

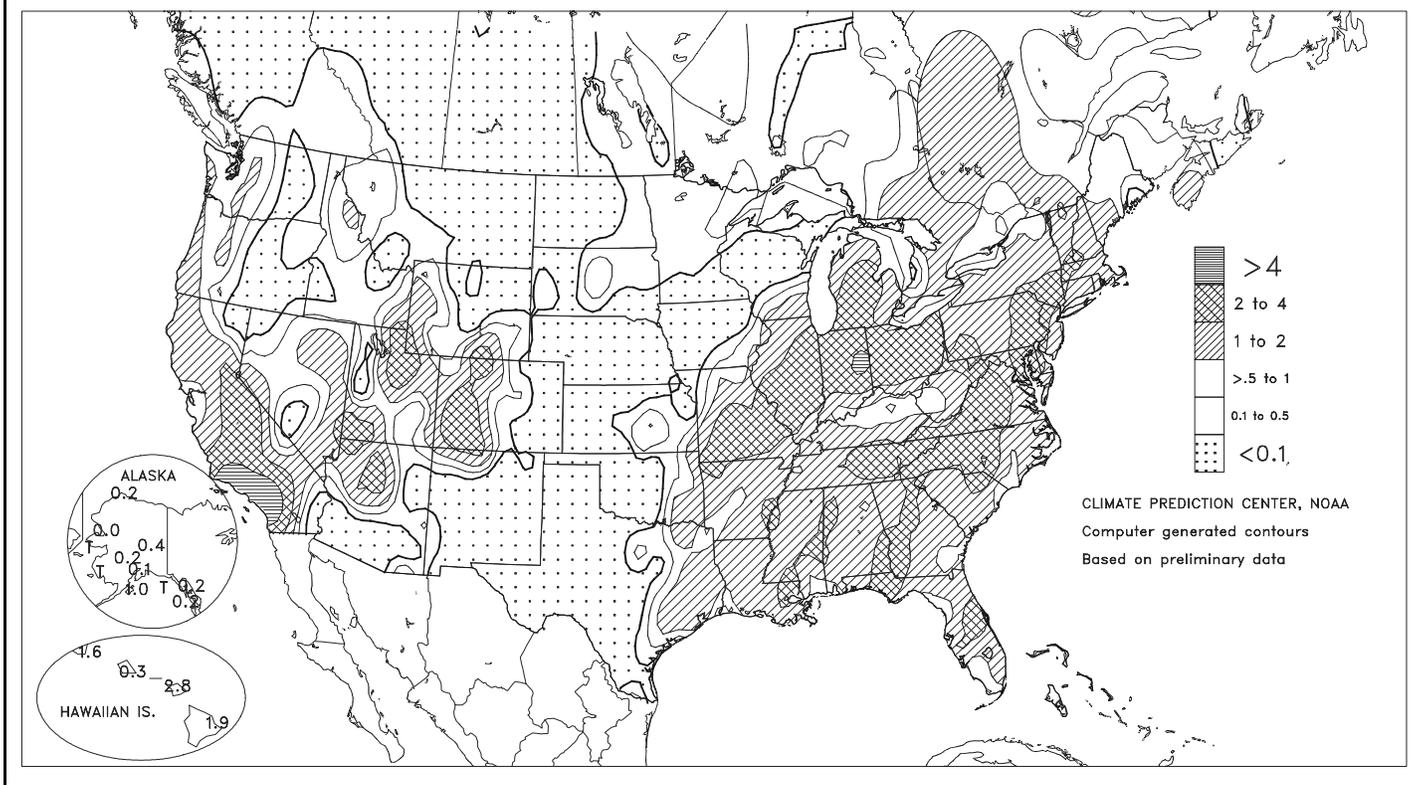
WEEKLY WEATHER AND CROP BULLETIN

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

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

Total Precipitation (Inches)

JAN 9 - 15, 2005



HIGHLIGHTS

January 9 - 15, 2005

Highlights provided by USDA/WAOB

A sudden pattern change brought welcomed dryness to **southern California** and the **Ohio Valley**, but sent bitterly cold air into the **northern Plains, Midwest,** and **Northeast**. Torrential rain and high-elevation snow continued early in the week across **southern California**, triggering additional flash flooding and mudslides. However, precipitation abruptly ended in much of the **West** on January 11, followed by a warming, drying trend. Toward week's end, beneficial precipitation began to overspread the **Northwest**, where below-average mountain snowpacks stood in stark contrast to the record snow depths and water equivalents observed in some locations farther

(Continued on page 5)

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Water Supply Forecast for the Western United States

Highlights

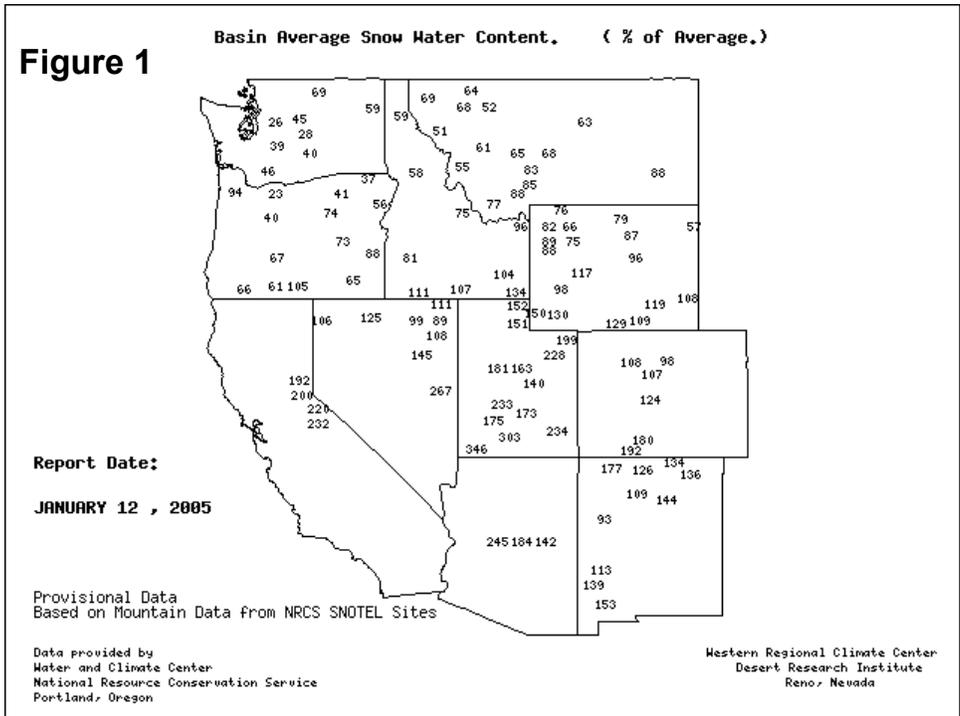
Significant rain and snow fell in California and the Southwest during the second half of October, much of November, and from late December through January 11. The stormy weather established and bolstered snowpacks across the southern half of the West, but largely bypassed the northern Rockies and the Northwest. As a result, water equivalents of the high-elevation snowpacks ranged from less than 50 percent of average in some Pacific Northwest basins to more than 200 percent of average in parts of Arizona, Utah, Nevada, and California.

Despite the early-season onslaught of precipitation, reservoir storage remained low in many Western States due to the effects of a multi-year drought. Statewide reservoir storage was less than 50 percent of average for January 1 in Nevada, New Mexico, Utah, and Wyoming.

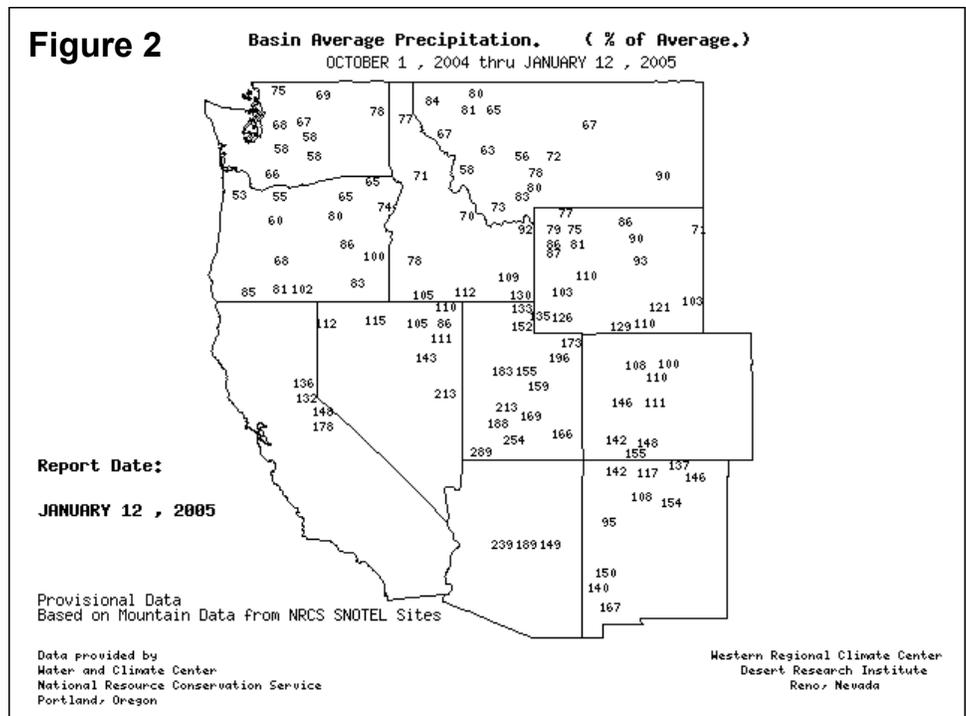
Snowpack and Precipitation

On January 12, 2005, the snowpack map reflected below-average snowpacks across the Northwest and above-average snowpacks in California, the Great Basin, and the Southwest (figure 1). Basin-average water equivalents were especially low in the Pacific Northwest, generally ranging from 25 to 50 percent of average in the Cascades of Washington and northern Oregon. In contrast, snow water equivalents were at least 150 percent of normal in many basins from the Sierra Nevada eastward into Utah and Arizona.

SNOTEL – River Basin Snow Water Content



SNOTEL – River Basin Precipitation



Season-to-date precipitation (October 1, 2004 - January 12, 2005) also displayed a pattern of higher values across the southern half of the West (figure 2). While precipitation averaged less than 70 percent of normal in much of Washington, northern and western Oregon, and parts of Montana, totals were at least 150 percent of normal in several basins from California eastward across Utah and Arizona.

Spring and Summer Streamflow Forecasts

As of January 1, 2005, sharply contrasting spring and summer streamflow forecasts were evident across the West (figure 3). Streamflows were forecast to total generally 50 to 90 percent of average in the Northwest, including much of Washington, Oregon, Idaho, Montana, and western and northern Wyoming. Below-normal streamflows were also expected in a few basins in the central and southern Rockies, from southeastern Wyoming southward into western Wyoming. Meanwhile, spring and summer streamflows were forecast to total at least 150 percent of average in parts of southwestern Utah and northern and central Arizona. Mostly near- to above-average streamflows (90 to 130 percent of average) were expected elsewhere in the southern half of the West, including much of California, Nevada, and the Four Corners States.

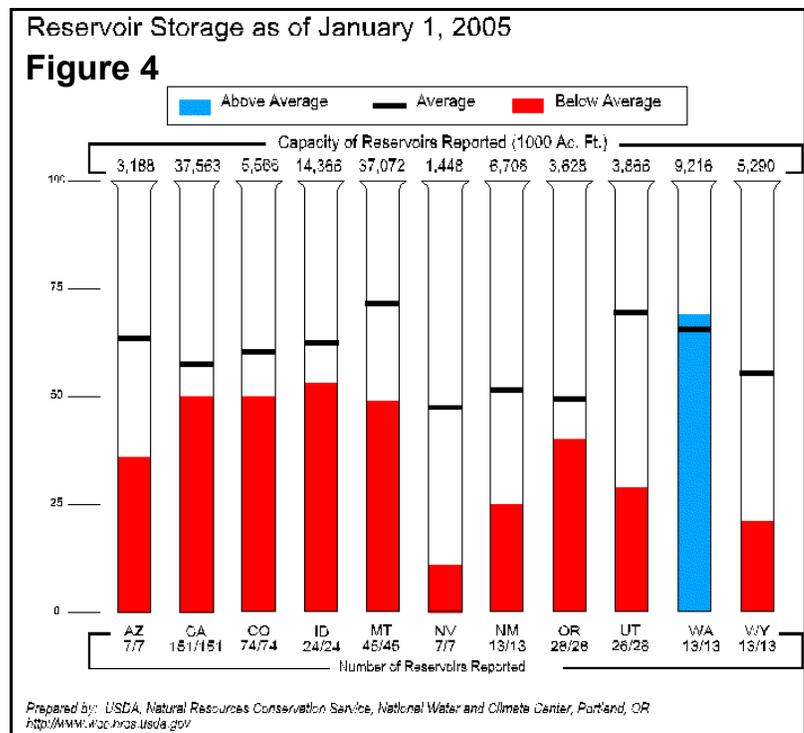
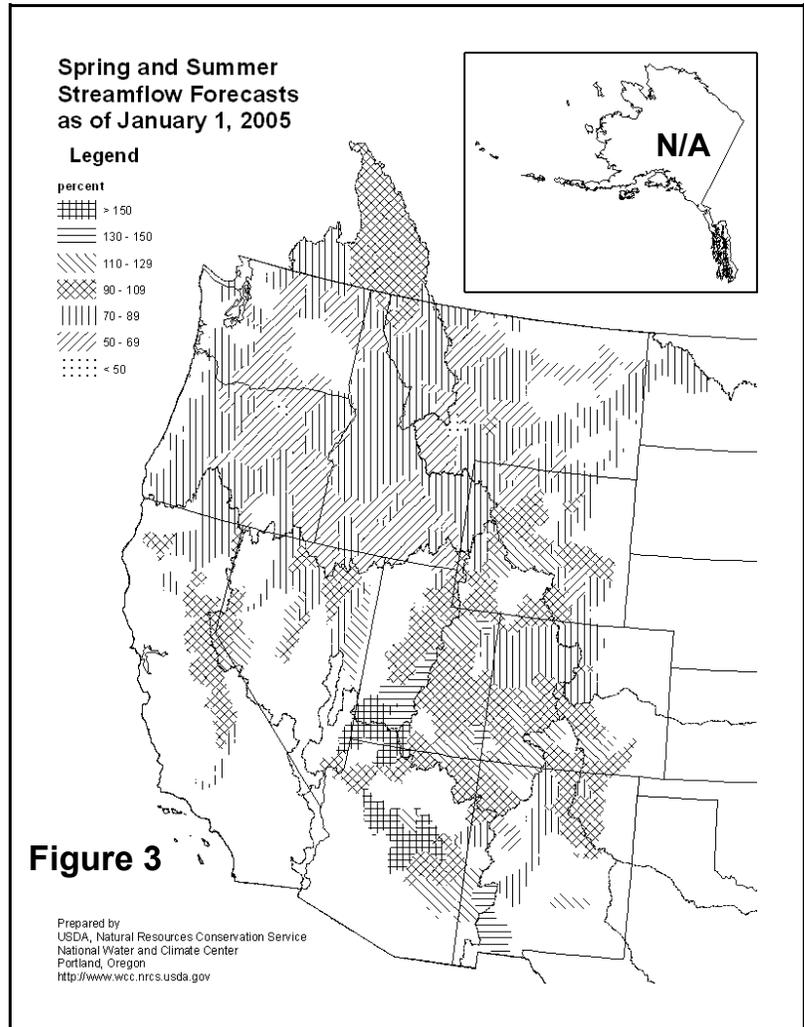
Reservoir Storage

As of January 1, 2005, reservoir storage in Arizona, Nevada, New Mexico, Utah, and Wyoming was significantly below historic averages for this time of year (figure 4), reflecting the effects of long-term drought. Below-average storage was also observed in all other Western States except Washington.

For More Information

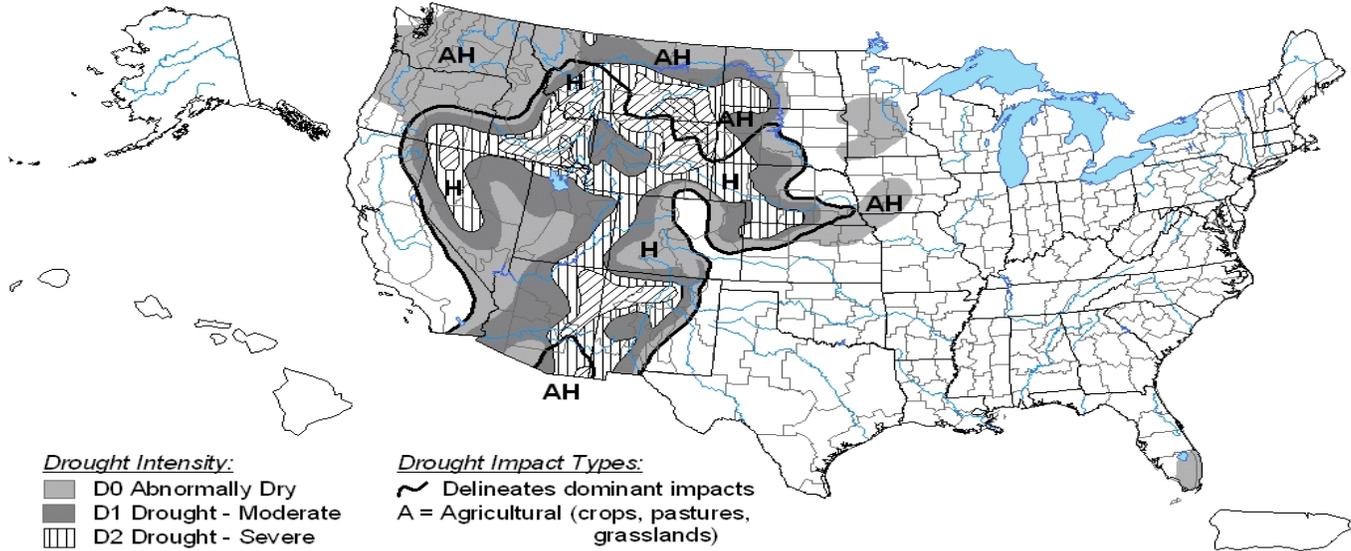
The National Water and Climate Center Homepage provides the latest available snowpack and water supply information. Please visit:

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



U.S. Drought Monitor

January 11, 2005
Valid 7 a.m. EST



Drought Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

- Delineates dominant impacts
- A** = Agricultural (crops, pastures, grasslands)
- H** = Hydrological (water)
- (No type = Both impacts)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

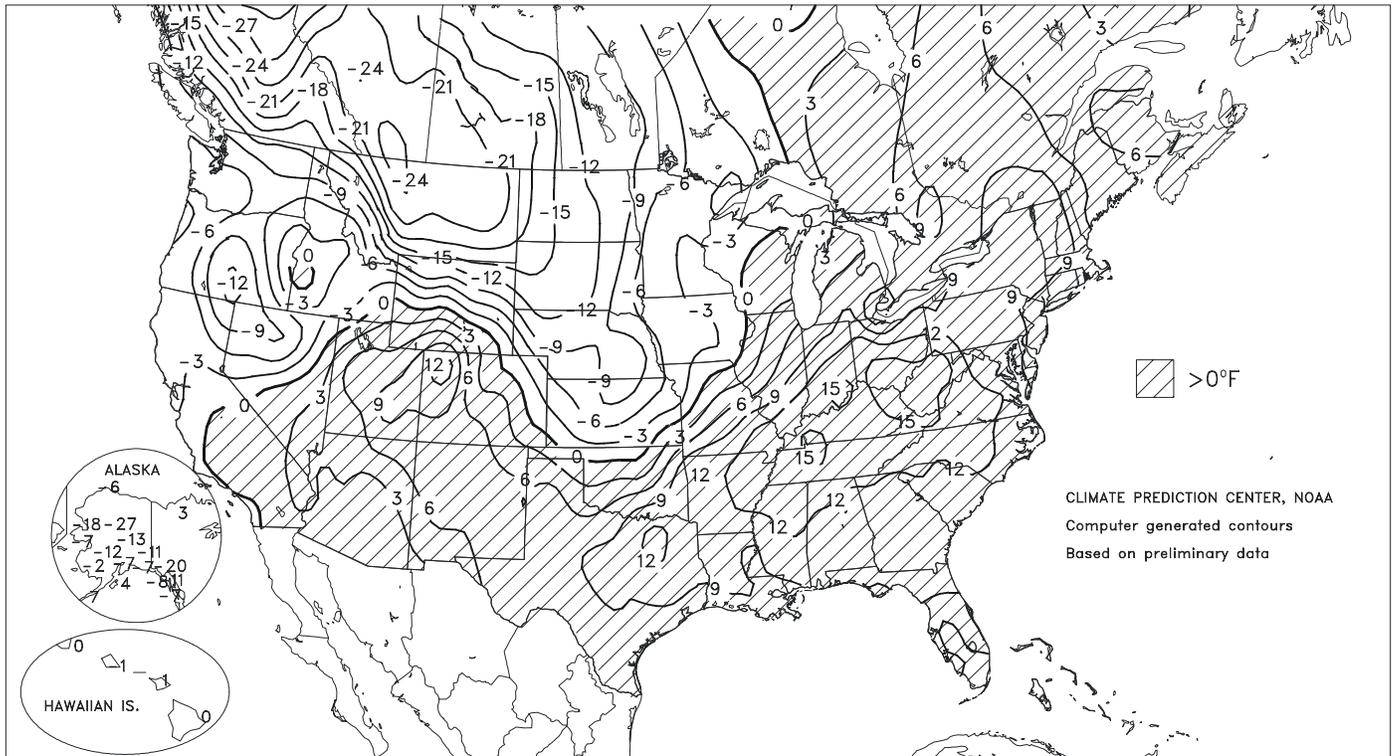
<http://drought.unl.edu/dm>



Released Thursday, January 13, 2005
Author: Mark Svoboda, NDMC

Departure of Average Temperature from Normal (°F)

JAN 9 - 15, 2005



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

(Continued from front cover)

south. Meanwhile, bitterly cold conditions persisted for much of the week on the **northern Plains**, where a substantial snow cover continued to protect much of the winter wheat crop from weather extremes. Weekly temperatures averaged as much as 25°F below normal in **northern Montana**. Farther south, a brief spell of mild weather on the **southern Plains** was replaced by sharply colder conditions. Late-week temperatures fell to 0°F as far south as **Kansas**, although a variable snow cover provided the **central Plains'** wheat with some insulation. Extremely cold, windy weather also overspread the **upper Midwest**, increasing livestock stress. Elsewhere in the **Midwest**, a final round of heavy rain struck the **southern and eastern Corn Belt**, triggering additional river flooding and maintaining soil saturation. As cold air swept into the wet and flooded **Midwestern** areas after midweek, complications included ice jams in still-flooded lowlands and heaving soils in some winter wheat fields.

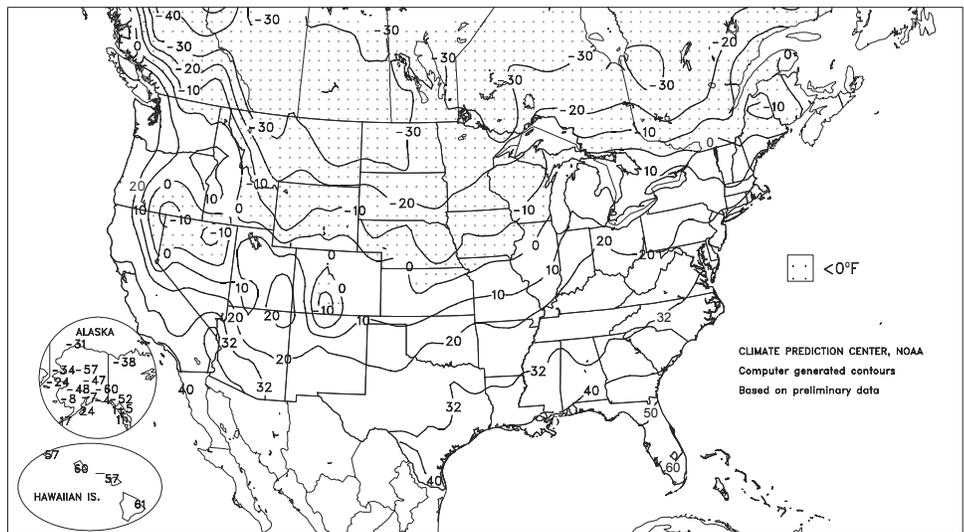
Elsewhere, a spell of record-setting warmth ended with a strong cold front's passage across the **South** on January 13-14. The record warmth boosted weekly temperatures more than 15°F above normal in several locations from the **lower Ohio Valley to the central Appalachians**. Heavy showers and locally severe thunderstorms preceded the front across the **South and East**, followed by cool, dry weather toward week's end.

In **southern California**, **Burbank** opened the week with consecutive daily-record rainfall totals (2.62 and 1.90 inches on January 9 and 10). Other **California** records for January 9 included 4.05 inches at **Big Bear Lake**, 3.79 inches on **Palomar Mountain**, and 3.39 inches in **Camarillo**. Downtown **Los Angeles, CA**, received 16.97 inches of rain from December 27 - January 10, breaking its 15-day record of 14.63 inches established from January 13-27, 1969. The 15-day total also surpassed **Los Angeles'** normal annual rainfall of 15.14 inches. The most tragic manifestation of **California's** heavy rain was a mudslide in **La Conchita** on January 10, when a collapsed hillside claimed 10 lives and damaged or destroyed more than 30 homes. Farther inland, the water equivalent of the **Sierra Nevada** snowpack climbed to 26 inches (193 percent of normal) by January 15, up from 9 inches (exactly normal) on December 27. From January 7-11, snowfall totals of 100 to 150 inches were common in the **Sierra Nevada**, with 152.5 inches reported at **Farewell Gap**, in **Tulare County, CA**. On the eastern flank of the **Sierra Nevada**, the National Weather Service office in **Reno, NV**, measured snowfall totaling 38.3 inches from January 7-11 and 81.0 inches from December 28 - January 11. Meanwhile in **southwestern Utah**, **Midway Valley (Cedar Breaks National Monument)** netted 70 inches of snow (10.70 inches of liquid) from January 7-11, increasing its snow depth to 134 inches. **Gothic, CO**, collected 73.5 inches of snow during the same 5-day period.

Meanwhile, record warmth across the **South and East** contrasted with cold weather on the **northern Plains**. January 1-13 temperatures averaged more than 20°F above normal in several locations, including the **West Virginia** cities of **Elkins** (50.2°F, or 21.3°F above normal) and **Bluefield** (53.3°F, or 20.5°F above normal). From January 1-14, **Virginia** average temperatures of 51.8°F in **Lynchburg** and 53.4°F in **Roanoke** broke records for the first 2 weeks of the year (51.5°F in 1907 and 48.9°F in 1950, respectively). More than 50 daily-record highs were established during the warm spell, which peaked from January 11-13. Record highs for January 13 included 85°F in **Naples, FL**, 78°F in **New Bern, NC**, and 70°F in **Erie, PA**. Meanwhile in **Montana**, temperatures from December 31 - January 14 averaged -3.5°F in **Cut Bank** and -0.3°F in **Great Falls**, the fifth-coldest such period in both locations. **Great Falls'** temperature averaged -6.0°F from December 31, 1907 - December 14, 1908. Elsewhere in **Montana**, **Billings'** temperature fell 30°F (from 33 to 3°F) in 2 hours on January 12, then plunged to -17°F on January 15. The last time **Billings'** temperature fell below -17°F was in January 1997. **Miles City, MT**, collected four consecutive daily-record lows (-32, -34, -30, and -27°F) from January 13-16. Farther east, **Embarrass, MN**,

Extreme Minimum Temperature (°F)

JAN 9 - 15, 2005



measured lows of -48 and -54°F on January 16 and 17, respectively. Elsewhere in **Minnesota**, low temperatures fell below 0°F on 6 consecutive days from January 13-18, its longest such streak since sub-zero readings were reported on 9 days in a row from February 4-12, 2003. Temperatures also fell below 0°F from January 13-18 in **LaCrosse, WI**, the longest such streak there since December 17-25, 2000.

Toward week's end, enough cold air spilled into the **Northwest** to set the stage for a snow and ice storm. Freezing rain accumulated to 0.25 to 0.50 inch in **Oregon's Willamette Valley** and in and near the **Columbia River Gorge**. Farther east, heavy rain abruptly ended following the passage of a strong cold front. In **Missouri**, **St. Louis** collected 2.78 inches of rain on January 12-13, boosting its total during the first half of the month to 8.78 inches. **St. Louis'** former January precipitation record of 8.53 inches was established in 1916. Elsewhere in **Missouri**, a January rainfall record was also broken in **Vichy-Rolla** (7.04 inches; previously, 5.57 inches in 1950). Daily-record rainfall totals on January 13 included 1.59 inches in **Lansing, MI**, and 1.48 inches in **Lincoln, IL**; records were established the following day in locations such as **Orlando, FL** (2.93 inches), and **Lynchburg, VA** (2.03 inches). The **middle and lower Ohio River** remained above flood stage from earlier rainfall, cresting on January 13 in **Tell City, IN** (6.8 feet above flood stage). For **Tell City** and several other gauging points in the **lower Ohio Valley**, it was the highest crest since 1997. In contrast, 2004 ended with a sixth consecutive year of below-normal precipitation in **Billings, MT**. **Billings'** 6-year precipitation total of 63.40 inches was 25.22 inches below normal and 72 percent of normal. Although **Billings'** 2004 precipitation totaled only 11.08 inches (75 percent of normal), it was the city's wettest year since 1999.

Early in the week, locally heavy showers diminished across the **eastern Hawaiian islands**, where 48-hour totals from January 9-11 reached 2.64 inches in **Kahului, Maui**, and 6.29 inches on the **Big Island at Paho**. Showery, breezy conditions overspread the **western Hawaiian islands** toward week's end, when **Lihue, Kauai**, netted 1.98 inches of rain on January 15-16, accompanied by a peak wind gust to 41 m.p.h. Farther north, bitterly cold weather replaced unusual warmth across **Alaska**. Weekly temperatures generally ranged from 4 to 8°F below normal in **southern Alaska** and averaged more than 25°F below normal across parts of the **Alaskan mainland**. **Bettles** posted a daily-record low of -57°F on January 11, and consecutive daily-record lows were noted on January 12-13 in locations such as **Ketchikan** (0°F both days) and **Wrangell** (5°F both days). Only light snow accompanied **Alaska's** cold wave, although heavy precipitation began to overspread **southern portions of the State** toward week's end. On January 16, **Juneau** netted a daily-record precipitation total of 1.01 inches, which fell as 10 inches of snow. Nevertheless, January 1-17 totals in **southern Alaska** were as low as 1.41 inches (31 percent of normal) in **Kodiak** and 1.81 inches (24 percent) in **Yakutat**.

Agricultural Weather Data Compiled by USDA's Stoneville Field Office

Weather Data for the Week Ending January 15, 2005

Data provided by the Mississippi State Delta Research and Extension Center (DREC)
and the University of Missouri Extension Commercial Agriculture Program.

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								4-INCH SOIL TEMP. °F		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
MISSISSIPPI																				
ND TUNICA 1W	56	43	69	28	50	-	1.27	-	1.27	-	-	3.21	-	-	-	0	2	1	1	
LYON	58	43	72	30	51	-	1.29	-	1.28	7.01	-	3.73	-	54	47	0	2	2	1	
VANCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	
PERTSHIRE	59	44	72	31	51	-	1.98	-	1.85	9.30	-	5.02	-	-	-	0	2	3	1	
SCOTT	60	45	73	32	53	-	1.28	-	1.25	-	-	3.27	-	-	-	0	1	2	1	
NE VERONA	61	45	72	32	53	-	1.20	-	1.14	11.07	-	3.24	-	58	49	0	1	2	1	
STARKVILLE	63	44	74	32	54	13	1.19	-0.12	1.14	6.00	76	1.80	65	-	-	0	1	2	1	
EC MACON	65	45	76	33	55	-	1.27	-	1.27	6.09	-	2.52	-	59	52	0	0	1	1	
SD STONEVILLE X	59	44	74	31	52	11	1.09	-0.17	0.89	9.36	115	3.36	124	58	50	0	2	3	1	
INDIANOLA 1S	61	45	73	31	53	-	0.93	-	0.93	8.00	-	3.24	-	-	-	0	1	1	1	
INVERNESS 5E	61	45	74	33	53	-	0.91	-	0.91	7.53	-	3.16	-	57	50	0	0	1	1	
SIDON	63	47	74	32	55	-	0.94	-	0.94	8.75	-	3.07	-	60	49	0	1	1	1	
N. ISSAQUENA	62	46	74	33	54	-	1.31	-	1.31	7.74	-	3.31	-	-	-	0	0	1	1	
SILVER CITY	63	47	76	33	55	-	1.02	-	1.02	8.17	-	3.13	-	-	-	0	0	1	1	
ONWARD	63	46	75	32	54	-	0.65	-	0.65	7.00	-	2.59	-	-	-	0	1	1	1	
MISSOURI																				
NW CORNING	23	11	35	-6	17	-5	0.20	0.03	0.20	0.57	34	0.26	54	-	-	0	7	1	0	
ALBANY	25	13	37	-4	20	-3	0.64	0.43	0.50	1.24	69	0.93	209	33	32	0	7	3	1	
ST. JOSEPH	25	14	40	-1	20	-5	0.77	0.63	0.77	1.72	98	1.27	379	*	*	0	7	1	1	
NC LINNEUS	29	18	39	1	24	1	0.96	0.84	0.58	2.74	145	1.92	483	33	33	0	7	4	1	
BRUNSWICK	32	20	56	4	26	2	1.27	1.07	0.57	2.97	128	2.31	409	35	33	0	7	4	1	
NE NOVELTY	31	18	59	0	25	2	1.20	0.97	0.63	3.57	148	2.61	493	36	34	0	7	3	2	
MONROE CITY	34	21	63	3	28	3	1.83	1.56	1.39	6.00	225	4.39	796	37	34	0	5	5	1	
WC GREEN RIDGE	36	21	61	7	29	4	1.96	1.72	1.71	6.19	224	5.26	895	37	34	0	7	4	1	
C AUXVASSE	37	22	63	6	30	6	1.98	1.69	1.68	6.74	222	5.53	839	39	36	0	5	5	1	
SANBORN FIELD	39	23	65	7	31	4	1.81	1.52	1.55	6.96	242	5.86	956	40	36	0	4	5	1	
COLUMBIA	38	23	64	7	31	4	2.08	1.79	1.85	7.02	245	5.92	975	-	-	0	4	5	1	
VERSAILLES	41	23	66	8	32	3	1.26	0.96	1.03	7.65	253	6.81	1012	41	36	0	4	4	1	
EC COOK STATION	49	30	70	11	39	8	2.30	1.89	1.39	6.38	151	5.43	571	46	41	0	4	2	2	
SW LAMAR	43	26	64	12	35	5	0.75	0.44	0.72	6.30	187	4.71	693	42	37	0	3	3	1	
SE DELTA	51	37	67	19	44	13	1.58	1.15	1.56	5.61	104	4.14	370	49	42	0	3	2	1	
CHARLESTON	53	40	68	21	46	16	1.48	0.93	1.44	7.71	140	5.11	348	50	44	0	3	2	1	
GLENNONVILLE	54	39	69	21	45	13	1.56	1.16	1.56	7.78	152	5.15	385	50	44	0	3	1	1	
CLARKTON	53	39	70	21	45	13	1.30	0.90	1.29	7.51	144	4.46	329	50	43	0	3	2	1	
PORTAGEVILLE DC	54	40	69	23	47	14	1.47	0.91	1.44	8.25	143	4.90	334	52	44	0	2	2	1	
PORTAGEVILLE LF	54	41	67	24	47	15	1.19	0.63	1.18	7.11	122	3.83	259	51	43	0	2	2	1	
STEELE	55	42	70	24	47	14	1.24	0.62	1.19	6.93	111	3.79	260	51	45	0	2	2	1	
CARDWELL	55	40	70	22	47	14	1.64	1.06	1.64	7.36	121	4.31	295	52	46	0	2	1	1	

Compiled by USDA/OCE/WAOB's Stoneville Field Office. X Based on 1971-2000 normals. - Sufficient data not available.

ND = Northern Delta; NE = Northeastern Mississippi; EC = East Central Mississippi; SD = Southern Delta

NW = Northwest; NC = North Central; NE = Northeast; WC = West Central; C = Central; EC = East Central; SW = Southwest; SE = Southeast.

Weather and Crop Summary for the Mississippi Delta: Temperatures climbed to 75°F or higher at some locations early in the week, but fell to near the freezing mark (32°F) by week's end. Strong southerly winds in advance of a cold front helped to spark locally heavy showers and thunderstorms. Rainfall totaled 1 inch or more in many locations, keeping Delta soils wet.

U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on January 12, 2005. Forecasts refer to January 1.

The **all orange** forecast for the 2004-05 season is 9.65 million tons, down 3 percent (%) from the previous forecast and 25% below last season's final utilization. Florida's all orange forecast, at 162 million boxes (7.29 million tons), is down 4% from the December forecast and 33% below the 2003-04 season. The production of early and midseason varieties is reduced 2 million boxes to 84 million boxes (3.78 million tons), 2% lower than the December forecast. The fruit drop rate of 18% is the second-highest since 1960, and the average fruit size is the smallest since the 2000-01 season. Florida's early-midseason harvest started late because of the smaller crop and lagging maturity level. Approximately 60% of the crop remains to be harvested. The Valencia forecast is decreased 4 million boxes to 78 million boxes (3.51 million tons), down 5% from the previous forecast. Florida's Valencia average drop rate is projected to reach 20%, and the average fruit size continues to be one of the smallest in the last 20 years.

The all orange forecast for California, at 60.5 million boxes (2.27 million tons), is 2% lower than the October forecast but 16% higher than last

season's final utilization. The Navel orange forecast is down 2 million boxes from October at 44.0 million boxes (1.65 million tons) but 16% above last season. California's Navel orange fruit size is large with some fruit quality problems, such as puff, observed. The Navel oranges' fruit-quality problems, combined with a higher fruit-drop rate caused by cold weather, have resulted in reduced harvested volumes. California's Valencia orange forecast is increased 500 thousand boxes to 16.5 million boxes (619,000 tons), up 3% from the October forecast and 18% higher than last season's final estimate. Overall quality for California's Valencia oranges is good and fruit sizes are larger than last year. The all orange forecast for Texas, at 1.75 million boxes (75,000 tons), is 8% lower than the October 1 forecast but 6% above the 2003-04 season. Texas' early-midseason orange forecast is reduced 150,000 boxes to 1.50 million boxes (64,000 tons). The Texas Valencia orange forecast, at 250,000 boxes, remains unchanged from the October 1 forecast but is 9% higher than the previous season. Crop conditions in Texas were reported as good. Arizona's all orange forecast is decreased 10,000 boxes to 430,000 boxes (16,000 tons).

National Weather Data for Selected Cities

Weather Data for the Week Ending January 15, 2005

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE 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	OF INCH OR MORE		
																		0.1 INCH OR MORE	5.0 INCH OR MORE	
AL BIRMINGHAM	64	44	74	31	54	12	0.76	-0.50	0.75	5.02	71	1.46	56	94	51	0	2	2	1	
AL HUNTSVILLE	60	45	70	31	53	14	1.01	-0.26	0.80	9.73	117	2.05	76	87	72	0	2	3	1	
AL MOBILE	69	52	76	38	60	10	0.49	-0.81	0.47	4.63	63	1.26	48	89	68	0	0	2	0	
AL MONTGOMERY	67	47	75	37	57	11	1.16	0.07	1.16	4.42	61	1.63	71	91	52	0	0	1	1	
AK ANCHORAGE	14	4	26	-7	9	-7	0.07	-0.07	0.06	2.19	159	0.67	203	78	71	0	7	2	0	
AK BARROW	-16	-23	-10	-31	-19	-6	0.24	0.24	0.16	0.75	625	0.44	4400	80	74	0	7	2	0	
AK FAIRBANKS	17	-34	26	-47	-23	-13	0.36	0.24	0.19	1.91	187	1.15	411	-999	-999	0	7	3	0	
AK JUNEAU	21	8	33	-5	15	-11	0.16	-0.93	0.12	10.96	140	0.29	12	79	65	0	7	3	0	
AK KODIAK	39	28	48	24	33	3	1.05	-0.84	0.55	11.94	102	1.11	27	84	71	0	5	3	1	
AK NOME	7	-9	16	-24	-1	-7	0.03	-0.16	0.03	1.64	115	0.30	73	69	58	0	7	1	0	
AZ FLAGSTAFF	43	20	54	3	32	2	1.49	1.03	1.01	8.30	297	3.63	378	92	44	0	5	3	1	
AZ PHOENIX	66	47	69	42	57	3	0.00	-0.19	0.00	2.90	216	1.34	319	77	54	0	0	0	0	
AZ TUCSON	66	40	72	32	53	2	0.00	-0.22	0.00	1.15	75	0.44	88	76	39	0	1	0	0	
AZ YUMA	69	48	76	42	59	2	0.00	-0.08	0.00	1.35	221	0.45	237	67	51	0	0	0	0	
AR FORT SMITH	59	36	72	26	48	11	0.76	0.24	0.75	6.11	135	4.62	409	92	60	0	3	2	1	
AR LITTLE ROCK	60	42	74	27	51	11	0.77	-0.03	0.46	7.35	114	4.46	256	89	60	0	2	3	0	
CA BAKERSFIELD	56	43	68	36	50	3	1.44	1.19	0.73	3.66	288	2.57	504	95	82	0	0	3	2	
CA FRESNO	52	42	64	34	47	2	0.77	0.30	0.37	5.36	234	2.20	232	92	85	0	0	3	0	
CA LOS ANGELES	64	50	70	45	57	0	3.31	2.68	1.60	13.13	429	6.64	523	96	70	0	0	3	2	
CA REDDING	51	35	56	28	43	-2	0.65	-0.81	0.39	13.12	171	2.30	77	92	83	0	3	3	0	
CA SACRAMENTO	50	37	57	33	43	-2	0.92	0.09	0.47	7.10	172	2.97	178	100	74	0	0	2	0	
CA SAN DIEGO	64	52	69	46	58	1	1.90	1.39	0.83	8.67	372	4.66	457	85	65	0	0	4	2	
CA SAN FRANCISCO	53	41	59	38	47	-2	0.97	0.00	0.47	10.04	207	3.62	185	97	89	0	0	3	0	
CA STOCKTON	50	40	57	34	45	0	0.93	0.34	0.64	5.13	170	2.02	170	92	86	0	0	3	1	
CO ALAMOSA	37	7	52	-13	22	8	0.21	0.15	0.21	0.58	129	0.31	258	83	66	0	6	1	0	
CO CO SPRINGS	48	21	61	8	35	7	0.01	-0.05	0.01	0.41	72	0.17	113	86	30	0	6	1	0	
CO DENVER INTL	41	16	60	2	29	1	0.06	0.00	0.06	0.22	49	0.18	129	94	61	0	7	1	0	
CO GRAND JUNCTION	43	26	54	13	35	10	0.98	0.84	0.42	1.52	185	1.31	437	89	73	0	4	4	0	
CO PUEBLO	42	18	67	4	30	1	0.09	0.01	0.09	0.42	75	0.17	100	85	67	0	6	1	0	
CT BRIDGEPORT	44	32	57	26	38	8	1.33	0.48	0.83	6.59	125	3.48	192	81	70	0	4	4	1	
CT HARTFORD	40	26	60	17	33	7	1.40	0.52	0.80	7.65	140	3.42	185	93	76	0	6	4	1	
DC WASHINGTON	53	37	71	30	45	10	2.27	1.53	1.85	5.68	122	2.62	165	88	60	0	1	3	1	
DE WILMINGTON	50	35	69	27	43	12	1.66	0.86	1.48	5.49	108	2.62	154	93	65	0	2	3	1	
FL DAYTONA BEACH	76	57	80	55	67	9	1.99	1.28	1.60	4.23	101	1.99	134	98	64	0	0	3	1	
FL JACKSONVILLE	74	54	82	48	64	11	1.12	0.30	1.10	3.82	89	1.15	69	96	66	0	0	3	1	
FL KEY WEST	78	70	80	67	74	4	1.40	0.90	1.40	2.17	67	1.42	129	86	68	0	0	1	1	
FL MIAMI	79	67	80	64	73	5	1.27	0.88	1.13	1.81	60	1.30	157	91	70	0	0	2	1	
FL ORLANDO	78	58	84	55	68	7	3.69	3.15	3.31	5.47	159	3.71	328	98	66	0	0	2	1	
FL PENSACOLA	67	53	73	42	60	8	1.12	-0.09	1.11	8.75	136	1.67	67	92	72	0	0	2	1	
FL TALLAHASSEE	70	52	77	47	61	10	1.13	-0.10	1.08	4.76	71	1.13	44	91	67	0	0	3	1	
FL TAMPA	77	59	83	53	68	7	0.45	-0.02	0.45	1.99	60	0.45	45	95	67	0	0	1	0	
FL WEST PALM BEACH	78	68	80	63	73	7	1.26	0.41	0.62	2.07	43	1.29	77	80	64	0	0	4	2	
GA ATHENS	63	42	68	32	53	11	1.56	0.52	1.53	4.51	77	1.71	79	89	64	0	1	2	1	
GA ATLANTA	62	44	68	34	53	11	1.36	0.25	1.35	6.42	106	1.58	70	92	64	0	0	2	1	
GA AUGUSTA	69	42	79	31	55	11	1.29	0.28	0.95	2.61	50	1.36	65	92	64	0	1	2	1	
GA COLUMBUS	66	46	72	41	56	10	1.35	0.28	1.33	4.09	61	1.54	68	92	49	0	0	2	1	
GA MACON	69	44	74	38	56	11	1.67	0.56	1.60	2.48	40	1.73	75	87	49	0	0	2	1	
GA SAVANNAH	69	49	77	41	59	10	0.70	-0.20	0.64	2.47	53	0.70	37	93	67	0	0	3	1	
HI HILO	79	63	84	61	71	0	1.88	-0.31	1.41	14.64	98	3.61	80	87	75	0	0	6	1	
HI HONOLULU	78	66	81	60	72	-1	0.28	-0.33	0.22	7.70	184	1.74	131	85	74	0	0	3	0	
HI KAHULUI	79	66	82	57	73	1	2.81	1.96	1.75	4.66	95	3.21	177	92	79	0	0	3	2	
HI LIHUE	79	65	81	57	72	0	1.62	0.56	1.28	14.90	210	5.45	236	86	78	0	0	4	1	
ID BOISE	40	24	47	19	32	2	0.02	-0.28	0.02	1.31	65	0.07	11	80	63	0	7	1	0	
ID LEWISTON	36	27	48	22	31	-2	0.06	-0.19	0.06	0.93	60	0.07	14	82	69	0	7	1	0	
ID POCATELLO	27	15	38	-3	21	-3	0.58	0.33	0.47	2.68	164	1.85	349	83	73	0	7	3	0	
IL CHICAGO/O'HARE	35	21	62	4	28	6	1.72	1.34	0.89	4.30	131	3.15	375	82	73	0	5	4	2	
IL MOLINE	27	16	40	-3	21	0	0.65	0.30	0.65	3.19	107	2.30	295	85	74	0	6	1	1	
IL PEORIA	34	20	64	1	27	5	1.40	1.08	0.82	5.41	173	4.01	549	91	75	0	5	4	1	
IL ROCKFORD	27	17	41	-2	22	3	1.16	0.86	0.74	3.18	116	2.53	378	86	77	0	6	3	1	
IL SPRINGFIELD	38	23	66	4	31	6	2.20	1.84	0.98	6.60	196	5.37	647	86	78	0	5	4	2	
IN EVANSVILLE	52	38	69	21	45	14	1.44	0.81	0.94	7.01	143	4.70	346	88	82	0	3	4	1	
IN FORT WAYNE	41	27	64	16	34	10	2.03	1.58	0.73	7.33	194	4.66	466	92	77	0	6	4	2	
IN INDIANAPOLIS	48	33	66	17	40	14	2.68	2.13	1.47	11.16	264	9.21	774	90	72	0	4	5	2	
IN SOUTH BEND	39	24	62	7	32	9	2.45	1.95	1.37	6.49	155	4.28	386	91	82	0	6	5	2	
IA BURLINGTON	30	17	47	-2	23	0	1.11	0.83	0.52	3.63	132	2.53	395	90	74	0	7	4	2	
IA CEDAR RAPIDS	23	10	34	-9	16	-2	0.31	0.09	0.29	1.87	96	0.92	196	91	72	0	7	3	0	
IA DES MOINES	22	10	34	-6	16	-4	0.17	-0.05	0.14	1.56	87	0.96	204	84	70	0	7	3	0	
IA DUBUQUE	24	10	35	-9	17	0	0.63	0.35	0.63	2.79	122	1.70	288	84	76	0	7	1	1	
IA SIOUX CITY	20	6	34	-13	13	-5	0.02	-0.12	0.01	0.51	53	0.39	130	80	65	0	7	2	0	
IA WATERLOO	21	5	33	-15	13	-3	0.00	-0.17	0.00	1.72	118	1.19	340	87	74	0	7	0	0	
KS CONCORDIA	23	10	36	-5	16	-10	0.00	-0.16	0.00	0.97	80	0.85	243	86	72	0	7	0	0	
KS DODGE CITY	32	17	59	2	25	-5	0.02	-0.12	0.01	1.59	146	1.43	447	90	69	0	7	2	0	
KS GOODLAND	31	15	57	3	23	-4	0.01	-0.09	0.01	0.29	46	0.10	43	89	73	0	7	1	0	
KS TOPEKA	28	17	47	3	23	-4	0.03	-0.17	0.03	5.67	303	5.04	1120	87	75	0	7	1	0	

Based on 1971-2000 normals

-999 Not Available

Weather Data for the Week Ending January 15, 2005

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	50 INCH OR MORE
KY WICHITA	32	20	45	7	26	-4	0.00	-0.20	0.00	2.87	158	2.57	547	92	80	0	7	0	0
KY JACKSON	57	42	72	25	49	15	0.81	0.03	0.64	7.38	123	4.10	240	86	53	0	2	3	1
KY LEXINGTON	53	38	68	25	46	14	0.73	-0.03	0.54	6.90	121	3.52	210	91	73	0	2	4	1
LA LOUISVILLE	54	40	70	25	47	14	0.69	-0.05	0.65	10.02	190	4.43	279	86	62	0	2	3	1
LA PADUCAH	54	40	69	21	47	15	2.16	1.44	1.19	8.73	147	5.41	347	90	68	0	3	3	2
LA BATON ROUGE	69	50	80	35	60	10	1.14	-0.24	1.14	6.40	79	3.26	114	93	57	0	0	1	1
LA LAKE CHARLES	69	51	77	36	60	9	1.01	-0.28	0.98	6.61	91	2.86	107	89	59	0	0	3	1
LA NEW ORLEANS	67	53	78	43	60	8	1.44	0.18	1.44	5.80	76	2.36	92	90	78	0	0	1	1
LA SHREVEPORT	66	46	76	33	56	10	0.99	-0.03	0.63	5.11	76	2.33	108	86	55	0	0	2	1
ME CARIBOU	27	4	51	-13	16	6	0.58	-0.11	0.30	4.97	106	0.96	64	87	55	0	7	4	0
ME PORTLAND	36	21	53	15	29	7	1.24	0.30	0.80	6.63	106	2.32	115	86	58	0	7	4	1
MD BALTIMORE	51	34	70	28	43	11	2.16	1.36	1.93	5.83	115	2.89	169	90	67	0	3	2	1
MA BOSTON	43	29	63	25	36	7	0.83	-0.05	0.44	6.30	113	2.64	142	86	61	0	7	6	0
MA WORCESTER	39	25	59	19	32	8	1.46	0.52	0.83	8.88	153	4.08	205	94	64	0	7	4	1
MI ALPENA	32	15	49	3	23	5	0.96	0.55	0.61	3.46	128	1.56	177	89	69	0	7	2	1
MI GRAND RAPIDS	36	23	55	9	29	6	2.43	1.99	1.19	6.19	169	3.81	397	90	74	0	7	4	2
MI HOUGHTON LAKE	31	16	47	2	23	5	1.53	1.17	0.77	4.77	189	2.99	388	90	81	0	7	3	2
MI LANSING	38	23	58	8	31	9	2.11	2.28	1.59	6.11	211	4.27	593	87	77	0	6	5	2
MI MUSKEGON	36	22	59	9	29	5	1.43	0.93	0.81	5.60	151	2.31	214	92	81	0	6	3	2
MI TRAVERSE CITY	31	19	49	6	25	4	1.06	0.38	0.86	4.40	108	1.54	108	90	66	0	6	4	1
MN DULUTH	12	-7	27	-22	3	-5	0.87	0.63	0.67	3.64	260	1.47	320	82	68	0	7	3	1
MN INT'L FALLS	6	-13	22	-26	-4	-6	0.31	0.14	0.24	2.74	263	0.74	218	83	73	0	7	2	0
MN MINNEAPOLIS	18	3	31	-14	10	-3	0.13	-0.09	0.06	0.91	62	0.47	102	81	65	0	7	4	0
MN ROCHESTER	17	1	31	-15	9	-2	0.00	-0.20	0.00	1.20	84	0.61	149	88	77	0	7	0	0
MN ST. CLOUD	15	-3	28	-25	6	-2	0.62	0.45	0.53	1.48	145	1.02	309	84	61	0	7	3	1
MS JACKSON	66	46	76	35	56	11	2.03	0.74	1.36	8.84	110	3.61	133	89	56	0	0	2	2
MS MERIDIAN	67	45	76	33	56	10	1.08	-0.25	1.08	6.09	75	1.93	69	90	62	0	0	1	1
MS TUPELO	62	45	75	32	54	14	0.07	-1.12	0.00	13.64	156	2.83	108	83	73	0	1	1	0
MO COLUMBIA	39	24	64	8	31	3	1.82	1.46	1.65	6.79	209	5.81	745	92	74	0	4	4	1
MO KANSAS CITY	27	17	40	2	22	-5	0.47	0.22	0.47	2.78	127	2.39	435	94	81	0	7	1	0
MO SAINT LOUIS	45	27	69	8	36	7	2.91	2.44	1.62	10.58	273	8.81	872	92	80	0	4	5	2
MO SPRINGFIELD	49	29	67	14	39	8	1.63	1.19	1.50	7.70	187	6.50	684	91	77	0	4	6	1
MT BILLINGS	13	-4	35	-17	5	-19	0.18	-0.01	0.11	0.51	48	0.26	67	85	67	0	7	4	0
MT BUTTE	24	-3	31	-20	10	-7	0.02	-0.09	0.01	0.40	52	0.03	13	93	63	0	7	2	0
MT GLASGOW	-5	-22	6	-32	-14	-24	0.02	-0.06	0.02	0.73	135	0.14	82	83	75	0	7	1	0
MT GREAT FALLS	9	-14	27	-31	-3	-24	0.02	-0.14	0.01	0.58	57	0.15	43	82	62	0	7	2	0
MT HAVRE	2	-22	26	-34	-10	-24	0.00	-0.11	0.00	0.18	24	0.02	8	79	72	0	7	0	0
MT KALISPELL	16	-2	30	-25	7	-14	0.19	-0.14	0.10	1.46	62	0.25	35	85	72	0	7	4	0
MT MISSOULA	22	6	32	-9	14	-9	0.19	-0.05	0.13	0.88	53	0.34	65	85	77	0	7	4	0
NE GRAND ISLAND	18	4	32	-14	11	-11	0.04	-0.07	0.02	0.81	90	0.74	308	89	77	0	7	3	0
NE LINCOLN	20	4	35	-18	12	-10	0.10	-0.06	0.05	1.47	121	1.04	297	91	78	0	7	2	0
NE NORFOLK	19	5	33	-13	12	-8	0.00	-0.11	0.00	0.54	61	0.39	163	84	68	0	7	0	0
NE NORTH PLATTE	21	7	34	-2	14	-9	0.00	-0.08	0.00	0.48	83	0.41	228	87	71	0	7	0	0
NE OMAHA	19	5	33	-11	12	-9	0.01	-0.16	0.01	0.84	66	0.50	143	88	72	0	7	1	0
NE SCOTTSBLUFF	28	12	39	0	20	-4	0.19	0.08	0.14	0.87	109	0.81	338	85	74	0	7	3	0
NE VALENTINE	19	0	32	-13	10	-10	0.11	0.05	0.07	0.66	147	0.65	542	83	75	0	7	3	0
NV ELY	39	15	48	-3	27	2	0.43	0.26	0.30	1.47	177	0.93	282	81	65	0	5	3	0
NV LAS VEGAS	58	44	61	36	51	5	0.32	0.21	0.18	3.70	578	1.60	667	68	52	0	0	3	0
NV RENO	36	18	44	6	27	-6	0.31	0.09	0.21	3.29	247	1.58	351	92	79	0	6	3	0
NV WINNEMUCCA	30	9	37	-9	19	-10	0.58	0.39	0.28	1.52	125	0.96	234	91	82	0	7	4	0
NH CONCORD	38	20	55	5	29	9	1.16	0.50	0.81	6.09	139	2.34	166	89	57	0	7	2	1
NJ NEWARK	47	33	67	24	40	9	1.45	0.53	1.13	6.49	118	3.16	164	86	74	0	3	4	1
NM ALBUQUERQUE	53	33	62	27	43	8	0.00	-0.11	0.00	1.06	145	0.76	317	63	29	0	4	0	0
NY ALBANY	40	25	57	15	32	10	1.40	0.85	0.84	5.62	146	2.92	247	93	66	0	6	2	2
NY BINGHAMTON	38	24	59	10	31	9	1.20	0.65	0.79	7.22	171	3.07	258	94	85	0	6	4	1
NY BUFFALO	43	27	68	14	35	10	0.90	0.18	0.60	7.34	137	2.35	151	86	63	0	5	4	1
NY ROCHESTER	40	26	62	15	33	9	0.61	0.09	0.25	4.67	121	1.68	150	90	74	0	6	5	0
NY SYRACUSE	43	27	64	15	35	12	1.11	0.53	0.55	6.09	140	2.29	185	87	63	0	6	5	1
NC ASHEVILLE	58	37	64	29	48	13	1.34	0.44	1.27	4.98	95	1.54	83	90	62	0	2	3	1
NC CHARLOTTE	64	41	73	32	53	12	1.11	0.20	0.60	3.86	76	1.12	59	92	53	0	1	2	2
NC GREENSBORO	61	41	71	32	51	14	1.14	0.34	0.89	4.05	86	1.20	72	95	58	0	1	2	1
NC HATTERAS	61	50	69	44	55	9	0.31	-1.06	0.31	3.01	41	0.31	11	92	72	0	0	1	0
NC RALEIGH	63	41	78	33	52	13	1.76	0.85	1.55	3.27	67	1.79	96	88	59	0	0	2	1
NC WILMINGTON	66	44	76	36	55	9	0.73	-0.30	0.73	2.42	41	0.73	34	94	60	0	0	1	1
ND BISMARCK	9	-15	28	-27	-3	-13	0.09	0.01	0.08	0.37	60	0.19	106	76	64	0	7	2	0
ND DICKINSON	9	-17	26	-29	-4	-18	0.00	-0.06	0.00	0.23	50	0.15	125	89	66	0	7	0	0
ND FARGO	8	-11	24	-24	-1	-7	0.49	0.32	0.26	1.64	178	0.63	180	80	67	0	7	3	0
ND GRAND FORKS	3	-17	24	-29	-7	-12	0.28	0.14	0.14	1.38	162	0.51	170	84	66	0	7	3	0
ND JAMESTOWN	6	-13	23	-23	-4	-12	0.09	-0.05	0.06	0.31	44	0.15	58	84	67	0	7	3	0
ND WILLISTON	1	-26	15	-34	-12	-19	0.01	-0.10	0.01	0.86	106	0.36	150	79	71	0	7	1	0
OH AKRON-CANTON	44	28	68	16	36	11	1.75	1.20	0.60	7.46	178	5.06	422	86	72	0	6	4	3
OH CINCINNATI	51	37	66	22	44	15	1.29	0.63	0.60	8.85	188	6.06	424	83	73	0	2	4	1
OH CLEVELAND	44	29	68	18	36	10	2.07	1.52	0.89	9.13	211	4.66	392	90	65	0	4	3	3
OH COLUMBUS	49	35	69	20	42	14	2.85	2.30	2.10	11.64	283	8.28	696	77	68	0	2	3	2
OH DAYTON	48	33	64	17	40	14	2.99	2.41	2.08	10.18	235	8.61	683	91	72	0	3	3	2
OH MANSFIELD	44	28	65	15	36	12	1.43	0.85	0.57	7.39	163	4.38	345	98	76	0	6	3	2

Based on 1971-2000 normals

-999 Not Available

Weather Data for the Week Ending January 15, 2005

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE 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	TEMP. °F		PRECIP	
																		0/1 INCH OR MORE	50 INCH OR MORE	0/1 INCH OR MORE	50 INCH OR MORE
OK TOLEDO	40	25	59	11	33	9	2.39	1.98	0.59	5.63	158	3.55	386	91	79	0	5	5	5	2	
OK YOUNGSTOWN	43	27	68	14	35	10	2.04	1.52	0.96	8.88	217	5.26	465	91	75	0	6	4	3	3	
OK OKLAHOMA CITY	50	30	68	19	40	4	0.01	-0.28	0.01	2.22	86	1.72	249	90	64	0	4	1	0	0	
OK TULSA	50	30	67	19	40	4	0.69	0.34	0.63	4.12	128	3.24	415	90	74	0	3	3	1	1	
OR ASTORIA	45	33	48	27	39	-3	0.53	-1.64	0.41	9.59	64	2.35	51	91	74	0	3	4	0	0	
OR BURNS	29	5	35	-4	17	-7	0.20	-0.05	0.14	2.39	128	0.59	105	85	78	0	7	2	0	0	
OR EUGENE	42	32	48	24	37	-2	0.37	-1.34	0.16	5.28	44	1.17	32	94	85	0	3	4	0	0	
OR MEDFORD	39	29	43	22	34	-4	0.32	-0.23	0.14	5.50	135	1.37	116	96	83	0	6	3	0	0	
OR PENDLETON	34	24	49	13	29	-4	0.10	-0.20	0.09	0.90	42	0.25	38	81	69	0	6	2	0	0	
OR PORTLAND	41	32	47	25	36	-3	0.23	-0.90	0.15	4.66	57	0.75	31	90	75	0	3	4	0	0	
OR SALEM	41	31	45	23	36	-4	0.38	-0.91	0.18	4.74	51	0.85	31	93	75	0	4	4	0	0	
PA ALLENTOWN	45	30	68	20	38	11	1.89	1.09	1.22	7.98	157	4.13	244	86	75	0	5	4	1	1	
PA ERIE	44	29	70	18	36	9	1.40	0.84	0.60	9.83	197	4.01	316	88	74	0	6	4	2	2	
PA MIDDLETOWN	47	33	64	24	40	11	2.11	1.50	1.63	7.37	162	4.00	308	91	65	0	3	4	1	1	
PA PHILADELPHIA	49	36	66	26	43	11	1.99	1.19	1.60	6.22	124	3.05	179	88	72	0	1	3	1	1	
PA PITTSBURGH	48	30	70	17	39	11	1.24	0.63	0.54	7.45	180	4.84	378	97	67	0	5	4	1	1	
PA WILKES-BARRE	41	26	62	13	33	7	1.96	1.42	1.38	8.14	221	4.75	420	96	76	0	6	4	1	1	
PA WILLIAMSPORT	44	29	64	20	37	11	1.41	0.79	0.48	8.28	196	4.12	322	88	79	0	5	4	0	0	
RI PROVIDENCE	44	30	62	25	37	8	1.13	0.14	0.56	8.24	132	3.34	160	90	72	0	6	4	1	1	
SC BEAUFORT	68	50	72	41	59	11	0.79	-0.14	0.71	2.79	55	0.79	41	95	61	0	0	2	1	1	
SC CHARLESTON	68	50	75	39	59	11	1.13	0.19	0.67	2.18	42	1.13	58	96	65	0	0	3	1	1	
SC COLUMBIA	69	42	77	35	56	12	1.22	0.16	1.22	2.45	44	1.23	56	87	52	0	0	1	1	1	
SC GREENVILLE	64	44	71	34	54	13	0.68	-0.31	0.61	7.47	125	0.92	44	95	59	0	0	2	1	1	
SD ABERDEEN	11	-12	24	-35	0	-10	0.24	0.13	0.10	0.69	111	0.36	150	82	71	0	7	3	0	0	
SD HURON	15	-8	26	-25	3	-11	0.16	0.05	0.09	0.38	64	0.17	85	87	67	0	7	3	0	0	
SD RAPID CITY	14	1	31	-9	8	-14	0.21	0.13	0.17	0.62	109	0.54	318	84	69	0	7	5	0	0	
SD SIOUX FALLS	17	-2	30	-19	8	-6	0.04	-0.07	0.02	0.56	76	0.45	205	84	67	0	7	2	0	0	
TN BRISTOL	59	35	71	26	47	13	1.43	0.65	0.70	5.15	102	2.12	129	97	54	0	4	3	2	2	
TN CHATTANOOGA	63	43	69	33	53	14	0.87	-0.35	0.87	8.67	118	2.07	82	85	62	0	0	1	1	1	
TN KNOXVILLE	60	40	73	31	50	13	0.57	-0.48	0.54	7.43	111	1.86	83	95	56	0	3	3	1	1	
TN MEMPHIS	60	45	72	29	53	14	1.17	0.24	1.10	8.76	114	4.40	217	83	63	0	2	3	1	1	
TN NASHVILLE	57	43	67	28	50	14	1.09	0.19	0.80	9.47	146	3.54	182	84	62	0	2	2	1	1	
TX ABILENE	63	42	76	23	52	9	0.00	-0.20	0.00	1.05	60	0.32	67	79	57	0	2	0	0	0	
TX AMARILLO	54	29	70	14	42	7	0.01	-0.13	0.01	1.55	167	1.07	334	83	41	0	5	1	0	0	
TX AUSTIN	69	47	80	27	58	8	0.09	-0.33	0.08	1.07	31	0.74	77	76	59	0	2	2	0	0	
TX BEAUMONT	70	50	77	38	60	8	0.79	-0.55	0.75	4.34	54	1.49	52	92	55	0	0	3	1	1	
TX BROWNSVILLE	77	57	83	44	67	8	0.04	-0.23	0.03	1.94	118	0.47	87	91	58	0	0	2	0	0	
TX CORPUS CHRISTI	74	53	83	35	64	8	0.06	-0.27	0.04	0.61	24	0.13	18	87	61	0	0	2	0	0	
TX DEL RIO	67	45	75	32	56	5	0.00	-0.09	0.00	0.48	51	0.08	40	83	64	0	1	0	0	0	
TX EL PASO	63	36	74	29	50	6	0.00	-0.09	0.00	0.61	62	0.25	114	67	23	0	3	0	0	0	
TX FORT WORTH	65	45	75	29	55	11	0.05	-0.37	0.05	3.37	95	2.72	275	83	44	0	1	1	0	0	
TX GALVESTON	67	54	75	43	61	5	0.88	-0.05	0.87	3.54	65	0.99	51	90	63	0	0	2	1	1	
TX HOUSTON	71	51	79	36	61	10	1.51	0.68	1.51	3.56	65	1.61	91	85	64	0	0	1	1	1	
TX LUBBOCK	58	32	77	20	45	7	0.01	-0.07	0.01	1.61	187	0.92	484	86	47	0	3	1	0	0	
TX MIDLAND	62	36	73	25	49	6	0.01	-0.10	0.01	0.13	15	0.02	8	80	46	0	3	1	0	0	
TX SAN ANGELO	66	40	77	22	53	9	0.00	-0.15	0.00	0.38	30	0.00	0	85	52	0	3	0	0	0	
TX SAN ANTONIO	68	51	79	35	59	9	0.04	-0.32	0.04	0.56	20	0.48	61	83	46	0	0	1	0	0	
TX VICTORIA	71	50	80	33	61	8	0.98	0.43	0.56	3.43	94	1.52	129	92	62	0	0	2	1	1	
TX WACO	65	45	74	30	55	9	0.03	-0.37	0.02	3.04	82	1.74	187	83	64	0	2	2	0	0	
TX WICHITA FALLS	60	35	73	23	47	7	0.00	-0.23	0.00	1.85	83	1.18	211	89	72	0	2	0	0	0	
UT SALT LAKE CITY	42	28	50	23	35	6	0.59	0.29	0.34	1.49	80	0.97	154	89	60	0	6	3	0	0	
VT BURLINGTON	38	19	58	10	29	11	1.21	0.71	1.07	4.91	151	1.66	160	87	62	0	6	2	1	1	
VA LYNCHBURG	59	36	71	27	47	13	2.54	1.74	1.62	5.31	108	2.90	173	93	54	0	4	3	2	2	
VA NORFOLK	61	41	77	34	51	11	1.38	0.49	1.38	3.80	78	1.39	75	96	65	0	0	1	1	1	
VA RICHMOND	61	40	75	31	50	14	1.90	1.07	1.89	4.58	94	2.21	126	93	66	0	1	2	1	1	
VA ROANOKE	59	37	71	29	48	13	1.11	0.40	0.68	3.47	80	1.34	91	84	59	0	4	3	1	1	
WA WASH/DULLES	53	34	69	28	43	11	1.96	1.27	1.79	5.34	118	2.33	159	89	69	0	4	2	1	1	
WA OLYMPIA	39	29	44	21	34	-4	0.75	-0.93	0.38	8.51	74	3.19	90	94	85	0	5	5	0	0	
WA QUILLAUTE	40	28	45	22	34	-6	0.70	-2.34	0.41	13.78	66	1.65	25	87	75	0	6	3	0	0	
WA SEATTLE-TACOMA	39	30	45	23	34	-6	0.15	-0.99	0.11	4.84	60	0.47	19	84	72	0	6	2	0	0	
WA SPOKANE	23	10	35	-6	17	-10	0.15	-0.26	0.10	2.03	65	0.69	78	89	71	0	7	3	0	0	
WA YAKIMA	32	16	48	11	24	-5	0.12	-0.14	0.10	2.05	105	0.92	161	83	67	0	7	3	0	0	
WV BECKLEY	55	37	67	23	46	16	0.70	-0.02	0.50	3.98	86	1.86	122	87	57	0	3	4	1	1	
WV CHARLESTON	59	40	76	25	49	16	0.46	-0.26	0.38	4.96	103	2.05	136	88	51	0	2	2	0	0	
WV ELKINS	58	34	70	24	46	17	0.85	0.08	0.34	4.86	96	2.33	143	85	46	0	4	5	0	0	
WV HUNTINGTON	57	38	75	24	48	16	0.46	-0.26	0.46	5.42	110	2.78	181	87	56	0	2	1	0	0	
WI EAU CLAIRE	20	5	34	-11	13	2	0.01	-0.21	0.01	1.23	83	0.32	71	80	54	0	7	1	0	0	
WI GREEN BAY	24	10	38	-6	17	2	0.16	-0.10	0.11	3.26	167	1.00	185	81	65	0	7	4	0	0	
WI LA CROSSE	22	7	35	-9	14	-2	0.06	-0.19	0.03	1.92	111	0.63	126	86	62	0	7	2	0	0	
WI MADISON	26	13	39	-5	19	2	0.76	0.51	0.75	3.06	139	1.60	296	82	67	0	6	2	1	1	
WI MILWAUKEE	30	18	51	-1	24	4	0.80	0.41	0.75	3.96	130	2.43	293	81	70	0	6	3	1	1	
WI CASPER	28	4	44	-16	16	-6	0.10	-0.01	0.08	0.19	22	0.10	42	85	71	0	7	2	0	0	
WY CHEYENNE	40	17	52	1	29	3	0.12	0.04	0.10	0.29	45	0.16	89	90	49	0	7	2	0	0	
WY LANDER	26	6	33	-14	16	-4	0.46	0.35	0.29	1											

National Agricultural Summary

January 10 - 16, 2005

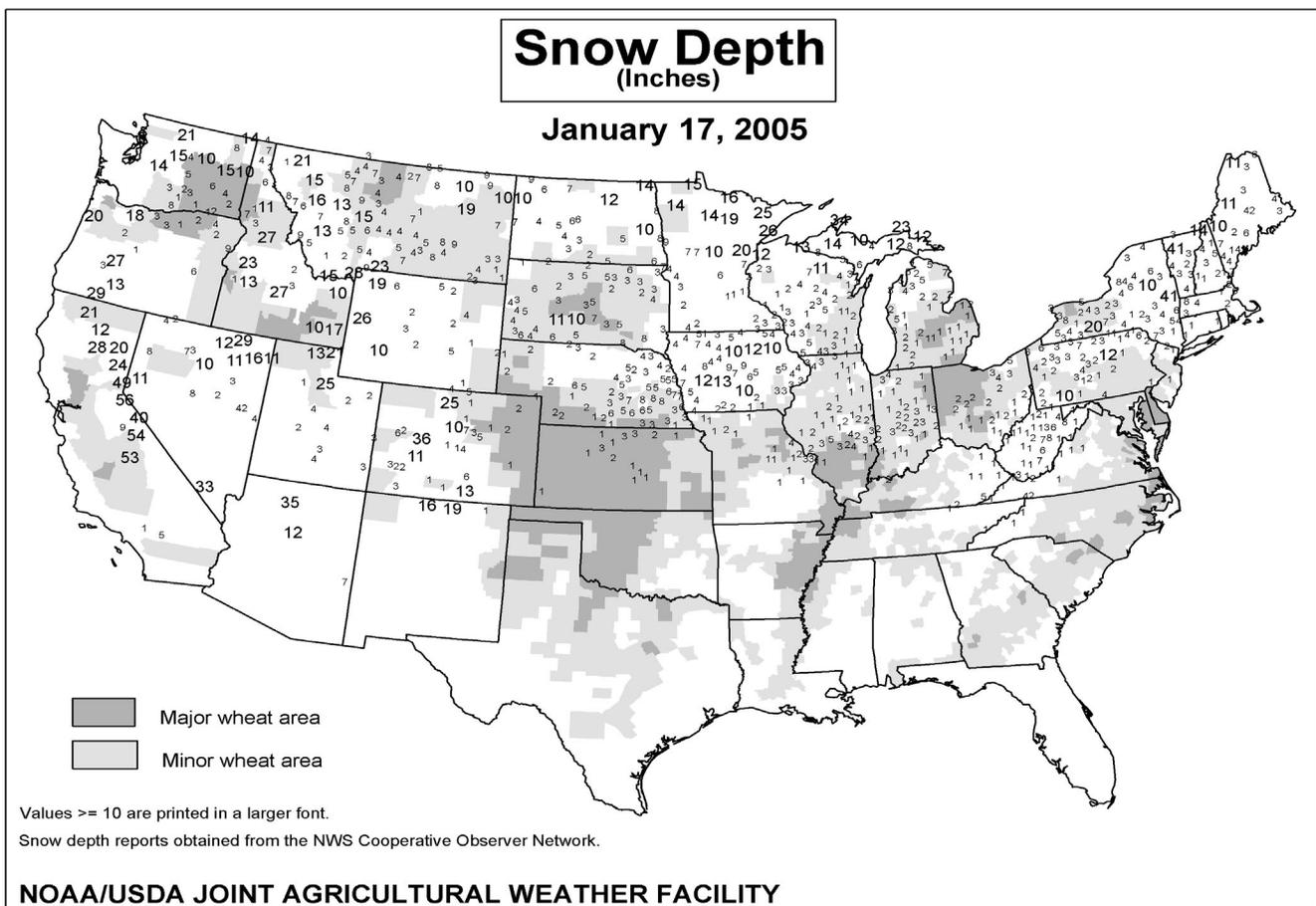
Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

A mass of arctic air held temperatures well below normal for the second week in a row in the Pacific Northwest, northern Rocky Mountains, and northern and central Great Plains. Though winter wheat is covered with a protective layer of snow across much of this area, snow cover is generally below average. As the arctic air pushed south and east through the week, temperatures fell in the Atlantic Coast States, Ohio Valley, Southeast, Delta, and southern Great Plains but still averaged above normal for the week. The clash of this cold air mass with a warm air system from the Atlantic caused heavy thunderstorms with high winds, hail, and some tornadoes in the eastern half of the Nation. Moderate to heavy precipitation caused more flooding in the Ohio River Valley.

Conditions were mostly dry in the Great Plains and western Corn Belt. Farther west, however, continued unstable weather brought heavy rain and snowfall to the Pacific Coast and central Rockies.

Heavy rainfall continued to slow fieldwork in California, although cotton harvesting ended. In Texas, the cotton harvest remained well behind normal but progressed well in dryer areas. Warm conditions in Georgia were favorable for small grains but caused early blooming in some fruit orchards, leaving the blooms vulnerable to returning cold weather. Florida growers harvested a variety of vegetable and citrus crops, although fieldwork was hampered by muddy conditions.



2004 U.S. Weather Review

Annual "Weather Review" provided by Douglas Le Comte, NOAA/CPC; annual national rankings provided by NCDC

During 2004, above-normal precipitation and near- to below-normal temperatures generally benefited agriculture across major grain, cotton, and soybean areas, although the four hurricanes that struck Florida caused major crop and property damage there and triggered flooding in other States as they tracked northward. Excessive wetness also affected the southern Plains, but widespread hydrological drought persisted in much of the West. Heavy snows from October-December provided an excellent start to the water year in California, the Great Basin, and the Southwest, raising hopes for improved water supplies in 2005.

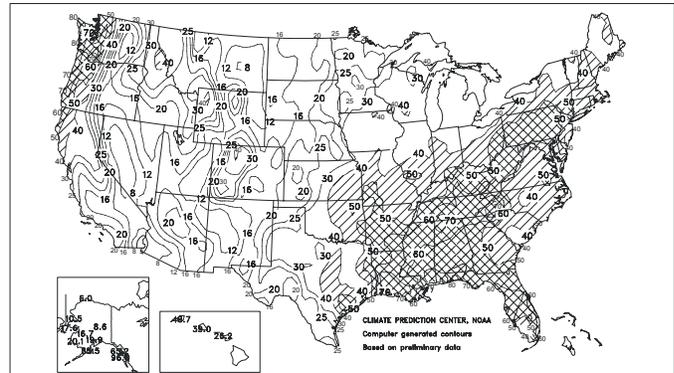
Winter (December 2003 - February 2004)

For the second consecutive year, winter was unusually cold over the eastern one-third of the country, although the temperature extremes mainly came in January, as Massachusetts saw its coldest January in over 100 years. Outside of the Desert Southwest, where dry weather kept the drought intact, the West tended to be cold and snowy, while the eastern and southern Plains States saw beneficial precipitation that eased drought conditions.

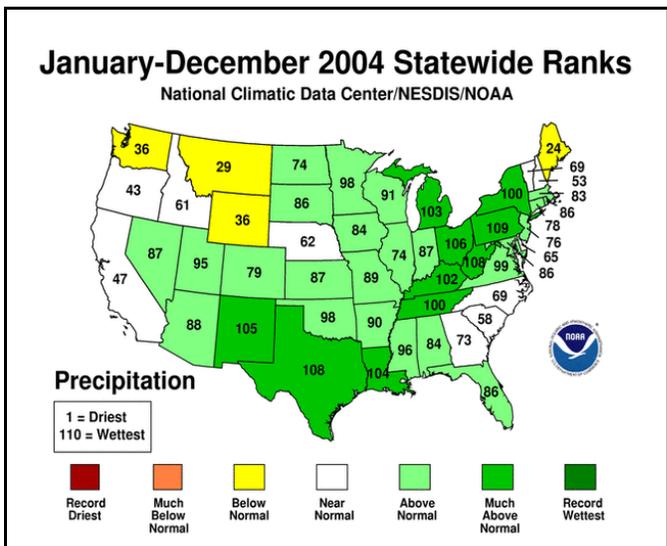
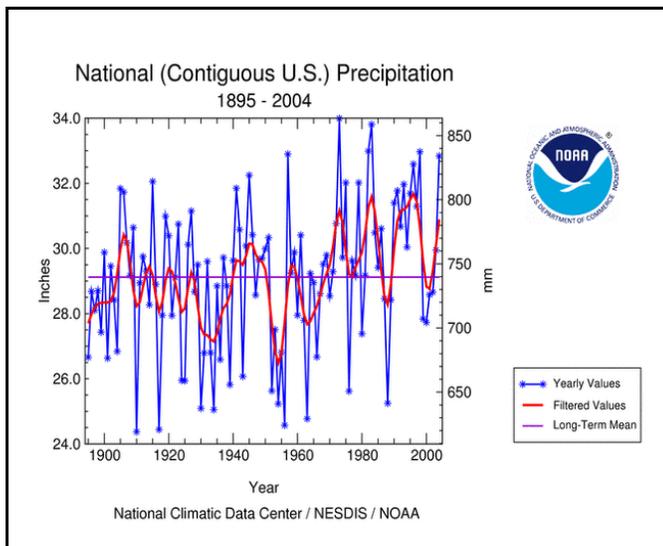
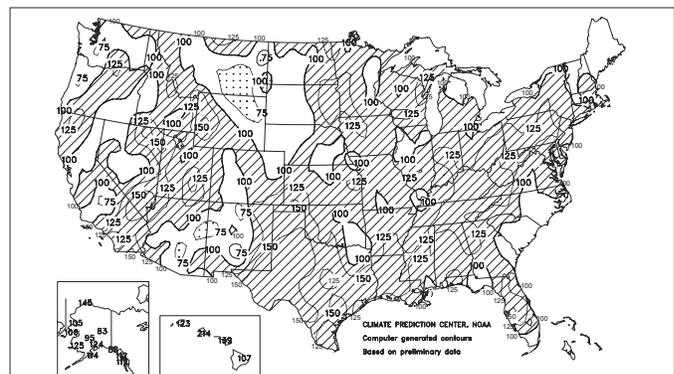
In the Plains, severe cold struck near the end of January, following a major snowstorm on January 25-26 that dumped 13.5 inches of snow on Omaha, NE, the city's heaviest snow since 1987. Two later storms dropped another 17.7 inches on the city during the first 6 days of February. The January storm also deposited 27.1 inches on Duluth, MN, resulting in their third greatest snowstorm on record.

Bitter cold invaded the Plains during January 27-31. In North Dakota, the reading of -43°F in Grand Forks on January 30 set an all-time low record. Kansas, Missouri, and Illinois all experienced sub-zero readings during the cold wave. The frigid temperatures expanded eastward by month's end, as Cincinnati, OH, measured -12°F on January 31.

Total Precipitation (Inches)
JAN - DEC 2004



Percent Of Normal Precipitation
JAN - DEC 2004



February rain and snow benefited drought areas across the Plains, West, and upper Midwest. The improved soil moisture was especially beneficial for winter wheat areas on the southern Plains. For the 3-month winter period, precipitation ranged from 100 to 150 percent (%) of normal from eastern Nebraska southward through eastern Kansas into Oklahoma and Texas. In contrast, abnormally dry weather extended from eastern Wyoming into eastern Colorado, Arizona, and New Mexico, with precipitation generally ranging from 50 to 75% of normal. Drought persisted into March on the central and northern High Plains.

Snowy, cold weather resulted in favorable mountain snowpacks from the Intermountain West to the central and northern Rockies by late February, offering hope for relief from the prolonged drought that had persisted from late 1999 or 2000 in much of the region.

Despite the late-January and early-February cold wave, winter temperatures averaged 1 to 2°F above normal over the Central States, while readings averaged 2 to 4°F below normal for the Eastern Seaboard and the Great Basin.

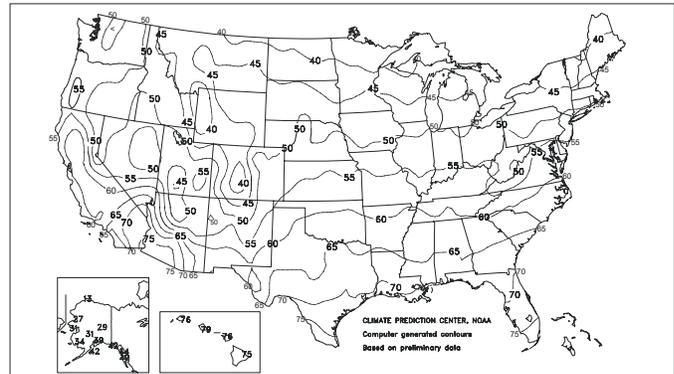
Spring (March - May)

Record warmth and dryness drastically reduced Western snowpacks during March. Monthly temperatures averaged 4 to 8°F above normal from the Pacific Coast eastward to the Plains, with readings as much as 10°F above normal in the Desert Southwest. The warmth, combined with precipitation totals less than 25% of normal, sharply cut snowpacks, resulting in dramatically lower forecasts of spring and summer streamflows. For the West as a whole, March 2004 was the warmest and driest March in 110 years of record-keeping.

Spring was abnormally wet across the Farm Belt, with March-May rainfall averaging 100 to 200% of normal from the Ohio Valley northward into the Great Lakes region and the upper Midwest. Spring was also unusually mild for most of the remainder of the country, resulting in the third-warmest spring on record nationwide.

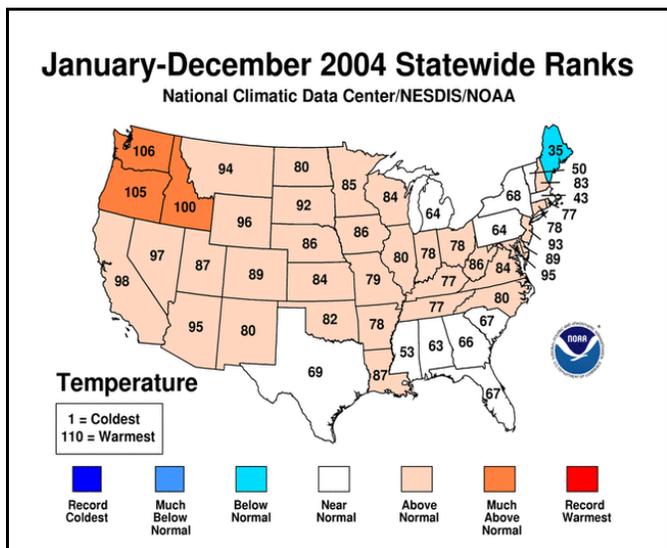
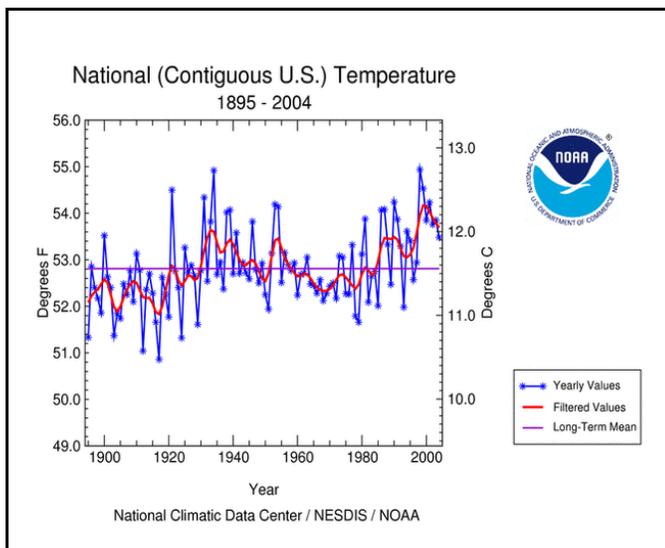
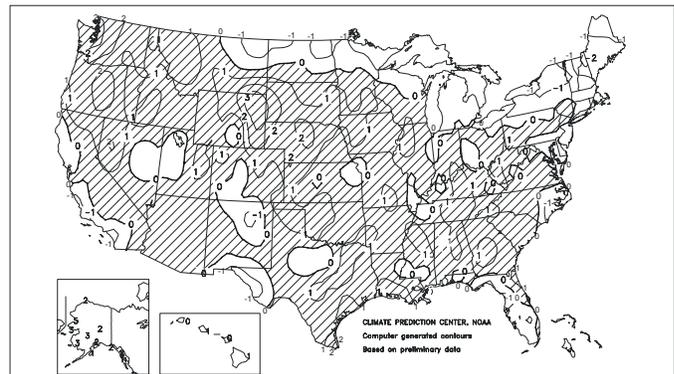
Average Temperature (°F)

JAN - DEC 2004



Departure of Average Temperature from Normal (°F)

JAN - DEC 2004



April was the second consecutive month of abnormal dryness in parts of the Southeast, where March rainfall totaled less than 25% of normal, but scattered heavy rains in mid- to late April eased dryness concerns.

A wetter April followed the dry March across the interior West, with flooding rains hitting southern New Mexico early in the month. Flash flooding also affected southern and western Texas. March-May cumulative precipitation exceeded twice normal from New Mexico into southern Texas.

Rain and snow benefited farmers over the central High Plains in April, although the region also endured a hard freeze on April 13 as thermometers dropped to 19°F in Liberal and Garden City, KS, threatening the winter wheat crop. Freezing temperatures again threatened crops in the Plains and Midwest from May 3-4 and May 13-15. Readings on May 3 dipped below 20°F in Wisconsin and below 30°F in Iowa, Michigan, Illinois, and Indiana. May 14 temperatures ranging from 26 to 30°F affected heading winter wheat in northwestern Kansas, while temperatures down to 28°F resulted in spotty damage to wheat in southwestern Kansas.

A front extending across the Northern States set up the conditions for excessive rainfall and numerous severe weather outbreaks in the Corn Belt during May. Midwestern downpours in mid- to late May slowed or stopped soybean and final corn planting due to widespread lowland flooding. Cool weather hampered summer crop development in the upper Midwest, one of the few areas of the country that saw below-normal temperatures this spring.

On May 29-30, a massive outbreak of severe thunderstorms led to about 1,200 reports of hail, tornadoes, and damaging winds across the Midwest. The final monthly total of 526 tornadoes nationally was just 17 short of the all-time monthly record set in May 2003.

Dry weather allowed drought to persist on the central and northern High Plains, as spring precipitation averaged less than 75% of normal from southeastern Montana into western Kansas, with amounts less than one-half of normal in southeastern Montana, eastern Wyoming, and western Nebraska.

Summer (June - August)

Abundant rains kept soil moisture high across the South, East, and much of the Midwest, while summer temperatures ranked among the lowest on record across the Plains, Midwest, and interior South. Too much rain in the East, partly due to Hurricanes Charley and Gaston and Tropical Storm Bonnie, caused crop disease and quality concerns.

Summer temperatures averaged 4°F below normal across the western Corn Belt and upper Midwest, and around 2°F below

normal elsewhere east of the Rockies. This resulted in the coolest summer across the Midwest and nationwide since 1992. Summer 2004 was also the Corn Belt's wettest since 1998 and the wettest nationwide since 1993. In sharp contrast, a persistent ridge maintained warm and dry conditions over Alaska, which notched its warmest summer on record, as statewide temperatures averaged nearly 5°F above normal. This was also one of Alaska's driest summers, and the heat and dryness resulted in a record number of acres (about 6.5 million) burned by wildfires this year.

In the West, summer rainfall tended to be above normal in the northern Great Basin and northern Rockies but below normal in the Southwest and Colorado River Basin. Outside of the Northwest, which experienced its third-warmest summer, the West's temperatures averaged near or slightly above normal.

Despite cool weather, crop development remained ahead of the normal pace across much of the Midwest, except for the northwestern Corn Belt, where persistent coolness resulted in pronounced crop developmental delays. Abundant moisture and lack of sustained heat resulted in overall favorable growing conditions for the Corn Belt, resulting in record corn and soybean production.

The tropical storm season got off to a slow start, with no named tropical storms developing by late July. Finally, Alex became the first named storm of the season on August 1, passing within about 10 miles of Cape Hatteras, NC, on August 3 as a category-2 hurricane. In the Gulf of Mexico, Bonnie moved into the Florida Panhandle as a minimal tropical storm on August 12.

The next 6 weeks made history as four hurricanes struck Florida, the first time since 1886 that any State has experienced four hurricanes in a single season. The storms destroyed 25,000 homes and damaged another 40,000, and caused considerable crop losses. The storms also brought severe weather, tornadoes, and flooding to many other Southeastern States.

Hurricane Charley made landfall in southwestern Florida as a category-4 storm on August 13, causing massive property damage in Punta Gorda and Port Charlotte. The storm continued northeastward, resulting in a swath of destruction across Florida, including the Orlando area. Charley came ashore again in South Carolina on August 14 with 80 m.p.h. winds. Preliminary damage estimates of \$14 billion made Charley the second costliest tropical cyclone in U.S. history, behind Andrew in 1992.

Gaston struck the coast of South Carolina on August 29 as a minimal hurricane. Gaston moved northeastward over North Carolina and across the Delmarva Peninsula on August 30, triggering widespread flooding across the Carolinas and Virginia as rainfall totals reached as high as 12 inches.

Autumn (September - November)

The seemingly relentless hurricane season continued, as Hurricane Frances made landfall on Florida's east coast as a category-2 storm on September 5. The storm hit the coast near Sewall's Point, continued west-northwestward across the central peninsula to the northeastern Gulf of Mexico, made landfall again near St. Marks, FL, as a tropical storm, and then moved northward through the Eastern United States. The damage costs reached \$9 billion, and the storm was blamed for six deaths.

Ivan tracked northward through the Gulf of Mexico and struck the Gulf Shores, AL, area as a category-3 hurricane on September 16, causing considerable damage to northwestern Florida before moving northeastward and emerging off the Delmarva Peninsula on September 19. Ivan brought widespread severe weather to the East, including tornadoes as far north as southern Pennsylvania. Ivan's remains eventually returned to the Gulf of Mexico and re-intensified to tropical storm strength before making a second landfall over Louisiana on the 24th. Ivan was blamed for 26 direct U.S. deaths and \$13 billion in damages, making this storm the third-costliest hurricane in U.S. history.

Jeanne made landfall on Florida's east coast as a category-3 hurricane on September 25 very close to where Frances struck the coast just 20 days earlier. Jeanne proceeded northward as a tropical storm through the Florida peninsula, weakening to a tropical depression over Georgia. This was the third hurricane to affect the major citrus and vegetable areas on the Florida peninsula.

Matthew came ashore in Louisiana as a weak tropical storm on October 10, causing minimal damage.

All told, six hurricanes and three tropical storms struck the United States in 2004. The total damage estimates of around \$40 billion made this the costliest tropical storm season on record.

In October, two major Pacific storms struck the West. The first storm buffeted the region with rain and snow from October 19-22, and a second bout of storminess struck a few days later. The first storm delivered lowland flooding and heavy mountain snows to California and points eastward. The Sierra Nevada picked up 2 to 3 feet of snow. In Nevada, the 9.78 inches measured on October 20 near Las Vegas set a new 24-hour State record. In Utah, several feet of snow blanketed the mountains.

Persistent southerly flow of moist air brought huge rainfall totals to the southern Plains and lower Mississippi Valley during November, causing major flooding in eastern Texas. Lufkin, TX, saw 16.23 inches in the first 4 weeks of the month. The San

Antonio River at Goliad, TX, crested 15.42 feet above flood stage on November 27. The late-month storm system causing the flooding in east Texas tracked northeastward to southern Illinois on November 24, spreading heavy rain and severe weather across the South and snow over the Midwest. More than 75 tornadoes struck from Texas to the southern Atlantic States during November 22-24, according to preliminary statistics.

Texas recorded its second-wettest summer since such records began in 1895 and its third-wettest autumn. The wet autumn on the southern High Plains stressed livestock, threatened the quality of open-boll cotton, and hampered summer crop harvesting.

December

A cold snap brought freezing temperatures to California crop areas at the end of November and in early December. Bakersfield, CA, recorded freezes on 6 consecutive mornings from November 29-December 4, setting or tying records each day. Large parts of the West measured temperatures averaging 10 to 18°F below normal for the week ending December 4.

In the eastern half of the country, one of the coldest December air masses in recent years invaded the United States on December 19-21, bringing sub-zero wind chills to the Midwest and Northeast and sub-freezing temperatures as far south as northern Florida. Daytime temperatures in the major cities across the Midwest barely climbed above 10°F on December 19 and struggled to exceed 0°F in upstate New York the following day.

A major storm system brought heavy snow on December 22-23 from Texas to the Great Lakes, with up to 20 inches or more in Indiana and Ohio. Arctic air followed the storm, resulting in widespread sub-zero cold on Christmas morning across the Plains and the Midwest. Denver saw -9°F on December 25, and Cleveland measured a record -17°F.

A low-pressure system in the Gulf of Mexico brought snow to southern Texas as far south as the Rio Grande Valley on Christmas Eve. Up to 1 foot fell in Victoria, and the 1.5 inches measured in Brownsville was its first measurable snow since 1895.

A series of Pacific storms began to hammer California and the interior West from December 27-31, burying the Sierra Nevada with massive snowfalls and inundating the valleys with heavy rains. Downtown Los Angeles, CA, recorded 8.15 inches of rain during the last 5 days of December, while up to 8 feet of snow buried the Tahoe ski areas. The storms caused flooding in California and Arizona, but the increased mountain snowpack across the Southwest and Great Basin eased drought concerns.

2004 U.S. Fieldwork Highlights

Fieldwork highlights provided by USDA/NASS

April: Warm, dry conditions across the Corn Belt, combined with ample precipitation in March, provided nearly ideal planting conditions for summer crops. By month's end, 63 percent (%) of the Nation's corn crop had been planted, 23 percentage points ahead of the 5-year average, while growers in the central Corn Belt were over 30 points ahead of their normal pace. Planting of small grains also advanced well ahead of normal, with 68% of the spring wheat crop, 63% of the barley crop, and 77% of the oat crop planted by month's end. Cotton planting progressed slightly ahead of normal with mostly dry conditions in the major producing areas, though some growers delayed planting due to insufficient moisture in the Southeast. Rice, sorghum, and sugarbeet planting progress also advanced ahead of the normal pace, while peanuts lagged slightly behind the 5-year average.

May: Planting of summer crops continued to advance rapidly through the first half of the month as warm, dry conditions prevailed in the Corn Belt and Southeast. By midmonth, 92% of the Nation's corn acreage had been planted, compared with 77% for the 5-year average. Planting was nearly complete in the western Corn Belt and Southeast and was ahead of normal in all States. Plantings of soybeans and small grains were also well ahead of the normal pace, while cotton, rice, and sorghum plantings were slightly ahead of normal. After midmonth, however, heavy rainfall slowed planting progress in the Corn Belt. Nevertheless, planting progress for most crops finished the month ahead of the normal pace. Emergence of summer crops advanced rapidly in most areas under mostly warm, though often wet, conditions. In the upper Midwest, however, temperatures averaged below normal for the month, slowing crop development. Emergence of corn and soybeans began to slip behind normal in the northern Corn Belt. Meanwhile, a hard freeze in the northern and central Great Plains around midmonth only minimally damaged the winter wheat crop.

June: Heavy rainfall limited fieldwork and flooded some fields in the Corn Belt and Delta, but most of the summer crop acreage had already been planted. In the Corn Belt and Great Plains, below-normal temperatures prevailed, slowing crop development. Heading of spring wheat, barley, and oats began to fall behind the normal pace, despite ahead-of-normal planting and emergence. Corn silking and soybean blooming, however, remained slightly ahead of normal nationwide, while cotton, sorghum, and rice development lagged slightly behind normal. Winter wheat harvest progressed rapidly during the month, reaching 51% complete by June 27, 10 points ahead of the 5-year average.

July: Below-normal temperatures slowed crop development across the Great Plains, Corn Belt, Ohio Valley, Delta, and interior areas of the Southeast. Due to early planting and emergence, corn and soybean development in most States advanced ahead of normal, but in the northern Great Plains and northern Corn Belt, the lack of heat units severely hampered growth. Winter wheat harvest slowed during the month and finished slightly behind normal, while harvest of other small grains started slowly. Meanwhile, the cotton crop developed at a normal pace nationwide, although Texas' crop began to lag behind as a result of cool, wet conditions. Rice heading progressed well, finishing the month slightly ahead of normal, while sorghum heading and coloring slipped slightly behind the 5-year average.

August: Hurricane Charley was the first of four hurricanes to strike Florida this year, causing considerable damage to citrus crops. For neighboring States in the Southeast and up the Atlantic Coast, however, the heavy rainfall from Hurricanes Charley and Alex, and Tropical Storm Bonnie, was generally beneficial to cotton and peanut crops in the area. Elsewhere, below-normal temperatures continued to prevail across the Corn Belt and Great Plains, further delaying crop development, particularly in the northernmost areas of the regions. On August 29, corn denting was 3 weeks behind the normal pace in North Dakota and 2 weeks behind in Minnesota. Small grain harvesting fell well behind normal, with spring wheat trailing the normal harvest pace by 25 points, barley by 14 points, and oats by 8 points. Opening of cotton bolls was also hindered by cool weather in the Delta, where progress trailed the normal pace by a week.

Sorghum and rice development also trailed the normal nationwide pace.

September: Hurricanes Frances and Jeanne came ashore 3 weeks apart in nearly identical locations along Florida's Atlantic Coast, dealing two more blows to the State's already-hard-hit citrus crops. Between these two damaging storms, another hurricane, Ivan, hit the Gulf Coast of Florida and Alabama. The three storms followed similar paths through the Atlantic Coast States, weakening in strength but dumping heavy rainfall on vulnerable open-boll cotton fields in the Southeast. In the northern Corn Belt and northern Great Plains, where a cool summer had limited development of summer crops, above-normal temperatures prevailed during the month. However, corn maturation in that area remained well behind normal at month's end, with North Dakota and Minnesota lagging by 73 points and 56 points, respectively. Soybean harvest had begun in all States but trailed behind the 5-year average pace in the upper Midwest, again due to delayed development during the summer. Sorghum coloring and maturation slipped to 1 week behind normal, while harvest fell 2 weeks behind. Development and harvest of the cotton crop also trailed the normal pace, mostly due to cool conditions in Texas. The rice harvest, however, advanced rapidly with warm, dry weather in all growing areas. Meanwhile, planting and emergence of the 2005 winter wheat crop progressed ahead of normal. Spring wheat, barley, and oat growers also struggled to complete their harvest after cool summer weather severely delayed maturation.

October: Warm but rainy conditions prevailed across the Corn Belt, Ohio Valley, Delta, and Great Plains, further delaying harvest of summer crops. Soybean harvest trailed the normal pace by 5 days nationwide, while corn harvest was over a week behind. North Dakota producers lagged 2 weeks on soybean harvesting and 3 weeks on corn. Harvest of cotton and sorghum continued to trail the normal pace in the southern Great Plains, due to persistent rainfall and earlier developmental delays. Winter wheat planting was hindered by rainfall but ended the month at the average pace, while emergence remained ahead of normal. The effects of the cool summer on the sunflower crop became apparent, with harvest only 25% complete at month's end, compared to the 5-year average of 76%. The sugarbeet harvest advanced rapidly during the month as cool weather permitted piling, but progress at month's end trailed slightly behind normal. The peanut harvest was also slightly behind normal.

November: Except for the West Coast, Southwest, and southern High Plains, temperatures averaged above normal for the month. In the Corn Belt, moderate rainfall caused only minor harvest delays. However, heavy rainfall in the southern Great Plains severely hampered harvesting, particularly for sorghum and cotton. The corn harvest was 95% complete nationwide by month's end, but continued to lag well behind normal in the northern Great Plains and adjacent areas of the Corn Belt, with North Dakota growers trailing their average pace by over 4 weeks. Meanwhile, soybean growers had harvested 95% of their acreage by November 21, slightly behind normal. Three-fourths of the cotton crop had been harvested by month's end, 10 points behind normal, with producers in the southern Great Plains lagging 3 to 4 weeks behind. The sunflower harvest began the month at 25% complete, over 50 points behind normal, but progressed rapidly during the month to 92% complete. Winter wheat planting was slightly behind normal, but emergence remained slightly ahead of normal.

December: Warm, dry conditions prevailed in the Corn Belt and Great Plains, encouraging final harvests of summer crops. However, some corn and soybean fields in the northernmost areas and some cotton fields on the southern Plains remained unharvested at year's end. Temperatures averaged below normal in the Delta and Southeast, with historic snowfalls along the western Gulf Coast on Christmas morning. In the Ohio Valley and central Atlantic Coast States, heavy snow during the week prior to Christmas disrupted holiday travel. By month's end, snow accumulations in the northern Great Plains, northern Rocky Mountains, and Pacific Northwest were well below normal, leaving winter wheat vulnerable to extremely cold weather.

2004 U.S. Crop Production Highlights

Highlights, released on January 12, 2005, were provided by USDA/NASS.

Corn: Grain production is estimated at 11.8 billion bushels, up less than 1 percent (%) from the November forecast and up 17% from 2003. The average grain yield is estimated at 160.4 bushels per acre, 0.2 bushel above the November forecast and up 18.2 bushels from 2003. Both production and yield estimates are the largest on record. The previous record for both was set last year when production was estimated at 10.1 billion bushels and yield was 142.2 bushels per acre. Across the Nation, record-high yields were achieved in 24 of the 41 States in the corn-for-grain estimating program. With the exception of Wisconsin, yields in the Corn Belt States reached record highs as weather conditions were mostly favorable throughout the growing season.

Planted area totaled 80.9 million acres, up 3% from last year. Corn planted area is either up or unchanged in all but 13 States. Area harvested for grain, at 73.6 million acres, is up 4% from 2003. Farmers harvested 6.10 million acres for silage, a 7% decrease from last year. However, the number of acres abandoned this year increased to 1.20 million acres, up 11% from the 1.08 million acres abandoned in 2003. The greatest increase in abandonment occurred in North Dakota. Cool, wet summer conditions and early freezes in August and September prevented the crop in many areas from fully developing and maturing to the point that was needed for producers to harvest. Corn silage production is estimated at 107 million tons, down fractionally from the 2003 level. Silage area decreased due to better growing conditions in many States, causing more acres to be harvested for grain and fewer acres cut for silage. The drop in acres was offset by an increase in yield with 17.6 tons per acre realized in 2004. This is 1.3 tons above last year's yield of 16.3 tons per acre.

Sorghum: Grain production is estimated at 455 million bushels, down 4% from the November forecast but 11% above 2003. Area harvested for grain is estimated at 6.52 million acres, down 16% from 2003. Average grain yield, at 69.8 bushels per acre, is down 2.1 bushels from the previous forecast but 17.1 bushels above the 2003 average yield. Grain yields are down from the previous forecast due to wet conditions during November that slowed maturity and delayed harvest in much of the Great Plains. Silage production is estimated at 4.76 million tons, up 34% from 2003. Area cut for silage is 352,000 acres, 3% higher than the previous year. Silage yields averaged 13.5 tons per acre, up 3.1 tons per acre from last year. Kansas led the Nation in area planted for all purposes and grain production, while Texas led the Nation for silage production. Seventeen of the 24 estimating States had grain yields greater than or equal to last year. Large increases in acreage harvested for silage occurred in California and New Mexico, as some producers replaced corn with sorghum, which requires less water.

Oats: Production of oats is estimated at 116 million bushels, down 20% from last year and down less than 1% from the Small Grains 2004 Summary. The estimated yield is 64.7 bushels per

acre, down 0.3 bushel from a year ago. Record-high yields are estimated in South Dakota and Washington. Harvested area is 1.79 million acres, 19% below last year. This is the smallest acreage harvested for grain on record, continuing a steady downward trend. Compared with last year, area harvested for grain declined 75,000 acres in Minnesota, 140,000 acres in North Dakota, and 60,000 acres in South Dakota. All updates to the Small Grains 2004 Summary were previously published in the November 2004 Crop Production report.

Barley: Production is estimated at 279 million bushels, unchanged from the November 1 Crop Production report but up slightly from last year's estimate. Average yield per acre, at 69.4 bushels, is the same as in November but 10.5 bushels above 2003. The area harvested for grain is estimated at 4.02 million acres, 15% below a year ago. Nationally, harvested area is the smallest since 1894, but yield is a new record high, 6.9 bushels above the previous record of 62.5 bushels set in 1992. State-record yields were set in Colorado, Idaho, Montana, Nebraska, and South Dakota.

Wheat: Production of all wheat totaled 2.16 billion bushels in 2004, fractionally below the Small Grains 2004 Summary and 8% below 2003. Grain area is 50.0 million acres, down 6% from last year. The yield is 43.2 bushels per acre, down 1.0 bushel from a year ago. All updates to the Small Grains 2004 Summary were previously published in the November 2004 Crop Production report.

The 2004 winter wheat production is estimated at 1.50 billion bushels. This is unchanged from the Small Grains 2004 Summary but 13% below last year's crop. The yield is 43.5 bushels per acre, 3.2 bushels below last year's final yield. Acreage for grain is estimated at 34.5 million acres, 6% below 2003. Planted area is 43.4 million acres, down 4% from the previous year.

Hard Red Winter (HRW) harvested acreage was down significantly from last year in the central Great Plains and Montana due to fewer planted acres and higher-than-normal abandonment. Dry spring conditions led to lower yields in all Plains States, except Texas, South Dakota, and Montana. Timely rains in South Dakota and Montana resulted in better yields than in 2003. Yields in Texas rebounded from below average levels last year. Overall, HRW production totals 856 million bushels, down 20% from last year.

Soft Red Winter (SRW) producing States' yields improved significantly from poor yields last year in the South and along the Atlantic coast. Yields declined from very good levels last year in most other States. Overall, SRW production is down fractionally from 2003 and totals 380 million bushels.

White Winter production, at 263 million bushels, is down 1% from last year. Improved yields more than offset lower acreage

in the Pacific Northwest (Idaho, Oregon, and Washington). Excellent irrigated and non-irrigated yields in Idaho resulted in a State-level yield equal to the record high set in 2000.

Other Spring Wheat production in 2004 is estimated at 569 million bushels, down 1% from the Small Grains 2004 Summary but up 7% from 2003. Harvested area is 13.2 million acres, 2% lower than last year. The yield is a record high 43.2 bushels per acre, 3.7 bushels higher than last year and 1.4 bushels higher than the previous record set in 1992. All updates to the Small Grains 2004 Summary were previously published in the November 2004 Crop Production report. Yields were better than last year in all States except Minnesota and Wisconsin, with large increases in most States.

Durum Wheat production for 2004 totaled 89.9 million bushels, down 1% from the Small Grains 2004 Summary and 7% less than last year. Grain area harvested totaled 2.36 million acres, 18% below a year ago. The yield is estimated at 38.0 bushels per acre, 4.3 bushels above 2003.

Rice: Production of rice in 2004 totaled a record high 231 million cwt, up 15% from 2003 and up 1% from the November forecast. Area for harvest, at 3.33 million acres, is up 11% from 2003. The average yield for all U.S. rice is estimated at 6,942 pounds per acre, 272 pounds above the 2003 yield. This all rice yield is the highest on record and the fifth consecutive year a new record-high yield has been established. The adoption of higher yielding rice varieties by producers continues to drive the increase in yields. Arkansas, California, Mississippi, and Missouri established new record-high yields. Delta State producers experienced an excellent year for rice production with the exception of Louisiana, which experienced a cloudy, cool early growing season. California also experienced a nearly ideal growing season.

Peanuts: Production of peanuts in 2004 totaled 4.26 billion pounds, up 3% from last year's crop and up 1% from the November 1 forecast. Planted area, at 1.43 million acres, is up 6% from 2003. Harvested area totaled 1.39 million acres, up 6% from 2003. The yield per harvested acre averaged 3,057 pounds, down 102 pounds from 2003. Record-high yields were set in New Mexico, North Carolina, Oklahoma, South Carolina, and Virginia.

Sunflowers: Sunflower production totaled 2.05 billion pounds, 23% below the 2003 production and down 16% from 2002. The average yield per acre, at 1,197 pounds, decreased 16 pounds from 2003. Planted area, at 1.87 million acres, is 20% below last year. Acreage harvested decreased 22% from last year to 1.71 million acres. Production in North Dakota, the leading State, is estimated at 792 million pounds, down 48% from 2003. North Dakota's yield per acre, at 1,002 pounds, is down 302 pounds from last year. Planted and harvested acres decreased from 2003 by 27 and 32%, respectively.

Soybeans: Production in 2004 totaled 3.14 billion bushels, the largest U.S. soybean crop in history. This is down slightly from the November forecast but 28% above the 2003 level. The

average yield per acre is estimated at a record high 42.5 bushels, 0.1 bushel below the November forecast, but 8.6 bushels above the 2003 final yield. Planted area for the Nation, at 75.2 million acres, is up 2% from 2003. Soybean growers harvested a total of 74.0 million acres, up 2% from last year. Yields are up dramatically from last year across most of the United States, due to adequate moisture and mild temperatures during the growing season, especially at critical stages of soybean development. From New Jersey westward through the Corn Belt to Kansas, and south along the Atlantic Coast, a total of 14 States established new record-high yields. In the Delta and Southeast, yields are either at record highs or only 2 bushels or less below last year's record-breaking yields. However, yields in Minnesota, Wisconsin, and the Dakotas are far from record-breaking, though only North Dakota yields actually declined from 2003.

Cotton: Upland cotton production is estimated at a record-high 22.3 million bales, up slightly from the December 1 forecast and 25% higher than last year's production. The yield for upland cotton, at 835 pounds per acre, is also a record high, up 17 pounds from the December forecast and 112 pounds higher than 2003. Harvested area, at 12.8 million acres, decreased 1% from last month but is 8% above last year. Upland planted area is estimated at 13.4 million acres, down 1% from the September estimate but less than 1% above last season. Data from the combined seven Objective Yield States show higher boll counts and weights than any of the previous six seasons.

American-Pima production is estimated at 736,000 bales, up 16,000 bales from the December forecast and up 70% from last year's output. The U.S. Pima yield is estimated at 1,425 pounds per harvested acre, up 59 pounds from last month and 255 pounds more than last year's yield. Producers planted 249,600 acres of Pima cotton in 2004, up 40% from 2003. The increase in planted acreage led to a similar increase in harvested acreage.

Sugarbeets: Production is estimated at 29.9 million tons, 1% above the November 1 forecast but 3% below last year's production. Growers in the 12 sugarbeet-producing States harvested 1.31 million acres, 1% below the November estimate and 3% below last year's 1.35 million acres. Yield is estimated at 22.9 tons per acre, 0.5 ton above November and 0.1 ton above the 2003 yield.

Sugarcane: Production of sugarcane for sugar and seed is estimated at 29.3 million tons, 3% below the December forecast and 13% below last year's 33.9 million tons. Area harvested and to be harvested for sugar and seed is estimated at 952,100 acres for the 2004 crop year, down 1% from December and 4% below last year. Yield is estimated at 30.8 tons per acre, 0.8 ton below last month, 3.3 tons below 2003, and the lowest nationwide yield since 1947. In Florida, where three hurricanes affected the sugarcane-producing areas around Lake Okeechobee, expected yield was 33.9 tons per acre, down 2.1 tons from December and the lowest since 1996. Louisiana's crop, adversely affected by heavy rainfall in June and muddy harvest conditions, yielded 24.0 tons per acre, the lowest since 1993.

TEMPERATURE AND PRECIPITATION SUMMARY Annual 2004

STATES AND STATIONS	TEMP., °F		PRECIP., IN.		STATES AND STATIONS	TEMP., °F		PRECIP., IN.		STATES AND STATIONS	TEMP., °F		PRECIP., IN.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	63	1	65.58	11.60	LEXINGTON	54	-1	53.54	7.64	COLUMBUS	52	-1	49.09	10.59
HUNTSVILLE	61	0	55.73	-1.78	LONDON-CORBIN	55	-1	60.76	13.35	DAYTON	51	-1	43.62	4.04
MOBILE	67	0	71.49	5.20	LOUISVILLE	57	0	50.32	5.79	MANSFIELD	48	-1	41.71	-1.52
MONTGOMERY	65	0	50.79	-3.98	PADUCAH	57	0	48.06	-1.18	TOLEDO	49	-1	37.41	4.20
AK ANCHORAGE	39	3	16.67	0.61	LA BATON ROUGE	67	0	43.31	-19.76	YOUNGSTOWN	48	-1	46.04	8.02
BARROW	13	2	5.81	1.66	LAKE CHARLES	68	0	44.00	-13.18	OK OKLAHOMA CITY	60	0	21.28	-14.57
COLD BAY	41	3	39.86	-0.42	NEW ORLEANS	70	1	66.33	2.17	TULSA	61	0	41.44	-0.98
FAIRBANKS	29	2	13.62	3.29	SHREVEPORT	66	0	36.67	-14.63	OR ASTORIA	52	1	68.35	1.22
JUNEAU	42	0	54.23	-4.10	ME BANGOR	43	-2	41.98	2.41	BURNS	47	3	9.74	-0.83
KING SALMON	38	3	20.88	1.47	CARIBOU	38	-1	41.69	4.26	EUGENE	54	2	41.26	-9.65
KODIAK	43	2	85.29	9.94	PORTLAND	45	-1	37.65	-8.18	MEDFORD	57	3	19.90	1.53
NOME	29	2	17.97	1.41	MD BALTIMORE	54	-1	62.72	20.78	PENDLETON	54	2	12.64	-0.12
AZ FLAGSTAFF	48	2	17.91	-5.00	MA BOSTON	50	-2	44.50	1.97	PORTLAND	56	2	38.08	1.01
PHOENIX	76	3	6.84	-1.45	WORCESTER	47	0	49.41	0.36	SALEM	55	2	41.80	1.80
TUCSON	71	2	10.09	-2.08	MI ALPENA	42	-1	24.54	-3.86	PA ALLENTOWN	51	0	57.15	11.98
AR FORT SMITH	62	1	28.25	-15.62	DETROIT	49	-1	31.49	-1.41	ERIE	48	-2	41.15	-1.62
LITTLE ROCK	62	0	39.54	-11.39	FLINT	47	0	29.76	-1.85	MIDDLETOWN	52	-1	54.75	14.25
CA BAKERSFIELD	67	2	5.45	-1.03	GRAND RAPIDS	47	-1	33.31	-3.81	PHILADELPHIA	55	0	48.00	5.96
EUREKA	52	-1	45.05	6.95	HOUGHTON LAKE	42	-1	24.69	-3.75	PITTSBURGH	50	-1	41.80	3.95
FRESNO	65	2	9.17	-2.06	LANSING	46	-1	25.42	-6.11	WILKES-BARRE	48	-2	50.00	12.45
LOS ANGELES	63	0	10.74	-2.41	MUSKEGON	48	1	28.03	-4.84	WILLIAMSPORT	49	-1	53.02	11.43
REDDING	64	2	36.89	3.37	TRaverse CITY	44	-2	27.37	-6.10	PR SAN JUAN	80	0	58.69	7.93
SACRAMENTO	62	1	14.69	-3.24	MN DULUTH	39	0	25.09	-5.91	RI PROVIDENCE	50	-1	50.31	3.85
SAN DIEGO	64	0	9.20	-1.57	INT'L FALLS	38	0	17.09	-6.85	SC CHARLESTON	65	0	51.02	-0.51
SAN FRANCISCO	59	2	18.76	-1.34	MINNEAPOLIS	46	1	22.93	-6.48	COLUMBIA	63	-1	55.06	6.79
STOCKTON	62	0	9.53	-4.31	ROCHESTER	44	0	22.82	-8.59	FLORENCE	62	-2	34.81	-9.95
CO ALAMOSA	44	3	6.26	-0.99	ST. CLOUD	43	1	24.80	-2.33	GREENVILLE	60	0	63.30	13.08
CO SPRINGS	50	2	12.40	-4.99	MS JACKSON	64	0	58.88	2.94	MYRTLE BEACH	63	-1	55.98	10.27
DENVER	51	2	13.92	0.30	MERIDIAN	63	-2	70.36	11.71	SD ABERDEEN	44	0	21.29	1.07
GRAND JUNCTION	55	3	6.59	-2.39	TUPELO	61	0	68.76	12.90	HURON	46	1	16.74	-4.15
PUEBLO	54	2	11.57	-0.82	MO COLUMBIA	54	0	39.67	-0.61	RAPID CITY	48	1	11.11	-5.52
CT BRIDGEPORT	51	-1	46.75	2.60	JOPLIN	58	0	37.07	-9.00	SIoux FALLS	46	1	22.06	-2.63
HARTFORD	49	-1	55.16	9.00	KANSAS CITY	55	1	27.74	-10.25	TN BRISTOL	55	0	66.87	25.55
DC WASHINGTON	56	-2	59.42	20.07	SPRINGFIELD	56	0	42.45	-2.52	CHATTANOOGA	60	0	63.25	8.73
DE WILMINGTON	53	-1	55.38	12.57	ST JOSEPH	54	0	26.90	-8.34	JACKSON	59	-1	55.59	0.81
FL DAYTONA BEACH	71	0	57.33	8.04	ST LOUIS	56	0	46.06	7.31	KNOXVILLE	58	0	58.74	10.52
FT LAUDERDALE	77	1	65.38	1.18	MT BILLINGS	49	2	9.76	-5.00	MEMPHIS	62	0	52.07	-2.58
FT MYERS	75	0	69.85	15.66	BUTTE	40	0	9.79	-2.99	NASHVILLE	59	0	56.68	8.57
JACKSONVILLE	68	0	44.68	-7.66	GLASGOW	44	1	10.46	-0.77	TX ABILENE	65	1	19.10	-4.67
KEY WEST	78	0	38.15	-0.79	GREAT FALLS	46	2	10.23	-4.66	AMARILLO	58	1	13.43	-6.29
MELBOURNE	73	1	43.09	-5.20	HELENA	47	3	9.39	-1.93	AUSTIN	67	-2	20.68	-12.97
MIAMI	77	0	69.80	11.27	KALISPELL	44	1	12.49	-4.72	BEAUMONT	69	0	58.95	-0.94
ORLANDO	73	0	50.86	2.51	MILES CITY	47	1	10.48	-3.01	BROWNSVILLE	74	1	33.87	6.32
PENSACOLA	68	0	64.14	-0.14	MISSOULA	47	2	14.04	0.22	COLLEGE STATION	68	-1	44.29	4.62
ST PETERSBURG	73	-1	69.09	19.51	NE GRAND ISLAND	51	1	16.62	-9.27	CORPUS CHRISTI	71	-1	28.63	-3.62
TALLAHASSEE	67	-1	65.42	2.22	HASTINGS	52	1	21.01	-6.93	DALLAS/FT WORTH	66	0	24.60	-10.13
TAMPA	73	0	52.12	7.36	LINCOLN	51	0	26.09	-2.28	DEL RIO	70	0	24.02	5.79
WEST PALM BEACH	76	1	65.87	4.48	MCCOOK	53	2	18.69	-2.93	EL PASO	66	1	4.22	-5.21
GA ATHENS	61	-1	50.43	2.61	NORFOLK	50	1	22.22	-4.44	GALVESTON	71	0	38.96	-4.88
ATLANTA	62	0	53.02	2.83	NORTH PLATTE	50	1	18.43	-1.23	HOUSTON	70	1	47.26	-0.58
AUGUSTA	63	0	53.06	8.47	OMAHA/EPPLEY	51	0	23.35	-6.87	LUBBOCK	62	2	8.80	-9.88
COLUMBUS	65	0	56.62	8.05	SCOTTSBLUFF	50	2	9.85	-6.48	MIDLAND	65	1	10.63	-4.17
MACON	65	1	58.14	13.15	VALENTINE	48	1	15.45	-4.07	SAN ANGELO	65	0	19.19	-1.71
SAVANNAH	66	0	46.34	-3.24	NV ELKO	49	3	10.90	1.31	SAN ANTONIO	69	0	28.47	-4.45
HI HILO	75	1	91.17	-35.10	ELY	47	2	8.59	-1.38	VICTORIA	70	0	39.10	-1.00
HONOLULU	78	1	12.72	-5.56	LAS VEGAS	70	2	6.88	2.39	WACO	67	0	28.13	-5.21
KAHULUI	76	0	13.19	-5.61	RENO	55	4	4.58	-2.90	WICHITA FALLS	64	1	19.11	-9.70
LIHUE	76	0	35.75	-3.81	WINNEMUCCA	51	2	8.28	-0.05	UT SALT LAKE CITY	55	3	16.17	-0.33
ID BOISE	55	3	10.41	-1.79	NH CONCORD	45	-1	44.50	6.90	VT BURLINGTON	45	0	36.28	0.23
LEWISTON	55	2	14.08	1.36	NJ ATLANTIC CITY	53	-1	47.84	7.25	VA LYNCHBURG	55	0	59.17	15.86
POCATELLO	49	2	7.73	-4.86	NEWARK	54	-1	56.43	10.17	NORFOLK	60	0	61.85	16.11
IL CHICAGO/O'HARE	49	0	31.77	-4.51	NM ALBUQUERQUE	59	2	6.37	-3.09	RICHMOND	57	-1	62.12	18.22
MOLINE	50	0	31.85	-6.19	NY ALBANY	47	-1	46.35	8.29	ROANOKE	56	0	54.52	12.04
PEORIA	51	0	31.25	-4.77	BINGHAMTON	45	-1	43.89	5.24	WASH/DULLES	54	0	64.72	22.91
ROCKFORD	48	0	25.73	-10.88	BUFFALO	47	-1	36.98	-3.56	WA OLYMPIA	51	1	52.78	1.99
SPRINGFIELD	52	-1	35.18	-0.38	ROCHESTER	47	-1	31.67	-2.29	QUILLAYUTE	50	1	95.02	-6.70
EVANSVILLE	55	-1	40.46	-3.81	SYRACUSE	47	-1	37.62	-2.42	SEATTLE-TACOMA	53	1	41.50	4.44
IN FORT WAYNE	49	-1	44.48	7.93	NC ASHEVILLE	55	0	59.52	12.48	SPOKANE	49	2	14.46	-2.21
INDIANAPOLIS	52	-1	53.49	12.55	CHARLOTTE	59	-2	62.67	19.15	YAKIMA	52	3	7.17	-1.09
SOUTH BEND	49	-1	34.73	-4.97	GREENSBORO	58	0	61.16	18.03	WV BECKLEY	51	-1	51.81	10.19
BURLINGTON	50	-2	34.11	-3.83	HATTERAS	62	-1	74.71	16.96	CHARLESTON	54	-1	61.06	17.02
CEDAR RAPIDS	48	-1	31.24	-2.17	RALEIGH	59	-1	48.95	5.90	ELKINS	49	-1	51.19	5.10
DES MOINES	51	1	33.62	-1.10	WILMINGTON	63	-1	63.78	6.71	HUNTINGTON	55	0	57.17	14.86
DUBUQUE	47	0	28.84	-6.67	ND BISMARCK	43	1	13.78	-3.06	WI EAU CLAIRE	45	1	24.14	-7.98
SIoux CITY	49	1	26.04	0.05	DICKINSON	42	-1	13.19	-3.16	GREEN BAY	44	-1	31.78	2.59
WATERLOO	48	1	27.80	-5.34	FARGO	42	0	18.50	-2.69	LA CROSSE	47	0	22.97	-9.39
KS CONCORDIA	54	0	24.57	-3.86	GRAND FORKS	40	0	17.78	-1.82	MADISON	46	0	31.86	-1.09
DODGE CITY	55	0	23.94	1.59	JAMESTOWN	41	-1	14.43	-4.06	MILWAUKEE	47	-1	22.32	-12.49
GOODLAND	53	2	13.79	-5.97	MINOT	42	0	13.97	-4.47	WAUSAU	43	-1	24.50	-8.86
HILL CITY	54	1	15.03	-7.86	WILLISTON	40	-1	14.28	0.12	WY CASPER	47	2	13.12	0.09
TOPEKA	55	1	29.49	-6.15	OH AKRON-CANTON	49	-1	51.09	12.62	CHEYENNE	48	3	10.93	-4.52
WICHITA	57	1	32.61	2.23	CINCINNATI	53	-1	44.72	2.11	LANDER	46	1	10.45	-2.97
KY JACKSON	55	-1	55.21	5.82	CLEVELAND	50	0	42.53	3.83	SHERIDAN	46	1	12.90	-1.82

Based on 1971-2000 normals.

International Weather and Crop Summary

January 9 - 15, 2005

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

HIGHLIGHTS

EUROPE: Chronic dryness in southern Spain and Portugal continued to limit moisture for winter grains, while unseasonably mild weather provided favorable overwintering conditions for dormant winter grains over the remainder of Europe.

FSU-WESTERN: The fourth consecutive week of unseasonably mild weather continued to provide favorable overwintering conditions for winter grains, but caused crops to lose some winter hardiness.

AUSTRALIA: Mostly dry weather prevailed across eastern Australia, but moisture supplies remained favorable for summer crop development.

MIDDLE EAST: Conditions were generally favorable for overwintering wheat in Turkey and Iran, but many locations currently lack a protective layer of snow.

NORTHWESTERN AFRICA: Dry weather continued throughout the region, with moisture supplies remaining limited for winter grains in southern Morocco.

SOUTH AFRICA: Beneficial rain covered the corn belt.

EASTERN ASIA: Unseasonably cold weather returned to winter wheat areas on the North China Plain but likely had minimal impact on well-hardened crops.

SOUTHEAST ASIA: Seasonable showers continued in Indonesia, maintaining moisture supplies for crops.

BRAZIL: Showers boosted moisture reserves in corn and soybean areas of Rio Grande do Sul, but summer warmth maintained high crop moisture demands.

ARGENTINA: Rain brought some relief to reproductive summer crops in central Argentina, following last week's heat wave.



EUROPE

Light rain and snow (2-8 mm, with locally higher amounts) across northern Europe maintained moisture supplies for dormant winter grains and oilseeds. In contrast, dry weather prevailed across much of the Iberian Peninsula, southern France, Italy, and southeastern Europe, providing no additional water for winter crops. The dryness has been persistent in southern Spain and Portugal, limiting soil moisture for vegetative winter grains and reducing irrigation supplies for later in the growing season. Temperatures in this region averaged about 1 to 2 degrees C below normal, reducing evaporative losses from slowly developing crops. Elsewhere in Europe, temperatures averaged about 2 to 6 degrees C above normal, providing favorable overwintering conditions for dormant winter crops. Snow cover remained patchy across the continent, leaving winter grains and oilseeds vulnerable to potential weather extremes.

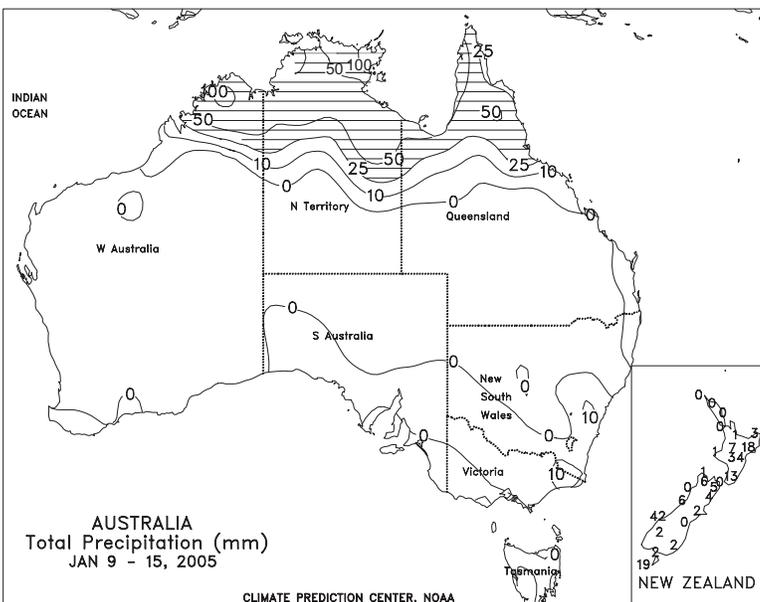
FSU-WESTERN

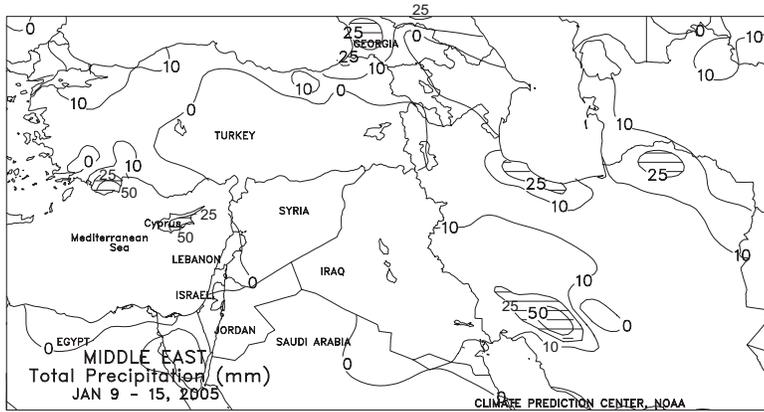
The fourth consecutive week of unusually mild weather maintained favorable overwintering conditions for winter grains in Russia, Ukraine, and Belarus. Weekly temperatures averaged 5 to 10 degrees C above normal across most of the region. Maximum temperatures rose above freezing in most areas, with the warmest weather (extreme maximum temperatures ranged from 9 to 12 degrees C) observed in Belarus, most of Ukraine, and the southern half of the Southern Region in Russia. Although temperatures remained low enough to keep winter grains dormant throughout the region, the persistent unusually mild weather likely caused crops to lose some winter hardiness. Furthermore, major winter wheat areas in Ukraine and Southern Region in Russia remained snow-free, leaving crops vulnerable to potential extreme cold. Although cooler weather overspread the region at week's end, temperatures still remained above normal. Light precipitation (2-10 mm or more) was observed over the region, falling mainly as rain in Belarus, Ukraine, and the Southern Region in Russia and snow across extreme northern Russia.



AUSTRALIA

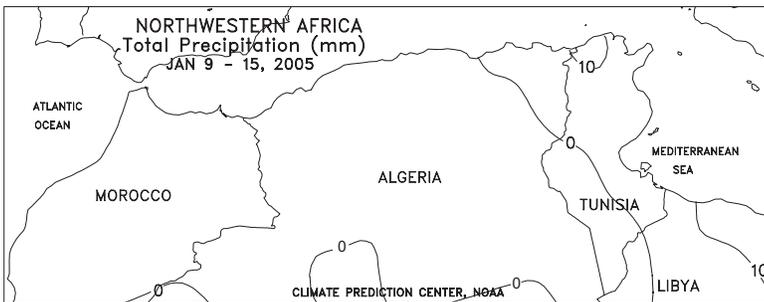
Dry weather prevailed across Queensland and northern New South Wales. Nevertheless, recent rainfall ensured that moisture supplies remained adequate to abundant for cotton and sorghum, favoring development of these summer crops. Furthermore, temperatures averaged about 1 to 2 degrees C below normal, reducing evaporative losses. Elsewhere in Australia, mostly dry weather (less than 5 mm) spurred final winter grain harvesting.





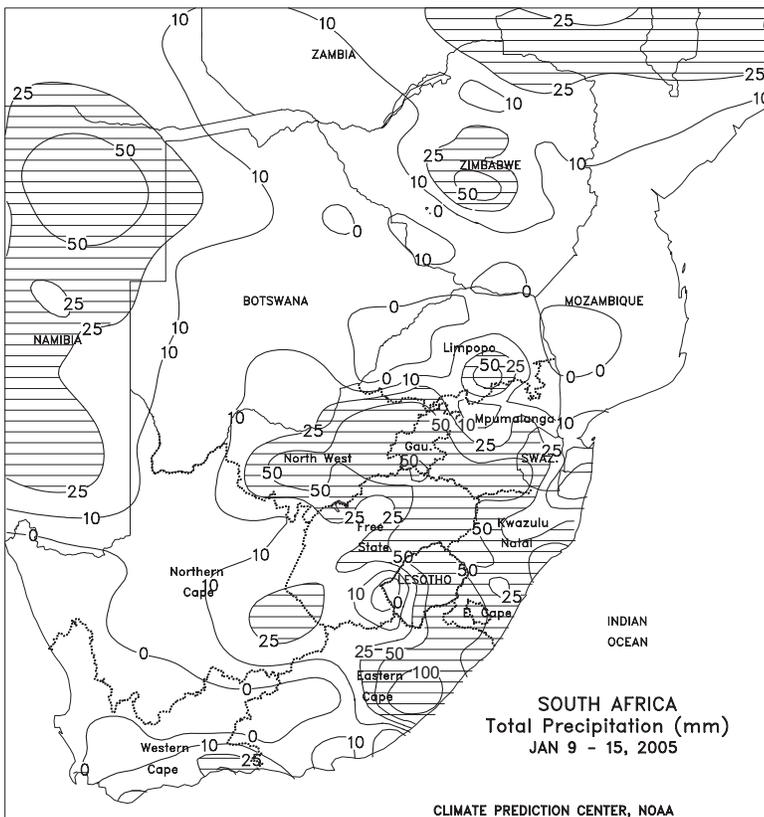
MIDDLE EAST

Across Turkey, mild weather (temperatures averaging 1-4 degrees C above normal, with lows generally ranging from -10 to -5 degrees C) favored overwintering wheat but kept most major production areas of the Anatolian Plateau void of protective snow cover. A mixture of rain and snow (3-10 mm, locally heavier in some coastal locations) fell across western Turkey late in the week but resulted in little new snow cover. Farther east, cool, snowy weather (temperatures averaging 1-3 degrees C below normal) dominated much of western Iran and, based on the distribution of precipitation reports, neighboring locations of Iraq. Precipitation was lightest (less than 5 mm) in previously snow-free areas of northwestern Iran, but the light snow prior to the onset of very cold weather (lows falling below -15 degrees C in some locations) offered timely protection from the bitter cold. However, a late-week warmup melted snow cover in northwestern Iran, leaving winter grains vulnerable to potential outbreaks of cold air. Mostly dry, seasonably cool weather prevailed elsewhere in the region, including northern Iraq (as indicated by neighboring reports).



NORTHWESTERN AFRICA

Dry weather prevailed throughout winter grain areas in Morocco, Algeria, and Tunisia. Although the dryness in Algeria and Tunisia has lasted for 2 weeks, soil moisture was adequate to meet crop water requirements. In Morocco, however, the dryness has persisted since December and rain is needed soon to prevent a decline in crop conditions. Temperatures averaged near to below normal across the region, reducing evaporative losses.



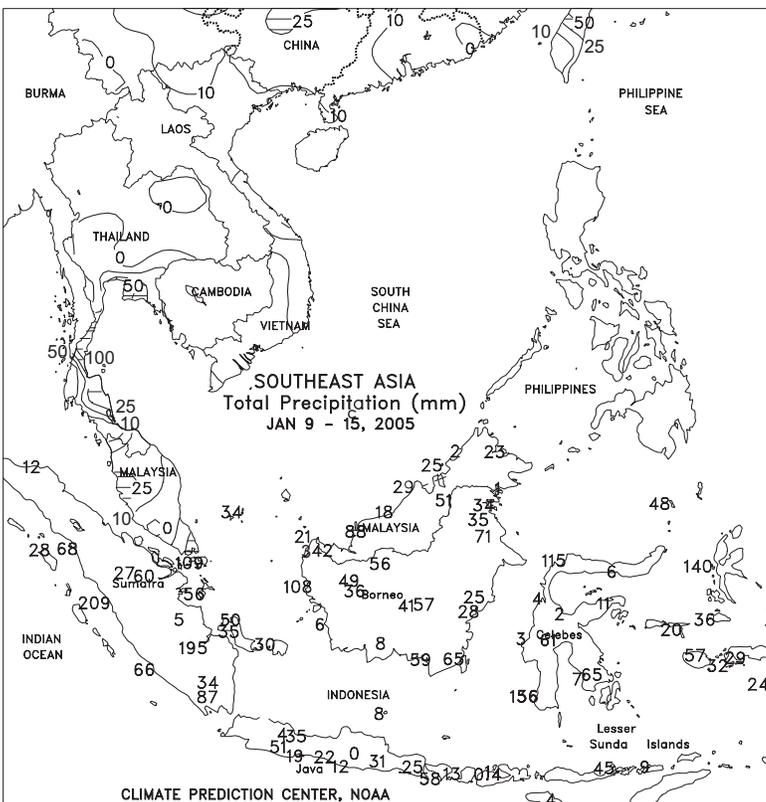
SOUTH AFRICA

Much-needed, timely rain (25-50 mm or more) overspread the corn belt, benefiting summer crops in or nearing reproduction. The rainfall was especially welcomed in western sections of the corn belt (western growing areas of North West and Free State), which predominantly grow white corn, following another week of unseasonable warmth and dryness. In addition, near- to below-normal temperatures lowered the risk of heat stress while reducing evapotranspiration rates. Beneficial showers (10-50 mm or more) also covered most major sugarcane areas of KwaZulu-Natal and southeastern Mpumalanga, and locally heavy showers (greater than 100 mm) were recorded in eastern growing areas of Eastern Cape. Scattered, mostly light showers (less than 25 mm) elsewhere in the Cape Provinces locally reduced irrigation requirements.



EASTERN ASIA

Unseasonably cold weather prevailed throughout most winter wheat areas on the North China Plain. In some areas, minimum temperatures fell to -10 degrees C, with weekly average temperatures remaining below freezing. Snow cover was nonexistent in most wheat areas, leaving crops exposed to the cold. However, winter wheat was well hardened prior to the cold snap and withstood the low temperatures. Although the freeze extended into winter rapeseed areas located south of the Yangtze Valley, temperatures were not as low as those recorded farther north. Rainfall (10-50 mm) was unseasonably heavy south of the Yangtze Valley, easing drought conditions that developed over the summer and autumn.



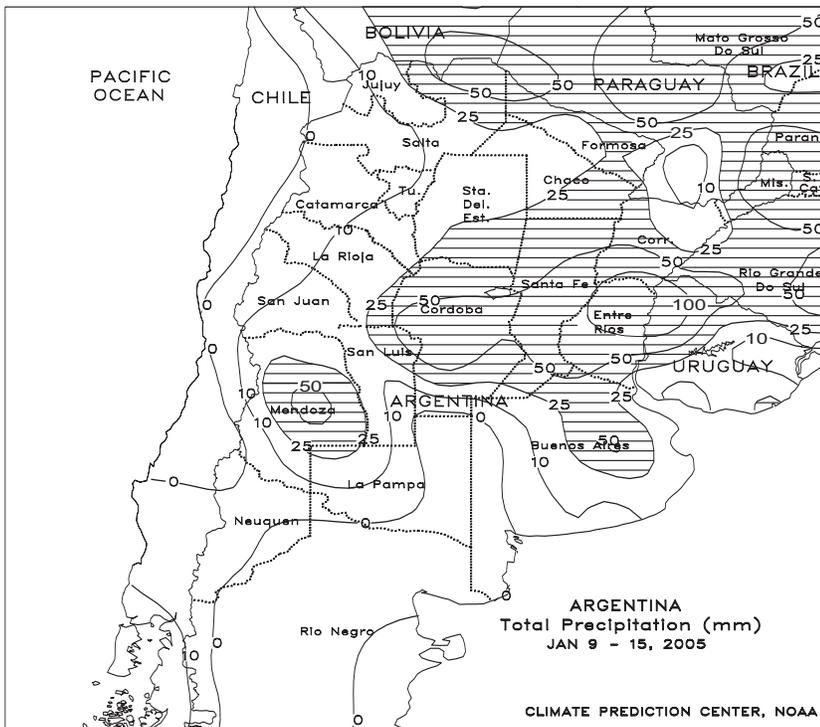
SOUTHEAST ASIA

In Indonesia, showers (10-50 mm) remained widespread in Java although not as heavy as last week's rainfall. Moisture supplies continued to be good for rice entering the heading stage of development. Showers (25-200 mm) were heavier in Sumatra, favoring oil palm and other plantation crops. In the Philippines, dry weather prevailed in the northeast, while showers remained near-normal in the east and southeast.



BRAZIL

Beneficial rain (25-50 mm or more, locally exceeding 100 mm) covered most major crop areas, including previously dry soybean areas of Rio Grande do Sul and western Bahia. However, near- to above-normal temperatures maintained unseasonably high crop moisture demands, and temperatures briefly reached the upper 30s degrees C in western growing areas of Rio Grande do Sul and outlying production areas of the northeastern interior. Although harvesting has already commenced in the earliest planted fields of Mato Grosso, crop development typically ranges from vegetative to reproductive.



ARGENTINA

Moderate to heavy rain (25-100 mm or more) covered most major summer crop areas of central and northeastern Argentina, maintaining generally favorable moisture levels for vegetative to reproductive summer grains, oilseeds, and cotton. The heaviest rainfall (greater than 100 mm) was concentrated in previously warm, dry locations of Entre Rios, helping crops recover from last week's brief, albeit stressful, heat wave. In contrast, drier weather supported fieldwork in winter wheat areas of eastern La Pampa and southwestern Buenos Aires. Reports indicated that winter wheat was 99 percent harvested as of January 14. Temperatures averaged near to above normal, with highs reaching the upper 30s degrees C at midweek, but late-week rainfall brought temperatures down to more seasonable levels.

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