

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

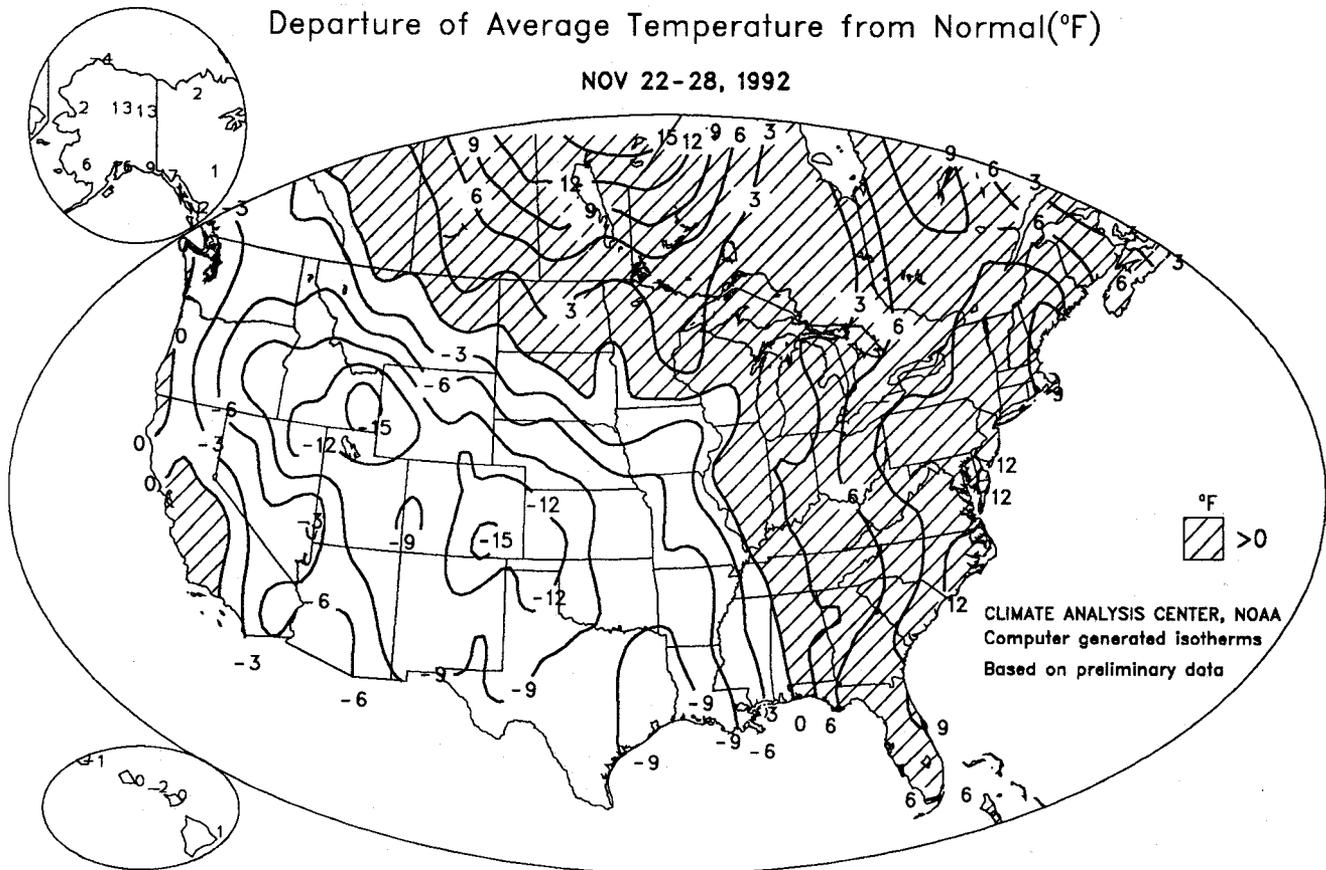
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December 1, 1992

Departure of Average Temperature from Normal(°F)

NOV 22-28, 1992



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

HIGHLIGHTS

November 22 - 28, 1992

Cold air poured southeastward through the Rockies and into the southern Plains in the wake of a major Thanksgiving-week snowstorm. Early in the week, a potent storm exited the east coast, but not before sparking another round of tornadic thunderstorms. At least 45 tornadoes were spotted during the 24-hour period ending at 5 a.m. EST on Monday morning. The lower Ohio Valley and the Southeastern States (especially AL and GA) were hardest hit by the severe weather. The storm also produced soaking rains from Missouri to the east coast. Early-week rainfall again hindered Corn Belt harvest activities. Fort Wayne, IN, collected 2.26 inches of rain on Sunday. Meanwhile, a winter storm gathered strength in the Rockies. By Monday morning, Alta, UT, at an elevation of 8,700 feet, had received 45 inches of snow in the previous 24 hours. Farther east, southerly winds

(Continued to back cover)

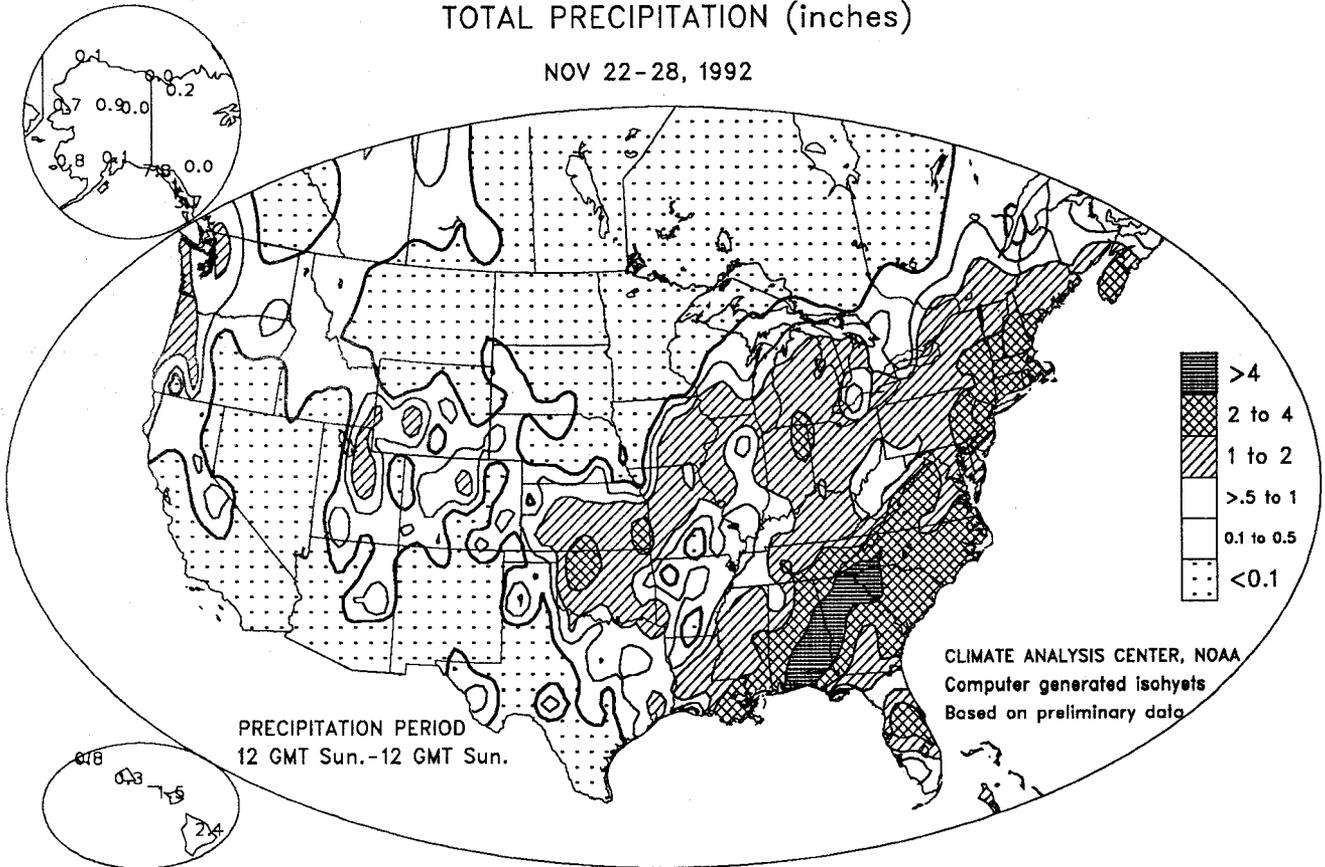
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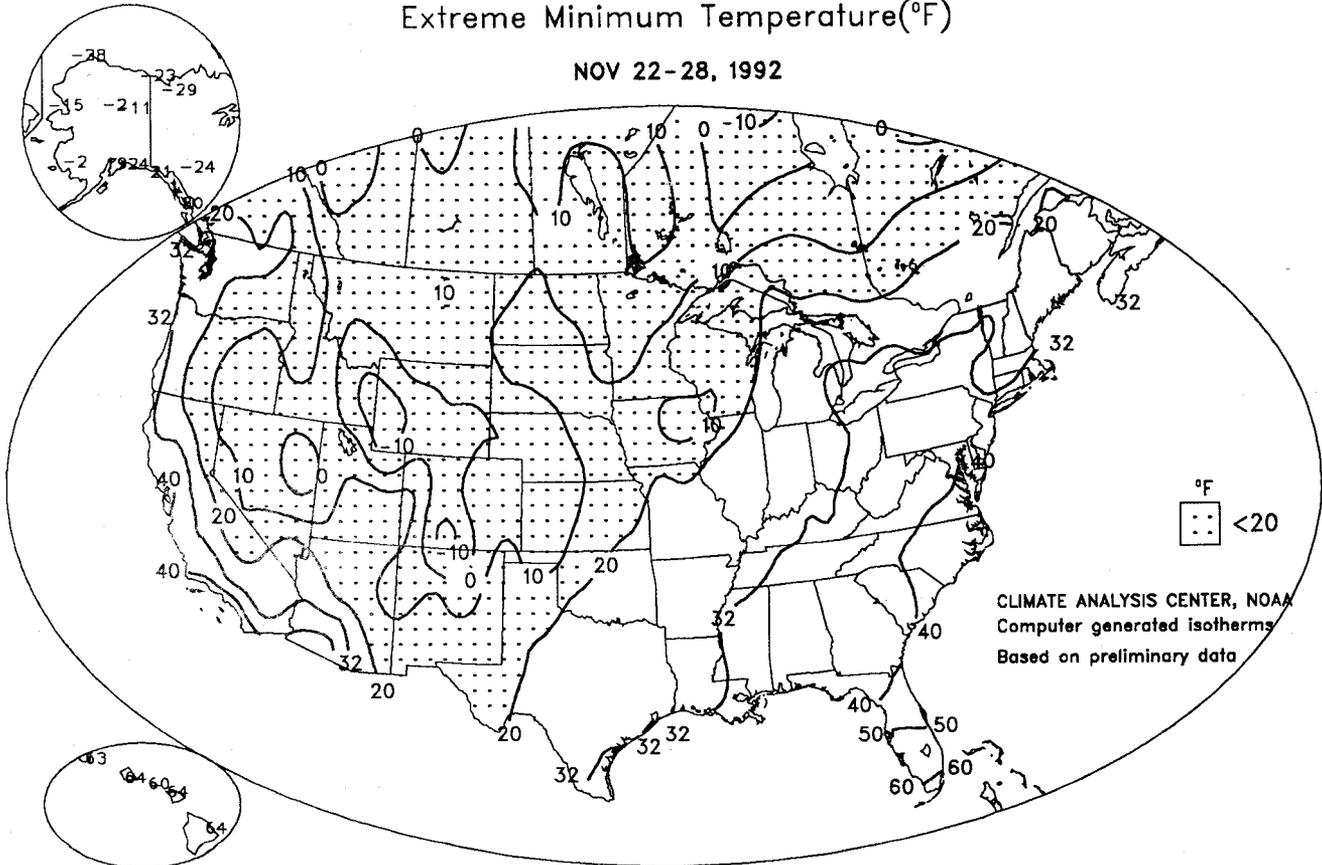
TOTAL PRECIPITATION (inches)

NOV 22-28, 1992



Extreme Minimum Temperature(°F)

NOV 22-28, 1992



Winter Weather Outlook

The National Weather Service's winter (December - February) outlook, issued on November 25, calls for at least a 55-percent probability of below-normal temperatures in an area from Colorado and eastern New Mexico through the South Central States to much of the lower Mississippi Valley (fig. 1). The best bet for subnormal temperatures, with at least a 60-percent

probability, includes the northwestern quarter of Texas. Above-normal temperatures, with at least a 55-percent probability, are expected from the northern Plains to the western Great Lakes. The highest probability for extra warmth lies along the California coast, where the probability rises to at least 65 percent.

(Continued to p. 19)

Figure 1

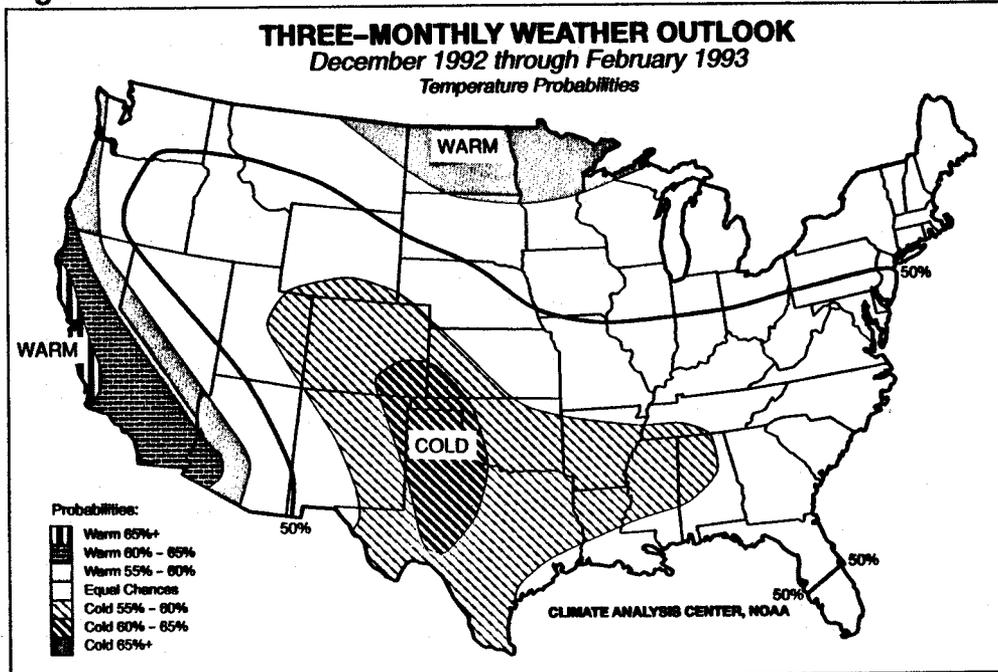
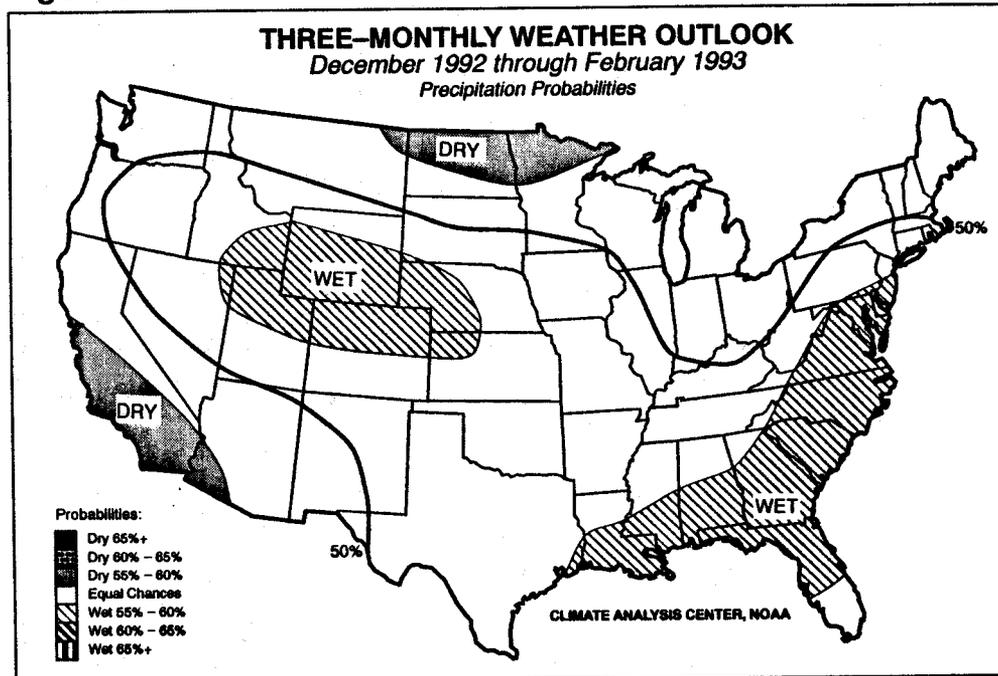


Figure 2



For information on the techniques that the Climate Analysis Center's Prediction Branch uses to prepare the long-range outlooks, see an article by A.J. Wagner entitled "Medium- and Long-Range Forecasting," published by the American Meteorological Society in its journal, *Weather and Forecasting*, Sept. 1989, pp. 413-426. For information on subscribing to their 30- and 90-day outlooks, write to: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

National Weather Data for Selected Cities

Weather Data for the Week Ending November 28, 1992

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 Sept 1	PCT. NORMAL SINCE Sept 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	43	74	36	50	1	2.4	1.4	1.4	15.8	154	51.3	104	90	57	0	0	2	2		
MOBILE	62	46	76	37	54	-2	3.2	2.2	2.6	17.0	137	65.2	111	93	58	0	0	4	1		
AK ANCHORAGE	61	46	79	37	54	1	3.6	2.7	2.0	14.4	149	57.8	131	91	64	0	0	4	3		
BARRROW	-4	-16	8	-38	-10	-4	.1	.1	.1	6.0	120	13.7	100	94	61	0	4	1	0		
FAIRBANKS	32	13	44	-4	23	25	.1	.1	T	3.1	125	11.5	119	94	78	0	7	1	0		
JUNEAU	43	34	51	24	39	8	1.8	.7	.8	25.1	133	73.1	152	95	65	0	2	3	2		
KODIAK	43	34	45	24	38	5	3.3	2.0	1.0	12.3	66	52.4	95	96	72	0	7	7	4		
NOME	20	5	31	-9	13	-1	.3	.1	.2	4.7	107	11.9	86	84	62	0	2	3	0		
AZ PHOENIX	66	43	70	40	54	-3	.0	.1	.0	.3	19	11.2	184	38	15	0	0	0	0		
PRESCOTT	50	21	55	16	35	-7	.0	.2	.0	1.2	50	18.6	159	67	19	0	7	0	0		
TUCSON	64	34	69	26	49	-7	T	.2	T	1.0	36	13.0	129	45	14	0	4	0	0		
YUMA	68	45	71	43	56	-4	.0	.1	.0	T	2	3.5	166	35	12	0	0	0	0		
AR FORT SMITH	46	34	53	20	40	-6	.8	.0	.6	12.8	132	42.6	116	92	69	0	2	3	1		
LITTLE ROCK	47	36	61	30	42	-6	.9	.2	.7	9.3	84	41.5	93	80	68	0	2	3	1		
CA BAKERSFIELD	64	41	76	37	53	0	.0	.2	.0	.9	88	6.6	135	71	35	0	0	0	0		
BUREKA	58	45	66	37	51	1	.2	-1.3	.1	4.6	50	19.9	62	86	63	0	0	4	0		
FRESNO	62	41	68	38	52	2	T	.3	T	2.2	126	11.4	131	90	42	0	0	0	0		
LOS ANGELES	70	49	74	47	60	0	.0	.4	.0	.5	28	12.4	121	59	21	0	0	0	0		
REDDING	58	38	63	30	48	-2	.4	-1.2	.3	7.2	86	27.4	81	98	43	0	1	3	0		
SACRAMENTO	60	41	66	35	51	1	.1	-1.5	.0	1.6	48	11.7	84	92	49	0	0	2	0		
SAN DIEGO	69	49	73	45	59	-1	T	.3	T	.2	14	10.2	131	72	29	0	0	2	0		
SAN FRANCISCO	61	48	65	42	54	2	.1	.6	.1	1.3	36	14.7	93	88	47	0	0	1	0		
CO DENVER	35	12	45	8	23	-12	.5	.3	.4	1.9	66	14.9	103	87	52	0	7	3	0		
GRAND JUNCTION	36	20	41	15	28	-7	T	.1	T	2.5	118	8.8	121	85	48	0	7	1	0		
PUEBLO	31	7	39	2	19	-17	T	.1	T	2.3	113	11.7	111	87	58	0	7	0	0		
CT BRIDGEPORT	55	46	67	38	51	9	2.5	1.6	1.2	12.1	120	41.8	112	92	72	0	0	5	2		
HARTFORD	53	41	72	28	47	10	1.9	.9	.9	8.6	77	37.7	95	98	74	0	1	5	1		
DC WASHINGTON	60	48	70	40	54	9	1.4	.7	1.0	8.9	103	33.6	94	90	65	0	0	5	1		
FL APALACHICOLA	73	62	79	49	67	9	.5	.3	.3	15.0	105	55.3	108	--	--	0	0	3	0		
DAYTONA BEACH	79	65	86	45	72	9	1.3	.8	.7	13.9	102	45.9	99	98	68	0	0	4	1		
JACKSONVILLE	77	60	85	39	69	9	.3	.0	.3	17.6	151	62.6	128	98	69	0	0	2	0		
KEY WEST	83	75	86	65	79	6	.5	.2	.3	13.0	92	37.0	99	88	72	0	0	5	0		
MIAMI	82	73	85	60	78	7	.2	.2	.1	22.3	127	55.9	101	91	68	0	0	4	0		
ORLANDO	81	65	87	49	73	8	2.3	1.9	1.6	15.0	137	52.1	110	97	64	0	0	4	1		
TALLAHASSEE	72	55	80	31	64	8	1.2	.3	1.0	14.0	113	61.4	103	95	64	0	1	3	1		
TAMPA	80	67	86	51	73	9	1.0	.5	1.0	8.3	83	34.7	78	95	69	0	0	2	1		
WEST PALM BEACH	82	71	86	58	77	7	.2	.4	.2	19.1	95	56.0	98	91	66	0	0	2	0		
GA ATLANTA	58	45	70	31	51	3	4.2	3.3	2.4	21.4	243	53.7	122	98	73	0	1	4	3		
AUGUSTA	67	51	76	32	59	8	1.0	.4	.6	14.9	203	49.2	124	97	63	0	1	5	1		
MACON	66	50	79	34	58	6	3.1	2.4	1.6	16.0	217	54.8	135	95	66	0	0	4	2		
SAVANNAH	72	58	81	39	65	10	2.4	1.9	1.1	17.2	189	56.9	121	96	74	0	0	5	3		
HI HILO	80	69	82	65	74	1	2.4	-1.1	1.5	34.5	112	91.3	80	95	72	0	0	4	2		
HONOLULU	82	67	86	64	75	-1	.3	.5	.2	5.4	98	12.2	62	88	56	0	0	2	0		
KAHULUI	83	68	87	64	75	1	1.5	1.0	1.3	5.7	181	13.5	88	91	59	0	0	4	1		
LIHUE	78	68	81	63	73	-1	.8	.5	.4	7.6	63	24.3	64	85	61	0	0	3	0		
ID BOISE	33	20	42	11	27	-10	.3	.0	.2	2.6	104	6.8	68	96	61	0	7	3	0		
LEWISTON	39	27	43	22	33	-4	.5	.2	.2	2.6	89	10.1	88	82	53	0	6	3	0		
POCATELLO	25	3	35	-12	14	-17	.3	.2	.2	2.4	102	7.2	74	93	65	0	7	3	0		
IL CHICAGO	41	32	46	22	37	1	1.0	.4	.5	11.6	145	27.7	87	97	78	0	3	4	1		
MOLINE	39	30	41	19	34	0	1.5	1.0	1.0	13.0	159	35.9	103	95	75	0	3	4	1		
PEORIA	41	33	46	24	37	2	.7	.2	.5	12.7	161	29.6	90	96	80	0	3	2	0		
QUINCY	40	32	43	23	36	-1	1.3	.9	.7	10.7	115	28.2	79	90	72	0	3	2	2		
ROCKFORD	38	29	41	18	34	1	1.1	.6	.7	11.1	127	28.2	82	95	73	0	3	3	1		
SPRINGFIELD	44	36	53	28	40	2	1.1	.7	.8	9.1	121	27.1	85	94	78	0	3	4	1		
IN EVANSVILLE	49	38	73	26	44	3	.9	.1	.7	8.4	101	34.1	90	91	62	0	2	4	1		
FORT WAYNE	41	36	49	28	39	3	2.4	1.8	2.3	16.5	220	41.9	131	95	80	0	3	5	1		
INDIANAPOLIS	45	37	65	29	41	3	1.8	1.1	1.7	14.1	175	42.3	118	93	77	0	3	5	1		
SOUTH BEND	42	35	49	29	39	3	.6	-1.1	.5	15.4	171	34.1	98	93	76	0	3	3	0		
IA DES MOINES	34	25	38	10	29	-4	1.3	1.0	1.2	10.5	161	31.4	106	95	79	0	5	2	1		
SIOUX CITY	35	24	42	16	30	-1	T	.2	T	7.5	149	29.2	119	96	66	0	7	1	0		
WATERLOO	33	20	38	2	27	-3	.9	.5	.8	8.5	117	29.3	93	99	86	0	4	3	1		
KS CONCORDIA	32	22	36	13	27	-9	.4	.2	.3	9.8	170	39.9	151	92	76	0	7	2	0		
DODGE CITY	31	18	37	7	25	-14	.7	.6	.5	2.7	73	20.7	104	96	72	0	7	3	1		
GOODLAND	31	13	36	6	22	-13	-1	.0	.1	5.2	185	25.5	163	89	69	0	7	2	0		
TOPEKA	36	27	41	19	32	-6	.8	.5	.5	10.6	136	33.9	106	95	74	0	6	3	0		
WICHITA	38	24	49	17	31	-9	.7	.5	.6	10.1	140	33.3	121	96	75	0	6	3	1		
KY BOWLING GREEN	51	39	74	31	45	2	1.2	.2	.7	10.0	103	35.9	81	95	62	0	2	4	1		
LEXINGTON	50	39	69	30	45	3	.7	.2	.3	7.6	88	47.3	113	93	69	0	2	4	0		
LOUISVILLE	51	41	74	32	46	4	1.3	.5	1.1	9.1	100	39.1	98	95	62	0	1	5	1		
LA BATON ROUGE	56	41	67	29	49	-7	.5	.6	.3	10.7	101	65.5	129	97	63	0	1	2	0		
LAKE CHARLES	55	40	62	28	47	-10	.9	.2	.8	13.2	100	58.8	121	97	63	0	2	2	1		
NEW ORLEANS	60	47	73	40	53	-4	4.5	3.4	3.0	22.4	185	76.4	141	89	59	0	0	3	3		
SHREVEPORT	50	35	60	23	42	-10	.3	.7	.2	14.0	148	45.6	115	89	60	0	2	2	0		

Based on 1951-80 normals.

Weather Data for the Week Ending November 28, 1992

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 Sept 1	PCT. NORMAL SINCE Sept 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
ME CARIBOU	39	30	52	24	34	8	4	-3	.3	6.6	69	34.7	105	91	69	0	6	4	5	0		
PORTLAND	49	35	64	27	42	8	2.3	1.2	1.1	10.0	87	36.4	94	99	74	0	2	4	5	0		
MD BALTIMORE	59	47	69	40	53	10	5.5	2.2	1.2	11.3	120	33.5	88	96	70	0	0	5	4	0		
MD SALISBURY	65	50	76	43	58	13	1.4	7	1.1	11.9	114	40.7	98	93	71	0	0	4	5	1		
MA BOSTON	55	43	63	38	49	8	4.5	3.5	3.3	11.2	105	35.5	91	98	77	0	0	5	5	2		
MA CHATHAM	52	45	57	40	48	7	1.4	3	9	6.7	58	33.6	81	95	84	0	0	4	1	1		
MI ALPENA	38	32	45	30	35	4	8	3	3	8.8	122	25.1	93	97	80	0	0	5	5	0		
MI DETROIT	44	37	49	32	41	6	9	3	7	11.9	184	35.0	124	95	79	0	1	5	1	1		
MI FLINT	41	36	47	32	39	4	1.3	7	1.0	9.0	139	34.9	130	94	83	0	1	5	1	1		
MI GRAND RAPIDS	41	34	45	31	37	3	1.1	4	5	13.5	158	38.8	126	93	71	0	1	4	1	1		
MI HOUGHTON LAKE	36	31	41	28	34	3	1.3	8	8	11.2	158	27.6	106	95	80	0	5	5	1	1		
MI LANSING	40	34	46	30	37	3	9	3	6	9.3	132	32.7	120	95	82	0	1	5	1	1		
MI MARQUETTE	33	23	42	15	28	3	1	5	1	9.7	98	29.0	84	94	81	0	7	4	0	1		
MI MUSKEGON	41	34	45	31	37	2	1.2	5	8	12.3	147	27.1	95	94	77	0	2	4	1	1		
MI SAULT ST. MARIE	34	26	37	20	30	2	4	3	3	14.0	144	32.3	106	90	70	0	7	2	0	0		
MN ALEXANDRIA	29	19	35	9	24	1	4	2	2	2.1	41	17.5	73	94	76	0	7	0	0	0		
MN DULUTH	32	20	39	12	26	3	3	3	3	6.9	99	27.5	98	90	69	0	7	1	0	0		
MN INT'L FALLS	28	17	39	6	23	4	4	4	4	3.7	61	21.8	94	93	70	0	7	0	0	0		
MN MINNEAPOLIS	35	25	41	16	30	3	3	3	3	9.2	168	28.6	113	87	68	0	7	0	0	0		
MN ROCHESTER	34	24	37	16	29	2	4	3	3	10.3	147	25.8	94	93	68	0	7	0	0	0		
MS GREENWOOD	53	41	71	34	47	-3	1.2	0	9	9.5	92	41.0	86	89	55	0	0	2	1	1		
MS JACKSON	55	42	70	35	49	-3	2.6	1.5	1.5	13.4	140	43.9	95	92	58	0	0	3	2	2		
MS MERIDIAN	57	43	73	36	50	-2	2.5	1.5	1.3	13.6	145	59.4	125	92	57	0	0	3	1	1		
MO CAPE GIRARDEAU	46	37	63	28	42	-1	8	7	7	13.9	145	36.8	90	92	66	0	2	3	1	1		
MO COLUMBIA	40	31	47	21	36	-4	1.8	1.3	1.5	13.2	145	31.6	91	95	77	0	3	3	1	1		
MO KANSAS CITY	37	28	40	20	32	-8	1.0	7	4	12.2	135	46.9	136	95	74	0	6	3	0	0		
MO SAINT LOUIS	41	31	53	27	40	0	1.3	7	1.2	10.5	144	29.8	95	87	68	0	3	3	1	1		
MO SPRINGFIELD	39	21	45	21	36	-5	1.2	6	1.0	17.3	171	43.8	119	94	75	0	3	3	1	1		
MT BILLINGS	35	19	48	12	30	-3	4	2	2	1.4	43	11.0	78	69	35	0	7	1	0	0		
MT GLASGOW	39	20	49	11	27	-3	1	0	0	1.8	105	8.9	85	92	60	0	7	2	0	0		
MT GREAT FALLS	38	20	48	11	29	-2	1	1	1	3.1	128	14.2	100	75	39	0	7	2	0	0		
MT HAVRE	34	14	46	2	24	-2	4	1	1	2.4	120	8.6	77	87	61	0	7	1	0	0		
MT HELENA	35	14	44	5	25	-3	4	1	1	2.2	106	8.8	81	84	43	0	7	1	0	0		
MT KALISPELL	30	17	37	9	24	-5	3	0	1	3.3	101	15.1	107	91	65	0	7	3	0	0		
MT MILES CITY	37	19	47	10	28	-1	1	1	1	3.0	119	14.3	105	89	53	0	7	1	0	0		
MT MISSOULA	28	15	39	6	21	-8	3	1	2	1.8	67	10.4	87	92	72	0	7	3	0	0		
NE GRAND ISLAND	32	21	39	10	27	-6	4	1	1	5.1	120	30.3	136	89	63	0	7	1	0	0		
NE LINCOLN	33	22	35	10	27	-6	4	1	1	5.7	105	24.8	95	95	71	0	7	2	0	0		
NE NORFOLK	35	23	44	15	29	-2	1	0	0	7.3	182	28.2	123	93	62	0	7	2	0	0		
NE NORTH PLATTE	33	15	43	2	24	-7	1	0	1	1.4	46	22.7	121	93	65	0	7	2	0	0		
NE OMAHA	34	24	37	17	29	-5	2	1	2	9.8	147	34.1	116	93	72	0	7	1	0	0		
NE SCOTTSSBLUFF	33	9	48	-3	21	-11	6	5	3	2.1	90	14.9	106	92	62	0	7	3	0	0		
NV VALENTINE	33	13	40	4	23	-7	2	1	1	2.2	86	18.1	108	88	64	0	7	2	0	0		
NV BLY	37	8	51	-4	22	-8	1	0	0	1.8	96	8.9	109	79	42	0	7	4	0	0		
NV LAS VEGAS	56	36	62	29	46	-3	0	1	0	1.2	128	8.2	220	41	18	0	1	0	0	0		
NV RENO	47	24	56	16	35	-1	4	2	2	5	46	3.5	58	76	32	0	6	1	0	0		
NV WINNEMUCCA	41	21	45	15	31	-4	1	1	1	9	54	2.8	42	84	46	0	6	2	0	0		
NH CONCORD	49	35	65	22	42	9	1.5	7	6	8.5	87	27.5	83	99	77	0	2	4	1	1		
NJ ATLANTIC CITY	61	46	74	33	54	11	6	2	4	9.4	101	33.0	87	95	71	0	0	5	0	0		
NM ALBUQUERQUE	40	19	44	15	30	-10	4	1	1	2.7	135	11.0	148	80	42	0	7	0	0	0		
NM CLOVIS	45	22	54	18	33	-10	1	1	1	1.5	37	19.6	119	88	37	0	7	2	0	0		
NM ROSWELL	52	22	58	16	37	-7	4	1	1	7	22	12.6	124	85	28	0	6	0	0	0		
NY ALBANY	50	41	58	33	45	10	1.1	4	4	8.9	99	28.3	87	98	76	0	0	5	0	0		
NY BINGHAMTON	48	38	59	33	43	10	1.1	4	6	10.8	117	38.1	113	94	76	0	0	3	1	1		
NY BUFFALO	48	39	55	37	44	7	9	1	5	13.2	138	43.7	130	94	78	0	0	6	0	0		
NY NEW YORK	58	48	70	40	53	10	2.3	1.4	1.1	8.9	88	32.0	82	90	65	0	0	5	2	2		
NY ROCHESTER	47	39	57	36	43	6	8	2	5	7.6	99	33.2	116	97	81	0	0	3	0	0		
NY SYRACUSE	50	39	59	33	45	8	1.3	5	7	11.0	115	41.1	116	94	76	0	0	5	1	1		
NC ASHEVILLE	57	42	67	36	50	6	3.0	2.2	1.2	14.5	149	50.3	124	97	69	0	0	5	3	3		
NC CHARLOTTE	61	50	71	39	55	8	2.3	1.6	8	20.0	225	50.7	129	95	69	0	0	4	2	2		
NC GREENSBORO	59	48	69	41	53	8	1.6	1.0	6	12.8	140	41.5	107	97	72	0	0	5	2	2		
NC HATTERAS	71	61	76	52	66	12	1.9	8	1.1	14.8	98	56.2	110	97	80	0	0	5	1	1		
NC NEW BERN	70	56	83	46	63	12	3.6	2.8	1.8	9.0	76	47.2	96	97	72	0	0	3	2	2		
NC RALEIGH	63	51	73	39	57	10	1.9	1.2	8	11.0	128	40.8	106	99	71	0	0	6	1	1		
NC WILMINGTON	72	58	81	42	65	12	3.6	2.9	2.3	12.4	108	61.7	124	98	70	0	0	4	2	2		
ND BISMARCK	35	18	44	9	26	3	1	0	1	2.4	94	12.2	83	90	62	0	7	1	0	0		
ND FARGO	28	18	31	7	23	1	4	2	2	4.5	119	19.9	106	91	74	0	7	1	0	0		
ND GRAND FORKS	29	17	31	9	23	3	4	2	2	2.5	64	16.3	93	92	74	0	7	0	0	0		
ND WILLISTON	31	14	35	8	23	0	1	0	1	2.0	81	12.0	93	96	74	0	7	1	0	0		
OH AKRON-CANTON	50	40	62	31	45	8	1.2	6	5	10.9	145	42.9	130	95	62	0	1	4	1	1		
OH CINCINNATI	48	39	68	30	44	4	1.3	6	1.0	8.6	104	36.1	98	92	67	0	2	3	1	1		
OH CLEVELAND	49	40	61	33	45	7	1.4	8	1.2	12.1	153	44.2	137	95	78	0	0	6	1	1		
OH COLUMBUS	51	42	66	33	46	8	1.1	4	6	7.4	105	38.1	112	98	75	0	0	5	1	1		
OH DAYTON	47	38	66	29	42	4	1.3	7	1.1	8.9	130	39.0	122	94	74	0	2	3	1	1		

Based on 1951-80 normals.

Weather Data for the Week Ending November 28, 1992

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 Sept 1	PCT. NORMAL SINCE Sept 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		
TOLEDO	44	37	50	30	40	5	1.1	.5	1.0	10.2	153	33.5	116	93	80	0	1	4	1	0	1	
YOUNGSTOWN	51	41	61	33	46	9	1.0	.3	.5	11.1	134	39.0	114	98	78	0	0	4	4	0	1	
OK OKLAHOMA CITY	43	29	58	20	36	-9	1.0	.7	.6	12.1	161	40.3	136	93	65	0	4	3	3	0	1	
TULSA	43	31	54	24	37	-8	1.2	.7	.7	11.0	109	38.3	104	94	67	0	1	4	1	2	1	
OR ASTORIA	51	38	54	29	44	-1	2.0	.6	1.6	15.6	82	41.4	72	88	61	0	4	4	1	1	1	
BURNS	33	12	38	3	22	-10	.7	.3	2.2	93	8.3	96	85	41	0	2	2	2	0	0	0	
MEDFORD	54	35	60	28	45	4	.7	.7	4.1	79	11.5	72	100	55	0	7	2	3	0	0	0	
PENDLETON	36	27	46	22	32	-7	.2	.2	2.8	96	7.9	76	95	74	0	6	0	2	2	0	0	
PORTLAND	48	37	51	34	43	0	.6	.5	7.9	83	23.5	77	84	59	0	0	2	2	0	0	0	
SALEM	50	34	57	25	42	-1	.7	.8	8.3	80	24.8	76	86	64	0	2	2	2	0	0	0	
PA ALLENTOWN	55	41	67	30	48	10	2.3	1.4	10.0	10.4	99	35.5	88	95	65	0	2	5	5	2	2	
ERIE	51	42	58	35	46	9	1.3	.4	.5	16.1	145	40.6	111	96	80	0	0	6	0	0	0	
HARRISBURG	55	44	66	34	50	10	1.8	1.0	1.5	12.0	128	30.6	86	94	61	0	0	2	1	1	0	
PHILADELPHIA	60	49	70	41	55	12	1.4	.6	.6	7.5	81	25.8	69	85	60	0	0	5	1	1	0	
PITTSBURGH	52	43	63	34	48	10	.7	.2	.5	7.7	104	33.8	101	93	68	0	0	4	0	0	0	
SCRANTON	55	44	65	32	49	13	1.0	.3	.4	8.1	92	26.6	83	93	66	0	1	5	0	0	0	
RI PROVIDENCE	56	43	68	34	50	10	2.7	1.7	1.2	11.6	104	40.5	100	97	76	0	0	5	5	2	2	
SC CHARLESTON	72	58	80	40	65	11	3.6	3.1	2.8	13.7	141	52.5	109	98	75	0	0	5	1	0	0	
COLUMBIA	67	51	74	34	59	8	.9	.3	3.3	12.9	142	46.8	103	97	64	0	0	5	0	0	0	
FLORENCE	67	55	77	41	61	9	2.7	2.1	.9	13.8	164	46.2	113	97	68	0	0	5	2	2	2	
GREENVILLE	59	46	69	37	52	4	2.9	2.2	1.6	18.4	169	55.4	118	96	73	0	0	4	2	2	2	
SD ABERDEEN	33	21	41	14	27	2	T	-1	T	3.6	120	16.6	97	91	68	0	7	1	0	0	0	
HURON	34	22	43	14	28	1	T	-1	T	3.9	117	22.2	124	93	63	0	7	1	0	0	0	
RAPID CITY	40	17	52	10	28	-2	.1	.0	.1	1.5	67	13.0	83	91	52	0	7	3	0	0	0	
SIOUX FALLS	34	22	43	13	28	0	T	-2	T	6.8	134	31.7	137	88	63	0	7	0	0	0	0	
TN CHATTANOOGA	57	45	71	36	51	5	2.1	1.0	1.3	15.1	135	50.3	106	92	66	0	0	3	2	2	2	
KNOXVILLE	56	44	70	37	50	4	1.6	.6	.8	9.1	99	37.5	89	94	70	0	0	3	2	2	2	
MEMPHIS	51	39	70	28	45	-3	1.0	-1	.6	11.6	118	43.2	93	89	60	0	1	2	1	0	0	
NASHVILLE	52	42	73	33	47	2	1.6	.7	.6	9.6	101	37.0	85	90	59	0	0	3	2	2	2	
TX ABILENE	53	30	68	22	42	-8	.1	-1	-1	5.6	85	26.9	120	85	37	0	5	2	0	0	0	
AMARILLO	38	19	54	10	29	-13	-2	-1	.2	1.2	35	20.1	109	90	54	0	6	1	0	0	0	
AUSTIN	60	37	68	26	49	-7	.2	-3	.2	7.1	80	42.8	147	84	33	0	2	2	0	0	0	
BEAUMONT	55	39	62	28	47	-10	-1	-1.0	-1	11.9	91	58.7	117	93	55	0	2	1	0	0	0	
BROWNSVILLE	68	47	81	34	58	-8	T	-2	T	8.6	86	29.5	123	87	39	0	0	0	0	0	0	
CORPUS CHRISTI	64	43	76	33	53	-9	T	-3	T	9.7	92	40.4	136	85	39	0	0	0	0	0	0	
DEL RIO	64	37	72	27	51	-5	T	-1	T	1.9	34	20.1	121	61	21	0	2	0	0	0	0	
EL PASO	53	26	58	17	39	-9	T	.0	T	.7	30	10.1	140	73	25	0	5	1	0	0	0	
FORT WORTH	53	35	65	28	44	-8	.5	.0	.5	9.9	119	38.1	130	85	50	0	2	1	0	0	0	
GALVESTON	57	46	65	35	52	-8	-1	-1.8	-1	12.5	109	48.8	133	79	52	0	0	1	0	0	0	
HOUSTON	58	37	65	27	47	-10	-1	-1.7	-1	8.1	66	48.9	115	92	52	0	2	2	0	0	0	
LUBBOCK	49	25	61	19	37	-8	-1	.0	-1	2.2	50	21.1	123	83	35	0	6	1	0	0	0	
MIDLAND	54	25	65	18	39	-9	T	-1	T	.9	22	20.8	160	82	29	0	6	1	0	0	0	
SAN ANGELO	57	32	69	23	45	-7	.2	.0	-1	2.6	43	20.3	117	78	30	0	4	2	0	0	0	
SAN ANTONIO	63	35	70	24	49	-8	T	-5	T	5.5	63	44.3	161	85	29	0	3	1	0	0	0	
VICTORIA	62	39	76	28	50	-10	-1	-1.4	-1	8.7	76	49.3	142	91	45	0	2	1	0	0	0	
WACO	56	35	67	26	46	-8	.3	-2	.3	7.8	94	35.3	123	89	45	0	3	1	0	0	0	
WICHITA FALLS	49	30	68	24	40	-9	-6	-3	.3	6.4	89	26.8	106	94	54	0	4	2	0	0	0	
UT CEDAR CITY	39	15	50	9	27	-8	-1	-1	.0	1.9	75	10.3	108	89	44	0	7	2	0	0	0	
SALT LAKE CITY	33	16	40	7	25	-11	.5	.2	.3	4.0	127	11.0	80	95	59	0	7	3	0	0	0	
VT BURLINGTON	47	39	56	36	43	11	1.3	.6	.9	11.3	131	29.8	96	95	73	0	0	4	1	1	0	
VA NORFOLK	68	54	81	44	61	12	2.4	1.7	1.8	9.2	90	44.1	106	93	65	0	0	4	1	1	0	
RICHMOND	64	51	74	42	57	12	1.2	.5	.7	6.9	67	38.9	96	91	64	0	0	6	1	0	0	
ROANOKE	57	44	68	35	51	7	2.9	2.4	1.8	9.5	106	40.3	112	95	67	0	0	4	2	2	2	
WA QUILLAYUTE	51	36	58	30	44	1	1.2	-2.2	.9	27.1	93	79.3	90	95	65	0	2	4	1	1	0	
SEATTLE-TACOMA	49	37	53	31	43	1	.4	-1.0	.4	8.9	83	28.5	89	78	48	0	2	2	0	0	0	
SPOKANE	31	20	37	15	26	-6	.3	-2	.1	4.2	113	12.4	89	97	78	0	7	4	0	0	0	
YAKIMA	37	23	41	16	30	-5	-1	-2	-1	1.9	112	5.9	91	94	72	0	7	1	0	0	0	
WV BECKLEY	52	41	66	31	47	8	.4	-3	.3	5.0	56	34.0	87	92	72	0	2	3	0	0	0	
CHARLESTON	56	43	73	35	50	7	.7	.0	.6	5.5	66	36.6	94	89	65	0	0	2	1	1	0	
HUNTINGTON	54	43	66	34	49	6	.9	.2	.5	5.4	68	34.6	92	90	69	0	0	3	0	0	0	
PARKERSBURG	54	43	70	35	49	7	.8	.2	.4	6.5	86	32.8	94	94	70	0	0	3	0	0	0	
WI GREEN BAY	35	24	38	11	30	0	.4	.0	.2	12.1	177	28.3	107	95	73	0	6	4	0	0	0	
LACROSSE	34	24	38	16	29	-1	.4	.0	.4	10.6	155	29.7	103	94	69	0	7	1	0	0	0	
MADISON	35	25	39	14	30	0	1.0	.6	.5	11.9	172	29.8	103	92	76	0	5	3	1	1	0	
MILWAUKEE	39	30	42	9	35	2	.8	.4	.4	11.1	160	31.7	110	94	74	0	3	5	0	0	0	
WAUSAU	35	21	38	9	28	1	.5	.1	.3	13.7	178	31.6	104	98	74	0	7	2	0	0	0	
WY CASPER	30	16	43	4	23	-6	.5	.4	.3	1.4	64	8.5	79	80	58	0	7	4	0	0	0	
CHEYENNE	31	15	39	7	23	-9	.7	.6	.6	2.2	97	12.4	96	79	53	0	7	3	1	1	0	
LANDER	23	5	40	-7	14	-13	1.1	.9	.6	2.1	75	12.3	99	83	63	0	7	4	1	1	0	
SHERIDAN	33	12	41	1	23	-6	T	-2	T	2.1	67	13.2	93	86	57	0	7	0	0	0	0	

Based on 1951-80 normals.

HEATING DEGREE DAYS (Base 65° F) November 22 - 28, 1992

(Cumulative totals and departures from normal are for the period July 1 - November 28, 1992)

STATES AND STATIONS	WEEKLY			CUMULATIVE			STATES AND STATIONS	WEEKLY			CUMULATIVE							
	TOTAL	DEPARTURE	DEP. from '91	TOTAL	DEPARTURE	DEP. from '91		TOTAL	DEPARTURE	DEP. from '91	TOTAL	DEPARTURE	DEP. from '91					
AL BIRMINGHAM	103	-6	-89	469	-29	-89	SHREVEPORT	156	71	373	30	-73	DAYTON	156	-30	1118	75	-32
MOBILE	78	17	-122	253	4	-122	ME CARIBOU	212	-60	2197	36	216	TOLEDO	169	-38	1314	58	55
MONTGOMERY	78	-10	-111	338	-28	-111	PORTLAND	158	-55	1601	76	212	YOUNGSTOWN	133	-66	1420	147	143
AK ANCHORAGE	201	-126	211	3230	94	211	MD BALTIMORE	84	-70	863	60	02	OK OKLAHOMA CITY	200	61	634	31	-113
BARROW	521	26	-7	6198	111	-7	MA BOSTON	53	-89	800	51	19	TULSA	192	57	675	79	-18
FAIRBANKS	295	-172	228	4219	270	228	CHATHAM	111	-53	1161	202	205	OR ASTORIA	143	3	1388	1	56
JUNEAU	184	-58	-50	2552	-150	-50	MI ALPENA	116	-45	1146	80	203	BURNS	298	68	1909	282	308
KODIAK	184	-43	197	2737	33	197	Detroit	207	-30	2053	275	272	MEDFORD	140	-28	784	-260	61
NOME	363	-8	1021	4504	405	1021	FLINT	167	-39	1343	91	110	PENDLETON	233	49	1179	-26	71
AZ FLAGSTAFF	266	45	194	1572	-115	194	GRAND RAPIDS	183	-27	1531	164	87	PORTLAND	152	1	880	-190	94
PHOENIX	73	20	00	111	-43	00	HOUGHTON LAKE	190	-23	1537	202	71	SALEM	160	5	932	-245	50
PRESCOTT	206	39	57	798	-154	57	LANSING	217	-23	1916	151	155	PA ALLENTOWN	115	-68	1215	138	160
TUCSON	111	46	19	233	21	19	MARQUETTE	192	-21	1647	294	126	ERIE	130	-65	1184	-81	60
WINSLOW	247	64	60	975	86	60	MUSKEGON	257	-19	2508	363	149	HARRISBURG	107	-65	1078	118	99
YUMA	58	27	36	73	-15	36	SAULT ST MARIE	192	-15	1515	187	90	PHILADELPHIA	71	-87	817	-16	42
AR FORT SMITH	172	42	-108	557	-15	-108	MN ALEXANDRIA	241	-15	2354	324	343	PITTSBURGH	121	-67	1191	40	56
LITTLE ROCK	163	44	-97	500	-19	-97	DULUTH	272	-21	2427	246	-32	SCRANTON	108	-86	1271	41	52
CA BAKERSFIELD	84	-1	-47	246	-45	-47	INT'L FALLS	295	-27	2526	183	-21	RI PROVIDENCE	104	-72	1128	68	172
EUREKA	93	-9	-147	1091	-389	-147	MINNEAPOLIS	243	-14	1732	182	-171	SC CHARLESTON	26	-50	245	-69	-82
FRESNO	92	-14	-8	301	-111	-8	ROCHESTER	250	-12	1923	284	-128	COLUMBIA	44	-52	429	-3	-57
LOS ANGELES	36	-6	-30	57	-182	-30	SAINT CLOUD	260	-24	2044	205	-67	FLORENCE	33	-57	374	-19	-62
REDDING	98	-4	15	333	-73	15	MS GREENWOOD	122	21	375	-91	-134	GREENVILLE	88	-30	661	105	39
SACRAMENTO	97	-9	-20	324	-90	-20	JACKSON	112	24	363	-24	-111	SD ABERDEEN	264	-15	1925	202	07
SAN DIEGO	32	-2	-106	50	-96	-106	MERIDIAN	104	10	354	-76	-122	HURON	258	-6	1796	176	-25
SAN FRANCISCO	72	-15	-16	350	-358	-16	MO CAPE GIRARDEAU	163	7	774	19	-76	RAPID CITY	255	18	1663	111	-40
STOCKTON	95	-10	-95	288	-107	-95	COLUMBIA	204	27	1026	113	-83	ST LOUIS	259	2	1711	152	-143
CO DENVER	288	83	-28	1277	-1	-28	KANSAS CITY	228	46	1064	163	-103	TX CHATTANOOGA	95	-38	634	-10	-38
GRAND JCT.	257	48	75	1048	-41	75	SAINT LOUIS	174	5	815	-44	-97	KNOXVILLE	106	-27	687	26	-52
PUEBLO	319	122	131	1377	256	131	SPRINGFIELD	201	37	844	12	-106	MEMPHIS	141	24	477	-48	-108
CT BRIDGEPORT	98	-64	224	1015	146	224	MT BILLINGS	244	10	1550	-21	-88	NASHVILLE	124	-12	611	-52	-120
HARTFORD	124	-67	68	1330	186	68	GLASGOW	264	-20	1916	5	-28	TX ABILENE	162	59	390	-35	-170
DE WILMINGTON	81	-79	77	905	54	77	GREAT FALLS	252	11	1897	143	66	AMARILLO	253	93	890	107	-88
DC WASHINGTON	76	-62	-124	763	106	-124	HAVRE	283	6	2019	87	33	AUSTIN	114	49	239	1	-79
FL APALACHICOLA	35	-13	-69	129	-35	-69	HELENA	278	20	1887	-83	83	BEAUMONT	124	68	246	39	-47
DAYTONA BEACH	12	-17	-28	42	-31	-28	KALISPELL	287	30	2110	-74	-20	BROWNSVILLE	56	38	77	28	-45
FORT MYERS	7	-2	-99	7	-14	-99	MILES CITY	257	-4	1600	-85	-172	CORPUS CHRISTI	80	45	126	9	-53
JACKSONVILLE	25	-28	-94	136	-36	-94	MISSOULA	305	52	1938	-27	176	DEL RIO	100	39	215	5	-71
KEY WEST	0	0	-8	0	0	-8	NE GRAND ISLAND	268	46	1432	164	-33	EL PASO	179	61	469	1	-5
MIAMI	0	-3	-60	0	-3	-60	LINCOLN	262	45	1306	128	-105	FORT WORTH	146	60	342	15	-130
ORLANDO	10	-8	-145	25	-17	-145	NORFOLK	251	16	1482	108	-133	GALVESTON	91	49	157	20	-63
TALLAHASSEE	41	-22	-58	187	-40	-58	NORTH PLATTE	285	47	1550	88	-4	HOUSTON	122	63	245	26	-58
TAMPA	9	-12	-31	35	-22	-31	OMAHA	249	39	1321	205	-146	LUBBOCK	197	60	590	-33	-181
W. PALM BEACH	2	-5	-31	2	-5	-31	SCOTTSBLUFF	307	79	1561	111	25	MIDLAND-ODESSA	178	69	455	0	-173
GA ATLANTA	93	-18	-112	473	-25	-112	VALENTINE	293	48	1695	175	-26	SAN ANGELO	141	47	359	-14	-178
AUGUSTA	45	-52	-99	373	-42	-99	NV ELY	297	57	1718	-65	39	SAN ANTONIO	112	54	234	12	-71
MACON	54	-33	-94	364	5	-94	LAS VEGAS	130	25	336	-40	06	VICTORIA	102	58	182	26	-40
SAVANNAH	28	-43	119	213	-63	119	RENO	205	7	1023	-383	149	WACO	134	55	305	18	-104
ID BOISE	268	69	14	1322	59	14	WINNEMUCCA	237	25	1413	-83	235	WICHITA FALLS	178	63	460	-22	-147
LEWISTON	222	30	89	1166	-84	89	NH CONCORD	159	-63	1722	189	294	UT BLANDING	257	45	1122	-131	116
POCATELLO	356	123	-15	1648	58	-15	NJ ATLANTIC CITY	77	-82	998	140	72	CEDAR CITY	265	60	1182	-50	17
IL CHICAGO	198	-8	-57	1364	219	-57	NM ALBUQUERQUE	245	72	823	-9	38	SALT LAKE CITY	282	79	1182	11	105
MOLINE	215	2	-138	1341	177	-138	CLOVIS	220	67	782	4	-154	VT BURLINGTON	152	-77	1688	101	192
PEORIA	195	-11	-70	1186	62	-70	ROSWELL	194	60	568	-21	-132	VA LYNCHBURG	85	-62	786	1	-2
QUINCY	203	10	02	1175	160	02	NY ALBANY	138	-70	1513	186	224	NORFOLK	37	-75	492	-21	-37
ROCKFORD	219	-5	-174	1490	188	-174	BINGHAMTON	150	-66	1754	286	348	RICHMOND	55	-78	699	12	23
SPRINGFIELD	175	-14	-186	1000	15	-186	BUFFALO	148	-51	1431	155	152	ROANOKE	97	-50	860	57	73
IN EVANSVILLE	147	-16	-37	763	-82	-37	NEW YORK	81	-69	851	80	142	WA COLVILLE	281	43	1773	-19	107
FORT WAYNE	181	-21	-108	1249	74	-108	ROCHESTER	155	-42	1536	281	191	QUILLAYUTE	148	-10	1531	-148	15
INDIANAPOLIS	168	-21	-25	1049	18	-25	SYRACUSE	142	-56	1494	229	209	SEATTLE-TACOMA	150	-4	1039	-253	64
SOUTH BEND	184	-16	-158	1284	112	-158	NC ASHEVILLE	105	-43	863	8	-6	SPOKANE	274	45	1628	-35	94
IA DES MOINES	247	29	35	1343	180	35	CAPE HATTERAS	13	-68	249	-77	-38	YAKIMA	242	35	1365	-69	66
DUBUQUE	265	29	-140	1686	279	-140	CHARLOTTE	68	-53	517	-51	-7	WV BECKLEY	127	53	---	---	---
STOUC CITY	246	13	-154	1509	220	-154	GREENSBORO	79	-56	736	50	45	CHARLESTON	106	-53	871	-25	-31
WATERLOO	266	24	-25	1566	110	-25	NEW BERN	26	-69	370	-62	-37	HUNTINGTON	113	-43	847	-42	-57
KS CONCORDIA	261	65	115	1207	207	115	RALEIGH-DURHAM	57	-68	602	-6	-29	PARKERSBURG	115	-49	967	52	-65
DODGE CITY	282	98	115	1133	220	115	WILMINGTON	23	-62	338	-24	-73	WI GREEN BAY	246	-1	1787	174	12
GOODLAND	302	89	-66	1400	148	-66	ND BISMARCK	269	-20	2074	154	-68	LA CROSSE	251	9	1612	183	-148
TOPEKA	231	47	-151	1051	95	-151	FARGO	290	-6	2061	174	-70	MADISON	243	2	1611	92	-57
WICHITA	236	63	-68	875	48	-68	GRAND FORKS	292	-18	2178	104	-99	MILWAUKEE	210	-13	1439	73	36
KY BOWLING GREEN	139	-13	-73	772	-14	-73	WILLISTON	294	-1	2164	155	57	WAUSAU	258	-6	2000	247	-42
LEXINGTON	141	-22	-96	872	-7	-96	OH AKRON-CANTON	138	-55	1345	174	97	WY CASPER	292	43	1556	-170	-144
LOUISVILLE	129	-25	-80	716	-87	-80	CLEVELAND	140	-48	1241	101	83	CHEYENNE	293	63	1714	36	-7
LA BATON ROUGE	113	50	-80	262	17	-80	COLUMBUS	128	-56	1067	-1	-43	LANDER	356	91	1671	-142	-106
LAKE CHARLES	123	62	-131	251	20	-131	CINCINNATI	148	-27	1024	60	09	SHERIDAN	291	39	1750	-45	-36
NEW ORLEANS	80	24		203	4													

Based on 1951-80 normals.

National Agricultural Summary

November 23 - 29, 1992

HIGHLIGHTS: Rain and storms across the South, and snow and rain from the Midwest to New England the first part of the week, hindered harvest progress and farming activities. Although the rest of the week was relatively quiet, soggy fields continued to hamper activities in these areas through the end of the period. The West continued mainly dry and cool, especially in California, where pastures continued to deteriorate.

SMALL GRAINS: The winter wheat crop improved slightly from last week, with 65 percent (%) of the crop rated good to excellent compared to 62% last week. Additional snow cover was needed for the crop in Idaho, Montana, and Wyoming. Rain delayed the completion of oats, barley, and rye seeding in the Southeast.

CORN: Corn harvest advanced slowly as rain, snow, and soggy fields hindered progress. Harvest was 75% complete in the 17 major producing States, compared with 99% last year and the 5-year average of 99%. Snow halted progress in Kansas, while wet conditions allowed little to no progress from the northern Great Plains to the Ohio Valley.

SOYBEANS: Soybean harvest continued in the Southeast. Showers and wet fields hampered progress. Harvest ranged from 9 to 19 percentage points behind average in Georgia, North Carolina, and South Carolina.

COTTON: Cotton harvest was 81% complete nationally, 3% ahead of last year and equal to the 5-year average. Rain and wet fields hindered progress in Alabama, Missouri, Oklahoma, and South Carolina. The Texas harvest was about 1 week ahead of normal.

SORGHUM: Sorghum harvest advanced slowly in the major producing areas, advancing just 2 points from last week. Snow brought harvest to a virtual standstill in Kansas. Harvest in the 12 major producing States was 85% complete, compared to 97% last year and the 5-year average of 97%.

OTHER FIELD CROPS: Hay harvest continued light in all regions of Arizona, except in the south-central area where harvest was moderate. Crop condition continued to be rated good. Alfalfa harvest was active in California. Peanut harvest in Oklahoma was virtually completed, while it continued on a limited basis in Texas. Sunflower harvest was completed in South Dakota, but was delayed in North Dakota by high moisture content. Sugarcane harvest and planting remained active in Florida. Harvesting was hindered by muddy fields in

Louisiana, but was winding down in Hawaii. Sugarbeet fields were irrigated in California. Christmas tree harvest continued in Oregon, Ohio, New Jersey, and Virginia.

FRUIT AND NUTS: The citrus harvests remained active in Arizona, Florida and California. Continued cool temperatures in the San Joaquin Valley of California were helpful in increasing color in the navel orange crop. Rain in Florida made some citrus groves too wet and slowed harvest in some areas. Apple harvest continued in eastern Arizona. Grapefruit harvest was active in western and central Arizona, southern California, and Florida. The Coachella Valley date, and the western Riverside County avocado harvests progressed in California. Pistachio harvest remained active in Arizona. Pecan harvest advanced in the South where weather permitted. In New Mexico, harvest gained momentum. Tree damage was reported in Georgia due to the tornadoes that touched down there.

VEGETABLES: A hard freeze ended the vegetable harvest in the High Plains of Texas. Above-normal precipitation in central Florida delayed harvest of some crops. Growing conditions in the southern and coastal areas of Florida remained normal. Vegetable plantings in the Palo Verde Valley and the Riverside area of California progressed well. Broccoli harvest remained active in Arizona and California. Broccoli planting was active in the Firebaugh district of California. Cabbage harvest continued active in Arizona and had started in west-central Florida. Cauliflower harvest remained moderate in Salinas-Watsonville and light in the Santa Maria area of California. The lettuce harvest decreased seasonally in California, and continued in Arizona and Texas.

PASTURES AND LIVESTOCK: Pastures in California were rated poor to fair, with light livestock water supplies. Pastures elsewhere in the Nation continued in fair to good condition. Livestock problems were reported in Iowa and North Dakota. Elsewhere, cattle were in generally good condition. Supplemental feeding was heavy in California, and was used as needed elsewhere. Feed supplies remained generally adequate.

Crop Progress

for the Week Ending November 29, 1992

CORN (Percent Harvested)

	Current	Last Wk	1991	Avg.
CO	85	80	96	97
GA	100	100	100	100
IL	80	75	100	100
IN	71	63	100	98
IA	80	74	97	99
KS	90	90	100	99
KY	98	96	100	99
MI	25	20	100	94
MN	85	73	99	99
MO	78	78	100	100
NE	74	69	100	100
NC	100	99	100	100
OH	60	47	100	95
PA	56	49	94	87
SD	66	51	100	100
TX	100	100	100	100
WI	53	48	95	98
17 States	75	69	99	99

These 17 States produced 94% of the 1991 corn crop.

GRAIN SORGHUM (Percent Harvested)

	Current	Last Wk	1991	Avg.
AR	100	100	100	100
CO	78	69	98	96
IL	92	88	100	100
KS	65	65	98	98
LA	100	100	100	100
MS	100	100	100	100
MO	87	87	96	99
NE	89	84	100	100
NM	96	95	31	NA
OK	94	92	84	83
SD	92	88	100	100
TX	99	98	95	96
12 States	85	83	97	NA
Excl. States with NA	85	83	97	97

These 12 States produced 98% of the 1991 grain sorghum crop.

COTTON (Percent Harvested)

	Current	Last Wk	1991	Avg.
AL	82	81	99	98
AZ	98	97	95	90
AR	96	93	99	99
CA	99	98	98	97
GA	76	67	96	95
LA	100	99	99	99
MS	97	96	100	99
MO	91	91	100	100
NM	65	60	60	58
NC	68	60	92	92
OK	52	51	35	50
SC	81	79	95	96
TN	94	89	97	97
TX	68	58	57	64
14 States	81	75	78	81

These 14 States produced 99% of the 1991 cotton crop.

Crop Condition (Percent)

for the Week Ending November 29, 1992

WINTER WHEAT

State	VP	P	F	G	EX
AR	0	0	6	74	20
CA	0	0	5	85	10
CO	3	6	25	51	15
GA	0	0	22	71	7
ID	0	4	20	70	6
IL	0	2	11	68	19
IN	0	2	26	70	2
KS	2	2	10	39	47
MI	5	5	30	50	10
MO	0	0	33	64	3
MT	1	2	24	60	13
NE	0	0	33	54	13
NC	0	0	17	81	2
OH	0	5	26	55	14
OK	0	5	52	43	0
OR	0	0	11	69	20
SD	1	1	27	64	7
TX	4	17	50	27	2
WA	0	0	65	35	0
19 State	1	4	30	48	17
Prev Week	1	6	31	46	16
Prev Year	3	11	38	43	5

VP - Very Poor P - Poor F - Fair
G - Good EX - Excellent

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 0.32 to 4.01 in. north; 0.33 to 5.30 in. central; 2.53 to 6.10 in. south. Temperatures 1 to 6° below normal north; 1 to 5° below normal central; 1 to 7° below normal south; Lows 21 to 29° north; 21 to 30° central; 24 to 32° south. Highs 66 to 74° north; 65 to 75° central; 67 to 77° south.

Days suitable for fieldwork 2.0. Soil moisture 16% adequate, 84% surplus. Winter wheat 86% seeded, 74% 1991, 78% avg. Pasture 3% very poor, 7% poor, 29% fair, 57% good, 4% excellent. Livestock 21% fair, 63% good, 16% excellent. Primary activities: Harvesting vegetables, hay, cotton, pecans, soybeans; plowing fields for small grain seeding; planting small grains, marketing cattle; repairing machinery; general care of livestock, poultry, catfish.

ARIZONA: Cold fronts cooled temperatures. Snow, higher elevations east; scattered showers southeast accompanied cold front 23rd. Temperatures 3 to 11° below normal. Extremes 4°; 66° higher elevations; 15°; 71° deserts.

Cotton harvested 98%, 95% 1991, 90% avg.; stalk shredding, plow down active statewide except complete southwest. Alfalfa good; harvest, light all areas, except south central moderate. Small grains planted 33%, 35% 1992, 40% avg.; stands established 12%, 24% 1992, 14% avg.; field preparations active. Fruit, vegetable harvest active. Various mixed vegetables along with cauliflower harvested west. Broccoli, green onions, lettuce, lemons, oranges, tangerines, grapefruits harvested west, central. Sweet corn, cabbage, tangelos, various mixed vegetables harvested central. Apples, pistachios, chili peppers, squash, tomatoes, pecans harvested east.

ARKANSAS: Temperatures below normal, widespread rainfall, first of week. Extremes 17°; 60°. Rainfall 0.04 to 0.81 in.

Days suitable for fieldwork 3. Soil moisture supplies adequate to surplus. Main farming: Wheat seedbed preparation, harvesting soybeans, cotton, planting wheat, oats, marketing calves, working cattle. Wheat planted 95%, 96% 1991, 95% avg. Cotton harvest slowed due to rainfall. As of 26th, the cotton classing office reported 1,312,780 bales of Arkansas cotton had been classed. Livestock good. Pastures mostly fair. Rainfall helped pastures in northwest, southwest. Pastures were supplying average forage for herds.

CALIFORNIA: High pressure early in the week was replaced by weak low pressure with variable cloudiness. Early 27th another system brought light rain showers to the north end of State.

Light rain slowed field activities north. Elsewhere, good progress fieldwork. Rice stubble burned, limited areas, before rain. Cotton harvest virtually complete, mostly American Pima standing. Shredding, discing for pink boll worm control followed harvest. Some fields prepared 1993 crop. Corn grain, corn silage harvests essentially complete. Seedbed preparation small grains, forage crops. New alfalfa, barley, oats, wheat seeded where conditions allowed. Emerged fields growing well.

Few fields grain sorghum harvested. Sugarbeets irrigated. Alfalfa harvested hay, green chopped. Post-harvest activities vineyards, stone fruit, nut orchards. Kiwifruit, Fuji, Granny Smith apples, persimmons packed. Coachella Valley date, Western Riverside County avocado harvests progressed. San Joaquin Valley Navel orange harvest continued, good quality. Cool weather improved external coloring. Grapefruit, lemons, tangerines actively picked southern areas. Broccoli moderate, variable quality Salinas-Watsonville; good quality Santa Maria. Cauliflower moderate, variable quality Salinas-Watsonville; light, good quality Santa Maria. Broccoli planting active Firebaugh district; broccoli, cauliflower packing continued under favorably dry weather westside, Kern-Tulare areas. Asparagus, cabbage, cauliflower crops Palo Verde Valley; cabbage, leaf lettuce, broccoli plantings Riverside area progressing well. Fall sweet corn harvest complete Coachella Valley. Celery moderate, good quality Salinas-Watsonville, light, variable quality Santa Maria. Iceberg, leaf, Romaine lettuce harvests light, seasonally decreasing, variable quality central coast. Fall lettuce harvest moved towards completion, Spring 1993 plantings emerging westside area. Fall potato movement from storages Tulake-Butte Valley moderate. Sweetpotato harvest progressed central valley. Other vegetables harvested: Beans, peas, squash, fresh market tomatoes, turnips, various oriental vegetables. Range, pasture mostly fair to poor. More moisture needed. Grasses germinated already stressed. Stockwater supplies light, no runoff ponds, creeks. Supplemental feeding full-swing, movement heavy. Calving active. Sheep lambing, grazing alfalfa.

COLORADO: Heavy snow fell on northern, central mountains, northeast plains on 23rd. Snowfall 3 to 9 in. east with largest amounts along the front range. Snow 8 to 14 in. mountains while the western valleys received mostly 0.10 in. or less of moisture. Light snow, blowing snow continued in the east on 24th, otherwise dry conditions prevailed until 28th when a new system brought more snow, windy conditions mostly to the northern, central mountains, up to 10 in. of snow fell along the front range, Palmer Divide. Cold temperatures prevailed statewide. Temperatures mostly 12 to 16° below normal east of the Continental Divide, 6 to 10° below normal in the west.

FLORIDA: Temperatures 4 to 6° below normal Panhandle, 3 to 6° above normal elsewhere. Highs middle 70s Panhandle, upper 80s central, south. Lows upper 20s Panhandle, Big Bend, middle 30s interior central Peninsula, low 40s interior south. Rain 3 to 5 days Panhandle, 1 to 4 days elsewhere. Rain 4.00 to 6.00 in. Panhandle. North mostly 1.00 to 2.00 in., central, south, under 0.50 to 2.00 in.

Soil moisture adequate to surplus Panhandle, south Peninsula; short to adequate northern Peninsula; short to surplus central Peninsula. Some flooding resulted from heavy showers in central Peninsula. Cotton, soybean harvesting, winter wheat planting delayed by wet weather. Sugarcane harvest, planting active. Rain most areas, some citrus groves too wet. High sand hills good.

Rain slowed harvest some areas. Oranges for processing increase in volume. White, colored grapefruit movement active for fresh, process use. Early tangerine harvest slowing. Tangelo movement increasing as more crops ready to pick. Caretakers cutting cover crops, plowing to remove excessive moisture. Growing conditions normal southern, coastal vegetable growing areas. Above normal precipitation in central area delayed harvest of some crops. Cabbage harvest begun west central area. Volume leaders; tomatoes, cucumber, pepper, squash, snap beans. Also available; cabbage, carrots, cherry tomatoes, celery, sweet corn, eggplant, escarole, iceberg lettuce, radishes, strawberries. State's pastures fair to excellent. Pasture 45% fair, 45% good, 10% excellent. State's cattle herds mostly good.

GEORGIA: Varied weather. Severe thunderstorms, isolated tornadoes, locally heavy rains first half. Rains diminished late, followed by much colder temperatures. Rain 1.00 to 3.00 in., local totals exceeding 5.00 in. north, west central. Few locations south central less than 0.50 in. Temperatures slightly above normal. Warmest early in the week, low 60s north to low 80s south. Coldest over the weekend, mostly upper 20s to low 30s, except low to mid 20s mountains, mid to upper 30s coast.

Days suitable for fieldwork 1.2. Soil moisture 13% adequate, 87% surplus. Cotton 2% poor, 35% fair, 63% good; 76% harvested, 96% 1991, 95% avg. Harvest hampered, quality declining. Sorghum 94% harvested for grain, 98% 1991, 98% avg. Soybeans 10% poor, 38% fair, 52% good; 77% harvested, 97% 1991, 90% avg. Wet fields slowed harvest. Wheat 22% fair, 71% good, 7% excellent; 52% planted, 54% 1991, 64% avg.; 42% emerged, 30% 1991, 40% avg. Rye 92% planted, 85% 1991, 92% avg. Other small grains 22% fair, 76% good, 2% excellent; 83% planted, 76% 1991, 83% avg. Onions 85% fair, 15% good; 52% planted, 57% 1991, 68% avg. Other vegetables 8% poor, 60% fair, 29% good, 3% excellent. Pecans 10% very poor, 28% poor, 58% fair, 4% good; 65% harvested, 87% 1991, 76% avg.; assessing tree losses due to tornadoes on 22th. Pasture 41% fair, 56% good, 1% excellent. Cattle, hogs good. Activities: Harvesting remaining crops, planting fall grains as wet soils permit. Protecting livestock from flooding. Celebrating holidays.

HAWAII: A low pressure system brought flash flood watch for most islands in the State. Heavy showers dampened the Thanksgiving holiday with flooding to low lying areas on 26th. Weekend rains fell on already saturated soil in many areas. Temperatures mid 80s to mid 60s. Rainfall 0.33 to 13.60 in.

Days suitable for fieldwork 7.0. Orchard growers expected to increase spraying efforts to control disease outbreaks caused by wet conditions. Recent rains made recovery difficult for crops already affected by previous week's rains. Banana, papaya shipments continued at high levels. Many sugarcane harvesting operations winding down for annual mill repairs, cleaning.

IDAHO: Temperatures 4 to 22° below normal throughout State. Precipitation throughout State except Rexburg. Cold weather, snow slowed down outdoor fieldwork.

Soil moisture varied across State. Adequate amount north, southwest; short amount southeast, south central. Activities: Repairing farm machinery, hauling grain, fall fieldwork, weed control. Winter wheat mostly good. Hay, roughage supplies adequate. Livestock activities: Marketing cattle, at least calf crop sold, cattle on winter hay. Livestock good.

ILLINOIS: Abundant clouds, seasonable temperatures, precipitation created typical November weather last week. Temperatures 2 to 3° below normal, upper 20s to mid 40s.

Corn harvest progresses slowly as wet field conditions prevail. Usual farm activities continue as many farmers wait for a freeze.

INDIANA: Temperatures 0 to 2° above normal. Highs 40 to 45°. Lows 30 to 35°. Precipitation 0.10 to 0.25 in.

Days suitable for fieldwork 1. Topsoil 14% adequate, 86% surplus. Subsoil 3% short, 29% adequate, 68% surplus. Pasture 84%, 85% last week. Tobacco processed 43%. Corn moisture content 23%, same as last week. Hay supplies 2% very short, 11% short, 85% adequate, 2% surplus. Wet fields are still a problem.

IOWA: Temperatures 0 to 4° below normal. Extremes 2°; 46°. Major winter storm 25th; 6 in. or more snow from southwest, through central, to northeast. No snow far northwest or southeast. Precipitation none to 1.28 in.; average 0.45 in. Preliminary data indicate this was the sixth wettest November in 120 years of State records.

Days suitable for fieldwork 2.3. Topsoil 19% adequate, 81% surplus. Subsoil 62% adequate, 38% surplus. Fall tillage completed for next year's row crop acreage 26%, 37% 1991, 59% avg. Row crop acreage fall fertilized 20%, 30% 1991, 46% avg. Grain storage space problem has eased, with 40% short, 60% adequate. Corn lodging 8% none, 71% light, 20% moderate, 1% heavy. Corn ear droppage 13% none, 79% light, 8% moderate. Cool, wet conditions continue to cause respiratory problems, foot rot in livestock.

KANSAS: Temperatures 6 to 11° below normal over State. Significant precipitation received all districts. Rainfall 0.63 to 2.02 in.

Days suitable for fieldwork 0.5. Surface moisture 1% short, 38% adequate, 61% surplus. Subsurface moisture 2% short, 71% adequate, 27% surplus. Harvest at virtual standstill due to snow storm that moved across State. Harvest already behind normal because of wet fields prior to the snow. Harvest has been hampered by an average of 2.5 days or less suitable for fieldwork per week for the State the past three weeks. Wheat planting for State mostly complete. Pastures for State still good. Cattle grazing corn, sorghum stubble, wheat pasture. Supplemental feeding of livestock necessary.

KENTUCKY: Cloudy, cold. Only exception 25th, temperatures upper 60s. Rest of week, highs 40s, only 30s on 27th, 28th. High temperatures 4 to 7° below normal, morning lows averaged just above normal. Scattered light rain or snow most days. Greatest rainfall on 24th, 0.25 to 0.50 in.

Corn, soybean harvest finishing up where conditions permit. Soil moisture generally ample for pasture, fall seeded crops. Wheat mostly seeded, emerged, generally good. First 3 days burley market sold 70 million pounds avg, \$183.10 per cwt. Cattle good, ample feed supplies.

LOUISIANA: Temperatures 4.4 to 11.5° below normal. Extremes 23°; 79°. Rainfall 0.25 in. south central to 2.51 in. southeast.

Days suitable for fieldwork 1.7. Soil moisture 10% adequate, 90% surplus. Pecans 83% harvested, 69% 1991, 67% avg. Soybeans 97% harvested, 97% 1991, 98% avg. Wheat 22% poor, 58% fair, 20% good; 75% planted, 86% 1991, 85% avg.; 72%

emerged, 79% 1991, 76% avg. Planting slow, wet fields. Sugarcane 64% harvested, 77% 1991, 74% avg. Muddy fields hampering harvest. Sweetpotatoes 98% harvested, 97% 1991, 98% avg. Livestock 42% fair, 52% good, 6% excellent. Pastures 7% poor, 12% fair, 80% good, 1% excellent. Vegetables 17% poor, 62% fair, 21% good. Harvesting satsumas, southeast. Spraying strawberries for diseases.

MARYLAND & DELAWARE: MARYLAND: Precipitation 1.38 in. Temperature 53.7°, normal 42.3°. Extremes 30°; 77°.

Pastures, cattle mostly excellent. Hay supplies adequate. Small grains good.

DELAWARE: Precipitation 0.98 in. Temperature 55.3°, normal 43.1°. Extremes 40°; 75°.

Hay supplies adequate. Pastures, livestock mostly excellent. Small grains good.

MICHIGAN: Extremes 23°; 42°. Precipitation 0.09 to 0.76 in. across the State.

Days suitable for fieldwork 2.0. Soil moisture 10% adequate, 90% surplus. Soybeans 85% harvested, 100% 1991, 96% avg. Corn 5% very poor, 10% poor, 35% fair, 40% good, 10% excellent. Pasture 70% of normal. Major activities: Cutting firewood, harvesting when possible, repairing machinery.

MINNESOTA: Temperatures 1 to 5° above normal. Extremes 1°; 46°. Precipitation none to 0.73 in., 0.34 in. below normal to 0.43 in. above normal.

Days suitable for fieldwork 4.0. Topsoil 2% very short, 3% short, 55% adequate, 40% surplus. Corn 85% harvested 99% 1991, 99% avg.; 26% moisture content 16% 1991, 17% avg.; 52% stubble plowed, 92% 1991, 95% avg.

MISSISSIPPI: Temperatures 48°, 3.2° below normal. Extremes 26°; 80°. Entire State received near normal rainfall. State avg.; 1.29 in., 0.15 in. above normal. Soil temperatures 56°.

Days suitable for fieldwork 1.5, 3.4 1991, 3.3 avg. Soil moisture 21% adequate, 52% surplus, 27% excessive. Cotton 97% harvested, 100% 1991, 99% avg. Soybeans 91% harvested, 95% 1991, 94% avg.; 18% poor, 25% fair, 51% good, 6% excellent. Wheat planted 89%, 90% 1991, 89% avg.; 83% emerged, 78% 1991, 75% avg.; 6% poor, 42% fair, 51% good, 1% excellent. Pecans 54% harvested, 76% 1991, 65% avg.; 66% very poor, 20% poor, 14% fair. Livestock 14% fair, 79% good, 7% excellent. Pasture 91% of normal. Activities: Planting wheat, shop work.

MISSOURI: Temperatures 2 to 7° below normal. Precipitation 0.42 in., most areas under 0.50 in. except north central, west central districts about 0.75 in.

Virtually no harvesting progress accomplished as damp weather prevented drying. Many areas still too muddy for harvesting. Corn harvest latest in over 10 years. Topsoil 52% adequate, 48% surplus. Some intended wheat acreage not seeded as a result of wet weather past 3 weeks. The extended period of wet weather causing some stress to calves.

MONTANA: Temperatures well below normal west, near normal east. Only significant precipitation received western divisions; up to 0.10 to 0.40 in. elsewhere, mostly in the form of snow.

The protectiveness of snowcover for winter wheat is 85% poor, 14% fair, 1% good.

NEBRASKA: Temperatures near normals northeast to 4° below normals northwest. Scattered precipitation varied from 0.10 in. northeast to 0.90 in. northwest.

Days suitable for fieldwork 2.7. Topsoil 7% short, 66% adequate, 27% surplus. Subsoil 6% short, 84% adequate, 10% surplus. Winter wheat 33% fair, 54% good, 13% excellent. Corn, sorghum grain harvest 5 weeks behind normal. Corn 74% harvested, 100% 1991, 100% avg. Sorghum grain 89% harvested, 100% 1991, 100% avg. Harvest delays due to weather conditions, high grain moisture content. Pasture, 97% of normal. Cattle gleaned stalks as available. Some supplemental hay feeding.

NEVADA: Upper level low pressure system moved eastward early in the week, leaving behind a cold air mass. Nights turned colder, especially in northeast. Temperatures below normal. Record low -25° recorded at Wildhorse reservoir in the north.

Livestock feeding requirements eased by generally mild weather. Activities: General maintenance, feeding, caring for livestock.

NEW ENGLAND: Precipitation 0.44 to 0.92 in. northern Maine, 1.03 to 3.85 in. elsewhere. Temperatures mid 30s to low 50s. Maximum temperatures low 50s to mid 60s north, high 50s to low 70s south. Minimum temperatures high teens to mid 30s.

Major farm activities: Tending livestock, cutting firewood, making general repairs.

NEW JERSEY: Temperatures much above normal, 44° north, 48° south, 50° coastal. Extremes 24°; 74°. Precipitation near normal; 0.69 in. north, 0.86 in. south, 0.77 in. coastal. Heaviest 24 hour total 0.70 in. on 26th, 27th.

Farmers busy deer hunting, cutting, digging, selling Christmas trees, pruning fruit, caring for livestock.

NEW MEXICO: Lingering snowcover following the snow storm of last week helped keep temperatures 10 to 14° colder than normal all across the State. Light precipitation near 0.10 in. eastern plains. Slightly heavier amounts of near 0.20 in. water equivalents were recorded with a band of snow 23rd night over the southwest, south central districts.

Days suitable for fieldwork 5.4. Soil moisture 79% short, 21% adequate. Crop conditions: Cotton 11% poor, 34% fair, 55% good. Irrigated sorghum 25% fair, 75% good. Dryland sorghum 10% poor, 30% fair, 60% good. Irrigated wheat 23% fair, 77% good. Dryland wheat 14% very poor, 57% poor, 29% fair. Pecans fair to good with harvest gaining speed. Red chile harvest winding down. Lettuce harvest finished. Cattle, sheep in fair to good shape. Range, pasture 73% of normal.

NEW YORK: Generally cloudy, warm, wet. Temperatures well above normal. Highs 40s, lows 30s. Extremes 23°; 70°. Rainfall exceeded 2.00 in. in southeastern areas. Lightest rainfall just under an inch south of Lake Ontario.

Wetness hindered outside activities. Major activities: Caring for livestock, trying to finish corn harvest, orchard clean up, cider making, hunting.

NORTH CAROLINA: Temperatures 6 to 13° above normal. Largest positive departures found in eastern areas. Precipitation 6.58 in. at Blowing Rock to 0.30 in. at Casar.

Days suitable for fieldwork 2.2. Soil moisture 41% adequate, 59% surplus. Crop condition: Pasture 6% poor, 26% fair, 68% good. Cotton 3% very poor, 4% poor, 73% fair, 20% good. Soybeans 2% poor, 40% fair, 58% good. Winter wheat 17% fair, 81% good, 2% excellent. Oats 21% fair, 79% good. Barley 8% fair, 92% good. Rye 2% poor, 15% fair, 83% good. Wheat 70% emerged, 65% 1991, 66% avg. Sorghum for grain harvested 88%, 96% 1991, 94% avg. Cotton harvested 68%, 92% 1991, 92% avg. Soybeans harvested 65%, 74% 1991, 74% avg. Winter wheat planted 80%, 83% 1991, 84% avg. Oats planted 86%, 100% 1991, 92% avg. Barley planted 89%, 100% 1991, 95% avg. Rye planted 81%, 100% 1991, 93% avg. Hay, roughage supplies 94% adequate, 6% surplus. Feed grain supplies 2% short, 94% adequate, 4% surplus. Major activities: Harvesting soybeans, cotton. Other activities: Harvesting sorghum; seeding small grains; tending livestock; equipment repair, general farm maintenance.

NORTH DAKOTA: Temperatures 1° above normal in the west, east to 4° above normal north central. Extremes 2° northeast; 49° north central, south central. Precipitation 0.02 in. southeast to 0.12 in. southwest.

Moderate snowcover. Corn, sunflower harvest, normally complete by early November, progressed slowly due to high moisture content. Ranchers are busy moving hay. Majority of calves weaned, some health problems reported in isolated areas. Grain marketing normal.

OHIO: High temperatures low 40s northwest to the upper 40s in the south were within a couple of degrees of normal. Warmest days produced readings in the 50s in most areas; temperatures into the 60s in the south. Low temperatures mid to upper 30s. Under the influence of cloudiness, lows were 5 to 10° above normal. Lows fell into the 20s over virtually all of the State. A low of 21° at Jackson on the morning of the 30th. Precipitation was below normal but widespread reaching 0.25 to 0.50 in. Precipitation fell nearly everyday somewhere in the State.

Days suitable for fieldwork 1.7. Topsoil 39% adequate, 61% surplus. Moisture content of harvested corn 25.2%. Precipitation continues to prevent farmers from completing harvest. Christmas tree harvest is underway.

OKLAHOMA: Temperatures 15° below normal Panhandle to 8° below normal southwest. Precipitation 0.18 in. southeast to 1.67 in north central.

Days suitable for fieldwork 3.6. Topsoil 7% short, 47% adequate, 46% surplus. Subsoil 12% short, 88% adequate. Wheat 5% poor, 52% fair, 43% good; 83% emerged, 86% 1991, 92% avg.; 14% grazed, 20% 1991, 29% avg. Cotton 52% harvested, 35% 1991, 50% avg. Sorghum 94% harvested, 84% 1991, 83% avg. Soybeans 81% harvested, 88% 1991, 80% avg. Peanuts 98% harvested, 94% 1991, 95% avg. Pastures 96%. Cattle good; marketings average, prices unavailable.

OREGON: Below normal temperatures statewide except coast, normal; 1 to 3° below normal western areas, 2° or more below eastern areas. Substantial rainfall statewide. Coastal Range, coastal areas 2.00 to 6.00 in., Willamette Valley. 0.75 to 1.25 in., southwest interior, northeastern areas 0.25 to 0.50 in., elsewhere 0.25 in. or less of precipitation.

Soil moisture mostly short to adequate. Winter wheat 100% planted, emerged. Winter wheat 20% excellent, 69% good, 11%

fair. 1992 sugarbeet crop continues to be shipped by rail, Klamath Co. Fruit, nut orchard winter activities continue, pruning to begin shortly, Willamette Valley. Winter cabbage, cauliflower harvest continues, Willamette Valley. Christmas tree harvest continues. Livestock good. Western pastures continue improvement. Rains, snows have improved eastern pastures, ranges, continued supplemental feeding. Eastern cattle continue to be moved from higher elevations. Sheep being moved onto grass seed fields, Willamette Valley. Range, pasture continues to improve.

PENNSYLVANIA: Mild temperatures, above normal precipitation prevailed across the Commonwealth. Temperature 50°, 10° above normal. Extremes 22°; 77°. Precipitation 1.07 in., 0.30 in. above normal.

Days suitable for fieldwork 2. Soil moisture 35% adequate, 65% surplus. Ensilage corn harvested 100% complete, 100% 1991. Soybean harvest 79% complete, 94% 1991. Fall plowing 93% complete, 100% 1991. Fourth cutting alfalfa 95% complete, 99% 1991. Quality of hay made 79% poor, 21% fair. Feed from pastures 21% very poor, 26% poor, 33% fair; 20% good. Activities: Hauling manure; maintaining machinery; harvesting soybeans, corn; fall plowing; fixing fence; caring for livestock.

PUERTO RICO: Island rainfall of 1.53 in. was 0.30 in. above normal. Highest rainfall 7.41 in. at Pico Del Este Luquillo, 3.52 in. at Rio Blanco lower, 3.26 in. at Arecibo 3ESE. Highest 24 hour total 2.76 in. at Pico del Este on 22nd. Island temperatures 79 to 81° coasts, 71 to 72° interior with means 63.4° at Pico del Este Luquillo to 81° at WSFO San Juan. Extremes 55°; 91°.

SOUTH CAROLINA: Temperatures above normal. Average rainfall 3.40 in.

Days suitable for fieldwork 2.8. Soil moisture 5% short, 68% adequate, 27% surplus. Cotton fair; 81% harvested, 95% 1991, 96% avg. Soybeans fair to good; 52% harvested, 80% 1991, 71% avg. Oats fair to good; 90% planted, 81% 1991, 84% avg.; 82% emerged, 71% 1991, 72% avg. Rye fair to good; 93% planted, 79% 1991, 82% avg.; 85% emerged, 71% 1991, 70% avg. Winter grazing fair to good; 95% planted, 91% 1991, 94% avg.; 91% emerged, 81% 1991, 88% avg. Barley fair to good; 94% planted, 87% 1991, 83% avg.; 88% emerged, 80% 1991, 73% avg. Wheat fair to good; 46% planted, 56% 1991, 61% avg.; 36% emerged, 35% 1991, 41% avg. Heavy rainfall slowed soybean, cotton harvesting, small grain planting.

SOUTH DAKOTA: Temperatures near normal. Extremes -9°; 55°. Seasonably light precipitation in the form of snow fell over the State with amounts generally less than a half of an inch.

Days suitable for fieldwork 2.3. Topsoil 7% very short, 21% short, 58% adequate, 14% surplus. Subsoil 18% very short, 20% short, 52% adequate, 10% surplus. Winter rye 23% fair, 74% good, 3% excellent. Sunflowers harvest 97% completed, 100% 1991, 100% avg. Wet, snow covered fields continue to slow the progress of the corn harvest. Livestock 4% fair, 75% good, 21% excellent. Pasture 80% of normal.

TENNESSEE: Temperatures, precipitation slightly above normal across State.

Cotton 94% harvested, 97% 1991, 97% avg. Cotton, soybean harvests continue in between showers. Crops are mostly good. Burley tobacco markets opened on the 23rd, both a good crop of tobacco, favorable prices reported. Pastures, cattle mostly good.

TEXAS: Strong system pushed across Panhandle, portions South Plains, Red River early, bringing wintery precipitation to region. Accompanying cold front dropped temperatures significantly across entire State. Cool, dry conditions prevalent latter half. Arrival cold air kept average temperature readings below normal, all areas. Readings ranged 7° below normal South Texas, 15° below normal Low Plains. Precipitation was near, or a bit above, normal High Plains, Low Plains; rest of State below normal amounts. Precipitation amounts seasonally light, most areas less than 0.25 in.

Crops: Cotton harvest at virtual standstill due to wet conditions. Fields in the Plains may suffer from freezing temperatures, snow. Quality harvested cotton extremely good. Cotton 77% normal; 68% harvested, 57% 1991, 64% avg. Harvest remaining grain sorghum fields Plains delayed due inclement weather. Small grain stands improving Blacklands; Hill Country emerged fields green from recent rains. Upper Coast, South Texas some late planting. Peanut harvest continued limited basis. South Texas, rain damaged some dug peanuts to be harvested. Soybean harvest neared completion East Texas, Upper Coast.

Commercial Vegetables: Rio Grande Valley, carrots, onions, tomatoes were making good progress. High Plains, hard freeze ended remaining vegetable harvest. East Texas, some greens showed signs aphid infestation. Trans-Pecos, lettuce harvest continued. Pecan harvest continued intermittently, as conditions allowed. Across State, cold wind helped nut drop. East Texas overall quality harvested nuts low. Many areas crop disappointing, prices good.

Range and Livestock: Showers continued to improve range, pasture conditions, stock tank levels. Winter pastures progressing slowly. Livestock remained fair to good, supplemental feeding increasing most areas. Some cattle turned out on wheat pasture.

UTAH: Temperature maximums 11° less than normal, minimums 6° less than normal. Precipitation heavy in the northern mountain division to moderate in the other mountainous areas of the State to light elsewhere, with the exception that no precipitation was reported in the Dixie Division.

Recent snow fall, cold weather have slowed down many outdoor activities in the northern half of the State. Major farm activities: Feeding, caring for livestock, winterizing equipment, buildings.

VIRGINIA: Temperatures 9 to 12° above normal. Extremes 29°; 81°. Precipitation above normal. Most areas received 1.00 to 2.50 in.

Days suitable for fieldwork 2.0. Topsoil 10% short, 35% adequate, 55% surplus. Pasture 37% fair, 61% good, 2%

excellent. Corn for grain harvest nearly completed. Soybeans harvested 71%, 88% 1991, 83% avg. Cotton harvested 60%, 92% 1991, 92% avg. Barley seeding completed. Winter wheat seeded 80%, 90% 1991, 90% avg. Winter grains, grazing crops 9% poor, 18% fair, 73% good. Forage from pastures, grazing crops dairy cattle 18%, beef cattle 66%, sheep 62%. Livestock 18% fair, 82% good. Preparing dark-fired, burley tobacco for market. Harvesting, selling Christmas trees.

WASHINGTON: Temperatures 3° below to 1° above normal west; 3° to 7° below normal east. Rainfall 1.29 to 2.84 in. west; 0.41 to 1.34 in. east.

Days suitable for fieldwork 1.4. Soil moisture 39% short, 60% adequate, 1% surplus. Hay, other roughage 13% short, 73% adequate, 14% surplus. Range, pasture 15% very poor, 42% poor, 28% fair, 15% good. Winter wheat emerged 100%, 95% 1991, 96% avg.; 65% fair, 35% good. Potatoes 100% harvested. Corn grain harvested 95%, 80% 1991, 86% avg.; 100% good. Heavy frost west, plants going dormant. Standing water still visible some fields. Cold temperatures east, snowcover provided protection most areas. Concord grape, fruit tree pruning continues. Ranchers feeding livestock, hauling water.

WEST VIRGINIA: Temperature 45°. Extremes 27°; 68°. Precipitation 0.26 in.

Days suitable for fieldwork 3.3. Soil moisture, 7% short, 86% adequate, 7% surplus. Corn, 95% harvested. Pastures, 19% poor, 37% fair, 36% good, 8% excellent; 83% of normal. Cattle, 88% good, 12% excellent. Sheep, good. Soybeans, 95% harvested. Wheat, 100% sown. Farm activities: General maintenance; chopping silage; harvesting corn, soybeans.

WISCONSIN: Temperature 28°; 1° below normal. Extremes 0°; 47°. Precipitation trace to 0.80. Heavy snow fell from southwestern to northeastern areas 25th, 26th; between 5 to 9 in. of snow.

Corn for grain 53% harvested, 95% 1991, 98% avg. Early December frost depths 0.30 in., 1.80 in. avg. Snow depths 0.4 in., 2.6 in. avg. Snow, frost dates relate to 27th.

WYOMING: Cold, snowy weather across State. Temperatures 10 to 15° below normal. Northeast only 5 to 9° below normal. Precipitation above normal with the exception of the far northwest. Most areas 0.10 to 0.30 in. above normal with the exception of the southeast which had 0.30 to 0.60 in. above normal.

1993 Winter wheat fair to good, additional moisture, snowcover needed in some areas. Livestock mostly good, culling, marketing, supplemental feeding continuing. Additional feed required in some counties in the northeast, southwest. Preparation for calving, lambing season.

International Weather and Crop Summary HIGHLIGHTS

November 22 - 28, 1992

FSU: Seasonable temperatures were accompanied by mixed precipitation over winter grain areas. Winter grains were dormant over most of the region.

EUROPE: Widespread light to moderate showers continued across the north. Dry weather covered Mediterranean winter grain areas.

NORTHWESTERN AFRICA: Dry weather covered winter grain areas in Morocco, Algeria, and Tunisia.

SOUTH AFRICA: Several days of dry weather allowed corn planting to progress.

SOUTH ASIA: Welcomed dryness covered southern India, following last week's heavy rainfall.

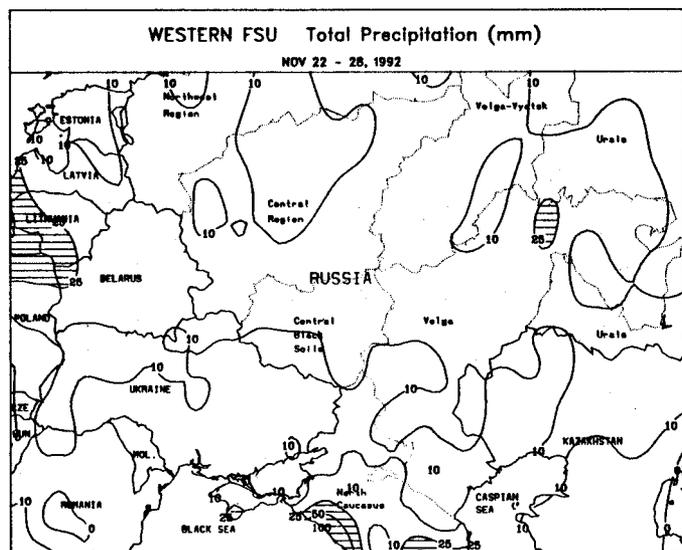
SOUTHEAST ASIA: Moderate showers covered most areas of Malaysia and Indonesia.

EASTERN ASIA: Cool temperatures aided hardening winter grains.

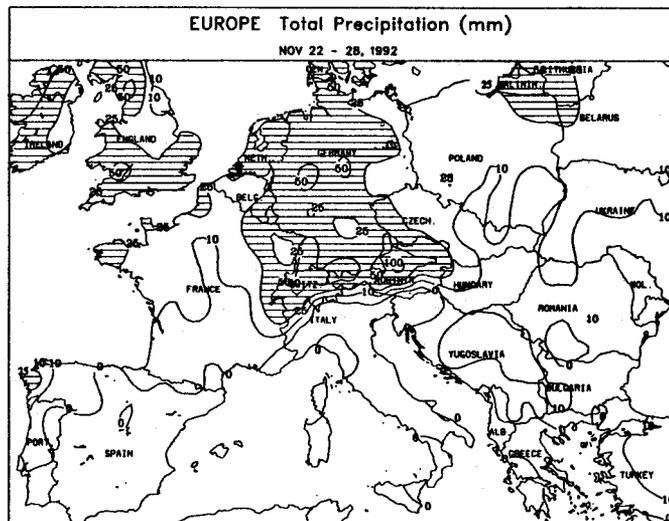
AUSTRALIA: Dry weather benefited winter wheat harvesting and summer crop planting.

SOUTH AMERICA: Persistent rain favored soil moisture reserves, but drier weather is needed for summer crop planting, especially in Argentina.

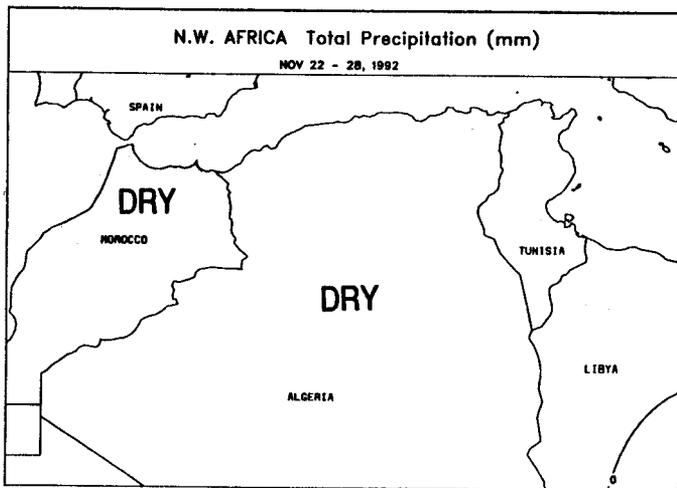
MEXICO: Freezing temperatures missed important vegetable and citrus areas.



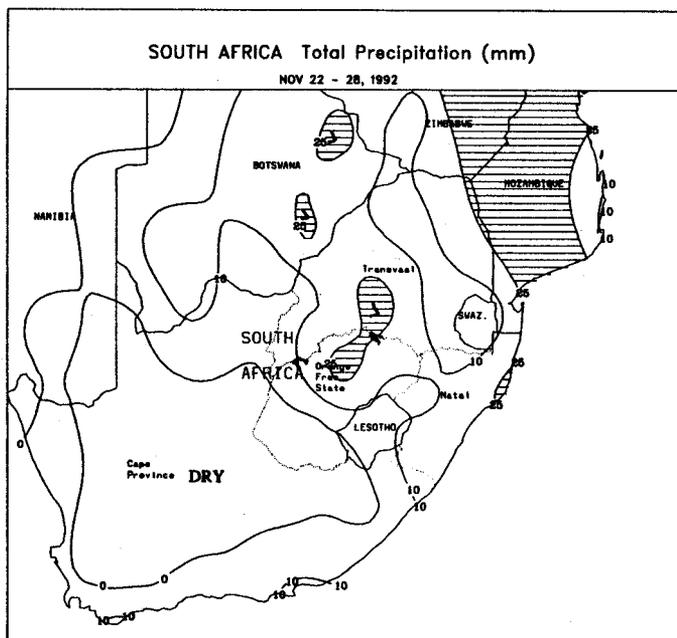
FSU-WESTERN: Widespread light precipitation (around 10 mm), mainly snow, covered winter grains in Belarus, Central Black Soils, Central Region, and the Volga Valley, increasing snow cover. Mixed rain and snow (3-17 mm) covered the Baltic States, Ukraine, and the northern tip of the North Caucasus. Winter grains were dormant over most of the region. Average temperatures were 1-3 degrees Celsius (C) below normal in the extreme north and south, and 1-2 degrees C above normal over central winter grain areas. Extreme cold (temperatures less than -15 degrees C) remained well to the north and east of the major winter grain area. In south-central cotton growing areas of the former Soviet Union, unseasonably warm, dry weather helped harvest.



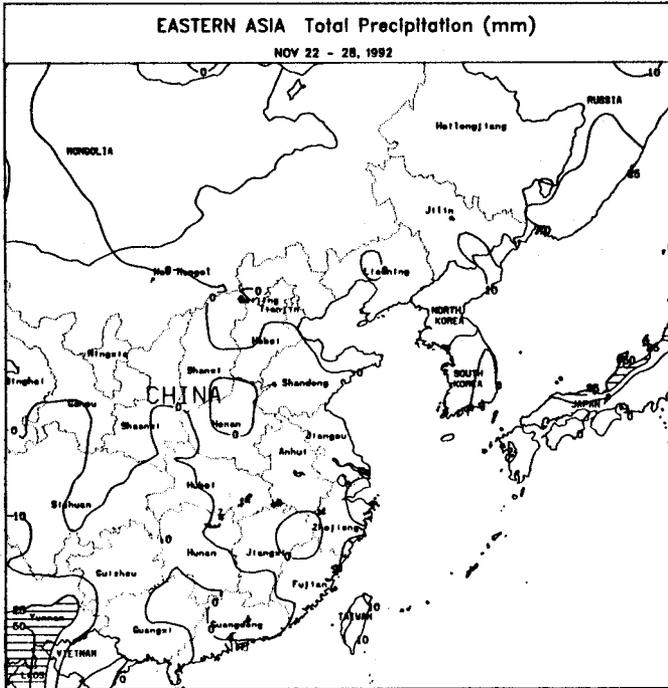
EUROPE: Widespread light to moderate showers over northern crop areas accompanied unseasonably warm weather. Greatest amounts of moisture (25-50 mm, with local amounts in excess of 75 mm) covered southern England, the Netherlands, and Germany, benefiting winter grain establishment. Light precipitation (7-25 mm) fell over northern France, Poland, Czechoslovakia, Hungary, and northern Romania. Mostly dry weather in southwestern France favored late corn harvesting. Further south, dry weather covered winter grain areas in Spain, Italy, Greece, and Bulgaria. Average temperatures were 2-4 degrees C above normal over most of Europe. Winter grains were in or entering dormancy in Poland, eastern Czechoslovakia, and northern Romania. Winter grains continued vegetative growth over the remainder of the region.



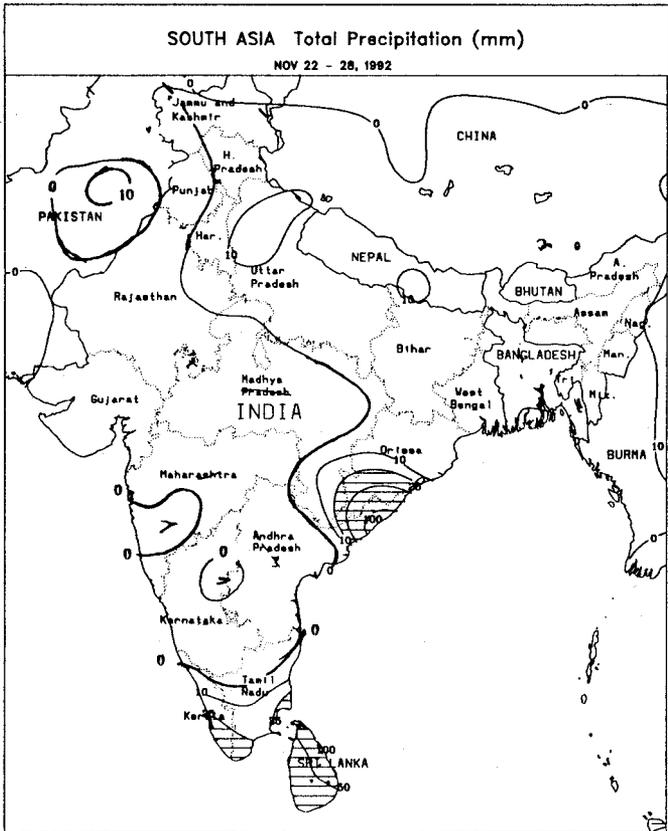
NORTHWESTERN AFRICA: Dry weather covered winter grains in Morocco, Algeria, and Tunisia. Rainfall since October in Morocco and western Algeria has been insufficient for widespread winter grain planting, especially in southern Morocco. Significant precipitation is needed to promote planting and to ensure favorable crop establishment. Although dry weather covered winter grain areas in eastern Algeria and Tunisia, adequate soil moisture favored emergence and early establishment. Average temperatures were 2-4 degrees C above normal in Morocco, Algeria, and Tunisia, increasing evaporation rates.



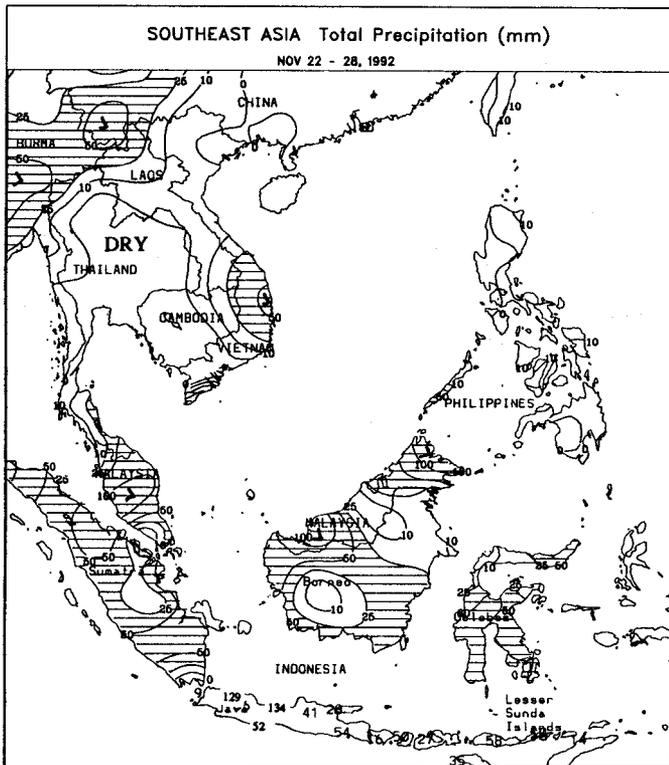
SOUTH AFRICA: Light to moderate showers (10-25 mm, with local amounts in excess of 25 mm) covered primary corn regions of Orange Free State, southeastern Transvaal, and Natal, maintaining adequate to abundant topsoil moisture for planting. Since most of the rain fell on November 24 and 25, several days of dry weather allowed planting to progress. Average temperatures were 2-3 degrees C below normal over the primary corn-producing areas.



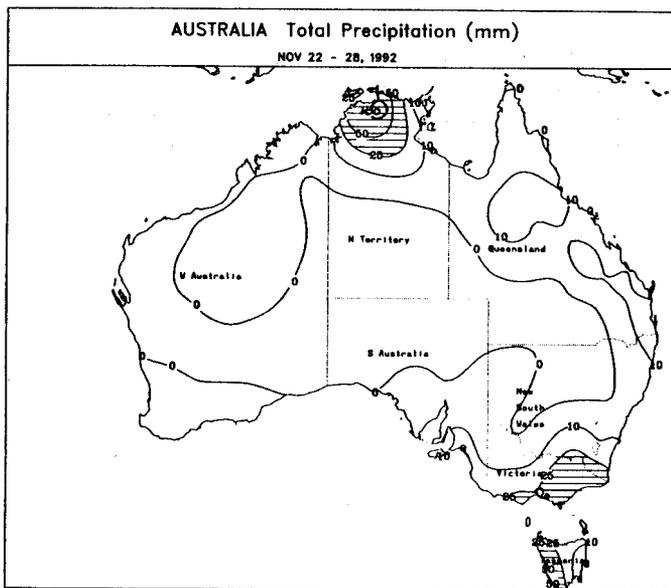
EASTERN ASIA: Dry weather encompassed most of China, allowing completion of summer crop harvesting. During the week, minimum temperatures of -4 to -7 degrees C were reported across the North China Plain. No significant damage is expected since previously cool temperatures have helped to harden winter grains, but some minor burn back may have occurred.



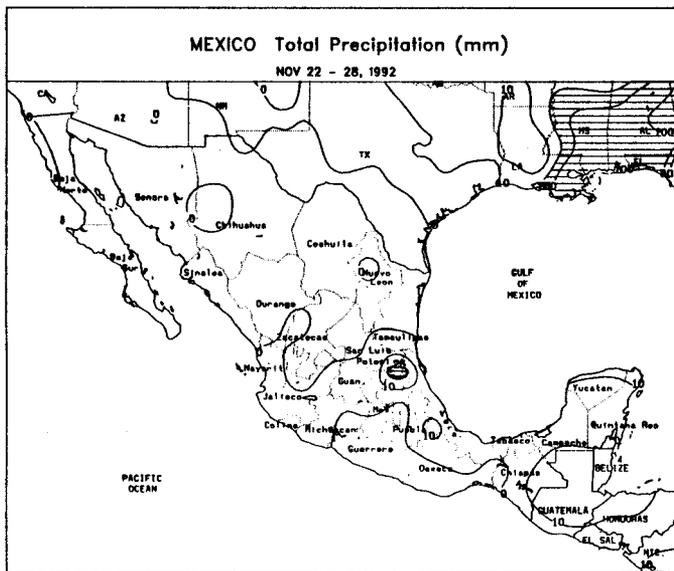
SOUTH ASIA: Dry weather returned to southern India. The dryness was welcomed, following last week's heavy rainfall. In central and northwestern India, little, if any, rainfall allowed summer crop harvests and winter wheat planting to progress without delay.



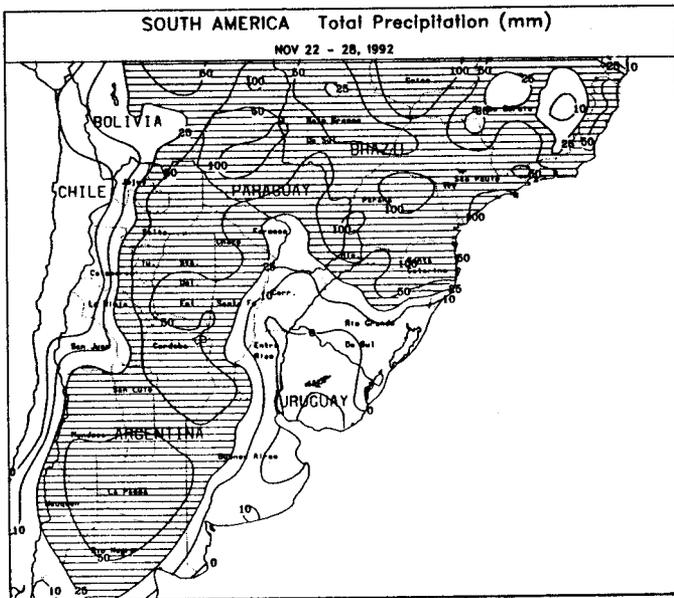
SOUTHEAST ASIA: Most of Malaysia and Indonesia received moderate to heavy showers (25-100 mm), aiding reservoir levels for rice irrigation. Portions of Sumatra and the Malay Peninsula received greater than 50 mm of rain, causing additional flooding. Central Vietnam received 25-50 mm of rain, while the Philippines reported only scattered light to moderate showers (8-26 mm).



AUSTRALIA: Dry weather favored winter wheat harvesting across Queensland, northern New South Wales, and Western Australia, and early maturing wheat in South Australia. After previous rains, the dryness also aided cotton and sorghum planting across the eastern summer crop areas. Light to moderate rain (5-15 mm) benefited late-filling wheat across Victoria. Temperatures averaged 2-4 degrees C below normal across the major wheat areas. Warmer temperatures are needed to aid winter grain dry down and prevent disease problems.



MEXICO: Light rain (less than 10 mm) fell across the main corn belt, with isolated higher amounts (15-25 mm) in the east, allowing late corn harvesting to progress most of the week. Freezing temperatures were common across the north-central intermountain region, but the coastal plains of the northeast and northwest were spared the cold weather. Dry weather aided winter wheat and vegetable planting across the northwest, where reservoir levels are adequate to abundant. This is the last regular weekly summary until next spring.



SOUTH AMERICA: In Argentina, moderate to heavy rain (20-90 mm) covered the crop areas of La Pampa northward into Chaco. The persistent rain continued to favor soil moisture for summer crops and filling winter wheat. However, the wetness caused some local flooding across the northern cotton areas and delayed the planting of summer crops, especially soybeans. A couple of weeks of drier weather is needed for summer crop planting and disease prevention for winter grains. Widespread rain (25-115 mm) prevailed over southern Brazil, favoring soil moisture for soybeans and corn. Somewhat drier weather the last few weeks have sped soybean planting. By the end of November, typically 30-40 percent of the soybeans are planted. Due to the widespread rain, temperatures averaged 2-4 degrees C below normal across Argentina and southern Brazil.

(Continued from p. 3)

The precipitation probabilities are generally weak (fig. 2). There will be a significant tendency for wetness over the central Rockies and most of the Gulf and Atlantic coastal States from Louisiana northeastward to southern New Jersey. Dryness is indicated for the northern portions of North Dakota and Minnesota. The outlook also calls for at least a 55-percent probability of below-normal rainfall for southern California, but there are no significant forecast indications for continued dryness in the northern portion of the State. California has experienced a 6-year period of deficient precipitation.

In unspecified areas on both maps, there are no significant departures of temperature or precipitation probabilities from climatology.

Forecasters noted that the overall temperature pattern is tilted toward the cool side after a succession of mostly warmer-than-normal winters. The forecast does not explicitly consider the possible cooling effects from the eruption of Mt. Pinatubo, as there is insufficient information on the regional distribution of any such effects.

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U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
National Weather Service/Climate Analysis Center
Managing Editor **Douglas Le Comte**
Meteorologists **Brad Rippey** (202) 720-1444
Vilhelm Bjerknes, David Secora, Wes Byrd, and Brian Morris.

Subscriptions **Joyce Houston** (202) 720-7917

U.S. DEPARTMENT OF AGRICULTURE

Economics Management Staff
Editor **Sharon Lee**
National Agricultural Statistics Service
Agricultural Statistician . . . **David Mueller** (202) 720-2157
World Agricultural Outlook Board
Agricultural Weather Analysts . **Ray Motha** (202) 720-9805
Tom Puterbaugh, Mark Brusberg, and Bob Stefanski.

(Continued from front cover)

developed, inducing thunderstorms along the Gulf coast, and pushing temperatures above 80°F as far north as Norfolk, VA. On Tuesday, near-blizzard conditions spread from the central Rockies into the High Plains. Midweek snow depths reached 6 inches in Dalhart, TX, 8 inches in Gage, OK, 19 inches in Laverne, OK, 15 inches in Garden City, KS, and 17 inches in Liberal, KS. Northerly winds of up to 40 mph whipped the snow into 10 to 15 foot drifts in southwestern Kansas. As the storm progressed northeastward, it produced a stripe of heavy snow from Kansas to Wisconsin. Ahead of the storm, heavy rain and warm air spread northward along the east coast. Midweek rainfall topped 4 inches in Columbus, GA, and neared 2 inches in Norfolk, VA. Fort Myers, FL, noted a daily record high of 89°F, which contrasted sharply with a midweek reading of -12°F in Pocatello, ID. Cold air reached the Plains by late in the week, producing a dozen daily record lows in Texas alone. On Saturday, temperatures dipped to 32°F as far south as McAllen, TX, along the lower Rio Grande River. Earlier, radiational cooling off of fresh snow cover had dropped temperatures to 6°F in Goodland, KS, on Thursday, and to 2°F in Waterloo, IA, on Friday. By week's end, cool, dry weather overspread most of the Nation. The highest temperature recorded in the contiguous States on Saturday was 78°F in Thermal, CA.

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