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

NEW MEXICO: Temperatures over the State above normal. Precipitation over the State with a trace at Clovis to 0.97 in at Silver City.

NEW YORK: Weather data not available.

Major farm activities: General farm maintenance, caring for livestock, making plans, purchases for up coming seasons.

NORTH CAROLINA: Temperatures 4° below normal in the mountains, 1° below in the Piedmont, 2° below at the Coast. Precipitation none to 1.98 in.

Days suitable for fieldwork 4.2. Soil moisture 3% short, 78% adequate, 19% surplus. Pasture 1% very poor, 12% poor, 35% fair, 51% good, 1% excellent. Crop condition: Wheat 20% fair, 78% good, 2% excellent; oats 21% fair, 77% good, 2% excellent; barley 24% fair, 72% good, 4% excellent; rye 21% fair, 75% good, 4% excellent. Tobacco plant beds 26% fair, 72% good, 2% excellent. Hay, roughage supplies 1% very short, 10% short, 85% adequate, 4% surplus. Feed grain supplies 1% very short, 8% short, 90% adequate, 1% surplus. Activities: Tending livestock; preparing, seeding tobacco plant beds; cutting wood; pruning trees; equipment repair; top dressing small grains, pastures; land preparation; general farm maintenance.

NORTH DAKOTA: Temperatures near normal north central, northeast to 9° above normal across the west. Precipitation 0.02 to 0.22 in. Limited snow cover.

Soil moisture short. Livestock good, calving less than 10% complete. Hay supplies mostly adequate, good quality alfalfa short.

OHIO: Temperature roller coaster ran through the period posting 1 to 5° subnormal. Highs were mostly in the low to mid 30s. Lows in the upper teens to low 20s. Temperatures moderated to the 40s to 50s for daytime highs at mid week, plunged to the single digits for overnight lows on the 15th. Precipitation generally above normal, 0.50 to 1.50 in. Snow cover measured up to 3.00 in. in the northern half of the State. Bitter cold temperatures during the latter part of the period, along with breezy conditions produced wind chill readings of -30°. Most animals required shelter from the intensified cold. Soil temperatures at the 4.00 in. depth averaged in the low to mid 30s.

Snow offered some protection to winter wheat stands.

OKLAHOMA: Temperatures 8° above normal south central to 13° above normal Panhandle. Precipitation none most districts to 0.09 in. east central.

Prolonged dry weather caused severe fire danger. Wheat condition suffering from lack of moisture. Warm, dry weather permitted off season field work. Cattle good; prices steady to slightly lower than preceding week.

OREGON: Temperatures well above normal; generally 5 to 10° above normal. Precipitation 2.50 to 3.50 in. central coast, 1.00 to 1.50 in. other coastal locations, near 1.00 in. Willamette Valley, 0.25 to 1.00 in. east of Cascades, less than 0.25 in. southwestern valleys, extreme southeast. Most precipitation fell on 12th to 13th.

Soil moisture adequate west, short east except surplus northeast mountains. Weed spraying in grains, grass seeds west. Winter wheat greening up east, still too early to determine extent of winter kill. Pruning tree fruits, filberts, blueberries, raspberries Willamette Valley. Freeze damage moderate in grapes, blackberries, raspberries. Livestock good. Calving, lambing continued east. Range, pasture poor to good west, best near coast; mostly poor east except good northeast mountains. Below normal snowpack causing concern about summer grazing in many areas east of Cascades; good spring rains will be critical.

PENNSYLVANIA: Return to winter weather with near normal temperatures, precipitation. Temperature 25°, 1° below normal. Extremes 0°, 53°. Precipitation 0.66 in, 0.03 in. above normal.

Activities: Spreading manure; maintaining machinery; caring for livestock.

PUERTO RICO: No Data Available.

SOUTH CAROLINA: Temperatures 0 to 4° below normal. Rainfall none south to 3.25 in. Upstate.

Farm activities: Wet conditions continue to slow fieldwork. Apply nitrogen to wheat.

SOUTH DAKOTA: Temperatures fluctuated during week. Began warm, turned cold, then warm again. Extremes -13°; 67°. Precipitation spotty, light. Precipitation for the year ranges from 0.87 in. below normal to 1.06 in. above normal.

TENNESSEE: Warm front 12th, 13th brought warm, unstable air to State. Very strong Arctic cold front 14th, 15th brought frigid temperatures, snow. Temperatures 2 to 5° above normal west, 5 to 10° below normal middle, east. Precipitation 1.50 to 3.00 in. Heavy rains all areas 13th, heavy snow over mountains 14th. Thunderstorms again statewide 17th.

Outdoor activities hampered by heavy rainfall. Breaking ice for livestock, meetings, bookkeeping main activities.

TEXAS: General northwest flow across State provided mild and mostly dry weather over past week. Only real shot of rain came 10th when south winds began to return significant moisture to eastern half of State. Even then, only eastern areas received more than one tenth of inch of moisture. At weekend, pattern was changing more to wet, cool regime. Temperatures were above normal statewide with all sections averaging 5 to 10° above normal. Rainfall was below normal at all locations.

Crops: Small grain growth was encouraged by recent rain, warmer temperatures. Most fields showed sign of progress. Cut worm damage becoming problem on some fields in Plains, elsewhere, insect activity remained minimal. Planting of spring oats continued on Plains. Statewide wheat condition 66% of normal compared with 43% 1990. Corn planting expected to start soon in southern areas. Producers in Blacklands and High Plains continued fertilize, herbicide applications. Budding, blooming of peach trees increased in many areas last week. Dormant spraying continued in Blacklands, eastern areas.

Commercial Vegetables: Rio Grande Valley, onion harvest began, yields appear promising. Cole crop harvest remained steady. Spring watermelon planting winding down. San Antonio Winter Garden, land preparation continued for spring crop planting. Spinach harvest continued at a rapid pace. Onion progress doing good. High Plains, field activities for onion, potato plantings underway.

Range and Livestock: Range, pasture conditions continued to improve in most areas due to recent rains, warm weather, ranchers in the Plains would like to see some rains. Winter grasses, forage continued to provide ample grazing for livestock. Most cattle remained in fair to good shape, but heavy tick infestations were reported on few herds in Cross Timbers. Calving on increase in some areas. Supplemental feeding, haying continued at normal pace. Range, pasture conditions: 2% very poor, 11% poor, 51% fair, 31% good, 5% excellent.

UTAH: Precipitation light north, none south. Temperature maximums 5° above normal, minimums 3° above normal.

Calving, lambing, continues. Livestock fair to good. Winter range poor to fair. Some supplemental feeding necessary. Fall seeded wheat fair to good. Major farm activities: Care of livestock, hauling manure, equipment maintenance; planning, attending farm meetings, purchasing seed, fertilizer, marketing hay, livestock.

VIRGINIA: Temperatures at or above normal. Extremes 6°; 68°. Precipitation 0.04 to 2.16 in. Days suitable for fieldwork 3.9. Topsoil moisture 13% short, 82% adequate, 5% surplus. Forage requirements from grazing dairy cattle 5%, beef cattle 17%, sheep 19%. Preparing tobacco plantbeds, top dressing small grains, liming, fertilizing, plowing, fence repair, maple syrup tapping continues.

WASHINGTON: Temperatures 6 to 12° above normal, east; 4 to 9° above normal, west. Precipitation none to 0.34 in., east; 0.50 to 1.59 in., west.

Days suitable for fieldwork 2.7. Soil moisture 69% short, 30% adequate, 1% surplus. Range, pasture 12% very poor, 57% poor, 13% fair, 18% good. Hay, other roughage 1% short, 98% adequate, 1% good. Winter wheat 37% very poor, 52% poor, 11% fair. A series of weak frontal systems moved across Washington throughout the week. The majority of precipitation was confined to western State. Temperatures were generally above normal. Winter wheat continues to look bad. Winter damage is spotty. A few grain producers have begun to replant damaged areas. Winter care continues on fruit, berry crops. Fertilizing old growth christmas trees, planting new seedlings was active between rain showers. Calving, lambing operations are going smoothly. Pastures starting to green up.

WEST VIRGINIA: Temperature 27°, 2 to 6° below normal. Extremes -2°; 56°. Precipitation above normal except in northeast which was below normal. Range 0.29 in., 1.66 in.

Days suitable for fieldwork 2.0. Soil moisture 53% adequate, 47% surplus. Wheat, barley good. Cattle good; 17% calved. Sheep good; 24% lambed. Hay supplies 70% adequate, 30% surplus. Other feeds 67% adequate, 33% surplus. Farm activities: feeding livestock, general maintenance, calving, lambing.

WISCONSIN: Temperature 16°. Extremes -19°; 42°. Temperature near normal. Wind chills -30 to -50° 15th. Snow 1.00 to 4.00 in. statewide 13th to 14th; up to 12 in. in Lake Superior snowbelt.

WYOMING: Temperatures well above normal. Precipitation below normal.

Winter wheat fair to good, drought stress reported. Additional moisture, snow cover needed. Livestock mostly good. Warm temperatures reducing stress. Calving, lambing, continuing.

International Weather and Crop Summary

HIGHLIGHTS

February 10-16, 1991

WESTERN USSR ... A warming trend reverses 2 weeks of bitter cold weather. Protective snow cover diminishes in the southern Ukraine.

NORTHWESTERN AFRICA ... Beneficial rain continues over winter grains in northern Morocco, Algeria, and Tunisia. Unfavorably dry weather continues to stress crops in southern Morocco.

EUROPE ... Unsettled weather covers the region with snow over the north and rain along Mediterranean crop areas.

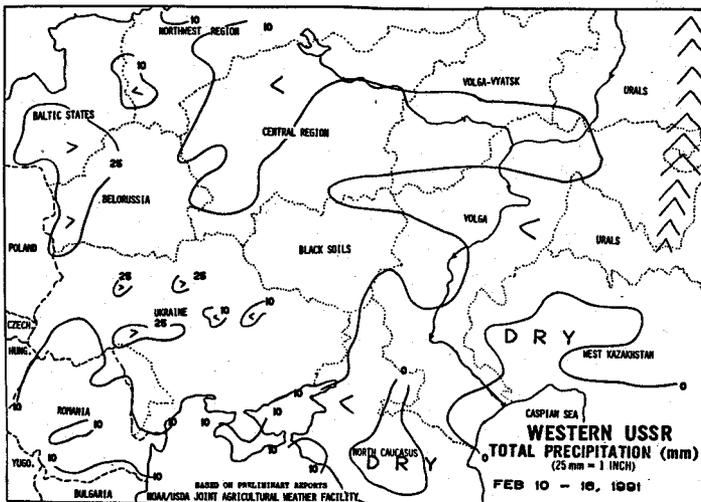
EASTERN ASIA ... Widespread rain continues over most summer crop areas. Continuing mild weather reduces the hardness of some winter wheat.

SOUTHEAST ASIA ... Seasonable showers continue over Java. Unseasonable dryness persists over most Philippine crop areas.

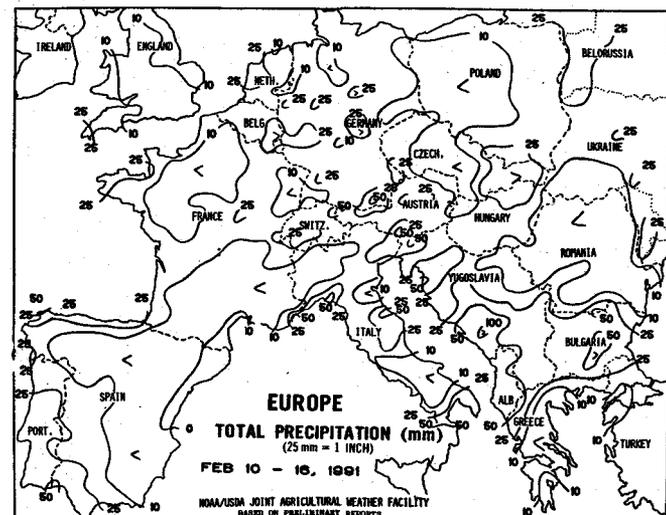
SOUTH AFRICA ... Scattered showers and seasonable temperatures benefit immature corn across the region.

SOUTH AMERICA ... In south-central Brazil, deficient moisture persists in Rio Grande do Sul while favorable conditions prevail in northern soybean areas. Cool weather and light showers dominate Argentina's summer crop area.

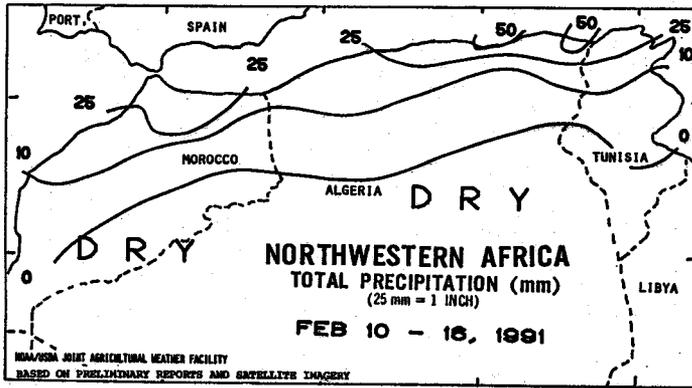
AUSTRALIA ... Heavy tropical showers soak northern Australia, while drier weather returns to eastern summer crop areas.



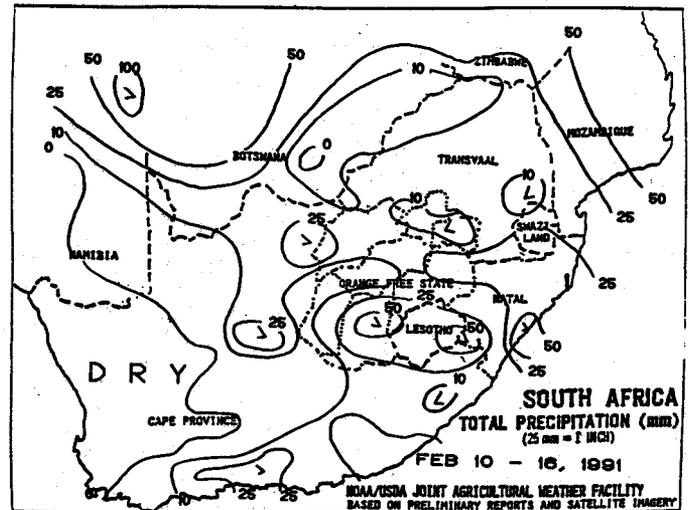
WESTERN USSR ... A warming trend covered the region, reversing a bitter cold weather pattern that had persisted over winter grain areas for the past 2 weeks. Early-week minimum temperatures, ranging from -20 to -25 degrees Celsius (C) as far south as the North Caucasus, rose to around -10 degrees C by week's end. Snow cover increased in the Baltic States, Belorussia, the Central Region, the Black Soils Region, and the northern Ukraine, where precipitation amounts generally ranged from 10 to 33mm. Snow changed to rain in the southern Ukraine, where temperatures rose above the freezing level. Precipitation amounts diminished to less than 5mm in the North Caucasus. Weekly average temperatures ranged from 2 to 3 degrees above freezing along the Black Sea Coast to 10 degrees below freezing in the Central Regions.



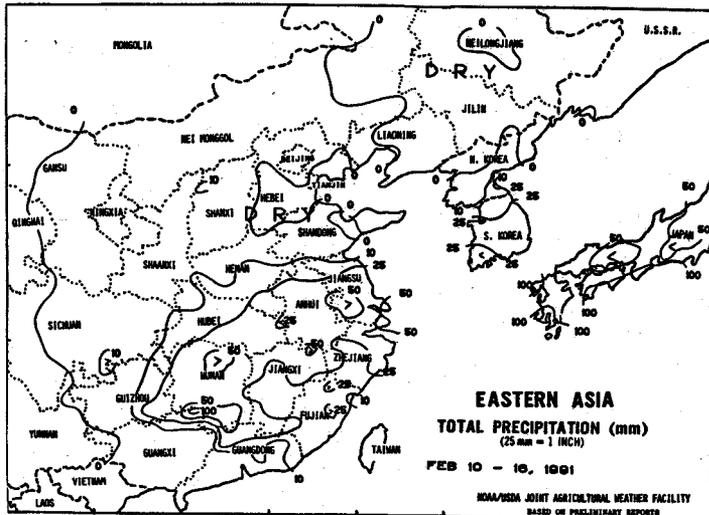
EUROPE ... Unsettled weather continued over the region. Snow spread eastward from England, through most of northern Europe, into eastern Europe. Weekly precipitation totals were highly variable but generally ranged from 10 to 25mm. Light to moderate rain (2-25mm) occurred over southern France, Spain, and Italy. Heavier precipitation (50-177mm) fell over western Yugoslavia and central Bulgaria. Light showers (2-10mm) fell in Greece. A slight warming trend occurred over winter grain areas. However, weekly average temperatures generally ranged 2-6 degrees C below normal in western and northern Europe. Weekly average temperatures were near to slightly above normal in southern Italy and southeastern Europe. Winter grains remained dormant over most of the region except in Mediterranean areas where vegetative growth occurred.



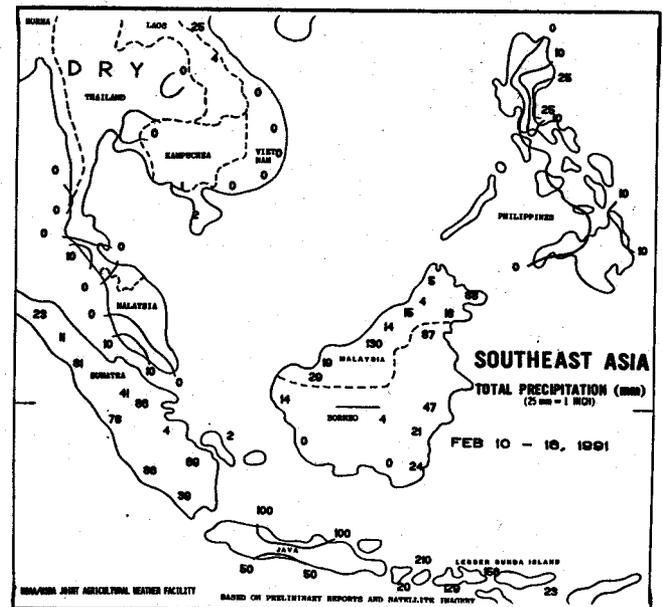
NORTHWESTERN AFRICA ... Widespread rain (10-50mm, with local accumulations reaching 73mm) continued to benefit vegetative winter grains in Algeria and Tunisia. In Morocco, showers (10-41mm) continued over northern winter grains. Further south, persistent dryness since late December has depleted moisture reserves and placed increasing stress on crops in the vegetative stage. Weekly average temperatures ranged 1-3 degrees C below normal from Morocco's northern crop regions to Tunisia and near normal over crop regions of southern Morocco.



SOUTH AFRICA ... Scattered showers and seasonable temperatures continued across the Maize Triangle, benefiting immature grains. Local accumulations exceeded 25mm in the Orange Free State, but in general, amounts were less than 20mm in the primary corn areas. Light to moderate showers (5-25mm) covered most crop areas of the Cape Province and Natal, although heavier showers (25-75mm) occurred over coastal sugarcane regions.



EASTERN ASIA ... Widespread showers (10-60mm) covered a large area of southern China, including coastal areas from eastern Guangdong to northern Jiangsu. Heaviest rain (35-60mm) was concentrated over the Yangtze Valley. In China's southern crop areas, beneficial showers in recent months have provided adequate planting moisture, although more rain is needed along the southern coast. Mild weather (temperatures 2-4 degrees C above normal) continued over China's winter wheat region. Weekly temperatures averaged 5 degrees C or more for the second week as far north as southern Shandong. The recent mild weather has caused a reduction in crop hardness in portions of the winter wheat belt, although northernmost crops are still dormant. Rainfall was seasonably light over most winter wheat areas and Manchuria, but moderate to heavy showers (25-50mm or more) covered much of South Korea and Japan.



SOUTHEAST ASIA ... Moderate to heavy showers (50-100mm or more) continued over Java, as well as many other crop regions of southern and western Indonesia. However, rainfall tapered off elsewhere across the region, including primary crop areas of Malaysia that generally received less than 25mm. Rainfall averaged less than 10mm for the second week over western Malaysia's palm oil regions. In the Philippines, light to moderate showers (10-35mm) fell over local areas of northeastern Mindanao and central Luzon. Rainfall elsewhere averaged less than 10mm. For the second year, the failure of the fall rainy season to develop normally over the eastern Philippines had created unfavorable growing conditions for grains and necessitated a timely start to the main wet season in April and May.

Cold Brushes Florida; Rain Drenches Parts of the Southeast

A chilly airmass surged into Florida at the beginning of President's Day weekend, dropping temperatures into the upper 20's as far south as Melbourne in east-central Florida (fig. 1). But by Sunday, a rapid warmup ensued as an approaching storm system turned winds to the southwest. The powerful and slow-moving storm spread rain into the Tennessee and Mississippi Valleys on Sunday. The 4-day rainfall reached nearly 9 inches in Huntsville, AL (fig. 2).

Florida largely escaped cold damage as arctic air did not have enough time to build in the frozen reaches of northern Canada before plowing southeastward. Temperatures near the center of the cold pool only reached -21° F at Warroad, MN. Florida's most serious weather-related problem possibly was wildfires, whipped by high wind, when downed power lines ignited dry brush. Ten thousand acres were reportedly charred.

Selected minimum temperatures in Florida:

Location	Saturday minimum (° F)	Sunday minimum (° F)
Jacksonville	25 *	27
Gainesville	25	26
Daytona Beach	28 *	30
Orlando	32 *	33
Tampa	33 *	36
W. Palm Beach	37 *	42
Ft. Myers	38	37

* A record low temperature tied or set for the date.

Minimum temperatures dipped into the lower 20's in southern Georgia and southern Alabama. Buds and blooms on early peach varieties may have been slightly damaged. See the "State Summaries of Weather and Agriculture" (page 8) for more details.

Preliminary River Forecast Center reports indicate that a maximum of 6 inches of rain fell in west-central Tennessee on the 17th, and that over 8 inches fell in parts of southeastern Arkansas, northeastern Louisiana, and northern Alabama on the 18th. Additional heavy rain fell in many of these areas on the 19th, resulting in widespread flooding in Louisiana, Mississippi, northern Alabama, northwestern Georgia, Tennessee, and southeastern Kentucky.

Figure 1

Minimum Temperatures for Saturday, February 16 through 7 a.m. EST

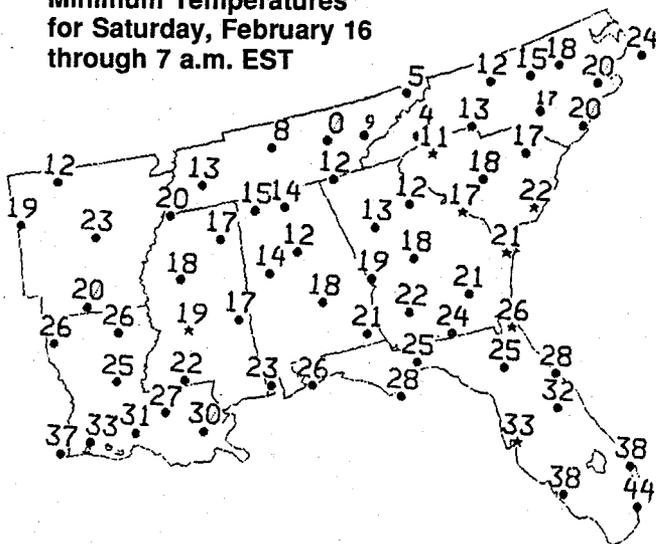
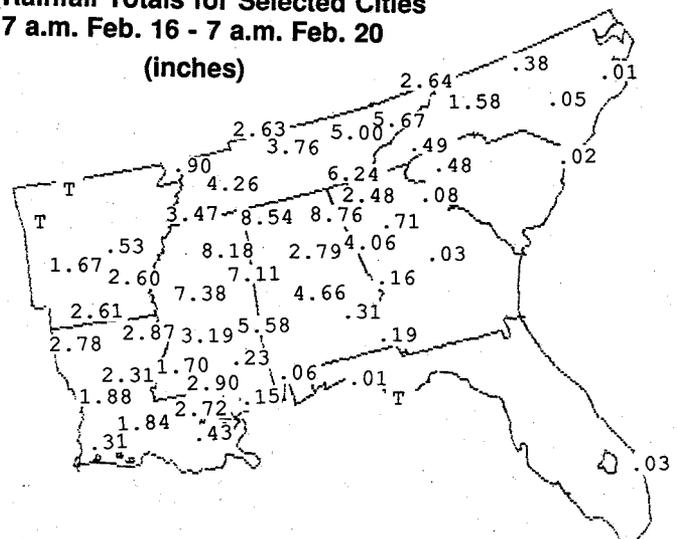


Figure 2

Rainfall Totals for Selected Cities 7 a.m. Feb. 16 - 7 a.m. Feb. 20 (inches)



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