

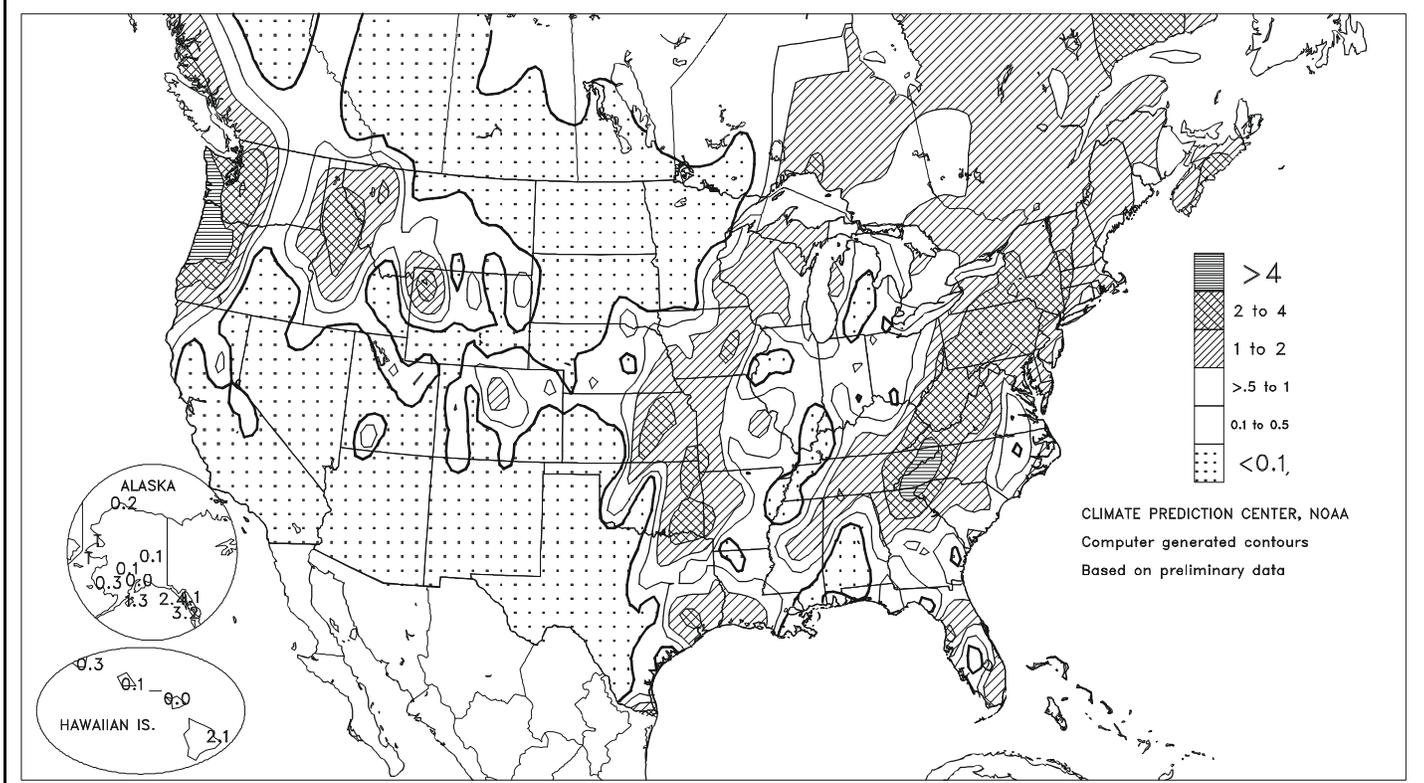
WEEKLY WEATHER AND CROP BULLETIN

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

Total Precipitation (Inches)

NOV 21 - 27, 1999



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

HIGHLIGHTS

November 21 - 27, 1999

Much-needed rain fell across the **east-central Plains** and **upper Midwest**, but unfavorably dry weather continued to adversely affect winter wheat development from the **central High Plains** southward into **western and central Texas**. Although scattered showers aided pastures and recently planted winter grains from **eastern Texas** into the **Southeast**, soil moisture remained short in many areas **west of the Delta**. In contrast, widespread showers further eased the 9-month drought across the **interior Northwest**, while seasonably wet weather prevailed in the **Pacific Northwest**. Dry weather in **southern California** and the **Southwest** favored fieldwork, including winter wheat

(Continued on page 3)

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Weather Data for Selected Locations in the Delta

Weather Data for the Week Ending November 27, 1999

Data provided by the Mississippi State Delta Research and Extension Center (DREC) and the Southern Regional Climate Center (SRCC).

STATES AND STATIONS	TEMPERATURE EF						PRECIPITATION							4-INCH SOIL TEMP. °F		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. EF		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
MS BATESVILLE X	65	42	79	29	54	5	--	--	--	--	--	--	--	--	--	0	2	--	--
BELZONI X	66	43	78	34	55	3	0.40	-0.84	0.40	--	--	--	--	--	--	0	0	1	0
CLARKSDALE X	62	41	75	31	52	2	0.21	-0.99	0.21	--	--	--	--	--	--	0	1	1	0
CLEVELAND X	64	42	77	33	53	2	0.15	-0.87	0.15	5.42	65	--	--	--	--	0	0	1	0
GREENVILLE X	63	43	76	33	53	1	0.34	-1.18	0.19	--	--	--	--	--	--	0	0	2	0
GREENWOOD X	64	43	78	31	54	2	0.66	-0.58	0.34	5.49	52	--	--	--	--	0	0	1	3
INDIANOLA 1S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INVERNESS 5E	64	45	76	34	55	--	0.47	--	0.26	7.54	--	41.89	--	63	55	0	0	2	0
LYON	63	42	77	31	53	--	0.21	--	0.12	7.16	--	--	--	--	--	0	1	2	0
MOORHEAD X	63	44	78	34	54	2	0.31	-0.98	0.25	9.94	94	--	--	--	--	0	0	3	0
ONWARD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ROLLING FORK X	65	43	79	32	54	2	0.41	-0.86	0.26	3.44	33	--	--	--	--	0	1	2	0
SIDON	66	46	78	34	56	--	0.60	--	0.34	8.40	--	--	--	63	58	0	0	2	0
TUNICA X	62	43	74	31	53	4	--	--	--	--	--	--	--	--	--	0	1	--	--
VICKSBURG X	65	43	79	32	54	-1	--	--	--	--	--	--	--	--	--	0	1	--	--
YAZOO CITY X	66	44	77	33	55	3	0.21	-1.06	0.21	--	--	--	--	--	--	0	0	1	0
STONEVILLE *	63	44	75	34	54	3	0.31	-1.19	0.16	7.85	70	47.24	103	63	52	0	0	2	0

Compiled by USDA/OCE/WAOB's Stoneville Field Office.

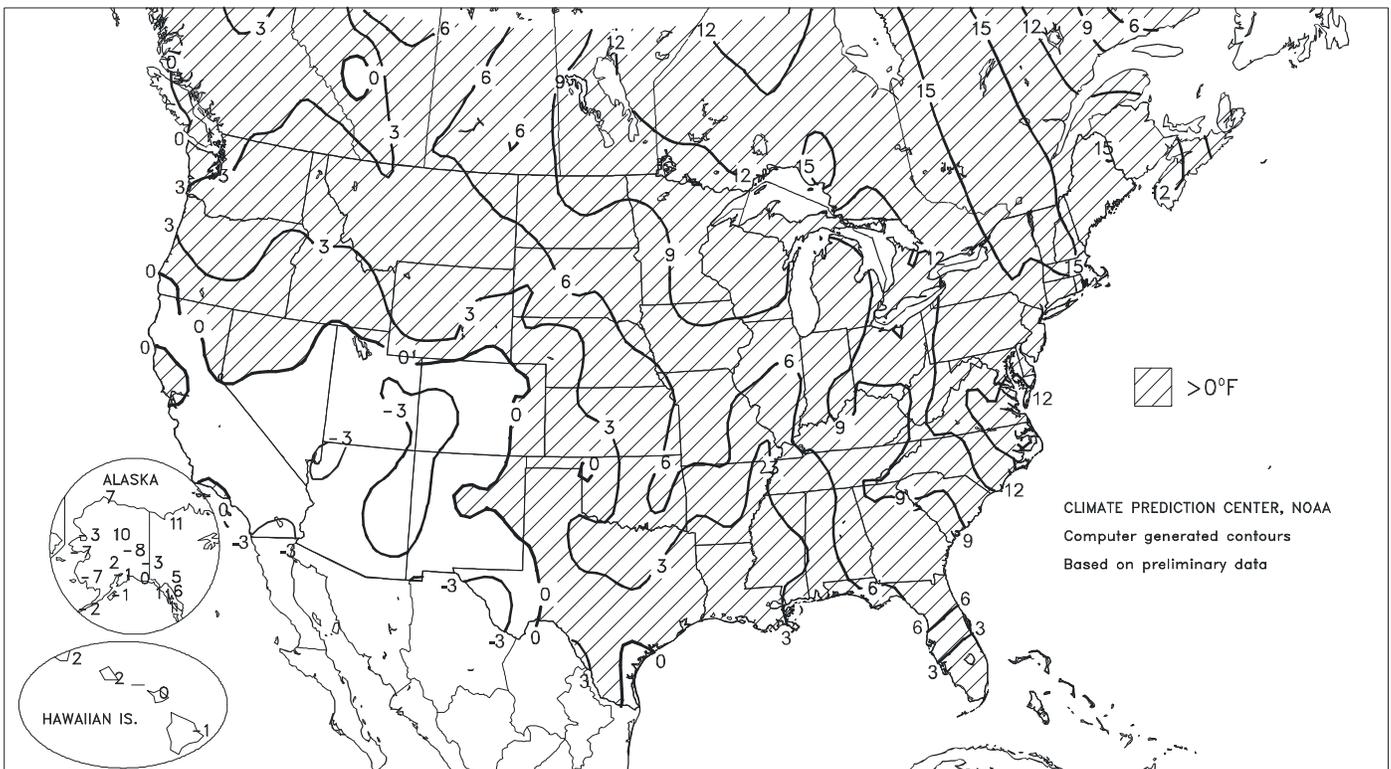
* Based on 1964-93 normals.

X Based on 1961-90 normals.

Delta Weather and Crop Summary: Temperatures were above normal until a midweek frontal passage. Thereafter, readings fell to more seasonable levels. Light frost was observed throughout the Delta late in the week as temperatures approached or reached the freezing mark. Light precipitation associated with the front helped to maintain soil moisture levels.

Departure of Average Temperature from Normal (°F)

NOV 21 - 27, 1999



(Continued from front cover)

planting and final cotton harvesting. Late-week, heavy rain and cooler weather spread across the **East**, reversing a recent drying trend. Precipitation topped 4 inches in parts of the **southern Appalachians**. Weekly temperatures averaged 9 to 17 °F above normal in the **Northeast** and 5 to 11°F above normal in the **Midwest**. Above-normal temperatures prevailed on the **Plains** for a 5th consecutive week, although record warmth shifted eastward. Readings averaged as much as 4°F below normal in the **Southwest**, ending a month-long warm spell.

More than 50 daily-record highs were set across the **eastern half of the Nation** during the week. Monday marked the 18th day this month with a high temperature at or above 80 °F in **Austin (Bergstrom), TX**, well above their previous November record of 14 days, set in 1950. Farther north, daily records were achieved on 3 consecutive days (November 22-24) in locations such as **Alpena, MI** (60, 59, and 58°F) and **Mansfield, OH** (66, 69, and 63°F). Cooler air arrived in the **Plains** and **Midwest** at midweek, however, while record warmth spread into the East. On November 24, **Austin** (59°F) recorded a high below 60 °F for the first time since March 13. A day later in **Arkansas**, **Little Rock**' s high of 48°F represented their first sub-50°F maximum since March 14. By Friday morning, **Austin** posted a daily-record low of 27°F. Farther east, daily-record highs included 70°F in **Philadelphia, PA** and 80°F in **Wilmington, NC**.

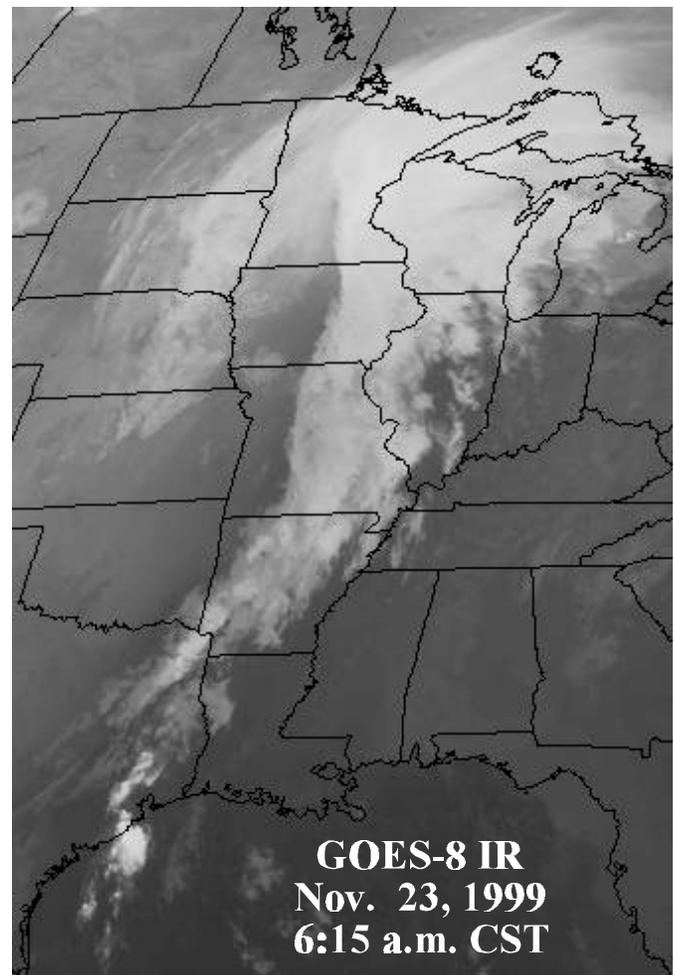
A storm system crossed the **central Plains** and **upper Midwest** during the early- to midweek period, producing the regions' first significant precipitation of the month. In **Nebraska**, dry spells ended at 49 days (October 4 - November 21) in **Lincoln**--their longest since September-November 1952--and 44 days (October 8 - November 21) in **Omaha (Valley)**--their longest since December 1985 - February 1986. In **Illinois**, **Moline**' s third-longest dry spell (36 days, from October 17 - November 21) ended on Monday. **Wichita, KS** netted 1.45 inches of rain on November 22, their first measurable rainfall since October 30. On the same day in **Wisconsin**, rainfall of 1.50 inches in **Green Bay** and 1.22 inches in **LaCrosse** were the greatest single-day totals since September 26, 1998, and July 8, 1999, respectively. August 1 - November 22 rainfall had totaled just 3.30 inches (31 percent of normal) in **Green Bay** and 6.01 inches (51 percent) in **LaCrosse**. Farther south, although storm-total rainfall reached 1.53 inches in **Houston, TX**, their year-to-date total through November 27 stood at 25.88 inches (61 percent of normal).

The storm also produced snow from parts of the **West** and the **central High Plains** to the **western Great Lakes region**. In **Utah**, early-week snowfall totaled 13.0 inches in **Alta** and 5.5 inches in **Salt Lake City**. Totals in **eastern Colorado** included 10.6 inches in **Colorado Springs** and 8.4 inches in **Denver**. **Colorado Springs**' snowfall followed a 34-day dry spell. In **Minnesota**, totals included 0.7 inch in **Minneapolis** and 5.7 inches in **Duluth**. In several other areas, however, a remarkably snow-free autumn continued. With a trace of snow so far this season, **International Falls, MN** headed toward their first autumn without a measurable amount since 1924. **Milwaukee, WI** established a record for their latest first trace of snow (the old record was November 27, 1994). Elsewhere in **Wisconsin**, locations such as **LaCrosse** and **Green Bay** did not receive a single flake of snow from November 1-27. The November

record in both cities is a trace.

A late-week storm system brought renewed heavy rainfall to the **Pacific Northwest**. The system boosted November 1-27 rainfall to 14.60 inches (163 percent of normal) in **Astoria, OR**, 11.22 inches (156 percent) in **Olympia, WA**, and 9.09 inches (174 percent) in **Seattle, WA**. Meanwhile, the storm that had earlier affected the **Plains** and **upper Midwest** shifted into the **East**. In **western North Carolina**, late-week rainfall totaled 5.86 inches at **Lake Toxaway**. Farther north, light rain (0.04 inch) on November 25 ended a 22-day spell without measurable rainfall in **Washington, DC**. The following day, 1.52 inches pelted the Nation' s capital.

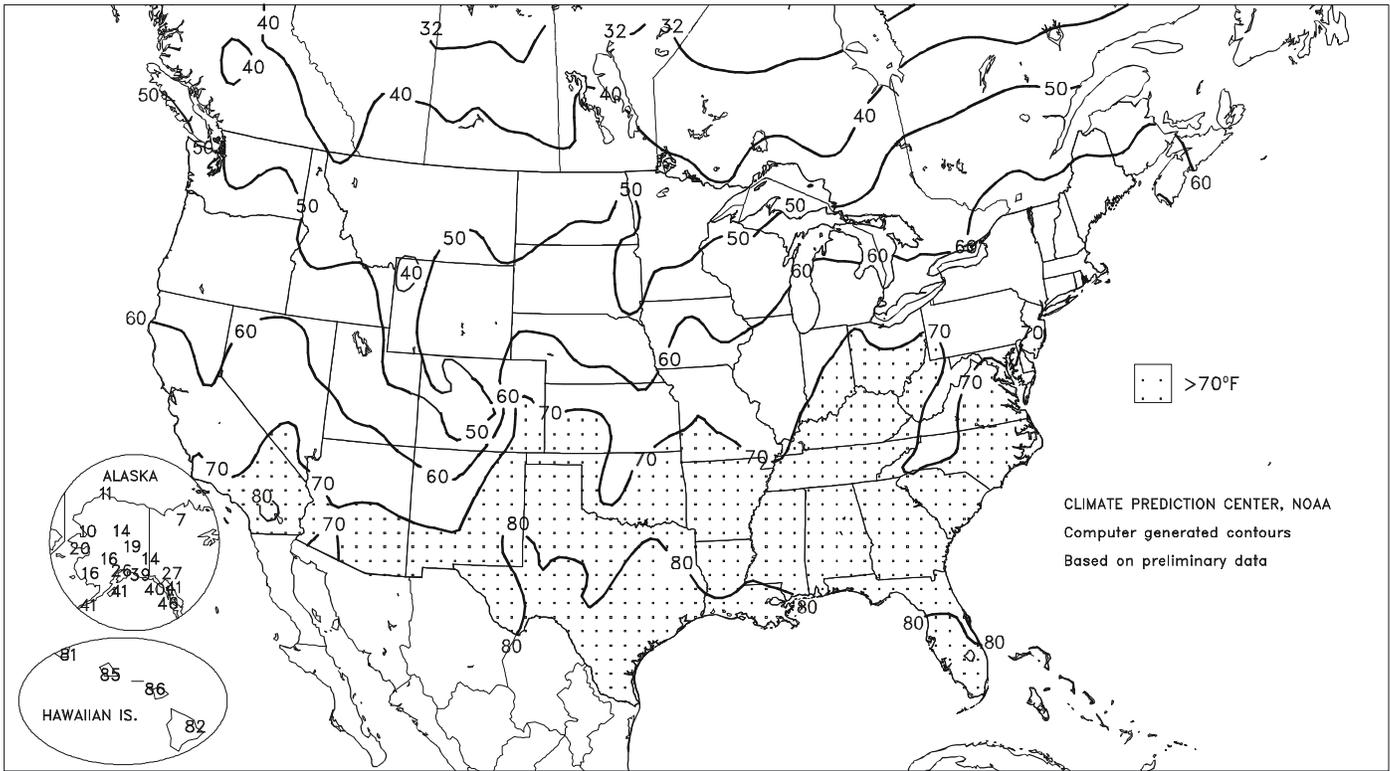
Cold weather returned to much of **Alaska**, especially across southern areas. On Thursday, the snow depth in **Bethel** reached 17 inches, breaking their November record of 16 inches, set in 1994. In **Juneau**, a 59-day streak (September 29 - November 26) with at least a trace of rain ended on Saturday. Their record, established in 1977, remains 77 days. After **Juneau**' s rain ended, their first hard freeze (at or below 28 °F) of the autumn occurred on November 27, nearly 2 weeks later than their previous record (November 14, 1952).



A Second Storm: This low-pressure system took a similar path to the previous week' s storm, but produced much more significant precipitation from the east-central Plains to the upper Midwest.

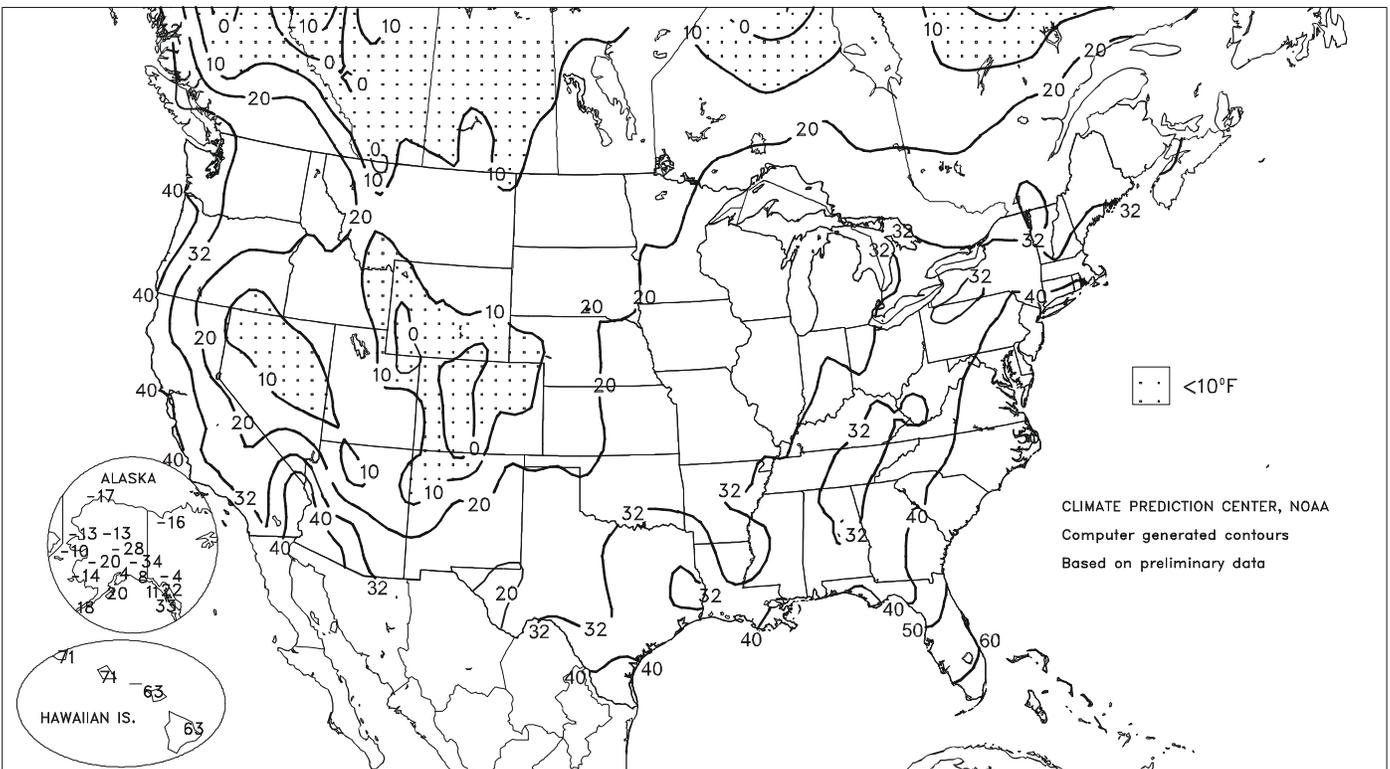
Extreme Maximum Temperature (°F)

NOV 21 - 27, 1999



Extreme Minimum Temperature (°F)

NOV 21 - 27, 1999



National Weather Data for Selected Cities

Weather Data for the Week Ending November 27, 1999

Data Provided by Climate Prediction Center (301-763-8000, Ext. 7503)

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 Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.		
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
AL	BIRMINGHAM	68	47	74	33	57	6	0.08	-1.03	0.05	7.52	71	45.48	93	97	56	0	0	3	0
	HUNTSVILLE	64	45	73	31	55	6	0.71	-0.53	0.26	6.78	58	42.73	84	10	67	0	1	4	0
	MOBILE	72	50	78	35	61	3	0.10	-0.97	0.08	12.30	99	47.38	81	10	58	0	0	2	0
	MONTGOMERY	71	47	78	31	59	5	0.44	-0.63	0.34	7.00	69	38.69	81	99	58	0	1	5	0
AK	ANCHORAGE	23	13	26	4	18	-1	0.00	-0.22	0.00	5.96	104	16.72	114	90	61	0	7	0	0
	BARROW	8	-4	11	-17	2	7	0.19	0.13	0.07	0.87	67	3.75	87	83	74	0	7	5	0
	FAIRBANKS	-2	-19	19	-28	-10	-8	0.13	-0.06	0.13	3.10	120	9.59	96	85	75	0	7	1	0
	JUNEAU	38	32	41	22	35	5	1.06	0.05	0.35	28.26	148	68.30	138	97	81	0	3	6	0
	KODIAK	37	27	41	20	32	-1	1.25	-0.12	0.47	28.63	147	68.65	114	89	59	0	5	5	0
	NOME	10	1	20	-10	6	-7	0.01	-0.21	0.01	4.34	92	15.14	109	91	61	0	7	1	0
AZ	FLAGSTAFF	50	12	64	3	31	-3	0.00	-0.49	0.00	4.57	85	16.06	80	76	18	0	7	0	0
	PHOENIX	70	45	78	40	58	-1	0.00	-0.17	0.00	1.31	63	6.63	101	43	14	0	0	0	0
	TUCSON	70	37	80	29	54	-2	0.00	-0.17	0.00	0.97	29	9.67	89	38	15	0	3	0	0
	YUMA	72	50	79	47	61	0	0.00	-0.06	0.00	0.02	2	4.35	162	44	18	0	0	0	0
AR	FORT SMITH	66	40	75	29	53	6	1.45	0.54	1.16	8.95	85	35.68	95	89	44	0	1	2	1
	LITTLE ROCK	65	41	77	30	53	4	0.26	-1.01	0.26	5.42	43	31.98	70	92	53	0	1	1	0
CA	BAKERSFIELD	59	38	63	34	49	-4	0.00	-0.17	0.00	0.40	37	5.82	116	84	44	0	0	0	0
	EUREKA	--	--	--	--	--	--	0.00	-9.99	0.00	5.65	67	33.16	111	--	--	--	--	--	--
	FRESNO	60	38	64	35	49	-2	0.01	-0.35	0.01	0.51	26	6.46	72	99	49	0	0	1	0
	LOS ANGELES	71	50	78	47	60	0	0.00	-0.46	0.00	0.36	16	7.49	74	69	23	0	0	0	0
	REDDING	58	37	62	32	47	-2	0.01	-1.32	0.01	5.20	67	22.36	82	96	48	0	1	1	0
	SACRAMENTO	58	38	62	34	48	-2	0.01	-0.68	0.01	1.64	42	11.58	79	97	52	0	0	1	0
	SAN DIEGO	67	48	71	45	58	-2	0.00	-0.39	0.00	0.06	3	5.17	63	74	32	0	0	0	0
	SAN FRANCISCO	59	48	61	41	53	0	0.08	-0.64	0.08	2.04	52	14.97	92	92	66	0	0	1	0
CO	ALAMOSA	43	6	58	1	25	-1	0.00	-0.08	0.00	1.33	68	7.54	106	84	26	0	7	0	0
	CO SPRINGS	43	22	60	8	32	-3	0.73	0.62	0.47	2.35	90	24.73	157	79	41	0	6	2	0
	DENVER	44	24	66	14	34	-2	0.47	0.28	0.38	1.97	65	20.70	141	81	39	0	6	2	0
	GRAND JUNCTION	43	22	50	14	33	-4	0.15	0.00	0.12	1.36	56	7.80	98	85	39	0	7	2	0
	PUEBLO	54	21	73	8	37	0	0.02	-0.09	0.01	0.95	50	13.80	128	78	31	0	7	2	0
CT	BRIDGEPORT	58	48	63	45	53	11	2.01	1.10	0.83	13.29	138	38.66	102	10	86	0	0	7	3
	HARTFORD	61	44	68	36	53	14	1.91	0.95	1.15	18.31	166	41.68	105	10	75	0	0	4	2
DC	WASHINGTON	66	52	73	46	59	12	1.56	0.82	1.52	14.25	156	37.75	107	10	68	0	0	2	1
DE	WILMINGTON	61	50	67	45	56	13	1.43	0.63	0.77	18.23	197	44.85	121	10	81	0	0	6	1
FL	DAYTONA BEACH	77	62	80	54	70	6	1.28	0.67	0.84	13.8	138	44.80	99	97	61	0	0	4	1
	JACKSONVILLE	75	58	79	44	67	7	0.53	0.00	0.43	17.12	144	40.79	84	99	67	0	0	4	0
	KEY WEST	79	71	81	68	75	1	0.00	-0.58	0.00	20.71	161	46.42	124	91	73	0	0	0	0
	MIAMI	82	67	84	65	74	2	0.64	0.16	0.63	23.45	149	62.31	116	94	57	0	0	2	1
	ORLANDO	79	62	82	54	70	4	0.35	-0.20	0.25	16.97	162	52.14	114	10	57	0	0	2	0
	PENSACOLA	72	53	78	38	63	5	0.31	-0.52	0.26	5.21	41	43.26	75	99	52	0	0	5	0
	TALLAHASSEE	73	52	78	35	63	6	0.03	-0.97	0.02	9.66	81	47.53	79	10	60	0	0	2	0
	TAMPA	78	63	80	55	71	5	0.60	0.16	0.60	10.69	112	33.30	80	99	69	0	0	1	1
	WEST PALM	80	65	81	60	73	2	0.77	-0.17	0.67	21.39	110	60.21	104	95	60	0	0	2	1
GA	ATHENS	67	51	72	37	59	8	1.54	0.66	1.08	9.77	99	38.86	86	97	69	0	0	4	1
	ATLANTA	67	51	73	39	59	9	2.54	1.59	1.51	10.85	109	37.73	82	98	63	0	0	3	2
	AUGUSTA	72	49	78	37	61	8	0.60	0.01	0.34	9.44	117	35.78	87	98	64	0	0	3	0
	COLUMBUS	71	53	77	39	62	8	0.24	-0.70	0.10	4.94	58	26.07	57	95	55	0	0	3	0
	MACON	71	50	77	37	61	7	0.24	-0.48	0.09	8.51	116	34.63	87	99	63	0	0	4	0
	SAVANNAH	75	56	80	41	65	8	0.37	-0.17	0.24	9.01	103	48.24	105	99	63	0	0	3	0
HI	HILO	80	66	82	63	73	-1	2.14	-1.34	1.38	16.44	53	102.1	88	96	69	0	0	7	1
	HONOLULU	84	72	85	71	78	2	0.11	-0.65	0.10	2.42	42	9.56	53	85	60	0	0	2	0
	KAHULUI	83	67	86	63	75	0	0.00	-0.67	0.00	0.43	11	7.21	42	88	54	0	0	0	0
	LIHUE	80	73	81	71	76	1	0.30	-0.98	0.12	8.67	74	28.87	77	86	69	0	0	6	0
ID	BOISE	47	32	54	22	39	2	0.67	0.31	0.34	1.11	39	7.69	73	88	49	0	4	4	0
	LEWISTON	49	36	58	32	43	4	1.12	0.84	0.95	2.78	103	10.47	94	93	60	0	2	4	1
	POCATELLO	43	25	57	9	34	2	0.09	-0.19	0.05	0.59	21	10.06	92	88	46	0	5	4	0
IL	CHICAGO/O'HARE	52	33	63	23	43	7	0.43	-0.26	0.38	4.81	54	35.63	108	94	54	0	3	3	0
	MOLINE	54	32	62	23	43	8	0.50	-0.07	0.44	5.77	63	31.44	86	94	48	0	3	4	0
	PEORIA	54	33	63	26	44	7	0.14	-0.49	0.13	3.12	35	27.70	83	93	50	0	3	2	0
	ROCKFORD	52	30	62	23	41	7	0.71	0.13	0.60	6.99	78	35.87	106	97	55	0	5	3	1
	SPRINGFIELD	56	34	65	24	45	6	0.24	-0.37	0.24	4.46	54	26.72	83	91	56	0	3	1	0
IN	EVANSVILLE	60	41	72	31	51	8	0.15	-0.76	0.08	3.73	41	34.22	88	93	53	0	2	2	0
	FORT WAYNE	54	37	70	28	45	7	0.45	-0.22	0.33	4.36	57	26.40	84	95	65	0	2	2	0
	INDIANAPOLIS	58	40	73	34	49	10	0.39	-0.40	0.20	3.28	39	29.86	82	98	60	0	0	3	0
	SOUTH BEND	53	36	67	28	45	8	0.34	-0.44	0.26	3.90	40	27.83	78	93	62	0	2	3	0
IA	BURLINGTON	55	33	62	26	44	7	0.19	-0.33	0.18	6.32	69	34.22	101	90	47	0	3	2	0
	CEDAR RAPIDS	51	30	58	24	40	7	1.74	1.28	1.51	4.36	54	31.69	99	97	53	0	5	4	1
	DES MOINES	52	33	63	26	42	7	1.27	0.90	0.71	3.76	48	31.26	99	90	46	0	3	4	1
	DUBUQUE	50	31	59	25	41	9	0.57	-0.05	0.48	3.60	37	34.20	95	94	51	0	4	2	0
	SIoux CITY	48	29	52	21	39	7	0.61	0.39	0.39	1.48	25	30.38	122	94	55	0	5	4	0
	WATERLOO	50	32	59	26	41	10	1.22	0.84	1.17	3.04	39	43.13	134	92	51	0	3	3	1
KS	CONCORDIA	54	32	63	26	43	5	0.86	0.64	0.53	2.02	33	25.10	90	88	43	0	5	2	1
	DODGE CITY	55	27	72	20	41	2	0.01	-0.16	0.01	2.74	69	21.06	101	83	30	0	5	1	0
	GOODLAND	49	25	69	13	37	2	0.14	0.00	0.14	1.02	33	20.02	113	86	37	0	6	1	0
	TOPEKA	56	32	64	23	44	5	1.60	1.21	1.59	6.91	80	33.27	99	92	49	0	3	2	1

Based on 1961-90 normals

Weather Data for the Week Ending November 27, 1999

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 Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
KY WICHITA	57	35	65	30	46	5	1.45	1.11	1.45	12.30	172	41.44	148	87	44	0	2	1	1
JACKSON	61	45	75	33	53	8	1.48	0.44	0.87	6.86	65	37.55	84	93	62	0	0	3	1
LEXINGTON	61	43	72	34	52	9	0.51	-0.35	0.28	4.89	56	29.65	74	96	63	0	0	4	0
LOUISVILLE	63	44	75	38	54	10	0.63	-0.28	0.38	5.06	55	35.53	88	93	54	0	0	3	0
PADUCAH	61	42	71	31	51	6	0.15	-0.94	0.10	5.53	53	37.09	84	93	55	0	1	4	0
LA BATON ROUGE	69	49	81	33	59	1	0.73	-0.37	0.54	10.75	89	42.26	77	99	57	0	0	4	1
LAKE CHARLES	71	47	82	32	59	1	1.02	-0.03	0.55	4.29	32	32.89	67	10	59	0	1	2	1
NEW ORLEANS	70	53	81	40	62	3	0.24	-0.92	0.18	8.61	69	42.53	76	95	64	0	0	3	0
SHREVEPORT	68	43	79	31	55	1	0.27	-0.78	0.13	8.65	80	50.74	122	91	48	0	1	3	0
ME CARIBOU	52	32	59	26	42	16	1.11	0.27	0.69	14.76	151	35.72	108	10	75	0	4	6	1
PORTLAND	58	41	70	33	49	14	0.67	-0.57	0.32	14.53	125	38.52	98	99	72	0	0	5	0
MD BALTIMORE	63	52	69	40	57	13	1.37	0.57	1.26	15.92	170	41.10	111	10	75	0	0	4	1
MA BOSTON	64	48	70	46	56	14	0.58	-0.44	0.36	16.32	161	36.39	98	97	66	0	0	4	0
WORCESTER	61	45	67	39	53	17	1.59	0.55	1.34	15.78	128	38.81	90	10	73	0	0	4	1
MI ALPENA	52	32	60	21	42	10	0.19	-0.33	0.16	4.38	61	18.61	70	10	74	0	4	3	0
GRAND RAPIDS	52	35	67	27	43	8	0.36	-0.44	0.31	5.20	52	30.31	92	95	64	0	3	3	0
HOUGHTON LAKE	48	29	59	20	39	7	0.40	-0.12	0.39	5.53	73	26.21	101	98	69	0	5	2	0
LANSING	52	32	67	21	42	7	0.16	-0.47	0.16	4.36	54	26.57	95	96	71	0	3	1	0
MUSKEGON	52	36	67	26	44	8	0.53	-0.21	0.41	4.27	45	27.62	95	95	65	0	2	2	0
TRAVERSE CITY	50	31	60	24	40	6	0.84	0.29	0.81	5.87	66	28.89	106	94	58	0	4	3	1
MN DULUTH	37	29	44	25	33	9	0.20	-0.18	0.17	8.54	107	38.34	134	95	71	0	6	4	0
INT'L FALLS	37	21	44	15	29	9	0.00	-0.23	0.00	6.56	106	28.77	123	94	62	0	7	0	0
MINNEAPOLIS	45	33	53	27	39	10	0.89	0.57	0.69	4.57	72	30.31	112	85	57	0	4	4	1
ROCHESTER	45	31	56	26	38	10	0.77	0.44	0.75	2.68	37	37.08	130	96	68	0	5	2	1
ST. CLOUD	41	27	46	21	34	9	0.13	-0.12	0.09	4.10	63	25.79	97	89	59	0	6	2	0
MS JACKSON	66	44	75	32	55	2	1.55	0.32	0.97	10.13	92	40.49	83	10	57	0	2	3	2
MERIDIAN	67	45	76	29	56	3	0.19	-0.99	0.19	7.01	67	33.99	68	10	59	0	2	1	0
TUPELO	65	46	72	32	55	5	0.41	-0.84	0.26	3.70	33	46.25	94	97	58	0	1	5	0
MO COLUMBIA	59	36	66	30	48	8	0.76	0.10	0.76	3.74	38	24.77	68	91	51	0	3	1	1
KANSAS CITY	55	34	64	24	45	6	1.63	1.24	1.60	7.62	77	38.05	106	86	52	0	2	2	1
SAINT LOUIS	59	38	68	31	49	6	0.70	-0.10	0.70	3.85	44	32.20	94	90	54	0	1	1	1
SPRINGFIELD	61	37	70	28	49	6	1.95	1.07	1.65	4.97	43	34.80	88	93	47	0	3	2	1
MT BILLINGS	43	26	48	16	34	2	0.21	0.02	0.14	3.08	94	12.76	90	68	38	0	6	2	0
BUTTE	39	22	46	2	31	7	0.06	-0.05	0.05	0.73	30	11.14	96	83	42	0	6	2	0
GLASGOW	40	24	46	18	32	8	0.02	-0.04	0.01	1.84	99	14.38	136	88	54	0	7	2	0
GREAT FALLS	40	26	46	21	33	3	0.30	0.13	0.28	2.98	115	12.42	87	83	52	0	6	2	0
KALISPELL	39	30	43	27	35	7	0.71	0.37	0.29	3.67	112	13.15	90	92	68	0	5	5	0
MILES CITY	42	24	49	17	33	5	0.26	0.15	0.15	1.48	56	11.05	83	87	47	0	7	2	0
MISSOULA	39	28	46	24	34	5	0.76	0.55	0.40	3.10	121	11.78	97	91	54	0	5	4	0
NE GRAND ISLAND	50	26	60	21	38	5	0.33	0.11	0.31	0.94	18	26.07	108	91	46	0	6	2	0
LINCOLN	52	29	57	25	40	5	0.92	0.66	0.75	2.17	32	26.70	98	92	42	0	6	2	1
NORFOLK	47	28	52	23	38	6	0.47	0.26	0.25	2.30	46	24.93	102	90	52	0	6	3	0
NORTH PLATTE	48	20	61	11	34	2	0.16	0.02	0.13	1.58	50	19.32	103	95	43	0	7	2	0
OMAHA	51	31	57	23	41	6	1.11	0.80	0.80	2.78	38	38.15	133	95	49	0	4	2	1
SCOTTSBLUFF	47	23	65	8	35	2	0.17	0.03	0.09	2.73	111	16.75	114	84	42	0	6	2	0
VALENTINE	46	21	55	11	33	3	0.04	-0.08	0.04	3.53	118	19.28	108	93	50	0	6	1	0
NV ELY	46	15	61	3	31	0	0.01	-0.13	0.01	0.73	29	6.42	69	74	28	0	6	1	0
LAS VEGAS	60	40	65	33	50	-2	0.00	-0.11	0.00	0.35	40	3.73	101	40	18	0	0	0	0
RENO	54	25	65	16	40	2	0.00	-0.22	0.00	0.50	32	4.32	67	73	27	0	7	0	0
WINNEMUCCA	50	23	62	6	37	2	0.00	-0.22	0.00	0.59	32	5.39	74	79	35	0	5	0	0
NH CONCORD	60	39	69	29	50	16	0.93	0.08	0.61	14.30	153	38.74	118	98	62	0	1	5	1
NJ NEWARK	63	51	66	46	57	13	1.86	0.92	0.85	15.21	149	41.86	104	98	74	0	0	6	2
NM ALBUQUERQUE	53	29	63	23	41	0	0.00	-0.08	0.00	0.80	35	8.26	99	57	20	0	6	0	0
NY ALBANY	59	42	68	33	50	14	1.48	0.71	0.80	15.52	178	37.17	113	99	73	0	0	4	1
BINGHAMTON	55	41	60	34	48	13	1.40	0.63	0.81	11.00	120	31.01	92	10	78	0	0	5	2
BUFFALO	57	42	69	37	49	12	1.06	0.13	0.89	10.25	102	31.92	92	97	65	0	0	4	1
ROCHESTER	59	43	71	38	51	14	1.31	0.62	1.13	7.90	99	30.61	106	94	66	0	0	4	1
SYRACUSE	59	42	67	35	51	14	1.80	0.92	1.68	10.93	105	29.36	83	95	67	0	0	2	1
NC ASHEVILLE	64	49	68	38	56	11	1.99	1.16	1.48	8.81	83	37.87	87	98	65	0	0	5	1
CHARLOTTE	67	50	71	36	59	10	0.89	0.13	0.79	11.75	121	33.68	86	99	68	0	0	4	1
GREENSBORO	65	49	68	38	57	10	1.17	0.48	1.09	12.39	128	40.82	105	98	75	0	0	6	1
HATTERAS	71	61	76	56	66	11	1.32	0.18	0.57	13.09	89	49.27	96	97	76	0	0	7	1
RALEIGH	69	50	75	39	60	11	0.84	0.12	0.66	25.58	293	48.49	128	10	59	0	0	6	1
WILMINGTON	76	58	80	48	67	12	1.94	1.16	0.66	30.83	294	70.01	139	95	58	0	0	5	2
ND BISMARCK	45	19	51	14	32	8	0.08	-0.03	0.08	1.86	65	26.30	176	89	49	0	7	1	0
DICKINSON	42	23	48	17	32	7	0.02	-0.06	0.02	3.03	100	17.89	114	88	48	0	7	1	0
FARGO	41	21	52	17	31	8	0.00	-0.14	0.00	7.54	173	24.95	133	89	53	0	7	0	0
GRAND FORKS	40	20	52	14	30	9	0.00	-0.14	0.00	2.67	65	21.39	121	90	55	0	7	0	0
JAMESTOWN	43	19	50	17	31	8	0.00	-0.11	0.00	2.99	94	22.25	136	91	46	0	7	0	0
WILLISTON	42	16	48	10	29	7	0.00	-0.11	0.00	1.76	70	14.64	112	86	50	0	7	0	0
OH AKRON-CANTON	57	39	69	33	48	9	0.79	0.05	0.55	9.50	114	33.99	101	98	73	0	0	3	1
CINCINNATI	60	42	71	35	51	10	0.34	-0.49	0.16	4.81	54	28.96	77	98	65	0	0	4	0
CLEVELAND	58	39	70	31	48	9	0.54	-0.23	0.38	8.34	95	29.02	87	95	61	0	1	4	0
COLUMBUS	60	41	71	35	50	10	0.49	-0.31	0.35	4.88	61	24.91	71	93	64	0	0	3	0
DAYTON	59	40	70	32	49	9	0.50	-0.24	0.31	3.98	51	27.41	82	94	62	0	1	4	0
MANSFIELD	56	36	69	30	46	8	0.51	-0.34	0.37	6.31	71	31.51	87	98	70				

Weather Data for the Week Ending November 27, 1999

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 Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	50 INCH OR MORE
OK TOLEDO	55	37	71	28	46	10	0.44	-0.26	0.37	4.92	66	27.30	92	96	64	0	2	3	0
OK YOUNGSTOWN	57	37	69	30	47	9	0.63	-0.11	0.43	9.19	103	38.07	112	95	64	0	2	5	0
OK OKLAHOMA CITY	62	37	71	26	50	4	0.06	-0.34	0.06	7.16	80	35.67	112	85	38	0	3	1	0
OR TULSA	64	40	75	28	52	6	1.26	0.58	1.22	12.76	114	43.07	113	82	41	0	2	2	1
OR ASTORIA	57	47	60	41	52	7	5.76	3.24	2.38	18.61	106	74.20	136	90	71	0	0	7	3
OR BURNS	44	23	54	12	33	2	0.03	-0.27	0.02	0.89	37	6.81	79	92	53	0	6	2	0
OR EUGENE	52	44	58	40	48	4	3.98	1.84	1.70	10.63	85	38.83	97	96	76	0	0	6	2
OR MEDFORD	49	39	54	33	44	3	0.55	-0.27	0.24	3.49	67	15.51	102	97	75	0	0	5	0
OR PENDLETON	53	37	64	33	45	6	0.64	0.25	0.32	2.73	96	8.39	82	85	51	0	0	4	0
OR PORTLAND	52	45	58	42	49	5	2.19	0.81	0.85	9.29	102	35.46	120	94	74	0	0	7	2
PA SALEM	52	44	57	41	48	5	3.42	1.81	1.55	9.55	95	41.13	130	98	76	0	0	6	2
PA ALLENTOWN	62	48	67	40	55	15	1.31	0.37	0.66	16.55	160	37.62	95	10	61	0	0	6	1
PA ERIE	58	42	70	35	50	10	1.02	0.08	0.86	12.56	107	36.71	98	97	67	0	0	3	1
PA MIDDLETOWN	62	49	69	44	56	15	1.19	0.36	0.66	13.42	140	35.87	97	99	73	0	0	3	1
PA PHILADELPHIA	63	52	71	47	58	15	1.14	0.32	0.54	18.67	207	45.21	120	99	75	0	0	5	1
PA PITTSBURGH	60	43	71	36	51	12	1.50	0.81	0.91	7.00	89	33.95	101	98	61	0	0	3	2
PA WILKES-BARRE	60	46	66	41	53	15	1.28	0.57	0.81	13.60	153	34.16	102	99	68	0	0	5	1
PA WILLIAMSPORT	60	45	65	42	53	14	2.25	1.39	1.37	17.43	173	42.87	115	91	60	0	0	4	2
RI PROVIDENCE	61	46	66	41	54	13	0.48	-0.59	0.23	14.35	129	39.89	98	98	75	0	0	4	0
SC BEAUFORT	73	58	77	45	65	8	1.15	0.56	1.14	10.77	111	47.53	99	97	63	0	0	2	1
SC CHARLESTON	73	57	79	45	65	9	0.94	0.34	0.58	16.57	168	41.67	87	97	68	0	0	5	1
SC COLUMBIA	71	51	77	41	61	9	0.28	-0.42	0.24	6.45	69	28.61	62	99	67	0	0	3	0
SD GREENVILLE	67	53	71	45	60	11	1.74	0.88	1.08	11.65	104	33.37	71	97	68	0	0	3	2
SD ABERDEEN	45	19	51	14	32	7	0.00	-0.11	0.00	4.42	126	22.11	122	93	46	0	7	0	0
SD HURON	47	22	52	17	35	7	0.03	-0.10	0.03	2.84	74	16.69	85	94	47	0	7	1	0
SD RAPID CITY	44	24	54	17	34	3	0.07	-0.04	0.07	1.79	63	18.75	116	87	49	0	7	1	0
SD SIOUX FALLS	47	27	48	20	37	9	0.01	-0.21	0.01	1.26	22	21.16	92	89	45	0	6	1	0
TN BRISTOL	65	41	73	33	53	9	2.67	1.95	1.74	6.56	77	33.82	91	99	56	0	0	2	2
TN CHATTANOOGA	67	46	75	32	57	9	1.53	0.37	0.80	8.62	75	45.65	96	10	60	0	1	4	2
TN KNOXVILLE	64	45	72	32	55	9	1.00	0.06	0.66	5.78	63	47.54	113	10	67	0	1	3	1
TN MEMPHIS	63	44	76	32	54	4	0.09	-1.22	0.08	5.01	45	40.80	89	91	52	0	1	2	0
TX NASHVILLE	63	44	72	32	53	6	1.14	0.09	0.81	6.99	72	38.30	91	98	61	0	1	3	1
TX ABILENE	68	43	81	25	55	3	0.00	-0.29	0.00	3.27	46	16.43	71	70	23	0	2	0	0
TX AMARILLO	59	30	74	19	44	1	0.00	-0.13	0.00	2.92	73	26.06	137	72	24	0	4	0	0
TX AUSTIN	73	43	86	27	58	0	0.24	-0.25	0.16	2.29	26	24.81	83	95	37	0	3	3	0
TX BEAUMONT	70	50	81	32	60	1	1.24	0.08	0.93	8.43	56	32.76	63	99	59	0	1	3	1
TX BROWNSVILLE	76	55	85	41	66	-1	2.65	2.34	2.50	7.51	74	22.77	90	96	54	0	0	4	1
TX CORPUS CHRISTI	74	51	85	36	63	0	0.59	0.28	0.30	6.33	63	29.06	101	95	48	0	0	2	0
TX DEL RIO	72	45	79	34	59	1	0.00	-0.15	0.00	0.39	7	15.31	87	80	28	0	0	0	0
TX EL PASO	63	35	72	24	49	0	0.00	-0.11	0.00	2.50	87	7.50	91	54	23	0	3	0	0
TX FORT WORTH	70	47	81	39	58	5	0.31	-0.16	0.29	4.87	54	21.16	67	84	39	0	0	3	0
TX GALVESTON	70	57	79	43	63	1	1.57	0.74	1.28	8.59	73	27.77	72	96	65	0	0	4	1
TX HOUSTON	73	46	84	32	59	0	1.54	0.69	0.91	3.47	28	26.09	62	96	47	0	1	3	1
TX LUBBOCK	65	30	78	23	47	0	0.00	-0.13	0.00	3.88	75	19.13	106	70	18	0	4	0	0
TX MIDLAND	66	35	79	23	51	1	0.00	-0.12	0.00	1.23	25	6.69	47	60	19	0	3	0	0
TX SAN ANGELO	69	40	83	27	55	3	0.00	-0.20	0.00	1.70	25	13.39	68	72	22	0	1	0	0
TX SAN ANTONIO	71	46	82	31	59	1	0.05	-0.49	0.05	1.40	16	16.20	55	90	32	0	1	1	0
TX VICTORIA	75	48	86	34	62	2	0.33	-0.20	0.18	5.27	47	24.79	71	95	38	0	0	4	0
TX WACO	71	47	82	37	59	4	0.27	-0.24	0.20	2.71	30	17.72	59	91	42	0	0	2	0
TX WICHITA FALLS	65	39	76	29	52	3	0.00	-0.31	0.00	5.26	66	28.79	105	81	42	0	2	0	0
UT SALT LAKE CITY	43	29	59	18	36	-1	0.47	0.17	0.47	1.17	30	11.82	81	81	49	0	4	1	0
VT BURLINGTON	59	41	66	34	50	17	1.03	0.31	0.83	15.31	170	31.45	99	92	62	0	0	2	1
VA LYNCHBURG	65	49	71	41	57	12	1.47	0.75	0.59	15.72	161	37.38	100	10	76	0	0	5	1
VA NORFOLK	68	54	74	46	61	11	0.60	-0.07	0.38	22.68	236	53.72	131	10	76	0	0	3	0
VA RICHMOND	68	52	76	43	60	13	0.18	-0.54	0.17	19.87	204	46.50	117	99	68	0	0	2	0
VA ROANOKE	65	49	70	39	57	12	0.72	0.01	0.35	10.62	104	33.68	89	96	75	0	0	4	0
VA WASH/DULLES	65	48	72	39	57	15	0.90	0.13	0.83	13.60	143	40.91	111	99	65	0	0	2	1
WA OLYMPIA	49	38	52	30	44	3	3.77	1.75	1.64	15.29	111	55.08	132	97	76	0	2	7	2
WA QUILLAYUTE	49	37	53	32	43	0	5.27	1.66	3.31	36.11	126	110.1	125	10	82	0	1	7	3
WA SEATTLE-TACOMA	48	41	51	38	44	0	2.28	0.82	1.00	11.43	111	36.35	119	99	77	0	0	7	1
WA SPOKANE	41	31	45	28	36	4	0.85	0.29	0.35	2.91	80	12.57	91	98	74	0	4	6	0
WA YAKIMA	50	30	56	24	40	4	0.14	-0.14	0.08	0.99	56	5.84	91	93	54	0	6	2	0
WV BECKLEY	61	45	67	30	53	12	1.69	0.97	0.95	8.90	101	33.99	91	97	65	0	1	5	2
WV CHARLESTON	62	42	75	30	52	8	3.37	2.52	2.27	9.75	104	34.58	89	10	62	0	1	3	2
WV ELKINS	63	40	69	33	52	13	1.00	0.20	0.63	8.31	85	32.93	80	98	60	0	0	5	1
WV HUNTINGTON	61	41	74	34	51	7	1.85	1.05	1.24	8.25	95	31.04	82	99	61	0	0	4	1
WI EAU CLAIRE	46	30	58	23	38	10	1.05	0.74	0.93	3.04	39	29.14	96	91	54	0	5	4	1
WI GREEN BAY	48	30	57	25	39	9	1.49	1.00	1.49	3.46	45	22.98	85	93	58	0	4	1	1
WI LA CROSSE	49	33	56	26	41	10	0.58	0.20	0.58	4.44	59	32.25	111	90	49	0	4	1	1
WI MADISON	50	32	59	27	41	10	0.90	0.40	0.85	3.64	49	31.00	107	92	54	0	4	2	1
WI MILWAUKEE	51	34	62	27	43	9	0.36	-0.25	0.33	5.83	72	36.67	121	94	55	0	2	3	0
WY CASPER	40	23	57	13	32	2	0.11	-0.06	0.11	1.89	72	8.85	75	81	46	0	7	1	0
WY CHEYENNE	40	21	56	3	30	-2	0.25	0.14	0.23	2.63	106	15.92	114	81	42	0	6	2	0
WY LANDER	44	22	58	12	33	6	0.07	-0.10	0.05	2.74	93	13.65	110	82	32	0	6	2	0
WY SHERIDAN	44	24	53	13	34	5	0.07	-0.10	0.07	3.88	118	12.86	94	81	38	0	6	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 22 - 28, 1999

HIGHLIGHTS

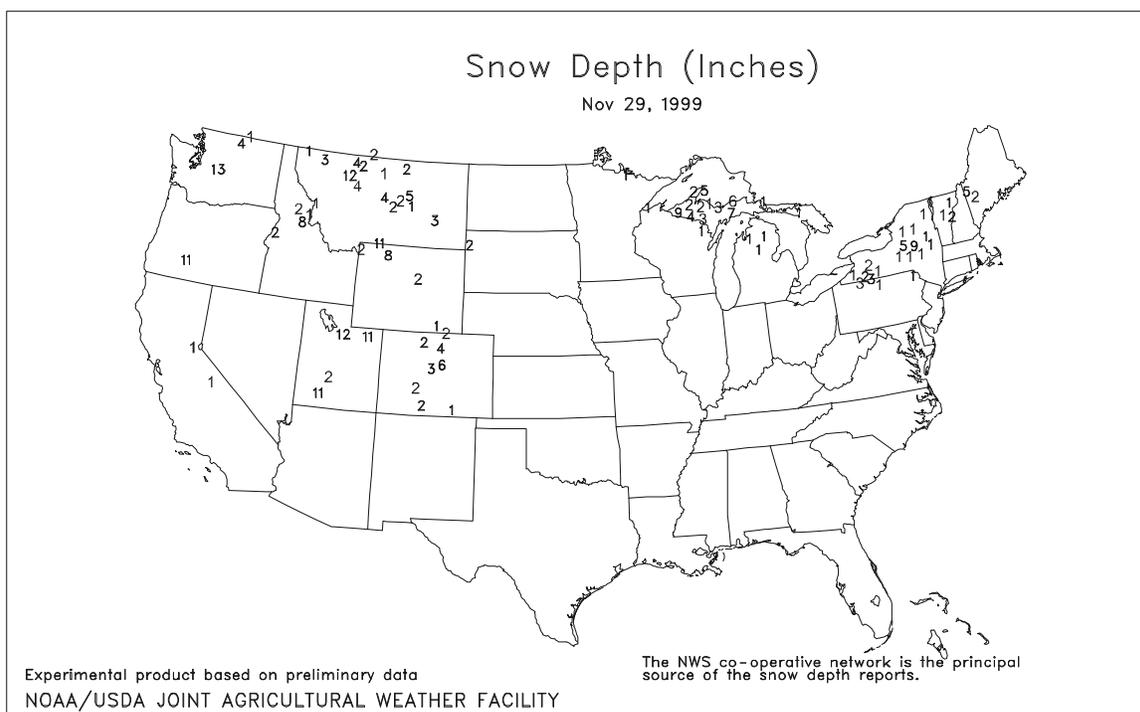
A cold front, producing light showers, pushed eastward across the Great Plains and Corn Belt, delivering much-needed moisture to dry wheat fields. A band of heavy rainfall recharged topsoil moisture supplies in the southern and central Appalachian Mountains. Lighter precipitation boosted moisture levels and temporarily delayed harvest activity in the

Piedmont and adjacent areas of the Atlantic Coastal Plains. In the Pacific Northwest, stormy weather continued to produce heavy rain along the coast and snow in the high elevations of the Cascade Range. Fieldwork continued without delays in California, as dry conditions prevailed in most areas.

Winter Wheat: Ninety-seven percent of the acreage was planted, slightly behind last year and the 5-year average. Sowing remained active in the Atlantic Coastal Plains and Southwest, advancing 20 percentage points during the week and surpassing 50 percent complete in California and Georgia. Planting also steadily progressed in North Carolina, even though widespread showers temporarily halted planting. Progress remained well behind normal due to the late row crop harvest. Planting lagged slightly behind average in Texas, where dry soils discouraged some growers. Ninety-one percent of the acreage was emerged, 3 percentage points behind last year and the 5-year average. Light showers provided moisture to germinate seeds and stimulate growth in parts of the Great Plains, Corn Belt, Mississippi Valley, and Southeast. Emergence progressed 15 percentage points in Arkansas, Georgia, and North Carolina. However, dry soils continued to hinder

development in the northern Great Plains and southern High Plains. In Texas, emergence lagged behind normal and growth was uneven due to dry soils, but beneficial moisture boosted crop conditions in the eastern halves of Kansas and Oklahoma. In North Carolina, precipitation promoted germination, but emergence was well behind the 5-year average due to the late planting season.

Cotton: Harvest was 88 percent complete, compared with 90 percent last year, and the 87-percent average for this date. Ideal weather aided rapid picking progress in the southern High Plains, especially in New Mexico where harvest advanced 20 percentage points. In Texas, where over three-fourths of the crop was picked, dry weather aided progress. Although scattered showers limited harvest progress in the Atlantic Coastal Plains, producers in North and South Carolina picked nearly 10 percent of the acreage.



Crop Progress and Condition

Week Ending November 28, 1999

Winter Wheat Percent Planted				
	Nov 28 1999	Prev Week	Prev Year	5-Yr Avg
AR	98	95	96	93
CA	65	45	69	63
CO	100	100	100	100
GA	55	35	63	55
ID	100	100	100	100
IL	100	100	100	100
IN	100	100	100	100
KS	100	100	99	100
MI	100	100	100	100
MO	100	99	98	98
MT	100	100	100	100
NE	100	100	100	100
NC	70	58	84	82
OH	100	100	100	100
OK	99	98	99	100
OR	98	95	100	97
SD	100	100	100	100
TX	92	89	97	96
WA	100	100	100	100
19 Sts	97	96	98	98
These 19 States planted 91% of last year's winter wheat acreage.				

Winter Wheat Crop Condition by Percent					
	VP	P	F	G	EX
AR	0	2	33	60	5
CA	0	0	30	50	20
CO	0	2	10	50	38
GA	3	5	33	56	3
ID	0	1	36	52	11
IL	4	28	44	20	4
IN	13	13	38	30	6
KS	5	17	42	35	1
MI	1	5	31	41	22
MO	2	11	60	26	1
MT	0	8	36	52	4
NE	10	13	32	40	5
NC	0	3	18	71	8
OH	0	3	22	61	14
OK	5	17	35	41	2
OR	0	20	50	20	10
SD	1	7	31	53	8
TX	10	37	39	14	0
WA	0	8	64	28	0
19 Sts	4	16	37	37	6
Prev Wk	5	15	38	35	7
Prev Yr	0	4	24	58	14

Cotton Percent Harvested				
	Nov 28 1999	Prev Week	Prev Year	5-Yr Avg
AL	95	93	99	94
AZ	79	72	83	87
AR	100	100	100	99
CA	96	93	69	90
GA	86	82	85	82
LA	100	100	100	100
MS	100	100	100	99
MO	100	100	99	97
NM	85	65	72	82
NC	72	63	98	87
OK	87	85	87	73
SC	92	84	96	87
TN	100	100	100	96
TX	77	67	86	78
14 Sts	88	82	90	87
These 14 States harvested 98% of last year's cotton acreage.				

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

Winter Wheat Percent Emerged				
	Nov 28 1999	Prev Week	Prev Year	5-Yr Avg
AR	92	77	88	83
CA	25	15	29	29
CO	100	100	99	99
GA	36	21	34	33
ID	91	90	97	96
IL	99	97	100	99
IN	99	97	99	99
KS	94	92	98	98
MI	100	100	100	100
MO	92	85	94	93
MT	96	90	95	94
NE	100	100	100	100
NC	50	35	69	68
OH	100	100	100	99
OK	92	87	91	93
OR	90	85	99	93
SD	100	95	100	99
TX	78	73	88	90
WA	100	97	100	98
19 Sts	91	87	94	94
These 19 States planted 91% of last year's winter wheat acreage.				

These are the last Crop Progress & Condition Tables for 1999. The next report will be issued during the first week of April 2000.

State Agricultural Summaries

Note: The weekly State Agricultural Summaries will be discontinued for the winter after this issue. The December monthly summary will be published on January 4, 2000; the January summary on February 1; the February summary on February 29; the March summary on March 28. The first weekly narrative for next spring will be published on April 4, 2000.

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: Days suitable for fieldwork 5.6. Topsoil 10% very short, 25% short, 64% adequate, 1% surplus. Soybeans 90% harvested, 93% 1998, 87% avg. Wheat 70% planted, 64% 1998, 70% avg. Livestock 18% very poor, 15% poor, 29% fair, 36% good, 2% excellent.

ALASKA: DATA NOT AVAILABLE UNTIL 2000

ARIZONA: Cotton harvest gains momentum in the latter part of the season, yet still remains 1 week behind the 5 year avg. Alfalfa harvest activity remained relatively constant since last week. Alfalfa harvest activity was reported as 51% not being harvested, 10% light, 17% moderate, 22% active. Alfalfa 7% poor, 34% fair, 44% good, 15% excellent. Sheeping off was reported as being light to moderate. Range, Pasture feed 5% poor, 38% fair, 54% good, 3% excellent. Small grains planting continues to remain behind normal. As of November 28, 6% Durum Wheat, 8% Barley, 10% Other Wheat, 10% Other Small Grains were reported as being planted. Last week central areas producers shipped a variety of vegetables including bok choy, broccoli, cilantro, dandelion, dill, endive, escarole, flowering kale, kale, kohlrabi, mixed greens, napa, parsley, spinach, swiss chard. Lettuce shipments included leaf, head lettuce. Eastern Areas producers shipped chile peppers, hot house tomatoes, head lettuce. Producers in western area also shipped a wide variety of vegetables including anise, bok choy, broccoli, broccoflower, cantaloupes, cauliflower, celery, cilantro, endive, escarole, honeydews, kale, napa, parsley, salad savoy, spinach, spring mix. Western lettuce shipments included boston, iceberg, leaf, romaine. Central Area citrus producers harvested lemons, navels, grapefruit, Fairchild tangerines. Western citrus producers harvested grapefruit, lemons last week.

ARKANSAS: Days suitable for fieldwork: 6. Topsoil 15% very short, 62% short, 23% adequate, 0% surplus. Areas continues to experience above normal temperatures, below normal rainfall. At the Little Rock weather service they will end the month with the 2nd warmest, 4th driest November of record (1879-1999). Livestock were reported in fair condition. Many farmers were feeding supplemental hay early this year because of the summer drought conditions. The main farm activity was: Planting wheat. Other activities included: Finishing

harvesting cotton, liming, fertilizing pastures, harvesting hay, bush hogging, land leveling, overseeding small grains, preparing fall pastures, spraying fields for insects, weeds, preparing land for planting of annual forages such as rye, ryegrass, fields were being subsoiled, plowed, shredding cotton stalks, equipment clean up, maintenance, cleaning poultry houses, Brucellosis vaccinations, fall calving, pregnancy checking spring bred cows, selling cull cows, weaning calves. Cotton 100% harvested; Wheat 98% planted, 92% emerged, 0% very poor 2% poor, 33% fair, 60% good, 5% excellent; Alfalfa 17% very poor, 32% poor, 49% fair, 2% good, 0% excellent; Other Hay 16% very poor, 41% poor, 34% fair, 8% good, 1% excellent; Range, pastures feed 26% very poor, 42% poor, 26% fair, 6% good, 0% excellent.

CALIFORNIA: Field activities made good progress in most areas. Seeding of small grains, winter forages was in full swing in the San Joaquin, Sacramento valleys. Earlier seeded fields of wheat, barley, oats, new alfalfa were emerging, growing rapidly. Cotton harvest was virtually complete, but growers were 2nd picking in some San Joaquin Valley cotton fields. After final picking was completed, fields were immediately shredded, disced for pink bollworm control. Harvested corn, cotton fields were being prepared for spring 2000 plantings. A few late fields of silage corn were still being harvested. Alfalfa, clover fields were treated for weeds in the Sacramento Valley. Seed alfalfa fields received winter herbicide applications in the southern San Joaquin Valley. Sugar beets harvest was ongoing in the San Joaquin Valley, new crop sugarbeet planting continued. Some sugarbeet growers placed mylar strips in fields to deter birds. Alfalfa was cut for hay or green chopped. Many alfalfa growers were conducting final cutting as plants were headed into winter dormancy. Pruning, tree removal, planting of cover crops was active in the harvested stone fruit orchards. Growers were fumigating the ground in preparation for new plantings of peach, prune, walnut, almond trees. Kiwifruit, persimmon harvests were active. Grape picking was nearly completed. The olive, pecan harvests were near completion, also. Picking of grapefruit, lemon crops was active in southern areas. The San Joaquin Valley's harvest of early variety, new crop navel oranges, tangerines gained momentum. Strawberry growers were weeding fields, trimming runners. The harvesting of fresh market, processing tomatoes was complete in most fields.

Some farmers were already beginning ground preparation for the 2000 processing tomato crop. Fields of winter broccoli were progressing well. The fall lettuce harvest declined in volume. Growers planted fields of onions, garlic, spring lettuce in some areas. Winter cabbage fields were thriving. Carrots were harvested, planted in Kern County. Growers, packers were moving sweet potatoes to market. The many crops harvested included: Cilantro, cauliflower, radishes, green beans, carrots, cucumbers, mint, okra, pumpkins, parsley, snap peas, sugar peas, chili peppers, squash, turnips. Recent rains have provided the moisture needed to initiate vegetative growth on pasture, range lands. Cool temperatures have slowed growth. Normal winter feeding of cattle was underway, calving continued. Alfalfa fields were being sheeped-off. Beekeepers were preparing hives for overwintering.

COLORADO: Days suitable for fieldwork 4.5. Topsoil 5% very short, 36% short, 58% adequate, 1% surplus. Subsoil moisture 5% very short, 30% short, 65% adequate, 0% surplus. Many areas of the state received rain, or snow early in the week with heaviest amounts falling in the mountains, along the Front Range. Harvest activities were slowed.

DELAWARE: Days suitable for fieldwork 4.0. Topsoil 7% short, 86% adequate, 7% surplus. Subsoil moisture 10% short, 89% adequate, 1% surplus. Soybeans 85% harvested, 89% 1998, 82% avg. Alfalfa hay 76% 5th cutting, 89% 1998, 85% avg. Hay supplies 28% short, 72% adequate. Pasture 3% poor, 15% fair, 75% good, 7% excellent. Barley 1% poor, 10% fair, 81% good, 8% excellent. Wheat 7% fair, 89% good, 4% excellent; 95% seeded, 94% 1998, 92% avg. Activities: Delayed soybean harvesting due to heavy fog through most of week. Continued seeding of small grains for small number of farmers.

FLORIDA: Warm temperatures returned. Temperatures at major stations averaged 2 to 7° above normal. Daytime highs 70s, 80s; nighttime lows 40s, 50s, 60s. Pensacola, Tallahassee at least one low in 30s. Scattered showers dropped less than 1.00 in. over most localities. Daytona Beach recorded about 1.25 in.; Apopka, about 1.66 in.; Dover, almost 2.00 in. Tallahassee, Ona, Ocklawaha received only about 0.10 in. or less for week. Moisture mostly short to adequate with some areas very short or surplus. Winter wheat for grain planting active. Sugarcane grinding active. Cotton harvest virtually complete. Vegetable harvesting for Thanksgiving market quite active until growers stopped for holiday observance. Vegetables harvested during week include: Tomatoes, peppers, endive, escarole, cucumbers, pickles, lettuce, radishes, snap beans, squash, sweet corn, okra, eggplant, watermelons. Mild temperatures, overcast skies with very little rain all citrus areas. Growers irrigating, new growth restricted to young trees in south. Good natural fruit coloring. Fresh, processed movement slowed by Thanksgiving. Most processors open. Caretakers cutting cover crops for the winter season, pushing out dead trees, replanting. Pasture feed 5% very poor, 10% poor, 50% fair, 35% good. Cattle 5% poor, 40% fair, 55% good. Most pasture fair to good; some condition hurt by lack of soil moisture. Western Panhandle: small grain winter grazing in some locations improved from last

weekend by rain. Permanent pasture grass is short, cool season forage not yet tall enough to graze. Lice on cattle significant problem. Central, southwest counties: rain late in week too little to help pasture condition. Cattle condition fair to good.

GEORGIA: Days suitable for field work 5.3. Soil moisture 9% very short, 38% short, 52% adequate, 1% surplus. Rye 89% planted, 87% 1998, 91% avg. Sorghum 94% harvested for grain, 95% 1998, 93% avg. Soybeans 81% harvested, 85% 1998, 74% avg. Other small grains 81% planted, 80% 1998, 84% avg. Onions 16% fair, 84% good; 37% transplanted, 37% 1998, 47% avg. Pecans 75% harvested, 75% 1998, 72% avg. Scattered rains during the Thanksgiving Holiday helped improve soil moisture conditions. The rains delayed harvesting in some areas, but helped small grains. Soybean harvest continued, but remained behind 1998 pace. The sorghum harvest was slightly ahead of the five year average rate. The cotton harvest was slowed by the rain in some areas, but harvesting remained ahead of the five year average progression. Wheat planting continued at the five year average rate. Wheat emerging remained ahead of the five year average pace. The condition improved from the previous week. The rains helped small grains. Rye planting progress was slightly ahead of 1998. Other small grain planting remained behind the five year average progression. The pecan harvest was at 1998 pace. Onion transplanting was active last week, catching up to 1998 rate. The onion condition changed slightly from the previous week. Other activities included: Mowing cotton stalks, taking soil samples, feeding hay to cattle.

HAWAII: Weather conditions were fair to poor for agriculture. Overcast skies prevailed for most of the week. Crop progress was slowed by the diminished sunlight. Strong trade winds raked the State over the weekend. Spraying, some forms of irrigation were hampered by the gusty winds. Wind damage to plants, fruits are expected to vary by location. Rainfall was generally light, limited to windward areas. Insect, disease was light. Banana harvesting remained steady. Leaf shredding is expected to be moderate. Papaya harvesting was steady. Most fields in fair condition after week of less than favorable weather. Head cabbage harvesting steady. Crop condition fair to good. Winter tomato harvesting increasing from area island.

IDAHO: Days suitable for fieldwork 5.0. Topsoil 10% very short, 45% short, 44% adequate, 1% surplus. Fruit trees are going into dormancy. Rain slowed some field activities in northern, southwestern counties. Corn harvested 88% for grain, 76% 1998, 84% avg. Winter wheat 100% planted, 100% 1998, 100% avg.; 91% emerged, 97% 1998, 96% avg. Activities: Wrapping up fall harvest, caring for and feeding livestock, plowing, preparing ground for spring crops, attending educational workshops, repairing equipment.

ILLINOIS: Days suitable for fieldwork 6.0. Topsoil 39% very short, 48% short, 13% adequate. Last week, minimal rainfall fell across the state, slightly improving topsoil moisture. Other activities included: Storing equipment, hauling water, caring for livestock.

INDIANA: Days suitable for fieldwork 5.8. Topsoil 39% very short, 38% short, 23% adequate, 0% surplus. Subsoil 56% very short, 35% short, 9% adequate, 0% surplus. Light showers helped dry soil conditions. Ponds drying up. Winter wheat seeding is complete. Winter wheat 13% very poor, 13% poor, 38% fair, 30% good, 6% excellent. Wheat 99% emerged, 99% 1998, 99% avg. Corn harvest is complete. Soybean harvest is complete. Farmers are feeding hay. Tobacco stripping, baling active. Activities: Applying fertilizer, nitrogen, spreading lime, tillage of soils, chopping stalks, equipment cleaning, repair, repairing tile, hauling grain, feeding hay, caring for livestock.

IOWA: Days suitable for field work 4.9. Topsoil 26% very short, 51% short, 23% adequate. Subsoil moisture 39% very short, 50% short, 11% adequate. Producers were thankful for rain received, but additional rain is needed. There is concern that high winds will cause soil erosion without the needed moisture or snow cover. Fieldwork has been completed for the year in most areas of the state. Fall 69% tillage, 63% 1998, 51% avg.; 60% fall fertilizer applied, 58% 1998, 42% avg. Grain movement 22% none, 52% light, 23% moderate, 3% heavy. Off-farm grain storage availability 21% short, 77% adequate, 2% surplus; on-farm storage 24% short, 74% adequate, 2% surplus. Use of stubble fields for grazing 24% none, 21% limited, 41% moderate, 14% extensive. Hay, roughage availability 7% short, 80% adequate, 13% surplus; quality of hay, roughage supplies 7% poor, 46% fair, 47% good.

KANSAS: Days suitable for fieldwork 4.3. Topsoil 20% very short, 34% short, 44% adequate, 2% surplus. Subsoil moisture 14% very short, 43% short, 43% adequate. Scattered showers last week were a welcome relief from the dry conditions that have dominated the State's weather for several weeks. Most of the precipitation fell in the eastern half of the State, with some areas reporting nearly 3 inches of rainfall. Wheat 10% pastured, 6% 1998, 9% avg. Last week's rain, cooler temperatures in the eastern half of the State gave a big boost to the wheat crop by reducing moisture stress, slowing greenbug activity. However, wheat fields in western area continue to suffer from the dry conditions. Sorghum 100% harvested, 99% 1998, 98% avg. Sunflowers 100% harvested, 98% 1998. Range, pasture feed 3% very poor, 19% poor, 47% fair, 30% good, 1% excellent. Stock water supplies 7% very short, 22% short, 71% adequate. Major livestock activities last week included: Moving cattle to crop residues or wheat pasture, weaning, marketing spring calves, feeding livestock. Dry, dusty conditions in western area continue to cause respiratory problems for both drylot, pasture cattle.

KENTUCKY: Days suitable for fieldwork 5.0 out of a possible 6 days. Topsoil 20% very short, 53% short, 27% adequate. Rainfall ended forest fires in the East. Temperatures 8° above normal, making November the warmest since 1895. Crop harvests virtually complete. Humidity levels, rain good for burley tobacco stripping. Burley market opening November 29th, growers active transporting stripped tobacco to warehouses. Fall seeded grains good condition with favorable

growth due to mild weather. Pastures supplying limited late season forage. Continued supplemental feeding necessary.

LOUISIANA: Days suitable for fieldwork 5.9. Soil moisture 26% very short, 48% short, 25% adequate, 1% surplus. Pecans 81% harvested, 73% 1998, 61% avg. Sugarcane 61% harvested, 56% 1998, 60% avg. Sweet potatoes 100% harvested, 100% 1998, 96% avg. Wheat 1% very poor, 20% poor, 65% fair, 14% good,; 98% planted, 95% 1998, 88% avg.; 96% emerged, 90% 1998, 78% avg. Wheat planting made good progress. Livestock 2% very poor, 14% poor, 40% fair, 41% good, 3% excellent. Vegetables 6% very poor, 19% poor, 43% fair, 31% good, 1% excellent. Pastures 16% very poor, 26% poor, 42% fair, 15% good, 1% excellent. Pasture feed improved slightly due to the scattered rain showers.

MARYLAND: Days suitable for fieldwork 4.4. Topsoil 9% short, 80% adequate, 11% surplus. Subsoil moisture 11% very short, 11% short, 74% adequate, 4% surplus. Soybeans 95% harvested, 99% 1998, 89% avg. Tobacco 28% stripped, 34% 1998, 31% avg. Clover, other hays 96% 4th cutting, 100% 1998, 97% avg. Alfalfa 95% 5th cutting, 89% 1998, 82% avg. Wheat 1% poor, 11% fair, 60% good, 28% excellent; 97% seeded, 99% 1998, 98% avg. Barley 1% poor, 16% fair, 66% good, 17% excellent. Rye 1% poor, 9% fair, 75% good, 15% excellent; 96% seeded, 100% 1998, 99% avg. Pasture feed 1% very poor, 6% poor, 24% fair, 54% good, 15% excellent. Hay supplies 6% very short, 39% short, 54% adequate, 1% surplus. Activities: Soybean harvest almost completed, stripping of tobacco continued, hay harvesting virtually complete.

MICHIGAN: Days suitable for fieldwork 6.0. Corn harvest was nearly completed with good weather conditions to finish up harvests. Temperatures were well above normal with near record highs in the beginning part of the week.

MINNESOTA: Days suitable for fieldwork 6.0. Topsoil 18% very short, 34% short, 43% adequate, 5% surplus. Average temperatures for the week were 9.2° above normal. Rain, light snow fell on the southeastern part of the state. The Southeast District had the greatest average amount of precipitation, 1.06 inches, while the North Central, West Central Districts had the least, 0.01 inch. The warm weather, dry conditions this fall allowed many producers to complete the majority of fieldwork before the rain, snow.

MISSISSIPPI: Days suitable for fieldwork 4.6. Soil moisture, 17% very short, 32% short, 48% adequate, 3% surplus. Wheat 99%planted, 100% 1998, 97% avg.; 94% emerged, 96% 1998, 91% avg.; 5% poor, 35% fair, 52% good, 8% excellent. Hay supply 45% short, 50% adequate, 5% surplus. Cattle 1% very poor, 9% poor, 38% fair, 45% good, 7% excellent. Producers in many parts of the state continue to prepare their fields for next year. Most parts of the state are still in need of precipitation.

MISSOURI: Topsoil moisture remained very short to short. Showers in the week provided some relief to pastures, winter

wheat crop. Stock ponds still in urgent need of run-off water. Farmers are hauling hay, preparing for the winter months.

MONTANA: Days suitable for fieldwork 4.9. Topsoil 17% very short, 34% short, 48% adequate, 1% surplus. Subsoil moisture 15% very short, 50% short, 35% adequate, 0% surplus. Wind damage to winter wheat 43% none, 43% light, 14% moderate, 0% heavy. Winter wheat protectiveness of snow cover 82% very poor, 7% poor, 6% fair, 5% good, 0% excellent. Cattle, calves moved from summer ranges 94%, 98% 1998, 97% avg. Sheep, lambs moved from summer ranges 97%, 99% 1998, 98% avg. Livestock grazing 91% open, 9% difficult, 0% closed. Other farming activities occurring: Fencing, shipping cattle to market, getting equipment ready for winter.

NEBRASKA: Days suitable for field activities 5.6. Topsoil 51% very short, 42% short, 7% adequate. Subsoil moisture 48% very short, 39% short, 13% adequate. In the western portion of area, temperatures averaged 2 to 4° above normals. However, in the eastern half, temperatures averaged 5 to 8° above normals for the week. Precipitation across the State ranged from traces to nearly one, three-fourth inches at Falls City. Some wheat fields continued to show more bare ground than growing wheat. Wheat: 10% very poor, 13% poor, 32% fair, 40% good, 5% excellent. Producers were moving cattle from one corn field to another because of completed grazing. Pasture, range 21% very poor, 34% poor, 31% fair, 14% good.. Producer activities included: Making decisions on seed to plant, reviewing yield data, decisions about herbicides for next year' s crop season, shredding stalks, caring for livestock, cattle processing, marketing cattle, reviewing financial records.

NEVADA: DATA NOT AVAILABLE

NEW ENGLAND: Days suitable for fieldwork 4.9. Topsoil 3% short, 78% adequate, 19% surplus. Subsoil 6% short, 78% adequate, 16% surplus. Pasture feed 19% very poor, 11% poor, 27% fair, 41% good, 2% excellent. Major farm activities included: Cutting, selling Xmas trees; spreading manure; harvesting corn for grain; preparing equipment for winter storage.

NEW JERSEY: Days suitable for field work 5. Adequate topsoil moisture, irrigation water supply were reported across the state. Temperatures averaged 51° North, 53° Central, 56° South. Extremes were 73° at Toms River on the 25th, 25° at Pemberton on the 29th. Weekly rainfall averaged 1.80 inches North, 1.14 inches Central, 0.79 inches South. The heaviest 24 hour total was 1.41 inches at Long Valley on the 26th to the 27th. Pastures are in fair condition. Farmers are busy with post-harvest field preparation. Planting of cover crops (wheat, rye) is still underway in many areas of the state. Harvest of corn, soybeans is still active in the central, northern counties. Below average corn, soybean yields are being reported. Some soybean fields in North Area will not be harvested due to the combination of low market prices, low yields. Harvest of fall cabbage, spinach, greens, carrots, leeks, cauliflower, other

minor vegetables is still occurring in some areas. Harvest of apples is virtually complete.

NEW MEXICO: Days suitable for field work 6.5. Topsoil moisture declined further during the week. The unusually warm fall temperatures were finally broken by a cold snap that yielded only spotty, light precipitation from Farmington across to the far northeast plains near Clayton. Average weekly temperatures varied from 2 to 6° cooler than normal across western, northern areas of the State. The central valleys, much of the east central, southeast plains averaged a few degrees above normal. Main farm activities were: Harvesting sorghum, red chile, cotton, land leveling, irrigating wheat. The new onion crop was in mostly good condition. Pecans were also in good condition, with some harvesting taking place. Sorghum continued in mostly good condition as harvest is over for most farmers. Wheat was only in fair condition due to the dry weather. Ranchers were busy with repairing pipelines, installing drinkers, marketing calves, culling cows, supplemental feeding, general maintenance activities. Pasture, Range feed 6% very poor, 18% poor, 39% fair, 34% good, 3% excellent. Cattle, sheep conditions were in fair to good condition.

NEW YORK: Days suitable 5.0. Soil moisture 95% adequate, 5% surplus. Harvest activities neared completion. Orchard clean-up active. Packing, grading fruits, vegetable crops. Livestock good condition. Farmers preparing machinery for winter storage.

NORTH CAROLINA: Days suitable for fieldwork 5 compared to 6.4 days last week. After consecutive dry weeks, Area received widespread rainfall accompanied by unseasonably warm weather. The rainfall hampered fieldwork in an already shortened holiday work-week in areas that still have a considerable amount of crops in the fields. Substantial precipitation in the previously dry Mountain region was welcomed. Currently, soil moisture across the State is rated 1% very short, 15% short, 61% adequate, 23% surplus. Cotton, soybean harvest dominated the field activities for the majority of the Coastal Plains. Farmers were able to make good progress in wheat planting but are still well behind the five-year average. Peanut, sorghum harvest is nearly complete. Other activities during the week included: Marketing Christmas trees, harvesting vegetable crops, field equipment service, repairs.

NORTH DAKOTA: Days suitable for fieldwork 7 in the state which aided producers in finishing outside work. Topsoil 12% very short, 35% short, 51% adequate, 2% surplus. Producers were working on equipment in preparation for next season. Dry conditions continued across the state.

OHIO: Days suitable for fieldwork 6.0. Topsoil 16% very short, 46% short, 37% adequate, 1% surplus. Winter wheat 0% very poor, 3% poor, 22% fair, 61% good, 14% excellent. Activities for the week include: Fall tillage, harvesting; stripping tobacco; land leveling; tiling; applying lime, fertilizer, manure; cleaning equipment; winterizing buildings; fencing corn fields

for animal grazing; digging nursery stock; cutting firewood; inspecting livestock waste tanks; sowing cover crops hauling grain; hauling water, hay to livestock; weaning, selling calves.

OKLAHOMA: Days suitable for fieldwork 6.2. Topsoil 38% very short, 34% short, 28% adequate. Subsoil moisture 24% very short, 50% short, 26% adequate Prolonged dryness stresses wheat west. Warm November temperatures boost row crop harvest well ahead of avg. Oats 11% very poor, 23% poor, 35% fair, 31% good; 82% planted, 96% 1998, 90% avg.; 56% up-to-stand, 88% 1998, 78% avg. Sorghum 96% harvested, 95% 1998, 89% avg. Soybeans 97% harvested, 87% 1998, 88% avg. Peanuts 100% dug, 96% 1998, 97% avg.; 99% combined, 86% 1998, 92% avg. Alfalfa Hay 3% very poor, 16% poor, 31% fair, 47% good, 3% excellent; 94% 4th cutting, 94% 1998, 99% avg.; 47% 5th cutting, 51% 1998, 81% avg. Livestock 1% very poor, 4% poor, 28% fair, 64% good, 3% excellent; Pasture, range 10% very poor, 25% poor, 40% fair, 24% good, 1% excellent. Prices for feeder cattle over 500 pounds steady.

OREGON: Activities: Winter wheat planting winding down to a finish. Christmas tree harvest continue' s at a rapid pace. Livestock continued to be fed. Holly harvest in full swing as growers prepare for holidays. This past week saw a major winter storm system came through the area. There were many reports of heavy rain, high winds associated with this front. Along the coast there were numerous reports rivers leaving their banks, flooding homes and businesses. Also there were several reports of roads being underwater, having buckled, mudslides covering some others.

PENNSYLVANIA: Days suitable for field work 4.7. Soil moisture 7% very short, 27% short, 65% adequate, 1% surplus. Corn 93% harvested, 92% 1998, 87% avg. Soybeans 96% harvested, 96% 1998, 91% avg. Fall 91% plowing, 90% 1998, 94% avg. Wheat 98% emerged, 97% 1998. Activities include: Harvesting corn, soybeans; building, machinery maintenance; hauling, pumping, spreading manure; shredding, baling corn stocks; caring for livestock; buying, hauling hay; plowing for the fall.

SOUTH CAROLINA: Days suitable for fieldwork 5.8. Soil moisture 8% very short, 32% short, 57% adequate, 3% surplus. Livestock 3% poor, 24% fair, 58% good, 15% excellent. Pasture Feed 2% very poor, 13% poor, 41% fair, 40% good, 4% excellent. Sorghum 95% harvested, 100% 1998, 92% avg. Sweet Potatoes 100% harvested, 100% 1998, 87% avg. Winter Grazings 95% planted, 94% 1998, 93% avg.; 89% emerged, 83% 1998, 85% avg.; 6% poor, 40% fair, 51% good, 3% excellent. Winter Wheat 63% planted, 55% 1998, 58% avg.; 44% emerged, 41% 1998, 41% avg.; 1% very poor, 1% poor, 54% fair, 40% good, 4% excellent. Barley 97% planted, 100% 1998, 90% avg.; 80% emerged, 93% 1998, 85% avg.; 35% fair, 33% good, 32% excellent. Oats 95% planted, 89% 1998, 89% avg.; 81% emerged, 78% 1998, 80% avg.; 41% fair, 47% good, 12% excellent. Rye 93% planted, 92% 1998, 86% avg.; 86% emerged, 73% 1998, 73% avg.; 49% fair, 44% good, 7% excellent. Pecans 56% harvested, 67% 1998, 61% avg.; 71% fair, 29% good.

SOUTH DAKOTA: Days suitable for fieldwork, 6.0. Topsoil 30% very short, 34% short, 30% adequate, 6% surplus. Subsoil moisture 16% very short, 30% short, 43% adequate, 11% surplus. Winter wheat 1% very poor, 7% poor, 31% fair, 53% good, 8% excellent; 100% planted, 100% 1998, 100% avg.; emerged 100%, 100% 1998, 99% avg. Precipitation of a trace to a few tenths inch did little to alleviate moisture stress on winter wheat, rye. Temperatures falling towards more seasonable levels have growers concerned about crops entering winter dormancy while moisture stressed.

TENNESSEE: Days suitable for fieldwork 6.0. Topsoil 18% very short, 23% short, 58% adequate, 1% surplus. Subsoil moisture 20% very short, 24% short, 56% adequate. Burley 81% stripped, 84% 1998, 81% avg. Winter wheat 100% seeded, 98% 1998, 93% avg.; 91% emerged, 84% 1998; 3% very poor, 5% poor, 22% fair, 50% good, 20% excellent. Several weak frontal boundaries moved through the State last week bringing much needed rainfall to portions of Middle, East Area. Temperatures remained quite mild across the State. The main field activities included: Wrapping up winter wheat seeding, preparing tobacco for market.

TEXAS: Harvest of remaining summer crops remained active. The first hard freeze occurred in the Plains following the passage of a weather front which also brought light rain showers to areas of North Central, East Area. Land preparation for the 2000 crops continued, but remained slow. Livestock forage conditions continued to decline, heavy supplemental feeding continued. General livestock conditions continued to decline in all areas of the state. Hauling water to livestock continued in many areas. In some areas livestock was being totally fed which prompted livestock sales. Citrus, vegetable harvest continued in the Rio Grande Valley.

Crops: Small Grains: Seeding of wheat, oats were minimal. A few growers were attempting to replant after severe seedling death had occurred. Aphid, Green bug populations increased in many locations. Statewide wheat condition was rated at 46% of normal compared with 71% 1998. Oats 80% Published, 92% 1998, 89% Avg. Cotton: Harvest continued as the first hard freeze occurred across the Plains which will aid in the harvest of the remaining cotton crop. Cotton stalk destruction continued to be active where cotton was being harvested. In a few locations, boll weevils counts were increasing prior to the freeze. Peanuts: Harvest was mostly completed on the Plains with generally good yields. In other areas, baling of peanuts due to the dry conditions was mostly complete. Harvested 82% Published, 85% 1998, 87% Avg. Sorghum: Harvest continued to wind down on the High Plains. The hard freeze that occurred across the Plains removed the possibility of further sprouting in the head which had occurred in a few locations. Harvested 99% Published, 94% 1998, 97% Avg. Soybeans: Harvest of remaining fields continued on the High Plains, but was mostly completed. Yields remained favorable. Published 99%, 92% 1998, 98% Avg.

Commercial Vegetables, Fruit and Pecans: Rio Grande Valley, harvest continued active for bell peppers, greens, cabbage, early citrus. Onions continued to make good progress, land preparation remained active for further

plantings. Harvesting of sugarcane remained active. San Antonio-Winter Garden, Harvest of cabbage, carrots, broccoli, bell peppers, greens continued. Land preparation for later winter vegetables remained active. East Area, Showers aided in the planting of fall crops, gardens as land preparation continued. Pine tree harvest continued. High Plains, bean harvest neared completion with generally good yields. Carrot and turnip was mostly completed. The colder temperatures enhanced harvest activities which continued to increase across the state. Quality remained variable. Evidence of summer insect damage became more noticeable.

Range and Livestock: General livestock conditions remained poor. Herd reduction continued to increase as supplemental, or total feeding continued. Hauling water to livestock also became more prevalent. Livestock sickness, mainly pneumonia, continued to occur as a result of the continued dry, dusty conditions. Grazing of wheat, oat occurred generally where irrigation was possible. Hay supplies continued to decrease as total feeding began in some areas.

UTAH: Days suitable for field work 6. Topsoil 29% very short, 39% short, 32% adequate. Counties throughout the state continue to be in need of precipitation.

VIRGINIA: Days suitable for fieldwork 4.9. Topsoil 1% very short, 14% short, 78% adequate, 7% surplus. Subsoil moisture 11% very short, 27% short, 57% adequate, 5% surplus. Beef Cattle Forage Obtained from Pastures 54%. Milk Cow Forage Obtained from Pastures 13%. Sheep Forage Obtained from Pastures 62%. Pastures 5% very poor, 15% poor, 35% fair, 39% good, 6% excellent. Livestock 1% very poor, 5% poor, 22% fair, 61% good, 11% excellent. Small Grain, Winter Grazing Crops 0% very poor, 6% poor, 27% fair, 59% good, 8% excellent. Soybeans 80% harvested, 83% 1998, 76% avg.; 6% very poor, 13% poor, 32% fair, 39% good, 10% excellent. Winter Wheat 90% seeded, 89% 1998, 87% avg.; 1% very poor, 4% poor, 28% fair, 58% good, 9% excellent. Barley 1% very poor, 2% poor, 22% fair, 71% good, 4% excellent. Cotton 81% harvested, 100% 1998, 89% avg. Average temperatures were in the mid- to upper-fifties across the Commonwealth during the past week. Daytime highs for many localities reached into the seventies. Nighttime lows were in the mid- to lower-thirties. Many localities recorded precipitation occurring over several days, however, accumulation was limited. Topsoil moisture levels improved. Ground water supplies remain slightly diminished. Pasture feed improved slightly during the previous week due to increased moisture. However, growth was minimal due to cold overnight temperatures. Livestock producers continued to provide supplemental hay to their herds. The number of beef cattle obtaining the majority of forage requirements from pasture declined slightly. The condition rating of animals increased slightly over the past week. The increase is attributed to mild temperatures, improved pasture feed. Damp weather hampered harvest progress of remaining acres of summer, fall crops. Corn producers completed harvest of corn for grain. Good yields have been reported in most localities. Eighty percent of soybean acreage has been harvested. Producers are slightly behind last year but ahead of the 5-year average. Producers have been pleasantly surprised by good yields. Small grain

producers completed seeding next year's barley crop, made good progress seeding wheat acreage. Ninety percent of areas' s wheat acreage has been seeded, slightly ahead of 1998, the 5-year avg. Previously seeded acres of both small grains have been rated in mostly good to excellent condition. Producers continue to scout for aphids. Cotton producers remain slightly behind a normal harvest schedule. Eighty-one percent of areas' s cotton acreage has been picked, compared to the 5-year average of 89%. Other activities during the past week included: Grading of tobacco, fall-calving, fencing for fall grazing, removing plastic, drip irrigation lines from fields, attending pesticide re-certification meetings, mowing cotton stalks, planting cover crops, winterizing equipment.

WASHINGTON: Days suitable for fieldwork 5.0. Topsoil 20% short, 75% adequate, 5% surplus. Subsoil moisture 6% very short, 62% short, 30% adequate, 2% surplus. Winter wheat dryland 9% poor, 70% fair, 21% good. Winter wheat irrigated 100% good. Winter wheat 100% planted, 100% 1998, 100% avg.; 100% emerged, 100% 1998, 98% avg. The 2000 winter wheat crop had been planted, emerged. Continued precipitation, mild weather helped the planted winter wheat. Herbicides were being applied to control the downy brome emergence. Hay, other roughage supplies were 15% short, 70% adequate, 15% surplus. Range, pasture 20% poor, 50% fair, 30% good. U-cut Christmas tree farms were opened for business. Most lowland areas in western area on were under water do to the heavy rain that fell in the last couple of weeks. Grapes, fruit trees were being pruned, corn for grain, sugar beets were both still being harvested.

WEST VIRGINIA: Days suitable for fieldwork 4.0. Topsoil 9% very short, 39% short, 52% adequate. Some much needed precipitation helped restore moisture supplies, improve pasture feeds. Hay 3rd cut 98%. Corn 94% harvested, 95% 1998, 89% 5-yr avg. Wheat 7% poor, 40% fair, 53% good; Wheat emerged 73%, 88% 1998. Cattle 2% very poor, 8% poor, 31% fair, 57% good, 2% excellent. Sheep 1% poor, 28% fair, 67% good, 4% excellent.

WISCONSIN: Days suitable for fieldwork 4.8. Soil Moisture 20% very short, 50% short, 30% adequate. Significant rainfall was received over most of the state during the past week. Snowfall occurred in the North-Central region of the state, with total accumulations reaching 12 inches near Lake Superior. Temperatures averaged 38^o state wide, 9^o above the 30-year avg.

WYOMING: Days suitable for fieldwork 5.0. Topsoil 4% very short, 59% short, 37% adequate. Subsoil moisture 3% very short, 55% short, 42% adequate. Average depth of snow cover 0.2 inches. Most counties have none. Condition of winter wheat crop 3% poor, 25% fair, 71% good, 1% excellent. Winter wheat wind damage 86% none, 13% light, 1% moderate. Winter wheat freeze damage 95% none, 5% light. Cattle 3% fair, 92% good, 5% excellent. Sheep 4% fair, 94% good, 2% excellent. Hay, roughage supplies 57% adequate, 43% surplus. Temperatures were generally above normal with scattered, light precipitation across the State.

International Weather and Crop Summary

November 21 - 27, 1999

HIGHLIGHTS

FSU-WESTERN: Significant snowfall accompanied unseasonably cold weather in major winter wheat-producing areas of Ukraine and southern Russia.

EUROPE: Unseasonably cold weather continued across much of Europe, causing winter grains to enter dormancy in the northeast.

EASTERN ASIA: Late-week cold weather aided winter wheat hardening across the North China Plain.

SOUTHEAST ASIA: Showers benefited oil palm and main-season rice in Java and Sumatra, Indonesia. Seasonably dry weather aided rice harvesting in Thailand and northern Vietnam.

SOUTH AMERICA: Three consecutive weeks of mostly dry weather stressed summer crop germination and slowed planting in extreme southern Brazil, southern Paraguay, and northern Argentina.

NORTHWESTERN AFRICA: Prospects for winter grain germination and establishment remained favorable in Morocco, Algeria, and Tunisia.

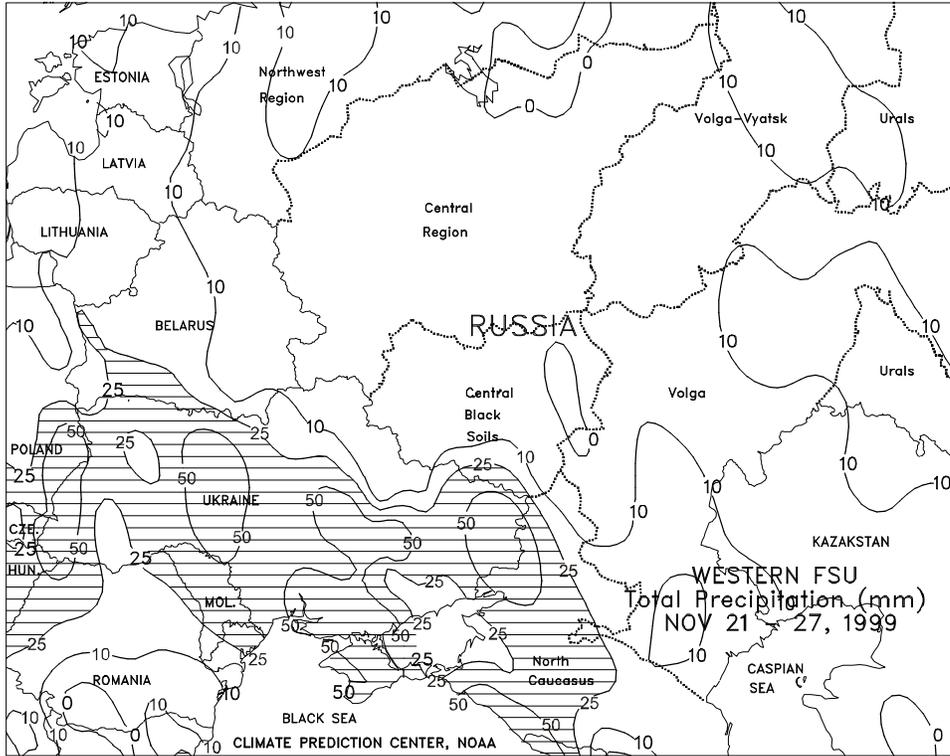
SOUTH AFRICA: Showers brought some relief to emerging crops in the eastern corn belt, but unfavorable dryness continued in the west.

AUSTRALIA: Rainy weather persisted in the east, hampering winter grain harvests and worsening quality prospects.



EUROPE

Mainly dry (less than 10 mm), unseasonably warm (temperatures 1-3 degrees C above normal) weather allowed sugar beet harvesting and late winter wheat planting to progress in eastern England, while showers (10-25 mm) in western England helped winter grain emergence and establishment. Farther east, near- to above-normal temperatures (up to 2 degrees C above normal) helped winter grain development from northwest France northeastward through Denmark. Elsewhere across Europe, unseasonably cold (temperatures 2-5 degrees C below normal) weather slowed winter grain development and caused winter grains to enter dormancy in southern and eastern Germany, Austria, the Czech Republic, Poland, and Slovakia. Light to moderate snow (10-40 mm) fell across southern Germany, southern Poland, and eastern Slovakia, increasing snow cover. Farther south, a mix of rain and snow (15-40 mm) fell across Hungary, Croatia, Serbia, and parts of northern Romania, where winter grains are likely easing into dormancy. In the remainder of southeastern Europe, showers (20-60 mm) helped winter grain emergence and establishment. Similarly, scattered showers (generally 15-55 mm) in central and southern Italy helped winter grain development. In contrast, dry weather benefited soybean harvesting in northern Italy and corn harvesting and winter grain planting in France, Spain, and Portugal.



FSU-WESTERN

Unseasonably cold weather continued to prevail over the region, keeping winter grains dormant in the north and pushing crops into dormancy across the south. Rain changed to heavy snow (25-50 mm or more) in major winter wheat-producing areas of Ukraine and the North Caucasus region in Russia, boosting moisture supplies. Elsewhere, light snow (mostly less than 10 mm of liquid equivalent) increased snow cover in northern Russia, with moderate snow (7-19 mm of liquid equivalent) falling over winter grain areas in the Baltic States and Belarus. Bitterly cold weather was observed over the region at week's end. The coldest weather occurred on November 26, when minimum temperatures fell to -20 degrees C as far south as central Ukraine and the northern tip of the North Caucasus region in Russia. The combination of the fresh protective snow cover and short duration of extreme cold minimized the threat for significant winterkill throughout the region.

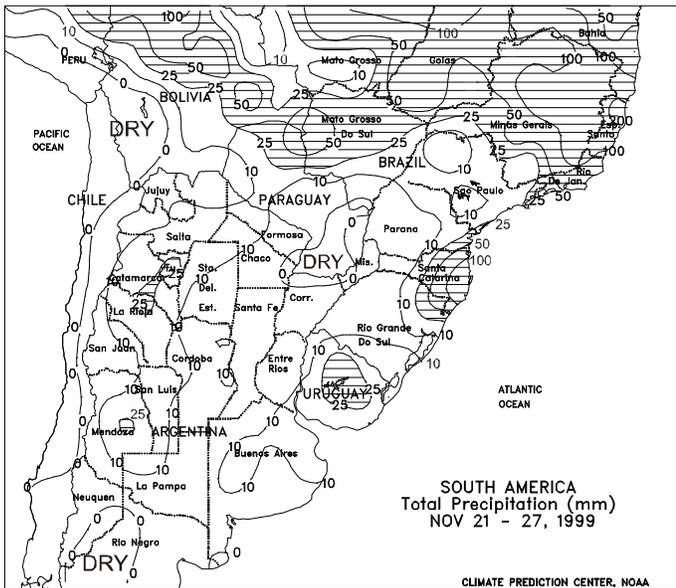
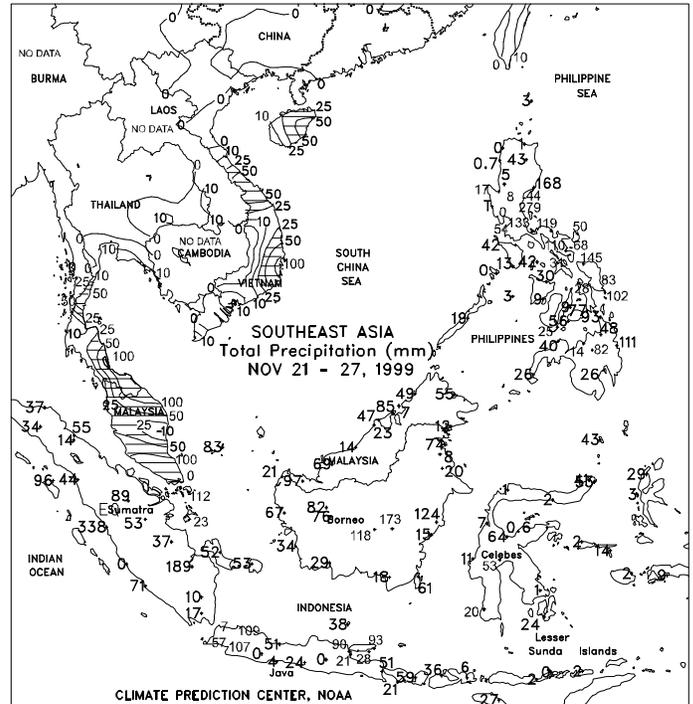


EASTERN ASIA

Late in the week, seasonably cold weather moved into the North China Plain and Yangtze Valley, aiding winter wheat hardening. However, weekly temperatures averaged 2 to 5 degrees C above normal across most of China, due to warmer weather earlier in the week. Light to moderate rain (5-25 mm) fell across the southern North China Plain and Yangtze Valley, favoring winter wheat establishment and rapeseed germination. Dry weather favored late double-crop rice harvesting in southern China.

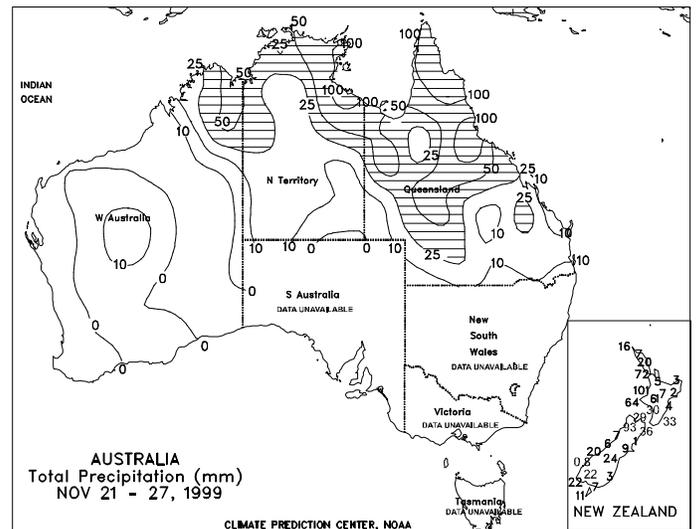
SOUTHEAST ASIA

In Java, Indonesia, seasonable showers (25-100 mm) maintained favorable moisture supplies for vegetative main season rice. Showers (35-170 mm) also increased moisture supplies for oil palm across Sumatra, Indonesia and peninsular Malaysia. Seasonably dry weather favored rice harvesting across Thailand and northern Vietnam. Light showers (10-30 mm) prevailed across the Mekong Delta in southern Vietnam, causing only minor rice harvesting delays. Heavy showers (100-250 mm) slowed fieldwork for rice and plantation crops in southern Luzon, Philippines. Elsewhere in the Philippines, seasonable showers (15-70 mm) maintained moisture supplies for second-season crops.



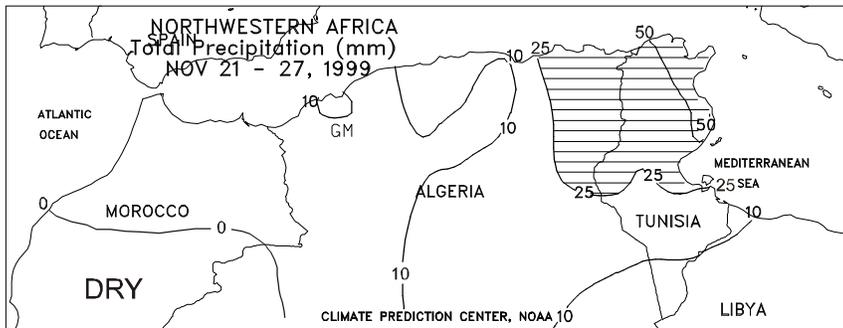
SOUTH AMERICA

In extreme southern Brazil and southern Paraguay, 3 consecutive weeks of mostly dry weather stressed soybean and corn development. The dryness, primarily in Parana, Rio Grande do Sul and southern Mato Grosso do Sul, had also started to slow soybean planting due to low topsoil moisture. In southwestern Minas Gerais, Goias, and Mato Grosso, showers (20-60 mm) aided soybean germination and coffee development. Temperatures averaged 1 to 2 degrees C below normal across Rio Grande do Sul and near to slightly above normal elsewhere in southern Brazil. According to reports as of November 26, Brazilian soybeans were 69 percent planted, compared with 75 percent last year. Most states were near last year's planting progress, except for Mato Grosso do Sul, where only 49 percent was planted, compared with 75 percent last year. In northern Argentina, dry weather stressed cotton germination and slowed planting. In the major corn and soybean area of central Argentina, scattered light to moderate rain (5-25 mm) increased soil moisture, especially in Buenos Aires. However, more widespread rain is needed across the region to ensure favorable summer crop germination. According to reports as of November 19, crop plantings in Argentina were soybeans 32 percent, corn 73 percent, and sunflowerseed 83 percent. The progress of these crops was the same as last year. Temperatures averaged near normal, but warmer weather late in the week increased crop water use.



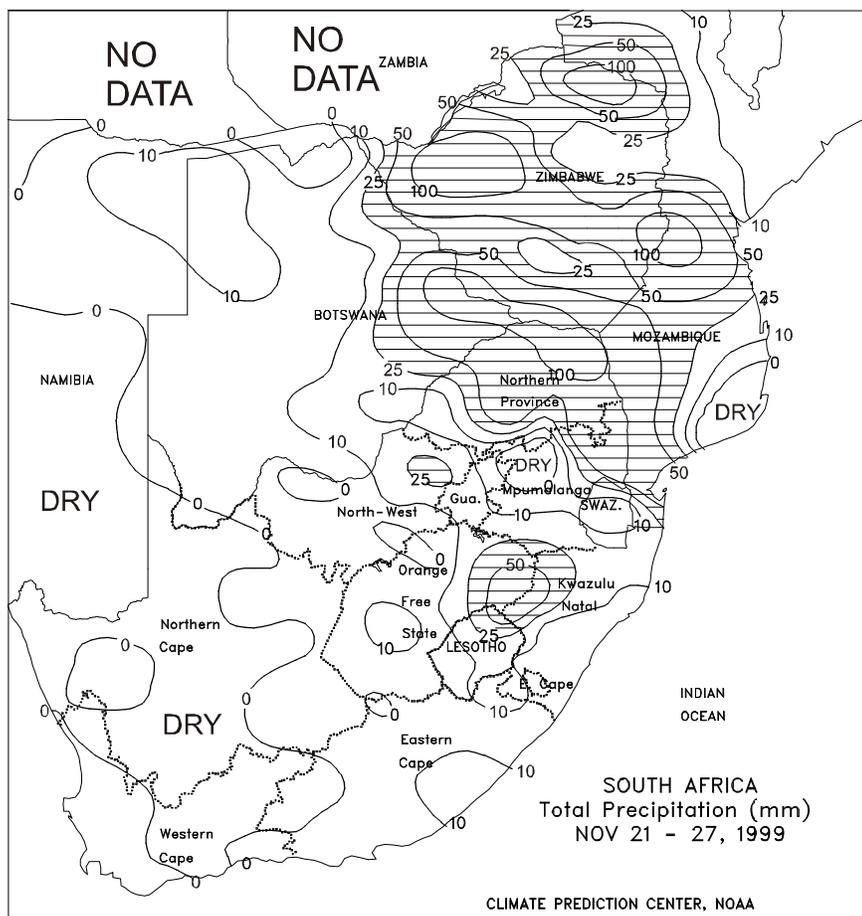
AUSTRALIA

Frequent showers kept maturing winter grains unfavorably wet over much of the east. In Queensland and northern New South Wales, light to moderate showers (10-25 mm or more) worsened the quality outlook on mature wheat and barley. In the southeast (South Australia, Victoria, and southern New South Wales), periodic rain (10-25 mm) hampered harvesting, which was active in most locations. The rains came too late to significantly improve winter grain prospects but may have benefited immature crops in traditionally cooler locations of western Victoria. Near- to below-normal temperatures continued throughout the east, exacerbating the effects of the untimely wetness while slowing summer crop development. In Western Australia, dry, warm weather favored winter grain harvesting. In New Zealand, moderate showers (25 mm or greater) covered southern North Island and nearby sections of South Island, but rainfall was lighter elsewhere.



NORTHWESTERN AFRICA

Following last week's beneficial rains, dry weather returned to winter grain areas in Morocco, helping planting activities. Farther east, light to moderate showers (4-15 mm) in eastern Algeria maintained adequate topsoil moisture for planting. Farther east, soaking rain (36-63 mm) slowed planting activities in eastern Algeria and Tunisia, but provided abundant topsoil moisture conditions for germination and early plant establishment. Unseasonably cold weather (weekly temperatures averaged 2-4 degrees C below normal) prevailed across the region, slowing crop emergence. Although temperatures dropped to as low as -2 degrees C during the middle of the week across interior growing areas of Algeria, temperatures did not fall low enough to threaten newly emerging crops.



SOUTH AFRICA

Moderate showers (10-25 mm or more) swept through the eastern half of the corn belt, benefiting emerging summer crops. Unfavorable dryness persisted, however, in western production areas currently experiencing planting delays. This included important white corn areas of central Free State and North West. Temperatures were above normal throughout the corn belt, exacerbating the dry conditions in the west while increasing evapotranspiration rates in the east. Although corn planting typically lasts until early January, crops planted past November are at greater risk of summer heat stress during critical stages of development. The warmth and dryness have also hastened wheat maturity. Elsewhere, showers were generally scattered and light in the Cape provinces and coastal sugarcane areas of Kwazulu-Natal. Temperatures averaged near normal in the Western Cape's agricultural districts, reducing crop moisture demands. In contrast, above-normal temperatures maintained high irrigation requirements in Eastern Cape and Kwazulu-Natal.

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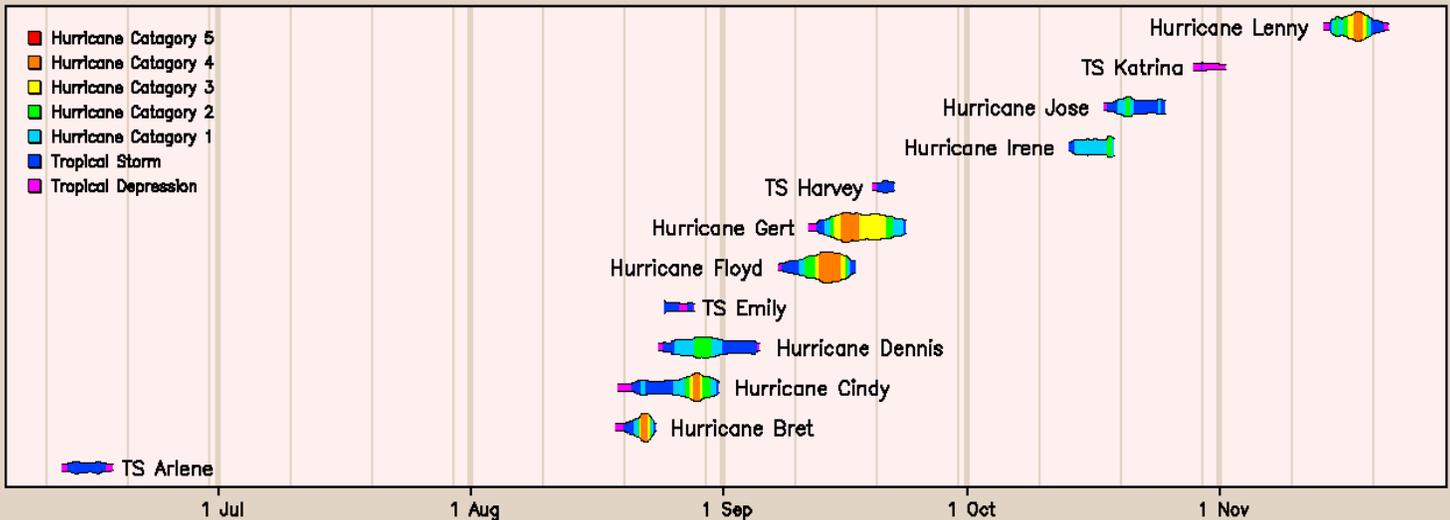
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1999 North Atlantic Tropical Storms



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Tropical storm information from the National Hurricane Center (Tropical Prediction Center), NWS, NOAA. The Atlantic hurricane season is normally from June 1 - November 30. The 1999 season had 12 named storms that included 8 hurricanes, with 5 of them major (sustained winds exceeding 110 mph). The Atlantic hurricane season averages 8 named storms that includes 5 hurricanes (with 2 majors).

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