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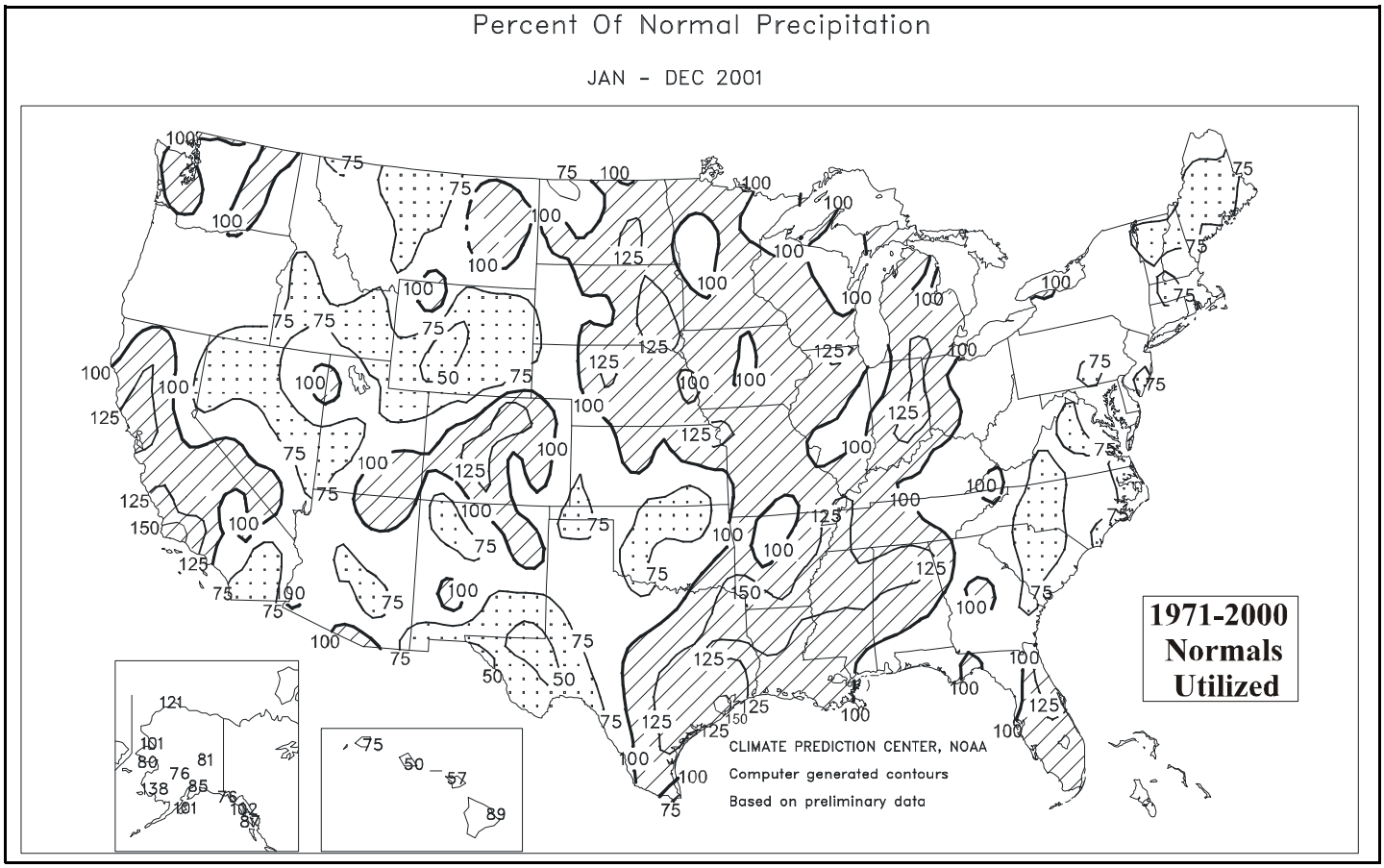
WEEKLY WEATHER AND CROP BULLETIN

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



HIGHLIGHTS

January 6 - 12, 2002

Highlights provided by USDA/WAOB

Cold air stubbornly clung across the **Southeast**, resulting in another minor freeze on January 9 as far south as **Florida's northern citrus areas**. Weekly temperatures averaged as much as 10°F below normal in **Florida**. In addition, widespread rain and snow fell across the **East** early in the week and again at week's end, aiding pastures and winter grains in the **southern Atlantic region**, and providing some relief from long-term drought. Meanwhile, record warmth overspread the **Plains** and **Midwest**, boosting temperatures 6 to 26°F above normal. On January 8, several locations noted monthly record-high temperatures. Although the warm weather permitted off-

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Contents

Water Supply Forecast for the Western United States

Snowpack and Precipitation

Mid-January snowpacks show a wide contrast, ranging from above average in Oregon, California, and Nevada, to below normal in central Montana, Wyoming, Colorado, New Mexico, and Arizona (fig. 1). Pacific Northwest snowpacks are running two to three times the values observed in January 2001. However, snowpacks diminished (compared with normal) during the first 2 weeks of January, due to a reduced frequency of storms in the West.

Snowpacks diminish rapidly moving eastward into western Montana, eastern Idaho, Wyoming, Colorado, New Mexico, and Arizona. Significant areas are in the 50 to 70 percent of average range.

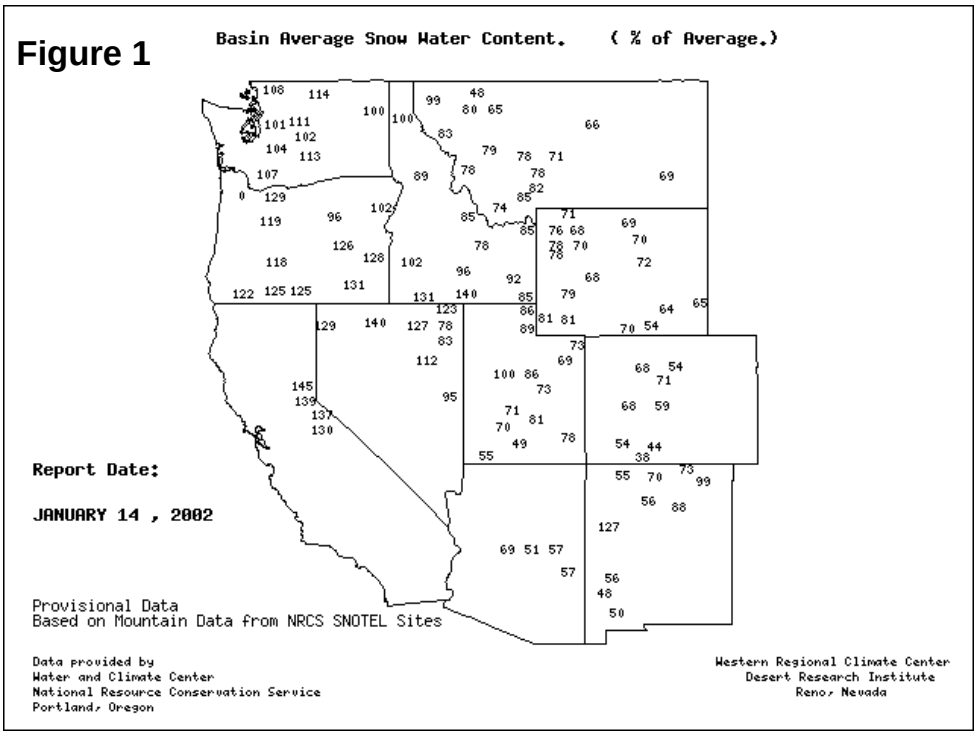
Seasonal precipitation (October 1 through January 14) reflects above-average precipitation for the Pacific Northwest, northern California, and Nevada, but below-average precipitation in southern California, Arizona, Arizona, New Mexico, Colorado, Wyoming, and central Montana (fig. 2).

Spring and Summer Streamflow Forecasts

The Pacific Northwest seasonal streamflow volume is forecast to improve significantly from last water year, based on information through January 1, 2002. Most forecasts in Oregon, Washington, Idaho, Nevada, and California indicate near- or slightly above-average

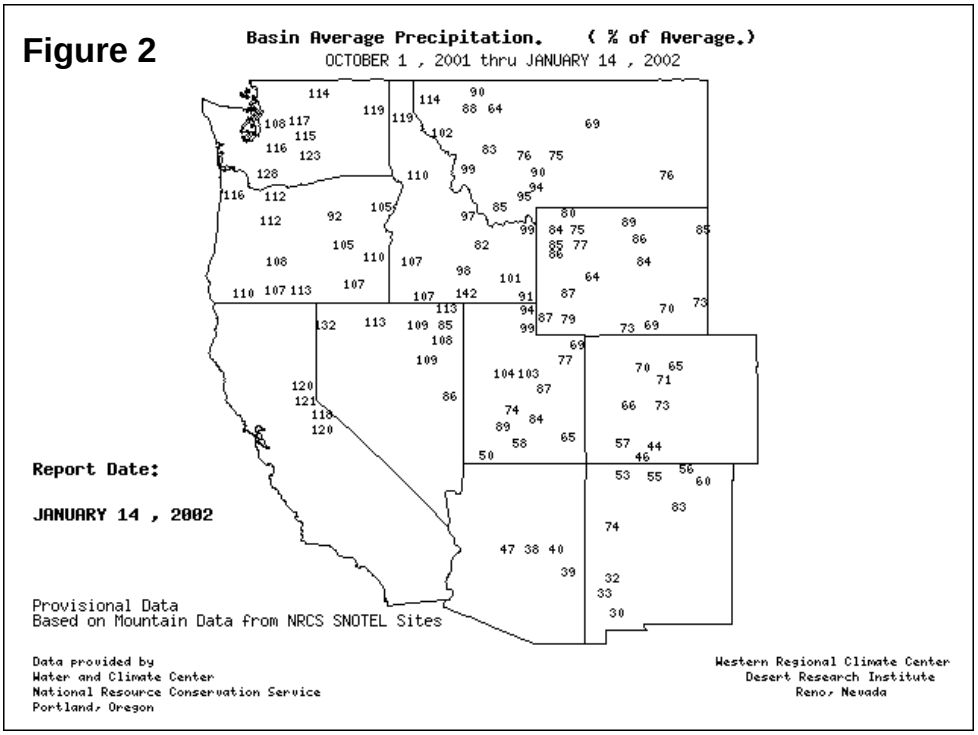
SNOTEL – River Basin Snow Water Content

Figure 1



SNOTEL – River Basin Precipitation

Figure 2



streamflow. However, central Montana, central Wyoming, Colorado, southern Utah, Arizona, and New Mexico forecasts indicate either below- or much-below average spring and summer streamflow (fig. 3).

Reservoir Storage

All major western storage reservoirs are below seasonal averages, except in Montana, where holdings are near average (fig. 4). The low levels reflect carryover from last year's drought that affected much of the West.

For More Information

The National Water and Climate Center Homepage provides the latest available snowpack and water supply information. Please visit:

http://www.wcc.nrcs.usda.gov

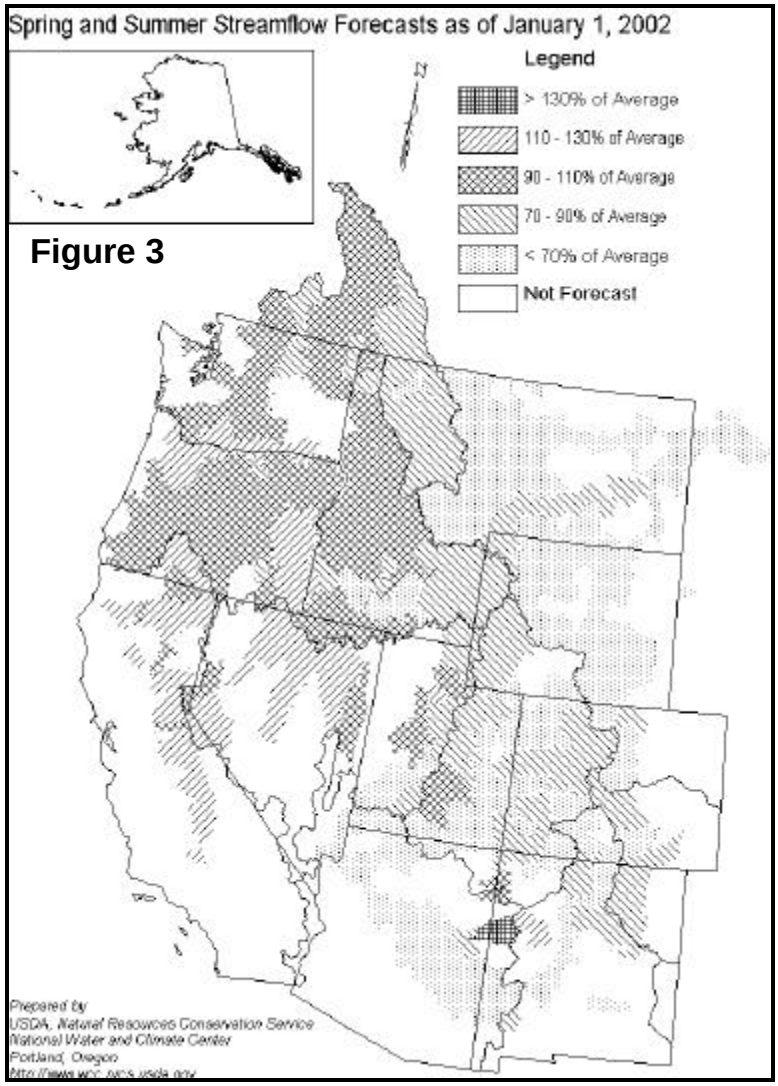


Figure 3

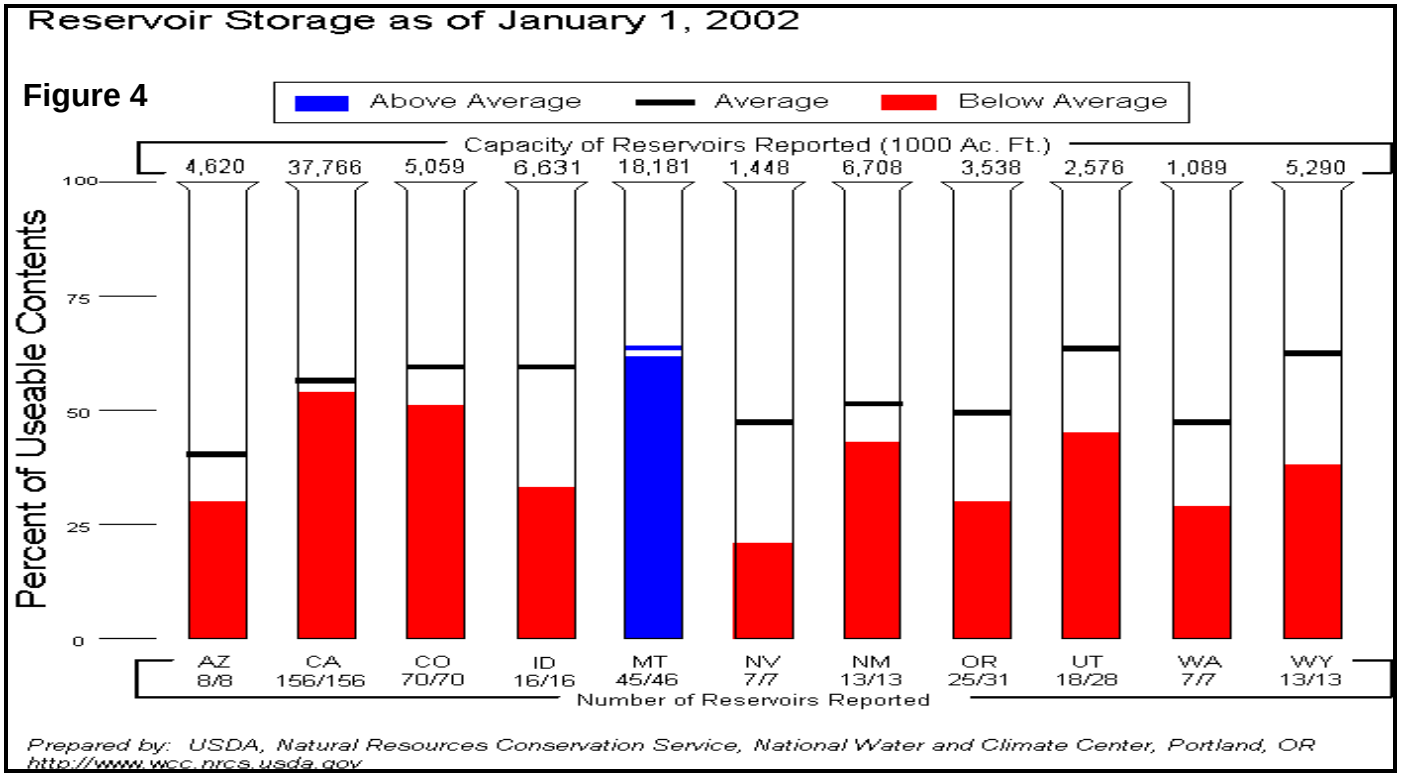
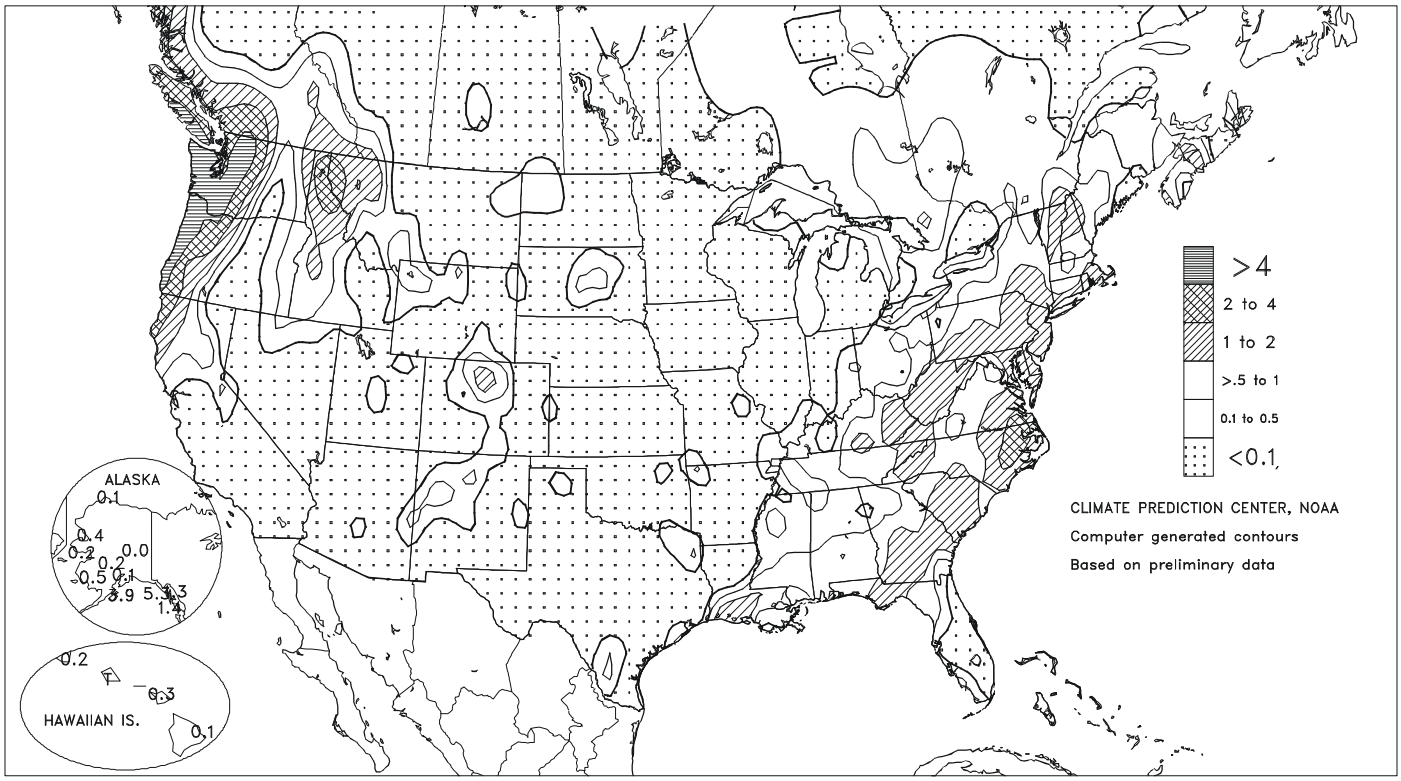


Figure 4

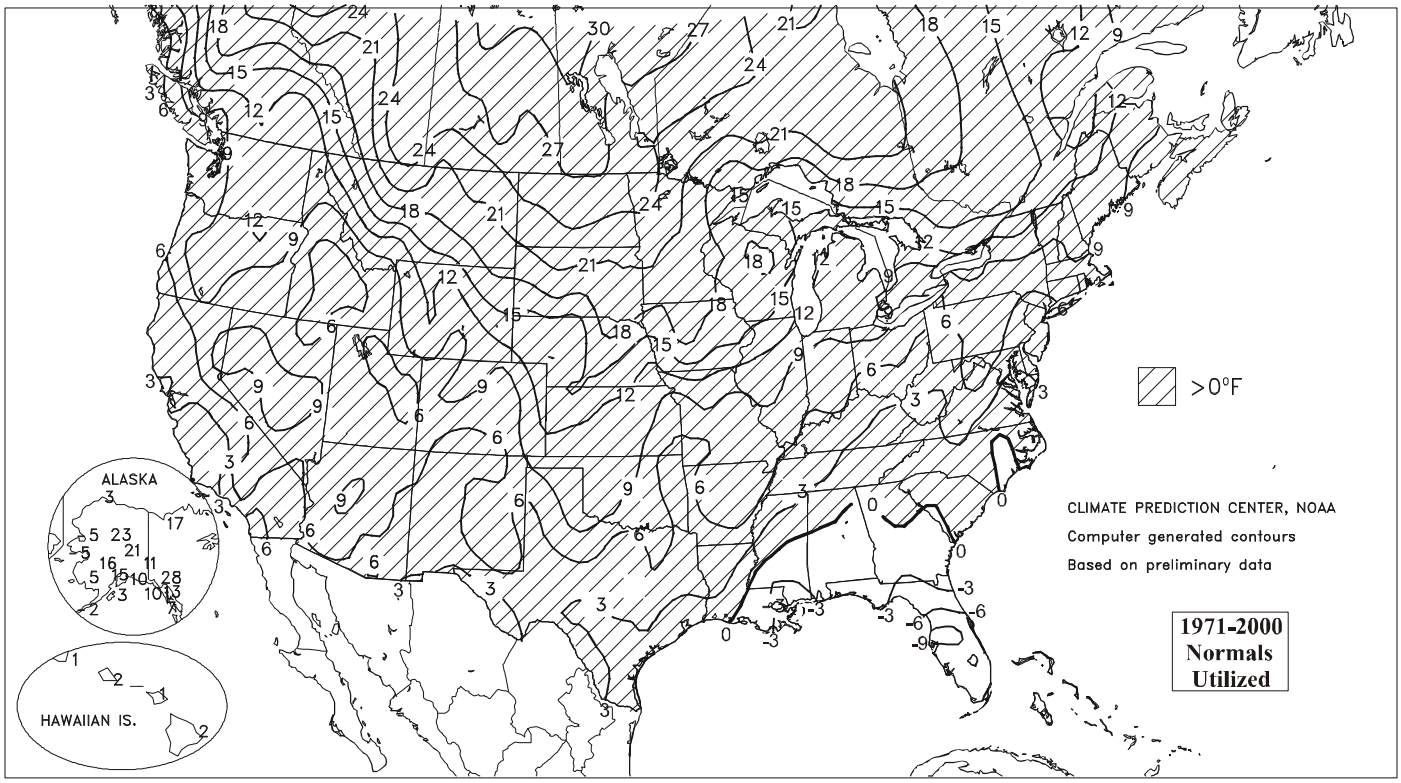
Total Precipitation (Inches)

JAN 6 - 12, 2002



Departure of Average Temperature from Normal (°F)

JAN 6 - 12, 2002



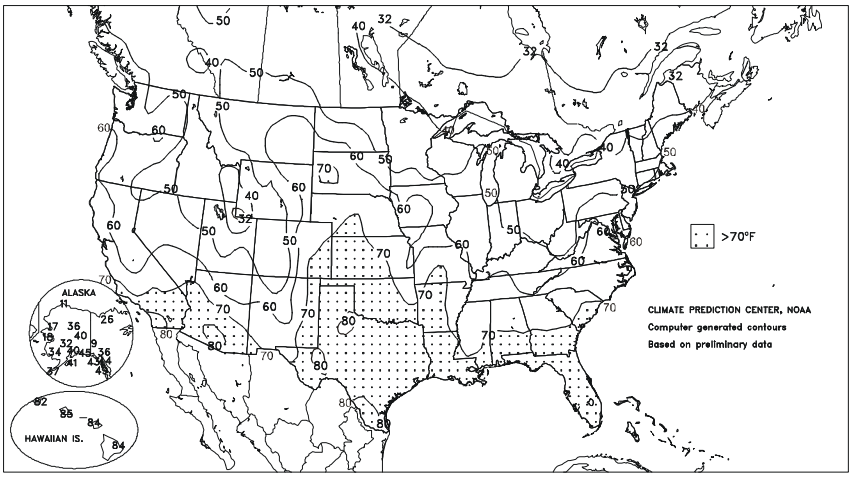
(Continued from front cover)
season fieldwork to continue and maintained low levels of livestock stress, many fields from **Montana to Texas** remained free of snow cover that would protect winter wheat from wind erosion and potential temperature extremes. Elsewhere, heavy precipitation was confined to the **northern Rockies** and areas from the **Cascades westward**, as a 2-month, drought-easing wet spell gradually subsided across the **Northwest**. Farther south, mostly dry weather persisted into a seventh month in the **Four Corners region**, where concerns about spring snow-melt runoff and summer water supplies continued to grow.

Early in the week, windy, dramatically milder conditions overspread the **northern Plains**, fueled by chinook (downslope) winds. Six days after New Year's Day, low temperatures in **Montana** fell to -5ºF in **Cut Bank**, -7ºF in **Great Falls**, and -14ºF in **Havre**, high temperatures on January 7 soared to 58, 60, and 62 ºF, respectively. From January 6-12, winds averaged 19.8 mph in **Great Falls** and 24.0 mph in **Cut Bank**. Peak wind gusts reached 61 mph in **Great Falls** on January 12, and topped 60 mph on 3 different days (January 7, 8, and 12) in **Cut Bank**, including a gust to 72 mph on January 8.

Meanwhile, record warmth developed across the **West** early in the week, expanding across the **Plains** and **Midwest** on January 8 and 9. For the week, more than 200 daily-record highs were established, nearly half of them on Tuesday. All-time monthly records were established on January 8 in locations such as **East Rapid City, SD** (73ºF), **Bismarck, ND** (63ºF), and **Oelwein, IA** (57ºF). Elsewhere on Tuesday, **Wichita, KS** (75ºF), tied their monthly record, previously attained on January 22, 1967, while **Glasgow, MT** (61ºF), and **Des Moines, IA** (64ºF), missed their respective January-record highs by just 1ºF. Although the passage of a cold front brought slightly cooler air to the **Plains** and **Midwest** after midweek, temperatures remained at near- to above-normal levels. Farther west, very warm conditions also developed across **southern California**, where daily-record highs included 85ºF on January 8 in **San Bernardino** and 84ºF on January 11 in **Riverside**.

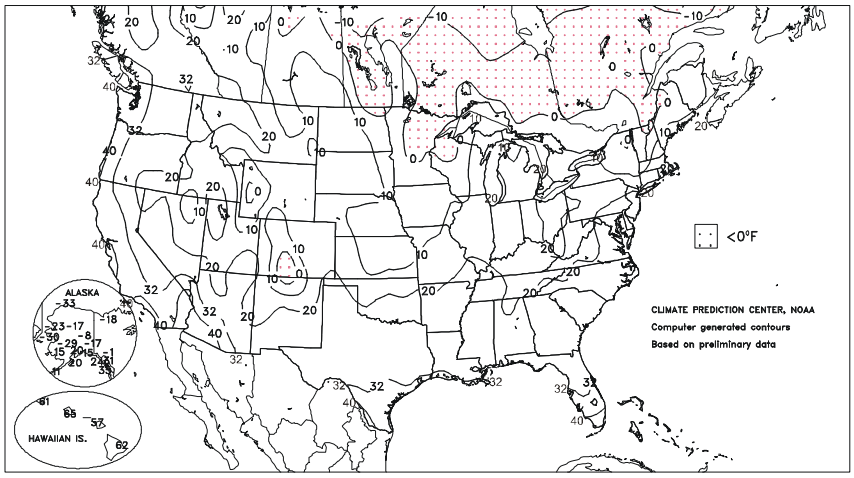
Extreme Maximum Temperature (ºF)

JAN 6 - 12, 2002



Extreme Minimum Temperature (ºF)

JAN 6 - 12, 2002



In contrast, a strong high-pressure system settled across the **central Gulf Coast region** on January 8, reaching **Florida** a day later. Readings remained mostly at or above 30ºF across **central Florida** on January 8, when steady winds at 10 mph or higher helped to maintain a fairly uniform temperature pattern, but generally ranged from 24 to 34ºF the following morning, when winds were calm. Selected low temperatures in **Florida** on January 9 included 24 ºF in **Hastings**, 25ºF (a daily-record low) in **Orlando**, 28ºF in **Daytona Beach**, and 32 ºF at both **Belle Glade** and **Immokalee**. Temperatures were not low enough to harm citrus fruits, which are typically damaged by a hard freeze (temperatures at or below 28ºF for 4 hours or more), although some winter ground crops required freeze-protection measures. In addition, blowing sand resulted in some possible reductions in quality (scarring) of some vegetables in **southern Florida**. Not surprisingly, the warm weather on the **northern Plains** and cold conditions in **Florida** resulted in some interesting comparisons. On January 8, the high of 61ºF in **Miami, FL**, was lower than the maximum temperatures in **Jordan, MT** (66ºF), and **Bismarck, ND** (63ºF).

The week opened and closed with fast-moving storm systems across the **East**. Both produced beneficial showers in the **Southeast** and heavy snow in parts of the **Northeast**. On January 6-7, 17.4 inches of snow blanketed **Albany, NY**, their fifth-highest January storm-total snowfall. The early-week storm delivered a trace of snow to **Philadelphia, PA**, and **Washington, DC**, the latest first snowfall on record in both cities (previously December 27, 1990, in **Philadelphia**, and December 25, 1894, in **Washington**). Farther south, showers provided limited relief from previously dry conditions. **Athens, GA**, recently completed their driest October-December period on record, with 2.55 inches (23 percent of normal), but netted 1.10 inches (59 percent) during the first 13 days of January. Elsewhere in **Georgia**, **Atlanta** received 4.02 inches (36 percent of normal) from October to December, their second-driest such period in the last 70 years, but recorded 1.06 inches (54 percent) from January 1-13. Even less relief from dryness was noted on the **Plains**, where **Dodge City, KS**, received only a trace of precipitation from January 1-13, following their second-driest June-December period on record (5.85 inches, or 43 percent of normal), behind only 1952.

Cold conditions lingered in **western Alaska**, but unusually mild weather lifted weekly temperatures at least 10 to 20ºF above normal across most of the **Alaskan interior**. Warmth peaked on January 9 in **Fairbanks, AK**, where the high of 40 ºF tied their record for the date. Significant precipitation was largely confined to **southern Alaska**, where **Kodiak** received 7.98 inches during the first 12 days of January. Meanwhile in **Hawaii**, an unusually quiet weather pattern prevailed through a fourth consecutive week, bringing renewed drought concerns. Some of the highest 24-hour totals were observed in **Kauai** on January 9-10, when rainfall included 1.60 inches in **Kokee** and 0.88 inch in **Wainiha**. Despite beneficial autumn rainfall nearly statewide, only scattered **Hawaiian** locations reported above-normal precipitation for 2001. **Honolulu, Oahu**, measured less than 15 inches of rain for the fourth consecutive year (4.52 inches in 1998, 12.01 inches in 1999, 7.09 inches in 2000, and 9.16 inches in 2001) for the first time since 1959-62, leaving their 50-month precipitation at 34.06 inches (36 percent of normal), or 60.82 inches below normal.

Weather Data for Selected Locations in the Delta and the Bootheel

Weather Data for the Week Ending January 12, 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			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
MS	BATESVILLE x	52	35	63	23	44	5	2.20	1.08	1.90	10.73	137	2.20	112	--	--	0	3	2	1
	CLARKSDALE x	53	34	63	27	44	4	0.82	-0.31	0.82	12.05	165	0.82	42	--	--	0	4	1	1
	CLEVELAND x	52	35	65	28	44	2	1.43	0.38	1.20	7.99	116	1.43	77	--	--	0	3	3	1
	GREENVILLE x	55	34	67	27	45	3	1.24	0.05	1.24	10.50	144	1.24	61	--	--	0	4	1	1
	GREENWOOD x	55	36	67	24	46	2	0.77	-0.45	0.77	9.21	122	1.31	62	--	--	0	3	1	1
	INDIANOLA 1S	55	37	66	29	46	--	0.50	--	0.50	8.46	--	1.62	--	47	42	0	2	1	1
	INVERNESS 5E	55	38	66	29	47	--	0.66	--	0.66	9.59	--	1.61	--	49	43	0	2	1	1
	LYON	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MOORHEAD x	56	39	66	30	48	5	0.72	-0.54	0.72	8.30	103	0.72	33	--	--	0	2	1	1
	ONWARD	57	40	70	28	49	--	0.23	--	0.22	8.59	--	1.62	--	48	44	0	2	2	0
	ROLLING FORK x	55	36	70	26	46	3	0.46	-0.87	0.25	5.70	72	0.46	20	--	--	0	3	3	0
	SCOTT	55	38	67	30	47	--	0.36	--	0.35	9.40	--	1.67	--	49	41	0	2	2	0
	SIDON	55	38	67	28	47	--	0.96	--	0.84	8.92	--	1.24	--	51	42	0	2	2	1
	TUNICA x	50	36	63	28	43	4	0.96	-0.11	0.80	11.23	152	0.96	51	--	--	0	4	2	1
	TUNICA 1W	52	35	63	28	44	--	0.39	--	0.31	11.27	--	0.94	--	46	40	0	3	3	0
	VANCE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	VICKSBURG x	55	39	70	27	47	0	1.42	-0.05	1.25	8.17	100	1.42	57	--	--	0	2	2	1
	YAZOO CITY x	55	38	70	25	47	2	1.66	0.19	1.37	9.15	104	1.66	66	--	--	0	2	2	1
	STONEVILLE *	54	35	67	29	45	4	1.87	0.61	1.65	10.96	144	1.87	87	50	41	0	3	2	1
MO	CARDWELL	51	32	62	26	41	9	0.31	-0.47	0.26	9.40	152	0.49	40	45	41	0	3	2	0
	CHARLESTON	47	31	59	26	39	9	0.27	-0.25	0.27	8.39	151	0.40	45	39	35	0	5	1	0
	CLARKTON	50	31	61	25	39	9	0.37	-0.21	0.34	10.33	186	0.49	45	--	--	0	5	4	0
	DELTA	48	29	57	26	37	7	0.17	-0.40	0.16	7.04	115	0.38	35	36	32	0	6	2	0
	GLENNONVILLE	49	32	59	27	40	10	0.25	-0.33	0.24	9.01	162	0.44	40	42	36	0	5	2	0
	PORTAGEVILLE #1	49	33	59	27	40	9	0.38	-0.48	0.37	9.23	146	0.44	35	44	37	0	4	2	0
	PORTAGEVILLE #2	49	33	60	26	40	9	0.35	-0.51	0.35	8.81	140	0.41	32	44	37	0	3	1	0
	STEELE	50	34	60	28	41	10	0.45	-0.39	0.33	8.67	132	0.54	42	43	38	0	3	2	0

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: A low-pressure system that moved along the Gulf Coast brought varying amounts of precipitation to all reporting stations. High pressure dominated the region thereafter, allowing temperatures to rise above normal. A dry cold front crossed the region late in the week. Recent warmth and abundant sunshine combined to aid winter wheat development.

U.S. Crop Production Highlights

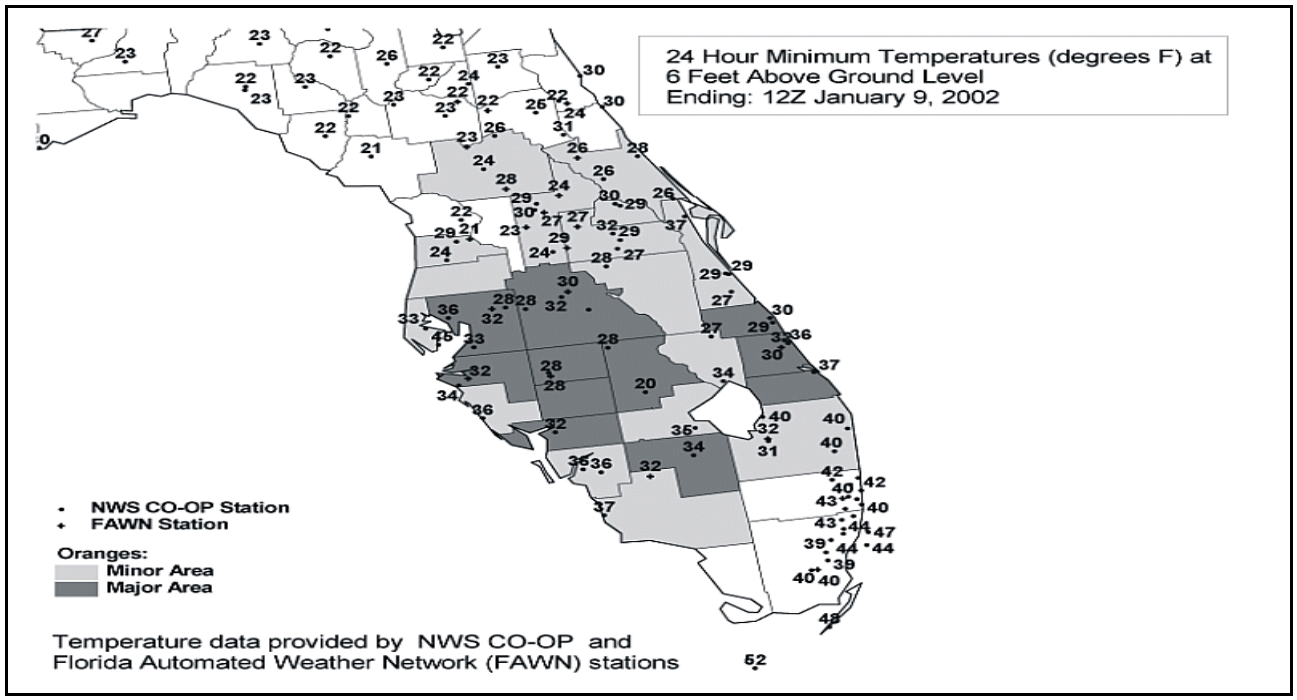
The following information was released by USDA's Agricultural Statistics Board on January 11, 2002. Forecasts refer to January 1.

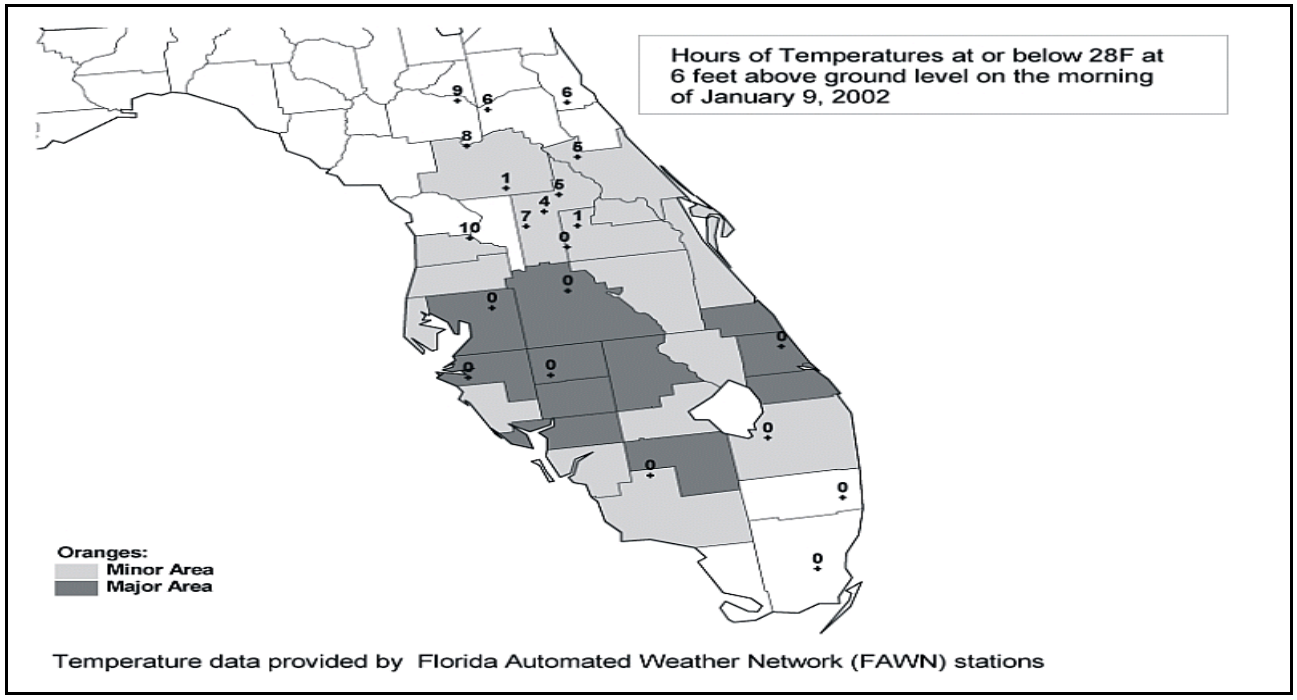
The **all orange** forecast for the 2001-02 crop is 12.5 million tons, virtually unchanged from the December 1 forecast, but up 1 percent (%) from last season's final utilization. Florida's all orange forecast remains at 231 million boxes (10.4 million tons), 3% higher than the previous season. Weather conditions until the end of December were warm and mostly dry. Early and midseason varieties in Florida are forecast at 131 million boxes (5.9 million tons), the same as the December forecast. If realized, this pro-duction will be 2% higher than last season. Fruit sizes are the third-smallest of the 10-season series. Losses from droppage are slightly above average. Florida's Valencia forecast is 100 million boxes (4.5 million tons), unchanged from the previous forecast, but 5% higher than last season's final utilization. Fruit sizes are slightly below average, while losses from droppage are below average.

The all orange forecast for California, at 54.0 million boxes (2.03 million tons), is the same as the October 1 forecast, but down 8% from the previous season. California's Navel orange harvest is 20% complete, and fruit sizes are larger than last season. The Texas all orange forecast is 1.9 million boxes (81,000 tons), down 300,000 boxes from the initial forecast in October, and 335,000 boxes below last season. Arizona's all orange utilization is forecast at 700,000 boxes (26,000 tons), a decrease of 50,000 boxes from the previous forecast and 200,000 boxes below the final 2000-01 utilization. If realized, it will be Arizona's fifth consecutive season of declining utilization.

Winter wheat seeded area for 2002 is expected to total 41.0 million acres, down fractionally from 2001. This is the smallest area since 1971. Approximate class breakdowns are: Hard Red Winter (HRW), 29.3 million acres; Soft Red Winter (SRW), 8.3 million; and White Winter, 3.4 million.

The HRW seeded area is up 1% from 2001. Significant acreage increases in Texas, Oklahoma, and Montana more than offset a large acreage decline in Kansas, where wheat seedings last increased in 1996 and fell to the lowest level since 1957. Oklahoma (first wheat acreage increase since 1990) and Texas are rebounding from last year, when dry conditions reduced seedings. The SRW area is down 4% from last year, and is 13% below 2 years ago. Acreage declined significantly across the Corn Belt, in Arkansas, and throughout much of the Southeast. Seeded acres increased sharply in Georgia, where growers planted additional wheat in place of rye as a cover crop. The White Winter seeded area is down 1% from 2001. Growers in Idaho planted the smallest acreage since 1962.





During the first 10 days of the new year, cold air settled deep into the South on several occasions. On January 3, a freeze was noted as far south as the lower Rio Grande Valley in southernmost Texas, where low temperatures generally ranged from 26 to 30 °F. Brownsville, TX, recorded 30 °F, their lowest temperature since an identical reading on January 13, 1997. Due to the short duration of the Texas freeze, agricultural impacts on citrus, unharvested sugarcane, and winter ground crops were relatively minor. A day later, the harshest of several freezes struck southern Louisiana, where Baton Rouge (18 °F) experienced their coldest weather since a low of 15°F on February 5, 1996. Since the harvest of Louisiana' s sugarcane crop was virtually complete, the primary agricultural concern involved the possible effect of cold weather on young sugarcane stands (mostly under 3 feet tall).

Southern Florida escaped the cold spell with only scattered frost, but central Florida (the State' s northern citrus areas) experienced several light freezes, primarily on January 4-5 and 8-9. The January 8-9 event resulted in more widespread freezes, although gusty winds on the 8th tended to keep temperatures in a narrow range near or just above the freezing mark , while calm conditions on the 9th allowed for easier implementation of freeze-protection measures and resulted in larger local variations in temperatures (generally 24 to 34°F; see top chart above). As shown by the freeze duration chart (bottom chart), all of Florida' s citrus region escaped freeze damage (temperatures did not fall below 28 °F for 4 hours or more), although some winter ground crops required freeze protection and may have sustained localized damage due to cold weather and blowing sand.

National Weather Data for Selected Cities

Weather Data for the Week Ending January 12, 2002

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

STATES AND STATIONS		TEMPERATURE EF						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP. EF		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	53	34	67	20	43	1	0.46	-0.78	0.37	5.46	83	0.70	34	91	51	0	2	3	0
	HUNTSVILLE	52	30	65	20	41	2	0.39	-0.88	0.31	6.75	87	0.44	20	88	65	0	5	2	0
	MOBILE	60	37	74	23	48	-2	0.46	-0.80	0.38	5.35	79	2.52	121	99	74	0	2	2	0
	MONTGOMERY	54	34	71	23	44	-2	0.64	-0.43	0.43	4.09	60	1.00	55	96	57	0	3	3	0
AK	ANCHORAGE	35	27	40	20	31	15	0.09	-0.06	0.04	0.32	24	0.12	44	87	75	0	7	3	0
	BARROW	-4	-16	11	-33	-10	3	0.04	0.04	0.02	0.11	92	0.05	500	83	76	0	7	3	0
	FAIRBANKS	22	2	40	-8	12	22	0.00	-0.13	0.00	0.17	18	0.08	35	87	77	0	7	0	0
	JUNEAU	42	36	44	31	39	13	1.29	0.17	0.49	5.83	79	1.34	68	95	84	0	1	7	0
	KODIAK	38	28	41	20	33	3	3.94	2.04	1.84	14.60	134	6.79	210	87	78	0	5	6	3
	NOME	7	-4	18	-30	1	-5	0.23	0.04	0.15	0.96	72	0.43	130	72	63	0	7	2	0
AZ	FLAGSTAFF	54	25	62	18	39	10	0.00	-0.45	0.00	1.16	45	0.00	0	79	27	0	7	0	0
	PHOENIX	74	48	81	41	61	8	0.00	-0.19	0.00	0.88	70	0.00	0	51	32	0	0	0	0
	TUCSON	73	40	82	32	56	5	0.00	-0.23	0.00	0.60	42	0.00	0	49	25	0	1	0	0
	YUMA	75	50	80	46	63	6	0.00	-0.08	0.00	0.01	2	0.00	0	30	25	0	0	0	0
AR	FORT SMITH	54	30	70	25	42	5	0.02	-0.50	0.02	5.98	139	0.28	31	90	44	0	6	1	0
	LITTLE ROCK	56	35	70	25	45	5	0.03	-0.77	0.03	8.45	138	0.57	41	87	41	0	3	1	0
CA	BAKERSFIELD	55	40	62	37	47	0	0.04	-0.21	0.03	0.80	68	0.14	34	98	84	0	0	2	0
	FRESNO	54	43	59	39	48	3	0.04	-0.41	0.01	2.54	122	0.61	82	98	90	0	0	4	0
	LOS ANGELES	68	49	76	47	59	2	0.00	-0.60	0.00	1.46	53	0.16	16	89	47	0	0	0	0
	REDDING	58	41	64	35	49	4	0.40	-1.03	0.35	12.11	172	2.82	119	95	81	0	0	3	0
	SACRAMENTO	54	43	58	38	49	4	0.08	-0.71	0.05	8.01	214	1.73	133	10	82	0	0	4	0
	SAN DIEGO	69	50	77	48	60	3	0.00	-0.48	0.00	0.61	29	0.16	20	79	55	0	0	0	0
	SAN FRANCISCO	58	49	63	44	53	4	0.04	-0.89	0.02	9.45	214	0.91	59	96	89	0	0	3	0
	STOCKTON	54	43	61	40	48	3	0.07	-0.49	0.02	6.43	234	1.40	151	99	95	0	0	6	0
CO	ALAMOSA	36	1	46	-6	19	5	0.14	0.08	0.14	0.31	74	0.18	200	88	68	0	7	1	0
	CO SPRINGS	49	24	61	14	37	9	0.07	0.00	0.07	0.21	38	0.12	92	73	32	0	5	1	0
	DENVER INTL	50	26	60	16	38	10	0.29	0.23	0.29	0.43	100	0.29	242	75	35	0	6	1	0
	GRAND JUNCTION	45	25	49	20	35	10	0.00	-0.14	0.00	0.38	50	0.07	29	86	62	0	7	0	0
	PUEBLO	54	19	73	10	37	8	0.08	0.00	0.08	0.43	81	0.21	150	82	49	0	7	1	0
CT	BRIDGEPORT	41	30	50	20	35	5	0.98	0.13	0.71	3.01	61	0.98	68	89	70	0	4	4	1
	HARTFORD	40	27	48	15	33	7	0.52	-0.35	0.31	2.73	54	0.52	35	91	71	0	5	4	0
DC	WASHINGTON	46	31	53	28	38	3	0.81	0.07	0.60	2.34	54	0.81	64	82	51	0	5	3	1
DE	WILMINGTON	43	30	56	22	36	4	0.44	-0.36	0.26	2.41	51	0.44	32	96	62	0	5	4	0
FL	DAYTONA BEACH	66	39	74	28	52	-6	0.06	-0.64	0.06	1.04	27	0.69	58	98	39	0	2	1	0
	JACKSONVILLE	64	38	72	27	51	-2	0.36	-0.44	0.28	3.97	101	0.84	64	96	51	0	2	2	0
	KEY WEST	70	58	76	50	64	-6	0.00	-0.52	0.00	3.62	119	0.06	7	84	63	0	0	0	0
	MIAMI	72	53	80	44	63	-5	0.02	-0.37	0.02	3.25	114	0.21	31	88	48	0	0	1	0
	ORLANDO	65	38	74	25	52	-9	0.02	-0.51	0.02	1.15	36	0.67	75	93	49	0	1	1	0
	PENSACOLA	61	39	74	25	50	-2	0.42	-0.76	0.39	5.36	91	2.99	153	94	59	0	2	4	0
	TALLAHASSEE	62	35	73	21	49	-3	1.19	-0.03	0.56	3.12	51	2.34	115	95	67	0	3	3	2
	TAMPA	64	44	70	36	54	-7	0.22	-0.25	0.17	1.87	60	0.98	123	94	53	0	0	2	0
	WEST PALM	71	47	78	39	59	-7	0.10	-0.70	0.10	3.55	80	0.15	12	87	49	0	0	1	0
GA	ATHENS	54	33	66	26	44	2	0.99	-0.03	0.79	2.62	48	1.14	67	76	49	0	4	2	1
	ATLANTA	51	34	66	25	43	1	0.62	-0.45	0.47	3.14	56	0.92	52	81	54	0	3	3	0
	AUGUSTA	60	28	70	19	44	0	1.22	0.24	0.63	2.82	59	1.82	111	88	55	0	6	2	2
	COLUMBUS	56	35	70	26	46	0	1.01	-0.06	0.56	3.23	52	1.42	79	93	49	0	2	3	1
	MACON	58	31	69	24	45	0	1.12	0.03	0.83	3.09	54	1.51	83	87	44	0	3	2	1
	SAVANNAH	62	37	71	25	49	0	1.31	0.42	0.98	2.41	56	1.90	128	88	49	0	2	2	1
HI	HILO	81	65	84	62	73	2	0.09	-2.04	0.09	13.89	99	0.12	3	84	72	0	0	1	0
	HONOLULU	82	69	85	65	76	3	0.02	-0.60	0.02	0.78	20	0.02	2	84	73	0	0	1	0
	KAHULUI	81	65	84	57	73	1	0.28	-0.57	0.15	3.65	81	0.54	37	92	81	0	0	3	0
	LIHUE	79	66	82	61	72	0	0.22	-0.85	0.16	1.72	26	0.22	12	87	76	0	0	3	0
ID	BOISE	44	30	52	28	37	8	0.13	-0.17	0.13	1.55	82	0.40	77	88	76	0	5	1	0
	LEWISTON	50	39	57	30	45	12	0.19	-0.06	0.09	1.33	91	0.69	168	78	65	0	1	3	0
	POCATELLO	37	22	43	18	30	6	0.02	-0.23	0.02	1.18	77	0.10	23	92	84	0	7	1	0
IL	CHICAGO/O'HARE	41	27	55	15	34	12	0.00	-0.39	0.00	1.01	32	0.02	3	80	63	0	4	0	0
	MOLINE	43	25	56	13	34	13	0.01	-0.35	0.01	1.00	35	0.01	2	79	57	0	6	1	0
	PEORIA	43	25	54	14	34	12	0.00	-0.33	0.00	1.42	47	0.07	12	87	56	0	7	0	0
	ROCKFORD	42	24	56	10	33	14	0.00	-0.30	0.00	0.93	36	0.00	0	82	59	0	6	0	0
	SPRINGFIELD	43	25	54	13	34	9	0.00	-0.37	0.00	2.12	66	0.03	4	80	65	0	6	0	0
IN	EVANSVILLE	45	27	56	16	36	5	0.29	-0.34	0.28	7.45	161	0.29	27	84	61	0	5	2	0
	FORT WAYNE	39	27	49	12	33	9	0.12	-0.34	0.12	2.52	70	0.12	15	86	67	0	5	1	0
	INDIANAPOLIS	40	26	50	15	33	7	0.17	-0.38	0.17	3.18	80	0.17	18	91	70	0	6	1	0
	SOUTH BEND	38	28	47	18	33	9	0.01	-0.50	0.01	2.32	58	0.07	8	86	70	0	6	1	0
IA	BURLINGTON	42	26	54	16	34	11	0.00	-0.30	0.00	1.11	42	0.12	23	86	54	0	5	0	0
	CEDAR RAPIDS	44	22	58	5	33	15	0.00	-0.22	0.00	1.04	56	0.00	0	88	46	0	6	0	0
	DES MOINES	47	22	64	5	35	15	0.00	-0.22	0.00	0.66	39	0.00	0	80	51	0	6	0	0
	DUBUQUE	40	23	51	8	32	15	0.00	-0.28	0.00	1.31	61	0.00	0	81	61	0	6	0	0
	SIOUX CITY	49	17	64	5	33	15	0.01	-0.13	0.01	0.46	51	0.01	4	86	54	0	7	1	0
	WATERLOO	43	21	57	4	32	16	0.00	-0.17	0.00	0.88	63	0.00	0	86	59	0	7	0	0
KS	CONCORDIA	52	27	64	10	39	13	0.00	-0.17	0.00	0.07	6	0.00	0	70	44	0	5	0	0
	DODGE CITY	56	25	74	12	40	10	0.00	-0.15	0.00	0.03	3	0.00	0	68	25	0	5	0	0
	GOODLAND	56	27	74	19	41	14	0.02	-0.09	0.02	0.66	112	0.03	16	69	40	0	5	1	0
	TOPEKA	53	22	66	9	38	11	0.03	-0.18	0.03	0.16	9	0.03	8	80	54	0	7	1	0

Based on1971-2000 normals

***** Not Available**

Weather Data for the Week Ending January 12, 2002

STATES AND STATIONS		TEMPERATURE EF						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP. EF		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	55	24	75	10	40	10	0.00	-0.21	0.00	0.08	5	0.00	0	74	46	0	7	0	0
KY	JACKSON	45	30	56	20	38	4	1.01	0.21	0.45	3.56	63	1.01	73	93	49	0	6	5	0
	LEXINGTON	43	28	53	15	35	3	0.45	-0.33	0.33	3.34	62	0.45	33	87	70	0	5	3	0
	LOUISVILLE	47	32	59	23	39	6	0.34	-0.40	0.30	4.81	97	0.34	27	94	68	0	5	2	0
	PADUCAH	47	31	61	24	39	7	0.26	-0.46	0.24	8.99	160	0.32	26	95	58	0	5	2	0
LA	BATON ROUGE	60	37	72	23	49	-1	0.48	-0.87	0.47	6.14	82	1.89	84	96	52	0	2	2	0
	LAKE CHARLES	63	42	72	27	52	1	0.60	-0.67	0.60	6.64	99	1.45	68	93	47	0	2	1	1
	NEW ORLEANS	60	40	73	27	50	-2	0.40	-0.81	0.31	5.39	76	2.49	125	86	66	0	1	2	0
	SHREVEPORT	62	38	71	26	50	4	0.00	-1.00	0.00	7.15	114	1.05	61	89	46	0	2	0	0
ME	CARIBOU	29	15	33	3	22	12	0.26	-0.44	0.11	1.25	28	0.26	21	93	78	0	7	4	0
	PORTLAND	39	27	49	19	33	11	0.23	-0.71	0.20	2.26	39	0.23	14	86	60	0	6	3	0
MD	BALTIMORE	46	28	56	22	37	5	1.41	0.61	0.94	3.14	67	1.41	103	92	67	0	5	3	1
MA	BOSTON	43	31	50	22	37	7	0.81	-0.06	0.51	3.63	70	0.81	55	87	58	0	4	3	1
	WORCESTER	37	26	43	15	32	8	0.61	-0.33	0.35	3.38	63	0.61	38	95	62	0	5	4	0
MI	ALPENA	37	25	46	17	31	12	0.05	-0.36	0.04	1.52	60	0.06	8	91	67	0	6	2	0
	GRAND RAPIDS	36	26	43	16	31	8	0.03	-0.41	0.03	2.40	69	0.03	4	89	68	0	5	1	0
	HOUGHTON LAKE	35	24	45	9	30	12	0.02	-0.34	0.01	0.61	26	0.02	3	90	77	0	5	2	0
	LANSING	37	26	44	12	32	10	0.03	-0.30	0.02	1.19	43	0.06	10	86	69	0	6	2	0
	MUSKEGON	39	31	47	22	35	11	0.03	-0.47	0.03	1.45	41	0.03	3	80	70	0	4	1	0
	TRAVERSE CITY	37	27	46	15	32	11	0.22	-0.45	0.11	2.58	68	0.40	35	94	68	0	5	5	0
MN	DULUTH	34	18	45	0	26	18	0.00	-0.22	0.00	0.55	43	0.00	0	90	73	0	6	0	0
	INT'L FALLS	32	15	43	-1	24	22	0.02	-0.15	0.02	0.29	30	0.02	8	89	71	0	6	1	0
	MINNEAPOLIS	39	23	49	4	31	18	0.00	-0.22	0.00	0.74	54	0.00	0	83	65	0	6	0	0
	ROCHESTER	38	21	47	2	29	17	0.00	-0.19	0.00	1.39	104	0.00	0	87	72	0	6	0	0
	ST. CLOUD	39	19	49	0	29	21	0.00	-0.16	0.00	0.18	19	0.02	8	90	61	0	6	0	0
MS	JACKSON	57	35	70	22	46	1	0.37	-0.91	0.37	5.47	73	1.40	65	94	56	0	2	1	0
	MERIDIAN	56	32	71	20	44	-2	0.66	-0.65	0.43	6.48	86	1.19	54	98	78	0	3	3	0
	TUPELO	54	32	67	24	43	3	0.65	-0.56	0.60	7.40	90	0.85	40	90	69	0	3	3	1
MO	COLUMBIA	46	25	62	14	35	7	0.00	-0.36	0.00	1.47	48	0.02	3	84	51	0	6	0	0
	KANSAS CITY	48	24	58	5	36	9	0.01	-0.24	0.01	0.77	37	0.02	5	78	44	0	5	1	0
	SAINT LOUIS	47	29	64	19	38	9	0.04	-0.43	0.04	3.59	98	0.13	16	77	59	0	5	1	0
	SPRINGFIELD	47	24	65	10	35	4	0.03	-0.41	0.03	3.62	92	0.10	13	87	61	0	7	1	0
MT	BILLINGS	50	30	60	24	40	16	0.00	-0.19	0.00	0.26	27	0.09	29	66	34	0	4	0	0
	BUTTE	40	18	50	5	29	12	0.42	0.31	0.22	0.50	69	0.42	221	92	49	0	7	3	0
	GLASGOW	46	20	61	13	33	23	0.07	-0.01	0.05	0.08	16	0.07	50	84	66	0	6	2	0
	GREAT FALLS	49	34	60	28	42	20	0.02	-0.15	0.02	0.41	43	0.02	7	71	42	0	4	1	0
	HAVRE	52	24	62	9	38	24	0.18	0.07	0.16	0.19	28	0.18	106	79	57	0	5	2	0
	KALISPELL	41	30	46	22	35	14	0.16	-0.17	0.08	0.73	33	0.23	40	93	84	0	5	4	0
	MISSOULA	41	28	51	23	35	12	0.05	-0.20	0.02	1.24	78	0.12	28	94	80	0	6	3	0
NE	GRAND ISLAND	53	22	68	8	37	15	0.00	-0.11	0.00	0.14	16	0.00	0	77	43	0	6	0	0
	LINCOLN	50	19	62	6	35	13	0.00	-0.17	0.00	0.34	30	0.00	0	75	51	0	7	0	0
	NORFOLK	51	22	68	9	37	17	0.00	-0.11	0.00	0.06	7	0.00	0	77	47	0	6	0	0
	NORTH PLATTE	53	15	69	7	34	11	0.00	-0.08	0.00	0.07	13	0.00	0	94	29	0	7	0	0
	OMAHA	48	21	58	9	35	14	0.00	-0.17	0.00	0.67	56	0.00	0	83	58	0	7	0	0
	SCOTTSBLUFF	53	22	66	16	38	14	0.00	-0.11	0.00	0.05	7	0.05	26	76	47	0	6	0	0
	VALENTINE	50	21	64	12	35	15	0.00	-0.06	0.00	0.00	0	0.00	0	85	49	0	7	0	0
NV	ELY	46	23	54	12	35	10	0.00	-0.16	0.00	0.10	13	0.00	0	82	66	0	7	0	0
	LAS VEGAS	63	41	67	35	52	6	0.00	-0.11	0.00	0.11	19	0.00	0	54	38	0	0	0	0
	RENO	56	30	66	26	43	10	0.20	-0.02	0.20	2.20	179	0.40	114	86	73	0	6	1	0
	WINNEMUCCA	48	29	58	21	38	9	0.17	-0.02	0.11	1.08	95	0.77	233	96	78	0	5	2	0
NH	CONCORD	37	23	47	15	30	10	0.29	-0.37	0.15	2.53	62	0.29	26	90	62	0	7	3	0
NJ	NEWARK	43	32	54	23	38	6	1.06	0.15	0.66	3.07	60	1.06	70	76	61	0	4	4	1
NM	ALBUQUERQUE	50	28	58	23	39	4	0.03	-0.08	0.03	0.28	41	0.04	21	76	44	0	7	1	0
NY	ALBANY	37	24	45	1	31	8	0.91	0.36	0.79	2.86	79	0.91	97	91	65	0	4	3	1
	BINGHAMTON	35	25	41	12	30	8	0.58	0.03	0.38	2.87	72	0.58	61	88	72	0	6	4	0
	BUFFALO	37	27	41	15	32	7	0.42	-0.30	0.23	6.90	136	0.42	33	95	70	0	4	5	0
	ROCHESTER	39	28	45	14	33	9	0.46	-0.06	0.30	2.20	61	0.48	53	87	69	0	4	3	0
	SYRACUSE	39	26	45	9	33	10	0.39	-0.19	0.22	2.69	65	0.50	51	90	70	0	4	4	0
NC	ASHEVILLE	51	26	66	21	38	2	0.82	-0.06	0.80	3.16	65	0.82	56	91	64	0	7	2	1
	CHARLOTTE	53	29	68	20	41	0	0.83	-0.06	0.67	2.91	62	0.95	63	89	46	0	5	2	1
	GREENSBORO	49	28	67	22	38	0	0.66	-0.12	0.63	3.06	70	0.84	64	83	47	0	6	2	1
	HATTERAS	55	40	65	35	48	2	0.64	-0.72	0.63	4.37	64	1.97	86	82	59	0	0	2	1
	RALEIGH	50	28	65	23	39	0	0.97	0.08	0.69	3.67	81	1.64	111	88	52	0	6	2	1
	WILMINGTON	59	33	71	26	46	0	0.88	-0.13	0.64	2.35	43	1.04	62	94	51	0	3	2	1
ND	BISMARCK	46	22	63	15	34	24	0.04	-0.04	0.04	0.21	36	0.08	57	83	62	0	7	1	0
	DICKINSON	46	25	60	15	36	22	0.01	-0.05	0.01	0.13	30	0.01	11	86	46	0	6	1	0
	FARGO	37	20	46	3	29	22	0.00	-0.17	0.00	0.22	26	0.00	0	88	71	0	6	0	0
	GRAND FORKS	37	22	47	0	29	24	0.00	-0.14	0.00	0.28	35	0.00	0	90	69	0	6	0	0
	JAMESTOWN	41	25	54	10	33	25	0.00	-0.13	0.00	0.07	11	0.00	0	86	62	0	5	0	0
	WILLISTON	42	23	50	12	33	25	0.42	0.31	0.42	1.06	139	0.50	263	86	74	0	6	1	0
OH	AKRON-CANTON	36	27	42	20	31	5	0.45	-0.11	0.33	1.53	39	0.46	47	88	75	0	6	3	0
	CINCINNATI	42	27	51	14	35	5	0.27	-0.39	0.24	4.35	98	0.27	23	87	69	0	5	3	0
	CLEVELAND	39	29	46	22	34	8	0.46	-0.09	0.26	3.04	74	0.51	54	86	65	0	5	3	0
	COLUMBUS	39	28	44	19	34	6	0.37	-0.18	0.32	3.38	87	0.37	39	87	76	0	6	3	0
	DAYTON	39	27	46	16	33	7	0.23	-0.35	0.19	3.89	95	0.23	23	89	65	0	6	3	0
	MANSFIELD	37	27	44	18	32	7	0.21	-0.38	0.14	2.73	64	0.21	21	93	66	0	6	3	0

Based on1971-2000 normals

***** Not Available**

Weather Data for the Week Ending January 12, 2002

STATES AND STATIONS		TEMPERATURE EF						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP. EF		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	41	30	51	21	35	11	0.20	-0.22	0.13	2.21	65	0.20	27	86	67	0	5	2	0
	YOUNGSTOWN	37	27	46	20	32	7	0.67	0.15	0.39	2.72	70	0.69	76	91	71	0	6	4	0
OK	OKLAHOMA CITY	57	30	73	19	43	7	0.00	-0.31	0.00	1.07	43	0.16	28	82	37	0	5	0	0
	TULSA	55	31	72	19	43	7	0.00	-0.36	0.00	2.35	77	0.10	16	79	51	0	3	0	0
OR	ASTORIA	53	44	60	37	48	6	3.85	1.70	1.60	17.55	125	5.72	155	94	85	0	0	7	3
	BURNS	37	22	43	16	30	6	0.41	0.15	0.39	1.89	107	0.84	183	94	80	0	7	2	0
	EUGENE	54	43	61	39	49	10	1.64	-0.06	0.81	9.34	83	2.63	91	94	85	0	0	5	2
	MEDFORD	54	39	65	33	47	9	0.75	0.20	0.26	5.43	141	1.09	116	95	66	0	0	3	0
	PENDLETON	53	37	62	31	45	12	0.11	-0.19	0.05	0.92	46	0.22	42	90	82	0	2	4	0
	PORTLAND	51	40	60	35	46	7	2.48	1.35	1.35	10.20	133	3.58	184	10	88	0	0	6	2
	SALEM	53	42	60	33	47	7	2.22	0.94	0.77	11.41	132	3.38	154	97	87	0	0	6	2
PA	ALLENTOWN	39	25	49	19	32	5	0.92	0.13	0.58	2.84	60	0.92	69	85	60	0	6	4	1
	ERIE	38	28	42	19	33	5	0.75	0.17	0.25	5.21	109	0.76	73	90	72	0	5	5	0
	MIDDLETOWN	42	26	55	20	34	5	1.11	0.50	0.71	2.98	70	1.11	107	92	59	0	6	3	1
	PHILADELPHIA	44	32	56	25	38	6	1.36	0.56	0.90	3.47	74	1.36	100	92	65	0	4	4	1
	PITTSBURGH	40	29	47	20	34	6	0.50	-0.11	0.27	2.93	76	0.50	49	89	61	0	6	3	0
	WILKES-BARRE	38	26	48	16	32	5	1.13	0.60	0.78	2.24	65	1.13	127	85	58	0	6	4	1
	WILLIAMSPORT	40	26	50	18	33	7	0.94	0.34	0.76	2.52	64	0.94	93	83	59	0	7	4	1
RI	PROVIDENCE	43	28	51	20	36	7	0.88	-0.10	0.50	3.34	57	0.88	53	90	65	0	5	3	1
SC	BEAUFORT	62	38	71	28	50	2	1.03	0.11	0.67	2.68	58	1.38	90	89	48	0	2	2	1
	CHARLESTON	61	36	70	27	48	0	1.28	0.35	0.71	3.58	75	1.85	119	89	48	0	2	2	2
	COLUMBIA	59	32	69	24	45	1	1.05	0.01	0.61	2.76	54	1.56	90	84	56	0	5	2	1
	GREENVILLE	53	30	68	21	42	1	0.76	-0.23	0.72	3.13	56	0.90	54	91	45	0	5	2	1
SD	ABERDEEN	40	21	48	9	30	20	0.00	-0.11	0.00	0.07	12	0.01	5	85	73	0	7	0	0
	HURON	44	24	61	13	34	20	0.00	-0.10	0.00	0.06	11	0.00	0	85	56	0	5	0	0
	RAPID CITY	54	22	72	12	38	16	0.03	-0.05	0.03	0.03	6	0.03	21	65	27	0	6	1	0
	SIOUX FALLS	43	21	57	7	32	18	0.00	-0.11	0.00	0.11	16	0.00	0	82	62	0	7	0	0
TN	BRISTOL	46	23	59	18	34	0	0.25	-0.52	0.18	3.67	78	0.25	19	98	59	0	7	3	0
	CHATTANOOGA	51	31	62	24	42	3	0.35	-0.84	0.35	5.44	80	0.36	18	83	63	0	5	1	0
	KNOXVILLE	47	31	59	21	39	2	0.38	-0.67	0.33	5.04	80	0.38	21	90	62	0	6	3	0
	MEMPHIS	53	35	64	25	44	5	0.46	-0.48	0.41	11.07	151	0.89	54	89	54	0	3	3	0
	NASHVILLE	49	31	61	19	40	3	0.46	-0.45	0.26	3.79	62	0.47	30	92	58	0	5	3	0
TX	ABILENE	63	36	76	26	49	6	0.00	-0.22	0.00	1.12	67	0.14	35	66	37	0	3	0	0
	AMARILLO	59	29	75	23	44	9	0.01	-0.14	0.01	0.31	36	0.08	31	77	32	0	4	1	0
	AUSTIN	66	37	74	26	51	1	0.00	-0.44	0.00	6.09	189	1.46	185	84	52	0	3	0	0
	BEAUMONT	65	43	73	30	54	2	0.37	-0.97	0.31	4.28	57	1.98	87	92	45	0	2	2	0
	BROWNSVILLE	72	48	78	40	60	1	0.01	-0.25	0.01	1.12	73	0.10	24	85	48	0	0	1	0
	CORPUS CHRISTI	70	46	78	37	58	2	0.00	-0.34	0.00	1.96	83	0.30	50	87	50	0	0	0	0
	DEL RIO	69	37	76	29	53	2	0.00	-0.08	0.00	0.35	38	0.00	0	72	38	0	2	0	0
	EL PASO	61	32	68	25	46	2	0.00	-0.10	0.00	0.14	15	0.00	0	61	26	0	4	0	0
	FORT WORTH	62	36	74	29	49	5	0.00	-0.45	0.00	3.38	100	0.14	17	82	33	0	3	0	0
	GALVESTON	63	48	70	39	56	0	0.74	-0.18	0.66	4.63	91	2.13	138	93	59	0	0	2	1
	HOUSTON	67	42	75	29	54	3	0.01	-0.82	0.01	7.01	137	0.84	59	89	49	0	2	1	0
	LUBBOCK	62	28	79	22	45	8	0.00	-0.08	0.00	0.15	18	0.02	13	82	34	0	6	0	0
	MIDLAND	61	31	74	24	46	3	0.00	-0.11	0.00	0.14	17	0.04	21	76	34	0	5	0	0
	SAN ANGELO	64	32	78	23	48	4	0.00	-0.16	0.00	0.32	26	0.18	64	76	37	0	4	0	0
	SAN ANTONIO	67	38	74	31	53	3	0.00	-0.36	0.00	3.71	143	0.28	44	86	38	0	2	0	0
	VICTORIA	68	43	75	33	56	3	0.02	-0.53	0.01	3.99	117	0.47	50	87	49	0	0	2	0
	WACO	65	35	75	26	50	4	0.00	-0.42	0.00	4.16	118	0.13	17	80	46	0	3	0	0
	WICHITA FALLS	61	35	77	25	48	8	0.00	-0.25	0.00	1.76	82	0.66	143	73	44	0	1	0	0
UT	SALT LAKE CITY	37	25	39	16	31	2	0.03	-0.27	0.03	1.83	106	0.39	78	95	80	0	7	1	0
VT	BURLINGTON	35	22	42	3	29	10	0.17	-0.32	0.07	1.66	55	0.17	21	92	67	0	6	5	0
VA	LYNCHBURG	49	26	64	16	37	3	0.64	-0.15	0.64	3.89	85	0.71	53	78	51	0	6	1	1
	NORFOLK	51	32	66	24	42	2	1.04	0.17	0.83	3.40	76	1.57	108	81	49	0	4	3	1
	RICHMOND	48	30	65	21	39	3	1.36	0.53	1.25	3.32	73	1.65	118	87	64	0	5	4	1
	ROANOKE	51	32	61	23	42	6	0.30	-0.40	0.29	2.78	69	0.30	26	72	49	0	4	2	0
	WASH/DULLES	46	27	58	21	36	4	0.27	-0.42	0.20	1.86	44	0.27	23	82	51	0	7	3	0
WA	OLYMPIA	52	40	57	33	46	8	4.03	2.36	1.98	17.07	159	5.12	180	97	91	0	0	7	2
	QUILLAYUTE	51	42	54	37	47	7	5.61	2.58	1.59	23.93	121	8.07	155	99	89	0	0	7	4
	SEATTLE-TACOMA	52	43	59	39	48	8	2.67	1.54	1.26	9.39	124	3.50	180	97	89	0	0	6	2
	SPOKANE	42	33	48	28	37	10	0.64	0.23	0.26	2.86	97	0.83	117	98	84	0	3	5	0
	YAKIMA	49	33	56	27	41	13	0.16	-0.11	0.14	1.48	80	0.36	78	97	86	0	3	3	0
WV	BECKLEY	40	26	47	18	33	3	0.59	-0.13	0.28	3.00	70	0.59	48	90	61	0	6	5	0
	CHARLESTON	42	29	52	23	36	3	1.53	0.82	0.70	4.00	88	1.53	128	96	63	0	6	5	1
	ELKINS	41	24	50	8	33	4	0.97	0.21	0.40	3.26	69	0.97	75	93	55	0	6	4	0
	HUNTINGTON	44	31	53	24	37	4	0.86	0.14	0.39	3.11	68	0.86	70	91	61	0	6	4	0
WI	EAU CLAIRE	39	19	48	0	29	17	0.00	-0.22	0.00	0.95	69	0.00	0	89	57	0	6	0	0
	GREEN BAY	38	25	53	17	31	15	0.05	-0.20	0.03	1.28	70	0.05	12	84	58	0	6	2	0
	LA CROSSE	41	22	53	6	32	16	0.00	-0.24	0.00	0.83	51	0.00	0	87	50	0	6	0	0
	MADISON	41	24	53	8	32	15	0.00	-0.25	0.00	1.13	54	0.00	0	79	60	0	6	0	0
	MILWAUKEE	40	27	54	17	33	12	0.00	-0.39	0.00	0.86	30	0.00	0	74	57	0	6	0	0
WY	CASPER	45	24	54	15	34	12	0.00	-0.11	0.00	0.14	17	0.01	5	70	47	0	5	0	0
	CHEYENNE	48	27	59	18	38	12	0.03	-0.05	0.02	0.18	30	0.05	36	68	36	0	5	2	0
	LANDER	44	19	54	11	32	12	0.01	-0.10	0.01	0.18	23	0.01	5	81	60	0	7	1	0
	SHERIDAN	52	23	69	16	37	16	0.00	-0.17	0.00	0.04	4	0.00	0	81	54	0	6	0	0

Based on1971-2000 normals ***** Not Available**

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

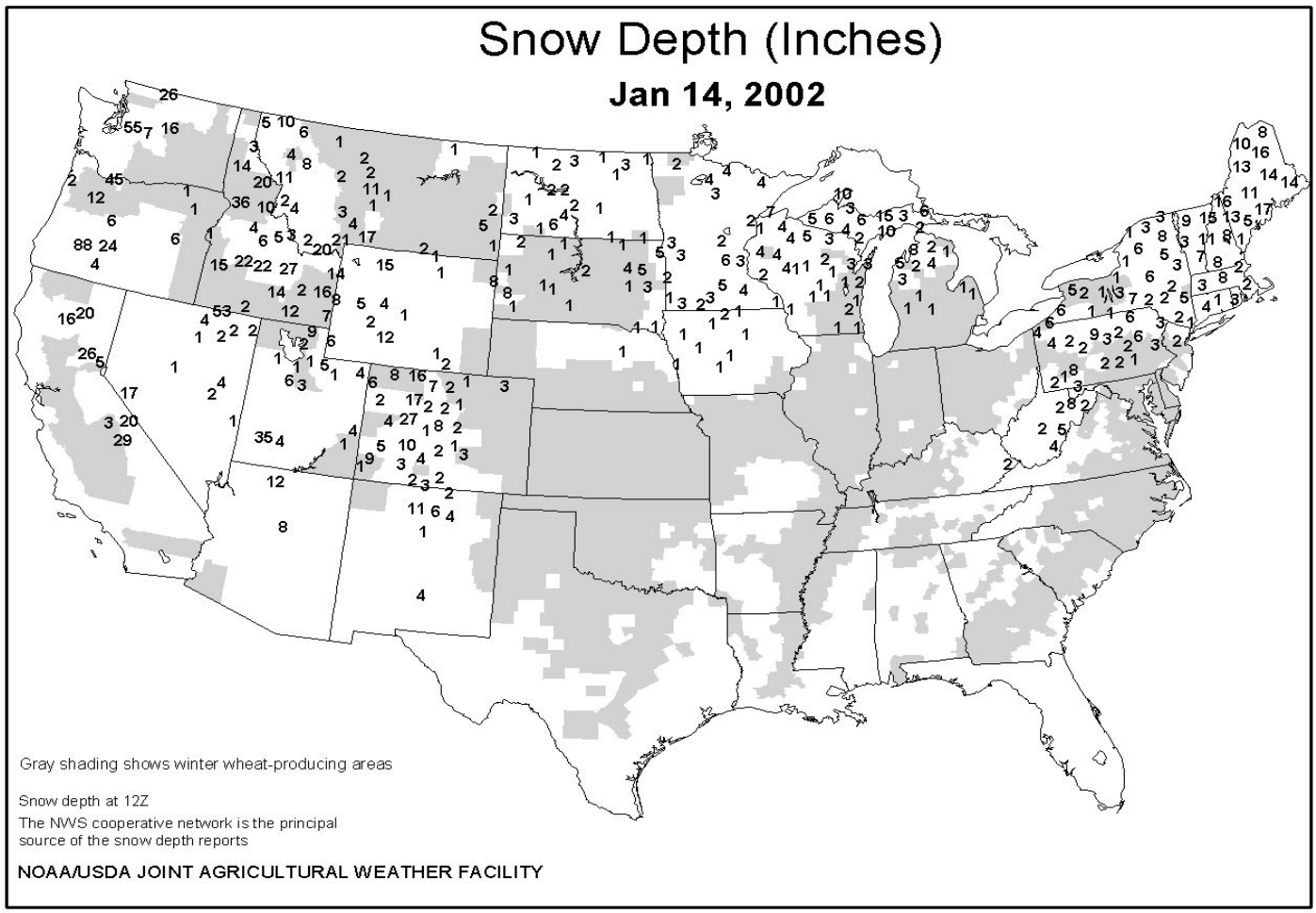
National Agricultural Summary

January 7 - 13, 2002

Weekly National Agricultural Summary provided by USDA/NASS

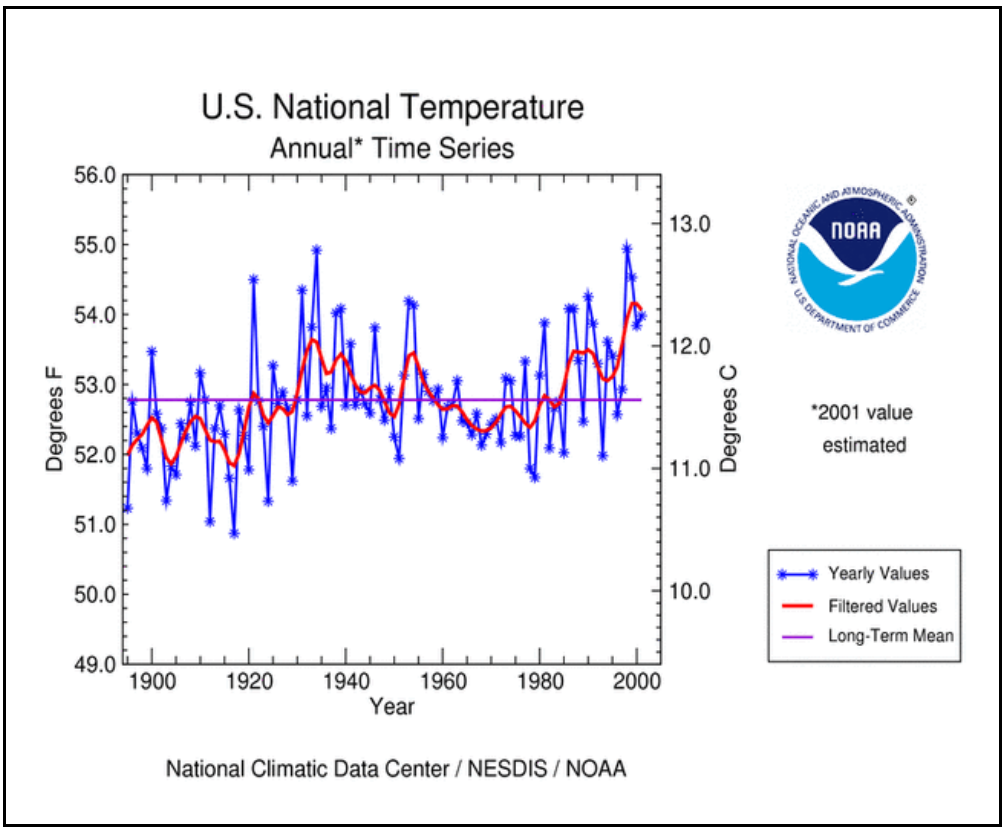
HIGHLIGHTS

Temperatures averaged above normal across most of the Nation during the week, especially from the Great Lakes to the northern High Plains. The warm weather stimulated growth of winter grains and forages in the southern Great Plains and supported development of winter crops in California. Winter wheat remained dormant in the northern Great Plains, despite record warmth across the region. With average daily temperatures hovering above freezing, frost depths diminished in some areas and were completely eliminated in others. Consequently, heaving and winter kill were virtually non-existent, although fields were exposed and vulnerable to an outbreak of bitter cold. An early-week cold front held average temperatures below normal along the eastern Gulf Coast, despite a rapid rebound in temperatures. Florida's citrus belt experienced subfreezing temperatures on the morning of January 9, but the duration was not long enough to damage citrus trees. Some minor icing of fruit was found, but most of the fruit in the affected areas was already harvested or scheduled for harvest very soon. The freezing temperatures caused little damage to tree foliage, although in the coldest locations, some outside leaves were burned and will fall off. The cold weather provided beneficial chill hours for fruit trees throughout the Southeast.



2001 United States Weather Review

Annual National Weather Review, provided by Douglas LeComte, CPC/NCEP/NWS/NOAA; Annual national rankings and time series provided by NCDC.



Highlights

According to the National Climatic Data Center, most of the country was abnormally warm in 2001 outside of the Southeast, resulting in the sixth warmest year since records began in 1895. Precipitation was slightly below average for the conterminous United States (28.6 inches; 0.5 inches below normal, or 40th driest in 107 years). This was the third consecutive year with below normal precipitation following nine straight years of surplus precipitation. The East Coast from Georgia to Maine was unusually dry, with Maine having its driest year ever. The Pacific Northwest saw drought develop early in the year, but late-year storms eased dryness. Frequent wet conditions hit much of the Midwest as well as the lower Mississippi Valley this year. Despite some scattered areas of dryness in several States, most of the Corn Belt once again escaped widespread growing-season drought. The southern Plains States, however, did experience drought at various times of the year.

Winter (December 2000-February 2001)

Drought developed over the Northwest during the winter, as high pressure aloft diverted precipitation-bearing storm systems to the north and south. Mountain snow accumulations totaled only 60-70 percent (%) of normal across the region, and November-April precipitation was the second lowest since records began in 1895. As a consequence, streamflows and reservoirs reached very low levels, especially in Washington, Oregon, Idaho, and Montana. October-March precipitation totaled 14.28 inches (36% of normal) in Eugene, Oregon, and 16.27 inches (58% of normal) in Seattle, Washington.

Many other parts of the country experienced a cold, wet winter. The western Corn Belt endured extensive and persistent snow cover and 3-month temperatures as much as 6°F below normal. In Florida, a freeze on January 5 affected some citrus fruits and winter vegetables as far south as the Everglades. A major winter storm struck California on January 11, bringing strong winds, heavy rain, high seas, and coastal flooding. In the Northeast, a Nor'easter dumped 1-2 feet of snow from northern New Jersey to New England on February 5.

Wet weather prevailed across most of the Great Plains, as 3-month precipitation totals exceeded 150% of normal from Texas to Minnesota. Precipitation, however, totaled under 50% of normal in drought-plagued Montana as well as over most of Florida and southern Georgia. Due in part to the December cold weather, winter temperatures were subnormal across much of the country, with the lowest readings (4-6°F below normal) in the central portion of the Nation.

Alaska, in contrast, experienced its mildest winter on record, as 3-month temperatures averaged 7-14 °F above normal.

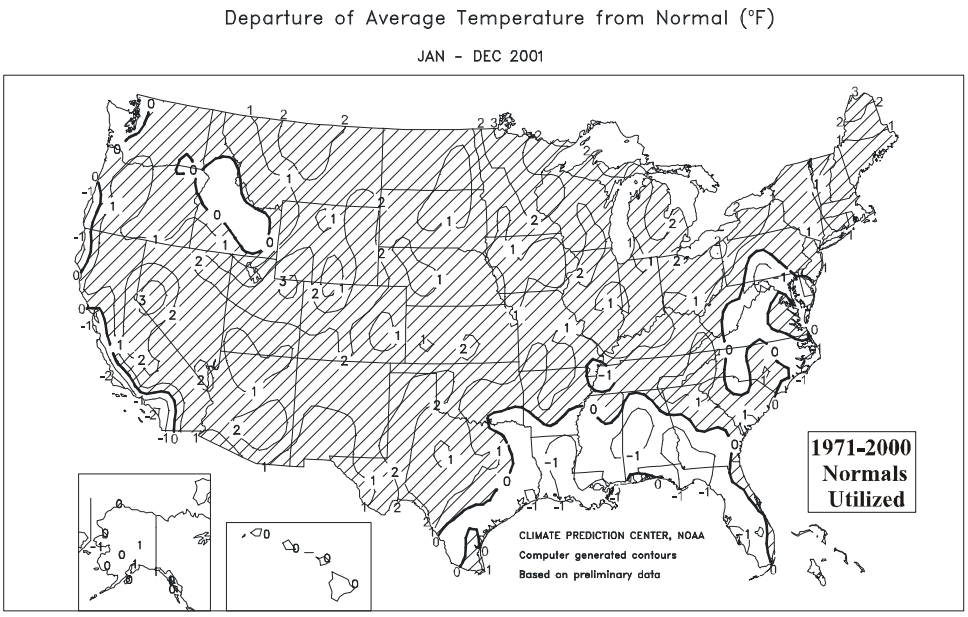
Spring (March-May)

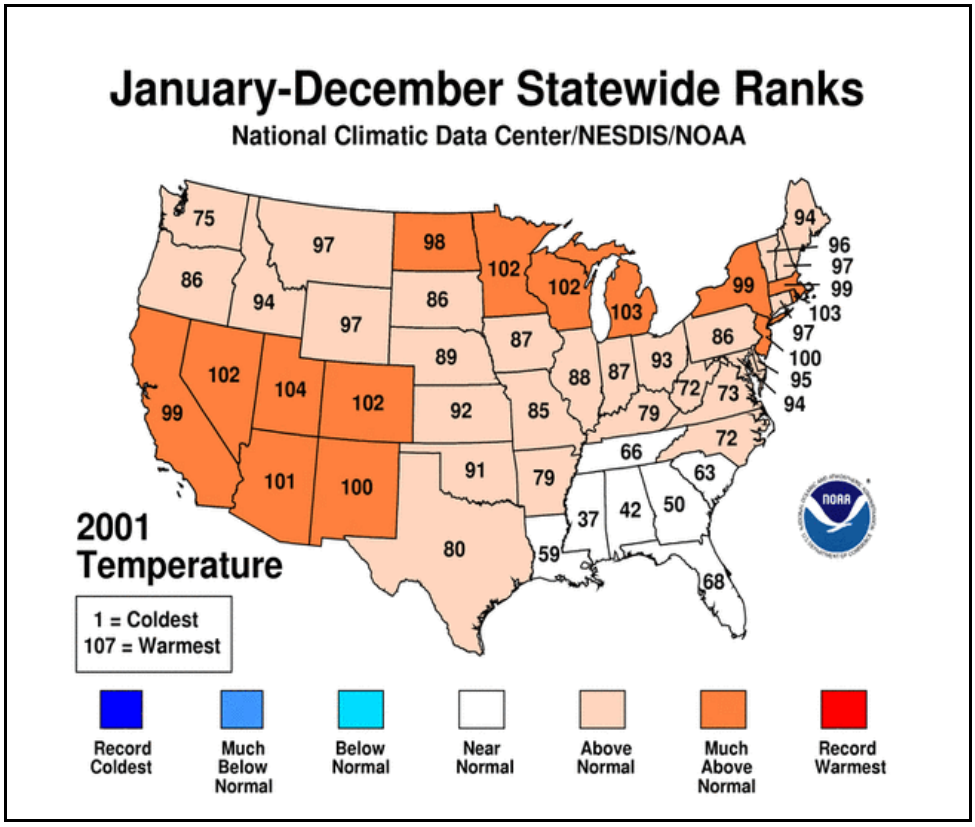
Several large winter storms struck the Northeast in March. The first left 1-3 feet of snow from the northern mid-Atlantic to New England during March 4-6. Another system left an additional 1 foot in the same general area on

March 9-10. Late-March snow depths over the higher terrain of New York and New England reached 2-3 feet at many locations. For the entire season, Erie, Pennsylvania, set a record with 147.0 inches of snow, exceeding the record set during the severe winter of 1977-78. In South Dakota, Huron's total of 85.1 inches beat a record going back to 1961-62.

A wet, stormy April in the upper Midwest in combination with the melting of the extensive snowpack led to major flooding along the upper reaches of the Mississippi River basin. Floodwaters caused considerable property damage in Wisconsin, Iowa, Illinois, Minnesota, and North Dakota. The Red River at Fargo, North Dakota, rose to 19.67 feet above flood stage on April 14, about 3 feet short of the record set in 1997. The Mississippi River at St. Paul, Minnesota, crested 9.5 feet above flood stage on April 18 and 9.6 feet above flood stage on April 29, the third highest level on record. South Dakota and Minnesota recorded the second wettest April ever. In Minneapolis, Minnesota, the April total of 7.00 inches eclipsed the 1986 record by 1.11 inches.

Heavy showers began easing drought in the Southeast, with much of Georgia and Florida measuring near to above-normal rainfall for the 3-month period. Farther north, the weather began trending toward dryness in the Northeast following the March storms. Large parts of Montana recorded less than 50% of normal precipitation this spring, allowing long-term drought to worsen.





Spring temperatures were mostly above normal except in the South and across the Eastern Seaboard. California and Nevada recorded their warmest May ever.

Summer (June-August)

Summer was quite wet and warm across much of the country, with large-scale dryness mostly limited to the southern Plains from Kansas through western Texas.

The first tropical storm of the Atlantic, Allison, made landfall on June 5 near Galveston, Texas. Although the storm was relatively weak in terms of wind and pressure, it was extremely wet and durable, and the unprecedented 2-week sojourn taken by its remains across the South and up the mid-Atlantic coast resulted in major flooding, especiallyin the Houston area where up to 35 inches of rain fell.

Conditions were much drier in central and western Texas, where persistent high pressure aloft brought drought to the region for the second consecutive summer. Rainfall was well under 50% of normal in June and July from central and western Texas into Oklahoma, and temperatures frequently exceeding 100°F exacerbated the dryness. Wichita Falls, Texas, measured no rain in June and July. Heavy rains exceeding 1 foot in late August and early September ended dryness in east Texas, but caused flooding in the coastal plain.

Fifteen named tropical storms developed in the Atlantic basin this year, well above the long-term average of around 10, but no storms of hurricane strength made landfall for the second consecutive year. Besides Allison, four other storms affected the country. Tropical Storm Barry crossed the Florida Panhandle on August 2 after dumping heavy rains on the Florida Peninsula. Tropical Storm Dean swamped Puerto Rico, with up to 12 inches of rain on August 23. Tropical Storm Gabrielle moved inland across central Florida on September 14, dumping over 10 inches of rain in west-central Florida. The northern edge of Hurricane Michelle caused minor damage to south Florida in early November after devastating western and central Cuba as a category 4 hurricane.

Over the central United States, the high pressure ridge aloft that caused the abnormal heat and dryness across the southern Plains expanded northward in late July and early August, bringing triple-digit heat to the upper Midwest. Highs reached 100°F in La Crosse, Wisconsin, and 98°F in Minneapolis, Minnesota, on July 31. The heat continued to expand, resulting in a nearly-nationwide heat wave from August 6-9. The reading of 102°F at Windsor Locks, Connecticut, on August 9 tied the all-time record set on July 3, 1966, while the maximum temperature of 105°F at Newark, New Jersey, on the 9th tied their previous all-time high.

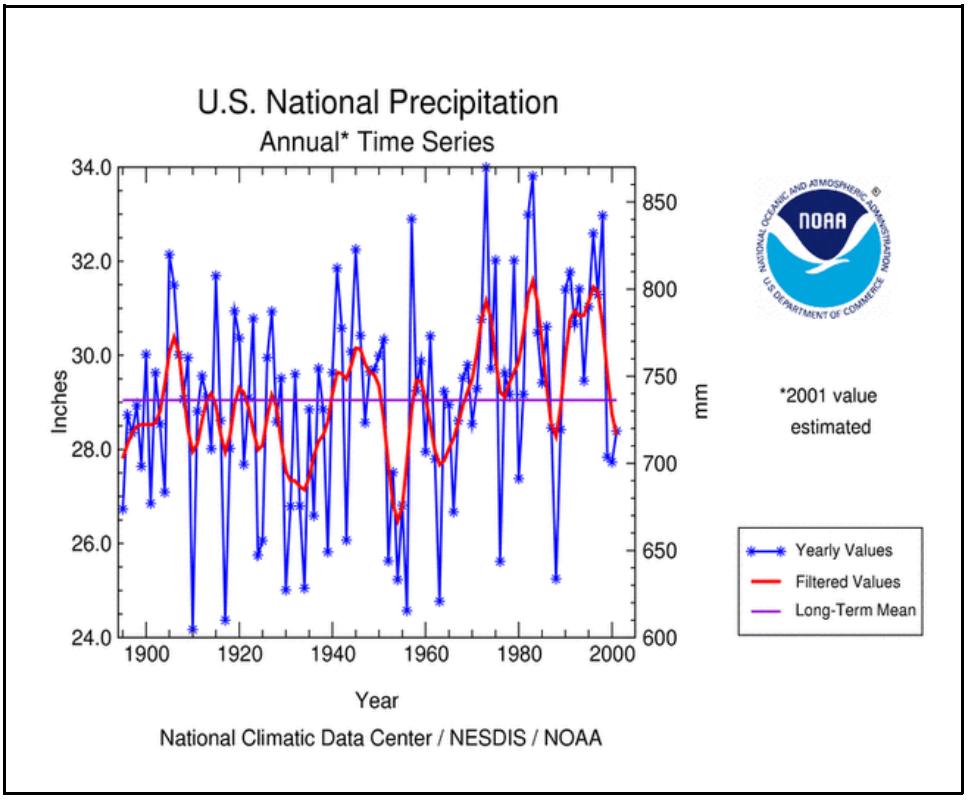
August heat and dryness in the Northwest, in combination with dry thunderstorm lightning strikes, contributed to numerous wildfires, although the overall fire season in the West was not as severe as 2000. Nevada and Idaho recorded the hottest August ever. Nationwide, the United States observed the fifth warmest summer on record, as temperatures in the Great Basin and Rockies averaged 2-4°F above normal.

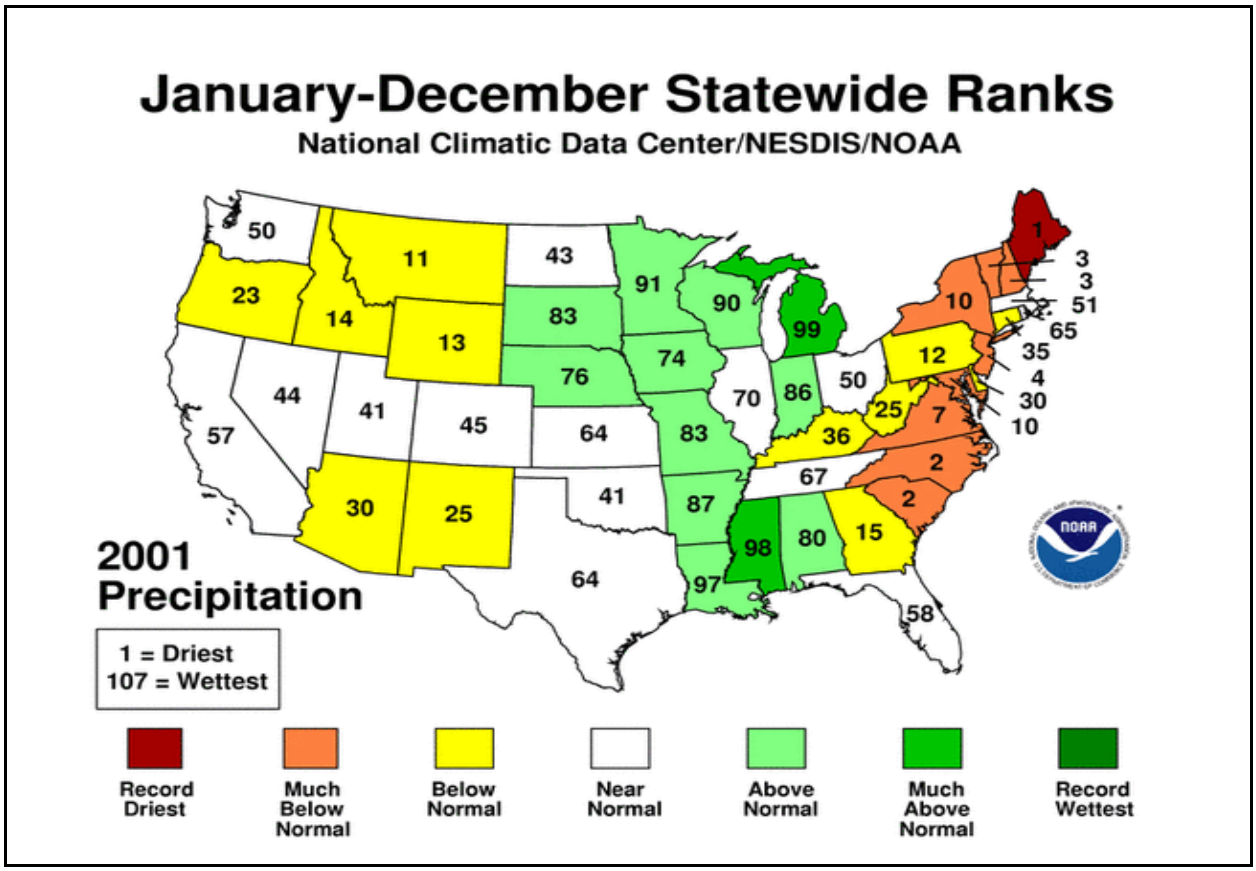
Temperatures across the Corn Belt averaged close to normal, with 3-month rainfall totals mostly near to above normal. Pockets of dryness, with seasonal rainfall under 75% of normal, could be found in eastern and northern Michigan and in parts of Illinois, Iowa, Minnesota, and Nebraska.

Autumn (September-November)

Autumn was unseasonably warm and dry in many places, with November the second warmest ever nationwide. This was in complete contrast to November 2000 - the second coldest on record. September-November rated the fourth warmest on record nationally and the warmest ever in Nevada and New Mexico. During November, every State in the contiguous U.S. reported above-normal temperatures. For the first time ever, Buffalo, New York, failed to record even a trace of snow in November. A lack of storms also resulted in many places recording below-normal precipitation.

The Eastern Seaboard was especially dry. September-November was the driest such period ever in Virginia, New Jersey, and Delaware, and the second driest in Rhode Island and Massachusetts. This was the driest Fall in the Northeast since the mid-1960s drought. Much of the Eastern Seaboard saw less than 0.1 inch of rain between mid-October and late-November, resulting in very





high fire danger and near-record low streamflows.

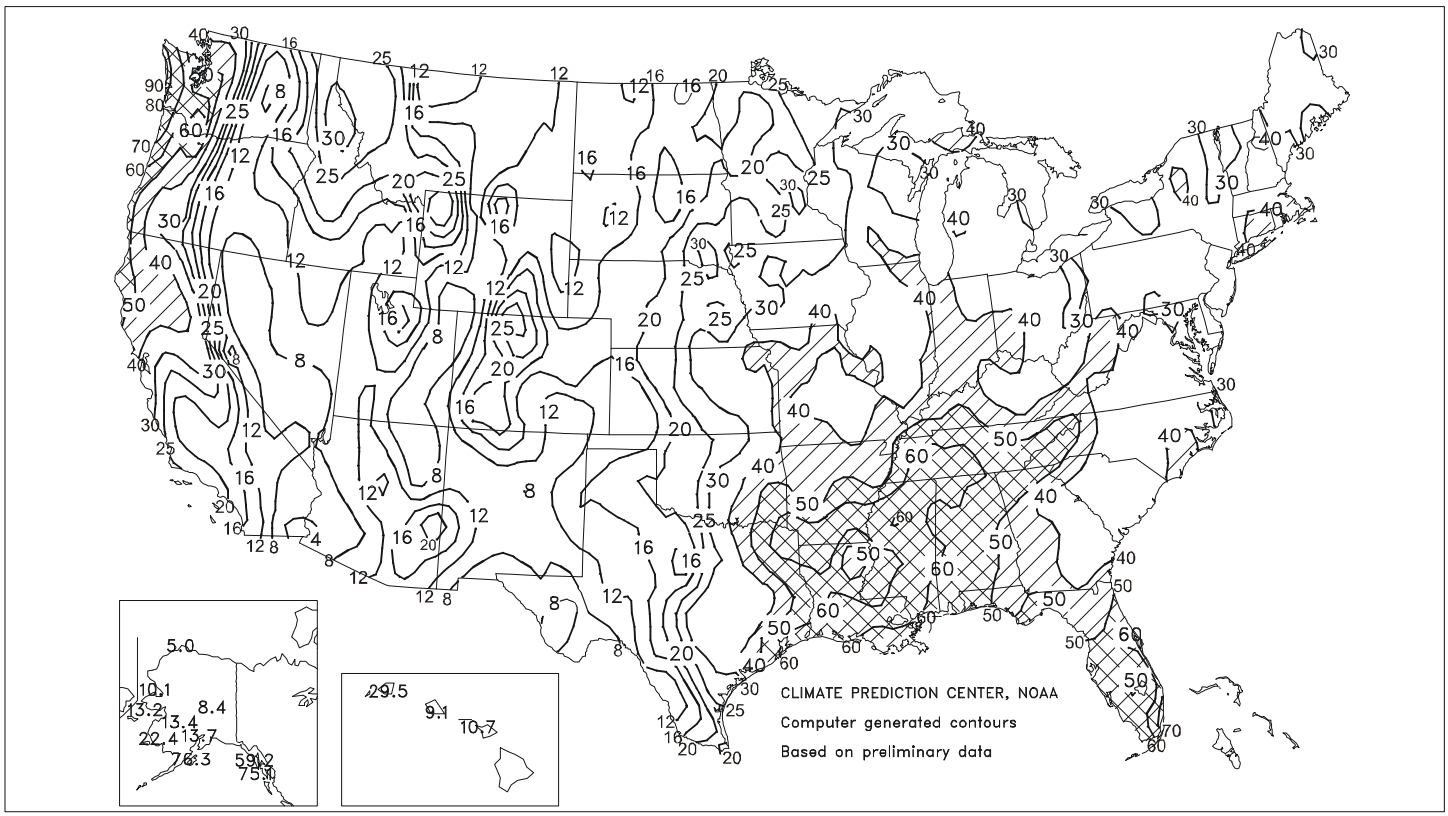
There were some major exceptions to the warm, dry weather conditions. Besides Tropical Storm Gabrielle in September, heavy rains struck the central and north Gulf coast of Texas in late August and early September, with Beaumont, Texas, accumulating over 18 inches of rain during August 26-September 4. In early October (the 9th), an outbreak of severe weather resulted in some 22 tornadoes in Nebraska and Oklahoma, and dozens of reports of large hail and damaging winds. A second bout of torrential rains in Texas triggered flooding in south-central areas of the State in mid-November as Austin measured 8.65 inches on November 15. A large storm system crossing the Midwest on October 24 brought blizzard conditions to the northern Plains and heavy rains and severe weather from Illinois to Ohio.

The deadliest tornado outbreak of the year took place in the South on November 23-24, as a frontal system triggered severe storms that took three lives in Arkansas, four in Mississippi, and four in Alabama. The storm system did, however, bring beneficial rains to parched areas along the East Coast.

Hawaii was another exception to the dry autumn weather regime, as several episodes of heavy showers eased long-term drought dating back to 1997. In one day (November 27), Honolulu's 3.24-inch rain total exceeded every monthly total since March 1997, when 4.90 inches fell.

In the Pacific Northwest, conditions were extremely dry preceding the relief from autumn storms. For the 12-month water year ending September, Washington and Oregon recorded the driest such period since 1976-77. Washington measured its second driest water year since records began more than 100 years ago, while Oregon experienced its third driest. Reno, Nevada, saw a 12-month precipitation total of 2.13 inches, or 28% of normal, its driest such period ever. But the 2001-02 water year got off to a wet start as a series of Pacific storms brought heavy coastal rains and mountain snows to California northward to Washington. Seattle measured more rain in November than during the 3-month period spanning November 2000-January 2001. In Washington, the Mt. Baker ski area recorded 96 inches of snow in the 10-day period starting November 25.

During this time, widespread cold blanketed Alaska, as the State experienced below-normal temperatures from mid-October through the third week of December. The sub-zero cold left November average temperatures 5-10°F below normal.



Persistentwetness plagued the lower Mississippi Valley, as 3-month rainfall totals ranged up to 20 inches fromnorthernMississippi and the eastern border of Arkansas into western Tennessee.

December

The eastern warmth continued into December. Scores of daily temperature records fell during the first week of December. On December 5, temperatures climbed into the 70s°F from Kansas to New Jersey, with the 60s °F as far north as Minnesota and Maine. Minneapolis-St. Paul's high of 63ºF shattered its old daily record by 9ºF. Milwaukee's high of 68ºF set a new record for the month. In Florida, Tampa enjoyed 80ºF weather every day from December 1-17, breaking their December record for consecutive days of 80ºF temperatures. Nationally, November-December was the second warmest such period on record. Just one year earlier, the country had experienced its coldest November-December.

In contrast, the severe cold continued in Alaska before moderating in late December. Lows fell to -30ºF or below daily from December 3-8 in Fairbanks, and reached -49 ºF at Bethel and -48ºF at Northway during December 18-20.

Much of the East Coast recorded below-normal precipitation for the third consecutive month, while the lower Mississippi Valley tallied above-normal rainfall for the third month. As a consequence, flooding was widespread across Arkansas, especially in southern and eastern sections.

Numerous Pacific storm systems continued to impact the West Coast, dropping well-above-normal amounts of precipitation on central California northward into Washington.

In late December, a major change in the upper-air circulationpattern occurred, allowing wintry conditions to envelop much of the lower 48 States. A persistent trajectoryof frigid Canadian air flowing over unseasonably mild surface water temperatures of the Great Lakes triggered very heavy lake-effect snows downwind of the Great Lakes. From December 24-28, nearly 7 feet (81.5 inches) of snow buried the Buffalo-Niagara International Airport as intense snow bands shifted north and south across the area. The December total of 82.7 inches set a new record for any month, and the snow depth on the 28th of 44 inches broke the previous all-time record of 42 inches recorded in early February 1977.

PRECIPITATION SUMMARY
Annual 2001

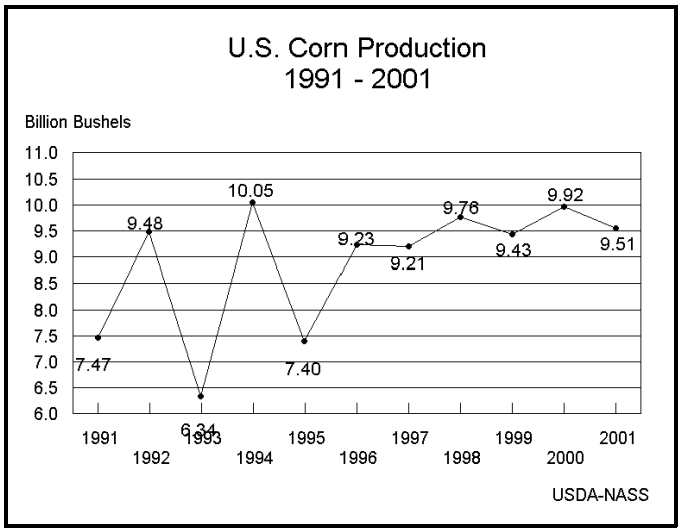
STATES AND STATIONS		TEMP., °F		PRECIP., IN.	
		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL	BIRMINGHAM	62	0	66.63	12.65
	HUNTSVILLE	61	0	63.61	6.10
	MOBILE	67	0	54.69	-11.60
	MONTGOMERY	65	0	47.43	-7.34
AK	ANCHORAGE	37	1	13.67	-2.39
	BARROW	11	0	5.02	0.87
	COLD BAY	39	1	45.50	5.22
	FAIRBANKS	29	2	8.37	-1.96
	JUNEAU	42	0	59.19	0.86
	KING SALMON	35	0	19.46	0.05
	KODIAK	41	0	76.32	0.97
	NOME	26	-1	13.22	-3.34
AZ	FLAGSTAFF	47	1	17.44	-5.47
	PHOENIX	76	3	6.72	-1.57
	TUCSON	70	1	7.82	-4.35
AR	FORT SMITH	62	1	40.66	-3.21
	LITTLE ROCK	63	1	50.20	-0.73
CA	BAKERSFIELD	66	1	7.35	0.87
	EUREKA	50	-3	34.72	-3.38
	FRESNO	65	2	12.00	0.77
	LOS ANGELES	62	-1	19.61	6.46
	REDDING	63	1	36.14	2.62
	SACRAMENTO	62	1	21.26	3.33
	SAN DIEGO	63	-1	8.52	-2.25
	SAN FRANCISCO	58	1	26.15	6.05
	STOCKTON	62	0	15.45	1.61
CO	ALAMOSA	43	2	9.87	2.62
	CO SPRINGS	50	2	15.04	-2.35
	DENVER	51	2	15.33	1.71
	GRAND JUNCTION	55	3	8.40	-0.58
	PUEBLO	52	0	11.65	-0.74
CT	BRIDGEPORT	53	1	35.33	-8.82
	HARTFORD	51	1	33.85	-12.31
DC	WASHINGTON	58	0	30.04	-9.31
DE	WILMINGTON	55	1	33.85	-8.96
FL	DAYTONA BEACH	71	0	58.29	9.00
	FT LAUDERDALE	76	0	56.48	-7.72
	FT MYERS	74	-1	52.93	-1.26
	JACKSONVILLE	68	0	49.17	-3.17
	KEY WEST	77	-1	47.47	8.53
	MELBOURNE	73	1	57.10	8.81
	MIAMI	77	0	71.86	13.33
	ORLANDO	72	-1	55.32	6.97
	PENSACOLA	69	1	47.57	-16.71
	ST PETERSBURG	73	-1	49.50	-0.08
	TALLAHASSEE	67	-1	63.51	0.31
	TAMPA	73	0	39.78	-4.98
	WEST PALM BEACH	75	0	67.34	5.95
GA	ATHENS	62	0	39.68	-8.14
	ATLANTA	62	0	38.80	-11.39
	AUGUSTA	64	1	33.61	-10.98
	COLUMBUS	66	1	38.60	-9.97
	MACON	64	0	47.19	2.20
	SAVANNAH	66	0	31.50	-18.08
HI	HILO	73	-1	112.50	-13.77
	HONOLULU	78	1	9.15	-9.13
	KAHULUI	76	0	10.67	-8.13
	LIHUE	76	0	29.46	-10.10
ID	BOISE	53	1	8.49	-3.71
	LEWISTON	53	0	10.89	-1.83
	POCATELLO	47	0	7.11	-5.48
IL	CHICAGO/O'HARE	51	2	45.76	9.48
	MOLINE	52	2	40.28	2.24
	PEORIA	53	2	37.70	1.68
	ROCKFORD	50	2	37.02	0.41
	SPRINGFIELD	54	1	35.01	-0.55
IN	EVANSVILLE	57	1	49.97	5.70
	FORT WAYNE	51	1	43.50	6.95
	INDIANAPOLIS	54	1	41.90	0.96
	SOUTH BEND	51	1	38.81	-0.89
IA	BURLINGTON	52	0	38.67	0.73
	CEDAR RAPIDS	49	0	35.70	2.29
	DES MOINES	51	1	28.15	-6.57
	DUBUQUE	48	1	34.79	-0.72
	SIOUX CITY	49	1	30.57	4.58
	WATERLOO	48	1	34.92	1.78
KS	CONCORDIA	55	1	27.21	-1.22
	DODGE CITY	56	1	18.35	-4.00
	GOODLAND	53	2	17.01	-2.75
	HILL CITY	55	2	22.27	-0.62
	TOPEKA	56	2	42.70	7.06
	WICHITA	58	2	24.49	-5.89
KY	JACKSON	57	1	35.13	-14.26
	LEXINGTON	56	1	40.33	-5.57
	LONDON-CORBIN	56	0	41.00	-6.41
	LOUISVILLE	58	1	45.86	1.33
	PADUCAH	58	1	54.99	5.75
LA	BATON ROUGE	67	0	62.35	-0.72
	LAKE CHARLES	68	0	56.83	-0.35
	NEW ORLEANS	69	0	69.51	5.35
	SHREVEPORT	66	0	59.37	8.07
ME	BANGOR	45	0	25.35	-14.22
	CARIBOU	41	2	29.43	-8.00
	PORTLAND	47	1	33.21	-12.62
MD	BALTIMORE	56	1	34.33	-7.61
MA	BOSTON	53	1	31.43	-11.10
	WORCESTER	49	2	33.30	-15.75
MI	ALPENA	46	3	27.07	-1.33
	DETROIT	51	1	34.54	1.64
	FLINT	49	2	35.84	4.23
	GRAND RAPIDS	49	1	40.70	3.58
	HOUGHTON LAKE	46	3	28.28	-0.16
	LANSING	49	2	31.86	0.33
	MUSKEGON	49	2	35.01	2.14
	TRAVERSE CITY	47	1	31.95	-1.52
MN	DULUTH	42	3	29.99	-1.01
	INT'L FALLS	40	2	27.56	3.62
	MINNEAPOLIS	48	3	34.23	4.82
	ROCHESTER	45	1	39.09	7.68
	ST. CLOUD	44	2	28.44	1.31
MS	JACKSON	64	0	62.89	6.95
	MERIDIAN	64	-1	68.95	10.30
	TUPELO	62	1	67.60	11.74
MO	COLUMBIA	55	1	40.60	0.32
	JOPLIN	59	1	43.94	-2.13
	KANSAS CITY	56	2	53.48	15.49
	SPRINGFIELD	57	1	45.30	0.33
	ST JOSEPH	54	0	45.86	10.62
	ST LOUIS	58	2	35.31	-3.44
MT	BILLINGS	49	2	10.96	-3.80
	BUTTE	40	0	10.61	-2.17
	GLASGOW	45	2	12.71	1.48
	GREAT FALLS	47	3	10.21	-4.68
	HELENA	47	3	10.40	-0.92
	KALISPELL	43	0	12.48	-4.73
	MILES CITY	45	2	14.63	0.56
	MISSOULA	45	0	13.28	-0.54
NE	GRAND ISLAND	52	2	23.15	-2.74
	HASTINGS	52	1	28.93	0.99
	LINCOLN	53	2	32.24	3.87
	MCCOOK	55	4	19.57	-2.05
	NORFOLK	51	2	27.54	0.88
	NORTH PLATTE	49	0	23.71	4.05
	OMAHA/EPPLEY	53	2	28.46	-1.76
	SCOTTSBLUFF	50	2	13.04	-3.29
	VALENTINE	50	3	20.58	1.06
NV	ELKO	48	2	7.46	-2.13
	ELY	46	1	6.17	-3.80
	LAS VEGAS	70	2	3.96	-0.53
	RENO	55	4	4.36	-3.12
	WINNEMUCCA	51	2	4.28	-4.05
NH	CONCORD	47	1	31.19	-6.41
NJ	ATLANTIC CITY	55	1	30.01	-10.58
	NEWARK	56	1	31.24	-15.02
NM	ALBUQUERQUE	58	1	6.52	-2.94
NY	ALBANY	49	1	28.78	-9.28
	BINGHAMTON	47	1	34.31	-4.34
	BUFFALO	50	2	35.15	-5.39
	ROCHESTER	50	2	29.18	-4.78
	SYRACUSE	50	2	34.32	-5.72
NC	ASHEVILLE	56	1	34.47	-12.57
	CHARLOTTE	61	0	26.24	-17.28
	GREENSBORO	59	1	29.86	-13.27
	HATTERAS	63	0	29.52	-28.23
	RALEIGH	61	1	35.01	-8.04
	WILMINGTON	64	0	38.00	-19.07
ND	BISMARCK	44	2	21.38	4.54
	DICKINSON	44	1	18.51	2.16
	FARGO	43	1	20.32	-0.87
	GRAND FORKS	41	1	21.60	2.00
	JAMESTOWN	42	0	20.18	1.69
	MINOT	44	2	9.90	-8.54
	WILLISTON	42	1	13.70	-0.46
OH	AKRON-CANTON	51	1	31.64	-6.83
	CINCINNATI	55	1	46.58	3.97
	CLEVELAND	52	2	34.36	-4.34
	COLUMBUS	54	1	36.88	-1.62
	DAYTON	53	1	42.24	2.66
	MANSFIELD	51	2	33.99	-9.24
	TOLEDO	52	2	33.92	0.71
	YOUNGSTOWN	51	2	29.42	-8.60
OK	OKLAHOMA CITY	61	1	29.07	-6.78
	TULSA	62	1	29.22	-13.20
OR	ASTORIA	51	0	60.89	-6.24
	BURNS	44	0	8.41	-2.16
	EUGENE	52	0	28.01	-22.90
	MEDFORD	56	2	15.02	-3.35
	PORTLAND	54	0	30.48	-6.59
	SALEM	53	0	33.73	-6.27
PA	ALLENTOWN	51	0	36.01	-9.16
	ERIE	51	1	34.43	-8.34
	MIDDLETOWN	54	1	25.76	-14.74
	PHILADELPHIA	57	2	31.02	-11.02
	PITTSBURGH	52	1	35.72	-2.13
	WILKES-BARRE	50	0	27.48	-10.07
	WILLIAMSPORT	51	1	35.07	-6.52
PR	SAN JUAN	81	1	52.19	1.43
RI	PROVIDENCE	52	1	40.11	-6.35
SC	CHARLESTON	66	1	40.06	-11.47
	COLUMBIA	64	0	28.01	-20.26
	FLORENCE	64	0	30.82	-13.94
	GREENVILLE	61	1	40.37	-9.85
	MYRTLE BEACH	64	0	39.79	-5.92
SD	ABERDEEN	44	0	22.62	2.40
	HURON	46	1	26.81	5.92
	RAPID CITY	48	1	14.46	-2.17
	SIOUX FALLS	47	2	30.19	5.50
TN	BRISTOL	56	1	41.78	0.46
	CHATTANOOGA	61	1	55.00	0.48
	JACKSON	60	0	58.94	4.16
	KNOXVILLE	59	1	42.54	-5.68
	MEMPHIS	63	1	65.98	11.33
	NASHVILLE	60	1	48.91	0.80
TX	ABILENE	65	1	21.85	-1.92
	AMARILLO	59	2	18.67	-1.05
	AUSTIN	67	-2	39.44	5.79
	BEAUMONT	69	0	69.07	9.18
	BROWNSVILLE	75	2	16.87	-10.68
	COLLEGE STATION	69	0	45.51	5.84
	CORPUS CHRISTI	72	0	39.43	7.18
	DALLAS/FT WORTH	66	0	38.11	3.38
	DEL RIO	71	1	9.61	-8.62
	EL PASO	65	0	4.30	-5.13
	GALVESTON	71	0	58.65	14.81
	HOUSTON	69	0	71.24	23.40
	LUBBOCK	62	2	15.49	-3.19
	MIDLAND	65	1	9.93	-4.87
	SAN ANGELO	66	1	18.55	-2.35
	SAN ANTONIO	69	0	36.75	3.83
	VICTORIA	70	0	42.78	2.68
	WACO	67	0	35.69	2.35
	WICHITA FALLS	64	1	17.45	-11.36
UT	SALT LAKE CITY	54	2	14.67	-1.83
VT	BURLINGTON	47	2	23.49	-12.56
VA	LYNCHBURG	55	0	32.49	-10.82
	NORFOLK	60	0	33.36	-12.38
	RICHMOND	58	0	31.49	-12.41
	ROANOKE	58	2	25.07	-17.41
	WASH/DULLES	55	1	37.03	-4.78
WA	OLYMPIA	49	-1	49.78	-1.01
	QUILLAYUTE	48	-1	95.89	-5.83
	SEATTLE-TACOMA	51	-1	36.83	-0.23
	SPOKANE	47	0	13.69	-2.98
	YAKIMA	51	2	6.84	-1.42
WV	BECKLEY	52	0	35.96	-5.66
	CHARLESTON	55	0	41.78	-2.26
	ELKINS	50	0	39.70	-6.39
	HUNTINGTON	56	1	34.83	-7.48
WI	EAU CLAIRE	46	2	36.20	4.08
	GREEN BAY	47	2	27.67	-1.52
	LA CROSSE	48	1	32.21	-0.15
	MADISON	48	2	38.50	5.55
	MILWAUKEE	49	1	36.30	1.49
	WAUSAU	46	2	30.69	-2.67
WY	CASPER	47	2	6.84	-6.19
	CHEYENNE	47	2	13.24	-2.21
	LANDER	46	1	5.35	-8.07
	SHERIDAN	46	1	10.88	-3.84

Based on 1971-2000 normals.

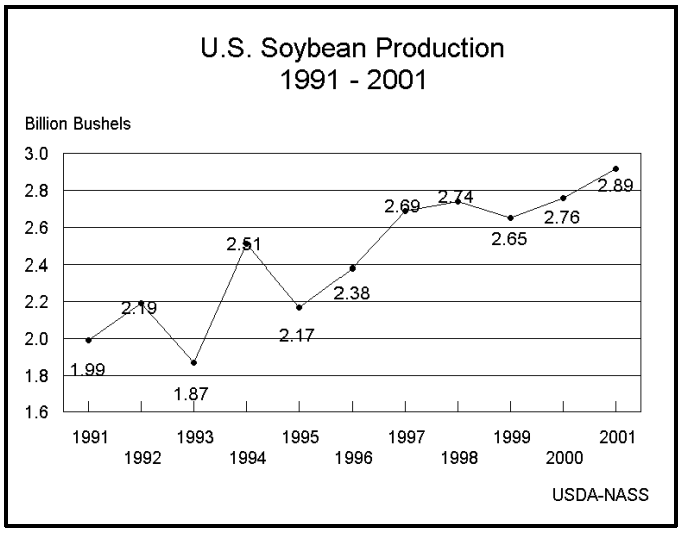
2001 Crop Production Highlights

Highlights provided by USDA/NASS

Corn grain production is estimated at 9.51 billion bushels, down 4 percent from the revised 9.92 billion bushels in 2000. This is the fourth-largest crop behind 1994's record production of 10.1 billion bushels, followed by 2000's and 1998's production. The U.S. grain yield of 138.2 bushels per acre, the second-highest yield on record, is up 0.2 bushel from November and 1.3 bushels from 2000.



Soybean production totaled 2.89 billion bushels, down 1 percent from the November 1 forecast but 5 percent above 2000. The 2001 production is a record high, followed by last year's 2.76 billion bushels. The average yield per acre in 2001 is estimated at 39.6 bushels, 0.2 bushel above the November 1 forecast and 1.5 bushels above the 2000 yield.



All wheat production totaled 1.96 billion bushels in 2001, down 2 percent from the last forecast and 12 percent below 2000. This is the lowest production since 1988. Grain area is 48.7 million acres, down 8 percent from last year and the smallest area harvested since 1972. The U.S. yield is 40.2 bushels per acre, down 1.8 bushels from a year ago. The 2001 winter wheat production totaled 1.36 billion bushels, down 13 percent from 2000 and the lowest level since 1978. The winter wheat yield decreased 1.2 bushels from the previous year to 43.5 bushels per acre. Acreage for grain is estimated at 31.3 million acres, down 11 percent from 2000. This is the smallest harvested winter wheat area since 1933. Other spring wheat production in 2001 totaled 513 million bushels, 8 percent below 2000. The harvested area is 14.6 million acres, up 1 percent from last year. The other spring wheat yield is 35.2 bushels per acre, 3.2 bushels below last year. Durum wheat production for 2001 totaled 83.6 million bushels, 24 percent lower than last year. The grain area totals 2.79 million acres, 22 percent below a year ago. The durum yield is estimated at 30.0 bushels per acre, 0.7 bushel per acre below 2000.

Cotton: Upland cotton production is estimated at 19.4 million bales, down 30,000 bales from the December 1 forecast. This is the largest upland production in history, surpassing the 1994 record of 19.3 million bales. American-Pima production is estimated at 678,000 bales, up 50,000 bales from the December forecast and up 74 percent from last year's output. The increase in Pima production is due entirely to a revision to California acreage.

Sorghum for grain production is estimated at 515 million bushels, down 4 percent from the November forecast, and up 9 percent from 2000. Area harvested for grain was estimated at 8.58 million acres, up 11 percent from 2000. Average grain yield, at 59.9 bushels per acre, was 1.0 bushel below the 2000 average yield.

Barley production is estimated at 250 million bushels, down 5 percent from the last forecast and down 22 percent from last year's estimate. This year's production is the lowest since 1953. Average yield per acre, at 58.2 bushels, is down 2.9 bushels from 2000. The area harvested for grain is estimated at 4.29 million acres, 18 percent below a year ago.

Oat production is estimated at 117 million bushels, 22 percent below last year's 150 million bushels. This is the lowest production on record. The estimated yield is 61.3 bushels per acre, 2.9 bushels below 2000. Area for harvest is estimated at a record-low 1.91 million acres, 18 percent below last year.

Rice production totaled a record high 213 million cwt, up 12 percent from 2000. The previous record high production was 206 million cwt in 1999. Area for harvest, at 3.31 million acres, is up 9 percent from 2000. The average yield for all U.S. rice is estimated at 6,429 pounds per acre, 55 pounds above the November 1 forecast. This all rice yield is the highest on record. The previous record of 6,281 pounds per acre was set last year.

Fieldwork Highlights: During January and February, soil moisture reserves diminished in the Southeast, Atlantic Coastal Plain, Pacific Northwest, and northern Great Plains, as precipitation was far below normal in most areas. Also, below-normal snow accumulations in the Cascades, Sierra Nevada, and northern Rockies limited irrigation reserves. Heading into the spring, frequent storms provided abundant moisture for most of the southern and central Great Plains, interior Mississippi Valley, central and western Corn Belt, and Southwest.

Soil moisture reserves along the Gulf Coast and Atlantic Coastal Plain received a much-needed boost in March. However, excessive soil moisture limited fieldwork and delayed planting progress in many areas of the South, including Texas. In Florida, late-March precipitation provided short-term drought relief. In the central Great Plains and Corn Belt, below-normal temperatures delayed the winter wheat crop's emergence from dormancy and limited growth of winter grains and forages in the southern Great Plains, lower Mississippi Valley, and Southeast. Warm weather stimulated growth of winter crops in California, although moisture shortages hindered development of dryland crops in some areas.

Fieldwork and planting progressed well ahead of normal in the eastern Corn Belt during the early weeks of spring. Along the lower Ohio Valley, rain delays were rare and planting advanced at a near-record pace. Meanwhile, field preparations and planting were frequently interrupted by wet weather across the northern and western Corn Belt. Row crop planting in the upper Mississippi Valley and northern Great Plains was mostly confined to short periods of dry weather near mid- and late-May. From the northern High Plains to the Pacific Northwest, drier-than-normal weather favored fieldwork, but stressed dryland winter crops and hindered emergence of small grains. Crop emergence was hindered by topsoil moisture shortages in parts of the eastern Corn Belt, and by excessive soil moisture in the western Corn Belt. Above-normal temperatures aided crop development across most of the Great Plains and Corn Belt during the spring, although a period of cold weather in late May slowed growth for several days, especially in the northwestern Corn Belt. Along the eastern Gulf Coast and southern Atlantic Coastal Plain, drought conditions gradually worsened until a late-spring rainy pattern erased topsoil moisture shortages and reduced subsoil moisture deficits.

Hot, dry weather during the summer months forced crops in the interior southern Great Plains and a large portion of the central Plains to develop deep root systems to access subsoil moisture reserves. However, the hot weather quickly ripened winter wheat fields, and the dry conditions supported rapid harvest. Meanwhile, crop development continued well ahead of normal in the eastern Corn Belt, and far ahead of normal along the Ohio River Valley, even though temperatures averaged slightly below normal in some locations. In the northern and western Corn Belt, early-season growth was periodically hindered by below-normal temperatures, but above-normal temperatures accelerated development after mid-June. By the end of August, crop development was ahead of normal in parts of the western Corn Belt, but remained behind normal across the northern Corn Belt. In the Southeast, near-normal precipitation provided adequate moisture for crop development in most areas, but crops were stressed by moisture shortages in scattered locations, especially interior parts of North and South Carolina. Moisture shortages also developed in the interior Mississippi Delta and northwestern Corn Belt. In the northern Great Plains, above-normal heat and precipitation benefited small grain development. Below-normal precipitation and reduced irrigation water supplies limited crop potential in the Southwest, while excessive rain hampered crops along the Gulf Coast.

In September, below-normal temperatures slowed ripening of row crops in the Corn Belt, lower Mississippi Valley, and Southeast, while above-normal temperatures promoted ripening in the northern Great Plains, Pacific Northwest, and Southwest. Harvest gradually accelerated in the Corn Belt, but activity was mainly confined along the Ohio River Valley until late in the month. Mostly dry weather aided harvest progress and seeding of winter crops on the northern Great Plains, along the mid-Atlantic Coastal Plain, and in the Pacific Coast States. Winter wheat seeding was aided by dry weather on the central and southern Great Plains early in the month, and a period of wet weather after midmonth provided moisture for germination and growth. Heavy rain produced flooding and surplus soil moisture supplies in the Florida Peninsula.

During October, late-maturing row crops quickly ripened in the Corn Belt, Great Plains, and Southeast, even though temperatures averaged below normal during most of the month. Widespread, heavy precipitation halted row crop harvest and seeding of winter grains in the lower Mississippi Valley and central Corn Belt near midmonth. Row crop harvest accelerated in the western Corn Belt and remained active in adjacent areas of the Great Plains after midmonth. Moisture shortages hindered winter wheat emergence across the northern and southern Great Plains. In the Pacific Northwest, low-lying coastal areas received much-needed rainfall, while higher elevations of the Cascades received beneficial accumulations of snow. In the Southwest, above-normal temperatures promoted rapid crop development, and dry weather aided field and orchard work.

During the first half of November, dry weather aided harvest progress across most of the Nation and the end of the harvest season quickly approached. Seeding of winter wheat and other winter crops also neared completion before midmonth, although abnormally dry soils hindered planting along the Atlantic Coastal Plain. Moisture shortages increased across most of the Great Plains, but a midmonth storm provided beneficial moisture for developing winter crops across much of the southern Great Plains. Warm weather and adequate topsoil moisture supplies supported winter grain development in the Corn Belt. Rain halted cotton harvest and other fieldwork in the Southeast late in the month, but the precipitation provided critical moisture for germinating and establishing winter wheat along the Atlantic Coastal Plain.

January 9 ENSO Update

The evolution toward a warm episode in the tropical Pacific continued during December 2001, as enhanced convection developed over the equatorial central Pacific for the first time since the 1997-98 El Niño episode. In addition, the Tahiti-Darwin SOI (-1.2) and the equatorial SOI (-0.8) were the lowest since early 1998. By early January 2002, equatorial SST anomalies increased to +1°C at the date line (Fig. 1).

In recent months, many tropical Pacific atmospheric and oceanic variables have been strongly modulated by intraseasonal (30-60 day) fluctuations, associated with the Madden-Julian Oscillation (MJO). Low-level wind fluctuations over the central and western tropical Pacific have been consistent with this activity. Significant low-level westerly wind anomalies occurred over the western equatorial Pacific during mid-October. November featured a return to easterly anomalies in this region during the first three weeks, followed by westerly anomalies during late November. December featured significant low-level westerly anomalies over the western equatorial Pacific during the first half of the month and over the west-central equatorial Pacific during the second half of the month, as the period of the MJO appeared to lengthen. This activity generated a strong eastward propagating oceanic Kelvin wave that contributed to the deepening of the oceanic thermocline and an increase in subsurface temperature anomalies in the vicinity of the date line (Fig. 2). The magnitude of this Kelvin wave suggests that an increase in SST anomalies, with negative anomalies possibly being replaced by positive anomalies, is likely to occur in the eastern Pacific in late January or early February.

The latest statistical and coupled model predictions show a spread ranging from near-normal to moderate warm episode conditions over the next 3-6 months. All of these prediction techniques have difficulty in making skillful forecasts during ENSO transition periods. Considering the observed oceanic and atmospheric circulation patterns and their recent evolution, it seems most likely that warm-episode conditions will develop in the tropical Pacific during the next 3-6 months.

Weekly updates for SST, 850-hPa wind, OLR and the equatorial subsurface temperature structure are available on the Climate Prediction Center homepage 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.

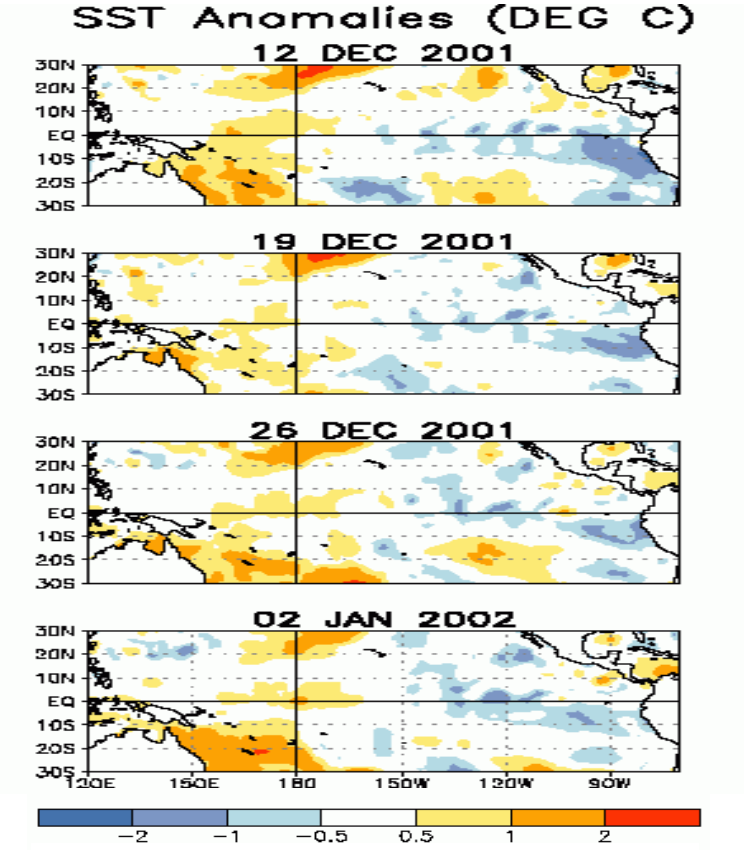


Figure 1. Recent weekly sea surface temperature (SST) anomaly patterns Departures are computed based on the 1971-2000 period means. Units are °C.

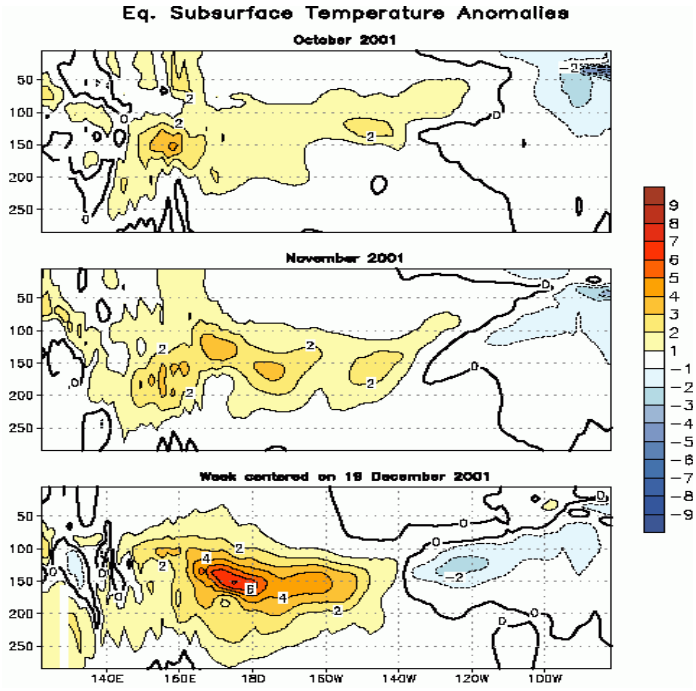


Figure 2. Depth-longitude cross section of anomalous equatorial ocean temperatures (°C) for October 2001, November 2001, and the week centered on December 19, 2001. Anomalies are computed based on the 1981-2000 period means.

International Weather and Crop Summary

January 6 - 12, 2002

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

HIGHLIGHTS

FSU-WESTERN: A warming trend late in the week followed the coldest weather so far this winter in southern areas, improving overwintering conditions for winter grains.

MIDDLE EAST: Dry weather brought much-needed relief from flooding in western Turkey.

EUROPE: Milder weather overspread much of Europe, improving overwintering conditions for dormant winter crops.

EASTERN ASIA: Across the North China Plain, unseasonably warmer weather caused winter wheat to lose some winter hardiness, increasing the potential for winterkill.

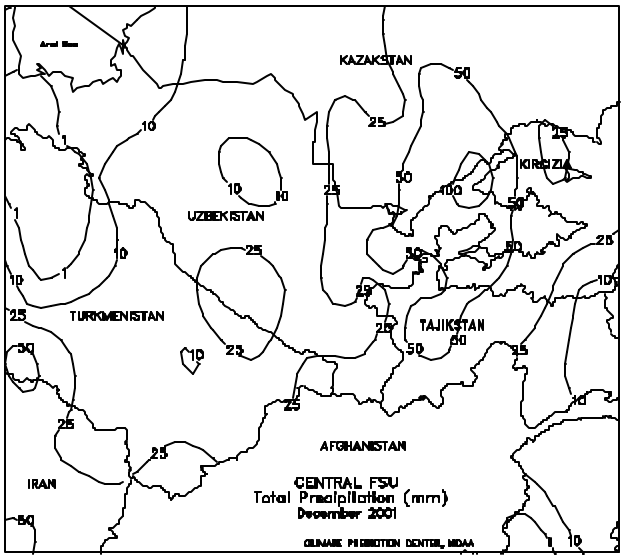
AUSTRALIA: Showers boosted moisture reserves for summer crop development.

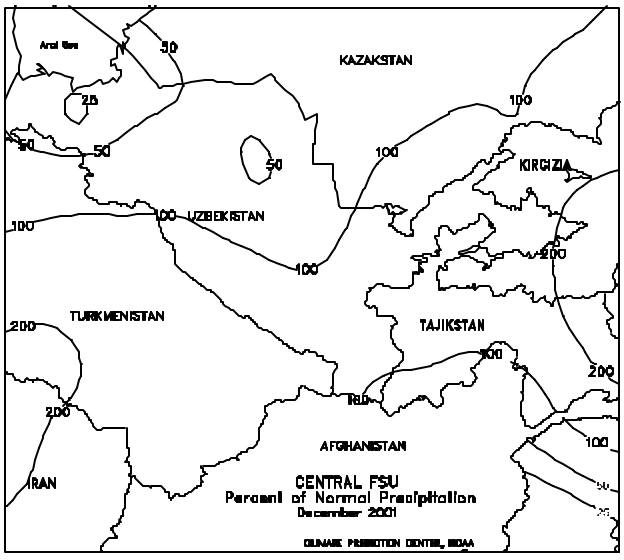
SOUTHEAST ASIA: Wetness eased in the southern Philippines as showers moved eastward, while showers continued to favor rice in Java, Indonesia.

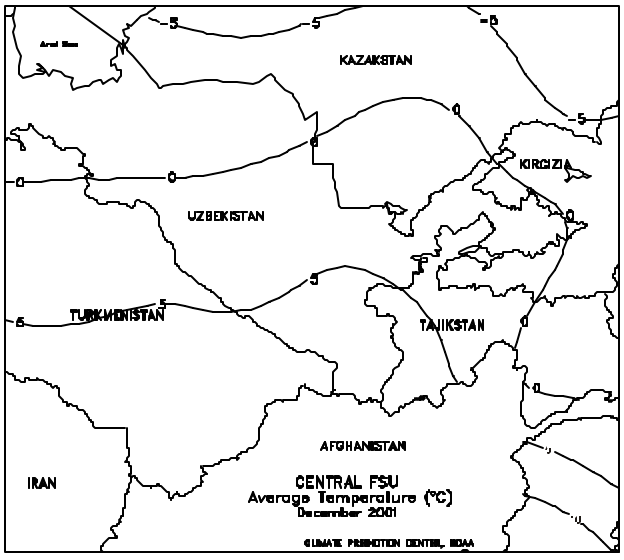
SOUTH AMERICA: In Rio Grande do Sul, Brazil, mostly dry weather continued to reduce soil moisture and started to stress soybeans and corn. In central Argentina, continued rain is needed due to recent dry weather.

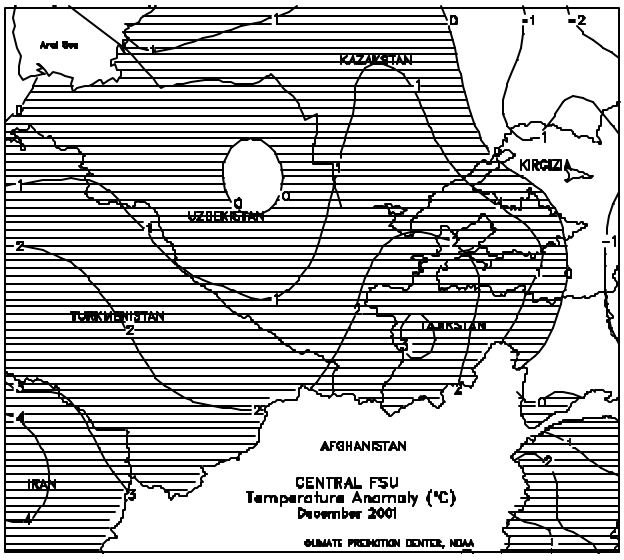
SOUTH AFRICA: Warm, showery weather benefited vegetative corn and other summer crops.

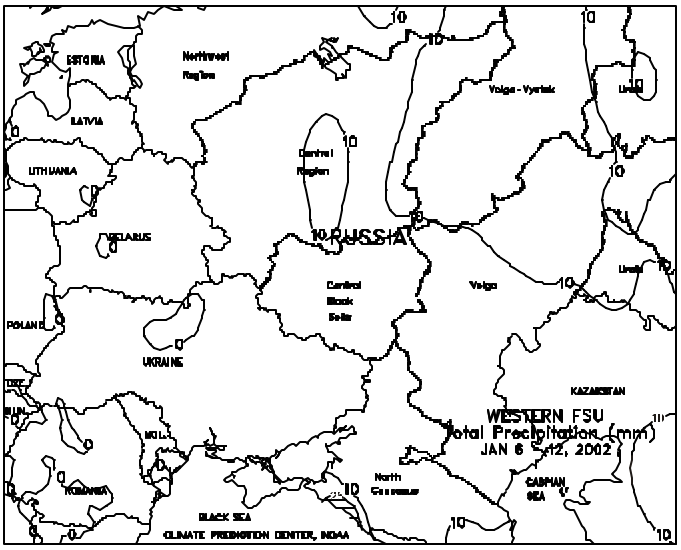
NORTHWESTERN AFRICA: Dry weather continued throughout the region, further reducing moisture reserves for vegetative winter grains.





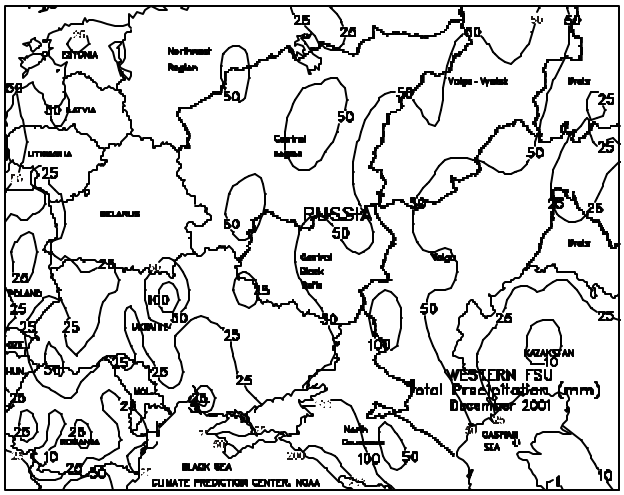


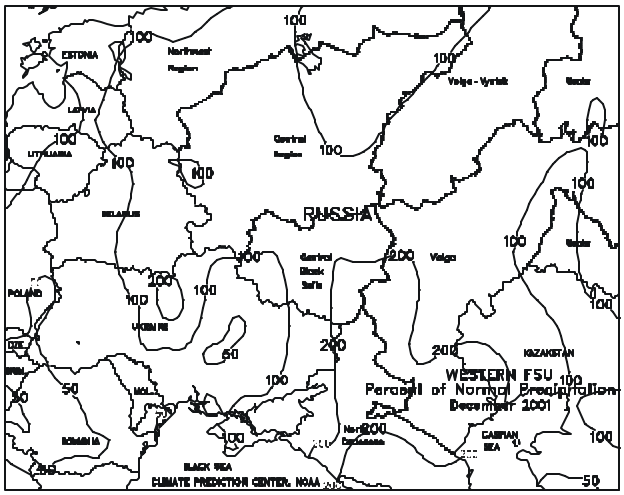


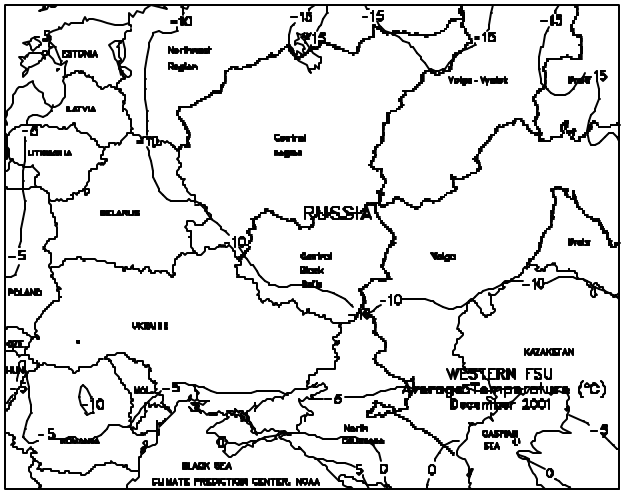


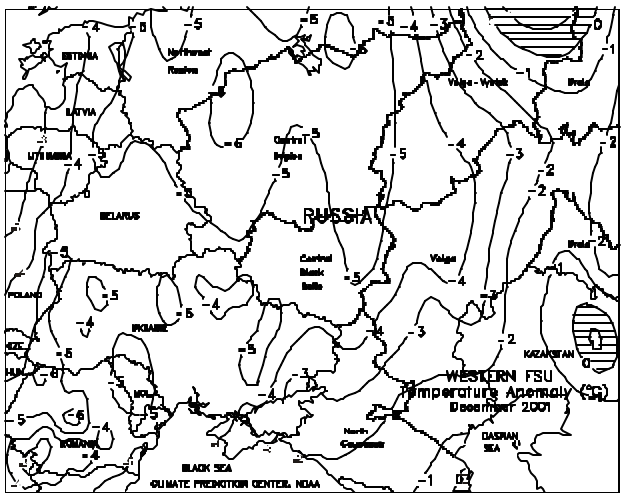
FSU-WESTERN

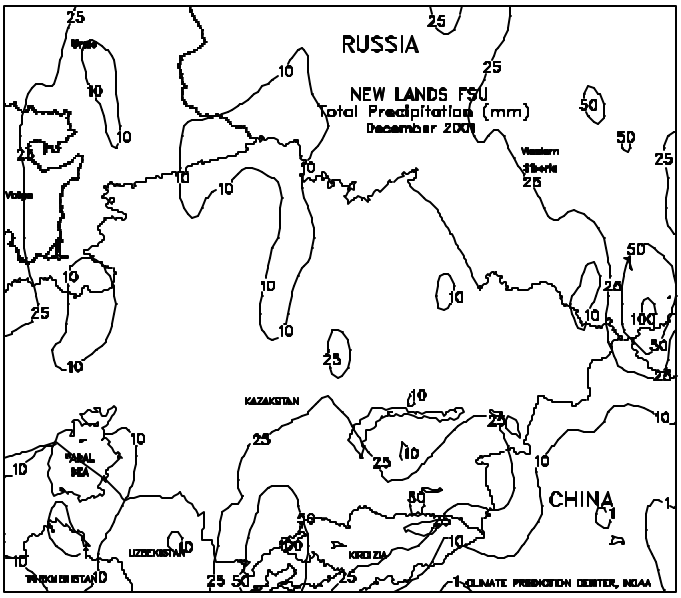
The coldest weather so far this winter prevailed in major winter wheat-producing areas of eastern Ukraine and southern Russia from January 8-9. The lowest temperatures ranged from -30 to -20 degrees C, falling well below the threshold for potential winterkill in areas without snow cover. In most areas, snow cover was sufficient enough to protect winter wheat from the potential for widespread winterkill. However, some local damage to crops was possible, especially in southeastern Ukraine, where snow cover was thin or patchy. Furthermore, crops in southeastern Ukraine entered dormancy poorly established, making them more susceptible to extremely cold weather. Rapid warming occurred at week's end, improving overwintering conditions for crops. Weekly temperatures averaged 4 to 10 degrees C below normal in eastern Ukraine and southern Russia, 1 to 3 degrees C below normal in northern Russia and western Ukraine, and near to slightly above normal in the Baltics and Belarus. In December, bitterly cold air persisted over most winter grain areas, dropping temperatures to well below normal. The frigid weather was accompanied by frequent snow falls, providing a protective blanket of snow in most areas. Near- to above-normal precipitation fell mostly as snow in Russia and Belarus, providing a deep snow cover. In the Krasnodar region of North Caucasus, Russia, heavy snow was followed by heavy rain at month's end, causing localized flooding. Elsewhere, below-normal precipitation was observed in most of Ukraine, falling periodically as snow in the west and a mixture of rain and snow in the south and east. The lowest temperatures in December were observed during December 16-22, with minimum temperatures falling to as low as -30 degrees C as far south as the northern tip of the North Caucasus region in Russia. In most of the major grain-producing areas that experienced extreme cold (-30 to -20 degrees C), snow cover was likely deep enough to protect winter grains from the potential for widespread winterkill. However, reports indicated that some localized damage to winter grains was possible from the eastern portion of the middle Volga Valley to the southern Urals, where snow cover was insufficient. Temperatures gradually moderated at month's end, improving overwintering conditions for winter grains, but melting some protective snow cover in the south.

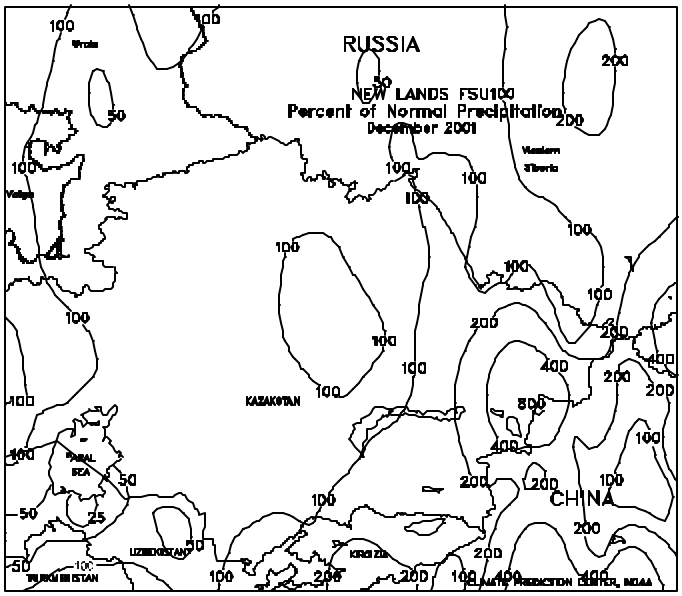


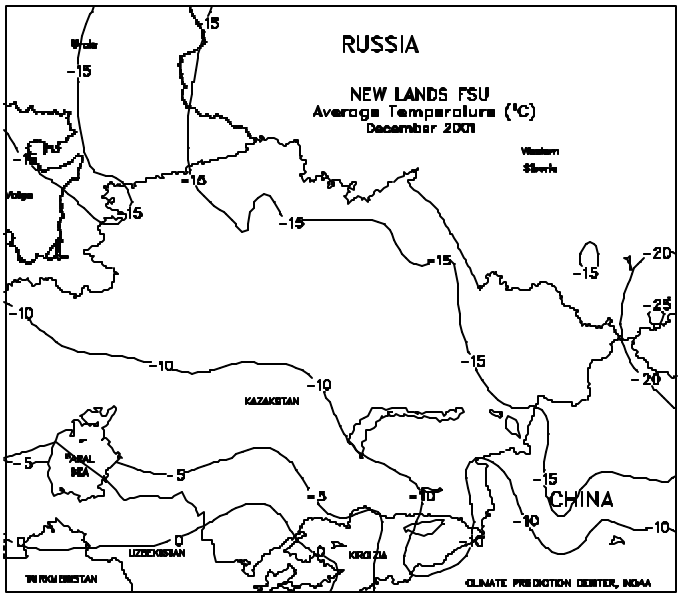


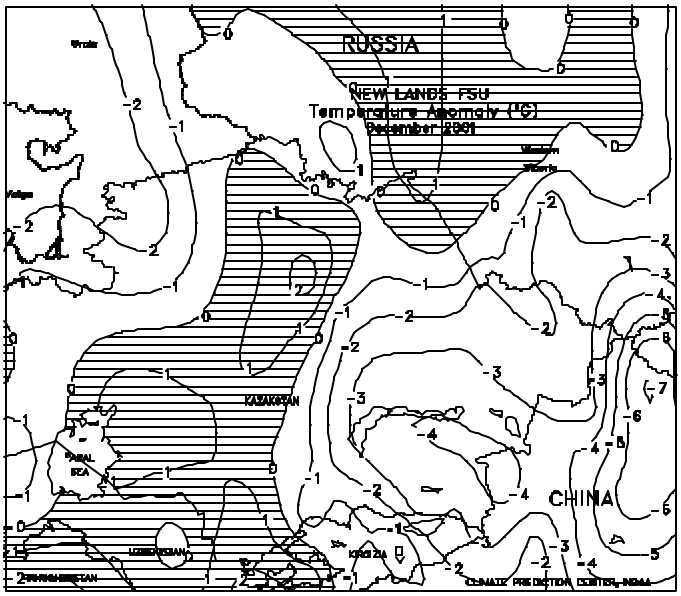


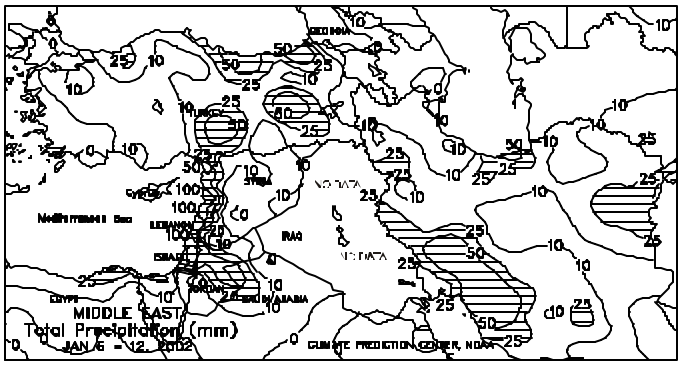



RUSSIA
NEW LANDS FSU
Total Precipitation (mm)
December 2001
KAZAKSTAN
CHINA
CLIMATE PREDICTION CENTER, NOAA


RUSSIA
NEW LANDS FSU100
Percent of Normal Precipitation
December 2001
KAZAKSTAN
CHINA
CLIMATE PREDICTION CENTER, NOAA

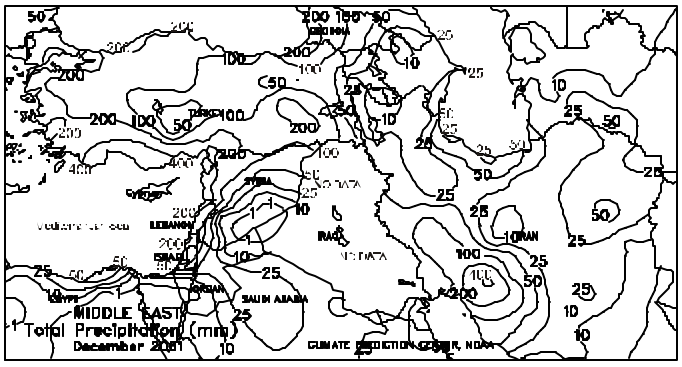

RUSSIA
NEW LANDS FSU
Average Temperature (°C)
December 2001
KAZAKSTAN
CHINA
CLIMATE PREDICTION CENTER, NOAA

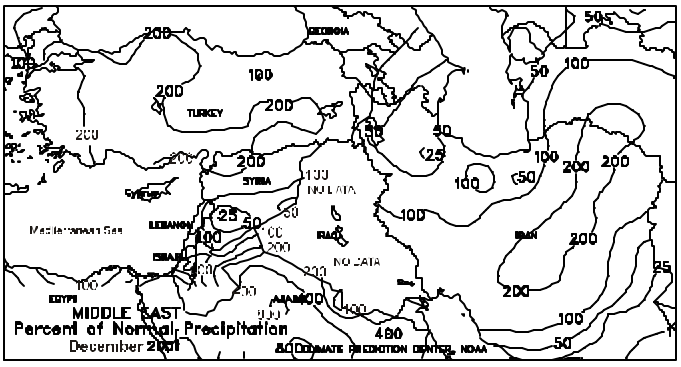

RUSSIA
NEW LANDS FSU
Temperature Anomaly (°C)
December 2001
KAZAKSTAN
CHINA
CLIMATE PREDICTION CENTER, NOAA

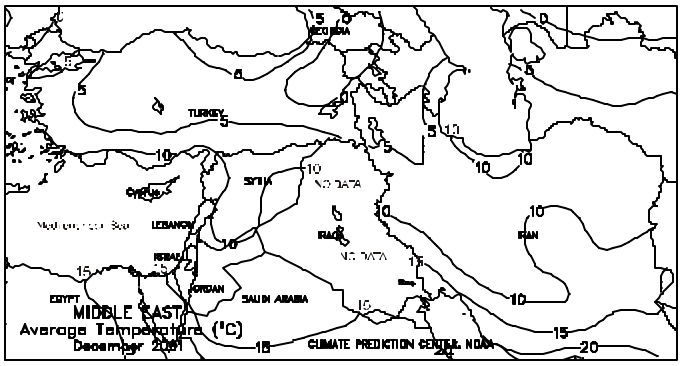


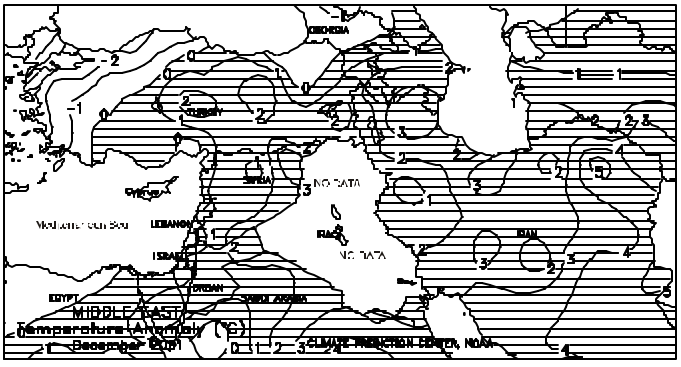
MIDDLE EAST

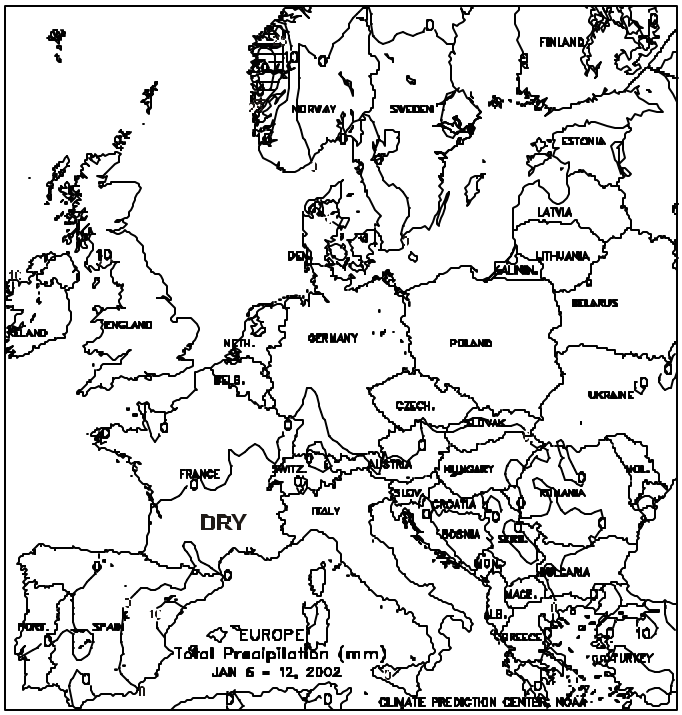
Dry weather covered southwestern Turkey and the Anatolian Plateau, providing much-needed relief from recent excessive wetness and local flooding. Near- to above-normal precipitation continued, however, in eastern Turkey, and heavy rain (25-100 mm or more) developed from south-central Turkey to Israel, boosting moisture reserves for winter grain development and future irrigation requirements. Light rain (5 mm or less) covered winter wheat areas of eastern Syria, but beneficial rain (5-25 mm or more) covered much of Iran, including previously dry sections of the east and northwest. Prevailing weather patterns and satellite imagery depicted scattered showers across Iraq. Temperatures continued to average well above normal across Iran, favoring overwintering semi-dormant wheat. In the west, much-cooler-than-normal weather kept winter wheat dormant across central Turkey but may have burned back tender vegetation in the more southerly growing areas. During December, wet weather kept most winter wheat areas well watered, but unseasonable wetness worsened flooding in parts of southwestern Turkey. The exception was northwestern Iran, which received light, scattered precipitation. Unfavorable warmth and dryness returned to southern and eastern Iran later in the month, but scattered showers continued elsewhere in the region's major winter wheat areas. Temperatures averaged below normal for the month in western and northern Turkey, keeping winter wheat in Anatolia dormant, but near to above normal elsewhere, favoring overwintering winter crops.





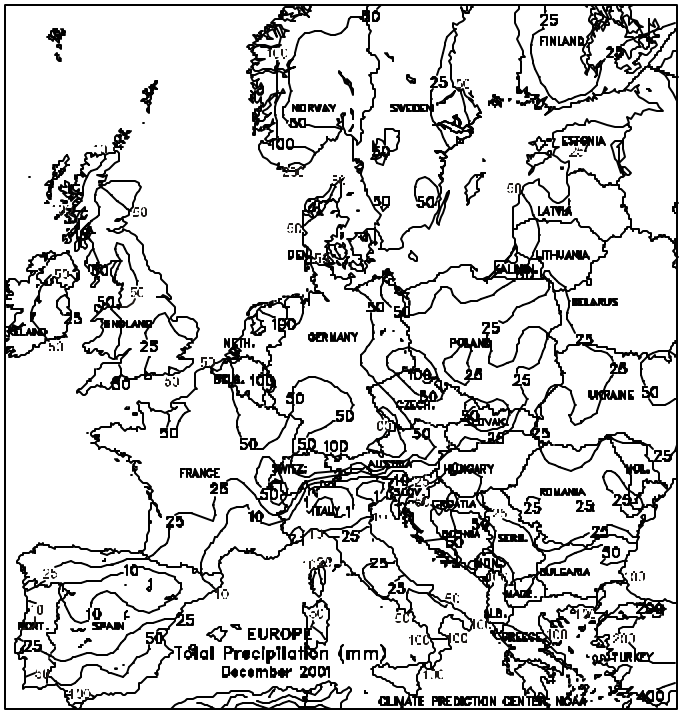


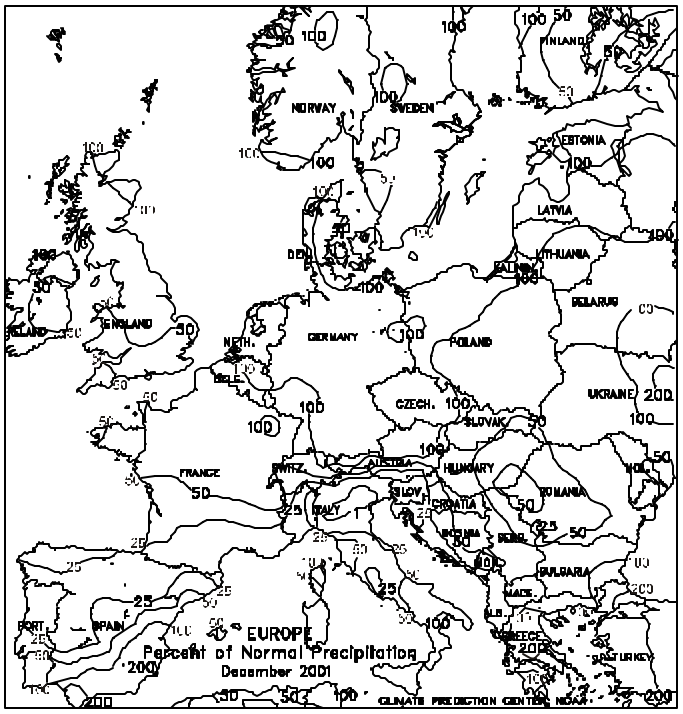


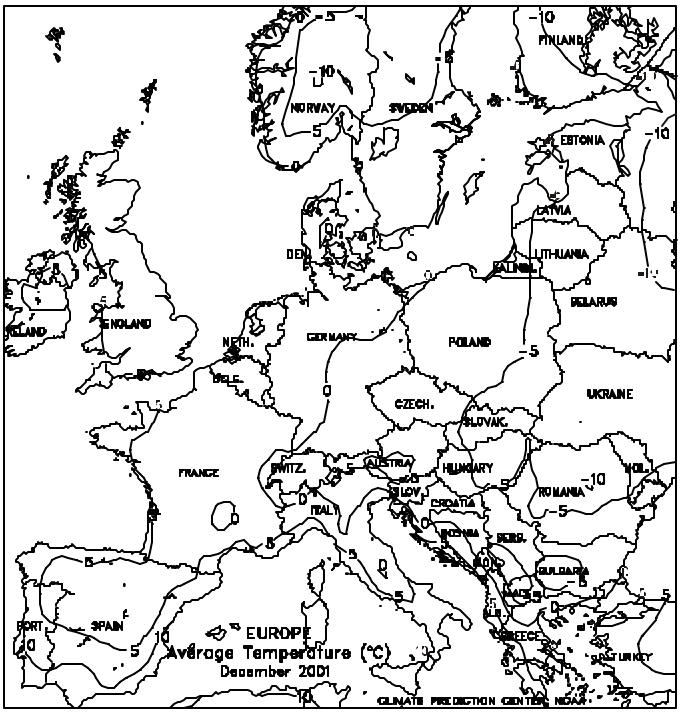


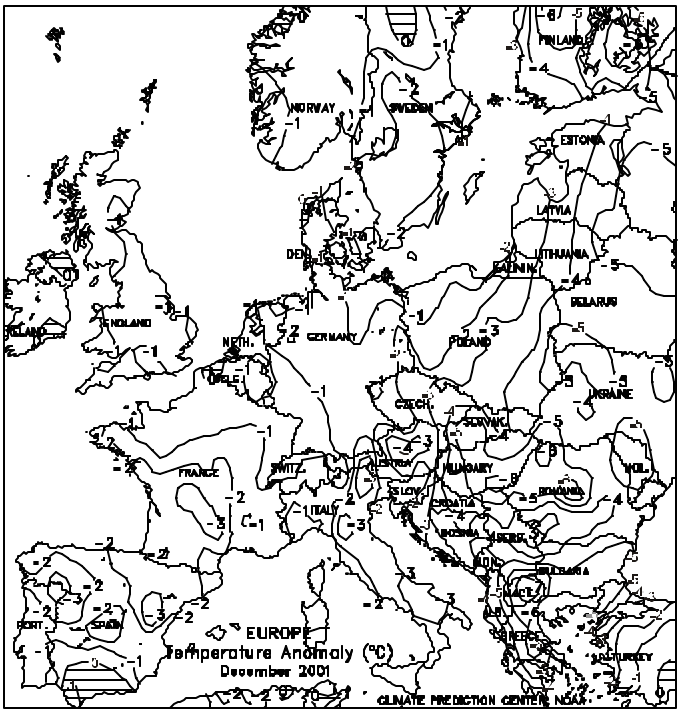
EUROPE

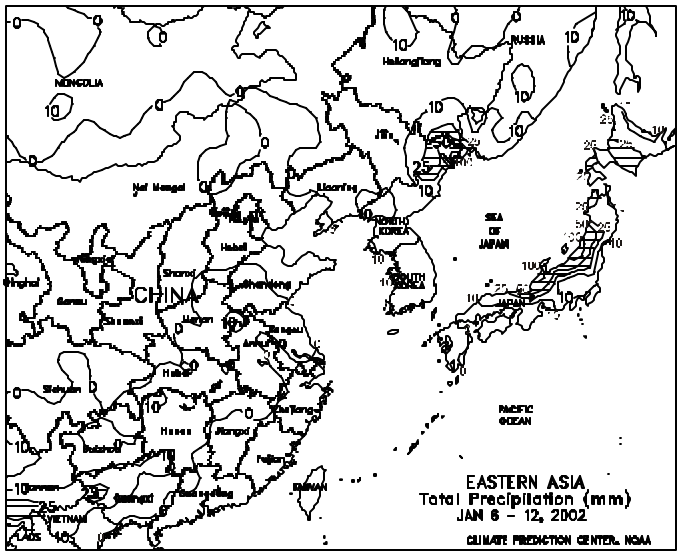
After several weeks of significantly colder-than-normal weather in most areas, milder weather overspread the continent. Temperatures averaged within about 2 degrees C of normal in most major crop-producing areas, improving overwintering conditions for dormant and semi-dormant winter grains. Despite the more mild conditions, sub-freezing temperatures were observed in Mediterranean citrus areas at the beginning of the week. Little if any precipitation fell across Europe (less than 5 mm). Nevertheless, moisture supplies remained adequate for slowly developing winter crops in extreme southwestern and south-central Europe. The milder weather and limited precipitation eroded the snow pack in northern Germany and parts of the northwestern Balkans and western Hungary by week' s end. Elsewhere in north-central and eastern Europe, a protective snow cover remained. Unseasonably cold weather gripped most of Europe in December, causing winter grains to enter dormancy in most of the west and remain dormant in the east. In eastern Europe, snowfall blanketed dormant crops during the coldest weather, minimizing the threat of widespread winterkill. In northern Europe, near- to above-normal precipitation maintained moisture supplies. In contrast, below-normal precipitation fell across southern Europe, except in extreme southern Spain, southern Italy, and extreme southeastern Europe, where precipitation averaged near normal. Chronic dryness persisted in Italy' s Po Valley, where little if any precipitation has fallen since the beginning of October.





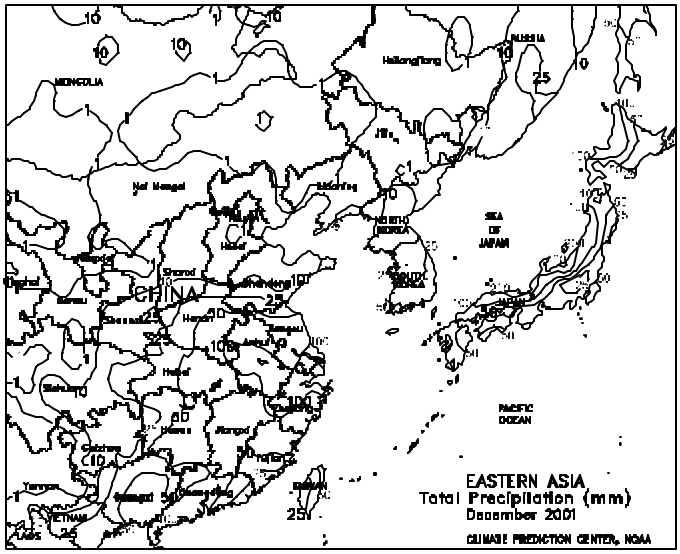


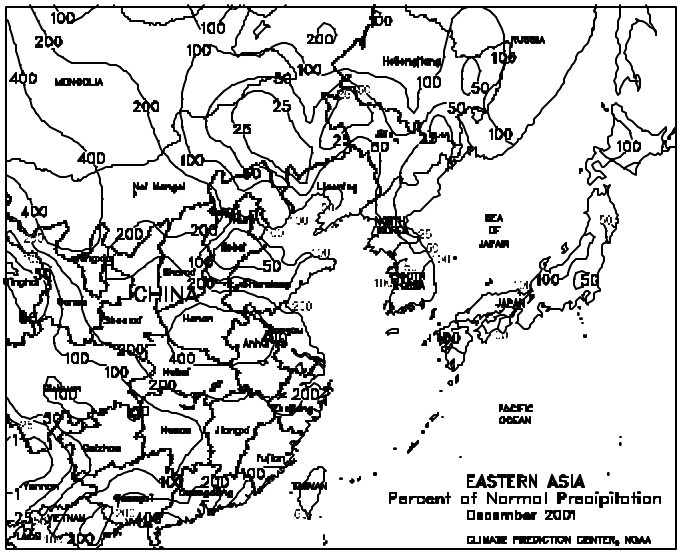


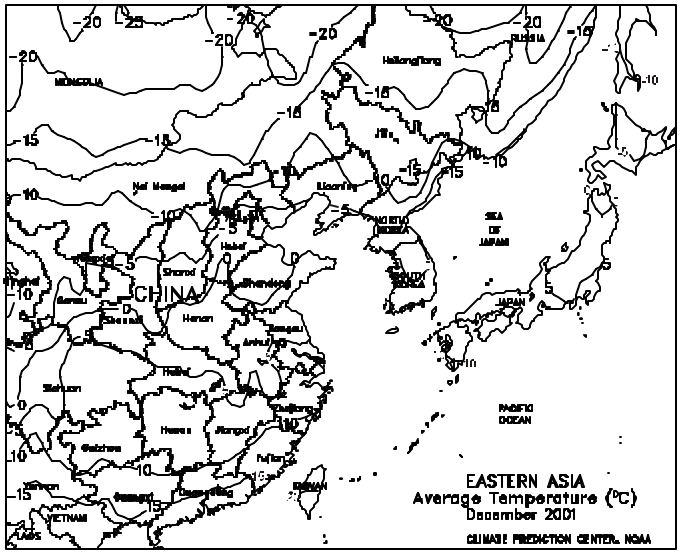


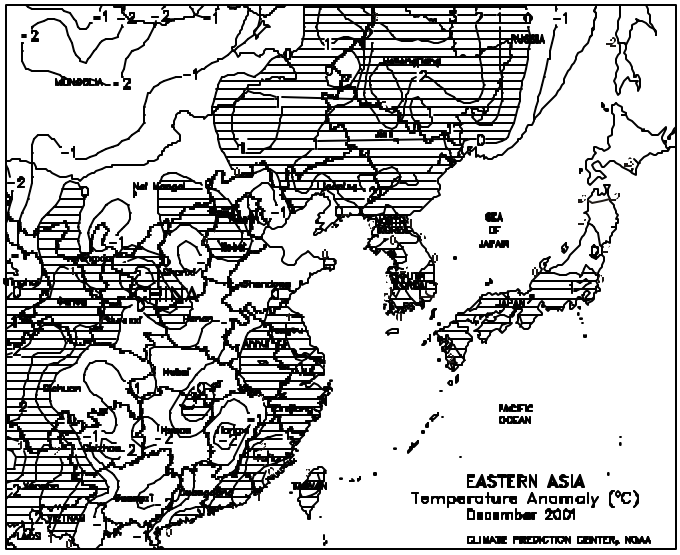
EASTERN ASIA

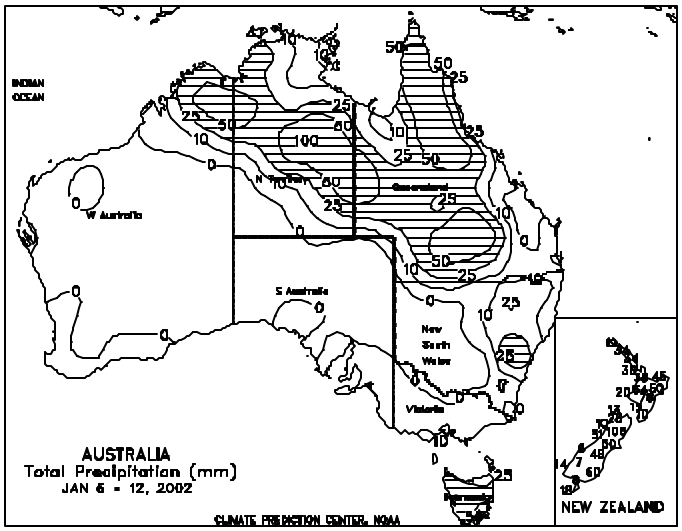
Across the North China Plain, unseasonably warm weather prompted winter wheat to lose winter hardiness and increase the potential for winterkill. In this region, temperatures averaged 4 to 8 degrees C above normal, with highs reaching the middle to upper teens degrees C. Overall the winter wheat crop is in fair condition, with autumn dryness offset by supplemental irrigation. Spring rainfall is typically the major determinant for winter wheat yields. By week' s end, light rain (3-10 mm) covered central China (from Shandong and Henan southward into Hunan), providing some moisture for dormant to semi-dormant winter crops. Heavier rain (10-25 mm) fell across northern Guangxi and southern Yunnan. Across the Yangtze Valley and southern China, overall moisture supplies are adequate for winter crops, but the recent dryness has slightly reduced supplies. Across southern China, temperatures averaged 3 to 7 degrees C above normal, with highs reaching the middle 20s degrees C. During December, above- to much-above-normal precipitation fell across eastern China during the first half of December, improving moisture supplies for winter crops. Only southwestern China (Sichuan, Guizhou, and Yunnan) received below-normal precipitation. Seasonably cold weather caused winter wheat to enter dormancy. In late December, freezing temperatures extended as far south as northern Guangdong, but remained north of the primary sugarcane-producing areas.


EASTERN ASIA
Total Precipitation (mm)
December 2001
CLIMATE PREDICTION CENTER, NOAA


EASTERN ASIA
Percent of Normal Precipitation
December 2001
CLIMATE PREDICTION CENTER, NOAA

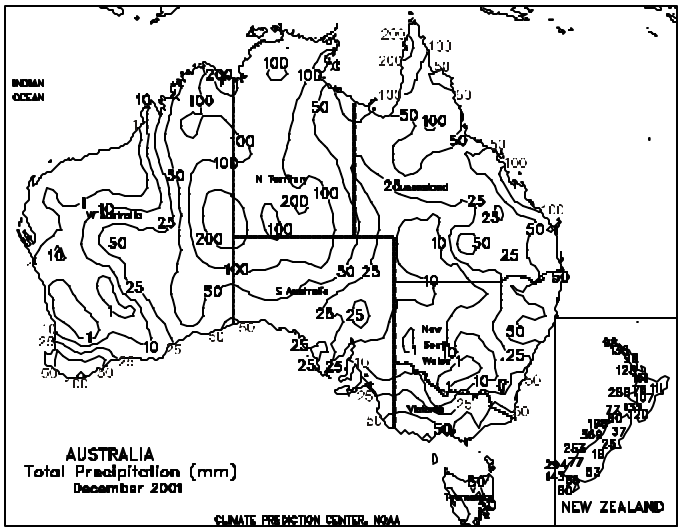

EASTERN ASIA
Average Temperature (°C)
December 2001
CLIMATE PREDICTION CENTER, NOAA

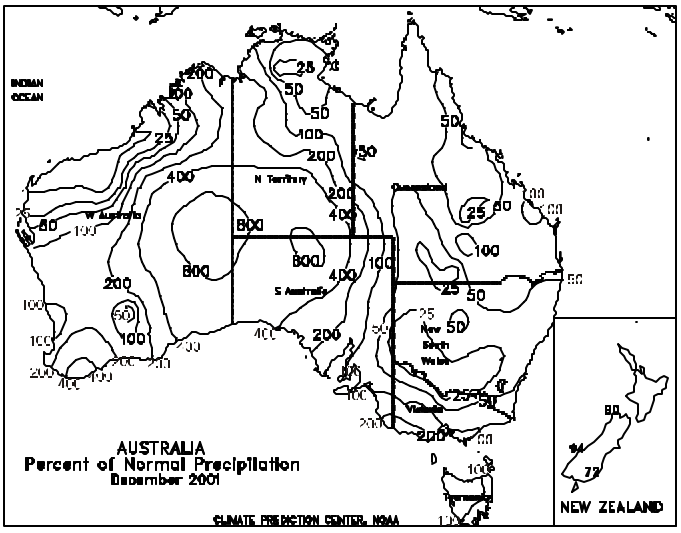

EASTERN ASIA
Temperature Anomaly (°C)
December 2001
CLIMATE PREDICTION CENTER, NOAA

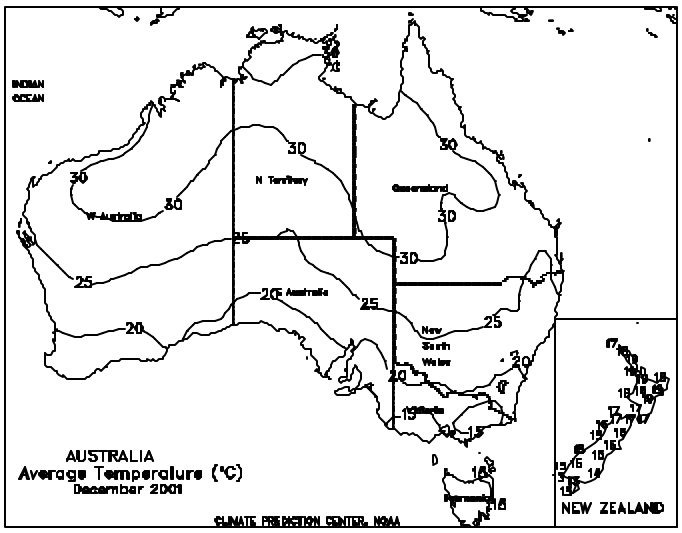


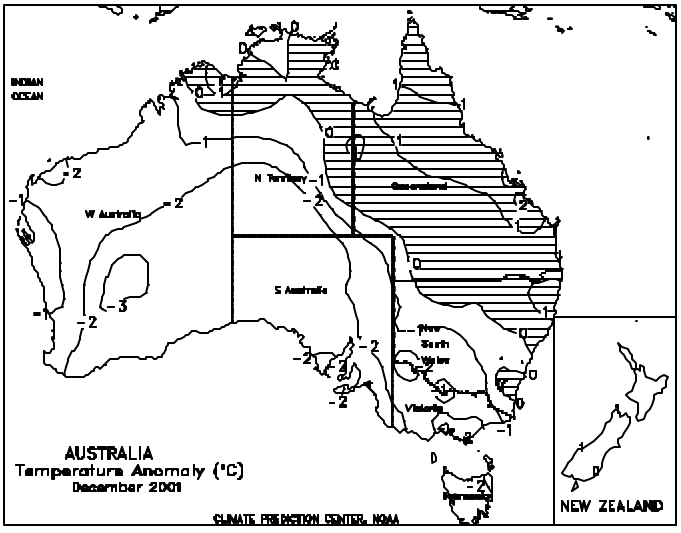
AUSTRALIA

Showers overspread important summer crop areas of east-central Australia (southern Queensland and northern New South Wales), with the largest amounts (10-50 mm or more) recorded in Queensland' s westerly growing areas. The moisture helped increase irrigation reserves and was favorable for pastures and nearby grazing lands. Lighter showers (10 mm or less) fell in Queensland' s eastern growing areas, including the coastal sugarcane region. Temperatures averaging near to above normal aided cotton and sorghum development. In Western Australia and the southeast (South Australia and Victoria), mostly dry, cool weather promoted final winter grain and oilseed harvests. However, breezy weather over portions of South Australia may have caused localized lodging. In New Zealand, soaking rain (25-50 mm, locally exceeding 100 mm) greatly improved moisture reserves for small grains and pastures. During December, periodic showers caused localized winter crop harvesting delays in Western Australia, South Australia, and Victoria, but the bulk of the winter harvesting reportedly progressed well. Below-normal temperatures, however, slowed maturation of later developing crops. In major summer crop areas of east-central Australia, warm, showery weather was generally favorable for the mostly irrigated crop.



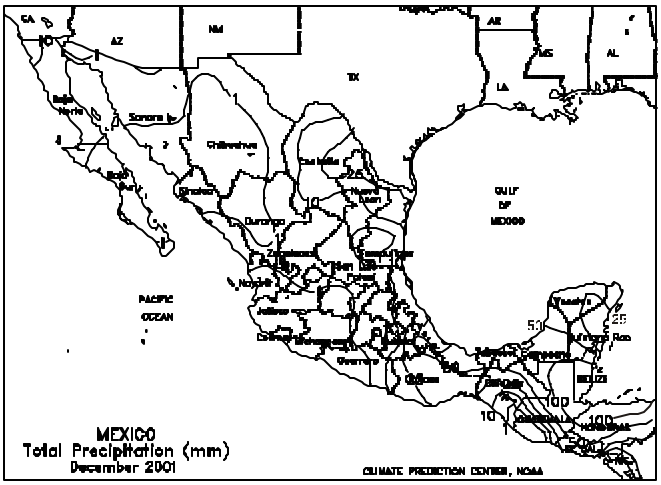


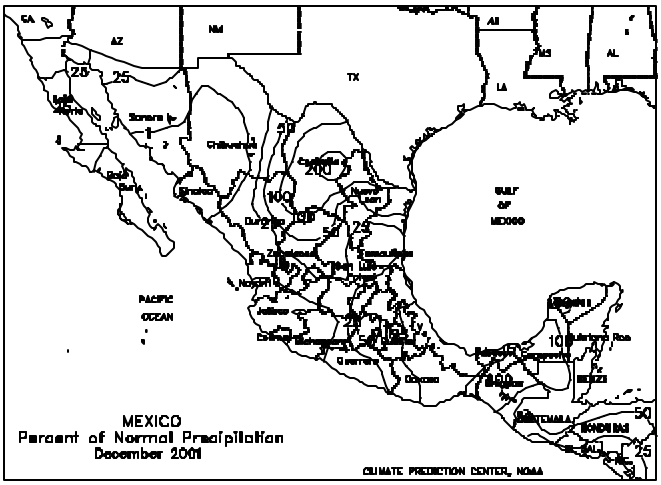


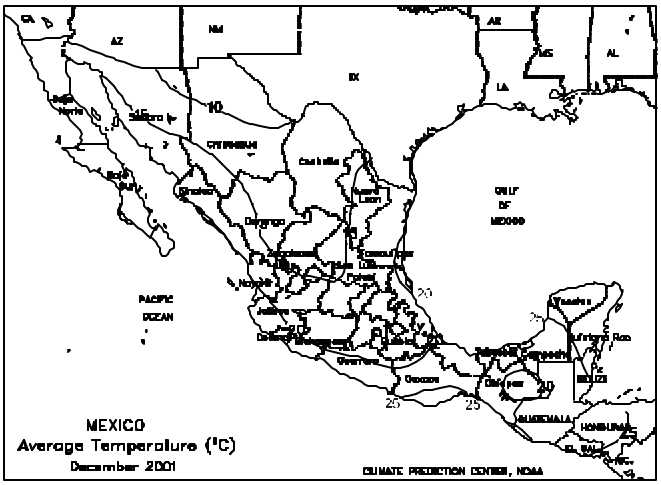


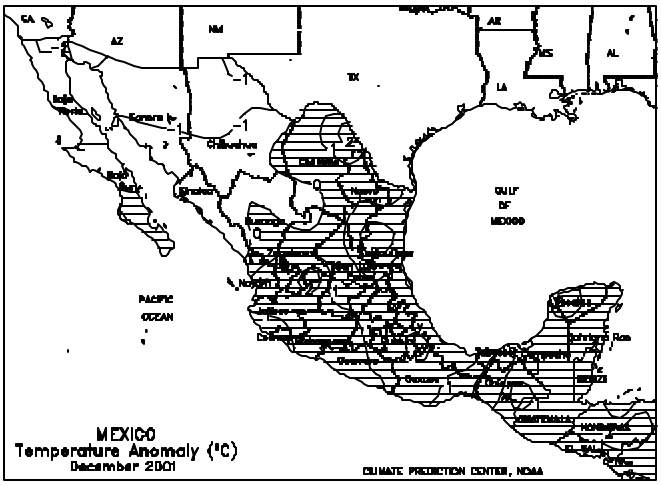
MEXICO

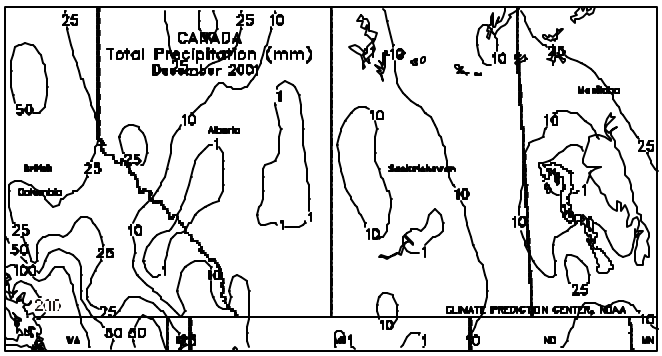
During December, seasonably dry weather favored corn harvesting across the main corn belt. Near- to above-normal rainfall favored late-filling corn across southeastern Mexico (Oaxaca, Chiapas, and Veracruz). Above-normal rainfall boosted reservoir supplies across Coahuila and the lower Rio Grande Valley.

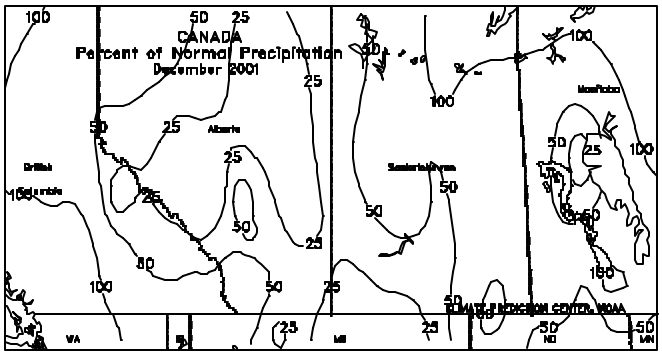


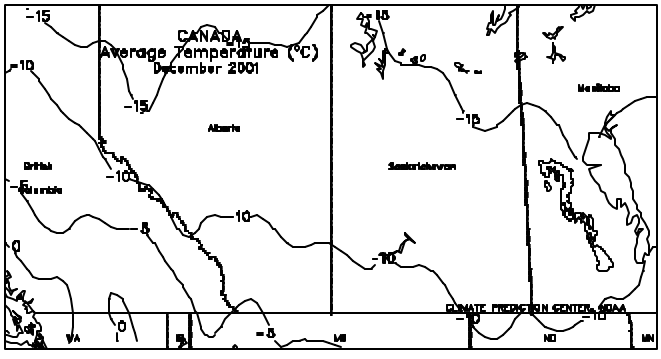


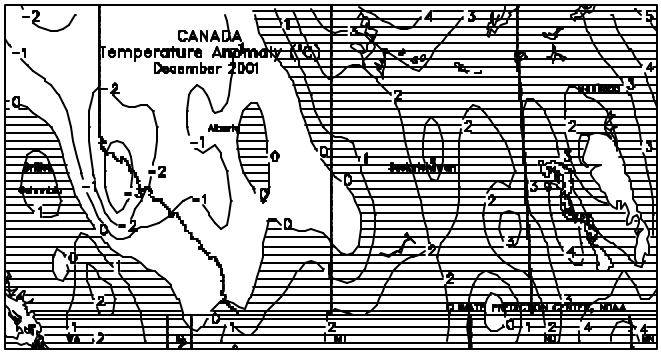


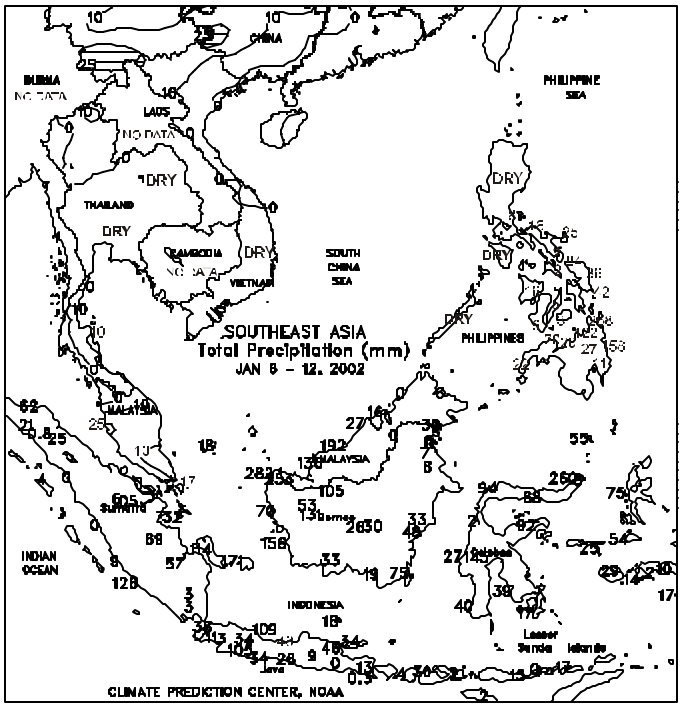






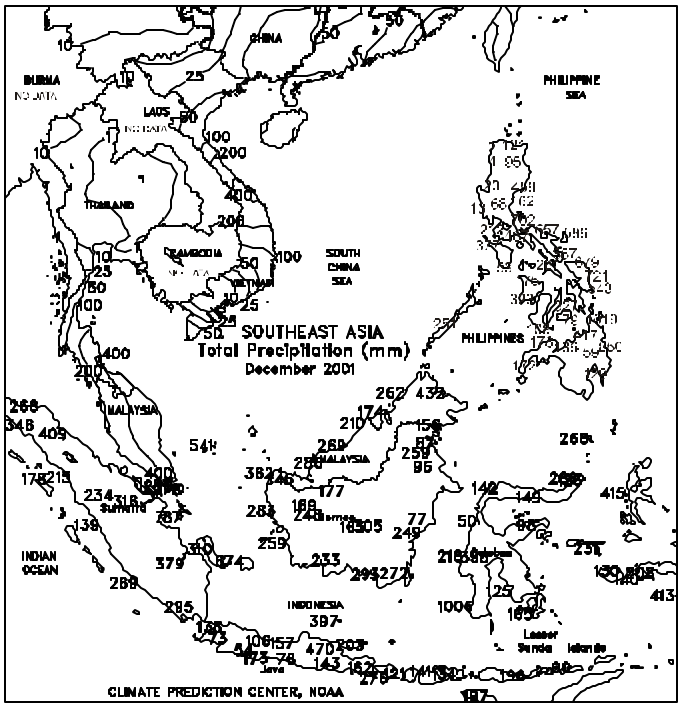


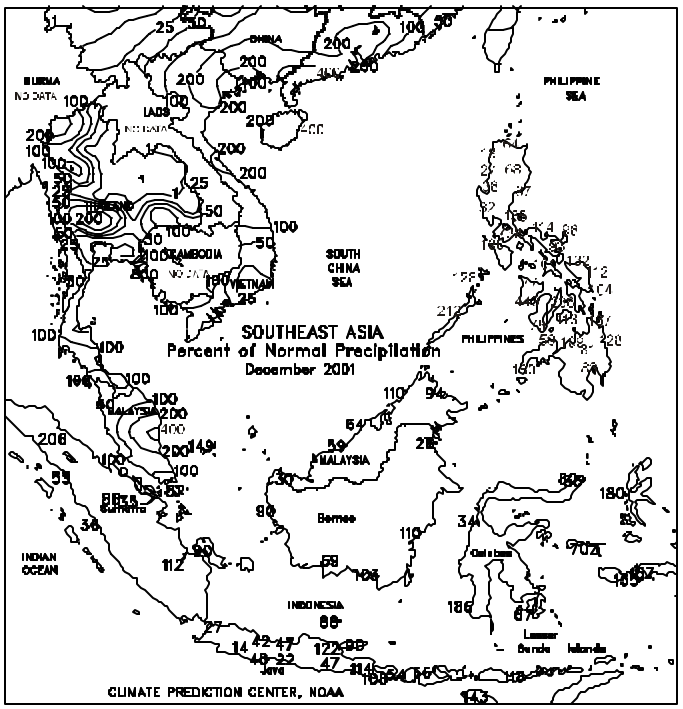


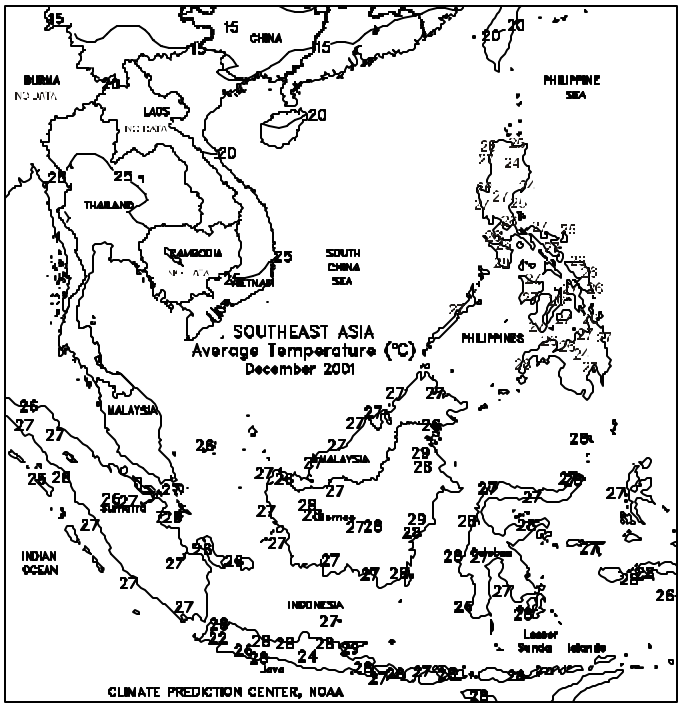


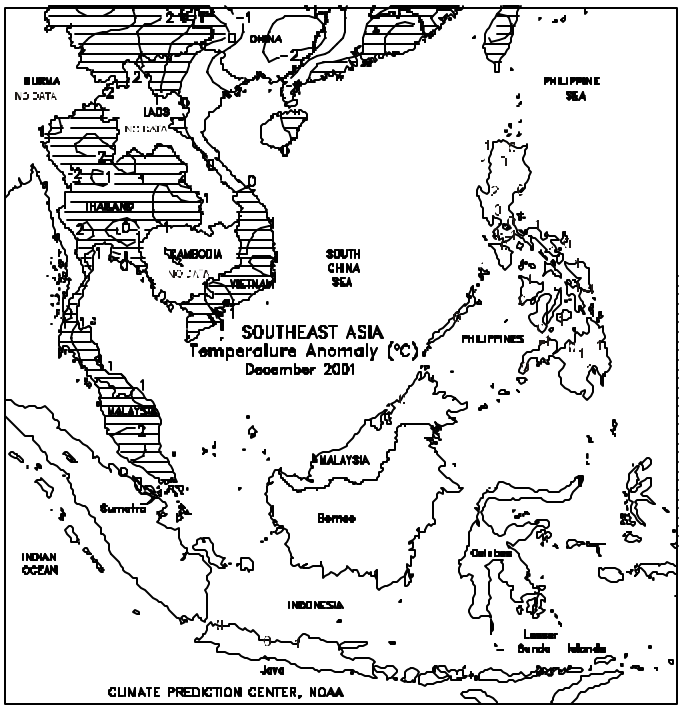
SOUTHEAST ASIA

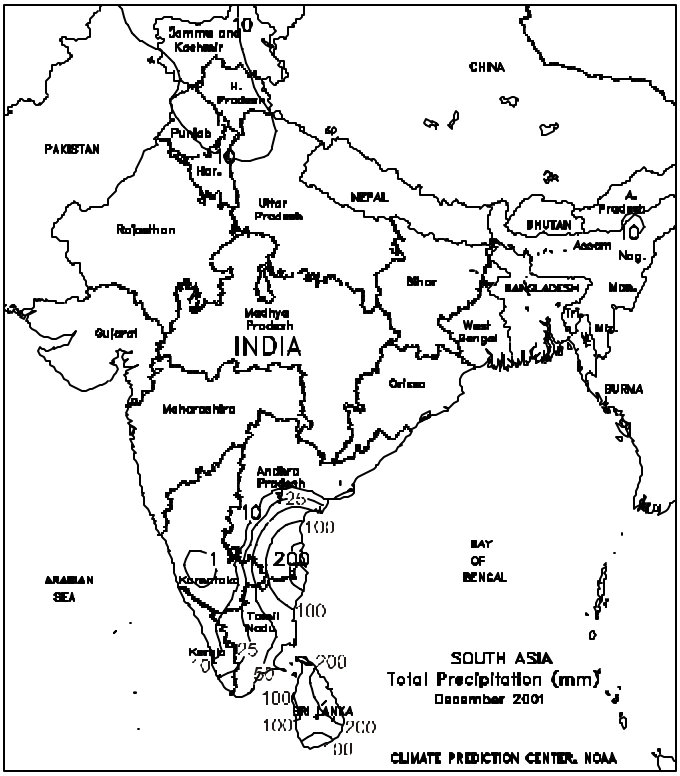
Heavy rains (25-100 mm) retracted to south-eastern areas of the Philippines, easing wetness elsewhere. Continued seasonably dry weather favored rice fieldwork in Thailand and Vietnam. Dry weather continued in peninsular Malaysia, reducing moisture supplies for oil palm. In Java, Indonesia, showers (25-100 mm) favored main-season rice. In December, seasonal dryness allowed rice harvesting to proceed throughout Indochina. Above-normal rainfall in the Philippines boosted moisture supplies for second-season crops, but caused some flooding. Unseasonably dry weather reduced moisture reserves for main-season rice in Java, Indonesia. Above-normal rainfall in peninsular Malaysia and Sumatra maintained adequate moisture for oil palm.

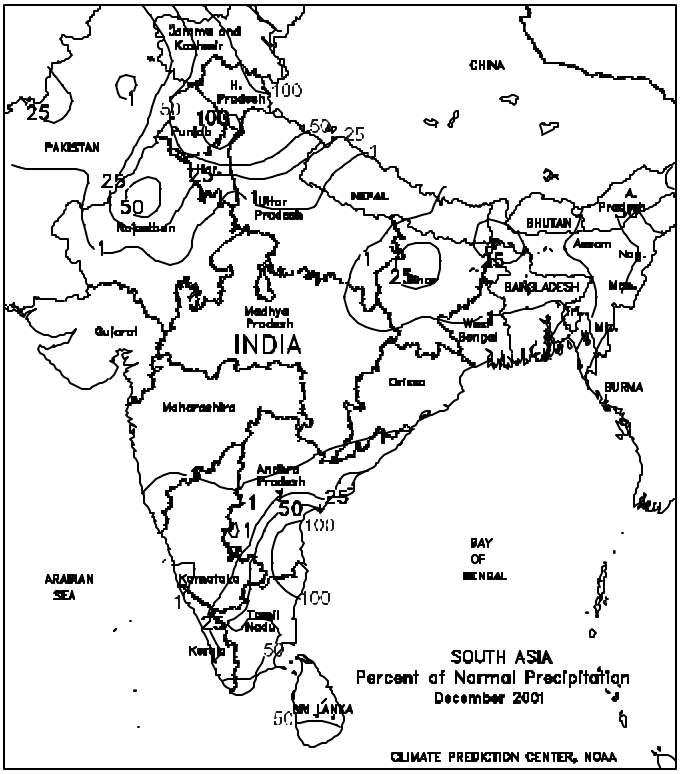


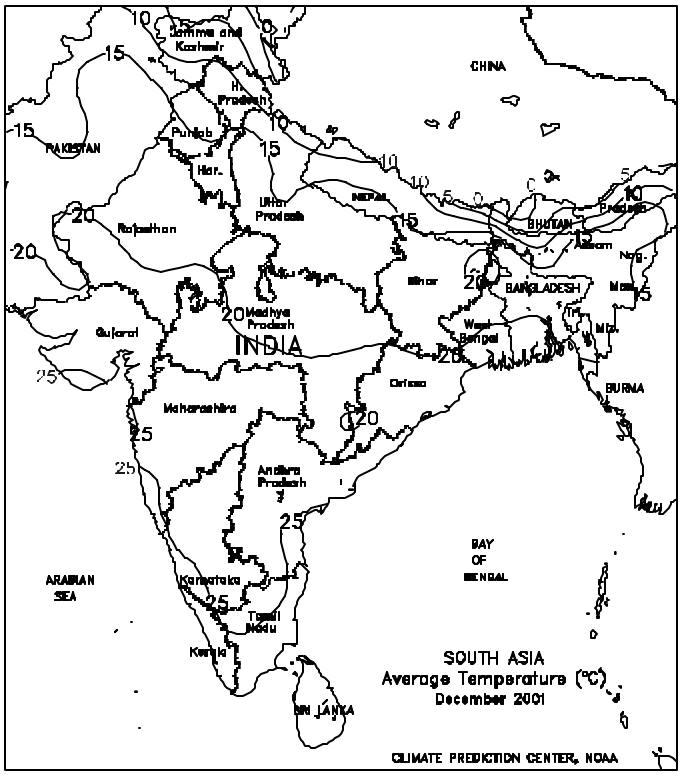


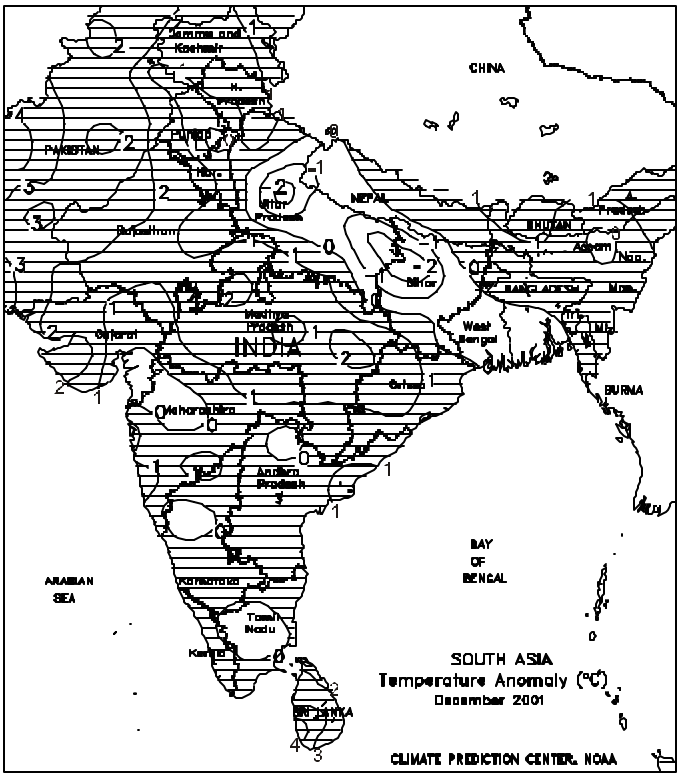

SOUTHEAST ASIA
Average Temperature (°C)
December 2001
CLIMATE PREDICTION CENTER, NOAA

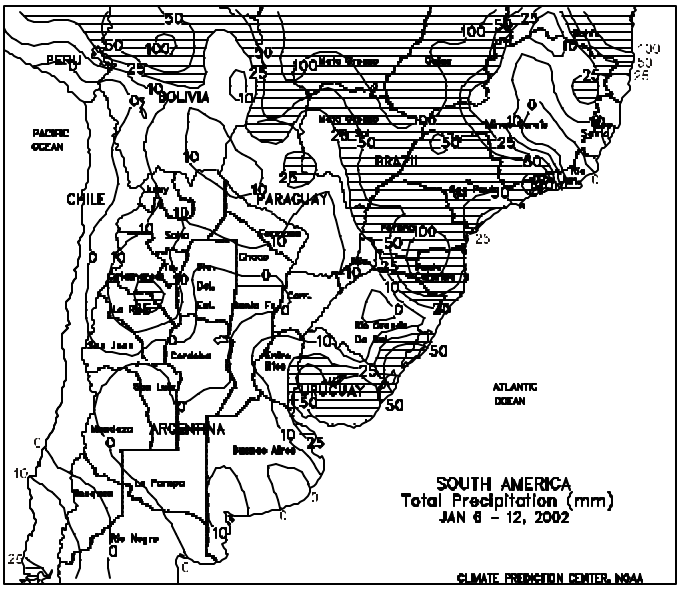

SOUTHEAST ASIA
Temperature Anomaly (°C)
December 2001
CLIMATE PREDICTION CENTER, NOAA


SOUTH ASIA
Total Precipitation (mm)
December 2001
CLIMATE PREDICTION CENTER, NOAA


SOUTH ASIA
Percent of Normal Precipitation
December 2001
CLIMATE PREDICTION CENTER, NOAA

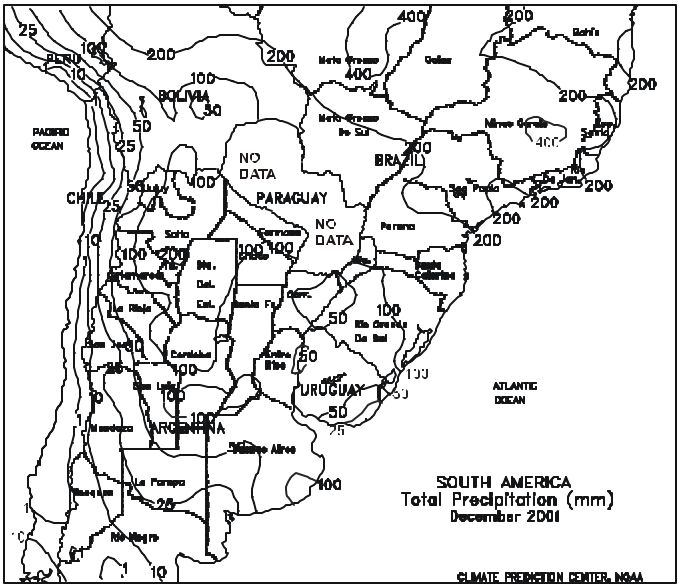


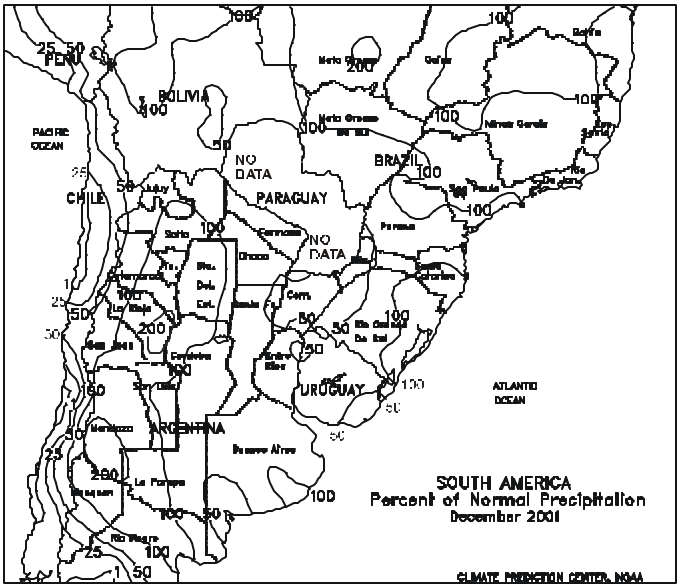




SOUTH AMERICA

In Rio Grande do Sul, Brazil, mostly dry weather (less than 10 mm) continued to reduce soil moisture and started to stress vegetative soybeans. Rainfall has been averaging about a third of normal for the past 3 to 4 weeks. Elsewhere in southern Brazil, widespread rain (25-100 mm or more) covered the remaining major soybean and corn-producing areas, including Parana and Santa Catarina, maintaining adequate soil moisture for summer crops. Unseasonably heavy showers possibly caused flooding in coastal Bahia and northern Goias (50-200 mm) and slowed sugarcane and corn harvesting across northeastern Brazil (25-75mm). In central Argentina, dry weather returned after last week' s beneficial rain, but continued rain is needed since soil moisture currently ranges from slightly short to adequate for summer crops. The rain is especially needed for reproductive corn, sorghum, and sunflowers. The dry weather, however, favored winter wheat harvesting in southern Buenos Aires. Temperatures averaged slightly above normal across Argentina and near normal in southern Brazil. Timely late-December and early-January rainfall in Argentina eased summer crop stress across the western crop areas, after below-normal rainfall during most of December. This drier weather favored winter wheat maturation across Buenos Aires, but heavy late-December rainfall in southern Buenos Aires slowed harvesting and possibly reduced quality. In Brazil, dryness during late-December and early-January reduced soil moisture across Rio Grande do Sul and southern Parana. Across the rest of southern Brazil, near-normal rainfall maintained adequate soil moisture for soybean development.


PERU
BOLIVIA
PACIFIC OCEAN
CHILE
NO DATA
PARAGUAY
BRAZIL
URUGUAY
ARGENTINA
ATLANTIC OCEAN
SOUTH AMERICA
Total Precipitation (mm)
December 2001
CLIMATE PREDICTION CENTER, NOAA


PERU
BOLIVIA
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CHILE
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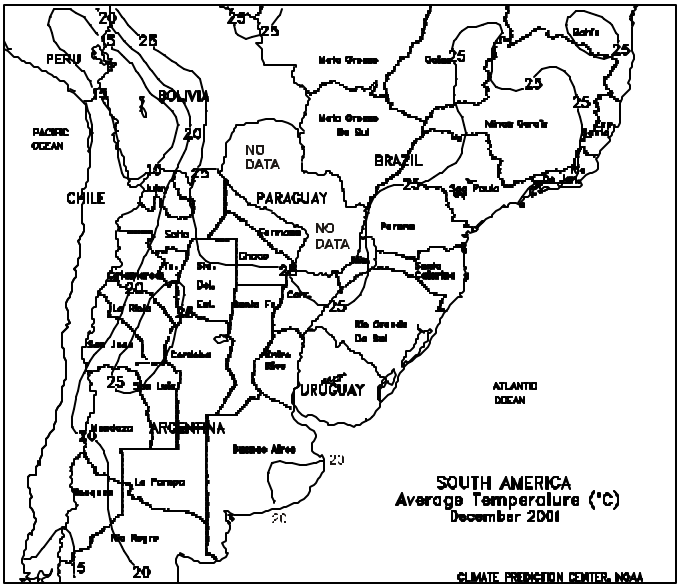
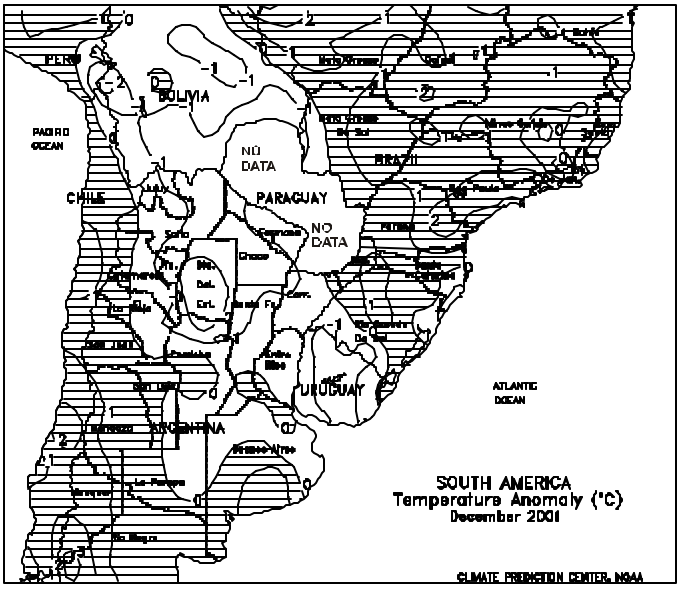
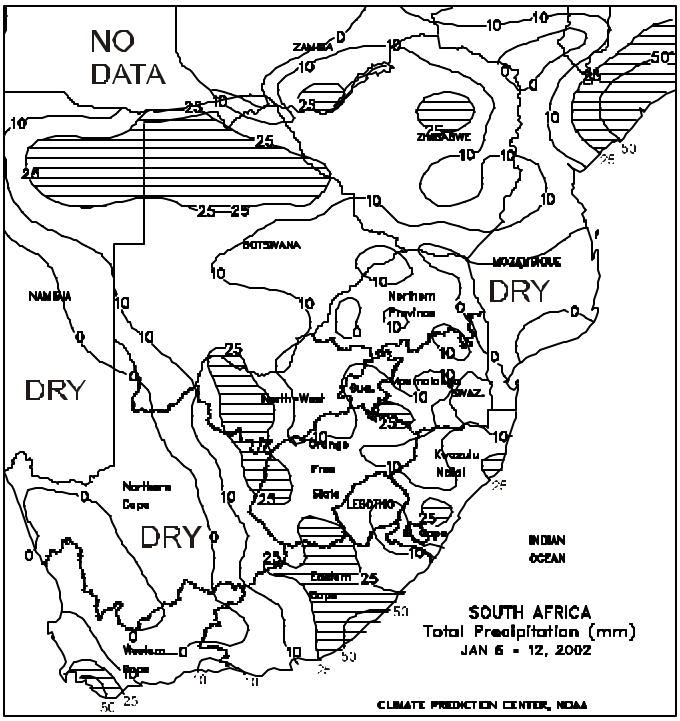
PARAGUAY
BRAZIL
URUGUAY
ARGENTINA
ATLANTIC OCEAN
SOUTH AMERICA
Percent of Normal Precipitation
December 2001
CLIMATE PREDICTION CENTER, NOAA

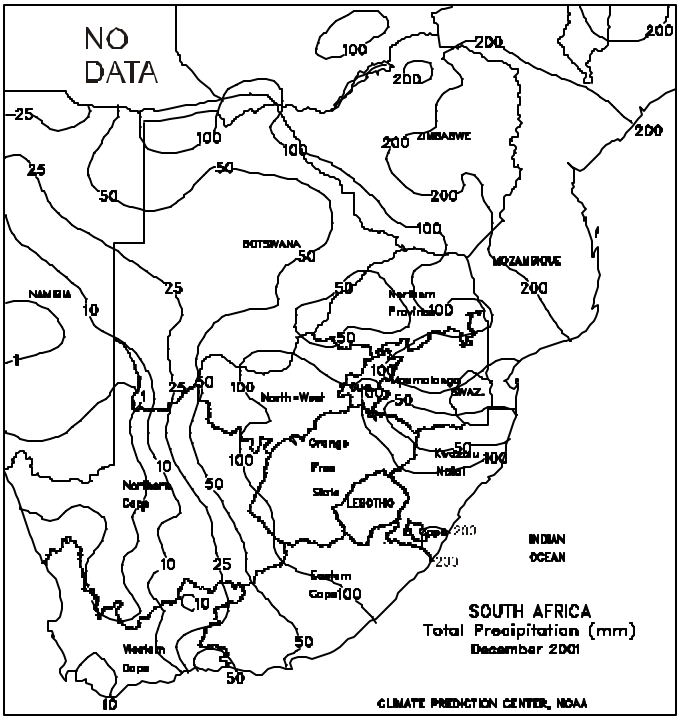

PERU
BOLIVIA
PACIFIC OCEAN
CHILE
NO DATA
PARAGUAY
BRAZIL
URUGUAY
ARGENTINA
ATLANTIC OCEAN
SOUTH AMERICA
Average Temperature (°C)
December 2001
CLIMATE PREDICTION CENTER, NOAA

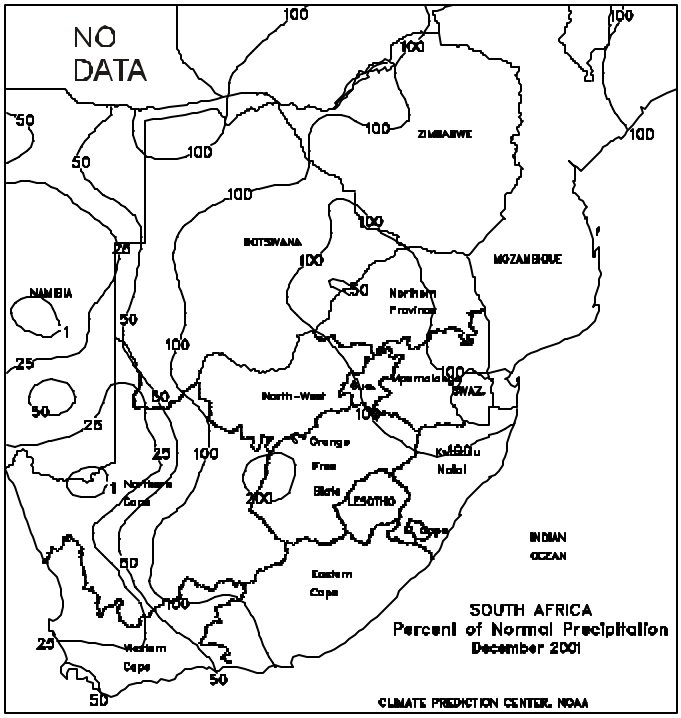

PERU
BOLIVIA
PACIFIC OCEAN
CHILE
NO DATA
PARAGUAY
BRAZIL
URUGUAY
ARGENTINA
ATLANTIC OCEAN
SOUTH AMERICA
Temperature Anomaly (°C)
December 2001
CLIMATE PREDICTION CENTER, NOAA

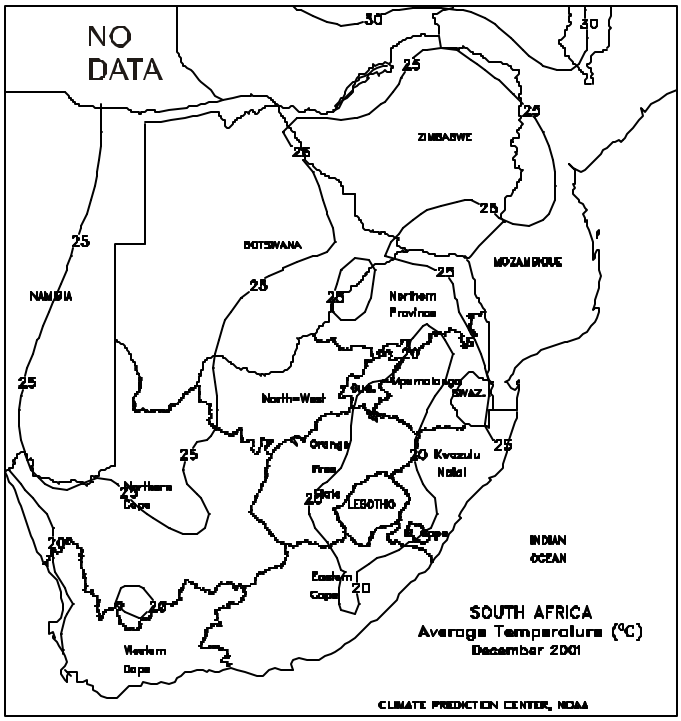


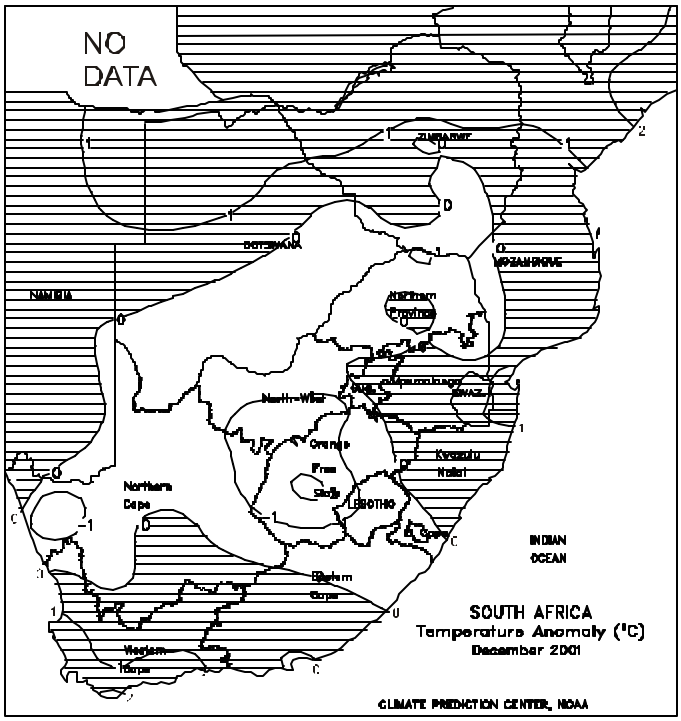
SOUTH AFRICA

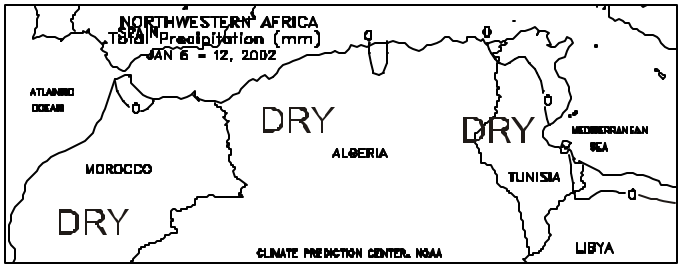
Light to moderate showers (3-25 mm or more) fell across the corn belt, sustaining generally favorable moisture levels for summer crops approaching reproduction. Temperatures averaged near to below normal, with highs ranging in the upper 20s and lower 30s degrees C, favoring crop development. Showery weather also covered most crop areas from Western Capethrough KwaZulu-Natal, increasing irrigation reserves. Temperatures averaged near to above normal in KwaZulu-Natal and neighboring locations in Eastern Cape, spurring sugarcane growth. In contrast, temperatures averaged 3 to 4 degrees C below normal in Western Cape, with highs generally ranging in the upper 20s and lower 30s degrees C. In December, mild, showery weather maintained generally favorable growing conditions for vegetative corn and other summer crops. However, portions of the western corn belt (North West and Free State) likely experienced some fieldwork delays from the frequent, above-normal rainfall, and temperatures averaged 1 to 2 degrees C below normal, slowing early summer crop growth. Temp eratures averaged near to slightly above normal elsewhere, favoring development of corn, sugarcane, and other summer crops, while maintaining high irrigation demands in orchard and vineyard areas of Western Cape.





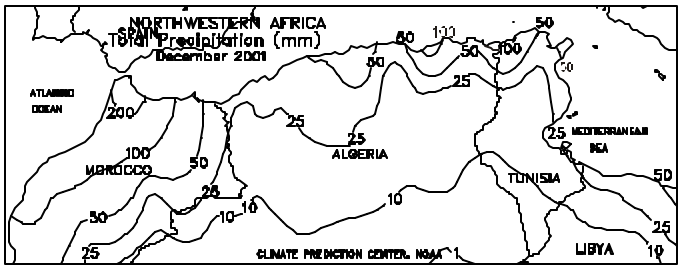


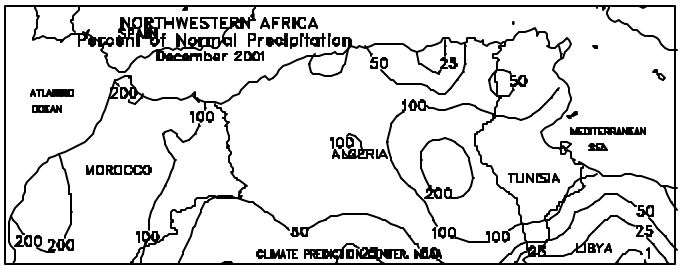


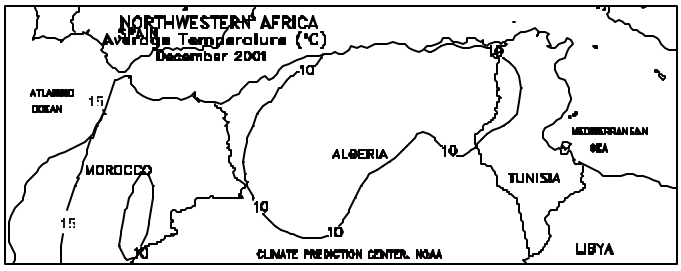


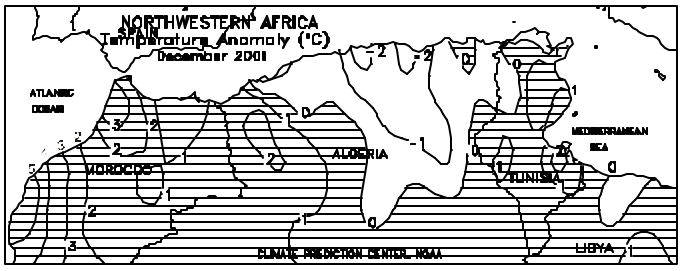
NORTHWESTERN AFRICA

Dry weather continued throughout winter grain areas of Morocco, Algeria, and Tunisia. In Morocco and western Algeria, 2 consecutive weeks of dryness resulted in declining topsoil moisture. Temperatures in Morocco were 1 to 5 degrees C above normal which exacerbated dryness, while cooler temperatures (1-3 degrees C below normal) eased evaporative losses in Algeria and Tunisia. In December, above-normal rainfall in Morocco boosted soil moisture, allowing winter grain planting to proceed. Farther east, most of Algeria and Tunisia received well-below-normal rainfall, limiting moisture for newly emerged crops. Moisture is needed soon to prevent a decline in crop conditions.









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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
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Managing Editor . . . . . ***David Miskus*** *(202) 720-7919*
Meteorologists . . . . . ***Eric Luebehusen, Brad Pugh,*** . . . . . and ***Chester Schmitt***
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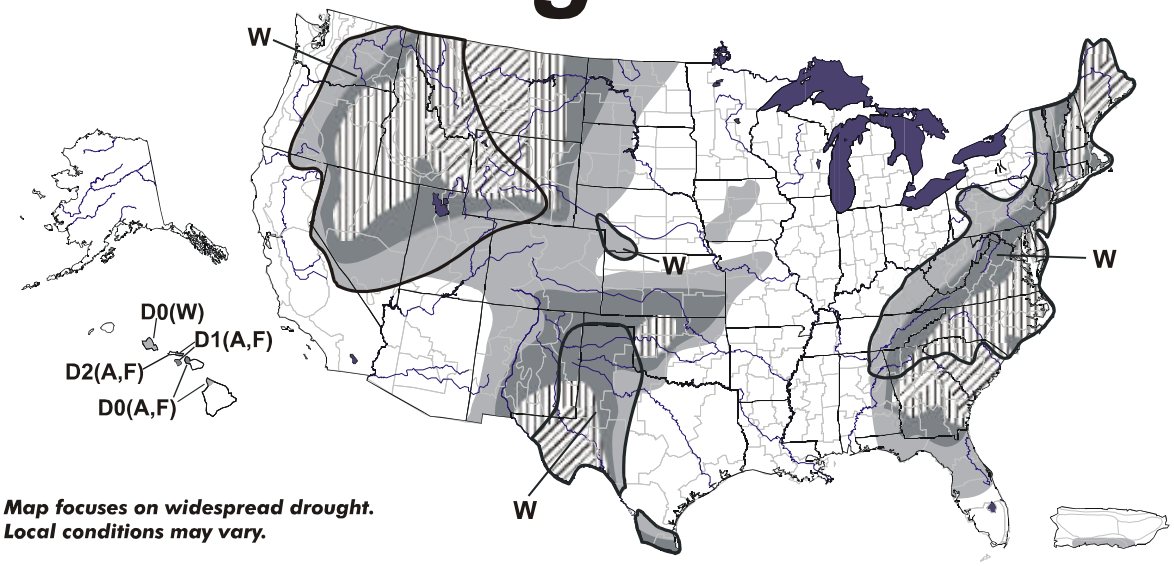
January 8, 2002 Valid 8 a.m. EST

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, January 10, 2002*** ●
Author: *Richard Heim, NCDC/NOAA*

Climate Prediction Center, W/NP52
Attn: *Weekly Weather & Crop Bulletin*
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