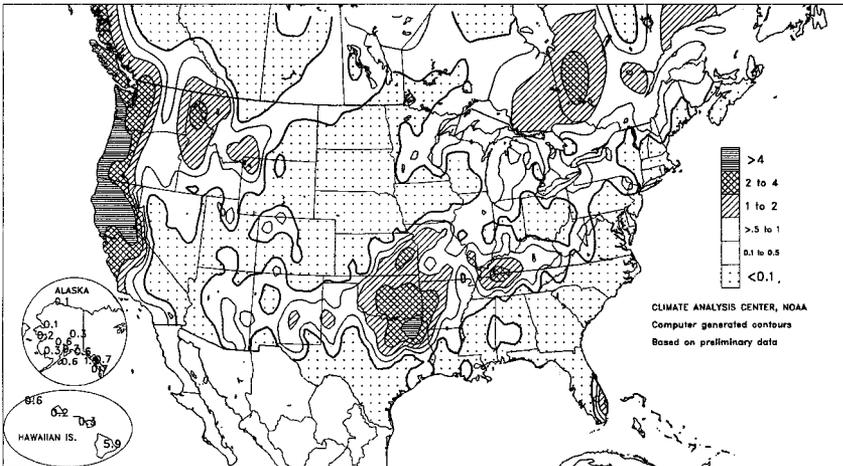
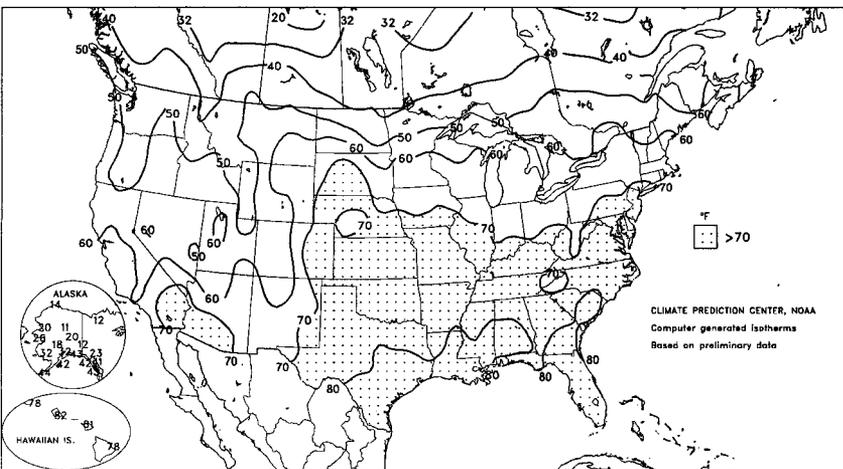


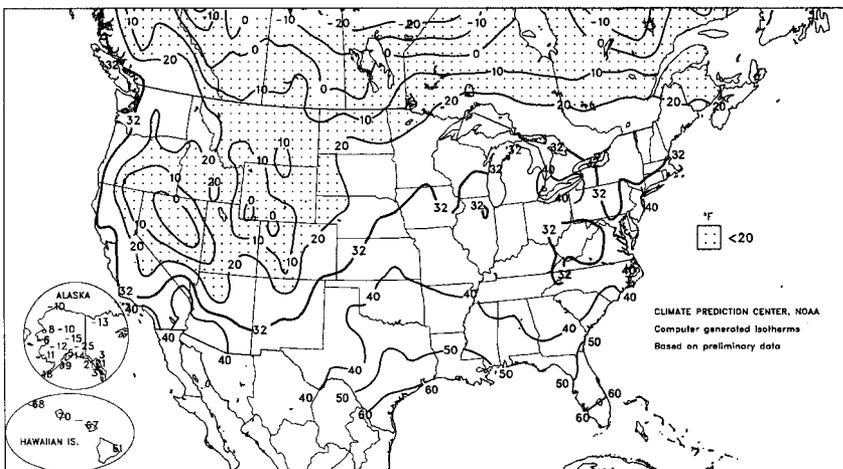
Total Precipitation (Inches)
NOV 29 - DEC 5, 1998



Extreme Maximum Temperature (°F)
NOV 29 - DEC 5, 1998



Extreme Minimum Temperature (°F)
NOV 29 - DEC 5, 1998



(Continued from front cover)

California's San Joaquin Valley. Preceding the arrival of colder air, heavy precipitation continued along the **West Coast** as far south as **central California**. Meanwhile, snow fell across portions of **Montana** late in the week, helping to insulate the winter wheat crop. Farther south, showers dampened areas from the **southern Plains** to **southeastern Kansas** prior to the onset of cooler conditions. While the moisture benefited winter wheat, it briefly delayed final cotton harvesting on the **High Plains**. Dry weather persisted, however, from the **Mid-Atlantic region** into the **Southeast**, allowing drought to intensify and further reducing soil moisture for fall-sown crops.

Nearly 400 daily-record highs were established during the week, boosting the November 22 - December 5 total to more than 500. On Sunday, low temperatures of 57°F in **LaCrosse, WI** and 54°F in **Rochester, MN** were higher than previous daily-record highs. Five days later, lows of 59°F in both **Moline, IL** and **Pittsburgh, PA** were the highest on record during December. During the first 5 days of December, monthly record highs were set or tied in various locations from **Pierre, SD** (77°F on Tuesday) to **Salisbury, MD** (76°F on Saturday). Highs of 68°F (on December 1) in **Minneapolis, MN** and 72°F (on December 4) in **Bridgeport, CT** shattered former December records by 5°F or more. In **Chicago, IL**, temperatures remained above freezing on 15 consecutive days (November 22 to December 6).

East of the Rockies, only parts of the **Plains** received significant precipitation. Rainfall twice overspread portions of the **central and southern Plains**, resulting in 1- to 4-inch weekly totals from **southeastern Kansas** to **northeastern Texas**. Daily-record rainfall totals were observed in **Oklahoma City, OK** (0.80 inch on Sunday) and **Dallas-Ft. Worth, TX** (1.48 inches on Thursday). Farther north, snow overspread areas from the **Great Basin** to the **northern Plains** toward week's end. In **Montana**, **Butte** netted 13.1 inches on December 3-4. Late-week snowfall totaled 6.4 inches in **Elko, NV**, 5.2 inches in **Billings, MT**, and 4.5 inches in **Pocatello, ID**. Meanwhile, heavy rainfall and mountain snows gradually ended across the **West Coast States**. Nevertheless, month-to-date rainfall reached 4.45 inches in **Astoria, OR** and 3.21 inches in **Eureka, CA**. On Friday, lows in **California's Sacramento Valley** plunged to daily-record levels in **Redding** (28°F) and **Red Bluff** (29°F).

National Weather Data for Selected Cities

Weather Data for the Week Ending December 5, 1998

Data Provided by Climate Prediction Center (301-763-8000 EXT. 7503) and the Southern Regional Climate Center

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	92 AND BELOW	.01 INCH OR MORE		.50 INCH OR MORE	
																		90 AND ABOVE	92 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	76	51	79	42	63	16	0.00	-1.13	0.00	0.00	0	60.48	120	90	48	0	0	0	0	0	0
HUNTSVILLE	76	47	79	36	61	14	0.04	-1.26	0.04	0.00	0	38.63	74	93	45	0	0	1	0	0	0
MOBILE	77	57	79	47	67	11	0.30	-0.85	0.26	0.29	35	84.58	142	100	61	0	0	5	0	0	0
MONTGOMERY	78	49	83	39	64	11	0.06	-1.08	0.03	0.05	6	46.44	95	99	50	0	0	4	0	0	0
AK ANCHORAGE	27	14	32	5	21	3	0.73	0.49	0.59	0.73	406	11.06	74	97	75	0	7	2	1	0	0
BARROW	9	1	14	-10	5	13	0.07	0.03	0.00	0.05	250	4.55	108	82	73	0	7	5	0	0	0
FAIRBANKS	7	-7	20	-15	0	4	0.33	0.14	0.25	0.33	236	10.45	102	89	80	0	7	4	0	0	0
JUNEAU	36	28	41	21	32	3	0.71	-0.27	0.36	0.71	100	59.59	118	94	68	0	7	3	0	0	0
KODIAK	37	26	42	19	31	-1	0.65	-0.77	0.33	0.24	24	101.94	165	93	50	0	6	5	0	0	0
NOME	19	5	26	-6	12	2	0.24	0.04	0.08	0.23	164	23.55	166	93	76	0	7	6	0	0	0
AZ FLAGSTAFF	46	24	55	13	35	3	0.62	0.10	0.27	0.45	122	27.41	132	96	52	0	6	3	0	0	0
PHOENIX	65	49	74	46	57	0	0.22	0.01	0.04	0.20	125	10.06	147	90	39	0	0	4	0	0	0
TUCSON	66	42	75	40	54	0	0.50	0.29	0.24	0.29	181	13.46	121	90	33	0	0	3	0	0	0
YUMA	67	50	71	44	58	0	0.08	0.00	0.03	0.05	83	4.52	164	88	39	0	0	2	0	0	0
AR FORT SMITH	74	53	79	46	63	19	1.71	0.88	1.01	0.68	117	42.35	110	98	59	0	0	7	2	0	0
LITTLE ROCK	73	53	79	43	63	17	0.28	-0.93	0.28	0.00	0	37.62	80	98	62	0	0	1	0	0	0
CA BAKERSFIELD	59	42	71	33	51	1	0.38	0.23	0.24	0.32	320	13.00	251	96	50	0	0	3	0	0	0
EUREKA	53	42	58	34	47	-2	4.79	3.31	2.09	3.32	325	61.61	190	92	74	0	0	7	2	0	0
FRESNO	58	43	69	34	50	3	0.31	-0.01	0.28	0.31	141	16.95	181	94	53	0	0	2	0	0	0
LOS ANGELES	61	49	83	47	55	-3	0.41	0.02	0.18	0.41	158	25.45	240	93	62	0	0	5	0	0	0
REDDING	52	38	57	28	46	-2	3.90	2.65	1.42	1.26	145	60.33	211	94	63	0	2	5	3	0	0
SACRAMENTO	55	41	61	32	48	0	1.33	0.75	0.68	0.45	115	28.60	186	94	63	0	1	5	1	0	0
SAN DIEGO	61	52	63	48	56	-3	0.58	0.21	0.47	0.58	223	15.67	182	90	58	0	0	4	0	0	0
SAN FRANCISCO	57	46	61	37	51	0	1.49	0.82	0.68	0.69	153	32.39	191	93	66	0	0	5	1	0	0
CO ALAMOSA	50	17	57	13	34	11	0.00	-0.10	0.00	0.00	0	6.84	96	89	29	0	7	0	0	0	0
CO SPRINGS	60	32	71	25	46	14	0.02	-0.09	0.02	0.02	25	16.09	101	56	19	0	4	1	0	0	0
DENVER	63	30	71	16	46	13	0.00	-0.17	0.00	0.00	0	15.92	107	62	18	0	5	0	0	0	0
GRAND JUNCTION	52	27	56	19	40	7	0.08	-0.06	0.06	0.02	20	8.86	109	89	39	0	6	2	0	0	0
PUEBLO	68	27	75	22	47	13	0.00	-0.11	0.00	0.00	0	11.43	105	77	17	0	5	0	0	0	0
CT BRIDGEPORT	58	43	72	41	51	12	0.06	-0.79	0.01	0.06	10	41.00	106	82	53	0	0	2	0	0	0
HARTFORD	57	37	70	33	47	13	0.06	-0.87	0.00	0.06	9	44.58	109	88	43	0	0	1	0	0	0
DC WASHINGTON	68	46	75	38	57	13	0.00	-0.72	0.00	0.00	0	34.18	95	87	41	0	0	0	0	0	0
DE WILMINGTON	66	43	74	36	54	14	0.00	-0.80	0.00	0.00	0	35.52	94	95	52	0	0	0	0	0	0
FL DAYTONA BEACH	79	60	80	54	70	7	0.36	-0.23	0.35	0.36	88	39.53	86	97	59	0	0	2	0	0	0
JACKSONVILLE	77	56	79	52	67	9	0.03	-0.52	0.01	0.02	5	56.45	115	100	82	0	0	3	0	0	0
KEY WEST	81	73	82	71	77	4	0.04	0.47	0.02	0.02	6	36.37	96	90	66	0	0	3	0	0	0
MIAMI	81	70	82	68	76	5	0.33	-0.11	0.20	0.33	106	68.63	126	95	57	0	0	5	0	0	0
ORLANDO	82	60	84	57	71	7	0.01	-0.50	0.01	0.01	3	44.11	95	99	49	0	0	1	0	0	0
PENSACOLA	73	58	79	47	65	9	0.07	-0.82	0.02	0.06	9	64.06	109	98	65	0	0	4	0	0	0
TALLAHASSEE	78	50	80	40	64	9	0.03	-1.05	0.01	0.03	4	57.25	83	99	55	0	0	3	0	0	0
TAMPA	82	63	84	57	72	8	0.00	-0.47	0.00	0.00	0	54.24	129	99	56	0	0	0	0	0	0
WEST PALM BEACH	81	68	82	60	74	5	0.87	0.14	0.49	0.87	178	64.46	110	88	58	0	0	4	0	0	0
GA ATHENS	73	47	75	38	60	11	0.00	-0.89	0.00	0.00	0	48.49	105	96	50	0	0	0	0	0	0
ATLANTA	73	51	75	44	62	14	0.00	-0.94	0.00	0.00	0	44.23	94	90	44	0	0	0	0	0	0
AUGUSTA	78	43	79	32	60	10	0.00	-0.66	0.00	0.00	0	46.28	111	100	42	0	1	0	0	0	0
COLUMBUS	76	51	79	43	63	12	0.00	-1.04	0.00	0.00	0	31.60	68	96	51	0	0	0	0	0	0
MACON	77	45	79	36	61	10	0.00	-0.84	0.00	0.00	0	41.82	102	100	45	0	0	0	0	0	0
SAVANNAH	77	50	79	42	64	9	0.03	-0.55	0.03	0.00	0	47.16	101	100	52	0	0	1	0	0	0
HI HILO	76	65	78	61	71	-3	5.92	2.78	1.37	4.34	200	102.64	86	99	73	0	0	7	5	0	0
HONOLULU	81	72	82	70	76	1	0.19	-0.62	0.01	0.18	31	3.61	20	80	51	0	0	4	0	0	0
KAHULUI	79	69	81	67	74	0	0.30	-0.37	0.09	0.17	36	5.75	32	86	56	0	0	5	0	0	0
LIHUE	77	70	78	68	73	-1	0.84	-0.54	0.18	0.55	67	24.73	64	87	64	0	0	6	0	0	0
ID BOISE	48	35	60	25	41	8	0.48	0.15	0.33	0.39	177	15.45	141	88	51	0	3	5	0	0	0
LEWISTON	44	34	49	29	39	2	0.17	-0.11	0.11	0.06	30	16.83	147	90	54	0	3	2	0	0	0
POCATELLO	43	30	53	19	37	8	0.41	0.15	0.20	0.33	183	13.10	117	99	62	0	3	5	0	0	0
IL CHICAGO/O'HARE	64	49	68	33	56	24	0.41	-0.24	0.41	0.00	0	36.33	108	93	72	0	0	1	0	0	0
MOLINE	65	49	71	31	57	26	0.48	-0.07	0.48	0.00	0	47.07	126	95	68	0	1	1	0	0	0
PEORIA	63	48	69	33	56	23	0.38	-0.23	0.35	0.03	7	40.74	119	94	71	0	0	2	0	0	0
ROCKFORD	62	46	66	30	54	25	0.30	-0.23	0.29	0.00	0	39.03	113	98	74	0	1	2	0	0	0
SPRINGFIELD	66	48	72	32	57	22	0.11	-0.54	0.11	0.00	0	44.28	134	90	60	0	1	1	0	0	0
IN EVANSVILLE	67	48	73	33	58	18	0.44	-0.45	0.28	0.16	25	40.35	101	98	59	0	0	2	0	0	0
FORT WAYNE	61	46	66	34	54	20	0.06	-0.63	0.04	0.02	4	37.34	116	92	67	0	0	2	0	0	0
INDIANAPOLIS	64	48	70	33	56	20	0.21	-0.59	0.21	0.00	0	48.37	130	91	57	0	0	1	0	0	0
SOUTH BEND	62	49	66	33	56	22	0.18	-0.62	0.16	0.02	4	33.22	91	93	73	0	0	2	0	0	0
IA BURLINGTON	65	51	73	37	58	27	0.25	-0.25	0.24	0.01	3	50.82	148	88	63	0	0	2	0	0	0
CEDAR RAPIDS	84	44	69	29	54	25	0.10	-0.32	0.10	0.00	0	45.24	140	99	71	0	2	1	0	0	0
DES MOINES	62	44	70	34	53	23	0.17	-0.17	0.08	0.03	12	39.57	124	98	71	0	0	3	0	0	0
DUBUQUE	62	45	67	31	54	26	0.16	-0.38	0.14	0.02	5	43.20	118	98	72	0	2	3	0	0	0
SIoux CITY	60	35	70	30	47	20	0.03	-0.16	0.02	0.03	21	30.96	123	98							

Weather Data for the Week Ending December 5, 1998

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	PRECIP.	
																		0.1 INCH OR MORE	5.0 INCH OR MORE
KY WICHITA	65	49	71	39	57	20	0.82	0.51	0.45	0.15	68	33.76	119	96	66	0	0	4	0
KY JACKSON	68	51	73	39	60	18	0.57	-0.46	0.40	0.40	55	48.64	106	75	39	0	0	2	0
KY LEXINGTON	67	48	71	37	57	17	0.53	-0.38	0.41	0.48	74	46.89	114	91	56	0	0	3	0
KY LOUISVILLE	69	52	73	39	61	20	0.15	-0.74	0.09	0.14	22	44.98	109	94	58	0	0	3	0
KY PADUCAH	68	51	74	34	60	18	0.85	-0.28	0.73	0.76	96	53.02	117	94	56	0	0	4	1
LA BATON ROUGE	79	60	82	51	69	14	0.09	-1.10	0.09	0.09	10	53.00	94	99	59	0	0	1	0
LA LAKE CHARLES	78	61	80	58	70	14	0.01	-1.09	0.01	0.01	1	52.98	105	100	65	0	0	1	0
LA NEW ORLEANS	78	62	81	56	70	13	0.17	-1.08	0.17	0.17	19	76.95	135	97	60	0	0	1	0
LA SHREVEPORT	77	58	80	47	68	16	0.66	-0.33	0.53	0.13	19	44.50	104	97	57	0	0	4	1
ME CARIBOU	35	21	44	13	28	7	0.45	-0.35	0.32	0.13	23	34.38	101	93	65	0	7	4	0
ME PORTLAND	52	34	65	25	43	11	0.04	-1.11	0.02	0.04	5	53.49	132	91	43	0	2	3	0
MD BALTIMORE	68	40	73	31	54	13	0.05	-0.73	0.05	0.05	9	33.17	87	88	38	0	1	1	0
MA BOSTON	58	43	69	39	50	11	0.03	-0.93	0.01	0.03	4	51.88	136	91	51	0	0	2	0
MA WORCESTER	54	39	65	35	47	15	0.04	-0.94	0.04	0.04	6	45.16	102	80	46	0	0	1	0
MI ALPENA	57	36	63	29	47	18	0.50	0.00	0.44	0.06	17	31.71	117	97	66	0	1	2	0
MI GRAND RAPIDS	60	48	65	37	54	22	0.61	-0.12	0.55	0.05	10	31.11	92	92	65	0	0	4	1
MI HOUGHTON LAKE	56	40	60	35	48	20	0.58	0.09	0.50	0.08	24	23.43	88	98	69	0	0	3	1
MI LANSING	61	47	65	34	54	23	0.31	-0.28	0.28	0.03	7	27.39	95	91	64	0	0	3	0
MI MARQUETTE	50	33	59	26	41	19	0.19	-0.43	0.05	0.08	14	37.84	115	93	59	0	2	3	0
MI MUSKEGON	57	46	65	39	52	19	0.76	0.04	0.55	0.20	39	27.19	90	94	73	0	0	3	1
MN DULUTH	44	31	53	27	38	19	0.58	0.26	0.54	0.56	255	32.67	113	98	68	0	5	3	1
MN INTL FALLS	36	26	44	16	31	17	0.05	-0.15	0.01	0.05	36	22.23	94	96	69	0	6	1	0
MN MINNEAPOLIS	57	34	68	30	46	22	0.24	-0.04	0.21	0.24	120	32.89	120	95	64	0	5	2	0
MN ROCHESTER	58	39	62	30	48	25	0.00	-0.28	0.00	0.00	0	31.90	111	98	63	0	1	0	0
MN ST. CLOUD	52	29	61	24	41	20	0.76	0.54	0.43	0.76	475	24.77	93	96	54	0	6	2	0
MS JACKSON	78	54	80	46	65	14	0.01	-1.29	0.01	0.01	1	45.32	90	97	55	0	0	1	0
MS MERIDIAN	76	48	81	41	62	11	0.02	-1.28	0.02	0.02	2	50.30	98	100	54	0	0	1	0
MS TUPELO	73	50	78	39	61	14	0.11	-1.24	0.08	0.03	3	43.41	86	96	55	0	0	2	0
MO COLUMBIA	69	48	74	34	59	22	0.40	-0.24	0.35	0.04	9	43.80	118	96	61	0	0	5	0
MO KANSAS CITY	66	49	71	38	57	22	0.85	0.48	0.58	0.01	4	48.33	133	96	68	0	0	3	1
MO SAINT LOUIS	69	50	74	38	59	21	0.16	-0.62	0.14	0.02	4	42.81	122	91	61	0	0	2	0
MO SPRINGFIELD	68	48	74	36	58	18	0.94	0.11	0.75	0.19	33	47.30	117	99	64	0	0	2	1
MT BILLINGS	45	29	59	11	37	8	0.54	0.37	0.33	0.51	425	14.21	98	87	51	0	5	4	0
MT BUTTE	36	21	48	1	29	8	0.91	0.80	0.71	0.89	1113	15.00	128	90	54	0	7	5	1
MT GLASGOW	41	25	57	12	33	13	0.25	0.18	0.18	0.20	333	14.43	136	91	61	0	7	4	0
MT GREAT FALLS	39	27	53	19	33	6	0.00	-0.17	0.00	0.00	0	16.42	113	85	55	0	5	0	0
MT KALISPELL	37	26	43	21	32	6	0.77	0.40	0.40	0.19	73	19.23	128	94	64	0	6	5	0
MT MILES CITY	47	28	64	18	38	14	0.06	-0.07	0.02	0.06	60	13.50	100	92	54	0	6	2	0
MT MISSOULA	37	30	45	23	34	7	0.53	0.30	0.34	0.45	265	20.98	168	96	62	0	6	4	0
NE GRAND ISLAND	59	38	70	33	49	19	0.01	-0.19	0.01	0.01	7	25.90	106	96	51	0	0	1	0
NE LINCOLN	62	39	71	34	50	20	0.03	-0.21	0.02	0.03	18	34.06	124	97	57	0	0	2	0
NE NORFOLK	60	38	69	30	48	20	0.02	-0.17	0.01	0.02	14	35.05	143	94	52	0	3	2	0
NE NORTH PLATTE	61	26	67	21	43	14	0.00	-0.12	0.00	0.00	0	22.43	119	96	37	0	7	0	0
NE OMAHA	62	42	72	36	52	22	0.04	-0.24	0.00	0.02	11	39.53	136	97	59	0	0	2	0
NE SCOTTSBLUFF	62	29	72	16	46	16	0.00	-0.14	0.00	0.00	0	16.39	111	78	25	0	5	0	0
NE VALENTINE	62	28	74	20	45	18	0.00	-0.11	0.00	0.00	0	24.07	135	87	34	0	5	0	0
NV ELY	44	17	56	-9	31	2	0.25	0.09	0.25	0.25	208	12.16	126	89	45	0	6	1	0
NV LAS VEGAS	61	43	68	39	52	3	0.00	-0.09	0.00	0.00	0	6.92	183	74	35	0	0	0	0
NV RENO	47	29	58	15	38	3	0.15	-0.07	0.09	0.06	38	12.04	181	82	41	0	4	2	0
NV WINNEMUCCA	43	22	57	-9	32	0	0.23	0.01	0.12	0.17	106	15.30	203	94	56	0	4	5	0
NH CONCORD	54	32	66	25	43	13	0.10	-0.69	0.00	0.10	18	34.73	103	91	40	0	4	2	0
NJ NEWARK	65	47	75	41	56	15	0.02	-0.83	0.01	0.02	3	42.44	103	78	40	0	0	1	0
NM ALBUQUERQUE	55	37	59	31	46	8	0.15	0.05	0.15	0.00	0	9.61	114	90	40	0	1	1	0
NY ALBANY	55	34	65	27	45	13	0.12	-0.60	0.03	0.12	24	38.05	113	90	51	0	4	2	0
NY BINGHAMTON	57	42	63	35	49	18	0.21	-0.52	0.12	0.21	41	37.72	109	83	44	0	0	2	0
NY BUFFALO	57	44	67	41	51	17	0.40	-0.50	0.32	0.08	13	33.36	94	94	57	0	0	2	0
NY ROCHESTER	58	39	67	32	48	15	0.22	-0.45	0.16	0.18	38	40.54	136	89	52	0	1	3	0
NY SYRACUSE	58	37	67	29	48	15	0.18	-0.63	0.09	0.17	30	35.62	98	86	45	0	2	4	0
NC ASHEVILLE	68	33	70	30	50	8	0.07	-0.76	0.00	0.07	12	44.83	101	100	43	0	4	1	0
NC CHARLOTTE	73	42	75	36	57	11	0.00	-0.76	0.00	0.00	0	37.77	94	92	42	0	0	0	0
NC GREENSBORO	71	41	73	36	56	12	0.07	-0.66	0.00	0.07	13	43.04	108	93	46	0	0	1	0
NC HATTERAS	69	57	71	51	63	11	0.02	-1.03	0.01	0.01	1	58.04	111	91	66	0	0	2	0
NC RALEIGH	74	42	77	35	58	12	0.00	-0.71	0.00	0.00	0	49.19	127	98	45	0	0	0	0
NC WILMINGTON	77	47	79	40	62	10	0.02	-0.76	0.01	0.01	2	59.65	117	98	41	0	0	2	0
ND BISMARCK	45	25	60	23	35	16	0.01	-0.10	0.01	0.01	13	23.48	156	95	61	0	7	1	0
ND DICKINSON	46	28	65	22	37	15	0.00	-0.08	0.00	0.00	0	24.62	156	93	56	0	7	0	0
ND FARGO	40	27	46	20	34	16	0.00	-0.14	0.00	0.00	0	31.54	167	97	75	0	6	0	0
ND GRAND FORKS	32	21	38	13	27	10	0.01	-0.13	0.00	0.01	10	23.56	133	98	82	0	7	1	0
ND JAMESTOWN	40	26	47	18	33	15	0.00	-0.11	0.00	0.00	0	21.65	131	96	70	0	7	0	0
ND WILLISTON	40	23	50	8	32	13	0.23	0.12	0.15	0.23	288	17.31	131	93	67	0	7	2	0
OH AKRON-CANTON	61	47	66	37	54	18	0.14	-0.58	0.12	0.02	4	38.15	111	95	60	0	0	2	0
OH CINCINNATI	65	48	71	30	57	19	0.21	-0.57	0.13	0.08	15	47.63	123	90	55	0	1	2	0
OH CLEVELAND	62	50	67	39	56	20	0.12	-0.63	0.12	0.00	0	30.90	91	87	56	0	0	1	0
OH COLUMBUS	64	48	69	36	56	20	0.06	-0.67	0.03	0.01	2	34.33	96	90	57	0	0	2	0
OH DAYTON	63	49	67	39	56	20	0.03	-0.69	0.02	0.02	4	37.12	109	84	56	0	0	2	0
OH MANSFIELD	61	48	65	35	54	20	0.19	-0.61	0.17	0.00	0	35.93	97	86	56	0	0	1	0

Weather Data for the Week Ending December 5, 1998

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		01 INCH OR MORE	.50 INCH OR MORE	01 INCH OR MORE	.50 INCH OR MORE
OK TOLEDO	61	48	64	36	55	22	0.04	-0.68	0.04	0.00	0	31.93	104	88	54	0	0	0	1	0	
OK YOUNGSTOWN	61	49	65	41	55	21	0.13	-0.59	0.12	0.01	2	35.22	101	84	49	0	0	2	0	0	
OK OKLAHOMA CITY	70	50	73	40	60	17	2.09	1.73	1.19	1.21	465	34.92	108	96	59	0	0	2	2	2	
OR TULSA	72	53	76	43	62	19	1.71	1.12	0.83	0.87	212	45.83	118	96	57	0	0	4	2	2	
OR ASTORIA	47	37	53	30	42	-2	5.37	2.93	2.30	4.40	257	77.01	134	97	74	0	1	7	4	0	
OR BURNS	39	21	54	6	30	2	0.70	0.42	0.18	0.44	220	15.60	173	92	62	0	6	7	0	0	
OR EUGENE	47	37	52	32	42	0	4.02	1.98	1.59	1.91	135	43.78	104	97	77	0	1	6	3	3	
OR MEDFORD	46	34	52	26	40	0	1.08	0.29	0.32	0.80	109	28.09	175	97	60	0	3	5	0	0	
OR PENDLETON	45	34	53	31	39	3	0.74	0.35	0.37	0.40	143	13.46	125	96	57	0	3	4	0	0	
OR PORTLAND	47	40	52	34	43	1	2.78	1.39	1.10	1.28	131	40.61	130	94	71	0	0	7	1	1	
OR SALEM	46	38	51	33	42	1	3.45	1.86	1.11	1.75	158	44.02	131	98	76	0	0	7	3	0	
PA ALLENTOWN	61	39	71	32	50	13	0.01	-0.85	0.01	0.01	2	39.08	96	95	55	0	1	1	0	0	
PA ERIE	63	50	68	44	57	20	0.50	-0.41	0.28	0.33	51	30.36	79	83	50	0	0	3	0	0	
PA MIDDLETOWN	66	40	73	30	53	15	0.00	-0.79	0.00	0.00	0	45.65	121	87	36	0	1	0	0	0	
PA PHILADELPHIA	65	45	73	37	55	14	0.01	-0.78	0.00	0.01	2	30.85	80	88	44	0	0	1	0	0	
PA PITTSBURGH	63	48	68	37	55	19	0.06	-0.61	0.03	0.03	6	32.43	94	86	46	0	0	2	0	0	
PA WILKES-BARRE	81	45	68	37	53	18	0.13	-0.52	0.13	0.13	29	34.06	100	85	48	0	0	1	0	0	
PA WILLIAMSPORT	62	38	68	26	50	14	0.15	-0.63	0.13	0.15	28	39.39	103	96	52	0	2	3	0	0	
RI PROVIDENCE	58	40	70	36	49	11	0.02	-1.02	0.02	0.02	3	51.35	123	91	49	0	0	1	0	0	
SC BEAUFORT	79	54	80	45	67	12	0.07	-0.56	0.00	0.00	0	47.50	98	99	56	0	0	1	0	0	
SC CHARLESTON	78	51	79	42	64	10	0.06	-0.59	0.01	0.04	9	63.56	130	100	48	0	0	5	0	0	
SC COLUMBIA	77	44	81	37	61	11	0.00	-0.72	0.00	0.00	0	44.20	94	96	38	0	0	0	0	0	
SC GREENVILLE	72	46	73	40	59	12	0.00	-0.90	0.00	0.00	0	47.75	100	94	47	0	0	0	0	0	
SD ABERDEEN	50	28	58	27	39	18	0.02	-0.09	0.01	0.02	25	28.34	156	97	56	0	7	2	0	0	
SD HURON	56	29	66	25	43	19	0.05	-0.06	0.03	0.05	63	25.03	127	96	50	0	6	2	0	0	
SD RAPID CITY	55	27	69	15	41	13	0.02	-0.09	0.00	0.02	25	21.06	130	81	42	0	5	1	0	0	
SD SIOUX FALLS	56	32	63	26	44	20	0.08	-0.13	0.05	0.06	43	30.96	133	97	60	0	5	2	0	0	
TN BRISTOL	66	35	89	28	50	9	0.09	-0.65	0.09	0.09	17	38.70	102	96	45	0	3	1	0	0	
TN CHATTANOOGA	74	43	76	36	58	13	0.01	-1.16	0.01	0.01	1	47.78	97	97	42	0	0	1	0	0	
TN KNOXVILLE	69	42	71	35	55	12	0.17	-0.82	0.17	0.17	24	48.13	111	96	49	0	0	1	0	0	
TN MEMPHIS	71	54	76	39	63	16	0.64	-0.71	0.39	0.39	40	49.00	103	99	61	0	0	2	0	0	
TN NASHVILLE	72	47	77	36	59	15	1.03	-0.04	0.72	0.94	124	45.13	104	94	50	0	0	3	1	0	
TX ABILENE	73	50	76	39	62	13	0.88	0.42	0.59	0.60	333	13.11	56	93	49	0	0	3	1	0	
TX AMARILLO	66	42	72	36	54	14	0.59	0.48	0.29	0.34	425	17.08	89	88	42	0	0	2	0	0	
TX AUSTIN	78	64	81	57	71	16	0.15	-0.31	0.15	0.15	45	37.70	124	92	53	0	0	1	0	0	
TX BEAUMONT	79	63	81	57	71	14	0.15	-0.95	0.12	0.02	3	54.98	103	98	65	0	0	4	0	0	
TX BROWNSVILLE	84	68	86	62	76	11	0.02	-0.26	0.01	0.02	10	19.66	77	97	58	0	0	2	0	0	
TX CORPUS CHRISTI	81	68	84	63	74	13	0.02	-0.26	0.01	0.02	10	29.92	103	98	68	0	0	2	0	0	
TX DEL RIO	75	54	78	45	65	9	0.03	-0.12	0.01	0.02	18	28.83	162	96	60	0	0	3	0	0	
TX EL PASO	61	41	66	35	51	5	0.59	0.47	0.33	0.26	289	6.70	79	96	46	0	0	2	0	0	
TX FORT WORTH	75	56	77	48	65	15	2.06	1.62	1.48	1.53	494	31.35	97	97	59	0	0	4	2	0	
TX GALVESTON	77	68	79	63	73	13	0.09	-0.75	0.06	0.08	14	48.39	123	98	64	0	0	4	0	0	
TX HOUSTON	81	62	83	54	71	15	0.33	-0.48	0.23	0.09	16	50.86	118	97	59	0	0	3	0	0	
TX LUBBOCK	67	43	73	39	55	11	0.56	0.43	0.29	0.27	270	13.08	72	91	44	0	0	3	0	0	
TX MIDLAND	71	47	77	38	59	11	0.18	0.05	0.02	0.02	20	4.58	32	86	31	0	0	2	0	0	
TX SAN ANGELO	74	49	79	37	62	12	0.00	-0.19	0.00	0.00	0	12.50	63	96	44	0	0	0	0	0	
TX SAN ANTONIO	78	62	81	53	70	15	0.05	-0.38	0.02	0.05	17	41.76	140	93	55	0	0	2	0	0	
TX VICTORIA	80	64	82	58	72	14	0.39	-0.09	0.31	0.37	112	43.14	121	99	65	0	0	4	0	0	
TX WACO	76	59	79	48	67	15	1.21	0.74	0.75	0.46	139	31.48	103	97	62	0	0	4	1	0	
TX WICHITA FALLS	73	51	77	44	62	16	1.22	0.82	1.07	1.08	491	22.18	80	93	56	0	0	3	1	0	
UT SALT LAKE CITY	55	37	64	17	46	12	0.70	0.38	0.70	0.70	292	23.23	154	77	35	0	2	1	1	0	
VT BURLINGTON	52	36	60	26	44	15	0.15	-0.49	0.00	0.15	34	50.20	155	84	48	0	3	2	0	0	
VA LYNCHBURG	70	38	75	29	54	11	0.07	-0.67	0.00	0.07	13	44.42	116	91	40	0	1	1	0	0	
VA NORFOLK	73	47	75	41	60	12	0.00	-0.68	0.00	0.00	0	49.43	118	92	47	0	0	0	0	0	
VA RICHMOND	73	43	77	33	58	14	0.00	-0.72	0.00	0.00	0	41.74	103	81	36	0	0	0	0	0	
VA ROANOKE	68	43	73	32	56	14	0.04	-0.65	0.00	0.04	8	42.74	111	74	35	0	1	1	0	0	
VA WASH/DULLES	71	38	74	30	54	15	0.00	-0.75	0.00	0.00	0	35.90	96	88	38	0	4	0	0	0	
WA HANFORD	45	30	55	18	38	-	0.36	-	0.34	0.02	-	5.95	-	94	61	0	3	2	0	0	
WA OLYMPIA	44	35	48	33	39	0	3.18	1.28	1.64	2.28	173	47.64	109	100	87	0	0	7	2	0	
WA QUILLAYUTE	44	34	47	31	39	-3	5.58	2.02	2.29	4.76	190	87.69	95	99	82	0	3	7	3	0	
WA SEATTLE-TACOMA	44	38	47	36	41	-1	1.85	0.24	0.80	1.01	103	36.02	112	97	71	0	0	6	1	0	
WA SPOKANE	37	30	44	26	34	3	1.57	1.01	0.55	1.07	274	15.55	107	96	78	0	5	6	1	0	
WA YAKIMA	41	24	46	16	32	0	0.58	0.28	0.35	0.21	95	8.22	121	98	71	0	7	4	0	0	
WV BECKLEY	62	38	69	29	50	12	0.15	-0.57	0.12	0.14	27	44.42	116	92	44	0	2	3	0	0	
WV CHARLESTON	67	39	73	28	53	12	0.14	-0.67	0.12	0.12	21	45.30	114	91	41	0	1	2	0	0	
WV ELKINS	64	29	71	18	46	10	0.11	-0.69	0.03	0.11	19	44.20	105	93	40	0	5	2	0	0	
WV HUNTINGTON	68	44	73	30	56	15	0.13	-0.65	0.09	0.09	16	41.04	106	87	45	0	1	2	0	0	
WI EAU CLAIRE	59	36	63	27	48	25	0.00	-0.28	0.00	0.00	0	28.95	94	97	56	0	3	0	0	0	
WI GREEN BAY	58	38	63	30	48	22	0.21	-0.21	0.16	0.05	17	28.52	103	98	67	0	1	3	0	0	
WI MADISON	80	45	64	32	53	25	0.09	-0.38	0.09	0.00	0	39.65	135	94	64	0	1	1	0	0	
WI MILWAUKEE	61	45	66	36	53	23	0.12	-0.46	0.08	0.04	10	33.80	109	93	67	0	0	3	0	0	
WY CASPER	53	31	59	14	42	16	0.00	-0.17	0.00	0.00	0	14.41	121	71	28	0	2	0	0	0	
WY CHEYENNE	57	30	65	17	44	14	0.02	-0.09	0.00	0.02	25	10.38	74	64	20	0	4	1	0	0	

November Weather and Crop Summary

Weather

Above-normal temperatures prevailed nearly nationwide despite several notable low-pressure systems, including Tropical Storm Mitch (November 4-5) in southern Florida and a "super storm" (November 10-11) across the northern Plains and upper Midwest. In addition, heavy rainfall induced early-month flooding in parts of the central Plains and re-introduced lowland flooding at mid-month to portions of eastern Texas. Increasingly stormy weather arrived in the Pacific Northwest during the last 2 weeks of November, improving soil moisture in interior sections, but saturating areas west of the Cascades with record or near-record rainfall. In contrast, warm, dry weather returned to the Plains during the second half of November, reducing soil moisture to generally favorably levels. Long-term drought persisted, however, in portions of the southern Plains, including western Texas. Intensifying drought stretched through a fifth month in the Mid-Atlantic region, extending southward into parts of the Southeast.

Monthly temperatures ranged from 2 to 6°F above normal in the Plains, Midwestern, Northwestern, and Southeastern States, aided by a warm spell that produced more than 250 daily-record highs during the last 10 days of November. Near-normal readings prevailed in the Northeastern and Mid-Atlantic regions, owing to an early-month cool wave. Temperatures averaged as much as 3°F below normal, however, in California, plagued by persistent coolness for most of 1998.

Monthly precipitation totaled more than 200 percent of normal in many areas from Washington southward to northern California, and eastward to western Montana. Precipitation also topped twice the normal on most of the northern and central Plains, in eastern Texas, and across southern Florida. In contrast, less than 50 percent of the normal monthly rainfall dampened southern California, the southern High Plains, and large portions of the Middle Atlantic and Southeastern States.

Early in the month, heavy rain and flooding persisted across parts of Kansas and Oklahoma. October 30 - November 1 rainfall topped 10 inches in a few southern Kansas locations, including Anthony (10.47 inches) and Madison (10.15 inches). Elsewhere in southern Kansas, record crests were established on November 1 along the Arkansas River at Derby (breaking a July 1993 standard) and the Cottonwood River at Plymouth (eclipsing a June 1965 high-water mark). Two days later, records on the Arkansas River (11.89 feet above flood stage) and Walnut River (14.45 feet above flood stage) converged on Arkansas City, KS, causing extensive flooding.

Meanwhile, the remnant circulation of Hurricane Mitch emerged over the southwestern Gulf of Mexico on November 3 and regained tropical storm status. Mitch then accelerated northeastward, crossing southern Florida on the morning of November 5 with maximum sustained near 60 mph. A peak gust to 73 mph was recorded at Fowey Rocks Lighthouse, near Miami. Despite the storm's rapid movement (about 25 mph), November 4-5 rainfall reached 6.06 inches near the point of

landfall at Ft. Myers, and 6.73 inches at West Palm Beach, just south of where Mitch departed Florida's east coast.

Just a few days later, on November 9, a rapidly developing low-pressure system reached the central Plains, turning northeastward a day later across the western Great Lakes region. The "super storm" produced record-low barometric pressures on the 10th in Minnesota (28.43 inches in Austin and Albert Lea) and Iowa (28.54 inches in Spencer and Estherville). Across the northwestern Corn Belt, wind gusts of 60 to 70 mph, with locally higher readings, accompanied by heavy snowfall, halted fieldwork and lodged unharvested corn. On Lake Michigan, wave heights on the night of November 10-11 reached 20.3 feet at a buoy 45 miles west of Holland, MI. November 9-10 snowfall totaled 13.4 inches in Sioux Falls, SD. Rapid City, SD secured their second-snowiest November (21.3 inches) by November 10, but received no snow thereafter.

Immediately following the "super storm," a moisture-laden system crossed the South. From November 12-14, heavy rain fell in eastern Texas, submerging some of the same lowlands struck by severe flooding in mid- to late October. Storm-total rainfall reached 8.44 inches in Victoria, TX, boosting their monthly rainfall to a November-record 10.11 inches (413 percent of normal). November rainfall totaled 10.21 inches in Houston, aided by a 4.68-inch amount on November 12. The San Bernard River at Boling, TX, which on October 21 had surged to a record 24.7 feet above flood stage, crested on November 24 more than 5 feet below the high-water mark. Dry weather arrived in eastern Texas and elsewhere in the Plains States after mid-month. During the second half of November, only 0.26 inch dampened Houston, while 0.07 inch fell on Victoria.

Drought continued through November in portions of the southern Plains, including much of western Texas. Abilene, TX received 1.06 inches (72 percent of normal) during the month, sealing their eighth consecutive month with sub-normal precipitation. Midland, TX netted 0.13 inches (19 percent of normal) during November, boosting their year-to-date total to only 4.56 inches (32 percent). Midland's driest year on record occurred in 1951 (4.24 inches), followed by 1933 (6.76 inches). In addition to the dryness, Midland entered December without their first autumn freeze for only the second time on record; their latest first freeze occurred on December 6, 1954. In Lubbock, TX, autumn minimum temperatures remained at or above 30°F through November for the first time since 1933. Through November, no autumn freeze occurred in Oklahoma City, OK. Prior to this year, Oklahoma City's latest first freeze was observed on November 30, 1934. In the east, however, an early-month cold snap in the wake of Tropical Storm Mitch delivered the season's first freeze to many areas away from the Gulf Coast. On November 7, sub-freezing temperatures were noted as far south as Tallahassee, FL (31°F).

While weather quieted across much of the Nation after mid-month, increasingly stormy conditions overspread the Pacific Northwest as far south as northern California. November rainfall records were established in Astoria, OR (19.60 inches,

or 195 percent of normal) and Seattle, WA (11.62 inches, or 199 percent), eclipsing totals from 1995 and 1990, respectively. Seattle's total represented their highest monthly rainfall since 11.85 inches fell during December 1979. Elsewhere in Oregon, Medford's total of 7.67 inches was less than 1 inch shy of their November record, set in 1942. In northern California, Eureka netted 14.09 inches (219 percent of normal) during the month.

In contrast, drought intensified across the Mid-Atlantic region and in parts of the Southeast. Five-month (July-November) rainfall deficits climbed to 11.45 inches in Washington, DC and 11.53 inches in Baltimore, MD. Since July 1, rainfall in both locations totaled under 6 inches, or 33 percent of normal. Long-term dryness also persisted in parts of the Great Lakes region and in portions of the Ohio and Tennessee Valleys. In Michigan, Flint's April-November precipitation totaled 12.78 inches (55 percent of normal), their second-driest such period on record, behind 12.70 inches in 1938. In the Ohio Valley, August-November rainfall stood at 8.16 inches (53 percent of normal) in Chattanooga, TN and 5.26 inches (40 percent) in Lexington, KY. Farther south, November rainfall was as low as 0.16 inches (6 percent of normal) in Charleston, SC and 0.30 inches (14 percent) in Savannah, GA.

While stormy weather assailed the Pacific Northwest after mid-month, much of the remainder of the Nation basked in unusual warmth. The mild spell sealed a virtually snowless month in many areas. In Kansas, Topeka's previous snow-free November occurred in 1980. Only 0.2 inch whitened Grand Rapids, MI, their lowest November snowfall since 1984. Ft. Wayne, IN experienced only their second snowless November on record, along with 1946. In Wisconsin, both LaCrosse (63, 62, 65, and 63°F) and Madison (65, 62, 64, and 63°F) closed the month with four consecutive daily-record highs. On November 29, lows of 54°F in Rochester, MN and 57°F in LaCrosse were higher than the previous record high temperatures for the date. Chicago, IL closed November with highs above 60°F on 5 consecutive days for the first time on record.

Alaskan temperatures ranged from near normal in southern areas to as much as 6°F above normal in the west. Along the Arctic coast at Barrow, an unusually late ocean freeze-up resulted in a monthly temperature departure of +16°F. Below-normal precipitation was observed at most Alaskan reporting stations. In southern Alaska, totals included 6.34 inches (42 percent of normal) in Yakutat and 1.72 inches (35 percent) in Juneau. Meanwhile in Hawaii, moisture supplies continued to improve in windward (east-facing) locations, although dry pockets persisted elsewhere. On the Big Island, monthly rainfall reached 15.57 inches (107 percent of normal) in Hilo and 25.80 inches (145 percent) in Glenwood. In contrast, only 0.85 inches (28 percent of normal) dampened Honolulu, boosting their year-to-date rainfall to 3.37 inches (18 percent).

Fieldwork

A large mass of cold air arrived from Canada early in the month and brought the first major snowstorm days later. Harvest activities were halted and wheat fields were blanketed with at least a few inches of snow in the northern Great Plains. A few

days later, another storm delivered a mixture of snow, and freezing rain in the northern Plains. As the system moved eastward, it produced heavy rains and damaging winds in parts of the Corn Belt and Mississippi Valley. During the second half of the month, temperatures averaged well above normal across most of the Nation, aiding development of winter wheat in the central and southern Great Plains, Mississippi Delta, southern and eastern Corn Belt, and Southeast. Dry conditions also prevailed over much of the Nation during the last half of the month, aiding harvest efforts and fall tillage operations. Harvest activities slowly resumed late in the month in the northern Plains and upper Mississippi Valley following earlier storms.

The harvest of the Nation's corn and soybean crops was nearing completion as the month began. Progress for both exceeded the average due to early ripening and good harvest weather. Nationally, the corn harvest was more than 1 week ahead of normal, with some areas of the northern Corn Belt more than 2 weeks ahead of average. The soybean harvest pace slowed as the end of the season approached, and was less than 1 week ahead of the 5-year average as the month began. Favorable weather during the month allowed the corn and soybean harvest pace to continue ahead of normal despite isolated delays. The corn harvest briefly fell behind normal in parts of the central Great Plains near mid-month, but warm, dry weather returned and the harvest pace quickly moved back ahead of the 5-year average.

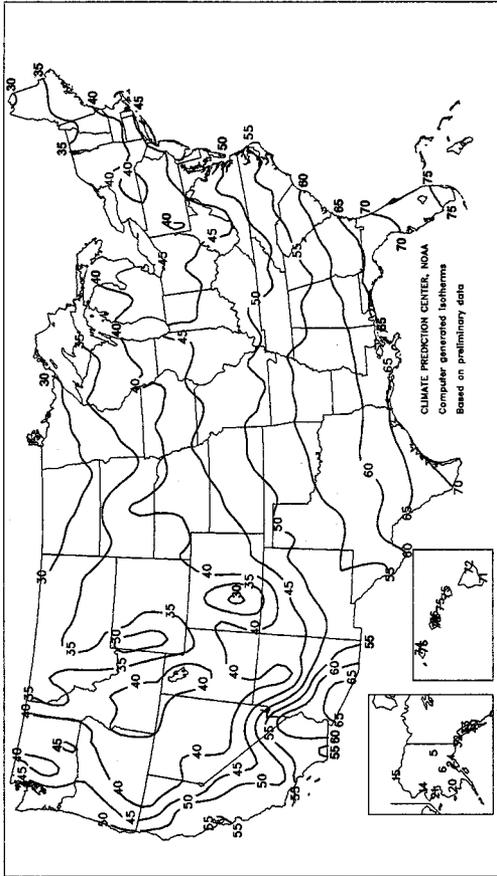
Most of the Nation's winter wheat was seeded as the month began, but progress was slightly behind normal. Planting was virtually complete in the northern Plains and Rocky Mountains, while growers in the Southeast and Southwest were just starting to gain momentum. By mid-month, most planting in the central and southern Great Plains and eastern Corn Belt was complete. Rain delayed planting efforts in parts of the southern Corn Belt. Dry soils forced growers in the Southeast to delay planting until early-month showers partially relieved topsoil dryness. Emergence also lagged normal, partly because of late planting and partly due to dry soils, especially in the Great Plains and Southeast. Emergence improved in the Great Plains and Mississippi Delta after early-month soaking rains. Warm weather during the last half of the month stimulated growth in the central and southern Great Plains, Corn Belt, and lower Mississippi Valley.

The cotton harvest began the month more than 1 week ahead of normal and remained ahead of the average throughout the month. Mostly dry conditions allowed growers in the lower Mississippi Valley to complete their harvest by mid-month. Dry weather also aided harvest in the Southeast, but harvest progress lagged in California due to the late-maturing crop.

Sorghum harvest progressed slightly ahead of normal until mid-month, when rains slowed progress in the Great Plains and southern Corn Belt. Dry conditions aided progress during the second half of the month, except in the northern Plains, where progress was halted by early-month winter storms. Harvest resumed late in the month as muddy fields slowly dried. The peanut harvest also progressed ahead of normal, as dry weather prevailed in most peanut producing regions. Florida growers finished harvesting far ahead of the 5-year average.

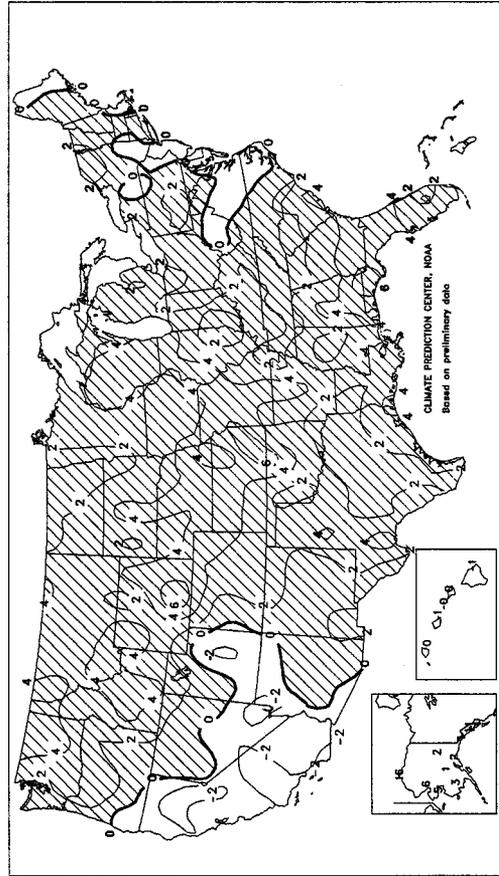
Average Temperature (°F)

NOV 1998



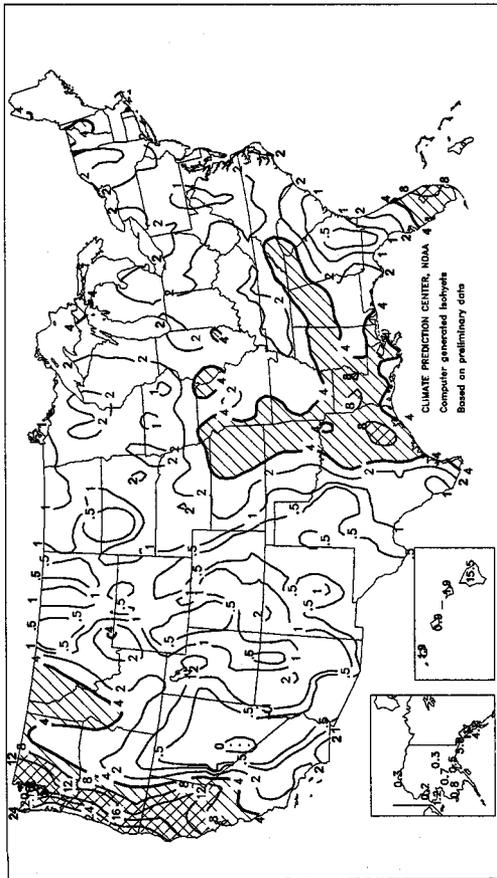
Departure of Average Temperature from Normal (°F)

NOV 1998



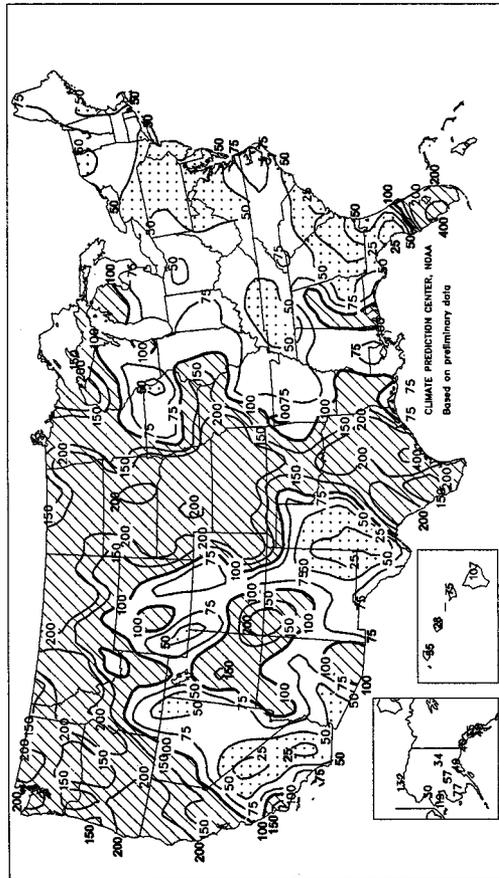
Total Precipitation (inches)

NOV 1998



Percent Of Normal Precipitation

NOV 1998



TEMPERATURE AND PRECIPITATION SUMMARY November 1998

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	57	4	4.36	0.03	ME CARIBOU	30	-1	2.10	-1.45	RI WILKES-BARRE	42	3	0.95	-2.07
AL HUNTSVILLE	54	2	3.02	-1.84	ME PORTLAND	39	1	2.04	-3.14	RI WILLIAMSPORT	42	0	1.15	-2.58
AL MOBILE	63	4	4.96	0.85	MD BALTIMORE	46	-1	1.13	-2.19	RI PROVIDENCE	43	-1	2.76	-1.67
AL MONTGOMERY	60	3	0.91	-3.17	MA BOSTON	44	-1	1.38	-2.85	SC BEAUFORT	63	4	0.84	-1.52
AK ANCHORAGE	24	2	0.54	-0.56	MA WORCESTER	40	1	2.30	-2.17	SC CHARLESTON	62	3	0.16	-2.32
AK BARROW	15	17	0.33	0.07	MI ALPENA	38	2	2.24	0.03	SC COLUMBIA	57	3	1.11	-1.79
AK FAIRBANKS	5	2	0.28	-0.55	MI GRAND RAPIDS	42	4	2.27	-1.06	SC GREENVILLE	54	2	2.39	-1.27
AK JUNEAU	33	1	1.72	-3.18	MI HOUGHTON LAKE	37	2	2.53	0.29	SD ABERDEEN	33	3	1.41	0.82
AK KODIAK	36	2	8.58	2.62	MI LANSING	41	2	1.63	-1.00	SD HURON	36	4	1.89	1.17
AK NOME	21	5	1.23	0.19	MI MARQUETTE	34	5	2.89	-0.28	SD RAPID CITY	36	2	1.08	0.52
AZ FLAGSTAFF	37	0	1.76	-0.19	MI MUSKEGON	42	3	2.30	-0.83	SD SIOUX FALLS	35	2	2.20	1.11
AZ PHOENIX	62	0	0.19	-0.47	MN DULUTH	32	4	3.83	2.03	TN BRISTOL	47	0	1.44	-1.50
AZ TUCSON	60	1	0.67	0.01	MN INT'L FALLS	27	2	1.70	0.56	TN CHATTANOOGA	53	2	3.16	-1.45
AZ YUMA	64	0	0.09	-0.16	MN MINNEAPOLIS	37	4	1.32	-0.23	TN KNOXVILLE	50	1	2.51	-1.24
AR FORT SMITH	54	4	3.41	-0.58	MS ROCHESTER	36	4	1.15	-0.46	TX MEMPHIS	56	3	2.61	-2.49
AR LITTLE ROCK	56	3	2.31	-2.89	MS ST. CLOUD	34	4	1.53	0.26	TX NASHVILLE	52	2	1.30	-2.82
AR BAKERSFIELD	52	-3	0.45	-0.24	MS JACKSON	59	3	4.32	-0.49	TX ABILENE	57	2	1.06	-0.42
CA EUREKA	51	0	14.57	8.09	MS MERIDIAN	58	3	3.52	-0.96	TX AMARILLO	49	3	0.34	-0.35
CA FRESNO	53	-1	0.36	-1.02	MO TUPELO	55	2	3.20	-1.64	TX AUSTIN	63	2	4.04	1.67
CA LOS ANGELES	59	-2	1.21	-0.56	MO COLUMBIA	48	4	1.87	-1.06	TX BEAUMONT	64	3	2.91	-1.93
CA REDDING	50	-2	9.30	4.09	MO KANSAS CITY	48	5	4.30	2.38	TX BROWNSVILLE	72	3	3.72	2.21
CA SACRAMENTO	53	-1	3.60	0.87	MO SAINT LOUIS	49	3	2.72	-0.58	TX CORPUS CHRISTI	69	3	2.66	1.06
CA SAN DIEGO	59	-3	0.70	-0.74	MT SPRINGFIELD	49	3	3.60	-0.15	TX DEL RIO	62	2	2.01	1.09
CA SAN FRANCISCO	54	-1	2.33	-0.53	MT BILLINGS	38	3	0.63	-0.22	TX EL PASO	55	3	0.34	-0.13
CA ALAMOSA	34	4	0.35	-0.06	MT BUTTE	33	5	0.74	0.21	TX FORT WORTH	58	1	4.91	2.62
CO CO SPRINGS	42	4	0.44	-0.05	MT GLASGOW	33	4	0.68	0.41	TX GALVESTON	67	4	2.67	-0.74
CO DENVER	42	3	0.44	-0.44	MT GREAT FALLS	36	2	0.98	0.31	TX HOUSTON	64	3	10.21	6.42
CO GRAND JUNCTION	40	0	0.42	-0.28	MT KALISPELL	36	5	1.75	0.45	TX LUBBOCK	52	3	0.29	-0.45
CO PUEBLO	44	4	0.46	-0.01	MT MILES CITY	36	4	0.55	0.03	TX MIDLAND	56	4	0.13	-0.56
CO BRIDGEPORT	45	0	1.22	-2.60	MT MISSOULA	36	3	3.00	2.19	TX SAN ANGELO	57	2	1.06	-0.02
CT HARTFORD	41	-1	2.34	-1.71	NE GRAND ISLAND	42	5	2.20	1.16	TX SAN ANTONIO	62	2	3.41	0.80
CT WASHINGTON	50	0	0.91	-2.21	NE LINCOLN	44	5	3.20	1.92	TX VICTORIA	65	2	10.11	7.66
DE WILMINGTON	46	0	1.27	-2.00	NE NORFOLK	40	4	2.05	1.04	TX WACO	59	2	3.50	1.07
FL DAYTONA BEACH	70	5	1.66	-1.18	NE NORTH PLATTE	39	4	1.31	0.85	UT WICHITA FALLS	55	3	2.27	0.73
FL JACKSONVILLE	66	5	2.39	0.20	NE OMAHA	44	5	1.48	-0.01	VT SALT LAKE CITY	43	2	1.27	-0.03
FL KEY WEST	77	2	2.30	-0.45	NE SCOTTSDUFF	40	3	1.20	0.58	VA BURLINGTON	39	3	1.02	-2.11
FL MIAMI	76	2	6.66	3.99	NV VALENTINE	39	5	1.43	0.83	VA LYNCHBURG	46	-1	1.12	-2.02
FL ORLANDO	71	3	1.67	-0.84	NV ELY	36	2	0.54	-0.12	VA NORFOLK	52	-1	1.83	-1.02
FL PENSACOLA	65	4	3.96	0.42	NV LAS VEGAS	54	0	0.33	-0.11	VA RICHMOND	49	0	1.30	-1.86
FL TALLAHASSEE	65	5	1.43	-2.44	NV RENO	42	2	0.77	-0.09	VA ROANOKE	49	1	0.86	-2.33
FL TAMPA	72	5	0.38	-1.40	NH WINNEUCCA	39	1	0.89	-0.04	VA WASH/DULLES	45	0	1.21	-2.10
FL WEST PALM BEACH	74	1	7.85	2.98	NH CONCORD	38	1	2.20	-1.45	VA HANFORD	46	-	1.31	-9.99
GA ATHENS	56	2	2.06	-1.60	NJ NEWARK	47	0	0.86	-3.05	VA OLYMPIA	45	2	14.95	6.89
GA ATLANTA	56	3	1.87	-1.99	NM ALBUQUERQUE	46	2	0.46	0.04	VA QUILLAYUTE	46	2	26.08	11.34
GA AUGUSTA	58	3	0.57	-1.90	NY ALBANY	40	0	1.65	-1.59	VA SEATTLE-TACOMA	47	1	11.62	5.79
GA COLUMBUS	61	4	0.88	-2.67	NY BINGHAMTON	39	1	1.43	-1.85	VA SPOKANE	40	5	3.78	1.63
GA MACON	59	3	0.70	-2.02	NY BUFFALO	42	1	1.61	-2.23	VA YAKIMA	41	2	0.84	-0.20
GA SAVANNAH	62	3	0.30	-1.88	NY ROCHESTER	42	1	1.41	-1.49	WV BECKLEY	44	0	2.64	-0.34
HI HILO	72	-2	15.57	1.07	NC SYRACUSE	41	1	2.06	-1.86	WV CHARLESTON	46	-1	1.89	-1.69
HI HONOLULU	78	0	0.85	-2.16	NC ASHEVILLE	49	1	2.78	-0.78	WV ELKINS	40	-1	1.40	-1.93
HI KAHULUI	75	0	1.94	-0.64	NC CHARLOTTE	53	1	2.28	-0.93	WV HUNTINGTON	47	1	2.31	-0.99
HI LIHUE	76	0	1.90	-3.56	NC GREENSBORO	51	1	1.55	-1.43	WI EAU CLAIRE	38	5	1.36	-0.16
ID BOISE	44	4	0.97	-0.49	NC HATTERAS	57	0	0.85	-4.13	WI GREEN BAY	39	5	1.67	-0.50
ID LEWISTON	43	2	2.67	1.52	NC RALEIGH	51	0	2.40	-0.58	WI MADISON	41	5	1.95	-0.17
ID POCATELLO	39	3	1.30	0.14	NC WILMINGTON	57	0	0.96	-2.15	WI MILWAUKEE	43	5	2.91	0.39
IL CHICAGO/O'HARE	45	5	2.00	-0.91	ND BISMARCK	31	2	1.40	0.80	WY CASPER	38	5	0.45	-0.32
IL MOLINE	44	4	2.76	0.25	ND DICKINSON	34	4	0.75	0.31	WY CHEYENNE	39	4	0.31	-0.22
IL PEORIA	45	4	2.63	-0.07	ND FARGO	29	1	1.75	1.01	WY LANDER	34	3	1.27	0.47
IL ROCKFORD	42	4	2.32	-0.25	ND GRAND FORKS	26	-1	1.73	1.07	WY SHERIDAN	35	2	0.84	0.02
IL SPRINGFIELD	46	3	2.81	0.27	ND JAMESTOWN	29	1	1.10	0.59	PR SAN JUAN	-	-	6.74	0.80
IN EVANSVILLE	48	2	2.78	-0.95	ND WILLSTON	30	2	1.27	0.80					
IN FORT WAYNE	43	2	1.65	-1.14	OH AKRON-CANTON	43	1	2.15	-0.87					
IN INDIANAPOLIS	45	2	2.52	-0.71	OH CINCINNATI	45	1	2.33	-1.14					
IN SOUTH BEND	43	3	1.24	-2.04	OH CLEVELAND	44	2	1.59	-1.58					
IA BURLINGTON	47	7	3.70	1.38	OH COLUMBUS	45	3	1.99	-1.23					
IA CEDAR RAPIDS	42	8	0.88	-1.07	OH DAYTON	45	2	1.59	-1.48					
IA DES MOINES	42	3	1.62	-0.17	OH MANSFIELD	43	1	1.55	-1.95					
IA DUBUQUE	40	4	1.31	-1.38	OH TOLEDO	42	3	1.54	-1.27					
IA SIOUX CITY	40	4	1.80	0.72	OH YOUNGSTOWN	42	1	1.99	-1.12					
IA WATERLOO	40	4	1.24	-0.57	OK OKLAHOMA CITY	53	4	3.09	1.11					
KS CONCORDIA	46	5	4.24	3.11	OR TULSA	53	4	3.26	0.13					
KS DODGE CITY	47	4	2.02	1.19	OR ASTORIA	47	0	19.80	9.54					
KS GOODLAND	43	4	2.11	1.42	OR BURNS	35	1	2.28	1.04					
KS TOPEKA	49	6	5.84	3.72	OR EUGENE	47	1	11.35	3.03					
KY WICHITA	49	5	3.20	1.61	OR MEDFORD	46	2	7.67	4.45					
KY JACKSON	50	2	2.98	-1.22	OR PENDLETON	45	4	2.31	0.74					
KY LEXINGTON	47	1	1.96	-1.43	OR PORTLAND	49	3	11.03	5.70					
KY LOUISVILLE	51	4	2.16	-1.54	OR SALEM	48	3	10.58	4.30					
LA PADUCAH	51	3	2.63	-1.69	PA ALLENTOWN	43	-1	1.39	-2.50					
LA BATON ROUGE	63	3	3.05	-1.26	PA ERIE	45	2	1.80	-2.20					
LA LAKE CHARLES	64	4	2.92	-1.34	PA MIDDLETOWN	46	1	0.92	-2.58					
LA NEW ORLEANS	65	4	3.40	-1.02	PA PHILADELPHIA	48	1	1.18	-2.16					
LA SHREVEPORT	58	1	4.59	0.14	PA PITTSBURGH	44	2	1.50	-1.34					

Based on 1961-90 normals.

National Agricultural Summary

November 30 - December 6, 1998

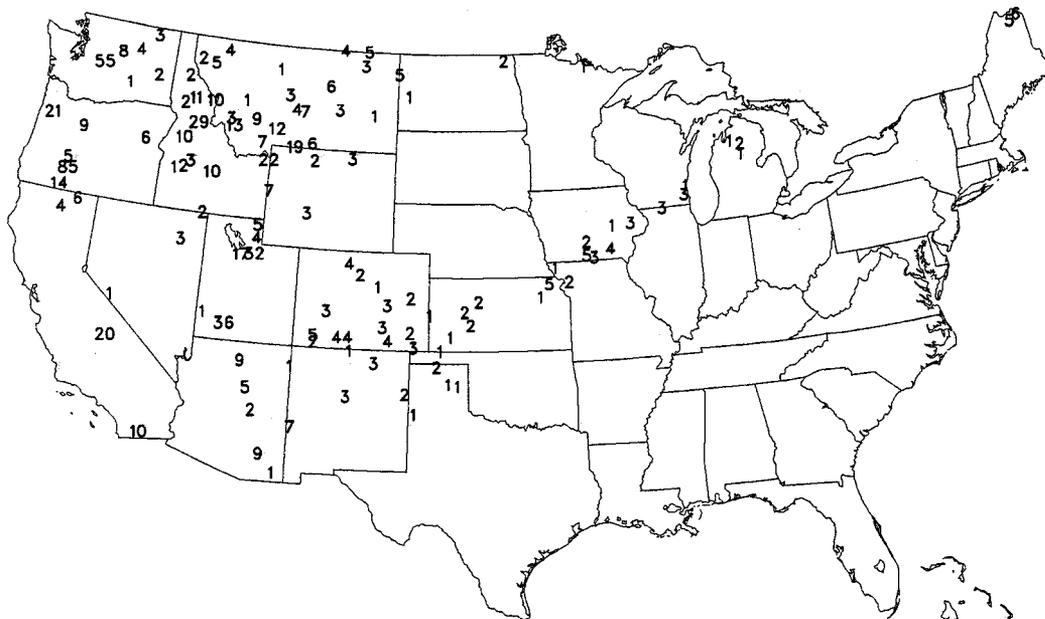
HIGHLIGHTS

Temperatures continued to average well above normal east of the Rocky Mountains, stimulating winter wheat development in parts of the central and southern Plains, southern and eastern Corn Belt, Southeast, and lower Mississippi Delta. In the southern High Plains, winter wheat also got a boost from scattered light showers. Wheat areas in the northern Rocky Mountains and Pacific Northwest also received beneficial precipitation. Dry conditions continued to assist late-season harvest efforts and fall tillage

operations in most of the Corn Belt, Southeast, and middle Atlantic Coastal Plains. Warm, dry weather relieved muddy field conditions and allowed harvest activities to resume in parts of the northern Plains and upper Mississippi Valley. In parts of the southern and central Great Plains, from eastern Texas to eastern Kansas, fieldwork was halted by heavy rains. Fieldwork was also halted in most parts of the Pacific Northwest, as heavy rains continued to deluge coastal areas from northern California to the Canadian border.

Snow Depth (Inches)

Dec 07, 1998



Experimental product based on preliminary data
 NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

The NWS co-operative network is the principal source of the snow depth reports.

November 1998

MONTHLY DATA FROM SELECTED FOREIGN CITIES
CLIMATE PREDICTION CENTER-NCEP-NWS-NOAA

*** DATA NOT AVAILABLE

International Weather and Crop Summary

November 29 - December 5, 1998

HIGHLIGHTS

FSU-WESTERN: The fourth consecutive week of unseasonably cold weather maintained a protective snow cover as far south as southern Ukraine.

EUROPE: Continued unseasonably cold weather caused winter grains to begin entering dormancy in the west and kept crops dormant in the north and east.

NORTHWESTERN AFRICA: The first substantial rains of the growing season in Morocco likely prompted widespread winter grain planting.

AUSTRALIA: Much-needed drier weather in the east aided summer crop development and winter grain maturation.

SOUTH ASIA: Seasonable dryness promoted summer crop harvesting and the planting of winter grown crops.

SOUTH AFRICA: Showers maintained generally favorable conditions for emerging corn and other summer crops.

SOUTHEAST ASIA: Drier weather eased wetness in southern Vietnam, while showers maintained adequate moisture supplies for rice and corn in Java.

EASTERN ASIA: Cold weather hardened winter grains for dormancy across the North China Plain.

SOUTH AMERICA: In central Argentina and Rio Grande do Sul, Brazil, topsoils became unfavorably dry for summer crop planting and germination.

CENTRAL AMERICA: Drier weather aided flood recovery efforts in Honduras.

COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
	AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	TOTAL	DPART F/NRM
NORWAY OSLO	-1	-4	4	-15	-3	-1.4	26	-64
SWEDEN STOCKHOLM	1	-2	5	-10	0	-2.9	0	-53
FINLAND HELSINKI	-2	-5	4	-17	-3	-3.6	33	-39
UKINGDO GLASGOW	9	3	13	-5	6	-0.6	138	25
EDINBURGH	9	3	15	-6	6	0.2	79	16
IRELAND DUBLIN	10	5	14	-3	7	0	78	14
ICELAND REYKJAVIK	4	1	10	-8	2	1.1	87	14
DENMARK COPENHAGEN	3	0	8	-8	2	-3.5	27	-21
LUXEMBO LUXEMBOURG	4	0	12	-10	2	-2	58	-21
SWITZERL ZURICH	4	0	11	-10	2	-1.8	129	44
GENEVA	7	1	15	-7	4	-1.3	89	-3
FRANCE PARIS/ORLY	8	2	15	-8	5	***	37	**
STRASBOURG	6	1	14	-10	3	-1.7	54	8
BOURGES	8	2	18	-8	5	-1.7	53	-5
BORDEAUX	13	4	22	-6	8	-0.4	120	28
TOULOUSE	11	3	19	-7	7	-1.6	67	19
MARSEILLE	12	4	20	-4	8	-2.4	22	-36
SPAIN VALLADOLID	13	3	20	-4	8	0.4	13	-40
MADRID	15	4	22	-5	10	0.5	21	-45
SEVILLE	21	11	26	3	16	1	21	-50
PORTUGA LISBON	19	12	21	7	15	1.2	33	-66
GERMANY HAMBURG	4	0	11	-8	2	-3	56	-16
BERLIN	4	0	11	-10	2	-3.2	43	-6
DUSSELDORF	6	1	15	-9	4	-2.3	85	22
LEIPZIG	4	0	11	-9	2	-2.2	49	12
DRESDEN	3	0	11	-11	2	-2.8	64	22
STUTT GART	4	-1	12	-10	2	-2.3	53	5
NURNBERG	4	0	12	-11	2	-2	59	15
AUSTRIA VIENNA	5	0	14	-8	3	-2	33	-9
INNSBRUCK	5	-2	13	-10	2	-1.8	48	-12
CZECHRE PRAGUE	3	-2	11	-14	1	-2.3	48	18
POLAND WARSAW	0	-4	10	-17	-2	-5.1	39	-3
LODZ	0	-3	9	-15	-1	-3.7	30	-9
KATOWICE	2	-2	10	-10	0	-2.2	36	-5
PRZEMYSL	1	-3	11	-11	-1	-4.3	38	-3
HUNGARY BUDAPEST	6	1	15	-5	3	-1.5	79	27
YUGOSLA BELGRADE	8	3	23	-3	5	-1.9	53	-3
ROMANIA BUCHAREST	6	-1	21	-6	3	-3.2	45	-2
BULGARIA SOFIA	7	1	24	-5	4	-1	53	3
ITALY MILAN	12	3	21	-4	8	0.9	11	-85
VERONA	11	3	16	-4	7	0.4	21	-52
VENICE	11	3	16	-3	7	-0.2	18	-67
GENOA	13	8	21	0	11	-1.8	9	-150
ROME	15	8	21	1	11	-1.2	39	-68
NAPLES	16	9	23	2	13	0.8	63	-91
GREECE THESSALONIKA	14	8	24	-3	11	0.3	180	122
LARISSA	14	7	25	0	11	0.2	124	64
ATHENS	19	13	24	9	16	0.5	164	108
TURKEY ISTANBUL	14	10	22	2	12	0.7	52	-36
ANKARA	13	1	20	-7	7	0.8	38	13
CYPRUS LARNACA	25	14	29	11	19	1.7	28	-10
ESTONIA TALLINN	-2	-6	6	-14	-4	-4.6	29	-36
LITHUANI KAUNAS	-2	-6	6	-21	-4	-6.1	33	-19
BELARUS MINSK	-3	-7	7	-20	-5	-5.9	46	-5
RUSSIA KAZAN	-7	-11	6	-26	-9	-5.9	49	5
MOSCOW	-6	-10	6	-21	-8	-6.7	61	5
YEKATERINBURG	-11	-15	4	-34	-13	-7.1	81	52
OMSK	-11	-15	10	-37	-13	-5.8	37	9
NOVOSIBIRSK	-9	-15	9	-36	-12	-2.2	42	14
BARNAUL	-6	-13	14	-34	-9	-2.7	20	-15
KHABAROVSK	-7	-14	3	-23	-10	-2.2	20	-1
VLADIVOSTOK	-1	-6	13	-18	-4	-2.5	24	-6
SARATOV	-4	-8	15	-24	-6	-4.2	73	33
VOLGOGRAD	0	-5	18	-22	-3	-2.2	74	41
ASTRAKHAN	5	-2	22	-15	2	-1.8	34	17
KRASNODAR	9	3	22	-5	6	-0.4	117	57
ORENBURG	-4	-10	15	-30	-7	-4	35	-4
KAZAKHS TSELINOGRAD	-6	-14	14	-35	-10	-3.7	11	-11
KARAGANDA	-4	-12	18	-34	-8	-3	15	-13
GEORGIA TBILISI	14	6	22	-2	10	2	51	19

Based on Preliminary Reports

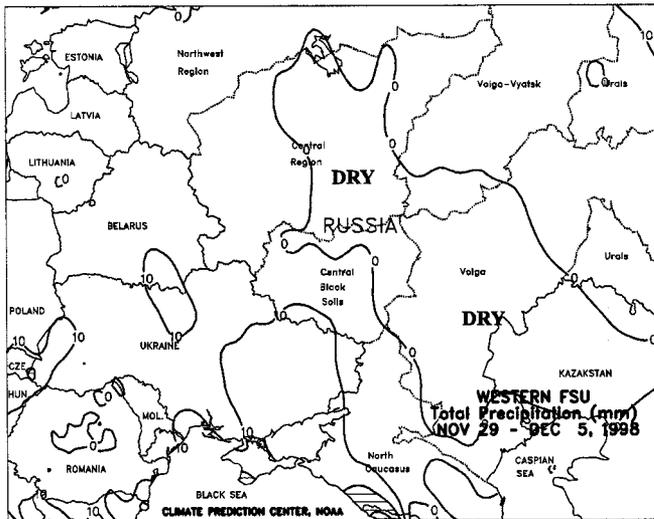
November 1998

COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)			COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
	AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	D PART F/NRM	TOTAL	D PART F/NRM		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	D PART F/NRM	TOTAL	D PART F/NRM
SYRIA DAMASCUS	24	7	31	1	15	3	0	-25									
ISRAEL JERUSALEM	22	12	27	7	17	2.5	6	-57									
PAKISTAN KARACHI	32	20	36	17	26	2.3	0	-2									
INDIA AMRITSAR	28	10	33	6	19	1.3	0	-7									
INDIA NEW DELHI	27	14	32	9	21	-0.1	15	8									
INDIA AHMEDABAD	32	16	35	10	24	-0.9	0	-11									
INDIA INDORE	30	16	34	9	23	1.2	1	-20									
INDIA CALCUTTA	30	21	33	15	25	1.8	170	154									
INDIA VERAVAL	33	21	36	17	27	0.8	0	-26									
INDIA BOMBAY	33	22	36	17	28	1	22	15									
INDIA POONA	30	16	32	8	23	0.4	40	17									
INDIA BEGAMPET	30	19	32	12	24	1.2	6	-17									
INDIA VISHAKHAPATNAM	30	24	32	21	27	***	116	**									
INDIA MADRAS	31	24	34	22	27	1.3	437	97									
INDIA MANGALORE	32	23	34	20	27	0.1	42	-30									
HONGKONG KINGS PEAK	26	20	30	18	23	***	29	**									
N KOREA PYONGYANG	6	**	18	-13	**	***	23	-26									
S KOREA SEOUL	12	4	21	-7	8	1.4	30	-6									
JAPAN SAPPORO	6	1	18	-6	4	-0.8	140	41									
JAPAN NAGOYA	17	8	23	3	12	0.8	11	-59									
JAPAN TOKYO	17	11	24	5	14	1.4	2	-88									
JAPAN YOKOHAMA	17	11	24	5	14	1.8	4	-100									
JAPAN KYOTO	17	9	23	2	13	1.5	6	-69									
JAPAN OSAKA	17	10	23	4	14	1	16	-50									
THAILAND PHETCHABUN	32	21	35	17	27	1.5	33	14									
THAILAND BANGKOK	32	25	36	23	29	1.3	19	-34									
MALAYSIA KUALA LUMPUR	32	24	34	22	28	2.1	123	-153									
VIETNAM HANOI	27	20	32	17	24	1.9	2	-41									
CHINA HARBIN	-5	-12	6	-21	-9	-1.3	16	8									
CHINA HAMI	10	-3	26	-10	4	3.6	6	4									
CHINA LANCHOW	13	-1	19	-4	6	4.2	0	-5									
CHINA BEIJING	9	0	20	-8	4	0.1	11	5									
CHINA TIENTSIN	11	1	22	-7	6	0.3	4	-6									
CHINA LHASA	14	-2	18	-5	6	3	0	-2									
CHINA KUNMING	19	9	25	6	14	2.9	35	-5									
CHINA CHENGCHOW	17	5	27	-2	11	2.9	1	-24									
CHINA YECHANG	21	11	28	7	16	3.6	2	-44									
CHINA HANKOW	20	11	28	7	16	4.9	14	-41									
CHINA CHUNGKING	20	14	26	11	17	***	5	**									
CHINA CHIHKIANG	20	11	29	7	16	3	29	-40									
CHINA WU HU	20	9	28	5	15	***	15	**									
CHINA SHANGHAI	19	14	27	10	16	***	18	**									
CHINA NANCHANG	21	13	30	7	17	3.6	33	-21									
CHINA TAIPEI	24	21	31	18	23	2.5	88	24									
CHINA CANTON	26	18	30	14	22	2.8	22	-19									
CHINA NANNING	26	17	29	14	22	2.9	5	-40									
CANARY I LAS PALMAS	26	20	32	19	23	2.7	1	-21									
MOROCCO CASABLANCA	21	13	27	8	17	0.8	0	-74									
MOROCCO MARRAKECH	26	11	32	6	19	2.2	0	-41									
ALGERIA ALGER	20	10	27	6	15	0.1	108	4									
ALGERIA BATNA	16	4	26	-2	10	0.3	32	-5									
TUNISIA TUNIS	19	11	29	4	15	-0.6	48	-8									
NIGER NIAMEY	37	21	40	19	29	1.3	0	0									
MALI TIMBUKTU	34	20	39	14	27	0.8	0	0									
MALI BAMAKO	35	21	37	15	28	1	0	-3									
MAURITAN NOUAKCHOTT	34	22	40	17	28	2.1	0	-4									
SENEGAL DAKAR	32	25	38	22	28	2.8	0	0									
CHAGOS DIEGO GARCIA	28	27	32	23	**	***	204	-7									
LIBYA TRIPOLI	22	11	32	6	16	-1.1	26	-20									
LIBYA BENGHAZI	21	15	27	10	18	0	33	-2									
EGYPT CAIRO	26	16	30	14	21	2.1	0	-4									
EGYPT ASWAN	**	**	34	14	**	***	**	**									
ETHIOPIA ADDIS ABABA	**	**	24	2	**	***	**	**									
KENYA NAIROBI	25	14	29	10	20	0.3	67	-54									
TANZANIA DAR ES SALAAM	31	21	33	13	26	-0.3	106	-10									
GABON LIBREVILLE	29	24	31	22	26	0.5	458	-65									
TOGO LOME	33	25	34	21	29	1.7	30	8									
BURKINA OUAGADOUGOU	37	21	38	18	29	1.3	0	-2									
COTE D'I ABIDJAN	33	25	34	23	29	1.7	186	44									
MOZAMBI MAPUTO	29	21	37	18	25	1.5	249	177									
ZAMBIA LUSAKA	**	**	35	17	**	***	**	**									
ZIMBABWE HARARE	28	17	34	14	22	1.6	124	23									
S AFRICA PRETORIA	27	17	35	11	22	1.2	233	132									
S AFRICA JOHANNESBURG	23	12	30	5	17	-0.5	210	93									
S AFRICA BETHAL	24	12	31	6	18	-0.1	148	21									
CANADA DURBAN	26	19	31	13	23	1.1	278	170									
CANADA CAPE TOWN	23	13	33	7	18	0	44	28									
CANADA TORONTO	9	1	19	-3	5	1.7	34	-37									
CANADA MONTREAL	7	1	14	-5	4	2	36	-57									
CANADA WINNIPEG	1	-7	10	-16	-3	1.5	8	-14									
CANADA REGINA	1	-8	13	-19	-4	1.5	40	28									
CANADA SASKATOON	0	-8	9	-20	-4	1.7	5	-9									
CANADA LETHBRIDGE	4	-5	12	-15	0	0.8	26	9									
CANADA CALGARY	2	-7	10	-14	-3	0.4	14	3									
CANADA EDMONTON	-1	-8	4	-16	-4	-0.1	16	-1									
CANADA VANCOUVER	10	6	15	2	8	1.9	251	81									
MEXICO GUADALAJARA	20	14	24	8	17	-0.6	0	-13									
MEXICO MEXICO CITY	21	13	26	9	17	3.4	5	-9									
MEXICO ACAPULCO	32	24	34	23	28	0.6	1	-43									
BERMUDA ST. GEORGES	25	19	27	15	22	0.4	45	-74									
BAHAMAS NASSAU	28	22	31	17	25	1.5	4	-51									
JAMAICA KINGSTON	32	25	33	23	28	1.5	119	38									
P RICO SAN JUAN	30	24	33	22	27	0.1	153	2									
GUADELO RAIZET	31	23	33	22	27	1.2	161	19									
MARTINIQ LAMENTIN	30	24	31	22	27	1.4	200	10									
BARBADO BRIDGETOWN	31	25	31	22	28	1	28	-104									
TRINIDAD PORT OF SPAIN	31	24	32	22	27	1.3	145	-53									
COLOMBI BOGOTA	19	10	22	5	14	0.9	91	4									
VENEZUE CARACAS	**	**	31	22	**	***	**	**									
F GUIANA CAYENNE	31	23	32	21	27	0.8	174	20									
BRAZIL FORTALEZA	**	**	**	27	**	***	**	**									
BRAZIL RECIFE	30	23	31	20	26	0.2	11	-33									
BRAZIL BELO HORIZONTE	26	19	31	16	22	-0.5	206	-36									
BRAZIL CAMPO GRANDE	**	**	**	24	**	***	**	**									
BRAZIL FRANCA	26	18	30	14	22	3.3	90	-112									
BRAZIL RIO DE JANEIRO	25	**	31	19	**	***	69	-30									
BRAZIL LONDRINA	**	**	33	15	**	***	23	-128									
BRAZIL SANTA MARIA	28	17	36	11	23	1.4	48	-84									
BRAZIL PORTO ALEGRE	26	15	34	10	21	-0.4	39	-36									
PERU LIMA	22	17	23	15	20	0.4	0	0									
BOLIVIA LA PAZ	16	3	30	-1	9	-0.8	43	-7									
CHILE SANTIAGO	26	8	32	5	17	0.4	0	-8									
ARGENTIN IGUAZU	30	18	36	13	24	***	27	**									
ARGENTIN FORMOSA	30	19	37	14	24	0	179	-5									
ARGENTIN CERES	30	15	37	7	22	-0.2	62	-37									
ARGENTIN CORDOBA	27	15	34	8	20	-0.4	61	-39									
ARGENTIN RIO CUARTO	25	14	34	7	19	-0.4	127	5									



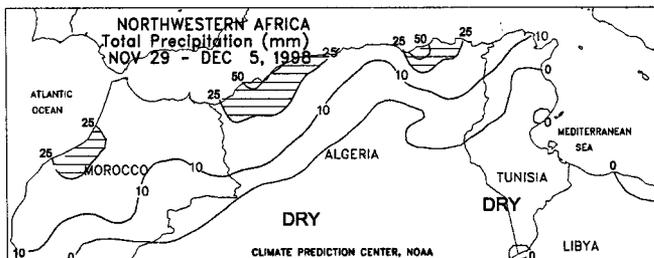
EUROPE

Unseasonably cold weather continued to prevail across most of Europe, causing winter grains to begin entering dormancy in the west and maintaining dormancy of winter grains in the north and east. Weekly temperatures averaged 2 to 7 degrees C below normal in most of Europe, except in Poland, where temperatures averaged 6 to 10 degrees C below normal. Like last week, lowest temperatures (-15 to -22 degrees C) were observed in eastern Poland, where a light to moderate snow cover protected winter grains from potential winterkill. Elsewhere, extreme minimum temperatures ranged from -2 to -4 degrees C in England, France, the Benelux countries, and northern Italy, and from -3 to -9 degrees C in Germany, the Czech Republic, Slovakia, Slovenia, Hungary, Romania, Serbia, and Bulgaria. Several days of dry weather helped late-season fieldwork in England, France, and Germany. In southern Europe, moderate to heavy rain (25 to locally more than 100 mm) spread eastward from eastern Spain through central Italy into Greece, slowing fieldwork.



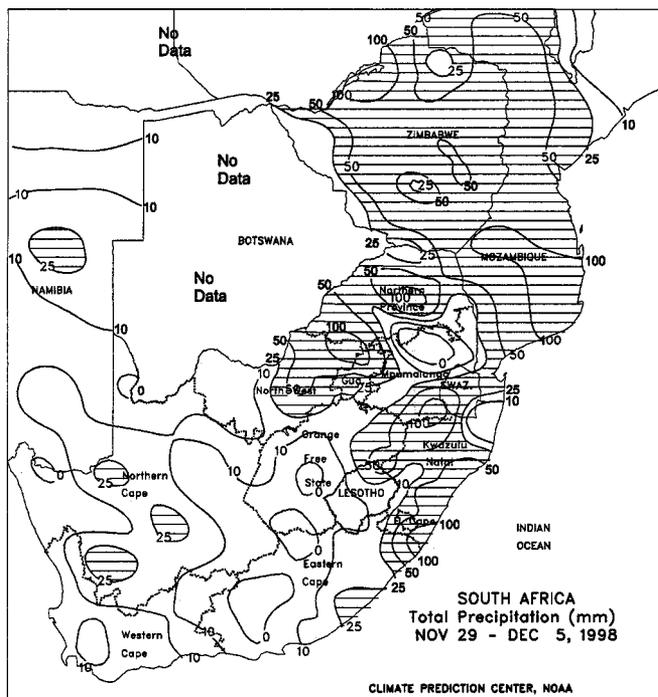
FSU-WESTERN

The fourth consecutive week of unusually cold weather occurred over the region, with weekly temperatures ranging from 5 to 13 degrees C below normal. Generally dry weather (precipitation amounts less than 5 mm) prevailed over most areas during the week. Snow cover as far south as southern Ukraine and the northern tip of the North Caucasus region in Russia provided protection from bitterly cold weather (extreme minimum temperatures ranging from -15 to -32 degrees C). Although winter wheat areas in extreme southern Ukraine and the southern half of the North Caucasus remained snow-free during the week, temperatures did not fall low enough to threaten dormant crops. At week's end, warmer weather spread eastward over Ukraine and southern Russia, with daytime highs rising above freezing (1 to 11 degrees C). The milder weather in these areas was accompanied by a mixture of rain and snow, with precipitation amounts ranging from 5 to 23 mm.



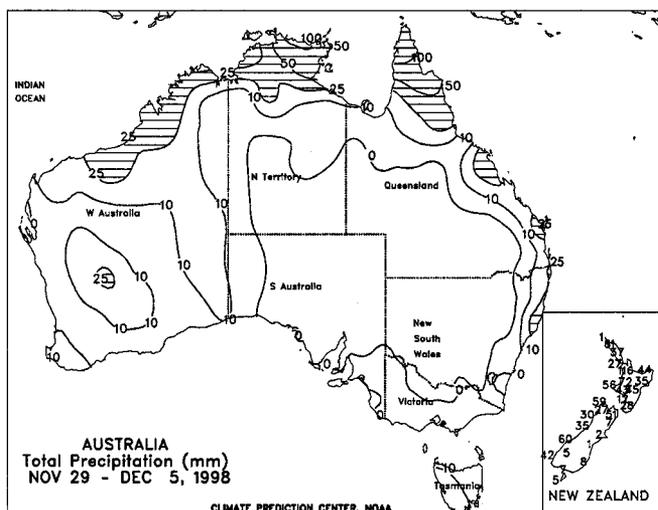
NORTHWESTERN AFRICA

In Morocco, the first significant precipitation since the beginning of the growing season fell over winter grain areas. Rainfall amounts ranging from 10 to 34 mm will likely prompt widespread planting, delayed by previous dryness. However, additional rain is needed to ensure uniform crop emergence and sufficient establishment. Farther east, light to moderate showers (10-33 mm) in Algeria maintained adequate topsoil moisture for emerging winter grains. In Tunisia, light, if any, precipitation (less than 8 mm) allowed winter grain planting to progress without delays. Weekly temperatures averaged 1 to 3 degrees C below normal in Morocco, Algeria, and Tunisia.



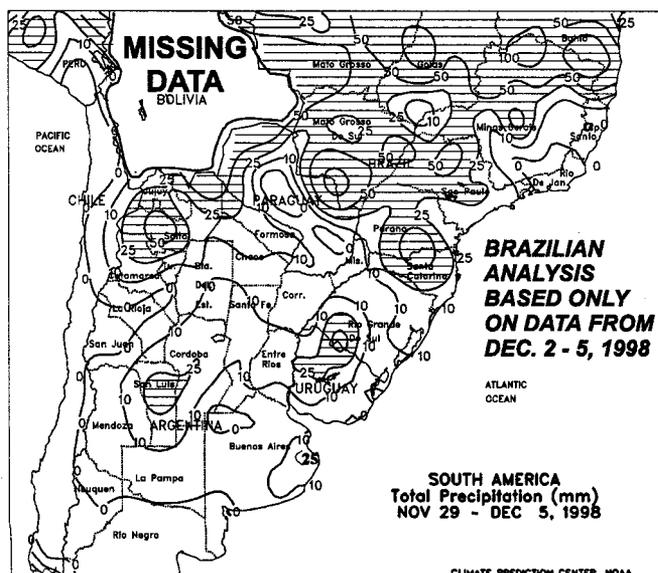
SOUTH AFRICA

Widespread, locally heavy rain (10-50 mm or more) maintained generally favorable growing conditions for corn and other summer crops. The continuation of beneficial rain in eastern and northern corn areas has sustained high pre-season yield prospects. A drying trend was developing in western crop areas of Free State but locally heavy rainfall (25-50 mm or more) returned to important white corn areas of North West. Temperatures across the corn belt were seasonable, with highs reaching the lower 30s C in western crop areas and the upper 20s C in the east. Elsewhere, heavy rain (50 mm or greater) continued in sugarcane areas of KwaZulu-Natal as more moderate amounts covered crops in Eastern Cape. In Western Cape, scattered, mostly light showers (3-8 mm, locally exceeding 20 mm) disrupted late wheat harvests.



AUSTRALIA

Dry weather dominated much of the east. In Queensland and northern New South Wales, the break in the chronic wetness favored cotton and sorghum development. In the southeast (South Australia to southern New South Wales), conditions favored maturing winter wheat and barley. Along the coast, however, showers (10-25 mm or more) kept coastal sugarcane areas unfavorably wet. Temperatures across the east averaged 1-3 degrees C below normal, although occasional highs in the lower to middle 30s C aided winter grain dry down and spurred summer crop growth. Scattered, light to moderate showers (most areas 10 mm or less, but locally exceeding 25 mm) caused some harvest delays in winter grain areas of Western Australia. In New Zealand, moderate to heavy rain (25-50 mm or more) covered most agricultural areas, the exception being pasture areas in eastern South Island.

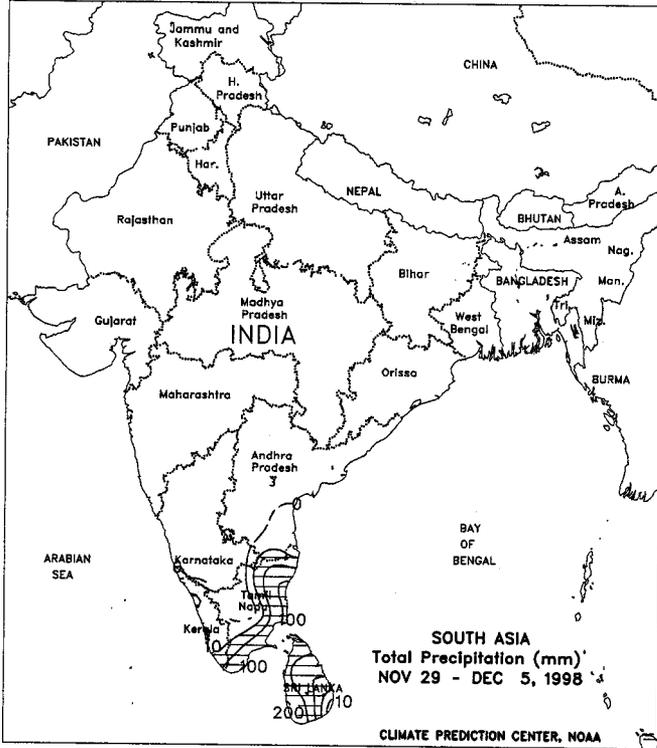


SOUTH AMERICA

In central Argentina, dry weather caused topsoils to become unfavorably dry for soybean and corn planting and germination, especially in northern Buenos Aires. Subsoil moisture supplies should be adequate in southern Cordoba and southern Santa Fe, but limited in northern Buenos Aires. Farther south in southern Buenos Aires, light rain (5-15 mm) provided little relief to stressed filling to maturing winter wheat. According to reports as of November 27, corn was 77 percent planted versus 80 percent last year, sunseed was 90 percent planted versus 85 percent last year, and soybeans were 52 percent planted versus 51 percent last year. Wheat harvesting was 15 percent complete. In southern Brazil, mostly dry weather prevailed across Rio Grande do Sul, causing topsoils to become unfavorably dry for soybean planting. Surface observations were missing from November 29 to December 1, but satellite data suggested that little or no rain fell across Rio Grande do Sul during this period, while scattered showers prevailed to the north. Moderate showers (25-70 mm) covered the remaining major soybean areas, boosting moisture supplies in Parana and maintaining adequate supplies elsewhere.

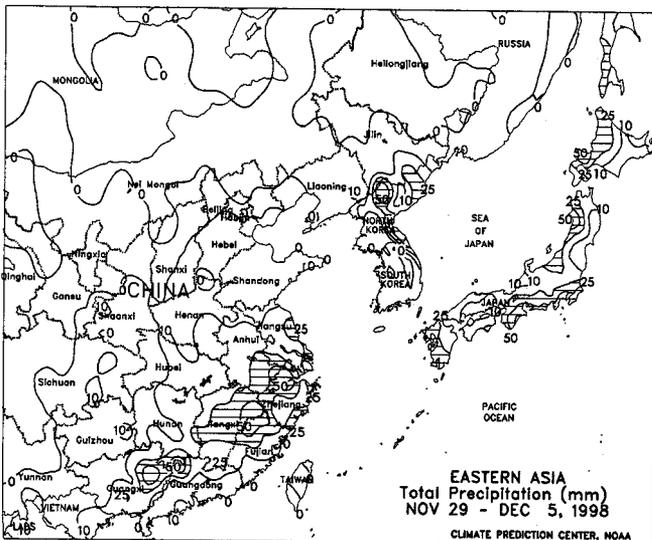
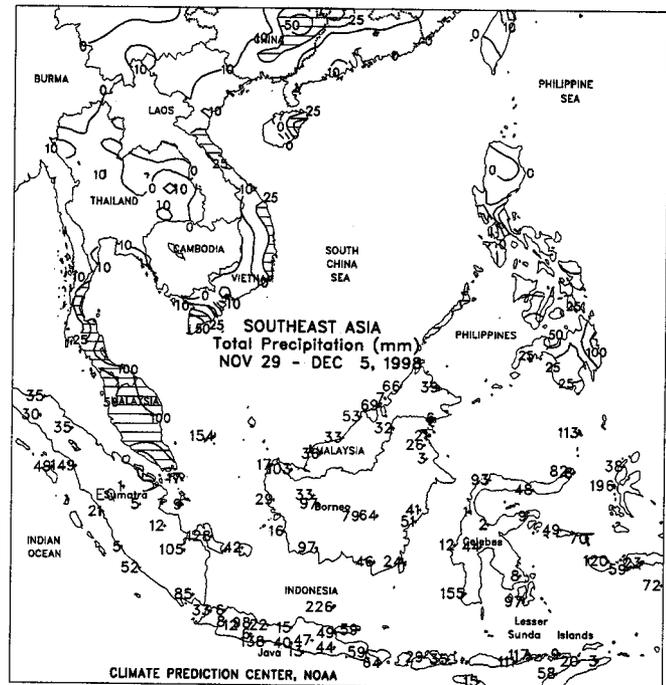
SOUTH ASIA

Warm, dry weather favored maturing summer crops and facilitated seasonal fieldwork. The dryness extended to Bangladesh and neighboring sections of India, bringing some relief to rice areas that had been very wet until recently. In central and northern crop areas, winter wheat and oilseed planting continued to make good progress. In southern India, the drier weather favored early growth of rabi (autumn-planted) grains and oilseeds, but showers disrupted fieldwork in coastal rice areas of the southern tip. Near- to above-normal temperatures throughout much of the region aided summer crop dry down, and germination and early development of newly sown grains and oilseeds.



SOUTHEAST ASIA

Rainfall (5-40 mm) diminished across southern and south-central Vietnam, providing relief from a series of three Tropical Storms (Chip, Dawn, and Elvis) that battered the region during the past several weeks. The drier weather favored seasonal rice harvesting and transplanting. In Thailand, seasonably dry weather favored main-season rice harvesting. Showers (20-70 mm) maintained moisture supplies for rice and corn in Java. Showers (30-90 mm) increased moisture supplies for rice and oil palm across peninsular Malaysia, eastern Malaysia (Sabah and Sarawak), and the Indonesian portion of Borneo. In the Philippines, widespread showers (30-90 mm, with scattered amounts greater than 100 mm) slowed main-season grain harvesting, but maintained moisture reserves for second-season crops.



EASTERN ASIA

Cold weather covered the North China Plain and penetrated as far south as the Yangtze Valley, hardening winter wheat and nudging the crop into the early stages of dormancy. Minimum temperatures ranged from -2 to -8 degrees C (2-4 degrees C below normal) across the North China Plain, burning back vegetative winter wheat. Light precipitation (less than 5 mm water equivalent), falling mostly as snow, fell across Hebei and Shandong. Heavier amounts (10-50 mm), falling mostly as rain, boosted moisture supplies for germinating to vegetative winter grains and oilseeds across the southern North China Plain, Yangtze Valley, and southeastern China.

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Monthly Record Highs (°F), December 1-7, 1998

Location/Date	High	Former Record/Date
December 1		
Pierre, SD	77	76 on Dec. 3, 1941
Alliance, NE	72	72 on Dec. 6, 1939
Yankton, SD	69	67 in 1890, 1939, and Dec. 9, 1970
Minneapolis, MN	68	63 in 1939, 1982
Spencer, IA	67	not available
Mason City, IA	67	not available
Sioux Falls, SD	63	62 on Dec. 3, 1941
Eau Claire, WI	63	63 in 1982
December 2		
Yankton, SD	70	see previous listing
Sioux Falls, SD	63	see previous listing
December 3		
Milwaukee, WI	64	63 in 1877, 1946, 1970, and 1982
Sioux Falls, SD	63	see previous listing
Green Bay, WI	62	62 in 1970
Marquette, MI	59	59 on Dec. 3, 1982
December 4		
Washington (DCA), DC	76	75 on Dec. 28, 1946, Dec. 4, 1982, and Dec. 29, 1984
Newark, NJ	75	72 on Dec. 10, 1946, Dec. 4, 1982, and Dec. 6, 1982
Wilmington, DE	75	74 on Dec. 29, 1984
Atlantic City Marina, NJ	74	72 on Dec. 18 and Dec. 29, 1984
N.Y. Central Park, NY	74	72 on Dec. 4, 1982
Burlington, IA	73	71 on Dec. 3, 1970
Philadelphia, PA	73	72 on Dec. 7, 1951 and Dec. 29, 1984
Bridgeport, CT	72	65 on Dec. 11, 1971
Brookhaven Lab, NY	72	69 on Dec. 29, 1984
Allentown, PA	72	72 on Dec. 29, 1984
Lincoln, IL	72	72 on Dec. 3, 1970 and Dec. 28, 1984
Moline, IL	71	69 on Dec. 3, 1970
Providence, RI	71	70 on Dec. 29, 1984
Champaign, IL	71	70 on Dec. 15, 1948
Cedar Rapids, IA	69	67 on Dec. 5, 1975
Scranton, PA	69	69 on Dec. 2, 1914
Dubuque, IA	67	67 on Dec. 24, 1889
Rockford, IL	66	66 on Dec. 28, 1984
December 5		
Salisbury, MD	76	76 on Dec. 16, 1971
Joplin, MO	76	76 on Dec. 13, 1948, Dec. 7, 1996

Location/Date	High	Former Record/Date
LaCrosse, WI	67	64 on Dec. 2, 1982
Madison, WI	62	62 in 1877, 1970, 1982, and 1984
December 6		
Wilmington, NC	81	81 on Dec. 1, 1982, Dec. 19, 1984, and Dec. 30, 1984
Richmond, VA	81	80 on Dec. 16, 1971
Mobile, AL	81	81 on Dec. 12, 1971 and Dec. 28, 1974
Roanoke, VA	80	76 in 1984
Raleigh-Durham, NC	80	79 on Dec. 4, 1978
Dulles Airport, VA	79	78 on Dec. 29, 1984
Washington (DCA), VA	78	see previous listing
Lynchburg, VA	78	78 in 1984
Baltimore (BWI), MD	77	77 on Dec. 29, 1984
Salisbury, MD	77	see previous listing
Dayton, OH	72	72 on Dec. 2, 1982
Detroit, MI	69	68 in 1982
December 7		
Wilmington, NC	82	see previous listing
Richmond, VA	81	see previous listing
Mobile, AL	81	see previous listing
Raleigh-Durham, NC	80	see previous listing
Lynchburg, VA	79	see previous listing
Washington (DCA), VA	79	see previous listing
Greensboro, NC	78	78 on Dec. 16, 1971
Baltimore (BWI), MD	77	see previous listing
Salisbury, MD	77	see previous listing
Atlantic City, NJ	77	75 on Dec. 29, 1984
Providence, RI	77	see previous listing
Bridgeport, CT	76	see previous listing
Boston, MA	76	73 on Dec. 29, 1984
Hartford, CT	76	74 on Dec. 29, 1984
Newark, NJ	76	see previous listing
Harrisburg, PA	75	75 on Dec. 29, 1984
Atlantic City Marina, NJ	74	see previous listing
Milton (Blue Hill), MA	74	72 on Dec. 29, 1984
Concord, NH	73	68 on Dec. 4, 1982
Philadelphia, PA	73	see previous listing
Worcester, MA	72	70 on Dec. 29, 1984
Portland, ME	71	69 on Dec. 4, 1982
Williamsport, PA	69	68 on Dec. 1, 1927
Burlington, VT	67	67 on Dec. 5, 1941
Montpelier, VT	67	64 on Dec. 4, 1982
Massena, NY	65	65 on Dec. 3, 1982

Compiled from National Weather Service record reports.
Data are preliminary and subject to change.

Climate Prediction Center, W/NP52
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