

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

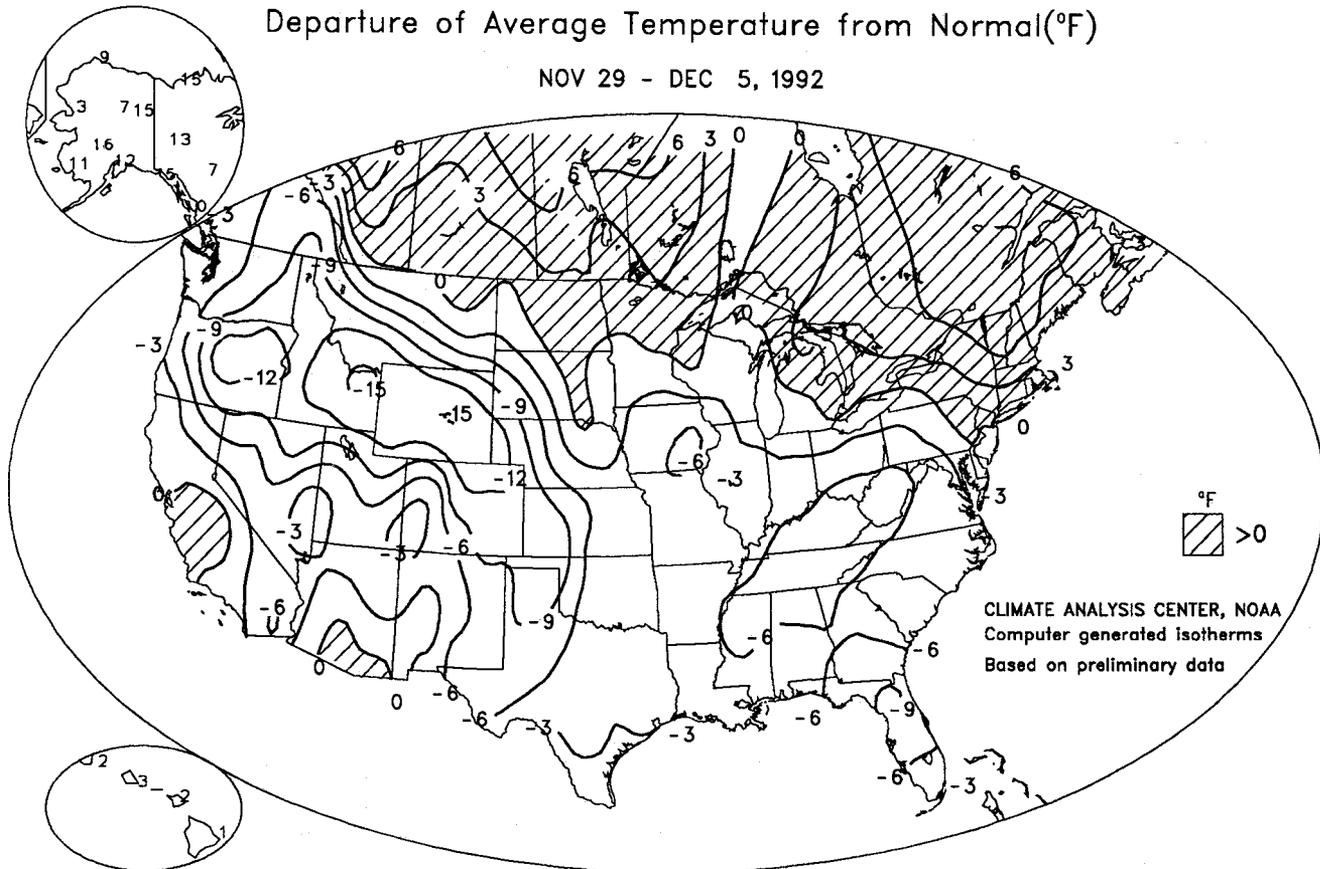
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December 8, 1992

Departure of Average Temperature from Normal(°F)

NOV 29 - DEC 5, 1992



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

HIGHLIGHTS

November 29 - December 5, 1992

A slight shift in the weather pattern brought precipitation to **California** and dry weather to the **Corn Belt** for the first time since late October. One facet of the weather that did not change, however, was the unmitigated flow of cold air through the **Rockies**, which spread to the east coast by week's end. Early in the week, a high pressure system settled over the **Great Basin**, while a storm approached the west coast. North and east of the high, chinook winds developed, producing gusts to 100 mph near **Dupuyer, MT**, and 67 mph in **Pierre, SD**. Elsewhere, more than 11 inches of rain drenched **Hilo, HI**, on Sunday and Monday, pushing their November rainfall above 25 inches (169 percent of normal). By midweek, the west coast storm slipped southward, producing heavy rain in the **San Francisco Bay** area, and up to 7 inches of snow near **Lake Tahoe**. Rainfall topped 1 inch in **Fairfield, CA**.

(Continued to p. 13)

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National Weather Data for Selected Cities

Weather Data for the Week Ending December 5, 1992

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS								
	AVERAGE	MAXIMUM	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		
AL BIRMINGHAM	53	31	57	25	42	-6	.8	-.3	.8	.8	103	52.1	104	94	35	0	5	1	1	0	0		
MOBILE	62	37	70	29	49	-6	.1	-1.1	.1	.1	7	65.3	109	94	40	0	5	1	2	1	0		
MONTGOMERY	58	32	66	27	45	-6	.3	-.7	.3	.3	45	58.1	129	90	31	0	5	1	1	3	0		
AK ANCHORAGE	35	23	48	13	29	13	.1	-.1	.1	.1	28	13.8	99	86	53	0	6	6	3	0	0		
BARROW	11	-10	24	-25	0	10	.1	.0	.1	T	100	2.5	57	90	79	0	7	2	4	0	0		
FAIRBANKS	22	-1	41	-16	11	16	.4	.2	.3	.3	250	11.9	121	91	73	0	4	4	4	0	0		
JUNEAU	39	33	42	23	36	7	1.2	.1	1.1	1.2	149	74.6	152	99	78	0	2	2	4	1	0		
KODIAK	40	27	46	22	34	2	2.2	1.0	.9	2.2	251	54.7	97	92	64	0	6	6	4	2	0		
NOME	20	-1	33	-15	10	2	.5	.4	.3	.5	500	12.0	86	90	70	0	7	0	1	2	0		
AZ PHOENIX	67	47	71	42	57	1	1.1	1.0	1.0	1.1	933	12.3	196	60	34	0	3	3	3	1	1		
PRESCOTT	52	26	62	18	39	-2	1.0	.8	.8	1.0	631	19.6	165	83	31	0	5	1	1	1	1		
TUCSON	66	41	74	32	53	-1	2.4	2.2	1.0	2.4	>1000	15.4	150	62	29	0	1	1	2	1	0		
YUMA	66	48	70	42	57	-1	1.9	1.8	1.7	1.9	>1000	5.4	249	45	25	0	6	6	0	0	0		
AR FORT SMITH	51	29	60	24	40	-4	.5	-.3	.5	.5	94	43.7	117	89	38	0	3	3	2	2	0		
LITTLE ROCK	50	34	56	29	42	-4	.2	-.8	.1	.2	28	41.7	91	69	43	0	3	3	1	0	0		
CA BAKERSFIELD	65	39	73	33	52	1	.8	-.1	.1	T	30	6.6	131	75	34	0	0	0	1	1	0		
EUREKA	57	40	59	37	49	-1	.8	-.6	.7	.8	78	20.7	62	84	65	0	0	0	2	1	0		
FRESNO	63	37	67	33	50	2	.7	-.3	.3	T	4	11.4	126	92	38	0	0	1	1	0	0		
LOS ANGELES	68	49	74	44	58	0	.2	-.1	.2	.2	95	12.6	120	66	33	0	0	0	1	0	0		
REDDING	57	37	63	24	47	-2	.5	-1.0	.4	.5	43	27.8	79	86	41	0	2	3	0	0	0		
SACRAMENTO	59	37	63	32	48	0	.8	-.3	.5	.8	200	12.5	86	93	45	0	1	2	2	0	0		
SAN DIEGO	68	48	77	44	58	-1	.4	-.2	.3	.4	228	10.6	132	75	35	0	0	0	2	2	0		
SAN FRANCISCO	60	44	64	41	52	1	.7	.0	.6	.7	142	15.4	93	91	51	0	0	0	3	1	0		
CO DENVER	31	12	49	6	22	-13	.3	.2	.1	.2	230	15.3	104	87	48	0	7	7	0	0	0		
GRAND JUNCTION	40	21	48	18	31	-1	.2	.1	.2	.2	222	9.0	122	83	37	0	2	2	4	1	0		
PUEBLO	35	12	45	1	24	-11	.1	.1	.1	.1	233	12.0	114	89	51	0	0	0	0	0	0		
CT BRIDGEPORT	46	34	49	29	40	2	.5	-.4	.3	.5	81	42.4	111	78	52	0	7	2	3	0	0		
HARTFORD	44	29	49	22	37	3	1.4	.4	.7	1.4	199	39.0	96	92	51	0	5	2	2	2	0		
DC WASHINGTON	45	32	47	29	38	-4	.1	-.6	.1	.1	18	33.7	93	80	49	0	5	5	2	2	0		
FL APALACHICOLA	63	40	68	33	52	-5	.2	-.6	.2	.2	32	55.0	105	96	49	0	0	0	0	0	0		
DAYTONA BEACH	66	41	73	36	54	-7	T	-.5	T	T	0	45.9	98	96	49	0	0	0	1	0	0		
JACKSONVILLE	64	36	72	33	50	-8	T	-.4	T	T	6	62.6	126	94	39	0	0	0	0	0	0		
KEY WEST	73	63	78	60	68	-4	T	-.5	T	T	0	37.0	98	80	55	0	0	0	0	0	0		
MIAMI	76	58	81	55	67	-3	.0	-.4	.0	.0	0	55.9	100	83	41	0	0	0	0	0	0		
ORLANDO	68	45	75	42	57	-6	T	-.4	T	T	3	52.1	109	93	45	0	5	0	1	0	0		
TALLAHASSEE	63	31	69	28	47	-8	T	-.9	T	T	0	61.5	101	95	30	0	0	0	0	0	0		
TAMPA	69	44	75	40	57	-7	.1	-.3	.1	.1	42	34.9	78	97	51	0	0	0	0	0	0		
WEST PALM BEACH	74	53	80	50	64	-5	.0	-.5	.0	.0	0	59.2	103	86	41	0	4	0	0	0	0		
CA ATLANTA	53	33	57	29	43	-4	.4	-.5	.4	.4	60	54.1	120	96	44	0	4	2	2	0	0		
AUGUSTA	59	32	62	29	45	-4	T	-.6	T	T	5	49.2	122	92	30	0	4	1	0	0	0		
MACON	57	32	60	29	45	-6	.2	-.6	.1	.2	26	55.0	133	87	32	0	4	2	0	0	0		
SAVANNAH	60	36	63	32	48	-5	T	-.6	T	T	0	56.9	120	87	34	0	1	0	0	0	0		
HI HILO	80	68	82	65	74	1	13.7	10.4	7.1	2.1	91	105.0	89	96	71	0	0	6	4	0	0		
HONOLULU	84	72	87	69	78	3	.3	-.4	.2	.3	58	12.7	62	86	58	0	0	3	0	0	0		
KAHULUI	84	68	87	66	76	2	.1	-.5	.1	.1	16	14.2	90	88	60	0	0	2	0	0	0		
LIHUE	81	71	83	66	76	2	5.5	4.3	5.0	5.3	621	30.5	77	92	71	0	0	4	1	0	0		
ID BOISE	29	16	36	2	23	-12	.2	-.1	.2	.2	90	7.0	67	96	69	0	7	3	0	0	0		
LEWISTON	34	24	48	14	29	-8	T	-.3	T	T	10	10.3	87	81	59	0	6	1	0	0	0		
POCATELLO	27	1	37	-22	14	-15	.6	-.4	.4	.6	443	7.8	79	91	67	0	7	4	0	0	0		
IL CHICAGO	35	24	44	14	29	-3	T	-.5	T	T	8	27.7	86	90	59	0	7	1	0	0	0		
MOLINE	35	21	43	9	28	-3	.1	-.4	.1	.1	19	36.0	102	91	65	0	7	2	0	0	0		
PEORIA	37	23	45	11	30	-2	T	-.4	T	T	12	29.6	89	90	60	0	7	1	0	0	0		
QUINCY	36	24	45	13	30	-4	T	-.4	T	T	10	28.3	78	84	54	0	7	2	0	0	0		
ROCKFORD	32	21	43	9	26	-3	.2	-.3	.1	.2	45	28.2	80	95	66	0	7	4	0	0	0		
SPRINGFIELD	39	27	47	15	33	-2	T	-.5	T	T	0	27.1	84	86	57	0	7	1	0	0	0		
IN EVANSVILLE	42	26	48	20	34	-5	T	-.8	T	T	0	34.1	88	84	51	0	7	0	0	0	0		
FORT WAYNE	36	27	42	16	32	-2	T	-.6	T	T	7	41.9	129	87	64	0	7	2	0	0	0		
INDIANAPOLIS	37	26	44	18	32	-4	T	-.7	T	T	8	42.3	116	87	62	0	7	1	0	0	0		
SOUTH BEND	35	26	43	12	31	-3	.3	-.4	.2	.3	62	35.0	98	90	65	0	7	3	0	0	0		
IA DES MOINES	33	17	39	6	25	-6	.1	-.2	.1	.1	33	31.6	106	92	67	0	7	3	0	0	0		
SIOUX CITY	37	18	47	4	27	-1	T	-.2	T	T	23	29.2	118	92	56	0	7	1	0	0	0		
WATERLOO	31	13	39	-3	22	-5	.3	.0	.2	.3	119	29.6	93	97	77	0	7	3	0	0	0		
KS CONCORDIA	36	21	45	15	29	-6	T	-.2	T	T	15	40.1	151	83	56	0	7	1	0	0	0		
DODGE CITY	32	19	40	11	26	-11	.4	-.2	.4	.4	380	22.0	110	84	61	0	7	1	0	0	0		
GOODLAND	30	12	38	6	21	-12	T	-.1	T	T	0	25.5	162	85	55	0	7	0	0	0	0		
TOPEKA	41	23	52	14	32	-4	T	-.3	T	T	9	34.0	105	86	50	0	7	1	0	0	0		
WICHITA	40	26	51	21	34	-4	.1	-.2	.1	.1	56	34.1	122	86	49	0	6	1	0	0	0		
KY BOWLING GREEN	42	26	46	20	34	-7	.2	-.8	.2	.2	30	36.1	80	96	55	0	7	4	0	0	0		
LEXINGTON	38	27	47	17	32	-7	.1	-.7	.0	.1	15	47.4	111	85	60	0	7	4	0	0	0		
LOUISVILLE	42	28	49	20	35	-6	.1	-.8	.0	T	5	39.2	97	89	60	0	6	2	0	0	0		
LA BATON ROUGE	64	38	75	25	51	-4	.5	-.6	.5	.5	68	66.1	128	96	46	0	2	2	0	0	0		
LAKE CHARLES	64	43	76	31	54	-2	.6	-.5	.6	.6	73	59.4	119	96	52	0	1	1	1	1	0		
NEW ORLEANS	64	42	77	31	53	-4	.3	-.8	.2	.3	41	76.7	139	97	46	0	2	3	0	0	0		
SHREVEPORT	59	34	65	26	46	-5	.1	-.8	.1	.1	17	45.7	113	87	33	0	3	2	0	0	0		

Based on 1951-80 normals.

Weather Data for the Week Ending December 5, 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 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	
																		90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	33	25	41	16	29	8	.1	-.7	.1	.1	19	34.9	103	90	74	0	7	3	0	0	
PORTLAND	44	30	49	20	37	6	.1	-1.0	.1	.1	9	36.5	92	89	50	0	5	1	0	0	
MD BALTIMORE	45	29	48	27	37	3	.1	-.7	.1	.1	15	34.4	88	92	56	0	6	2	0	0	
SALISBURY	49	30	52	25	39	3	.3	-.5	.2	.3	60	41.1	97	91	52	0	7	4	0	0	
MA BOSTON	45	35	50	23	40	3	1.0	.0	.9	1.0	136	36.5	91	83	50	0	1	3	1	0	
CHATHAM	46	35	50	26	41	4	1.9	.0	1.4	1.9	232	62.9	147	90	63	0	2	4	1	0	
MI ALPENA	35	27	45	21	31	2	.2	-.3	.1	.2	61	25.4	93	93	62	0	7	4	0	0	
DETROIT	37	29	41	20	33	0	.1	-.6	.1	.1	7	35.0	122	87	63	0	5	1	0	0	
FLINT	35	28	41	19	31	0	.1	-.4	.1	.1	29	35.0	128	90	67	0	7	2	0	0	
GRAND RAPIDS	35	27	42	18	31	-1	.1	-.4	.1	.1	48	39.0	124	93	69	0	7	3	0	0	
HOUGHTON LAKE	33	27	41	20	30	-3	.2	-.1	.4	.6	179	27.9	106	93	72	0	7	5	0	0	
LANSING	35	26	42	19	31	-1	.1	-.5	.1	.1	20	32.8	118	89	65	0	7	3	0	0	
MARQUETTE	29	18	42	15	23	1	.3	-.3	.1	.3	67	29.1	83	94	75	0	7	5	0	0	
MUSKOGON	36	30	43	22	33	0	.6	.0	.2	.6	133	27.7	95	92	66	0	6	4	0	0	
SAULT ST. MARIE	32	23	40	14	28	3	.3	-.5	.3	.5	118	32.9	105	91	72	0	7	5	0	0	
MN ALEXANDRIA	26	12	37	-1	19	-1	.1	-.2	.0	.1	0	17.5	73	91	74	0	7	0	0	0	
DULUTH	26	14	35	1	20	1	.1	-.2	.0	.1	32	27.6	97	88	65	0	7	2	0	0	
INT'L FALLS	25	11	34	-4	18	3	.2	-.1	.1	.2	94	21.9	94	91	66	0	7	2	0	0	
MINNEAPOLIS	30	18	42	2	24	-1	.2	.0	.1	.2	94	28.8	113	90	63	0	7	4	0	0	
ROCHESTER	27	15	35	-4	21	-3	.3	.0	.2	.3	156	26.0	94	96	74	0	7	5	0	0	
MS GREENWOOD	53	32	59	26	43	-6	.6	-.6	.6	.6	72	41.6	86	90	42	0	5	1	1	1	
JACKSON	57	32	65	25	45	-6	.9	-.2	.9	.9	112	45.1	95	93	41	0	5	1	1	1	
MERIDIAN	57	33	64	27	45	-5	1.5	-.4	1.5	1.5	179	61.0	125	93	35	0	5	1	1	1	
MO CAPE GIRARDEAU	44	27	48	21	36	-1	.0	-.9	.0	.0	0	36.8	89	88	49	0	7	0	0	0	
COLUMBIA	41	24	48	14	32	-5	.5	-.5	.5	.5	6	31.8	90	87	46	0	7	2	0	0	
KANSAS CITY	40	24	48	14	32	-6	.3	-.3	.3	.3	12	46.9	135	87	52	0	7	1	0	0	
SAINT LOUIS	42	29	49	20	36	-3	.3	-.5	.3	.3	3	29.8	93	74	45	0	6	1	0	0	
SPRINGFIELD	44	25	52	20	34	-5	.3	-.6	.3	.3	0	43.8	117	82	44	0	7	0	0	0	
MT BILLINGS	31	14	47	0	22	-8	.2	.0	.1	.2	142	11.2	78	68	38	0	7	2	0	0	
GLASGOW	35	13	45	5	24	2	.2	-.1	.2	.2	0	9.0	85	90	44	0	7	1	0	0	
GREAT FALLS	32	17	45	11	25	-5	.2	-.2	.2	.2	17	14.2	99	76	44	0	6	2	0	0	
HAVRE	35	15	45	8	25	1	.0	-.1	.0	.0	0	9.1	80	81	48	0	7	0	0	0	
HELENA	28	7	47	-8	18	-9	.2	.0	.2	.2	160	9.0	82	89	52	0	7	1	0	0	
KALISPELL	29	12	39	1	21	-7	.1	-.1	.1	.1	0	15.2	105	90	58	0	7	1	0	0	
MILES CITY	36	14	50	4	25	-1	.1	-.1	.1	.1	0	14.3	104	83	35	0	7	0	0	0	
MISSOULA	25	8	36	-8	17	-11	.1	-.2	.1	.1	6	10.4	86	92	64	0	7	1	0	0	
NE GRAND ISLAND	36	20	44	9	28	-3	.3	-.2	.3	.3	0	30.7	136	80	46	0	7	0	0	0	
LINCOLN	37	20	45	10	28	-3	.1	-.1	.1	.1	42	24.9	94	87	50	0	7	1	0	0	
NORFOLK	38	20	46	8	29	1	.2	-.1	.2	.2	190	28.4	123	83	43	0	7	1	0	0	
NORTH PLATTE	36	12	45	1	24	-5	.1	.0	.1	.1	100	22.8	121	84	43	0	7	1	0	0	
OMAHA	37	21	45	9	29	-3	.1	-.2	.1	.1	36	34.2	116	86	61	0	7	1	0	0	
SCOTTSBLUFF	30	3	41	-13	16	-14	.6	.4	.3	.3	388	15.5	109	88	58	0	7	3	0	0	
VALENTINE	34	11	41	-1	22	-6	.1	.0	.1	.1	83	18.2	108	82	47	0	7	2	0	0	
NV ELY	41	14	51	6	28	-1	.1	-.1	.1	.1	42	8.9	107	74	31	0	7	1	0	0	
LAS VEGAS	55	35	60	32	45	-2	.2	-.2	.2	.2	460	8.4	222	56	26	0	1	1	0	0	
RENO	46	19	56	5	32	-3	.0	-.2	.0	.0	0	3.5	56	74	28	0	7	0	0	0	
WINNEMUCCA	40	19	48	-3	29	-3	.2	-.2	.2	.2	0	3.1	45	87	40	0	7	0	0	0	
NH CONCORD	43	25	48	18	34	5	.2	-.6	.1	.2	32	27.7	82	96	50	0	6	3	0	0	
NJ ATLANTIC CITY	47	29	52	25	38	2	.2	-.6	.2	.2	41	33.2	86	88	50	0	6	3	0	0	
NM ALBUQUERQUE	46	24	53	18	35	-3	.6	.5	.4	.6	712	11.5	153	74	38	0	6	2	0	0	
CLOVIS	45	22	59	11	34	-8	.3	-.1	.3	.3	50	19.6	119	88	41	0	7	2	0	0	
ROSWELL	50	23	70	10	37	-6	.5	.4	.4	.5	833	13.1	128	86	38	0	6	3	0	0	
NY ALBANY	41	30	46	18	36	4	1.2	.5	.6	1.2	245	29.5	89	92	59	0	5	4	1	0	
BINGHAMTON	35	27	40	20	31	1	.1	-.5	.1	.1	27	38.2	111	94	63	0	7	5	0	0	
BUFFALO	36	30	40	19	33	0	.4	-.4	.2	.4	63	44.2	128	91	61	0	4	7	0	0	
NEW YORK	45	37	49	29	41	1	.3	-.6	.1	.3	43	32.2	81	77	53	0	1	2	0	0	
ROCHESTER	37	30	39	16	33	0	.4	-.3	.2	.3	74	33.6	115	94	65	0	5	5	0	0	
SYRACUSE	39	31	42	17	35	2	.3	-.5	.1	.3	49	41.3	114	92	62	0	4	4	0	0	
NC ASHEVILLE	47	28	55	22	37	-5	.5	-.7	.5	.5	0	50.3	122	83	38	0	4	0	0	0	
CHARLOTTE	55	32	55	28	42	-3	.3	-.7	.3	.3	2	51.0	127	82	33	0	4	1	0	0	
GREENSBORO	50	27	54	21	39	-2	.4	-.7	.4	.4	0	41.5	105	80	37	0	7	0	0	0	
HATTERAS	59	40	64	35	50	-2	.4	-.8	.4	.4	1	56.4	108	88	43	0	0	1	0	0	
NEW BERN	58	32	60	29	45	-4	.4	-.8	.4	.4	0	47.2	94	91	37	0	5	0	0	0	
RALEIGH	51	28	53	26	40	-5	.1	-.6	.1	.1	13	40.8	105	93	46	0	7	1	0	0	
WILMINGTON	59	33	61	30	46	-5	.5	-.8	.5	.5	0	61.7	122	93	37	0	3	0	0	0	
ND BISMARCK	33	11	42	2	22	1	.1	-.1	.1	.1	38	12.3	83	89	58	0	7	2	0	0	
FARGO	27	13	39	0	20	0	.1	-.1	.1	.1	70	20.0	106	88	73	0	7	2	0	0	
GRAND FORKS	28	14	38	0	21	4	.1	-.1	.1	.1	60	16.4	92	90	72	0	7	1	0	0	
WILLISTON	29	9	40	1	19	-2	.1	-.1	.1	.1	0	12.1	92	90	64	0	7	1	0	0	
OH AKRON-CANTON	34	27	38	20	30	0	.3	-.3	.2	.3	67	43.2	129	94	70	0	7	4	0	0	
CINCINNATI	37	26	45	16	31	-6	.1	-.6	.1	.1	12	36.2	96	84	64	0	7	2	0	0	
CLEVELAND	36	29	39	25	33	-3	.3	-.3	.2	.3	71	44.5	135	87	62	0	6	3	0	0	
COLUMBUS	37	27	43	18	32	-4	.1	-.5	.1	.1	15	38.4	111	86	62	0	6	2	0	0	
DAYTON	36	26	43	16	31	-5	.1	-.6	.1	.1	2	39.1	120	86	64	0	7	1	0	0	

Based on 1951-80 normals.

Weather Data for the Week Ending December 5, 1992

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS							
	AVERAGE	MAXIMUM	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	.01 INCH OR MORE		.50 INCH OR MORE	
																				TEMP. °F	PRECIP.		
TOLEDO	36	29	41	19	32	0	.1	-.5	.1	.1	28	33.6	114	89	67	0	0	5	2	0	0		
YOUNGSTOWN	35	27	38	20	31	-.2	.5	-.1	.4	.5	120	39.7	114	95	70	0	0	7	3	0	0		
OK OKLAHOMA CITY	48	28	58	26	38	.3	.3	-.1	.3	.3	170	40.6	136	89	42	0	0	6	1	0	0		
TULSA	49	28	58	25	39	.3	.3	-.2	.3	.3	82	38.6	104	84	38	0	0	7	1	0	0		
OR ASTORIA	46	33	52	30	39	.5	2.0	-.6	1.2	.6	33	43.3	72	88	59	0	0	3	5	1	0		
BURNS	27	8	34	-13	18	-.2	.4	-.0	.4	.4	150	8.4	95	91	66	0	0	7	2	0	0		
MEDFORD	47	30	53	19	39	-.1	.3	-.5	.1	.2	44	11.7	70	99	68	0	0	4	3	0	0		
PENDLETON	32	21	52	11	27	-.1	.2	-.1	.1	.2	85	8.2	77	95	78	0	0	4	3	0	0		
PORTLAND	44	33	48	29	38	-.4	1.2	-.2	.6	.6	58	24.7	77	86	58	0	0	3	3	2	2		
SALEM	44	31	50	19	37	-.5	2.2	-.7	1.1	1.5	134	27.0	79	85	63	0	0	4	4	4	2		
PA ALLENTOWN	43	30	47	26	36	.1	.1	-.8	.1	.1	15	35.5	87	87	51	0	0	6	2	0	0		
ERIE	37	32	39	29	34	-.1	.4	-.4	.1	.4	65	41.1	110	88	59	0	0	4	6	0	0		
HARRISBURG	41	32	44	26	36	-.1	.2	-.8	.1	.1	0	30.6	84	82	51	0	0	5	0	0	0		
PHILADELPHIA	46	33	53	31	40	.1	.2	-.6	.1	.2	31	26.0	68	77	46	0	0	3	2	0	0		
PITTSBURGH	37	26	41	20	31	-.4	.4	-.2	.2	.4	103	34.2	100	93	62	0	0	7	5	0	0		
SCRANTON	41	30	44	24	36	-.1	.1	-.5	-.1	.1	19	26.7	81	89	55	0	0	5	3	0	0		
RI PROVIDENCE	46	31	50	24	39	.2	.7	-.3	.4	.7	99	41.3	99	90	51	0	0	4	4	0	0		
SC CHARLESTON	60	36	64	33	48	-.4	.4	-.6	.4	.7	7	52.5	108	87	35	0	0	0	1	0	0		
COLUMBIA	57	31	61	27	44	-.5	.4	-.7	.4	.7	0	46.8	101	91	30	0	0	6	0	0	0		
FLORENCE	58	34	60	31	46	-.4	.0	-.6	.0	.0	0	46.3	111	90	35	0	0	2	0	0	0		
GREENVILLE	52	30	55	23	41	-.5	.4	-.8	.4	.7	0	55.5	116	83	32	0	0	5	0	0	0		
SD ABERDEEN	30	15	41	0	22	.1	.1	-.0	.1	.1	75	16.7	97	90	68	0	0	7	3	0	0		
HURON	34	16	44	3	25	.1	.1	-.1	.1	.1	56	22.3	123	90	58	0	0	7	2	0	0		
RAPID CITY	35	10	50	-5	22	-.7	.2	-.1	.1	.2	238	13.2	84	84	42	0	0	7	2	0	0		
SIoux FALLS	32	16	44	0	24	-.1	.1	-.1	.1	.1	62	31.7	136	89	61	0	0	7	1	0	0		
TN CHATTANOOGA	49	30	52	26	40	-.4	.4	-.7	.4	.4	54	50.7	105	91	43	0	0	6	1	0	0		
KNOXVILLE	45	29	49	23	37	-.6	.5	-.5	.5	.5	73	38.1	88	93	51	0	0	4	2	1	0		
MEMPHIS	49	31	56	24	40	-.6	.3	-.8	.3	.3	40	44.3	93	79	40	0	0	4	1	0	0		
NASHVILLE	46	29	50	23	37	-.6	.1	-.9	.1	.1	14	37.1	83	84	44	0	0	5	2	0	0		
TX ABILENE	55	32	66	26	44	-.5	.1	-.2	.1	.1	40	26.9	119	81	31	0	0	3	1	0	0		
AMARILLO	40	21	54	14	31	-1.0	.4	-.3	.4	.4	500	20.5	110	89	52	0	0	7	2	0	0		
AUSTIN	62	40	73	34	51	-.3	.2	-.3	.2	.2	43	42.9	145	80	35	0	0	0	1	0	0		
BEAUMONT	64	43	73	34	53	-.3	1.5	-.4	1.5	1.5	187	60.2	118	95	50	0	0	0	2	1	0		
BROWNSVILLE	73	54	84	43	64	-.0	1.6	1.4	1.5	.1	28	31.1	128	97	71	0	0	0	4	1	0		
CORPUS CHRISTI	68	48	80	40	58	-.3	.3	-.0	.2	.2	100	40.7	136	95	60	0	0	0	3	0	0		
DEL RIO	65	42	74	37	54	-.1	.0	-.1	.0	.0	0	20.1	120	70	30	0	0	0	0	0	0		
EL PASO	55	29	62	21	42	-.5	1.1	1.0	.6	1.1	>1000	11.1	153	74	36	0	0	5	3	1	0		
FORT WORTH	57	35	67	33	46	-.4	.4	-.4	.4	.4	7	38.0	128	85	37	0	0	0	1	0	0		
GALVESTON	63	51	74	43	57	-.2	.1	-.8	.0	.0	4	48.9	130	94	61	0	0	0	2	0	0		
HOUSTON	65	41	75	35	53	-.3	.1	-.8	.1	.1	11	49.0	113	94	45	0	0	0	2	0	0		
LUBBOCK	48	26	60	22	37	-.7	.2	-.1	.1	.2	300	21.3	124	86	40	0	0	6	3	0	0		
MIDLAND	54	26	69	22	40	-.8	.4	-.1	.1	.1	0	20.8	158	82	30	0	0	6	0	0	0		
SAN ANGELO	58	31	72	24	45	-.6	.0	-.2	.0	.0	0	20.3	116	79	31	0	0	4	0	0	0		
SAN ANTONIO	63	41	71	32	52	-.3	.1	-.2	.1	.1	52	44.4	160	86	41	0	0	1	1	0	0		
VICTORIA	66	45	78	40	56	-.3	.1	-.5	.0	.1	14	49.3	140	94	55	0	0	0	2	0	0		
WACO	60	36	72	34	48	-.4	.4	-.4	.4	.4	6	35.3	121	88	38	0	0	0	1	0	0		
WICHITA FALLS	53	31	62	28	42	-.5	.4	-.3	.3	.3	0	26.8	105	89	41	0	0	5	0	0	0		
UT CEDAR CITY	42	17	53	10	29	-.4	.4	-.1	.1	.1	25	10.4	106	75	29	0	0	7	1	0	0		
SALT LAKE CITY	33	14	40	3	23	-1.0	.4	-.3	.3	.3	9	11.0	79	94	61	0	0	7	2	0	0		
VT BURLINGTON	39	31	45	17	35	-.7	.2	-.4	.1	.1	24	30.0	95	95	58	0	0	2	6	0	0		
VA NORFOLK	52	34	55	30	43	-.3	.1	-.6	.0	.0	13	44.2	104	90	41	0	0	2	2	0	0		
RICHMOND	50	29	55	26	40	-.3	.4	-.7	.4	.4	2	39.0	95	80	41	0	0	7	1	0	0		
ROANOKE	45	26	49	22	36	-.5	.4	-.6	.4	.4	0	40.3	110	79	42	0	0	7	0	0	0		
WA QUILLAYUTE	45	31	49	25	38	-.4	1.5	-.3	1.0	.1	4	80.7	88	91	59	0	0	4	3	1	0		
SEATTLE-TACOMA	44	33	48	28	39	-.4	.3	-.1	.2	.2	1	28.8	87	86	52	0	0	4	3	0	0		
SPOKANE	28	16	37	5	22	-.9	.4	-.5	.4	.4	0	12.4	86	93	72	0	0	7	1	0	0		
YAKIMA	37	20	49	12	29	-.7	.0	-.3	.0	.0	0	5.9	88	91	56	0	0	7	0	0	0		
WV BECKLEY	35	25	40	14	30	-.6	.6	-.1	.2	.2	.6	34.6	87	93	57	0	0	7	5	0	0		
CHARLESTON	40	26	48	18	33	-.7	.5	-.2	.4	.4	.5	37.1	94	90	62	0	0	7	3	0	0		
HUNTINGTON	40	27	47	17	33	-.4	.4	-.3	.1	.1	.4	73	35.0	82	87	58	0	0	7	4	0	0	
PARKERSBURG	39	27	45	19	33	-.6	.3	-.3	.2	.2	55	33.1	93	91	59	0	0	7	3	0	0		
WI GREEN BAY	29	19	34	4	24	-.3	.4	-.1	.1	.1	.3	112	28.3	106	91	64	0	0	7	4	0	0	
LACROSSE	29	19	35	4	24	-.4	.4	-.1	.3	.3	.4	195	30.8	106	93	67	0	0	7	2	0	0	
MADISON	30	20	34	9	25	-.3	.1	-.3	.0	.1	22	29.8	101	88	61	0	0	7	4	0	0		
MILWAUKEE	32	24	41	14	28	-.2	.1	-.4	.0	.1	33	31.7	109	87	61	0	0	7	3	0	0		
WAUSAU	26	17	31	2	22	-.2	.2	-.2	.1	.2	74	31.8	104	96	72	0	0	7	5	0	0		
WY CASPER	25	1	34	-20	13	-1.5	.2	-.1	.1	.2	188	8.6	80	82	58	0	0	7	3	0	0		
CHEYENNE	32	10	40	-5	21	-1.1	.2	-.2	.2	.2	350	12.7	98	83	44	0	0	7	3	0	0		
LANDER	20	1	34	-20	11	-1.5	.3	-.2	.3	.3	300	12.6	100	86	53	0	0	7	1	0	0		
SHERIDAN	30	6	49	-9	18	-1.0	.3	-.1	.3	.3	208	14.1	98	84	49	0	0	7	1	0	0		

Based on 1951-80 normals.

HEATING DEGREE DAYS (Base 65° F) November 29 - December 5, 1992

(Cumulative totals and departures from normal are for the period July 1 - December 5, 1992)

STATES AND STATIONS	WEEKLY		CUMULATIVE			STATES AND STATIONS	WEEKLY		CUMULATIVE			STATES AND STATIONS	WEEKLY		CUMULATIVE		
	TOTAL	DEPARTURE	TOTAL	DEPARTURE	DEP. from '91		TOTAL	DEPARTURE	TOTAL	DEPARTURE	DEP. from '91		TOTAL	DEPARTURE	TOTAL	DEPARTURE	DEP. from '91
AL BIRMINGHAM	160	41	629	12	-6	SHREVEPORT	133	37	506	67	-39	DAYTON	239	36	1357	111	11
MOBILE	109	40	362	44	-75	ME CARBON	248	-53	2445	-17	155	TOLEDO	227	0	1541	58	74
MONTGOMERY	138	41	476	13	-38	PORTLAND	198	-41	1799	35	191	YOUNGSTOWN	235	17	1655	164	192
AK ANCHORAGE	249	-91	3479	3	195	MD BALTIMORE	194	21	1057	81	71	OK OKLAHOMA CITY	186	33	820	64	-98
BARROW	449	-70	6647	41	-57	MA BOSTON	180	21	980	72	109	TULSA	184	33	859	112	-7
FAIRBANKS	379	-113	4598	157	192	MA BOSTON	175	-11	1336	191	214	OR ASTORIA	177	33	1565	34	98
JUNEAU	201	-47	2753	-197	-79	MA BOSTON	168	-11	1314	69	215	BURNS	330	86	2239	368	389
KODIAK	219	-20	2956	13	224	MI ALPENA	240	-18	2293	257	229	MEDFORD	184	5	968	-255	50
NOME	385	-12	4889	393	1053	MI DETROIT	223	-1	1566	90	116	PENDLETON	266	77	1445	51	181
AZ FLAGSTAFF	242	11	1814	-104	135	MI FLINT	233	2	1764	166	79	PORTLAND	186	29	1066	-161	143
PHOENIX	56	-14	167	-57	-34	MI GRAND RAPIDS	233	1	1770	203	68	SALEM	191	30	1123	-215	96
PRESCOTT	179	0	977	-154	-31	MI HOUGHTON LAKE	244	-17	2160	134	111	PA ALLENTOWN	201	-3	1416	135	210
TUCSON	82	5	315	26	-8	MI LANSING	239	5	1886	299	127	ERIE	213	-1	1397	-82	94
WINSLOW	231	29	1206	115	-2	MI MARQUETTE	289	-8	2797	355	63	HARRISBURG	201	9	1279	127	150
YUMA	54	6	127	-9	20	MI MUSKEGON	225	-1	1740	186	80	PHILADELPHIA	174	-3	991	-19	95
AR FORT SMITH	174	30	731	15	-74	MI SAULT ST MARIE	261	-17	2615	307	274	PITTSBURGH	232	26	1423	66	128
LITTLE ROCK	161	29	661	10	-68	MN ALEXANDRIA	318	5	2330	168	-169	SCRANTON	205	-10	1476	31	94
CA BAKERSFIELD	93	-7	339	-52	-82	MN DULUTH	311	-6	2738	240	-147	RI PROVIDENCE	182	-15	1310	53	198
EUREKA	112	4	1203	-385	-166	MN INT'L FALLS	327	-23	2853	160	-145	SC CHARLESTON	118	30	363	-39	-14
FRESNO	105	-15	406	-126	-38	MN MINNEAPOLIS	287	7	2019	189	-275	COLUMBIA	144	35	573	32	30
LOS ANGELES	47	-1	104	-183	-36	MI ROCHESTER	307	22	2230	306	-201	FLORENCE	134	30	508	11	19
REDDING	122	7	455	-66	29	MI SAINT CLOUD	301	-5	2345	200	-181	GREENVILLE	168	36	829	141	127
SACRAMENTO	117	-1	441	-91	14	MS GREENWOOD	156	43	531	-48	-72	SD ABERDEEN	298	-2	2223	200	-70
SAN DIEGO	45	1	95	-95	-27	MS JACKSON	140	41	503	17	-44	HURON	280	-4	2076	172	-102
SAN FRANCISCO	89	-8	439	-366	-99	MS MERIDIAN	137	34	491	-42	-60	RAPID CITY	298	49	1961	160	-46
STOCKTON	116	-2	404	-109	-28	MO CAPE GIRARDEAU	203	26	977	45	-44	SIOUX FALLS	286	7	1997	159	-224
CO DENVER	301	88	1578	87	-78	MO COLUMBIA	230	34	1256	147	-76	TN CHATTANOOGA	175	30	809	20	42
GRAND JCT.	238	9	1286	-32	-49	MO KANSAS CITY	231	31	1295	194	-117	KNOXVILLE	192	45	879	71	39
PUEBLO	286	79	1663	335	79	MO SAINT LOUIS	205	18	1020	-26	-95	MEMPHIS	172	42	649	-6	-68
CT BRIDGEPORT	173	-10	1188	136	159	MO SPRINGFIELD	212	34	1056	46	-86	NASHVILLE	191	43	802	-9	-59
HARTFORD	198	-17	1528	169	244	MT BILLINGS	297	55	1847	34	-69	TX ABILENE	146	32	536	-3	-166
DE WILMINGTON	181	3	1086	57	133	MT GLASGOW	286	-15	2202	-10	-93	AMARILLO	239	68	1129	175	-64
DC WASHINGTON	186	30	949	136	156	MT GREAT FALLS	280	30	2177	173	84	AUSTIN	93	19	332	20	-73
FL APALACHICOLA	116	62	226	8	-69	MT HAVRE	280	-11	2299	76	20	BEAUMONT	81	18	327	57	-31
DAYTONA BEACH	76	37	118	6	-15	MT HELENA	331	62	2218	-21	120	BROWNSVILLE	21	-4	98	24	-53
FORT MYERS	25	9	32	-5	-15	MT KALISPELL	309	43	2419	-31	31	CORPUS CHRISTI	48	8	174	17	-58
JACKSONVILLE	104	42	240	6	-34	MT MILES CITY	281	6	1881	-79	-180	DEL RIO	77	5	292	10	-71
KEY WEST	0	-2	0	-2	00	MT MISSOULA	336	74	2274	47	239	EL PASO	163	33	632	34	-11
MIAMI	2	-4	2	-7	-6	NE GRAND ISLAND	258	20	1690	184	-67	FORT WORTH	130	34	472	49	-123
ORLANDO	56	29	81	12	-24	NE LINCOLN	254	19	1560	147	-118	GALVESTON	56	8	213	28	-60
TALLAHASSEE	124	52	311	12	-69	NE NORFOLK	250	-4	1732	104	-204	HOUSTON	79	11	324	37	-60
TAMPA	57	29	92	7	-24	NE NORTH PLATTE	286	36	1836	124	10	LUBBOCK	195	46	785	13	-167
W. PALM BEACH	14	7	16	2	-13	NE OMAHA	250	21	1571	226	-188	MIDLAND-ODESSA	172	54	627	54	-164
GA ATLANTA	153	30	626	5	48	NE SCOTTSDALE	338	97	1899	208	101	SAN ANGELO	142	39	501	25	-179
AUGUSTA	136	27	509	-15	-34	NE VALENTINE	298	38	1993	213	-46	SAN ANTONIO	88	19	322	31	-69
MACON	141	44	505	49	22	NV ELY	260	5	1978	-60	23	VICTORIA	62	9	244	35	-55
SAVANNAH	116	35	329	-28	-21	NV LAS VEGAS	137	17	473	-23	00	WACO	114	25	419	43	-93
ID BOISE	294	81	1616	140	179	NV RENO	227	16	1250	-367	145	WICHITA FALLS	160	33	620	11	-129
LEWISTON	251	54	1417	-30	93	OH WINNEMUCA	247	22	1660	-61	223	UT BLANDING	235	8	1361	-119	82
POCATELLO	354	107	2002	165	151	OH NH CONCORD	216	-31	1938	158	295	CEDAR CITY	247	27	1429	-23	-7
IL CHICAGO	249	22	1613	241	-21	OH NJ ATLANTIC CITY	188	11	1186	151	151	SALT LAKE CITY	291	71	1473	82	127
MOLINE	256	22	1597	199	-75	OH NM ALBUQUERQUE	208	21	1031	12	20	VT BURLINGTON	207	-48	1895	53	167
PEORIA	244	18	1430	80	-142	OH CLOVIS	218	54	1000	58	-157	VA LYNCHBURG	192	29	978	30	71
QUINCY	242	30	1417	190	-79	OH ROSWELL	197	53	765	32	-131	NORFOLK	149	22	641	1	51
ROCKFORD	268	23	1758	211	-12	OH RICHMOND	204	-29	1717	157	217	RICHMOND	175	24	874	36	122
SPRINGFIELD	223	16	1223	31	-184	OH ROANOKE	236	-2	1990	284	392	ROANOKE	203	40	1063	97	160
IN EVANSVILLE	214	35	977	-47	-151	OH BUFFALO	221	1	1652	156	165	WA COLVILLE	307	60	2080	41	190
FORT WAYNE	232	12	1481	86	-7	OH NEW YORK	167	-4	1018	76	188	QUILLAYUTE	184	23	1715	-125	61
INDIANAPOLIS	230	25	1279	43	-11	OH ROCHESTER	220	1	1756	282	202	SEATTLE-TACOMA	183	25	1222	-228	106
SOUTH BEND	239	20	1523	132	-21	OH SYRACUSE	210	-12	1704	217	214	SPOKANE	299	61	1927	26	178
IA DES MOINES	278	40	1621	220	-166	NC ASHEVILLE	194	32	1057	40	79	YAKIMA	253	37	1618	-32	141
DUBUQUE	295	37	1981	316	07	NC CAPE HATTERAS	105	10	354	-67	22	WV BECKLEY	242	46	---	---	---
SIOUX CITY	260	6	1769	226	-207	NC CHARLOTTE	155	20	672	-31	74	CHARLESTON	222	49	1093	24	65
WATERLOO	300	36	1866	146	-184	NC GREENSBORO	183	31	919	81	141	HUNTINGTON	219	47	1066	5	19
KS CONCORDIA	254	42	1461	249	-17	NC NEW BERN	141	25	511	-37	48	PARKERSBURG	222	42	1189	94	15
DODGE CITY	273	75	1406	295	27	NC RALEIGH-DURHAM	175	35	777	29	78	WI GREEN BAY	285	14	2072	188	-9
GOODLAND	303	79	1703	227	148	NC WILMINGTON	132	33	470	9	-1	LA CROSSE	285	21	1897	204	-216
TOPEKA	229	28	1280	123	-69	ND BISMARCK	300	-8	2374	146	-136	MADISON	277	15	1888	107	-79
WICHITA	219	31	1094	79	-141	ND FARGO	315	-8	2376	166	-160	MILWAUKEE	255	11	1694	84	32
KY BOWLING GREEN	213	48	985	34	-9	ND GRAND FORKS	308	-26	2486	78	-219	WAUSAU	303	15	2303	262	-97
LEXINGTON	226	48	1098	41	-5	ND WILLISTON	321	7	2485	162	-12	WY CASPER	362	104	1918	-66	-95
LOUISVILLE	209	39	925	-48	-47	OH AKRON-CANTON	241	29	1586	203	155	CHEYENNE	309	71	2023	107	14
LA BATON ROUGE	99	27	361	44	-53	OH CLEVELAND	225	19	1466	120	128	LANDER	379	103	2050	-39	-60
LAKE CHARLES	80	12	331	32	-66	OH COLUMBUS	229	26	1296	25	15	SHERIDAN	329	67	2079	22	00
NEW ORLEANS	86	23	289	27	-96	OH CINCINNATI	236	45	1260	105	63						

Based on 1951-80 normals.

November Weather and Crop Summary

California Drought Update

Storms were deflected to the north and south of California during November by persistent high pressure systems over the eastern Pacific Ocean. As a result, monthly precipitation was a meager 20 percent of normal statewide.

By the end of November, the cumulative contents of California's 155 largest reservoirs stood at 55 percent of normal, according to the State's Drought Information Center. On December 1, 1991, that figure was 59 percent of normal, representing a 1-year loss of nearly 1 million acre feet (326 billion gallons), or 7 percent, of the State's reservoir storage. Snowpack in the Sierra Nevada mountains, which melts in the spring to feed many of these reservoirs, is only about 30 percent of normal.

The 6-year California drought (October 1, 1986 to date) is part of a larger-scale drought that is currently affecting the Northwestern United States, including parts of Washington, Oregon, Idaho, Montana, North Dakota, Wyoming, Nevada, and Utah. However, California is often the focus of drought concerns, due to a burgeoning population of 30 million and its heavily agricultural and irrigation-dependent Sacramento, San Joaquin, and Imperial Valleys.

Weather

Elsewhere, a steady progression of storms kept most areas wetter than normal from the Rockies eastward. The three wettest areas were the central Rockies, and separate strips from Oklahoma to the Great Lakes, and from the central Gulf coast to the Carolinas. Wet weather hampered harvests that were already delayed by late-maturing crops. By month's end, corn harvest was running more than 25 percent behind the 5-year average in 7 of the 17 major corn-producing States (SD, NE, WI, MI, IN, OH, and PA). The Michigan corn harvest was only one-quarter completed. Similarly, wet weather in the Southeast held the cotton harvest 15 percentage points or more behind the 5-year average in four States (AL, GA, SC, and NC).

Significant disturbances traversed the Rockies and evolved into major low pressure centers in the southern Plains on November 1, 3, 11, 19, 21, and 24. The first four storms were primarily rain-makers, with snowfall confined to the Rockies and the North Central States. The fifth storm will be remembered for its tornado-laced thunderstorms which swept across the Gulf Coast States and lower Ohio Valley on November 21 and 22. More than two dozen deaths resulted, according to press reports, most of which occurred in Mississippi and Georgia. The sixth storm, which developed during the Thanksgiving travel period, produced heavy snow in the central Rockies, and from northern Texas to Wisconsin. The succession of storms gradually eroded an area of troublesome short-term dryness in the southern Plains that had been adversely affecting the winter wheat crop.

The storms pulled progressively colder air through the Rockies and into the Plains States, especially as snow cover became established across the Intermountain West. The harshest cold outbreak in the southern Plains trailed the sixth major storm. On November 28, temperatures fell to the freezing mark (32°F) as far south as McAllen, TX, on the lower Rio Grande River. Cold air largely avoided the Southeast, although Tallahassee, FL, reported 28°F readings on November 29 and 30.

The stormy, gloomy weather that much of the Nation experienced during November was summed up by a record set in Des Moines, IA. The sun shone for only 57 hours during the month, breaking the record of 69 hours set in December 1971. The sun normally shines during nearly half of the 300 daylight hours in Des Moines in November.

Crop Progress

The beginning of the month saw corn and sorghum harvests well behind normal. Soybean, cotton, and winter wheat activities were at or just slightly behind normal. **Corn harvest** progress, especially across the Corn Belt, was hampered by high moisture content in the grain. As producers waited for their crop to dry down, the situation was further aggravated by rain and snow. Progress was especially slow during the first and last weeks, as precipitation at the beginning of the month and muddy fields at the end of the month brought harvest to a crawl.

The **soybean harvest** progress was near normal as the month began. Although rain and snow, especially in the Midwest, hampered activity, good progress was made, and by mid-month most of the crop was harvested. Progress in the Southeast was delayed by wet weather during the first part of the month and continued to be delayed by wet field conditions at month's end.

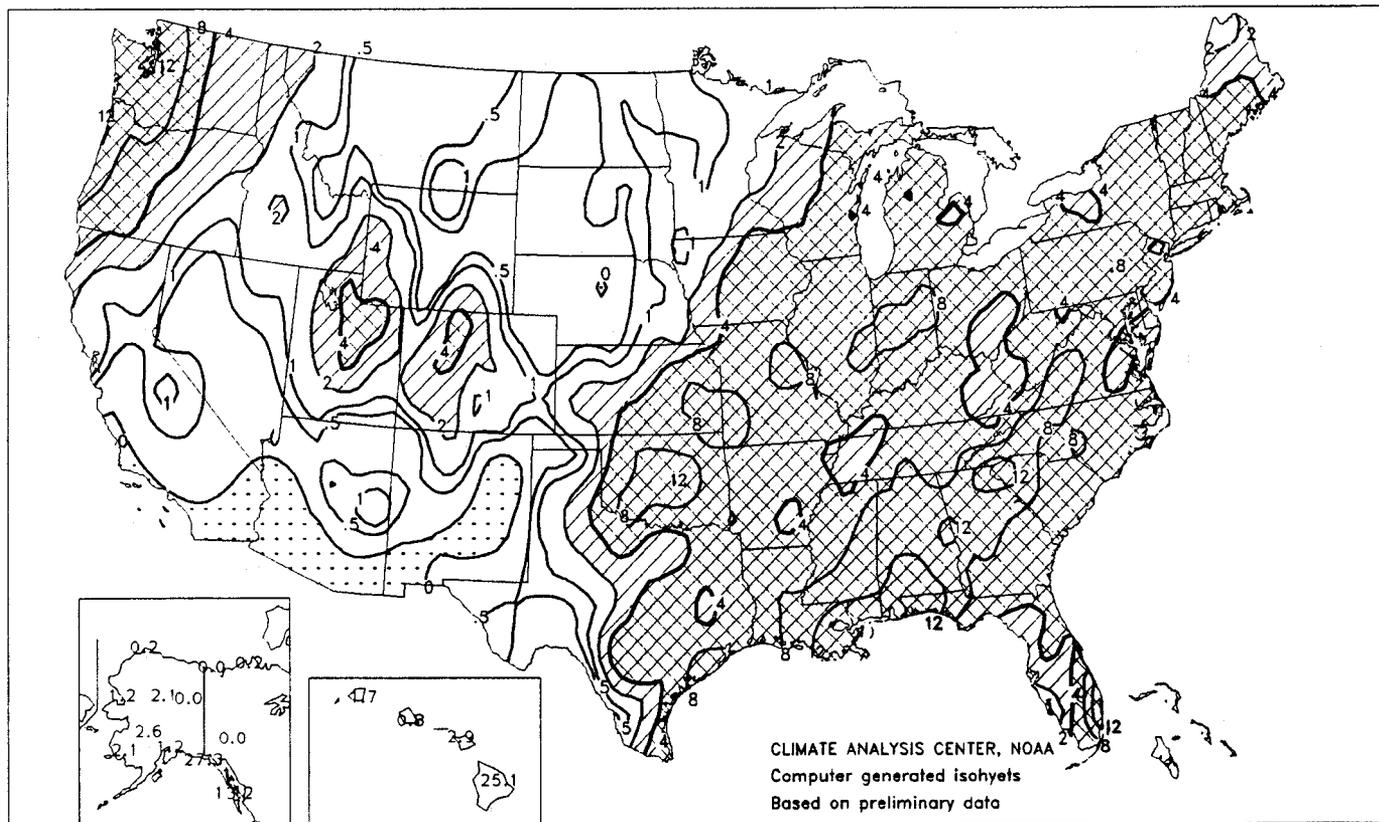
The beginning of the month saw **sorghum harvest** progress behind normal. Weather conditions allowed modest progress through the first part of the month. A mid-month snow storm brought progress to a halt in Kansas and delayed progress elsewhere by the end of the month. At month's end, harvest was almost a month behind normal.

The **cotton harvest** progress began the month near normal. A freeze in Texas allowed cotton harvest to advance ahead of normal for the period. Although rain hindered progress over the Gulf States, dry conditions in California and Arizona allowed harvest progress to stay near normal.

Winter wheat seeding was completed in most areas by the middle of the month. Rain had delayed completion in the southeast. At month's end, the crop was in generally good condition.

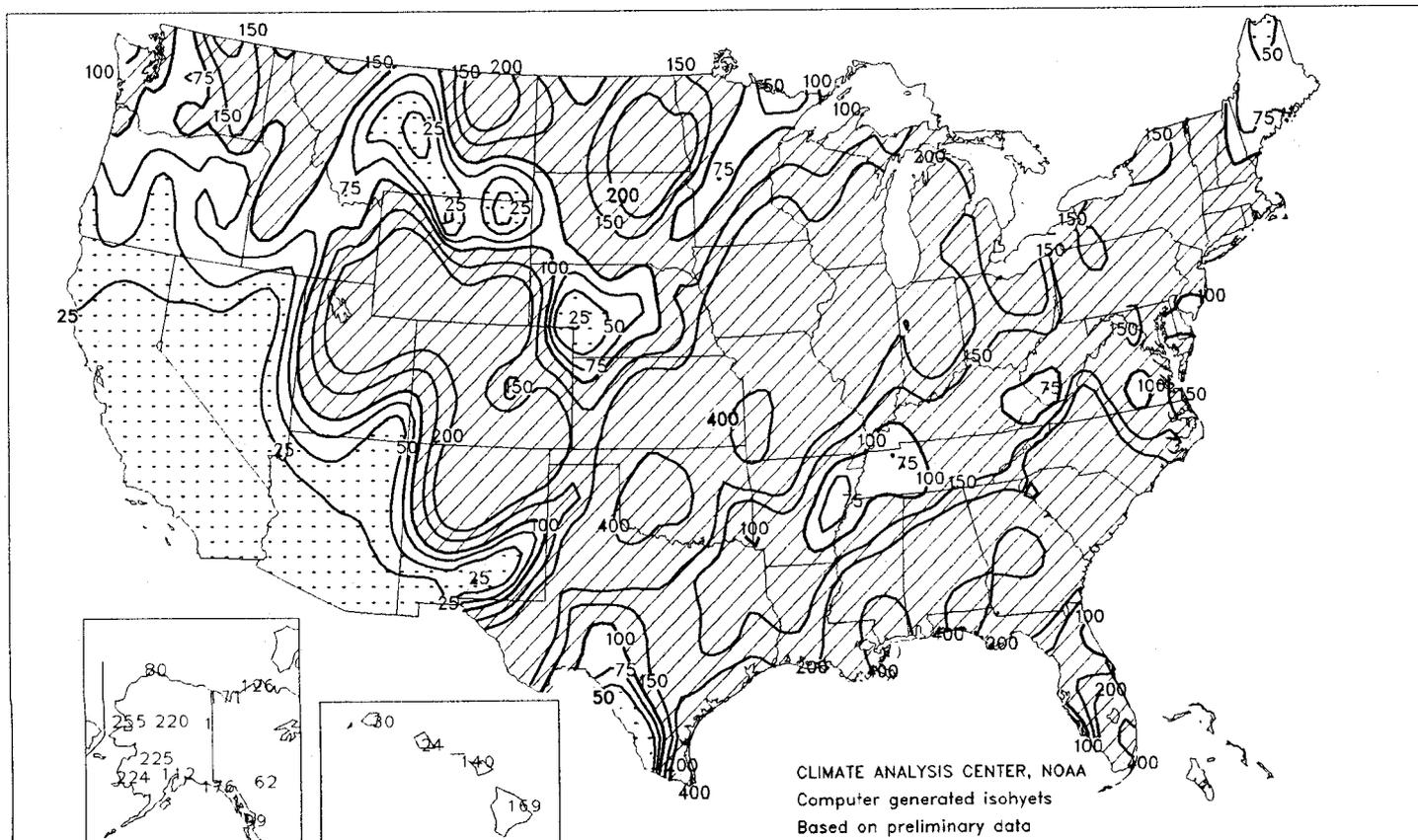
TOTAL PRECIPITATION (inches)

NOV 1992



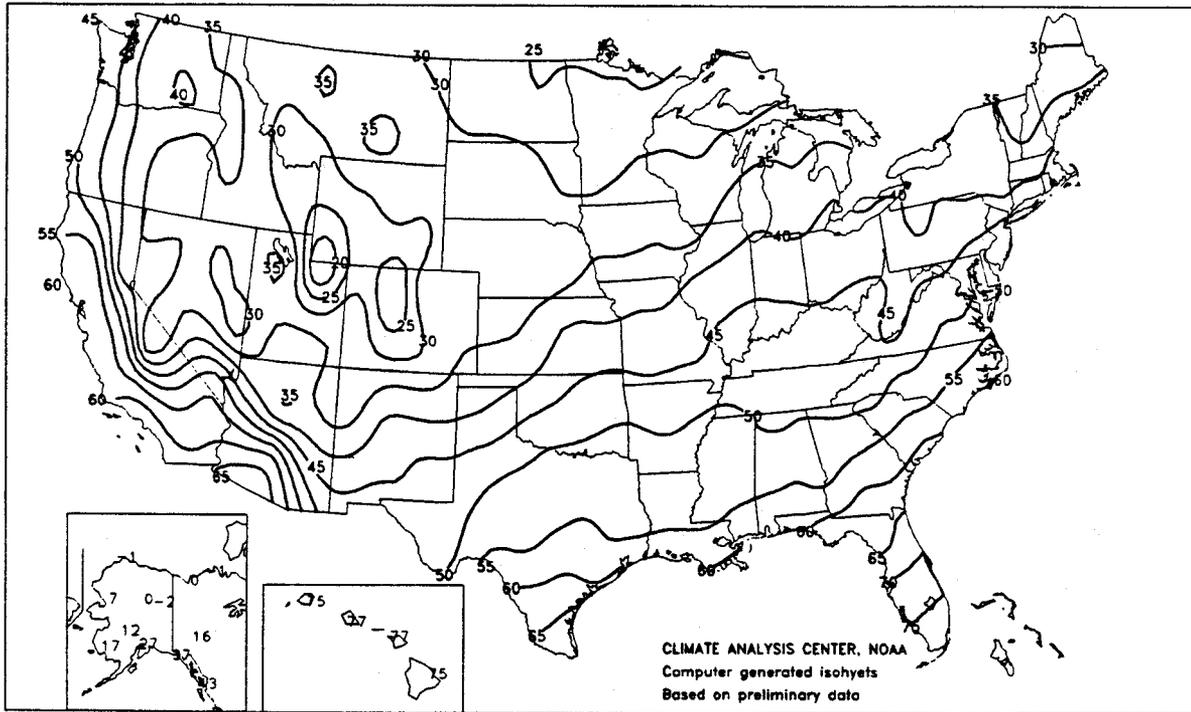
PERCENT OF NORMAL PRECIPITATION

NOV 1992



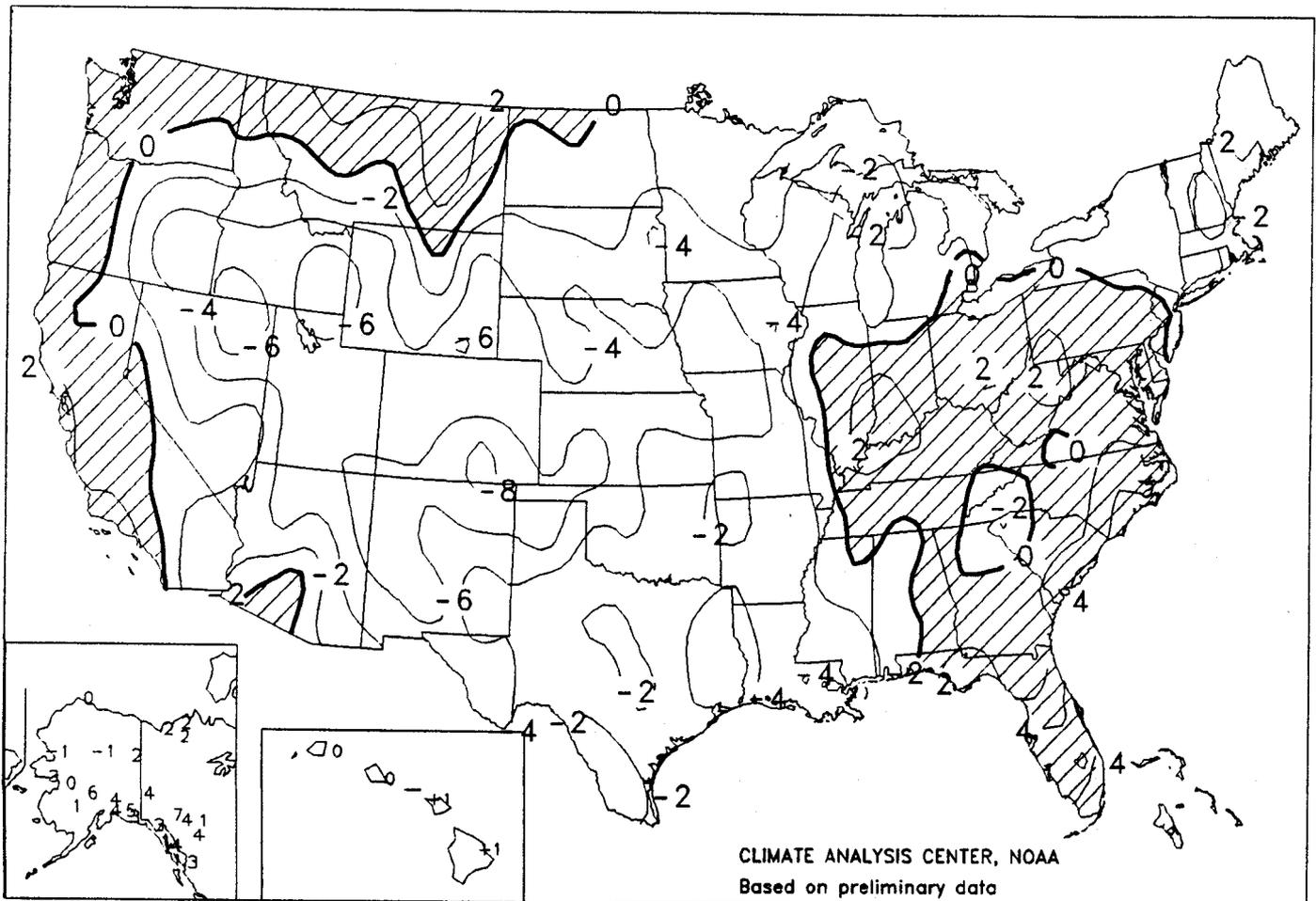
AVERAGE TEMPERATURE(°F)

NOV 1992



Departure of Average Temperature from Normal(°F)

NOV 1992



TEMPERATURE AND PRECIPITATION SUMMARY

November 1992

STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	52	0	7.9	4.3	LA BATON ROUGE	55	-3	8.1	4.1	OK YOUNGSTOWN	41	0	4.2	1.4
HUNTSVILLE	49	-1	5.2	1.0	LAKE CHARLES	56	-4	7.4	3.2	OK OKLAHOMA CITY	46	-3	4.5	3.0
MOBILE	56	-2	12.7	9.0	NEW ORLEANS	57	-3	15.3	11.2	TULSA	46	-3	4.8	2.3
MONTGOMERY	54	-1	10.0	7.0	SHREVEPORT	52	-3	4.7	1.0	OR ASTORIA	46	0	10.1	0.0
AK ANCHORAGE	27	5	1.2	0.1	ME CARIBOU	29	-2	1.6	-1.6	BURNS	30	-5	0.9	-0.3
BARROW	-1	0	0.2	-0.1	PORTLAND	38	-1	4.4	-0.3	MEDFORD	45	2	1.5	-1.3
FAIRBANKS	10	6	0.9	0.3	MD BALTIMORE	47	1	3.4	0.3	PENDLETON	40	-1	1.2	-0.3
JUNEAU	38	6	7.9	2.7	MA SALISBURY	49	1	3.6	0.5	PORTLAND	46	1	4.6	-0.6
KODIAK	36	1	4.8	-1.0	MA BOSTON	43	-2	6.1	2.0	SALEM	46	2	4.8	-0.8
NOME	13	-4	0.9	0.0	MA CHATHAM	44	-2	3.1	-1.4	PA ALLENTOWN	43	1	5.1	1.3
AZ FLAGSTAFF	34	-2	0.5	-1.2	MI ALPENA	34	-1	4.0	1.8	ERIE	42	1	5.4	1.6
PHOENIX	62	1	T	-0.5	MI DETROIT	40	1	4.3	2.0	HARRISBURG	44	0	4.8	1.5
PRESCOTT	42	-4	0.1	-0.6	MI FLINT	38	0	4.0	1.8	PHILADELPHIA	48	2	3.3	0.0
TUCSON	56	-3	T	-0.6	MI GRAND RAPIDS	38	-1	5.6	2.8	PITTSBURGH	43	1	3.3	1.0
WINSLOW	37	-6	0.3	-0.1	MI HOUGHTON LAKE	34	-1	4.6	2.4	SCRANTON	42	1	3.5	0.5
YUMA	64	0	0.0	-0.2	MI LANSING	38	-1	3.9	1.5	WILLIAMSPORT	43	2	4.7	1.1
AR FORT SMITH	48	-2	5.6	2.1	MI MARQUETTE	28	-2	4.3	1.4	RI PROVIDENCE	43	-1	5.0	0.8
LITTLE ROCK	49	-2	5.3	1.0	MI MUSKOGON	38	-1	6.3	3.4	SC CHARLESTON	60	4	5.8	3.6
CA BAKERSFIELD	56	0	0.0	-0.6	MI SAULT ST. MARIE	31	-2	5.0	1.8	COLUMBIA	55	1	4.0	1.5
BISHOP	44	-2	0.0	-0.5	MN ALEXANDRIA	27	-2	0.6	-0.5	FLORENCE	57	2	5.5	3.3
EUREKA	52	0	2.2	-3.7	MN DULUTH	27	-1	1.8	0.2	GREENVILLE	50	-2	7.8	4.7
FRESNO	54	1	T	-1.2	MN INT'L FALLS	25	0	1.2	-0.1	SD ABERDEEN	30	-1	1.2	0.6
LOS ANGELES	64	2	0.0	-1.5	MN MINNEAPOLIS	31	-2	2.0	0.7	HURON	31	-1	1.0	0.3
REDDING	52	-1	0.9	-4.6	MN ROCHESTER	31	-2	4.0	2.6	RAPID CITY	32	-2	0.4	-0.1
SACRAMENTO	53	0	0.3	-1.9	MN ST. CLOUD	29	-1	1.4	0.1	STOUX FALLS	30	-3	1.0	0.1
SAN DIEGO	63	1	T	-1.0	MS GREENWOOD	53	-1	5.2	0.6	TN BRISTOL	47	1	2.3	-0.7
SAN FRANCISCO	57	2	0.2	-2.2	MS JACKSON	53	-2	8.3	4.4	CHATTANOOGA	49	0	5.9	1.7
STOCKTON	54	1	0.2	-1.6	MS MERIDIAN	53	-1	10.7	7.2	KNOXVILLE	48	0	4.3	0.5
CO ALAMOSA	22	-7	0.5	0.1	MS TUPELO	51	-0	6.7	2.1	MEMPHIS	51	-1	4.8	0.7
CO SPRINGS	32	-6	0.8	0.3	MO CAPE GIRARDEAU	--	--	5.2	1.5	NASHVILLE	49	1	4.5	1.0
DENVER	34	-5	1.5	0.7	MO COLUMBIA	41	-3	8.1	5.9	TX ABILENE	51	-2	2.6	1.2
GRAND JUNCTION	36	-4	0.8	0.2	MO KANSAS CITY	49	-5	5.1	3.5	AMARILLO	39	-6	0.8	0.2
FUEBLO	31	-9	1.1	0.6	MO SAINT LOUIS	34	0	6.3	3.8	AUSTIN	57	-2	3.8	1.6
CT BRIDGEPORT	45	-1	4.5	0.7	MO SPRINGFIELD	44	-1	9.1	6.2	BEAUMONT	56	-4	6.9	2.6
HARTFORD	41	-1	4.2	0.2	MT BILLINGS	37	2	0.3	-0.5	BROWNSVILLE	66	-1	5.6	4.2
DC WASHINGTON	49	0	3.4	0.6	MT GLASGOW	32	2	0.6	0.4	CORPUS CHRISTI	63	-2	4.8	3.3
FL APALACHICOLA	56	-5	3.3	0.5	MT GREAT FALLS	35	1	0.3	-0.4	DEL RIO	58	-1	0.7	-0.1
DAYTONA BEACH	69	4	2.2	-0.4	MT HAVRE	33	2	0.8	0.3	EL PASO	48	-3	0.3	0.0
FT. MYERS	74	4	1.2	-0.2	MT HELENA	33	1	0.2	-0.4	FORT WORTH	53	-3	3.6	1.5
JACKSONVILLE	64	2	1.9	0.2	MT KALISPELL	33	2	1.6	0.3	GALVESTON	61	-2	7.2	4.1
KEY WEST	78	3	3.8	0.6	MT MILES CITY	35	2	0.6	0.0	HOUSTON	67	-4	6.0	2.4
MIAMI	77	4	13.8	11.2	MT MISSOULA	31	-1	1.0	0.1	LAREDO	52	-2	1.3	0.1
ORLANDO	70	3	2.7	0.9	NE GRAND ISLAND	33	-5	0.9	0.2	LUBBOCK	46	-2	1.5	0.9
TALLAHASSEE	62	3	7.0	3.7	NE LINCOLN	34	-5	1.4	0.5	MIDLAND	49	-3	0.7	0.1
TAMPA	70	3	2.4	0.6	NE NORFOLK	33	-3	1.3	0.6	SAN ANGELO	53	-2	1.0	0.0
GA WEST PALM BEACH	76	4	12.6	9.2	NE NORTH PLATTE	32	-3	0.2	-0.3	SAN ANTONIO	57	-2	3.5	1.2
ATHENS	52	0	8.3	5.0	NE OMAHA	34	-5	2.4	1.1	VICTORIA	60	-3	3.9	1.6
ATLANTA	51	-1	10.0	6.6	NE SCOTTSBLUFF	31	-5	1.0	0.5	WACO	54	-3	4.0	1.8
AUGUSTA	56	1	6.7	4.6	NE VALENTINE	30	-4	0.5	0.1	WICHITA FALLS	50	-2	4.6	3.2
MACON	55	0	10.3	8.0	NV ELKO	28	-7	1.0	0.2	UT BLANDING	--	--	0.3	-0.6
SAVANNAH	61	3	5.2	3.2	NV ELY	31	-3	0.2	-0.3	CEDAR CITY	35	-4	0.1	-0.8
HI HILO	75	2	25.2	10.3	NV LAS VEGAS	53	-1	0.0	-0.4	SALT LAKE CITY	34	-6	2.5	1.3
HONOLULU	77	1	1.0	-2.2	NV RENO	40	0	0.1	-0.5	VT BURLINGTON	37	0	3.7	0.9
KAHULUI	77	1	3.5	1.2	NV WINNEMUCCA	35	-2	0.6	-0.1	VA LYNCHBURG	48	1	5.6	4.7
LIHUE	75	0	2.3	-3.2	NH CONCORD	36	-2	3.5	-0.1	NORFOLK	54	2	4.3	1.4
ID BOISE	35	-5	1.4	0.1	NJ ATLANTIC CITY	46	0	3.1	-0.6	RICHMOND	51	2	2.6	-0.7
LEWISTON	40	0	1.2	0.1	NM ALBUQUERQUE	40	-4	1.1	0.8	ROANOKE	46	-1	5.6	3.0
POCATELLO	29	-6	1.4	0.5	NM CLOVIS	42	-5	0.3	-0.1	WA COLVILLE	32	-2	2.5	0.4
IL CAIRO	--	--	5.5	1.5	NY ROSWELL	46	-1	0.1	-0.3	QUILLAYUTE	45	1	11.9	-1.2
CHICAGO	38	-2	5.4	3.3	NY ALBANY	39	-1	3.6	0.6	SEATTLE-TACOMA	46	1	5.6	0.0
MOLINE	38	-2	6.8	4.8	NY BINGHAMTON	37	-1	3.8	0.8	SPOKANE	34	-1	3.0	1.0
PEORIA	40	0	5.6	3.6	NY BUFFALO	40	0	4.9	1.3	WALLA WALLA	41	-1	3.5	1.2
QUINCY	39	-2	7.5	5.5	NY NEW YORK	47	-1	5.3	1.5	YAKIMA	38	0	1.0	0.0
ROCKFORD	36	-1	4.8	2.5	NY ROCHESTER	39	-2	2.9	0.2	WV BECKLEY	44	2	1.9	-0.9
SPRINGFIELD	42	0	6.1	4.2	NY SYRACUSE	40	-1	3.8	0.3	CHARLESTON	47	2	3.2	0.3
IN EVANSVILLE	47	2	4.3	1.0	NC ASHEVILLE	46	0	7.2	4.2	ELKINS	43	2	2.7	0.0
FORT WAYNE	41	1	8.0	5.4	NC CHARLOTTE	52	1	5.8	3.0	HUNTINGTON	47	1	3.2	0.4
INDIANAPOLIS	43	1	7.9	4.9	NC GREENSBORO	49	0	6.0	3.5	PARKERSBURG	46	1	3.5	1.1
SOUTH BEND	40	0	5.6	2.8	NC HATTERAS	60	4	4.8	0.0	WI GREEN BAY	33	-1	5.3	3.6
IA DES MOINES	35	-4	5.2	3.7	NC NEW BERN	57	3	5.4	2.3	LACROSSE	33	-3	3.6	2.1
DUBUQUE	33	-3	6.8	4.3	NC RALEIGH	52	2	5.0	2.2	MADISON	35	-1	4.8	3.0
STOIX CITY	33	-3	1.0	0.0	ND WILMINGTON	59	3	7.1	4.0	MILWAUKEE	37	0	5.4	3.4
WATERLOO	34	-2	5.6	4.0	ND BISMARCK	29	0	0.8	0.3	WAUSAU	30	-2	3.2	1.4
KS CONCORDIA	36	-6	2.2	1.1	ND FARGO	27	-1	1.7	1.0	WY CASPER	32	-1	0.9	0.3
DODGE CITY	36	-7	2.4	1.6	ND GRAND FORKS	27	0	0.9	0.1	CHEYENNE	31	-4	1.7	1.2
GOODLAND	33	-5	0.5	-0.1	ND WILLISTON	28	-1	0.8	0.3	LANDER	29	-2	1.6	0.9
TOPEKA	39	-3	5.3	3.5	OH AKRON-CANTON	41	0	5.1	2.6	SHERIDAN	33	0	1.3	0.5
WICHITA	41	-3	5.0	3.6	OH CINCINNATI	44	0	4.3	1.2	FR SAN JUAN	81	1	11.4	5.3
KY BOWLING GREEN	47	1	3.9	0.0	OH CLEVELAND	42	0	6.5	3.8					
JACKSON	47	4	3.2	0.0	OH COLUMBUS	45	2	4.0	1.4					
LEXINGTON	46	1	3.5	0.2	OH DAYTON	43	1	5.1	2.4					
LOUISVILLE	48	2	4.7	1.2	OH MANSFIELD	41	0	7.6	4.9					
PADUCAH	48	1	3.5	-0.6	OH TOLEDO	41	1	4.4	2.0					

Based on 1951-80 normals.

November Weather in Historical Perspective

On a national basis, November 1992 was a cold, wet month. The national average temperature of 40.6°F was nearly 2°F below normal, and the 19th lowest since 1895 (fig. 1). Prior to 1992, November temperatures had averaged above normal for 4 consecutive years. The national normalized precipitation index attained its 24th highest ranking in November (fig. 2), propelled by near-record wetness in four of nine regions.

The anomalously heavy precipitation was fueled by an active storm track through the South (5th wettest November), Central (3rd wettest), and East North Central regions (6th wettest). Moisture-laden southerly winds kept the Southeast (3rd wettest) damp (table 1). In contrast, storms bypassed the West region (California and Nevada), which recorded its sixth driest

November on record as it enters a potential seventh year of drought.

Cold air trailed the storms into the Southwest (6th coldest November) and South regions (10th coldest). Only the Southeast region (38th warmest) mustered an average temperature above the long-term mean.

The temperature contrast between the South region and the Southeast region helped to ignite a vicious severe weather outbreak between November 21 and 23, when nearly 100 tornadoes tore across the Gulf Coast States and the lower Ohio Valley. The preliminary tornado count for November 1992 was 178, which is nearly seven times the 1953-1991 average of 26 (fig. 3).

Figure 1

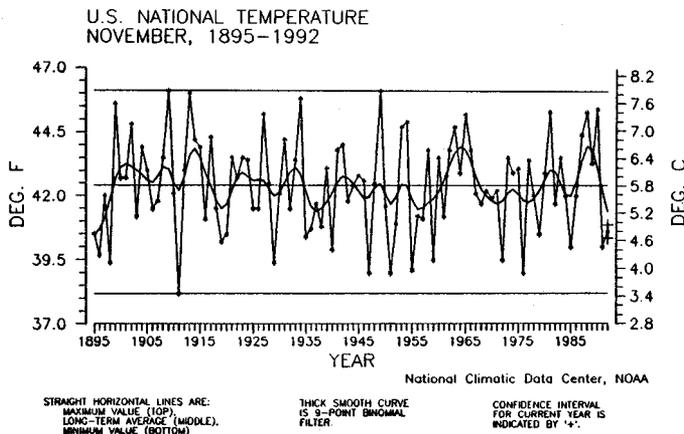


TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR NOVEMBER 1992, BASED ON THE PERIOD 1895-1992. 1 = DRIEST/COLDEST, 98 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
NORTHEAST	71	47
EAST NORTH CENTRAL	93	32
CENTRAL	96	47
SOUTHEAST	96	61
WEST NORTH CENTRAL	62	40
SOUTH	94	10
SOUTHWEST	42	6
NORTHWEST	33	25
WEST	6	29
NATIONAL	75	19

Figure 2

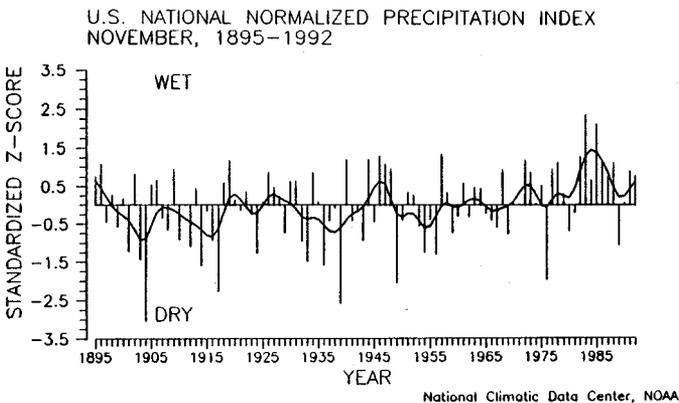
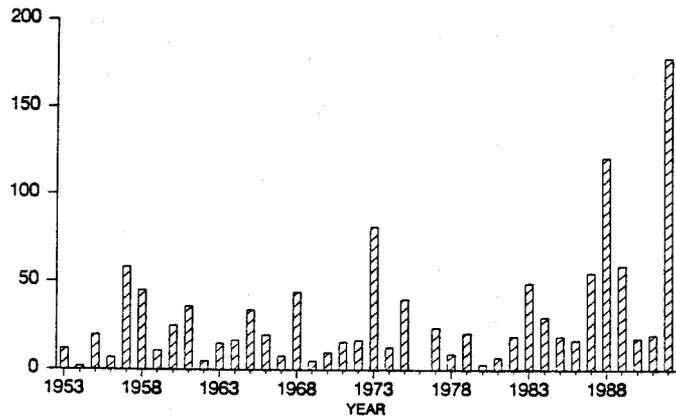


Figure 3

NUMBER OF OBSERVED TORNADOES, U.S.
NOVEMBER TOTAL, 1953-1992



HEATING DEGREE DAYS (Base 65° F) November 1992

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL BIRMINGHAM	401	14	SHREVEPORT	381	88	DAYTON	658	-29
MOBILE	276	58	ME CARIBOU	1064	47	TOLEDO	719	-52
MONTGOMERY	323	16	PORTLAND	814	16	YOUNGSTOWN	721	-23
AK ANCHORAGE	1131	-168	MD BALTIMORE	529	-32	OK OKLAHOMA CITY	563	77
BARROW	1982	2	SALISBURY	473	-46	TULSA	565	91
FAIRBANKS	1636	-197	MA BOSTON	656	62	OR ASTORIA	555	-3
JUNEAU	791	-178	CHATAM	636	42	BURNS	1041	159
KODIAK	876	-33	MI ALPENA	919	22	MEDFORD	583	-59
NOME	1560	96	DETROIT	725	-40	PENDLETON	752	35
AZ FLAGSTAFF	913	52	FLINT	793	7	PORTLAND	556	-29
PHOENIX	127	-32	GRAND RAPIDS	794	-1	SALEM	558	-51
PRESCOTT	679	49	HOUGHTON LAKE	934	31	PA ALLENTOWN	649	-26
TUCSON	261	57	LANSING	813	18	ERIE	673	-56
WINSLOW	789	126	MARQUETTE	1092	45	HARRISBURG	615	-18
YUMA	97	5	MUSKEGON	796	22	PHILADELPHIA	504	-72
AR FORT SMITH	500	44	SAULT ST MARIE	1014	48	PITTSBURGH	657	-45
LITTLE ROCK	456	42	MN ALEXANDRIA	1127	50	SCRANTON	676	-47
CA BAKERSFIELD	273	5	DULUTH	1121	17	RI PROVIDENCE	652	4
EUREKA	393	-15	INT'L FALLS	1178	-25	SC CHARLESTON	197	-65
FRESNO	316	-38	MINNEAPOLIS	1003	49	COLUMBIA	305	-34
LOS ANGELES	67	-72	ROCHESTER	1019	47	FLORENCE	266	-49
REDDING	386	46	SAINT CLOUD	1079	23	GREENVILLE	455	32
SACRAMENTO	340	-20	MS GREENWOOD	365	6	SD ABERDEEN	1054	10
SAN DIEGO	84	-34	JACKSON	364	48	HURON	1021	37
SAN FRANCISCO	235	-80	MERIDIAN	351	16	RAPID CITY	973	70
STOCKTON	305	-46	MO CAPE GIRARDEAU	550	-17	SIOUX FALLS	1030	70
CO DENVER	926	137	COLUMBIA	722	77	TN CHATTANOOGA	465	-18
GRAND JCT.	868	106	KANSAS CITY	773	116	KNOXVILLE	494	8
PUEBLO	1009	265	SAINT LOUIS	615	3	MEMPHIS	428	13
CT BRIDGEPORT	599	14	SPRINGFIELD	622	25	NASHVILLE	461	-31
HARTFORD	722	20	MT BILLINGS	837	-63	TX ABILENE	413	52
DE WILMINGTON	527	-55	GLASGOW	990	-84	AMARILLO	765	177
DC WASHINGTON	477	-12	GREAT FALLS	886	-44	AUSTIN	267	46
FL APALACHICOLA	150	-4	HAVRE	966	-93	BEAUMONT	273	83
DAYTONA BEACH	70	-13	HELINA	960	-48	BROWNSVILLE	82	27
FORT MYERS	19	-6	KALISPELL	958	-65	CORPUS CHRISTI	139	23
JACKSONVILLE	147	-17	MILES CITY	909	-81	DEL RIO	230	27
KEY WEST	0	0	MISSOULA	1011	15	EL PASO	502	94
MIAMI	2	-2	NE GRAND ISLAND	959	137	FORT WORTH	366	71
ORLANDO	47	-2	LINCOLN	927	132	GALVESTON	171	32
TALLAHASSEE	182	-28	NORFOLK	949	79	HOUSTON	270	69
TAMPA	57	-8	NORTH PLATTE	970	70	LUBBOCK	554	59
W. PALM BEACH	9	0	OMAHA	910	145	MIDLAND-ODESSA	475	90
GA ATLANTA	398	4	SCOTTSBUFF	1019	146	SAN ANGELO	370	44
AUGUSTA	289	-49	VALENTINE	1039	109	SAN ANTONIO	260	61
MACON	307	8	NV ELY	1048	115	VICTORIA	202	52
SAVANNAH	194	-46	LAS VEGAS	364	18	WACO	331	66
ID BOISE	907	148	RENO	748	-11	WICHITA FALLS	457	61
LEWISTON	737	-10	WINNEMUCCA	899	80	UT BLANDING	860	62
POCATELLO	1078	184	NH CONCORD	875	44	CEDAR CITY	880	103
IL CHICAGO	795	39	NJ ATLANTIC CITY	565	-17	SALT LAKE CITY	921	162
MOLINE	819	39	NM ALBUQUERQUE	752	122	VT BURLINGTON	843	9
PEORIA	748	-8	CLOVIS	688	121	VA LYNCHBURG	504	-36
QUINCY	764	62	ROSWELL	573	96	NORFOLK	337	-56
ROCKFORD	849	24	NY ALBANY	773	2	RICHMOND	427	-56
SPRINGFIELD	671	-16	BINGHAMTON	837	24	ROANOKE	552	9
IN EVANSVILLE	538	-59	BUFFALO	738	-3	WA COLVILLE	995	59
FORT WAYNE	714	-33	NEW YORK	546	9	QUILLAYUTE	602	-34
INDIANAPOLIS	645	-51	ROCHESTER	774	42	SEATTLE-TACOMA	580	-26
SOUTH BEND	742	1	SYRACUSE	753	21	SPOKANE	916	13
IA DES MOINES	897	105	NC ASHEVILLE	558	0	YAKIMA	799	-5
DUBUQUE	958	82	CAPE HATTERAS	182	-94	WV BECKLEY	630	-54
STOUC CITY	944	86	CHARLOTTE	372	-57	CHARLESTON	522	-69
WATERLOO	934	40	GREENSBORO	474	-21	HUNTINGTON	527	-55
KS CONCORDIA	867	150	NEW BERN	260	-78	PARKERSBURG	567	-39
DODGE CITY	875	200	RALEIGH-DURHAM	390	-60	WI GREEN BAY	960	36
GOODLAND	963	156	WILMINGTON	238	-57	LA CROSSE	952	61
TOPEKA	770	101	ND BISMARCK	1077	-15	MADISON	903	6
WICHITA	703	82	FARGO	1125	21	MILWAUKEE	825	-6
KY BOWLING GREEN	531	-30	GRAND FORKS	1145	-10	WAUSAU	1038	48
LEXINGTON	566	-37	WILLISTON	1116	-6	WY CASPER	972	9
LOUISVILLE	505	-62	OH AKRON-CANTON	717	-3	CHEYENNE	1014	108
LA BATON ROUGE	297	79	CLEVELAND	682	-14	LANDER	1075	49
LAKE CHARLES	281	77	COLUMBUS	600	-87	SHERIDAN	963	-12
NEW ORLEANS	240	54	CINCINNATI	617	-31			

Based on 1951-80 normals.

National Agricultural Summary

November 30 - December 6, 1992

HIGHLIGHTS: The week was generally dry except in the Southwest, along the Pacific Coast, and across the Appalachians, where rain and snow developed. Temperatures were generally below normal, except in the upper Midwest and New England, where they were at or above normal. Harvest activities advanced slowly as producers fought muddy conditions.

SMALL GRAINS: This week's weather caused the winter wheat crop condition to decline slightly. In Oklahoma, warm weather was needed for the late-planted wheat. Small grain stands in Texas had improved. Seeding of oats, barley, and rye advanced in the Southeast as weather and field conditions permitted.

CORN: Corn harvest advanced steadily as muddy fields hindered progress. Harvest was 83 percent (%) complete in the 17 major producing States, compared with 100% last year and the 5-year average of 99%. In Illinois, harvest advanced where the ground had frozen. High-moisture content in the grain continued to be a problem in Nebraska, Illinois, Minnesota, and Wisconsin.

SOYBEANS: Soybean harvest advanced in the Southeast. Wet fields continued to hamper progress. Harvest ranged from 11 to 22 percentage points behind average in Georgia, North Carolina, and South Carolina. In Missouri, harvest advanced slowly due to high moisture content.

COTTON: Cotton harvest was 88% complete nationally, 4% ahead of last year and equal to the 5-year average. Harvest advanced in Texas as conditions allowed. In California and Mississippi, the harvests were finished.

SORGHUM: Sorghum harvest advanced in the major producing areas, advancing 5 points from last week. Harvest in the 12 major producing States was 90% complete, compared to 98% last year and the 5-year average of 99%. Snow from previous storms hampered activities in Kansas. Wet field conditions delayed harvest in Nebraska.

OTHER FIELD CROPS: Light hay harvest continued light in all regions of Arizona. Peanut harvest in the Low Plains region of Texas was virtually completed. In North Dakota, sunflower

harvest was delayed by high-moisture content in the heads and wet fields. Sugarcane harvest and planting advanced in Florida. Muddy fields continued to hinder harvest in Louisiana, and delayed the completion of the harvest in Hawaii.

FRUIT AND NUTS: The citrus harvests advanced in Arizona, Florida, and California. Citrus groves, trees, and fruit were reported as near excellent condition in Florida. Grapefruit harvest continued in California, with good quality reported. In Florida, many east coast grapefruits were exported. The Riverside County avocado harvest advanced in California. Pecan harvest advanced in Arizona, Georgia, Texas, and New Mexico. The New Mexican crop was reported in fair to good condition. Scattered showers caused some harvest delays in the Trans-Pecos region of Texas.

VEGETABLES: Favorable growing conditions were reported in the major vegetable areas of Florida. Broccoli harvest continued in Arizona and California. Cabbage harvest remained active in Arizona and Florida. Cauliflower harvest continued moderate in Salinas-Watsonville and light in the Santa Maria area of California. Celery harvest was reported heavy, with good quality in the Salinas-Watsonville area; and was reported moderate, with good quality in the Santa Maria area. The California fall lettuce harvest neared completion. New plantings of lettuce began in the Westside area of California.

PASTURES AND LIVESTOCK: Pastures in California were rated poor to fair, in the central and southern areas, and good in the north. Livestock water supplies remained light. Pastures elsewhere in the Nation continued in fair to good condition. Cattle grazed stubble where conditions permitted. Muddy conditions caused livestock problems in Iowa and Oregon. Increased cattle losses reported in the Texas plains due to blizzard-like conditions. Elsewhere, cattle were in generally good condition. Supplemental feeding continued where needed. Feed supplies remained generally adequate.

(Continued from front cover)

Meanwhile, a low pressure center intensified rapidly east of New England, inducing heavy snowfall in the mountains. Great Barrington, MA, received 14 inches. By Thursday morning, the first of more than a dozen daily record lows appeared in the West, as Redding, CA, reached 30°F. But even colder air arrived by Saturday (Redding: 24°F) as the storm turned eastward across the southern Rockies. The Intermountain West awoke on Friday to temperatures as low

as -20°F in Rawlins, WY, and -22°F in Pocatello, ID. Stanley, ID, registered -33°F. Farther south, snowfall reached 19 inches in Flagstaff, AZ, and 2 feet in New Mexico's Rockies. By Saturday, the second snowstorm in 2 weeks arrived in the southern Plains. Snow depths reached 7 inches in Dalhart, TX, and 6 inches in Gage, OK, and Enid, OK. Meanwhile, cold air swept into the East, causing snow squalls in the Great Lakes States and central Appalachians.

Crop Progress

for the Week Ending December 6, 1992

CORN (Percent Harvested)

	Current	Last Wk	1991	Avg.
CO	88	85	98	98
GA	100	100	100	100
IL	88	80	100	100
IN	79	71	100	99
IA	85	80	99	99
KS	95	90	100	100
KY	99	98	100	100
MI	40	25	100	97
MN	92	85	99	99
MO	85	78	100	100
NE	84	74	100	100
NC	100	100	100	100
OH	75	60	100	98
PA	65	56	98	95
SD	77	66	100	100
TX	100	100	100	100
WI	59	53	98	99
17 States	83	75	100	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	82	78	100	98
IL	95	92	100	100
KS	75	65	100	100
LA	100	100	100	100
MS	100	100	100	100
MO	91	87	98	99
NE	93	89	100	100
NM	99	96	53	NA
OK	96	94	86	87
SD	93	92	100	100
TX	100	99	97	98
12 States	90	85	98	NA
Excl. States with NA	90	85	98	99

NA - not available.

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

COTTON (Percent Harvested)

	Current	Last Wk	1991	Avg.
AL	90	82	99	99
AZ	99	98	98	95
AR	99	96	100	100
CA	99	99	99	99
GA	83	76	98	97
LA	100	100	100	100
MS	100	97	100	100
MO	97	91	100	100
NM	78	65	75	69
NC	71	68	94	95
OK	53	52	40	55
SC	86	81	97	98
TN	97	94	99	99
TX	80	68	68	78
14 States	88	81	84	88

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

Crop Condition (Percent)

for the Week Ending December 6, 1992

WINTER WHEAT

State	VP	P	F	G	EX
AR	0	0	6	74	20
CA	0	0	10	85	5
CO	3	6	25	51	15
GA	0	0	13	87	0
ID	0	4	27	64	5
IL	0	2	11	68	19
IN	0	2	20	73	5
KS	0	3	5	51	41
MI	5	10	30	45	10
MO	0	2	30	62	6
MT	1	2	24	60	13
NE	0	0	34	58	8
NC	0	0	17	79	4
OH	0	5	25	56	14
OK	0	10	31	59	0
OR	0	0	11	69	20
SD	0	2	32	60	6
TX	2	19	59	17	3
WA	0	0	65	35	0
19 State	1	6	27	51	15
Prev Week	1	4	30	48	17
Prev Year	N/A	N/A	N/A	N/A	N/A

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 totals 0.51 to 1.89 in. north; 0.41 to 1.64 in. central; 0.16 to 0.55 in. south. Temperatures 5° to 9° below normal north and central; 2° to 6° below normal south; lows 21° to 30° north; 20° to 29° central; 25° to 35° south. Highs 50° to 59° north; 55° to 66° central; 65° to 71° south.

Days suitable for fieldwork 4.4. Soil moisture 57% adequate, 43% surplus. Winter Wheat 88% seeded, 87% 1991, 87% avg. Pasture condition 2% very poor, 7% poor, 33% fair, 48% good, 10% excellent. Livestock condition 16% fair, 73% good, 11% excellent. Primary activities: harvesting vegetables, hay, cotton, pecans, soybeans; planting small grains, marketing cattle; repairing machinery; general care of livestock, poultry, catfish.

ARIZONA: Sunny, mild days first of week gave way to snow in mountains, rain in lower elevations. Largest rainfall amount: 3.14 in., Payson. Temperatures 1° above to 7° below normal. Extremes 9°; 73° higher elevations; 18°; 74° deserts.

Cotton harvested 99%, 98% 1991, 95% avg.; stalk shredding, plowdown active weather permitting Statewide except complete southwest; Alfalfas good; harvest, light all areas. Small grains planted 52%, 54% 1992, 38% avg.; stands established 34%, 36% 1991, 20% avg.; field preparations active early week. Fruit, vegetable harvest active. Broccoli, cabbage, green onions, lettuce, napa, spinach available western, central areas. Also available west: Cauliflower, escarole, endive. Squash, sweet corn, leeks available, central. Eastern area: chili, squash, tomatoes available. Pecan harvest continued.

ARKANSAS: Temperatures below normal, freezing precipitation, later part of week. Temperatures 18°; 63°. Rainfall none to 0.71 in.

Days suitable for fieldwork 2. Soil moisture supplies adequate to surplus. Activities: Harvesting cotton, planting wheat, oats, marketing calves, working cattle. Wheat planted 98%, 100% 1991, 98% avg. Cotton harvest near completion. As of December 3, the cotton classing office reported 1,419,667 bales of Arkansas cotton had been classed. Livestock good. Pastures good. Pastures were supplying average forage for herds.

CALIFORNIA: High pressure dominated during week. A storm moved into State midweek, spreading small amounts of moisture. Strong offshore winds developed, bringing cold air into State, allowing minimums below freezing many key spots late week.

Intermittent rainfall hampered fieldwork north. Elsewhere, good progress field activities. Rice stubble burned where conditions, air quality regulations allowed. Cotton harvest essentially complete. Fields shredded, plowed for pink bollworm control following harvest. Ground preparation next year's crop. Sugar beets irrigated. Alfalfa greenchopped limited areas. Seedbeds prepared small grains, winter forages. Some barley, oats, wheat seeded. Emergence, growth good where rained; drier areas began irrigation. General activities included pre-plant herbicide application next year's row crops. Orchard, vineyard weed control, pruning continued. Western Riverside County harvesting avocados. Fuji, Granny Smith apples being packed. Lemons, grapefruits, tangerines, Navel oranges harvested with good quality. Broccoli moderate, variable quality Salinas-Watsonville; good Santa Maria. Cauliflower moderate, variable quality Salinas-Watsonville; fairly light, generally good Santa Maria. Celery fairly heavy, good quality Salinas-Watsonville; moderate, good quality Santa Maria. Fall lettuce almost complete; new plantings lettuce began Westside. Broccoli, freezer cabbage, cauliflower, mixed lettuce harvest continued. Late tomatoes, peppers continued, sweet potatoes winding down Central Valley. Palo Verde head lettuce, broccoli produced good yields; cabbage next week. Leaf lettuce, oriental vegetables, spinach, broccoli harvested Coachella Valley. Other

crops harvested: Beets, green onions, turnips. Rainfall improved range, pasture. Northern areas condition good; central, southern fair to poor. Vegetation stressed, lack of moisture. Very little runoff. Stock ponds, streams slow to fill. Supplemental feeding active. Calving, lambing active. Sheep grazed alfalfa.

COLORADO: Period was marked by seasonably cold temperatures and periods of light snowfall. Two upper level systems moved through, triggered areas of snow. High pressure brought fair weather on the 1st. Snow was generally light with no reporting station having more than 4 in. during the 7 day period. The lowest temperature was -14° at Alamosa, the highest 54° at Trinidad and Longmont. The most precipitation 0.41 in. liquid equivalent at Allenspark.

FLORIDA: Temperatures 4 to 9° cooler than normal north, coastal Panhandle 2° cooler than normal. Central Peninsula 4 to 7° cooler than normal, inland south 3 to 5° cooler than normal. Southeast coastal sections near normal. Highs upper 60s to low 70s north, mid 70s central and near 80 south. Lows below freezing Panhandle, Big Bend. Lows upper 30s, low 40s central Peninsula, inland south, 50s southeast coast. Precipitation 0.25 or less except west central Peninsula, up to 0.50. Rain 1 to 2 days north, central, 3 days Panhandle. Many locations east coast, south, received no rain.

Soil moisture adequate to surplus Panhandle and south Peninsula, short to adequate northern Peninsula, short to surplus central Peninsula. Cotton, soybean harvest winding down. Sugarcane harvest, planting active. Winter wheat planting delayed by wet soil. Citrus groves, trees, fruit near excellent condition. Rain needed, some irrigating. Early orange harvest for processing increasing. Grapefruit movement active on east coast with heavy volume to exports. Early tangerine harvest all but complete. Dancy tangerines, Orlando tangelo harvest increasing. Caretakers cutting cover crops. Placing, fueling heaters in cold areas. Growing weather very nice over major vegetable growing areas. Irrigation very active southwest. Harvest moving from central to southern production areas. Volume leaders; tomatoes, sweet corn, peppers, cucumbers, squash. Also available; snap beans, cabbage, carrots, celery, eggplant, escarole, iceberg, specialty lettuce, radishes, cherry tomatoes. State's pastures fair to excellent. Pasture ratings, 30% fair, 60% good, 10% excellent. Moisture levels mostly short to adequate. State's cattle herds mostly good condition.

GEORGIA: Cold week. Temperatures 4 to 8° below normal. Coldest from mid teens to low 20s mountains to mid 30s near coast. Warmest from low 50s north to mid 60s south. Series of frontal systems moved across State during the week. Little rain until Friday and weekend. Heaviest rain Sunday, freezing rain and sleet common, mainly along and north of Atlanta to Athens area. Accumulations mountains caused some travel problems. Rain 0.50 to locally 1.00 in. over north, 0.50 in. or less central and 0.10 in. or less south.

Days suitable for field work 4.4. Soil moisture 3% short, 64% adequate, 33% surplus. Cotton 1% poor, 26% fair, 69% good, 4% excellent; 83% harvested, 98% 1991, 97% avg.; Harvest 3 weeks behind normal, quality declining. Sorghum 96% harvested for grain, 99% 1991, 99% avg.; harvest nearing completion. Soybeans 29% fair, 70% good, 1% excellent; 85% harvested, 99% 1991, 96% avg.; harvest 2 weeks behind normal, wet fields a problem. Wheat 13% fair, 87% good; 70% planted, 75% 1991, 82% avg.; 49% emerged, 44% 1991, 57% avg.; planting delays wet fields north, rapid progress drier areas. Rye 96% planted, 96% 1991, 96% avg. Other small grains 14% fair, 86% good; 93% planted, 86% 1991, 91% avg. Onions 100% good; 60% planted, 80% 1991, 83% avg. Other vegetables 4% poor, 70% fair, 26% good; harvest of turnips, collards, kale, cabbage increasing. Pecans 8% very poor, 29% poor, 49% fair, 14% good; 79% harvested, 89% 1991, 84% avg. Pasture 1% very

poor, 5% poor, 44% fair, 49% good, 1% excellent. Cattle, hogs good. Activities: Planting onions, routine care of livestock, poultry, repairing fences, buildings in tornado-damaged areas.

HAWAII: Heavy rains brought flooding to several areas of the State. On Hawaii island, Hilo, the surrounding areas experienced flooding, silting early in the week. On Thursday, heavy rains on Kauai caused flooding in the Hanalei area. Temperatures ranged mid 60s to mid 80s. Rainfall ranged none to 9.60 inches.

Days suitable for fieldwork 7.0. Seasonally cooler weather, heavy rains slowed crop progress. Taro fields adjacent to the Hanalei River on Kauai were flooded Thursday night further slowing recovery from Hurricane Iniki's destruction 3 months earlier. Banana and papaya harvesting active. Sugarcane harvesting, slowed by rains in some areas, winding down for annual mill cleaning, repair.

IDAHO: Temperatures ranged from 7 to 19° degrees below normal throughout State. Precipitation was reported throughout State except Orofino. Cold weather and snow drastically slowed down outdoor fieldwork.

Soil moisture varied across State. Adequate amount southwest; short amount north, southeast, southcentral. Activities: marketing crops, repairing farm machinery. Winter wheat mostly good. Hay, roughage supplies adequate. Livestock activities: Marketing cattle, cattle on winter hay. Livestock good.

ILLINOIS: Cold, gray more often than not across State as weather systems cruised across the Midwest. Temperatures 2 to 6° below normal, upper 20s to lower 40s. Precipitation 0.01 to 0.40 in.

The corn harvest progresses a little better in the areas where the ground has frozen, but in the slower-progressing areas it is still too wet. Also the moisture of the corn crop has the elevators behind on drying the crop in most unharvested areas.

INDIANA: Temperatures 3 to 6° below normal. Highs mid 30s to 40°. Lows, low to mid teens. Precipitation none to 0.10 in., extreme north. Coldest air of season, weekend.

Topsoil 34% adequate, 66% surplus. Subsoil 5% short, 51% adequate, 44% surplus. Corn moisture content 22%, 1% below last week. Wet fields remain a problem, most areas. Other activities: Processing tobacco, machinery repair, hauling grain, winterizing farmstead, bookkeeping, care of livestock.

IOWA: Temperatures 2 to 5° below normal. Extremes -4°; 47°. Precipitation 0.03 to 0.38 in.; average 0.20 in. Nearly statewide snowcover has prevented development of significant soil frost.

Days suitable for fieldwork 2.9. Topsoil 51% adequate, 49% surplus. Subsoil 72% adequate, 28% surplus. Grain storage space problem has eased, with 38% short, 60% adequate, 2% surplus. Corn lodging 11% none, 66% light, 20% moderate, 3% heavy. Muddy conditions, snow are causing stress among livestock, limited grazing of stubble fields.

KANSAS: Temperatures 3 to 8° below normal over State. No significant precipitation received.

Days suitable for fieldwork 2.0. Surface moisture 4% short, 47% adequate, 49% surplus. Subsurface moisture 8% short, 79% adequate, 13% surplus. Harvest resumed at slow pace in wake of snow storm that moved across State last week. Harvest hampered by average of 2.5 days or less suitable for fieldwork per week for past 4 weeks. Wheat planting for State mostly complete. Snow-storm Thanksgiving week dealt western feedlots substantial losses. Pastures providing limited grazing. Cattle grazing corn, sorghum stubble, wheat pasture. Supplemental feeding livestock necessary.

KENTUCKY: Cloudy, cold, little precipitation. High temperature near 40°, lows around 28°. Highs 10° below normal and lows 3° below normal. Precipitation slight, most areas less than 0.25 in. Deficit averaged 0.75 in.

Soil moisture still mostly adequate for late fall needs. Corn harvest virtually complete, soybean combining winding down.

Burley stripping active with generally adequate humidity. Kentucky gross sales 164,552,771 pounds through 3rd. Price averaged \$183.45. Burley Belt net sales 234,481,367 pounds. Livestock good with ample feed supplies.

LOUISIANA: Temperatures 4.1° to 6.7° below normal. Extremes 21°; 77°. Rainfall 0.16 in. northwest to 0.68 in. southwest.

Days suitable for fieldwork 3.6. Soil moisture 69% adequate, 31% surplus. Pecans 89% harvested, 69% 1991, 77% avg. A very light crop expected. Soybeans 100% harvested, 97% 1991, 99% avg. Continued wetness caused some abandonment. Wheat 12% poor, 59% fair, 29% good; 84% planted, 86% 1991, 91% avg.; 78% emerged, 87% 1991, 86% avg. Sugarcane 77% harvested, 77% 1991, 83% avg. Harvest continues in the mud. Sweet potatoes 99% harvested, 98% 1991, 99% avg. Livestock 40% fair, 57% good, 3% excellent. Pastures 2% very poor, 7% poor, 18% fair, 73% good. Vegetables 13% poor, 57% fair, 30% good. Harvesting citrus, southeast.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 0.10 in. Temperature 38.5°, normal 39.6°. Extremes 11°; 58°. Snow in western areas.

Pastures, cattle, mostly excellent. Hay supplies adequate. Small grains good. Trying to complete corn, soybean harvest. Holiday preparations. Cutting firewood, scraping roads.

DELAWARE: Precipitation 0.19 in. Temperature 41.0°, normal 41.1°. Extremes 28°; 53°.

Hay supplies adequate. Pastures, livestock mostly excellent. Small grains good. Holiday preparations. Cutting firewood.

MICHIGAN: Extremes 17°; 35°. Precipitation none to 0.64 in. across the State.

Days suitable for fieldwork 3.5. Soil moisture 15% adequate, 85% surplus. Soybeans 90% harvested, 100% 1991, 98% avg. Corn 10% very poor, 15% poor, 35% fair, 35% good, 5% excellent. Pasture condition 65% of normal. Major activities: Cutting firewood, drying corn, harvesting when possible, hunting, repairing machinery, spreading fertilizer, manure.

MINNESOTA: Temperatures 3° above normal to 2° below normal. Extremes 7°; 43°. Precipitation 0.04 to 0.27 in., 0.19 in. below normal to 0.11 in. above normal. Snowfall 2 to 5 in. with snow depth averaging 1 to 4 in.

Corn harvested increased to 92% complete, compared with 99% 1991, 99% avg. Grain moisture remains high.

MISSISSIPPI: Temperatures 43°, 6.9° below normal. Extremes 20°; 75°. Most of the State received light rainfall. State avg.; 0.59 in., 0.61 below normal. Soil temperatures 46°.

Days suitable for fieldwork 3.7, 1.5 1991, 3.4 avg. Soil moisture 59% adequate, 37% surplus, 4% excessive. Soybeans 96% harvested, 97% 1991, 97% 5 year avg.; 18% fair, 79% good, 3% excellent. Wheat planted 96%, 92% 1991, 93% 5 year avg.; 88% emerged, 84% 1991, 80% 5 year avg.; 7% poor, 22% fair, 69% good, 2% excellent. Pecans 75% harvested, 78% 1991, 73% 5 year avg.; 26% very poor, 57% poor, 14% fair, 3% good. Livestock 22% fair, 70% good, 8% excellent. Pasture 94% of normal. Activities: Harvesting soybeans, planting wheat, shop work.

MISSOURI: Temperatures 5° below normal. Precipitation 0.05 in.; only minor amounts all areas.

Days suitable for fieldwork 2.6. Topsoil 46% adequate, 54% surplus, wettest areas west-central, northern districts. Harvesting progress limited by muddy soil, high moisture grain. Corn harvest similar to 1985 when wet weather also delayed progress. About 25% corn remains unharvested in northern third of State, some northern counties over 33% still in field. Soybean harvest progressing slowly, too much moisture in beans. Bean harvest least advanced south-western, west-central districts at 75, 87% respectively. Wheat crop has good start most areas. Sorghum harvesting least advanced northeastern district at 76%, all northern, western districts have at least 15% still in field. Hay supply 9% short, 80% adequate, 11% surplus. Livestock 10% fair, 82% good, 8% excellent.

MONTANA: Temperatures well below normal with some southwest locations averaging 19° below normal. Northeast was the exception with 1 to 3° above normal. Precipitation received in most of State with heavier amounts in west, along south central border.

Grazing open. Winter wheat snowcover protectiveness is poor.

NEBRASKA: Temperatures 2° below normal east to 12° below normal northwest. Scattered precipitation as rain, snow occurred throughout week averaging 0.20 in. statewide.

Days suitable for fieldwork 5.4. Topsoil 8% short, 72% adequate, 20% surplus. Subsoil 6% short, 86% adequate, 8% surplus. Winter wheat 34% fair, 58% good, 8% excellent. Corn, sorghum grain harvest five weeks behind normal. Corn 84% harvested, 100% 1991, 100% avg. Sorghum grain 93% harvested, 100% 1991, 100% avg. Harvest delays due to weather conditions, wet field conditions, high grain moisture content. Pasture, range 96% of normal. Cattle grazing stalks as available. Some supplemental feeding. Hay, forage supplies 4% short, 73% adequate, 23% surplus.

NEVADA: Weak high pressure dominated during early part of week with mostly dry conditions, near normal temperatures. Storm system later in week brought light snow to Sierra, some northern valleys. Temperatures close to seasonal normals early in week then dipped below normal by end of week. Extremes -27°; 64°.

Farm/ranch activities: feeding, caring for livestock; maintenance.

NEW ENGLAND: Precipitation 0.42 to 1.84 in. Massachusetts, 0.50 to 1.42 in. Vermont, 0.01 to 0.77 in. elsewhere. Temperatures high 20s to low 40s. Maximum temperatures high 30s to low 50s. Minimum temperatures single digits to high teens north, single digits to mid 20s south.

Activities: Tending livestock, cutting firewood, general repairs.

NEW JERSEY: Temperatures much below normal; 34° north, 37° south, 39° coastal. Extremes 19°; 53°. Precipitation below normal; averaged 0.14 in. north, 0.24 in. south, 0.28 in. coastal. Heaviest 24 hour total 1.00 in. on 4th, 5th.

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

NEW MEXICO: Temperatures 7° below normal for State. A major winter storm affected all sections of the State during the latter part of the week. Snowfalls of 4 to 8 in. common at lower elevations, with totals in excess of a foot at many mountain locations.

Days suitable for fieldwork 3.8. Soil moisture 60% short, 38% adequate, 2% surplus. Crop conditions: Cotton 11% poor, 45% fair, 44% good. Irrigated wheat 8% fair, 92% good. Dryland wheat 12% very poor, 60% poor, 28% fair. Chile fair to good; red harvest nearing completion. Pecan harvest active; crop in fair to good shape. Crop harvesting hindered by rain, snow. Cattle, sheep fair to good. Range, pasture 70% of normal.

NEW YORK: Temperatures near normal first half of week. Highs in mid 40s, lows in mid 30s. Second half was below normal. Extremes 1°; 49°. Precipitation fell nearly every day. Light rain, snow flurries fell first half of week. Eastern areas received up to 16 in. of snow on 2nd, 3rd, elsewhere lighter amounts fell. Late week 2 to 4 in. of snow fell.

Activities: livestock care, winter chores, attending meetings, hunting. Cold weather, snow made outside activities difficult.

NORTH CAROLINA: Temperatures 2 to 5° below normal. Precipitation 0.91 in. at Bryson City to no precipitation at a majority of locations.

Days suitable for fieldwork 2.9. Soil moisture 47% adequate, 53% surplus. Crop condition: Pasture 2% very poor, 2% poor, 24% fair, 70% good 2% excellent. Cotton 7% very poor, 8% poor, 59% fair, 26% good. Soybeans 5% poor, 44% fair, 49% good 2% excellent. Winter wheat 17% fair, 79% good, 4% excellent. Oats 23% fair, 77% good. Barley 18% fair, 82% good. Rye 13% fair, 84% good 3% excellent. Wheat emerged 77%, 73% 1991, 74% avg. Sorghum for grain harvested 93%, 98% 1991, 96% avg. Cotton harvested

71%, 94% 1991, 95% avg. Soybeans harvested 68%, 83% 1991, 83% avg. Winter wheat planted 87%, 91% 1991, 89% avg. Oats planted 89%, 100% 1991, 97% avg. Barley planted 94%, 100% 1991, 100% avg. Rye planted 91%, 100% 1991, 98% avg. Hay, roughage supplies 2% very short, 92% adequate, 6% surplus. Feed Grain supplies 94% adequate, 6% surplus. Major activities: Harvesting soybeans, cotton. Other activities: Harvesting sorghum; seeding small grains; tending livestock; equipment repair.

NORTH DAKOTA: First half was cool with light snow, freezing rain, rain; last half was cool, dry. Statewide temperatures averaged normal southwest to 3° above normal northwest, northeast, east central. Extremes: -8° northeast; 46° south central. Precipitation ranged 0.02 in. south central to 0.08 in. north central, east central.

Corn, sunflower harvest continued slowly due to high grain moisture content, rain, snow. Corn for grain 90% harvested, 100% 1991, avg. Sunflower 92% harvested, 100% 1991, avg. Winter wheat 66% sufficient snow cover, rye 71%, alfalfa 49%. Winter wheat rated 1% poor, 42% fair, 51% good, 6% excellent; rye 1% poor, 45% fair, 51% good, 3% excellent. Livestock mostly good condition. Cattle condition rated 15% fair, 70% good, 15% excellent; sheep 7% fair, 77% good, 16% excellent. Supplemental feed fed to cattle 81%, sheep 86%. Hay and forages supplies rated 7% short, 82% adequate, 11% plentiful. Livestock marketings normal.

OHIO: A surge of arctic air brought drier, colder than normal weather. Daily high temperatures mid to upper 30s. These readings 7 to 11° below normal over the central, south 4 to 8° below normal over the north. Lows were from the 20s to near 30°. Coldest readings occurred on 6th with lows in the mid to upper teens. Considerable cloud cover was over the State with light to moderate precipitation. Totals were between 0.20 in. north to near 0.40 in. the central, south. Heavier snows were reported in the northeast snowbelt. Snowcover by the end of the period was 1 to 2 in. north. Soil temperatures at the 4-inch depth under bare ground averaged in the 30s across State.

Days suitable for fieldwork 4.3. Topsoil 51% adequate, 49% surplus. Moisture content of harvested corn 24.8%. Corn harvest is now just over 3 weeks behind normal. The northern region remains the farthest behind.

OKLAHOMA: Temperatures 4 to 10° below normal. Precipitation none south central, southeast to 0.45 in. east central.

Days suitable for fieldwork 3.5. Topsoil 73% adequate, 27% surplus. Subsoil 10% short, 90% adequate. Wheat 10% poor, 31% fair, 59% good; 87% up to stand, 90% 1991, 94% avg.; 20% grazed, 23% 1991, 33% avg. Warm weather needed for lateplanted wheat. Snowcover should provide insulation, good moisture. Cotton 53% harvested, 40% 1991, 55% avg. Hard freeze should accelerate harvest. Sorghum 96% harvested, 86% 1991, 87% avg. Soybeans 87% harvested, 91% 1991, 85% avg. Snow delayed harvest, particularly north. Pastures 95%. Cattle good; marketings down, prices steady to slightly higher. Ranchers busy feeding hay.

OREGON: Below normal temperatures statewide; 3° below normal west, 10° below normal east. Substantial precipitation statewide. Coastal Range 2.50 in., coastal areas 1.00 to 2.00 in., northwestern valleys 1.25 to 3.50 in., southwestern valleys 0.50 to 1.33 in., Cascades 1.50 to 2.00 in., eastern areas 0.10 to 0.50 in. North central, southeastern areas received up to 6 in. snowfall.

Soil moisture mostly adequate west, short to adequate east. Winter wheat 20% excellent, 69% good, 11% fair. Fruit, nut orchard winter activities continue, Willamette Valley. Winter cabbage and table beet harvest continues, Willamette Valley. Christmas tree harvest continues. Livestock good. Western pastures continue improvement. Rains, snows have improved eastern stock water supplies; pastures, ranges dormant, continued supplemental feeding. Sheep being moved onto grass seed fields, Willamette Valley. Muddy conditions in cattle weaning lots, feedlots.

PENNSYLVANIA: Coldest week of the season. Northwest corner received 1 to 2 feet of snow. Temperature 35°, 3° below normal. Extremes 7°; 53°. Precipitation 0.27 in., 0.49 in. below normal.

Soybean harvest 85% complete, 100% 1991. Fall plowing 100% complete, 100% 1991. Fourth cutting alfalfa 100% complete, 100% 1991. Activities: Hauling manure; maintaining machinery; harvesting soybeans, grain corn; fall plowing; fixing fence; preparing for winter; caring for livestock.

PUERTO RICO: Rainfall of 2.28 in. was 1.12 in. above normal. Highest rainfall 5.95 in. at Pico Del Este Luquillo, 5.12 in. at Rio Blanco Lower, 4.26 in. at Trujillo Alto. Highest 24 hour total 2.38 in. at Rio Blanco lower on 28th. Temperatures 79° on the coast, 70 to 74° interior with mean station temperatures 62.1° at Cerro Maravilla to 81.7° at Guayama. Extremes 53°, 91°.

SOUTH CAROLINA: Temperatures across State were much below normal. Rainfall 0.10 in. Statewide.

Days suitable for fieldwork 4.4. Soil moisture 11% short, 80% adequate, 9% surplus. Cotton fair; 86% harvested, 97% 1991, 98% avg. Soybeans fair; 63% harvested, 89% 1991, 85% avg. Oats fair to good; 92% planted, NA 1991, NA avg; 86% emerged, NA 1991, NA avg. Rye fair to good; 94% planted, NA 1991, NA avg, 98% emerged, NA 1991, NA avg. Winter grazing fair to good; 93% emerged, NA 1991, NA avg. Barley fair to good; 95% planted, NA 1991, NA avg, 92% emerged, NA 1991, NA avg. Wheat fair to good; 62% planted, NA 1991, NA avg, 48% emerged, NA 1991, NA avg. Mostly dry weather helped soybean and cotton harvesting, and small grain planting.

SOUTH DAKOTA: Temperatures were 2 to 7° below normal in the west, and 3° below to 3° above normal in the central and east. Extremes -19°, 53°. Precipitation amounts were generally less than 0.10 with some local amounts up to 0.50 in.

Days suitable for fieldwork 3.5. Topsoil moisture 3% very short, 20% short, 63% adequate, 14% surplus. Subsoil moisture 10% very short, 26% short, 55% adequate, 9% surplus. Winter rye 22% fair, 73% good, 5% excellent. Wet and snow-covered fields continue to slow the progress of the corn harvest. Livestock 2% fair, 87% good, 11% excellent. Pasture 78% of normal.

TENNESSEE: Temperatures below normal; 5° below normal in Memphis, Chattanooga to 11° below normal in Bristol, Crossville. Precipitation below normal Statewide. Middle region was 0.99 in. below normal, east was 0.58 in. shy of its normal.

Cotton 97% harvested, 99% 1991, 99% avg. Cotton harvest is nearing completion, soybean harvest is continuing at normal pace. Other farm work include general maintenance, chore activities. Cattle mostly good.

TEXAS: Cold airmass moved southward, mixed with tropical moisture, triggered precipitation most areas. Change produced wintery conditions High Plains late, into weekend. Cold rain, drizzle covered most other areas at times. Data shows all sections State below normal temperatures. Departures from normal ranged from -14° South Plains to -1° South Central. Precipitation amounts mostly light. Rainfall below normal except High Plains, Trans-Pecos. Departures ranged from +.04 inches Trans-Pecos, South Plains to +.27 Panhandle. Elsewhere departures ranged from -.08 inches Rolling Plains to -.54 inches Blacklands, North Texas.

Crops: Cotton harvest resumed Cross Timbers, Southern High, Low Plains, as conditions allowed. Cotton growers anxious get crop harvested quickly as possible. Some late-planted fields Blacklands remain to be harvested. Remaining grain sorghum fields Plains were harvested. Small grain stands improving most areas. Some late wheat planted Blacklands, Hill Country, South Texas. Few isolated instances greenbugs, winter grain mites occurred some emerged fields in Blacklands. Peanut harvest Low Plains nearing completion. Cross Timbers, dryland production was excellent. Remaining soybean fields were harvested.

Commercial Vegetables: Rio Grande Valley, onions, tomatoes progressed, with some minor insect damage. Citrus harvest continued. East Texas, greens showed signs aphid, pill bug infestation. Pecan harvest full swing Tans-Pecos, with intermittent delays from rain. East Texas harvest almost complete. Across

State, freezing temperatures increased nut drop. Many areas crop quality diminished by early season moisture stress, insect pressure.

Range and Livestock: Deaths increased from blizzard-like conditions in Plains. Ranchers feeding livestock, providing winter protection where possible. Stock tank levels East Texas improving with rains. Winter pastures progressing slowly, but some cattle moved onto winter pasture. Livestock conditions remained fair, good.

UTAH: Temperature maximums averaged 6° below normal and minimums 4° below normal. Reported precipitation was moderate in the North Central division and light elsewhere, except none was reported in the Dixie division.

Recent snowfall has brightened the outlook for next year's moisture condition if current rate of snowfall continues throughout the winter. Activities: attending meetings, feeding, caring for livestock.

VIRGINIA: Temperatures near or slightly below normal. Extremes 13°, 55°. Precipitation was well below normal: none to 0.62 in.

Days suitable for fieldwork 2.9. Topsoil 5% short, 64% adequate, 31% surplus. Pasture 3% very poor, 3% poor, 32% fair, 61% good, 1% excellent. Soybeans harvested 79%, 95% 1991, 90% avg. Cotton harvested 70%, 95% 1991, 95% avg. Winter wheat seeded 90%, 95% 1991, 94% avg. Winter grains, grazing crops 3% poor, 44% fair, 53% good. Forage from pastures, grazing crops dairy cattle 15%, beef cattle 50%, sheep 53%. Livestock 12% fair, 88% good. Marketing dark-fired, burley tobacco. Pruning apple trees. Liming, fertilizing hayland.

WASHINGTON: Temperatures 1 to 5° below normal west; 2 to 8° below normal east. Precipitation 0.01 to 1.59 in. west; none to 0.61 in. east.

Days suitable for fieldwork 2.8. Soil moisture 35% short, 64% adequate, 1% surplus. Hay, other roughage 11% short, 68% adequate, 21% surplus. Range, pasture 14% very poor, 31% poor, 49% fair, 6% good. Winter wheat dryland 73% fair, 27% good; irrigated 100% good. Barley dryland 88% fair, 12% good; irrigated 100% good. Rain, freezing temperatures west; crop conditions remain unchanged eastern areas, despite cold weather and lack of snow cover. Poinsettias shipped to retailers; Christmas tree, holiday greenery harvest in full swing. Cold weather slowed fieldwork, but pruning continued central orchards. Growers making plans to attend winter vegetable meetings. Cattle, calves normally fed through winter sold due to forage shortage.

WEST VIRGINIA: Temperature 31°. Extremes 3°, 49°. Precipitation 0.47 in.

Days suitable for fieldwork 2.7. Soil moisture, adequate. Corn, 97% harvested. Pastures, 29% poor, 21% fair, 50% good; 81% of normal. Cattle, good. Sheep, good. Soybeans, 98% harvested.

WISCONSIN: Temperature 22°, 2° below normal. Extremes -5°, 39°. Light snow or flurries every day except 5th somewhere in State. Accumulations of up to 3 in. on 1st, 3rd. North-central areas received up to 8 in. later in the week.

Corn for grain 59% harvested, 98% 1991, 99% avg. Comments from ag agents indicate that any progress is going slowly. Snow and unfrozen ground have kept a lot of farmers out of the field. Those that are harvesting find that moisture levels are still high. Many commented that fields are lodging due to snow that was received in the past 2 weeks. This means that many farmers will not be able to get into the fields until spring. Molds are showing up more across the State; there are more reports in the northern, central areas.

WYOMING: Cold, snowy weather. Temperatures normal to 15° below normal. Precipitation amounts were above normal with the exception of the Big Horn basin where amounts were below normal. Precipitation 0.02 to 0.30 in. above normal with the exception of the southwest which had 0.30 to 0.90 in. above normal.

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

November 1992
MONTHLY DATA FROM SELECTED FOREIGN CITIES
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
 *** = DATA NOT AVAILABLE

International Weather and Crop Summary
HIGHLIGHTS

November 29 - December 5, 1992

FSU: Early-week bitter cold stressed dormant winter grains.

EUROPE: Widespread rain maintained ample moisture for winter grains in the northwest and improved conditions in the southwest and northeast.

NORTHWESTERN AFRICA: Dry weather continued to cover winter grain areas in Morocco, Algeria, and Tunisia.

SOUTH AFRICA: Dry weather favored corn planting.

SOUTH ASIA: Mostly dry, warm weather favored fieldwork. Heavy showers continued over Sri Lanka and local areas of southern India.

SOUTHEAST ASIA: Heavy showers covered Java's rice. Rainfall was variable over Malaysia's oil palm areas.

EASTERN ASIA: Seasonably light precipitation covered central China.

AUSTRALIA: Rains favored eastern summer crops but delayed winter wheat harvesting across the south.

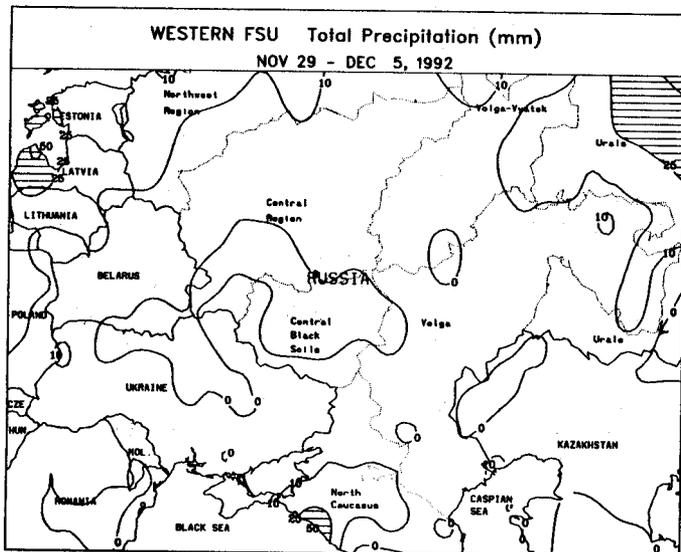
SOUTH AMERICA: Heavy rain caused possible lodging to winter wheat in portions of western Argentina.

COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
		AVG MAX	AVG MIN	HI	LO	AVG	F/NRM	TOTAL	DPART F/NRM
NORWAY	OSLO	1	-3	6	-12	-1	0.1	172	80
SWEDEN	STOCKHOLM	4	1	8	-11	2	-0.4	70	19
FINLND	HELSINKI	0	-3	7	-16	-1	-2.0	91	23
U KING	GLASGOW	9	3	16	-6	6	-0.6	174	61
	EDINBURGH	9	3	15	-6	6	0.1	86	22
	BIRMINGHAM	10	5	15	-3	7	1.1	106	44
	LONDON	11	5	17	-3	8	1.8	131	48
IRELND	DUBLIN	11	6	16	-1	8	1.3	64	-5
ICELND	REYKJAVIK	2	-1	8	-6	1	-0.8	100	21
DENMRK	COPENHAGEN	7	3	12	-5	5	-0.4	98	50
LUXEMB	LUXEMBOURG	8	4	18	-3	6	1.9	101	27
SWITZL	ZURICH	9	4	15	-1	7	2.6	175	95
	GENEVA	10	5	15	-3	7	2.2	132	35
FRANCE	PARIS/ORLY	11	6	16	-1	9	***	82	**
	STRASBOURG	11	5	16	-1	8	2.8	68	20
	BOURGES	12	6	16	-2	9	2.7	89	27
	BORDEAUX	16	9	20	3	13	4.5	149	53
	TOULOUSE	15	8	20	1	11	3.3	60	5
	MARSEILLE	15	7	21	2	11	0.8	28	-36
SPAIN	VALLADOLID	13	6	19	0	9	2.0	2	-49
	MADRID	16	5	22	-1	11	1.7	3	-63
	SEVILLE	21	9	26	4	15	-0.1	3	-67
PORTUG	LISBON	18	12	23	9	15	1.3	12	-87
GERMNY	HAMBURG	8	4	13	0	6	0.9	144	80
	BERLIN	8	4	13	-2	6	0.7	70	23
	DUSSELDORF	10	5	15	1	8	1.4	112	49
	LEIPZIG	9	3	14	-3	6	1.3	27	-10
	DRESDEN	8	3	15	-4	6	1.2	36	-6
	STUTTART	10	4	14	-2	7	2.5	61	13
	NURNBERG	8	3	15	-4	6	1.9	67	25
	MUNICH	9	4	16	-1	7	3.8	132	78
AUSTRI	VIENNA	8	3	17	-4	5	0.8	85	43
	INNSBRUCK	9	2	16	-3	5	2.0	127	68
CZECH	PRAGUE	7	1	17	-4	4	0.9	22	-6
POLAND	WARSAW	6	2	11	-4	4	0.4	61	21
	LODZ	6	2	11	-4	4	1.6	47	8
	KATOWICE	7	1	12	-8	4	1.5	41	0
	PRZEMYSL	7	2	16	-4	5	0.9	52	8
HUNGAR	BUDAPEST	9	3	16	-4	6	0.8	44	-11
F YUGO	BELGRADE	12	6	22	-1	9	1.7	61	5
ROMANI	BUCHAREST	12	1	25	-8	7	0.8	13	-34
BULGAR	SOFIA	10	3	22	-6	6	0.2	41	-10
ITALY	MILAN	12	6	17	0	9	2.1	23	-88
	VERONA	12	4	21	-2	8	1.1	43	-37
	VENICE	13	7	18	1	10	1.4	26	-71
	GENOA	16	12	19	1	14	1.2	53	-107
	ROME	19	10	24	4	15	2.4	84	-23
	NAPLES	20	11	26	0	15	2.8	120	-33
GREECE	THESSALONIKA	16	8	23	1	12	0.8	34	-18
	LARISSA	17	6	30	-1	11	0.2	58	4
	ATHENS	19	13	26	5	16	0.0	51	-6
TURKEY	ISTANBUL	14	9	25	3	12	0.2	79	-9
	ANKARA	9	-2	21	-11	4	-2.2	62	37
CYPRUS	LARNACA	22	12	29	3	17	-0.7	40	2
FSU	TALLINN	1	-3	8	-16	-1	-1.9	62	5
	LENINGRAD	0	-4	9	-16	-2	-2.1	43	-10
	KAUNAS	3	0	11	-3	2	-0.2	57	8
	MINSK	1	-2	10	-14	-1	-1.1	67	19
	KAZAN	-2	-5	4	-17	-4	0.3	72	35
	MOSCOW	-1	-4	4	-20	-3	-0.9	54	5
	SVERDLOVSK	-3	-8	8	-17	-5	-0.2	28	1
	OMSK	-5	-10	3	-22	-7	1.1	42	20
	KUSTANAY	-2	-8	3	-16	-5	1.0	37	16
	KRASNOYARSK	-4	-10	7	-23	-7	1.6	49	15
	NOVOSIBIRSK	-5	-10	9	-26	-7	2.6	42	14
	BARNAUL	-3	-9	6	-18	-6	1.5	40	3
	KHABAROVSK	-5	-13	10	-24	-9	-0.6	10	-6
	VLADIVOSTOK	1	-5	12	-17	-2	-1.2	28	-7
	KIEV	4	0	12	-7	2	0.1	97	45
	LVOV	5	1	13	-3	3	0.8	105	57
	KIROVOGRAD	5	1	14	-10	3	0.6	35	0

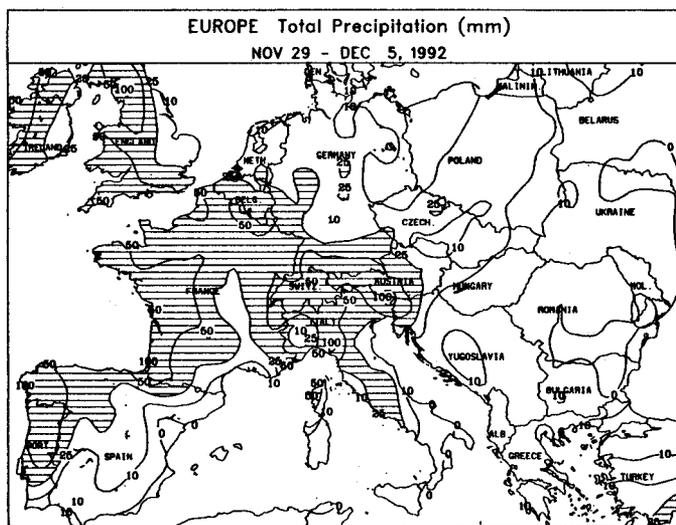
Based on Preliminary Reports

November 1992

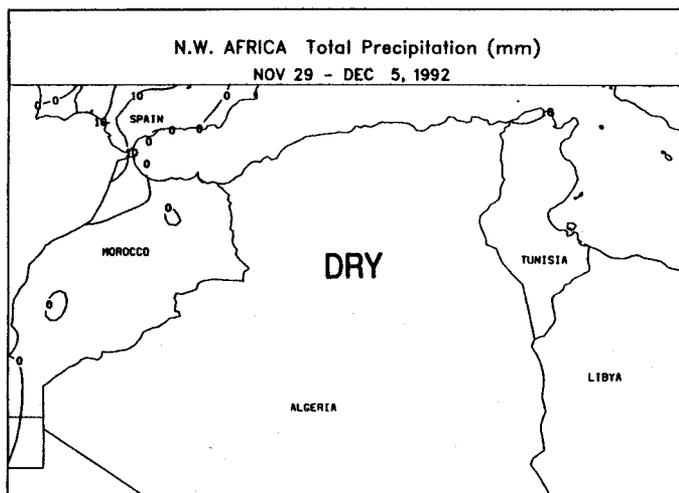
COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)			COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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FSU	ODESSA	9	4	16	-4	6	0.5	38	-11	KENYA	NAIROBI	24	14	25	13	19	-0.2	**	**	TANZAN	DAR ES SALAAM	31	22	32	20	27	0.4	**	**	GABON	LIBREVILLE	28	23	29	21	26	-0.4	443	-80	TOGO	LOME	32	24	33	21	28	0.8	3	-19	B FASO	OUAGADOUGOU	34	20	38	16	27	-0.9	7	6	IVRY C	ABIDJAN	31	24	33	17	27	0.4	**	**	MOZAMB	MAPUTO	30	21	40	17	26	1.7	69	4	ZAMBIA	LUSAKA	**	**	**	**	**	**	**	**	ZIMBAB	HARARE	29	16	32	11	23	1.8	71	-40	S AFRI	PRETORIA	28	16	32	12	22	1.2	85	-25	KROONSTAD	JOHANNESBURG	26	13	32	6	19	-1.3	227	153	BETHAL	BETHAL	25	12	29	6	18	0.2	119	-1	DURBAN	DURBAN	26	18	32	13	22	1.0	78	-26	CAPE TOWN	CAPE TOWN	24	12	33	8	18	0.2	9	-8	CANADA	TORONTO	6	0	15	-7	3	-0.4	107	44	MONTREAL	MONTREAL	5	-2	14	-11	2	-0.5	101	20	WINNIPEG	WINNIPEG	-2	-8	5	-18	-5	-0.6	40	14	REGINA	REGINA	1	-6	7	-15	-3	2.0	11	-2	SASKATOON	SASKATOON	0	-7	5	-17	-3	2.2	19	5	LETHBRIDGE	LETHBRIDGE	5	-4	15	-14	1	1.2	32	15	CALGARY	CALGARY	4	-6	12	-15	-1	1.2	39	26	EDMONTON	EDMONTON	2	-5	8	-18	-2	2.0	29	13	VANCOUVER	VANCOUVER	9	4	12	-4	7	0.6	168	18	MEXICO	GUADALAJARA	24	9	27	3	17	-1.0	52	39	MEXICO CITY	MEXICO CITY	21	10	25	7	16	1.9	25	11	ACAPULCO	ACAPULCO	32	24	34	22	28	0.3	4	-49	BERMUD	ST. GEORGES	25	21	27	18	23	1.4	85	-34	BAHAMA	NASSAU	28	22	31	19	25	1.4	67	2	CUBA	HAVANA	29	23	34	19	26	1.9	89	18	JAMAIC	KINGSTON	33	25	34	23	29	1.5	5	-68	P RICO	SAN JUAN	31	24	33	22	27	0.7	290	135	GUADEL	RAIZET	30	22	32	20	26	1.1	97	-41	MARTINQ	LAMENTIN	29	24	31	22	26	0.9	214	39	BARBAD	BRIDGETOWN	30	24	31	23	27	0.2	93	-53	TRINID	PORT OF SPAIN	31	23	33	21	27	1.5	59	-150	COLOMB	BOGOTA	19	8	23	2	14	0.7	97	-12	VENEZU	CARACAS	32	24	34	20	28	1.6	119	67	F GUIA	CAYENNE	31	22	32	20	26	0.4	75	-78	BRAZIL	FORTALEZA	29	24	31	23	27	-0.7	5	-8	RECIFE	RECIFE	28	23	29	20	25	-1.0	58	25	BELO HORIZONTE	BELO HORIZONTE	26	19	31	16	23	0.5	167	-80	CAMPO GRANDE	CAMPO GRANDE	30	20	34	10	25	0.7	136	-28	FRANCA	FRANCA	26	18	30	15	22	1.2	55	-151	LONDRINA	LONDRINA	29	17	33	12	23	0.9	157	14	SANTA MARIA	SANTA MARIA	27	15	32	6	21	-0.7	44	-67	PORTO ALEGRE	PORTO ALEGRE	27	16	33	7	21	0.0	73	-2	PERU	LIMA	24	18	26	16	21	2.5	0	-1	BOLIVI	LA PAZ	15	2	18	-1	8	-2.1	82	31	CHILE	SANTIAGO	25	10	34	2	17	-0.2	4	-3	ARGENT	IGUAZU	30	17	36	8	23	**	166	**	FORMOSA	FORMOSA	28	19	36	12	24	-0.5	107	-31	CERES	CERES	26	15	35	4	21	-2.1	155	49	CORDOBA	CORDOBA	24	14	32	2	19	-2.0	164	55	RIO CUARTO	RIO CUARTO	23	13	33	0	18	-1.4	101	-15	ROSARIO	ROSARIO	24	13	30	2	18	-1.6	149	43	BUENOS AIRES	BUENOS AIRES	23	12	30	3	17	-1.3	131	46	SANTA ROSA	SANTA ROSA	23	12	31	-1	17	-1.9	143	56	TRES ARROYOS	TRES ARROYOS	20	10	28	3	15	-1.6	51	-17	N CALD	NOUMEA	28	20	31	18	24	0.4	8	-50	FIJI	NAUSORI	27	22	30	18	25	-0.2	272	13	SAMOA	PAGO PAGO	29	24	32	-5	27	0.0	568	283	TAHITI	PAPEETE	31	24	32	22	27	1.0	202	57	N ZEAL	AUCKLAND	20	14	23	10	17	0.8	115	31	WELLINGTON	WELLINGTON	17	12	22	9	14	**	83	**	PA N G	PORT MORESBY	31	23	34	20	27	-0.2	6	-62	AUSTRL	DARWIN	32	26	34	22	29	-0.2	185	49	MOREE	MOREE	28	14	34	8	21	-1.8	72	23	BRISBANE	BRISBANE	27	18	34	13	22	-0.7	105	9	PERTH	PERTH	23	13	33	6	18	-0.9	78	58	CEDUNA	CEDUNA	22	11	32	5	17	-2.3	35	14	ADELAIDE	ADELAIDE	20	12	30	7	16	-2.2	64	35	MELBOURNE	MELBOURNE	19	9	26	3	14	-1.8	93	42	WAGGA	WAGGA	21	8	28	3	15	-3.3	78	38	CANBERRA	CANBERRA	18	8	25	2	13	-2.2	90	30	INDONE	DJAKARTA	30	23	32	21	26	-0.8	104	**	PHILIP	MANILA	30	22	33	19	26	-0.5	97	-16



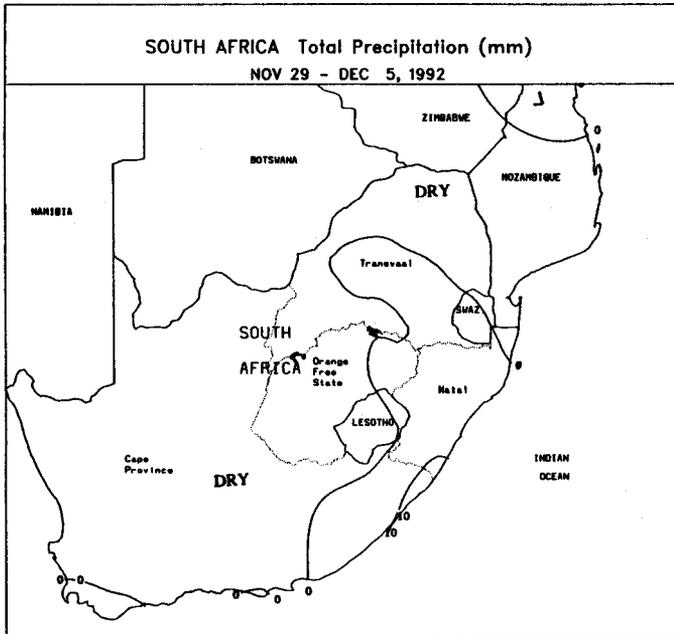
FSU-WESTERN: Early-week bitter cold from Siberia spread westward over the region, ushering in the coldest weather so far this winter. Coldest weather from November 29 to December 2 covered winter grains in eastern Belarus, Central Region, Volga Vyatsk, Central Black Soils, eastern Ukraine, Volga Valley, and North Caucasus. Minimum temperatures on these days dropped to around -15 degrees Celsius (C), with northern locations reporting minimum temperatures as low as -28 degrees C. While temperatures reached the threshold for winterkill, the combination of snow cover and a short duration of extreme cold minimized the potential for significant damage. By week's end, milder air from Europe spread rapidly eastward over winter grain areas, returning temperatures to more seasonable readings. Little, if any, precipitation accompanied this week's changeable weather pattern.



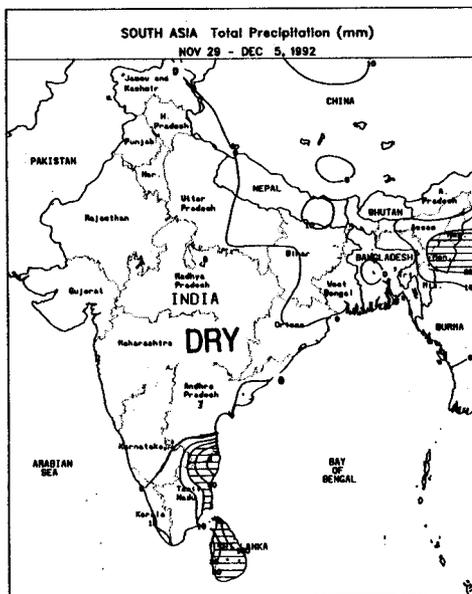
EUROPE: Periodic showers covered most of western and northern Europe, while dry weather prevailed in the southeast. Substantial moisture (25-75 mm, with scattered heavier amounts) soaked most of England, France, Belgium, west-central and southern Germany, and the Alpine region. Winter grains have ample moisture in the northwest. Beneficial rain (10-75 mm) also fell over the northwestern half of the Iberian peninsula and the northern two-thirds of Italy. The moisture was needed following several weeks of dryness. However, only light rain (1-9 mm) fell in eastern Spain, with dry weather along the southeast coast as well as in extreme southern Italy, Greece, and Bulgaria. In eastern Europe, beneficial moisture (10-23 mm) fell over winter grain areas of Poland and Czechoslovakia, boosting soil moisture for winter crops. Showers diminished in Hungary and Romania, where 1-7 mm of weekly rainfall were common. Temperatures averaged above normal over most of Europe, but winter grains were hardening or in the dormancy stage in the east and north.



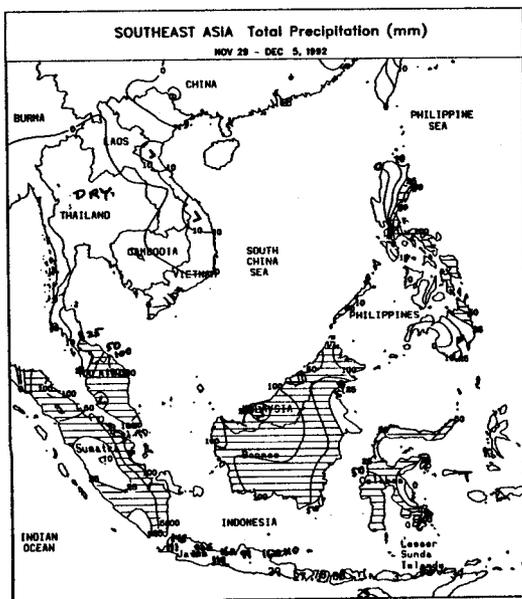
NORTHWESTERN AFRICA: Dry weather continued over winter grain areas in Morocco and western Algeria. As a result, topsoil moisture continued limited for crop emergence and early plant establishment. Winter grain planting was likely progressing slowly due to the persistent unfavorable dryness. Usually, winter grain planting is well underway across the region. In eastern Algeria and Tunisia, additional rain is needed to ensure a good start for this year's growing season, although the second consecutive week of dryness allowed planting to progress without delay.



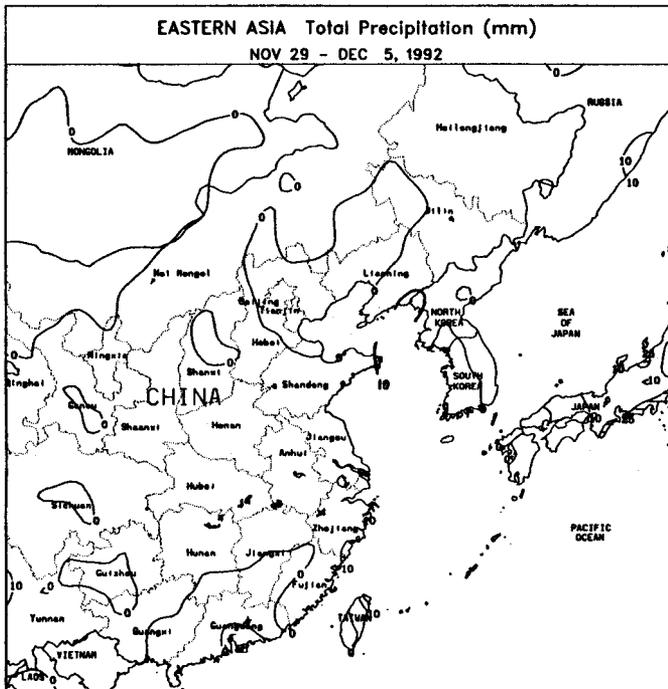
SOUTH AFRICA: Dry, warmer-than-normal weather covered primary corn areas, allowing planting to progress. High temperatures averaged in the low to mid 30's C, warming soils for germination. Weeks of beneficial, soaking rains have provided adequate to abundant topsoil moisture for planting, but following last year's extended drought, subsoil moisture is still deficient. In Natal, rainfall totaled less than 10 mm in primary sugar areas. South Africa's coastal crop areas have not received abundant rainfall like the interior corn areas, with many locations, including sugarcane areas, receiving below-normal amounts.



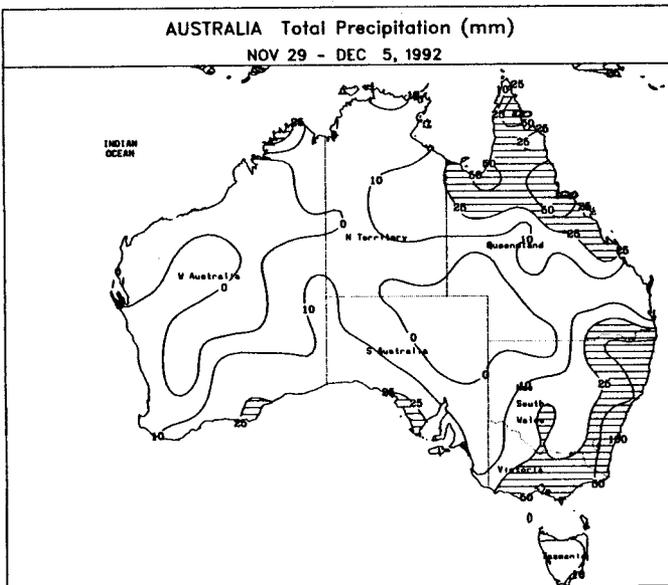
SOUTH ASIA: Dry, seasonably warm weather dominated the region, favoring fieldwork for both summer crop harvest and winter crop plantings. The exception was northeastern Tamil Nadu and Sri Lanka, which received moderate to heavy showers (40-198 mm) in primary rice areas. More rain would be welcomed over southern India in upcoming weeks for immature grains, oilseeds, and cotton.



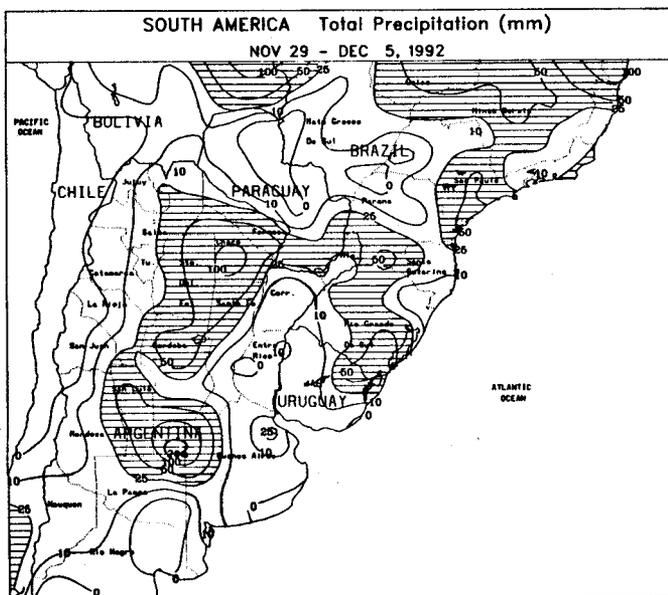
SOUTHEAST ASIA: Heavy rain (100-200 mm or more) covered most of Java, boosting irrigation but causing more localized flooding. Rainfall ranged from 24 to 85 mm in Malaysian's western oil palm region, with inundating rains (115-216 mm) over much of eastern Malaysia. In the Philippines, moderate to heavy showers (25-50 mm or more) fell from southern Luzon to northeastern Mindanao, maintaining favorable conditions for fall planted grains.



EASTERN ASIA: Seasonably light precipitation (less than 10 mm) fell over central China, dampening topsoils, but providing little improvement to subsoil moisture. The moisture favored vegetative winter wheat in North China Plain. Temperatures averaged 1-3 degrees above normal across most of China.



AUSTRALIA: Light to moderate rain (10-50 mm) fell across southern Queensland and northern New South Wales, aiding soil moisture for germinating cotton and sorghum. Winter wheat harvesting has finished across Queensland and neared completion in northern New South Wales. Further south, moderate showers (13-34 mm) fell across the remainder of New South Wales, Victoria, and Southern Australia, delaying early harvesting but favoring late filling wheat. Mostly dry weather (less than 5 mm) fell across Western Australia, benefiting maturing wheat and harvesting. The first widespread showers (15-100 mm) of the season prevailed in northeastern Queensland, favoring sugarcane. Typically, rainfall starts to increase in this area during mid-November to mid-December. Temperatures averaged 1-3 degrees C below normal in the eastern summer crop areas and across the southern wheat areas. Warmer temperatures are needed in the south to aid maturing winter wheat.



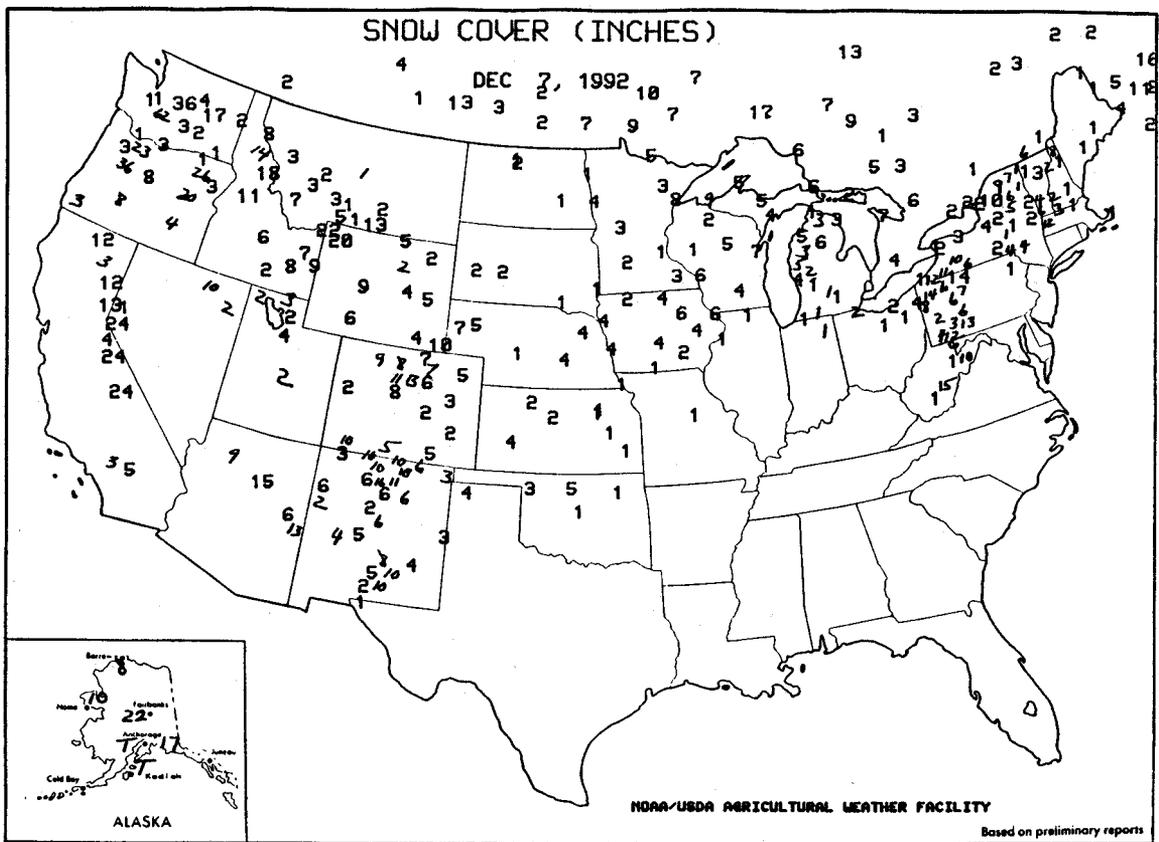
SOUTH AMERICA: In Argentina, late-week showers and thunderstorms produced moderate to heavy rain (36-77 mm, with isolated amounts over 200 mm) across northwestern Buenos Aires, northeastern La Pampa, and southern Cordoba, causing some flooding and possible lodging to filling and maturing wheat. Another band of moderate to heavy rain (25-130 mm) fell from northern Cordoba into Chaco and Formosa, exacerbating already wet conditions. Dry weather (less than 10 mm of rain) prevailed across most of southern Santa Fe and northern Buenos Aires, allowing corn, soybean, and sunflower planting. Across southern Brazil, moderate showers fell over Rio Grande do Sul, Santa Catarina, and southern Parana, keeping soil moisture adequate for summer crops but causing some soybean harvesting delays. Further north, drier weather (3-11 mm of rain) enabled summer crop planting to progress on most days in southern Mato Grosso do Sul and Sao Paulo. The stormy weather pattern kept Argentina 1-2 degrees C below normal for the week, while temperatures averaged near normal across southern Brazil.

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