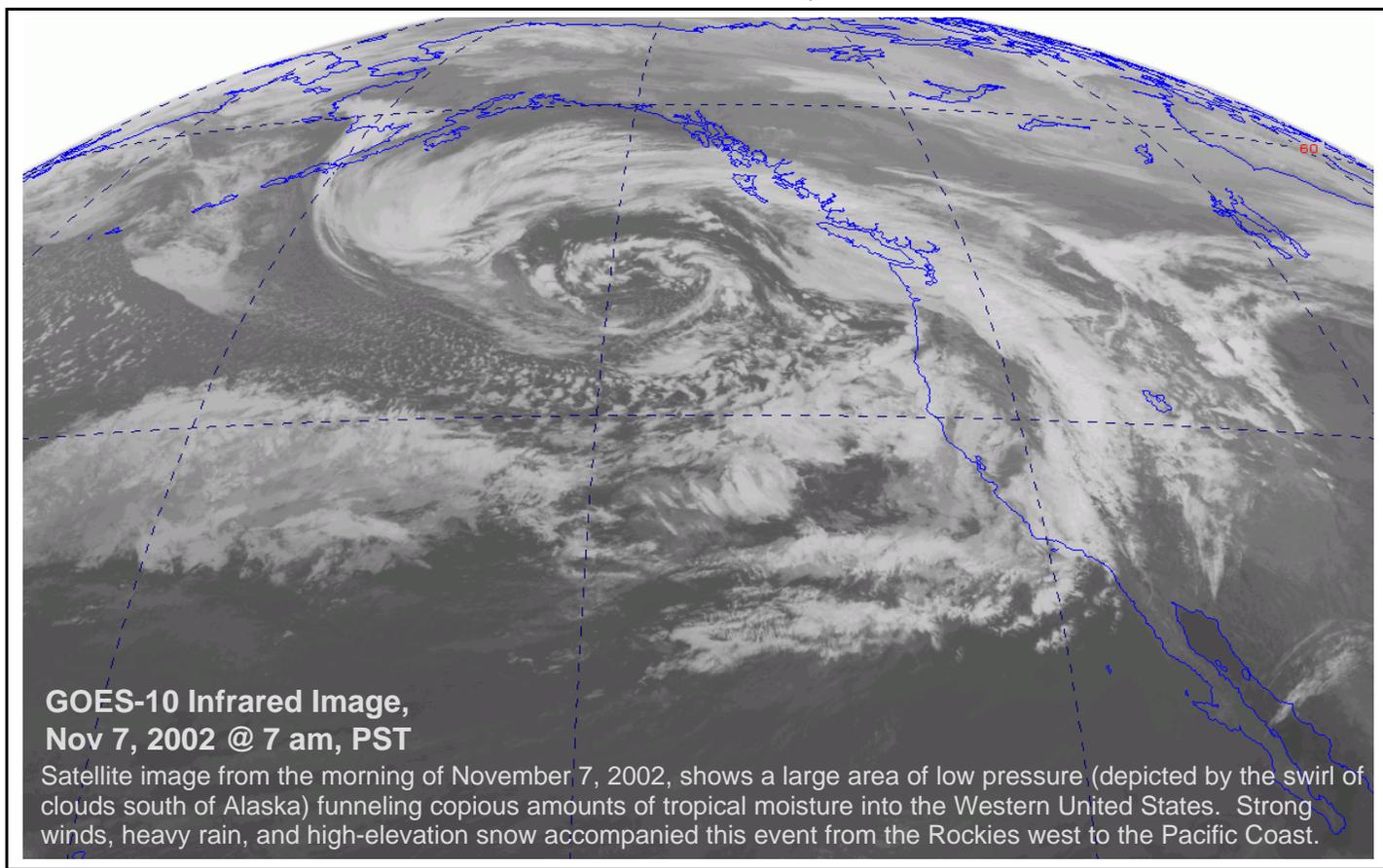


# WEEKLY WEATHER AND CROP BULLETIN



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 Infrared Image,  
Nov 7, 2002 @ 7 am, PST**

Satellite image from the morning of November 7, 2002, shows a large area of low pressure (depicted by the swirl of clouds south of Alaska) funneling copious amounts of tropical moisture into the Western United States. Strong winds, heavy rain, and high-elevation snow accompanied this event from the Rockies west to the Pacific Coast.

## HIGHLIGHTS

**November 3 - 9, 2002**

*Highlights provided by USDA/WAOB*

**T**he sudden arrival of the **Western** wet season aided pastures and winter grains across **California** and the **Northwest**. Despite beneficial, high-elevation snowfall across the **West**, a full season of consistently heavy precipitation will be needed to reduce or eliminate the effects of long-term drought on irrigation reserves and rangelands. Meanwhile, warm, dry weather returned to the **Plains**, where very cold weather had prevailed for the previous 3 weeks. The **Plains'** warmth (as much as 6°F above normal) aided autumn fieldwork operations and brought some renewed winter wheat development, but reduced soil moisture for wheat establishment across

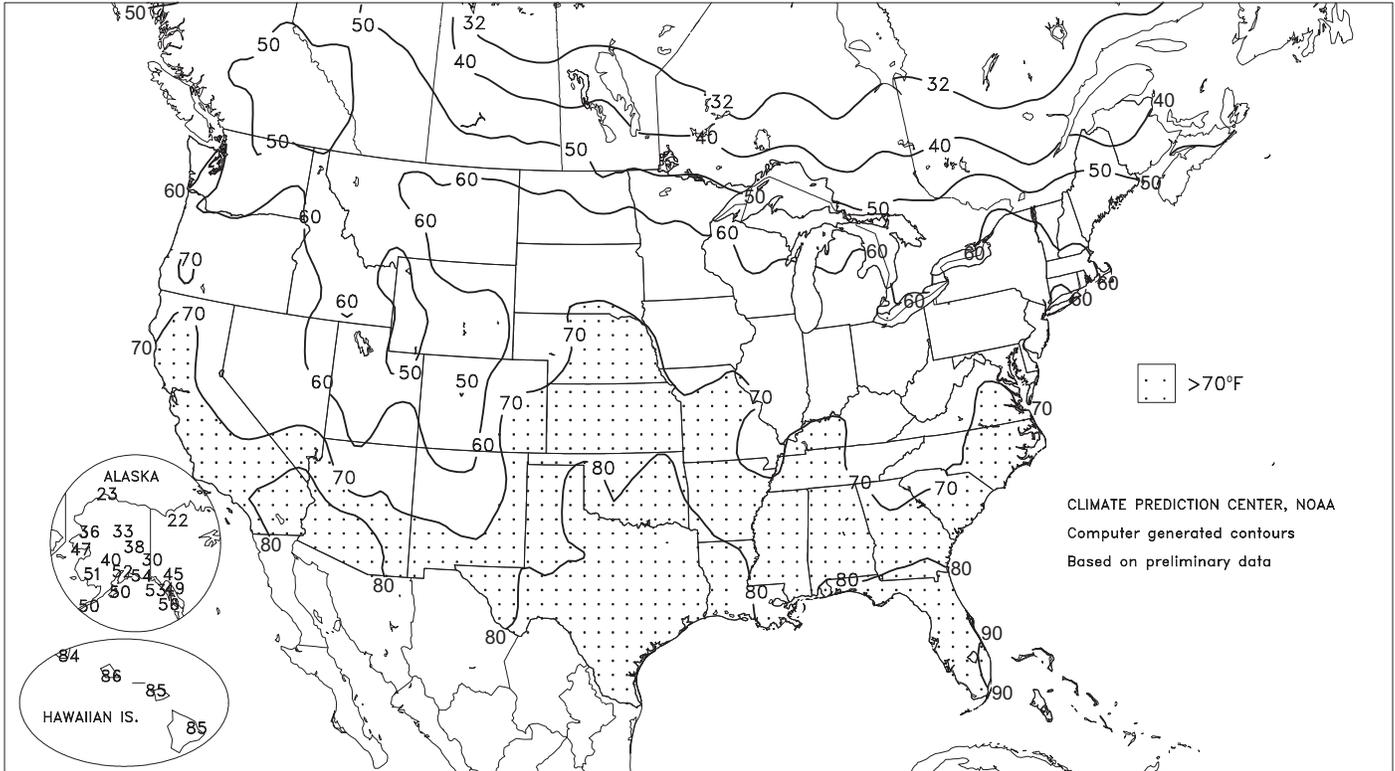
*(Continued on page 3)*

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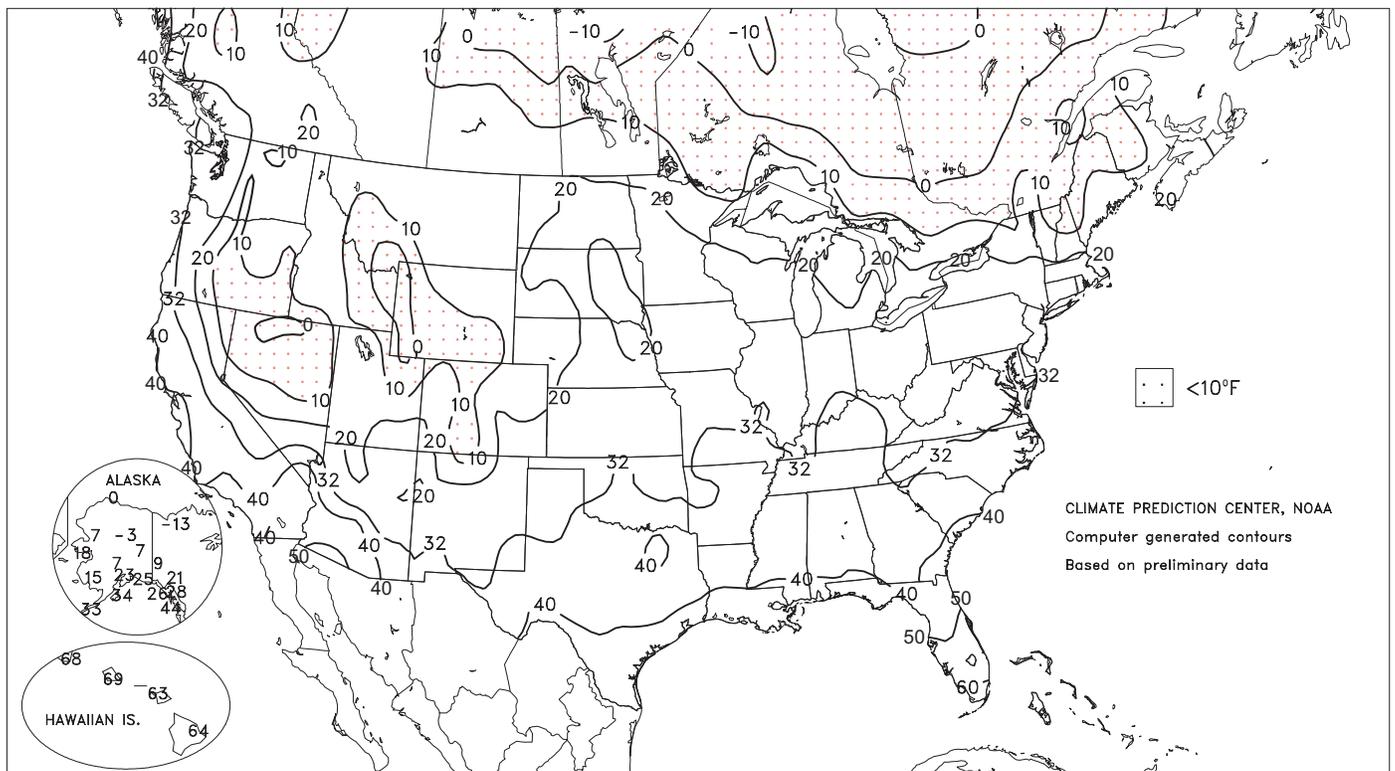
Extreme Maximum Temperature (°F)

NOV 3 - 9, 2002



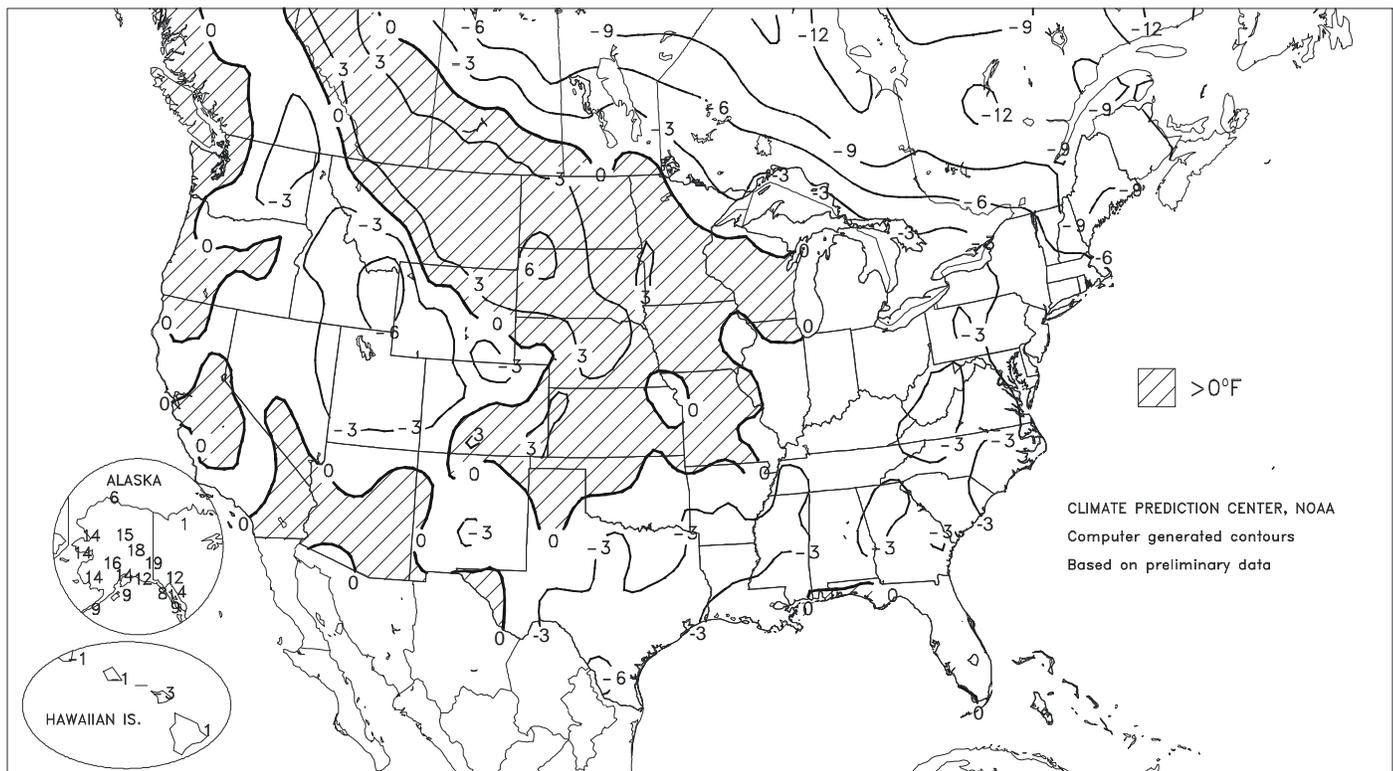
Extreme Minimum Temperature (°F)

NOV 3 - 9, 2002



## Departure of Average Temperature from Normal (°F)

NOV 3 - 9, 2002



(Continued from front cover)

roughly the **northwestern half of the region**. Farther east, mild, mostly dry weather favored final summer harvesting across the **northern and western Corn Belt**. Elsewhere in the **Midwest**, mild, showery weather promoted winter wheat development, although pockets of dryness persisted in **Lower Michigan** and **northern portions of Indiana and Ohio**. Across the **South**, heavy rain caused additional lowland flooding in the **western Gulf Coast region** and triggered another setback in cotton and soybean harvesting in the **Delta**. Widespread precipitation further eased long-term drought in the **East**, excluding **Florida's peninsula**, where a gradual drying trend increased citrus irrigation demands.

During the early- to mid-week period, another significant storm system crossed the **South and East**. In **Texas** on November 4, daily-record rainfall reached 5.14 inches in **Lufkin** and 4.56 inches in **College Station**. A day later, records included 2.27 inches in **Tupelo, MS**, 1.83 inches in **Huntsville, AL**, 1.40 inches in **Monroe, LA**, and 1.35 inches in **Greenville-Spartanburg, SC**. At mid-week, wet snow blanketed **northern New England**, while rain fell farther south and closer to the **Atlantic Coast**. In **Caribou, ME**, November 6-7 snowfall totaled 3.3 inches.

Meanwhile, cold weather eased across much of the Nation. More than 100 daily-record lows were set or tied during the first half of the week, mostly in **New England** and the **Northwest**. By November 7, however, temperatures reached daily-record levels in locations such as **Spokane, WA** (58°F), and **Whitman Mission, WA** (66°F), just 3 days after daily-record lows of 11°F in both locations. A second round of cold air overspread **New England**, however, where **Caribou, ME**, registered daily-record lows on November 3 (16°F), 7 (8°F), and 8 (6°F). At week's end, warm weather began to overspread the **East**, where the November 8 high of 65°F in **Martinsburg, WV**, represented their first

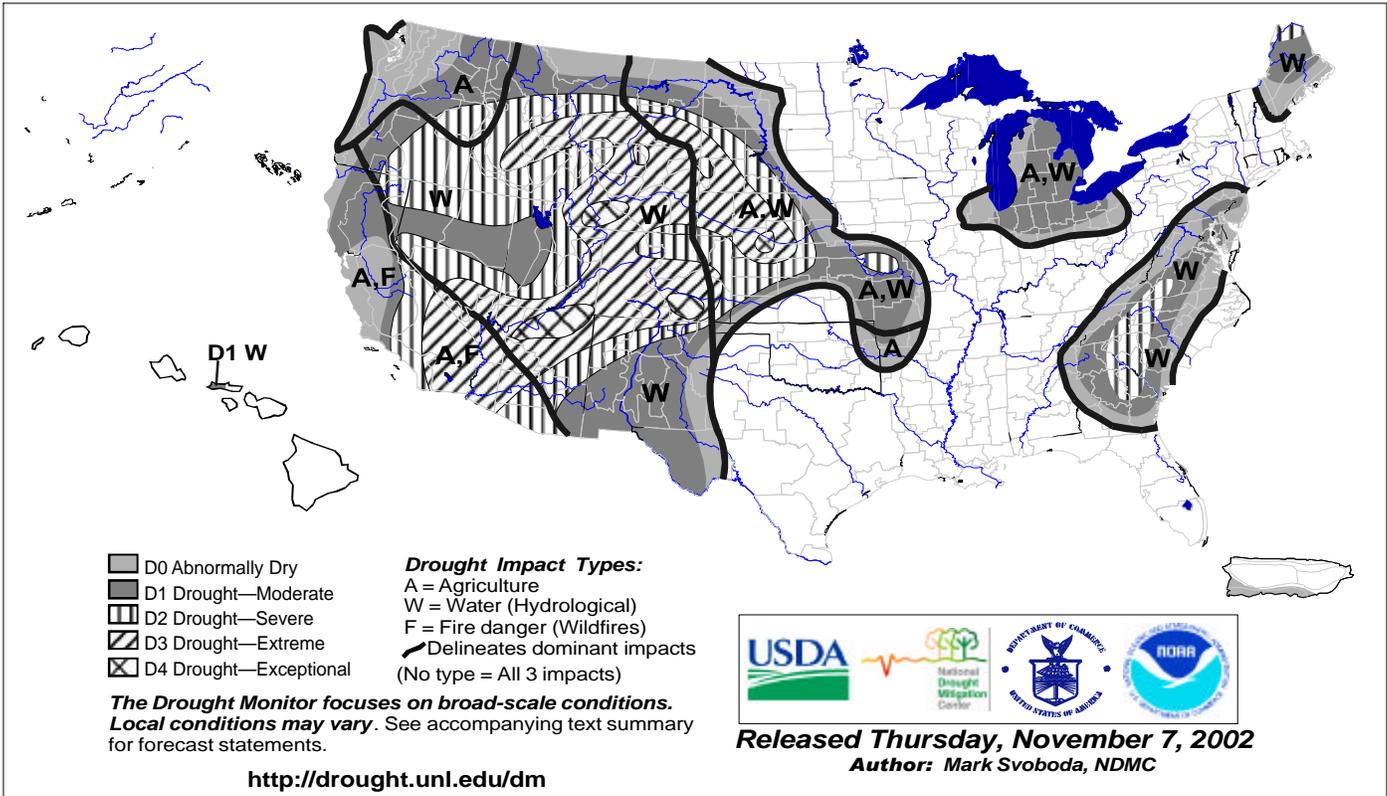
reading at or above 65°F since October 13. Farther south, warmth intensified across the **southern Atlantic region**, boosting high temperatures to monthly record levels on November 6 in **Miami** (91°F) and **Miami Beach, FL** (92°F).

Downtown **Los Angeles, CA**, received more rain (2.31 inches) from November 7-9 than during the year-to-date through November 6 (1.61 inches). Despite the rain, **Los Angeles'** year-to-date sum through November 10, 3.92 inches, was just 31 percent of normal. Elsewhere in **southern California**, 48-hour rainfall from November 7-9 included 6.38 inches in **Ojai** and 6.41 inches on **Mt. Wilson**. Farther north, mid- to late-week rainfall locally exceeded 10 inches in the **Santa Lucia Mountains** near **San Francisco**. In addition to high-elevation snowfall, gusty winds raked much of the **West**. On November 7, a gust to 58 mph was clocked in **Redding, CA**; 2 days later, **Payson, AZ**, recorded a gust to 65 mph.

Mostly dry weather and record warmth prevailed across **Alaska** for much of the week, followed by a return to near-normal temperatures by week's end. Daily-record highs were observed in more than a dozen locations, helping to boost weekly temperatures 6 to 18°F above normal. On November 6, maxima of 51°F in **Bethel** and 47°F in **Nome** were the stations' highest November readings in the last half-century. Since 1949, **Bethel's** previous latest autumn reading at or above 50°F occurred on October 20, 1957. Elsewhere in **Alaska**, **Valdez** posted five consecutive daily-record highs from November 5-9, while **Kodiak** was one of the State's few wet spots, netting 5.06 inches (221 percent of normal) from November 1-10. Meanwhile, cool, mostly dry weather prevailed in **Hawaii**, where weekly temperatures averaged as much as 3°F below normal.

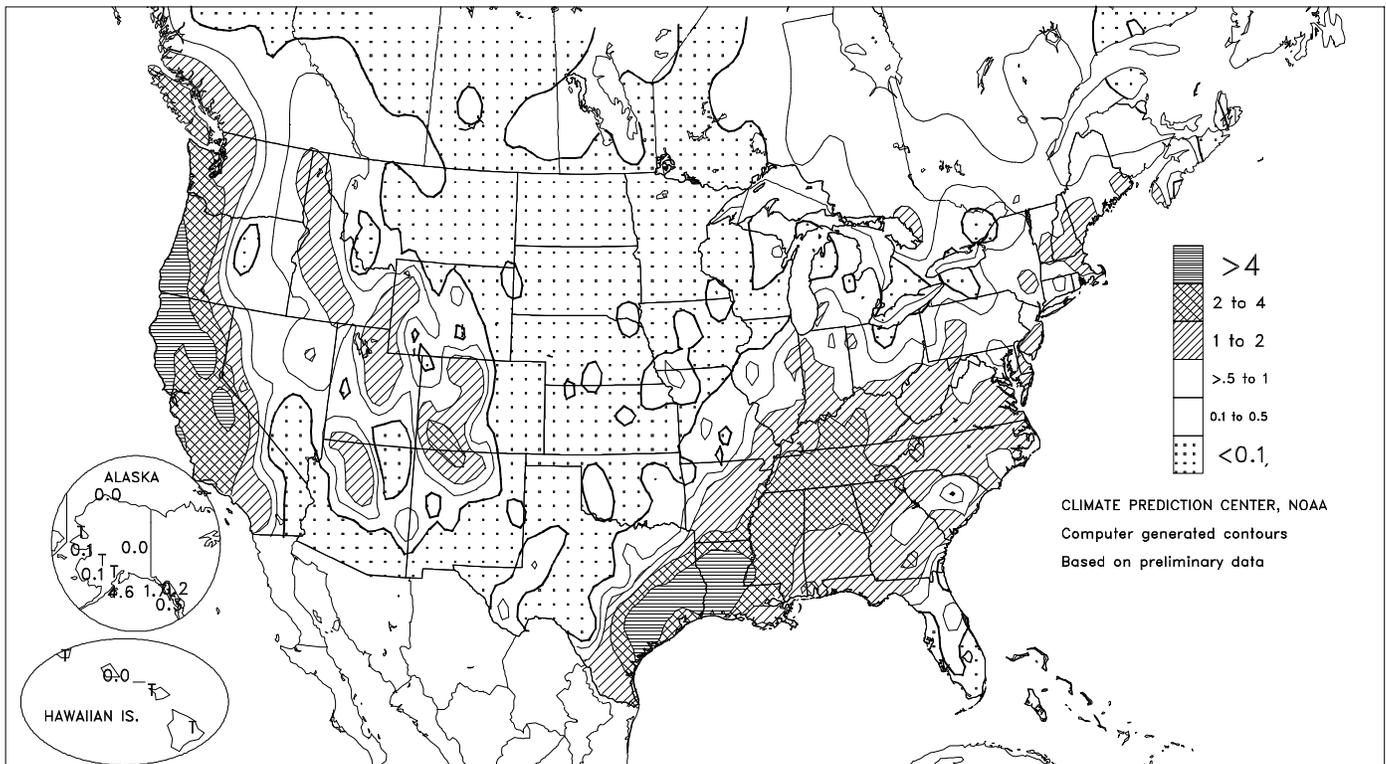
# U.S. Drought Monitor

November 5, 2002  
Valid 7 a.m. EST



## Total Precipitation (Inches)

NOV 3 - 9, 2002



## Weather Data for Mississippi and the Missouri Bootheel

### Weather Data for the Week Ending November 9, 2002

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

STATES AND STATIONS	TEMPERATURE °F						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. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
MS BATESVILLE <sup>x</sup>	57	44	68	33	50	-4	1.49	0.31	0.53	22.47	274	61.12	133	-	-	0	0	4	1
BELZONI <sup>x</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CLARKSDALE <sup>x</sup>	-	-	-	-	-	-	2.70	1.54	1.30	17.34	231	62.97	141	-	-	-	-	4	3
CLEVELAND <sup>x</sup>	58	44	67	37	51	-7	3.19	2.06	1.35	16.83	213	54.12	117	-	-	0	0	4	3
GREENVILLE <sup>x</sup>	59	47	69	37	53	-4	2.75	1.54	1.88	14.54	190	49.68	111	-	-	0	0	2	2
GREENWOOD <sup>x</sup>	62	45	77	35	54	-4	3.18	2.13	2.09	17.73	218	47.04	103	-	-	0	0	3	2
INDIANOLA 1S	61	46	76	38	54	-	3.00	-	1.85	15.91	-	47.39	-	60	56	0	0	3	2
INVERNESS 5E	62	48	77	40	55	-	2.72	-	1.77	16.41	-	43.48	-	60	53	0	0	3	2
LYON	60	45	77	38	53	-	2.34	-	1.35	15.34	-	47.82	-	59	53	0	0	4	2
MACON	64	46	76	37	55	-	1.67	-	0.97	14.83	-	41.51	-	60	56	0	0	3	2
MOORHEAD <sup>x</sup>	60	47	75	41	54	-4	2.22	1.12	2.19	6.60	81	34.32	74	-	-	0	0	2	1
ONWARD	62	47	77	38	55	-	2.89	-	1.18	17.04	-	44.64	-	62	56	0	0	3	3
PERTSHIRE	60	44	76	35	52	-	2.97	-	1.66	13.61	-	-	-	59	50	0	0	3	2
ROLLING FORK <sup>x</sup>	61	44	71	38	52	-5	3.08	2.01	2.21	16.90	204	38.34	82	-	-	0	0	4	2
SCOTT	61	45	77	37	53	-	2.41	-	1.10	11.96	-	-	-	57	52	0	0	3	2
SIDON	63	47	77	38	55	-	2.78	-	1.87	14.90	-	51.18	-	61	53	0	0	5	2
STARKVILLE	-	-	-	-	-	-	2.51	-	1.65	14.74	-	-	-	24	23	-	-	3	2
TUNICA <sup>x</sup>	56	44	66	38	50	-6	2.10	0.94	1.10	18.95	253	59.74	134	-	-	0	0	3	2
TUNICA 1W	59	43	73	34	51	-	1.76	-	0.99	14.72	-	49.75	-	55	51	0	0	4	2
VANCE	60	45	75	38	52	-	2.35	-	1.16	22.52	-	55.52	-	57	55	0	0	4	2
VERONA	61	44	74	35	53	-	2.53	-	1.90	18.36	-	53.46	-	61	53	0	0	3	2
VICKSBURG <sup>x</sup>	62	47	70	40	54	-6	3.09	2.00	1.27	22.76	266	50.21	103	-	-	0	0	4	3
YAZOO CITY <sup>x</sup>	61	44	71	37	52	-6	2.76	1.63	1.54	19.93	236	55.06	111	-	-	0	0	3	2
STONEVILLE <sup>x</sup>	60	44	69	38	52	-5	2.64	1.54	1.80	17.42	221	55.36	126	60	52	0	0	5	2
MO DELTA	57	40	68	29	49	0	0.69	-0.37	0.46	5.68	64	49.49	113	53	45	0	1	3	0
STEELE	58	44	71	36	51	0	1.25	0.36	0.92	10.84	127	43.31	99	54	48	0	0	3	1
GLENNONVILLE	58	43	69	36	50	0	1.21	0.40	0.65	7.31	91	35.84	93	54	48	0	0	3	2
PORTAGEVILLE LF	57	45	71	38	51	0	0.78	-0.18	0.69	8.81	100	38.83	91	59	50	0	0	3	1
CLARKTON	58	42	70	35	50	0	2.09	1.28	1.27	8.96	112	45.39	117	54	48	0	0	3	2
CARDWELL	58	43	71	34	51	0	1.30	0.64	1.04	8.84	97	39.62	91	57	50	0	0	3	1
CHARLESTON	57	43	70	35	50	0	2.15	1.39	1.48	9.73	126	42.41	103	54	47	0	0	4	2
PORTAGEVILLE DC	58	44	71	36	51	0	0.88	-0.08	0.64	8.08	92	36.80	87	63	56	0	0	3	1

Compiled by USDA/OCE/WAOB's Stoneville Field Office. <sup>x</sup> Based on 1971-2000 normals.

**Weather and Crop Summary:** Some dry weather late in the week did little to aid harvest activities. Farmers with the capability of working in the mud harvested at extremely inefficient speeds. Some harvesters were pushed through fields by tractors, and there were several reports of cotton harvesters being stuck in the field with a load of cotton. As harvests continued, soils were increasingly unable to hold equipment. Farmers were set for a long, muddy finish to the harvest season. Winter wheat planting was also tremendously delayed in the Delta, suggesting the possibility of decreased acreage.

## U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on November 12, 2002. Forecasts refer to November 1.

**Corn** production is forecast at 9.00 billion bushels, up slightly from last month but down 5 percent (%) from 2001. Yields are expected to average 127.6 bushels per acre, up 0.4 bushel from October but down 10.6 bushels from last year. If realized, production would be at the lowest level since 1995. Yield prospects in Iowa, Minnesota, and Nebraska increased from last month, despite heavy rainfall at the beginning of the month that slowed harvest progress. Ohio producers realized lower-than-expected yields as harvest progressed on the late-planted, drought-stricken crop.

**Soybean** production is forecast at 2.69 billion bushels, up 1% from October but 7% below 2001. Yields are expected to average 37.5 bushels per acre, up 0.5 bushel from last month. If realized, this would be the lowest production since 1999. Area for harvest

is forecast at 71.8 million acres, unchanged from October but 2% below last year. As harvest progressed, producers realized yield increases from last month in the northern Great Plains, Great Lakes, upper Mississippi Valley, and Tennessee Valley. However, in the Atlantic Coast States, yield prospects decreased from last month.

**All cotton** production is forecast at 17.8 million 480-pound bales, down 1% from October and down 12% from last year's record-high production. Yield is expected to average 665 pounds per harvested acre, down 9 pounds from last month. Growers in Alabama, Georgia, and the Atlantic Coast States are continuing to see the results of adverse weather that affected their season. Harvested area, at 12.9 million acres, is unchanged from October 1 but 7% below 2001.

National Weather Data for Selected Cities

Weather Data for the Week Ending November 9, 2002

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 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	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
AL BIRMINGHAM	63	46	72	36	54	-2	2.00	1.02	1.01	17.40	204	54.53	118	97	61	0	0	3	2
AL HUNTSVILLE	61	43	74	35	52	-2	2.39	1.33	1.84	11.86	129	42.98	89	95	70	0	0	3	2
AL MOBILE	71	51	78	43	61	0	1.18	0.06	0.93	22.47	211	59.79	104	93	66	0	0	4	1
AL MONTGOMERY	67	47	75	37	57	-2	0.36	-0.47	0.19	6.76	86	30.27	65	10	70	0	0	2	0
AK ANCHORAGE	44	33	52	23	39	15	0.04	-0.23	0.04	7.79	147	15.16	106	93	87	0	3	1	0
AK BARROW	12	6	23	0	9	6	0.00	-0.03	0.00	2.43	217	4.46	114	86	79	0	7	0	0
AK FAIRBANKS	32	19	38	7	25	18	0.00	-0.16	0.00	2.25	100	12.94	142	83	74	0	7	0	0
AK JUNEAU	45	34	49	28	40	5	0.21	-1.18	0.16	17.00	96	48.74	99	99	92	0	3	2	0
AK KODIAK	48	42	50	34	45	10	4.58	3.01	2.68	25.94	142	73.16	116	89	81	0	0	5	3
AK NOME	39	30	47	18	34	14	0.12	-0.18	0.07	4.54	101	12.25	84	81	67	0	4	3	0
AZ FLAGSTAFF	52	26	60	16	39	0	0.78	0.37	0.68	6.88	146	11.50	58	77	24	0	5	2	1
AZ PHOENIX	80	58	86	51	69	4	0.00	-0.14	0.00	0.87	50	2.24	33	37	25	0	0	0	0
AZ TUCSON	78	48	84	40	63	1	0.00	-0.15	0.00	2.20	77	6.98	65	40	29	0	0	0	0
AZ YUMA	82	57	86	50	69	1	0.00	-0.03	0.00	0.02	4	0.19	8	35	27	0	0	0	0
AR FORT SMITH	62	42	78	32	52	-2	0.51	-0.58	0.31	4.30	48	38.41	104	96	57	0	1	3	0
AR LITTLE ROCK	61	43	75	36	52	-3	0.85	-0.41	0.55	9.41	99	38.60	92	95	61	0	0	3	1
CA BAKERSFIELD	72	49	77	42	60	1	1.29	1.18	0.77	1.29	219	2.88	55	56	37	0	0	3	1
CA FRESNO	70	49	75	42	60	4	1.76	1.52	1.10	1.76	145	4.49	49	82	53	0	0	3	1
CA LOS ANGELES	66	54	69	49	60	-3	1.39	1.19	1.06	1.53	178	3.21	31	95	74	0	0	3	1
CA REDDING	66	41	79	32	53	-1	1.95	1.06	1.49	2.06	54	12.92	50	74	59	0	1	3	1
CA SACRAMENTO	68	45	71	37	56	-1	2.16	1.72	0.19	2.18	120	10.55	76	91	46	0	0	3	1
CA SAN DIEGO	68	56	73	51	62	-2	0.20	-0.02	0.13	0.55	59	2.13	25	90	72	0	0	2	0
CA SAN FRANCISCO	65	52	71	47	58	1	2.85	2.33	1.58	2.85	151	8.81	57	87	77	0	0	2	2
CA STOCKTON	69	44	73	35	57	0	2.18	1.81	1.56	2.18	135	6.81	64	75	53	0	0	3	2
CO ALAMOSA	51	25	63	8	38	5	0.06	-0.03	0.06	2.01	119	4.20	64	***	***	0	4	1	0
CO CO SPRINGS	56	28	66	23	42	2	0.00	-0.15	0.00	2.67	116	7.46	45	67	24	0	5	0	0
CO DENVER INTL	53	30	65	18	41	0	0.02	-0.14	0.02	1.16	55	7.00	54	66	31	0	3	1	0
CO GRAND JUNCTION	50	27	56	22	39	-3	0.71	0.52	0.59	4.63	215	7.67	96	78	49	0	5	2	1
CO PUEBLO	63	26	73	20	45	3	0.00	-0.15	0.00	1.09	65	3.58	31	69	37	0	5	0	0
CT BRIDGEPORT	51	35	58	30	43	-5	0.41	-0.44	0.15	11.16	136	35.57	93	87	53	0	3	3	0
CT HARTFORD	50	30	62	23	40	-5	0.80	-0.16	0.59	8.39	90	33.71	85	88	60	0	5	3	1
DC WASHINGTON	56	40	65	35	48	-4	0.82	0.13	0.81	7.92	100	26.36	77	96	62	0	0	2	1
DE WILMINGTON	54	34	63	30	44	-5	0.67	-0.01	0.55	10.25	129	31.49	85	92	40	0	3	2	0
FL DAYTONA BEACH	80	56	87	49	68	-1	0.54	-0.22	0.49	7.34	61	49.04	110	99	65	0	0	2	0
FL JACKSONVILLE	76	52	83	43	64	0	0.15	-0.37	0.13	12.04	97	46.81	97	94	52	0	0	2	0
FL KEY WEST	84	75	87	68	80	2	0.00	-0.72	0.00	11.21	104	36.45	104	80	63	0	0	0	0
FL MIAMI	85	69	91	62	77	1	0.02	-0.95	0.02	7.53	48	56.49	104	89	55	1	0	1	0
FL ORLANDO	81	58	86	51	70	-1	0.15	-0.33	0.10	9.87	108	52.85	119	93	55	0	0	2	0
FL PENSACOLA	73	55	82	45	64	1	0.69	-0.35	0.60	20.20	180	55.65	97	90	66	0	0	4	1
FL TALLAHASSEE	74	51	83	38	63	0	1.99	1.13	1.43	13.83	148	47.96	85	92	70	0	0	2	2
FL TAMPA	81	60	84	51	71	0	0.00	-0.27	0.00	9.53	104	45.21	110	88	53	0	0	0	0
FL WEST PALM	84	63	89	56	73	-2	0.10	-1.24	0.10	5.36	35	54.91	101	91	55	0	0	1	0
GA ATHENS	61	43	71	34	52	-3	1.36	0.51	1.15	12.15	150	37.47	90	96	63	0	0	4	1
GA ATLANTA	63	45	71	39	54	-2	1.96	1.09	1.53	14.30	172	39.07	90	84	65	0	0	3	1
GA AUGUSTA	66	44	73	34	55	-2	0.52	-0.14	0.29	10.22	134	33.13	84	90	58	0	0	4	0
GA COLUMBUS	67	48	74	40	57	-2	0.60	-0.19	0.27	8.21	129	36.51	89	96	56	0	0	4	0
GA MACON	67	45	73	34	56	-1	0.53	-0.13	0.26	8.65	134	32.18	83	96	61	0	0	5	0
GA SAVANNAH	70	49	77	41	59	-2	1.26	0.67	0.83	10.53	117	39.61	88	99	64	0	0	3	1
HI HILO	84	66	85	64	75	0	0.04	-3.48	0.02	15.04	65	120.9	116	93	73	0	0	3	0
HI HONOLULU	85	70	86	69	78	-1	0.00	-0.51	0.00	2.21	62	11.83	86	77	68	0	0	0	0
HI KAHULUI	84	64	85	63	74	-3	0.02	-0.41	0.02	4.44	224	14.15	100	86	76	0	0	1	0
HI LIHUE	82	70	84	68	76	-1	0.04	-1.04	0.04	3.62	43	28.40	90	82	76	0	0	1	0
ID BOISE	53	32	64	22	42	-2	0.90	0.63	0.52	1.60	86	4.97	51	69	47	0	4	3	1
ID LEWISTON	54	33	63	23	44	1	0.18	-0.09	0.10	1.35	64	9.01	83	79	64	0	3	2	0
ID POCATELLO	43	18	54	4	30	-9	0.64	0.39	0.63	2.14	99	6.65	62	87	68	0	6	2	1
IL CHICAGO/O'HARE	52	36	63	24	44	1	0.20	-0.49	0.12	3.53	51	31.77	100	87	60	0	3	2	0
IL MOLINE	53	35	68	26	44	0	0.02	-0.64	0.02	3.05	45	31.95	94	84	65	0	3	1	0
IL PEORIA	52	36	67	28	44	0	0.36	-0.29	0.34	2.67	40	31.30	99	93	64	0	3	2	0
IL ROCKFORD	51	32	65	22	42	0	0.11	-0.49	0.11	4.82	71	31.57	97	86	60	0	4	1	0
IL SPRINGFIELD	53	38	66	27	46	0	0.28	-0.36	0.25	4.66	74	38.28	124	93	73	0	3	2	0
IN EVANSVILLE	55	43	70	31	49	0	0.85	-0.03	0.52	9.89	144	41.37	110	92	76	0	1	3	1
IN FORT WAYNE	50	37	63	23	43	-1	0.39	-0.27	0.31	4.51	72	29.67	94	91	64	0	1	3	0
IN INDIANAPOLIS	52	39	67	28	45	-2	1.01	0.21	0.59	7.35	111	34.83	99	96	74	0	3	3	1
IN SOUTH BEND	51	36	64	22	43	-1	0.76	0.00	0.54	3.37	42	25.67	75	86	61	0	3	2	1
IA BURLINGTON	53	35	68	27	44	-1	0.07	-0.55	0.06	4.44	61	36.12	107	94	59	0	2	2	0
IA CEDAR RAPIDS	51	31	65	23	41	-1	0.03	-0.49	0.03	8.16	133	36.22	119	93	61	0	5	1	0
IA DES MOINES	52	34	68	27	43	0													

Weather Data for the Week Ending November 9, 2002

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	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
KY	WICHITA	61	38	73	31	50	1	0.02	-0.43	0.01	9.21	154	32.15	116	90	55	0	2	2	0
	JACKSON	55	40	68	33	48	-3	1.19	0.32	0.87	11.06	138	45.89	109	92	63	0	0	4	1
	LEXINGTON	54	41	68	34	48	-1	1.51	0.82	1.35	13.50	202	41.77	106	88	61	0	0	4	1
	LOUISVILLE	56	45	71	37	50	-1	1.23	0.44	0.90	13.69	200	45.06	118	95	69	0	0	4	1
LA	PADUCAH	56	43	71	33	50	0	1.58	0.66	0.97	11.45	140	45.92	111	93	63	0	0	3	2
	BATON ROUGE	70	50	79	40	60	-2	1.93	0.92	1.45	17.47	176	51.06	94	98	66	0	0	3	1
	LAKE CHARLES	72	52	81	42	62	-1	4.37	3.37	3.78	30.48	273	74.88	152	96	66	0	0	6	1
	NEW ORLEANS	73	55	80	45	64	0	2.03	1.01	1.67	26.36	267	54.65	99	93	72	0	0	5	1
ME	SHREVEPORT	64	47	81	36	55	-4	1.98	0.91	1.20	10.00	111	33.24	77	96	63	0	0	3	1
	CARIBOU	32	17	37	6	25	-10	0.20	-0.52	0.15	7.18	100	31.30	98	91	69	0	7	3	0
	PORTLAND	46	26	56	15	36	-5	1.43	0.32	1.35	9.19	100	36.06	94	88	51	0	5	3	1
	BALTIMORE	56	34	64	28	45	-3	0.74	0.06	0.71	9.92	124	31.31	86	95	57	0	4	2	1
MA	BOSTON	50	35	60	28	43	-5	0.94	0.00	0.88	7.82	92	31.90	89	82	45	0	4	2	1
	WORCESTER	46	29	59	24	38	-5	0.69	-0.38	0.62	9.11	88	36.81	87	92	47	0	5	4	1
	ALPENA	47	28	62	12	37	-1	0.59	0.09	0.41	4.05	70	23.62	94	93	54	0	5	3	0
	GRAND RAPIDS	49	32	62	24	41	-1	0.55	-0.16	0.29	3.56	45	25.64	80	94	64	0	4	2	0
MI	HOUGHTON LAKE	45	25	58	11	35	-4	0.40	-0.10	0.25	4.21	70	21.08	84	89	68	0	5	3	0
	LANSING	50	30	63	17	40	-2	0.36	-0.21	0.24	2.22	34	20.13	73	85	59	0	4	2	0
	MUSKOGON	50	35	63	25	42	0	0.37	-0.36	0.20	4.22	58	24.61	88	88	68	0	4	2	0
	TRAVERSE CITY	49	31	60	22	40	-1	0.19	-0.44	0.10	3.46	47	27.17	94	88	56	0	4	3	0
MN	DULUTH	42	26	54	18	34	1	0.00	-0.52	0.00	7.03	97	30.07	105	88	69	0	5	0	0
	INT'L FALLS	37	23	51	9	30	-1	0.00	-0.35	0.00	2.29	42	22.76	102	86	60	0	6	0	0
	MINNEAPOLIS	48	32	66	27	40	2	0.04	-0.47	0.04	8.16	149	38.26	141	85	63	0	4	1	0
	ROCHESTER	49	29	63	24	39	3	0.08	-0.42	0.08	5.65	95	32.14	111	91	66	0	5	1	0
MS	ST. CLOUD	45	27	62	21	36	2	0.03	-0.41	0.02	10.29	179	33.00	130	94	61	0	6	2	0
	JACKSON	65	46	78	37	56	-1	2.13	1.06	0.92	18.93	237	60.13	128	96	60	0	0	3	3
	MERIDIAN	65	45	77	37	55	-3	1.48	0.47	0.86	22.63	277	49.10	99	85	47	0	0	4	2
	TUPELO	61	44	73	35	52	-2	3.05	2.07	2.27	20.00	251	57.96	126	97	71	0	0	5	2
MO	COLUMBIA	56	40	71	31	48	1	0.39	-0.40	0.32	6.60	87	40.33	114	93	64	0	2	3	0
	KANSAS CITY	58	37	71	25	47	0	0.16	-0.36	0.15	5.02	58	24.67	71	91	60	0	2	2	0
	SAINT LOUIS	58	43	72	35	50	1	0.45	-0.35	0.35	7.87	117	38.46	116	86	67	0	0	3	0
	SPRINGFIELD	60	41	74	32	50	0	0.39	-0.55	0.32	4.40	46	33.77	88	85	63	0	1	3	0
MT	BILLINGS	53	32	60	21	42	4	0.00	-0.19	0.00	2.35	83	9.00	66	61	31	0	4	0	0
	BUTTE	43	14	53	-4	28	-4	0.00	-0.14	0.00	1.26	61	10.47	89	84	41	0	7	0	0
	GLASGOW	54	23	64	17	38	5	0.04	-0.05	0.03	1.32	73	12.13	115	78	50	0	6	2	0
	GREAT FALLS	50	30	61	23	40	4	0.00	-0.15	0.00	2.16	92	14.48	105	67	33	0	4	0	0
NE	HAVRE	51	27	63	18	39	5	0.29	0.21	0.16	1.87	106	13.68	129	73	50	0	5	2	0
	KALISPELL	50	20	62	9	35	1	0.16	-0.12	0.16	1.47	59	10.64	74	75	59	0	6	1	0
	MISSOULA	45	20	51	8	33	-3	0.00	-0.19	0.00	0.74	34	9.33	78	81	68	0	6	0	0
	GRAND ISLAND	61	29	73	21	45	4	0.09	-0.25	0.09	5.13	117	17.10	70	86	47	0	5	1	0
NV	LINCOLN	57	30	72	19	43	0	0.16	-0.23	0.09	6.34	118	26.23	99	89	57	0	5	2	0
	NORFOLK	59	28	74	19	43	3	0.03	-0.33	0.03	3.84	87	19.27	77	86	55	0	6	1	0
	NORTH PLATTE	58	23	70	19	41	2	0.00	-0.21	0.00	3.52	124	10.98	58	93	32	0	7	0	0
	OMAHA	55	32	71	23	44	1	0.08	-0.36	0.08	4.16	70	25.96	93	88	62	0	5	1	0
OH	SCOTTSBLUFF	54	24	65	16	39	1	0.01	-0.18	0.01	1.20	48	6.96	46	78	45	0	6	1	0
	VALENTINE	55	26	72	18	41	4	0.00	-0.19	0.00	1.72	56	11.07	59	83	48	0	6	0	0
	ELY	52	20	63	5	36	-1	0.51	0.34	0.46	1.84	85	4.24	47	56	35	0	5	2	0
	LAS VEGAS	70	48	75	40	59	0	0.00	-0.06	0.00	0.63	102	1.25	32	40	27	0	0	0	0
NV	RENO	59	31	67	20	45	1	0.85	0.70	0.43	0.97	92	4.68	78	60	31	0	4	3	0
	WINNEMUCCA	58	19	64	0	39	-2	0.92	0.75	0.78	1.29	92	5.18	75	54	31	0	4	2	1
	CONCORD	46	23	60	16	35	-6	1.04	0.19	0.86	7.74	100	31.93	99	93	44	0	7	3	1
	NEWARK	53	38	64	35	46	-4	0.70	-0.15	0.38	11.15	135	35.87	90	81	53	0	0	2	0
NM	ALBUQUERQUE	58	37	67	30	47	-1	0.38	0.21	0.27	2.45	107	5.94	69	67	27	0	1	2	0
	ALBANY	47	32	62	26	39	-4	0.57	-0.20	0.42	8.02	107	32.38	98	82	51	0	6	4	0
	BINGHAMTON	43	32	58	25	38	-3	0.31	-0.41	0.17	9.03	120	36.51	110	86	63	0	5	4	0
	BUFFALO	50	36	64	25	43	-1	0.37	-0.48	0.20	6.20	77	32.20	95	81	52	0	1	4	0
NY	ROCHESTER	50	37	66	29	44	1	0.25	-0.37	0.19	5.23	76	27.90	96	81	58	0	1	4	0
	SYRACUSE	49	35	66	26	42	-1	0.67	-0.14	0.28	8.43	101	34.70	102	81	57	0	3	5	0
	ASHEVILLE	57	37	65	29	47	-2	0.78	-0.10	0.74	9.40	117	33.30	81	90	62	0	2	2	1
	CHARLOTTE	61	40	70	34	50	-5	1.16	0.36	1.06	10.13	119	32.22	85	94	54	0	0	3	1
NC	GREENSBORO	60	42	69	35	51	-1	1.08	0.43	0.98	11.02	131	31.61	83	92	54	0	0	2	1
	HATTERAS	64	49	72	39	56	-4	1.16	-0.08	0.71	13.38	106	48.40	97	89	57	0	0	4	1
	RALEIGH	61	40	73	33	51	-3	1.12	0.45	0.69	13.97	169	39.22	104	93	55	0	0	3	1
	WILMINGTON	66	43	75	37	54	-5	0.92	0.28	0.77	7.21	67	41.63	82	99	54	0	0	4	1
ND	BISMARCK	50	25	64	19	38	5	0.00	-0.19	0.00	1.25	40	10.74	67	84	51	0	7	0	0
	DICKINSON	52	27	62	20	40	6	0.00	-0.17	0.00	1.16	36	11.11	71	79	38	0	6	0	0
	FARGO	43	28	64	23	36	3													

Weather Data for the Week Ending November 9, 2002

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	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
OK TOLEDO	52	36	64	25	44	0	0.28	-0.31	0.28	4.27	72	24.32	85	88	66	0	3	1	0
OK YOUNGSTOWN	50	37	63	31	43	-1	0.38	-0.23	0.27	5.15	72	35.05	107	85	64	0	2	4	0
OK OKLAHOMA CITY	64	40	82	32	52	-1	0.05	-0.48	0.03	8.26	99	32.27	99	87	46	0	1	2	0
OR TULSA	66	41	84	31	54	0	0.08	-0.73	0.04	5.06	51	28.58	76	85	55	0	2	3	0
OR ASTORIA	58	42	62	29	50	2	1.64	-0.57	0.74	3.69	34	39.34	80	91	70	0	2	6	1
OR BURNS	54	19	60	4	37	1	0.31	0.09	0.11	0.41	27	4.02	48	66	43	0	4	3	0
OR EUGENE	58	36	70	21	47	0	3.04	1.34	1.52	4.31	61	23.72	65	85	61	0	2	4	2
OR MEDFORD	62	36	70	26	49	2	2.00	1.42	1.25	2.70	96	9.40	71	80	41	0	3	4	2
OR PENDLETON	53	30	68	20	42	-2	0.33	-0.02	0.18	1.28	62	7.37	73	78	60	0	4	3	0
OR PORTLAND	56	40	60	27	48	0	0.73	-0.42	0.35	2.90	49	22.07	81	90	68	0	2	4	0
OR SALEM	57	37	61	25	47	0	1.99	0.69	0.85	3.46	57	25.03	87	88	69	0	2	4	2
PA ALLENTOWN	52	30	63	26	41	-4	0.40	-0.42	0.29	11.29	129	33.73	86	87	55	0	6	3	0
PA ERIE	50	39	63	32	44	-2	0.18	-0.69	0.12	12.49	128	39.33	109	76	60	0	1	3	0
PA MIDDLETOWN	53	36	66	33	45	-3	0.43	-0.31	0.41	10.48	142	32.86	95	94	50	0	0	2	0
PA PHILADELPHIA	55	38	64	34	46	-4	0.61	-0.05	0.60	10.20	137	31.28	86	83	58	0	0	2	1
PA PITTSBURGH	49	36	62	27	43	-2	0.49	-0.14	0.34	6.73	108	28.27	86	92	65	0	1	4	0
PA WILKES-BARRE	49	31	67	28	40	-5	0.33	-0.36	0.17	11.16	144	34.48	105	89	47	0	5	2	0
PA WILLIAMSPORT	50	31	63	26	40	-4	0.40	-0.40	0.38	12.31	150	36.73	102	97	73	0	6	3	0
RI PROVIDENCE	52	34	63	27	43	-4	0.61	-0.40	0.55	9.35	108	32.47	83	83	51	0	4	3	1
SC BEAUFORT	69	51	76	44	60	-1	0.99	0.37	0.49	11.46	126	44.93	100	98	58	0	0	4	0
SC CHARLESTON	69	47	76	40	58	-2	1.42	0.84	0.81	14.78	151	50.25	108	95	55	0	0	4	1
SC COLUMBIA	66	44	74	35	55	-2	0.49	-0.17	0.24	12.64	165	40.70	95	90	57	0	0	4	0
SC GREENVILLE	61	43	69	36	52	-2	1.40	0.52	1.36	13.26	148	38.36	88	97	59	0	0	3	1
SD ABERDEEN	49	22	71	15	36	1	0.00	-0.24	0.00	2.10	56	14.94	77	91	68	0	7	0	0
SD HURON	50	27	65	18	39	3	0.00	-0.26	0.00	2.65	71	14.13	71	92	54	0	5	0	0
SD RAPID CITY	57	28	67	20	43	5	0.00	-0.19	0.00	3.20	117	10.38	65	70	29	0	5	0	0
SD SIOUX FALLS	51	25	65	17	38	2	0.22	-0.15	0.15	5.46	109	24.04	103	91	66	0	7	3	0
TN BRISTOL	55	36	67	28	46	-2	0.86	0.25	0.51	7.41	120	31.84	89	98	58	0	3	4	1
TN CHATTANOOGA	59	43	70	33	51	-2	1.60	0.60	1.37	11.15	126	39.86	86	90	62	0	0	3	1
TN KNOXVILLE	58	41	69	31	50	-2	0.98	0.19	0.67	11.74	176	49.21	121	95	63	0	1	3	1
TN MEMPHIS	58	45	73	37	52	-4	1.13	0.00	0.76	22.11	275	63.25	142	92	68	0	0	3	1
TN NASHVILLE	58	42	71	33	50	-2	1.22	0.33	0.96	12.02	159	49.18	122	94	66	0	0	3	1
TX ABILENE	66	44	83	32	55	-3	0.28	-0.10	0.27	7.32	116	26.60	123	85	58	0	1	2	0
TX AMARILLO	63	36	75	26	49	0	0.00	-0.21	0.00	5.02	137	17.15	92	74	31	0	3	0	0
TX AUSTIN	70	45	80	34	58	-5	3.30	2.59	3.15	16.12	206	34.63	118	81	43	0	0	2	1
TX BEAUMONT	71	53	82	43	62	-2	2.44	1.39	1.53	22.38	185	55.22	108	10	63	0	0	3	2
TX BROWNSVILLE	77	58	84	49	67	-3	1.31	0.83	0.75	18.47	190	26.97	107	96	66	0	0	4	2
TX CORPUS CHRISTI	74	55	83	49	64	-4	1.69	1.22	0.88	18.48	193	28.59	97	93	63	0	0	2	2
TX DEL RIO	70	49	78	42	60	-3	0.07	-0.18	0.04	9.45	215	17.45	104	90	70	0	0	2	0
TX EL PASO	69	45	76	37	57	1	0.00	-0.06	0.00	1.57	63	5.82	70	65	35	0	0	0	0
TX FORT WORTH	68	47	86	37	57	-2	0.27	-0.42	0.17	8.37	113	40.34	132	92	46	0	0	2	0
TX GALVESTON	72	58	83	52	65	-3	2.84	2.06	1.40	26.11	255	60.59	161	93	64	0	0	3	2
TX HOUSTON	69	52	83	42	61	-3	3.77	2.75	2.32	26.65	263	53.88	131	96	66	0	0	4	2
TX LUBBOCK	65	39	79	32	52	0	0.14	-0.04	0.14	6.84	152	17.54	100	87	54	0	1	1	0
TX MIDLAND	65	43	78	35	54	-2	0.17	0.00	0.16	3.82	89	8.05	59	83	65	0	0	2	0
TX SAN ANGELO	66	44	83	33	55	-2	0.12	-0.19	0.11	6.05	102	12.85	67	87	56	0	0	2	0
TX SAN ANTONIO	71	48	80	40	60	-3	1.26	0.55	1.16	16.57	213	43.59	149	95	58	0	0	2	1
TX VICTORIA	72	52	84	41	62	-4	2.38	1.72	1.51	14.87	147	35.21	98	95	63	0	0	2	2
TX WACO	68	48	83	38	58	-2	0.97	0.36	0.65	13.25	180	29.20	101	93	62	0	0	2	1
TX WICHITA FALLS	67	42	85	35	55	-1	0.00	-0.44	0.00	7.69	112	26.76	103	86	52	0	0	0	0
UT SALT LAKE CITY	52	27	60	17	39	-5	0.22	-0.11	0.19	2.05	62	9.34	65	75	33	0	5	2	0
VT BURLINGTON	44	29	62	15	36	-5	0.30	-0.42	0.25	9.93	126	32.97	104	80	50	0	4	4	0
VA LYNCHBURG	58	35	69	28	46	-3	1.04	0.32	0.85	8.24	101	28.67	76	87	51	0	3	4	1
VA NORFOLK	62	42	72	36	52	-3	1.70	0.98	0.87	14.94	177	43.51	107	91	51	0	0	3	1
VA RICHMOND	58	38	70	32	48	-3	1.43	0.71	0.78	10.40	122	31.49	81	96	59	0	1	3	1
VA ROANOKE	56	38	68	34	47	-3	0.88	0.15	0.74	9.10	115	26.95	72	84	61	0	0	4	1
VA WASH/DULLES	56	35	66	28	45	-3	0.80	0.03	0.79	8.72	107	31.19	86	89	52	0	2	2	1
WA OLYMPIA	57	35	73	18	46	2	1.24	-0.47	0.47	2.47	30	31.64	86	98	76	0	2	5	0
WA QUILLAYUTE	55	42	58	26	49	3	4.03	0.77	1.37	8.96	49	65.57	86	94	80	0	2	6	2
WA SEATTLE-TACOMA	54	41	59	30	48	1	1.53	0.28	0.60	2.61	41	23.92	88	87	69	0	2	4	1
WA SPOKANE	47	26	58	11	37	-1	1.08	0.64	0.78	1.82	77	10.00	79	87	57	0	4	2	1
WA YAKIMA	51	23	57	7	37	-4	0.42	0.23	0.28	0.61	53	4.30	71	76	61	0	5	2	0
WV BECKLEY	50	35	64	25	42	-4	0.52	-0.09	0.16	8.09	122	34.12	94	82	68	0	3	4	0
WV CHARLESTON	56	37	67	29	47	-1	1.14	0.36	0.70	10.50	148	38.82	102	94	61	0	2	4	1
WV ELKINS	51	30	67	24	41	-3	1.05	0.33	0.68	9.38	123	44.73	111	96	53	0	4	5	1
WV HUNTINGTON	56	40	69	29	48	-1	1.41	0.68	0.95	10.87	168	41.49	114	88	59	0	1	4	1
WI EAU CLAIRE	49	27	64	21	38	1	0.04	-0.43	0.03	10.98	167	38.90	131	92	52	0	5	2	0
WI GREEN BAY	50	30	62	22	40	2	0.13	-0.41	0.09	6.06	102	26.93	103	91	59	0	5	2	0
WI LA CROSSE	51	31	63	22	41	1	0.17	-0.33	0.16	7.20	116	29.89	101	91	53	0	5	2	0
WI MADISON	49	32	62	20	41	1	0.09	-0.45	0.09	4.93	83	24.58	83	83	63	0	4	1	0
WI MILWAUKEE	52	37	66	25	44	1	0.12	-0.49	0.10	4.57	70	25.19	82	80	59	0	3	2	0
WI CASPER	48	26	58	12	37	1	0.00	-0.19	0.00	1.64	69	6.54	55	64	42	0	5	0	0
WI CHEYENNE	47	27	57	14	37	1	0.00	-0.14	0.00	3.10	131	9.56	66	59	40	0	4	0	0
WI LANDER	42	20	50	7	31	-4	0.03	-0.22	0.03	2.12	75	7.45	61	89	58	0	7	1	0
WI SHERIDAN	55	23	63	14	39	4	0.00	-0.21	0.00	2.96	97	10.70	79	73	41	0	7	0	0

Based on 1971-2000 normals

\*\*\* Not Available

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

## October Weather and Crop Summary

### Weather

*Weather summary provided by USDA/WAOB*

Wet weather hampered fieldwork across the South and East, but further eased long-term drought in the latter region. Hurricane Lili made landfall along the Louisiana coast on October 3, moving ashore as a windier but less wet system than Tropical Storm Isidore the week before. A series of storm systems followed the tropical weather, contributing to lowland flooding in the western Gulf Coast region and significant soybean and cotton harvest delays in the Delta. From Georgia to the Mid-Atlantic States, above-normal precipitation improved groundwater supplies, but a gradual drying trend prevailed across Florida's peninsula. Meanwhile, rain and snow slowed corn and soybean harvesting in the upper Midwest, but showers replenished soil moisture reserves in the Ohio Valley. A small portion of the Midwestern winter wheat area, including northern portions of Indiana and Ohio and much of lower Michigan, remained unfavorably dry by month's end. Early-season cold outbreaks halted winter wheat emergence and development across the northern and central High Plains, where a patchy snow cover provided wheat with some protection from late-month temperatures that ranged from -10 to 10 degrees F. The combination of extremely cold weather and limited soil moisture raised concerns about the establishment and winter hardiness of the northwestern half of the Plains' wheat crop. In contrast, widespread precipitation soaked the southeastern half of the Plains, aiding pastures and winter grains but slowing fieldwork, including cotton, peanut, and sorghum harvesting. Farther west, cold, dry weather hampered the emergence and development of Northwestern winter wheat. Elsewhere in the West, cool, mostly dry weather favored autumn fieldwork, although the region continued to suffer from below-normal irrigation reserves and drought-stressed rangelands.

Following the formation of eight named tropical storms during September, an Atlantic Basin record for any month, there were no new Atlantic tropical storms or hurricanes in October for the first time since 1994. However, two Atlantic systems that formed in September affected the United States, while the remnants of eastern Pacific Hurricane Kenna—which on October 25 became the third-strongest known storm to make landfall on the Pacific Coast of Mexico (maximum sustained winds were estimated near 140 mph, down from 165 mph earlier in the day)—contributed to heavy rainfall in the western Gulf Coast States. Most significantly, Lili was the first hurricane to strike the U.S. mainland since Irene crossed southern Florida on October 15-16, 1999. In the nearly 3-year interval between Irene and Lili, 22 Atlantic Basin hurricanes either bypassed the U.S. mainland or failed to cross the coast at hurricane intensity.

Although Lili weakened markedly before making landfall and further still after moving inland, October 3 peak wind gusts across southern Louisiana included 92 mph in New Iberia and 72 mph in Lafayette. Maximum sustained winds were estimated near 100 mph at landfall (near the western edge of Vermillion Bay), down from 145 mph the previous evening. Nevertheless, Lili left a swath of agricultural wind damage, lodging sugarcane in southern Louisiana and buffeting unharvested summer crops, especially rice and cotton, in the Delta. Peak wind gusts generally ranged from 70 to 90 mph in the western portions of Louisiana's sugarcane region and 30 to 50 mph in the Delta. Meanwhile, Kyle lasted for 22 days (September 20 - October 12) at strengths

ranging from tropical depression to hurricane, and on five occasions was upgraded to a tropical storm. Kyle finally arrived along the Atlantic Seaboard on October 11, paralleling the Carolina coastline. In Atlantic Basin history, only Ginger (27 days in September-October 1971) and Inga (nearly 25 days in September-October 1969) had a longer life cycle. October 11 peak wind gusts included 49 mph on Bald Head Island (Cape Fear), NC, and 50 mph in Georgetown, SC. Although Kyle was drawn into a non-tropical storm system and not directly responsible for heavy rain farther inland, many locations from the eastern Carolinas to southeastern New York received rainfall in excess of 4 inches. In Raleigh-Durham, NC, the 5.79-inch total on October 10-11 was their highest 2-day rainfall since 6.49 inches fell during the passage of Hurricane Floyd on September 15-16, 1999.

After midmonth, repeatedly heavy rainfall caused extensive lowland flooding in the western Gulf Coast region. Some of the most impressive daily totals were noted on October 28, when Houston, TX, netted 8.04 inches (their greatest October daily total since 9.25 inches fell on October 25, 1984). Elsewhere in Texas, Corpus Christi measured their second daily-record total in 5 days (2.94 inches on October 24 and 2.61 inches on October 28).

#### Highest October Precipitation (Inches)

<u>Location</u>	<u>Total</u>	<u>Normal</u>	<u>Previous Record/Year</u>
Lake Charles, LA	21.45	3.94	17.28 in 1970
Lafayette, LA	18.27	4.02	15.65 in 1985
Valdez, AK	15.46	8.58	15.43 in 1979
Iron Mtn., MI	6.25	2.65	5.22 in 1983

Beaumont-Port Arthur, TX, received measurable rainfall on 11 consecutive days from October 19-29, totaling 10.55 inches. Lake Charles, LA, noted at least a trace of rain on 12 consecutive days (October 19-30), including 10.83 inches in a 5-day period from October 25-29. During the same 5-day wet spell, Lafayette, LA, recorded 10.32 inches. Across southeastern Texas, 15-day (October 19 - November 5) rainfall included 17.31 inches in Houston and 18.69 inches in Conroe. Monthly rainfall in Houston and College Station, TX, 14.65 and 9.79 inches, respectively, were the stations' highest October totals since 1984; the 11.81-inch sum in Galveston, TX, was their greatest in October since 17.34 inches fell in 1925. In western Texas, Midland (3.29 inches, or 186 percent [%] of normal) posted their wettest October since a record-setting, 7.45-inch total in 1986.

Even without a drop of rain during the last 8 weeks of 2002, San Antonio, TX (43.57 inches of precipitation through November 5), would experience their wettest year since 1992. San Antonio's annual record of 52.28 inches was established in 1973. Similarly, 70.11 inches of rain soaked Lake Charles, LA, during the first 10 months of the year, less than 10 inches below their annual record of 79.88 inches, set in 1919. Meanwhile in Mississippi, Jackson followed their third-wettest September (9.62 inches) with their eighth-wettest October (7.18 inches).

Meanwhile, on the dry side of the picture, no measurable rain (1.04 inches below normal) fell during October in San Francisco, CA, for the first time since 1978. In northern California, no rain (2.18 inches below normal) fell in Redding, while only 0.02 inch (2.19 inches below normal) dampened Mt. Shasta City. In Olympia, WA, where less than 1 inch of rain fell in October for the first time since 1987, the September-October rainfall totaled just 1.23 inches (20% of normal). Farther east, Denver, CO,

reported their 15<sup>th</sup> consecutive month with below-normal precipitation, netting 0.49 inch (49% of normal). Denver received 9.83 inches (just shy of 50% of normal) from August 2001 - October 2002. In the East, the only significant dry spot was southern Florida, where Miami noted their driest October on record.

#### Lowest October Precipitation (Inches)

Location	Total	Normal	Previous Record/Year
Miami, FL	0.71	6.19	1.12 in 1925

Aside from the wet and dry contrasts, one of the month's largest weather stories was the persistently cold weather. In Kansas, Topeka opened October with a high of 91°F, but noted below-normal temperatures on 19 of 20 days to end the month.

#### Lowest October Average Temperature (°F)

Location	Avg.	Dep.	Previous Record/Year
Hastings, NE	46.0	-7.0	48.6 in 1976
Kearney, NE	45.1	-6.1	45.7 in 1969
Chadron, NE	40.8	-8.1	not available
Alliance, NE	40.1	-9.1	not available
Miles City, MT	39.3	-8.4	40.3 in 1969
Sheridan, WY	38.0	-7.1	38.6 in 1969
Marquette, MI	37.9	-5.3	38.0 in 1988

A number of other locations noted near-record October temperatures. In Montana, average temperatures of 36.0°F (9.0°F below normal) in Glasgow and 37.6°F (7.9°F below normal) in Great Falls were their lowest October values since 1925. However, Great Falls marked 24 days with low temperatures at or below 32°F, breaking their October 1925 record of 23 days. Great Falls also posted a low of -9°F on October 31, narrowly missing their monthly record of -11°F, set on October 30, 1991. In several dozen other locations, however, the late-month cold outbreak shattered October temperature records. On October 30, Williston, ND (-9°F), swept away their former monthly record (-3°F on October 29, 1895, and October 30, 1991) by a wide margin. The next day, a sampling of October records included -7°F in Burns, OR; -2°F in Winnemucca, NV; -1°F in Davenport, WA; and 0°F in Alturas, CA. Winnemucca's low represented their earliest sub-zero reading on record (previously, -2°F on November 4, 1935).

The transition to colder weather was accompanied by widespread snowfall. On October 1, Ely, NV, received 8.7 inches, breaking their 24-hour snowfall record for October. Farther east, monthly snowfall included 23.4 inches in Lander, WY; 17.0 inches in Marquette, MI; 8.9 inches in Wausau, WI; 7.7 inches in Valentine, NE; and 7.6 inches in Sioux City, IA. A significant portion of the Plains, Midwestern, and Great Lakes snow fell from October 21-23.

On October 30, the high of 39°F in Baltimore, MD, was their lowest October maximum on record, edging the standard of 40°F achieved most recently on October 30, 1925. Farther west, Denver, CO, noted maxima of 18°F on October 30 and 19°F on October 31, the first time since records began in 1874 that their highs failed to reach 20°F during October. In contrast, above-normal temperatures across the Lower 48 were confined to a small portion of the Southeast. In Florida, Tampa's warmest October (78.9°F, or 3.1°F above normal) since 1985 capped their warmest September-October period on record.

Alaska experienced a continuation of mild, wet weather during October. That combination translated into some significant, early-season snowfall across the Alaskan interior. October

snowfall totaled 14.7 inches (118% of normal) in Fairbanks and 14.5 inches (128%) in McGrath. Farther south, record October precipitation was noted in Valdez (15.46 inches, or 180% of normal), while Kodiak experienced their second-wettest October (17.45 inches, or 243%). Record warmth overspread much of Alaska toward month's end, propelling monthly temperatures as much as 10°F above normal. On October 30, a daily-record high of 50°F in Healy, AK, was higher than the maxima in Lubbock, TX, and Greensboro, NC (both 48°F). A day later, the daily-record high of 34°F in Barrow, AK, contrasted with high temperatures that were the lowest on record for October 31 in locations such as Denver, CO (19°F), and Cheyenne, WY (15°F). In Nome, AK, the monthly average temperature of 34.8°F (6.3°F above normal) was their highest October reading since 1925.

Aside from a heavy rain event that affected areas from eastern Kauai to the northwestern section of the Big Island at various times from October 14-17, relatively quiet weather prevailed across Hawaii. Event totals for a 96-hour period (October 14-18) included 8.67 inches in Lanai City, Lanai; 7.53 inches in Kihei, Maui; 6.86 inches in Punaluu, Oahu; and 6.48 inches in Kamalo, Molokai. On Maui, Kahului followed their driest September on record (a trace) with an October total of 4.42 inches (421% of normal). Most of the rain, 3.47 inches, fell in a 24-hour period on October 15-16, propelling Kahului to their wettest October since a 4.71-inch total in 1989 and wettest month since a 9.23-inch sum in January 1997.

## Fieldwork

*Fieldwork summary provided by USDA/NASS*

Widespread, heavy rain curtailed corn and soybean harvests in the western Corn Belt and winter wheat seeding in the central Great Plains early in the month, but mostly dry weather favored progress during the rest of the month. Along the Gulf Coast and adjacent inland areas of the southern Great Plains, Mississippi Delta, and Southeast, wet weather hampered harvest of cotton, peanut, rice, and sorghum fields most of the month. Periods of light precipitation provided adequate moisture for germinating winter wheat in the eastern Corn Belt and the Great Plains, but cold weather and moisture shortages limited germination and growth in parts of the central and northern Great Plains. Dry weather supported field and orchard work in the Pacific Coast States.

The Nation's corn acreage was 96 percent (%) mature on October 13, equaling the 5-year average for this date. Above-normal temperatures quickly ripened late-maturing fields around the Great Lakes and eastern Corn Belt, but cold nighttime temperatures slowed ripening on the Great Plains. On November 3, harvest was 77% complete, about 5 days behind the 84-percent average for this date. At the beginning of October, harvest was active in the southern and eastern Corn Belt, but heavy rain prevented progress in the western Corn Belt and Great Plains. During the remainder of October, favorably dry weather supported harvest across the Corn Belt, although most areas experienced at least brief delays due to rain or snow. On November 3, harvest was well ahead of normal in the eastern Corn Belt, but lagged well behind normal in the northwestern Corn Belt and adjacent parts of the Great Plains. Harvest was least advanced in Wisconsin and South Dakota, where only about one-half of the crop was harvested by November 3.

Ninety-six percent of the soybean acreage was dropping leaves by October 13, matching the 5-year average. Nearly all fields in the western Corn Belt and northern Great Plains were shedding leaves

by October 6, and warm weather promoted ripening in the lower Mississippi Valley and along the Atlantic Coastal Plain until midmonth. Harvest progressed slightly behind normal during October, and by November 3, harvest was 87% complete, compared with the 5-year average of 92%. Scattered precipitation periodically interfered with harvest across the Corn Belt during October, but delays were mostly brief. The longest delays were in the western Corn Belt and upper Mississippi Valley, where heavy rain delayed early-month harvest progress. Heavy rain also held harvest far behind normal along the lower Mississippi Valley and adjacent areas of the Ohio and Tennessee Valleys. Harvest approached completion well ahead of normal in Michigan and near normal in Illinois, Indiana, Iowa, and Ohio. On November 3, harvest was 3 weeks behind the 5-year average in Louisiana, and more than 1 week behind normal in Arkansas, Kentucky, Mississippi, and Tennessee.

Ninety-four percent of the cotton acreage had open bolls on October 13, slightly more than the 93-percent average for this date. Above-normal temperatures promoted ripening of late-maturing fields throughout the South at the beginning of the month, but colder-than-normal temperatures hindered ripening in the southern Great Plains as midmonth approached. Harvest was 53% complete by November 3, but progress was well behind the average of 69%. Picking delays began at the beginning of the month, when two tropical storms saturated fields along the Gulf Coast and adjacent inland areas of the Mississippi Delta and Southeast. As the month progressed, rain delays persisted and extended into inland areas of the southern Great Plains. By midmonth, picking was more than 2 weeks behind the 5-year average in Arkansas, Louisiana, Mississippi, and Tennessee. In the Southeast, lengthy delays were mostly confined to areas along the eastern Gulf Coast, while areas along the Atlantic Coastal Plain experienced shorter delays. However, only Virginia remained ahead of normal at the end of the month. In the Southwest, dry weather supported picking most of the month.

On November 3, the Nation's winter wheat acreage was 90% planted and 80% emerged. Planting progress equaled the 5-year average, while emergence exceeded the 5-year average of 76%. Seeding of the soft red winter wheat acreage rapidly progressed in the Corn Belt, and occasional showers provided nearly ideal topsoil moisture for seed germination. Elsewhere, rain frequently interrupted sowing in the southern Great Plains and adjacent areas of the central Great Plains, while mostly dry weather supported planting across the rest of the Great Plains. Fields quickly emerged in the Great Plains, even though moisture shortages remained in significant pockets of the central and northern High Plains through most of the month. At the end of the month, a mixture of wintery precipitation provided adequate moisture for germination and growth on the northern Great Plains, but extremely cold weather nearly halted emergence and above-ground development. Planting accelerated in Arkansas, California, and Oregon after midmonth. Favorable topsoil moisture aided rapid emergence in Arkansas, while unfavorably dry soils limited emergence in Oregon.

Rice progressed to 96% harvested on October 27, slightly less than the 5-year average of 98%. Tropical storms halted harvest progress in the lower Mississippi Valley early in the month, especially in Louisiana and Mississippi. Tropical storm Lili's heavy downpours remained east of the Mississippi River, but Arkansas and Missouri also experienced

some rain delays during the month. In Texas, the first crop harvest was virtually complete before the tropical storms moved inland, but the heavy rain delayed harvest of the ratoon crop. Dry weather aided harvest in California.

Cold weather hindered sorghum ripening and delayed harvest across most of the Great Plains during October. In the central and southern Corn Belt, above-normal temperatures quickly ripened fields early in the month, but below-normal temperatures delayed ripening of late-maturing fields during the remainder of the month. On October 27, the crop was 93% mature, 5 percentage points less than the 5-year average for this date. In addition to late ripening, frequent rain also contributed to a slow harvest pace during October. Harvest delays were longer and more frequent in the central and southern Great Plains and lower Mississippi Valley. In the Corn Belt and northern Great Plains, rain delays were shorter and less frequent. On November 3, harvest was 70% complete, well behind the 5-year average of 87%. Harvest was nearly complete in the lower Mississippi Valley and Corn Belt, but lagged more than 2 weeks behind normal in Kansas.

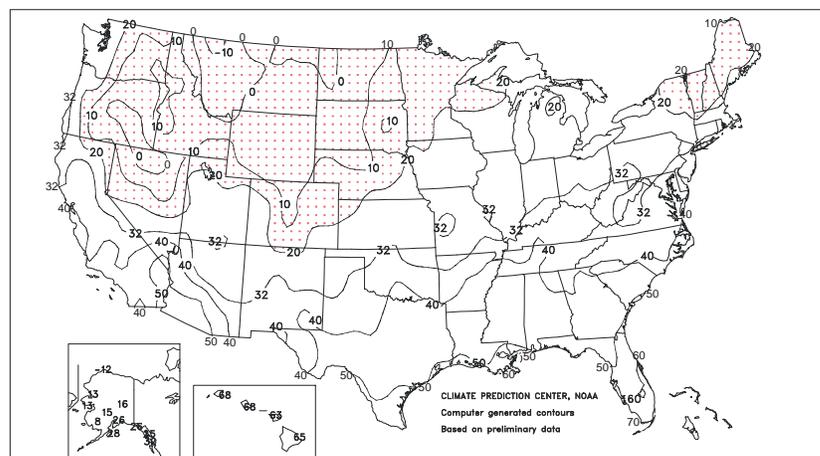
The peanut harvest progressed slowly during October, as rain frequently interrupted digging along the eastern Gulf Coast and southern Great Plains. Harvest delays were shorter and less frequent on the Atlantic Coastal Plain. On November 3, harvest was 75% complete, well behind the 5-year average of 86%. In Texas, harvest was nearly 2 weeks behind normal on November 3.

The sugar beet harvest was aided by mostly dry weather and favorably cold piling temperatures during October, especially in the Red River Valley, High Plains, and Pacific Coast States. In Idaho, harvest progressed later than normal due to slow ripening. Meanwhile, warm weather delayed early-month progress in Michigan, but below-normal temperatures favored beet piling after midmonth. By November 3, harvest was 94% complete in the four major sugar beet-producing States. Harvest was virtually complete in Minnesota and North Dakota and neared completion in Michigan. Idaho's harvest accelerated after midmonth but remained behind the 5-year average at the end of the month.

The sunflower harvest progressed behind last year and the 5-year average throughout the month, as cold weather delayed ripening. Harvest was especially late in North Dakota. On November 3, harvest was 66% complete, compared with last year's 88% and the 5-year average of 84%.

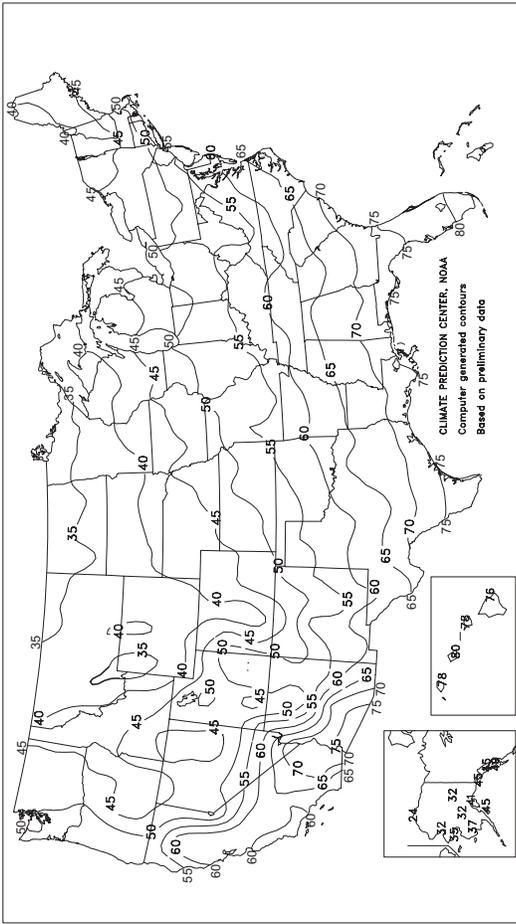
Extreme Minimum Temperature (°F)

October 2002



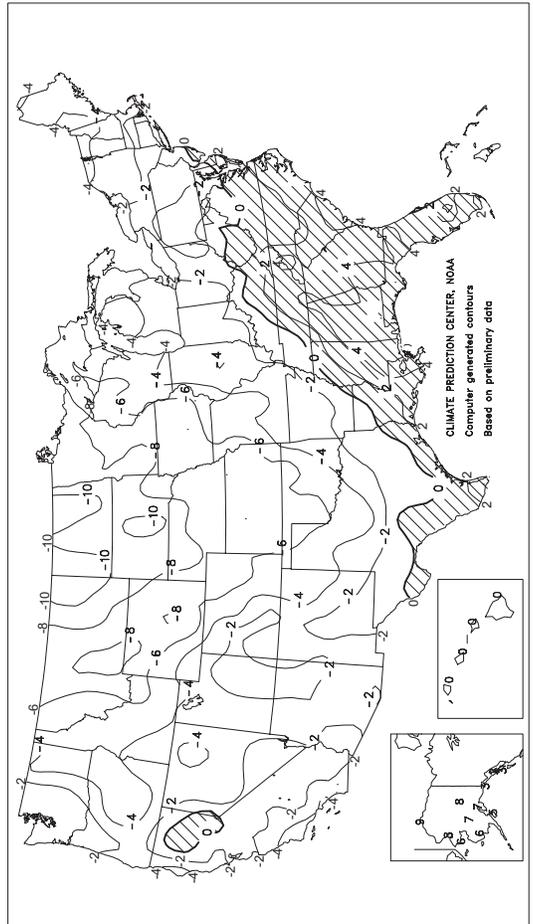
Average Temperature (°F)

October 2002



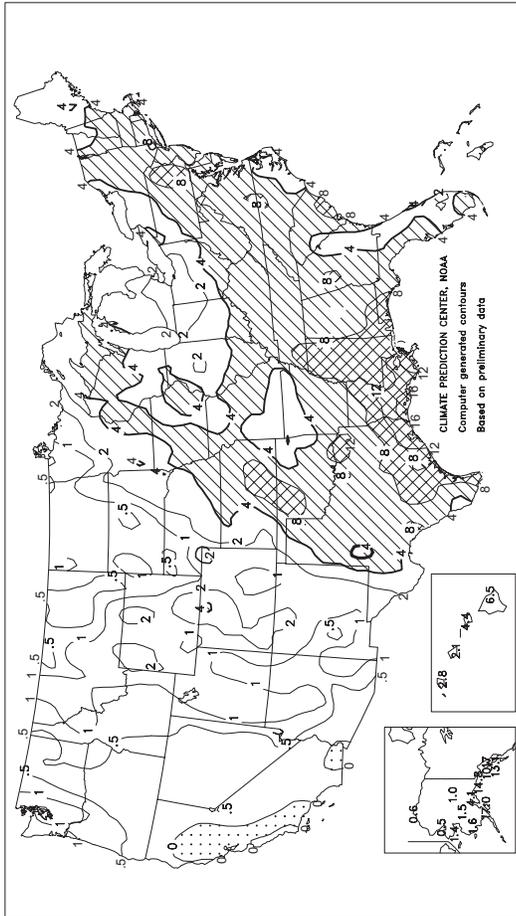
Departure of Average Temperature from Normal (°F)

October 2002



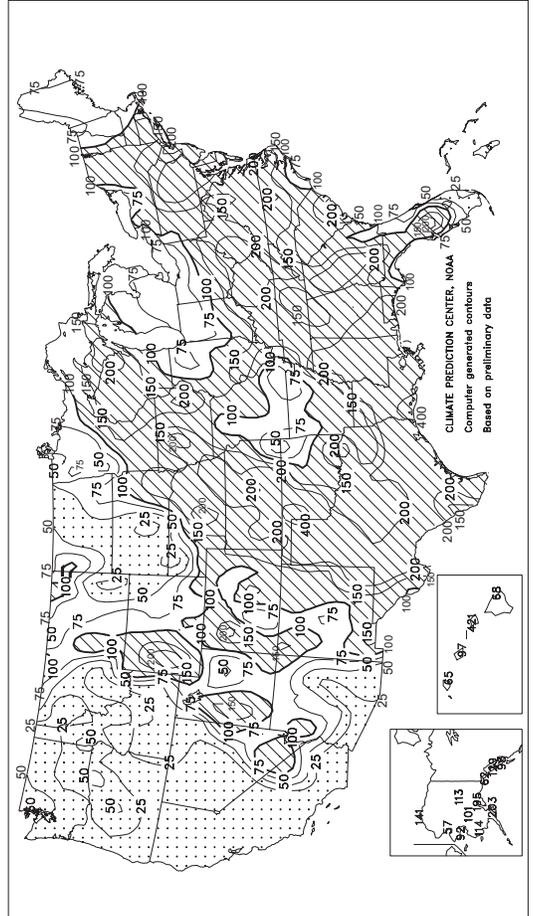
Total Precipitation (inches)

October 2002



Percent Of Normal Precipitation

October 2002



# TEMPERATURE AND PRECIPITATION SUMMARY

## October 2002

STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.	
	AVERAGE	DEPARTUR	TOTAL	DEPARTUR		AVERAGE	DEPARTUR	TOTAL	DEPARTUR		AVERAGE	DEPARTUR	TOTAL	DEPARTUR
AL BIRMINGHAM	67	4	5.46	2.23	LEXINGTON	56	-1	6.52	3.82	COLUMBUS	53	-2	2.68	0.37
AL HUNTSVILLE	65	4	3.45	-0.09	LA LONDON-CORBIN	58	2	4.49	1.69	DAYTON	51	-2	2.53	-0.19
AL MOBILE	72	4	8.35	5.10	LA LOUISVILLE	58	0	4.65	1.86	MANSFIELD	49	-2	1.81	-0.87
AL MONTGOMERY	70	5	2.57	-0.01	LA PADUCAH	58	0	3.90	0.45	TOLEDO	50	-2	1.70	-0.65
AK ANCHORAGE	41	7	4.05	1.97	LA BATON ROUGE	72	4	9.30	5.49	OR YOUNGSTOWN	49	-2	2.01	-0.45
AK BARROW	24	9	0.55	0.16	LA LAKE CHARLES	72	3	21.51	17.57	OK OKLAHOMA CITY	56	-6	4.64	1.00
AK COLD BAY	44	4	7.74	3.20	LA NEW ORLEANS	74	4	10.08	7.03	OK TULSA	58	-5	3.33	-0.72
AK FAIRBANKS	32	8	1.04	0.12	ME SHREVEPORT	67	0	6.56	2.11	OR ASTORIA	52	-1	0.95	-4.66
AK JUNEAU	45	3	10.70	2.40	ME BANGOR	44	-4	3.19	-0.29	OR BURNS	41	-3	0.05	-0.67
AK KING SALMON	43	10	3.30	1.21	ME CARIBOU	40	-3	2.77	-0.22	OR EUGENE	52	-1	0.41	-2.94
AK KODIAK	45	5	16.97	8.61	ME PORTLAND	47	-1	4.17	-0.23	OR MEDFORD	53	-2	0.16	-1.15
AK NOME	35	6	1.45	-0.13	MD BALTIMORE	56	1	6.01	2.85	OR PENDLETON	49	-3	0.75	-0.24
AZ FLAGSTAFF	46	-1	1.88	-0.05	MA BOSTON	52	-2	3.48	-0.31	OR PORTLAND	54	0	0.63	-2.25
AZ PHOENIX	75	0	0.37	-0.42	MA WORCESTER	47	-3	4.39	-0.28	PA SALEM	52	-1	0.47	-2.56
AZ TUCSON	70	-1	0.51	-0.70	MI ALPENA	42	-4	2.21	-0.12	PA ALLENTOWN	52	0	6.85	3.52
AR FORT SMITH	61	-2	2.08	-1.86	MI DETROIT	50	-2	1.15	-1.08	PA ERIE	51	-2	4.37	0.45
AR LITTLE ROCK	61	-2	5.09	0.84	MI FLINT	47	-2	1.27	-1.07	PA MIDDLETOWN	53	-2	6.37	3.44
CA BAKERSFIELD	66	-1	0.00	-0.30	MI GRAND RAPIDS	47	-3	2.04	-0.76	PA PHILADELPHIA	57	0	5.90	3.15
CA EUREKA	49	-6	0.06	-2.30	MI HOUGHTON LAKE	41	-5	1.84	-0.42	PA PITTSBURGH	51	-2	2.99	0.74
CA FRESNO	65	0	0.00	-0.65	MI LANSING	46	-3	1.21	-1.08	PA WILKES-BARRE	49	-2	5.49	2.47
CA LOS ANGELES	63	-4	0.05	-0.31	MI MUSKEGON	47	-3	1.99	-0.81	PA WILLIAMSPORT	51	0	7.27	4.08
CA REDDING	65	2	0.00	-2.18	MI TRAVERSE CITY	45	-4	2.64	-0.30	PR SAN JUAN	82	0	4.81	-0.25
CA SACRAMENTO	63	-1	0.02	-0.87	MN DULUTH	36	-8	3.05	0.59	RI PROVIDENCE	53	0	3.49	-0.20
CA SAN DIEGO	64	-4	0.04	-0.40	MN INT'L FALLS	33	-9	1.08	-0.90	SC CHARLESTON	71	5	8.44	5.35
CA SAN FRANCISCO	61	0	0.00	-1.04	MN MINNEAPOLIS	42	-7	4.21	2.10	SC COLUMBIA	67	3	4.79	1.90
CA STOCKTON	63	-2	0.00	-0.82	MN ROCHESTER	42	-5	3.50	1.30	SC FLORENCE	67	3	3.20	0.26
CO ALAMOSA	42	-1	0.57	-0.10	MN ST. CLOUD	38	-7	3.58	1.34	SC GREENVILLE	62	2	4.66	0.78
CO CO SPRINGS	45	-4	1.33	0.47	MS JACKSON	68	4	7.18	3.76	SD MYRTLE BEACH	68	3	3.23	0.00
CO DENVER	44	-6	0.49	-0.38	MS MERIDIAN	69	4	10.33	7.05	SD ABERDEEN	38	-9	1.19	-0.44
CO GRAND JUNCTION	51	-2	1.27	0.27	MO TUPELO	64	2	6.28	2.90	SD HURON	40	-8	1.92	0.33
CO PUEBLO	48	-4	0.67	0.03	MO COLUMBIA	52	-4	4.22	1.04	SD RAPID CITY	39	-9	0.65	-0.72
CT BRIDGEPORT	53	-2	4.11	0.57	MO JOPLIN	56	-4	2.31	-1.63	SD SIOUX FALLS	41	-7	3.85	1.92
CT HARTFORD	50	-2	4.35	0.41	MO KANSAS CITY	51	-6	3.51	0.18	TN BRISTOL	60	5	3.74	1.44
DC WASHINGTON	58	-1	5.00	1.78	MO SPRINGFIELD	55	-3	3.28	-0.19	TN CHATTANOOGA	65	5	3.36	0.10
DE WILMINGTON	55	-1	6.15	3.07	MO ST JOSEPH	50	-7	3.26	-0.02	TN JACKSON	60	-1	6.56	3.24
FL DAYTONA BEACH	77	3	2.94	-1.54	MO ST LOUIS	55	-3	4.78	2.02	TN KNOXVILLE	63	4	5.59	2.94
FL FT LAUDERDALE	81	2	1.14	-5.30	MT BILLINGS	41	-7	1.12	-0.14	TN MEMPHIS	63	-1	8.28	4.97
FL FT MYERS	79	1	1.05	-1.54	MT BUTTE	35	-6	0.06	-0.73	TN NASHVILLE	61	1	4.49	1.62
FL JACKSONVILLE	74	5	2.58	-1.28	MT GLASGOW	36	-9	0.29	-0.42	TX ABILENE	61	-5	4.37	1.47
FL KEY WEST	82	2	2.91	-1.43	MT GREAT FALLS	38	-8	0.51	-0.42	TX AMARILLO	53	-5	3.35	1.85
FL MELBOURNE	78	3	5.11	0.35	MT HELENA	41	-4	0.16	-0.50	TX AUSTIN	69	-2	9.11	5.14
FL MIAMI	82	3	0.71	-5.48	MT KALISPELL	37	-5	0.08	-0.88	TX BEAUMONT	72	2	14.05	9.38
FL ORLANDO	78	3	4.98	2.25	MT MILES CITY	40	-8	0.46	-0.67	TX BROWNSVILLE	78	3	8.31	4.53
FL PENSACOLA	74	5	7.23	3.10	MT MISSOULA	41	-3	0.20	-0.63	TX COLLEGE STATION	69	-2	9.79	5.57
FL ST PETERSBURG	80	4	2.84	0.20	NE GRAND ISLAND	46	-6	2.43	0.92	TX CORPUS CHRISTI	75	1	9.50	5.56
FL TALLAHASSEE	74	5	3.23	-0.02	NE HASTINGS	46	-7	3.31	1.64	TX DALLAS/FT WORTH	65	-2	6.44	2.33
FL TAMPA	79	3	2.02	-0.27	NE LINCOLN	47	-6	4.66	2.72	TX DEL RIO	72	1	7.40	5.40
FL WEST PALM BEACH	80	2	2.52	-2.94	NE MCCOOK	46	-7	1.78	0.50	TX EL PASO	64	-1	1.09	0.28
GA ATHENS	64	2	3.30	-0.17	NE NORFOLK	44	-7	2.49	0.77	TX GALVESTON	75	1	11.81	8.32
GA ATLANTA	65	2	5.94	2.83	NE NORTH PLATTE	43	-7	2.38	1.14	TX HOUSTON	72	2	14.65	10.15
GA AUGUSTA	67	4	2.94	-0.26	NE OMAHA/EPPLEY	47	-6	3.18	0.97	TX LUBBOCK	58	-3	5.25	3.55
GA COLUMBUS	69	3	3.98	1.25	NE SCOTTSBLUFF	43	-5	0.48	-0.53	TX MIDLAND	62	-2	3.29	1.52
GA MACON	68	4	4.80	2.43	NE VALENTINE	40	-8	0.53	-0.69	TX SAN ANGELO	63	-2	4.06	1.49
GA SAVANNAH	71	4	4.33	1.21	NV ELKO	44	-3	0.08	-0.63	TX SAN ANTONIO	71	0	7.84	3.78
HI HILO	76	0	6.52	-3.12	NV ELY	43	-2	0.91	-0.09	TX VICTORIA	73	1	8.55	4.29
HI HONOLULU	80	0	2.11	-0.07	NV LAS VEGAS	68	-1	0.32	0.08	TX WACO	67	-2	9.00	5.33
HI KAHULUI	78	0	4.42	3.37	NV RENO	53	1	0.12	-0.30	TX WICHITA FALLS	60	-5	4.64	1.53
HI LIHUE	78	0	2.77	-1.48	NH WINNEMUCCA	45	-4	0.13	-0.53	UT SALT LAKE CITY	50	-3	0.71	-0.86
ID BOISE	49	-4	0.31	-0.45	NH CONCORD	45	-3	3.07	-0.39	VA BURLINGTON	46	-2	3.30	0.18
ID LEWISTON	48	-4	0.77	-0.19	NJ ATLANTIC CITY	56	1	6.38	3.52	VA LYNCHBURG	57	1	4.64	1.25
ID POCATELLO	43	-5	0.40	-0.57	NJ NEWARK	56	0	6.79	3.63	VA NORFOLK	64	3	6.55	3.08
IL CHICAGO/O'HARE	50	-2	1.61	-1.10	NM ALBUQUERQUE	57	0	0.54	-0.46	VA RICHMOND	60	2	6.09	2.49
IL MOLINE	50	-3	2.85	0.05	NY ALBANY	48	-1	4.02	0.81	VA ROANOKE	58	1	4.66	1.51
IL PEORIA	51	-2	1.46	-1.30	NY BINGHAMTON	46	-2	4.28	1.26	VA WASH/DULLES	55	0	5.06	1.69
IL ROCKFORD	48	-3	1.98	-0.59	NY BUFFALO	49	-2	3.23	0.04	WA OLYMPIA	49	-1	0.63	-3.56
IL SPRINGFIELD	52	-4	3.12	0.50	NY ROCHESTER	50	0	2.09	-0.51	WA QUILLAYUTE	49	-1	1.96	-7.85
IN EVANSVILLE	56	-1	3.76	0.98	NY SYRACUSE	50	0	3.98	0.78	WA SEATTLE-TACOMA	51	-2	0.66	-2.53
IN FORT WAYNE	50	-2	1.58	-1.05	NC ASHEVILLE	60	5	3.14	-0.03	WA SPOKANE	43	-4	0.19	-0.87
IN INDIANAPOLIS	53	-2	2.64	-0.12	NC CHARLOTTE	62	0	5.43	1.77	WA YAKIMA	47	-2	0.09	-0.44
IN SOUTH BEND	50	-2	1.43	-1.84	NC GREENSBORO	60	2	6.18	2.91	WV BECKLEY	53	0	4.75	2.11
IA BURLINGTON	49	-6	3.48	0.57	NC HATTERAS	68	2	5.10	-0.21	WV CHARLESTON	57	2	6.10	3.43
IA CEDAR RAPIDS	47	-5	5.11	2.90	NC RALEIGH	62	2	9.35	6.17	WV ELKINS	51	0	4.71	1.85
IA DES MOINES	47	-6	3.11	0.49	NC WILMINGTON	67	2	2.34	-0.87	WV HUNTINGTON	56	0	5.40	2.67
IA DUBUQUE	46	-4	3.57	1.07	ND BISMARCK	36	-9	0.63	-0.65	WI EAU CLAIRE	44	-3	4.17	1.93
IA SIOUX CITY	45	-6	2.88	0.89	ND DICKINSON	34	-11	0.76	-0.58	WI GREEN BAY	44	-3	3.26	1.09
IA WATERLOO	46	-4	2.52	0.03	ND FARGO	37	-8	1.44	-0.53	WI LA CROSSE	45	-6	3.33	1.17
KS CONCORDIA	49	-7	4.49	2.65	ND GRAND FORKS	35	-9	1.00	-0.70	WI MADISON	45	-4	2.10	-0.08
KS DODGE CITY	49	-8	2.85	1.40	ND JAMESTOWN	35	-10	1.21	-0.19	WI MILWAUKEE	48	-3	1.66	-0.83
KS GOODLAND	46	-6	1.45	0.40	ND MINOT	35	-10	0.55	-0.77	WI WAUSAU	41	-6	3.81	1.18
KS HILL CITY	47	-8	2.83	1.38	OH WILLISTON	32	-12	1.10	0.23	WY CASPER	38	-8	0.59	-0.55
KS TOPEKA	51	-6	5.42	2.43	OH AKRON-CANTON	50	-2	1.88	-0.65	WY CHEYENNE	39	-6	1.10	0.35
KS WICHITA	52	-7	8.29	5.84	OH CINCINNATI	54	-2	4.51	1.55	WY LANDER	40	-6	1.72	0.35
KY JACKSON	57	-1	6.39	3.21	OH CLEVELAND	52	0	1.52	-1.21	WY SHERIDAN	38	-7	1.36	-0.05

Based on 1971-2000 normals.

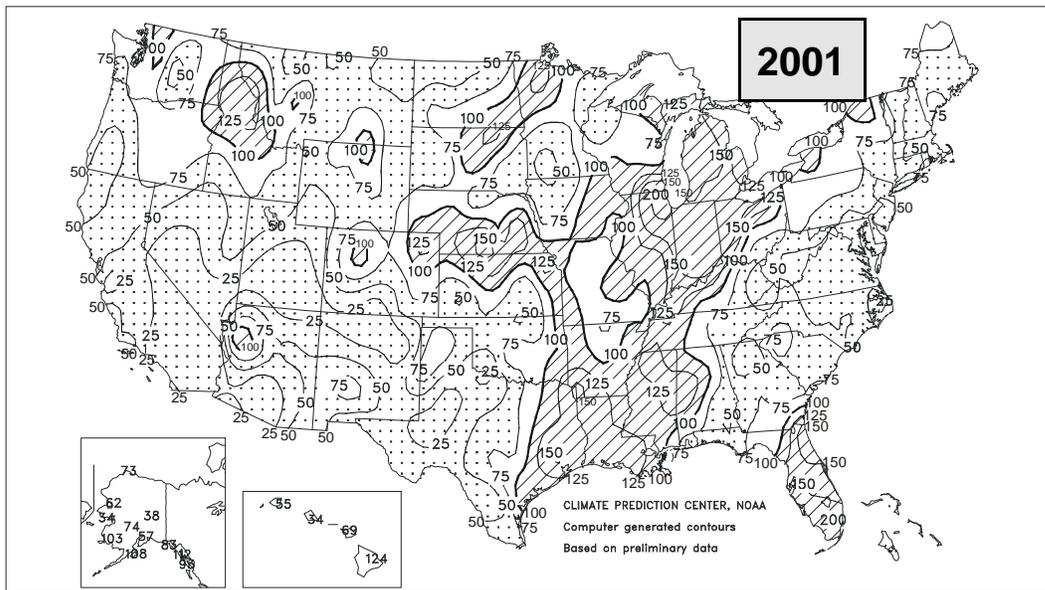
\*\*\* Not Available.

# September 1 - November 11 Percent of Normal Precipitation, 2001 versus 2002

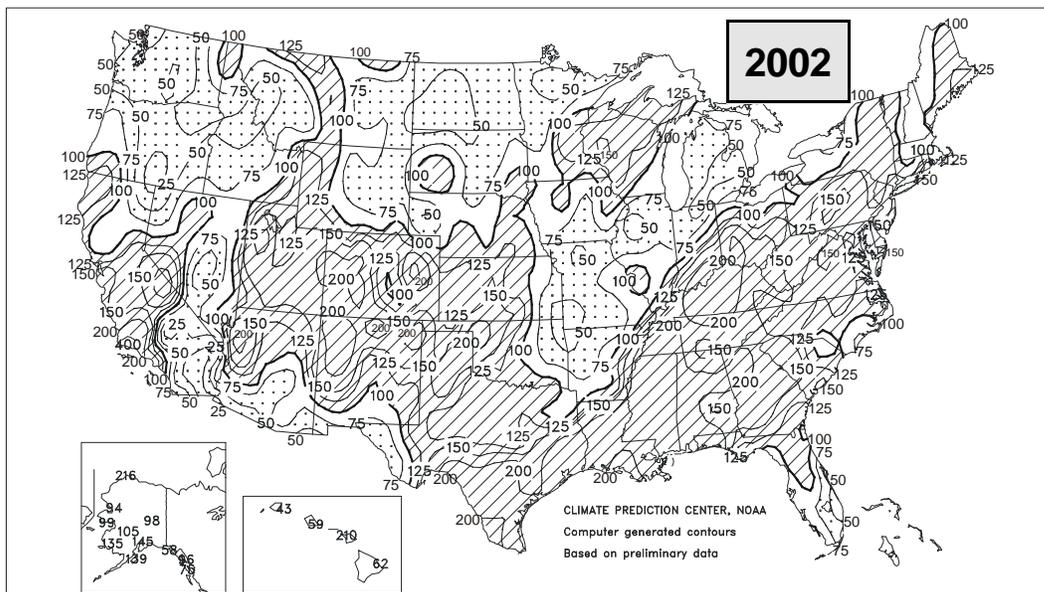
Strikingly different precipitation patterns were observed across the United States during roughly the first halves of autumn 2001 and 2002. Last year, September 1 - November 11 dryness was dominant across the East (excluding Florida's peninsula) and virtually the entire western half of the Nation (Fig. 1). As a result, favorable conditions for winter wheat establishment were confined to the Ohio Valley and Great Lakes States.

This year, the early influence of an El Niño-driven weather pattern has resulted in abundant rainfall across the East, South, and the southern half of the Plains, slowing fieldwork but boosting moisture reserves for winter grains (Fig. 2). In contrast, seasonal precipitation arrived late across the Northwest, leaving wheat with little moisture until recently. Across the northwestern half of the Plains, limited moisture reserves and a cold autumn have raised concerns about wheat's establishment and winter hardiness. Pockets of dryness also exist from the Ozark Plateau to Lower Michigan.

Percent Of Normal Precipitation  
**Figure 1** SEP 1 - NOV 11 2001



Percent Of Normal Precipitation  
**Figure 2** SEP 1 - NOV 11 2002



## National Agricultural Summary

November 4 - 10, 2002

*Weekly National Agricultural Summary provided by USDA/NASS*

### HIGHLIGHTS

**Above-normal temperatures stimulated germination and growth of winter wheat on the central and northern Great Plains, while mild weather and adequate topsoil moisture aided development in the Corn Belt and southern Great Plains. Row-crop harvest continued with few delays in the Corn Belt and most areas of**

**the Great Plains, but a persistent wet weather pattern continued to hamper harvest across much of the southern Great Plains, Mississippi Delta, and Southeast. A strong storm also produced heavy rain that halted field and orchard work along the Pacific Coast.**

**Corn:** Harvest advanced to 86 percent complete, 4 percentage points behind this date last year and 6 percentage points behind the 5-year average. Harvest progressed with few delays in the Corn Belt and northern Great Plains, advancing 10 percentage points or more in most States. Harvest was most active in Michigan, Minnesota, and the Dakota's, where growers harvested 15 percent of their acreage during the week. Progress was slower across the southern Corn Belt, where harvest was nearly finished.

**Soybeans:** Harvest progressed to 91 percent complete, compared with last year's 95-percent pace and the 5-year average of 96 percent. Light precipitation interrupted harvest across much of the Corn Belt, but delays were brief, and harvest approached completion only slightly later than normal in most areas. Wisconsin producers led the harvest pace with an 11-percent advancement during the week. In Michigan, the harvest season ended ahead of normal. Meanwhile, heavy rain further delayed harvest in the lower Mississippi Valley, where progress ranged from 2 to 4 weeks behind normal. Harvest also lagged far behind normal in North Carolina.

**Winter wheat:** Ninety-two percent of the acreage was planted, and 85 percent was emerged. Planting trailed last year's 96-percent pace and the 5-year average of 93 percent. Emergence lagged slightly behind last year's 86 percent, but exceeded the 83-percent average for this date. Seeding was most active in Arkansas, but progress remained far behind the average for this date. Planting also remained far behind normal along the Atlantic Coastal Plain. In California and Missouri, growers sowed 10 percent of their acreage during the week. Above-normal temperatures stimulated germination and growth in areas of the central and northern Great Plains where topsoil moisture supplies were adequate. Where moisture supplies were short, emergence was spotty and slow, and emerged plants sacrificed vegetative growth for root development. In the Corn Belt and southern Great Plains, temperatures and soil moisture were mostly favorable for crop development. In the Pacific Coast States, heavy precipitation provided immediate crop moisture requirements and boosted long-term moisture reserves along the coast. However, inland areas of the Pacific Northwest received only marginal drought relief.

**Cotton:** Picking advanced to 59 percent complete, but fell more than 2 weeks behind last year and the 5-year average of 79 and 77 percent, respectively. Heavy rain continued to delay picking along the western Gulf Coast and adjacent inland areas of the southern Great Plains and Mississippi Delta. Texas growers picked just 2 percent of their acreage during the week, and progress was only slightly faster in Arkansas, Louisiana, Mississippi, Missouri, and Oklahoma. Heavy rain also limited harvest in the Southeast, but lengthy delays were less widespread, especially along the Atlantic Coastal Plain. In North Carolina and Virginia, harvest advanced 9 and 10 percentage points, respectively. Picking was most active in California, where harvest neared completion following a 14-percent advancement during the week.

**Sorghum:** Harvest, at 76 percent complete, remained well behind last year and the 5-year average of 95 and 91 percent, respectively. Late crop ripening and muddy fields contributed to slow progress in the southern Great Plains. Harvest was more active in the central and northern Great Plains, advancing 10 percentage points in Colorado, 9 percentage points in Kansas, and 8 percentage points in Nebraska and South Dakota.

**Other Crops:** The peanut harvest progressed to 80 percent complete, well behind last year's 93-percent pace and the 5-year average of 90 percent. Digging remained active along the mid-Atlantic Coastal Plain, advancing 11 and 9 percentage points in North Carolina and Virginia, respectively. Harvest approached completion slightly later than normal along the eastern Gulf Coast, and progress lagged well behind normal in the southern Great Plains, especially in Texas where digging was far behind normal.

The sugar beet harvest advanced to 98 percent complete in the four major sugar beet-producing States. Progress equaled last year and the 5-year average. Harvest rapidly approached completion in Idaho, despite rain delays.

The sunflower harvest advanced to 78 percent complete, well behind last year and the average of 96 and 91 percent, respectively. Harvest remained active in most areas of the central and northern Great Plains, even though muddy fields limited progress during part of the week. North Dakota led harvest progress with a 17-percent advancement.

# Crop Progress and Condition

## Week Ending November 10, 2002

Weekly U.S. Crop Progress and Condition Tables provided by USDA/NASS

Winter Wheat Percent Planted				
	Nov 10 2002	Prev Week	Prev Year	5-Yr Avg
AR	54	43	80	79
CA	45	35	39	33
CO	100	100	100	100
ID	100	100	100	99
IL	98	97	97	98
IN	98	94	97	98
KS	97	96	100	97
MI	100	100	98	99
MO	88	78	89	89
MT	100	100	100	100
NE	100	100	100	100
NC	31	26	67	55
OH	100	98	96	99
OK	94	92	96	89
OR	85	79	100	95
SD	100	100	100	100
TX	88	86	95	88
WA	100	99	100	100
18 Sts	92	90	96	93

These 18 States planted 90% of last year's winter wheat acreage.

Soybeans Percent Harvested				
	Nov 10 2002	Prev Week	Prev Year	5-Yr Avg
AR	65	59	92	87
IL	97	96	97	98
IN	96	93	94	98
IA	99	98	98	99
KS	83	81	99	95
KY	70	61	94	89
LA	69	67	99	99
MI	100	96	82	92
MN	97	91	99	99
MS	81	78	98	96
MO	87	79	90	92
NE	92	89	100	98
NC	17	14	62	41
ND	99	95	100	100
OH	95	92	96	97
SD	95	91	100	99
TN	55	47	78	81
WI	89	78	93	98
18 Sts	91	87	95	96

These 18 States harvested 96% of last year's soybean acreage.

Cotton Percent Harvested				
	Nov 10 2002	Prev Week	Prev Year	5-Yr Avg
AL	54	49	64	80
AZ	68	63	66	66
AR	70	65	94	94
CA	94	80	89	75
GA	57	51	71	68
LA	69	64	97	99
MS	65	60	95	97
MO	73	67	97	93
NC	56	47	75	65
OK	43	39	59	65
SC	51	44	68	69
TN	65	58	91	93
TX	44	42	69	64
VA	76	66	79	65
14 Sts	59	53	79	77

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

Winter Wheat Percent Emerged				
	Nov 10 2002	Prev Week	Prev Year	5-Yr Avg
AR	43	32	57	56
CA	30	15	19	14
CO	100	98	100	98
ID	75	65	90	85
IL	93	85	89	90
IN	90	77	81	88
KS	91	87	96	91
MI	90	84	84	93
MO	72	62	62	70
MT	89	83	84	86
NE	100	98	100	100
NC	25	20	37	33
OH	94	87	86	92
OK	91	85	84	77
OR	37	27	81	73
SD	96	93	94	92
TX	80	77	75	71
WA	93	91	97	97
18 Sts	85	80	86	83

These 18 States planted 90% of last year's winter wheat acreage.

Corn Percent Harvested				
	Nov 10 2002	Prev Week	Prev Year	5-Yr Avg
CO	70	65	94	88
IL	95	91	95	96
IN	90	78	80	89
IA	89	76	91	95
KS	96	95	100	98
KY	99	96	99	97
MI	89	74	62	69
MN	86	71	94	96
MO	97	95	94	94
NE	75	64	92	91
NC	87	83	100	98
ND	85	70	96	91
OH	85	75	76	79
PA	86	74	85	69
SD	69	54	93	89
TN	99	99	100	100
TX	100	99	100	100
WI	58	49	70	79
18 Sts	86	77	90	92

These 18 States harvested 95% of last year's corn acreage.

Sorghum Percent Harvested				
	Nov 10 2002	Prev Week	Prev Year	5-Yr Avg
AR	100	100	100	100
CO	78	68	89	67
IL	96	95	98	95
KS	68	59	99	94
LA	100	98	100	100
MO	95	90	95	94
NE	83	75	96	94
NM	38	31	67	59
OK	80	77	85	80
SD	87	79	97	92
TX	81	79	92	91
11 Sts	76	70	95	91

These 11 States harvested 98% of last year's sorghum acreage.

Peanuts Percent Harvested				
	Nov 10 2002	Prev Week	Prev Year	5-Yr Avg
AL	87	84	90	95
FL	97	96	99	99
GA	92	86	100	98
NC	88	77	98	89
OK	79	76	92	89
TX	44	41	80	71
VA	98	89	100	99
7 Sts	80	75	93	90

These 7 States harvested 98% of last year's peanut acreage.

## Crop Progress and Condition

**Week Ending November 10, 2002**

*Weekly U.S. Crop Progress and Condition Tables provided by USDA/NASS*

Sugar Beets Percent Harvested				
	Nov 10 2002	Prev Week	Prev Year	5-Yr Avg
ID	93	78	98	95
MI	96	91	91	95
MN	99	99	99	99
ND	100	100	100	100
4 Sts	98	94	98	98
These 4 States planted 81% of last year's sugar beet acreage.				

Sunflowers Percent Harvested				
	Nov 10 2002	Prev Week	Prev Year	5-Yr Avg
CO	71	61	89	71
KS	77	63	99	94
ND	75	58	97	91
SD	85	80	96	94
4 Sts	78	66	96	91
These 4 States harvested 89% of last year's sunflower acreage.				

Winter Wheat Crop Condition by Percent					
	VP	P	F	G	EX
AR	0	5	34	54	7
CA	0	30	30	30	10
CO	2	7	51	34	6
ID	0	7	30	61	2
IL	0	1	26	66	7
IN	0	3	32	56	9
KS	2	5	30	54	9
MI	2	5	29	53	11
MO	0	2	37	57	4
MT	1	5	30	59	5
NE	11	6	38	40	5
NC	4	5	21	63	7
OH	0	2	21	57	20
OK	0	2	24	53	21
OR	30	15	40	15	0
SD	4	8	36	45	7
TX	1	2	19	52	26
WA	3	16	55	24	2
18 Sts	2	5	31	50	12
Prev Wk	2	6	34	48	10
Prev Yr	7	15	34	38	6

National crop conditions for selected States are weighted based upon the year 2001 planted acres.

**VP - Very Poor**

**P - Poor**

**F - Fair**

**G - Good**

**EX - Excellent**

**\* - Revised**

**NA - Not Available**

## 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:** Days suitable for fieldwork 2.8. Topsoil 0% very short, 2% short, 44% adequate, 54% surplus. Soybeans 45% harvested, 34% 2001, 68% avg.; 19% very poor, 43% poor, 29% fair, 9% good, 0% excellent. Wet weather continued. Row crop harvest delayed.

**ALASKA: DATA NOT AVAILABLE**

**ARIZONA:** Temperatures throughout the state were near average for the week. Cotton harvest was 68% complete, slightly ahead of 2001 rate of 66%, ahead of the 5- yr 66% avg. Alfalfa harvest continued, with mostly good conditions reported. Significant rainfall during the last several weeks has slightly improved range, pasture feeds. Six of 17 reporting stations are above 50% of normal precipitation levels for this time of year.

**ARKANSAS:** Days suitable for fieldwork 4.0. Soil 1% very short, 8% short, 57% adequate, 34% surplus. Soybeans: 99% shedding, 100% 2001, 99% 5- yr. avg.; 99% mature, xx% 2001, 93% 5-yr. avg. from '96-2000. 65% harvested, 92% 2001, 87% 5- yr. avg. Cotton 70% harvested, 94% 2001, 94% 5- yr. avg. Rice 99% harvested, 100% 2001, 100% 5- yr. avg. Wheat 54% planted, 80% 2001, 79% 5- yr. avg.; 43% emerged, 57% 2001, 56% 5- yr. avg. Other Hay 4% very poor, 10% poor, 37% fair, 44% good, 5% excellent. Pasture, range feed 4% very poor, 20% poor, 37% fair, 34% good, 5% excellent. Revisions: No revisions made to previous week. FIELD CROP: Wheat planting, ground preparation continued. Soybean, cotton harvest continued. Cotton harvested continues to be behind due to excessive rainfall. Wheat planted is behind schedule due to excessive moisture. LIVESTOCK, PASTURE, RANGE: Cattle were in good condition. Cattle producers were working cattle, weaning calves, selling livestock.

**CALIFORNIA:** Rains late in the week halted field activities in many areas. Cotton harvesting continued at full speed as growers tried to beat the rain. Picking of cotton was complete in many locations, as growers continued to shred, disc harvested fields to comply with pink bollworm plow-down requirements. Previously planted fields of alfalfa hay, winter forage were growing well, while planting of new fields continued in some areas. The season's last cutting of alfalfa hay was underway in many fields; cut hay was windrowed, baled and stacked. Fields of winter wheat were planted in several locations. New fields were cultivated, pre-irrigated in preparation for the fall planting of winter grains. Early planted grains were developing normally. Grain corn, Milo were maturing normally. Cutting of silage corn was nearing completion. The sugar beet harvest was ongoing, while fields planted for later harvest were maturing, nearly ready for harvest. Harvest of dry beans continued, but was winding down. Rice harvesting was almost finished, but continued in a few fields. Baling of rice straw was ongoing in several fields, while burning of rice straw halted in other areas until drying of the straw occurred. Raisin grape harvesting was complete. Many growers were running their crop over shaker screens for cleaning prior to delivery to processors. Harvesting continued in late variety table grape vineyards. Varieties picked, packed included Crimson Seedless, Red Globe. Wine, juice grape harvesting was still underway in a few vineyards, but rain received at the end of the week should bring an end to the season. Harvested vineyards were cultivated, fertilized, treated with herbicides. Pruning commenced in a few grape vineyards. Cultivation, pruning, irrigation, herbicide applications continued in many stone fruit orchards. Trees and vines were pulled out, piled up for chipping or burning in many areas, while open ground was treated for nematode control in preparation for new plantings. Fuyu, Hachiya persimmons, Hayward kiwifruit were picked, packed. The last remaining pomegranates harvested went for juice.

Strawberry harvesting continued in the Central Coast counties. Strawberries were developing well in Fresno, Tulare counties. Some were picked for sale at local roadside stands. Weed control, whitewash applications were underway in citrus orchards. Navel orange harvesting continued. Cooler nights, mornings improved color on early navels, tangerines. New plantings of Navel oranges and Clementines mandarins commenced in the Sanger district. Lemons, Satsuma mandarins, pummelos were picked, hauled to citrus packing houses. Fuerte avocados were harvested in Tulare County. Olive groves were pruned, copper sprays were applied to control Olive Knot. Walnut harvesting continued in several districts, while the almond, pistachio seasons ended. Harvested walnuts were hauled to processors. Irrigation, pest control activities continued in many orchards. Field work activities slowed due to rainfall. Fields were prepared for new plantings of garlic, onion, other winter vegetables in Fresno County. Maturing lettuce, broccoli fields were irrigated, treated to control insect pests. Carrots were being treated for root knot nematode in Imperial County. Post harvest cucumber beds were being pulled, cleaned up. Pumpkin harvest was complete. Fresh market tomato and freezer lima bean harvests were winding down. Lettuce, broccoli, cauliflower, cabbage harvesting continued in Fresno County. Growers harvested late varieties of cantaloupe and sweet corn fields. A small amount of fall spinach was harvested. Radicchio harvest commenced in the San Joaquin Valley. The following vegetables were also harvested: basil, carrots, daikon, eggplant, mustard greens, garlic, green onions, okra, peppers, parsley, squash. Rain in central, northern state was welcome relief for cattle, sheep producers. Supplemental feeding continued, but mild temperatures improved prospects for winter pastures in the next few weeks. Fall calving, lambing continued. In central state, ewes, baby lambs were grazing in alfalfa fields. Lambs were grazing on alfalfa, sudan grass pastures in the Imperial Valley. Turkeys were moving to processors for the holiday season.

**COLORADO:** Days suitable for field work 4.6. Top soil 14% very short, 19% short, 61% adequate, 6% surplus. Subsoil 57% very short, 32% short, 11% adequate, 0% surplus. Most mountain areas received 1 to 3 feet of snow late in the week. The Eastern Plains received only trace amounts of moisture, if any. Sugar Beets 94% harvested, 95% 2001, 87% avg.

**DELAWARE:** Days suitable for fieldwork 3.50. Topsoil 61% adequate, 39% surplus. Subsoil 61% adequate, 39% surplus. Soybeans 31% harvested, 78% 2001, 62% avg. Sorghum 87% harvested, 80% 2001, 66% avg. Barley 25% fair, 72% good, 3% excellent; 87% planted, 98% 2001, 94% avg. Winter wheat 35% fair, 59% good, 6% excellent; 70% planted, 83% 2001, 73% avg. Range, Pasture feed 2% very poor, 12% poor, 34% fair, 42% good, 10% excellent. Other hay 4th cutting 65%, 95% 2001, 97% avg. Alfalfa hay 4th cutting 95%, 100% 2001, 99% avg.; 5th cutting 43%, 61% 2001, 59% avg. Hay supplies 15% very short, 56% short, 27% adequate, 2% surplus. Apples 98% harvested, 99% 2001, 99% avg. Last week was wet at the beginning of the week, with sunny, warmer weather by week's end. Activities: Soybean harvest, small grain seeding had been hindered by wet conditions, but progressed during the drier portion of the week.

**FLORIDA:** Topsoil, Subsoil 3% very short, 25% short, 70% adequate, 2% surplus. Temperature average: 1<sup>o</sup>. below to 1<sup>o</sup>. above normal, major cities. Daytime highs: mostly 70s, 80s; several reports of record daily highs received. Nighttime lows: 40s, 50s; several Panhandle, a few northern Peninsula localities recorded at least one low in 40s; Tallahassee, Alachua reported at least one low in 30s. Rainfall range: 0.00 in; to nearly 2.00 in. cold fronts crossing from Panhandle to

southeastern Peninsula brought abundant rains to many Panhandle, a few northern Peninsula localities; many northern, most central, southern Peninsula areas received from 0.00 in. to less than 0.25 in.; 0.50 in. to nearly 2.00 in. fell over Brooksville, Jay, Lake Alfred, Marianna, Quincy, Daytona Beach, Pensacola, Tallahassee. Peanut digging 97% done; 99% 2001, 99% 5-yr avg. Abundant rainfall delaying peanut, cotton harvesting in Panhandle, some northern Peninsula localities, especially Escambia, Santa Rosa counties. However, rains replenished soil moisture supplies; surplus supplies reported for a few Panhandle, northern Peninsula areas; a few localities, scattered from northern to southern Peninsula, reporting very short supplies. Some northern producers making last cutting of hay for year. Sugarcane cutting continues, Everglades. Mild, dry weather, citrus areas; warm at weeks' end. Citrus trees, fruit in good condition. Caretakers irrigating many areas. Most early fruit have good on-tree coloring. Harvest increasing for processing. Fresh fruit shippers actively packing for Thanksgiving markets. Caretakers cutting cover crops: still spraying fresh crops; pushing out, burning dead trees. Fall vegetable harvest increasing, central, southern Peninsula as growers begin to meet Thanksgiving Day demand. Vegetables available: snap beans, sweet corn, cucumbers, egg plant, okra, peppers, radishes, squash, tomatoes, a very light supply of watermelons. Quality mostly good. Strawberry harvesting getting underway, Plant City region; warm weather hindering proper berry development. Pasture feed 35% fair, 65% good. Condition of Cattle 35% fair, 65% good. Panhandle northern Peninsula: pastures still green; some "standing hay" going into dormancy; growth slowed due to seasonally cooler temperatures; planting of small grains for winter forage slowed by wet field conditions. Central Peninsula, Big Bend: pasture feed fair due to drought. Southern Peninsula: pasture feed mostly good. Statewide: cattle condition fair to good.

**GEORGIA:** Days suitable for field work 3.8. Soil 5% short, 72% adequate, 23% surplus. Rye 71% planted, 65% 2001, 73% avg. Sorghum 74% harvested for grain, 79% 2001, 83% avg. Soybeans, 10% very poor, 19% poor, 49% fair, 20% good, 2% excellent; 96% dropping leaves, 99% 2001, 98% avg. Other small grains 59% planted, 54% 2001, 60% avg. Onions 2% transplanted, 5% 2001, 7% avg. Apples 98% harvested, 98% 2001, 99% avg. Pecans 8% very poor, 25% poor, 45% fair, 20% good, 2% excellent; 24% harvested, 25% 2001, 35% avg. Rain continued to slow most farming practices for the State. Cooler temperatures produced frost in some areas. Wet field conditions delayed cotton defoliation, harvesting. Cotton quality deteriorated, peanuts were lost due to excess rain. Sun needed for hay, cotton harvesting to resume. Pastures were invaded by fire ants. Weather conditions improved toward the end of the week, cotton harvesting resumed. Rain benefitted fall grains, winter grazing. Activities: Peanut combining continued, wheat planting neared completion.

**HAWAII:** An upper level high pressure system kept trade winds light over the State during the past week. Showers were light, confined to the mountain areas. East state banana harvest remained active. Light showers, sunny skies benefitted papaya orchards. Most vegetable crops remained in generally fair to good condition, but pastures are beginning to dry up.

**IDAHO:** Days suitable for fieldwork 4.9. Topsoil 16% very short, 42% short, 41% adequate, 1% surplus. Alfalfa hay 100% 4th cutting harvested, 100% 2001, 94% avg. Field Corn 46% harvested for grain, 85% 2001, 61% avg. Apples 97% harvested, 100% 2001, 98% avg. Activities: Fall cultivation, manure hauling, cattle feeding, harvesting sugarbeets, corn for grain.

**ILLINOIS:** Days suitable for fieldwork 4.5. Topsoil 3% very short, 19% short, 73% adequate, 5% surplus. Corn, soybean harvest continued last week as drier weather permitted many farmers to get into the few remaining acres they had to harvest. Corn acreage in northern state was where the majority of harvest activity took place. Rain showers did move in late in the week with heavy rains occurring mainly in southern state. This will help recharge the soil moisture levels as well as ponds, lakes that have been suffering from the drought conditions

experienced this summer. Farmers with wheat seeded are also glad to see the moisture levels being replenished prior to winter but are concerned with the slow emergence of their wheat crop due to the cooler than normal fall weather we have been experiencing. Farmers were also able to begin plowing under corn stalks again last week as the soils dried out. Soil temperatures continued to stay cool enough that many farmers began fall application of anhydrous last week. Activities: Hauling grain, storing equipment for the winter, spreading fertilizer, livestock waste from manure pits.

**INDIANA:** Days suitable for fieldwork 4.3. Topsoil 4% very short, 11% short, 67% adequate, 18% surplus. Subsoil 13% very short, 27% short, 56% adequate, 4% surplus. Field activities slowed by showers early, late in the week, most areas. Many farmers were able to finish harvest of their corn, soybean fields. Temperatures were cooler than normal most of the week. Temperatures averaged 3° below to 3° above normal. Precipitation averaged 0.36 to 2.65 inches. Corn harvest made good progress. Corn harvest 1 day ahead of average, 5 days ahead of 2001. Soybean harvest 2 days ahead of 2001. Soybean harvest finished up last week, most farms. Corn, soybean yields highly variable within and between fields. Pastures continued to improve, especially in the southern regions. Livestock remain in mostly good condition. Hay supplies 13% very short, 38% short, 46% adequate, 3% surplus. Hay prices high. Fall calving active. Cattle being moved into corn stubble, some farms. Activities: Harvesting corn, soybeans, chopping, discing stalks, cleaning up, repairing equipment, chiseling soils, stripping tobacco, spreading fertilizer, lime, seeding winter wheat, drying, selling grain, hauling manure, taking care of livestock.

**IOWA:** Days suitable for fieldwork were 5.2. Topsoil 1% very short, 12% short, 80% adequate, 7% surplus. Subsoil 13% very short, 24% short, 57% adequate, 6% surplus. Corn 89% harvested, 91% 2001, 95% avg.. Soybeans 99% harvested, 98% 2001, 99% avg.. Corn harvest 89% complete, remaining slightly behind the average of 91%. Scattered snow showers slowed harvest in some areas. Corn lodging and the amount of corn ear droppage were virtually unchanged from last week. State's soybean harvest is nearly complete at 99%, equal to the five-year average. Grain movement is currently rated 24% none, 34% light, 29% moderate, 13% heavy. Storage availability decreased as more grain was brought in from the fields. Off-farm storage 36% short, 60% adequate, 4% surplus. On-farm storage 39% short, 58% adequate, 3% surplus. As harvest nears completion, primary seedbed preparation, fertilizer application continue. Twenty-eight percent of primary seedbed preparation is complete; behind the previous year's 32%, average of 43%. Fertilization also lags behind with 24% complete compared to 27% in 2001, 5-yr avg of 36%. With scattered moisture in the form of rain, snow received last week, topsoil, subsoil moisture levels were largely unchanged.

**KANSAS:** Days suitable for fieldwork 4.0. Topsoil 2% very short, 8% short, 83% adequate, 7% surplus. Subsoil 20% very short, 35% short, 44% adequate, 1% surplus. Drier weather allowed some harvesting to resume. Sorghum, soybean, sunflower harvest are significantly behind normal for this time of year. Wheat pastured 7%, 5% 2001, 4% avg. Pasture feed 30% very poor, 28% poor, 28% fair, 12% good, 2% excellent.

**KENTUCKY:** Days suitable for fieldwork 2.0. Topsoil 1% short, 54% adequate, 45% surplus. Subsoil 6% short, 64% adequate, 30% surplus. Rainfall Statewide was 1.99 inches. Burley tobacco 48% stripped, 47% 2001, 36% avg. Stripped tobacco 1% very poor, 6% poor, 26% fair, 49% good, 18% excellent. Pasture feed 1% very poor, 3% poor, 20% fair, 58% good, 18% excellent. Winter wheat 68% seeded, 94% 2001, 91% avg.; 1% poor, 10% fair, 58% good, 31% excellent. Activities: Stripping tobacco, soybean harvesting, winter wheat seeding. Corn harvest nearly complete. Wet field conditions delaying soybean harvest.

**LOUISIANA:** Days suitable for fieldwork 1.8. Soil 1% short, 24% adequate, 75% surplus. Hay 100% 2nd cutting, 98% last week, 100% 2001, 100% avg. Pecans 45% harvested, 35% last week, 43% 2001,

44% avg. Sugarcane 24% very poor, 40% poor, 29% fair, 7% good; 38% harvested, 31% last week, 46% 2001, 41% avg. Sweet potatoes 71% harvested, 68% last week, 92% 2001, 93% avg. Winter wheat 26% planted, 23% last week, 64% 2001, 72% avg.; 18% emerged, 11% last week, 40% 2001, 47% avg. Livestock 3% very poor, 5% poor, 41% fair, 47% good, 4% excellent. Vegetables 10% very poor, 21% poor, 55% fair, 14% good. Range, pasture 5% very poor, 14% poor, 51% fair, 27% good, 3% excellent.

**MARYLAND:** Days suitable for fieldwork 3.00. Topsoil 1% very short, 9% short, 65% adequate, 25% surplus. Subsoil 7% very short, 37% short, 52% adequate, 4% surplus. Corn 94% harvested for grain, 94% 2001, 90% avg. Soybeans 40% harvested, 86% 2001, 70% avg. Sorghum 75% harvested, 92% 2001, 79% avg. Barley 1% poor, 16% fair, 68% good, 15% excellent. Winter wheat 2% very poor, 4% poor, 18% fair, 64% good, 12% excellent; 72% planted, 89% 2001, 82% avg. Range, Pasture feed 2% very poor, 7% poor, 30% fair, 50% good, 11% excellent. Tobacco stripped 33%, 44% 2001, 25% avg. Other hay 4th cutting 96%, 100% 2001, 95% avg. Alfalfa hay 4th cutting 95%, 99% 2001, 100% avg.; 5th cutting 38%, 73% 2001, 71% avg. Hay supplies 15% very short, 40% short, 44% adequate, 1% surplus. Apples 97% harvested, 100% 2001, 99% avg. Wet soils hindered field activities such as corn, soybean harvest, small grain planting. Corn still standing is deteriorating due to wet conditions, resulting in a lower value crop.

**MICHIGAN:** Days suitable for fieldwork 6.0. Topsoil 7% very short, 22% short, 67% adequate, 4% surplus. Subsoil 20% very short, 31% short, 46% adequate, 3% surplus. All hay 4th cutting 95%, 91% 2001, 94% avg. Temperatures ranged from 1 to 3<sup>o</sup> above normal State. Growing degree days (GDD) remained above normal all districts of State. Average precipitation amounts ranged from 0.34 inch northwest Lower Peninsula to 1.32 inches southwest Lower Peninsula. Unseasonably warm weather during end of week helped harvesting efforts. Corn harvest nearing completion, well ahead of normal pace. Soybean harvest completed. Sugarbeet harvest wrapping up with tonnage reported as light, but excellent quality. Winter wheat continued to look good. Fall tillage active. Fruit harvest complete for 2002. Apples loaded into controlled atmosphere storage. Fall orchard, vineyard maintenance continued. Vegetable harvest complete with exception of carrots, winter squash.

**MINNESOTA:** Days suitable for field work 5.2. Topsoil 0% very short, 1% short, 86% adequate, 13% surplus. Corn 20% moisture, 19% 2001, 17% avg. Soybeans 14% moisture, 12% 2001, 11% avg. Sunflowers 83% harvested, 98% 2001, 92% avg. Most areas of the state are nearly finished with this year's harvest, thanks to a week of mostly sunny days, seasonable temperatures. Statewide temperatures for the week averaged 2.6<sup>o</sup> above normal. Extensive wet areas in the Central, East Central Districts, scattered wet spots elsewhere continued to be difficult to access with equipment. Some of the fields are expected to be impossible to harvest until freeze-up. Moisture levels in crops declined somewhat, but remained high enough for supplemental drying to be required. High drying expenses, more fuel use during combining, big repair bills are expected to cut into the increased income available from better prices per bushel this year.

**MISSISSIPPI:** Days suitable for fieldwork 2.0. Soil moisture, 19% adequate, 81% surplus. Cotton 65% harvested, 95% 2001, 97% avg. Rice 96% harvested, 100% 2001, 100% avg. Soybeans 81% harvested, 98% 2001, 96% avg. Sweetpotatoes 94% harvested, 100% 2001, 96% avg. Wheat 42% planted, 82% 2001, 82% avg.; 25% emerged, 57% 2001, 58% avg. Cattle 1% very poor, 4% poor, 24% fair, 61% good, 10% excellent. Cooler, drier weather will be welcomed by farmers who wish to finish with harvesting, fall plantings.

**MISSOURI:** Days suitable for fieldwork 4.4. Topsoil 15% very short, 25% short, 55% adequate, 5% surplus. Most farmers got back into their fields, continued with fall harvesting. Corn harvesting ranges from about 93% in the northeast district to 97% or more in all other districts. Soybean harvest varies from 63% in the southeast to 95% in the north-

central district. Sorghum harvesting ranges from 85% in the east-central district to complete in the northwest, southwest, southeast. Wet weather has continued to slow the cotton harvest. Winter wheat seeding varies from 85% in the southeast district to 94% north-central. Pasture feed 32% very poor, 29% poor, 26% fair, 13% good. Reporters in many areas remain concerned about low water levels in stock ponds. Rainfall for the week averaged 0.38 inches, with most counties receiving only light amounts. The southeast district received 1.70 inches, while all other areas ranged from 0.14 inch in the north-central district to 0.54 inch in the south-central district.

**MONTANA:** Winter wheat is now 100% seeded. Emergence is at 89% compared to 84% 2001, 86% 5-yr avg. Winter wheat 1% very poor, 5% poor, 30% fair, 59% good, 5% excellent. 2001 15% very poor, 13% poor, 61% fair, 11% good, 0% excellent.

**NEBRASKA:** Days suitable for fieldwork 4.9. Subsoil moisture supplies rated very short or short across 80% of the state. Temperatures ranged from normals to 5<sup>o</sup> above normals for the week. Precipitation for the week was scattered, light, generally under 0.2 inch in the eastern third of the state. Fall harvest progress is about two weeks behind average.

**NEVADA: DATA NOT AVAILABLE**

**NEW ENGLAND:** Field Corn 100% harvested, 100% 2001, 100% avg.; condition good/fair. Third Crop Hay 100% harvested, 99% 2001, 99% avg.; condition fair. Apples: 100% harvested, 100% 2001, 99% avg.; condition good/fair. Massachusetts Cranberries 100% harvested, 100% 2001, 100% avg.; condition good/fair. Cold temperatures, snow arrived in many areas of state during the week, followed by warmer temperatures on the weekend. Cranberry harvest in Massachusetts is complete. Apple, field corn harvest were also wrapped up for the season, as was the cutting of third crop hay. Farmers continue to prepare their fields, equipment for winter.

**NEW JERSEY:** Days suitable for field work 4.8. Cool temperatures continued through the early part of last week, as a weak low pressure system moved through the region on Tuesday. Showers fell through Wednesday morning, with winds increasing by late afternoon. Windy conditions continued into Thursday, with gusts reaching 30 mph in some areas. Abnormally warm weather returned to region over the weekend, with daytime temperatures reaching 70<sup>o</sup> in some areas by Sunday. Activities: Equipment repair, field clean up, harvesting soybeans, field corn. Producers took advantage of warmer temperatures to make good progress harvesting corn, soybeans. Vegetable producers continued fall cleanup of fields, greenhouses. Harvest of Broccoli, cauliflower, cabbage, kale, other fall vegetables was winding down in some areas. Producers continued to make good progress harvesting cranberries. Crop condition was rated as mostly good.

**NEW MEXICO: DATA NOT AVAILABLE**

**NEW YORK:** Days suitable 4.6. Topsoil 1% short, 74% adequate, 25% surplus. Indian summer weather helped farmers wind up fall duties. Most crops have been harvested, put in storage. Activities: Harvesting remaining grain corn, soybeans; fall tillage; packing, grading fruits, vegetables; winterizing equipment.

**NORTH CAROLINA:** Days suitable for fieldwork 2.6. Soil 0% very short, 3% short, 50% adequate, 47% surplus. Much needed rain replenished water levels, improved pasture quality, but continued to severely limit crop harvest across most of the state. Small grain plantings were again delayed, there is some concern as to whether normal acreage amounts will be planted. High moisture content has deteriorated burley tobacco quality in open air barns where some barn scald, rot has been observed. A few farms managed to make some progress harvesting corn, soybeans, peanuts, cotton. Livestock producers are still concerned about having adequate winter feed

supplies since hay harvest has been delayed with the wet weather. Christmas tree growers have begun their harvest, are gearing up for heavy harvest over the next few weeks. Equipment maintenance was the main activity for the week as farmers waited for fields to dry.

**NORTH DAKOTA:** Days suitable for fieldwork 5. Topsoil 14% very short, 28% short, 55% adequate, 3% surplus. Subsoil 19% very short, 29% short, 49% adequate, 3% surplus. A week of mostly dry conditions aided harvest progress throughout the state. Dry edible beans 99% combined, 100% 2001, 100% avg.

**OHIO:** Days suitable for fieldwork 4.2. Topsoil 5% very short, 21% short, 66% adequate, 8% surplus. Corn 85% harvested for grain, 76% 2001, 79% avg. Soybeans 95% harvested, 96% 2001, 97% avg. Fall, winter apples 98% harvested, 98% 2001, 98% avg. Tobacco 42% stripped, 32% 2001, 29% avg. Winter wheat 94% emerged, 86% 2001, 92% avg.; 0% very poor, 2% poor, 21% fair, 57% good, 20% excellent. Rain showers hampered harvesting activities last week, but producers took full advantage of the four days suitable for fieldwork to make fairly good progress. In addition to harvesting, producers stripped tobacco, prepared equipment for storage, spread lime, fertilizer, tilled soil, contacted local FSA offices, marketed grain.

**OKLAHOMA:** Days suitable for fieldwork 2.8. Topsoil 0% very short, 1% short, 79% adequate, 20% surplus. Subsoil 1% very short, 10% short, 75% adequate, 14% surplus. Winter Wheat 0% very poor, 2% poor, 24% fair, 53% good, 21% excellent. Rye 99% emerged, 97% last week, 90% 2001, 86% avg.; 0% very poor, 1% poor, 12% fair, 47% good, 40% excellent. Oats 93% seedbed prepared, 91% last week, 91% 2001, 96% avg.; 60% planted, 57% last week, 64% 2001, 71% avg.; 57% emerged, 52% last week, 54% 2001, 51% avg.; 0% very poor, 1% poor, 33% fair, 51% good, 15% excellent; Corn 99% harvested, 97% last week, 100% 2001, 100% avg. Sorghum 93% mature, 90% last week, 98% 2001, 98% avg. Soybeans 98% mature, 96% last week, 99% 2001, 98% avg.; 81% harvested, 74% last week, 91% 2001, 79% avg. Peanuts 79% dug, 76% last week, 92% last year, 89% avg. Cotton 6% very poor, 8% poor, 24% fair, 43% good, 19% excellent. Alfalfa 74% 5<sup>th</sup> cutting, 71% last week, 59% 2001, 51% avg.; 4% very poor, 5% poor, 28% fair, 55% good, 8% excellent; Other Hay 97% 2<sup>nd</sup> cutting, 95% last week, 87% 2001, 84% avg.; 4% very poor, 12% poor, 32% fair, 47% good, 5% excellent. Livestock 0% very poor, 4% poor, 27% fair, 62% good, 7% excellent; Livestock: Livestock auctions reported an increase in marketings of steers, heifers less than 800 pounds. The price for feeder steers less than 800 pounds increased an average of \$1.70 per cwt. from the previous week, averaged \$83.60 per cwt. The price for feeder heifers less than 800 pounds increased an average of \$2.00 per cwt. from the previous week, averaged \$78.40 per cwt.

**OREGON:** Activities: Winter wheat seeding continued in less than ideal conditions. November 30 crop insurance deadline quickly approaching. Emergence of crop has been spotty. Christmas tree operators busy harvesting. Easter lily harvest, bulb planting complete with most bulbs packed, stored in coolers. Nurseries continued fall digging, shipping of balled, burlapped plants. Some vegetable producers harvesting "cole" crops. Cranberry harvest continued, crop may have been damaged by hail showers. Precipitation, to an extent, helped relieve drought stress of range, pasture land. Fall calving underway. Cattle, sheep moved to winter pastures.

**PENNSYLVANIA:** Days suitable for field work 4.0. Soil 2% very short, 3% short, 70% adequate, 25% surplus. Fall 75% plowing, 82% 2001, 84% avg. Corn 86% harvested, 85% 2001, 69% avg. Barley 94% emerged, 89% 2001, 93% avg. Winter wheat 98% planted, 98% 2001, 95% avg.; 81% emerged, 85% 2001, 81% avg. Soybean 28% very poor, 34% poor, 26% fair, 12% good; 51% harvested, 88% 2001, 75% avg. Alfalfa 4th cutting 86% complete, 96% 2001, 94% avg. Quality of hay made 30% very poor, 8% poor, 26% fair, 24% good, 12% excellent. Pasture feeds 13% very poor, 16% poor, 27% fair, 34% good, 10% excellent. Activities: Harvesting corn, soybeans; harvesting forages, baling straw; filling silos; fixing fences; machinery maintenance; cleaning

barns; hauling, spreading manure; caring for livestock; spraying herbicides, insecticides; fertilizing; attending annual meetings, banquets.

**SOUTH CAROLINA:** Days suitable for field work 4.7. Soil 8% short, 79% adequate, 13% surplus. Soybeans 99% leaves turning color, 99% 2001, 99% avg.; 87% leaves dropped, 92% 2001, 88% avg.; 73% mature, 86% 2001, 73% avg.; 23% harvested, 45% 2001, 34% avg.; 22% very poor, 35% poor, 28% fair, 15% good. Sorghum 98% harvested, 94% 2001, 92% avg.; 7% very poor, 20% poor, 22% fair, 51% good. Cotton 99% bolls opened, 100% 2001, 100% avg. Cotton 51% harvested, 68% 2001, 69% avg.; 44% very poor, 40% poor, 15% fair, 1% good. Peanuts 94% harvested, 98% 2001, 94% avg.; 7% very poor, 29% poor, 35% fair, 22% good, 7% excellent. Winter Wheat 42% planted, 27% 2001, 33% avg.; 32% emerged, 20% 2001, 23% avg.; 1% very poor, 2% poor, 20% fair, 77% good. Barley 70% planted, 74% 2001, 84% avg; 54% emerged, 56% 2001, 64% avg.; 61% fair, 39% good. Pastures 2% very poor, 4% poor, 42% fair, 49% good, 3% excellent. Rye 65% planted, 60% 2001, 70% avg.; 52% emerged, 43% 2001, 55% avg.; 70% fair, 30% good. Oats 68% planted, 69% 2001, 72% avg. 60% emerged, 54% 2001, 54% avg.; 3% poor, 43% fair, 53% good, 1% excellent. Sweet potatoes 96% harvested, 100% 2001, 96% avg.; 20% poor, 55% fair, 25% good. Apples 98% harvested, 100% 2001, 100% avg.; 65% fair, 34% good, 1% excellent. Livestock 1% very poor, 2% poor, 42% fair, 51% good, 4% excellent. Pecans 45% harvested, 49% 2001, 46% avg.; 10% very poor, 20% poor, 60% fair, 10% good. Winter Grazings 74% planted, 80% 2001, 84% avg.; 64% emerged, 61% 2001, 69% avg.; 2% poor, 48% fair, 46% good, 4% excellent.

**SOUTH DAKOTA:** Days suitable for fieldwork 5.0. Topsoil 18% very short, 27% short, 52% adequate, 3% surplus. Subsoil 28% very short, 31% short, 38% adequate, 3% surplus. Feed supplies 28% very short, 30% short, 41% adequate, 1% surplus. Stock water supplies 33% very short, 28% short, 38% adequate, 1% surplus. Winter rye 12% very poor, 3% poor, 39% fair, 35% good, 11% excellent; 100% emerged, 100% 2001, 100% avg. Sorghum 87% harvested-grain, 97% 2001, 92% avg. Sorghum silage 100% harvested, 100% 2001, 99% avg. Sunflower 85% harvested, 96% 2001, 94% avg. Cattle 5% very poor, 7% poor, 28% fair, 53% good, 7% excellent. Sheep 6% very poor, 7% poor, 23% fair, 57% good, 7% excellent. Slightly above normal temperatures, minimal precipitation last week were greatly needed, after the previous weeks of cool wet weather, in an attempt to speed-up harvest progress. Activities: Harvesting row crops, hauling grain, manure hauling, fall fertilizing, fall tillage, baling corn stalks, weaning, selling calves, moving cattle to fall grazing, winterizing equipment.

**TENNESSEE:** Days suitable for fieldwork 3.0. Topsoil 1% short, 70% adequate, 29% surplus. Subsoil 2% very short, 6% short, 72% adequate, 20% surplus. Burley 55% stripped, 46% 2001, 54% avg. Wheat 60% seeded, 71% 2001, 77% avg.; 37% emerged, 28% 2001; 6% poor, 21% fair, 56% good, 17% excellent. A low pressure system brought cool temperatures, periods of rainfall throughout much of state last week. The wet, soggy fields continued to hinder producers in their efforts to complete harvest. Soybean harvest was almost 3 weeks behind the 5-year average, while cotton harvest advanced only 7% points from a week ago, is currently 4 weeks behind normal. With persistent rainfall, the amount of acreage left to be harvested, growers are concerned about declining quality of both the cotton, soybean crops. A few of the State's corn producers were still in the process of finishing harvest last week. Over-half of the 2003 winter wheat acreage had been sown, well behind the normal pace. Good moisture in the barns allowed burley growers to strip an additional 13% of their crop. Rainfall averaged about half an inch to an inch above normal across West, East, with heavier amounts occurring in Mid-State.

**TEXAS:** Agricultural Summary: Conditions improved across the state during the week. The return of sunshine, light winds assisted in drying fields, pastures across the state. After two weeks of rainy weather, harvest resumed in areas where drying was sufficient. Some locations require a few more days of drying before fields will support farm machinery. Light to moderate frost occurred across most areas of the

Plains, Trans Pecos, portions of Central state. Warmer daytime temperatures promoted growth, development of small grains. Producers were preparing livestock for grazing small grain fields. In areas where frosts occurred, producers were required to remove livestock from hay grazer fields due to the threat of prussic acid poisoning. Range, pasture dormancy was extending southward with the frost line. Supplemental feeding increased slightly. Sickness problems in livestock was improving with more favorable weather. Small Grains: Planting was on hold during early week as soils remained wet. By late week, planting resumed in many areas where drying was sufficient. Increased sunshine, warmer conditions enhanced growth of earlier planted small grains. With drier conditions, more producers were able to allow livestock to graze fields that were previously too wet. Wheat 87% of normal compared with 46% 2001. Corn: Harvest was completed by late week. Land preparation for next year's crop moved ahead but was slow as drying out was needed. Cotton: Harvest resumed by late week in some areas as conditions improved. A few areas that received heavier amounts of rain during previous weeks will require a few more sunny days before harvest can continue. Some field losses were expected as a result of the rains. Cotton 63% of normal compared with 48% 2001. Sorghum: Harvest of remaining sorghum moved ahead as soils dried across the Plains. Grazing of abandoned sorghum fields continued in some areas. Land preparation for next year's crop moved ahead but was slow in many areas as drying out was needed. Peanuts: Harvest was accelerating as soils dried. Losses from sustained rainfall was a concern, but producers were still evaluating the extent of any damage. Peanut 74% of normal compared to 62% 2001. Soybeans: Isolated harvest resumed by late week in a few locations as drying out became sufficient. Some beans were lost as a result of the extended wet period. Rice: Harvest of the ratoon crop was slow as drying out continued. Commercial Vegetables, Fruit, Pecans In the Rio Grande Valley earlier planted peppers, onions, cabbage, green beans continued to make good progress. Saturation remained a problem in some locations, additional drying was needed. Harvest of early season citrus progressed slowly as orchards dried out. In the San Antonio-Winter Garden good progress continued for earlier planted spinach, cabbage, carrot, tomatoes, green beans, onions. A few fields will require replanting due to washing-out or drowning-out caused by the extended period of rainfall. Vegetable planting was hampered by wet conditions. In East state harvest of remaining sweet potatoes continued. Some producers continued to experience a souring problem due to wet conditions. In the High Plains pumpkin harvest continued in a few locations as conditions improved. Land preparation for next year's crops was on hold across the Plains. Pecans: Harvest increased as open conditions returned to the state. Sprouting in the hull remained a problem for some producers as a result of wet conditions. Range, Livestock: Pasture feeds continued to vary across most areas of the state. Recent rainfall increased the growth of cool season forages, many producers were able to keep supplemental feeding to a minimum. Livestock trampling remained a problem in some locations as pastures were slow to dry. Elsewhere, some producers were able to return livestock to grain fields. Supplemental feeding remained light across most areas of the state as the result of adequate pasture feeds. Sickness in livestock improved with the return of sunshine, warmer temperatures.

**UTAH:** Days suitable for field work 6. Topsoil 10% very short, 29% short, 57% adequate, 4% surplus. Subsoil 28% very short, 34% short, 38% adequate. Winter wheat 91% emerged, 69% 2001, 93% avg. Corn 49% harvested for grain, 98% 2001, 81% avg.; 2% very poor, 6% poor, 36% fair, 41% good, 15% excellent. Cattle 3% very poor, 12% poor, 42% fair, 37% good, 6% excellent. Sheep 10% poor, 38% fair, 47% good, 5% excellent. Range, Pasture feed 29% very poor, 36% poor, 25% fair, 10% good. Activity this week was preparation for winter. Temperatures were colder, many counties received snowfall.

**VIRGINIA:** Days suitable for fieldwork 3.5. Topsoil 1% very short, 4% short, 73% adequate, 22% excellent. Subsoil 11% very short, 28% short, 53% adequate, 8% surplus. Beef Cattle Forage 70% obtained from pastures, NA 2001, NA 5-yr avg. Milk Cow Forage 25% obtained

from pastures. Sheep Forage 74% obtained from pastures, NA 2001, NA 5-yr avg. Pasture 7% very poor, 15% poor, 40% fair, 32% good, 6% excellent. Livestock 1% very poor, 4% poor, 30% fair, 58% good, 7% excellent. Small Grain, Winter Grazing Crops 1% poor, 32% fair, 56% good, 11% excellent. Other Hay 3% very poor, 13% poor, 45% fair, 31% good, 8% excellent. Alfalfa Hay 1% very poor, 11% poor, 38% fair, 43% good, 7% excellent. Soybeans 12% very poor, 37% poor, 35% fair, 14% good, 2% excellent; 44% harvested, 76% 2001, 56% 5-yr avg. Winter Wheat 51% seeded, 68% 2001, 61% 5-yr avg. Barley 94% seeded, 99% 2001, 91% 5-yr avg. Peanuts 98% dug, 100% 2001, 99% 5-yr avg.; 88% combined, 100% 2001, 98% 5-yr avg. Cotton 76% harvested, 79% 2001, 65% 5-yr avg. The Commonwealth has experienced a week of near normal temperatures with a sufficient amount of rainfall. Crop harvest has slowed. Very few soybeans have been harvested in the past few weeks due to continued rains. Small grain planting has slowed in some areas for the same reason. Pastures are looking excellent with above normal topsoil moisture. Wet field conditions continue to hinder wheat planting. Activities: Taking soil samples, planting small grains, harvesting cotton, soybeans, peanuts between showers.

**WASHINGTON:** Days suitable for fieldwork 5.1. Topsoil 17% very short, 59% short, 24% adequate. Subsoil 16% very short, 54% short, 30% adequate. Irrigation water supplies were 3% short, 97% adequate. The highest temperature in the state was 69° in Walla Walla. The lowest temperature in the state was 8° in Deer Park. Winter wheat 100% planted, 93% emerged, 3% very poor, 16% poor, 55% fair, 24% good, 2% excellent. In western state, record cold temperatures may have damaged fall seedings of small grains, new grass seedings. In eastern state, precipitation maintained winter wheat, subsoil moisture conditions, though it remained in short supply. Field corn 3% poor, 9% fair, 88% good. Corn for grain 50% harvested. Potatoes 99% harvested. Hay, other roughage supplies 15% short, 85% adequate. Livestock operations continued to provide supplemental feed due to the poor fall grazing conditions. Benton County growers assessed cold damage to tree fruit, grapes. Some estimates put apple crop loss as high as 15%. Most grapes have been harvested, with some wineries taking advantage of the cold temperatures to make ice wine.

**WEST VIRGINIA:** Days suitable for fieldwork 3.1. Topsoil 7% short, 72% adequate, 21% surplus, 14% short, 76% adequate, 10% surplus last week, 44% very short, 46% short, 10% adequate in 2001. Corn 76% harvested for grain, 65% last week, 85% 2001, 82% 5-yr avg. Soybeans 68% harvested for grain, 55% last week, 87% 2001, 89% 5-yr avg. Winter wheat 1% poor, 18% fair, 81% good; 99% planted, 85% last week, 96% 2001, 90% 5-yr avg.; 83% emerged, 76% last week, 71% 2001. Cattle, calves 2% poor, 18% fair, 74% good, 6% excellent. Sheep, Lambs 1% poor, 19% fair, 76% good, 4% excellent. Most of the state continued to receive welcomed rainfall at nearly double the normal amounts in most areas except the eastern panhandle. Feeding of hay to livestock was slowed due to continued slight pasture improvement from recent rains. Activities: Slowed by rainfall, included harvesting of corn, soybeans, planting winter wheat, winter preparations.

**WISCONSIN:** Topsoil 5% very short to short, 75% adequate, 20% surplus. After a challenging growing season, farmers across the state commented on better than expected yields. Wet soil conditions combined with poor drying conditions kept northern farmers from getting into fields, delayed harvest progress. Trace rainfall combined with cool temperatures, overcast skies kept soil moisture levels adequate to surplus across the state. High soil moisture levels kept farmers in northern state from field work last week, although 5.5 days were suitable for fieldwork. Many reporters mentioned that manure hauling, stalk chopping and baling, tillage activities were occurring on dry ground; while waiting for the rest of fields to dry, harvest to continue.

**WYOMING:** Corn 8% very poor, 9% poor, 14% fair, 67% good, 2% excellent. Corn 61% harvested for grain, 86% 2001, 71% average.

## November 7 ENSO Update

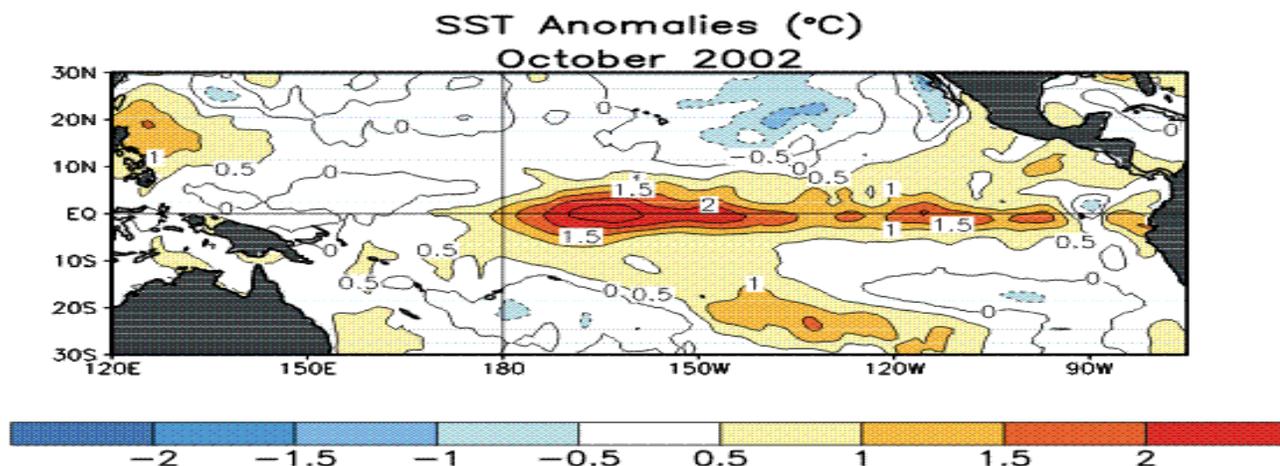


Figure 1. Sea surface temperature (SST) anomalies during October 2002. Departures from average (anomalies) are based on the 1971-2000 base period means. (Analysis based on NOAA/PMEL TAO buoy data, NOAA/AVHRR satellite data and ships of opportunity.)

Further evolution toward basin-wide mature El Niño conditions occurred during October, as sea surface temperature (SST) anomalies increased in all of the Niño regions. SST anomalies (departures from average) were greater than  $+1^{\circ}\text{C}$  throughout most of the equatorial Pacific between  $180^{\circ}\text{W}$  and the South American coast, and SST anomalies exceeded  $+2^{\circ}\text{C}$  between  $175^{\circ}\text{W}$  and  $140^{\circ}\text{W}$  (Fig. 1). Positive subsurface temperature departures and a deeper-than-average oceanic thermocline prevailed throughout most of the equatorial Pacific (Fig. 2). Atmospheric indicators of El Niño include consistently negative values of the Southern Oscillation Index (SOI) since March 2002, and weaker-than-average low-level easterly winds since May 2002 throughout the equatorial Pacific. In addition, above-average precipitation has been observed over the tropical Pacific, especially in the vicinity of the date line ( $180^{\circ}\text{W}$ ) since August 2002, while drier-than-average conditions prevailed over many sections of Indonesia, India, Mexico and Central America. These oceanic and atmospheric conditions indicate the presence of El Niño.

Most coupled model and statistical model forecasts indicate that El Niño conditions will continue through spring 2003. Based on the recent evolution of conditions in the tropical Pacific, we expect SST anomalies to increase further in the eastern equatorial Pacific, with the establishment of basin-wide mature El Niño conditions during December 2002-February 2003. However, based on the latest predictions and an assessment of current oceanic and atmospheric conditions, we expect that this event will be weaker than the 1997-98 El Niño.

Expected global impacts include: 1) drier-than-average over Indonesia and eastern Australia continuing during the next several months, 2) wetter-than-average over southeastern South America (Uruguay, northeastern Argentina, and southern Brazil) through the end of 2002, 3) drier-than-average over southeastern Africa during December 2002-February 2003, 4) drier-than-average over Northeast

Brazil and northern South America during December 2002-April 2003, and 5) wetter-than-average conditions over coastal sections of Ecuador and northern Peru during December 2002-April 2003. Over the United States and Canada we expect: 1) drier-than-average conditions in the Ohio Valley states and northern U.S. Rockies during winter 2002-2003, 2) wetter-than-average conditions along much of the southern tier of the U.S. during winter 2002-2003, and 3) warmer-than-average conditions in the northern tier states, southern and southeastern Alaska, and western and central Canada during late fall 2002 and winter 2002-2003.

This discussion is a team effort of NOAA and its funded institutions. Updates of SST, 850-hPa wind, OLR and the equatorial subsurface temperature structure are available on the Climate Prediction Center web page at <http://www.cpc.ncep.noaa.gov> (Weekly Update). Forecasts for the evolution of El Niño/La Niña are updated monthly in CPC's Climate Diagnostics Bulletin Forecast Forum.

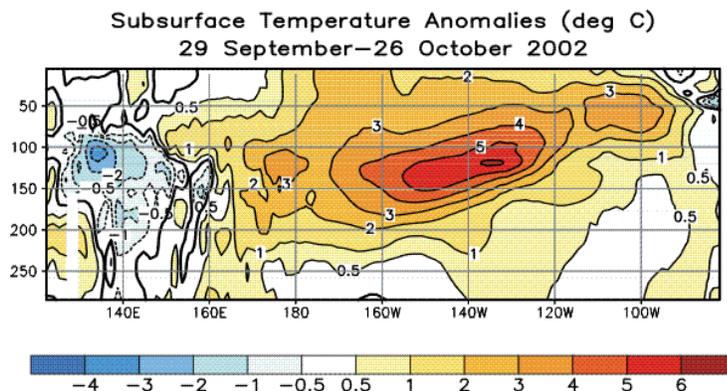


Figure 2. Depth-longitude sections of anomalous equatorial ocean temperatures for recent weeks. Contour interval is  $1^{\circ}\text{C}$ . Anomalies are departures from the 1981-2000 base period means.

# International Weather and Crop Summary

November 3 - 9, 2002

International Weather and Crop Highlights and Summaries provided by USDA/WAOB

## HIGHLIGHTS

**EUROPE:** Drier weather eased excessive wetness in northeastern Europe, while rain slowed summer crop harvesting in southeastern Europe, especially cotton in Greece.

**NORTHWESTERN AFRICA:** Across northwestern Africa, widespread rain boosted soil moisture reserves for upcoming winter wheat planting across Algeria and Tunisia, while dry weather prevailed across Morocco.

**SOUTH AFRICA:** Cooler, drier weather overspread the corn belt, favoring summer crop planting and limiting net evaporative losses from germinating to emerging summer crops.

**MIDDLE EAST:** Wet weather slowed cotton harvesting in western Turkey, while more rain was needed for winter wheat in northern Iran.

**FSU-WESTERN:** An early-season snowstorm tracked across southern Ukraine into parts of southern Russia, halting late-season harvest activities.

**EASTERN ASIA:** Cool, dry weather eased winter wheat toward dormancy.

**SOUTHEAST ASIA:** Drier weather favored harvesting in Thailand and northern Vietnam.

**SOUTH ASIA:** Dry weather favored winter grains, oilseeds, and cotton harvesting.

**AUSTRALIA:** Hot, dry weather increased evaporative losses from vegetative summer crops and reservoirs used for irrigation, but spurred winter grain maturation and harvesting.

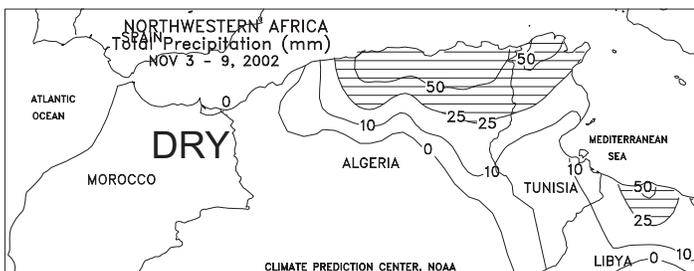
**MEXICO:** Across the main corn belt, late-season showers favored immature corn but slowed early corn harvesting.

**SOUTH AMERICA:** Throughout Brazil and Argentina, showers increased moisture for summer crops but hampered fieldwork.



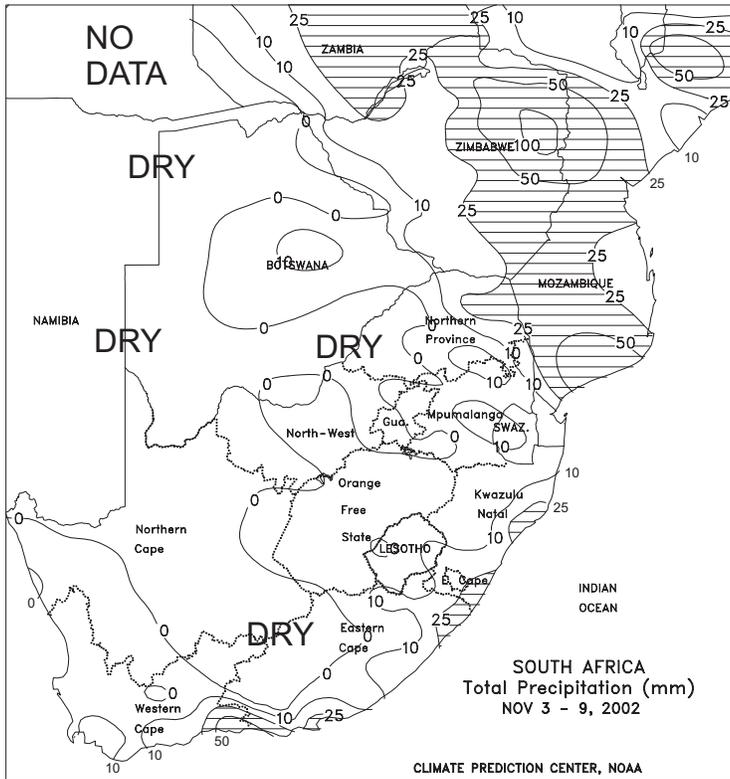
### EUROPE

Widespread rain (25-75 mm) covered most of England, France, and the Benelux countries, boosting moisture supplies for germinating to vegetative winter grains and oilseeds. The rain, however, delayed late-season fieldwork and caused local flooding. Precipitation (5-25 mm) diminished somewhat across Germany, where drier weather was needed to alleviate excessively wet soils and favor winter crop establishment. Drier, but cooler weather (less than 10 mm) eased excessive wetness in Poland, especially in the north. Much cooler weather spread across northeastern Europe, with minimum temperatures ranging from -8 to -3 degrees C, hardening winter grains, but causing some burn back of tender vegetation. This was the first widespread hard freeze that ended the growing season from eastern Germany eastward into the Czech Republic, Slovakia, and Poland. Rain (7-20 mm) benefited winter grains and oilseeds across the Czech Republic and Slovakia. In most of northern Europe, drier weather was needed to ensure adequate establishment for winter crops. Unseasonably heavy rain (25-80 mm or more) returned to southeastern Europe, boosting moisture supplies for winter grains, but slowing late winter crop planting and summer crop harvesting. Heavy rain (40-90 mm) delayed cotton harvesting in Greece. In Italy, mostly dry weather favored winter grain and oilseed planting and summer crop harvesting, but topsoils were becoming dry for non-irrigated winter crop germination. Beneficially drier weather prevailed across Iberian Peninsula, favoring winter grain planting. Temperatures averaged 2 to 5 degrees C below normal across eastern Europe, while temperatures averaged 1 to 2 degrees C above normal across the west. Scattered frost prevailed in eastern France, northern Italy, and the highlands of central Spain, while freezing weather was observed in the lower Danube River Valley.



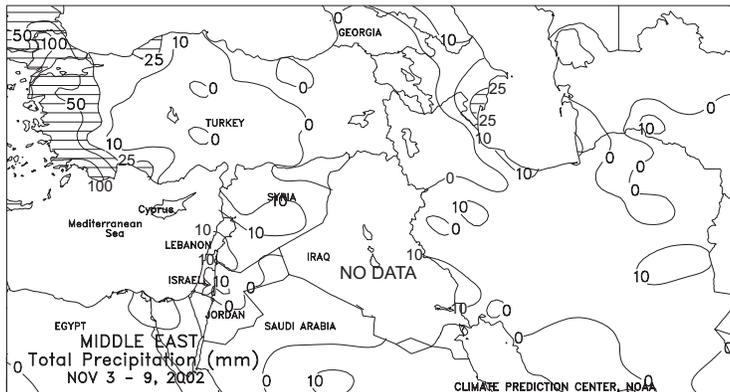
### NORTHWESTERN AFRICA

From central Algeria to northern Tunisia, widespread rain (25-70 mm or more) boosted soil moisture reserves for upcoming winter wheat planting. Dry weather prevailed from extreme western Algeria into Morocco. Early preparations for winter grain planting continued across the region. Temperatures averaged 1 to 3 degrees C below normal across Algeria and Tunisia and 1 to 3 degrees C above normal in Morocco.



**SOUTH AFRICA**

Following 2 weeks of beneficial rainfall, mostly dry weather (less than 3 mm) overspread the corn belt. The drier weather favored fieldwork, including summer crop planting, and was accompanied by cooler weather helping to limit net evaporative losses from germinating to emerging summer crops. Temperatures across the country averaged about 2 to 4 degrees C below normal, with maximum temperatures mostly in the upper 20s degrees C in the corn belt. Nevertheless, more rain was needed across the corn belt to eliminate soil moisture deficits following below-normal rainfall in recent months. Farther south, light showers (2-9 mm) in Western Cape caused temporary delays in winter grain harvesting.



**MIDDLE EAST**

In extreme western Turkey, unseasonably heavy rain (25-80 mm or more) slowed cotton harvesting. Elsewhere in Turkey, mostly dry weather favored winter wheat planting and germination and cotton harvesting. Light rain (5-30 mm) brought some relief from dryness to the southern Mediterranean Sea coast of Turkey, but more rain was still needed. In Syria, Lebanon, Israel, and Jordan, light rain (2-16 mm) provided some moisture for rainfed winter wheat. In northwestern Iran, mostly dry weather continued to reduce moisture supplies for winter wheat germination and establishment. Temperatures averaged 1 to 4 degrees C above normal across the whole region, increasing moisture demands on irrigated crops.

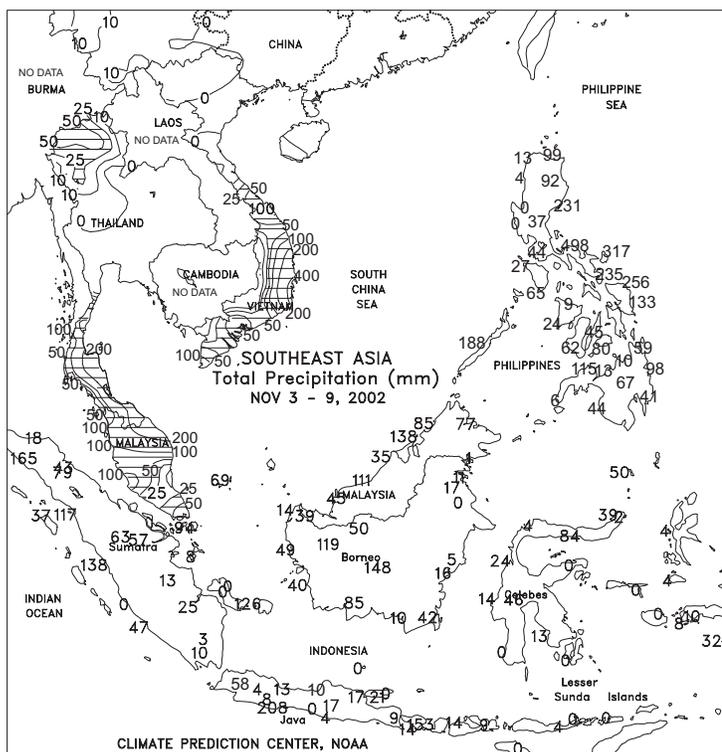


**FSU-WESTERN**

Unsettled weather prevailed throughout most of the region, as a series of storms brought widespread precipitation along with a steady decline in temperatures. In most areas, weekly precipitation amounts ranged from 5 to 40 mm (liquid equivalent), with the greatest amounts of moisture (25-50 mm or more) falling from Moldova and the southern Ukraine, northeastward into the Volga Region in Russia. From November 5-6, an early-season snowstorm tracked across southern Ukraine into parts of southern Russia, halting late-season harvesting. Farther north, light to moderate snow fell from the Baltics and Belarus, eastward across northern Russia, providing a fresh snow cover over dormant winter grains. By week's end, a shallow to moderate snow cover existed over winter grain areas in most of Russia, Moldova, and Ukraine. Unseasonably cold weather prevailed throughout most areas, with weekly temperatures averaging 1 to 5 degrees C below normal. Furthermore, weekly temperatures averaged well below 5 degrees C at most locations in Ukraine and the northern half of the Southern Region in Russia, halting winter wheat growth and prompting further cold-hardening in crops. Due to the fresh snow cover, extreme minimum temperatures fell between -10 and -5 degrees C as far south as southern Ukraine. In major cotton-producing areas of Central Asia, unseasonably warm, dry weather continued the favorable weather pattern prevailing over the region, aiding the cotton harvest.

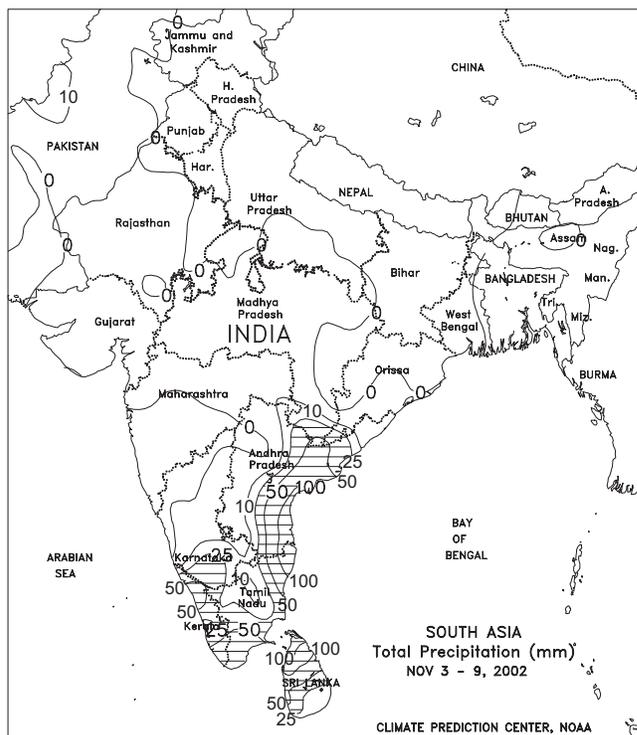
**EASTERN ASIA**

Dry weather dominated China and the Korean Peninsula, aiding autumn fieldwork. On the North China Plain, seasonably low temperatures (freezing temperatures at nearly all locations) eased winter wheat toward dormancy, with temperatures averaging 5 degrees C in the more northerly growing areas. In southern China, main-season rice harvesting progressed well, but near- to below-normal temperatures slowed growth rates of sugarcane along the coast. In Japan, moderate to heavy rain (25-50 mm or more) fell along northern and western coastal areas of Honshu and Hokkaido, slowing final harvests of rice and other summer crops.



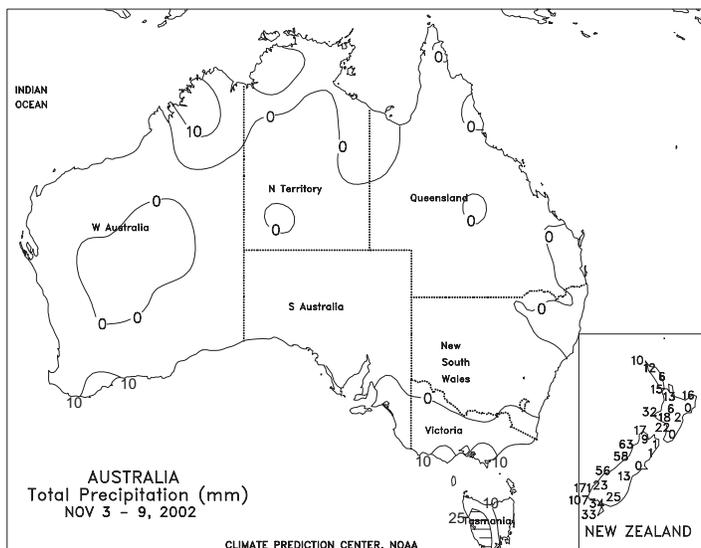
**SOUTHEAST ASIA**

Seasonably dry weather eased wetness in Thailand and allowed main-season rice harvesting to continue. In northern Vietnam, dry weather favored 10<sup>th</sup> month rice harvesting, while to the south, heavy showers (50-100 mm) increased moisture supplies for rice. Showers (25-400 mm or more) fell throughout the Philippines. The heaviest rain fell in the east, specifically in southern Luzon. The showers slowed fieldwork. Light rain (10-25 mm) fell in Java, Indonesia, as transplanting of main-season rice continues to be delayed. Heavy showers (50-100 mm) increased moisture supplies for oil palm in peninsular Malaysia and Sumatra.



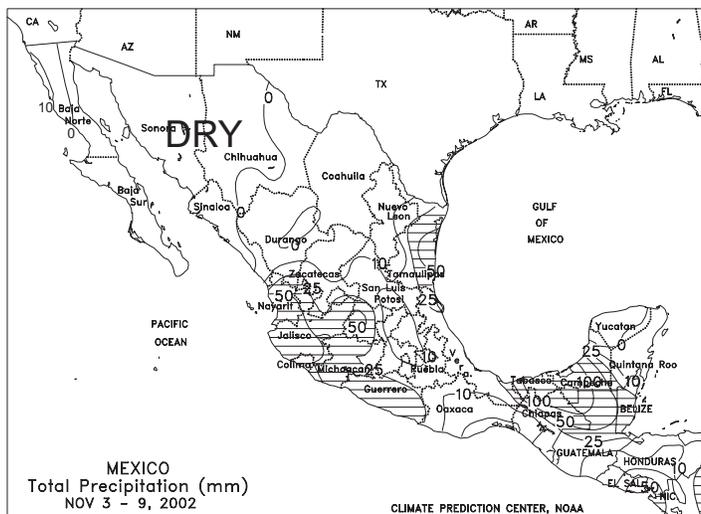
**SOUTH ASIA**

Seasonably dry weather dominated the region, with showers (25-100 mm or more) confined to coastal rice areas over southern India. The dry weather favored drydown and harvesting of summer grains, oilseeds, and cotton. In the east, the slow retreat of floodwaters fostered winter-grown rice planting in Bangladesh and neighboring sections of India. Winter wheat and oilseed planting progressed across northern Pakistan and India.



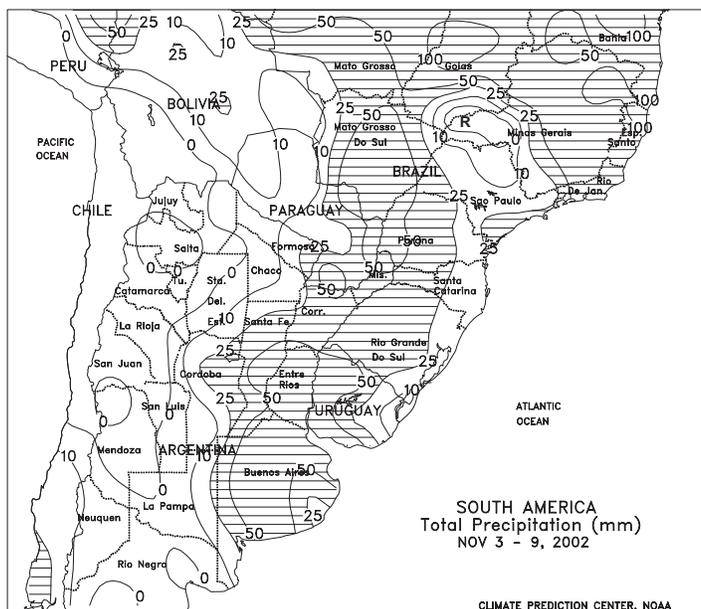
**AUSTRALIA**

Hot, mostly dry weather continued to prevail across much of southern and eastern Australia, providing little relief to drought-stressed winter grains and summer crops. In southern Queensland and northern New South Wales, showers (less than 5 mm) were much too light to significantly reduce evaporative losses from vegetative summer crops and reservoirs used for irrigation. Similar weather in southern New South Wales, northern Victoria, and South Australia stressed winter grains still filling but had little impact on those crops further along in development awaiting harvesting. Farther west, last week's showers in Western Australia were replaced by hot, dry weather, spurring winter grain maturation and harvesting. Temperatures averaged about 2 to 4 degrees C above normal in most areas, with maximum temperatures in the lower to middle 30s degrees C. In New Zealand, showers (5-15 mm) in some areas delayed fieldwork, while dry weather prevailed elsewhere.



**MEXICO**

Widespread, late-season showers (10-75 mm) covered the Southern Plateau, especially across the western corn belt. The rain favored immature corn and recently planted winter wheat but slowed early corn harvesting. The heaviest rain (greater than 100 mm) fell across coastal areas of Michoacan and Guerrero, causing local flooding. Light to moderate showers (10-50 mm) fell elsewhere across eastern Mexico, slowing fieldwork but boosting moisture supplies for winter crops. Very heavy rain (100 - 200 mm) fell in parts of Tabasco, causing flooding and slowing sugarcane fieldwork. Temperatures averaged 1 to 3 degrees C above normal across most of Mexico, aiding maturing summer crops.



**SOUTH AMERICA**

In Brazil, soaking rain (25-100 mm or more) further improved summer crop prospects in recently dry crop areas of Mato Grosso, Goias, and Minas Gerais. The rainfall helped to bring temperatures down to more seasonable levels, but highs in the middle 30s degrees C returned to the region by week's end. Dry, seasonably warm weather returned to coffee and citrus areas of Minas Gerais and Sao Paulo, increasing crop moisture demands following last week's beneficial rainfall. Moderate showers (25 mm or more) increased moisture reserves for summer crop establishment in the southwestern growing areas (Mato Grosso do Sul and Parana) but maintained unfavorably wet conditions in Rio Grande do Sul for summer crop planting and winter wheat harvesting. According to independent analyst Safras e Mercado, soybeans were 29 percent planted as of November 8, compared with 32 percent last year and the 5-year average of 30 percent. In Argentina, heavy rain (50-100 mm or more) returned to previously wet crop areas from Buenos Aires northward through Entre Rios, hampering summer crop planting. However, mostly dry weather (rainfall less than 10 mm in most areas) in western and northern crop areas spurred fieldwork following last week's favorable rainfall. Temperatures averaged 1 to 2 degrees C below normal throughout Argentina's northern crop areas, but temperatures stayed above freezing in southern sections of the winter wheat belt. According to reports from Argentina, winter wheat was 5 percent harvested as of November 9. In addition, corn, soybeans, and sunflowers were 69, 20, and 63 percent planted, respectively, as of November 9.

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