

WEEKLY WEATHER AND CROP BULLETIN

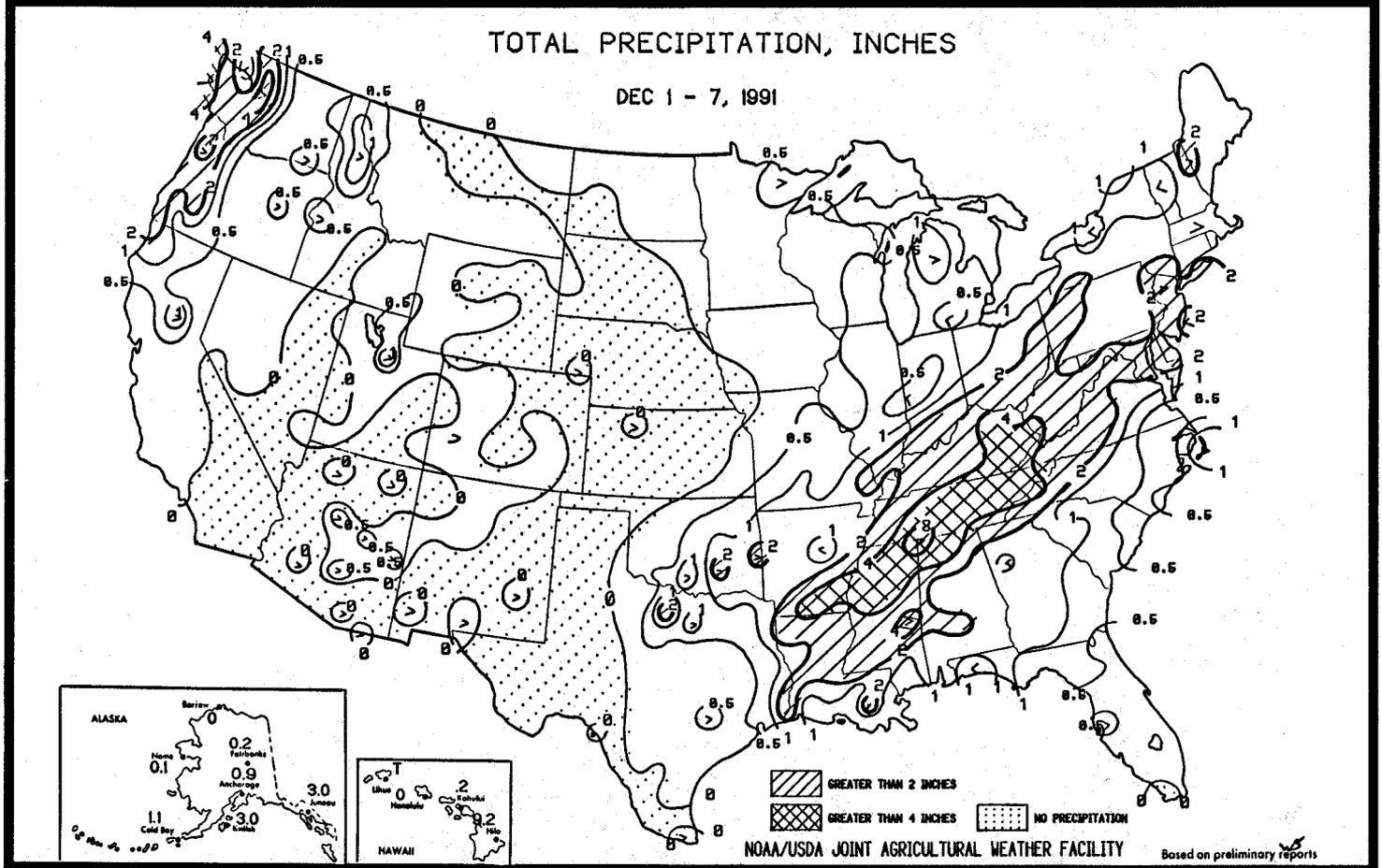
U.S. DEPARTMENT OF COMMERCE
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HIGHLIGHTS

December 1 - 7, 1991

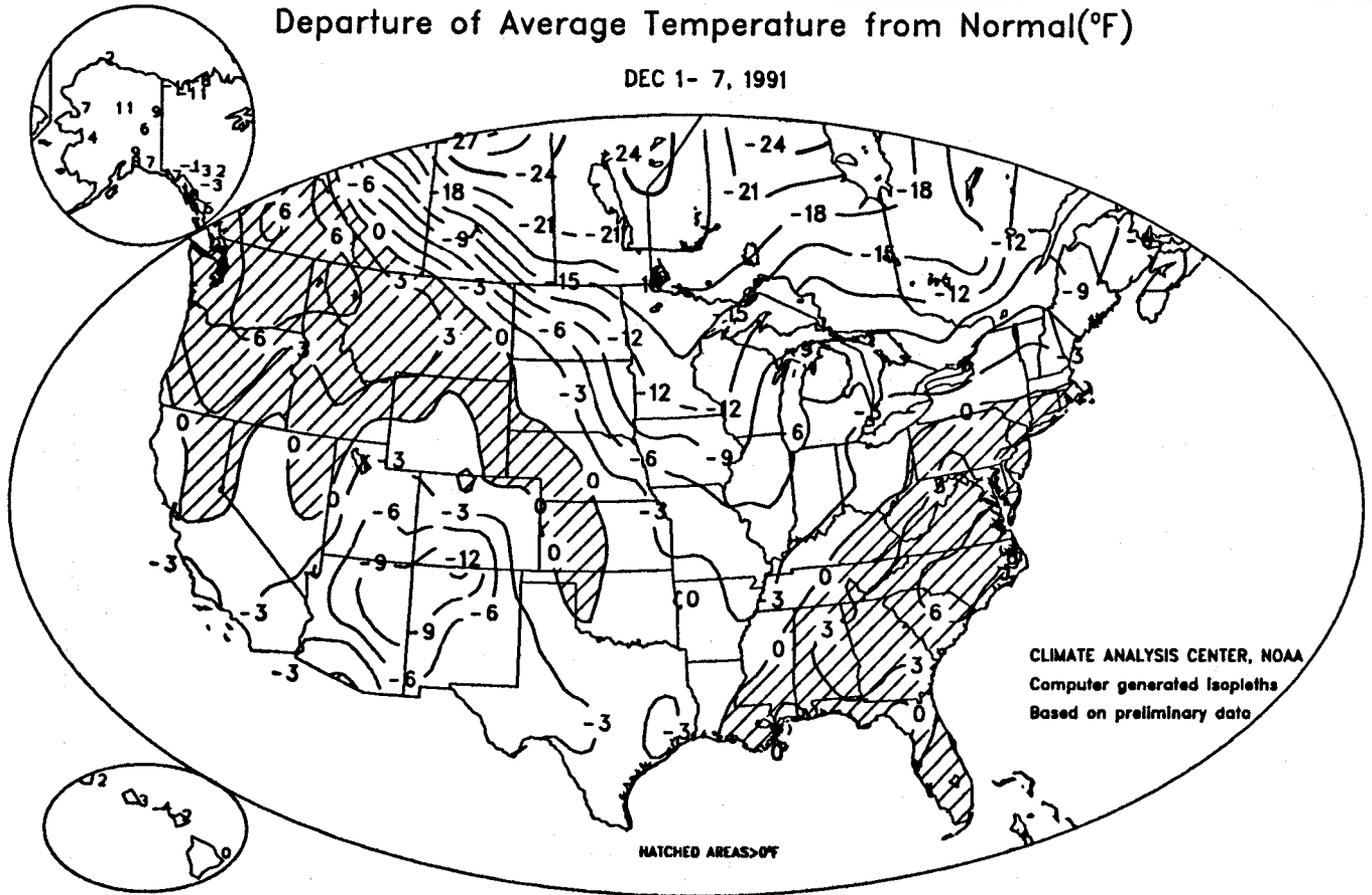
A slow-moving storm system dumped heavy rain from Louisiana to New Jersey, and snow from the Midwest to New England. Very cold air trailed the storm into the East. In the West, early-week cold was followed by a warm-up in advance of a storm. Early in the week, torrential rain caused flooding along the west slopes of the Appalachians from northern Mississippi to West Virginia. During the 48 hours ending noon Monday, 12.58 inches of rain besieged Pulaski, TN. Farther east, more than 40 daily record highs were established between Sunday and Tuesday. Tampa, FL (86° F), Atlanta, GA (79° F), and Cape Hatteras, NC (78° F), set all-time December record highs. Meanwhile, more than a dozen daily record lows were toppled in the West. Temperatures dropped to 29° F in Bakersfield, CA, and as low as the mid 20's in the Imperial Valley of southern California. In the North
(Continued to back cover)

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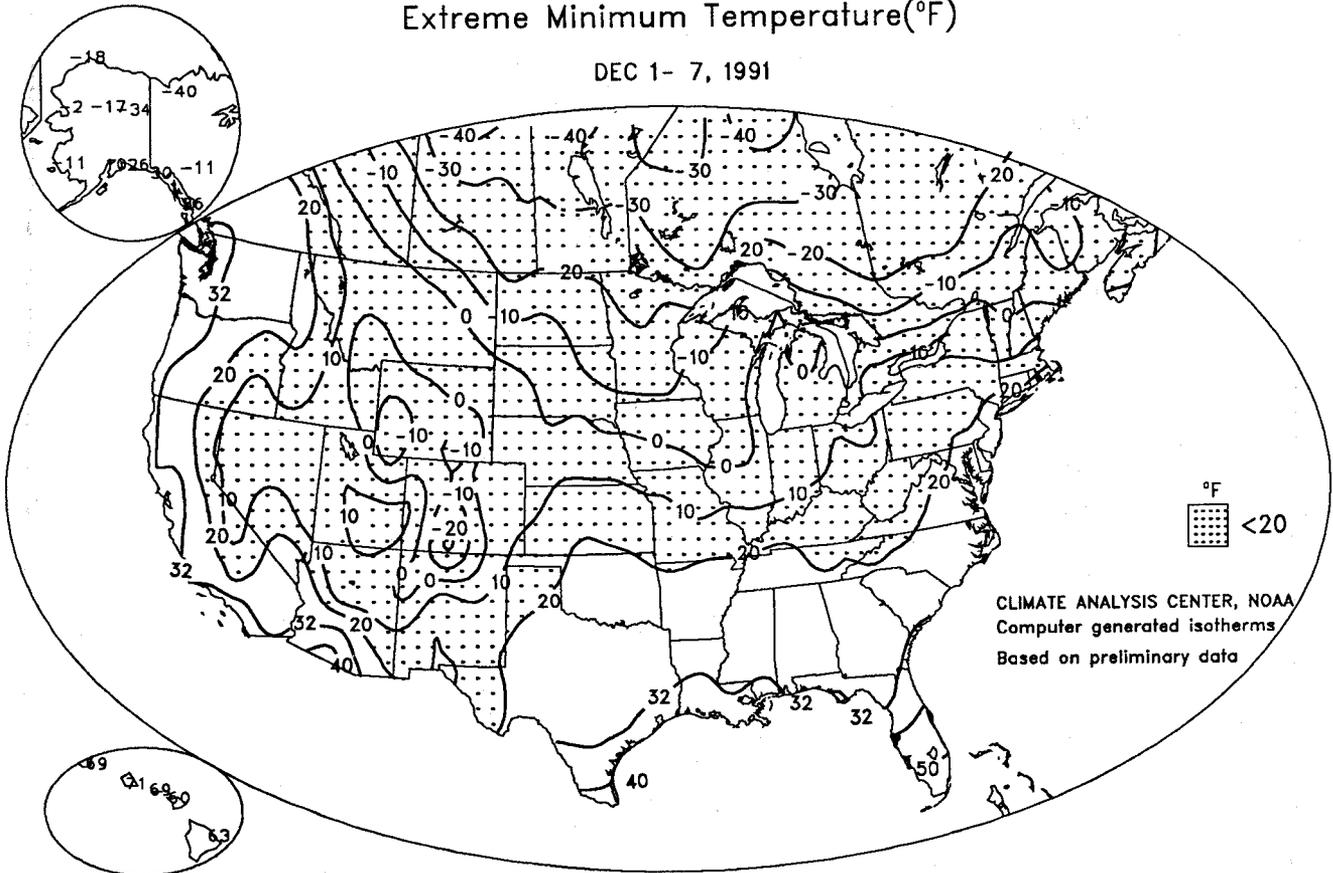
Departure of Average Temperature from Normal(°F)

DEC 1- 7, 1991



Extreme Minimum Temperature(°F)

DEC 1- 7, 1991



National Weather Data for Selected Cities

Weather Data for the Week Ending December 7, 1991

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT			NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	62	40	76	25	51	3	1.3	.3	1.1	1.3	125	50.6	100	91	47	0	0	4	3	1	2	
MOBILE	66	43	79	30	54	0	1.2	.1	.7	1.2	107	79.8	133	97	46	0	0	1	3	3	1	
MONTGOMERY	65	41	82	26	53	2	1.7	.7	1.5	1.7	170	63.8	141	94	42	0	0	3	2	1	1	
AK ANCHORAGE	29	21	35	18	25	9	.9	.6	.5	.9	340	16.4	117	89	61	0	0	7	3	1	1	
BARROW	-3	-12	0	-19	-8	2	T	.0	T	T	0	1.8	40	83	73	0	0	7	0	0	0	
FAIRBANKS	9	-8	23	-18	1	7	.2	.0	T	T	0	8.6	87	82	54	0	0	7	4	0	0	
JUNEAU	35	27	45	12	31	2	3.0	1.9	1.2	3.0	275	77.1	156	98	79	0	0	5	7	3	3	
KODIAK	39	31	42	20	35	4	3.0	1.7	1.5	3.0	240	93.5	166	96	68	0	0	3	6	3	3	
NOME	15	4	19	-3	9	2	.1	.0	.1	.1	73	13.9	99	77	49	0	0	7	3	0	0	
AZ PHOENIX	65	44	74	36	55	0	.0	.2	.0	.0	0	6.7	108	70	26	0	0	0	0	0	0	
PRESCOTT	42	16	55	4	29	-10	T	.4	T	T	0	14.2	81	84	46	0	0	7	0	0	0	
TUCSON	65	41	76	29	53	-1	.0	.2	.0	.0	0	9.3	91	78	25	0	0	2	0	0	0	
YUMA	69	45	75	35	57	-2	.0	.1	.0	.0	0	2.4	109	41	17	0	0	0	0	0	0	
AR FORT SMITH	53	34	70	25	44	0	1.5	.8	.8	1.5	203	43.4	115	96	61	0	0	3	2	2	2	
LITTLE ROCK	51	37	69	30	44	-2	.6	.4	.3	.6	65	55.3	121	77	61	0	0	1	2	0	0	
CA BAKERSFIELD	62	34	69	29	48	-2	.2	.0	.2	.2	129	5.1	100	59	25	0	0	2	0	0	0	
EUREKA	54	41	59	36	48	-1	.9	.5	.7	.9	64	21.9	65	96	77	0	0	0	0	1	0	
FRESNO	61	32	66	29	47	-1	.3	.1	.3	.3	79	9.6	105	83	31	0	0	5	5	1	0	
LOS ANGELES	65	48	77	43	57	-2	.0	.3	.3	.3	7	8.2	78	81	34	0	0	0	1	0	0	
REDDING	60	37	63	28	49	0	.6	.9	.6	.6	40	21.1	60	91	41	0	0	2	2	1	1	
SACRAMENTO	60	37	63	31	49	1	.5	.1	.4	.5	79	14.6	100	88	40	0	0	3	2	0	0	
SAN DIEGO	64	47	69	42	55	-4	.0	.3	.0	.0	0	11.9	147	77	37	0	0	0	0	0	0	
SAN FRANCISCO	61	44	63	41	53	-2	.0	.7	.0	.0	3	13.3	80	85	44	0	0	0	1	0	0	
CO DENVER	47	18	65	1	33	0	.0	.1	.0	.0	0	20.2	137	81	31	0	0	7	0	0	0	
GRAND JUNCTION	38	17	45	15	28	-4	.4	.1	.1	.1	0	8.7	118	88	42	0	0	7	0	0	0	
PUEBLO	47	15	66	2	31	-4	.0	.1	.1	.1	0	13.7	130	84	36	0	0	7	0	0	0	
CT BRIDGEPORT	45	33	60	23	39	2	2.0	1.1	1.3	2.0	228	38.2	99	80	56	0	0	4	6	1	1	
HARTFORD	42	27	63	16	34	1	1.6	.6	1.3	1.6	167	45.9	112	88	56	0	0	6	4	4	1	
DC WASHINGTON	52	37	62	24	44	2	2.4	1.7	.9	2.4	337	27.0	74	83	58	0	0	4	3	3	3	
FL APAALACHICOLA	68	48	77	33	58	1	.6	.1	.6	.6	84	89.9	172	93	62	0	0	0	1	1	0	
DAYTONA BEACH	77	55	85	39	66	4	T	.5	T	T	6	65.7	141	96	54	0	0	0	1	0	0	
JACKSONVILLE	73	47	84	30	60	3	.1	.4	.1	.1	21	79.2	160	94	51	0	0	1	1	0	0	
KEY WEST	80	70	84	61	75	2	T	.5	T	T	0	40.5	107	91	70	0	0	0	0	0	0	
MIAMI	81	67	85	55	74	4	T	.4	T	T	2	71.3	127	88	63	0	0	0	1	0	0	
ORLANDO	78	57	86	41	67	4	.2	.2	.1	.2	41	60.8	127	97	50	0	0	0	2	0	0	
TALLAHASSEE	69	44	77	26	57	2	.7	.3	.7	.7	71	71.3	117	97	58	0	0	1	1	1	1	
TAMPA	76	56	86	40	66	3	.7	.2	.5	.7	140	43.2	96	96	55	0	0	0	3	1	1	
WEST PALM BEACH	80	63	87	49	72	3	.4	.1	.2	.4	79	75.9	131	93	62	0	0	0	2	0	0	
GA ATLANTA	62	42	79	26	52	5	.9	.1	.9	.9	107	54.1	120	82	46	0	0	3	1	1	1	
AUGUSTA	67	39	80	25	53	4	.6	.0	.6	.6	105	54.6	136	93	44	0	0	4	1	1	1	
MACON	66	42	80	28	54	3	1.3	.5	1.3	1.3	158	49.8	120	97	50	0	0	4	2	1	1	
SAVANNAH	69	47	82	32	58	5	.7	.1	.7	.7	120	67.3	142	91	47	0	0	1	1	1	1	
HI HILO	80	67	81	63	73	1	9.2	5.9	4.4	9.2	282	146.5	124	97	71	0	0	0	6	2	2	
HONOLULU	84	73	87	71	78	4	T	.7	T	T	0	16.6	81	78	53	0	0	0	0	0	0	
KAHULUI	83	70	87	60	76	3	.2	.3	.2	.2	43	10.9	68	86	58	0	0	0	2	0	0	
LIHUE	80	72	82	69	76	2	T	1.2	T	T	3	31.7	80	87	65	0	0	0	1	0	0	
ID BOISE	43	27	53	16	35	1	.2	.1	.2	.2	75	9.4	90	92	54	0	0	6	1	0	0	
LEWISTON	48	37	51	29	43	6	.2	.1	.1	.2	54	11.1	94	82	51	0	0	2	2	0	0	
POCATELLO	39	20	49	-2	30	0	.1	.1	.1	.1	47	13.5	137	90	55	0	0	7	2	0	0	
IL CHICAGO	33	17	49	3	25	-7	.6	.0	.5	.6	105	34.4	106	91	61	0	0	6	2	0	0	
MOLINE	33	15	50	-2	24	-7	.5	.0	.4	.5	105	33.1	93	87	63	0	0	6	2	0	0	
PRORIA	34	17	54	-1	25	-7	.5	.1	.5	.5	111	34.6	104	90	67	0	0	6	2	0	0	
QUINCY	36	19	57	3	27	-6	.5	.1	.5	.5	112	35.2	97	94	66	0	0	6	2	0	0	
ROCKFORD	30	13	45	-4	22	-8	.6	.1	.5	.6	126	31.2	89	89	65	0	0	6	3	1	0	
SPRINGFIELD	36	21	55	4	29	-6	.3	.2	.3	.3	69	36.9	114	95	70	0	0	6	1	0	0	
IN EVANSVILLE	43	29	61	15	36	-3	2.5	1.7	1.9	2.5	306	31.4	81	90	62	0	0	4	2	2	2	
FORT WAYNE	37	22	53	5	30	-3	.7	.1	.6	.7	119	43.4	133	88	63	0	0	5	3	1	1	
INDIANAPOLIS	39	24	58	5	32	-3	.5	.2	.5	.5	70	36.5	100	87	61	0	0	4	3	0	0	
SOUTH BEND	36	21	52	5	28	-5	.5	.1	.3	.5	80	35.3	99	88	68	0	0	6	3	0	0	
IA DES MOINES	35	15	54	1	25	-5	.1	.2	.1	.1	31	37.7	126	90	57	0	0	6	2	0	0	
SIOUX CITY	30	10	43	0	20	-8	T	.2	T	T	16	25.4	102	91	68	0	0	7	2	0	0	
WATERLOO	28	6	47	-7	17	-10	.2	.1	.1	.2	57	41.8	131	89	69	0	0	7	2	0	0	
KS CONCORDIA	44	25	60	13	34	0	.0	.2	.0	.0	0	18.3	69	82	43	0	0	6	0	0	0	
DODGE CITY	50	23	64	17	37	0	.0	.1	.0	.0	0	9.3	46	84	35	0	0	7	0	0	0	
GOODLAND	46	20	66	4	33	0	T	.1	T	T	0	22.0	140	85	44	0	0	7	0	0	0	
TOPEKA	44	25	66	13	35	-1	.0	.3	.0	.0	0	26.8	83	89	50	0	0	6	0	0	0	
WICHITA	46	27	67	18	37	-1	.0	.3	.0	.0	0	24.7	89	87	46	0	0	6	0	0	0	
KY BOWLING GREEN	48	32	60	19	40	-1	3.3	2.4	2.8	3.3	341	44.9	99	88	61	0	0	3	3	2	2	
LEXINGTON	48	29	62	14	39	0	4.1	3.3	3.3	4.1	488	38.7	90	88	66	0	0	3	2	2	2	
LOUISVILLE	46	31	61	16	39	-1	2.4	1.6	1.9	2.4	301	35.4	87	82	57	0	0	3	3	2	2	
LA ALEXANDRIA	62	42	75	33	52	0	2.1	1.0	1.3	2.1	193	71.2	147	92	56	0	0	0	2	2	2	
BATON ROUGE	68	44	83	31	56	2	.7	.4	.4	.7	65	69.4	134	93	49	0	0	1	2	0	0	
LAKE CHARLES	64	45	77	35	55	-1	.9	.2	.6	.9	81	69.0	138	97	61	0	0	0	2	1	1	
NEW ORLEANS	68	45	83	32	56	0	.5	.5	.5	.5	45	100.3	181	96	51	0	0	1	3	0	0	

Based on 1951-80 normals

Weather Data for the Week Ending December 7, 1991

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT			NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	58	38	71	29	48	-3	2.7	1.8	1.8	2.7	311	77.2	190	94	57	0	0	0	2	2	2	2
ME CARIBOU	20	3	43	-17	12	-9	1.1	.3	.5	1.1	143	34.3	101	82	54	0	0	0	7	7	5	1
PORTLAND	34	17	56	5	25	-4	1.5	.5	1.0	1.5	144	54.6	137	87	58	0	0	0	6	6	4	1
MD BALTIMORE	50	33	63	20	42	2	1.8	1.0	1.0	1.8	234	28.0	72	85	55	0	0	0	4	4	3	3
SALISBURY	56	38	72	25	47	5	2.2	1.4	1.4	2.2	273	42.3	99	92	54	0	0	0	4	4	3	2
MA BOSTON	44	29	64	19	36	-1	1.2	.2	.8	1.2	121	41.0	102	84	49	0	0	0	6	6	4	1
CHATHAM	46	31	53	21	39	0	1.5	.4	.8	1.5	131	37.1	86	85	60	0	0	0	4	4	5	1
MI ALPENA	28	14	45	2	21	-7	.7	.3	.4	.7	155	33.1	121	91	61	0	0	0	7	7	5	0
DETROIT	36	24	51	8	30	-2	.8	.2	.3	.8	136	28.6	99	84	57	0	0	0	5	4	0	0
FLINT	33	20	45	6	27	-4	.9	.4	.4	.9	177	30.4	111	90	64	0	0	0	6	6	4	0
GRAND RAPIDS	34	21	45	8	28	-4	.9	.3	.3	.9	148	43.2	137	94	66	0	0	0	6	6	4	0
HOUGHTON LAKE	25	11	42	-7	18	-8	1.2	.7	.6	1.2	245	36.9	139	88	64	0	0	0	7	7	5	1
LANSING	34	20	46	4	27	-4	.7	.1	.3	.7	121	29.4	106	92	65	0	0	0	6	6	4	0
MARQUETTE	19	1	31	-11	10	-12	.8	.2	.3	.8	137	36.4	103	89	76	0	0	0	7	7	5	0
MUSKOGON	34	22	42	12	28	-4	.8	.2	.4	.8	134	40.3	138	91	63	0	0	0	6	6	4	0
SAULT ST. MARIE	21	7	35	-3	14	-10	.7	.1	.2	.7	111	31.4	100	84	61	0	0	0	7	7	6	0
MN ALEXANDRIA	17	-2	34	-17	8	-12	.4	.2	.2	.4	205	28.2	117	86	59	0	0	0	7	7	5	0
DULUTH	15	-6	32	-16	5	-14	.4	.1	.2	.4	116	43.2	152	85	59	0	0	0	7	7	5	0
INT'L FALLS	9	-14	18	-24	-2	-16	.5	.3	.3	.5	218	27.4	117	85	62	0	0	0	7	7	6	0
MINNEAPOLIS	22	0	44	-11	11	-13	.3	.1	.2	.3	150	35.9	141	87	60	0	0	0	7	7	4	0
ROCHESTER	21	2	39	-10	12	-12	.3	.0	.1	.3	109	35.7	129	90	73	0	0	0	7	7	4	0
MS GREENWOOD	58	38	71	30	48	0	5.0	3.8	2.8	5.0	418	63.1	129	90	56	0	0	0	2	2	2	1
JACKSON	65	38	81	28	51	1	3.0	1.9	2.8	3.0	263	60.8	128	94	49	0	0	0	3	2	2	1
MERIDIAN	64	39	80	29	52	2	4.2	3.0	3.0	4.2	355	70.9	145	94	45	0	0	0	3	2	2	1
MO CAPE GIRARDEAU	44	30	60	17	37	-	2.9	2.0	1.6	2.9	332	46.1	110	88	61	0	0	0	4	2	2	2
COLUMBIA	41	24	67	8	32	-4	.9	.4	.9	.9	183	33.0	94	86	59	0	0	0	6	6	1	1
KANSAS CITY	41	24	63	9	33	-5	.9	.3	.9	.9	3	26.7	76	86	51	0	0	0	6	6	1	0
SAINT LOUIS	43	26	69	10	35	-3	.5	.0	.5	.5	93	31.9	99	85	55	0	0	0	6	6	2	0
SPRINGFIELD	45	29	66	14	37	-2	.9	.3	.7	.9	144	35.1	94	90	62	0	0	0	5	5	1	0
MT BILLINGS	41	25	52	11	33	3	.1	.1	.1	.1	53	20.5	144	77	49	0	0	0	5	7	1	0
GLASGOW	32	9	53	-4	20	-1	.1	.1	.1	.1	183	10.9	104	87	59	0	0	0	7	7	1	0
GREAT FALLS	44	25	51	8	34	5	.1	.1	.1	.1	35	14.0	98	76	50	0	0	0	4	1	1	0
HAVRE	38	19	53	6	28	5	.7	.1	.7	.7	0	9.0	80	86	52	0	0	0	6	6	0	0
HELENA	41	23	49	0	32	5	.2	.1	.1	.2	157	11.4	104	96	57	0	0	0	5	4	0	0
KALISPELL	39	29	45	13	34	7	.3	.0	.0	.3	94	14.8	102	94	69	0	0	0	3	6	0	0
MILES CITY	40	18	55	1	29	4	.1	.1	.1	.1	50	20.0	146	85	51	0	0	0	6	2	0	0
MISSOULA	39	27	48	15	33	6	.4	.1	.1	.4	158	11.1	91	96	68	0	0	0	5	5	0	0
NE GRAND ISLAND	39	18	60	6	28	-2	.7	.7	.7	.7	0	27.8	123	91	63	0	0	0	7	7	0	0
LINCOLN	42	19	61	8	30	0	.0	.0	.0	.0	0	22.8	86	85	46	0	0	0	7	7	0	0
NORFOLK	35	12	58	0	24	-4	.0	.0	.0	.0	0	28.4	123	91	60	0	0	0	7	7	0	0
NORTH PLATTE	49	16	69	6	33	4	.0	.0	.0	.0	0	19.8	105	91	36	0	0	0	7	7	0	0
OMAHA	37	18	54	4	27	-4	.0	.0	.0	.0	0	35.5	120	82	61	0	0	0	6	6	0	0
SCOTTSBLUFF	50	19	66	2	35	4	.0	.0	.0	.0	0	14.3	101	76	28	0	0	0	7	7	0	0
VALENTINE	39	14	55	-1	26	-1	.0	.0	.0	.0	0	21.9	130	87	58	0	0	0	7	7	0	0
NV RLY	48	13	61	6	31	3	.1	.1	.1	.1	53	9.8	118	70	27	0	0	0	7	1	0	0
LAS VEGAS	57	33	62	30	45	-2	.0	.0	.0	.0	0	3.8	101	50	22	0	0	0	2	2	0	0
RENO	52	22	61	14	37	3	.0	.0	.0	.0	0	5.0	81	88	32	0	0	0	6	1	0	0
WINNEMUCA	46	18	58	6	32	-1	.4	.3	.3	.4	232	7.6	109	85	44	0	0	0	6	2	0	0
NE CONCORD	36	18	61	9	27	-1	1.4	.6	1.1	1.4	171	37.3	110	90	60	0	0	0	6	4	1	1
NJ ATLANTIC CITY	53	34	66	21	44	4	1.9	1.0	.7	1.9	224	32.6	84	89	56	0	0	0	4	3	3	3
NM ALBUQUERQUE	45	23	56	18	34	-4	.7	.1	.7	.7	36	10.2	135	78	35	0	0	0	7	1	0	0
CLOVIS	53	22	67	15	37	-4	.7	.1	.7	.7	0	21.4	129	84	27	0	0	0	7	7	0	0
ROSWELL	55	24	72	17	40	-2	.7	.1	.7	.7	38	18.7	182	81	29	0	0	0	7	1	0	0
NY ALBANY	39	20	54	12	29	-1	1.5	.9	1.2	1.5	223	34.4	104	87	55	0	0	0	6	5	1	1
BINGHAMTON	38	24	51	12	31	1	1.2	.5	.5	1.2	173	31.8	92	90	63	0	0	0	6	5	2	2
BUFFALO	37	25	46	17	31	-2	1.3	.5	.5	1.3	159	37.7	109	93	61	0	0	0	6	6	0	0
NEW YORK	49	35	66	26	42	2	1.8	.9	1.0	1.8	211	36.5	92	91	54	0	0	0	3	6	2	2
ROCHESTER	37	24	48	18	31	-2	.9	.3	.5	.9	143	27.2	93	92	64	0	0	0	6	5	0	0
SYRACUSE	37	24	45	13	31	-2	1.3	.6	.7	1.3	176	35.3	97	90	65	0	0	0	6	5	1	1
NC ASHEVILLE	57	34	69	19	46	4	3.6	2.9	2.3	3.6	499	42.4	103	90	52	0	0	0	4	3	2	2
CHARLOTTE	61	43	76	25	52	7	.7	.0	.7	.7	103	43.0	107	80	46	0	0	0	3	2	1	1
GREENSBORO	60	38	76	21	49	6	1.2	.5	.6	1.2	167	40.2	101	83	50	0	0	0	4	3	2	2
HATTERAS	65	49	78	35	57	6	1.2	.2	1.2	1.2	123	61.2	117	90	55	0	0	0	0	2	1	1
NEW BERN	67	43	81	29	55	6	.5	.3	.5	.5	62	47.3	94	90	44	0	0	0	3	2	0	0
RALEIGH	64	42	77	24	53	9	.6	.1	.6	.6	87	33.4	85	80	44	0	0	0	4	2	1	1
WILMINGTON	65	44	79	27	55	4	.8	.1	.7	.8	111	56.1	111	90	49	0	0	0	4	3	1	1
ND BISMARCK	27	6	55	-7	17	-4	.7	.1	.7	.7	36	16.6	113	83	53	0	0	0	7	2	0	0
FARGO	17	-3	32	-17	7	-12	.2	.1	.2	.2	171	20.7	110	81	61	0	0	0	7	4	0	0
GRAND FORKS	12	-7	26	-19	3	-14	.3	.1	.1	.3	193	21.5	121	82	58	0	0	0	7	6	0	0
WILLISTON	27	2	50	-16	15	-6	.2	.1	.1	.2	164	17.7	135	91	60	0	0	0	7	5	0	0
OH AKRON-CANTON	43	24	58	7	33	-1	2.0	1.4	1.5	2.0	334	22.8	68	87	61	0	0	0	5	3	1	1
CINCINNATI	44	26	58	10	35	-2	2.7	2.0	2.5	2.7	391	37.7	100	88	62	0	0	0	4	4	1	1
CLEVELAND	43	26	54	10	34	-1	1.3	.6	1.0	1.3	198	31.7	96	83	61	0	0	0	4	3	1	1

Weather Data for the Week Ending December 7, 1991

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	40	24	57	9	32	-3	1.6	1.0	1.5	1.6	272	35.1	108	86	60	0	4	2	1
TOLEDO	38	25	52	9	31	-1	.7	.1	.6	.7	118	26.5	90	86	59	0	4	4	1
YOUNGSTOWN	41	26	55	9	33	0	1.5	.9	1.0	1.5	240	24.2	69	86	62	0	5	3	1
OK OKLAHOMA CITY	52	34	71	26	43	0	.5	.3	.3	.5	189	38.3	128	91	52	0	4	2	0
TULSA	50	34	69	25	42	-1	.6	.1	.3	.6	126	29.6	79	91	60	0	4	2	0
OR ASTORIA	52	44	54	39	48	4	3.7	1.2	2.2	3.7	145	54.3	90	97	81	0	0	7	1
BURNS	40	24	42	11	32	3	.1	-.2	.1	.1	36	5.4	61	93	67	0	6	1	0
MEDFORD	44	35	50	24	40	0	.7	.0	.5	.7	96	14.1	84	100	84	0	1	1	0
PENDLETON	52	39	58	31	46	8	.4	.0	.4	.4	108	13.2	123	80	51	0	1	2	0
PORTLAND	52	43	54	40	48	5	2.4	1.0	1.1	2.4	171	31.6	98	99	78	0	0	7	2
SALEM	52	42	54	38	47	5	1.6	.1	.8	1.6	103	31.3	90	93	74	0	0	5	1
PA ALLENTOWN	44	31	62	19	38	3	1.8	.9	.8	1.8	211	32.7	79	93	59	0	4	5	2
ERIE	40	28	50	15	34	-1	1.5	.7	.7	1.5	190	30.1	80	86	60	0	5	5	2
HARRISBURG	45	33	58	22	39	3	1.4	.6	1.4	1.4	182	29.7	81	78	53	0	4	1	1
PHILADELPHIA	50	36	60	24	43	4	2.4	1.6	1.1	2.4	310	34.7	90	83	56	0	4	3	2
PITTSBURGH	44	27	58	14	36	1	2.1	1.5	1.3	2.1	375	30.5	89	90	60	0	5	4	2
SCRANTON	42	29	61	17	36	2	1.5	.9	.8	1.5	257	29.1	89	89	55	0	4	6	2
RI PROVIDENCE	46	30	65	21	38	2	1.5	.5	.9	1.5	151	44.1	106	88	50	0	4	5	1
SC CHARLESTON	67	47	82	31	57	5	.4	-.2	.4	.4	67	48.5	99	90	49	0	1	1	0
COLUMBIA	67	42	79	28	55	6	.8	.1	.8	.8	114	60.6	131	92	42	0	4	1	1
FLORENCE	68	44	86	28	56	7	.3	-.3	.3	.3	50	43.0	103	91	41	0	2	1	0
GREENVILLE	62	41	74	23	51	6	1.0	.1	.7	1.0	117	45.4	95	84	47	0	4	2	1
SD ABERDEEN	22	4	40	-14	13	-8	T	-.1	T	T	27	23.0	133	85	61	0	7	2	0
BURON	27	6	45	-8	17	-7	T	-.1	T	T	0	23.3	129	84	57	0	7	0	0
RAPID CITY	41	16	57	4	29	0	T	-.1	T	T	36	17.3	110	82	52	0	7	1	0
STOUK FALLS	26	4	44	-9	15	-9	T	-.2	T	T	6	27.3	117	91	67	0	7	1	0
TN CHATTANOOGA	58	37	72	23	47	4	3.4	2.3	1.9	3.4	307	51.4	106	91	52	0	4	3	3
KNOXVILLE	56	36	75	21	46	3	6.0	5.1	2.9	6.0	615	54.1	124	92	55	0	4	3	3
MEMPHIS	50	36	65	28	43	-3	3.7	2.6	2.4	3.7	344	57.7	121	81	57	0	2	2	2
NASHVILLE	52	35	70	21	43	0	4.3	3.4	3.1	4.3	443	43.4	97	92	65	0	2	3	2
TX ABILENE	59	36	76	29	48	-1	.1	-.1	.1	.1	33	27.1	120	87	41	0	4	2	0
AMARILLO	53	24	71	16	39	-2	.0	-.1	.0	.0	0	13.1	71	77	24	0	6	0	0
AUSTIN	63	43	73	33	53	-2	.1	-.4	.1	.1	14	38.2	128	88	47	0	0	3	0
BEAUMONT	66	46	79	36	56	0	2.1	1.0	1.9	2.1	187	71.9	140	95	59	0	0	2	1
BROWNSVILLE	72	52	81	43	62	-2	.1	-.2	.1	.1	32	29.6	121	92	54	0	0	2	0
CORPUS CHRISTI	70	47	80	37	59	-3	.1	-.2	.1	.1	23	38.3	128	94	56	0	0	1	0
DEL RIO	65	43	76	31	54	-1	T	-.1	T	T	7	19.0	113	69	35	0	1	1	0
EL PASO	54	29	68	22	42	-5	T	.0	T	T	50	8.9	122	81	32	0	6	1	0
FORT WORTH	58	39	74	29	48	-2	.8	.4	.7	.8	190	45.6	153	93	55	0	3	2	1
GALVESTON	62	52	70	44	57	-1	-.6	-.2	.2	.2	26	56.9	151	89	63	0	0	2	0
HOUSTON	64	42	77	31	53	-3	.5	-.4	.3	.5	54	52.2	120	97	58	0	1	3	0
LUBBOCK	55	29	73	24	42	-1	T	-.1	T	T	0	21.8	127	80	29	0	5	0	0
MIDLAND	58	30	74	24	44	-4	T	-.1	T	T	0	21.4	163	80	29	0	5	0	0
SAN ANGELO	60	34	76	24	47	-3	T	-.2	T	T	0	20.4	116	88	41	0	4	0	0
SAN ANTONIO	64	42	73	29	53	-2	.1	-.3	.0	.1	14	28.9	104	87	46	0	1	3	0
VICTORIA	65	45	78	31	55	-3	.1	-.4	.1	.1	28	50.7	144	93	55	0	1	2	0
WACO	61	41	74	29	51	-1	.2	-.3	.1	.2	36	37.4	127	91	53	0	1	2	0
WICHITA FALLS	59	36	78	28	47	1	.5	-.2	.2	.5	164	29.5	115	90	44	0	4	2	0
UT CEDAR CITY	45	17	53	5	31	-2	T	-.2	T	T	0	11.8	121	84	37	0	7	0	0
SALT LAKE CITY	39	20	47	6	29	-4	.2	-.1	.1	.2	53	17.6	125	90	51	0	6	2	0
VT BURLINGTON	34	16	53	5	25	-3	.7	.1	.6	.7	120	31.9	101	87	53	0	6	3	1
VA NORFOLK	63	42	80	29	53	7	.3	-.4	.2	.3	42	40.7	96	82	47	0	2	2	0
RICHMOND	59	39	75	26	49	7	1.8	1.0	.9	1.8	233	33.0	80	91	64	0	4	3	2
ROANOKE	54	34	63	18	44	3	2.4	1.7	1.0	2.4	373	35.6	97	83	54	0	4	3	3
WA QUILLAYUTE	50	44	52	38	47	5	4.7	.9	2.2	4.7	123	93.0	100	100	87	0	0	7	4
SEATTLE-TACOMA	50	44	52	39	47	5	1.6	.2	1.2	1.6	117	33.7	101	96	80	0	0	5	1
SPOKANE	42	34	46	28	38	7	.9	.3	.6	.9	159	14.0	96	95	71	0	2	3	1
YAKIMA	53	30	58	26	42	8	.1	-.2	.1	.1	42	7.4	110	99	54	0	5	1	0
WV BECKLEY	51	31	66	11	41	5	3.4	2.7	1.5	3.4	493	37.1	93	87	60	0	3	4	3
CHARLESTON	51	32	61	15	42	2	2.7	2.0	1.6	2.7	383	39.3	99	85	62	0	2	4	2
HUNTINGTON	49	31	61	14	40	0	2.9	2.2	1.4	2.9	417	36.2	94	87	63	0	3	4	3
PARKERSBURG	48	29	61	14	38	0	2.8	2.2	2.0	2.8	480	42.4	119	93	67	0	5	4	2
WI GREEN BAY	28	10	45	-1	19	-7	.5	.2	.3	.5	153	25.7	96	90	59	0	7	3	0
LACROSSE	25	5	43	-3	15	-12	.3	.1	.1	.3	118	35.2	121	90	62	0	6	4	0
MADISON	28	11	45	-2	20	-7	.7	.3	.4	.7	189	38.1	129	88	62	0	6	4	0
MILWAUKEE	31	17	42	6	24	-6	.7	.3	.3	.7	153	38.2	131	89	62	0	6	4	0
WAUSAU	21	3	40	-7	12	-11	.5	.2	.3	.5	147	37.9	124	93	75	0	7	3	0
WY CASPER	36	20	46	-3	28	0	.1	.0	.1	.1	118	12.2	113	72	46	0	6	2	0
CHEYENNE	45	20	63	0	33	1	.0	-.1	.0	.0	0	18.6	143	61	26	0	6	0	0
LANDER	37	13	53	-9	25	0	T	-.1	T	T	23	14.5	115	84	48	0	7	1	0
SHERIDAN	39	19	51	5	29	1	.2	.0	.1	.2	88	15.6	108	85	53	0	7	2	0

Based on 1951-80 normals

November Weather and Crop Summary

Weather

November began and ended with major snowstorms; in between, cold weather repeatedly covered the Central States and heavy precipitation fell from the Rockies to the Great Lakes. Negligible rain fell in the southern half of California, heightening fears of a sixth year of drought. Northern Florida and most of Georgia received below-normal rainfall for the third consecutive month, while parts of the mid-Atlantic region endured an eighth consecutive drier-than-normal month. Drought eased markedly in the central Plains, aiding Kansas' 1992 winter wheat crop; in the interior West, boosting snowpack; and in the central Appalachians, vanquishing the wildfire threat.

Strong storms regularly entered the United States through the Pacific Northwest, diving into the Rockies before lifting toward the Great Lakes. November snowfall records were buried in more than half a dozen cities from Colorado to Michigan, including Colorado Springs, CO (21.7 inches), and La Crosse, WI (30.3 inches). Monthly snowfall of 46.9 inches in Minneapolis, MN, was a record for any month, formerly set in January 1982. Along the primary storm track, November precipitation was quadruple the normal in parts of New Mexico, Colorado, and the upper Mississippi Valley. Only one Atlantic coastal storm developed, moving along the mid-Atlantic shoreline on the 9th and 10th, but it aggravated the coastal damage caused by the massive northeaster only 10 days earlier. Though it was a wet month for much of the country, California, southern Texas, and the central and southern Atlantic Coast States were unusually dry.

Temperatures ranged from near normal to 3° F above normal west of the Rockies and in the Northeast. But in the Nation's middle third, temperatures ranged from 2 to 9° F below normal. Frequent arctic outbreaks and snow cover kept Iowa and Minnesota especially cold.

The early-month storm dumped a one-storm record of 28.4 inches in Minneapolis (8 inches fell on October 31) and pulled bitterly cold air into the Central and Eastern States. More than 640 daily record lows were set east of the Rockies during the cold snap, which began in late October and eased by the 10th. Temperatures during that time averaged more than 20° F below normal from Montana to Iowa. The middle third of November was active in terms of storminess, but high pressure systems trailing the storms were of maritime, not arctic, origin. The Pacific Northwest and Rockies absorbed the brunt of the weather, which included strong winds and bountiful moisture. Precipitation also streaked into the central Plains, improving soil moisture for winter wheat. After the 20th, storms again began to entrain arctic air, ripening conditions for snow in the North Central States and heavy rain in parts of the East. Brief surges of warmth into the East contributed to 90 daily record highs and thunderstorm outbreaks. An episode on the 29th resulted in 100 occurrences of damaging winds or large hail from Oklahoma to Indiana. Snow continued to pile up at regular intervals in the upper Mississippi Valley, including 12 inches in La Crosse, on the 23rd. November ended as it began, with Minneapolis noting a 14-inch snowfall, and cold air spilling

southward behind the storm. This cold outbreak, although far less severe (only 30 daily record lows) than its early-month predecessor, will be remembered for its California dust storm. On the 29th, gusty winds blew across parched fallow fields in central California, resulting in a chain reaction accident that claimed 17 lives and involved more than 100 vehicles.

Row Crop Harvest

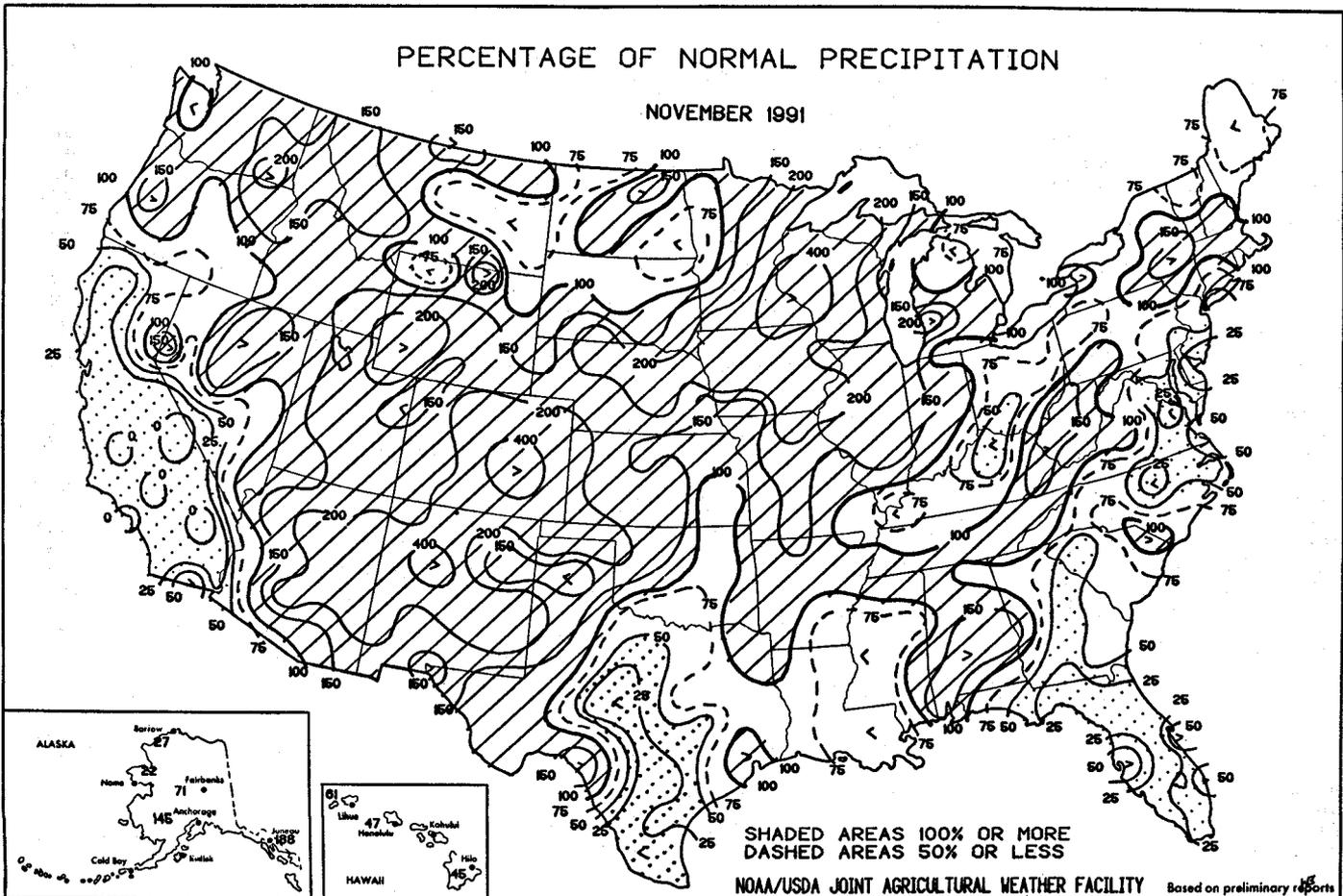
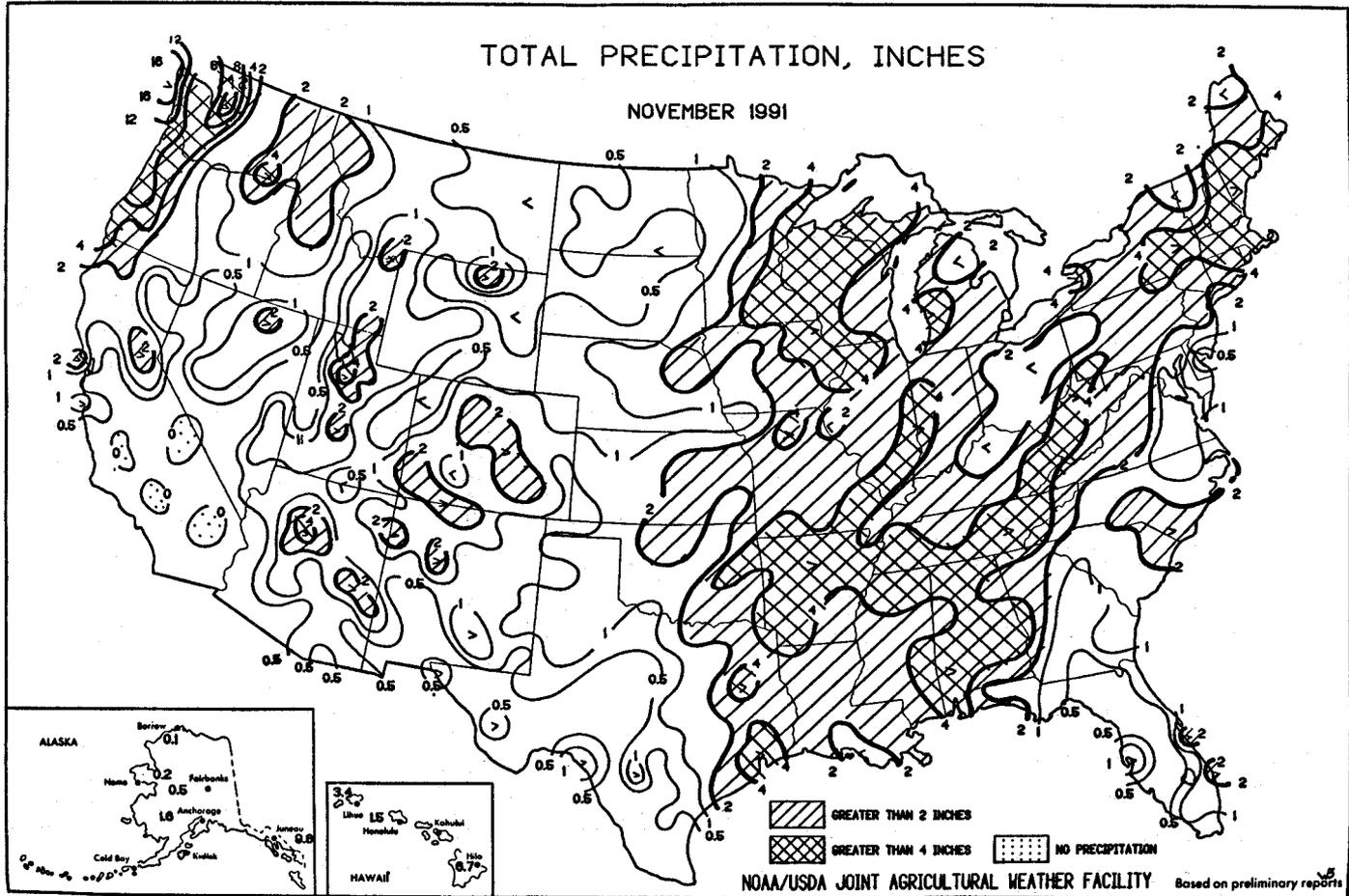
Progress of the **corn** harvest was at or ahead of normal in all of the major producing States entering November, with harvest complete in South Dakota and well along in the eastern Corn Belt. Record cold and snows slowed activity early in the month, but a brief respite near mid-month allowed for harvest of most fields in the Corn Belt. Harvest was very near completion by the end of November with activity continuing in only Missouri, New York, Oregon, Pennsylvania, and Washington. Should the recent wintery weather continue, some acreage in Iowa and the Great Lakes region may remain unharvested until spring.

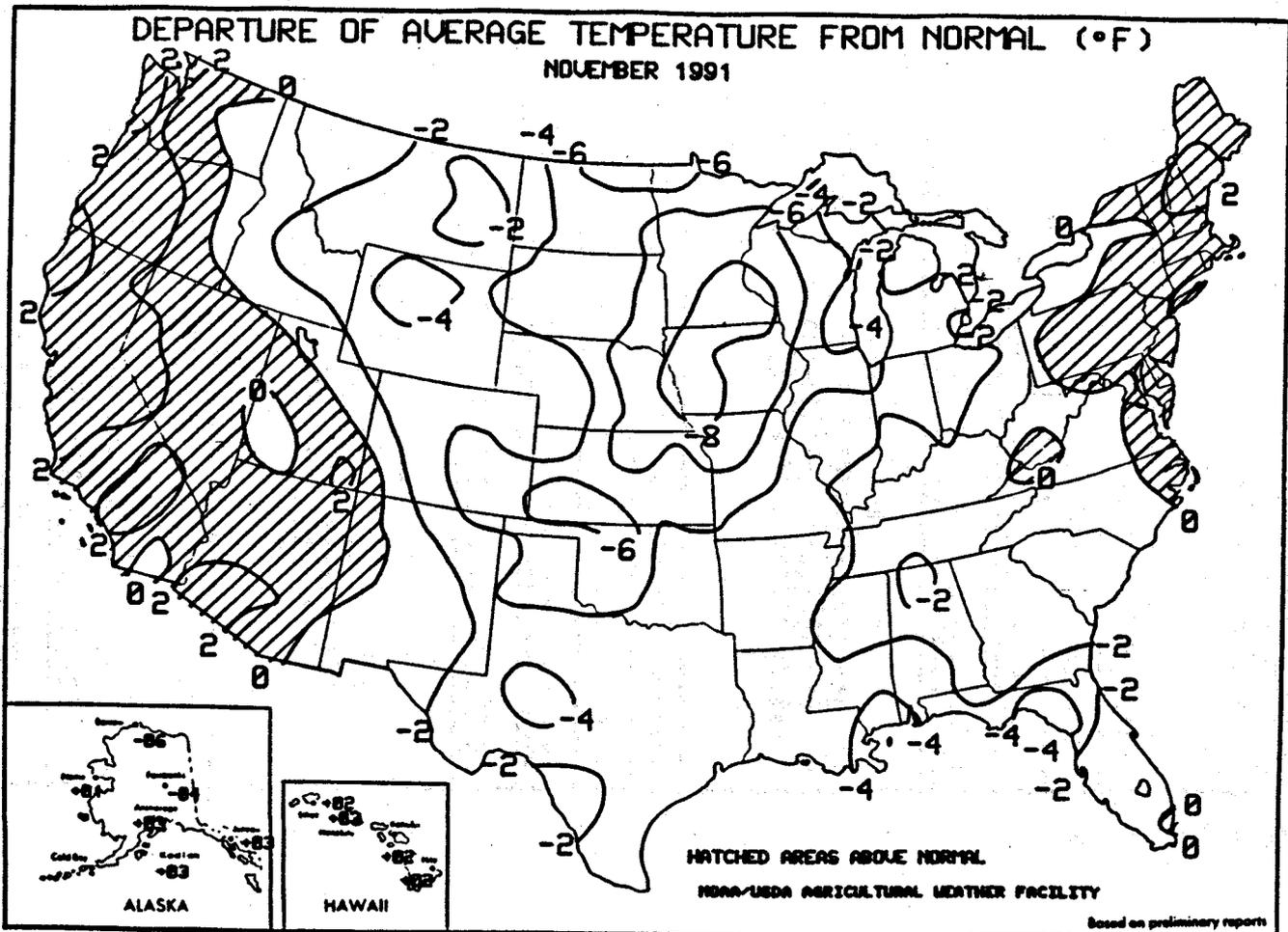
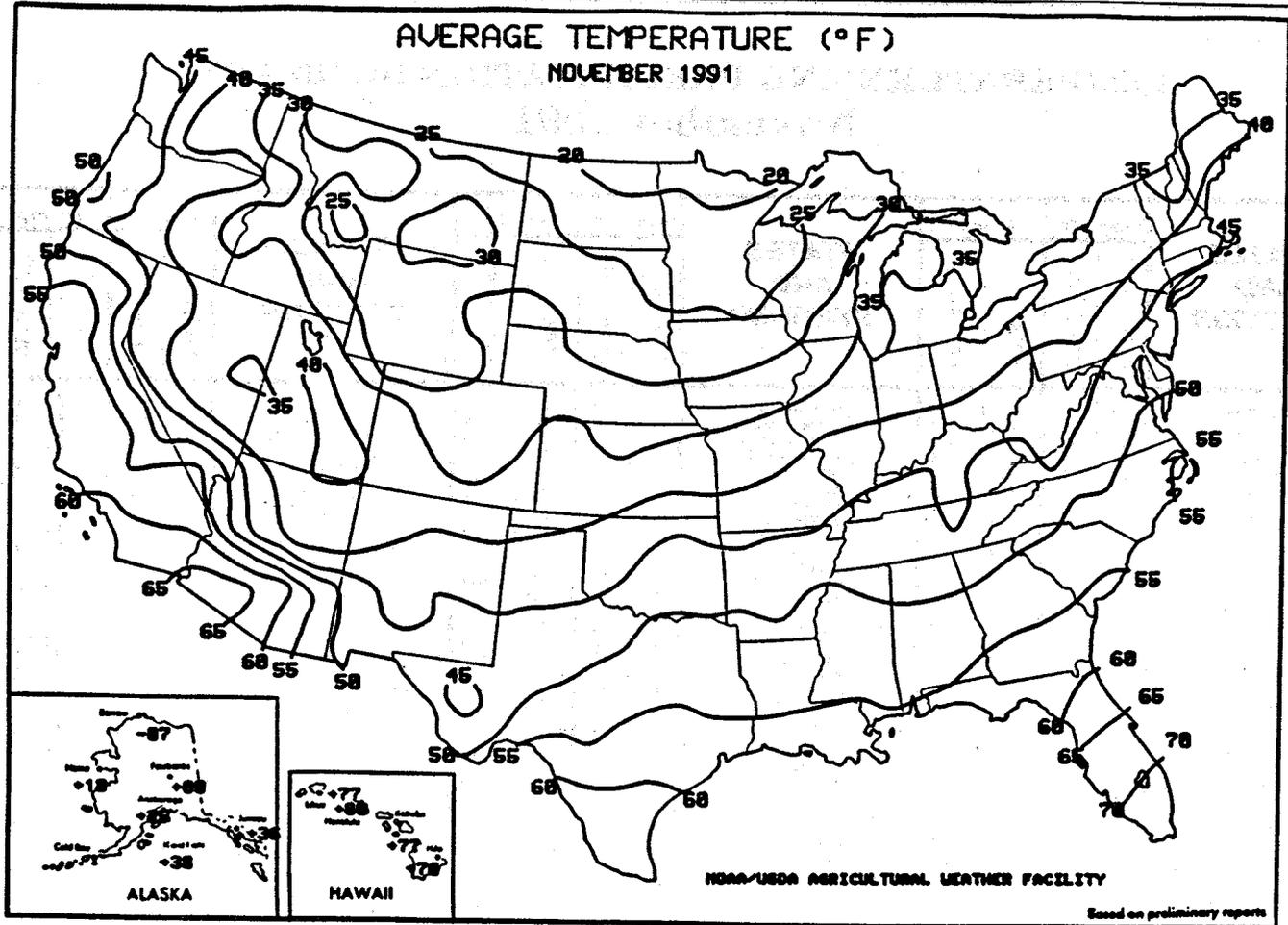
Soybean harvest, although slowed by the inclement weather of early November, was completed considerably earlier than normal in the Northern States. Harvest was complete by mid-November in the North, nearing completion in the Central States, and past the midway point in the Southeast. Harvest continued between rains in the Southeast through the end of November. Record November snowfall and an early winter in northern Iowa and Minnesota may result in the abandonment of some late-seeded acreage.

Rains early in the month halted **cotton** picking in Missouri and slowed harvest to a near standstill in Texas and the Mississippi and Tennessee Valleys. Harvest was 57% complete in the 14 major producing States on November 3, compared with 60% last year and 54% average. Mostly dry weather thereafter in the major producing regions allowed harvest to progress at a near-normal pace and harvest to approach completion in the Mississippi and Tennessee Valleys by mid-month. Second picking was active in the Delta during the second half of the month, while growers in Arizona, New Mexico, Oklahoma, and Texas continued with the first picking. Harvest progress had advanced to 75% complete by the end of the month, 5 percentage points behind last year but 1 point ahead of the average.

Winter Wheat Seedings

A major winter storm brought snow and record cold temperatures to the wheat producing area from the Great Basin to the northern Plains in early November. Fortunately, seeding was complete or nearly complete in most of the northerly States and most of the acreage had emerged. Seeding was in the early stages in California and Georgia, in full swing in the South, and was well along in the Pacific Northwest. Extreme cold slowed crop emergence across the Central States during the first half of November. Crop condition for much of the acreage in Kansas rated poor or very poor due to extreme drought. Significant precipitation fell across most of the Nation during the second half of November, easing concerns over low soil moisture. Seeding was continuing in California and the Southeast at month's end.





TEMPERATURE AND PRECIPITATION SUMMARY

November 1991

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	50	-2	4.0	0.4	LA ALEXANDRIA	54	-3	2.1	-2.0	TOLEDO	38	-2	2.2	-0.3
AL HUNTSVILLE	48	-3	4.1	-0.1	LA BATON ROUGE	56	-3	2.7	-1.2	TOLEDO YOUNGSTOWN	39	-1	1.4	-1.4
AL MOBILE	54	-5	5.8	2.1	LA LAKE CHARLES	56	-4	3.2	-1.0	OK OKLAHOMA CITY	45	-4	1.9	0.4
AL MONTGOMERY	52	-3	5.8	2.9	LA NEW ORLEANS	56	-4	2.2	-1.8	OK TULSA	46	-3	2.0	-0.6
AK ANCHORAGE	25	3	1.6	0.5	ME SHREVEPORT	52	-3	3.9	0.2	OR ASTORIA	47	1	10.5	0.4
AK BARROW	-6	-6	0.1	-0.2	ME CARIBOU	33	1	1.6	-1.6	OR BURNS	36	0	1.0	-0.2
AK FAIRBANKS	1	-4	0.5	-0.2	ME PORTLAND	40	2	4.3	-0.3	OR MEDFORD	47	4	2.4	-0.4
AK JUNEAU	35	3	9.8	4.6	MD BALTIMORE	46	-1	1.7	-1.4	OR PENDLETON	41	0	2.7	1.2
AK KODIAK	38	3	15.3	9.5	MA SALTSBURY	48	1	0.6	-2.4	OR PORTLAND	47	2	6.4	1.2
AK NOME	18	1	0.2	-0.7	MA BOSTON	45	0	4.1	-0.1	OR SALEM	47	3	5.9	0.2
AZ FLAGSTAFF	37	1	4.5	2.8	MA CHATHAM	46	1	4.9	0.4	PA ALLENTOWN	44	1	2.5	-1.2
AZ PHOENIX	64	3	1.2	0.7	MI ALPENA	34	-1	1.5	-0.7	PA ERIE	41	-1	3.2	-0.6
AZ PRESCOTT	45	1	2.6	1.3	MI DETROIT	38	-1	2.6	0.3	PA HARRISBURG	44	1	2.1	-1.2
AZ TUCSON	59	0	0.8	0.2	MI FLINT	36	-3	3.0	0.7	PA PHILADELPHIA	47	1	1.6	-1.8
AZ WINSLOW	41	-2	1.0	0.6	MI GRAND RAPIDS	36	-3	6.4	3.6	PA PITTSBURGH	42	0	2.0	0.9
AR YUMA	66	4	0.1	-0.1	MI HOUGHTON LAKE	33	-2	1.9	-0.4	PA SCRANTON	41	0	3.8	0.9
AR FORT SMITH	47	-3	4.0	0.5	MI LANSING	35	-3	3.0	0.7	PA WILLIAMSPORT	42	1	3.3	-0.3
AR LITTLE ROCK	49	-3	4.4	0.1	MI MARQUETTE	27	-3	5.9	3.0	RI PROVIDENCE	45	2	4.6	0.4
CA BAKERSFIELD	56	0	T	-0.6	MI MUSKEGON	36	-3	4.2	1.4	SC CHARLESTON	56	-1	1.6	-0.5
CA BISHOP	46	0	0.0	-0.5	MI SAULT ST. MARIE	32	-1	3.5	0.3	SC COLUMBIA	53	-2	1.5	-1.1
CA EUREKA	52	0	2.0	-3.8	MN ALEXANDRIA	23	-6	0.8	-0.4	SC FLORENCE	52	-2	3.1	0.9
CA FRESNO	56	3	T	-1.2	MN DULUTH	22	-7	4.9	3.2	SD GREENVILLE	49	-2	1.4	-1.7
CA LOS ANGELES	63	2	T	-1.5	MN INT'L FALLS	20	-5	1.8	0.6	SD ABERDEEN	25	-5	0.3	-0.3
CA REDDING	54	1	1.3	-4.3	MN MINNEAPOLIS	24	-9	5.3	4.0	SD HURON	27	-5	0.8	0.1
CA SACRAMENTO	56	3	0.2	-2.0	MN ROCHESTER	24	-9	5.9	4.4	SD RAPID CITY	30	-5	0.7	0.2
CA SAN DIEGO	62	0	0.1	-1.0	MS ST. CLOUD	22	-8	2.3	1.0	SD SIOUX FALLS	26	-7	1.8	0.9
CA SAN FRANCISCO	58	3	0.2	-2.1	MS GREENWOOD	52	-1	2.1	-2.4	TN BRISTOL	46	0	3.4	0.4
CA STOCKTON	56	3	0.3	-1.5	MS JACKSON	52	-2	2.4	-1.5	TN CHATTANOOGA	48	-1	4.9	0.7
CO ALAMOSA	23	-6	1.2	0.8	MS MERIDIAN	52	-3	5.0	1.6	TN KNOXVILLE	47	-2	5.2	1.5
CO CO. SPRINGS	33	-5	2.1	1.6	MO TUPELO	49	-2	5.4	0.7	TN MEMPHIS	49	-2	5.7	1.6
CO DENVER	35	-4	2.7	1.9	MO CAPE GIRARDEAU	--	--	7.4	3.7	TN NASHVILLE	47	-1	2.9	-0.6
CO GRAND JUNCTION	38	-2	1.1	0.5	MO COLUMBIA	39	-5	3.1	0.9	TX ABILENE	50	-4	0.3	-1.0
CO PUEBLO	34	-6	2.5	2.0	MO KANSAS CITY	37	-8	2.0	0.4	TX AMARILLO	41	-4	0.7	0.1
CT BRIDGEPORT	46	1	2.8	-1.0	MO SAINT LOUIS	42	-2	3.3	0.8	TX AUSTIN	57	-2	0.9	-1.3
CT HARTFORD	43	1	4.0	0.0	MO SPRINGFIELD	42	-3	3.9	1.0	TX BEAUMONT	57	-3	4.0	-0.3
DC WASHINGTON	49	0	0.8	-2.0	MT BILLINGS	33	-2	1.0	0.1	TX BROWNSVILLE	65	-3	0.2	-1.3
FL APALACHICOLA	58	-3	0.7	-2.1	MT GLASGOW	28	-1	0.4	0.1	TX CORPUS CHRISTI	62	-4	0.4	-1.1
FL DAYTONA BEACH	64	-1	0.6	-2.0	MT GREAT FALLS	32	-3	0.8	0.0	TX DEL RIO	57	-2	1.4	0.6
FL FT. MYERS	70	0	0.3	-1.1	MT HAVRE	29	-2	0.6	0.2	TX EL PASO	50	-1	0.5	0.2
FL JACKSONVILLE	59	-3	0.7	-1.0	MT HELENA	30	-2	0.9	0.3	TX FORT WORTH	52	-4	1.0	-1.0
FL KEY WEST	74	-1	0.1	-3.1	MT KALISPELL	30	-2	2.2	0.9	TX GALVESTON	59	-4	4.0	0.9
FL MIAMI	73	0	1.2	-1.5	MT MILES CITY	31	-1	0.4	-0.2	TX HOUSTON	57	-4	5.0	1.4
FL ORLANDO	66	-1	0.3	-1.6	MT MISSOULA	30	-1	1.7	0.8	TX LAREDO	62	-1	0.1	-1.1
FL TALLAHASSEE	56	-3	0.6	-2.7	NE GRAND ISLAND	32	-6	1.7	0.9	TX LUBBOCK	45	-3	1.1	0.5
FL TAMPA	66	-1	1.3	-0.6	NE LINCOLN	32	-7	1.7	0.8	TX MIDLAND	48	-4	0.7	0.1
GA WEST PALM BEACH	71	0	2.3	-1.0	NE NORFOLK	29	-7	2.3	1.6	TX SAN ANGELO	50	-4	0.2	-0.7
GA ATHENS	51	-1	1.6	-1.7	NE NORTH PLATTE	32	-3	0.9	0.4	TX SAN ANTONIO	57	-2	0.5	-1.8
GA ATLANTA	51	-1	3.2	-0.2	NE OMAHA	31	-9	1.7	0.4	TX VICTORIA	60	-3	0.9	-1.4
GA AUGUSTA	52	-2	1.4	-0.7	NE SCOTTSDUFF	33	-3	0.7	0.2	TX WACO	54	-3	1.7	-0.5
GA MACON	53	-2	0.6	-1.7	NE VALENTINE	29	-5	1.3	0.8	TX WICHITA FALLS	48	-4	0.8	-0.6
GA SAVANNAH	57	-1	1.3	-0.6	NV ELKO	36	1	1.3	0.5	UT BLANDING	--	--	1.6	0.7
HI HILO	76	2	6.7	-8.1	NV ELY	34	1	0.5	-0.1	UT CEDAR CITY	38	-2	1.1	0.2
HI HONOLULU	80	3	1.5	-1.7	NV LAS VEGAS	55	2	0.4	0.0	UT SALT LAKE CITY	40	0	2.2	1.0
HI KAHULUI	77	2	T	-2.1	NV RENO	43	4	0.9	0.3	VT BURLINGTON	38	1	1.6	-1.2
HI LIHUE	77	2	3.4	-2.1	NV WINNEMUCA	39	2	0.8	0.1	VA LYNCHBURG	47	0	3.3	0.4
ID BOISE	37	-2	1.8	0.5	NH CONCORD	40	2	4.8	1.2	VA NORFOLK	53	1	1.7	-1.1
ID LEWISTON	40	0	2.0	0.8	NJ ATLANTIC CITY	47	0	0.8	-3.0	VA RICHMOND	50	0	0.7	-2.6
ID POCATELLO	33	-2	1.6	0.8	NM ALBUQUERQUE	43	-1	1.9	1.6	VA ROANOKE	47	0	2.5	-0.1
IL CAIRO	--	--	2.0	-2.0	NM CLOVIS	42	-4	1.4	0.9	VA COLVILLE	32	-2	2.4	0.3
IL CHICAGO	35	-5	3.6	1.5	NY ALBANY	47	-1	1.0	0.6	VA QUILLAYUTE	46	1	18.5	5.4
IL MOLINE	34	-5	5.0	3.1	NY BINGHAMTON	40	0	4.8	1.7	VA SEATTLE-TACOMA	47	3	5.3	-0.2
IL PRORIA	36	-4	3.6	1.6	NY BUFFALO	39	1	4.5	1.5	VA SPOKANE	34	-1	3.1	1.0
IL QUINCY	37	-5	1.6	-0.4	NY NEW YORK	39	-1	4.0	0.4	VA WALLA WALLA	42	-1	5.0	3.1
IL ROCKFORD	33	-4	4.2	2.0	NY ROCHESTER	49	1	1.7	-2.0	VA YAKIMA	38	0	1.2	0.3
IL SPRINGFIELD	38	-4	3.3	1.4	NY SYRACUSE	39	-2	2.4	-0.3	WV BECKLEY	43	1	4.0	1.2
IN EVANSVILLE	43	-2	3.7	0.3	NC ASHEVILLE	46	-1	3.3	0.2	WV CHARLESTON	46	0	5.0	2.1
IN FORT WAYNE	38	-2	3.2	0.7	NC CHARLOTTE	51	0	2.8	0.0	WV ELKINS	39	-1	2.7	-0.0
IN INDIANAPOLIS	40	-2	4.0	0.9	NC GREENSBORO	49	0	1.7	-0.9	WV HUNTINGTON	45	-1	3.1	0.3
IN SOUTH BEND	37	-4	2.8	0.0	NC HATTERAS	57	1	1.2	-3.7	WV PARKERSBURG	43	-2	4.2	1.8
IA DES MOINES	31	-8	3.6	2.1	NC NEW BERN	54	0	1.6	-1.4	WI GREEN BAY	30	-4	2.7	1.0
IA DUBUQUE	30	-6	4.3	1.8	NC RALEIGH	50	0	0.7	-2.1	WI LACROSSE	27	-8	6.2	4.8
IA STOUK CITY	28	-8	2.7	1.8	NC WIMINGTON	54	-2	3.0	-0.2	WI MADISON	31	-4	3.9	2.1
IA WATERLOO	29	-7	4.1	2.4	ND BISMARCK	23	-6	0.7	0.2	WI MILWAUKEE	35	-2	3.4	1.4
KS CONCORDIA	35	-7	1.5	0.4	ND FARGO	22	-6	0.5	-0.3	WI WAUSAU	26	-5	5.4	3.6
KS DODGE CITY	36	-6	1.5	0.8	ND GRAND FORKS	21	-5	0.4	-0.4	WY CASPER	30	-3	1.2	0.6
KS GOODLAND	36	-2	1.3	0.7	ND WILLISTON	25	-3	0.5	0.0	WY CHEYENNE	32	-3	0.9	0.3
KS TOPEKA	38	-5	2.2	0.4	OH AKRON-CANTON	39	-2	2.0	-0.6	WY LANDER	27	-4	2.0	1.2
KS WICHITA	40	-5	2.4	0.9	OH CINCINNATI	41	-2	1.9	-1.2	WY SHERIDAN	30	-3	2.4	1.6
KY BOWLING GREEN	46	-1	3.5	-0.3	OH CLEVELAND	40	-2	2.9	0.2	PR SAN JUAN	80	0	6.2	0.6
KY JACKSON	46	3	5.2	2.0	OH COLUMBUS	41	-1	1.3	-1.3					
KY LEXINGTON	43	-2	1.3	-2.0	OH DAYTON	39	-3	2.1	-0.5					
KY LOUISVILLE	45	-1	1.9	-1.6	OH MANSFIELD	38	-3	1.8	-0.9					
KY PADUCAH	45	-2	2.2	-1.8										

Based on 1951-80 normals

November Weather in Historical Perspective

November 1991 was a cold, wet month for the majority of the Nation. It ranked as the 12th coldest November in 97 years of records (table 1), ending a recent stretch of warm Novembers dating to 1987 (fig. 1). Precipitation was above normal according to both indices. The areally averaged ranking was the 34th wettest (table 1), while the areally weighted mean standardized ranking was the 25th wettest (fig. 2).

Only the Northeast and West regions (fig. 3) had above-normal temperatures during November (table 1). Temperatures ranked within the coldest third of the historical distribution in all other regions except the Northwest. It was among the coldest Novembers in the South (6th coldest) and East North Central regions (8th coldest).

Above-normal precipitation accompanied below-normal temperatures in five regions. Heavy snow plagued the East North Central region, which had its second wettest November ever. Similarly, heavy mountain snow contributed to the Southwest's 6th wettest November. Only the West region (14th driest) received significantly below-normal precipitation.

After 4 years of below-normal October-November precipitation in the primary Hard Red Winter Wheat Belt (central Plains), a wet November in 1991 pushed the 2-month precipitation to near-normal levels (fig. 4). For the Nation as a whole, areas of excessive wetness and dryness diminished to their smallest sizes since September 1990 and June 1991, respectively (fig. 5).

TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR NOV 1991, BASED ON THE PERIOD 1895-1991.
1 = DRIEST/COLDEST, 97 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
NORTHEAST	39	62
EAST NORTH CENTRAL	96	8
CENTRAL	60	17
SOUTHEAST	43	25
WEST NORTH CENTRAL	83	12
SOUTH	44	6
SOUTHWEST	92	25
NORTHWEST	66	42
WEST	14	63
NATIONAL	64	12

Figure 3



Figure 4

PRIMARY HARD RED WINTER WHEAT BELT PRECIPITATION
OCTOBER-NOVEMBER, 1895-1991

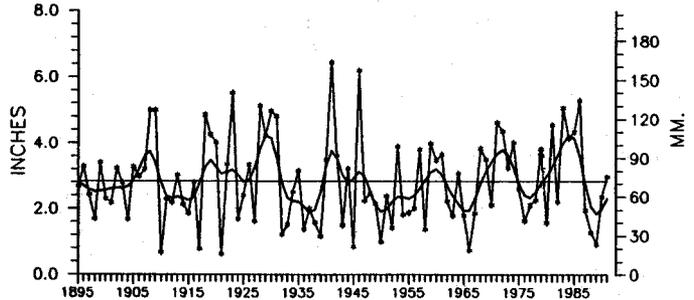


Figure 1

U.S. NATIONAL TEMPERATURE
NOVEMBER, 1895-1991

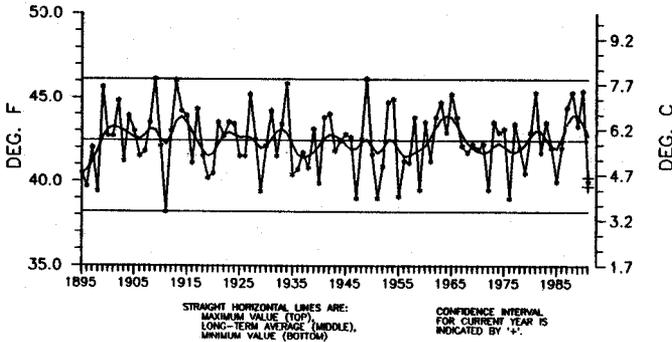


Figure 5

U.S. PERCENT AREA DRY AND WET
JANUARY 1986 THROUGH NOVEMBER 1991

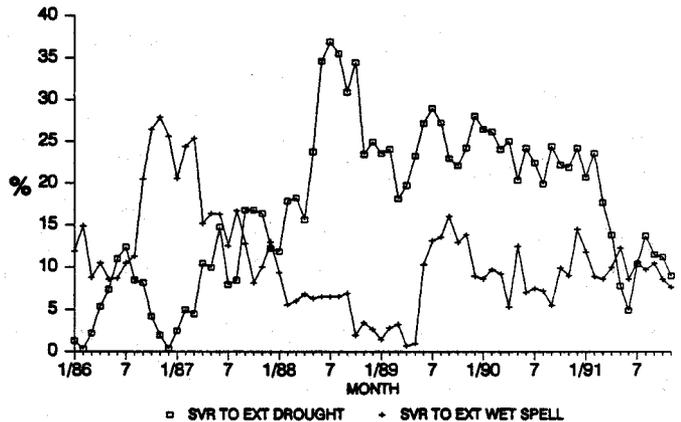
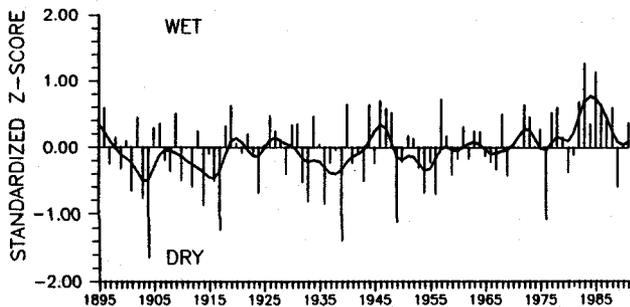


Figure 2

U.S. NATIONAL WEIGHTED MEAN PRECIPITATION INDEX
NOVEMBER, 1895-1991



National Agricultural Summary

December 2 - 8, 1991

HIGHLIGHTS: Significant rainfall in the East and Pacific Northwest replenished soil moisture supplies, but slowed or halted field activities. Mostly dry weather across the Southwest allowed for the harvest of late-season crops.

SMALL GRAINS: Small grain seeding approached completion in the extreme Southeast and continued in the Southwest, while heavy rains slowed progress in the Delta and Tennessee Valley. Continued gentle rains were replenishing the below-normal soil moisture in the Pacific Northwest, but sub-soil moisture was still deficient in many areas. High temperatures at week's end melted much of the snow cover in the Central States. Winter wheat seeding reached 88 percent (%) complete in Georgia and Alabama, and 92% to 94% in Mississippi, North Carolina, and Louisiana.

CORN: Efforts to harvest corn remaining in Iowa were slowed by snow and mud, while weather conditions permitted the harvest of late fields in New York. Harvest was virtually complete in the Pacific Northwest.

SOYBEANS: Rains continued to delay the completion of harvest in the northern Delta, while mostly dry weather in Texas and along the Atlantic Coast allowed harvest to progress. Harvest was very near completion in the Atlantic and Gulf Coast States.

COTTON: Cotton harvest moved at a fast pace as mostly dry weather prevailed from California through western Oklahoma. Harvest was also active, though well along, in the Southeast. Yields and quality were low in many parts of the Texas Plains due to an earlier freeze. Producers began land preparation for 1992 cotton crop in South Texas and the Rio Grande Valley, and continued in California.

GRAIN SORGHUM: Sorghum harvest was almost completed on the Texas Plains and advanced rapidly in New Mexico as dry weather allowed producers back into the fields. Very little acreage remained to be harvested in the Southeast.

OTHER FIELD CROPS: Peanut harvest was on the decline in central Texas, and producers were plowing fields damaged by an earlier freeze. Sugarcane harvest remained active in Florida and

Louisiana. Sweetpotato digging was virtually complete in Louisiana as the little acreage remaining for harvest will probably be abandoned due to wet conditions. Adequate humidity allowed active tobacco stripping in Kentucky.

FRUIT AND NUTS: Pecan picking remained in full swing across the southern tier of States, and fair conditions were reported for most of this year's crop. Texas' pecan yields were light due to excess moisture and insect pressure and some sprouting of nuts in hulls occurred due to wetness. Lemons, grapefruit, oranges, and tangerines were being picked in Arizona. Navel orange volume increased in California as maturity advanced, but sizes remained small. Citrus movement was active in California's southern desert. Florida citrus fruit remained in excellent condition, with harvest very active for the fresh market and increasing for processing. Pruning of fruit trees was underway in New Jersey, while Oregon producers were pruning hazelnut and caneberry orchards.

VEGETABLES: Mixed vegetable and lettuce harvests continued in central and western Arizona. Fall harvests of broccoli, cauliflower, celery, and lettuce remained active in California. Florida's vegetable harvest was active in southern areas, with tomatoes, peppers, cucumbers, sweet corn, squash, and snap beans heading the volume list. Georgia onions were in good condition, with planting well along. Cole crop harvests continued in East Texas and Oregon's Willamette Valley. Rio Grande Valley, Texas pepper harvest slowed due to low prices.

PASTURES AND LIVESTOCK: Pasture and range conditions improved, with additional rains across much of the East, but remained mostly fair to good in the Atlantic Coast States. Range condition remained mostly good in the South Central States and mixed in the West. Livestock suffered some respiratory problems from extreme temperatures on Texas' Northern Plains. The swine disease transmissible gastroenteritis (TGE) was reported in some parts of western Iowa.

New Orleans Smashes the 100-Inch Barrier

On December 3, New Orleans, LA, reported 0.5 inches of rain. Not a big deal, usually, but this 24-hour total brought the year-to-date rainfall past the 100-inch mark, giving the Crescent City the dubious distinction of being one of the few cities in the conterminous United States to ever record an annual rainfall of 100 inches. This was accomplished even though rainfall since September has been below normal. Indeed, year-to-date rainfall had already reached 92 inches at the end of August. This appears to be the first time that any city in the lower 48 States has exceeded 100 inches in more than 25 years. A look through annual precipitation records published in the National Climatic Data Center's Local Climatological Data Annual, which contains records for about

200 cities, shows that the last time a city exceeded 100 inches may have been Tallahassee, FL, which totaled 104 inches in 1964. Earlier, West Palm Beach reached 109 inches in 1947.

Outside of mountain locations and lower population areas along the Pacific Northwest coast, the wettest region in the continental United States is the Gulf Coast region. New Orleans, with a mean annual rainfall of 60 inches, is one of the wettest cities in the country. Miami also averages 60 inches, while Mobile, AL, and Tallahassee, FL, both average 65 inches. Outside the lower 48 States, the rain-weary residents of New Orleans can take solace in the fact that Yakutat, AK, and Hilo, HI both average about 130 inches yearly.

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 mostly 1.00 to 2.00 in.; 2.00 to 4.00 in. northwest. Temperatures averaged within 2° of normal. Early week highs 70's north, low 80's elsewhere. Midweek lows mostly mid to upper 30's; upper teens few locations.

Days suitable for fieldwork 3.7. Soil moisture 4% short, 71% adequate, 25% surplus. Extensive rains previous week caused considerable erosion, flooding of some Tennessee Valley fields. Soybeans 99% harvested, 99% 1990, 95% avg. Winter wheat 88% seeded, 89% 1990, 87% avg. Pastures 6% very poor, 19% poor, 57% fair, 18% good. Livestock 49% fair, 48% good, 3% excellent. Activities: Harvesting soybeans, fall vegetables, pecans; shredding cotton stalks; seeding, fertilizing small grains, winter annuals; feeding, marketing livestock, catfish.

ARIZONA: Clear skies, 2nd-4th. Cloudy 5th. 6th-7th clear statewide except southeast, partly cloudy. Avg. temperatures for period 1 to 12° below normal. Extremes -5°, 75° higher elevations, 15°, 76° deserts.

Cotton harvested 98%, 100% 1990, 96% avg.; stalk shredding, plowdown, active. Alfalfa harvest, moderate, condition good; sheeping off, light to moderate. Small grains seeded 54%, 53% 1990, 38% avg.; small grains established, 36%, 38% 1990, 20% avg. Lemons, grapefruit, oranges, tangerines, mixed vegetables harvested central, west. Peanuts harvested west. Pecans harvested, central. Lettuce harvested west; central. All harvesting activities completed east.

ARKANSAS: Temperatures averaged near normal for the week, with widespread rainshowers early in the week. Rainfall was heaviest in the southwest. Temperature extremes 18°; 80°. Rainfall ranged from 0.48 in. to 3.67 in.

Soybean harvest complete. Producers continued to plant remaining wheat acreages. Cotton gins were cleaning up modules and starting to close down. Livestock in good condition.

CALIFORNIA: Strong high pressure to the north produced gusty offshore winds and cold temperatures. A low pressure system headed into the northern two-thirds of the State late in the week bringing light amounts of rainfall to many areas with up to a foot of snow in the mountains. Cooler temperatures followed. Several mornings showed wind-sheltered valley reports with below freezing minimums.

Field activities progressed despite weekend rain. Rice stubble burned as air quality regulations allowed. Stubble baling ongoing. Late cotton harvested. Shredding, discing, pink bollworm control active. Weed control, field preparation next year's crop. Grain sorghum harvest nearing completion. New alfalfa seeded. Cool temperatures, low moisture slowed growth. Small grains, forage crops seeded. Pre-irrigation some areas. Herbicide applications ongoing. Next year's sugar beets received weed treatments. Normal cultural practices active, including dormant and herbicide spraying, ground fumigation, pruning. Harvest near completion for kiwifruit, persimmons, dates, and apples. Pecan harvest progressed. High winds caused minor damage new season avocados. Navel orange volume increased as maturity improved, sizes small. Mandarins and Pummelo grapefruit picked, good demand. Desert citrus movement active. Broccoli fairly light Salinas-Watsonville, Santa Maria good quality. Fall packing continued Fresno,

Patterson-Newman, Kern-Tulare. Imperial Valley harvest started, fair quality, Coachella Valley good quality. Cauliflower supplies light Salinas-Watsonville, Santa Maria variable quality. Harvest continued active Patterson-Newman, Coachella Valley. Celery supplies heavy Salinas-Watsonville, moderate to heavy Santa Maria, good quality. Lettuce supplies very light Santa Maria, variable quality as end of season nears. Fall harvest started Imperial Valley, fair quality, Blythe good quality. Fall potato movement Tulelake-Butte Valley continued. Other vegetables harvested: cabbage, carrots, various oriental vegetables. Range conditions very poor to fair. Supplemental feeding continued. Pastures improved slowly. Calving continued.

COLORADO: A strong upper-level weather system moved across the State on the 2nd. Many river basins received nearly 0.35 in. of moisture. High pressure on the 3rd and 4th dropped temperatures to near 0° or below. Warmer temperatures moved in later in the week but average temperatures for the period were 5 to 10° below normal.

FLORIDA: Average weekly temperatures mostly 1 to 3° above normal. Highs: Panhandle, Big Bend, upper 70s; northeast, central, south, middle 80s. Lows: Panhandle, Big Bend, 20s; central, 30s to 40s; southeast coast, low, middle 50s. Rain reported 1 to 4 days at many locations. Weekly totals 0.50 to 1.00 in. Panhandle, Big Bend; under 0.25 in. northeast, south; under 0.50 in. central Peninsula.

Soil moisture short to adequate southern Peninsula, elsewhere mostly short. Winter wheat planting for grain active. Cotton harvest winding down. Sugarcane harvest, planting active. Citrus trees, groves good condition. Light showers, irrigation in use. Mild night, warm day temperatures. Fruit in excellent condition. Harvest for fresh market very active, increasing for processing. Mostly mild, dry weather prevailed over major vegetable producing areas. Planting active southern areas. Harvest active southern areas, near complete most crops central areas. Volume leaders: Tomatoes, peppers, cucumbers, sweet corn, squash, snap beans. Also available: Carrots, celery, eggplant, escarole, lettuce, radishes, strawberries. Harvest Hastings area cabbage underway. State's pastures poor to good. Pasture ratings 25% poor, 35% fair, 40% good. Moisture levels short to adequate. State's cattle herds mostly fair to good condition.

GEORGIA: Rains central and south early week. Totals 0.50 in. southeast; mostly 1.00 to 2.00 in. elsewhere. Remainder of week dry. Temperatures 1 to 3° above normal. Freezing temperatures common mid and late week. Coldest mid and upper teens mountains, mostly upper 20s, low 30s extreme South. Warmest temperatures upper 60s and low 70s north, upper 70's and low 80s central and south.

Days suitable for fieldwork 4.6. Soil moisture 3% very short, 35% short, 58% adequate, 4% surplus. Cotton 98% harvested, 99% 1990, 95% avg. Sorghum 99% harvested for grain, 99% 1990, 98% avg. Soybeans 5% poor, 43% fair, 52% good; 99% harvested, 97% 1990, 91% avg. Wheat 8% very poor, 29% poor, 44% fair, 19% good; 75% planted, 88% 1990, 85% avg.; 44% emerged, 70% 1990, 64% avg.; rapid planting progress. Rye 18% very poor, 28% poor, 39% fair, 15% good; 96% planted, 100% 1990, 96% avg. Other small grains 5% very poor, 29% poor, 41% fair, 24% good, 1% excellent; 86% planted, 95% 1990, 93% avg. Pecans 12% very poor,

14% poor, 72% fair, 2% good; 89% harvested, 91% 1990, 82% avg.; condition down. Onions 100% good; 80% planted, 86% 1990. Pastures fair to good. Cattle and hogs good. Harvesting late row crops, pecans, vegetables; planting small grains.

HAWAII: Cooler weather prevailed across the islands, fair for crop progress. Cold front from the previous week brought heavy rains to some areas on Monday, damaging some orchard plantings. Trade winds up to 30 mph brought showers to higher elevations. Mandatory irrigation water restrictions lifted Maui island. Temperatures ranged mid 60s to high 80s. Record matching high 85° recorded on December 2, Honolulu. Cooler evening temperatures, slowed progress some crops, but benefitted others. Daily rainfall ranged from none to 3.40 inches.

Days suitable for fieldwork 7.0. Cabbage, tomato, ginger root, cucumber harvesting active. Wind caused some older tree losses in papaya orchards. Banana production decreasing seasonally.

IDAHO: Temperatures ranged from 7° below normal to 8° above normal. Precipitation covered State; Sandpoint in north received most (1.93 inches).

Soil moisture mostly adequate across State. Activities: late fall tillage, attending meetings, marketing commodities and repairing equipment. Hay, roughage supplies adequate. Some hay being fed. Livestock in good condition.

ILLINOIS: Temperatures ranged from the upper teens to the mid 30's across the State, which is 2 to 6° below normal. Precipitation ranged from 0.50 in. north to as much as 2.30 in. south.

INDIANA: Temperatures averaged 2° below normal to 2° above normal. Highs upper 30's to upper 40's. Lows upper teens to mid 30's. Extremes: upper single digits to 60's. Precipitation averaged 0.30 to 2.00 in. More south.

Cold temperatures early in the week allowed farmers to haul manure. Other field activity was minimal. Activities included hauling grain, cleaning and repairing machinery. Most farmers have been tending to livestock and their bookwork for tax purposes.

IOWA: Record lows on Wednesday gave way to record highs by Sunday. Temperatures 1° above normal southwest to 9° below normal northeast. Extremes -12°, Sibley, 4th to 69°, Burlington, 8th. Precipitation trace southwest to 0.62 in. Walford; average 0.12 in.; normal 0.27 in.

Efforts to harvest remaining corn are being slowed by snow and mud. Southern half of State has lost snow cover. Movement of grain to market has been light. Changing weather continues to stress livestock and slow rate of gain. Swine disease TGE reported in western parts of State.

KANSAS: Temperatures were below normal. Greatest departure was 7° below normal in the southeast. Precipitation ranged from .04 to .31 in.

Wet conditions continue to delay fieldwork. Topsoil moisture adequate for wheat development. Below normal temperatures curtailed wheat progress the past week. Subsoil moisture remains short in most areas. Stockmen busy feeding and tending livestock.

KENTUCKY: Average temperatures 40°. Average highs 46 to 54°. Average lows 27 to 34°. Rainfall averaged 2.80 in.

Surface and subsurface moisture levels improved over last 3 weeks. Kentucky burley sales totaled 162.1 million lbs. thru 5th, avg. price \$181.82 per cwt. Adequate humidity allowed active stripping. Livestock good condition.

LOUISIANA: Average temperatures ranged from 3° below to 3° above normal. Temperature extremes 27°, 83°. Rainfall averaged .76 in. south central to 3.11 in. northeast.

Days suitable for fieldwork: 3.7. Soil moisture supplies: 2% short, 57% adequate, 41% surplus. Pecans 4% very poor, 17% poor, 59% fair, 17% good, 3% excellent; 91% harvested, 85% 1990, 84% avg. Soybeans 100% harvested, 100% 1990, 99% avg. Sugarcane 92% harvested, 86% 1990, 87% avg. Many mills to end grinding by the weekend of Dec. 14th. Sweetpotatoes 99% harvested, 97% 1990, 99% avg. The little remaining for harvest will probably be left in fields due to wet conditions. Wheat 54% fair, 44% good, 2% excellent; 94% planted, 92% 1990, 92% avg.; 89% emerged, 87% 1990, 85% avg. Top dressing winter wheat and pastures. Vegetables 5% very poor, 15% poor, 60% fair, 20% good. Pastures 11% very poor, 12% poor, 11% fair, 19% good, 47% excellent. Many winter pastures running late for grazing. Livestock 2% poor, 39% fair, 57% good, 2% excellent. Hay feeding active. Crawfish harvesting, management active.

MARYLAND & DELAWARE: MARYLAND: Precipitation 2.31 in. Temperature 46.2°, normal 39.6°. Extremes 10°; 77°.

Activities: Preparing fields for spring planting; stripping tobacco; fall vegetable harvest; gleaning fields; liming and fertilizer applications; marketing and caring for livestock.

DELAWARE: Precipitation 2.64 in. Temperature 48.1°, normal 41.0°. Extremes 23°; 77°.

Activities: Cleaning, storing equipment; cleaning seed for next year; marketing and caring for livestock.

MICHIGAN: Temperatures 2 to 11° below normal. Temperature extremes -11°; 51°. Precipitation ranged from .16 to 1.73 in. Cold and snow reported at the start of the week over most of the State. Warm weather late in the week reduced snow cover.

Major activities: marketing grain, caring for livestock. Livestock feed supplies adequate. Livestock condition good.

MINNESOTA: Temperatures averaged 8 to 14° below normal. Extremes 48° at Winona and -25° at both Warroad and Itasca. Precipitation totals averaged 0.11 to 0.45 inches for the State which is near normal to 0.21 inches above normal. Greatest total for the week was 0.90 inches at Winona. Snowfall received averaged 1 to 10 inches. Snow depth on Sunday averaged 17 inches in the northeast and north central regions, and 3 to 9 inches elsewhere.

MISSISSIPPI: Avg. temp. 50°, 0.1° above normal. Extremes 21°; 83°. State average rainfall 2.81 in., 1.59 in. above normal. Soil temp. 51°.

Days suitable for fieldwork 1.5, 3.1 1990, 3.4 avg. Soil moisture 29% adequate, 53% surplus, 18% excessive. Soybeans 97% harvested, 99% 1990, 95% avg.; 1% poor, 40% fair, 56% good, 3% excellent. Hay supply 11% adequate, 82% surplus, 7% excessive. Feed grain 21% adequate, 75% surplus, 4% excessive. Wheat planted 92%, 91% 1990, 91% avg.; 84% emerged, 76% 1990, 83% avg.; 1% poor, 56% fair, 43% good. Pecans 78% harvest, 68% 1990, 74% avg.; 15% poor, 50% fair, 29% good, 6% excellent. Livestock 21% fair, 73% good and 6% excellent. Pasture 86% of normal. Activities: Finishing harvests and feeding livestock.

MISSOURI: Temperatures below normal until week-end. Rainfall varied from none to less than 1.00 in. except 1.00 to 2.00 in. southeast.

Damp weather permitted only limited amount late harvesting.

MONTANA: Temperatures 5° above normal except northeast 1 to 4° below normal. Precipitation statewide. West and southern areas wettest, north was light. Amounts mainly less than 0.50 in. Winter wheat generally good. Snowcover protection present most areas. Most livestock receiving supplemental feed. Grazing continues on crop and hay stubble and winter ranges.

NEBRASKA: Temperatures varied from 8° above normal in the west to 5° below normal in the northeast. Only scattered trace amounts of precipitation throughout the week.

NEVADA: Temperatures averaged near to slightly below normal. Extremes 1°; 64°. Precipitation trace to .44. An upper level low pressure system brought snow and rain to central and northern areas late in the week.

Feeding of livestock necessary in some areas. Cold weather halted outside work late in the week. Major activities included caring for livestock, maintenance.

NEW ENGLAND: Precipitation .70 to 1.60 in. north; 1.25 to 2.00 in. south. Average temperatures low teens northern Maine; high teens to high 20s elsewhere north; high 20s to high 30s south. Maximum temperatures low 40s north to mid 60s south; minimum temperatures -20° north to mid 20s south.

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

NEW JERSEY: Temperatures above normal, averaged 36° north, 41° south, 43° coastal. Extremes 18°; 67°. Precipitation above normal; averaged 2.14 in. north, 1.85 in. south, 1.65 in. coastal. Heaviest 24-hour total 1.18 in. on 2nd, 3rd.

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

NEW MEXICO: Precipitation for the week was very light and spotty. No location received as much as 0.10 in. Temperatures were below normal for the week except in northeast plains, and well below normal in the extreme west.

Days suitable for fieldwork 5.8. Soil moisture 19% short, 76% adequate, 5% surplus. Crop conditions: Cotton, 22% very poor, 22% poor, 45% fair, 11% good with harvest 84% complete; Irrigated sorghum, 25% poor, 50% fair, 25% good with harvest 82% complete; Dryland sorghum 67% fair, 33% good, with harvest 85% complete; Irrigated wheat 36% fair, 64% good, with 78% being grazed; Dryland wheat 50% fair, 50% good, with 66% being grazed; Pecans 100% fair. Cattle and sheep fair to good. Range condition 87% of normal.

NEW YORK: Weather was active most of week with measurable precipitation reported each day. Heaviest day was 3rd when rain, freezing rain, sleet and snow fell. All areas exceeded normal precipitation for week. Amounts ranged from 137 percent of normal in St. Lawrence Valley to 260 percent in the Western Plateau. Temperatures quite variable. All areas averaged below normal. Departures from normal increased to the north.

Major farm activities: caring for livestock, general farm maintenance, harvesting grain corn, winterizing machinery, packing and grading apples.

NORTH CAROLINA: Temperatures 1 to 5° below normal. Precipitation .10 to 2.04 in.

Days suitable for fieldwork 4.5. Soil moisture 21% short, 74% adequate, 5% surplus. Crop condition: Wheat 1% poor, 29% fair, 69% good, 1% excellent; Oats 2% poor, 27% fair, 70% good, 1% excellent; Barley 2% poor, 33% fair, 63% good, 2% excellent; Rye 3% poor, 22% fair, 74% good, 1% excellent; Pasture 14% poor, 35% fair, 51% good. Cotton harvested 94%, 98% 1990, 95% avg; Soybeans harvested 85%, 89% 1990, 79% avg; Wheat emerged 74%, 76% 1990, 78% avg; Wheat planted 93%, 92% 1990, 91% avg. Livestock feed from pastures 45%. Hay and roughage supplies 1% short, 89% adequate, 10% surplus. Feed grain supplies 3% short, 92% adequate, 5% surplus. Major activities included harvesting cotton, sorghum and soybeans; and planting small grains. Other activities: land preparation, cutting wood, tending livestock, preparing tobacco plant beds, harvesting Christmas trees.

NORTH DAKOTA: Temperatures averaged 2 to 8° below normal. Extremes: -24° west central; 57° west and southeast. Precipitation ranged from 0.26 in. southwest to 0.66 in. west central.

Average snow depth 1.8 in. Winter wheat seedings 2% very poor, 2% poor, 55% fair, 38% good, 3% excellent. Rye seedings 1% very poor, 3% poor, 55% fair, 39% good, 2% excellent. Snow cover protection: Winter wheat 29% sufficient, Rye 37%, Alfalfa 42%. Hay supplies 83% adequate, 17% plentiful. Pastures open for grazing 44%.

OHIO: The weather continued swinging from one extreme to another. Arctic air behind a cold front early in the week sent the mercury to lows in the single digits across much of the State Thursday morning. Milder air soon followed, with highs in the 50s and 60s. Average highs were 40s and 50s with lows generally 25 to 35°. The week started out very wet with all but the northwest getting over 1.00 in. of precipitation on Monday. One to 2 in. of snow fell in the north on Tuesday. The rest of the week was fairly dry. Weekly precipitation ranged from 0.50 to 1.00 in. northwest to over 2.00 in. parts of central and south. Mild temperatures prevented significant frost from developing in the soils. Four-inch soil maximum temperatures averaged in the 40s.

Days suitable for fieldwork 4.0. Soil moisture 35% short, 50% adequate, and 15% surplus. Pastures 5% very poor, 10% poor, 40% fair, 35% good, 10% excellent. Activities: winterizing and repairing machinery and working with livestock. Subsoil moisture is improving, but must continue to improve with precipitation at or above the current level for the next few months in order to lessen the concern for next spring.

OKLAHOMA: Temperatures up to 4° above normal southwest and southeast. Precipitation none in several districts to 0.60 inches east central. Warm, sunny days helped wheat development. Cotton harvest moved at a fast pace as warm, dry days prevailed. Prices for cattle were lower.

OREGON: Temperatures above normal statewide. West, 0 to 5° above normal. East, 0 to 7° above normal. Precipitation abundant. Precipitation 5.00 to 10.00 in., northern Cascades; 3.00 to 5.00 in. southern Cascades and coastal areas; Willamette Valley, 1.50 to 3.00 in.; southwestern corner, 0.70 to 4.00 in.; east, 0.20 to 0.70 in.

Soil moisture; mostly adequate. Winter wheat condition, mostly good. Orchard cleanup, hazelnut and caneberry pruning, and Peach Leaf Curl spraying continued. Christmas tree harvest full swing. Some cole crop harvest for fresh market continues, Willamette Valley. Livestock condition was mostly good to excellent. Calf weanings and sales continued. Supplementary feeding and pasture seedings underway. Feedlots conditions reported muddy. Pasture regrowth continuing western areas and lower elevations. Range, pasture, fair to good east, good west.

PENNSYLVANIA: Cool and wet across the State. Average temperature 35°, 3° below normal. Extremes 8°; 65°. Average precipitation 1.73 in., 0.97 in. above normal.

Activities: Repairing fence; hauling manure; maintaining machinery; and caring for livestock.

PUERTO RICO: The island average rainfall of 0.78 in. was 0.38 inches below normal. Highest weekly totals were 2.94 in. at Paraiso, 2.10 in. at Rio Blanco and 1.78 in. at Rio Piedras Aes. Highest 24-hour total was 1.13 in. at Paraiso. Accumulated total rainfall for Puerto Rico from January 1 to December 6 is 51.09 inches, 15 percent below normal. San Juan mean temperature was 78.4°, 0.4° above normal, rainfall was 1.32 in., 0.17 in. above normal. Divisional temperatures averaged 77 to 80° on the coasts, 70 to 73° in the interior with mean station temperature ranging from 61.9° at Cerro Maravilla to 82.8° Vieques. Highest

temperature was 89° at Ponce and Arecibo; lowest temperature was 52° at Adjuntas Aes.

SOUTH CAROLINA: Temperatures were 3 to 4° above normal. Rainfall totals ranged from 1.30 in. upstate to 0.30 in. along the coast.

Farm activities: Dry conditions continued; Soybean harvest ahead of average pace; Wheat planting continued; Tobacco beds being prepared.

SOUTH DAKOTA: Average temperatures 5 to 10° below normal southeast, 5 to 10° above normal Black Hills. Other locations near normal. Extremes -15°; 62°. Light precipitation Black Hills and northeast, generally less than .10 in.

Topsoil moisture 4% very short, 21% short, 75% adequate. Subsoil moisture 8% very short, 37% short, 55% adequate. Feed supplies 69% adequate, 31% surplus. Water supplies 11% very short, 12% short, 67% adequate, 10% surplus. Rye 11% fair, 84% good, 5% excellent. Winter wheat 33% fair 67% good. Livestock 95% good, 5% excellent.

TENNESSEE: Cold front brought rain 2nd, 3rd, followed by cold, dry conditions 4th. High pressure moved eastward, brought dry warming trend 5th through weekend. Temperatures averaged near normal West, Middle; slightly above normal East. Coldest 16° Crossville 4th, warmest 75° Knoxville 2nd. Statewide high temperatures averaged 60 to 70°, 2nd; fell to 30°, 4th; back to 60° by weekend. Low temperatures dipped 15 to 20°, 5th. Precipitation averaged 0.50 to over 2.50 in. above normal. Storms 2nd dumped 3.57 in. Crossville, 3.07 in. Nashville, generally 2.00 in. most west locations. No rain statewide 4th through weekend.

Statewide soil moisture adequate to surplus. Primary activities: Seeding, fertilizing small grains, annuals; Shredding cotton stalks; Marketing tobacco, livestock; Storing crops; Cattle, hogs mostly fair to good.

TEXAS: Dry west to northwest flow dominated weather during past week. Rainfall scarce until cool front, upper disturbance crossed over weekend. Pattern brought heaviest rains to eastern third of State. Temperatures warmed up through week as major track of weather systems retreated northward. Front produced only minor cooling. Average rainfall below normal in all districts, despite showers in east over weekend. Heaviest showers fell north central, East Texas and Upper Coast where weekly amounts averaged from 0.30 to 0.70 in. Amounts under 0.10 in. reported in West, South Texas. Temperatures near or above normal in all districts except Lower Valley.

Crops: Sorghum harvest almost complete as producers got back into fields on Plains. Cotton harvest good progress as weather conditions permitted. Yields, qualities low many parts of Plains due to early freeze. Shredding fields destroyed from freeze. Producers began land preparation for 1992 cotton crop in South Texas, Rio Grande Valley. Small grain fields helped by warmer temperatures, showers throughout week. Many early planted fields continued to be grazed. Low moisture, insect infestation caused many fields suffer in Coastal Bend area. Statewide wheat condition is rated at 77% of normal compared with 81 percent last year. Wheat Condition: 0% very poor, 3% poor, 41% fair, 50% good, 6% excellent. Soybean harvest neared completion across the state. Peanut harvest winding down in central Texas, producers plowing fields damaged by freeze. Yields in Low Plains down from earlier expectations.

Commercial Vegetables: High Plains, some tilling, fertilizing underway on some vegetable land for 1992 crop. East Texas, cole crops progressing well. Some compost, organic material being applied to fields. Rio Grande Valley, pepper harvest slowed to low price. Melon fields being prepared for spring planting. Pecan

harvest full swing across State. Yields light due to excess moisture, insect pressure. Most trees defoliated. Some sprouting in hulls occurred due to wet conditions.

Range and Livestock: Range, pasture abundant forage, although quality continued to decline. Winter grasses green, growing in Cross Timbers. Livestock continued be turned on winter pastures. Livestock suffered some respiratory problems from extreme temperatures on Northern Plains.

UTAH: Temperatures averaged 7° degrees below normal. Precipitation was moderate in the Wasatch and Uinta Mountains; light elsewhere.

Range conditions reported mostly good to excellent. Maintenance of equipment and preparation for coming year continues.

VIRGINIA: Temperature extremes ranged from 11° at Earlehurst to 80° at Norfolk and Patrick Henry. Rainfall amounts ranged from 2.50 in. over the west and central areas while the north and south averaged about 1.50 in. Several locations reported over 3.00 in.

Days suitable for fieldwork 2.5. Topsoil moisture 8% short, 77% adequate, and 15% surplus. Soybeans 95% harvested, 94% 1990, 84% avg. Winter grain, grazing crops condition 11% very poor, 23% poor, 41% fair, 23% good, and 2% excellent. Pasture condition 16% very poor, 37% poor, 36% fair, 10% good, and 1% excellent. Livestock mostly fair to good condition. Forage from pastures, winter grains dairy cattle 13%, beef cattle 36% and sheep 35%. Soybean and cotton harvest slowed due to rain. Precipitation improved small grains. Preparing dark-fired and burley tobacco for market.

WASHINGTON: Temperatures 1 to 5° above normal west; 2 to 8° above normal east. Precipitation 0.83 to 2.60 in. west; none to 0.75 in. east.

Days suitable for fieldwork, 1.3. Soil moisture 35% short, 65% adequate. Hay, other roughage 9% short, 81% adequate, 10% surplus. Range and pasture 11% very poor, 24% poor, 13% fair, 52% good. Winter wheat 9% poor, 21% fair, 70% good.

Continued gentle rains were replenishing the below normal soil moisture in central and eastern counties. Sub-soil moisture was still deficient in many areas. Warm weather caused the light snow cover to melt on northern winter wheat fields. Late plantings of winter wheat in Spokane County were still emerging. Christmas tree cutting was active. Cattle were doing well on late fall pastures. Livestock producers in Stevens County started feeding winter rations.

WEST VIRGINIA: Average temperature 41°. Extremes 8°, 68°. Precipitation averaged 2.06 in.

Days suitable for fieldwork 2.8. Soil moisture, 21% short, 59% adequate, 20% surplus. Wheat, 100% sown; 83% fair, 17% good. Barley, 99% sown; 95% fair, 5% good. Pastures, 19% very poor, 33% poor, 39% fair, 9% good; 54% of normal. Cattle, good. Sheep, good. Farm activities: General maintenance, fencing, and marketing livestock.

WISCONSIN: Temperature 17°. Extremes -20°; 56°. Heavy snows southeast on 2nd. Snow accumulations between 6 and 10 in. were common in southeast and parts of south central district. Amounts ranging from 1 to 5 in. over the rest of the State. Snow on the 3rd, generally 1 to 3 in. On the night of the 4th, more snow (2 to 6 in.) in the northern two-thirds of State; lesser amounts across south. Light snow in north on 6th. Most of the snow melted over the weekend with warmer weather.

WYOMING: Temperatures well below normal. Very little precipitation statewide.

1992 winter wheat fair to good condition. Additional moisture and snowcover needed. Livestock mostly good. Additional supplemental feeding reported. Culling, marketing, preparations for calving, lambing continuing.

International Weather and Crop Summary

HIGHLIGHTS

December 1 - 7, 1991

WESTERN USSR ... Bitter cold stresses dormant winter grains.

EUROPE ... Mostly dry weather favors late-season harvesting, with winter grains dormant across the north and east.

EASTERN ASIA ... Winter wheat conditions are still poor across the North China Plain.

SOUTHEAST ASIA ... Widespread showers boost moisture reserves in Java and Indonesia.

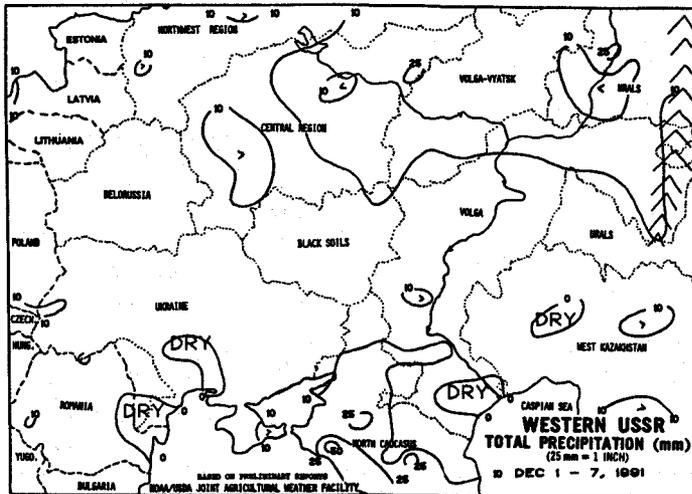
SOUTH ASIA ... Summer crop harvests progress. Winter plantings continue, but cool weather in the north slows germination.

SOUTH AMERICA ... Beneficial rain aids crops in south-central Brazil. In Argentina, continued wet weather raises concerns about winter wheat conditions.

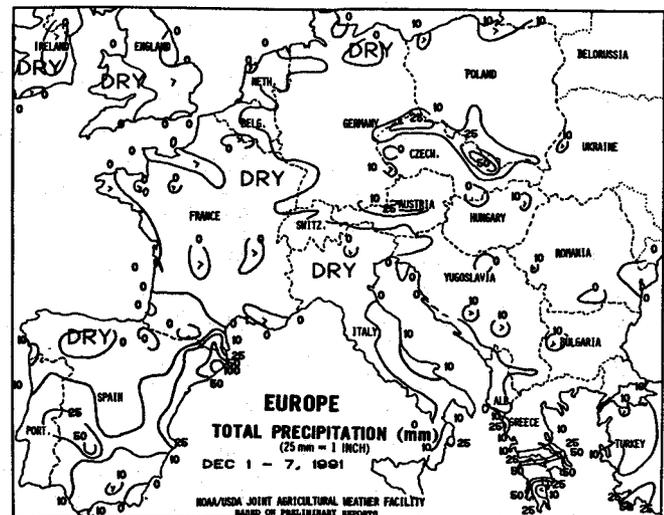
AUSTRALIA ... Winter wheat harvesting progresses, while rains favor summer crops in Queensland.

NORTHWESTERN AFRICA ... Light showers moisten topsoils in Morocco, while drier weather returns to winter grain areas in Algeria and Tunisia.

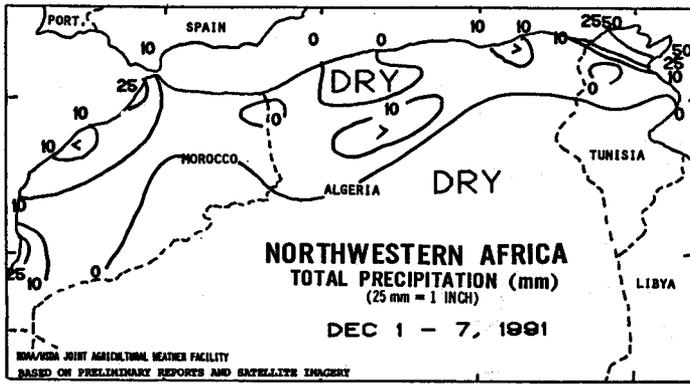
SOUTH AFRICA ... Showers and milder temperatures bring relief to vegetative corn.



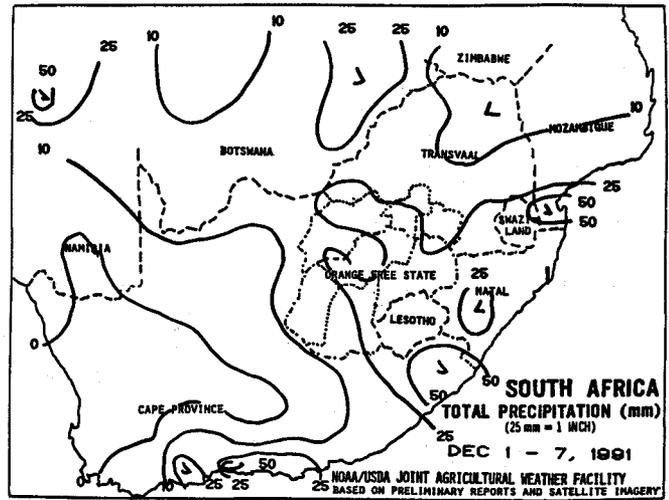
WESTERN USSR ... A storm system moved eastward across the northern portion of the region, bringing widespread snow and ushering in the coldest weather so far this season. By week's end, minimum temperatures around -15 degrees Celsius (C) covered winter grain areas as far south as northern Ukraine. Lowest temperatures of around -20 degrees C covered northern crop areas in Black Soils Region. Although the bitter cold stressed dormant winter grains, light to moderate snow blanketed most areas, providing protection from potential winterkill. While precipitation, mainly snow, over most of the region ranged from 5 to 10mm, rain covered most of the North Caucasus, where precipitation was the greatest (10-50mm).



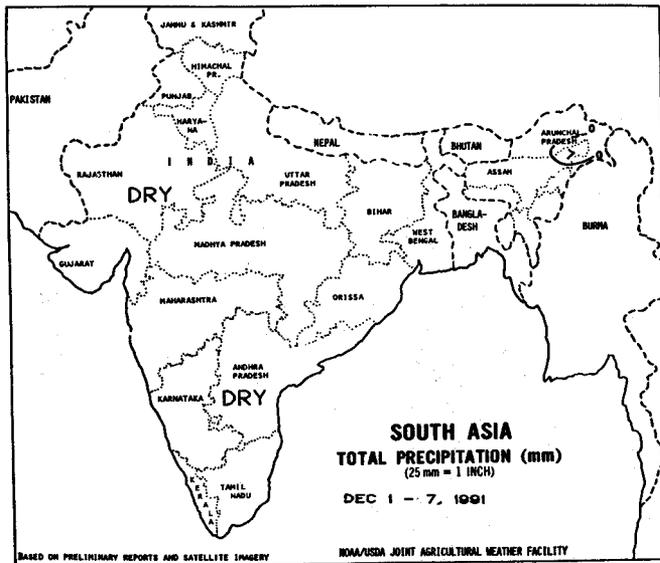
EUROPE ... Mostly dry weather allowed late-season harvesting of sugarbeets, corn, and other summer crops across much of Europe. Weekly rainfall averaged 5mm or less. Heavier precipitation (10-57mm) fell along Czechoslovakia's border with Poland and Germany. Locally heavy showers benefited winter crops in Portugal (10-36mm), southwestern and northeastern Spain (10-50mm or more), and southern Greece (10-81mm). Weekly average temperatures were above normal across the Mediterranean region, promoting winter crop growth. In contrast, below-average weekly temperatures prevailed across much of northern and eastern Europe, with high temperatures only a few degrees above freezing pushing winter grains into dormancy.



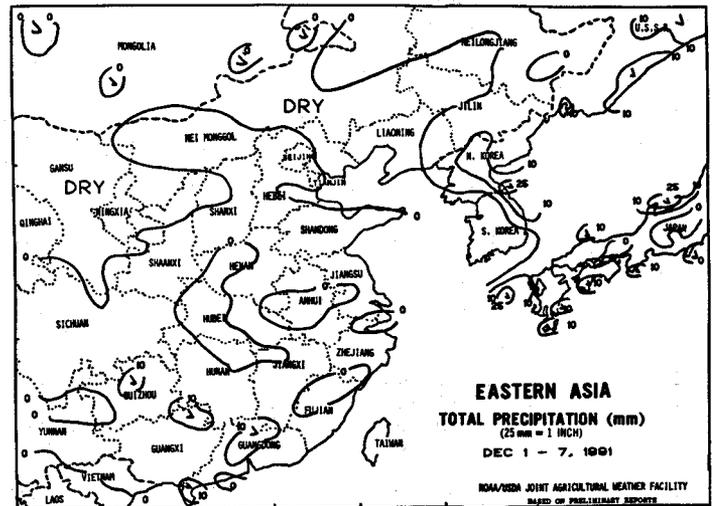
NORTHWESTERN AFRICA ... Winter grain planting was reportedly coming to an end in Morocco. Planting is usually nearing completion in Tunisia and well underway in Algeria. Light showers (less than 10mm) dampened topsoils in Morocco, and additional precipitation is needed to spur growth. Following last week's rainy weather pattern, drier weather (precipitation less than 10mm) returned to most winter grain areas in Algeria and Tunisia. An exception was northernmost crop areas in Tunisia, where rainfall ranged from 25 to 59mm.



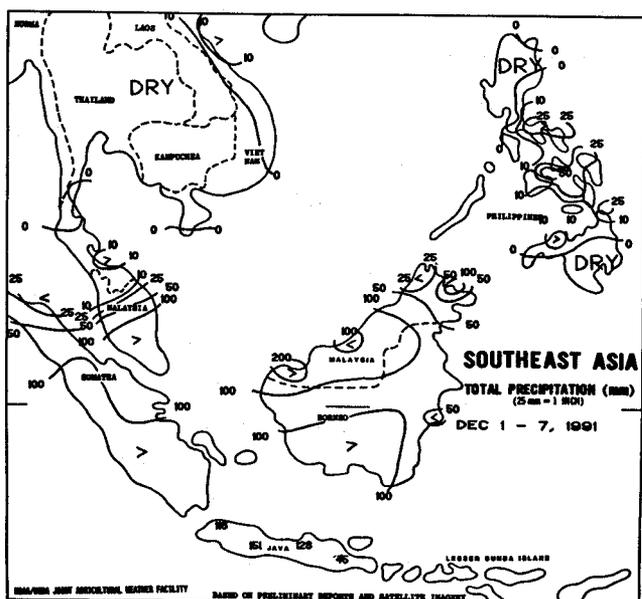
SOUTH AFRICA ... Showers (10-57mm) and milder temperatures brought some relief to vegetative corn across the region. Temperatures had reached the mid-30's prior to the rainfall in the Orange Free State, stressing crops with limited moisture. Moderate showers (22-67mm) benefited grains and sugarcane in Natal and eastern Cape Province.



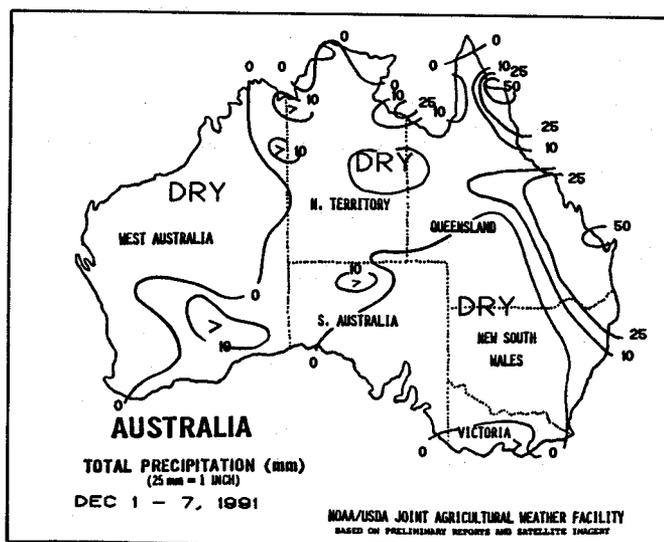
SOUTH ASIA ... Dry, seasonably warm weather maintained favorable conditions for cotton, grain, and oilseed harvests in central and southern India. Further north, dry weather favored winter grain and oilseed plantings, usually nearing completion by the end of December. However, temperatures were cooler than normal, slowing germination, but lowest minimum temperatures (1-5 degrees C) had little impact on crop development.



EASTERN ASIA ... Only scattered light rain (1-7mm) fell across the North China Plain, keeping unfavorable conditions for winter wheat. However, timely early-spring rainfall can improve growing conditions. Average weekly temperatures ranged from 7 to 10 degrees C (3-4 degrees C above normal), suggesting some vegetative growth of winter wheat. Light rain (less than 5mm) spread across southern China, with heavier amounts (5-15mm) in Guangdong, favoring winter crops and reservoir levels. Weekly temperatures averaged 1-3 degrees C above normal across southern China.



SOUTHEAST ASIA ... Widespread, moderate to heavy showers (50-100mm or more) continued over primary crop areas of Malaysia and Indonesia, improving moisture reserves for rice and plantation crops. Drier-than-normal conditions persisted, however, in rice regions of eastern Java and northwestern Malaysia. The recent seasonal increase in rainfall, although late, has greatly improved irrigation reserves across the region, especially in Java's drought stricken rice areas. In the Philippines, rainfall tapered off from last week, with light to moderate rain (5-58mm) limited to grain regions from southern Luzon to northern Mindanao.



AUSTRALIA ... Little or no rain fell across the winter wheat areas of New South Wales, Victoria, and Western and South Australia, aiding harvesting. Moderate rain (26-88mm) covered the summer crop and sugarcane areas of Queensland, favoring crop germination and development. Weekly temperatures averaged 1-2 degrees C below normal across the major crop regions.

SOUTH AMERICA ... In south-central Brazil, moderate to heavy rain (48-121mm) fell across Mato Grosso do Sul, Sao Paulo, and northern Parana, aiding coffee, citrus, germinating soybeans, and developing corn. Further south across Santa Catarina and Rio Grande do Sul, somewhat drier conditions, with only scattered light rain (5-14mm), favored soybean planting after previously heavy rains. In Argentina, widespread moderate and isolated heavy rains (30-126mm) covered most of the crop areas, delaying summer crop plantings and winter wheat harvesting. The continued wet conditions are raising concerns about winter wheat quality and lodging, especially in Buenos Aires. However, soil moisture conditions remain good to excellent for cotton, soybeans, and corn. Temperatures for the week averaged 1-3 degrees C above normal in southern Brazil and near normal across Argentina.



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(Continued from front cover)

Central States, arctic air invaded behind the departing storm, pushing wind chills below -50° F in parts of the **Dakotas** and **Minnesota**. More than 30 daily record lows were set, including readings of -7° F in **Waterloo, IA**, and 7° F in **Akron, OH**. Significant snow fell from **Iowa** and **northern Missouri** to the **Northeast**. **Milwaukee, WI**, reported 9 inches of fresh snowcover on Tuesday morning, and **Portland, ME**, had an 8-inch snow depth by week's end. Heavy snow squalls developed downwind of the **Great Lakes**. By Friday, a new storm neared the **Northwest**, increasing wind gusts to 62 mph in **Seaside, OR**, and to 80 mph in **Wheatland, WY**. As the storm edged southward, rainfall in **northern California** topped 2 inches in **Crescent City**, and exceeded 1 inch in parts of the **western Sierra Nevada foothills**. At week's end, seasonably mild weather prevailed nationwide, melting much of the non-mountain snowpack except in the **upper Mississippi Valley**.

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