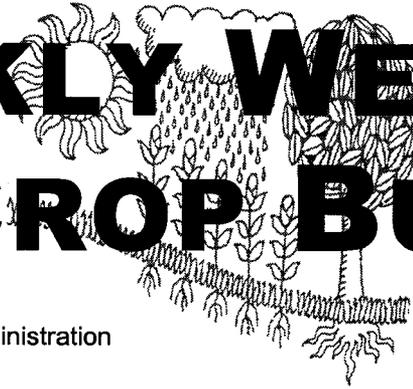


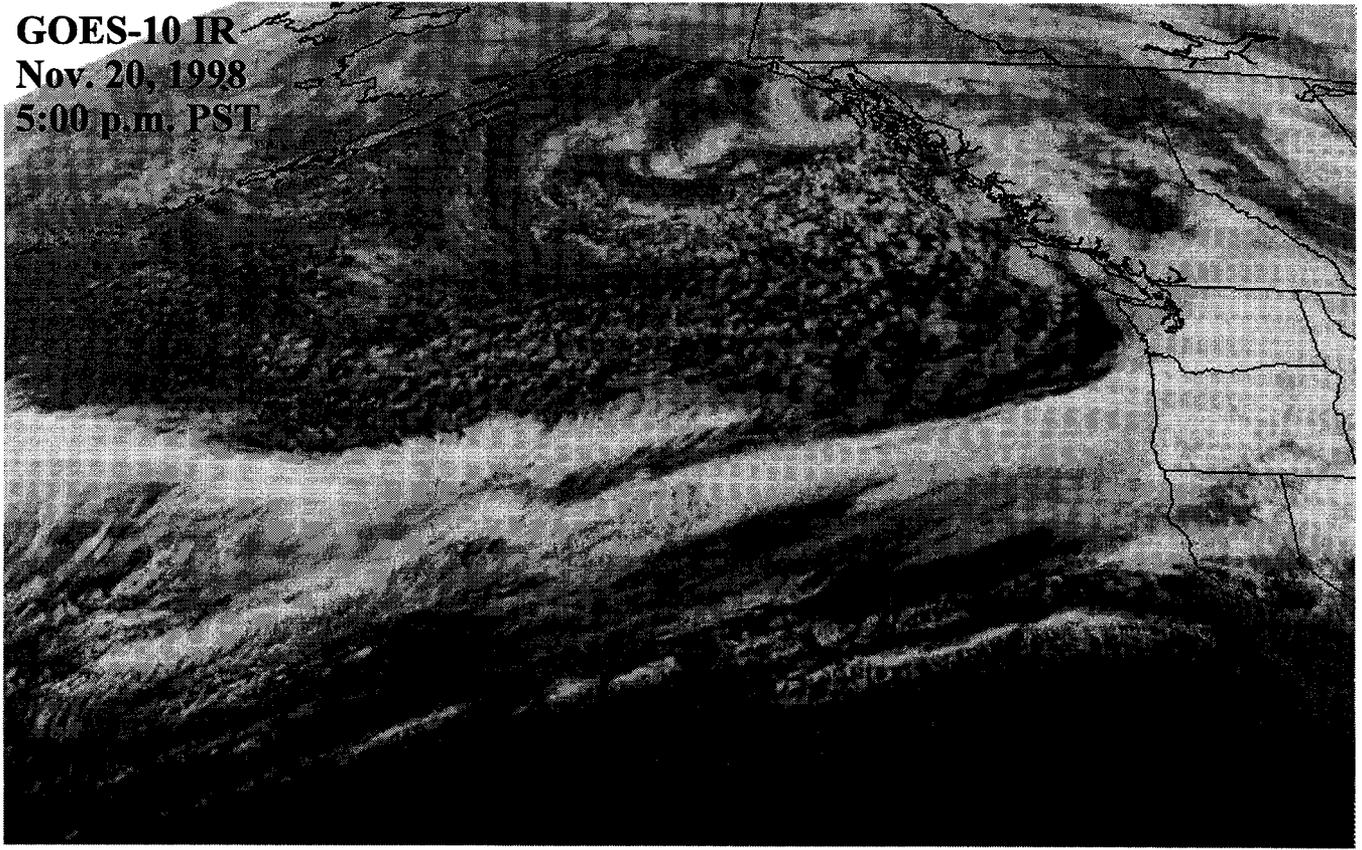
WEEKLY WEATHER AND CROP BULLETIN



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service
and World Agricultural Outlook Board

GOES-10 IR
Nov. 20, 1998
5:00 p.m. PST



HIGHLIGHTS

November 15 - 21, 1998

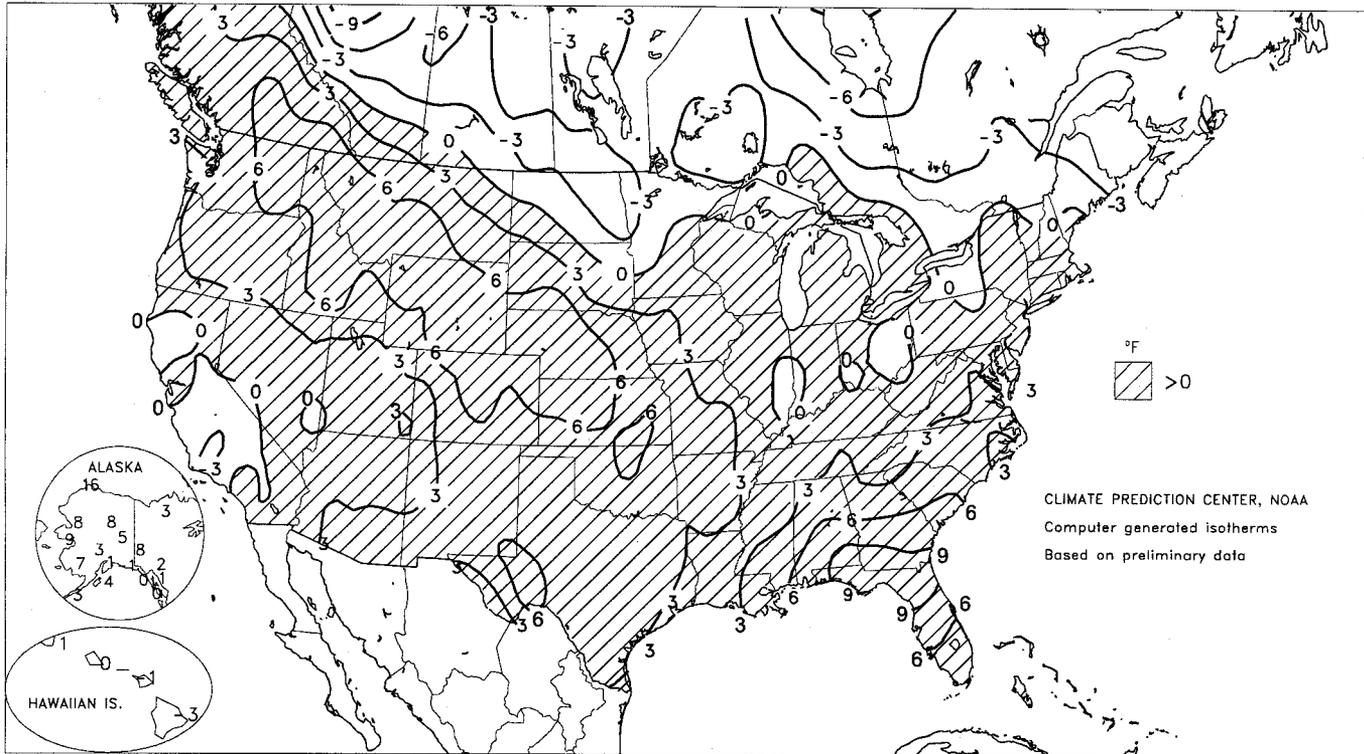
Hheavy precipitation and high winds across the **Northwest**, and snowy, cold weather on the **northern Plains**, were exceptions to an otherwise mild, mostly dry pattern across much of the Nation. Scattered showers in the **Southeast** provided beneficial moisture for recently planted winter wheat, while mild, dry weather in the **Corn Belt**, **Southwest**, and **central and southern Plains** favored late summer crop harvesting and winter wheat growth. Weekly temperatures ranged from 3 to 9°F above normal in a broad arc from the **Northwestern and Rocky Mountain States** into the **Southeast**, including the **central and southern Plains**. Departures topped +10°F at a few locations in southern **Alabama** and western **Florida**. Near-normal
(Continued on page 3)

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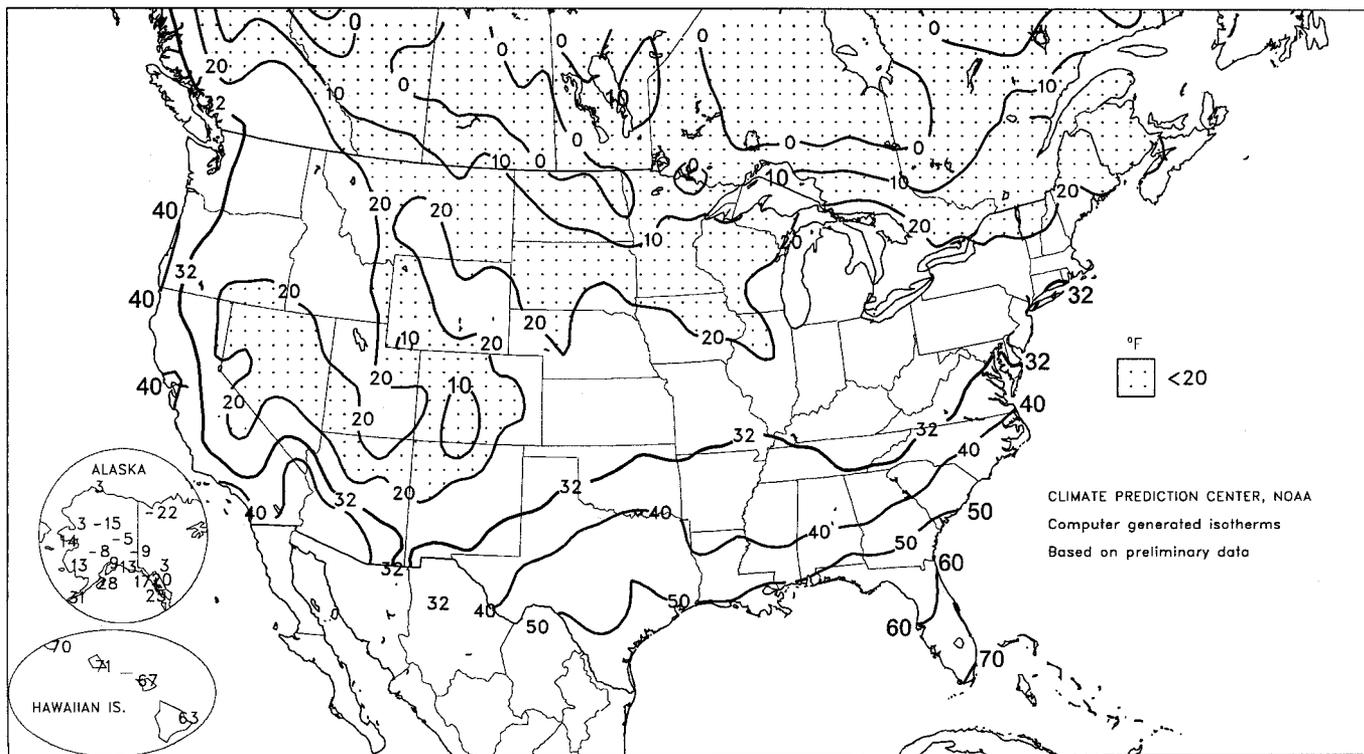
Departure of Average Temperature from Normal (°F)

NOV 15 - 21, 1998



Extreme Minimum Temperature (°F)

NOV 15 - 21, 1998



(Continued from front cover)

readings prevailed in **California** and from the **Great Lakes States** into the **Northeast**. Temperatures averaged as much as 7°F below normal, however, in the snow-covered **Red River Valley**.

Early in the week, warmer-than-normal weather prevailed nearly nationwide. On Sunday in **Colorado**, daily records were tied or broken in **Yuma** (78°F) and **Pueblo** (80°F). A day later, **Melbourne**, FL recorded 85°F. Slightly cooler air overspread the **Western and Central States** after midweek, but warmth continued in the **Southeast**. **Melbourne** also netted a daily-record high (87°F) on Friday. Although scattered showers dampened the **Southeast** early in the week and again toward week's end, portions of the **Mid-Atlantic region** remained extremely dry. July 1 - November 21 rainfall totaled 5.29 inches (33 percent of normal) in **Washington, DC** and 5.14 inches (32 percent) in **Baltimore, MD**. In both cities, July-November amounts in 1930 (4.75 inches in **Washington** and 3.29 inches in **Baltimore**) were the lowest on record.

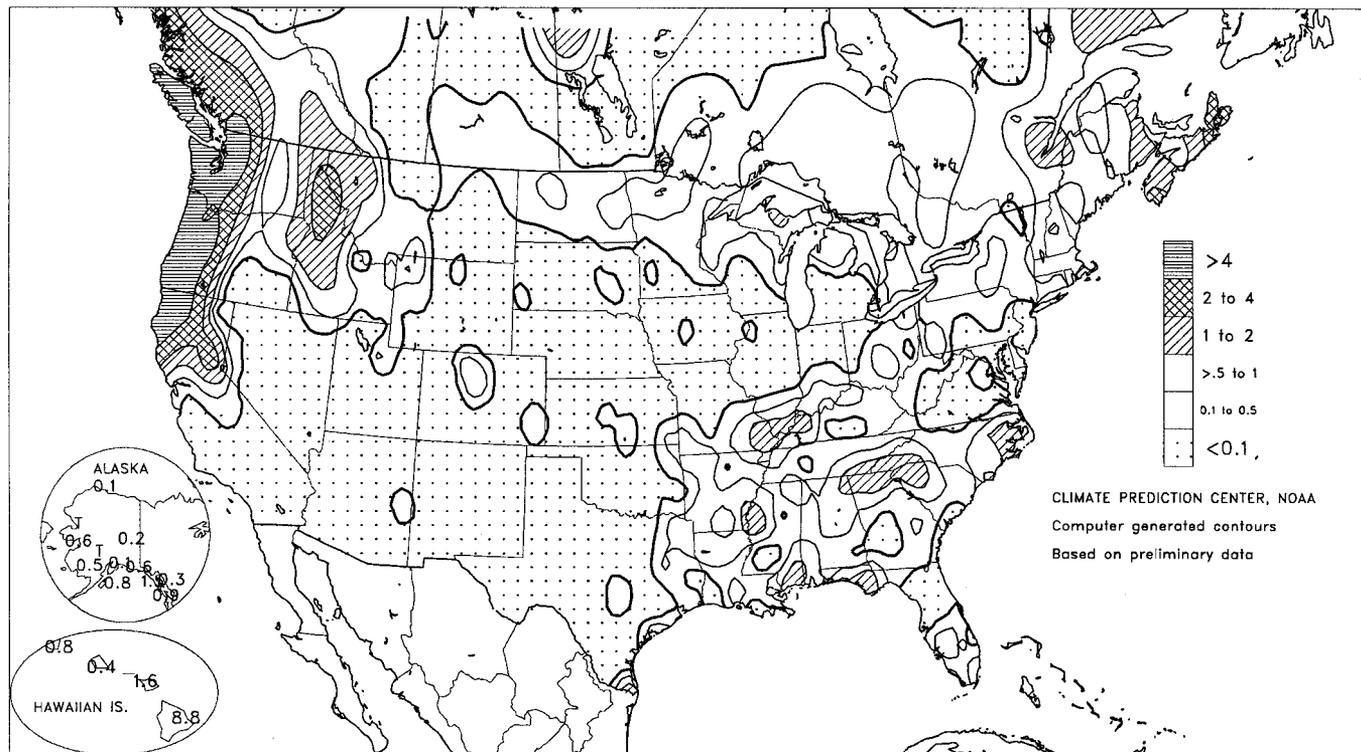
Meanwhile, flooding gradually subsided across **eastern Texas**. On Tuesday, the **San Bernard River** near **Boling** crested at

greater than 19 feet above flood stage, but remained more than 5 feet below the October 21 record. Farther north, snow overspread the **northern Plains** and **western Great Lakes region** at midweek. Storm-total snowfall reached 17.0 inches in **Thief River Falls, MN** and 12.9 inches in **Grand Forks, ND**. By Friday morning, post-storm lows in the **Red River Valley** dipped to -5°F in **Fargo, ND** and -8°F in **Grand Forks**.

Storminess intensified across the **Pacific Northwest** after midweek. In **Oregon**, 120-hour (November 17-22) rainfall included 9.19 inches in **Brookings** and 4.95 inches in **Roseburg**. In the **Oregon Cascades** at **Crater Lake**, 27 inches of snow fell in 24 hours on November 21-22, raising the snow depth to 49 inches. Farther south, 5.21 inches deluged **Eureka, CA** on November 20-21, breaking their 24-hour November record set in 1926. **Crescent City, CA** received 5.68 inches during the same period. Generally minor flooding was reported in **western Oregon** and **northwestern California**. On Saturday, the **Smith River** near **Hiouchi Valley, CA** crested about 2.3 feet above flood stage.

Total Precipitation (Inches)

NOV 15 - 21, 1998



National Weather Data for Selected Cities

Weather Data for the Week Ending November 21, 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 Sep 1	PCT. NORMAL SINCE Sep 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
AL BIRMINGHAM	68	47	73	35	58	6	0.46	-0.80	0.33	6.59	68	60.55	128	94	57	0	0	0	3	0	
AL HUNTSVILLE	84	43	70	36	64	3	0.80	-0.58	0.40	6.00	57	38.76	78	87	59	0	0	0	3	0	
AL MOBILE	72	58	78	49	65	6	0.96	-0.04	0.86	29.80	258	83.67	146	99	68	0	0	4	1		
AL MONTGOMERY	73	53	80	41	63	7	0.16	-0.84	0.04	11.16	121	46.45	99	96	58	0	0	5	0		
AK ANCHORAGE	27	15	32	9	21	1	0.06	-0.18	0.06	1.39	25	9.92	68	87	79	0	7	1	0		
AK BARRROW	15	10	19	3	13	16	0.12	0.06	0.01	2.11	173	4.40	106	84	70	0	7	7	0		
AK FAIRBANKS	12	-2	17	-5	5	5	0.15	-0.04	0.09	1.62	68	10.02	102	90	80	0	7	4	0		
AK JUNEAU	35	28	43	20	32	1	0.35	-0.72	0.13	19.57	108	58.37	121	93	68	0	5	4	0		
AK KODIAK	42	34	45	28	38	4	0.79	-0.56	0.27	31.86	174	99.68	169	95	71	0	3	5	0		
AK NOME	27	20	30	14	23	8	0.55	0.31	0.16	6.30	139	23.29	169	96	81	0	7	6	0		
AZ FLAGSTAFF	54	21	60	15	38	2	0.00	-0.46	0.00	8.84	179	26.48	134	82	24	0	7	0	0		
AZ PHOENIX	76	50	80	48	63	2	0.00	-0.16	0.00	1.72	88	9.77	151	58	20	0	0	0	0		
AZ TUCSON	78	47	83	41	62	4	0.00	-0.15	0.00	1.72	54	12.88	120	60	16	0	0	0	0		
AZ YUMA	77	51	81	47	64	1	0.00	-0.06	0.00	2.26	314	4.38	167	51	19	0	0	0	0		
AR FORT SMITH	68	43	73	37	56	6	0.08	-0.86	0.06	13.39	137	40.39	110	97	46	0	0	3	0		
AR LITTLE ROCK	65	44	70	39	54	3	0.43	-0.82	0.26	10.33	91	37.08	83	98	55	0	0	4	0		
CA BAKERSFIELD	80	39	85	35	50	-6	0.02	-0.16	0.01	0.90	97	12.57	258	96	51	0	0	2	0		
CA EUREKA	58	47	64	39	53	1	6.19	4.58	4.19	11.81	149	52.87	1808	100	75	0	0	6	3		
CA FRESNO	60	41	64	37	51	-2	0.06	-0.27	0.06	0.79	47	16.78	184	97	53	0	0	1	0		
CA LOS ANGELES	69	50	76	49	60	-1	0.00	-0.44	0.00	0.82	34	24.45	251	93	44	0	0	0	0		
CA REDDING	58	44	63	34	51	0	2.15	0.87	1.10	7.04	106	54.44	209	93	57	0	0	4	2		
CA SACRAMENTO	62	42	68	37	52	0	0.31	-0.36	0.22	1.98	60	25.43	180	95	54	0	0	2	0		
CA SAN DIEGO	66	52	71	49	59	-2	0.01	-0.35	0.01	0.45	29	14.72	188	82	48	0	0	1	0		
CA SAN FRANCISCO	60	48	63	42	54	0	0.24	-0.48	0.08	1.85	49	30.22	194	94	62	0	0	4	0		
CA ALAMOSA	51	16	81	9	33	5	0.00	-0.09	0.00	2.88	152	6.86	99	88	21	0	7	0	0		
CA CO SPRINGS	56	30	70	17	43	6	0.00	-0.11	0.00	2.02	80	16.20	103	69	16	0	3	0	0		
CA DENVER	58	32	73	22	45	7	0.01	-0.18	0.01	2.43	85	15.82	110	74	20	0	3	1	0		
CA GRAND JUNCTION	52	28	64	22	40	1	0.00	-0.17	0.00	3.15	136	8.77	112	81	31	0	8	0	0		
CA PUEBLO	64	26	79	17	45	6	0.00	-0.11	0.00	2.55	142	11.51	108	79	19	0	6	0	0		
CT BRIDGEPORT	53	41	62	35	47	2	0.25	-0.66	0.20	6.43	73	40.33	109	92	64	0	0	3	0		
CT HARTFORD	48	34	58	26	41	0	0.46	-0.50	0.25	9.53	94	43.46	111	94	54	0	2	4	0		
DC WASHINGTON	60	42	68	36	51	2	0.10	-0.63	0.10	2.94	35	33.80	98	94	47	0	0	1	0		
DE WILMINGTON	57	37	64	32	47	2	0.12	-0.65	0.11	5.31	62	34.98	96	85	47	0	1	2	0		
FL DAYTONA BEACH	83	65	85	60	74	9	0.01	-0.63	0.01	8.24	66	38.12	86	99	58	0	0	1	0		
FL JACKSONVILLE	78	61	82	58	70	9	0.35	-0.15	0.18	10.99	96	54.41	114	100	65	0	0	3	0		
FL KEY WEST	83	75	84	72	79	4	0.13	-0.51	0.12	18.86	151	36.30	99	97	73	0	0	1	0		
FL MIAMI	83	73	85	71	78	5	0.07	-0.49	0.01	26.11	170	67.61	128	97	75	0	0	2	0		
FL ORLANDO	84	64	86	60	74	7	0.08	-0.47	0.08	7.87	76	44.09	97	99	56	0	0	1	0		
FL PENSACOLA	74	61	80	50	67	7	0.80	-0.21	0.33	20.96	175	61.23	108	98	65	0	0	5	0		
FL TALLAHASSEE	78	62	81	57	70	11	0.48	-0.45	0.44	15.44	140	57.12	96	100	60	0	0	4	0		
FL TAMPA	82	68	84	63	75	8	0.00	-0.42	0.00	9.20	100	54.34	132	98	63	0	0	0	0		
FL WEST PALM BEACH	82	69	83	66	75	4	0.11	-0.95	0.02	21.66	116	62.89	110	96	65	0	0	2	0		
GA ATHENS	65	48	73	38	56	4	0.88	0.02	0.60	9.31	102	48.93	110	96	62	0	0	2	1		
GA ATLANTA	65	49	70	39	57	4	0.38	-0.54	0.18	6.76	74	44.41	98	94	60	0	0	3	0		
GA AUGUSTA	70	50	81	38	60	6	0.16	-0.41	0.09	9.35	124	46.50	115	98	58	0	0	3	0		
GA COLUMBUS	72	55	78	44	64	8	0.24	-0.62	0.08	6.80	88	31.73	71	95	57	0	0	5	0		
GA MACON	72	52	79	41	62	7	0.14	-0.51	0.12	9.08	135	41.82	106	97	57	0	0	3	0		
GA SAVANNAH	73	57	79	53	65	7	0.02	-0.49	0.01	7.00	84	47.03	103	98	64	0	0	2	0		
HI HILO	77	65	79	63	71	-3	8.80	5.31	2.91	36.16	128	95.07	85	100	78	0	0	7	5		
HI HONOLULU	82	73	84	71	77	0	0.41	-0.30	0.09	1.17	23	3.79	22	82	55	0	0	6	0		
HI KAHULUI	79	70	82	67	75	-1	1.64	1.01	0.51	2.43	74	5.55	33	90	65	0	0	7	1		
HI LIHUE	80	72	81	70	76	1	0.75	-0.55	0.35	3.49	33	23.43	65	86	67	0	0	6	0		
ID BOISE	53	37	60	30	45	8	0.37	0.01	0.09	2.77	109	14.79	144	81	43	0	2	3	0		
ID LEWISTON	51	40	59	34	46	5	0.32	0.04	0.24	4.63	184	16.00	146	80	49	0	0	6	0		
ID POCATELLO	48	29	55	20	39	4	0.34	0.06	0.15	3.15	123	12.45	117	95	52	0	6	4	0		
IL CHICAGO/O'HARE	49	34	60	25	41	2	0.02	-0.67	0.00	9.25	112	36.03	111	85	56	0	2	1	0		
IL MOLINE	49	30	61	18	40	1	0.00	-0.58	0.00	13.56	155	46.71	129	85	55	0	4	0	0		
IL PEORIA	51	33	62	20	42	2	0.00	-0.63	0.00	7.91	94	40.48	123	83	51	0	2	0	0		
IL ROCKFORD	46	30	59	18	38	1	0.05	-0.55	0.00	9.28	109	38.79	116	89	59	0	3	1	0		
IL SPRINGFIELD	54	34	62	21	44	2	0.00	-0.59	0.00	7.31	95	44.20	139	82	44	0	2	0	0		
IN EVANSVILLE	57	34	66	28	46	0	0.59	-0.30	0.39	6.28	75	39.83	104	96	49	0	3	2	0		
IN FORT WAYNE	49	32	56	29	41	0	0.00	-0.66	0.00	6.35	90	36.72	119	86	51	0	5	0	0		
IN INDIANAPOLIS	62	34	60	22	43	1	0.18	-0.59	0.18	9.40	122	47.49	134	91	46	0	2	2	0		
IN SOUTH BEND	48	34	56	31	41	1	0.00	-0.77	0.00	6.20	58	33.05	95	92	63	0	3	0	0		
IA BURLINGTON	52	38	60	24	45	5	0.00	-0.45	0.00	18.40	213	50.57	1527	77	51	0	2	0	0		
IA CEDAR RAPIDS	45	28	55	18	35	-1	0.00	-0.49	0.00	12.76	172	45.05	1447	89	59	0	2	0	0		
IA DES MOINES	50	29	61	22	40	2	0.00	-0.40	0.00	5.64	78	39.95	128	88	53	0	4	0	0		
IA DUBUQUE	44	28	55	17	36	1	0.01	-0.62	0.01	9.34	100	42.96	121	91	62	0	5	1	0		
IA SIOUX CITY	50	29	57	23	39	4	0.00	-0.24	0.00	5.71	101	30.93	125	91	60	0	6	0	0		
IA WATERLOO	44	27	54	15	36	1	0.06	-0.35	0.00	8.25	111	44.52	139	87	62	0	5	1	0		
KS CONCORDIA	59	35	65	30	47	7	0.00	-0.25	0.00	10.39	178	32.87	119	87	47	0	3	0	0		
KS DODGE CITY	63	35	71	28	49	7	0.00	-0.19	0.00	6.78	178	22.04	107	89	30	0	3	0	0		
KS GOODLAND	58	33	75	27	46	9	0.03	-0.14	0.03	3.22	108	17.28	99	81	32	0	4	1	0		
KS TOPEKA	60	34	70	28	47	5	0.00	-0.43	0.00	14.24	172	40.35	121	92	41	0	3	0	0		

Based on 1961-90 normals

Weather Data for the Week Ending November 21, 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 Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	82 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	50 INCH OR MORE		
KY WICHITA	81	36	70	30	48	5	0.07	-0.29	0.00	15.31	223	93.04	119	92	41	0	2	1	0		
KY JACKSON	59	40	68	32	46	2	0.23	-0.77	0.23	5.79	60	46.36	105	88	47	0	1	1	0		
KY LEXINGTON	58	36	64	29	46	0	0.38	-0.46	0.28	3.82	48	45.26	115	93	51	0	2	2	0		
KY LOUISVILLE	59	40	68	33	49	3	0.81	-0.08	0.46	5.44	65	44.83	113	92	46	0	0	2	0		
LA PADUCAH	60	36	68	32	48	1	0.94	-0.11	0.94	9.49	99	51.63	119	97	48	0	0	0	0		
LA BATON ROUGE	72	55	79	48	63	4	0.47	-0.56	0.25	13.62	122	52.72	98	98	67	0	0	2	0		
LA LAKE CHARLES	69	55	80	49	62	3	0.08	-0.93	0.07	21.05	168	53.11	110	98	75	0	0	2	0		
LA NEW ORLEANS	71	58	80	53	65	4	0.27	-0.80	0.22	24.30	212	76.88	141	98	72	0	0	2	0		
LA SHREVEPORT	67	49	71	39	58	2	0.23	-0.82	0.13	17.61	177	43.87	108	95	67	0	0	4	0		
ME CARIBOU	31	19	37	11	25	-5	0.49	-0.35	0.20	6.85	76	33.56	104	92	68	0	7	4	0		
ME PORTLAND	46	33	55	25	39	1	0.35	-0.89	0.15	14.28	135	52.21	137	91	48	0	3	3	0		
MD BALTIMORE	58	35	65	29	46	0	0.07	-0.71	0.07	2.89	33	32.54	90	94	47	0	3	1	0		
MA BOSTON	50	39	58	33	45	0	0.41	-0.60	0.20	9.20	99	51.51	142	94	58	0	0	3	0		
MA WORCESTER	48	36	53	30	40	2	0.72	-0.33	0.26	7.88	67	44.29	104	91	47	0	2	6	0		
MI ALPENA	41	32	47	23	38	1	0.56	0.04	0.50	9.28	138	31.18	119	95	66	0	4	4	1		
MI GRAND RAPIDS	46	33	54	30	39	2	0.12	-0.68	0.00	7.39	79	30.70	95	87	59	0	4	1	0		
MI HOUGHTON LAKE	39	32	46	27	35	1	0.66	0.14	0.60	8.24	115	22.96	90	98	72	0	5	4	1		
MI LANSING	48	32	53	27	39	1	0.03	-0.80	0.02	5.38	72	27.16	99	89	61	0	5	2	0		
MI MARQUETTE	35	23	42	9	29	0	1.25	0.57	0.88	8.12	83	37.49	118	93	68	0	0	0	0		
MI MUSKEGON	48	35	55	31	41	2	0.11	-0.63	0.06	9.11	103	26.43	92	86	61	0	1	3	0		
MN DULUTH	34	21	39	11	27	0	0.75	0.34	0.52	10.81	141	31.55	112	97	75	0	7	3	1		
MN INT'L FALLS	28	13	35	-4	20	-4	0.92	0.67	0.61	6.29	105	22.29	96	95	78	0	7	3	1		
MN MINNEAPOLIS	40	26	49	19	33	1	0.15	-0.20	0.15	4.55	75	32.65	122	87	65	0	6	1	0		
MN ROCHESTER	38	26	47	16	32	1	0.12	-0.25	0.09	6.93	99	31.93	113	95	76	0	5	2	0		
MN ST. CLOUD	37	23	43	15	30	2	0.52	0.24	0.45	4.71	74	24.06	92	94	71	0	7	2	0		
MS JACKSON	68	48	75	39	58	3	0.23	-0.93	0.20	7.65	78	45.72	96	98	67	0	0	4	0		
MS MERIDIAN	71	48	78	38	60	5	0.58	-0.50	0.21	6.67	70	50.31	102	100	61	0	0	3	0		
MS TUPELO	67	42	74	35	55	3	0.71	-0.46	0.71	6.32	62	43.32	90	97	52	0	0	1	1		
MO COLUMBIA	57	35	64	29	46	3	0.16	-0.52	0.16	13.25	144	43.46	122	93	52	0	2	1	0		
MO KANSAS CITY	58	35	69	29	48	4	0.00	-0.42	0.00	18.85	197	46.03	130	92	49	0	3	0	0		
MO SAINT LOUIS	57	37	66	29	47	2	0.20	-0.58	0.20	6.96	86	42.68	127	89	50	0	1	1	0		
MO SPRINGFIELD	60	36	68	29	48	3	0.35	-0.53	0.35	12.78	118	46.50	120	96	50	0	2	1	0		
MT BILLINGS	50	33	61	24	42	8	0.12	-0.07	0.12	3.00	96	13.78	98	75	37	0	4	1	0		
MT BUTTE	42	28	48	18	35	8	0.19	0.08	0.11	1.94	83	13.96	121	89	43	0	6	2	0		
MT GLASGOW	36	23	54	14	30	2	0.16	0.10	0.10	4.78	263	14.34	137	94	74	0	6	2	0		
MT GREAT FALLS	45	29	53	14	37	4	0.23	0.07	0.23	2.20	89	16.13	114	81	44	0	4	1	0		
MT KALISPELL	43	31	49	23	37	7	0.40	0.09	0.20	2.98	100	18.12	127	96	62	0	4	5	0		
MT MILES CITY	45	27	59	15	36	5	0.05	-0.06	0.04	3.29	129	13.41	101	92	62	0	5	2	0		
MT MISSOULA	44	33	51	28	38	7	1.03	0.84	0.71	3.35	140	19.36	181	96	58	0	5	7	1		
NE GRAND ISLAND	56	30	66	22	43	7	0.00	-0.25	0.00	4.24	86	25.85	108	88	48	0	4	0	0		
NE LINCOLN	55	28	65	21	42	4	0.00	-0.28	0.00	8.33	127	34.02	126	90	51	0	5	0	0		
NE NORFOLK	51	27	57	20	39	4	0.00	-0.22	0.00	6.16	128	34.85	144	91	58	0	6	0	0		
NE NORTH PLATTE	58	23	70	17	41	7	0.00	-0.16	0.00	4.35	143	22.43	120	95	34	0	7	0	0		
NE OMAHA	54	29	62	22	41	4	0.00	-0.33	0.00	4.88	69	39.50	139	89	50	0	5	0	0		
NE SCOTTSBLUFF	55	26	69	20	40	5	0.00	-0.14	0.00	4.44	191	16.46	114	88	32	0	6	0	0		
NE VALENTINE	55	25	71	18	40	7	0.00	-0.14	0.00	5.50	190	23.98	136	92	36	0	7	0	0		
NV ELY	51	23	57	14	37	4	0.00	-0.16	0.00	2.90	120	11.94	128	77	24	0	7	0	0		
NV LAS VEGAS	65	43	70	38	54	0	0.00	-0.11	0.00	1.79	229	6.86	192	52	23	0	0	0	0		
NV RENO	54	30	61	22	42	3	0.07	-0.15	0.02	3.00	229	11.70	188	79	30	0	5	2	0		
NV WINNEMUCCA	51	27	62	15	39	2	0.17	-0.05	0.16	4.43	270	14.74	208	89	43	0	6	2	0		
NH CONCORD	44	31	55	22	38	1	0.62	-0.33	0.20	6.33	74	33.56	104	95	48	0	3	6	0		
NJ NEWARK	54	40	62	31	47	1	0.11	-0.83	0.07	5.03	53	42.06	107	86	49	0	1	2	0		
NM ALBUQUERQUE	59	34	65	24	47	4	0.00	-0.08	0.00	2.26	103	9.46	115	68	22	0	1	0	0		
NY ALBANY	45	34	51	26	40	1	0.56	-0.21	0.40	7.19	89	37.34	116	99	72	0	3	5	0		
NY BINGHAMTON	43	32	49	28	37	0	0.47	-0.30	0.29	6.72	79	37.15	113	94	61	0	5	4	0		
NY BUFFALO	46	34	57	29	40	0	0.18	-0.73	0.13	5.74	62	32.88	97	88	58	0	3	3	0		
NY ROCHESTER	46	32	53	27	39	-1	0.26	-0.43	0.21	5.80	78	40.30	142	88	57	0	4	3	0		
NY SYRACUSE	48	33	54	23	40	0	0.63	-0.25	0.26	6.65	69	35.10	101	89	59	0	3	5	0		
NC ASHEVILLE	58	37	63	29	48	1	0.41	-0.42	0.40	6.00	60	44.81	104	97	59	0	2	2	0		
NC CHARLOTTE	65	44	72	38	55	3	0.43	-0.31	0.41	7.44	82	37.76	98	92	53	0	0	3	0		
NC GREENSBORO	64	41	70	33	53	4	0.30	-0.39	0.30	4.34	48	42.81	111	92	46	0	0	1	0		
NC HATTERAS	65	55	69	47	60	4	0.52	-0.64	0.21	10.06	73	57.85	115	96	64	0	0	3	0		
NC RALEIGH	66	42	72	36	54	3	0.38	-0.31	0.30	8.62	105	48.98	131	97	53	0	0	3	0		
NC WILMINGTON	68	51	79	44	59	3	0.69	-0.06	0.38	7.64	78	59.59	120	98	62	0	0	4	0		
ND BISMARCK	34	20	45	9	27	0	0.44	0.33	0.39	5.54	201	23.54	159	97	80	0	7	2	0		
ND DICKINSON	39	25	55	17	32	4	0.12	0.03	0.07	7.56	256	24.43	157	96	73	0	6	3	0		
ND FARGO	30	15	35	-5	23	-4	0.38	0.23	0.33	7.91	187	30.53	164	95	81	0	7	4	0		
ND GRAND FORKS	28	10	35	-9	18	-7	0.35	0.21	0.16	6.80	170	22.35	128	97	82	0	7	3	0		
ND JAMESTOWN	30	17	41	8	24	-3	0.51	0.40	0.43	5.98	194	21.54	132	98	83	0	7	3	0		
ND WILLISTON	30	18	43	13	24	-1	0.50	0.39	0.30	5.40	221	17.08	132	97	81	0	7	4	0		
OH AKRON-CANTON	49	33	56	25	41	0	0.62	-0.10	0.53	8.24	81	37.65	115	97	84	0	3	3	1		
OH CINCINNATI	45	32	60	21	42	-1	0.41	-0.42	0.38	4.91	60	46.64	126	97	52	0	6	2	0		
OH CLEVELAND	50	35	61	27	42	1	0.18	-0.58	0.16	4.62	57	30.37	93	88	59	0	2	3	0		
OH COLUMBUS	52	34	69	29	43	1	0.29	-0.49	0.29	5.67	77	33.67	98	94	58	0	4	1	0		
OH DAYTON	51	34	61	29	43	1	0.22	-0.51	0.21	5.62	79	36.87	113	85	49	0	3	2	0		
OH MANSFIELD	48	32	58	25	40	-1	0.15	-0.70	0.15	4.49	55	35.34	100	91	58	0	5	1	0		

Weather Data for the Week Ending November 21, 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 Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.		
																90 AND ABOVE	82 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
OK TOLEDO	49	32	58	26	41	2	0.00	-0.68	0.00	3.78	55	31.08	107	93	61	0	3	0	0	
OK YOUNGSTOWN	49	33	56	27	41	1	0.46	-0.29	0.29	7.42	90	34.86	104	88	57	0	3	4	0	
OK OKLAHOMA CITY	66	43	73	34	54	6	0.09	-0.35	0.02	13.53	158	33.02	105	94	50	0	0	1	0	
OK TULSA	66	42	73	32	54	5	0.02	-0.70	0.02	16.60	156	44.14	118	93	40	0	1	1	0	
OR ASTORIA	53	43	56	36	48	1	4.55	2.11	2.34	18.36	119	63.87	121	98	78	0	0	7	2	
OR BURNS	44	30	53	23	37	4	0.87	0.37	0.27	2.47	113	14.29	169	91	60	0	5	6	0	
OR EUGENE	54	43	59	35	49	3	3.86	1.81	1.84	8.57	81	36.39	96	97	70	0	0	6	3	
OR MEDFORD	51	41	55	33	46	3	3.85	3.08	2.83	7.35	163	25.31	175	98	73	0	0	6	2	
OR PENDLETON	54	41	61	37	47	7	0.41	0.02	0.12	3.80	143	12.84	127	87	59	0	0	6	0	
OR PORTLAND	55	45	59	42	50	5	2.86	1.58	1.71	8.59	108	33.80	118	93	69	0	0	7	2	
OR SALEM	54	44	59	40	49	5	3.89	2.16	1.88	8.66	99	37.16	123	97	71	0	0	6	2	
PA ALLENTOWN	52	34	59	28	43	1	0.16	-0.77	0.09	8.26	87	38.44	99	96	56	0	3	2	0	
PA ERIE	50	37	59	33	44	1	0.52	-0.42	0.20	5.06	48	29.72	81	88	60	0	0	5	0	
PA MIDDLETOWN	54	36	59	30	45	1	0.10	-0.73	0.10	5.05	57	45.05	125	84	46	0	1	1	0	
PA PHILADELPHIA	56	40	63	36	48	3	0.13	-0.67	0.13	4.32	52	30.29	82	89	50	0	0	1	0	
PA PITTSBURGH	51	34	62	29	43	1	0.28	-0.40	0.26	4.44	81	31.97	97	87	56	0	4	2	0	
PA WILKES-BARRE	47	35	53	28	41	0	0.24	-0.50	0.23	6.01	72.8	33.49	102	87	59	0	2	1	0	
PA WILLIAMSPORT	48	32	54	26	40	-1	0.22	-0.66	0.21	5.19	56	38.14	107	92	61	0	4	2	0	
RI PROVIDENCE	52	36	61	27	44	0	0.81	-0.24	0.51	8.71	85	51.30	129	97	61	0	2	3	1	
SC BEAUFORT	75	59	80	53	67	8	0.00	-0.55	0.00	7.34	80	48.88	99	98	72	0	0	0	0	
SC CHARLESTON	73	58	80	49	65	7	0.06	-0.52	0.05	17.04	183	63.53	134	97	61	0	0	2	0	
SC COLUMBIA	68	50	74	39	59	5	0.49	-0.18	0.43	8.14	94	44.40	98	95	59	0	0	3	0	
SC GREENVILLE	63	47	72	40	55	4	0.37	-0.48	0.34	9.55	91	47.83	104	93	57	0	0	4	0	
SD ABERDEEN	35	24	38	16	29	0	0.28	0.15	0.23	8.80	257	28.35	158	96	77	0	7	4	0	
SD HURON	39	28	46	22	33	2	0.04	-0.11	0.01	6.24	166	24.21	125	92	69	0	6	2	0	
SD RAPID CITY	50	26	61	18	38	4	0.06	-0.06	0.00	8.04	291	20.80	130	92	44	0	7	1	0	
SD SIOUX FALLS	41	26	47	19	33	2	0.02	-0.22	0.02	9.69	173	30.92	135	96	71	0	6	1	0	
TN BRISTOL	61	34	70	27	47	1	0.29	-0.41	0.28	3.73	47	38.31	105	97	50	0	3	2	0	
TN CHATTANOOGA	64	43	69	35	54	4	0.56	-0.55	0.34	5.32	51	47.79	102	94	55	0	0	2	0	
TN KNOXVILLE	60	38	64	30	49	1	0.28	-0.62	0.22	4.61	55	47.33	114	97	61	0	1	2	0	
TN MEMPHIS	66	45	71	39	55	4	0.28	-0.96	0.28	6.39	64	48.34	108	96	52	0	0	1	0	
TN NASHVILLE	64	39	73	32	52	2	0.43	-0.57	0.43	4.18	47	44.08	107	93	43	0	2	1	0	
TX ABILENE	71	46	80	42	59	5	0.01	-0.31	0.01	2.68	39	12.54	55	89	40	0	0	1	0	
TX AMARILLO	64	36	73	29	50	5	0.00	-0.15	0.00	7.95	204	16.64	88	82	31	0	3	0	0	
TX AUSTIN	73	56	80	50	65	5	0.03	-0.50	0.02	23.25	274	37.81	128	96	63	0	0	2	0	
TX BEAUMONT	69	54	80	49	61	1	0.17	-0.98	0.10	21.28	153	54.81	108	97	77	0	0	3	0	
TX BROWNSVILLE	80	62	85	53	71	3	0.18	-0.15	0.15	15.38	155	19.81	79	98	66	0	0	4	0	
TX CORPUS CHRISTI	78	61	81	56	68	3	0.01	-0.33	0.01	19.03	196	29.92	105	97	70	0	0	1	0	
TX DEL RIO	73	55	78	49	64	4	0.04	-0.15	0.01	4.97	86	28.79	165	96	55	0	0	4	0	
TX EL PASO	69	42	76	35	56	4	0.00	-0.11	0.00	2.81	100	6.11	74	71	29	0	0	0	0	
TX FORT WORTH	66	51	77	45	59	3	0.01	-0.50	0.01	10.82	126	29.41	94	95	63	0	0	1	0	
TX GALVESTON	70	60	78	55	65	1	0.16	-0.68	0.13	21.08	190	48.26	128	99	84	0	0	2	0	
TX HOUSTON	72	56	82	49	64	4	0.04	-0.84	0.03	27.93	235	50.56	122	97	66	0	0	2	0	
TX LUBBOCK	67	39	78	34	53	4	0.00	-0.15	0.00	3.08	61	12.52	70	81	31	0	0	0	0	
TX MIDLAND	72	43	80	39	58	6	0.01	-0.13	0.01	1.52	31	4.57	32	85	29	0	0	1	0	
TX SAN ANGELO	71	47	80	43	59	5	0.01	-0.22	0.01	3.59	54	12.54	65	92	47	0	0	1	0	
TX SAN ANTONIO	73	55	79	46	64	4	0.05	-0.55	0.01	23.04	270	41.88	145	93	61	0	0	5	0	
TX VICTORIA	73	58	80	52	65	3	0.09	-0.47	0.08	28.63	264	42.71	123	99	68	0	0	2	0	
TX WACO	67	53	79	49	60	3	0.05	-0.50	0.02	14.58	168	30.54	104	97	71	0	0	4	0	
TX WICHITA FALLS	66	45	78	38	56	5	0.01	-0.33	0.01	3.39	44	19.28	71	94	54	0	0	1	0	
UT SALT LAKE CITY	53	32	62	27	42	3	0.05	-0.25	0.05	4.15	114	22.62	158	83	33	0	5	1	0	
VT BURLINGTON	42	30	48	19	36	0	0.46	-0.29	0.20	9.13	109	50.11	161	90	55	0	5	5	0	
VA LYNCHBURG	61	35	67	30	48	1	0.04	-0.69	0.02	3.99	44	44.14	120	98	46	0	2	3	0	
VA NORFOLK	63	48	70	43	56	4	0.18	-0.48	0.10	5.23	58	48.84	121	96	57	0	0	5	0	
VA RICHMOND	65	38	72	33	52	3	0.20	-0.53	0.20	5.41	60	41.48	106	95	42	0	0	1	0	
VA ROANOKE	61	37	65	30	49	2	0.10	-0.63	0.00	2.92	30	42.19	113	85	42	0	2	1	0	
VA WASHINGTON	59	34	67	28	46	2	0.16	-0.61	0.16	3.63	41	35.58	99	94	45	0	4	1	0	
WA HANFORD	58	41	67	27	49	-	0.13	-	0.11	1.17	-	5.51	-	81	49	0	1	2	0	
WA OLYMPIA	53	39	56	31	46	4	4.24	2.28	2.39	11.34	94	37.87	95	100	82	0	2	7	2	
WA QUILLAYUTE	51	41	55	32	46	3	6.34	2.82	2.23	26.36	103	74.23	87	100	85	0	1	7	5	
WA SEATTLE-TACOMA	51	43	57	41	47	2	2.74	1.33	1.14	10.60	117	29.80	101	100	75	0	0	5	2	
WA SPOKANE	48	35	58	28	41	6	1.37	0.84	0.93	2.92	94	13.13	98	95	69	0	2	4	1	
WA YAKIMA	52	32	65	19	42	4	0.25	-0.01	0.12	0.70	46	7.63	123	93	51	0	4	5	0	
WV BECKLEY	55	32	64	23	44	1	0.18	-0.52	0.18	5.15	62	43.38	118	96	53	0	3	1	0	
WV CHARLESTON	58	34	67	26	46	0	0.24	-0.61	0.24	5.44	63	44.56	117	90	48	0	3	1	0	
WV ELKINS	54	28	63	19	41	1	0.07	-0.72	0.07	6.16	67	43.51	108	94	52	0	4	1	0	
WV HUNTINGTON	58	34	70	27	46	1	0.38	-0.40	0.31	4.88	61	40.26	109	90	51	0	3	2	0	
WI EAU CLAIRE	40	28	48	18	34	3	0.20	-0.14	0.02	4.10	55	29.03	96	92	69	0	4	4	0	
WI GREEN BAY	42	29	51	20	35	2	0.37	-0.13	0.24	6.77	94	28.46	107	89	67	0	6	3	0	
WI MADISON	44	30	57	26	37	3	0.04	-0.46	0.03	7.58	108	39.58	139	88	61	0	5	2	0	
WI MILWAUKEE	46	33	54	27	39	3	0.05	-0.54	0.02	7.08	94	33.29	111	90	65	0	3	2	0	
WY CASPER	47	29	56	23	38	6	0.00	-0.17	0.00	5.90	240	14.45	124	73	34	0	5	0	0	
WY CHEYENNE	52	30	64	26	41	7	0.02	-0.09	0.01	2.19	91	10.48	78	84	25	0	5	2	0	
WY LANDER	47	25	55	20	36	6	0.02	-0.16	0.02	6.08	216	17.19	140	83	37	0	7	1	0	
WY SHERIDAN	50	25	61	18	38	6	0.02	-0.17	0.00	6.32	200	17.37	128	86	44	0	7	1	0	

NOTE: These data are preliminary and subject to change. In the past, precipitation totals from a number of stations have been incomplete.

National Agricultural Summary

November 16-22, 1998

HIGHLIGHTS

Temperatures averaged above normal across most of the Nation, aiding development of winter wheat in the central Plains and parts of the Corn Belt and Southeast. Dry conditions also prevailed over much of the Nation, aiding harvest efforts and fall tillage operations. However, fields remained too muddy to resume harvest activities in parts of the northern Plains and upper

Mississippi Valley following earlier storms. Cold air moved southward from Canada but did little damage to winter wheat. In the Pacific Northwest, rain aided wheat development but halted field activities along the Pacific coastline from northern California to Canada. Some of the rains were very heavy, resulting in isolated flooding and soil erosion.

Winter Wheat: Planting progressed to 97 percent complete, equal to the average for this date. Emergence advanced to 92 percent of the acreage, also equal to the 5-year average. Farmers in the northern Great Plains, Pacific Northwest, and eastern Corn Belt had completed planting operations. A small percentage remained to be planted in the central and southern Great Plains, southern Corn Belt, and Mississippi Delta. Dry weather aided planting efforts in the Southeast and Southwest, especially in California, where progress jumped ahead of normal. Substantial acreage remained to be seeded in Georgia, where dry soils hindered planting operations until last week. Seasonable temperatures aided emergence and growth in the southern Corn Belt, Mississippi Delta, and Southeast, and parts of the Pacific Northwest. Cold Canadian air pushed into the northern Great Plains, but most fields had at least a few inches of snow to protect the wheat from the low temperatures.

Corn: The Nation's corn harvest advanced to 97 percent complete, as progress remained ahead of the normal pace. In Colorado, warm, dry weather aided harvest efforts, as most of the remaining acreage was combined. Across most of the Corn Belt, the harvest was proceeding ahead of normal, with only a small percentage of the acreage remaining to be harvested. Michigan farmers were finishing the harvest season well ahead of normal due to early ripening of the crop and favorable harvest weather. However, inclement weather continued to delay harvest in South Dakota, where progress remained well behind the 5-year average.

Cotton: The Nation's cotton harvest progressed to 86 percent complete, up from 80 percent the previous week and ahead of the 82 percent normally harvested by this date. Dry weather continued to aid the harvest effort in California, but progress remained far behind the normal pace. Favorable weather also aided harvest efforts in Arizona and New Mexico, but progress still lagged several days behind normal. In the southern Great Plains and Southeast, the harvest pace was slower, but dry weather favored harvest efforts of the few growers who still had unharvested cotton to pick.

Other crops: Sorghum harvested advanced to 94 percent complete, slightly behind the 95 percent average. Dry weather aided harvest efforts in the central and southern Great Plains. Colorado growers moved slightly ahead of normal, but progress remained slightly behind average in Texas and New Mexico. Muddy field conditions virtually halted progress in South Dakota. Ninety-five percent of the peanuts were harvested, 1 week ahead of the normal 92 percent pace. Growers in the Southeast were nearly finished with harvest activities, slightly behind normal except in Florida, where less than half of the peanut crop would normally be harvested by this date. Progress was less advanced in the southern Great Plains. In Oklahoma, where growers would normally be wrapping up harvest activities by now, progress was several days behind the average for this date.

Crop Progress and Condition

Week Ending November 22, 1998

Winter Wheat Percent Planted				
	Nov 22 1998	Prev Week	Prev Year	5-Yr Avg
AR	96	90	86	86
CA	60	40	57	48
CO	100	100	100	100
GA	36	22	27	39
ID	100	99	100	99
IL	100	98	100	99
IN	100	99	100	100
KS	98	98	99	99
MI	100	100	100	100
MO	92	86	97	95
MT	100	100	100	100
NE	100	100	100	100
NC	75	70	79	73
OH	100	100	100	100
OK	99	96	99	100
OR	100	97	100	96
SD	100	100	100	100
TX	95	92	97	95
WA	100	100	100	99
ALL	97	95	97	97

These 19 States planted 91% of last year's winter wheat acreage.

Winter Wheat Percent Emerged				
	Nov 22 1998	Prev Week	Prev Year	5-Yr Avg
AR	83	72	73	73
CA	20	15	19	22
CO	99	97	100	100
GA	18	11	16	23
ID	96	92	92	92
IL	98	95	99	94
IN	96	92	96	97
KS	97	95	96	97
MI	100	97	99	98
MO	86	70	91	85
MT	95	93	93	91
NE	100	100	100	100
NC	65	50	62	56
OH	100	100	96	97
OK	89	85	91	93
OR	95	89	84	90
SD	100	100	100	99
TX	85	79	88	87
WA	100	99	99	94
ALL	92	88	92	92

These 19 States planted 91% of last year's winter wheat acreage.

Cotton Percent Harvested				
	Nov 22 1998	Prev Week	Prev Year	5-Yr Avg
AL	97	93	84	89
AZ	81	71	87	87
AR	100	97	94	96
CA	60	45	97	93
GA	82	76	65	79
LA	100	99	100	99
MS	100	100	97	97
MO	96	93	93	94
NM	61	43	79	75
NC	95	90	74	82
OK	84	80	70	62
SC	91	89	76	82
TN	99	98	90	93
TX	83	75	78	72
ALL	86	80	83	82

These 14 States harvested 98% of last year's cotton acreage.

Sorghum Percent Harvested				
	Nov 22 1998	Prev Week	Prev Year	5-Yr Avg
AR	100	100	100	100
CO	80	66	34	76
IL	98	98	97	95
KS	96	95	91	96
LA	100	100	100	100
MS	100	100	100	100
MO	95	92	95	94
NE	98	94	97	97
NM	72	60	96	75
OK	91	88	79	81
SD	89	89	98	98
TX	92	88	95	97
ALL	94	91	92	95

These 12 States harvested 99% of last year's sorghum acreage.

Peanuts Percent Harvested				
	Nov 22 1998	Prev Week	Prev Year	5-Yr Avg
AL	98	95	100	100
FL	100	99	100	40
GA	99	98	100	100
NC	98	95	96	99
OK	89	87	98	99
SC	100	98	98	98
TX	82	77	87	81
VA	100	100	99	100
ALL	95	92	97	92

These 8 States harvested 99% of last year's peanut acreage.

Corn Percent Harvested				
	Nov 22 1998	Prev Week	Prev Year	5-Yr Avg
CO	96	83	97	95
GA	100	100	100	100
IL	98	95	98	97
IN	99	98	91	92
IA	98	95	99	98
KS	98	98	98	98
KY	99	99	99	97
MI	98	94	67	82
MN	98	97	98	97
MO	96	91	96	94
NE	95	89	95	95
NC	100	100	100	100
OH	96	92	81	86
PA	89	85	73	79
SD	86	82	99	95
TX	100	100	100	100
WI	96	91	83	89
ALL	97	94	94	95

These 17 States harvested 92% of last year's corn acreage.

Winter Wheat Crop Condition by Percent					
	VP	P	F	G	EX
AR	0	1	31	52	16
CA	0	0	10	40	50
CO	0	1	11	54	34
GA	0	21	42	36	1
ID	0	1	8	74	17
IL	0	4	24	59	13
IN	1	2	20	59	18
KS	1	5	21	62	11
MI	1	4	33	52	10
MO	0	4	34	59	3
MT	1	5	33	60	1
NE	0	1	23	67	9
NC	0	7	27	56	10
OH	0	3	21	56	20
OK	0	2	15	74	9
OR	0	3	23	74	0
SD	0	0	13	67	20
TX	1	14	46	33	6
WA	0	14	47	39	0
ALL	0	5	25	59	11
Prev Wk	1	6	26	54	13
Prev Yr	0	4	23	62	11

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

State Agricultural Summaries

These summaries, issued weekly through the summer growing season, 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. The crop weather reports are also available on the Internet through the NASS Home Page on the World Wide Web at <http://www.usda.gov/nass/> or from JAWF at <http://www.usda.gov/oce/waob/jawf>.

ALABAMA: Cotton harvested 97%, 84% 1997, 89% avg. Peanuts dug 100%, 100% 1997, 100% avg. Peanuts combined 98%, 95% 1997, 100% avg.

ARIZONA: Cotton harvest is progressing at a normal pace, but the harvest is still 1 week behind 1997 and the average. Alfalfa harvest activity 58% not being harvested, 12% light, 22% moderate, 8% active. Alfalfa unchanged last week. Alfalfa 2% poor, 10% fair, 82% good, 6% excellent. Sheeping off increased slightly. Small grains are being planted in the areas where cotton harvest is furthest along. As of November 22, 17% of the durum wheat, 38% of other wheat, 18% of the barley, 36% of the other small grains had been planted. Other farmers reported preparing for small grain planting. Range, pasture feed 8% poor, 33% fair, 45% good, 14% excellent. Last-week central area growers shipped broccoli, cabbage, cantaloupes, carrots, green onions, head lettuce, honeydew, mixed greens, parsley, spinach, turnips, a light volume of beets, endive, escarole, napa, watermelons. Eastern producers shipped apples, chile peppers, processed lettuce. Western producers shipped broccoli, cantaloupes, cauliflower, honeydews, mixed greens, parsley, spinach, light volume of cilantro, kale. Lettuce shipments included boston, head, leaf, romaine. Western citrus groves harvested fairchild tangerines, lemons, navel oranges last week, while central area groves shipped fairchild tangerines, grapefruit, lemons, navel oranges.

ARKANSAS: Days suitable for fieldwork 5.5. Soil moisture 13% short, 81% adequate, 6% surplus. Temperatures for the week were above normal, precipitation was well below normal. A midweek frontal passage brought light rainfall to the State, with a quarter to half inch amounts common. Same front resulted in some late-week low temperatures near freezing. Main farming activities included harvesting cotton, soybeans, planting wheat. Both the cotton, soybean harvest progressed ahead of the 1997 progress level, ahead of the 5-year average. This is due largely to hot, dry conditions that prevailed during the crop's early development stages. Other farm activities included applying herbicides to wheat, equipment clean up, maintenance, soil sampling, ground preparation activities for next spring. Cattle producers continued to market cattle, wean calves, cull cows from their herds. Producers continued to feed hay. Cattle were given vaccinations, treated for worms, were reported in good condition statewide. Oats 3% fair, 85% good, 12% excellent. Alfalfa 1% very poor, 27% poor, 53% fair, 19% good. Other hay 6% very poor, 15% poor, 42% fair, 36% good, 1% excellent. Range, pasture feed 5% very poor, 22% poor, 38% fair, 31% good, 4% excellent.

CALIFORNIA: Field activities gradually resumed as soils dried from earlier rains. Seeding of small grains, winter forages, new alfalfa gained momentum in most areas. Cool, cloudy conditions slowed the emergence, growth of seeded wheat, barley fields in the San Joaquin Valley. Rice harvest was complete in all growing areas. Cotton harvest progressed in the San Joaquin Valley; some fields were drying slowly due to the cool, foggy weather. Lint quality continued to deteriorate as the bolls

remained wet. Harvested cotton fields were immediately plowed down for pink bollworm control. Desert area cotton harvest was virtually complete. Dry beans, corn for grain, silage were harvested where conditions permitted. Fall sugar beet harvest was nearing completion in the San Joaquin Valley. New crop sugar beets were growing well in most areas; some growers placed mylar streamers in fields to prevent bird damage. Imperial Valley sugarbeets were treated for aphids and armyworms. Alfalfa was sprayed aerially for weeds. Cool weather slowed the growth of alfalfa, sudangrass in the Imperial Valley. Greenchopping of alfalfa remained active in the San Joaquin Valley, while alfalfa hay harvest was winding down. Growers of almonds, walnuts, prunes, stone fruits were fertilizing, pruning, conducting post harvest irrigation. Picking of San Joaquin Valley grapes for fresh consumption continued. Emperor, red globe, Christmas rose, and crimson seedless were the major varieties being picked. Some grapes were still being harvested for wine use. Fuji, Granny Smith apple picking was still active. Kiwifruit, persimmon harvests continued. Valencia orange harvest was near completion. Naval orange picking gathered momentum as size, maturity improved. Lemon, satsuma mandarin harvests continued. Lemon sizes were small, picking has been limited. Lettuce harvesting continued in the San Joaquin Valley and central coast areas. Harvest of fall cantaloupes, honeydew melons declined significantly in the Imperial Valley. Fall broccoli, cauliflower harvests began to accelerate in the San Joaquin Valley. All pepper harvesting was completed in most areas. Additional vegetable crops harvested included green beans, cabbage, mustard, turnips, peas, spinach, sweet potatoes, beets. Garlic, carrot, red onion, potato fields were planted in central, southern counties. Winter pasture conditions were good in northern areas. Conditions in the central part of the State were fair at best, as storms continued to miss the area. Stocker cattle were moving onto winter pastures, especially in the northern areas as snow arrived at higher elevations. Supplemental feeding of cattle continued in the central counties, where some stocker cattle remain in lots until rangeland conditions improve. Most fall calving was completed and lambing was winding down.

COLORADO: Mild weather conditions during the week enabled farmers to make additional progress in harvesting late-season crops. Unusually warm weather have also allowed for additional growth on the 1999 winter wheat crop across the eastern Plains.

DELAWARE: Days suitable for fieldwork 6.0. Topsoil moisture 10% very short, 50% short, 40% adequate. Subsoil moisture 5% very short, 45% short, 50% adequate. Wheat 1% poor, 16% fair, 76% good, 7% excellent; 90% planted, 76% 1997, 88% avg. Soybeans 81% harvested, 51% 1997, 72% avg. Alfalfa hay 85% fifth cutting, 84% 1997, 72% avg. Hay supplies 17% short, 83% adequate. Pasture feed 8% poor, 30% fair, 62% good. Activities: Corn harvesting finished up, wheat planting nearing completion, hay harvesting close to finish.

FLORIDA: Topsoil moisture throughout Panhandle, northern Peninsula short to adequate, with areas very short moisture. Southern Peninsula moisture adequate to surplus. Warm, mostly dry conditions continued. Light scattered showers brought about 0.50 in. rain to Homestead area; at least 0.50 in. to the Immokalee region. Some southwestern fields remain under water. Palmetto-Ruskin reported from note to 2.00 in. rain. Quincy reported at least 0.30 in. rain. Winter wheat for grain is being planted. Haying virtually complete. Cotton harvest active. Peanut harvest complete. Sugarcane harvest, planting active. One-hundred percent of the peanut acreage for nuts has been harvested. Clear weather allowed growers to increase vegetable harvesting to meet the holiday demand. Major vegetables shipped: Snap beans, sweet corn, cucumbers, eggplant, endive, escarole, lettuce, okra, parsley, peppers, pickles, radishes, squash, tomatoes, watermelons. Warm, dry in most areas with few showers, limited new growth, growers irrigating. Harvest increasing for early oranges, tangerines, tangelo, all grapefruit. Processing plants taking grove run fruit, packing house eliminations. Caretakers cutting cover crops, spraying, pushing out dead trees, resetting young trees. Pasture feed very poor 5%, poor 20%, fair 40%, good 35%. Cattle poor 5%, fair 45%, good 50%. Panhandle; winter grazing small grains still slow in emerging, growth slow. Moisture needed for grass growth. North-central very little grass left, soil dry. West-central; grass growth seasonally very slow. Rye grass for winter forage being planted. Southwest; some low-lying areas still under water. Statewide, cattle, calves condition poor to good.

GEORGIA: Days suitable for fieldwork 5.2. Soil moisture 15% very short, 35% short, 48% adequate, 2% surplus. Cotton 11% very poor, 21% poor, 45% fair, 21% good, 2% excellent. Rye 84% planted, 87% 1997, 90% avg. Sorghum 94% harvested for grain, 85% 1997, 91% avg. Soybeans 24% very poor, 25% poor, 36% fair, 14% good, 1% excellent; 83% harvested, 52% 1997, 63% avg. Other small grains 77% planted, 75% 1997, 75% avg. Onions 11% very poor, 1% poor, 21% fair, 27% good; 40% excellent; 28% transplanted, 27% 1997, 31% avg. Pecans 16% very poor, 31% poor, 42% fair, 10% good, 1% excellent; 66% harvested, 56% 1997, 60% avg. Pasture feed 12% very poor, 23% poor, 38% fair, 26% good, 1% excellent. Some counties were completing the fall harvest, while rain slowed harvest progress in parts of the State. Lack of rain continued to be a problem for many counties, rain was still needed for planting small grains, planting is about the same as in 1997. Cotton harvest remained ahead of 1997, average. Soybean harvest was delayed in some counties, still 2 weeks ahead. Soybean condition decreased. Other activities included routine care of livestock, pasture over seeding, preparation of greenhouses to plant next year's tobacco, vegetables, sanitation chores.

HAWAII: Weather conditions were generally unfavorable for agriculture. Cloudy skies, frequent showers slowed farming activities, crop growth for most of the week. Gusty trade winds hampered irrigation, spraying during the second half of the week. Banana fields adversely affected by weather. Cloudy skies slowed fruit development. Brisk winds shredded leaves in exposed areas. Harvesting of papayas will remain heavy. Farmers will increase spraying with the advent of rainy weather. Head cabbage harvesting varied heavy to light by district. Overall crop quality was good. Most other vegetables made fair to poor progress due to inclement weather.

IDAHO: Days suitable for fieldwork 5.3. Topsoil moisture 1% surplus, 73% adequate, 26% short. Temperature across the State above normal. Precipitation totals still below normal except in northern areas of the State. Apples harvested 99%, 1997 100%, avg. 100%. Corn harvested for grain 72%, 1997 86%, avg. 81%. Sugarbeets harvested 100%, 1997 100%, avg. 99%. Activities: Fall ground preparation, wrapping up fall harvest, caring for livestock.

ILLINOIS: Days suitable for fieldwork 6.2. Topsoil moisture 1% very short, 3% short, 88% adequate, 8% surplus. Dry weather last week allowed farmers to nearly finish corn harvest. As the 1998 crop season winds down, farmers are busy applying anhydrous ammonia, lime, fertilizer, as well as completing fall tillage, storing equipment.

INDIANA: Days suitable for fieldwork 6.6. Topsoil moisture 4% very short, 26% short, 68% adequate, 2% surplus. Subsoil moisture 9% very short, 25% short, 61% adequate, 5% surplus. Dry weather conditions enhanced fall field preparation for next year's planting season. Corn harvest virtually complete. Winter wheat crop remains in good condition due to mild weather temperatures. Activities: Harvesting corn, fall tillage, applying manure, fertilizer and lime, caring for livestock.

IOWA: Days suitable for fieldwork 5.7. The week's warm, dry weather allowed producers to get back to work on fall activities. Harvest is nearly complete, with just scattered reports of corn and soybean fields left. Corn acreage harvested 98%, 99% 1997, 98% avg. Winter wheat planted 98%, 98% 1997, 100% avg. Completion of 1999 row crop fall tillage 54%, 53% 1997, 46% avg.; fall fertilizer applied 48%, 49% 1997. Grain movement rated 24% none, 46% light, 25% moderate, 5% heavy. The grain storage situation has begun to stabilize. Off-farm grain storage 31% short, 67% adequate, 2% surplus; on-farm storage 28% short, 69% adequate, 3% surplus. Feedlot conditions improved with the warm weather last week as livestock remain in mostly good condition. Availability of hay, roughage supplies 3% short, 86% adequate, 11% surplus; quality of hay, roughage supplies 8% poor, 48% fair, 44% good. Use of stubble fields for grazing 20% none, 26% light, 44% moderate, 10% extensive.

KANSAS: Days suitable for fieldwork 4.0. Topsoil moisture 1% very short, 1% short, 73% adequate, 25% surplus. Subsoil moisture 4% short, 80% adequate, 16% surplus. Fall harvest is nearly complete. Some fields are still too wet to enter, especially in the southeast. Soybeans harvested 91%, 98% 1997, 97% avg. Sunflowers harvested 96%, 95% 1997. Pasture feed 2% very poor, 6% poor, 30% fair, 55% good, 7% excellent. Stock water supplies 2% short, 88% adequate, 10% surplus. Producers were weaning calves, moving cattle to crop residue. Health problems for calves persist due to change in weather, muddy conditions.

KENTUCKY: Early week suitable for fieldwork, late-week rain delayed wrap up of corn, soybean harvest but benefited tobacco stripping. Topsoil, subsoil moisture mostly adequate to short. Additional rain needed to resupply stock ponds. Slightly above-normal temperatures, light rainfall late in the week allowed farmers to continue harvest of the few remaining fields. Relative humidity generally favorable for tobacco stripping, with crop approaching 50% stripped. Most producers transporting tobacco to auction market, with sales floors having ample supplies available for sale on

opening day, 23rd. Soil moisture generally adequate statewide for fall seeded small grains. Wheat seeding nearing completion, emerged mostly good to fair condition. Poor pasture conditions make supplemental feeding necessary. Cattle mostly good condition.

LOUISIANA: Days suitable for fieldwork 3.2. Soil moisture 4% short, 62% adequate, 34% surplus. Cotton: Cotton harvest was completed. Hay 100% final cutting, 100% 1997, 100% avg. Pecans 64% harvested, 58% 1997, 52% avg. Sugarcane 1% very poor, 10% poor, 25% fair, 47% good, 17% excellent; 50% harvested, 49% 1997, 55% avg. Sweet potatoes 97% harvested, 92% 1997, 93% avg. Wheat 3% poor, 17% fair, 77% good, 3% excellent; 98% planted, 82% 1997, 77% avg.; 91% emerged, 68% 1997, 64% avg. Livestock 2% very poor, 7% poor, 39% fair, 49% good, 3% excellent. Most cattlemen are winter feeding. Vegetables 7% very poor, 13% poor, 35% fair, 39% good, 6% excellent. Pasture feed 3% very poor, 20% poor, 37% fair, 35% good, 5% excellent. Winter pastures are improving due to added moisture, cooler weather.

MARYLAND: Days suitable for fieldwork 6.6. Topsoil moisture 29% very short, 56% short, 15% adequate. Subsoil moisture 32% very short, 57% short, 11% adequate. Rye 2% very poor, 11% poor, 36% fair, 50% good, 1% excellent; 97% planted, 96% 1997, 96% avg. Wheat 4% very poor, 15% poor, 36% fair, 44% good, 1% excellent; 96% planted, 90% 1997, 93% avg. Field corn 97% combined, 90% 1997, 94% avg. Soybeans 93% harvested, 77% 1997, 81% avg. Tobacco 30% stripped, 25% 1997, 25% avg. Pasture feed 21% very poor, 41% poor, 17% fair, 21% good. Alfalfa hay 85% 5th cutting, 77% 1997, 77% avg. Hay supplies 2% very short, 32% short, 57% adequate, 9% surplus. Activities: Rye, wheat seeding virtually completed, corn harvesting completed, soybean harvesting continued, as well as tobacco stripping.

MICHIGAN: Days suitable for fieldwork 6.0. Hay and corn harvests were wrapping up with mild conditions. Temperatures were 1 to 2 degrees above normal, and precipitation was light. Fall tillage made good progress.

MINNESOTA: Snowfall during the week occurred mostly in northern areas of the State. Some areas received significant accumulation. Temperatures were above normal, especially during the latter part of the week.

MISSISSIPPI: Days suitable for fieldwork 3.8. Soil moisture 6% very short, 17% short, 64% adequate, 13% surplus. Cotton 100% harvested, 97% 1997, 97% avg. Soybeans 100% harvested, 93% 1997, 94% avg. Sweet potatoes 100% harvested, 95% 1997, 99% avg. Wheat 98% planted, 88% 1997, 92% avg.; 91% emerged, 78% 1997, 83% avg.; 3% very poor, 4% poor, 44% fair, 48% good, 1% excellent. Cattle 6% very poor, 8% poor, 28% fair, 52% good, 6% excellent. Activities: Main farming activity for the week was feeding cattle.

MISSOURI: Days suitable for fieldwork 5.3. All districts reporting several days. Topsoil moisture 2% short, 79% adequate, 19% surplus. Wettest area is the west-central district at 32% surplus, followed by north-central, northeast, central, all around 25% surplus. Ground intended for next year's spring crops that has been worked at least once (excluding no till) 37%, 41% 1997, 36% avg. Favorable weather hastening completion of row crop harvest. Corn harvest least advanced in northeast district at 90%, followed by northwest, north-

central, west-central around 95%. Soybean harvest ranges from 95% northeast, west-central, southwest, to near completion most other districts. Sorghum harvest in central, northeast districts least advanced at 88%, other districts 95% or more. Recent warm weather, available moisture have helped growth of wheat, pastures. Precipitation 0.22 in., ranging from virtually none in northern half of State to over 0.50 in. in south-central, southeast districts. Pasture feed 3% poor, 32% fair, 57% good, 8% excellent.

MONTANA: Most areas of the State received varying amounts of snow last week. Temperatures over much of the State last week were in the 30's degrees C, low 40's degrees C. Recent moisture has been welcomed by winter wheat producers, as they have indicated that their crops are doing well. Livestock producers are still moving cattle, sheep off of summer pasture.

NEBRASKA: Days suitable for fieldwork 5.7. Topsoil moisture 3% short, 91% adequate, 6% surplus. Subsoil moisture 1% very short, 8% short, 85% adequate, 6% surplus. Little or no precipitation statewide. Corn harvest 95%, 95% 1997, 95% avg. Soybean harvest 98%, 99% 1997, 100% avg. Sorghum harvest 98%, 97% 1997, 97% avg. Wheat 1% poor, 23% fair, 67% good, 9% excellent. Producer activities: Recordkeeping, fencing, livestock care.

NEVADA: Light precipitation fell across central, northern locations, while the south remained dry. Temperatures warmed dramatically across the north over the weekend, high winds became common. Light snow continued to accumulate in northern mountains. Haying continued south, but was virtually complete north. Some corn remained to be harvested. Sod harvest continued south. Row-crop harvests complete. Pasture, range condition good. Vaccinating of cattle, movement to winter range continued. Cows, heifers were being pregnancy tested. Main farm, ranch activities: Moving, vaccinating, testing cattle, haying, corn harvest, equipment maintenance.

NEW ENGLAND: Days suitable for fieldwork 5.3. Topsoil moisture 3% short, 55% adequate, 42% surplus.

NEW JERSEY: Days suitable for fieldwork 7. Amount of feed requirements pastures are supplying ranges from below average to average. The irrigation water supply is short to adequate. Farmers are planting winter wheat for cover. Harvesting of fall items (beets, cabbage, endive, escarole, Boston, romaine lettuce, leeks, herbs, parsley, spinach, turnips, winter squash) occurring. Harvesting of soybeans continues but is slowing down with the harvesting of corn for grain nearly finished. Pastures reported in fair condition.

NEW MEXICO: Days suitable for fieldwork 6.9. Topsoil moisture fell to 15% very short, 32% short, 52% adequate, 1% surplus. Dry weather throughout State last week provided excellent conditions for fall harvest. Across the State, producers continued harvesting sorghum, cotton, chile, pecans. Sorghum harvest was nearly three-fourths completed, far behind last year at this time. Cotton crop fell behind schedule, because of cool weather during the spring, has never caught up. Harvest, still not two-thirds completed, was far behind 1997 at this time, average. Fifty-five percent of the red chile had been harvested, keeping the crop's progress well behind the same time in 1997, 74% 1997; 30% fair, 59% good, 11% excellent. Corn harvest was completed last week, 100% 1997; 7% poor, 4% fair, 65% good, 24%

excellent. Cattle, sheep ranchers were busy moving their livestock to market. Both remained in fair to good condition.

NEW YORK: Continued mild weather permitted outside activities to progress with little interruption. Potato, apple, onion growers graded, packed, moved crops to market. Cider making slowed. Wine making was in full swing. Producers of turkeys prepared equipment for slaughtering. Many farmers across the State took time off during the week for deer hunting.

NORTH CAROLINA: Days suitable for fieldwork 5. The week's good weather proved to be beneficial to farmers harvesting late-season crops, planting grains. Statewide, precipitation, temperatures were a little above normal. Soil moisture remains short to very short in most areas and for the State 9% very short, 36% short, 50% adequate, 5% surplus. Continued progress was made harvesting cotton soybeans, which are well above the 5-year averages. Pasture conditions continue to deteriorate. Activities: Harvesting late-season crops; planting small grains; tending livestock; cutting and shipping Christmas trees.

NORTH DAKOTA: There was no fieldwork throughout the state due to snow. Some eastern counties still have a few acres of late-season crops unharvested. Most producers hauled hay in before the snow, except a few producers are having difficulties due to snow and now melting snow. Calves were being weaned. Livestock were grazing fields again due to favorable weather conditions. Producers were mostly quiet as they reviewed their 1998 situation.

OHIO: Days suitable for fieldwork 6.3. Topsoil moisture 4% very short, 26% short, 67% adequate, 3% surplus. Corn harvested for grain 96%, 81% 1997, 87% avg. Tobacco 39% stripped, 28% 1997. Winter wheat 3% poor, 21% fair, 56% good, 20% excellent. Activities for the State include fall plowing, chiseling; harvest; laying tile, maintaining ditches; applying fertilizer, lime, potash, manure; cleaning up equipment for winter storage; putting up bins; cutting firewood; harvesting, selling Christmas trees; weaning calves; stripping tobacco; shipping poinsettias.

OKLAHOMA: Days suitable for fieldwork 5.1. Topsoil moisture 2% very short, 7% short, 87% adequate, 4% surplus. Subsoil moisture 5% very short, 12% short, 82% adequate, 1% surplus. Mild weather, ample soil moisture provided excellent growing conditions for wheat, forage crops. Wheat 8% grazed, 18% 1997, 18% avg. Oats 81% up-to-stand, 76% 1997, 70% avg.; 0% grazed, 12% 1997, 8% avg. Soybeans 83% harvested, 77% 1997, 84% avg. Peanuts 77% combined, 96% 1997, 95% avg. Alfalfa hay 1% very poor, 8% poor, 43% fair, 44% good, 4% excellent; 89% 4th cutting, 100% 1997, 100% avg.; 51% 5th cutting, 78% 1997, 85% avg. Other hay 76% 2nd cutting, 95% 1997, 99% avg. Livestock 1% very poor, 4% poor, 28% fair, 64% good, 3% excellent. Pasture, range feed 4% very poor, 20% poor, 35% fair, 40% good, 1% excellent. Cattle marketings average, feeder steer prices up.

OREGON: Activities: Harvest, fall fieldwork nearing completion. Fall nursery, container movement continued. Greenhouses busy with winter plants, preparing for early-spring flowers. Live Christmas tree balling continued. Domestic Christmas tree sales continuing. Livestock condition mostly good. Some low land pastures still soggy.

PENNSYLVANIA: Days suitable for fieldwork 5.5. Soil moisture 36% very short, 43% short, 20% adequate, 1% surplus. Ensilage corn harvested 100% harvested, 100% 1997, 100% avg. Soybeans harvested 95% complete, 83% 1997, 84% avg. Fall plowing 87% complete, 88% 1997, 92% avg. Barley emerged 99% complete, 97% 1997, average not available. Alfalfa 4th cutting 98% complete, 92% 1997, 91% avg. Quality of hay made 13% very poor, 8% poor, 45% fair, 31% good, 3% excellent. Apple harvest 100% complete, 100% 1997, 100% avg. Activities: Fall plowing; harvesting corn, soybeans; seeding wheat, cover crops; filling silos; machinery maintenance; fixing fences; hauling, spreading manure; spreading lime, fertilizer; grading potatoes; chopping, discing stalks; caring for livestock.

SOUTH CAROLINA: Days suitable for fieldwork 5.4. Soil moisture 13% very short, 36% short, 47% adequate, 4% surplus. Barley 100% planted, 99% 1997, 83% avg.; 85% emerged, 96% 1997, 76% avg.; 75% fair, 25% good. Livestock 6% poor, 32% fair, 60% good, 2% excellent. Oats 83% planted, 90% 1997, 85% avg.; 70% emerged, 82% 1997, 75% avg.; 2% very poor, 9% poor, 46% fair, 43% good. Pasture feed 8% very poor, 15% poor, 40% fair, 36% good, 1% excellent. Peanuts 100% harvested, 98% 1997, 98% avg. Pecans 60% harvested, 63% 1997, 51% avg.; 9% poor, 67% fair, 24% good. Rye 87% planted, 92% 1997, 81% avg.; 70% emerged, 78% 1997, 68% avg.; 4% very poor, 13% poor, 46% fair, 37% good. Sorghum 99% harvested, 98% 1997. Winter grazings 91% planted, 95% 1997, 91% avg.; 80% emerged, 83% 1997, 82% avg.; 11% very poor, 13% poor, 39% fair, 36% good, 1% excellent. Winter wheat 47% planted, 46% 1997, 49% avg.; 38% emerged, 36% 1997, 33% avg.; 6% poor, 65% fair, 27% good, 2% excellent.

SOUTH DAKOTA: Days suitable for fieldwork 1.4. Topsoil moisture 59% adequate, 41% surplus. Subsoil moisture 69% adequate, 31% surplus. Week of sunshine, warmer weather melted snow, leaving behind muddy fields, making fieldwork difficult. Harvest resumed but made little progress this week due to the poor field conditions. Sunflower 94% harvested, 100% 1997, 99% avg. Winter rye 20% fair, 42% good, 38% excellent. Winter wheat, winter rye remain in good condition. Livestock remain in good to excellent condition, some stress, death loss being reported. Livestock 1% poor, 14% fair, 62% good, 23% excellent. Stock water supplies 1% short, 75% adequate, 24% surplus.

TENNESSEE: Days suitable for fieldwork 5.0. Topsoil moisture 3% very short, 30% short, 67% adequate. Subsoil moisture 4% very short, 32% short, 63% adequate, 1% surplus. Burley 76% stripped, 64% 1997, 73% avg. Winter wheat 96% seeded, 89% 1997, 87% avg.; winter wheat 76% emerged; 6% poor, 25% fair, 57% good, 12% excellent. Adequate moisture allowed market preparations for burley tobacco producers to continue, with more than three-fourths of the crop stripped by week's end. Emergence of winter wheat acreage also moved beyond the three-fourths mark with good moisture.

TEXAS: Northern half of State enjoyed open, dry conditions, while southern half remained under cloudy, damp conditions until late week when open, sunny weather returned. Fieldwork active in Plains; however, saturated fields in most other areas kept fieldwork to minimum. Supplemental feeding of livestock was main

activity many central, southern areas. Temperatures warmer most of week until weak cold front late-week cooled things off.

Crops: Small grains: Wheat, oat stands continued make good to excellent progress nearly all areas. Stockers turned in fields to graze many areas. There was considerable amount acreage to be planted for grain central, south-central; however, wet fields have stalled progress. Cotton harvest moved ahead rapidly in Plains as producers raced to beat next wet spell. Many remaining fields north-central are of poor quality due wet conditions. Harvest also made good progress Trans-Pecos. Grain sorghum: Harvest made good progress in the Plains most of week. Sunny days, warmer weather increased maturing later fields. Most focus put on cotton harvest; however, some producers would like another freeze to finish crop. Peanuts: Harvest continued, was winding down many fields north-central as open, dryer conditions returned. Combining again slow south-central, with some previously dug fields turning brown due to prolonged wet conditions. Soybeans: Harvest winding down in the Plains with good weather conditions.

Commercial Vegetables: Rio Grande Valley, planted crops made good progress last week, fieldwork slowly moved ahead as fields dried. San Antonio-Winter Garden, cabbage, spinach fields made good progress last week. East, sweet potato harvest completed most fields. Trans Pecos, chili pepper harvest moved ahead under open conditions. Pecans: Harvest increased many areas as dryer conditions returned. Significant sprouting reported. Harvest winding down Southern areas. Peaches: Producers began their fall spraying programs many areas.

Range and Livestock: Producers busy in the northern areas trying to get final hay cutting. Wheat, oats providing good grazing many areas. Livestock conditions remained good. Markets active with higher prices reported quality calves.

UTAH: Days suitable for fieldwork 5. Topsoil moisture 1% short, 98% adequate, 1% surplus. Subsoil moisture 2% short, 98% adequate. Harvest season is virtually over for this crop year.

VIRGINIA: Days suitable for fieldwork 6.3. Topsoil moisture 42% very short, 47% short, 11% adequate. Subsoil moisture 41% very short, 47% short, 12% adequate. Corn 100% harvested, 92% 1997, 96% avg. Cotton 98% harvested, 71% 1997, 83% avg. Soybeans 79% harvested, 58% 1997, 64% avg. Winter wheat 86% seeded, 68% 1997, 78% avg. Barley 98% seeded, 98% 1997, 98% avg. Winter apples 100% harvested, 99% 1997, 100% avg. Pasture feed 38% very poor, 39% poor, 19% fair, 4% good. Livestock 3% very poor, 15% poor, 35% fair, 43% good, 4% excellent. Weather conditions remained mostly dry throughout the Commonwealth last week. The lack of additional moisture has made it necessary for producers to increase their feeding of livestock from supplemental to

full-scale levels. Many producers continue to water their livestock from private wells, as creeks, ponds remain well-below-normal levels. In spite of dry weather conditions, some small grain producers have reported good germination and development. Other producers, however, have reported that their crop has been in the ground for nearly 6 weeks, with little or no growth at all. With the exception of double-cropped soybeans, nearly all summer crops have been harvested. Other activities for the week included continued marketing of cattle, grading and preparing tobacco for market, harvesting vegetables, taking soil samples, harvesting milo, overseeding pastures, hay fields, participating in pesticide re-certification classes.

WASHINGTON: Days suitable for fieldwork 4.3. Topsoil moisture 3% very short, 22% short; 50% adequate, 25% surplus. Subsoil moisture 8% very short, 40% short, 50% adequate, 2% surplus. Combination of rain, mild weather were beneficial for the winter wheat crop, moderate grass weed problems in early-seeded wheat became evident. Corn for grain 80% harvested, 78% 1997, 76% avg. Hay, other roughage supplies, 2% short, 78% adequate, 20% surplus. Livestock on winter feeding programs, calves were being weaned. Cranberry harvest was completed, all fruit was harvested except for ice wine grapes. Low returns disappointed apple growers. Christmas tree harvest continued rapidly with growers trying to fill orders on time, Christmas tree stands began to open.

WEST VIRGINIA: Days suitable for fieldwork 5.8. Topsoil moisture 16% very short, 60% short, 24% adequate. State experienced a cool, dry week. Low-moisture supplies have caused pastures to decline in some areas of the State. Rain is needed to restore soil moisture, improve pasture conditions. Corn harvested for grain 93%, 81% 1997, 85% avg. Wheat 14% poor, 83% fair, 3% good; planted 96%, 83% 1997, 93% avg.; emerged 84%. Cattle 2% poor, 27% fair, 69% good, 2% excellent. Sheep 19% fair, 74% good, 7% excellent.

WISCONSIN: Most parts of the State saw some precipitation, with the southeast district seeing the least amount. In terms of cumulative rainfall, the northern three districts are as much as 2 to 10 inches behind the thirty-year normal. This shortage has had its toll on pastures and hay supplies. The rest of the State is ahead on rainfall, by as much as 1.8 to 9.1 inches. The amount of corn harvested is now estimated to be 96%, up 5 points from the prior week, up 13 points from 1997, and 7 points above the 5-year average.

WYOMING: Unseasonably mild weather, little precipitation were welcomed last week. Farmers were able to begin picking up the pace on the corn for grain harvest. Ranchers were able to save winter hay supplies by keeping cattle on pastures.

International Weather and Crop Summary

November 15 - 21, 1998

HIGHLIGHTS

FSU-WESTERN: Continued unseasonably cold weather caused winter wheat to enter dormancy as far south as the Black Sea Coast.

EUROPE: Unseasonably cold weather halted winter grain growth in western Europe and prompted crops in the east to begin entering dormancy.

NORTHWESTERN AFRICA: Dry weather continued to delay early winter grain planting in Morocco and western Algeria, while light showers farther east in eastern Algeria and Tunisia helped condition topsoils for planting.

AUSTRALIA: Scattered showers in the east kept mature winter grains unfavorably wet in northern growing areas, but beneficial dryness returned to the southeast.

SOUTH ASIA: Two tropical cyclones hit rice areas of eastern India.

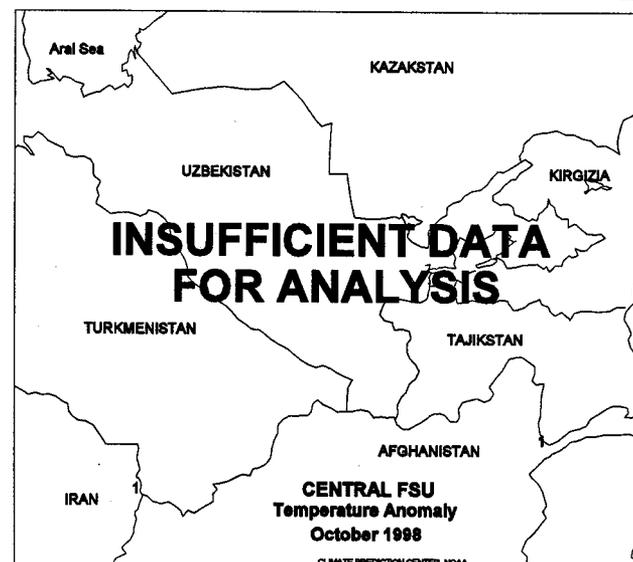
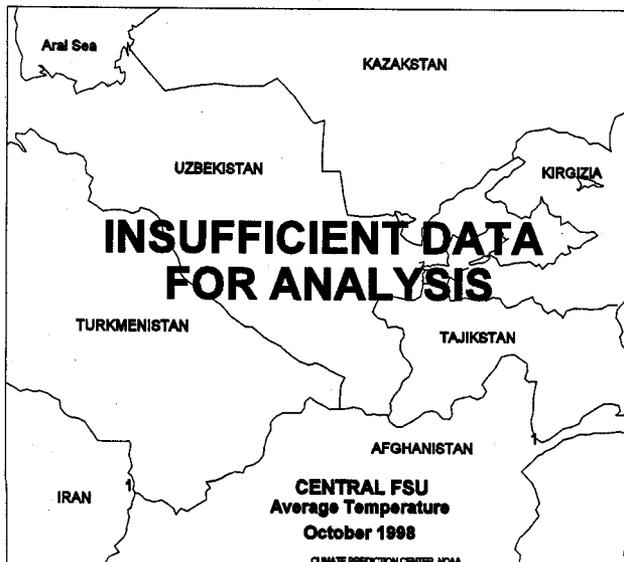
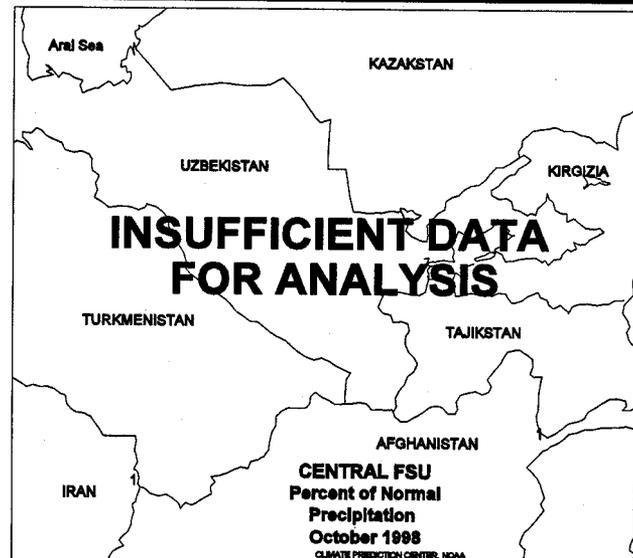
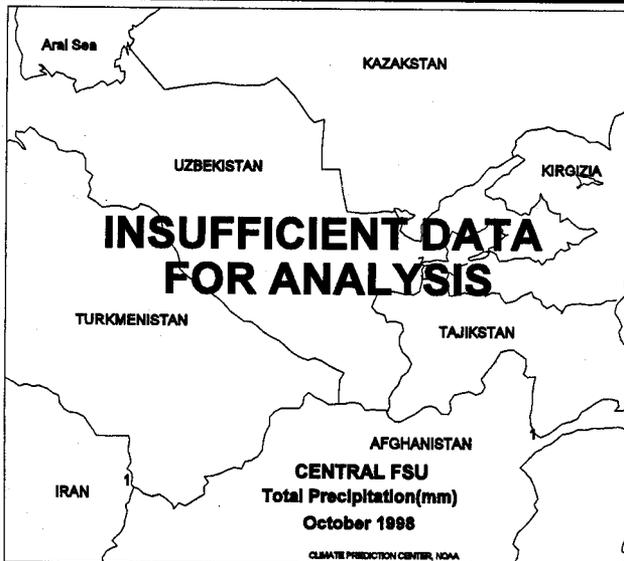
SOUTH AFRICA: Widespread, soaking rain raised moisture levels for corn and other summer crops.

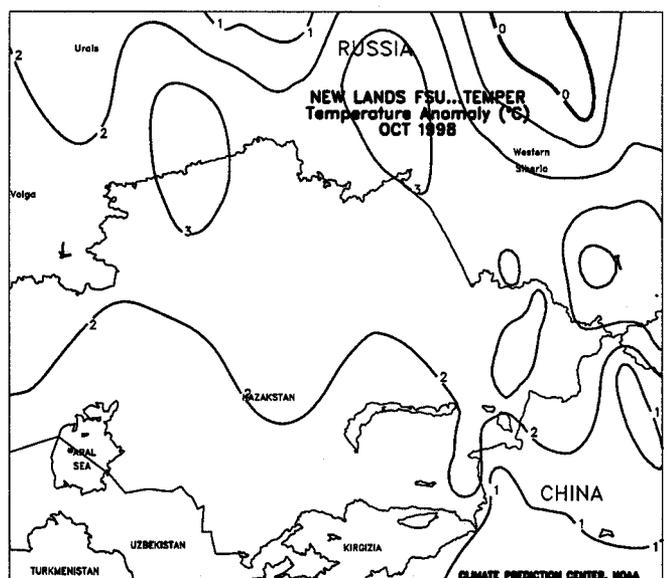
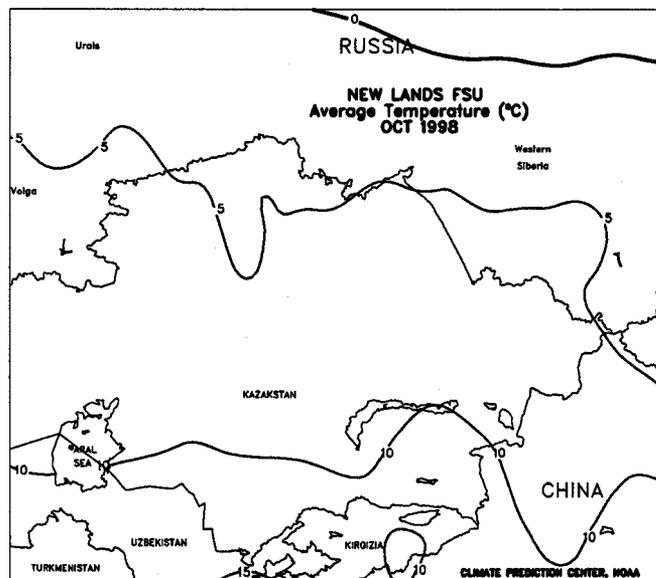
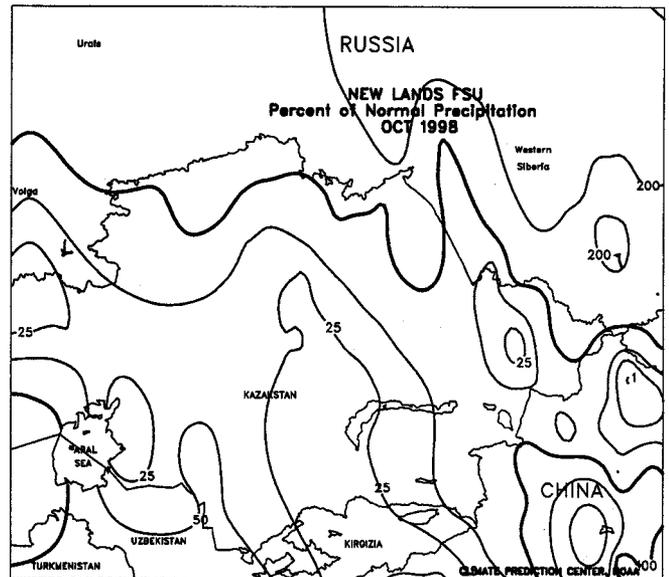
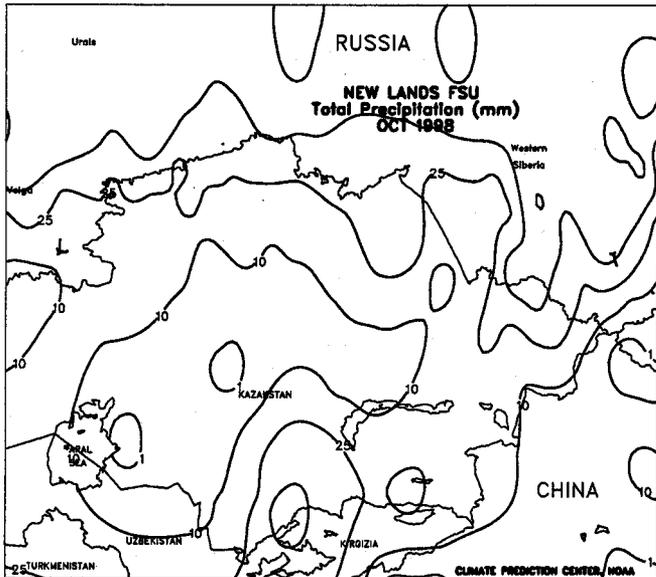
SOUTHEAST ASIA: Tropical Storm Dawn struck southern Vietnam, producing heavy showers and slowing rice harvesting.

EASTERN ASIA: Cooler weather hardened winter grains across the North China Plain.

SOUTH AMERICA: In central Argentina, dry weather returned to the major wheat areas of southern Buenos Aires, reducing soil moisture for winter wheat.

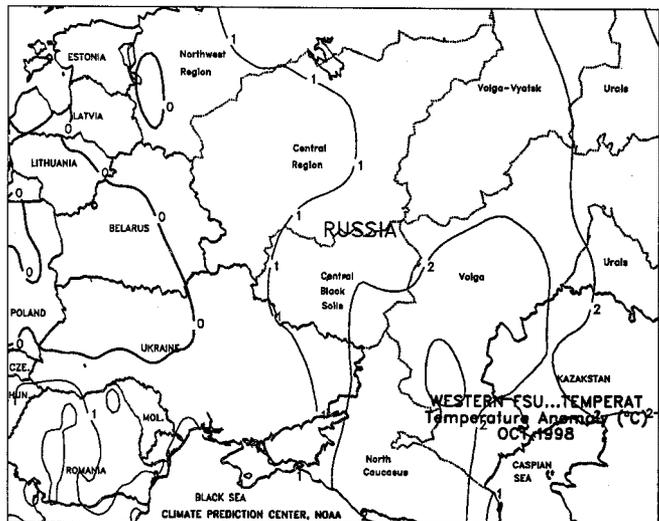
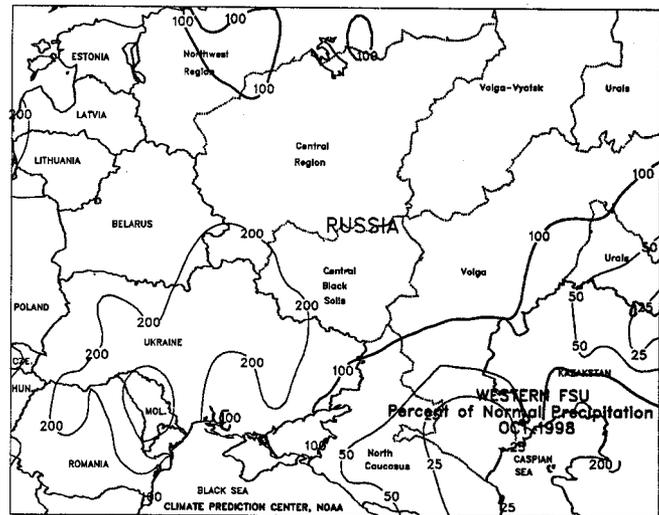
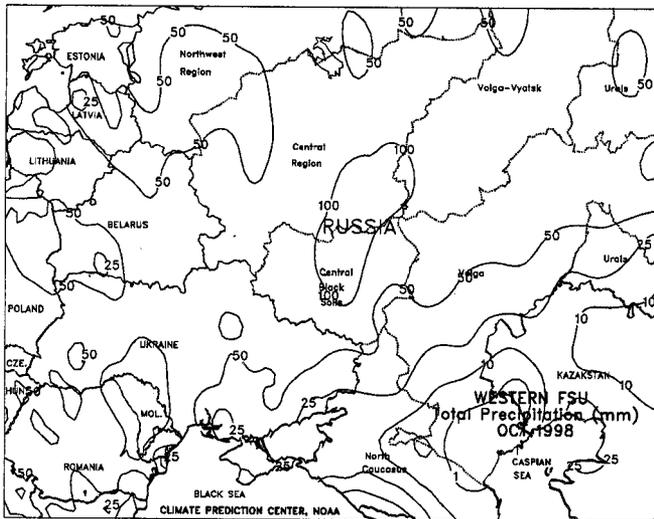
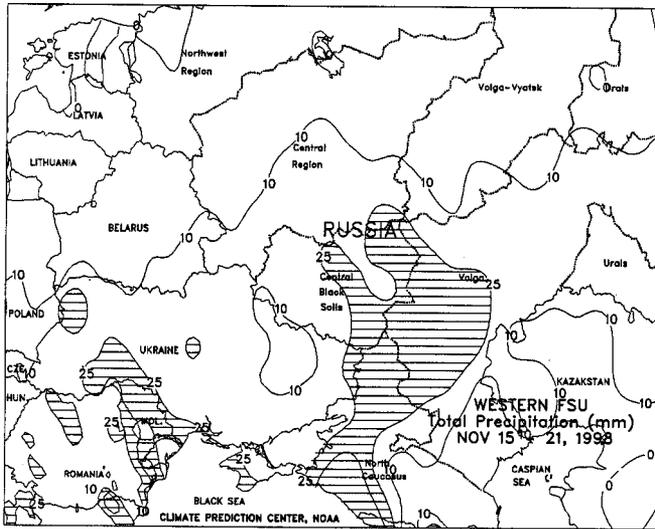
CENTRAL AMERICA: Unseasonably heavy showers (30-140 mm) slowed flood recovery efforts in Honduras.

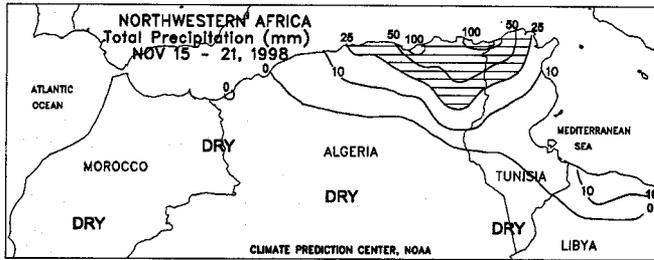




FSU-WESTERN

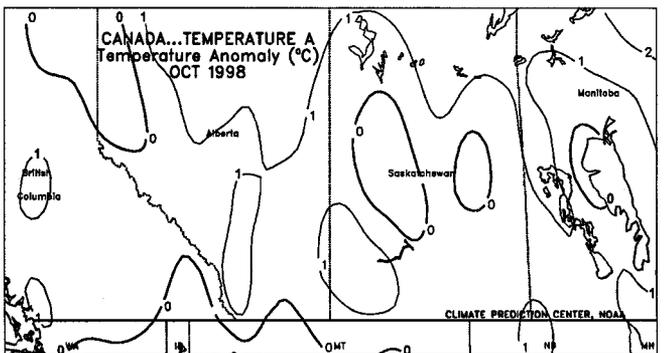
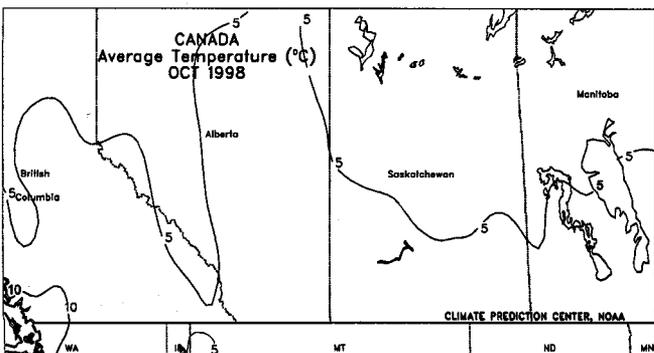
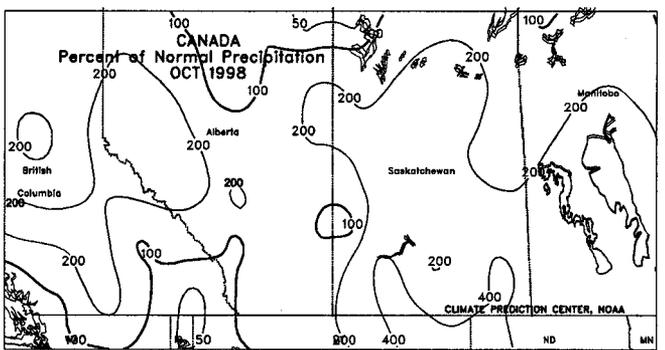
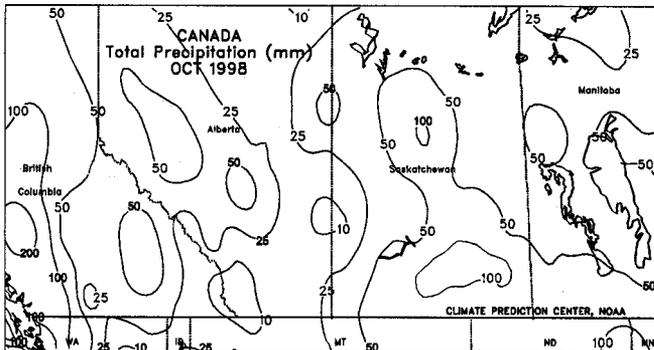
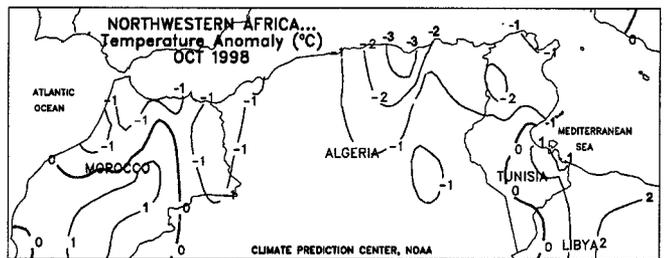
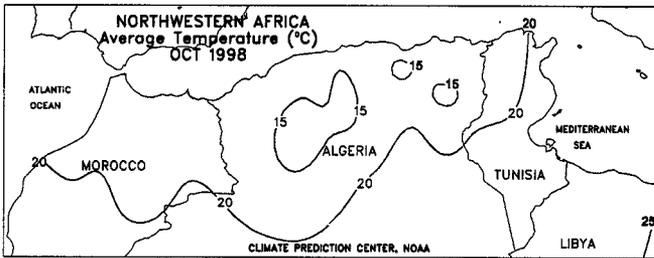
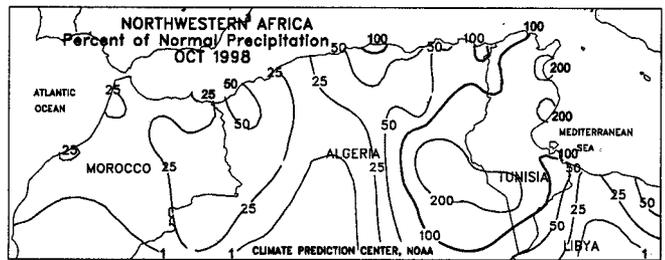
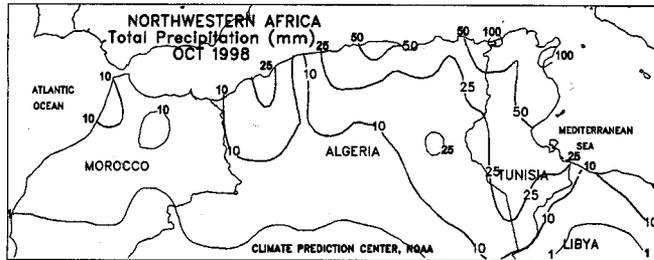
Unseasonably cold weather continued to prevail over the region, causing winter grains to begin entering dormancy as far south as the Black Sea Coast. Widespread rain and snow (10-40 mm or more) continued to boost moisture supplies in previously dry areas of eastern Ukraine and southern Russia. Widespread snow continued to fall from the Baltics and Belarus eastward across northern Russia, maintaining a protective snow cover. The snow cover in these areas protected winter grains from bitterly cold weather (extreme minimum temperatures ranging from -15 to -29 degrees C). Farther south, extreme minimum temperatures in Ukraine and southern Russia ranged from 0 to -15 degrees C. In October, drought persisted through the middle of the month in eastern Ukraine and southern Russia (southern Black Soils Region, North Caucasus, and the lower Volga Valley), delaying winter wheat planting well beyond optimum dates and adversely affecting crop development. In contrast, above-normal precipitation and mild weather in western Ukraine and northern Russia (Northwest Region, Central Region, northern Black Soils Region, Volga Vyatsk, and the upper Volga Valley) favored winter grain establishment. Since October 20, light to moderate showers have brought much-needed moisture to drought-stricken winter wheat areas in eastern Ukraine and southern Russia. However, unseasonably cold weather during the past 2 weeks has limited plant establishment, making crops more vulnerable to potential winterkill conditions.





NORTHWESTERN AFRICA

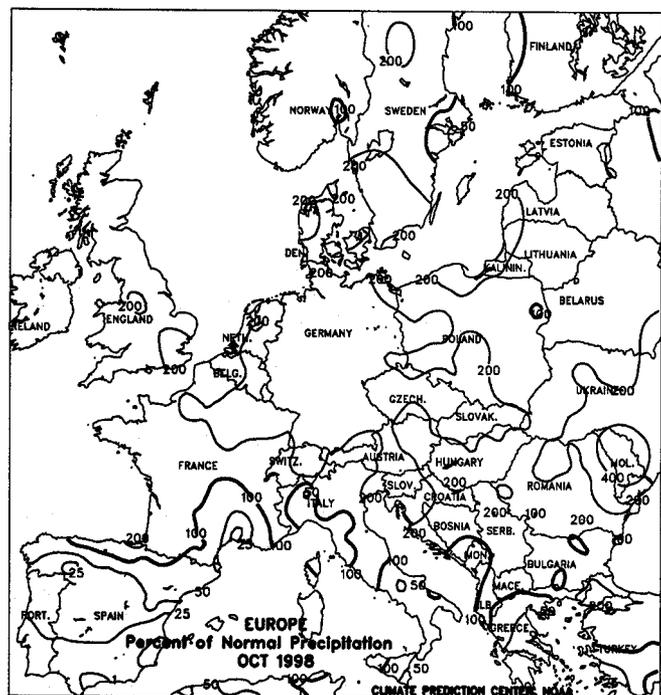
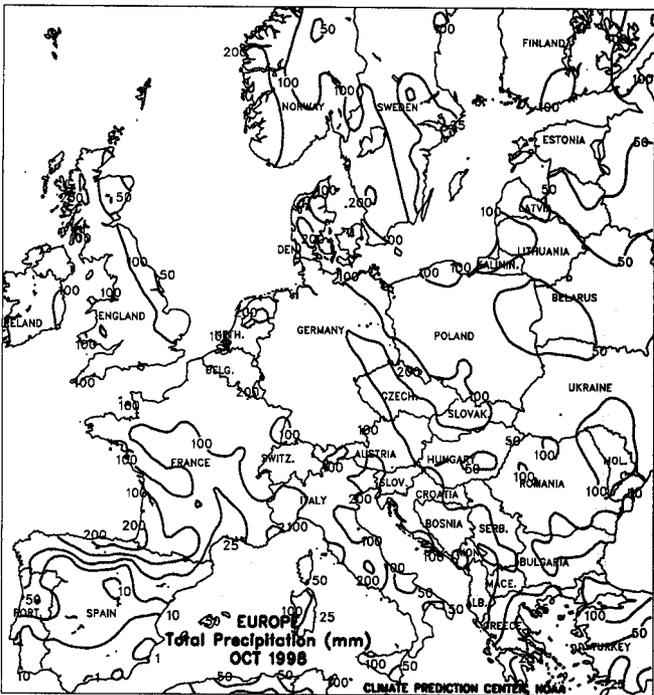
A slow start to the autumn rainy season continued to delay early winter grain planting in Morocco and western Algeria. Farther east, light to moderate showers (10-37 mm or more) in eastern Algeria and northern Tunisia helped to initiate planting. Weekly temperatures averaged 1 to 3 degrees C above normal in Morocco and western Algeria and near to slightly below normal in Tunisia. In October, dry weather prevailed over Morocco and most of Algeria, where topsoils remained unfavorably dry for winter grain planting. In extreme northeastern Algeria and northern Tunisia, widespread rain in early October was followed by dry weather that began around October 11 and continued until month's end, slowing planting. Although the autumn rainy season is off to a slow start in many areas, plenty of time remains for planting. The bulk of the crop is typically planted from mid-November to mid-December. Planting often extends into early January in Algeria.

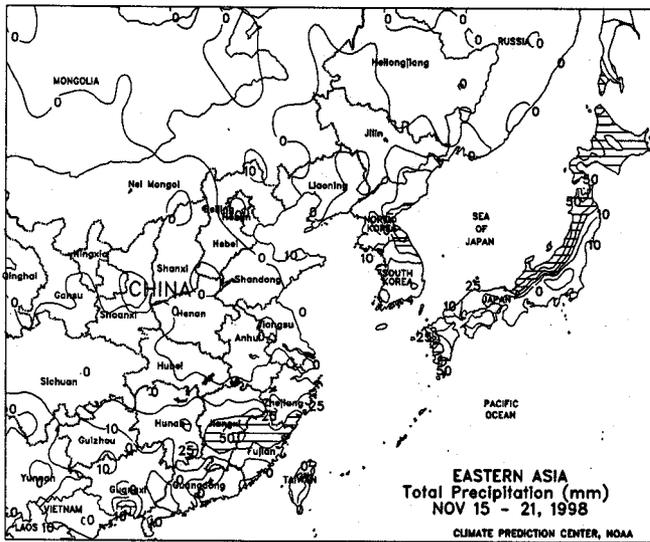
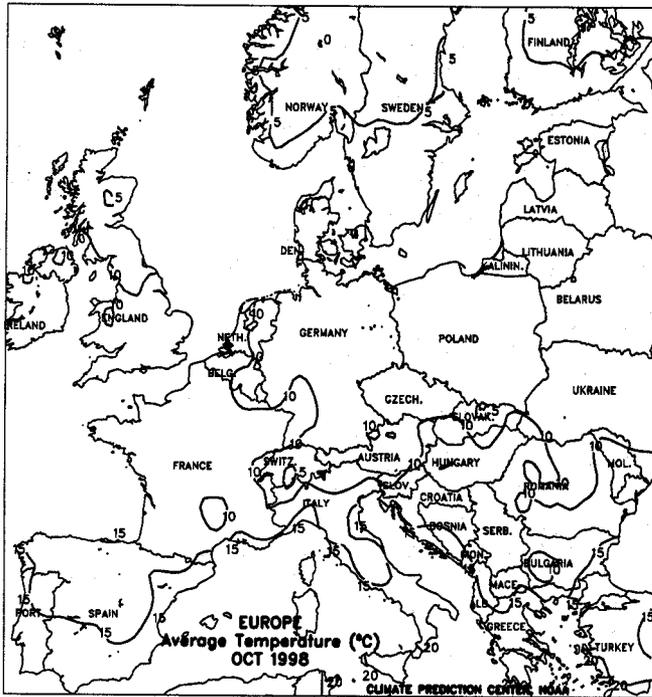




EUROPE

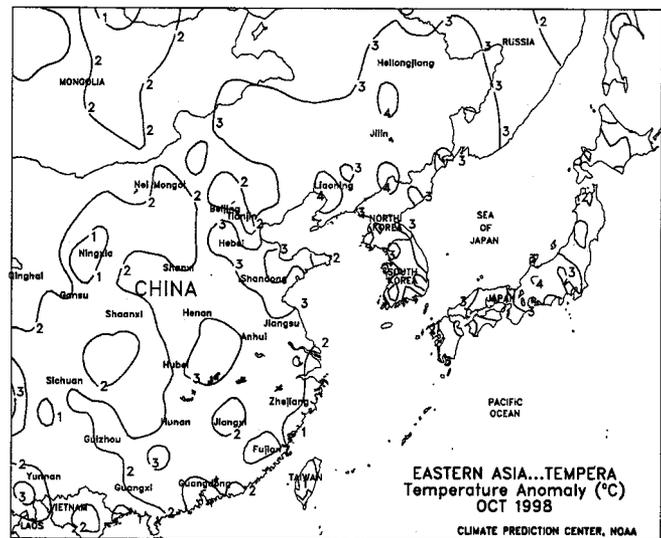
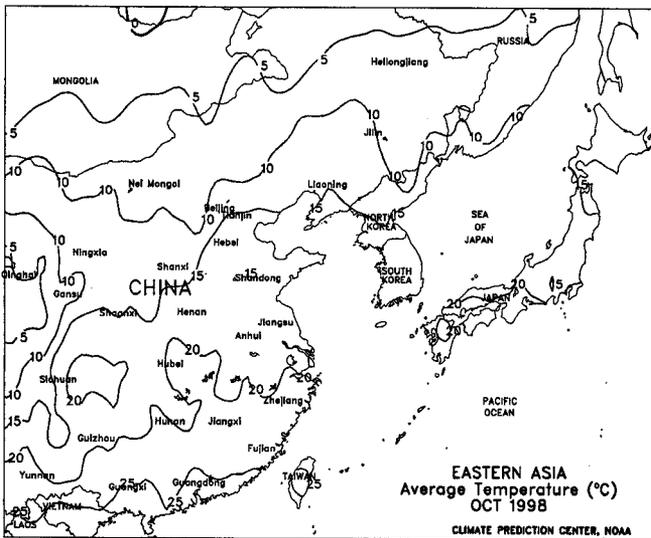
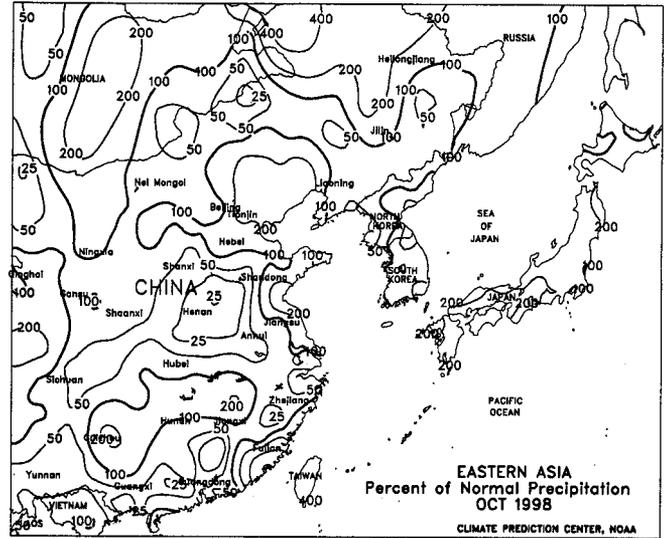
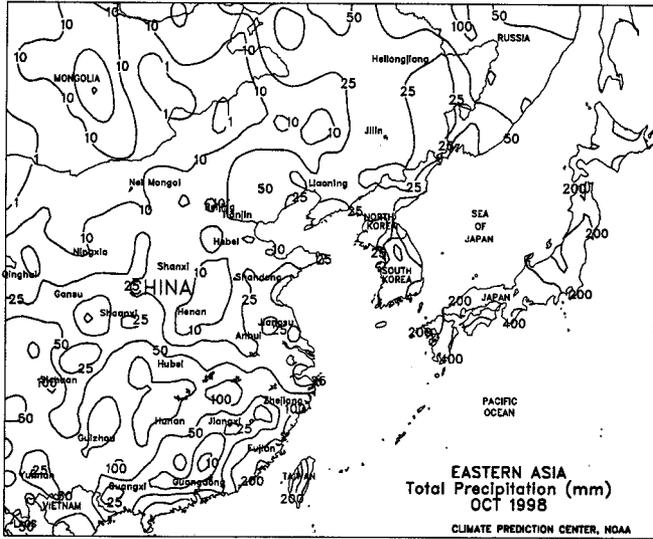
Unseasonably cold weather prevailed across most of Europe, halting winter crop growth in the west and inducing winter grains into dormancy in the east. Drier weather improved conditions for late summer crop harvesting and winter wheat planting in England, France, and Germany. Although the dry weather in Portugal, Spain, and Italy favored rapid winter wheat planting, cool weather slowed crop emergence. Farther east, unseasonably cold weather stretched from Poland southward through Hungary into Greece, with weekly temperatures averaging 3 to 8 degrees C below normal. The cold weather kept winter grains dormant in northern areas and limited further winter grain establishment in the southeast. Widespread precipitation (10-25 mm or more), including some snow, accompanied the colder weather in southeastern Europe, halting late-autumn fieldwork. In October, above-normal precipitation fell in most of Europe, slowing summer crop harvesting and winter grain planting. However, the precipitation provided abundant moisture supplies for winter grain development. In southern Romania and Bulgaria, wet weather early in the month continued September's above-normal rainfall pattern, halting corn harvesting and delaying winter wheat planting beyond optimum dates. In Spain and Greece, below-normal rainfall in October allowed rapid harvesting of corn, sunflower, and cotton.

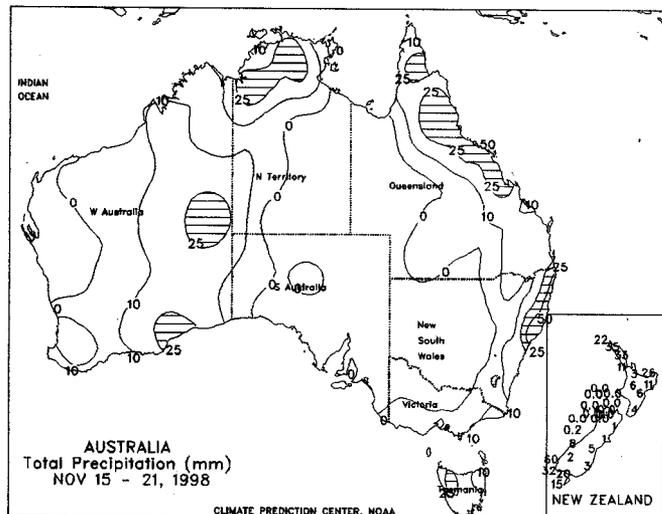




EASTERN ASIA

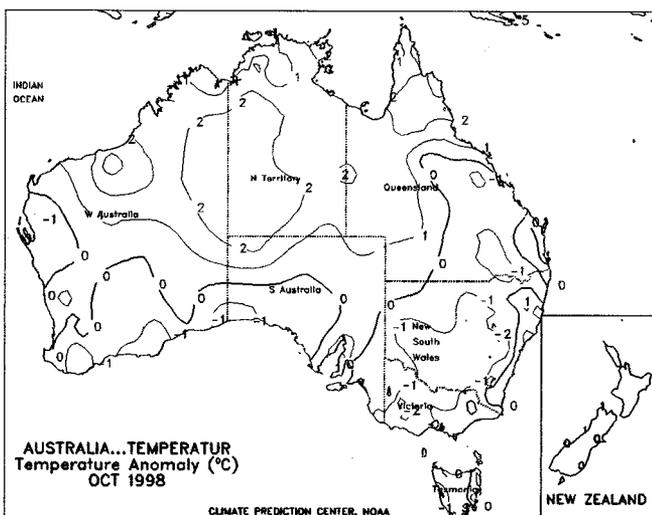
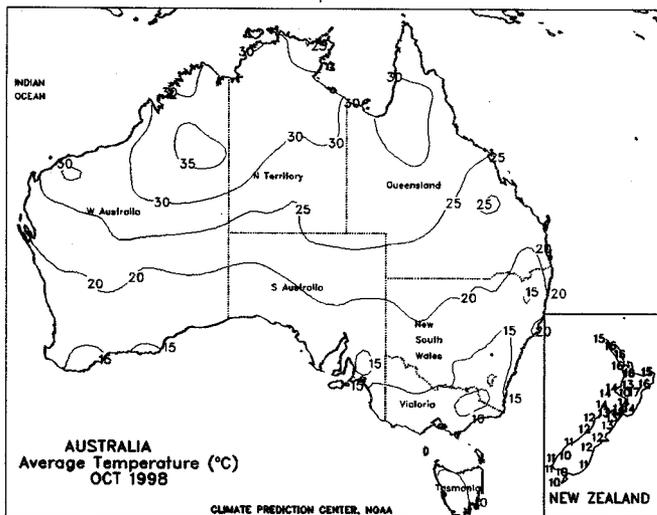
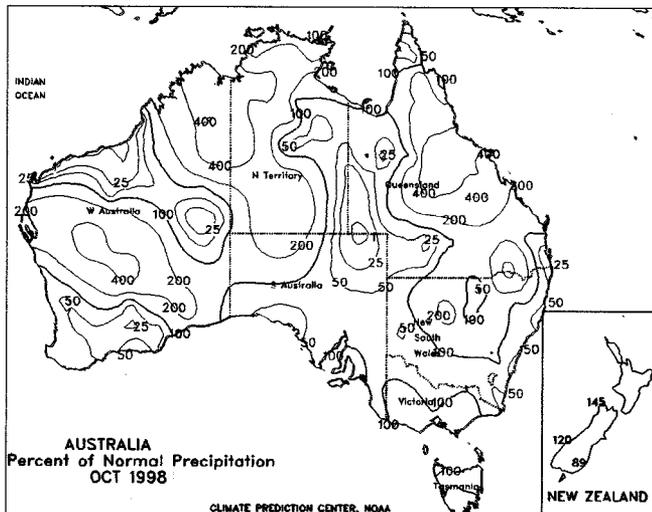
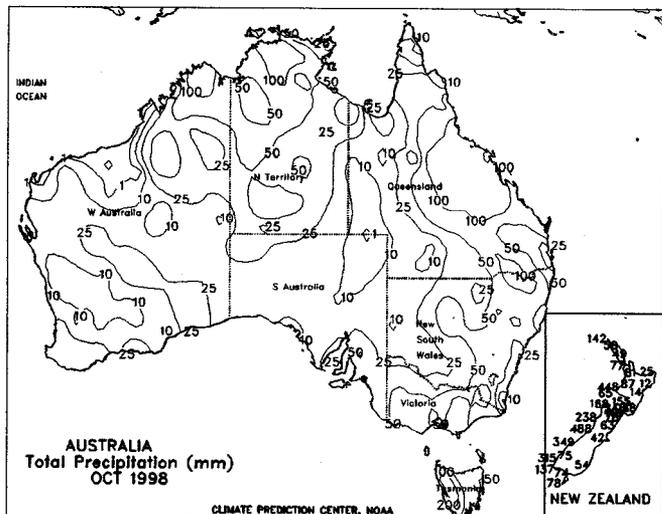
Across the northern half of the North China Plain, cooler weather (minimum temperatures 0 to -7 degrees C) hardened winter wheat for winter dormancy and burned back some vegetative growth. Temperatures averaged 1 to 3 degrees C below normal in the North China Plain. Seasonably dry weather continued to hamper rainfed winter wheat establishment across the North China Plain. Rain (10-40 mm) slowed late double-crop rice harvesting in the Yangtze Valley and southern China. Temperatures averaged 2 to 3 degrees above normal across the region. Mostly dry weather favored late summer crop harvesting across the Korean Peninsula and southern Japan. Moderate precipitation (50-150 mm) slowed late rice harvesting across northern Japan (Hokkaido and northwestern Honshu). Rice harvesting neared completion across Japan and the Korean Peninsula. During October, below-normal rainfall in the North China Plain stressed germinating to vegetative rainfed winter wheat but favored summer crop harvesting. Near-normal October rainfall maintained moisture supplies for late rice across the Yangtze Valley. Near- to above-normal rainfall slowed summer crop harvesting in Manchuria, South Korea, and Japan.

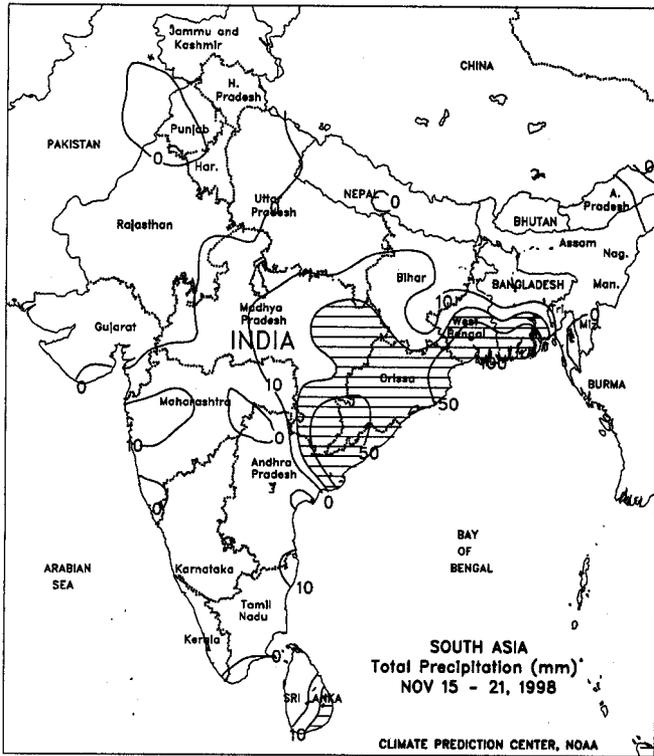




AUSTRALIA

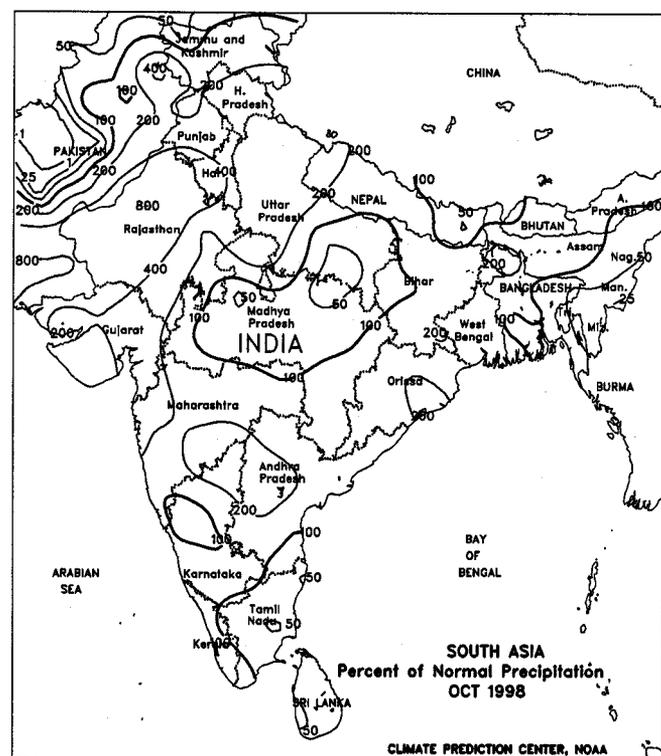
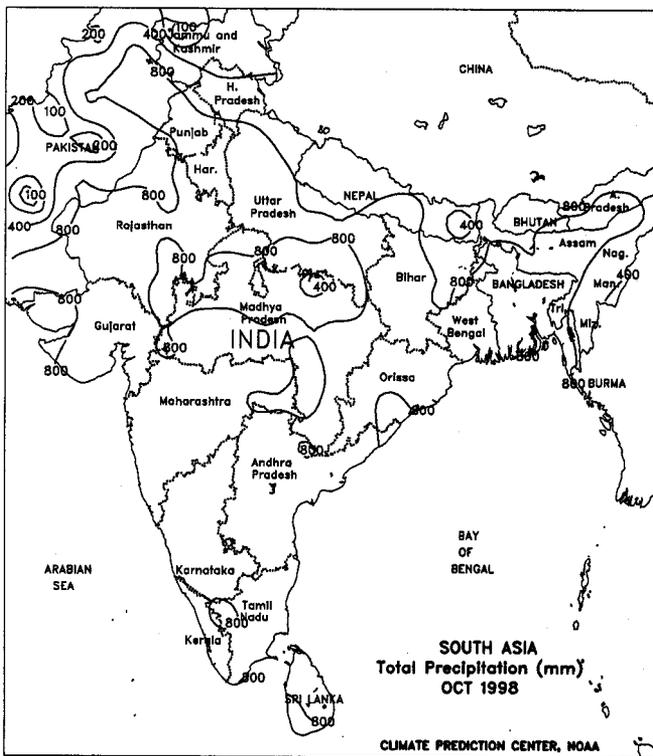
Scattered, generally light showers (less than 25 mm in most locations) continued in the agricultural areas of Queensland and northern New South Wales. The moisture kept unharvested winter grains unfavorably wet. In addition, cooler-than-normal temperatures accompanied the rainfall, slowing cotton and sorghum development. Isolated, heavier showers (25-50 mm or more) were recorded in coastal sugarcane areas. Elsewhere, variable rain (1-33 mm) swept across Western Australia's winter grain belt, but favorably drier conditions dominated the southeast. In New Zealand, the main pasture lands were dry. During October, unseasonable wetness redeveloped over the winter grain areas of Queensland and New South Wales, slowing fieldwork and worsening crop quality prospects. The heaviest rainfall (weekly totals of 25-50 mm or more), which came late in the month, also had a negative effect on sugarcane yields. October rainfall was near to below normal in the western and southeastern winter grain belts, favoring growth of filling to maturing crops. Temperatures averaged near to below normal throughout the nation's agricultural districts.

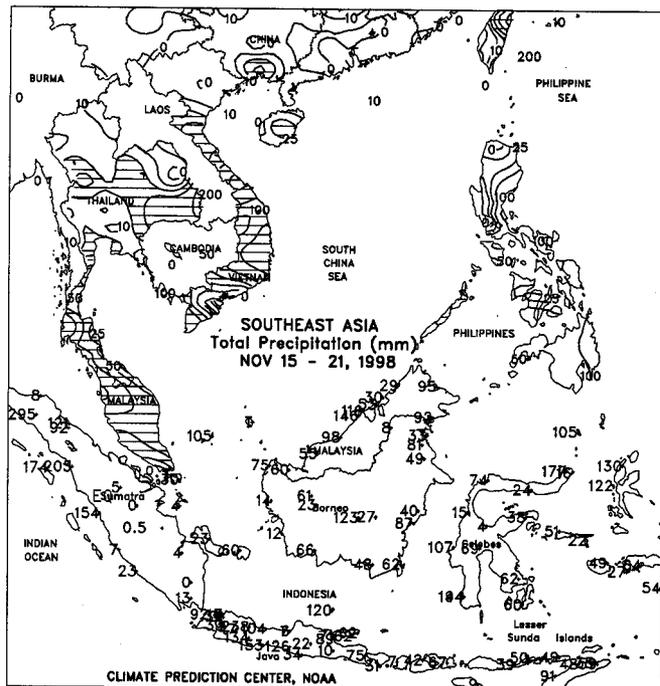
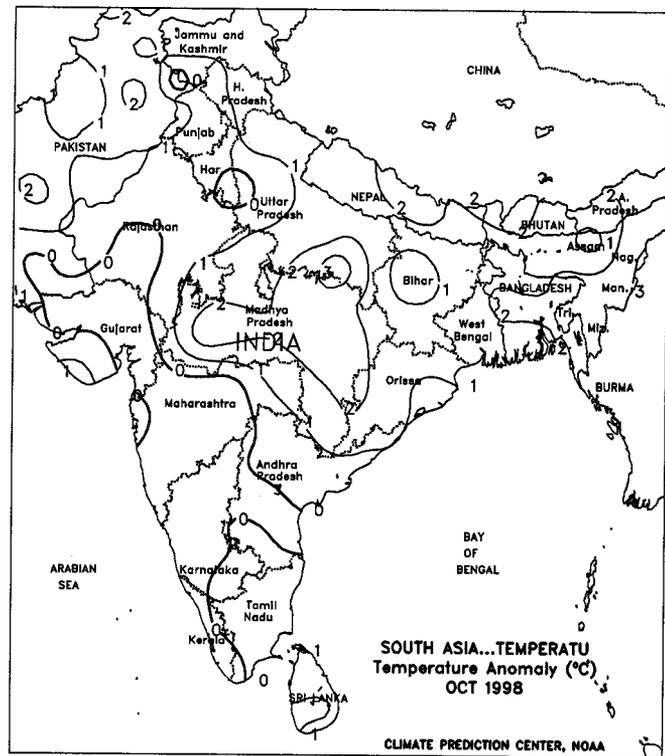
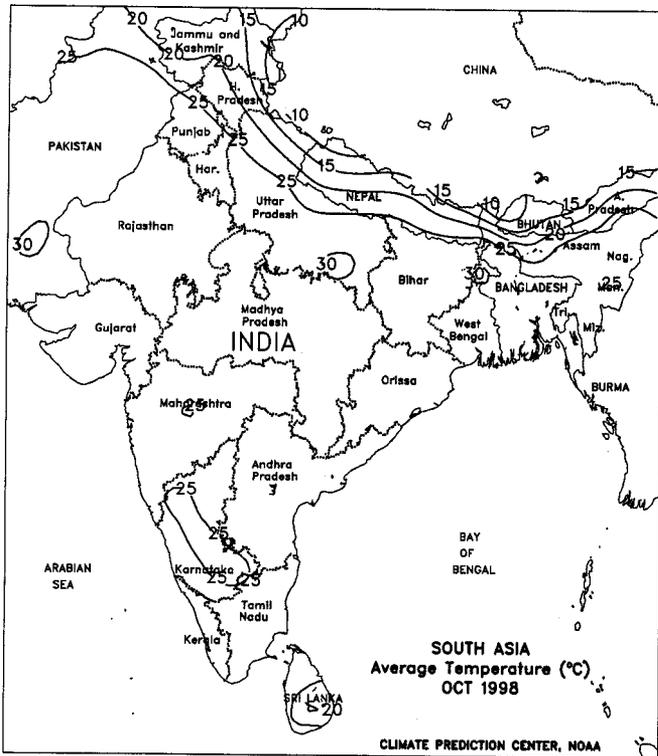




SOUTH ASIA

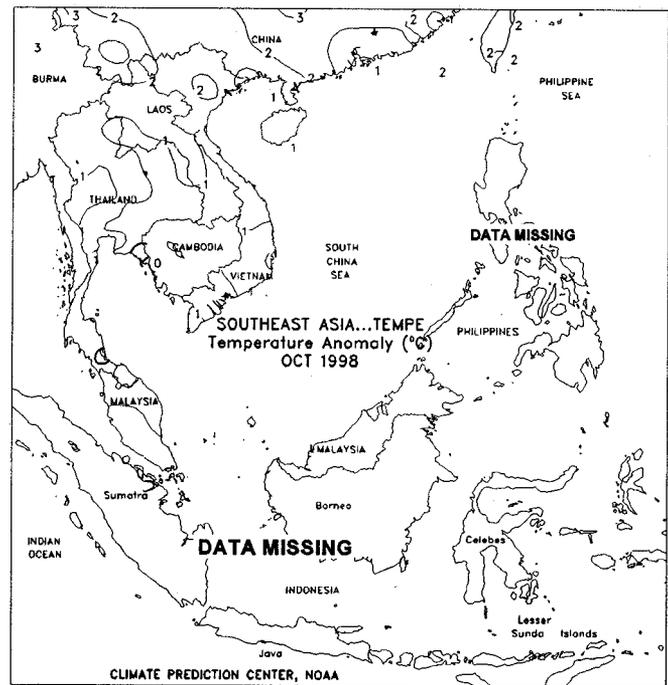
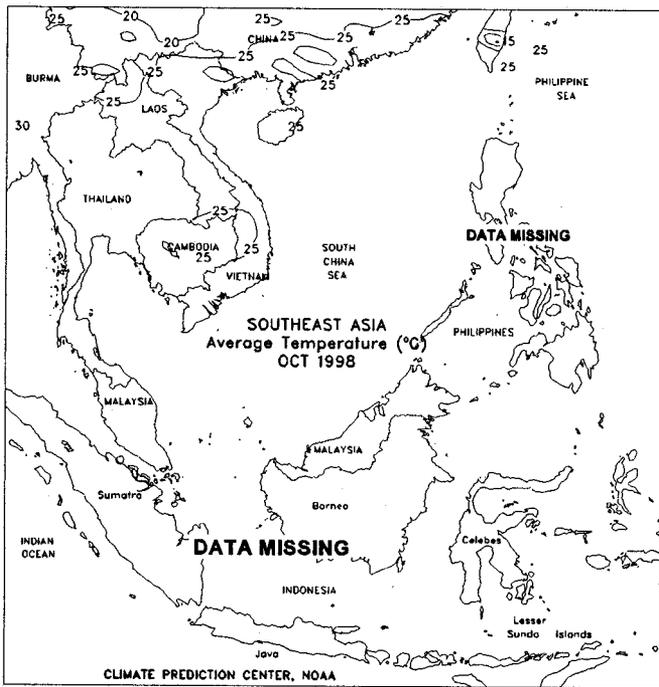
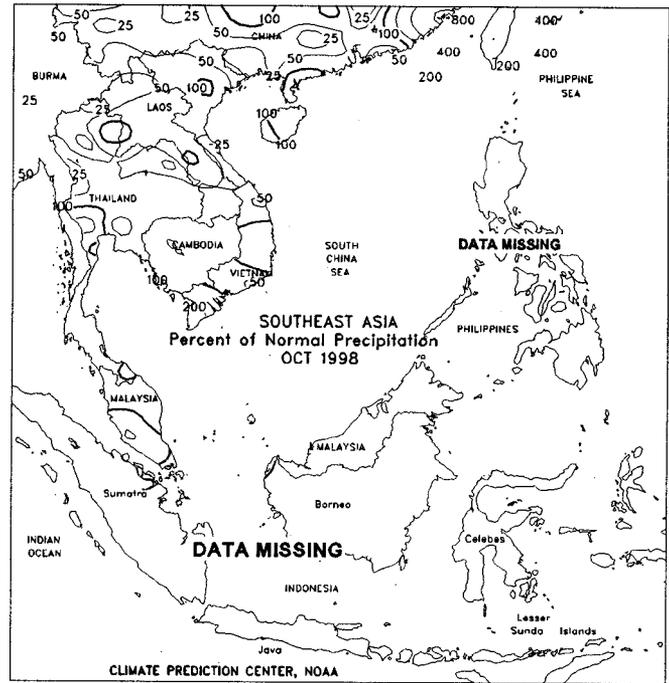
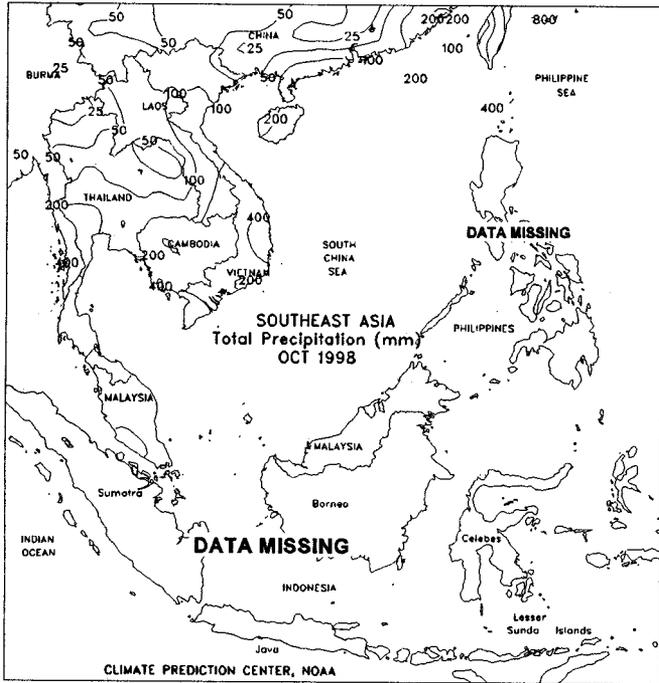
Tropical cyclones struck India's east coast on the 16th and 21st, bringing locally heavy rain (50 mm or more) and high winds to coastal rice areas. The first storm bore sustained winds of about 80 knots and may have damaged unharvested main-season rice and newly seeded secondary crops. The second storm, formerly known as "Chip," was somewhat weaker, with sustained winds of about 65 knots. Seasonable warmth and dryness elsewhere favored summer crop harvests and allowed winter grain and oilseed planting to proceed unhindered. During October, outbreaks of unseasonable rainfall were harmful to maturing summer crops but provided the region with favorable levels of moisture for secondary (rabi) crops. In the southern interior, persistent, moderate to heavy showers dominated early in the month. In mid-October, locally heavy rain threatened maturing rice and cotton in north-central India. By month's end, unseasonably heavy rain in eastern rice areas centered over Bangladesh hampered both harvesting and transplanting.

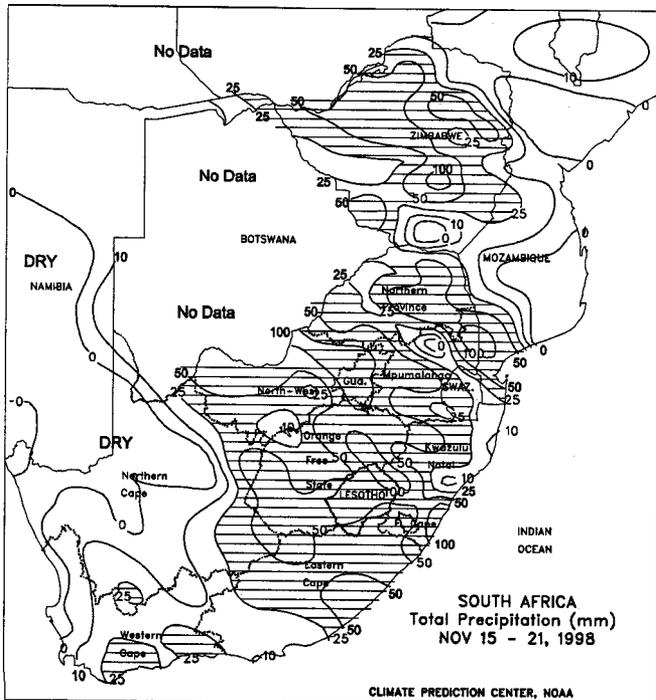
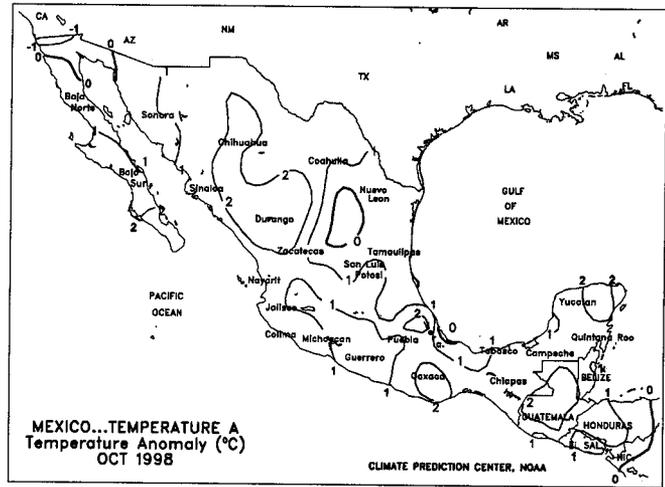
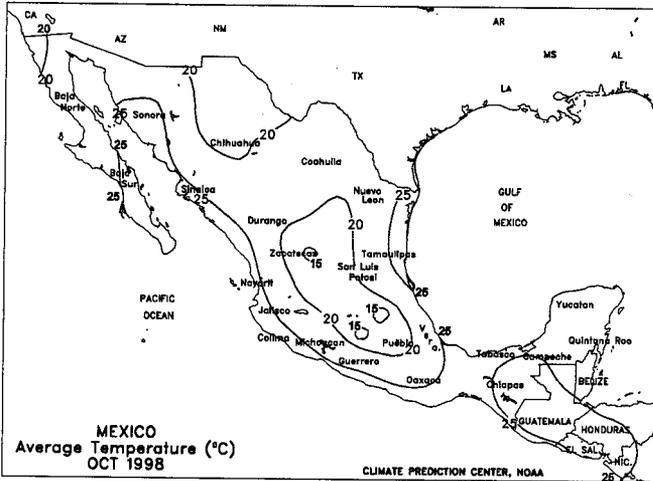
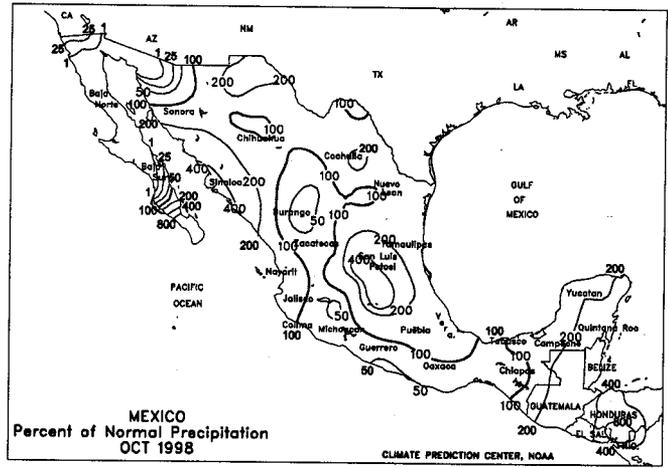
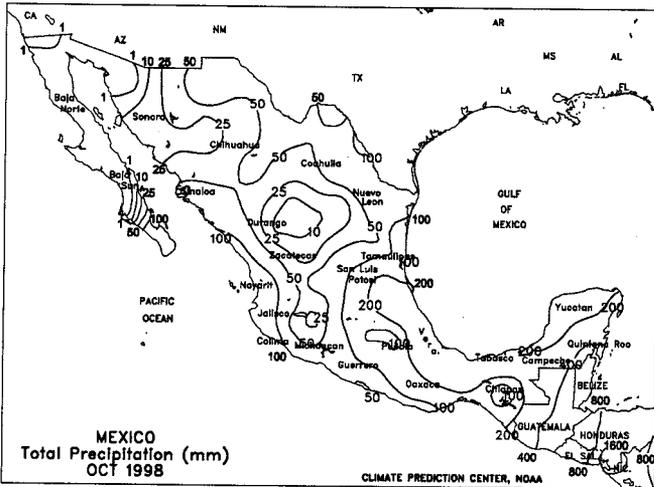




SOUTHEAST ASIA

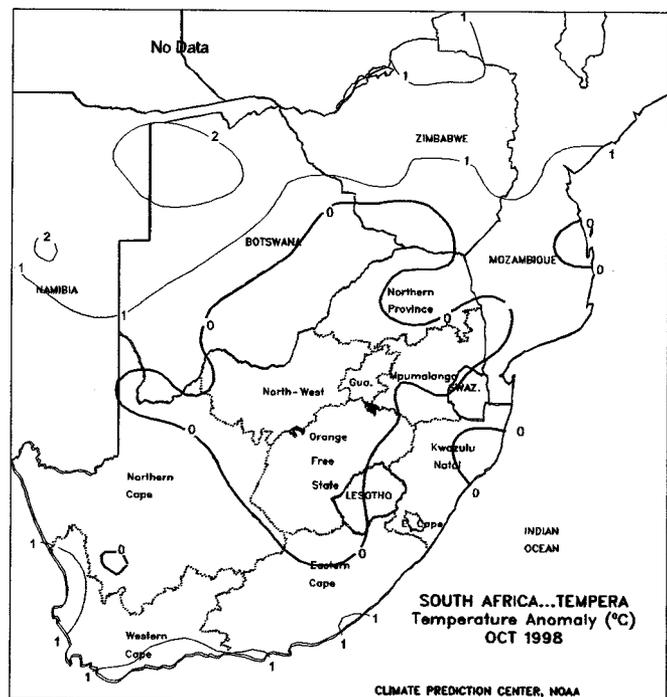
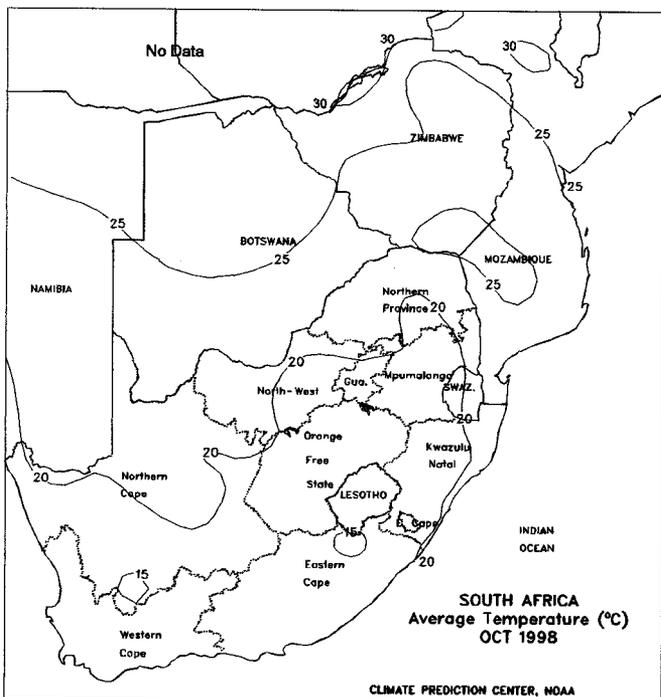
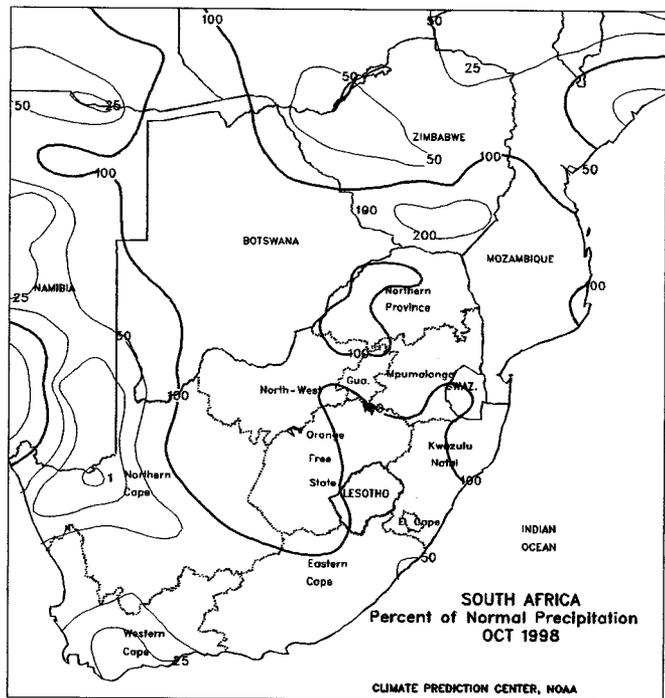
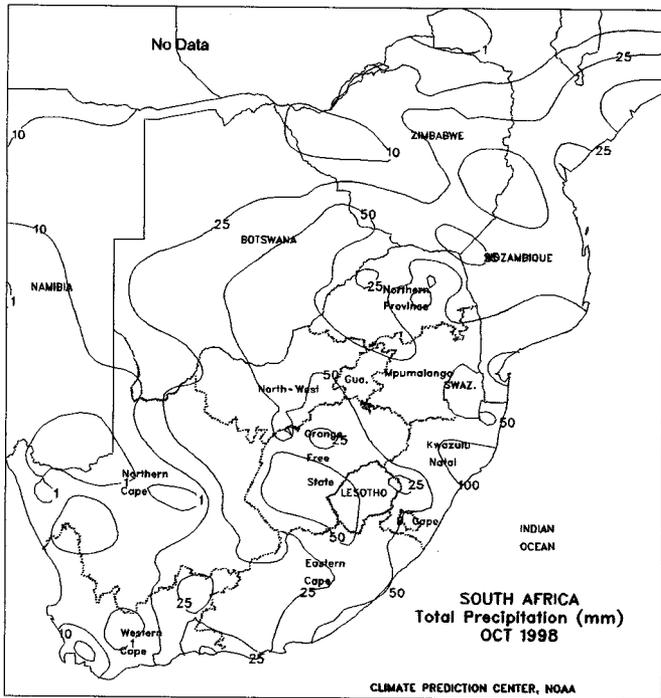
Tropical Storm Dawn hit the south-central coast of Vietnam on November 20, with sustained winds near 35 knots (40 mph). Dawn brought heavy showers (100-300 mm) and flooding to southern Vietnam, slowing rice harvesting. In Java, heavy showers (40-130 mm) continued to increase moisture supplies for main-season rice, but slowed fieldwork. In the Philippines, moderate to heavy showers (40-125 mm) slowed summer grain harvesting, but increased moisture supplies for second-season crop planting. Unseasonably heavy showers (20-60 mm, with isolated amounts greater than 75 mm) slowed main-season rice harvesting but increased moisture supplies for the upcoming second-season rice crop. Showers (30-75 mm) maintained moisture supplies for oil palm across peninsular Malaysia. During mid-October, two typhoons (Zeb and Babs) hit the northern Philippines (Luzon island), causing flooding and damage to mature crops. Above-normal October rainfall contributed to flooding and possible rice damage in central and southern Vietnam. Below-normal rainfall aided rice harvesting in Thailand. Near- to above-normal October rainfall increased moisture supplies for oil palm across peninsular Malaysia. In Java, unseasonably heavy showers slowed main-season rice planting and caused some replanting.

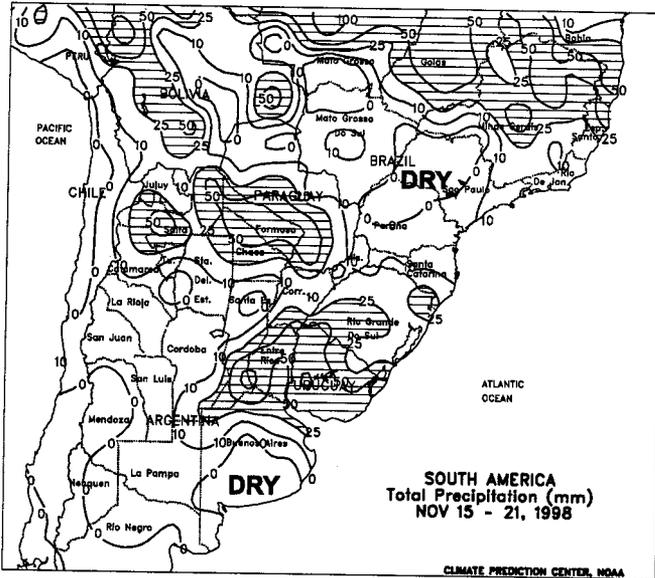




SOUTH AFRICA

Widespread, locally heavy rain (25-50 mm, locally exceeding 100 mm) provided ample moisture for summer crop germination and establishment. Drier weather prevailed across important wheat areas of Western Cape, favoring late harvests. In the corn belt, heavy showers (100 mm or more) were recorded in every province, with the highest concentration centered over Gauteng. Locally heavy rain also fell in coastal sugarcane areas of KwaZulu Natal. Temperatures averaged near to above normal, with highs reaching the mid 30's degrees C in the western and central corn belt prior to the arrival of soaking rains. In October, rainfall was near to above normal in western and northern sections of the corn belt. Most of the rain came early in the month, and the ensuing drier weather favored fieldwork that included summer crop planting and wheat harvesting. Dry pockets that existed in eastern Free State and Northern Province have since filled in, resulting in mostly favorable moisture levels for summer crops across the country. Unlike last season, planting should be completed on schedule, weather permitting.





SOUTH AMERICA

In central Argentina, dry weather returned to southern Buenos Aires, reducing soil moisture for reproductive to filling winter wheat. To the north, heavy showers (100-150 mm) slowed filling to maturing winter wheat and possibly reduced quality in southern Santa Fe. The moisture, however, erased lingering moisture deficits for summer crop planting. According to reports as of November 13, corn was 68 percent planted versus 72 percent last year, sunseed was 75 percent planted versus 68 percent last year, and soybeans were 22 percent planted versus 23 percent last year. In southern Brazil, light to moderate showers (10-40 mm) eased short-term dryness in Rio Grande do Sul. Elsewhere, somewhat drier weather favored summer crop planting. According to reports as of November 12, soybeans were 32 percent planted compared with 30 percent last year. In October, below-normal rainfall stressed vegetative to reproductive winter wheat across central Argentina. Rain increased soil moisture levels in late October and early November, helping to stabilize crop prospects. In southern Brazil, continued above-normal rainfall slowed winter wheat harvesting and reduced wheat quality.

