

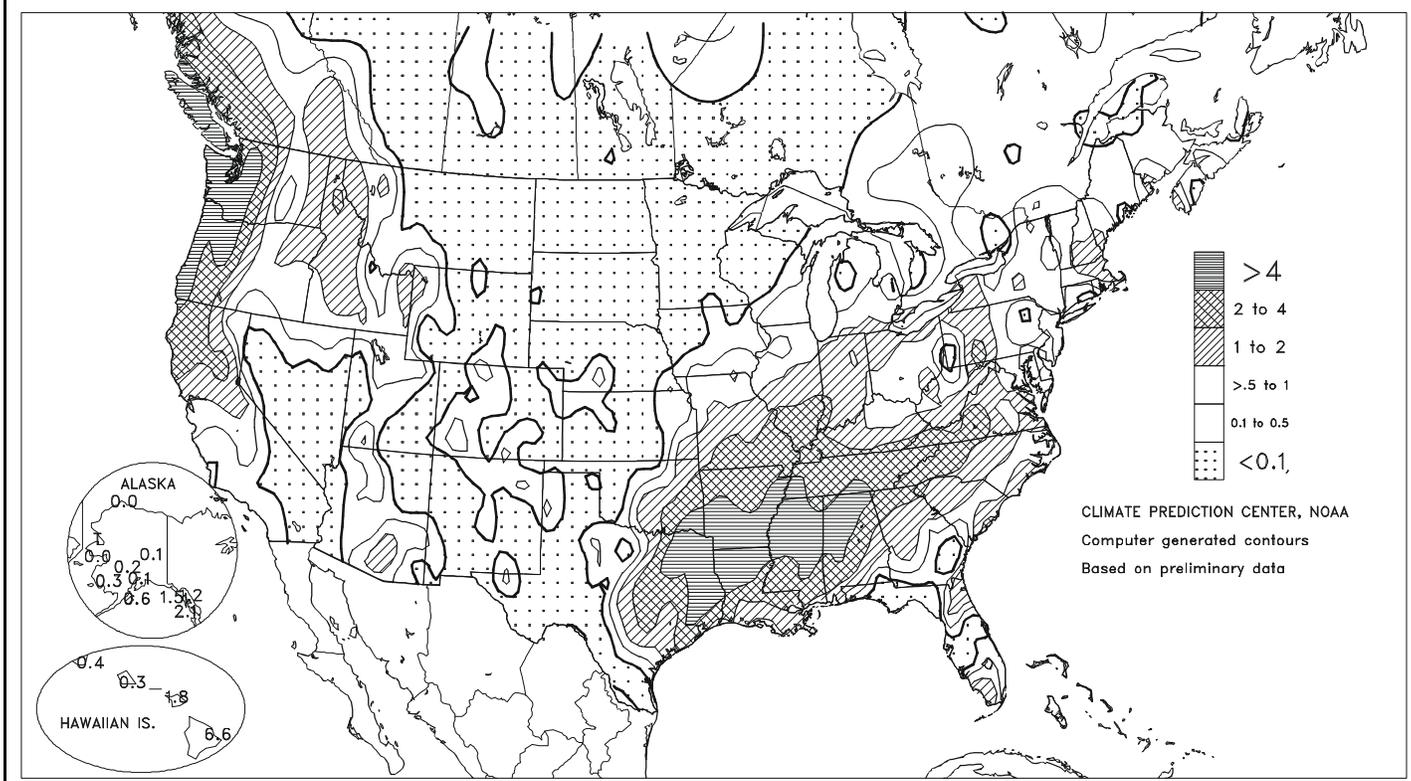
# WEEKLY WEATHER AND CROP BULLETIN

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

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

Total Precipitation (Inches)

DEC 9 - 15, 2001



## HIGHLIGHTS

December 9 - 15, 2001

Highlights provided by USDA/WAOB

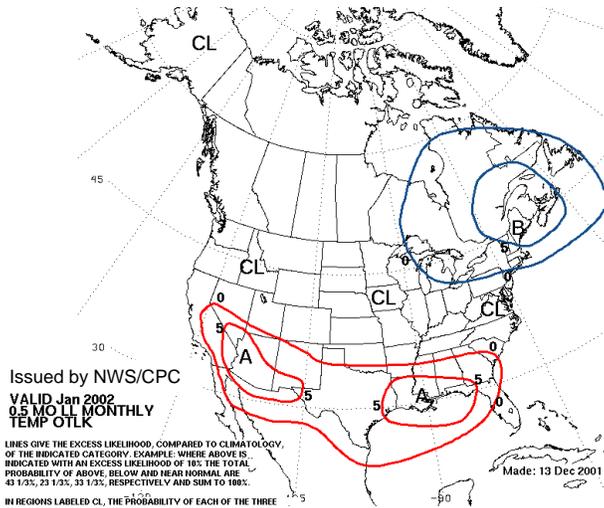
**H**eavy rainfall returned to the **South** during the mid- to late-week passage of two storm systems, bringing renewed lowland flooding to areas from **eastern Texas to the lower Ohio Valley** and submerging some winter wheat fields. Among the hardest hit areas was the **Delta**, where generally 4 to 6 inches of rain fell on top of 6- to 15-inch totals in late November. Meanwhile, drought-easing precipitation overspread the **East**, but largely bypassed the **southern Atlantic Coastal Plain** where unfavorably dry conditions maintained the threat of wildfire activity and continued to stress winter grains. In contrast, more than 2 inches of rain soaked the previously dry **southern**  
*(Continued on page 3)*

## Contents

<b>January &amp;</b>	
<b>January-March Outlooks</b> .....	2
Temperature Departure &	
Extreme Minimum Temperature Maps .....	3
Weather Data for the Delta and Bootheel &	
<b>U.S. Crop Production Highlights</b> .....	4
National Weather Data for Selected Cities .....	5
National Agricultural Summary &	
Snow Cover Map .....	8
International Weather and Crop Summary &	
<b>November Temperature/Precipitation Maps</b> ....	9
Subscription Information &	
December 11 Drought Monitor .....	24

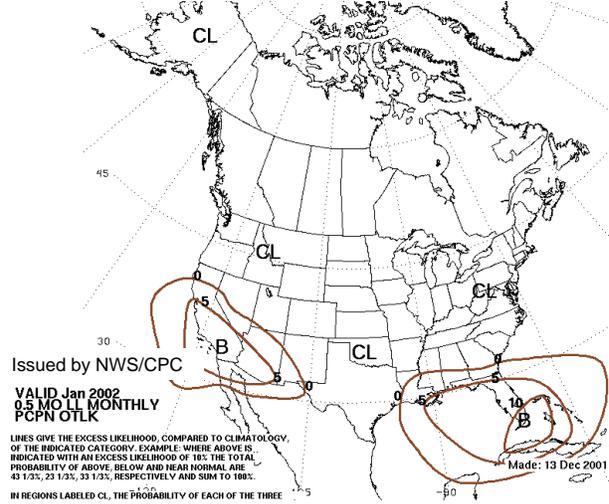
# Monthly Temperature & Precipitation Outlook

Temperature Outlook: January 2002



Above-normal temperatures (A) are expected from the Southwest eastward across the southern Plains and into the Southeast. Meanwhile, below-normal temperatures will likely develop in the Northeast. For the remainder of the United States, there are no strong indications for above- or below-normal temperatures. Therefore, climatology (CL) is forecast.

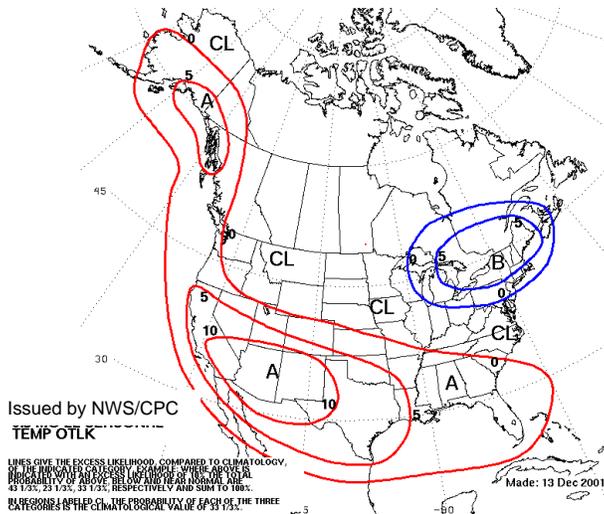
Precipitation Outlook: January 2002



Below-normal precipitation (B) is expected accompany the warmer-than-normal conditions in portions of the Southwest as well as the eastern Gulf Coast states, including Florida. For the rest of the United States, there are no strong forecast indicators for above- or below-normal precipitation, so climatology (CL) is forecast.

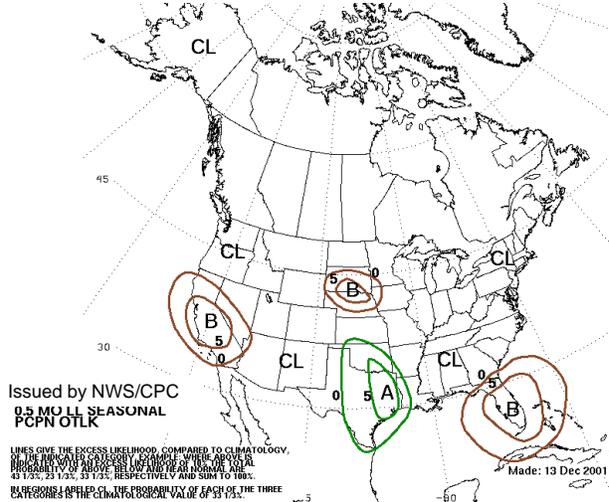
# Seasonal Temperature & Precipitation Outlook

Temperature Outlook: January - March 2002



Seasonal forecasts reflect ENSO-neutral conditions (weak or non-existent El Niño or La Niña). Above-normal (A) temperatures should expand to encompass much of the southern United States, the central and southern Rockies, and the Great Basin. In addition, above normal temperatures will spread northward along the Pacific coast, including southern Alaska. Below-normal temperatures (B) will likely persist in the Northeast, but expand into portions of the Great Lakes and Mid Atlantic. Climatology (CL) is forecast for the rest of the country since forecast indicators favor neither above- nor below-normal temperatures.

Precipitation Outlook: January - March 2002



Seasonal forecasts reflect ENSO-neutral conditions (weak or non-existent El Niño or La Niña). An area of above-normal (A) precipitation is forecast across the southern Plains. Meanwhile, below-normal rainfall (B) is forecast for Florida, the western Corn Belt, and California. Climatology (CL) is forecast for the rest of the United States, including Alaska.

(Continued from front cover)

**Atlantic Coastal Plain**, where unfavorably dry conditions maintained the threat of wildfire activity and continued to stress winter grains. In contrast, more than 2 inches of rain soaked the previously dry **southern Appalachians**. Farther west, unusually mild weather (6 to 14°F above normal) prevailed across the **Corn Belt**. However, showery conditions prevailed in soft red and white winter wheat areas from the **Ohio Valley to the lower Great Lakes region**, leaving some lowlands flooded and some fields with standing water. Mild weather also prevailed on the **northern and central Plains**, although winter wheat remained dormant. However, occasional high winds on the drought-affected **northern Plains** maintained an inadequate snow cover for protection against potential cold weather and caused localized soil erosion. Across the **southern half of the Plains**, meanwhile, significant precipitation was confined to easternmost wheat areas, leaving pockets of dryness in **Kansas and Oklahoma**. In the **West**, colder air edged into **California** by week's end, bringing a minor freeze to **San Joaquin Valley** citrus areas. **San Joaquin Valley** low temperatures generally ranged from 28 to 32°F on December 16. Cold weather also prevailed in the **Southwest**, where weekly temperatures averaged as much as 10°F below normal. Farther north, wet weather continued to ease long-term drought and boost high-elevation snow packs in **northern California**, the **Great Basin**, the **Pacific Northwest**, and the **northern Rockies**.

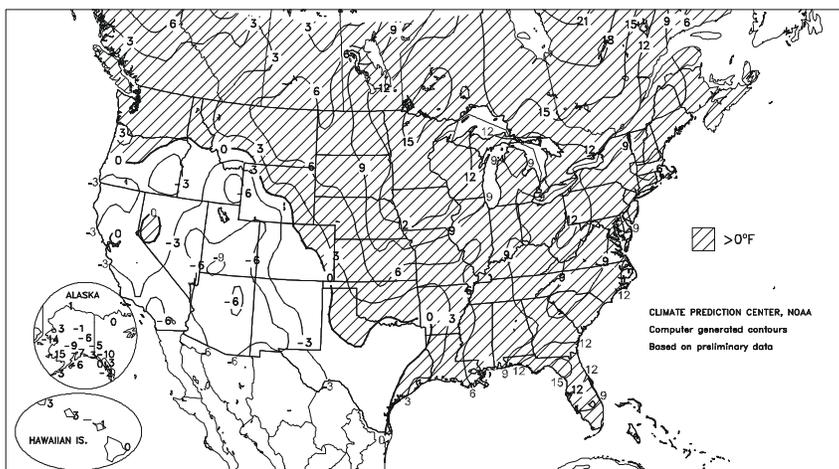
Record warmth was most persistent in the **Southeast**, where **Tampa, FL**, posted a daily-record high of 85°F on December 12. In fact, Tampa broke their December record of 12 consecutive high at or above 80°F (set in 1971 and 1972), attaining at least 80°F on each of the first 15 days of the month. Meanwhile, streaks of above-normal average temperatures reached 49 days (October 28 - December 15) in **Minneapolis, MN**, and 46 days (October 31 - December 15) in **Marquette, MI**. Temperatures in **Des Moines, IA**, averaged 40.3°F during the first 15 days of the month, on a pace to break their December 1889 record of 39.6°F. In **Chicago, IL**, high temperatures reached 40°F on every autumn day through December 13 (the high only reached 38°F on December 14), breaking their record set in 1963, when the high first failed to reach 40°F on December 2. Several **Midwestern** locations, including **Madison, WI**, set or extended records for their latest first measurable snowfall. **Madison's** previous record was set on December 15, 1999, when a 0.9-inch snowfall marked their first accumulation of the season.

In contrast, heavy snow continued to accumulate across the **West**. Early- to midweek snowfall totaled 16 inches at the north rim of the **Grand Canyon, AZ**. Farther north, 48-hour snowfall totals from December 12-14 were estimated as high as 45.0 inches at **Elk Butte in Clearwater County, ID**, and 28.5 inches at **Twin Lakes in Ravalli County, MT**. According to the California Department of Water Resources, the water equivalent of the **Sierra Nevada** snow pack climbed to 12 inches (nearly 140 percent of normal) by December 15, up from about 5 inches at the end of November. Meanwhile in **Seattle, WA**, the October 1 - December 15 precipitation total, 16.51 inches (138 percent of normal), exceeded their October 2000 - March 2001 sum of 16.28 inches (58 percent). High winds accompanied the **Western** storminess, resulting in peak gusts to 79 mph in **Florence, OR**, on December 13, and 54 mph in **Red Bluff, CA**, on December 14.

Farther east, 24-day (November 24 - December 17) rainfall in **western Tennessee** reached 20.03 inches in **Memphis** and 17.93 inches in **Dyersburg**. In **Arkansas**, **Little Rock** netted 3.68 inches on December 16, their highest 1-day total since August 18, 1997. The rain also boosted **Little Rock's** yearly total above their annual normal of 49.25 inches for the first time since 1997. Elsewhere in **Arkansas**, **Texarkana** noted consecutive daily-record rainfalls on December 15 and 16, totaling 4.96 inches.

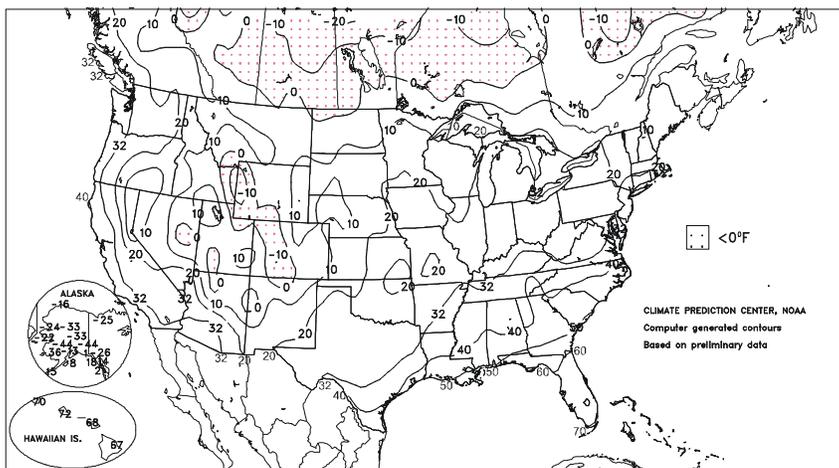
Departure of Average Temperature from Normal (°F)

DEC 9 - 15, 2001



Extreme Minimum Temperature (°F)

DEC 9 - 15, 2001



Late in the week, a storm system departed the **Great Lakes and Northeastern States**, leaving a band of generally light snow and gusty winds. Storm-total (December 14-15) snowfall reached 3.0 inches in **Springfield, IL**, and 4.5 inches in **Burlington, VT**. Peak wind gusts in the storm's wake reached 58 mph in **Columbus, OH**. Before cooler air arrived in the **East**, Friday's highs of 78°F in **Charleston, SC**, and 75°F in **Norfolk, VA**, were among more than a dozen daily records. Meanwhile, cold air settled into the **West** at week's end, resulting in a daily-record low (-10°F on December 15) in **Eureka, NV**. A day later, a minor freeze struck **California's San Joaquin Valley**, where low temperatures included 28°F in **Delano** and 31°F in **Bakersfield**.

Cold weather (as much as 15°F below normal) intensified across **southern and western Alaska**, but near-normal temperatures returned elsewhere. Heavy snow preceded the arrival of bitterly cold conditions in **southwestern Alaska**, where **King Salmon** received 9.1 inches of snow from December 8-12, followed by a daily-record low of -35°F on December 15. In **Anchorage, AK**, temperatures fell below 0°F on 10 of the first 15 days in December, including a low of -13°F on December 14, following a record-setting 682-day spell (January 18, 2000 - November 30, 2001) without sub-zero cold. Meanwhile, a disturbance drifted westward across the **Hawaiian islands**, triggering locally heavy showers. Some of the heaviest precipitation fell on December 12-13, when 24-hour totals on the **Big Island** reached 3.45 inches in **Glenwood** and 2.75 inches in **Pihonua**. Elsewhere, rainfall during the same period included 2.36 inches in **Pukalani, Maui**, and 1.67 inches at **Wheeler Air Force Base on Oahu**.

**Weather Data for Selected Locations in the Delta and the Bootheel**

**Weather Data for the Week Ending December 15, 2001**

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 Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
MS BATESVILLE <sup>x</sup>	57	43	65	33	50	6	4.53	3.24	2.30	6.57	241	62.46	122	--	--	0	0	3	2	
CLARKSDALE <sup>x</sup>	54	42	63	38	48	3	5.62	4.43	3.00	7.72	303	--	--	--	--	0	0	2	2	
CLEVELAND <sup>x</sup>	58	42	66	38	50	4	4.04	2.92	1.95	4.98	213	62.86	138	--	--	0	0	6	2	
GREENVILLE <sup>x</sup>	58	43	65	38	51	3	5.43	4.33	2.32	6.81	268	64.56	134	--	--	0	0	3	3	
GREENWOOD <sup>x</sup>	60	43	68	34	52	5	5.17	4.03	3.63	5.89	238	62.10	130	--	--	0	0	3	2	
INDIANOLA 1S	57	45	65	39	51	--	4.33	--	2.53	5.20	--	64.64	--	56	51	0	0	4	2	
INVERNESS 5E	59	47	67	40	53	--	5.19	--	2.99	6.40	--	59.24	--	57	52	0	0	3	2	
LYON	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MOORHEAD <sup>x</sup>	60	47	68	42	54	7	4.49	3.16	2.32	5.15	181	57.11	116	--	--	0	0	2	2	
ONWARD	59	46	69	38	53	--	4.42	--	3.72	4.86	--	54.14	--	58	55	0	0	3	2	
ROLLING FORK <sup>x</sup>	60	44	68	39	52	5	4.23	3.04	3.42	4.23	159	48.18	99	--	--	0	0	3	2	
SCOTT	57	44	67	39	51	--	4.96	--	2.91	5.92	--	--	--	55	50	0	0	2	2	
SIDON	59	47	67	41	53	--	4.77	--	3.26	5.85	--	51.70	--	59	51	0	0	3	2	
TUNICA <sup>x</sup>	56	41	63	36	49	5	5.15	3.83	2.48	6.17	224	55.73	116	--	--	0	0	4	3	
TUNICA 1W	55	41	63	34	48	--	4.76	--	2.52	5.69	--	54.17	--	53	49	0	0	3	2	
VANCE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
VICKSBURG <sup>x</sup>	61	46	74	38	54	4	4.72	3.46	1.63	4.72	175	71.75	140	--	--	0	0	4	3	
YAZOO CITY <sup>x</sup>	61	47	70	38	54	5	5.34	3.94	4.64	5.34	178	61.25	118	--	--	0	0	3	2	
STONEVILLE <sup>*</sup>	57	44	65	39	51	5	5.34	4.06	2.67	6.94	241	68.57	139	58	51	0	0	4	2	
MO CARDWELL	53	40	59	31	46	5	2.47	1.36	1.07	3.81	159	40.03	80	53	49	0	1	4	3	
CHARLESTON	52	40	58	31	45	6	1.72	0.60	0.74	3.13	127	38.50	81	51	45	0	2	4	2	
CLARKTON	52	39	57	30	45	6	2.49	1.80	0.95	4.35	221	43.07	98	--	--	0	3	4	2	
DELTA	51	37	54	26	44	6	1.74	0.78	0.60	2.60	111	34.39	69	48	43	0	3	4	3	
GLENNONVILLE	52	39	58	30	45	6	1.90	1.21	0.75	3.33	169	37.76	86	51	46	0	3	4	2	
PORTAGEVILLE #1	53	41	59	33	47	7	2.00	0.86	0.92	3.77	150	42.98	88	53	46	0	0	4	2	
PORTAGEVILLE #2	55	41	66	31	47	7	1.94	0.80	0.97	3.77	150	39.04	80	53	46	0	2	5	1	
STEELE	53	42	59	34	47	6	2.12	0.87	1.15	3.30	120	45.43	90	51	46	0	0	4	1	

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

\* Based on 1964-93 normals.

x Based on 1961-90 normals.

**Delta and Bootheel Weather and Crop Summary:** The Delta received rainfall amounts many times the normal, most of which fell during the mid- to late-week period. The heavy rain combined with previously saturated soils to prolong the flooding of many agricultural fields. Despite the wetness, above-normal temperatures prevailed for most of the week. Damage to winter wheat worsened, but the extent was not yet determined.

**U.S. Crop Production Highlights**

The following information was released by USDA's Agricultural Statistics Board on December 11, 2001. Forecasts refer to December 1.

**All cotton** production is forecast at 20.1 million 480-pound bales, down 1 percent from last month, but up 17 percent from 2000. The yield is expected to average 691 pounds per harvested acre, up 6 pounds from last month. Survey and ginnings data indicated decreased production forecasts in Alabama, California, Mississippi, and Texas, which more than offset increased production forecasts in Arkansas, Missouri, South Carolina, Tennessee, and Virginia. The increase in yield resulted from a decrease in Texas harvested acreage.

The **all orange** forecast for the 2001-02 crop is 12.5 million tons, unchanged from the October 1 forecast, but up 1 percent from last season's final utilization. Florida's all orange forecast remains at 231 million boxes (10.4

million tons), 3 percent higher than the previous season. Autumn weather conditions have been warm and dry, affecting fruit sizing. Early and midseason varieties in Florida are forecast at 131 million boxes (5.9 million tons), the same as the October forecast. If realized, this production will be 2 percent higher than last season. Fruit sizes are expected to be slightly smaller than the 10-season mean. Loss from droppage remains near average. Florida's Valencia forecast is 100 million boxes (4.5 million tons), unchanged from the previous forecast, but 5 percent higher than last season's final utilization. Fruit sizes are slightly below the mean. Loss from droppage is greater than the past two seasons but remains below the average. Arizona, California, and Texas orange production forecasts are carried forward from October.

National Weather Data for Selected Cities

Weather Data for the Week Ending December 15, 2001

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

STATES AND STATIONS	TEMPERATURE EF						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. EF		PRECIP		
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
AL	BIRMINGHAM	60	47	67	38	54	8	3.88	2.73	2.59	3.88	160	65.75	127	98	67	0	0	4	3
	HUNTSVILLE	58	46	64	39	52	8	4.30	2.96	3.56	4.79	169	62.09	115	93	73	0	0	4	2
	MOBILE	68	53	75	47	60	6	1.23	0.02	0.80	1.27	50	53.12	87	96	82	0	0	3	1
	MONTGOMERY	63	50	69	38	57	7	1.66	0.47	0.77	1.68	67	46.02	91	10	82	0	0	4	2
AK	ANCHORAGE	16	4	29	-13	10	-7	0.12	-0.13	0.07	0.12	23	13.59	89	83	72	0	7	3	0
	BARROW	-6	-13	3	-16	-9	2	0.00	-0.03	0.00	0.01	17	4.97	113	83	81	0	7	0	0
	FAIRBANKS	-4	-20	9	-33	-12	-6	0.06	-0.13	0.05	0.06	15	8.34	80	78	75	0	7	2	0
	JUNEAU	34	28	36	14	31	3	1.17	0.18	0.31	2.47	116	57.17	110	97	93	0	7	6	0
	KODIAK	31	19	38	8	25	-6	0.62	-0.89	0.31	1.23	39	69.74	109	79	66	0	7	3	0
	NOME	2	-15	16	-22	-6	-14	0.00	-0.19	0.00	0.00	0	12.69	88	69	63	0	7	0	0
AZ	FLAGSTAFF	34	6	47	-8	20	-10	0.48	-0.07	0.28	0.85	73	17.13	79	89	41	0	7	4	0
	PHOENIX	57	42	72	36	50	-4	0.34	0.12	0.32	0.89	189	6.73	94	80	54	0	0	2	0
	TUCSON	55	36	68	27	46	-6	0.53	0.28	0.35	0.61	122	7.83	69	81	55	0	2	4	0
	YUMA	62	42	72	38	52	-5	0.00	-0.11	0.00	0.01	5	3.32	113	57	48	0	0	0	0
AR	FORT SMITH	52	37	55	26	45	4	1.54	0.82	0.61	1.92	118	36.88	93	99	68	0	3	5	1
	LITTLE ROCK	54	38	57	32	46	2	3.62	2.48	2.31	4.56	184	46.88	97	97	70	0	1	5	2
CA	BAKERSFIELD	53	36	56	33	45	-3	0.19	0.05	0.10	0.36	120	7.05	131	86	68	0	0	2	0
	FRESNO	52	37	55	32	44	-2	0.24	-0.06	0.23	0.39	60	10.46	106	90	76	0	1	2	0
	LOS ANGELES	61	47	65	43	54	-3	0.23	-0.13	0.23	0.46	60	18.77	169	63	39	0	0	1	0
	REDDING	53	35	59	29	44	-1	1.98	0.75	1.02	4.73	181	31.58	104	87	64	0	3	3	1
	SACRAMENTO	55	40	59	36	48	2	0.65	0.11	0.10	2.63	229	17.61	109	90	47	0	0	3	1
	SAN DIEGO	60	47	63	45	54	-4	0.12	-0.24	0.08	0.26	34	8.33	92	81	59	0	0	2	0
	SAN FRANCISCO	55	45	57	42	50	0	0.89	0.22	0.71	4.37	314	21.98	122	81	68	0	0	3	1
	STOCKTON	55	38	57	33	47	2	0.51	0.05	0.48	1.58	161	12.00	94	83	67	0	0	2	0
CO	ALAMOSA	32	1	39	-5	17	-1	0.02	-0.09	0.02	0.02	8	9.76	132	85	57	0	7	1	0
	CO SPRINGS	46	17	55	9	32	2	0.00	-0.11	0.00	0.00	0	14.94	93	74	21	0	7	0	0
	DENVER INTL	44	20	57	9	32	***	0.12	***	0.08	0.12	***	15.31	***	80	34	0	7	2	0
	GRAND JUNCTION	34	18	38	13	26	-4	0.09	-0.05	0.05	0.26	87	8.35	100	90	71	0	7	2	0
	PUEBLO	48	9	60	-3	28	-4	0.04	-0.07	0.04	0.04	17	11.47	104	79	39	0	7	1	0
CT	BRIDGEPORT	51	36	57	26	43	8	0.34	-0.46	0.23	0.77	44	34.07	85	87	72	0	3	2	0
	HARTFORD	44	28	52	18	36	6	0.65	-0.25	0.33	0.81	42	32.45	77	96	82	0	5	4	0
DC	WASHINGTON	56	43	67	35	49	9	0.51	-0.21	0.36	1.08	70	29.59	80	91	69	0	0	4	0
DE	WILMINGTON	55	38	63	27	46	9	0.58	-0.22	0.18	1.17	68	33.05	85	95	65	0	3	6	0
FL	DAYTONA BEACH	81	65	84	63	73	12	0.05	-0.53	0.05	0.12	10	58.06	125	10	68	0	0	1	0
	JACKSONVILLE	74	63	80	58	69	13	2.29	1.70	2.25	2.63	214	48.67	98	10	82	0	0	4	1
	KEY WEST	82	74	83	71	78	6	0.36	-0.10	0.35	1.39	136	45.30	117	89	75	0	0	2	0
	MIAMI	83	72	84	71	77	8	0.02	-0.39	0.02	1.78	196	70.60	128	88	66	0	0	1	0
	ORLANDO	83	65	84	62	74	11	0.02	-0.48	0.01	0.10	9	54.94	117	10	64	0	0	2	0
	PENSACOLA	70	57	79	52	64	10	0.15	-0.80	0.13	0.21	11	45.41	76	94	76	0	0	2	0
	TALLAHASSEE	74	61	81	57	68	14	0.04	-1.10	0.02	0.14	6	62.87	100	99	81	0	0	3	0
	TAMPA	83	70	85	67	76	13	0.00	-0.50	0.00	0.16	15	39.05	91	99	66	0	0	0	0
	WEST PALM	82	70	83	66	76	8	0.41	-0.16	0.25	1.46	110	65.40	110	93	72	0	0	2	0
GA	ATHENS	63	47	71	42	55	9	0.59	-0.32	0.53	0.59	31	38.79	82	98	79	0	0	4	1
	ATLANTA	61	47	72	42	54	9	0.86	-0.10	0.55	0.86	42	37.44	77	96	78	0	0	5	1
	AUGUSTA	66	50	75	42	58	10	0.83	0.09	0.79	0.84	55	33.45	78	97	66	0	0	4	1
	COLUMBUS	65	50	75	43	58	9	0.69	-0.43	0.47	0.71	30	37.50	78	97	67	0	0	5	0
	MACON	66	50	74	43	58	9	0.96	0.00	0.88	1.07	55	46.68	110	96	67	0	0	4	1
	SAVANNAH	70	57	80	49	64	12	0.16	-0.49	0.16	0.34	26	31.33	66	98	74	0	0	1	0
HI	HILO	77	68	80	67	73	1	6.64	3.83	3.67	11.14	179	109.8	89	91	81	0	0	7	4
	HONOLULU	81	73	83	72	77	3	0.34	-0.51	0.18	0.34	19	8.73	44	76	69	0	0	3	0
	KAHULUI	78	70	80	68	74	1	1.82	1.12	1.26	2.13	145	9.69	51	82	75	0	0	6	1
	LIHUE	79	72	80	70	76	3	0.37	-0.76	0.10	1.03	42	28.99	72	82	74	0	0	6	0
ID	BOISE	35	24	42	20	30	-1	0.43	0.13	0.35	0.94	142	8.28	73	89	74	0	7	4	0
	LEWISTON	41	31	46	27	36	1	0.17	-0.11	0.08	0.41	69	10.65	90	87	72	0	5	3	0
	POCATELLO	26	13	35	7	20	-5	0.22	-0.03	0.18	0.94	177	6.97	60	91	82	0	7	4	0
IL	CHICAGO/O'HARE	44	29	48	22	36	8	0.51	-0.08	0.42	0.54	42	45.31	131	92	68	0	6	3	0
	MOLINE	44	27	50	19	36	9	0.33	-0.19	0.29	0.43	37	39.72	105	91	67	0	6	3	0
	PEORIA	44	30	48	21	37	9	0.46	-0.11	0.35	0.59	46	36.94	105	95	74	0	6	3	0
	ROCKFORD	43	28	48	20	35	10	0.49	0.01	0.47	0.59	55	36.68	104	92	71	0	6	3	0
	SPRINGFIELD	45	30	48	20	37	6	0.60	-0.05	0.48	0.68	48	33.60	99	95	75	0	5	2	0
IN	EVANSVILLE	51	35	58	26	43	7	1.59	0.73	0.88	2.41	129	45.22	109	98	77	0	3	3	2
	FORT WAYNE	46	31	53	23	39	9	1.15	0.47	0.82	1.20	82	42.29	127	95	72	0	4	3	1
	INDIANAPOLIS	47	34	54	26	41	9	1.40	0.62	0.98	1.57	92	40.46	106	94	74	0	3	3	1
	SOUTH BEND	45	30	49	23	38	8	0.76	-0.01	0.49	0.85	51	37.41	100	92	72	0	4	4	0
IA	BURLINGTON	45	30	48	21	37	9	0.39	-0.08	0.36	0.48	46	38.16	109	93	61	0	5	3	0
	CEDAR RAPIDS	46	28	51	18	37	13	0.40	0.02	0.35	0.59	70	35.25	107	91	57	0	5	3	0
	DES MOINES	46	29	53	23	37	11	0.20	-0.11	0.19	0.64	93	28.13	87	85	68	0	6	2	0
	DUBUQUE	41	27	47	18	34	11	0.64	0.17	0.60	0.95	90	34.43	92	90	71	0	6	2	1
	SIoux CITY	48	26	53	17	37	14	0.00	-0.19	0.00	0.12	29	30.24	119	84	67	0	6	0	0
	WATERLOO	44	26	51	19	35	13	0.08	-0.23	0.07	0.30	43	34.34	104	90	70	0	5	2	0
KS	CONCORDIA	51	30	56	23	41	10	0.06	-0.13	0.04	0.06	14	27.20	96	78	61	0	5	2	0
	DODGE CITY	52	25	58	18	39	6	0.03	-0.12	0.03	0.03	9	18.35	87	86	41	0	6	1	0
	GOODLAND	50	22	61	12	36	6	0.38	0.29	0.25	0.38	173	16.76	93	76	54	0	7	2	0
	TOPEKA	50	32	56	23	41	9	0.15	-0.18	0.08	0.15	20	42.72	124	82	62	0	4	2	0

Based on 1961-90 normals

## Weather Data for the Week Ending December 15, 2001

STATES AND STATIONS	TEMPERATURE EF						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. EF		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
KY	WICHITA	50	31	58	21	41	7	0.06	-0.22	0.05	0.08	13	24.49	85	86	62	0	4	2	0
	JACKSON	56	43	69	34	49	10	0.98	-0.03	0.37	1.80	83	34.38	72	97	63	0	0	5	0
	LEXINGTON	54	40	62	32	47	10	0.84	-0.09	0.55	1.67	84	39.11	92	93	79	0	1	4	1
	LOUISVILLE	54	40	62	30	47	9	1.10	0.25	0.67	1.94	105	43.33	102	98	75	0	2	3	1
LA	PADUCAH	53	38	60	27	45	7	1.71	0.61	1.01	3.07	130	49.39	105	10	71	0	3	4	2
	BATON ROUGE	67	48	79	41	57	4	2.83	1.57	2.79	2.83	107	60.93	105	97	63	0	0	2	1
	LAKE CHARLES	66	48	76	41	57	3	3.36	2.21	3.06	3.46	143	55.10	106	94	65	0	0	3	1
	NEW ORLEANS	69	54	79	48	62	7	1.03	-0.28	0.91	1.03	37	67.64	115	91	79	0	0	4	1
	SHREVEPORT	58	41	69	33	50	1	4.92	3.98	2.73	5.42	266	58.69	133	96	72	0	0	4	3
ME	CARIBOU	35	20	44	13	28	12	0.16	-0.59	0.16	0.30	18	28.74	82	87	59	0	7	1	0
	PORTLAND	43	26	50	17	34	6	0.65	-0.41	0.28	0.73	31	31.91	76	92	71	0	6	4	0
MD	BALTIMORE	54	39	65	27	47	9	0.57	-0.20	0.34	1.22	74	33.82	87	91	72	0	2	4	0
MA	BOSTON	47	36	57	29	41	6	0.98	0.06	0.57	1.20	60	29.81	75	93	65	0	3	4	1
	WORCESTER	42	31	49	24	37	9	0.87	-0.06	0.40	1.06	52	31.58	69	98	71	0	4	5	0
MI	ALPENA	42	28	48	24	35	10	0.35	-0.12	0.29	1.22	120	26.83	96	96	71	0	6	2	0
	GRAND RAPIDS	42	30	48	26	36	8	0.45	-0.22	0.24	0.65	44	38.98	112	96	75	0	6	3	0
	HOUGHTON LAKE	40	27	45	20	33	9	0.24	-0.21	0.21	0.38	38	28.07	103	96	85	0	6	2	0
	LANSING	43	31	48	23	37	10	0.60	0.04	0.41	0.74	61	31.47	107	95	74	0	4	3	0
	MUSKOGON	43	30	50	25	37	7	0.49	-0.21	0.20	0.70	46	34.29	110	93	77	0	5	3	0
	TRAVERSE CITY	41	27	47	21	34	8	0.20	-0.30	0.20	1.09	103	30.86	108	98	66	0	5	1	0
MN	DULUTH	34	20	40	15	27	13	0.00	-0.28	0.00	0.18	29	29.62	101	90	76	0	7	0	0
	INT'L FALLS	35	15	43	3	25	16	0.00	-0.19	0.00	0.22	54	27.51	115	88	65	0	7	0	0
	MINNEAPOLIS	40	26	47	20	33	14	0.00	-0.25	0.00	0.19	34	33.68	121	86	71	0	7	0	0
	ROCHESTER	38	25	45	16	32	14	0.12	-0.12	0.07	0.99	180	38.69	133	90	79	0	7	3	0
	ST. CLOUD	37	23	45	16	30	15	0.00	-0.19	0.00	0.08	19	28.36	105	92	71	0	7	0	0
MS	JACKSON	63	47	71	40	55	6	2.82	1.47	2.46	2.86	101	61.67	118	96	70	0	0	5	1
	MERIDIAN	64	48	71	38	56	7	3.51	2.12	3.50	3.54	122	67.20	126	98	83	0	0	2	1
	TUPELO	58	44	65	37	51	7	3.87	2.45	3.33	4.58	153	65.63	125	98	82	0	0	4	1
MO	COLUMBIA	47	32	51	23	40	7	1.05	0.46	0.78	1.05	80	40.20	106	91	68	0	3	5	1
	KANSAS CITY	47	32	53	24	40	9	0.75	0.38	0.67	0.76	94	53.48	145	88	65	0	4	2	1
	SAINT LOUIS	49	35	50	27	42	7	1.62	0.90	0.80	1.70	107	33.55	93	90	68	0	3	4	2
	SPRINGFIELD	48	33	51	18	41	5	2.02	1.26	1.09	2.05	122	43.83	105	92	68	0	3	5	2
MT	BILLINGS	39	24	51	18	32	6	0.16	-0.01	0.16	0.16	46	10.95	75	70	41	0	6	1	0
	BUTTE	30	7	39	-2	19	1	0.03	-0.06	0.01	0.06	27	10.59	89	85	50	0	7	3	0
	GLASGOW	35	13	48	5	24	8	0.00	-0.08	0.00	0.00	0	12.70	118	82	67	0	7	0	0
	GREAT FALLS	38	20	44	12	29	4	0.03	-0.16	0.03	0.03	8	9.85	67	75	38	0	7	1	0
	HAVRE	39	14	49	3	27	9	0.01	-0.10	0.01	0.01	4	6.90	63	75	53	0	7	1	0
	KALISPELL	34	17	39	5	25	2	0.14	-0.25	0.12	0.38	47	12.36	79	83	74	0	7	2	0
	MISSOULA	34	22	41	19	28	4	0.17	-0.08	0.13	0.31	60	12.47	97	90	75	0	7	3	0
NE	GRAND ISLAND	48	26	55	18	37	11	0.01	-0.16	0.01	0.04	10	23.05	94	84	60	0	6	1	0
	LINCOLN	50	27	55	17	39	13	0.02	-0.19	0.02	0.19	40	32.09	115	80	56	0	6	1	0
	NORFOLK	48	26	55	13	37	13	0.00	-0.17	0.00	0.01	3	27.49	111	85	55	0	6	0	0
	NORTH PLATTE	45	14	59	4	30	5	0.08	-0.03	0.08	0.08	33	23.72	124	95	46	0	7	1	0
	OMAHA	49	28	55	22	39	13	0.01	-0.23	0.01	0.36	67	28.15	96	83	61	0	6	1	0
	SCOTTSBLUFF	45	17	59	13	31	4	0.00	-0.14	0.00	0.00	0	13.04	87	82	52	0	7	0	0
	VALENTINE	42	18	56	11	30	7	0.00	-0.08	0.00	0.00	0	20.58	114	88	62	0	7	0	0
NV	ELY	29	3	39	-8	16	-10	0.07	-0.10	0.07	0.16	46	6.23	64	84	65	0	7	1	0
	LAS VEGAS	52	34	59	31	43	-3	0.00	-0.08	0.00	0.00	0	3.85	98	53	36	0	3	0	0
	RENO	42	27	51	17	35	2	0.13	-0.09	0.11	1.32	281	3.88	55	73	60	0	7	2	0
	WINNEMUCCA	38	20	47	16	29	-1	0.38	0.19	0.20	0.56	127	4.53	58	89	74	0	7	3	0
NH	CONCORD	41	22	47	12	31	6	0.93	0.19	0.52	1.07	66	30.02	86	98	66	0	7	4	1
NJ	NEWARK	54	39	63	30	46	9	0.25	-0.53	0.13	0.97	57	30.20	72	87	69	0	1	3	0
NM	ALBUQUERQUE	42	25	53	19	34	-2	0.07	-0.04	0.05	0.07	29	6.35	74	74	46	0	7	2	0
NY	ALBANY	42	25	50	17	34	6	0.89	0.21	0.45	1.20	81	28.03	81	96	73	0	5	4	0
	BINGHAMTON	42	28	52	21	35	8	0.53	-0.17	0.37	0.90	59	32.92	93	98	81	0	5	3	0
	BUFFALO	46	32	54	27	39	9	1.02	0.16	0.87	1.08	58	29.75	81	97	68	0	6	4	1
	ROCHESTER	47	30	58	24	38	8	0.87	0.24	0.77	1.01	73	28.47	93	94	68	0	6	4	1
	SYRACUSE	47	31	58	25	39	10	0.77	0.02	0.65	0.96	58	33.09	88	96	67	0	5	4	1
NC	ASHEVILLE	58	43	67	39	51	11	1.37	0.57	1.02	1.38	79	33.51	73	95	79	0	0	4	1
	CHARLOTTE	58	47	68	41	53	10	1.32	0.55	1.25	1.32	80	25.60	62	10	71	0	0	5	1
	GREENSBORO	54	43	67	37	49	8	1.34	0.58	1.28	1.35	84	28.99	71	95	74	0	0	3	1
	HATTERAS	67	56	71	52	62	12	1.24	0.24	0.91	1.44	67	28.56	53	96	76	0	0	6	1
	RALEIGH	58	46	73	41	52	9	1.43	0.71	1.16	1.44	94	34.42	87	90	77	0	0	4	1
	WILMINGTON	70	52	78	44	61	12	1.02	0.21	0.50	1.02	60	37.71	72	99	68	0	0	5	1
ND	BISMARCK	35	16	51	11	25	10	0.00	-0.11	0.00	0.06	25	21.31	140	91	71	0	7	0	0
	DICKINSON	33	16	45	9	25	7	0.00	-0.08	0.00	0.12	67	18.51	116	92	59	0	7	0	0
	FARGO	33	19	39	10	26	13	0.00	-0.14	0.00	0.00	0	20.10	105	90	76	0	6	0	0
	GRAND FORKS	32	10	37	3	21	9	0.00	-0.14	0.00	0.08	27	21.40	119	94	79	0	7	0	0
	JAMESTOWN	33	17	45	9	25	11	0.00	-0.11	0.00	0.05	21	20.16	121	95	70	0	7	0	0
	WILLISTON	30	10	41	-1	20	6	0.00	-0.14	0.00	0.60	222	13.74	103	87	77	0	7	0	0
OH	AKRON-CANTON	49	34	58	27	42	10	0.61	-0.08	0.34	0.77	51	31.34	89	96	80	0	4	4	0
	CINCINNATI	52	36	61	26	44	10	0.64	-0.09	0.37	1.42	89	43.92	110	95	76	0	3	3	0
	CLEVELAND	48	33	57	24	40	8	0.92	0.19	0.75	0.93	59	32.76	93	99	81	0	4	4	1
	COLUMBUS	51	36	61	29	44	11	0.45	-0.22	0.24	0.79	54	34.66	94	96	78	0	3	3	0
	DAYTON	50	34	58	24	42	9	0.81	0.12	0.63	1.10	73	39.67	113	97	74</				

Weather Data for the Week Ending December 15, 2001

STATES AND STATIONS	TEMPERATURE EF						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. EF		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
OK TOLEDO	47	31	54	22	39	10	0.93	0.24	0.66	0.97	64	32.88	104	97	76	0	5	4	1
OK YOUNGSTOWN	49	32	58	24	41	10	0.43	-0.26	0.18	0.50	33	27.89	78	96	75	0	4	4	0
OK OKLAHOMA CITY	51	32	58	23	41	1	0.28	-0.05	0.10	0.30	41	28.46	87	95	67	0	4	4	0
OR TULSA	51	36	55	24	43	3	0.56	0.05	0.20	0.56	48	27.53	70	93	69	0	3	4	0
OR ASTORIA	50	39	54	34	45	2	4.40	2.00	1.79	7.78	151	56.84	93	96	82	0	0	7	4
OR BURNS	31	12	39	2	22	-4	0.33	0.06	0.17	0.73	124	8.09	86	93	78	0	7	5	0
OR EUGENE	48	38	53	34	43	2	1.65	-0.31	1.06	4.23	100	25.53	57	94	85	0	0	7	1
OR MEDFORD	43	34	48	29	38	0	1.13	0.36	0.75	2.82	171	13.51	79	95	78	0	2	7	1
OR PENDLETON	44	32	53	28	38	3	0.28	-0.08	0.12	0.45	56	10.16	91	87	76	0	5	5	0
OR PORTLAND	47	40	53	35	44	3	1.97	0.56	0.78	4.56	153	28.42	86	93	84	0	0	7	1
PA SALEM	48	38	52	34	43	3	2.19	0.63	1.34	5.82	174	31.52	88	95	84	0	0	7	1
PA ALLENTOWN	51	32	60	21	42	9	0.45	-0.35	0.22	0.46	26	34.55	83	91	69	0	5	4	0
PA ERIE	48	33	57	29	40	7	0.80	-0.05	0.68	0.85	45	30.83	77	91	78	0	5	3	1
PA MIDDLETOWN	52	34	63	26	43	8	0.61	-0.13	0.47	1.21	74	25.10	65	96	69	0	5	4	0
PA PHILADELPHIA	54	40	63	31	47	10	0.50	-0.27	0.22	1.17	71	30.08	76	91	67	0	1	5	0
PA PITTSBURGH	52	34	65	27	43	11	0.22	-0.44	0.14	0.56	39	33.86	96	94	63	0	4	3	0
PA WILKES-BARRE	48	32	58	22	40	9	0.10	-0.49	0.06	0.46	35	26.83	77	96	72	0	5	3	0
PA WILLIAMSPORT	48	32	57	25	40	8	0.35	-0.35	0.18	0.98	63	34.47	88	96	69	0	5	3	0
RI PROVIDENCE	47	33	53	23	40	6	0.67	-0.33	0.31	0.79	36	38.44	89	98	80	0	3	6	0
SC BEAUFORT	70	56	77	50	63	11	0.08	-0.62	0.06	0.12	8	43.25	87	10	70	0	0	3	0
SC CHARLESTON	70	55	78	50	63	11	1.49	0.79	1.24	1.49	103	39.82	80	99	72	0	0	5	1
SC COLUMBIA	64	51	73	44	57	9	1.01	0.23	0.86	1.02	63	27.83	58	95	67	0	0	3	1
SC GREENVILLE	60	46	68	40	53	9	1.36	0.42	1.15	1.36	69	39.50	80	95	72	0	0	4	1
SD ABERDEEN	33	20	37	11	26	10	0.00	-0.09	0.00	0.00	0	22.56	123	90	81	0	6	0	0
SD HURON	36	24	41	19	30	11	0.00	-0.11	0.00	0.00	0	26.75	135	94	73	0	6	0	0
SD RAPID CITY	43	19	58	11	31	6	0.00	-0.11	0.00	0.00	0	14.46	88	78	44	0	7	0	0
SD SIOUX FALLS	42	25	50	20	33	14	0.00	-0.17	0.00	0.02	5	30.10	128	88	71	0	6	0	0
TN BRISTOL	58	40	70	37	49	10	2.04	1.27	0.98	2.48	152	40.83	105	98	60	0	0	5	2
TN CHATTANOOGA	60	47	67	38	53	11	3.40	2.22	1.79	3.48	139	53.40	105	90	70	0	0	4	2
TN KNOXVILLE	58	46	69	43	52	11	2.90	1.87	1.30	3.50	161	41.37	92	94	67	0	0	5	2
TN MEMPHIS	57	44	65	37	51	7	4.43	3.08	2.74	5.19	178	60.99	124	94	70	0	0	3	2
TX NASHVILLE	55	43	63	34	49	8	1.44	0.37	0.67	2.69	117	48.28	107	95	75	0	0	4	2
TX ABILENE	58	36	67	24	47	1	0.00	-0.24	0.00	0.00	0	20.87	87	85	59	0	3	0	0
TX AMARILLO	55	25	64	19	40	3	0.09	0.00	0.08	0.09	41	18.53	96	85	36	0	7	2	0
TX AUSTIN	60	38	70	27	49	-3	1.88	1.44	1.12	4.19	436	39.00	126	98	64	0	2	4	1
TX BEAUMONT	67	48	74	41	58	3	0.65	-0.42	0.51	0.89	39	67.66	124	98	65	0	0	3	1
TX BROWNSVILLE	72	56	82	45	64	1	0.09	-0.19	0.09	0.94	159	16.79	65	89	67	0	0	1	0
TX CORPUS CHRISTI	67	52	76	42	59	0	0.33	0.05	0.18	1.70	288	39.47	134	94	75	0	0	4	0
TX DEL RIO	61	40	76	32	51	-2	0.19	0.05	0.16	0.36	116	9.62	54	87	59	0	2	3	0
TX EL PASO	51	27	57	22	39	-6	0.05	-0.09	0.05	0.05	18	4.21	49	76	32	0	6	1	0
TX FORT WORTH	56	37	66	29	47	-1	0.81	0.40	0.42	1.34	147	36.21	110	92	52	0	3	3	0
TX GALVESTON	67	55	73	48	61	4	4.75	-0.05	0.37	1.11	65	57.26	141	91	64	0	0	3	0
TX HOUSTON	67	46	75	37	56	2	2.23	3.45	1.64	5.47	324	70.54	159	93	72	0	0	3	3
TX LUBBOCK	55	29	63	23	42	1	0.02	-0.11	0.02	0.02	7	15.38	84	82	47	0	6	1	0
TX MIDLAND	55	33	58	25	44	-1	0.06	-0.08	0.05	0.06	20	9.89	67	86	45	0	3	2	0
TX SAN ANGELO	59	33	65	25	46	-1	0.08	-0.10	0.08	0.08	20	18.49	92	86	58	0	4	1	0
TX SAN ANTONIO	61	42	66	31	51	-2	1.39	1.05	0.97	3.25	411	36.57	121	95	53	0	1	4	1
TX VICTORIA	66	47	74	38	57	1	0.73	0.26	0.63	3.24	324	42.50	117	92	70	0	0	3	1
TX WACO	57	38	69	29	48	-1	2.24	1.81	1.50	2.67	281	34.33	111	92	73	0	1	4	1
TX WICHITA FALLS	54	33	62	25	44	0	0.18	-0.12	0.17	0.18	28	16.53	58	83	65	0	4	2	0
UT SALT LAKE CITY	33	21	40	9	27	-3	0.39	0.06	0.27	0.96	135	14.19	92	91	65	0	7	5	0
VT BURLINGTON	42	25	52	16	34	10	0.66	0.09	0.32	0.92	72	22.92	69	98	68	0	6	5	0
VA LYNCHBURG	53	39	65	29	46	7	2.10	1.36	1.22	2.35	148	31.66	81	94	74	0	1	4	2
VA NORFOLK	63	51	75	46	57	12	1.42	0.71	1.26	1.42	96	32.95	77	92	71	0	0	2	1
VA RICHMOND	58	43	71	31	50	9	0.93	0.19	0.75	0.99	63	30.81	74	96	72	0	1	5	1
VA ROANOKE	54	41	68	33	47	8	1.60	0.91	1.39	1.86	126	24.45	62	89	73	0	0	4	1
VA WASH/DULLES	54	36	67	25	45	9	0.68	-0.06	0.31	1.20	75	36.64	95	92	74	0	3	5	0
WA OLYMPIA	46	37	51	29	42	4	3.37	1.53	2.08	7.40	187	45.23	97	95	89	0	1	7	2
WA QUILLAYUTE	47	37	50	33	42	2	7.63	4.11	2.93	13.29	176	93.32	96	93	84	0	0	7	4
WA SEATTLE-TACOMA	45	37	51	35	41	0	2.69	1.34	1.75	4.16	143	35.10	103	95	84	0	0	7	1
WA SPOKANE	35	24	40	16	29	1	0.86	0.31	0.69	1.53	130	13.18	86	94	84	0	7	3	1
WA YAKIMA	40	26	51	21	33	3	0.15	-0.18	0.06	0.90	134	6.62	92	94	82	0	7	4	0
WV BECKLEY	51	39	67	29	45	10	0.99	0.25	0.54	1.58	101	35.13	89	95	78	0	1	4	1
WV CHARLESTON	58	41	71	32	50	12	0.40	-0.38	0.23	1.54	91	40.85	100	97	58	0	2	4	0
WV ELKINS	55	35	67	22	45	12	0.41	-0.39	0.23	1.06	62	38.47	89	97	58	0	3	3	0
WV HUNTINGTON	57	40	68	32	49	11	0.55	-0.22	0.32	1.48	90	34.06	86	97	66	0	2	5	0
WI EAU CLAIRE	41	24	49	17	32	14	0.03	-0.22	0.03	0.57	102	35.82	115	92	54	0	7	1	0
WI GREEN BAY	41	24	49	19	33	12	0.43	0.07	0.31	0.96	119	27.40	97	94	64	0	7	2	0
WI LA CROSSE	42	26	50	19	34	12	0.00	-0.30	0.00	0.40	60	31.78	106	94	57	0	6	0	0
WI MADISON	41	26	48	17	34	11	0.49	0.05	0.48	0.68	71	38.05	127	91	64	0	6	2	0
WI MILWAUKEE	44	29	49	22	36	10	0.32	-0.23	0.28	0.57	48	36.01	113	86	67	0	6	2	0
WY CASPER	34	15	44	9	25	1	0.01	-0.15	0.01	0.01	3	6.72	55	76	52	0	7	1	0
WY CHEYENNE	40	20	53	13	30	2	0.02	-0.07	0.02	0.03	14	13.14	93	59	36	0	7	1	0
WY LANDER	30	13	40	8	22	1	0.12	-0.02	0.12	0.16	53	5.35	42	83	65	0	7	1	0
WY SHERIDAN	41	15	55	7	28	5	0.03	-0.14	0.03	0.03	9	10.87	77	79	54	0	7	1	0

Based on 1961-90 normals

\*\*\* Not Available

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

# National Agricultural Summary

December 10 - 16, 2001

Weekly National Agricultural Summary provided by USDA/NASS

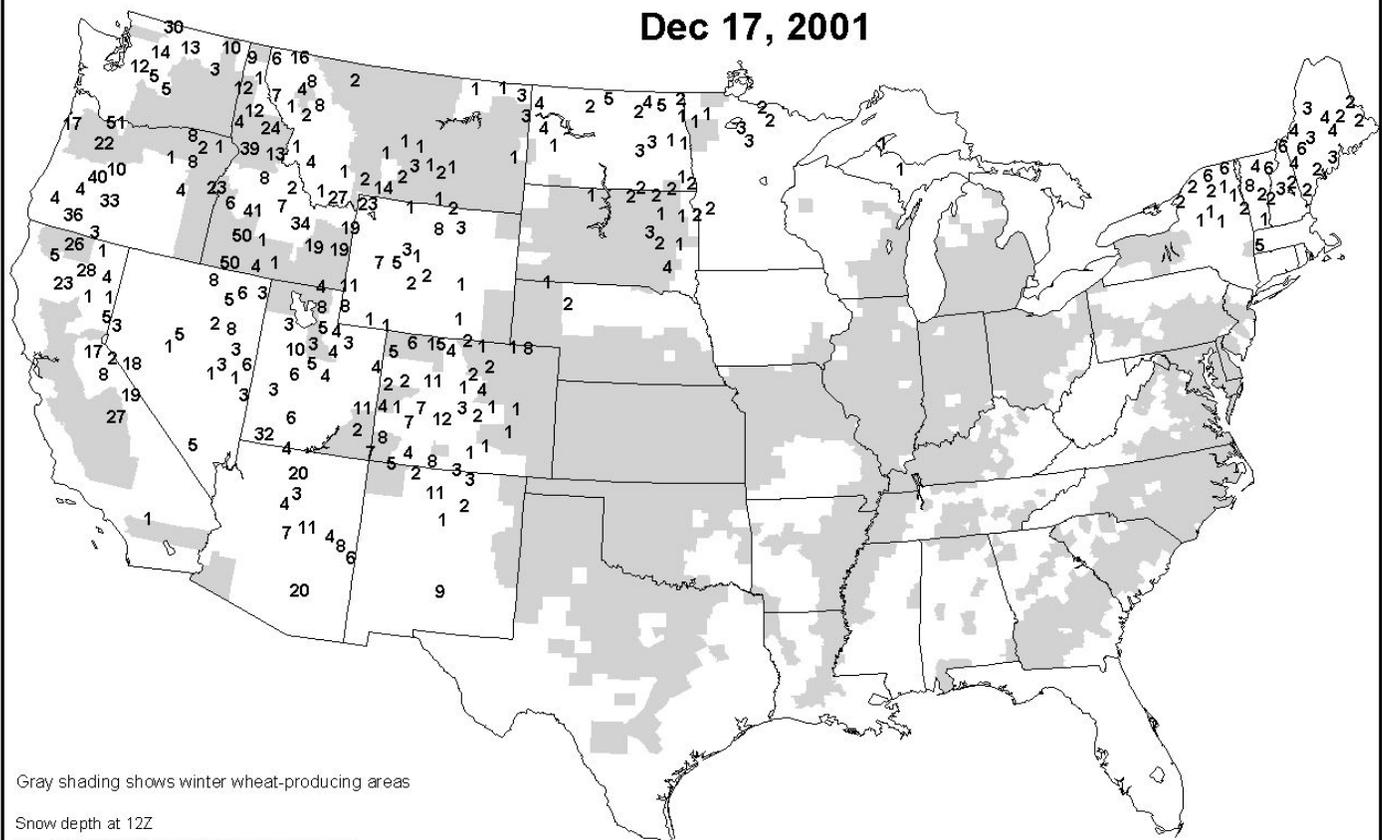
## HIGHLIGHTS

Above-normal temperatures continued to support development of winter crops and forages across most of the Nation. In the southern Great Plains and the Southwest, below-normal temperatures prevailed, but growth of winter crops was only slightly hindered. Many winter wheat fields in the lower Mississippi Valley and adjacent areas of the southern Great Plains, Southeast, and Ohio Valley were stressed by heavy rains that produced saturated soils, standing water, and flooding along rivers and streams. Moisture supplies were mostly adequate for winter wheat development in the eastern Corn Belt, although

some areas were unfavorably wet. In the Great Plains, moisture reserves remained low in many areas, especially on the northern High Plains. In the central Great Plains and southern High Plains, light showers maintained topsoil moisture supplies, and provided short term crop requirements. Light showers also provided much-needed moisture for winter crops on the Atlantic Coastal Plain. Heavy precipitation continued in the Pacific Northwest, while mostly dry weather aided field and orchard work in California's valleys. Dry weather also supported fieldwork in Florida.

## Snow Depth (Inches)

Dec 17, 2001



Gray shading shows winter wheat-producing areas

Snow depth at 12Z

The NWS cooperative network is the principal source of the snow depth reports

# International Weather and Crop Summary

December 9 - 15, 2001

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

## HIGHLIGHTS

**FSU-WESTERN:** Widespread snow provided a fresh snow cover in most areas, protecting winter grains from bitterly cold weather.

**MIDDLE EAST:** A wet weather pattern continued to dominate Turkey, increasing the potential for local crop damage.

**EUROPE:** Cold weather enveloped much of the continent, however, temperatures in eastern Europe were not likely cold enough to cause widespread winterkill.

**EASTERN ASIA:** Seasonably cold weather caused winter wheat to enter dormancy across the North China Plain, and much needed rain favored winter crops across the Yangtze Valley and southern China.

**AUSTRALIA:** Drier weather brought some relief to unharvested winter crops in Western Australia and the southeast.

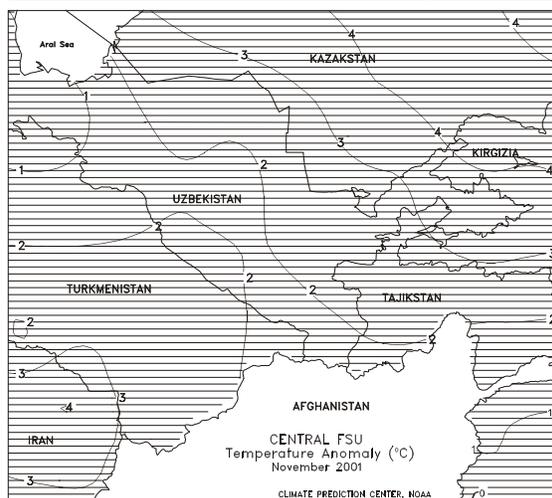
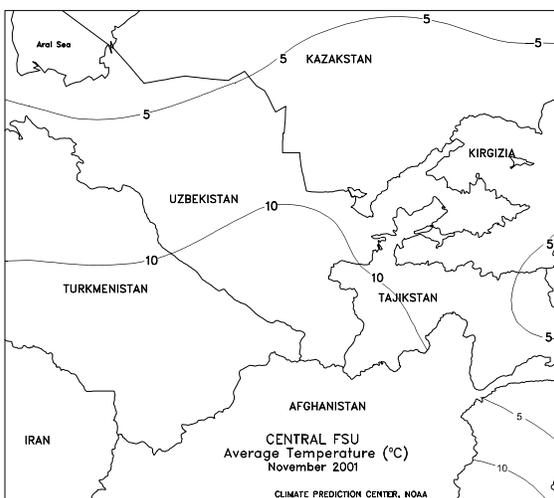
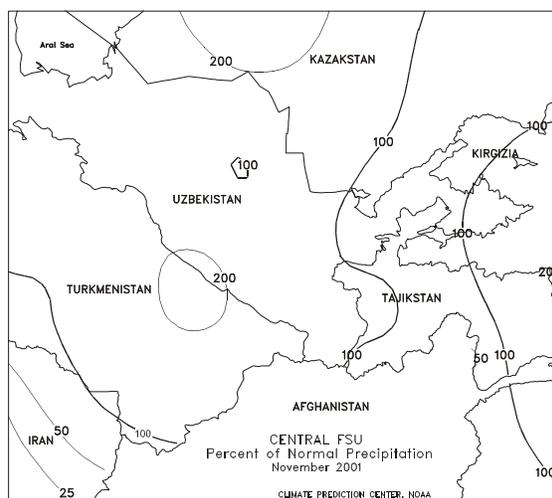
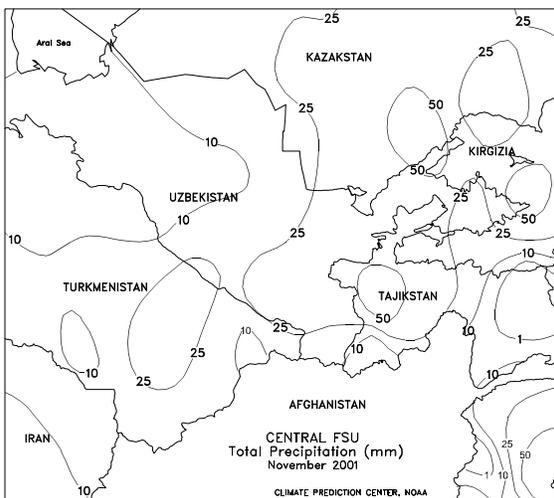
**SOUTHEAST ASIA:** The remnants of Tropical Storm Kajiki brought heavy rains to central Vietnam, hampering rice transplanting.

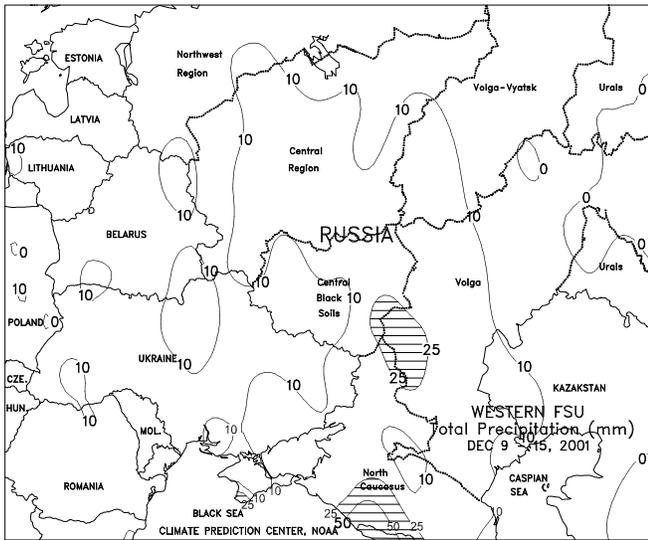
**SOUTH ASIA:** Conditions remained favorable for summer crop harvesting and winter crop establishment.

**SOUTH AMERICA:** In western Argentina continued dry, warm weather reduced topsoil moisture and increased stress on vegetative summer crops. Across southern Brazil, widespread showers (15-100 mm or more) continued to maintain adequate to abundant soil moisture for soybeans, corn, sugarcane, coffee, and oranges.

**SOUTH AFRICA:** Wet weather persisted in the western corn belt but conditions were generally more favorable for summer crop development elsewhere.

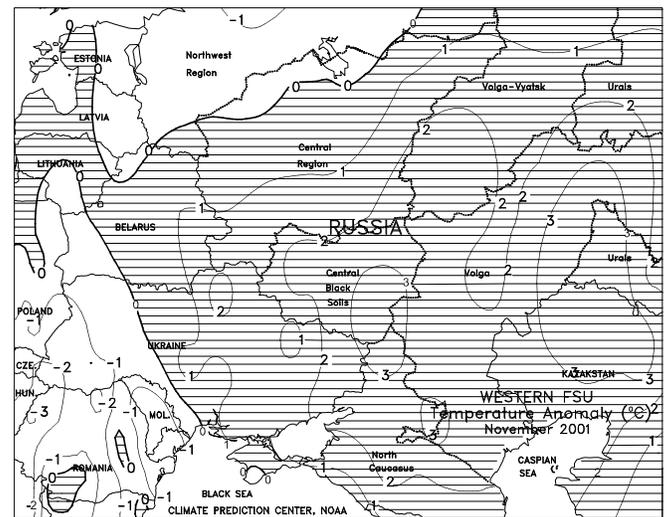
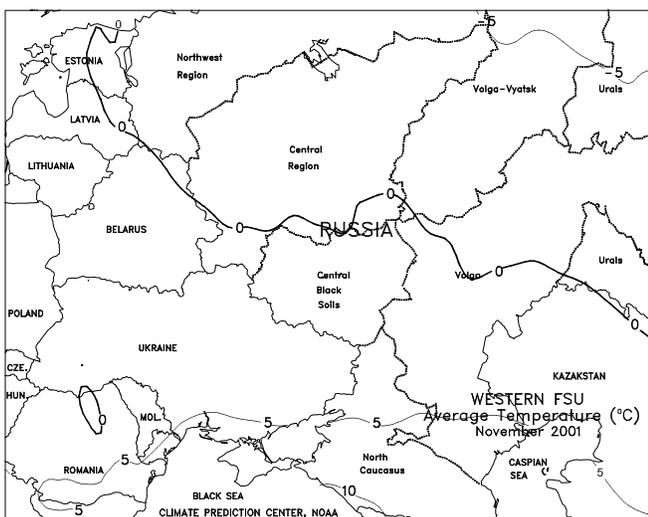
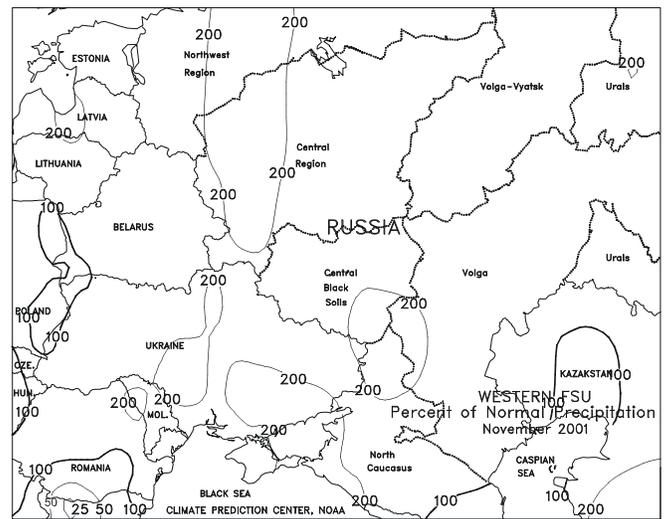
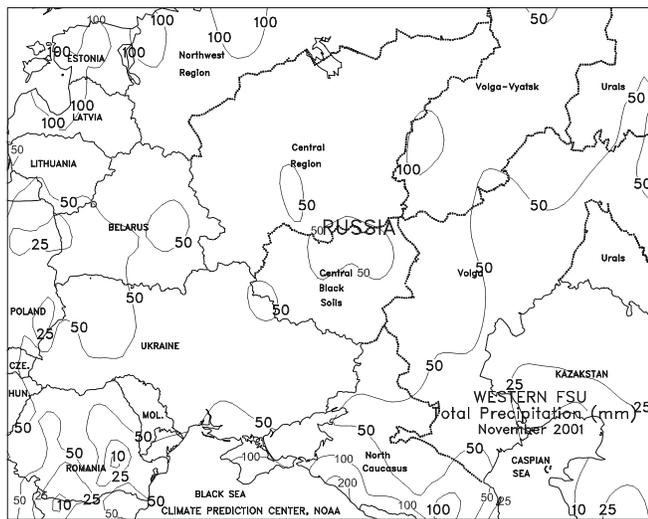
**NORTHWESTERN AFRICA:** The first substantial rains of the growing season in Morocco likely prompted widespread winter grain planting.

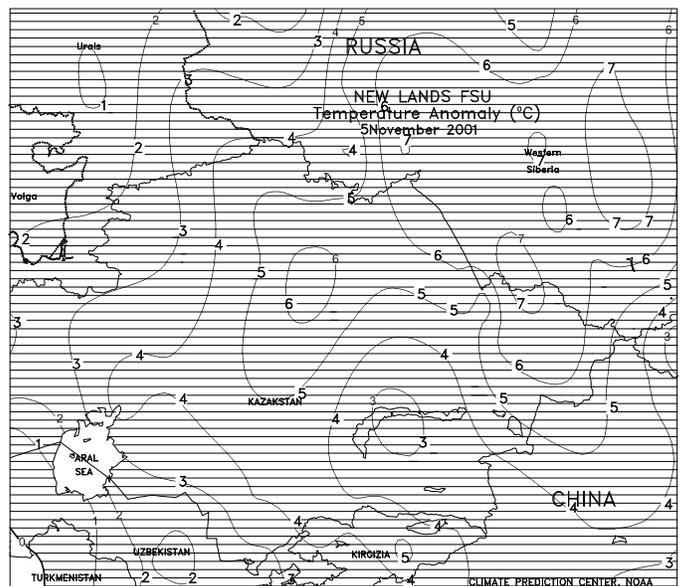
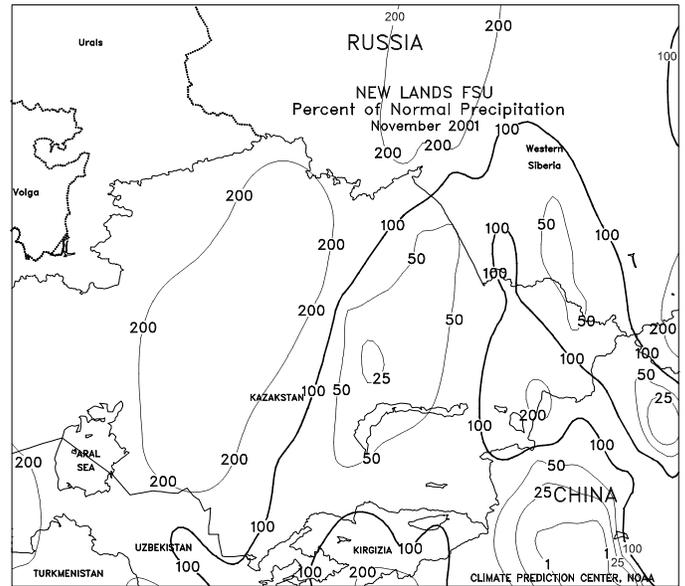
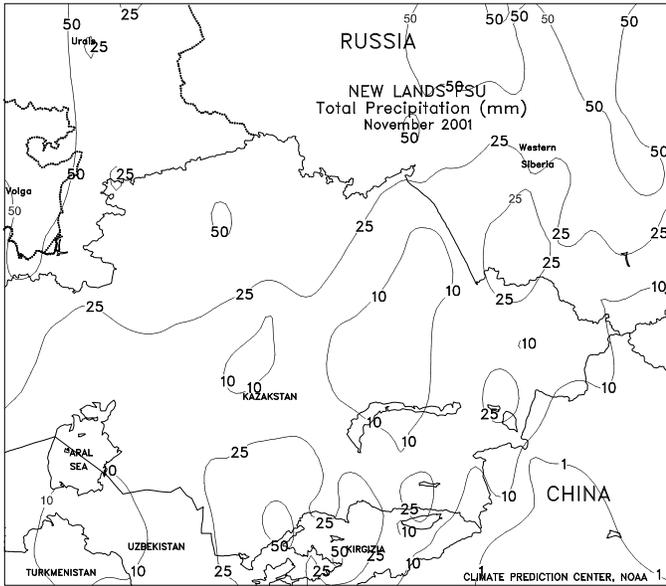




**FSU-WESTERN**

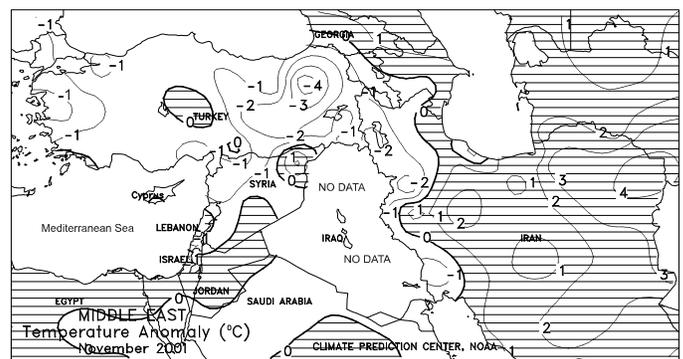
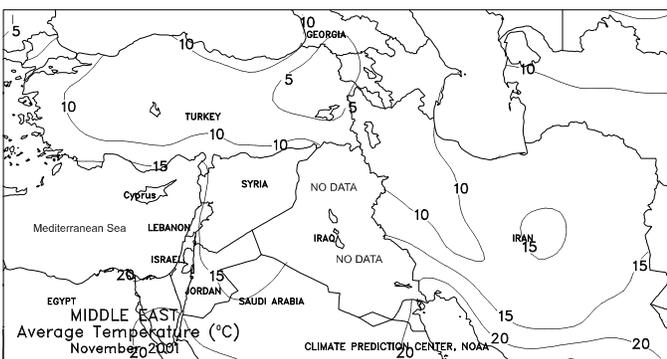
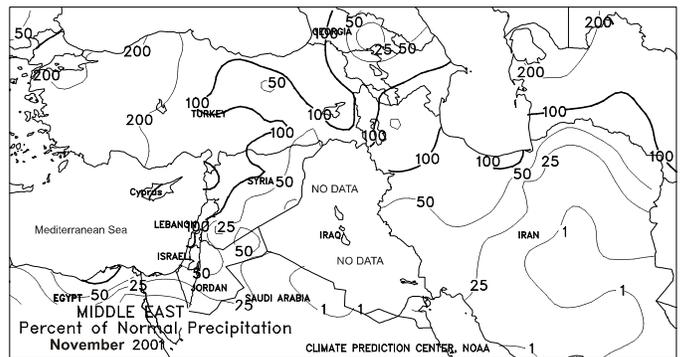
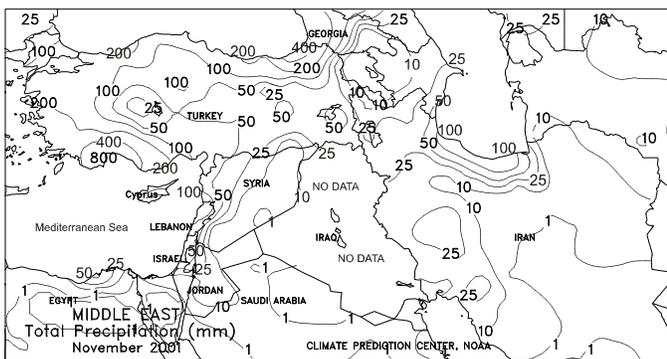
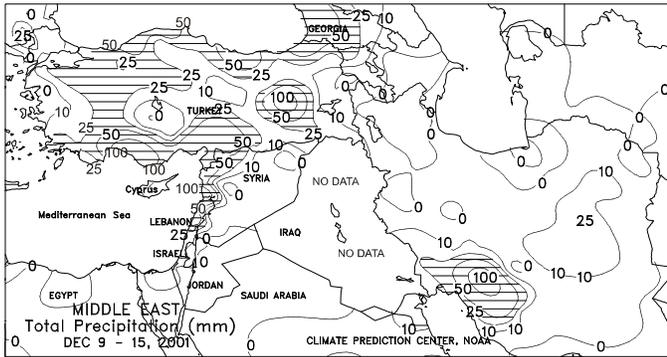
Periods of snow occurred in most areas during the week, increasing protective snow cover. The greatest amounts of moisture (10-37 mm of liquid equivalent) spread from the North Caucasus region in Russia and the eastern Ukraine, northward through the middle Volga Valley into northern Russia. A fresh snow cover in most areas provided adequate protection from a bitterly cold air mass that remained well entrenched over the region. Extreme minimum temperatures fell at or below -20 degrees C as far south as northern Ukraine and the northern tip of the North Caucasus, and as far west as the Baltics. The lowest temperatures along the Black Sea Coast ranged from -15 to -5 degrees C. Weekly temperatures averaged 4 to 9 degrees C below normal in most areas. In November, mild weather and above-normal precipitation favored winter grains in most areas. Above-normal temperatures prevailed over most of Russia and the eastern two-thirds of Ukraine, while near-normal temperatures were observed in western Ukraine, Belarus, and the Baltics. Although the weather was unseasonably mild in northern Russia, temperatures remained low enough to keep winter grains dormant. Winter wheat in major growing areas of Ukraine and southern Russia entered dormancy during the month. In southern Russia, winter wheat in most areas was well established prior to dormancy. In Ukraine, a lack of planting moisture in south-central and southeastern areas likely caused spotty germination and limited plant establishment, making winter wheat more susceptible to potential winterkill conditions. Although significant precipitation (25-50 mm) boosted soil moisture in these areas during the second half of November, cooler weather prevented further crop establishment.





MIDDLE EAST

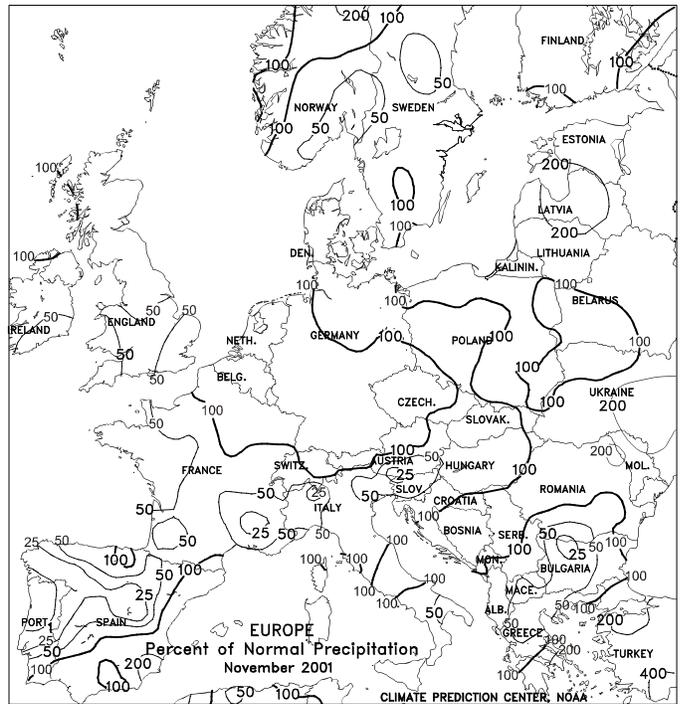
The pattern of widespread, locally heavy rain (10-50 mm, locally exceeding 100 mm) persisted across Turkey, further increasing long-term moisture reserves for winter wheat. However, the worsening flood situation along the southern coast increased the potential for local damage to unharvested summer crops, including cotton. Heavy rain was also recorded in western Syria, but amounts diminished drastically to the east, with little or no rain from eastern Syria to northwestern Iran. Elsewhere in Iran, pockets of heavy rain (25-100 mm or more) continued in the southwest with lighter showers (5-10 mm or more) streaming into wheat areas of the northeast. Above-normal temperatures fostered late winter wheat development from southeastern Turkey through Iran. In contrast, colder-than-normal weather in western Turkey helped Anatolian crops enter dormancy. In November, stormy weather dominated the eastern Mediterranean, bringing heavy rain to much of western Turkey. Flooding was reported in southern coastal areas, and some damage was possible to unharvested cotton and other summer crops. Somewhat lighter showers benefited vegetative to semi-dormant winter wheat elsewhere in Turkey, as well as in neighboring locations in Syria. Beneficial showers finally developed across Iran later in the month, boosting topsoil moisture for late crop establishment but doing little to offset long-term moisture deficits. Temperatures averaged below normal in eastern Turkey and northwestern Iran, but near normal in most other areas. The exception was northeastern Iran, where above-normal temperatures accompanied chronic dryness.

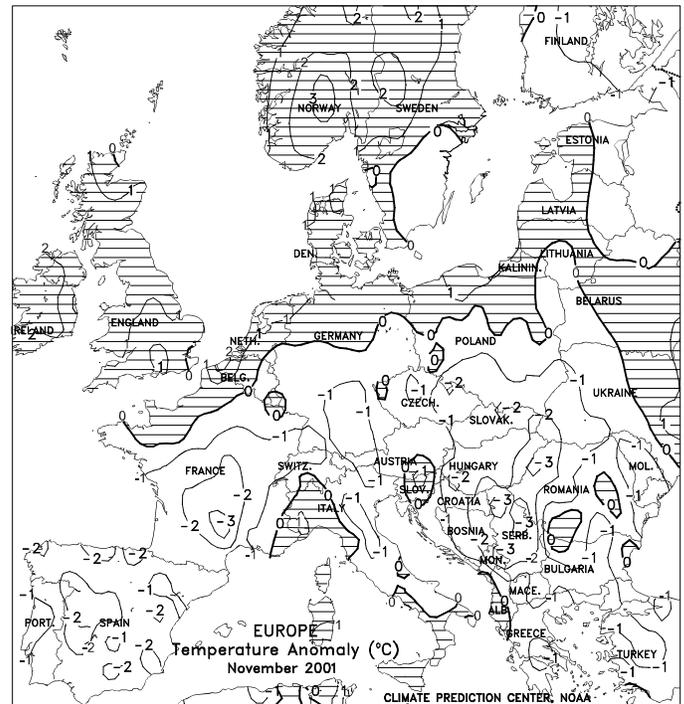




**EUROPE**

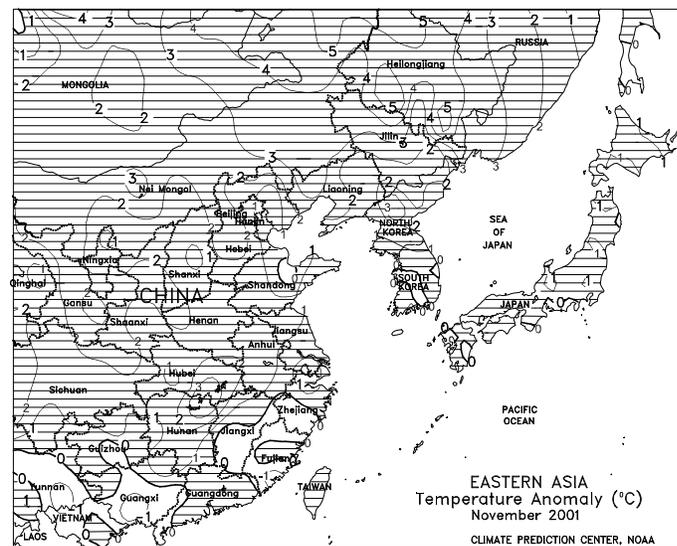
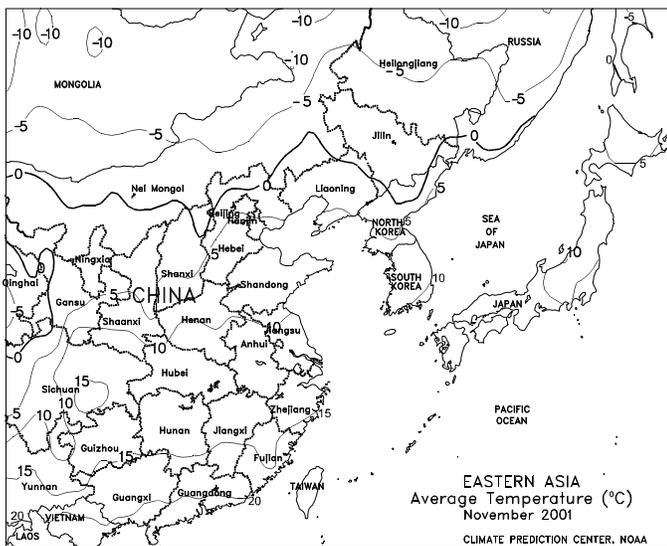
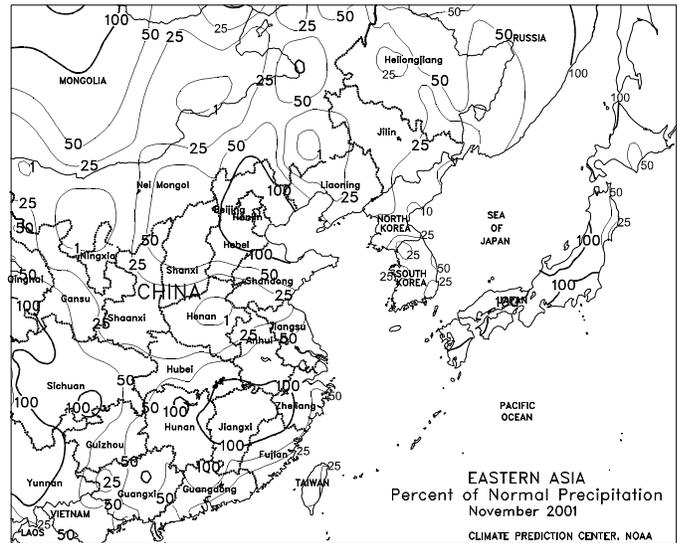
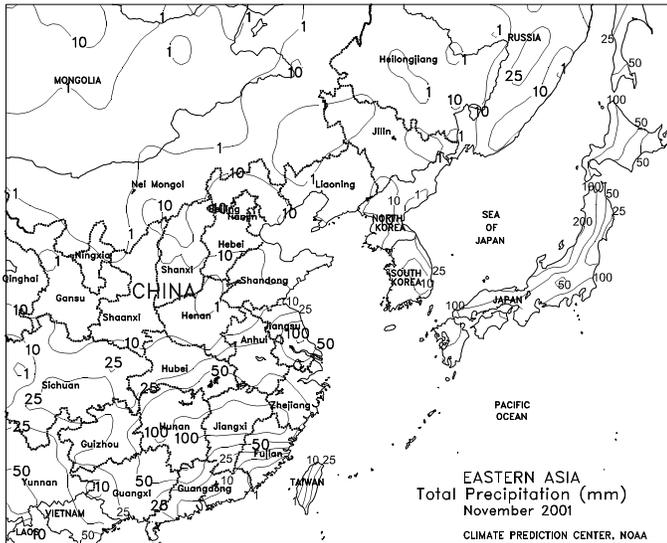
Scattered showers (3-30 mm or more) helped durum wheat development in southern Spain and southern Italy, while mostly dry weather (less than 5 mm) prevailed elsewhere in western Europe. Seasonable temperatures across the southern Iberian peninsula also aided crop development. In contrast, temperatures averaged 2 to 5 degrees C below normal throughout the remainder of western Europe, halting further crop development. In eastern Europe, light snow (3-37 mm liquid equivalent) in most areas increased the protective snow cover for dormant winter grains. Very cold weather enveloped this region as well, with temperatures averaging 3 to 9 degrees C below normal. Although minimum temperatures ranged from -21 to -9 degrees C, temperatures were not likely cold enough to cause widespread winterkill. In November, near- to below-normal rainfall in England, France, and northern Spain favored well-established winter grains. Widespread precipitation maintained abundant moisture supplies in north-central and northeastern Europe. Scattered precipitation in south-central and southeastern Europe came too late to help winter grain establishment in southern Romania and Bulgaria, but helped durum wheat development in southern Italy. Cold weather caused winter grains in north-central and eastern Europe to enter dormancy.

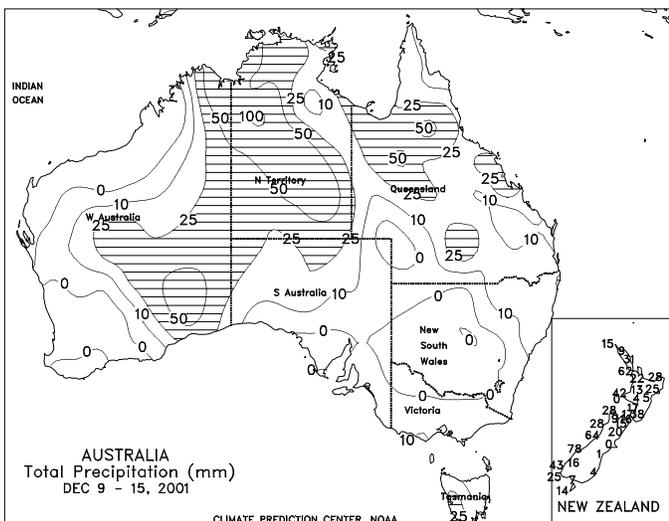




**EASTERN ASIA**

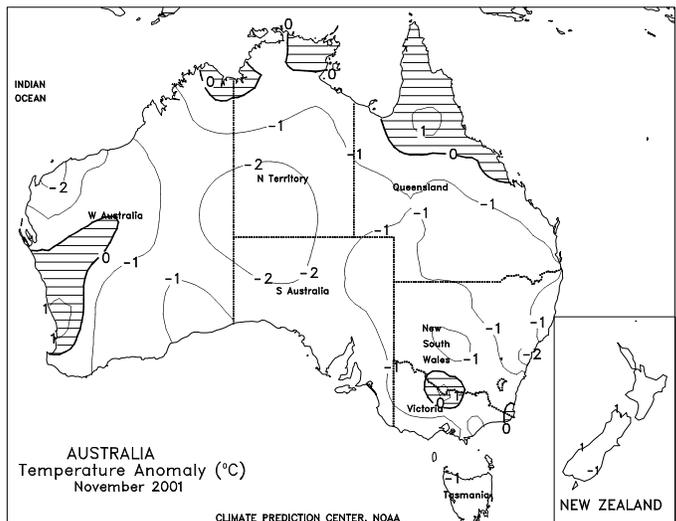
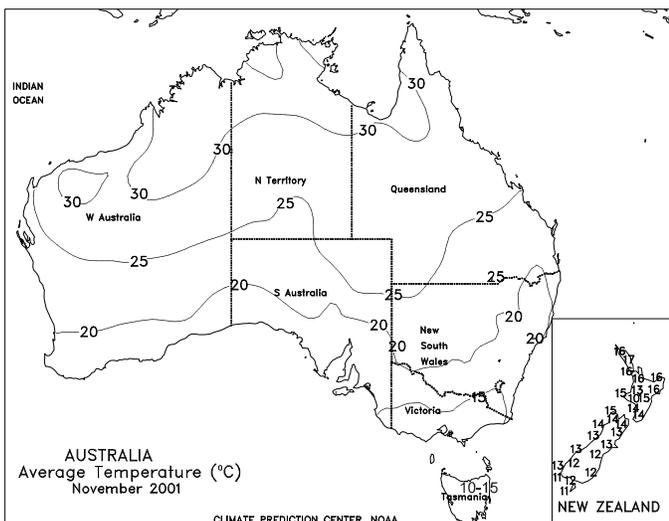
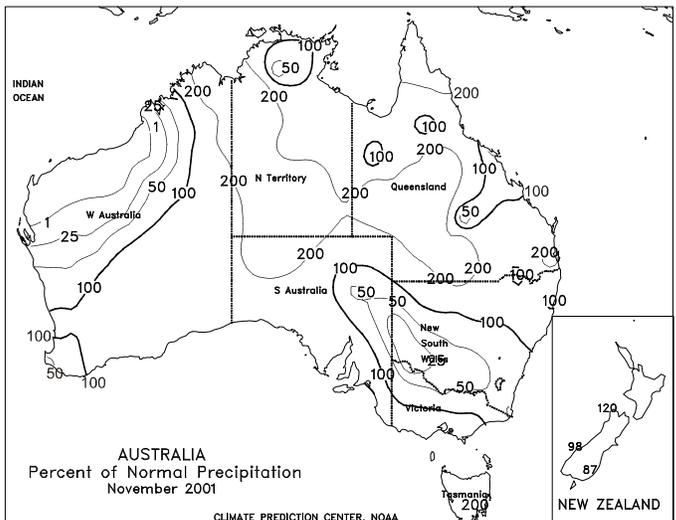
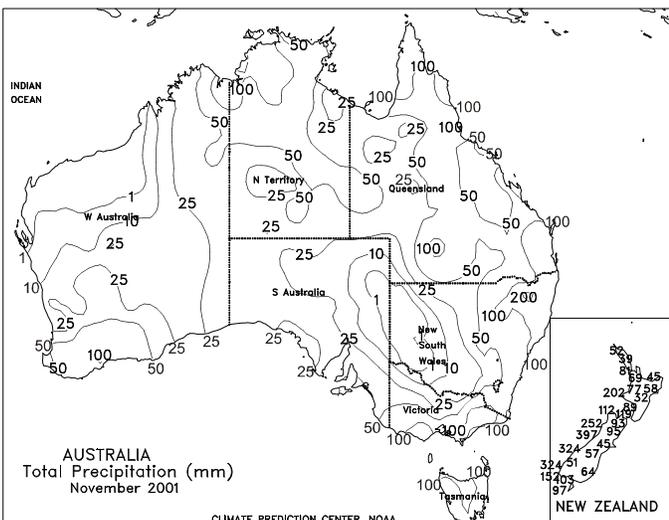
Seasonably cold weather caused winter wheat to enter dormancy across the North China Plain. Light precipitation (snow and rain) increased moisture supplies for spring growth. Much needed rain (15-60 mm) fell across the Yangtze Valley and southern China, easing short-term moisture deficits and favoring winter crops. The rain, however, slowed any remaining late rice harvesting. Temperatures averaged 1 to 3 degrees C below normal across the North China Plain and interior southern China and near normal elsewhere in China. During November, variable precipitation provided some moisture for winter wheat establishment across the North China Plain. Early December precipitation boosted moisture supplies across the region for winter wheat nearing dormancy. Across the Yangtze Valley and southern China, November rainfall was mostly below normal with pockets of above-normal rainfall in interior southern China.





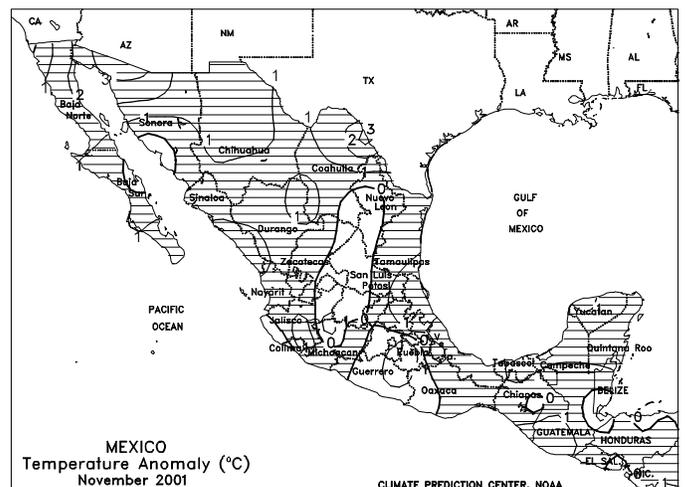
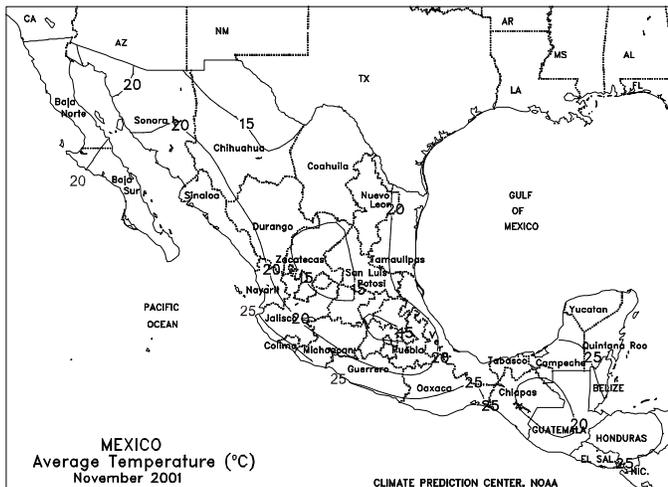
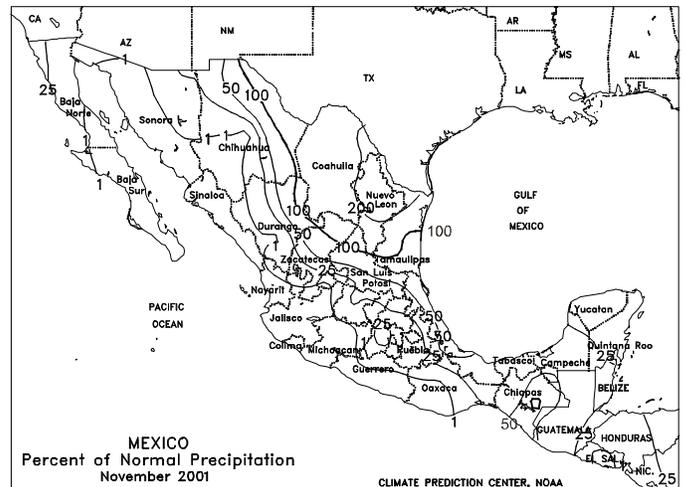
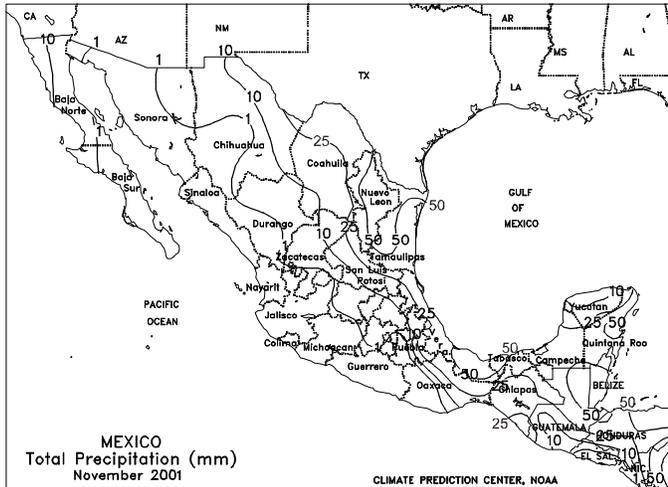
**AUSTRALIA**

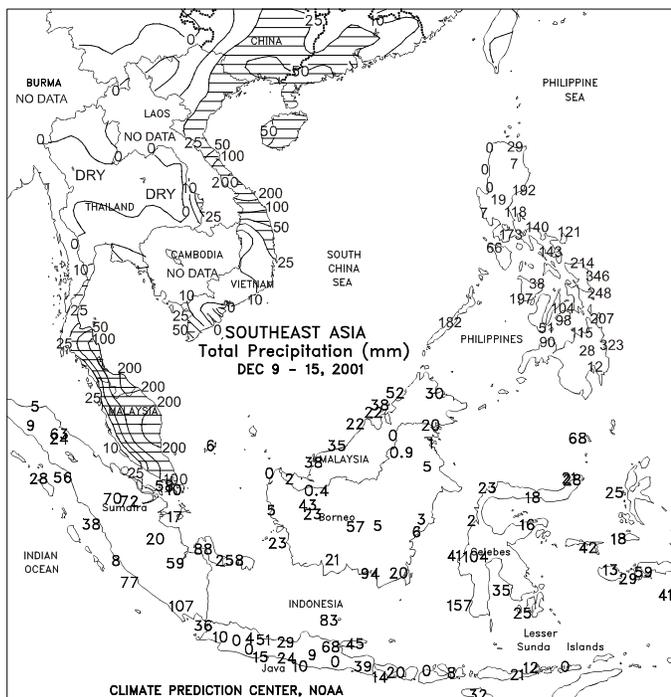
Drier, albeit cooler weather covered Western Australia and the southeast (South Australia, Victoria, and southern New South Wales), bringing some relief to unharvested winter crops that have recently been subject to unfavorable wetness. Light to moderate showers (10-25 mm or more) covered primary summer crop areas of southern Queensland and northeastern New South Wales, increasing moisture for vegetative summer crops. However, drier weather developed in the western grazing areas of Queensland and New South Wales, with highs ranging from 35 to 40 degrees C. In New Zealand, dry weather covered eastern small grain and pasture areas of South Island but moderate showers (10-25 mm or more) continued elsewhere. In November, scattered, light to moderate showers fell on a weekly basis across Western Australia and the southeast, benefiting summer crops and pastures but hampering winter crop harvesting. Above-normal rainfall improved summer crop prospects in primary cotton, sorghum, and sugarcane areas of southern Queensland and northern New South Wales. Temperatures averaged near to below normal for the month in the major agricultural districts, slowing early summer crop development and affecting dry down of winter crops.



MEXICO AND CUBA

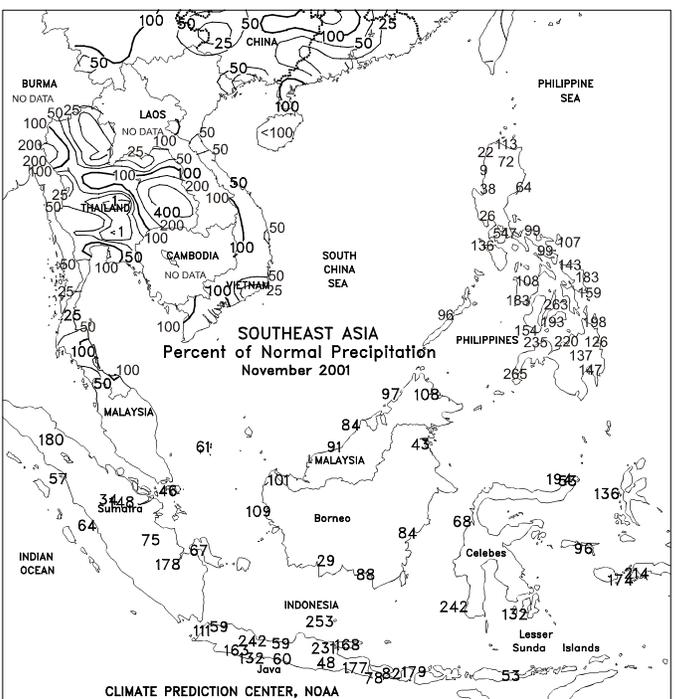
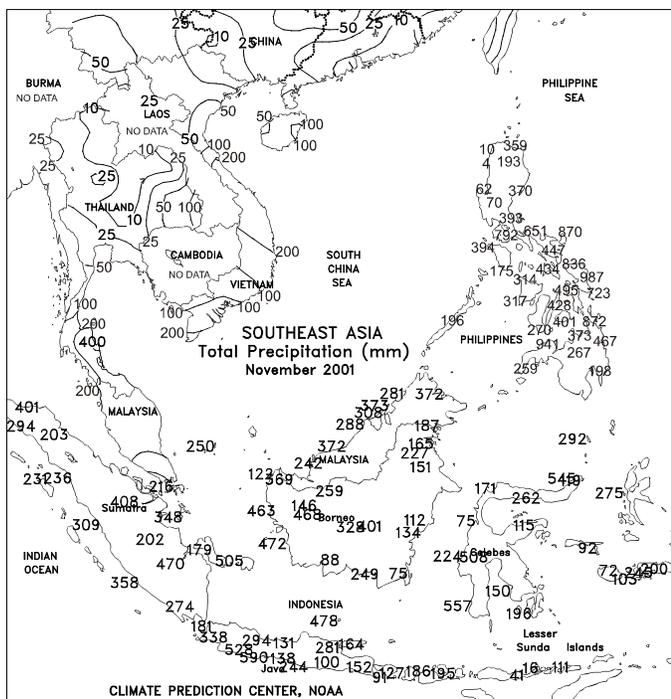
During November, seasonably drier weather prevailed across the main corn belt, favoring corn maturation and harvesting. In northeastern and north-central Mexico, above-normal November rainfall helped to boost reservoir levels and soil moisture for winter grain planting. In Cuba, Hurricane Michelle made landfall on November 4 with sustained winds of 115 knots (132 mph). The hurricane damaged sugarcane, citrus, and infrastructure in western Cuba. According to the United States National Hurricane Center, Michelle was the strongest hurricane to hit Cuba since 1952.

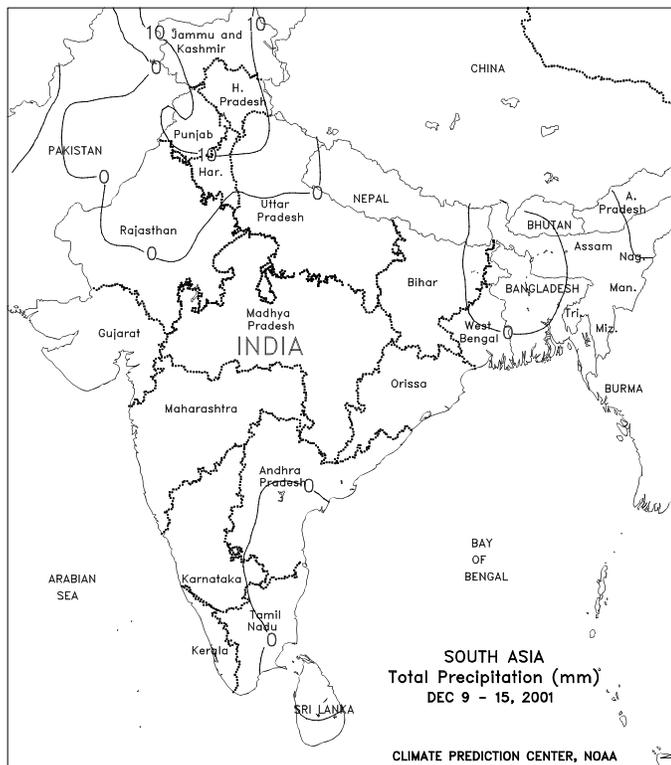
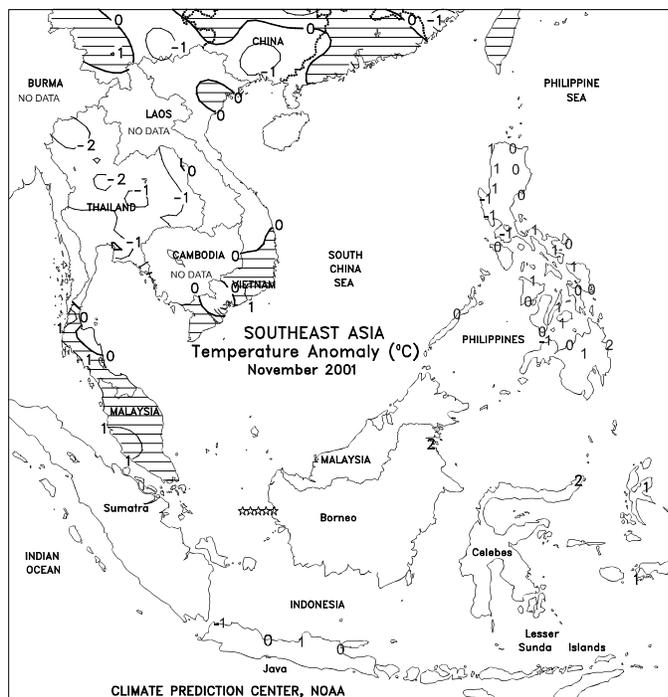
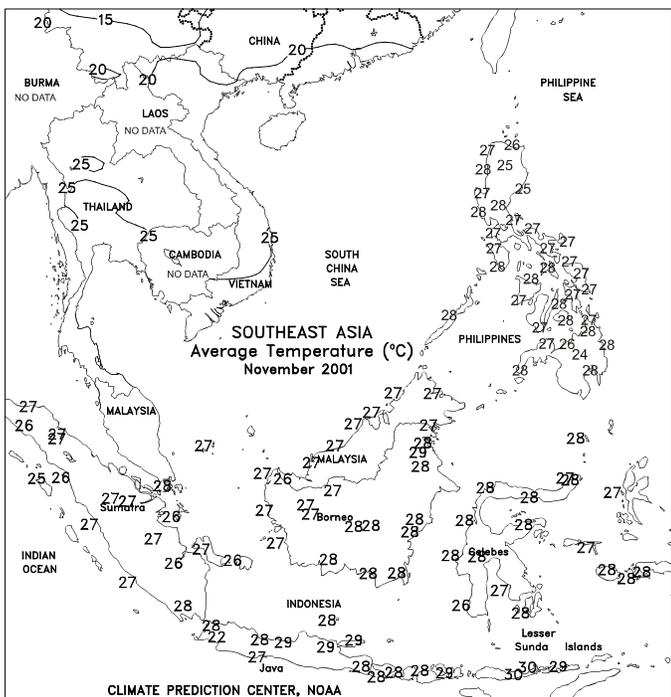




**SOUTHEAST ASIA**

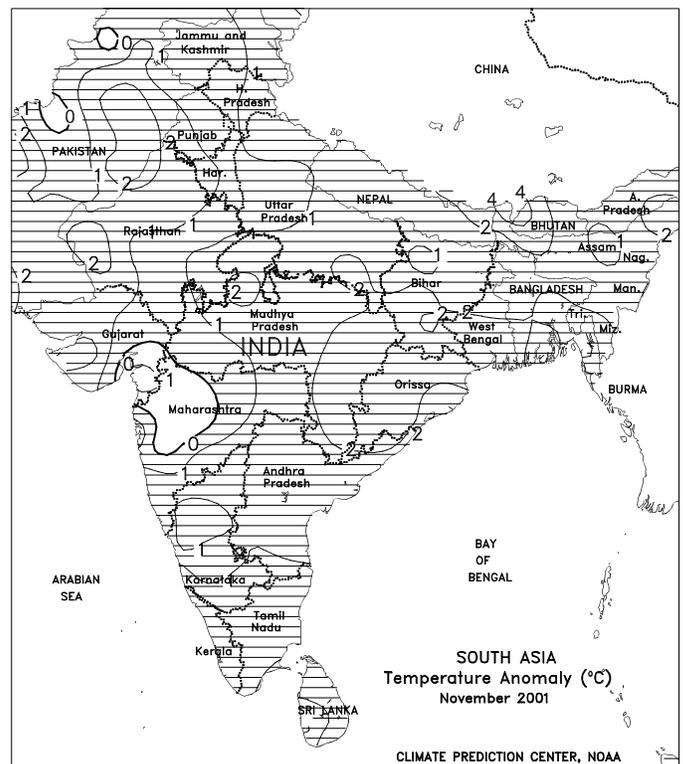
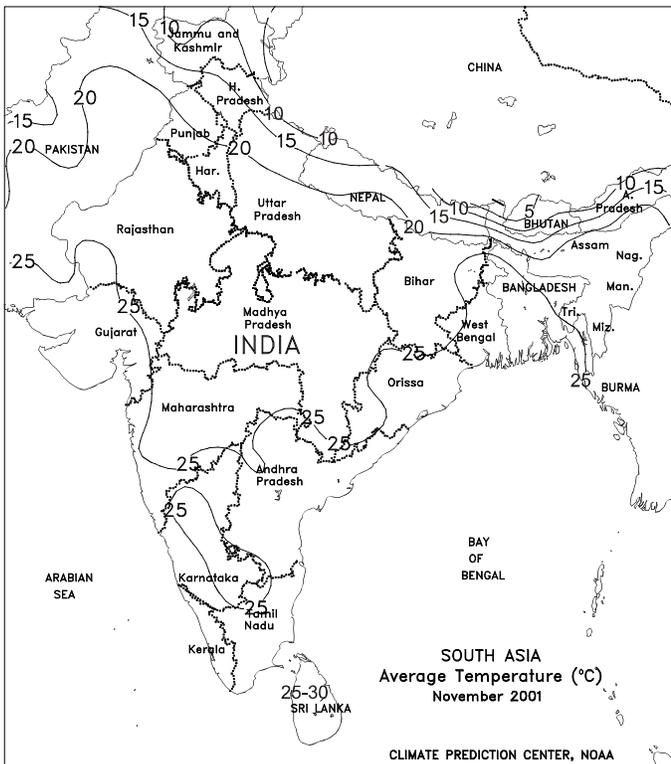
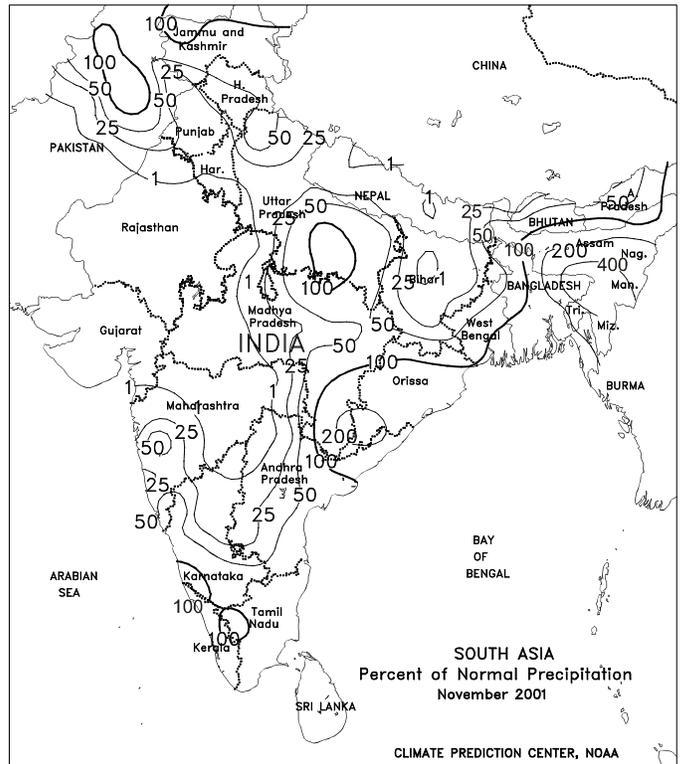
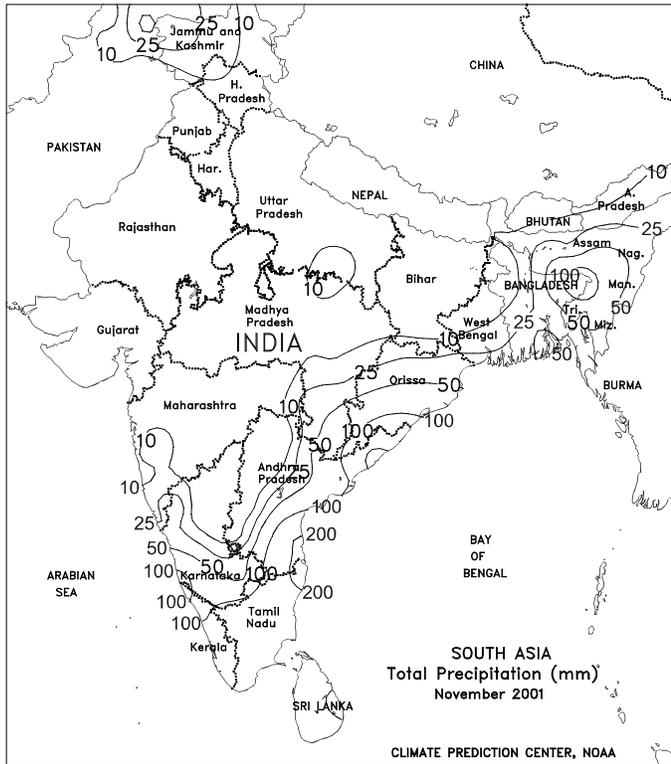
The remnants of Tropical Storm Kajiki moved along the Vietnam coast, bringing heavy rains (25-200 mm, locally more). The heavy rainfall caused some flooding in central Vietnam and hampered winter-spring rice transplanting up to the Red River Delta in the north. Heavy showers (25-200 mm) fell throughout most of the Philippines, slowing fieldwork for rice and plantation crops, but increasing moisture supplies. Continued dryness in Java, Indonesia further reduced moisture supplies for vegetative main-season rice. Heavy showers (50-400 mm) increased moisture availability to oil palm throughout peninsular Malaysia and Sumatra, Indonesia. Seasonably dry weather continued to favor ongoing harvest activities for main-season rice. In November, Tropical Storm Lingling brought above-normal rainfall to most of the Philippines, slowing harvest activities, but increasing moisture supplies for second season crops. Lingling made landfall in south-central Vietnam, bringing heavy rains and high winds and possibly causing damage to mature rice. Near- to above-normal November rainfall in Java, Indonesia increased moisture supplies for main-season rice, while below-normal rainfall decreased moisture supplies for oil palm in peninsular Malaysia.





**SOUTH ASIA**

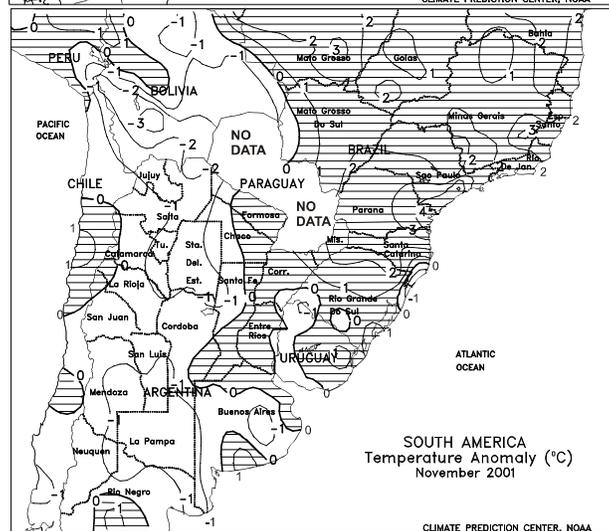
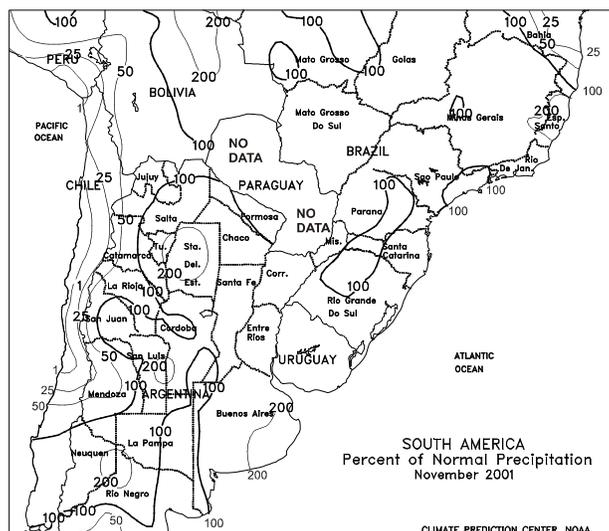
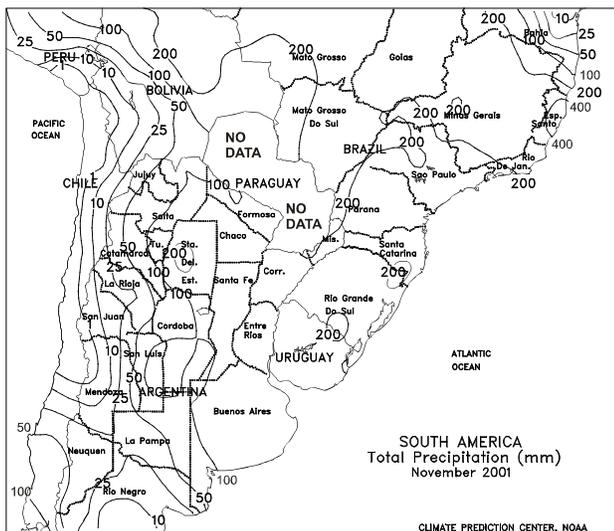
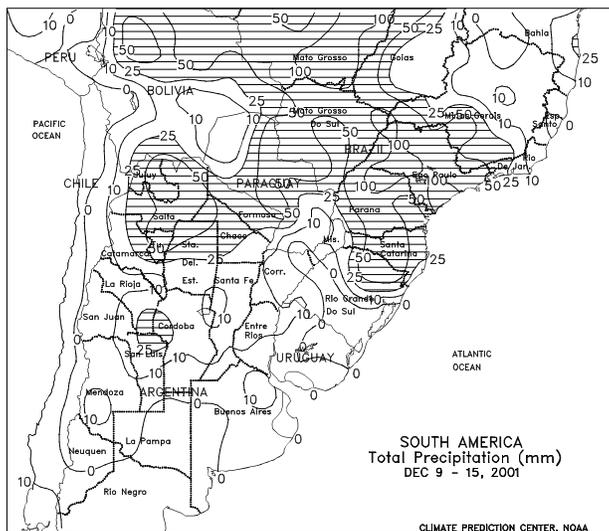
Warm, dry weather favored summer crop harvesting throughout much of the region. In north-central India (Punjab and adjacent areas), showers (10 mm or more) boosted moisture reserves for germination and establishment of winter grains and oilseeds. During November, lingering monsoon showers gradually receded from major rice areas of eastern India and Bangladesh. The drier weather allowed fieldwork, including main-season (kharif) rice harvesting, to intensify. By month's end, showers were confined to a seasonal position over southernmost India and Sri Lanka. Elsewhere, dry, warmer-than-normal weather favored harvesting of cotton and other summer crops. Winter wheat and oilseed planting likely made good early progress across Pakistan and northern India. *(This is the final weekly summary of the season. Coverage will resume in June 2002 with the onset of the summer rainy season.)*

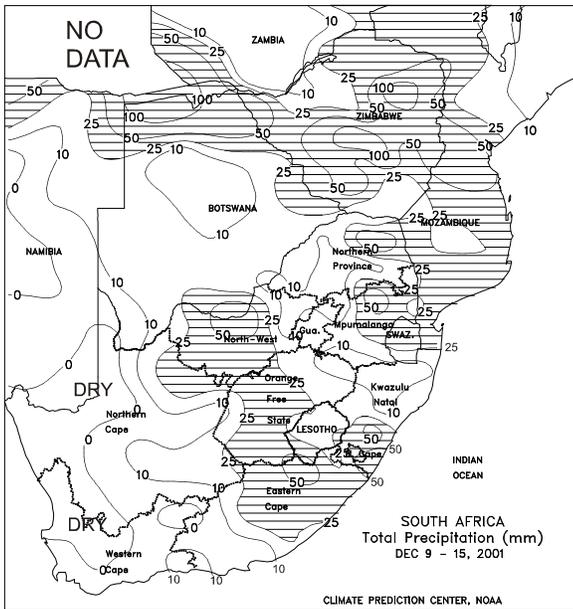


**SOUTH AMERICA**

In western Argentina (La Pampa and central and southern Cordoba), continued dry, warm weather (scattered amounts less than 15 mm) reduced topsoil moisture and increased stress on vegetative corn, soybeans, sorghum, and sunflowerseed. This region accounts for 25 to 35 percent of the total area for those crops. Dry weather prevailed elsewhere in central Argentina, favoring wheat maturation and harvesting, but topsoil moisture for summer crops was also declining. Winter wheat was still immature in southern Buenos Aires. In northern Argentina, light to moderate rain (10-50 mm) continued to provided adequate moisture supplies for newly planted cotton. Across Argentina, temperatures averaged 1 to 2 degrees C above normal, increasing crop water use. According to the Argentine Agricultural Secretariat as of December 14, nationwide corn, sorghum, sunflowers, and soybeans were 83, 80, 89, and 70 percent planted, respectively, compared with 85, 80, 93, and 75 percent last year. Cotton planting was 63 percent complete. Winter wheat harvesting was 41 percent done compared with 31 percent done last year. Across southern Brazil, widespread showers (15-100 mm or more) continued to maintain adequate to abundant soil moisture for soybeans, corn, sugarcane, coffee, and oranges. Mostly dry weather covered Espirito Santo, northeastern Minas Gerais, and western Bahia, reducing soil moisture for soybeans, corn, and coffee. According to Safras, a Brazilian grain analyst firm, as of December 14, soybeans were 98 percent planted, compared with the 5-year average of 95 percent. Across central Argentina, November rainfall was above normal but

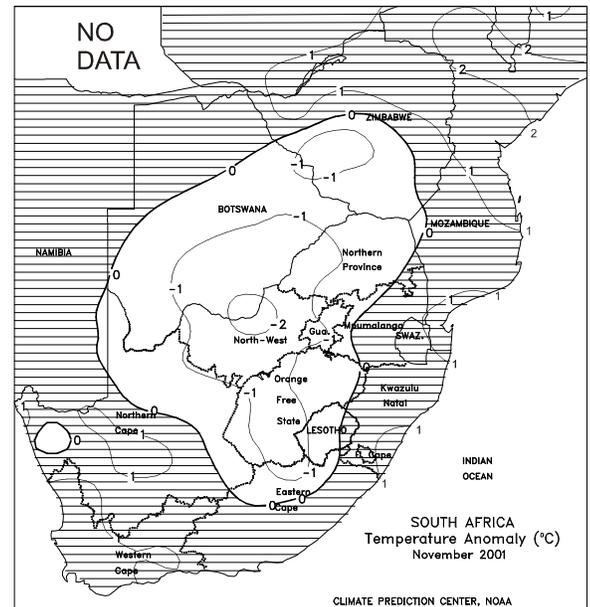
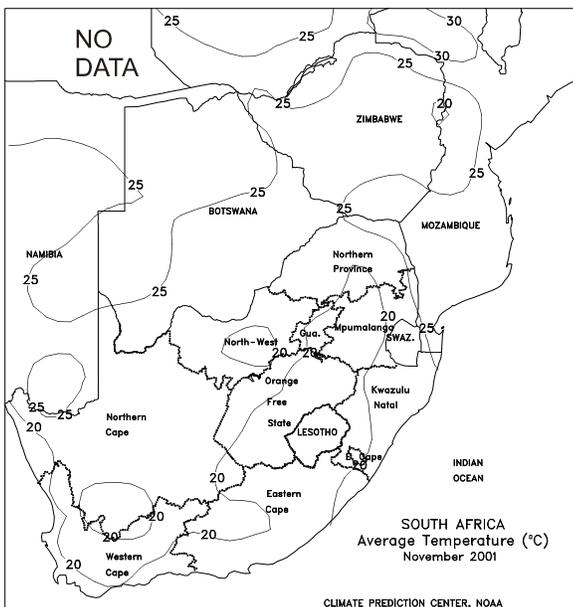
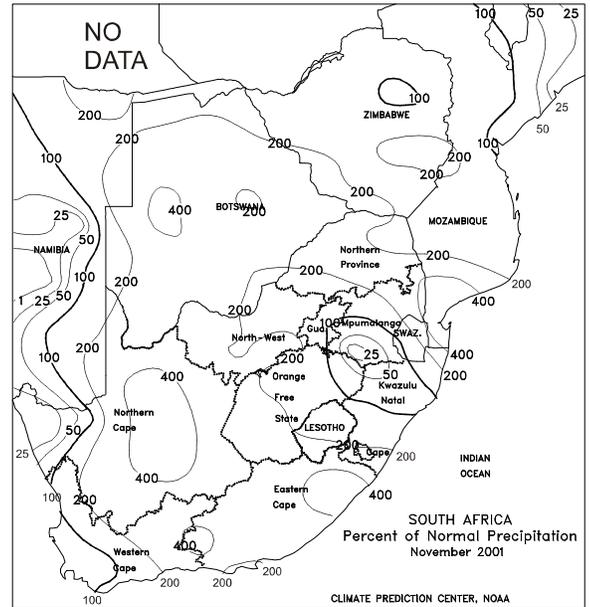
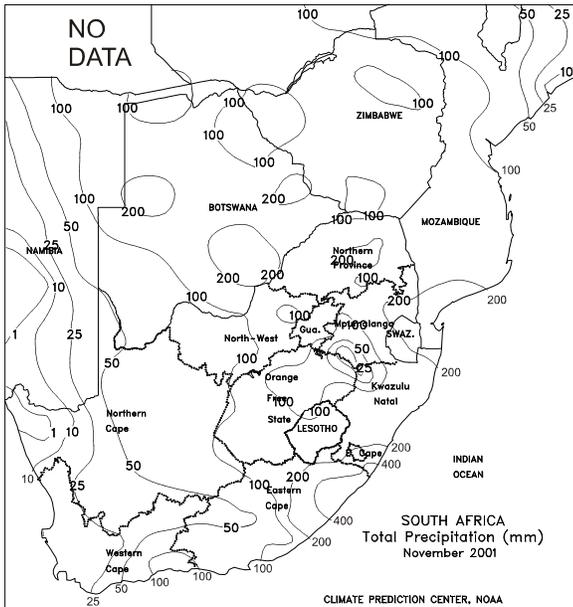
much less than October, generally favored germinating summer crops and filling to maturing winter wheat. However, below-normal rainfall in southern Cordoba slowed corn planting and reduced soil moisture supplies. By late November, winter wheat harvesting was underway. Across southern Brazil, near- to above-normal November rainfall maintained adequate to abundant soil moisture for germinating soybeans.

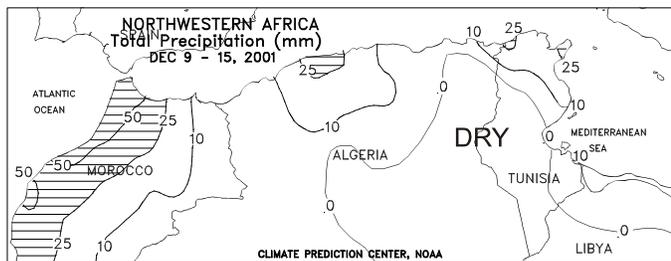




**SOUTH AFRICA**

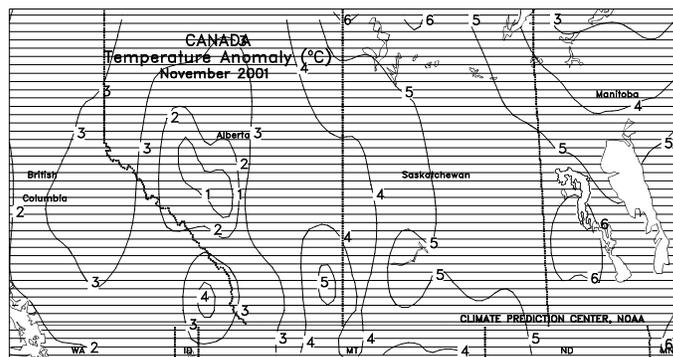
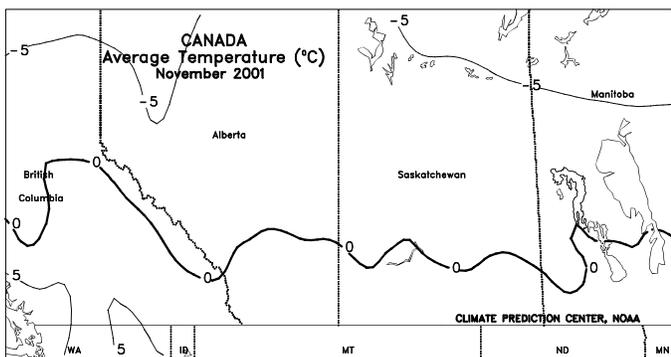
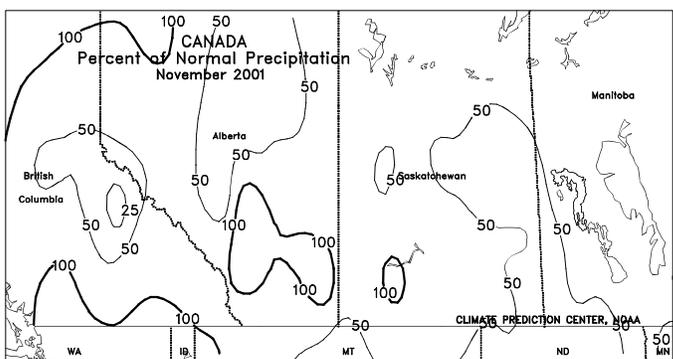
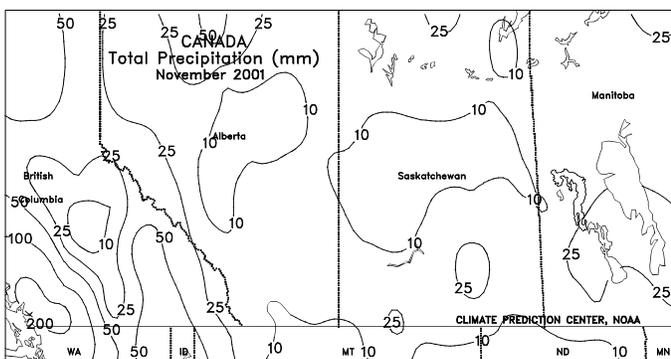
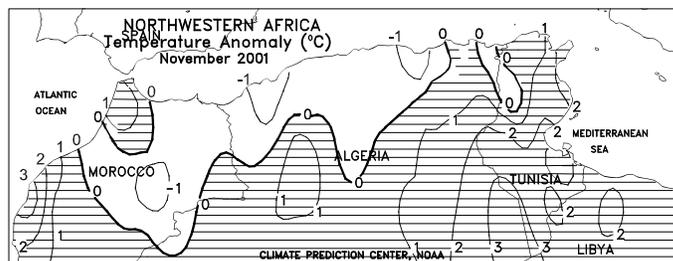
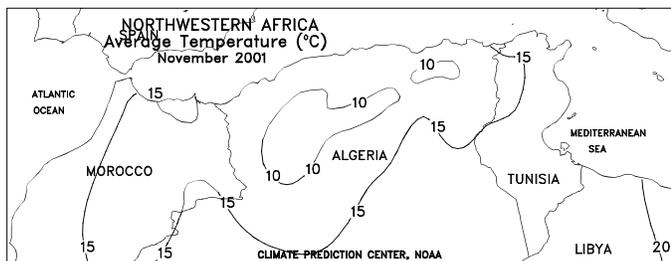
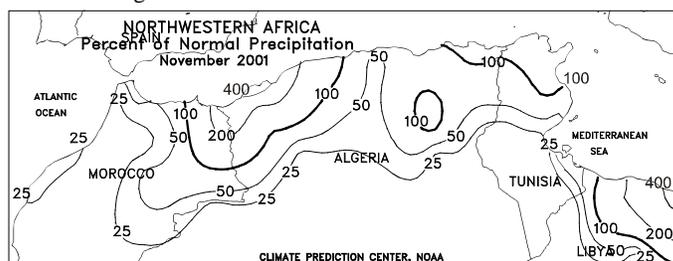
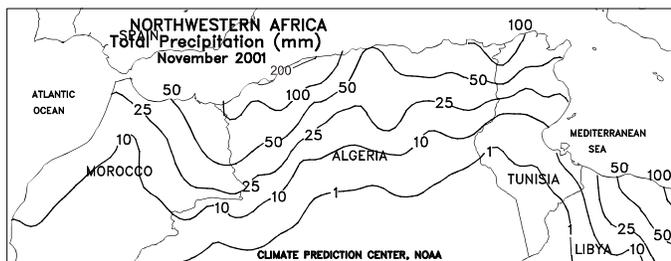
Widespread, locally heavy rain (10-25 mm, locally exceeding 50 mm) continued in the western corn belt. Excessive topsoil moisture was likely causing further fieldwork delays in important white corn areas of North West and Free State. Lighter showers (5-25 mm) favored development of vegetative summer crops farther east (eastern Free State and southern Mpumalanga). Across the corn belt, highs generally ranged in the upper 20s degrees C, which was below average for western growing areas and near to slightly above in the east. Elsewhere, heavy rain (25-50 mm, locally reaching 100 mm) returned to Eastern Cape and neighboring sections of KwaZulu-Natal, keeping sugarcane and other summer crops abundantly watered. Lighter showers (5-25 mm) fell in the more northerly sugarcane areas. Warm, dry weather maintained seasonably high irrigation demands in orchards and vineyards of Western Cape. Throughout November, an active weather pattern generated frequent, occasionally heavy showers over the corn belt and in crop areas of Eastern Cape and KwaZulu-Natal. The rainfall, which provided abundant to excessive moisture levels for summer crop germination and establishment, eventually resulted in localized flooding and planting delays. In Western Cape, an overall drier pattern necessitated irrigation of fruits and vegetables. Monthly temperatures were near to below normal in the corn belt and slightly above normal elsewhere.





**NORTHWESTERN AFRICA**

In Morocco, the first significant precipitation since the beginning of the growing season fell over winter grain areas. Rainfall amounts ranging from 10 to 50 mm will likely prompt widespread planting, delayed by previous dryness. However, additional rain is needed to ensure uniform crop emergence and sufficient establishment. Showers (25-35 mm) in central Algeria helped ease developing dryness, while in western Algeria, winter grain planting was likely progressing slowly due to the unfavorable dryness since the end of November. In eastern Algeria and Tunisia light showers (2-25 mm) dampened topsoils for planting, however soaking rain was needed to boost topsoil moisture for germination and early establishment. In November, dry weather in Morocco slowed winter grain planting, while near- to above-normal rainfall in Algeria and Tunisia favored planting and early emergence of winter grains. Planting typically continues through December.



The *Weekly Weather and Crop Bulletin* (ISSN 0043-1974) is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the *Weekly Weather Chronicle*. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53rd Congress, 3rd Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

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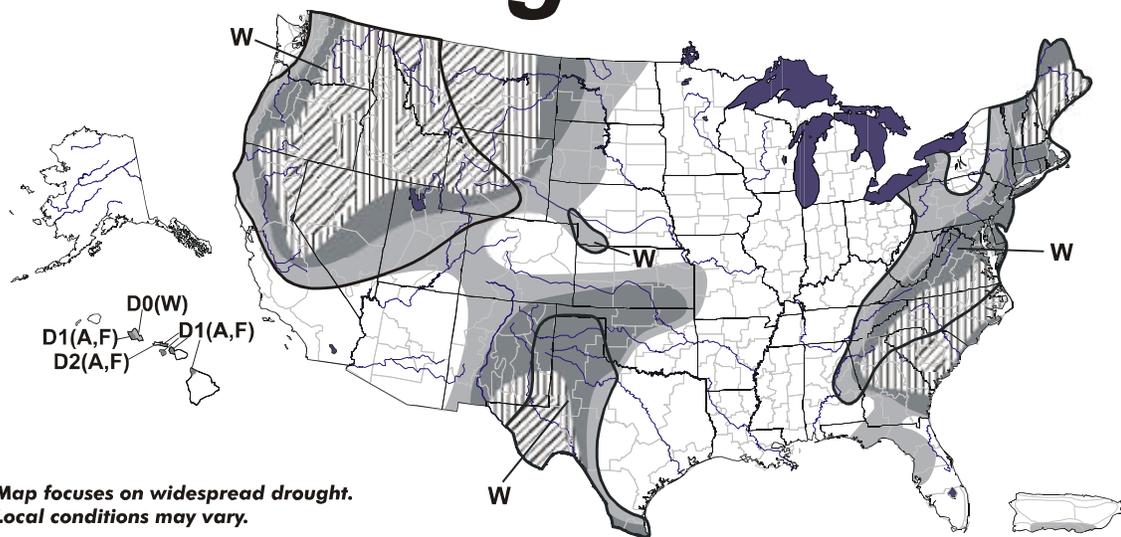
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December 11, 2001 Valid 8 a.m. EST

# U.S. Drought Monitor



Map focuses on widespread drought.  
Local conditions may vary.

- D0 Abnormally Dry
- D1 Drought-First Stage
- ▨ D2 Drought-Severe
- ▩ D3 Drought-Extreme
- ⊠ D4 Drought-Exceptional
- Delineates Overlapping Areas

Drought Impact Types:  
A = Agriculture  
W = Water (Hydrological)  
F = Fire danger (Wildfires)  
(No type = All 3 impacts)



See accompanying text summary for forecast statements  
<http://drought.unl.edu/monitor/monitor.html>

● Released Thursday, December 13, 2001 ●  
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