

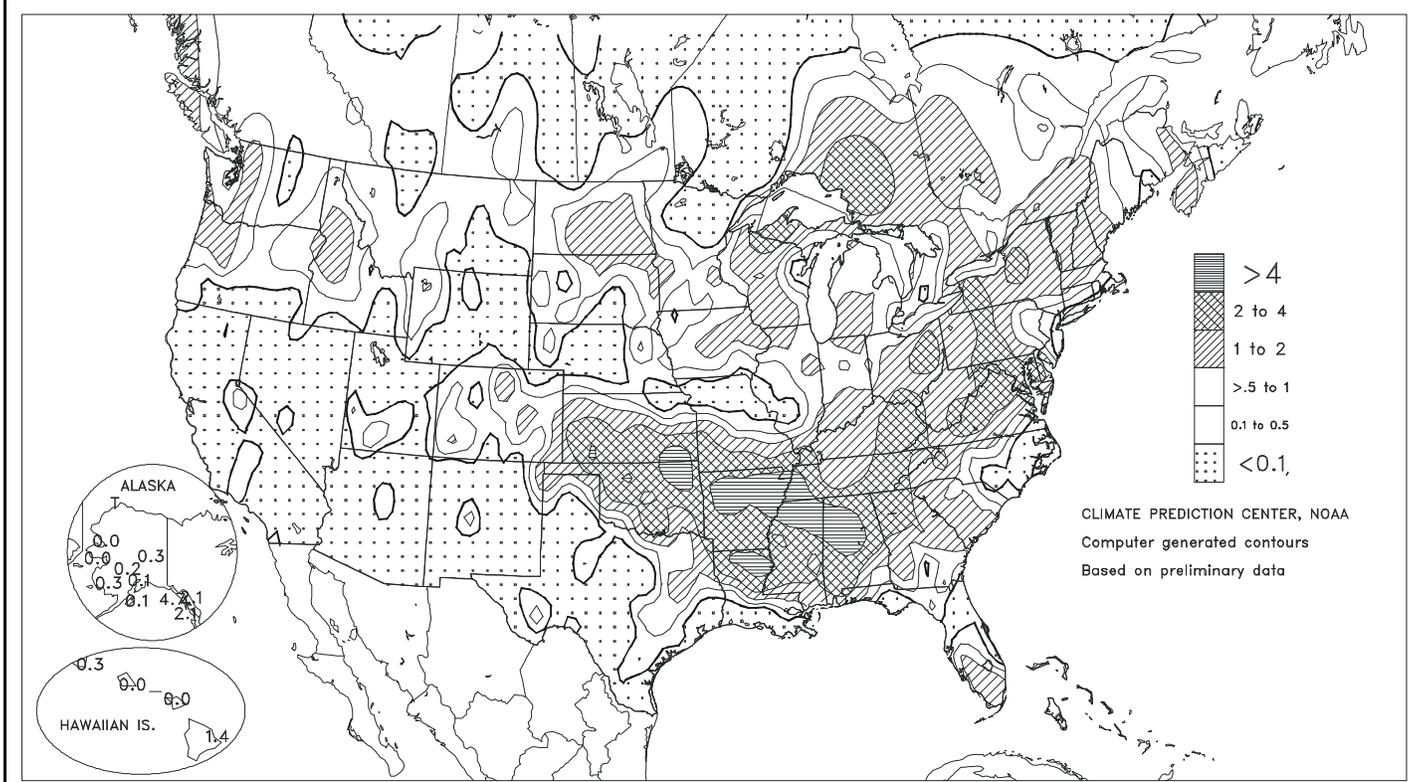
# WEEKLY WEATHER AND CROP BULLETIN

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)

MAY 11 - 17, 2003



## HIGHLIGHTS

May 11 - 17, 2003

Highlights provided by USDA/WAOB

**T**he demarcation between wet and dry conditions remained extremely sharp across the **South Central States**, stretching southeastward from the **southern Plains to the central Gulf Coast**. South of the line, hot, breezy, mostly dry weather hastened winter wheat maturation and maintained stress on emerging summer crops across the **southern Plains and western Gulf Coast region**. The dry region was centered on **Texas**, where weekly temperatures averaged as much as 8°F above normal and May 18 temperatures soared to 100°F or higher as far north as the northern panhandle. Just to the north and east, however, excessive wetness further delayed spring fieldwork and

(Continued on page 9)

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# Water Supply Forecast for the Western United States

## Highlights

On May 1, 2003, Western water-supply volume forecasts continued to show spring and summer streamflows less than 50 percent of average in parts of the Intermountain West. However, streamflow forecasts improved in the Columbia Basin and the Rockies of Colorado, Wyoming, and Montana due to cool, wet weather during April. In spite of a cool, wet spring in much of the West, previously dry (autumn and winter) weather kept streamflow forecasts at 50 to 90 percent of average in many Western basins.

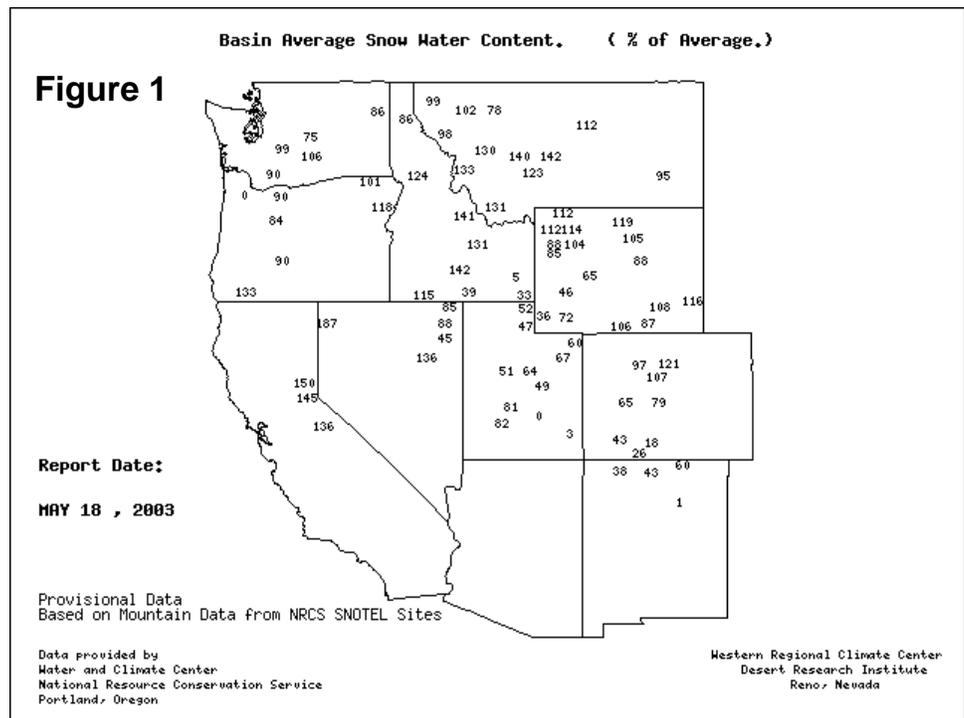
This year's water-supply forecasts are on the heels of last year's record-to near-record-low runoff in the Southwest, Intermountain West, and southern Rockies. In many of these areas, this year's snowpack is resting on very dry soils, which typically results in reduced snowmelt runoff.

## Snowpack and Precipitation

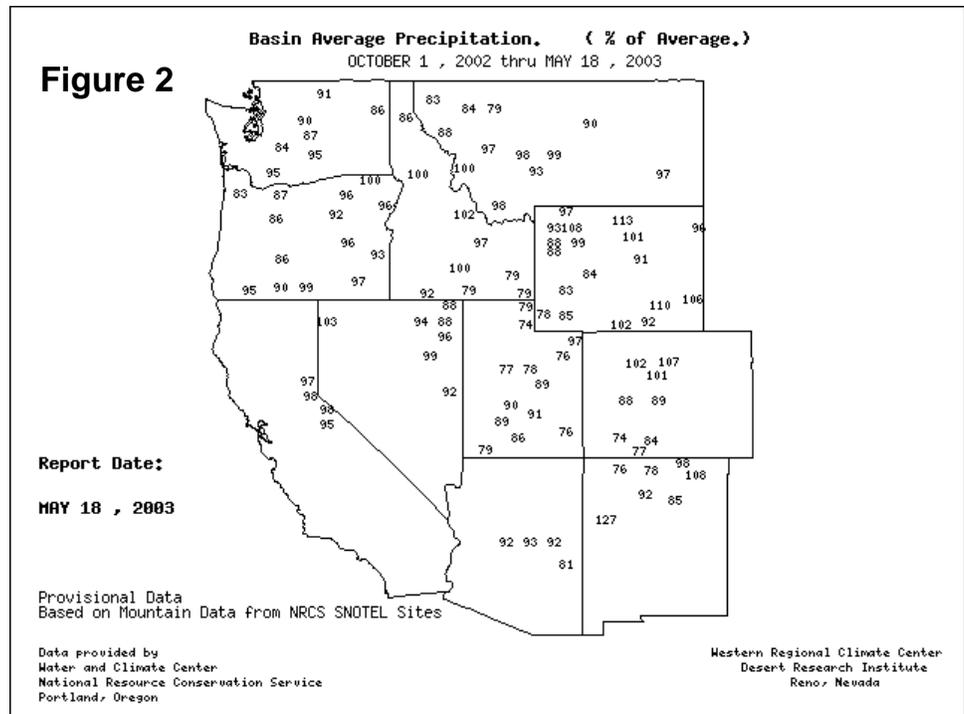
On May 18, 2003, the snowpack map (fig. 1) reflected below-average snowpacks in the Intermountain West and eastern Oregon, in part due to a warmer-than-average winter. Significantly below-average snowpacks (less than 50 percent of average) were reported in parts of northern Nevada, Utah, and adjacent areas. However, snowpacks improved during April on the eastern slopes of the Rockies in Colorado and Wyoming, and in the northern Rockies of Idaho and Montana. Several basin snowpacks in Wyoming, Colorado, and Idaho edged higher to 90 to 130 percent of the average. Southwestern snowpacks were largely melted out for the year, but cool spring weather delayed snowmelt in higher elevations elsewhere in the West.

Utah experienced a significant wind event and warm weather from April 10-14. Sustained winds up to 40 mph and temperatures up to 10°F above normal resulted in a 50-percent loss of mid-elevation snowpack, in part by sublimation

## SNOTEL – River Basin Snow Water Content



## SNOTEL – River Basin Precipitation



(transition of a solid directly to a vapor without passing through an intermediate liquid phase). Many stations lost 4 to 6 inches of snow water equivalent, of which 1 to 2 inches melted into dry soils with very little measured increase in streamflow.

Season-to-date precipitation (October 1, 2002 - May 18, 2003) generally improved during April along the eastern slopes of the Rocky Mountains and in the northern Rockies. States benefiting included eastern Colorado, eastern Wyoming, central and southwestern Montana, central and northern Idaho, eastern Washington, northeastern and southwestern Oregon, and California. Many basins in these areas reported seasonal totals at least 90 percent of average (fig. 2). In contrast, most of the Intermountain West, including western Utah, continued to report season-to-date totals ranging from 70 to 90 percent of average.

### Spring and Summer Streamflow Forecasts

On May 1, 2003, Western water-supply forecasts continued to show significantly below-average streamflow for the Intermountain West (fig. 3). Parts of southern and central Utah, northern Nevada, southern Idaho, southeastern Oregon, and central Wyoming are forecast to experience less than 50 percent of average spring and summer streamflows. Due to a cool, wet April, streamflow forecasts improved in the Columbia Basin and the Rockies of Colorado, Wyoming, and Montana. However, because of a dry autumn and winter, spring and summer water-supply forecasts for many Western basins still range between 50 and 90 percent of average. In several Southwestern and Rocky Mountain basins, poor water-supply prospects follow last year's extremely low runoff.

### Reservoir Storage

On May 1, 2003, Arizona, Colorado, Nevada, New Mexico, Oregon, Utah, and Wyoming reported below-average reservoir storage for this time of year (fig. 4). Below-normal storage in the Rockies and Southwest reflected carryover dryness from last year's drought. Reservoir storage was near seasonal averages in California, Idaho, Montana, and 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>

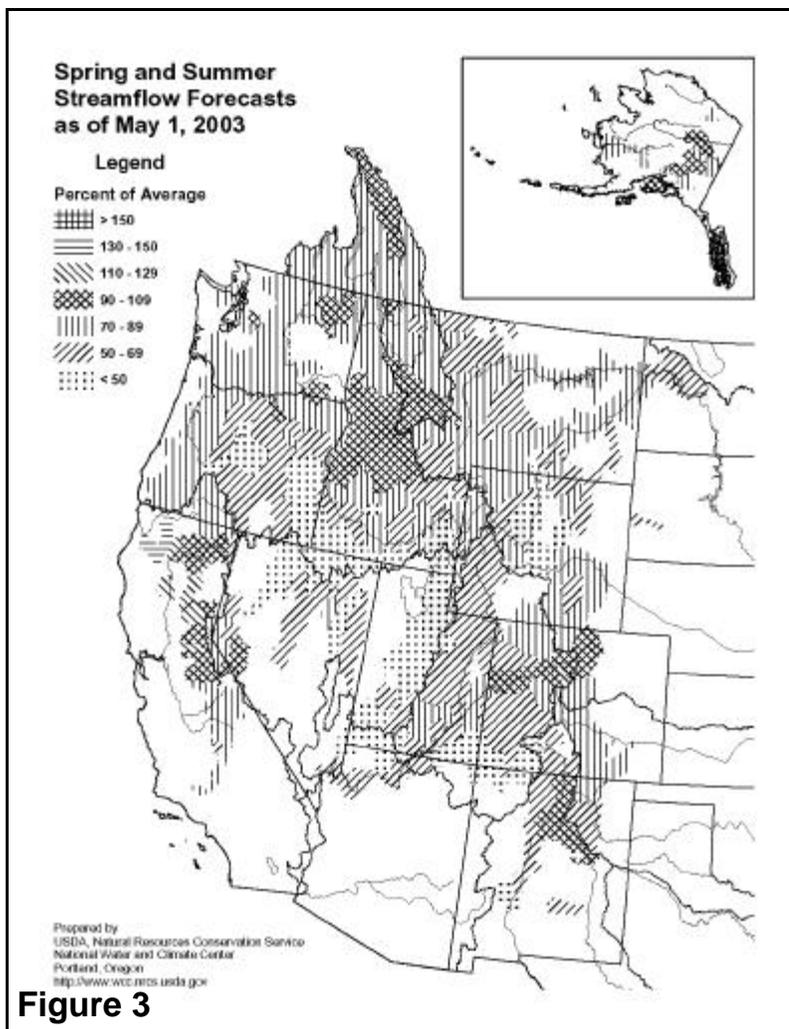
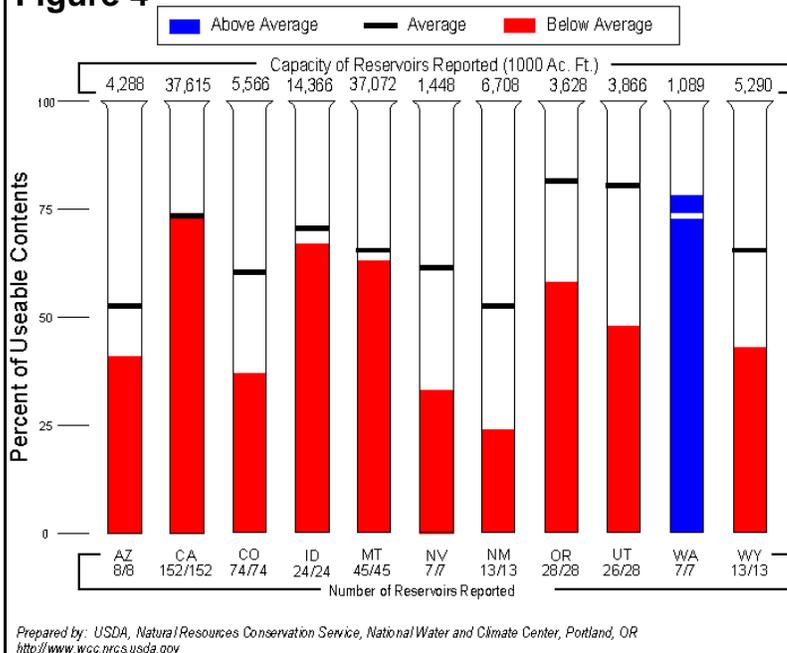


Figure 3

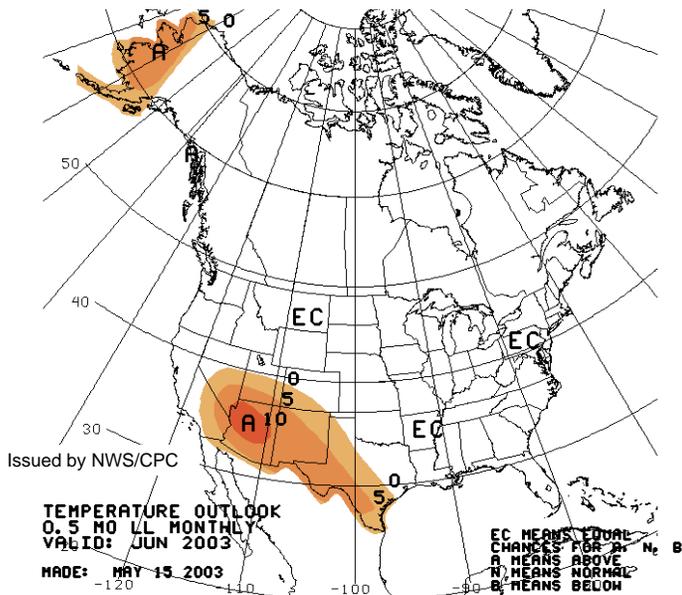
### Reservoir Storage as of May 1, 2003

Figure 4



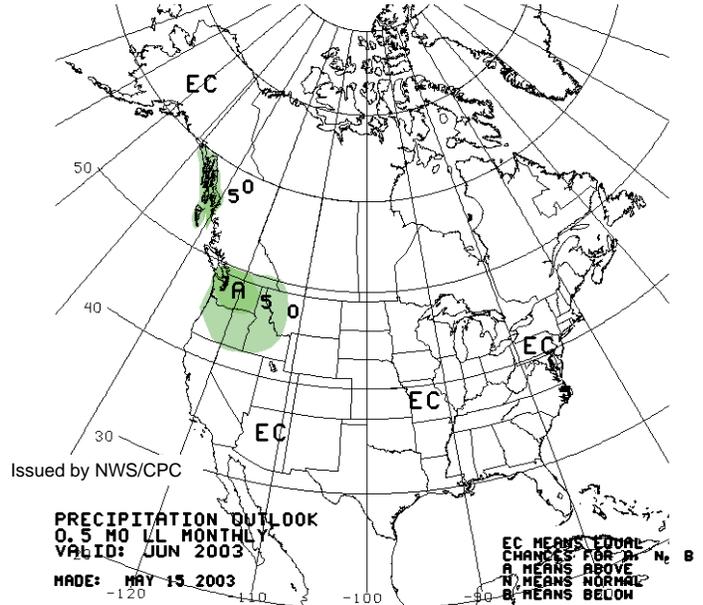
# Monthly Temperature & Precipitation Outlook

### Temperature Outlook: June 2003



Above-normal temperatures (A) are forecast across portions of the southern Plains and Southwest. In addition, abnormal warmth is expected to persist in western Alaska. For the rest of the Nation, there is an equal chance (EC) for above- or below-normal temperatures.

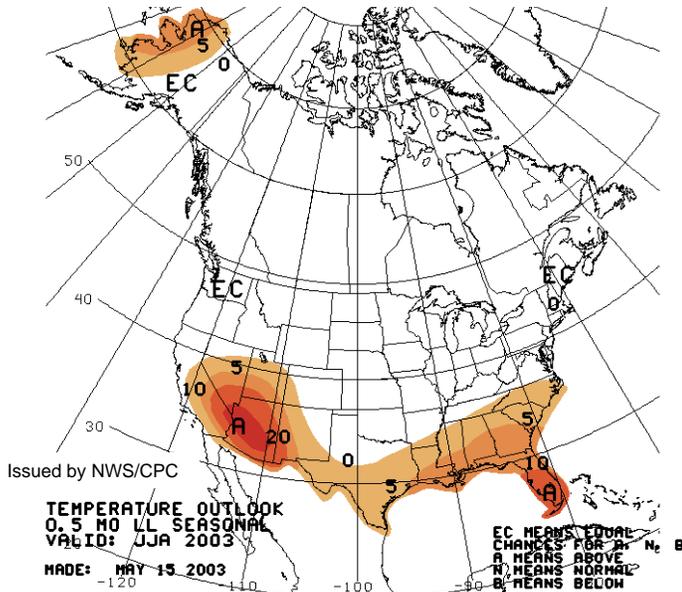
### Precipitation Outlook: June 2003



Above-normal precipitation (A) is expected in the Pacific Northwest. Elsewhere, there is an equal chance (EC) for above- or below-normal precipitation.

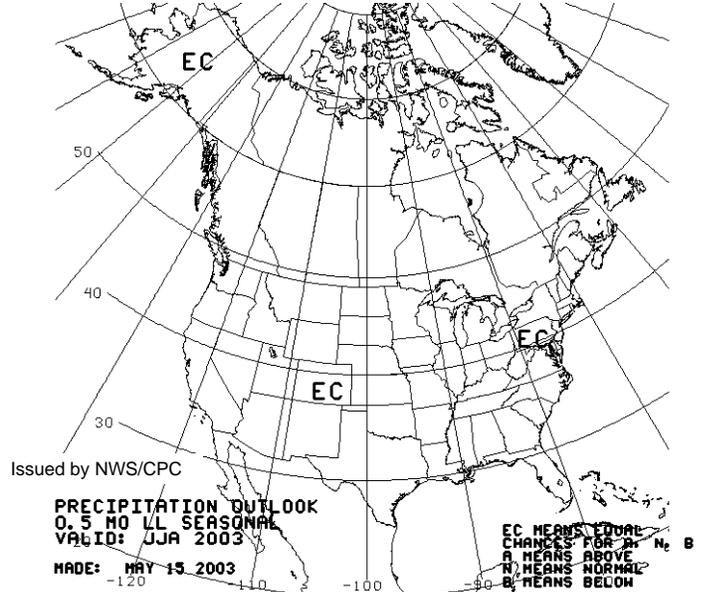
# Seasonal Temperature & Precipitation Outlook

### Temperature Outlook: June - August 2003



Above-normal (A) temperatures are forecast across the Southeast, Gulf Coast, Rio Grande Valley, and the Southwest. For the rest of the Nation, there is an equal chance (EC) for above- or below-normal temperatures.

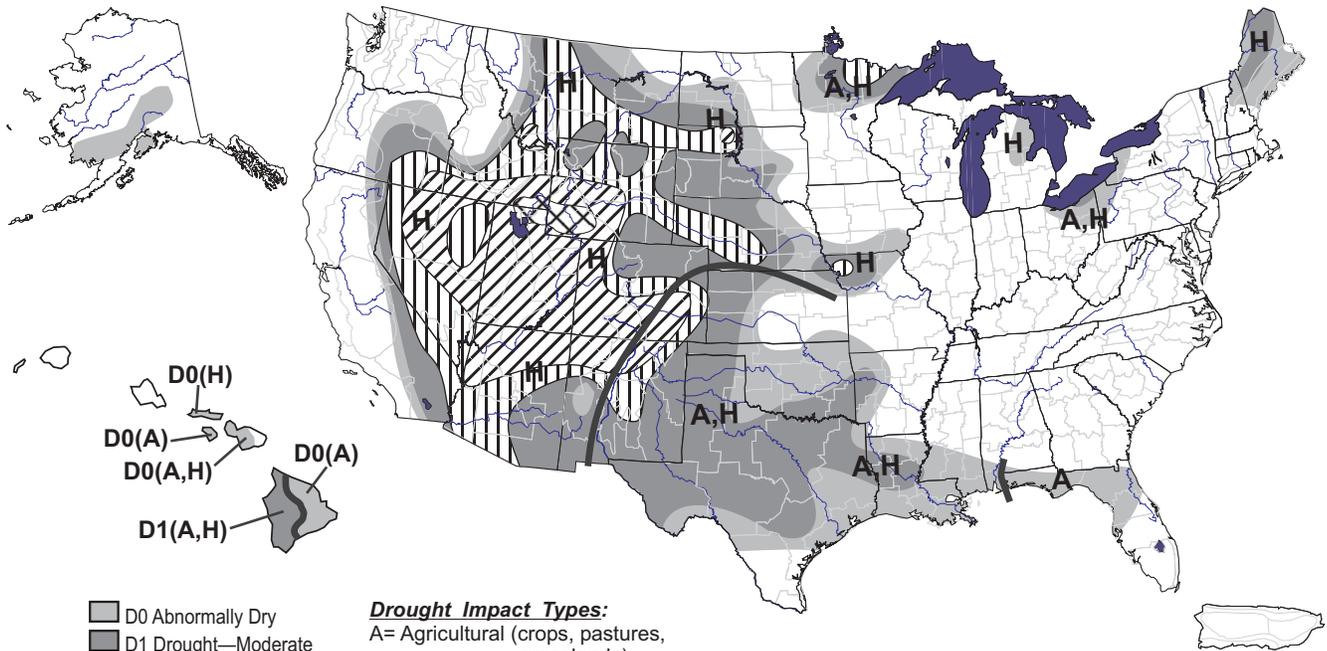
### Precipitation Outlook: June - August 2003



Forecast indicators favor neither above- nor below-normal precipitation. Therefore, the outlook calls for an equal chance (EC) for above- or below-normal precipitation.

# U.S. Drought Monitor

May 13, 2003  
Valid 8 a.m. EDT



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

- Drought Impact Types:**  
 A= Agricultural (crops, pastures, grasslands)  
 H= Hydrological (water)  
 Delineates dominant impacts  
 (No type = both impacts)

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



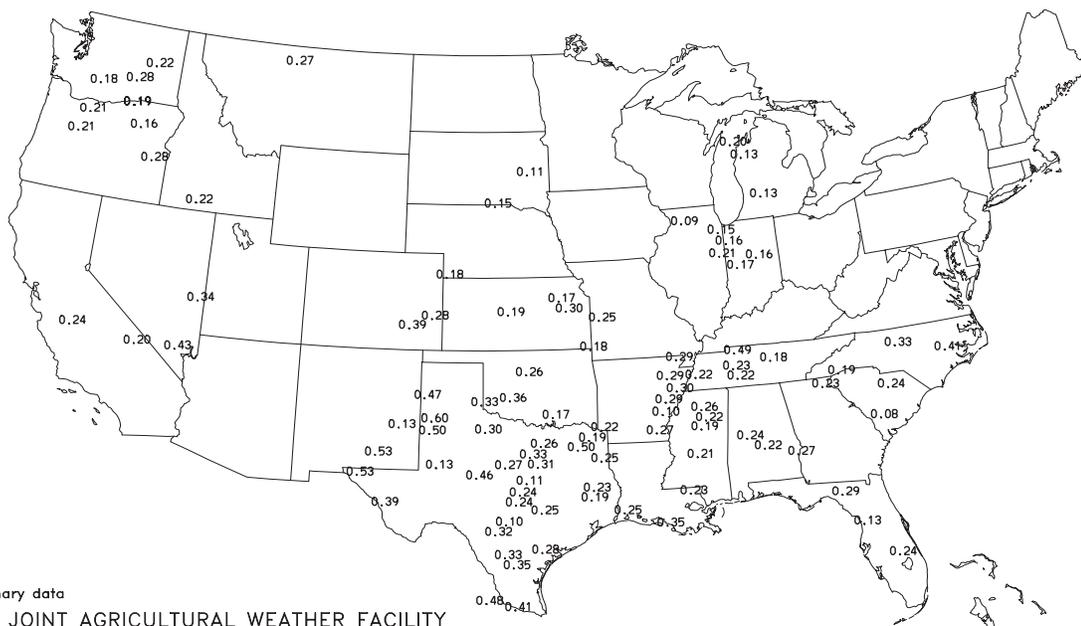
**Released Thursday, May 15, 2003**

**Author: Rich Tinker, NOAA's Climate Prediction Center**

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

## Average Pan Evaporation (Inches)

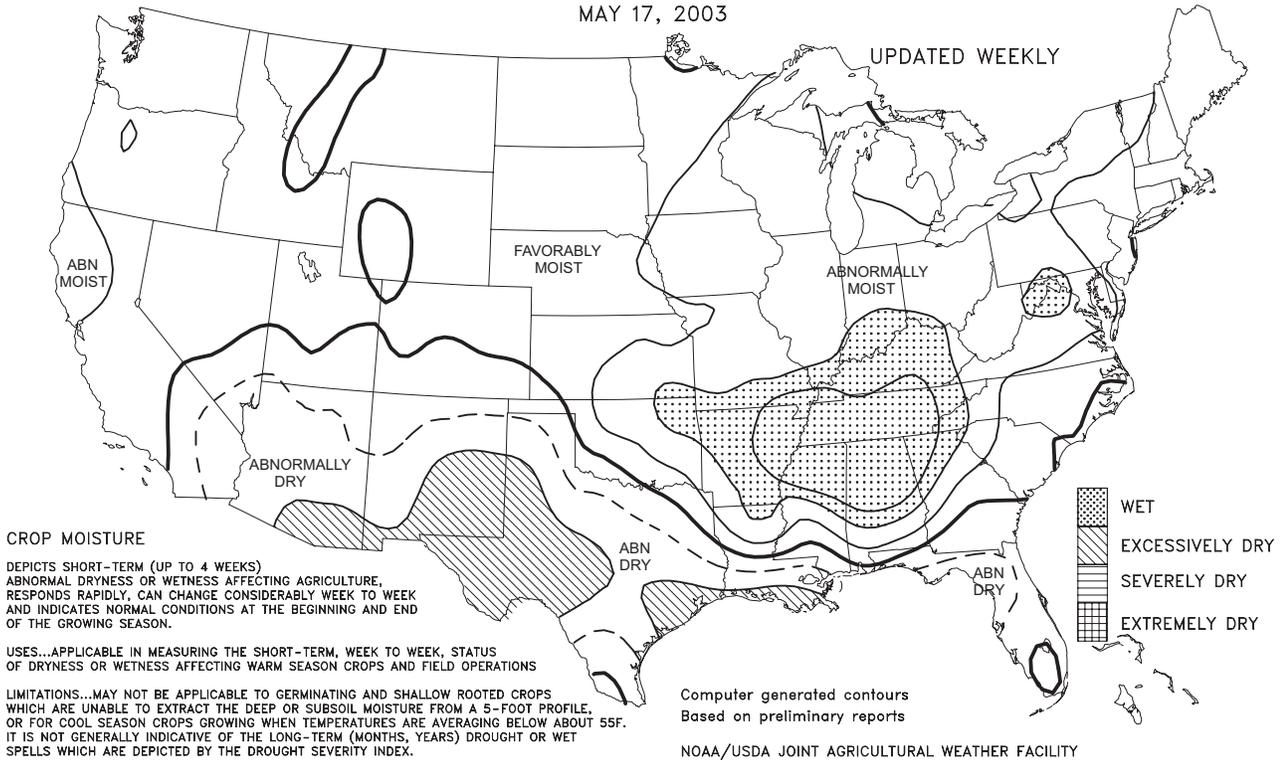
MAY 11 - 17, 2003



Based on preliminary data  
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Crop Moisture  
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE  
MAY 17, 2003

UPDATED WEEKLY



CROP MOISTURE

DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.

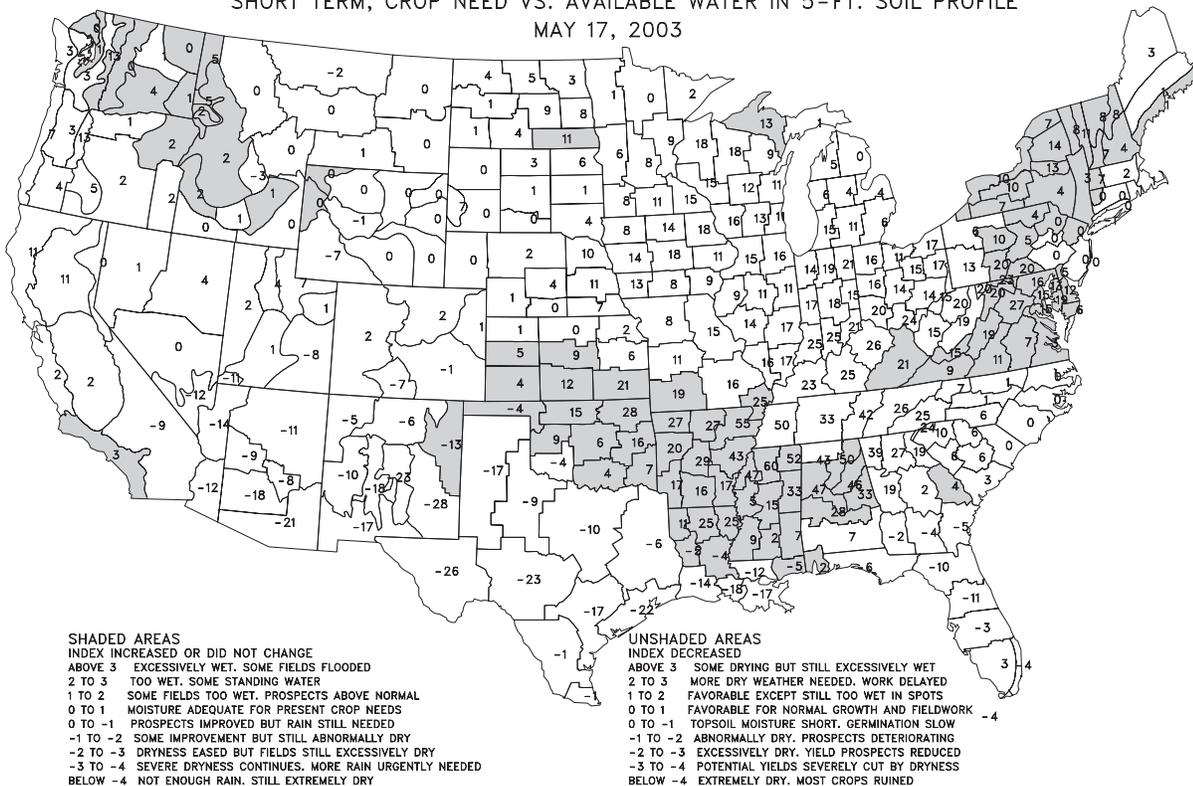
USES...APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F. IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.

Computer generated contours  
Based on preliminary reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Crop Moisture Index  
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE  
MAY 17, 2003



**SHADED AREAS**  
INDEX INCREASED OR DID NOT CHANGE  
ABOVE 3 EXCESSIVELY WET. SOME FIELDS FLOODED  
2 TO 3 TOO WET. SOME STANDING WATER  
1 TO 2 SOME FIELDS TOO WET. PROSPECTS ABOVE NORMAL  
0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS  
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED  
-1 TO -2 SOME IMPROVEMENT BUT STILL ABNORMALLY DRY  
-2 TO -3 DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY  
-3 TO -4 SEVERE DRYNESS CONTINUES. MORE RAIN URGENTLY NEEDED  
BELOW -4 NOT ENOUGH RAIN. STILL EXTREMELY DRY

**UNSHADED AREAS**  
INDEX DECREASED  
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET  
2 TO 3 MORE DRY WEATHER NEEDED. WORK DELAYED  
1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS  
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK  
0 TO -1 TOPSOIL MOISTURE SHORT. GERMINATION SLOW  
-1 TO -2 ABNORMALLY DRY. PROSPECTS DETERIORATING  
-2 TO -3 EXCESSIVELY DRY. YIELD PROSPECTS REDUCED  
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DRYNESS  
BELOW -4 EXTREMELY DRY. MOST CROPS RUINED

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

BASED ON PRELIMINARY DATA

# Weather Data for Mississippi and the Missouri Bootheel

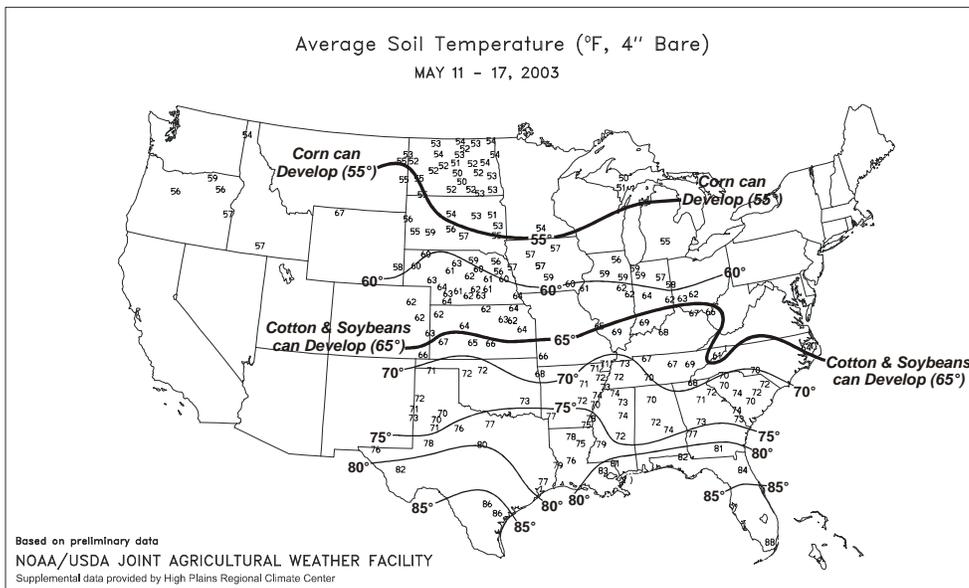
## Weather Data for the Week Ending May 17, 2003

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							4-INCH SOIL TEMP. °F		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	PRECIP	
																		.01 INCH OR MORE	.50 INCH OR MORE
MS BATESVILLE <sup>x</sup>	80	61	88	51	71	2	8.60	7.34	5.90	20.08	143	29.91	129	-	-	0	0	4	4
MS BELZONI <sup>x</sup>	86	66	90	58	76	5	1.68	0.21	1.08	8.01	51	19.55	75	-	-	2	0	3	2
MS CLARKSDALE <sup>x</sup>	81	61	88	54	71	0	3.51	2.39	2.42	12.13	91	20.88	90	-	-	0	0	4	2
MS CLEVELAND <sup>x</sup>	81	62	89	54	72	1	1.05	-0.21	0.63	9.26	62	18.51	76	-	-	0	0	4	1
MS GREENVILLE <sup>x</sup>	81	63	89	53	72	0	1.58	0.39	1.02	8.38	59	-	-	-	-	0	0	4	1
MS GREENWOOD <sup>x</sup>	80	61	87	51	70	-2	1.61	0.38	1.16	9.83	68	18.65	78	-	-	0	0	6	1
MS INDIANOLA 1S	81	63	90	55	72	-	1.57	-	0.91	7.38	-	14.82	-	79	73	0	0	4	2
MS INVERNESS 5E	81	63	88	55	72	-	1.50	-	0.76	5.88	-	14.53	-	81	72	0	0	5	2
MS LYON	81	62	90	55	71	-	3.24	-	1.50	14.64	-	20.73	-	80	70	0	0	6	2
MS MACON	79	62	86	52	70	-	3.45	-	1.30	14.59	-	24.94	-	77	69	0	0	3	3
MS MOORHEAD <sup>x</sup>	81	64	88	56	72	1	1.52	0.31	0.79	8.02	55	18.87	77	-	-	0	0	4	2
MS ONWARD	80	62	87	54	71	-	2.34	-	1.28	-	-	-	-	78	72	0	0	4	2
MS PERTSHIRE	81	61	90	56	71	-	5.75	-	4.22	17.16	-	23.82	-	81	69	1	0	5	3
MS ROLLING FORK <sup>x</sup>	81	62	92	54	71	0	1.67	0.48	0.80	9.29	63	19.31	77	-	-	1	0	4	2
MS SCOTT	80	62	88	55	71	-	1.37	-	0.64	-	-	-	-	83	72	0	0	5	2
MS SIDON	81	63	89	55	72	-	1.30	-	0.89	7.99	-	15.76	-	84	71	0	0	3	1
MS STARKVILLE	78	60	87	51	69	0	4.08	2.96	2.28	13.31	92	24.70	99	80	70	0	0	4	3
MS TUNICA <sup>x</sup>	81	62	90	53	71	1	4.81	3.48	3.05	14.06	97	-	-	-	-	1	0	4	3
MS TUNICA 1W	80	60	86	53	70	-	6.30	-	2.03	12.46	-	-	-	74	69	0	0	6	4
MS VANCE	79	62	88	57	71	-	4.10	-	2.82	15.61	-	21.51	-	76	74	0	0	5	2
MS VERONA	78	61	85	52	69	-	3.71	-	1.64	15.88	-	24.20	-	79	67	0	0	4	3
MS VICKSBURG <sup>x</sup>	82	65	89	55	73	1	2.00	0.74	1.55	14.66	97	25.84	99	-	-	0	0	3	1
MS YAZOO CITY <sup>x</sup>	81	62	89	51	72	0	1.42	0.12	1.30	9.81	61	18.81	69	-	-	0	0	3	1
MS STONEVILLE <sup>x</sup>	83	63	92	55	73	3	2.06	0.94	1.04	8.52	59	17.57	70	84	72	1	0	4	2
MO DELTA	74	57	83	51	65	-2	1.47	0.12	0.89	10.96	82	14.59	70	74	62	0	0	4	1
MO STEELE	76	60	87	55	68	0	3.01	1.49	2.28	18.07	135	25.43	121	73	65	0	0	2	2
MO GLENNONVILLE	76	58	86	50	66	-2	1.61	0.28	1.37	9.03	73	14.24	77	70	64	0	0	3	1
MO PORTAGEVILLE LF	77	60	87	53	68	1	2.23	0.63	1.73	12.37	92	19.12	93	79	65	0	0	2	2
MO CLARKTON	77	58	87	52	67	-1	2.38	1.05	1.99	11.88	96	17.82	96	74	64	0	0	3	1
MO CARDWELL	76	60	86	54	68	0	2.96	1.39	2.36	17.35	125	24.04	114	75	66	0	0	4	2
MO CHARLESTON	75	58	83	50	66	0	2.19	0.88	1.26	10.90	84	16.73	84	74	65	0	0	3	2
MO PORTAGEVILLE DC	76	60	86	52	68	1	2.21	0.61	1.73	11.04	82	17.38	84	77	65	0	0	3	1

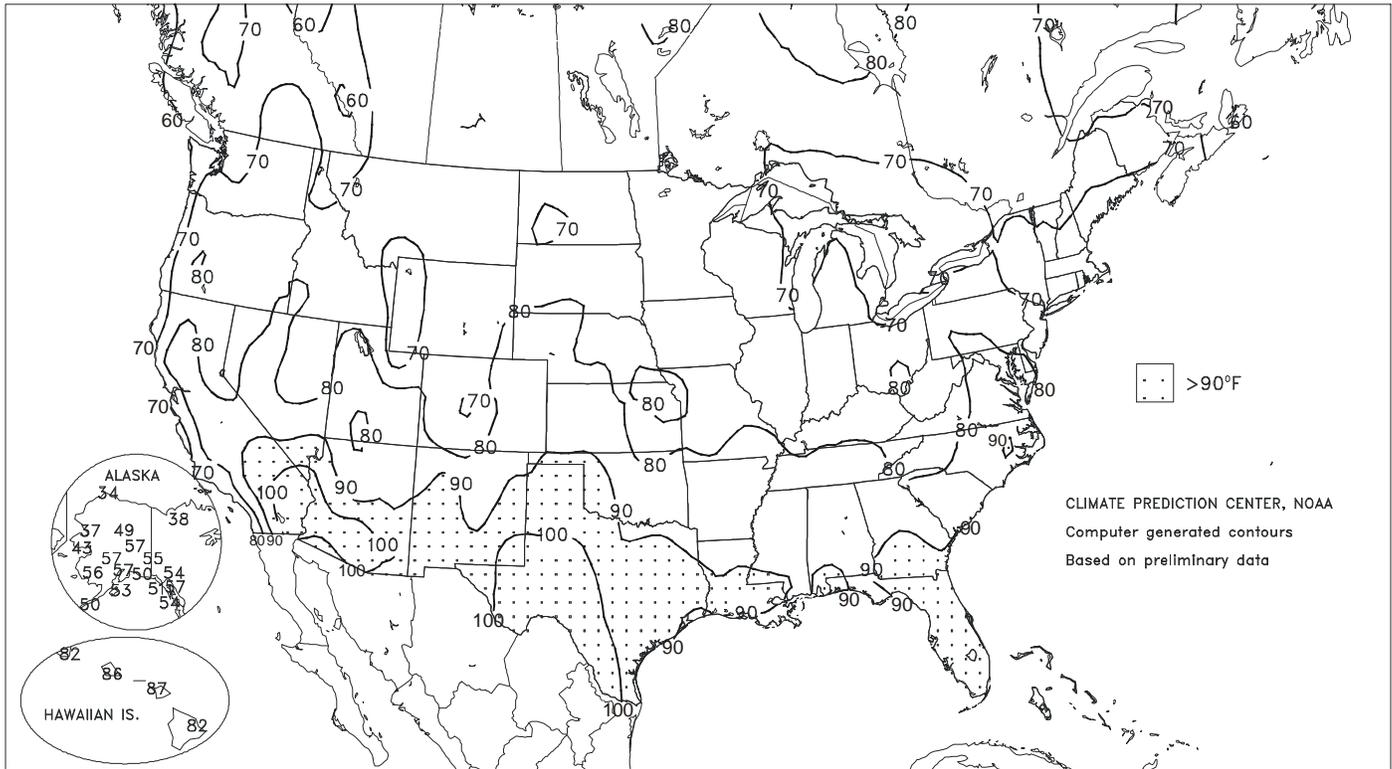
Compiled by USDA/OCE/WAOB's Stoneville Field Office. <sup>x</sup> Based on 1971-2000 normals. - Sufficient data not available.

**Weather and Crop Summary:** Heavy precipitation was the week's highlight. Substantial rain fell in most areas, including some locations in the southern Delta that received precipitation for the first time since planting. Much of the northern Delta experienced flooding due to rainfall locally in excess of 6 inches. There were a few reports of crop damage due to flooding, high winds, and hail. Wet conditions slowed planting and brought crop progress in line with the average. Most areas needed a few dry days before planting can resume to prevent rutting the fields with heavy machinery.



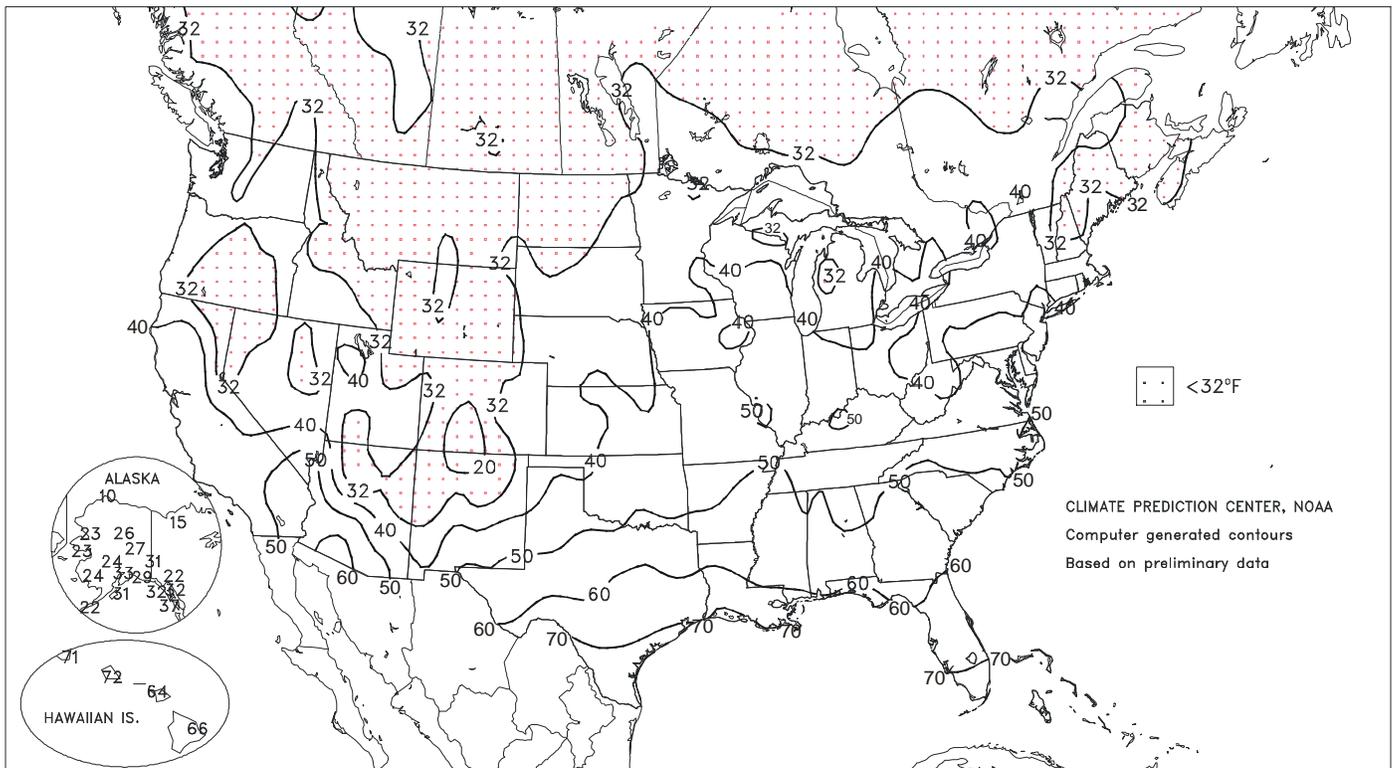
Extreme Maximum Temperature (°F)

MAY 11 - 17, 2003



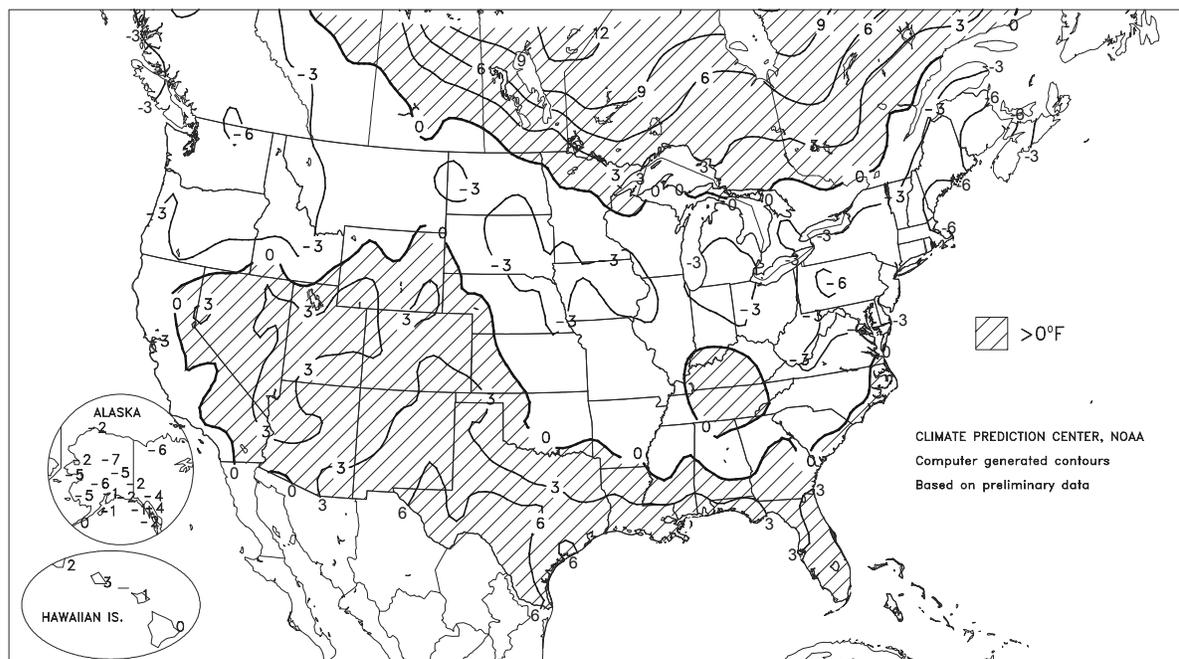
Extreme Minimum Temperature (°F)

MAY 11 - 17, 2003



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

MAY 11 - 17, 2003



(Continued from front cover)

caused additional lowland flooding in portions of the **interior South**, including the **Tennessee Valley**. Meanwhile across the **northern and central Plains** and the **Midwest**, cool weather and occasional showers again slowed fieldwork, although planting advanced more quickly than the previous week in most areas. Winter grains and previously planted summer crops continued to generally benefit from the recent eradication of the **Midwestern** drought and improving soil moisture levels on the **High Plains**. Farther west, warm, dry weather overspread **California**, promoting summer crop planting, emergence, and development. Elsewhere **west of the Rockies**, hot, dry weather increased irrigation requirements in the **Southwest**, while very cool air (temperatures averaged as much as 6°F below normal) followed scattered showers in the **Northwest**. Scattered frost and freezes were noted from May 16-19 across the **interior Northwest**, where effects on blooming trees and vines, emerging summer crops, and the most advanced winter wheat fields were being evaluated. Cool conditions (temperatures at least 2 to 6°F below normal) also persisted in the **Northeast**.

Severe thunderstorms were scattered across the **central and southern Plains, Midwest, South, and East**, but were less numerous than the previous week. Nevertheless, according to preliminary information provided by the Storm Prediction Center (SPC), there were approximately 100 tornadoes during the week, along with nearly 400 reports of wind damage and about 700 reports of hail at least three-quarters of an inch in diameter. SPC's preliminary, month-to-date tornado tally through May 18 reached 498, easily surpassing the May 1995 record of 391 and June 1992 all-time U.S. monthly record of 399. The week's most impressive severe weather outbreak struck the **southern High Plains** on May 15, featuring a record number of tornadoes for any date across the **Panhandles of Oklahoma and Texas**. In just over 6 hours, the total of 26 tornadoes eclipsed the region's daily-record total of 23, set on June 8, 1995.

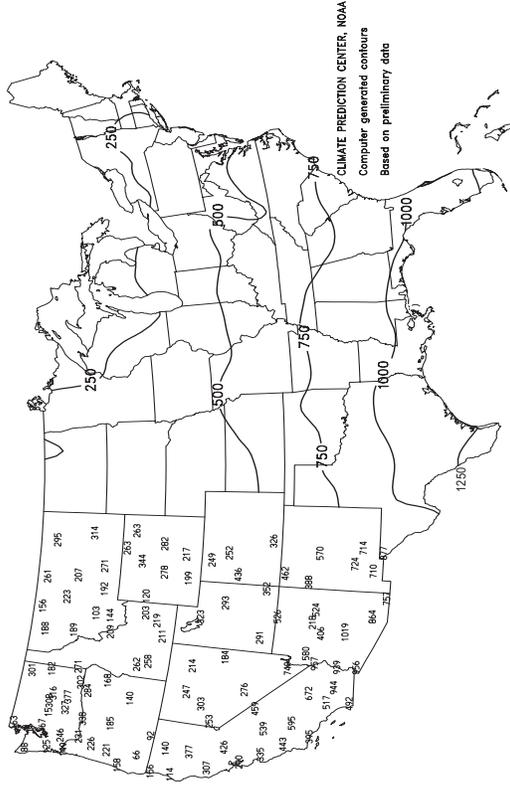
**San Angelo, TX**, noted daily-record highs on May 14 and 15 (108 and 101°F), its third and fourth days of triple-digit heat of the year. By week's end, **San Angelo's** streak of above-normal daily temperatures reached 22 days (April 26 - May 17), while its spell without measurable precipitation stretched to 26 days (April 22 - May 17). The last time **San Angelo** received at least 0.10 inch of rain was March 21-22, when 0.92 inch fell. Similarly, hot, dry conditions gripped the remainder of the **South Central States**, resulting in more than three dozen daily-record highs. For example, **Houston, TX**, notched daily-

record highs on May 13, 15, and 16 (91, 92, and 93°F), while **New Orleans (Audubon Park), LA**, posted records on May 11, 14, and 16 (93, 92, and 93°F). Toward week's end, heat shifted into the **Southwest**, where daily-record highs on May 17 included 99°F in **El Paso, TX**, and 103°F in **Tucson, AZ**. Tucson's first triple-digit reading of the year arrived 9 days ahead of the May 26 average but 4 days later than last year's first 100-degree heat. Farther north, the week ended with a flurry of daily-record lows on May 17 in locations such as **Great Falls, MT** (26°F), and **Yakima, WA** (29°F). The cold weather in **Great Falls** preceded a daily-record snowfall (4.3 inches) the following day. **Spokane, WA**, noted four consecutive freezes (32, 31, 31, and 32°F) from May 16-19, the last two of which were daily-record lows.

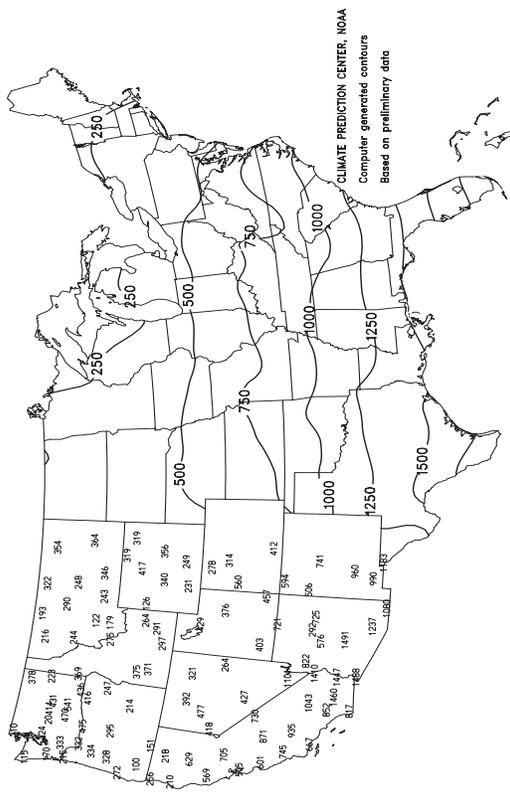
Rainfall reached May-record levels in parts of the **interior South**, totaling 14.94 inches (519 percent of normal) through May 18 in **Birmingham, AL**. The previous May record in **Birmingham** was 11.10 inches, set in 1969. Elsewhere in **Alabama, Muscle Shoals'** May 1-18 rainfall reached 10.20 inches, less than 2 inches below its May 1983 record of 11.86 inches. Month-to-date rainfall also topped 10 inches in several **Tennessee** locations, including **Memphis** (10.94 inches) and **Nashville** (10.17 inches). Meanwhile in **Michigan, Marquette** netted consecutive daily-record totals on May 11 and 12 (2.32 and 1.27 inches). Farther west, beneficial precipitation in **North Dakota** included a daily-record total (1.02 inches on May 13) in **Jamestown**. During the mid- to late-week period, daily-record totals were set in **Southern and Eastern** locations such as **Monroe, LA** (3.09 inches on May 14), **Roanoke, VA** (2.10 inches on May 15), and **Jonesboro, AR** (3.45 inches on May 16). **Memphis** closed the week with consecutive daily-record totals of 2.39 and 1.77 inches.

Precipitation broke a dry spell across **southeastern Alaska**, where some locations received more rain in a few days than the previous several weeks. For example, **Juneau** received 1.98 inches from May 12-18, following totals of 0.86 inch in April and 0.11 inch during the first 11 days of May. Elsewhere in **Alaska**, generally light, scattered rain and snow showers accompanied cooler-than-normal weather. **Valdez** received 3.3 inches of snow on May 10-11, followed by a 4.7-inch total in **King Salmon** on May 13. Meanwhile in **Hawaii**, warm weather (as much as 3°F above normal) accompanied scattered showers. Heavy showers in windward areas in a 24-hour period on May 17-18 accounted for nearly half of the weekly rainfall in the **Big Island** locations of **Glenwood** (1.79 of 4.00 inches) and **Mountain View** (1.43 of 3.11 inches).

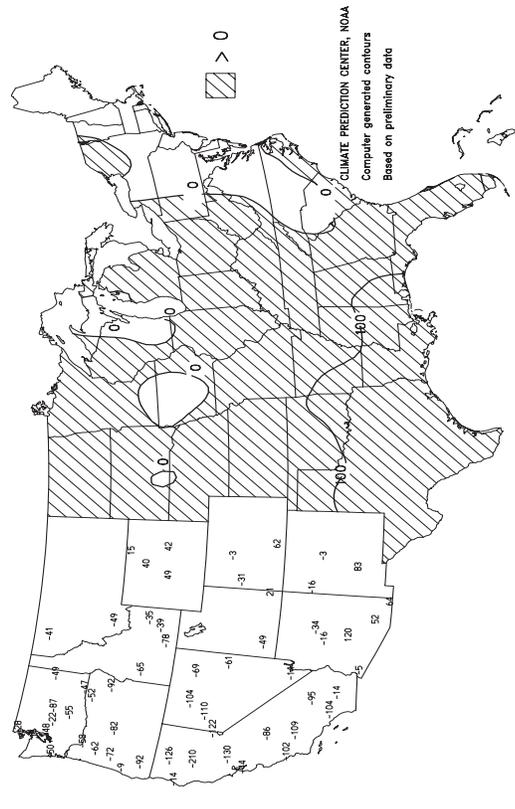
Total Growing Degree Days  
APR 1 - MAY 17, 2003



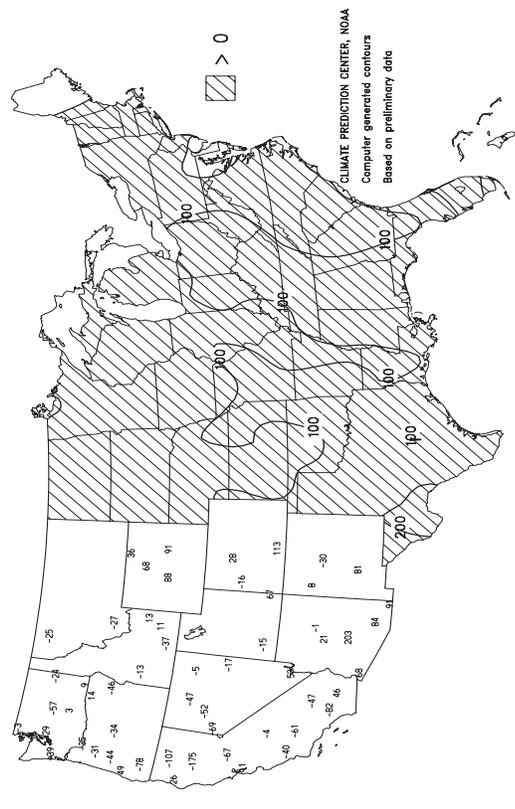
Total Growing Degree Days  
MAR 1 - MAY 17, 2003



Departure From Normal Growing Degree Days  
APR 1 - MAY 17, 2003



Departure From Normal Growing Degree Days  
MAR 1 - MAY 17, 2003



National Weather Data for Selected Cities

Weather Data for the Week Ending May 17, 2003

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F			
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
AL BIRMINGHAM	78	60	86	51	69	0	5.27	4.14	1.45	22.32	166	30.34	131	99	59	0	0	5	5
AL HUNTSVILLE	78	60	83	52	69	1	3.17	1.96	1.64	13.90	99	23.18	95	92	65	0	0	5	2
AL MOBILE	87	68	90	60	78	5	0.48	-0.94	0.40	8.46	54	14.59	55	86	52	1	0	2	0
AL MONTGOMERY	82	61	88	51	72	0	1.11	0.17	0.73	13.16	101	17.95	76	10	64	0	0	3	1
AK ANCHORAGE	52	39	57	33	45	-1	0.10	-0.04	0.10	1.14	78	2.29	79	82	57	0	0	1	0
AK BARROW	21	13	34	10	17	-2	0.02	0.02	0.02	0.19	83	0.39	85	88	81	0	7	1	0
AK FAIRBANKS	52	34	57	27	43	-5	0.27	0.17	0.27	0.33	49	1.40	88	82	51	0	1	1	0
AK JUNEAU	50	37	57	32	44	-3	2.09	1.32	0.86	6.51	78	13.63	79	93	76	0	1	5	3
AK KODIAK	49	35	53	31	42	-1	0.12	-1.31	0.06	10.53	74	33.98	121	77	54	0	2	4	0
AK NOME	36	28	43	23	32	-5	0.00	-0.14	0.00	1.92	122	3.23	99	77	68	0	7	0	0
AZ FLAGSTAFF	72	36	78	23	54	4	0.00	-0.19	0.00	1.62	37	4.51	49	53	14	0	2	0	0
AZ PHOENIX	96	68	104	61	82	4	0.00	-0.03	0.00	0.67	48	4.41	147	26	12	6	0	0	0
AZ TUCSON	96	60	103	50	78	4	0.00	-0.06	0.00	0.55	45	1.65	53	17	13	6	0	0	0
AZ YUMA	94	64	102	56	79	0	0.00	0.00	0.00	0.24	67	1.35	132	39	25	6	0	0	0
AR FORT SMITH	78	58	87	49	68	-1	0.86	-0.34	0.65	6.87	64	10.58	68	97	58	0	0	4	1
AR LITTLE ROCK	79	59	85	53	69	0	2.22	1.07	1.52	8.61	65	14.33	71	97	57	0	0	4	1
CA BAKERSFIELD	84	57	89	48	71	1	0.00	-0.04	0.00	1.72	89	3.37	78	63	38	0	0	0	0
CA FRESNO	83	54	90	48	69	1	0.00	-0.08	0.00	4.14	133	5.79	78	75	42	1	0	0	0
CA LOS ANGELES	68	55	72	53	61	-2	0.00	-0.05	0.00	3.23	104	8.05	87	91	67	0	0	0	0
CA REDDING	76	56	84	50	66	0	0.00	-0.38	0.00	8.85	105	17.86	87	***	***	0	0	0	0
CA SACRAMENTO	78	50	84	47	64	-1	0.00	-0.11	0.00	5.58	136	8.25	72	94	35	0	0	0	0
CA SAN DIEGO	68	57	70	54	62	-2	0.00	-0.03	0.00	3.10	101	7.98	108	88	73	0	0	0	0
CA SAN FRANCISCO	64	50	69	48	57	-1	0.00	-0.08	0.00	6.24	135	10.15	78	86	69	0	0	0	0
CA STOCKTON	81	48	87	44	64	-2	0.00	-0.11	0.00	3.13	89	4.81	55	80	44	0	0	0	0
CO ALAMOSA	74	30	82	14	52	2	0.01	-0.13	0.01	0.76	57	1.05	59	69	18	0	5	1	0
CO CO SPRINGS	73	42	80	30	57	3	0.31	-0.21	0.31	2.49	64	3.08	68	82	23	0	1	1	0
CO DENVER INTL	72	44	85	32	58	4	0.22	-0.43	0.22	7.06	209	7.56	197	82	32	0	1	1	0
CO GRAND JUNCTION	76	49	82	39	63	3	0.32	0.10	0.32	2.14	89	3.29	94	64	35	0	0	1	0
CO PUEBLO	81	44	87	31	62	3	1.02	0.69	1.01	3.85	128	4.67	130	70	35	0	1	2	1
CT BRIDGEPORT	60	49	65	46	55	-3	0.05	-0.86	0.05	8.99	87	14.54	86	83	67	0	0	1	0
CT HARTFORD	65	45	70	36	55	-4	0.27	-0.72	0.20	7.66	76	13.21	78	84	56	0	0	2	0
DC WASHINGTON	69	54	82	49	61	-4	1.82	0.95	1.47	9.86	118	17.71	124	82	58	0	0	3	1
DE WILMINGTON	65	49	77	45	57	-5	0.63	-0.33	0.55	8.54	89	15.58	98	89	53	0	0	3	1
FL DAYTONA BEACH	90	67	95	60	79	5	0.05	-0.60	0.04	11.51	149	17.19	126	94	45	5	0	2	0
FL JACKSONVILLE	88	64	93	57	76	3	0.00	-0.73	0.00	13.67	157	18.41	118	91	42	2	0	0	0
FL KEY WEST	87	79	88	76	83	2	0.00	-0.72	0.00	8.33	153	10.12	110	82	66	0	0	0	0
FL MIAMI	89	76	91	70	82	3	0.73	-0.38	0.38	7.57	92	8.84	72	87	57	3	0	4	0
FL ORLANDO	92	68	94	64	80	3	0.04	-0.70	0.04	9.79	131	12.15	99	92	45	6	0	1	0
FL PENSACOLA	86	69	89	61	78	4	0.33	-0.61	0.30	10.63	86	16.53	74	90	58	0	0	2	0
FL TALLAHASSEE	90	62	94	53	76	2	0.32	-0.74	0.24	10.02	81	17.20	77	88	40	3	0	2	0
FL TAMPA	89	72	91	68	81	4	0.26	-0.30	0.26	8.77	151	11.79	110	87	54	1	0	1	0
FL WEST PALM	90	75	92	74	83	5	0.40	-0.73	0.40	11.29	116	13.22	83	89	58	4	0	1	0
GA ATHENS	77	58	81	49	67	-2	0.71	-0.15	0.60	11.77	114	18.05	93	91	62	0	0	5	1
GA ATLANTA	76	60	85	53	68	-1	2.19	1.28	0.99	17.78	159	23.32	112	89	64	0	0	5	2
GA AUGUSTA	81	60	89	51	71	1	1.15	0.51	0.54	15.48	172	21.20	121	89	62	0	0	5	1
GA COLUMBUS	81	62	89	54	72	0	0.80	-0.03	0.47	12.56	108	20.38	98	95	52	0	0	4	0
GA MACON	83	60	90	52	72	1	0.46	-0.19	0.20	15.50	162	22.13	116	92	52	2	0	4	0
GA SAVANNAH	84	64	89	58	74	2	0.75	0.01	0.61	15.62	181	19.69	127	95	55	0	0	3	1
HI HILO	80	67	82	66	74	0	1.40	-0.45	0.42	19.28	61	25.98	52	87	73	0	0	7	0
HI HONOLULU	86	74	86	72	80	3	0.00	-0.17	0.00	2.89	84	5.20	61	69	61	0	0	0	0
HI KAHULUI	86	68	87	64	77	1	0.00	-0.14	0.00	1.03	23	8.79	83	77	62	0	0	0	0
HI LIHUE	82	73	82	71	77	2	0.24	-0.43	0.08	11.01	134	17.52	109	76	68	0	0	5	0
ID BOISE	66	44	80	35	55	-3	0.35	0.07	0.25	4.25	126	6.74	114	78	49	0	0	2	0
ID LEWISTON	64	45	75	39	55	-3	0.68	0.33	0.40	5.30	164	8.99	169	77	57	0	0	4	0
ID POCATELLO	67	37	77	31	52	-1	0.04	-0.31	0.04	2.71	80	4.13	75	84	48	0	2	1	0
IL CHICAGO/O'HARE	66	47	73	44	57	-1	0.77	0.05	0.58	10.84	133	11.39	99	81	55	0	0	2	1
IL MOLINE	68	47	79	40	58	-3	1.14	0.22	1.13	10.16	114	11.06	92	86	58	0	0	2	1
IL PEORIA	69	49	77	45	59	-2	0.06	-0.88	0.06	8.32	96	9.91	84	91	60	0	0	1	0
IL ROCKFORD	67	46	73	42	56	-3	1.25	0.39	1.13	6.34	79	6.84	63	83	57	0	0	2	1
IL SPRINGFIELD	69	51	75	45	60	-3	0.10	-0.81	0.06	7.31	85	9.20	76	86	61	0	0	3	0
IN EVANSVILLE	73	56	74	48	64	-1	1.47	0.32	0.68	11.67	101	17.73	101	87	58	0	0	5	1
IN FORT WAYNE	65	46	73	38	56	-4	1.09	0.28	0.83	10.92	131	13.61	110	95	61	0	0	3	1
IN INDIANAPOLIS	70	52	73	42	61	-1	0.93	-0.05	0.87	11.53	123	16.24	114	90	57	0	0	3	1
IN SOUTH BEND	63	45	73	38	54	-5	1.03	0.29	0.72	10.03	120	12.16	97	92	69	0	0	3	1
IA BURLINGTON	68	49	77	46	59	-3	0.34	-0.64	0.32	8.36	94	10.02	85	90	51	0	0	2	0
IA CEDAR RAPIDS	66	46	73	42	56	-4	1.78	0.95	1.64	6.99	94	7.89	83	93	52	0	0	4	1
IA DES MOINES	69	50	76	46	60	-1	0.81	-0.12	0.75	12.25	153	14.41	141	90	63	0	0	3	1
IA DUBUQUE	65	44	71	38	54	-5	1.16	0.25	1.09	7.13	87	7.80	71	89	64	0	0	5	1
IA SIOUX CITY	69	44	77	38	57	-3	0.42	-0.42	0.38	8.00	120	9.18	116	95	53	0	0	3	0
IA WATERLOO	68	46	73	39	57	-3	0.72	-0.17	0.40	10.44	140	11.29	121	90	62	0	0	3	0
KS CONCORDIA	72	46	79	40	59	-3	2.01	-0.74	0.16	6.43	93	7.64	92	89	61	0	0	2	0
KS DODGE CITY	78	49	86	39	64	1	0.28	1.42	1.22	6.71	120	8.08	117	93	42	0	0	3	2
KS GOODLAND	73	45	81	37	59	1	0.61	-0.18	0.60	4.68	106	5.53	104	89	65	0	0	2	1
KS TOPEKA	73	53	82	44	63	-1	0.95	-0.13	0.83	10.03	123	11.91	116	92	61	0	0	2	1

Weather Data for the Week Ending May 17, 2003

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.		
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
KY	WICHITA	72	55	80	44	64	0	1.27	0.35	1.04	9.09	124	11.15	122	92	64	0	0	3	1
	JACKSON	72	54	77	49	63	0	1.57	0.40	0.84	10.90	100	20.88	115	86	57	0	0	5	2
	LEXINGTON	72	54	76	49	63	0	2.26	1.18	0.87	13.54	128	19.33	112	87	58	0	0	4	3
	LOUISVILLE	74	57	79	51	66	1	2.11	0.98	0.99	13.70	125	18.96	108	88	56	0	0	4	2
	PADUCAH	75	58	81	49	66	1	2.36	1.29	1.33	12.67	106	20.42	106	96	54	0	0	4	2
LA	BATON ROUGE	87	68	93	63	78	5	0.35	-0.84	0.35	5.67	42	13.45	54	98	52	2	0	1	0
	LAKE CHARLES	87	69	89	67	78	4	0.00	-1.36	0.00	4.88	48	11.44	60	96	65	0	0	0	0
	NEW ORLEANS	88	73	91	68	80	5	0.00	-0.96	0.00	10.63	84	15.39	64	89	64	3	0	0	0
	SHREVEPORT	83	65	89	59	74	2	1.45	0.28	0.72	6.03	53	14.13	70	91	57	0	0	5	1
ME	CARIBOU	55	36	74	33	46	-5	0.48	-0.25	0.30	5.66	82	9.75	82	93	57	0	0	3	0
	PORTLAND	55	42	61	36	48	-5	0.75	-0.11	0.41	7.32	69	11.80	66	93	69	0	0	4	0
MD	BALTIMORE	67	51	83	43	59	-3	2.09	1.20	1.96	9.65	108	18.95	123	85	66	0	0	4	1
MA	BOSTON	56	45	65	40	50	-8	0.25	-0.47	0.10	8.55	93	14.45	88	92	66	0	0	4	0
	WORCESTER	58	43	66	39	50	-6	0.41	-0.57	0.27	8.39	80	15.18	86	97	58	0	0	3	0
MI	ALPENA	59	41	64	34	50	-1	0.42	-0.16	0.31	4.67	80	5.17	58	94	56	0	0	5	0
	GRAND RAPIDS	63	43	71	35	53	-4	1.41	0.68	1.13	9.12	116	10.63	93	94	64	0	0	3	1
	HOUGHTON LAKE	63	41	73	32	52	-1	0.69	0.14	0.66	5.82	104	6.17	73	88	60	0	1	3	1
	LANSING	64	43	72	32	54	-2	0.67	0.11	0.46	6.86	101	7.42	75	87	64	0	1	3	0
	MUSKEGON	65	43	72	31	54	-1	0.64	-0.02	0.56	6.39	93	6.91	65	89	72	0	1	3	1
	TRAVERSE CITY	62	41	68	34	51	-3	0.54	0.07	0.47	6.46	110	7.16	67	89	52	0	0	2	0
MN	DULUTH	65	42	69	39	54	3	0.05	-0.57	0.05	4.26	83	4.69	66	71	44	0	0	1	0
	INT'L FALLS	73	39	77	32	56	3	0.01	-0.51	0.01	1.29	37	1.48	30	78	27	0	2	1	0
	MINNEAPOLIS	68	48	74	42	58	-1	2.16	1.48	1.38	8.48	149	9.25	123	83	48	0	0	3	2
	ROCHESTER	64	45	70	42	55	-1	1.02	0.25	0.82	9.40	139	10.37	123	90	62	0	0	2	1
	ST. CLOUD	70	43	76	36	56	0	0.66	0.07	0.31	8.69	177	9.45	151	90	34	0	0	3	0
MS	JACKSON	80	61	87	51	71	0	3.15	2.04	2.16	19.15	131	29.58	119	96	62	0	0	4	2
	MERIDIAN	81	67	88	50	74	3	0.05	-1.08	0.00	14.71	96	23.07	87	***	***	0	0	1	0
	TUPELO	77	60	84	50	69	0	3.54	2.23	1.37	18.74	131	27.98	116	95	70	0	0	5	3
MO	COLUMBIA	69	52	76	46	61	-2	0.22	-0.88	0.14	11.55	115	13.82	99	89	57	0	0	3	0
	KANSAS CITY	71	52	80	45	62	-1	0.24	-1.01	0.21	7.88	90	9.10	81	92	56	0	0	2	0
	SAINT LOUIS	71	56	75	52	64	-2	0.18	-0.76	0.08	9.85	103	12.79	92	88	67	0	0	3	0
	SPRINGFIELD	71	54	79	44	63	-1	1.86	0.86	0.90	10.01	95	14.06	94	93	72	0	0	5	2
MT	BILLINGS	67	42	77	36	54	-1	0.25	-0.31	0.12	3.80	91	5.01	90	83	34	0	0	3	0
	BUTTE	58	30	70	24	44	-3	0.26	-0.18	0.19	3.70	132	5.25	138	87	29	0	5	2	0
	GLASGOW	67	41	78	29	54	-1	0.31	-0.05	0.18	3.29	165	3.69	141	81	46	0	1	3	0
	GREAT FALLS	64	36	75	26	50	-1	0.15	-0.41	0.07	3.78	104	4.51	93	81	27	0	2	3	0
	HAVRE	66	38	76	31	52	-2	0.28	-0.12	0.14	3.68	151	4.04	124	84	39	0	2	3	0
	KALISPELL	60	34	72	25	47	-4	0.36	-0.07	0.21	3.59	109	4.66	79	87	45	0	4	4	0
	MISSOULA	60	35	75	28	48	-4	0.22	-0.21	0.12	4.63	154	7.27	151	86	55	0	2	4	0
NE	GRAND ISLAND	71	45	79	39	58	-2	0.17	-0.74	0.17	6.56	98	8.20	103	95	58	0	0	1	0
	LINCOLN	72	46	82	36	59	-2	0.35	-0.61	0.35	5.78	79	7.81	90	91	53	0	0	1	0
	NORFOLK	70	45	76	37	57	-2	0.77	-0.09	0.76	7.19	110	8.31	106	94	54	0	0	2	1
	NORTH PLATTE	73	43	79	37	58	0	0.00	-0.76	0.00	6.71	136	7.55	130	93	46	0	0	0	0
	OMAHA	70	47	79	39	59	-2	0.97	-0.04	0.75	7.67	104	9.34	104	91	55	0	0	2	1
	SCOTTSBLUFF	75	41	90	31	58	2	0.42	-0.18	0.42	3.64	84	4.35	80	92	46	1	1	1	0
	VALENTINE	72	41	83	34	57	0	0.05	-0.68	0.05	5.79	121	6.37	115	88	51	0	0	1	0
NV	ELY	70	34	75	29	52	2	0.00	-0.30	0.00	3.93	149	4.63	112	74	26	0	2	0	0
	LAS VEGAS	91	65	97	54	78	3	0.00	-0.06	0.00	0.72	85	2.85	134	26	16	5	0	0	0
	RENO	76	43	80	38	60	4	0.00	-0.13	0.00	1.18	79	1.57	43	53	26	0	0	0	0
	WINNEMUCCA	72	39	80	32	56	1	0.00	-0.22	0.00	1.85	82	3.74	101	73	39	0	1	0	0
NH	CONCORD	60	40	68	35	50	-5	1.02	0.28	0.58	8.81	112	14.72	111	97	56	0	0	4	1
NJ	NEWARK	65	51	69	47	58	-4	0.04	-1.00	0.02	7.00	66	13.86	79	78	59	0	0	2	0
NM	ALBUQUERQUE	83	55	89	46	69	5	0.00	-0.11	0.00	1.46	106	2.48	107	38	14	0	0	0	0
NY	ALBANY	63	46	69	36	55	-3	1.46	0.66	0.91	7.91	95	13.52	104	93	56	0	0	3	1
	BINGHAMTON	57	43	67	37	50	-5	0.82	0.05	0.49	6.09	73	10.82	81	91	71	0	0	5	0
	BUFFALO	60	46	75	43	53	-4	2.06	1.34	0.89	7.04	91	12.01	90	92	66	0	0	5	1
	ROCHESTER	60	46	74	38	53	-3	1.80	1.20	0.91	5.85	87	9.84	88	91	73	0	0	5	2
	SYRACUSE	62	44	72	38	53	-3	1.71	0.97	1.14	8.15	99	12.19	94	93	60	0	0	5	1
NC	ASHEVILLE	73	54	79	51	63	1	0.42	-0.55	0.24	15.75	153	21.40	118	84	56	0	0	4	0
	CHARLOTTE	76	56	79	49	66	-3	1.58	0.76	1.57	18.53	201	24.11	144	83	57	0	0	2	1
	GREENSBORO	73	55	79	47	64	-1	0.61	-0.30	0.38	15.13	160	22.40	139	83	56	0	0	2	0
	HATTERAS	74	66	78	59	70	3	0.28	-0.59	0.28	17.14	168	22.69	114	87	61	0	0	1	0
	RALEIGH	77	56	83	46	66	0	0.33	-0.54	0.31	10.41	118	16.94	104	84	53	0	0	2	0
	WILMINGTON	79	61	88	52	70	0	0.15	-0.84	0.09	13.51	144	19.23	110	93	53	0	0	3	0
ND	BISMARCK	65	41	71	31	53	-2	1.42	0.94	0.81	4.53	133	5.03	115	88	60	0	1	4	1
	DICKINSON	61	39	69	30	50	-4	0.14	-0.32	0.10	4.75	135	4.90	113	95	45	0	1	2	0
	FARGO	69	43	76	35	56	-1	0.65	0.11	0.28	5.39	146	5.85	116	87	44	0	0	4	0
	GRAND FORKS	68	41	74	32	54	-2	0.24	-0.22	0.23	3.30	105	3.70	84	88	38	0	1	2	0
	JAMESTOWN	64	41	69	33	53	-3	1.91	1.44	1.02	6.19	188	6.34	143	99	53	0	0	5	2
	WILLISTON	63	37	73	28	50	-4	0.56	0.16	0.56	5.71	213	6.67	185	90	55	0	2	1	1
OH	AKRON-CANTON	66	47	74	38	56	-2	2.63	1.72	1.88	10.57	121	14.28	106	92	66	0	0	5	2
	CINCINNATI	70	52	74	45	61	-2	0.69	-0.33	0.44	10.51	103	15.76	99	92	61	0	0	4	0
	CLEVELAND	66	49	75	38	57	-1	0.77	0.01	0.51	8.32	102	13.04	101	88	57	0	0	4	1
	COLUMBUS	67	49	73	40	58	-4	0.69	-0.18	0.30	8.63	105	13.25	102	88	63	0	0	5	0
	DAYTON	66	49	71	44	58	-2	1.00	0.09	0.42	9.33	98	12.63	88	92					

Weather Data for the Week Ending May 17, 2003

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP		
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
OK	TOLEDO	65	46	71	38	55	-4	0.71	0.05	0.33	9.09	122	12.25	109	86	66	0	0	5	0
	YOUNGSTOWN	64	46	77	35	55	-2	0.75	-0.02	0.33	7.36	89	11.29	89	94	68	0	0	5	0
	OKLAHOMA CITY	78	57	85	47	68	0	0.38	-0.85	0.23	4.50	52	5.37	47	93	59	0	0	3	0
	TULSA	78	57	84	47	68	-1	3.37	1.96	1.82	9.14	85	11.06	77	94	65	0	0	4	3
OR	ASTORIA	58	42	68	39	50	-2	1.15	0.43	0.40	21.38	151	38.89	123	92	73	0	0	4	0
	BURNS	63	32	77	24	48	-3	0.15	-0.07	0.09	3.32	127	4.67	95	90	49	0	3	2	0
	EUGENE	62	42	74	37	52	-3	0.43	-0.17	0.28	12.34	112	21.80	87	93	69	0	0	4	0
	MEDFORD	68	44	82	36	56	-2	0.19	-0.09	0.12	6.98	182	11.20	133	85	39	0	0	2	0
	PENDLETON	64	43	77	36	54	-4	0.44	0.16	0.24	3.51	115	7.50	131	80	59	0	0	2	0
	PORTLAND	61	46	77	40	54	-3	0.90	0.36	0.35	11.70	153	22.06	130	86	66	0	0	5	0
	SALEM	62	44	75	40	53	-2	1.27	0.79	0.78	12.13	149	22.29	117	90	64	0	0	6	1
PA	ALLENTOWN	63	47	73	38	55	-4	0.26	-0.76	0.14	6.61	70	11.12	71	85	64	0	0	5	0
	ERIE	63	47	78	39	55	-2	1.03	0.33	0.38	7.32	89	13.21	102	87	70	0	0	5	0
	MIDDLETOWN	64	51	79	46	58	-3	0.64	-0.32	0.56	9.48	108	16.02	110	91	57	0	0	4	1
	PHILADELPHIA	67	52	82	46	60	-3	0.33	-0.57	0.32	7.48	79	14.45	92	79	59	0	0	2	0
	PITTSBURGH	66	47	79	39	57	-3	0.49	-0.35	0.17	7.17	88	12.19	92	93	54	0	0	6	0
	WILKES-BARRE	61	47	74	41	54	-5	0.14	-0.68	0.05	5.26	66	8.29	66	90	57	0	0	4	0
	WILLIAMSPORT	61	48	77	38	54	-5	1.08	0.25	0.54	7.75	89	12.76	90	88	66	0	0	5	1
RI	PROVIDENCE	62	46	68	39	54	-4	0.35	-0.45	0.31	10.33	98	16.13	88	85	57	0	0	3	0
SC	BEAUFORT	83	66	90	59	74	2	0.48	-0.11	0.30	7.59	96	11.62	77	89	48	1	0	2	0
	CHARLESTON	83	64	89	56	73	1	0.89	0.14	0.51	14.11	169	17.60	113	88	52	0	0	4	1
	COLUMBIA	80	61	87	53	70	-1	0.86	0.21	0.79	16.26	181	21.22	121	87	61	0	0	2	1
	GREENVILLE	76	58	80	53	67	0	1.01	-0.05	0.62	17.79	158	23.74	119	89	57	0	0	4	1
SD	ABERDEEN	65	42	74	33	54	-3	0.22	-0.34	0.14	5.03	114	5.72	106	88	61	0	0	3	0
	HURON	67	42	77	33	54	-4	0.39	-0.26	0.26	4.29	78	5.55	85	94	53	0	0	4	0
	RAPID CITY	67	41	75	33	54	0	0.00	-0.65	0.00	4.40	100	4.94	95	89	47	0	0	0	0
	SIoux FALLS	65	42	76	36	54	-3	0.52	-0.22	0.37	6.25	101	7.20	100	93	63	0	0	3	0
TN	BRISTOL	73	53	78	46	63	1	1.09	0.10	0.60	13.41	142	22.20	136	90	47	0	0	3	1
	CHATTANOOGA	79	59	85	50	69	2	1.47	0.49	0.62	15.83	124	26.24	114	91	58	0	0	4	2
	KNOXVILLE	76	56	83	49	66	1	1.15	0.08	0.53	15.18	130	27.06	133	90	54	0	0	3	1
	MEMPHIS	78	61	84	54	70	0	6.69	5.52	2.37	17.39	121	26.51	116	90	61	0	0	5	4
	NASHVILLE	76	59	83	49	68	1	2.22	1.05	1.24	14.26	124	24.30	127	93	50	0	0	3	2
TX	ABILENE	88	63	100	55	76	1	0.00	-0.60	0.00	1.06	24	2.20	34	69	42	4	0	0	0
	AMARILLO	81	52	94	40	66	2	0.00	-0.52	0.00	1.14	32	1.38	29	87	33	1	0	0	0
	AUSTIN	90	68	97	63	79	4	0.29	-0.86	0.26	1.15	16	6.71	61	85	60	5	0	2	0
	BEAUMONT	87	71	91	66	79	4	0.00	-1.28	0.00	3.31	32	10.73	55	93	58	1	0	0	0
	BROWNSVILLE	92	77	95	76	85	6	0.00	-0.52	0.00	0.94	23	2.20	33	93	57	7	0	0	0
	CORPUS CHRISTI	91	76	94	72	84	7	0.00	-0.76	0.00	1.43	26	3.79	42	91	61	5	0	0	0
	DEL RIO	97	73	106	69	85	8	0.00	-0.50	0.00	0.80	21	1.57	29	74	39	6	0	0	0
	EL PASO	94	61	99	53	77	4	0.00	-0.06	0.00	0.22	35	1.59	108	25	14	6	0	0	0
	FORT WORTH	83	64	94	53	74	2	0.28	-0.92	0.20	3.07	34	6.37	48	83	48	1	0	2	0
	GALVESTON	85	76	86	73	81	5	0.07	-0.74	0.07	1.80	25	4.69	34	93	72	0	0	1	0
	HOUSTON	89	72	93	68	81	6	0.00	-1.12	0.00	4.59	48	10.75	67	86	58	4	0	0	0
	LUBBOCK	87	57	98	45	72	3	0.00	-0.49	0.00	1.34	43	1.44	33	77	42	3	0	0	0
	MIDLAND	93	65	103	56	79	7	0.00	-0.41	0.00	0.18	9	1.17	37	65	40	5	0	0	0
	SAN ANGELO	93	65	108	56	79	6	0.00	-0.69	0.00	1.34	32	3.22	52	67	38	5	0	0	0
	SAN ANTONIO	92	71	97	66	81	6	0.03	-1.01	0.03	1.00	15	4.14	40	88	43	5	0	1	0
	VICTORIA	91	74	95	70	83	7	0.00	-1.14	0.00	1.41	18	5.10	42	92	58	5	0	0	0
	WACO	86	66	97	61	76	2	0.00	-1.03	0.00	3.96	50	7.11	58	87	60	2	0	0	0
	WICHITA FALLS	85	61	92	49	73	2	0.44	-0.41	0.44	2.84	42	3.75	39	84	50	1	0	1	0
UT	SALT LAKE CITY	73	49	79	39	61	3	0.00	-0.50	0.00	4.97	96	6.66	85	68	31	0	0	0	0
VT	BURLINGTON	64	45	71	38	55	-1	1.83	1.09	0.98	6.76	97	8.74	80	89	51	0	0	4	1
VA	LYNCHBURG	71	53	78	46	62	-1	1.88	0.94	1.34	12.78	134	20.05	124	83	55	0	0	3	2
	NORFOLK	77	59	90	51	68	2	0.27	-0.58	0.25	9.98	105	17.56	105	81	50	1	0	3	0
	RICHMOND	75	54	84	46	65	0	0.50	-0.40	0.31	11.74	125	18.11	114	86	53	0	0	3	0
	ROANOKE	71	54	83	49	63	0	3.36	2.40	2.10	13.96	143	21.21	132	80	60	0	0	3	2
	WASH/DULLES	68	51	82	41	59	-3	2.94	2.00	2.53	11.44	128	19.26	131	88	70	0	0	4	1
WA	OLYMPIA	61	39	73	36	50	-3	0.52	0.02	0.24	13.49	133	25.27	106	94	70	0	0	6	0
	QUILLAYUTE	54	40	59	36	47	-4	1.36	0.10	0.44	26.74	124	43.93	92	94	77	0	0	5	0
	SEATTLE-TACOMA	59	45	68	40	52	-3	0.45	0.06	0.29	10.06	137	19.81	119	91	71	0	0	3	0
	SPOKANE	61	39	72	32	50	-4	0.22	-0.14	0.15	3.80	104	7.71	110	85	38	0	1	2	0
	YAKIMA	66	38	75	29	52	-4	0.09	0.00	0.09	1.77	123	4.26	125	74	38	0	2	1	0
WV	BECKLEY	66	49	77	43	58	-1	1.52	0.50	0.95	10.09	107	16.94	108	84	66	0	0	3	2
	CHARLESTON	70	53	80	44	61	-1	1.28	0.30	0.84	8.18	87	17.45	110	88	52	0	0	3	1
	ELKINS	67	47	81	35	57	0	0.85	-0.23	0.35	10.01	101	16.58	100	98	46	0	0	4	0
	HUNTINGTON	71	54	80	45	63	0	2.26	1.25	1.16	13.70	144	20.89	132	90	55	0	0	3	2
WI	EAU CLAIRE	68	44	74	39	56	-1	1.23	0.43	1.12	9.40	142	10.36	122	91	38	0	0	2	1
	GREEN BAY	64	44	71	39	54	-2	0.20	-0.39	0.20	6.93	116	8.07	98	94	56	0	0	1	0
	LA CROSSE	68	48	73	41	58	-2	1.30	0.57	0.75	8.60	120	9.69	104	88	42	0	0	2	2
	MADISON	65	45	72	38	55	-2	0.73	0.04	0.41	7.65	105	8.50	86	84	57	0	0	3	0
	MILWAUKEE	60	45	68	43	53	-2	0.65	0.00	0.33	7.14	89	7.93	69	83	63	0	0	3	0
WY	CASPER	70	35	79	25	52	1	0.08	-0.47	0.08	2.98	80	3.60	73	82	39	0	2	1	0
	CHEYENNE	68	42	79	30	55	5	0.00	-0.56	0.00	3.72	95	4.02	84	70	37	0	1	0	0
	LANDER	68	41	74	34	55	2	0.01	-0.55	0.01	3.16	67	4.57	79	65	33	0	0	1	0
	SHERIDAN	65	36	76	29	51	-1	0.06	-0.48	0.06	4.87	121	6.04	112						

# National Agricultural Summary

May 12 - 18, 2003

Weekly National Agricultural Summary provided by USDA/NASS

## HIGHLIGHTS

**Tornadoes and strong thunderstorms were reported in Texas, Oklahoma, and parts of the interior South. Heavy rains fell in a wide swath from eastern Kansas and Oklahoma, through Arkansas, Alabama, Mississippi, northern Georgia, and Tennessee. This precipitation slowed fieldwork and caused flooding in some locations. Warm daytime temperatures and dry weather favored crop development in the Pacific Northwest, despite widespread cloud cover and sporadic showers. Temperatures approached normal levels in California's Central Valley following a prolonged period of cool, damp weather. The warm, dry weather promoted rice and cotton planting and cotton emergence. Hot, dry weather increased irrigation demands in the Southwest as dry conditions dominated in a band from southern California to the Texas and Oklahoma Panhandles. Subsoil moisture conditions remained very dry in the central and northern Rockies, despite some scattered rain and snow showers. Scattered showers slowed**

**planting progress in the central and northern Great Plains and upper Mississippi Valley. Cool weather and scattered frosts in the northern Great Plains and slowed winter wheat development and the emergence of small grains. Dry conditions and temperatures over 90 degrees F stressed crops in the southern Great Plains. Late-week storms alleviated dry topsoil conditions and benefited emerging crops. Scattered showers and cool weather in the Great Lakes region slowed fieldwork and crop development. Warm days and mostly dry weather in the Corn Belt favored corn and soybean planting, although wet fields from the previous week's heavy rain hampered fieldwork in some areas, especially in Indiana and Ohio. Excessively wet conditions persisted in the northern Delta States, Tennessee Valley, and southern Ohio Valley. Farther north, cool conditions with limited shower activity allowed Pennsylvania, New York, and New England growers to make good progress.**

**Corn:** Planting was 77 percent complete, 7 percentage points ahead of last year's pace but 4 points behind the 5-year average. The crop was 43 percent emerged, 11 points ahead of last year but 8 points behind the average. Continued wet fields and scattered showers across most of the Corn Belt slowed planting progress as most States fell behind their average pace. Early-season progress allowed Ohio to remain 16 points ahead of normal, despite saturated fields which halted fieldwork. In Illinois, Indiana, Kentucky, Michigan, and Minnesota, planting progressed 6 points or less. With drier conditions, producers in Nebraska planted 31 percent of their crop, but remained 12 points behind their average pace. Colorado growers also took advantage of dry weather to plant 27 percent of their crop. Emergence gained momentum in most areas under generally cool, cloudy weather. However, emergence lagged behind the average in all of the Corn Belt States except Illinois, Missouri, and Ohio.

**Soybeans:** Planting was 25 percent complete, 3 points behind last year's pace and 19 points behind normal for this date. The crop was 9 percent emerged, 3 points ahead of last year but 9 points behind the average. Of the 18 major producing States, only Arkansas and Mississippi are equal to or ahead of their average planting pace. Planting progress was more than 1 week behind normal in Illinois, Indiana, Iowa, Louisiana, Michigan, and Nebraska. Heavy rainfall across the Delta, Tennessee Valley, and Southeast limited planting progress to 8 points or less in most States. With drier conditions, producers in Nebraska and Minnesota advanced 16 points but remained 24 and 15 points behind their average pace, respectively, due to wet conditions early in the season that slowed planting. Fields slowly began to emerge across the Corn Belt, with all States except Ohio behind normal progress. Emergence gained momentum in the Delta due to warm temperatures and adequate soil moisture, especially in Mississippi where 70 percent of the crop had emerged.

**Winter Wheat:** Sixty-eight percent of the Nation's winter wheat was headed, 4 points ahead of last year's pace and 2 points ahead of the average. Development accelerated in the central and southern Great Plains, central Corn Belt, and along the Atlantic Coastal Plain, yielding double-digit increases in the percentage headed. Heading was slightly ahead of normal in Kansas and Missouri. However, fields headed behind normal in the eastern Corn Belt, especially in Ohio. Fields also developed slower than normal due to cool weather across the northern Great Plains, where only a few fields were headed in Montana and South Dakota.

**Cotton:** Planting advanced to 58 percent complete, 8 points behind last year and 6 points behind the average. Only two States were at or above their average planting pace, Oklahoma with a 20-point planting increase, and Texas with an 11-point advance. Nearly ideal conditions supported planting in Georgia, South Carolina, North Carolina, and Virginia, as producers seeded nearly one-fifth or more of their crop. Progress was only slightly slower in Louisiana, Missouri, Tennessee, and Texas. California planting progress remained well behind the average but increased 9 points with warmer, drier conditions.

**Sorghum:** Planting advanced to 31 percent complete, 4 points behind last year and 5 points behind the average. Planting was most active in the Delta, with Louisiana and Missouri advancing 13 and 10 points, respectively. Planting was

also active in Arkansas, Colorado, Kansas, Nebraska, Oklahoma and South Dakota, but minimal progress was seen in Illinois, New Mexico, and Texas. Illinois and Nebraska were 16 points or more behind their average for this date.

**Rice:** Eighty-three percent of the crop had been planted, compared with last year and the average of 88 percent. The crop was 72 percent emerged, 2 points behind last year but 2 points ahead of the average. Improved conditions in California allowed planting progress to advance 15 points but still remained 32 points behind the normal pace. As planting neared completion in the Delta, progress slowed due to heavy rainfall. Warm weather promoted emergence in the Delta and along the western Gulf Coast.

**Small grains:** Spring wheat planting progressed to 78 percent, 10 points ahead of last year and 1 point ahead of the average. The crop was 57 percent emerged, 27 points ahead of last year and 5 points ahead of the average. North Dakota planting advanced 12 points to 68 percent complete, 9 points ahead of last year and 2 points ahead of the normal pace. Planting neared completion in South Dakota and Washington. Below-normal temperatures across the northern Great Plains and Pacific Northwest slowed emergence and crop development.

The barley crop was 75 percent seeded, compared with last year's 70 percent and the average of 77 percent. The crop was 51 percent emerged, 21 points ahead of last year and 1 point ahead of the average. North Dakota's planting progress advanced to 62 percent complete, 10 points ahead of last year and 3 points ahead of normal pace as growers seeded 16 percent of their crop. Planting was virtually complete in Washington.

The oat crop was 87 percent seeded and 70 percent emerged. Planting was ahead of last year's pace of 81 percent seeded, and emergence was 17 points ahead of last year's pace. Planting was completed in Iowa and Ohio and virtually complete in Nebraska and South Dakota. Wisconsin's planting progress advanced 14 points to 90 percent complete, 16 points ahead of last year but 2 points behind the normal pace. Other States showed slow progress due to wet conditions. About one-fifth of the crop emerged in Ohio and Wisconsin. Emergence was only slightly slower in Minnesota, North Dakota, and Pennsylvania.

**Other crops:** Sugar beet planting progressed to 95 percent in the four major sugar beet-producing States. Planting was ahead of last year by 7 points and 5 points ahead of the average. Planting was completed in Idaho and winding down in Michigan. Rain slowed progress in North Dakota and Minnesota, where planting advanced 7 and 6 points, respectively.

Peanuts were 54 percent planted, 4 points behind last year and 6 points behind the average. Planting progress in the Southeast accelerated rapidly as soil conditions improved. With ideal conditions, North Carolina growers planted more than one-third of their crop. Despite Alabama, Florida, Georgia, and Virginia growers planting more than 20 percent of their crop, all of these States remained behind their average pace due to a slow start earlier in the year. Rapid progress was also evident in the southern Great Plains where Oklahoma and Texas producers seeded 32 and 24 percent of their crop, respectively.

# Crop Progress and Condition

Week Ending May 18, 2003

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

Corn Percent Planted				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
CO	70	43	80	80
IL	79	73	51	79
IN	61	58	13	70
IA	79	64	93	90
KS	90	80	93	91
KY	76	71	54	79
MI	39	35	50	71
MN	91	85	88	88
MO	81	71	78	80
NE	77	46	91	89
NC	92	82	99	94
ND	68	58	68	64
OH	86	86	21	70
PA	55	41	55	62
SD	69	47	77	67
TN	90	86	95	94
TX	98	92	98	95
WI	61	42	53	74
18 Sts	77	64	70	81
These 18 States planted 92% of last year's corn acreage.				

Soybeans Percent Planted				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
AR	35	31	31	35
IL	21	10	10	43
IN	25	21	4	50
IA	19	6	51	54
KS	25	13	25	39
KY	11	6	5	25
LA	39	36	42	63
MI	11	8	23	39
MN	40	24	48	55
MS	78	73	71	73
MO	19	8	17	31
NE	22	6	41	46
NC	18	7	35	23
ND	18	10	30	28
OH	46	46	7	52
SD	15	7	26	28
TN	9	4	19	20
WI	20	8	27	36
18 Sts	25	16	28	44
These 18 States planted 96% of last year's soybean acreage.				

Winter Wheat Percent Headed				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
AR	99	97	100	100
CA	99	97	100	99
CO	29	11	31	30
ID	0	0	0	1
IL	85	68	76	81
IN	62	35	48	66
KS	88	65	76	80
MI	0	0	0	5
MO	89	69	82	80
MT	1	0	0	0
NE	10	1	15	19
NC	93	80	97	98
OH	17	3	13	33
OK	100	98	98	98
OR	9	0	27	11
SD	1	0	0	2
TX	93	85	89	90
WA	12	5	6	11
18 Sts	68	56	64	66
These 18 States planted 90% of last year's winter wheat acreage.				

Corn Percent Emerged				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
CO	14	8	31	35
IL	61	41	32	57
IN	45	32	7	46
IA	38	12	41	56
KS	62	42	66	66
KY	67	62	47	67
MI	11	3	7	34
MN	34	7	12	49
MO	68	57	64	64
NE	31	13	47	50
NC	72	60	94	86
ND	19	12	7	22
OH	72	34	10	44
PA	30	9	26	31
SD	10	3	10	26
TN	87	83	88	84
TX	88	77	85	84
WI	16	3	12	36
18 Sts	43	24	32	51
These 18 States planted 92% of last year's corn acreage.				

Soybeans Percent Emerged				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
AR	28	NA	24	21
IL	5	NA	2	20
IN	12	NA	2	26
IA	2	NA	5	18
KS	11	NA	13	19
KY	0	NA	3	14
LA	33	NA	33	49
MI	2	NA	2	11
MN	2	NA	0	15
MS	70	NA	56	56
MO	6	NA	9	14
NE	3	NA	8	13
NC	5	NA	18	11
ND	3	NA	0	5
OH	31	NA	3	24
SD	1	NA	1	6
TN	0	NA	11	9
WI	3	NA	0	9
18 Sts	9	NA	6	18
These 18 States planted 96% of last year's soybean acreage.				

Cotton Percent Planted				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
AL	73	64	82	82
AZ	80	70	95	94
AR	60	51	74	79
CA	89	80	98	96
GA	62	41	70	64
LA	79	65	86	91
MS	82	73	80	84
MO	48	33	81	85
NC	66	42	81	75
OK	61	41	57	44
SC	43	24	73	65
TN	38	23	59	69
TX	44	33	48	44
VA	85	64	95	91
14 Sts	58	44	66	64
These 14 States planted 98% of last year's cotton acreage.				

# Crop Progress and Condition

Week Ending May 18, 2003

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

Oats Percent Planted				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
IA	100	100	100	99
MN	94	89	84	87
NE	99	96	100	99
ND	61	49	60	66
OH	100	100	83	95
PA	89	86	84	92
SD	98	92	94	92
WI	90	76	74	92
8 Sts	87	79	81	86
These 8 States planted 53% of last year's oat acreage.				

Oats Percent Emerged				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
IA	91	83	97	95
MN	73	55	49	67
NE	93	86	96	94
ND	42	25	13	35
OH	99	79	73	89
PA	77	58	79	76
SD	88	73	68	73
WI	61	40	46	76
8 Sts	70	54	53	67
These 8 States planted 53% of last year's oat acreage.				

Barley Percent Planted				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
ID	87	80	93	91
MN	96	88	51	69
MT	75	61	74	87
ND	62	46	52	59
WA	99	98	99	99
5 Sts	75	63	70	77
These 5 States planted 81% of last year's barley acreage.				

Barley Percent Emerged				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
ID	69	58	62	68
MN	63	34	29	51
MT	44	33	23	53
ND	38	25	8	31
WA	93	85	90	90
5 Sts	51	39	30	50
These 5 States planted 81% of last year's barley acreage.				

Rice Percent Planted				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
AR	93	91	92	90
CA	35	20	77	67
LA	96	93	96	97
MS	89	85	90	92
MO	75	69	55	81
TX	99	97	100	99
6 Sts	83	78	88	88
These 6 States planted 100% of last year's rice acreage.				

Rice Percent Emerged				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
AR	87	77	82	75
CA	2	0	37	26
LA	91	84	91	93
MS	81	*71	79	78
MO	60	40	37	52
TX	96	92	98	94
6 Sts	72	64	74	70
These 6 States planted 100% of last year's rice acreage.				

Spring Wheat Percent Planted				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
ID	90	84	96	95
MN	94	89	57	75
MT	74	61	67	84
ND	68	56	59	66
SD	99	97	97	95
WA	99	98	97	99
6 Sts	78	69	68	77
These 6 States planted 99% of last year's spring wheat acreage.				

Spring Wheat Percent Emerged				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
ID	71	65	79	79
MN	70	43	27	54
MT	39	23	17	48
ND	49	35	18	40
SD	93	84	76	80
WA	90	84	88	92
6 Sts	57	41	30	52
These 6 States planted 99% of last year's spring wheat acreage.				

Sorghum Percent Planted				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
AR	92	84	93	87
CO	13	7	11	14
IL	3	2	3	19
KS	15	10	20	22
LA	75	62	77	85
MO	36	26	31	40
NE	8	2	18	25
NM	7	4	5	7
OK	21	16	30	20
SD	15	7	11	13
TX	53	52	56	55
11 Sts	31	27	35	36
These 11 States planted 97% of last year's sorghum acreage.				

Peanuts Percent Planted				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
AL	56	35	55	67
FL	50	25	61	57
GA	46	17	59	61
NC	70	32	70	65
OK	72	40	51	54
TX	56	32	50	50
VA	60	29	82	77
7 Sts	54	26	58	60
These 7 States planted 98% of last year's peanut acreage.				

Sugar Beets Percent Planted				
	May 18 2003	Prev Week	Prev Year	5-Yr Avg
ID	100	99	100	99
MI	99	98	99	100
MN	94	88	84	86
ND	91	84	78	82
4 Sts	95	91	88	90
These 4 States planted 81% of last year's sugar beet acreage.				

# Crop Progress and Condition

**Week Ending May 18, 2003**

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

Pasture and Range Crop Condition by Percent Week Ending May 18, 2003											
	VP	P	F	G	EX		VP	P	F	G	EX
AL	0	3	24	55	18	NH	0	2	19	60	19
AZ	15	35	32	15	3	NJ	0	0	0	89	11
AR	1	5	32	50	12	NM	22	44	33	1	0
CA	0	0	15	55	30	NY	0	0	6	76	18
CO	10	31	36	17	6	NC	1	1	15	62	21
CT	0	15	18	48	19	ND	4	15	34	42	5
DE	0	5	24	65	6	OH	1	3	21	59	16
FL	5	15	40	35	5	OK	2	13	34	44	7
GA	0	2	18	68	12	OR	3	11	36	44	6
ID	0	1	25	59	15	PA	2	4	16	51	27
IL	0	1	18	61	20	RI	0	0	49	51	0
IN	0	3	20	60	17	SC	0	1	9	74	16
IA	0	1	16	53	30	SD	7	20	36	30	7
KS	13	23	33	25	6	TN	1	4	15	62	18
KY	0	3	14	52	31	TX	16	24	38	19	3
LA	2	13	45	37	3	UT	5	15	38	41	1
ME	2	13	31	48	6	VT	0	0	14	81	5
MD	0	3	26	49	22	VA	0	3	19	60	18
MA	0	0	10	46	44	WA	0	1	51	46	2
MI	2	9	27	52	10	WV	0	3	30	59	8
MN	2	5	25	59	9	WI	1	4	21	48	26
MS	3	11	29	48	9	WY	5	19	40	35	1
MO	0	7	28	53	12	<b>48 Sts</b>	<b>5</b>	<b>12</b>	<b>29</b>	<b>42</b>	<b>12</b>
MT	2	15	31	42	10	Prev Wk	6	12	31	41	10
NE	10	20	42	24	4	Prev Yr	9	16	30	37	8
NV	1	8	15	30	46						

**VP - Very Poor**  
**P - Poor**  
**F - Fair**  
**G - Good**  
**EX - Excellent**  
  
**NA - Not Available**  
**\* - Revised**

*National crop conditions for selected States are weighted based upon the year 2002 planted acres.*

Winter Wheat Crop Condition by Percent					
	VP	P	F	G	EX
AR	1	10	29	49	11
CA	0	0	30	60	10
CO	5	11	22	46	16
ID	0	0	4	73	23
IL	1	2	20	62	15
IN	1	2	15	56	26
KS	6	14	29	39	12
MI	0	4	30	60	6
MO	1	7	30	46	16
MT	2	4	17	59	18
NE	0	8	31	44	17
NC	1	13	28	54	4
OH	1	2	15	57	25
OK	5	11	30	41	13
OR	0	9	52	37	2
SD	1	6	21	50	22
TX	23	25	34	16	2
WA	2	7	19	52	20
<b>18 Sts</b>	<b>7</b>	<b>12</b>	<b>28</b>	<b>41</b>	<b>12</b>
Prev Wk	6	12	30	40	12
Prev Yr	16	20	31	29	4

## State Agricultural Summaries

*These summaries, issued weekly through the summer growing season, provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service. The crop weather reports are also available on the Internet through the NASS Home Page on the World Wide Web at <http://www.usda.gov/nass/> or from JAWF at <http://www.usda.gov/oce/waob/jawf>.*

**ALABAMA:** Days suitable for fieldwork 3.4. Topsoil 1% very short, 8% short, 28% adequate, 63% surplus. Corn 93% planted, 98% 2002, 98% avg.; 82% emerged, 87% 2002, 89% avg. Soybeans 12% planted, 25% 2002, 28% avg.; 4% emerged, 15% 2002, 16% avg. Winter wheat 1% very poor, 7% poor, 38% fair, 47% good, 7% excellent. Pasture feed 0% very poor, 3% poor, 33% fair, 50% good, 14% excellent. Livestock condition 0% very poor, 3% poor, 24% fair, 55% good, 18% excellent. Rains continued to delay fieldwork across the state. Activities: Fertilizing hayfields, pastures, controlling weeds, working cattle for spring herd health management.

**ALASKA:** Days suitable for fieldwork 5.0. Topsoil 5% short, 95% adequate. Planting was underway across the state last week. Temperatures were slightly below normal, most areas received some rain. Daytime high temperatures were mostly in the mid to high fifties. Lows were in the twenties to mid-thirties. Planting of barley 75% complete statewide, last week 20% of the crop was planted. Planting of oats 60% complete, last week less than 5% of the crop was planted. Planting of potatoes began this week with 15% of the crop being reported as seeded. Vegetable crops were being transplanted/seeded. Livestock conditions 10% fair, 75% good, 15% excellent.

**ARIZONA:** Temperatures for the State were at or above average for the week. Cotton 80% planted, 95% 2002, 94% 5-yr. avg. Alfalfa conditions were mostly good, with harvest progressing at a normal rate. Small grain development still remains behind normal because of the extended cool spring temperatures. With no precipitation reported at any of the 17 reporting stations, Range, pasture feeds have not improved.

**ARKANSAS:** Days suitable for fieldwork 4. Soil 1% very short, 6% short, 54% adequate, 39% surplus. Corn 100% planted, 100% 2002, 99% 5-yr avg.; 100% emerged, 98% 2002, 94% 5-yr avg.; 0% very poor, 4% poor, 22% fair, 56% good, 18% excellent. Soybeans: 35% planted, 31% 2002, 35% 5-yr avg.; 28% emerged, 24% 2002, 21% 5-yr avg. Sorghum 92% planted, 93% 2002, 87% 5-yr avg.; 80% emerged, 86% 2002, 77% 5-yr avg. Cotton 60% planted, 74% 2002, 79% 5-yr avg.; 50% emerged, 56% 2002, 53% 5-yr avg. Rice 93% planted, 92% 2002, 90% 5-yr avg.; 87% emerged, 82% 2002, 75% 5-yr avg.; 1% very poor, 4% poor, 24% fair, 54% good, 17% excellent. Winter Wheat 99% headed, 100% 2002, 100% 5-yr avg.; 1% very poor, 10% poor, 29% fair, 49% good, 11% excellent Hay other 0% very poor, 4% poor, 47% fair, 43% good, 6% excellent Hay Alfalfa 0% very poor, 1% poor, 33% fair, 63% good, 3% excellent Pasture, Range 1% very poor, 5% poor, 32% fair, 50% good, 12% excellent FIELD CROPS: Winding up planting, fertilizing, administering weed control were the main activities across the state during the week. The recommended time line to fertilize corn, sorghum is drawing to an end, nonetheless producers efforts to topdress, side dress nitrogen have been hampered because of the rains. In both the eastern, western portions of the state, rain and hail was reported to have lodged wheat fields. Early wheat was turning color, should be ready to harvest in a few weeks. Strawberries were being harvested. Tomatoes, peaches were being sprayed for disease, pest control. LIVESTOCK: Livestock were reported to be in good condition with many herds being sprayed for ticks. Producers are vaccinating, worming, administering fly control, culling cows. Many pastures are being fertilized, being sprayed for weeds. Where possible, first cuttings of hay were made, but reported

short because of the dry early season. Some hay cuttings were lost due to the rain.

**CALIFORNIA:** Warm, sunny weather improved growth in cotton fields, as cultivation, irrigation were underway in many fields. Some cotton plants began to emerge. Cotton planting continued in most areas, a few fields were replanted due to poor germination. Pesticide treatments to control aphids began. Harvesting proceeded in mature grain fields. Stubble was windrowed, drying. Unharvested fields of wheat, barley, oats were drying, being prepared for harvest. Stripe rust was reported in some wheat fields, causing yield reductions. Winter forage fields were cut for silage or green-chopped, as only a few fields remained to be harvested. Oat hay fields were harvested, several wheat fields were cut for silage. Fields of alfalfa hay, seed alfalfa continued to show strong growth. Alfalfa hay was cut, windrowed, dried, baled. Field corn for seed, animal feed, other uses continued to show good growth, was being irrigated. Late planting of some corn fields continued. Sugar beets continued to exhibit vigorous growth. Irrigation, fungicide treatments were underway in many fields. Planting of rice fields continued in many areas. Rice has emerged in early-planted fields. Dry lima bean planting was underway. Sweet potato planting continued. The picking, packing of stone fruit gained momentum as warm weather, sunny skies prevailed. Poppy and Earlicot apricots, Springcrest, Super Rich, Queen Crest peaches, Mayfire and May Glo nectarines were harvested. Brooks, Tulare, Kings, Ranier cherries were picked and packed. Splitting was evident in early cherry varieties due to damp, rainy weather experienced during April. Fruit thinning continued in many stone fruit orchards; treatments to control disease, insect pests were made as necessary. Wine, raisin, table grape vineyards were cultivated, treated with fungicides, insecticides. Cane training, leaf pulling, treatments to thin, lengthen fruit clusters were underway in some table grape vineyards. Open blossoms were noted in a few grape vineyards. Removal of grape vineyards continued in most districts. Bright red blooms were open in many pomegranate orchards in Fresno County. Strawberries for processing were harvested in Merced County. Avocado, olive trees were blooming. Irrigation, applications of fungicides, insecticides were underway in some citrus orchards. Harvest of the Navel orange crop slowed, while Valencia orange harvest continued to gain momentum. Lemons were harvested in the Central Valley. Steady development continued in almond orchards; heavily laden branches were propped up in many orchards. Irrigation, treatments to control diseases, insect pests were made in almond, walnut, pistachio orchards. Walnuts were treated for codling moth, blight. Weather conditions were relatively favorable for vegetable production. Fresh market, processing tomato planting continued. Freezer lima bean, watermelon planting began. Garlic plantings were maturing steadily and nearing their harvest cycle. Onion harvesting was underway in some fields with the sacks of bulbs spread in the sun for drying. Maturing onion fields were prepared for harvest. Honeydew planting started late due to cold spring temperatures. Processing tomatoes were growing steadily, blooming. Steady growth continued in fields of eggplant, peppers, squash, sweet corn, cucumbers. Cool temperatures continued slowing melon development. Some asparagus fields in the San Joaquin Valley continued to produce marketable spears, but their season was nearly finished. Broccoli, lettuce continued to be harvested. Small leeks, red onions, squash, sweet peas were picked in the Central Valley. The following vegetables were also harvested: artichokes, basil, cabbage, carrots, celery, cilantro, fava beans, mustard greens, parsley, radicchio, spinach. Foothill pastures were beginning to dry in northern state.

Special feeder cattle auctions were scheduled in northern state for late May through mid-June as cattle begin to ship from pastures. Foothill pastures were dry in central California with many feeder cattle having already shipped to market. Excellent cattle weight gains were reported in some areas. April rains, snow at higher elevations improved prospects for summer pastures. Lambs began to move from pastures in the Mojave desert. Most lambs have already shipped from pastures in central state. Stock ewes grazed in pastures, fallow fields, harvested grain fields in the central area. Beehives were moved into vegetable fields on the west side of the San Joaquin Valley.

**COLORADO:** Days suitable for field work 5.2. Top soil 4% very short, 14% short, 76% adequate, 6% surplus. Subsoil 15% very short, 33% short, 48% adequate, 4% surplus. Temperatures last week were above normal. The Front Range, southeastern parts of the state received moisture ranging from light to locally heavy rain showers. Spring wheat 92% planted, 92% 2002, 89% avg.; 66% emerged, 71% 2002, 69% avg.; 4% poor, 25% fair, 61% good, 10% excellent. Spring barley 95% seeded, 99% 2002, 97% avg.; 72% emerged, 87% 2002, 85% avg.; 5% poor, 18% fair, 58% good, 19% excellent. Alfalfa 1st cutting 8%, 4% 2002, 2% avg. Dry beans 5% planted, 6% 2002, 4% avg. Sugar beets 99% planted, 99% 2002, 99% avg.; 65% up to stand, 50% 2002, 44% avg.; 3% very poor, 3% poor, 10% fair, 65% good, 19% excellent. Summer potatoes 80% planted, 86% 2002, 93% avg.; 50% emerged, 17% 2002, 33% avg.; 1% poor, 16% fair, 69% good, 14% excellent. Fall potatoes 74% planted, 82% 2002, 76% avg.; 14% emerged, 1% 2002, 1% avg.; 15% poor, 25% fair, 60% good. Dry onions 1% very poor, 2% poor, 17% fair, 62% good, 18% excellent.

**DELAWARE:** Days suitable for fieldwork 4.6. Topsoil 48% adequate, 52% surplus. Subsoil 78% adequate, 22% surplus. Corn 76% planted, 89% 2002, 78% avg.; 47% emerged, 65% 2002, 40% avg. Soybeans 14% planted, 17% 2002, 12% avg. Sorghum 14% planted, 16% 2002, 11% avg. Barley 6% poor, 26% fair, 52% good, 16% excellent, 85% headed, 99% 2002, 94% avg. Winter wheat 8% poor, 22% fair, 61% good, 9% excellent; 57% headed, 85% 2002, 73% avg. Strawberries 90% bloomed, 90% 2002, 90% avg. Strawberries 7% harvested, 12% 2002, 11% avg. Snap beans 44% planted, 37% 2002, 41% avg. Sweet corn 50% planted, 60% 2002, 52% avg. Potatoes 93% planted, 100% 2002, 97% avg. Watermelons 47% planted, 29% 2002, 39% avg. Cantaloupes 53% planted, 47% 2002, 43% avg. Hay supplies 10% very short, 35% short, 49% adequate, 6% surplus. Pasture feed 5% poor, 24% fair, 65% good, 6% excellent. Other hay 1st cutting 20%, 35% 2002, 35% avg. Alfalfa hay 1st cutting 15%, 34% 2002, 35% avg. Misty, cool weather conditions delayed field activities this week. Some progress was made with corn, soybeans, potatoes, vegetables. Barley is almost all headed, will start to turn in the next week or two. Winter wheat is in fair to good condition despite all the wet weather. Pastures are in mostly good condition. Hay is in short to adequate supply.

**FLORIDA:** Topsoil 25% very short, 35% short, 40% adequate. Subsoil 15% very short, 35% short, 50% adequate. Soil moisture supplies continued to dry out in most localities; no areas reported any surplus supplies. Most soil moisture short to adequate; very short supplies reported in scattered areas of Panhandle, Peninsula. Peanuts 50% planted, 61% 2002, 57% 5-yr avg. Temperature average 2 to 5° above normal, major cities. Daytime highs: 80s, 90s; most nighttime lows: 60s, 70s; Jacksonville, Tallahassee recorded at least one low in 50s. Rainfall range: none to 0.75 in., major cities; several localities recorded no measurable rain. Clash of Atlantic, Gulf of Mexico sea breezes brought thunderstorms, significant rains to many inland areas, Sunday, May 18. Some peanut producers are waiting for significant rains before planting dryland acreage. Peanut, cotton emergence good in most Panhandle, northern Peninsula areas. Irrigated tobacco mostly good to excellent. Hay baling active, especially in some Panhandle, northern Peninsula counties. Vegetable producers picking for Memorial Day market. Vegetables Available: Cantaloupes, cucumbers, eggplant,

okra, peppers, potatoes, sweet corn, tomatoes, watermelons. Harvesting declining seasonally for snap beans, cabbage, celery, radishes, squash; lighter volume available. Rain in citrus areas at least three days, some thunderstorms. New growth limited. New crop fruit making good progress. Valencia harvest still very active with supplies running low in a few areas. Grapefruit harvest all but over for season. Honey tangerine harvest about complete. Caretakers cutting cover crops, hedging, topping, pushing out dead trees, burning where permits available, some resets being planted. Pasture feed 5% very poor, 15% poor, 40% fair, 35% good, 5% excellent. Cattle 25% fair, 70% good, 5% excellent. Range, pasture feed decreased throughout State due to drought. Condition of cattle fair to excellent, most in good condition.

**GEORGIA:** Days suitable for field work 4.8. Soil 3% very short, 17% short, 55% adequate, 25% surplus. Corn 3% poor, 22% fair, 64% good, 11% excellent; 1% silked, 6% 2002, 3% avg. Cotton 2% poor, 25% fair, 62% good, 11% excellent. Hay 1% very poor, 4% poor, 29% fair, 53% good, 13% excellent. Sorghum 7% poor, 39% fair, 51% good, 3% excellent; 47% planted, 45% 2002, 46% avg. Soybeans 1% poor, 18% fair, 80% good, 1% excellent. Tobacco 1% poor, 23% fair, 63% good, 13% excellent. Wheat 6% poor, 26% fair, 53% good, 15% excellent; 5% harvested for grain, 8% 2002, 8% avg. Onions 4% poor, 21% fair, 40% good, 35% excellent; 39% harvested, 93% 2002, 69% avg. Watermelons 1% very poor, 6% poor, 41% fair, 44% good, 8% excellent; 98% planted, 100% 2002, 97% avg. Apples 34% fair, 46% good, 20% excellent. Peaches 23% fair, 77% good; 5% harvested, 4% 2002, 6% avg. Continued rains made fieldwork difficult in north, central state. South state received less rain than the rest of the State. Rains hampered hay harvest. High winds damaged wheat crops in west state. County Agents, in west, central state, also reported top soil moisture as short in some areas. Warmer, dryer weather was needed to cut, cure hay. Crops, pastures have benefitted from the rainfall in central state. Corn, grain sorghum conditions continued to improve. Cotton, peanut, soybean planting proceed as planned. Activities: Spraying tobacco for insects, applying herbicides to corn, harvesting snapbeans, zucchini.

**HAWAII:** Generally favorable weather continued throughout the State during the past week. East state banana orchards were in fair to good condition. New, mature papaya orchards in lower Puna benefitted from the favorable weather, adequate soil moisture. Vegetables remained in mostly fair to good condition with warm, sunny weather, heavy irrigation.

**IDAHO:** Days suitable for fieldwork 5.9. Topsoil 1% very short, 16% short, 75% adequate, 8% surplus. Irrigation Water Supply is 3% very poor, 16% poor, 38% fair, 41% good, 2% excellent. For the third consecutive week most of the state has experienced below normal temperatures. Additional spring precipitation received continues to reduce irrigation water demands in many areas of the state. Hay, Roughage Supply 2% short, 66% adequate, 32% surplus. Sugarbeets Emerged 96%, 77% 2002, 82% avg. Oats 78% planted, 83% 2002, 80% avg.; 56% emerged, 62% 2002, 54% avg. Onions 97% emerged, 98% 2002, 100% avg. Dry Peas 63% planted, 98% 2002, 92% avg.; 29% emerged, 58% 2002, 59% avg. Lentils 48% planted, 96% 2002, 87% avg.; 13% emerged, 31% 2002, 37% avg. Potatoes 77% planted, 82% 2002, 79% avg.; 6% emerged, 5% 2002, 11% avg. Dry Beans 22% planted, 26%, 2002, 13% avg. Winter Wheat 64% Jointed, 55% 2002, 68% avg.; Boot Stage 8%, 1% 2002, 12% avg. Spring Wheat 7% Jointed, 5%, 2002, 14% avg. Barley 7% Jointed, 4% 2002, 14% avg. Alfalfa Hay 1<sup>st</sup> cutting harvested 3%, 3% 2002, 6% avg. Activities: Planting small grains, potatoes, corn, lentils, dry peas, dry beans, cutting hay, moving livestock to spring range.

**ILLINOIS:** Days suitable for fieldwork 2.5. Topsoil 1% short, 59% adequate, 40% surplus. Winter wheat 22% filled, 19% 2002, 24% avg. Oats 6% headed, 3% 2002, 7% avg.; 1% very poor, 2% poor, 20% fair,

62% good, 15% excellent. Alfalfa hay 2% poor, 20% fair, 55% good, 23% excellent. Red clover 3% poor, 20% fair, 60% good, 17% excellent. Pasture 1% poor, 18% fair, 61% good, 20% excellent. Planting progress was slow last week with some additional rainfall, already existing wet conditions across the state. Hay cutting has also been delayed in many areas. The cool, damp conditions have caused some concern for the winter wheat crop which is now forming grain.

**INDIANA:** Days suitable for fieldwork 1.0. Topsoil 31% adequate, 69% surplus. Subsoil 4% short, 50% adequate, 46% surplus. Another week of rain, wind, strong thunderstorms in many areas of the state halted or slowed field work. Farmers are now very concerned about the delayed planting. Heavy rain occurred in some regions. Flooding continued along river bottoms. Standing water still exists in many low lying areas of fields. Spots in some fields were drying up by the weekend. Corn, soybean planting made some progress. Soybean planting is 10 days behind average. Good stands in early planted corn fields, except in wet spots. Some replanting will be necessary. Temperatures averaged 7° below to 2° above normal for the week. Precipitation averaged 0.21 to 2.95 inches. Spreading of fertilizer, spraying took place on some fields. Winter wheat 82% good to excellent compared with 57% 2002. Wheat damaged in some fields from wind, water. Livestock are in mostly good condition. Spring calving continued. Tobacco plants being set. Pastures continue to improve and grow. Pastures 3% poor, 20% fair, 60% good, 17% excellent. Activities: Planting major crops, moving grain to market, hauling manure, repairing equipment, cleaning up from wind, water damage, taking care of livestock.

**IOWA:** Days suitable for fieldwork 2.4. Topsoil 0% very short, 0% short, 65% adequate, 35% surplus. Iowa fieldwork is moving along, but additional rains received last week allowed farmers little time to catch up on fieldwork. Wet spots remained in fields across the state, and after the remainder of the corn is planted, those spots may be replanted. Oat 100% seedings, 91% emergence, 97% 2002, 0% very poor, 2% poor, 20% fair, 55% good, 23% excellent. Corn 64% planting, 93% 2002, 90% 5-yr avg.; 38% emergence, 41% 2002 emergence, 56% 5-yr avg emergence. Soybean 6% planting, 51% 2002, 54% 5-yr avg.; 2% emergence, 5% 2002, 18% 5-yr avg. Pasture, Range feed 0% very poor, 1% poor, 16% fair, 53% good, 30% excellent.

**KANSAS:** Topsoil 4% very short, 7% short, 71% adequate, 18% surplus. Subsoil 13% very short, 29% short, 50% adequate, 8% surplus. Range, pasture feed 13% very poor, 23% poor, 33% fair, 25% good, 6% excellent. Storm activity limited fieldwork to 3.6. Received many reports of tornados, wind, hail, flood damage. Rains improved dryland wheat condition in some areas. Stockwater supplies 7% very short, 21% short, 66% adequate, 6% surplus. Feed grain supplies 4% very short, 19% short, 75% adequate, 2% surplus. Hay, forage supplies 7% very short, 28% short, 64% adequate, 1% surplus. Cotton in Southwest state is 10% planted, 15% planted in the South Central area of the State.

**KENTUCKY:** Days suitable for fieldwork totaled 2.5. Topsoil 38% adequate, 62% surplus. Subsoil 1% short, 49% adequate, 50% surplus. Temperatures averaged 65°, 2° below normal. Rainfall continued to affect planting and setting. Rainfall totaled 1.53 inches statewide. Corn planting progress was slowed due to wet soils, flooded field conditions. Corn 76% planted, 22% 2002, 3% below avg.; 67% emerged, 20% above 2002, 5 -yr avg.; 2% very poor, 10% poor, 33% fair, 40% good, 15% excellent. Winter wheat 1% very poor, 7% poor, 22% fair, 45% good, 25% excellent. Dark tobacco 11% set, 4% above 2002, 13% below avg. Burley tobacco 12% set, 3% above 2002, 11% below avg.. Pasture feed 3% poor, 14% fair, 52% good, 31% excellent. The hay 1% very poor, 3% poor, 18% fair, 53% good, 25% excellent. The strawberry 32% small, 47% medium, 21% large. Sorghum 7% planted, 6% above avg.; 16% below avg. Activities: Cutting hay,

equipment maintenance, cattle handling, field preparation where possible.

**LOUISIANA:** Days suitable for fieldwork 5.9. Soil 27% very short, 34% short, 33% adequate, 6% surplus. Corn 2% very poor, 3% poor, 30% fair, 56% good, 9% excellent. Cotton 1% very poor, 2% poor, 34% fair, 63% good; 63% emerged 46% last week, 71% 2002, 77% avg. Hay 1st cutting 41%, 32% last week, 47% 2002, 47% avg. Rice 20% fair 71% good, 9% excellent. Planting of rice was near completion. Sorghum 60% emerged, 47% last week, 67% 2002, 75% avg. Spring plowing 98% plowed, 96% last week, 97% 2002, 97% avg. Sorghum, corn were suffering in many areas due to the dry conditions. Sugarcane 4% very poor, 9% poor, 26% fair, 46% good, 15% excellent. Sweet potatoes 12% planted, 7% last week, 21% 2002, 20% avg. Winter wheat 12% poor, 42% fair, 44% good, 2% excellent; 82% turning color, 57% last week, 94% 2002, 97% avg.; 4% harvested, 0% last week, 20% 2002, 29% avg. Livestock 1% very poor, 6% poor, 39% fair, 49% good, 5% excellent. Vegetables 1% very poor, 10% poor, 43% fair, 42% good, 4% excellent.

**MARYLAND:** Days suitable for fieldwork 3.8. Topsoil 52% adequate, 48% surplus. Subsoil 2% short, 75% adequate, 23% surplus. Corn 72% planted, 78% 2002, 75% avg.; 36% emerged, 60% 2002, 36% avg. Soybeans 11% planted, 18% 2002, 14% avg. Lima Beans 24% planted, 19% 2002, 16% avg. Sorghum 15% planted, 8% 2002, 9% avg. Strawberries 91% bloomed, 92% 2002, 94% avg. Snap Beans 20% planted, 30% 2002, 30% avg. Sweet Corn 48% planted, 68% 2002, 65% avg. Potatoes 90% planted, 98% 2002, 100% avg. Barley 2% very poor, 6% poor, 29% fair, 57% good, 6% excellent; 94% headed, 97% 2002, 97% avg. Hay supplies 22% very short, 31% short, 47% adequate. Other Hay 1st cutting 14%, 27% 2002, 25% avg. Alfalfa Hay 1st cutting 12%, 31% 2002, 30% avg. Winter Wheat 3% very poor, 10% poor, 31% fair, 49% good, 7% excellent; 42% headed, 93% 2002, 79% avg. Pasture feed 3% poor, 26% fair, 49% good, 22% excellent. Tobacco 13% transplanted, 46% 2002, 22% avg. Snap beans 14% planted, 22% 2002, 23% avg. Cantaloupes 54% planted, 55% 2002, 64% avg. Watermelons 60% planted, 35% 2002, 47% avg. Cool, misty weather last week slowed progress on cutting, baling hay, planting corn, soybeans. Barley is almost all headed and will begin to turn in the next week or two. Winter Wheat is progressing slowly due to the cool, wet weather. Corn, soybean plantings are progressing on schedule while hay cutting is delayed by one to two weeks.

**MICHIGAN:** Days suitable for fieldwork 3.0. Topsoil 0% very short, 1.0% short, 53% adequate, 46% surplus. Subsoil 1.0% very short, 16% short, 63% adequate, 20% surplus. All Hay 1st cutting 0%, 0% 2002, 3.0% avg. Asparagus 33% harvested, 34% 2002, 46% avg. Barley planted 65%, 61% 2002, 89% avg. Barley emerged 38%, 34% 2002, 76% avg. Oats 94% planted, 86% 2002, 95% avg.; 70% emerged, 68% 2002, 84% avg. Fieldwork delayed by saturated soil. Temperatures ranged from 3° below normal to 2° above normal State. Average rainfall amounts ranged from 0.03 inches central Lower Peninsula to 0.48 inches south central Lower Peninsula. Fieldwork for past week at a minimum due to rainy weather. Soil moisture has improved. Alfalfa around State reached 8 to 14 inches with no problems. In southeast, central part of Lower Peninsula, corn has shown emergence, growing at a slow rate. Corn fields southeast at a growth stage V1. Soybean, oat fields have started to emerge. Wheat fields have progressed to a Feeke's growth stage 7 across State. Spraying for ragweed active. Sugarbeet stands looked good. Potato plantings progressed nicely. Last week began cool, wet but ended with warm, sunny weather. Insect pollination activity high on weekend. Apple bloom almost complete southwest. Apples full bloom to early petal fall on Ridge, southeast. In northwest apples pink, west central apples pink to full pink. Bloom heavy for most varieties south. Leaf damage, due to frost, high winds, hail over past few weeks, reported Berrien County. Moderate scab infection periods occurred May 11, 12 across State. Apricots growing rapidly

southwest. The crop appeared heavy. Peaches southwest, southeast will require thinning as crop is heavy. Peaches west central full bloom. Peach leaf curl symptoms began to show south. Oriental fruit moth catches increased across State. Tart cherries full bloom northwest. Sweet cherries shuck southeast. On Ridge, west central, sweet cherries full bloom. Frost damage reported both tart, sweet cherries northwest. European plums shuck southwest, full bloom west central. Japanese plums out of shuck southwest. Pear drop began southwest. Pears petal fall southeast. Blueberries bloom southwest. On Ridge, blueberries early to late pink depending on variety. Blueberries Van Buren County negatively affected by a cold winter. Dead shoots abundant Jersey variety bushes. Grapes had two leaves out, both flower clusters exposed southwest. Some scattered hail damage Berrien County reported. Strawberry bloom continued south. Spittlebugs, tarnished plant bug, and two spotted spider mites observed some fields. Fall bearing raspberry canes 2 to 4 inches long south. Vegetable fieldwork limited due to rains and wet fields, as cold temperatures inhibited plant growth. Growers continued to plant tomatoes, peppers, radishes, carrots, sweet corn when possible. Pumpkin seeding, snap bean planting underway. Asparagus harvest continued at a slow pace. Growers observed very minor frost damage, some cutworm damage, asparagus beetle egg laying activity, some evidence of purple spot disease. Direct seeded cucumbers inside tunnels at second to third leaf stage. Early, direct seeded cucumbers with no protection at first true leaf stage. Planting completed for onions, neared completion for potatoes. Onions, potatoes, sweet corn starting to emerge. Some early planted potato fields have poor stands attributed to seed piece decay. Late planted spinach had mostly emerged. Stands looked good, but a little water damage reported west central part of State.

**MINNESOTA:** Days suitable for fieldwork 2.6. Topsoil 0% very short, 3% short, 76% adequate, 21% surplus. Corn 96% ground prepared, 95% 2002, 94% avg. Soybeans 61% ground prepared, 65% 2002, 71% avg. Potatoes 80% planted, 69% 2002, 67% avg. Sweet corn 27% planted, 36% 2002, 46% avg. Green peas 64% planted, 74% 2002, 74% avg. Canola 79% planted, 15% 2002, NA% avg. Dry Beans 38% planted, 16% 2002, 31% avg. Sunflowers 42% planted, 7% 2002, 29% avg. Pasture feed 2% very poor, 5% poor, 25% fair, 59% good, 9% excellent. Alfalfa 5% very poor, 9% poor, 27% fair, 53% good, 6% excellent. Oats 1% very poor, 2% poor, 21% fair, 61% good, 15% excellent. Weather systems throughout the state this past week brought rain storms as well as hail storms to parts of the state. Farmers throughout the state are reporting standing water in fields, as well as flooding in some areas. The statewide average temperature was 56.6°, 0.4° above normal for the week.

**MISSISSIPPI:** Days suitable for fieldwork 3.3. Soil 3% very short, 12% short, 41% adequate, 44% surplus. Corn 100% planted, 100% 2002, 100% avg.; 98% emerged, 100% 2002, 97% avg.; 1% very poor, 7% poor, 21% fair, 49% good, 22% excellent. Cotton 82% planted, 80% 2002, 84% avg.; 71% emerged, 59% 2002, 63% avg.; 1% very poor, 10% poor, 28% fair, 46% good, 15% excellent. Rice 89% planted, 90% 2002, 92% avg.; 81% emerged, 79% 2002, 78% avg.; 8% poor, 18% fair, 55% good, 19% excellent. Sorghum 93% planted, 86% 2002, 86% avg.; 85% emerged, 74% 2002, 76% avg.; 7% poor, 13% fair, 65% good, 15% excellent. Soybeans 78% planted, 71% 2002, 73% avg.; 70% emerged, 56% 2002, 56% avg.; 1% very poor, 10% poor, 22% fair, 54% good, 13% excellent. Wheat 12% mature, 15% 2002, 17% avg.; 11% poor, 43% fair, 34% good, 12% excellent. Hay 75% harvested (cool season), 69% 2002, 63% avg.; 7% harvested (warm season), NA 2002, 4% avg.; 3% very poor, 10% poor, 27% fair, 50% good, 10% excellent. Sweetpotatoes 5% planted, 5% 2002, 8% avg. Cattle 2% very poor, 7% poor, 23% fair, 53% good, 15% excellent. Pasture 3% very poor, 11% poor, 29% fair, 48% good, 9% excellent. Watermelons 97% planted, 98% 2002, 83% avg.; 16% poor, 40% fair, 37% good, 7% excellent. Heavy rains fell across most of the state, bringing relief to

some, grief for others. Statewide, the rainfall average is nearly two inches above normal.

**MISSOURI:** Days suitable for fieldwork 2.5. Topsoil 5% short, 60% adequate, 35% surplus. Subsoil 6% short, 69% adequate, 25% surplus. Wet fields, additional rain again hindered fieldwork over most of the State. Substantial hail damage was reported to corn, wheat in Mississippi, Butler, Stoddard counties, with a few central district counties also indicating damage. Crops in the Bootheel are also suffering from too much standing water from excessive rain, seep water in counties along the Mississippi River where thousands of acres are affected. Corn planting ranges from 41% northeast district to 89% northwest and virtual completion southwest, southeast districts. Corn is in need of dry weather as the crop is yellowing from too much moisture in many low-lying fields. Sorghum planting most advanced southeast at 64%, least advanced central, east-central at 6% or less. Soybean planting is most advanced northeast at 40%, followed by the north-central, west-central districts at 25% or more, while the northeast, south-central districts are least advanced at 6%. Wheat crop most advanced in southwest, southeast districts with nearly all headed, least advanced across northern third of State at 55 to 65% headed. Pasture feed 7% poor, 28% fair, 53% good, 12% excellent. Rainfall averaged 0.95 inch, ranging from around 0.15 inch across northern third of State to 2.23 inches southwest district, 2.96 inches southeast. Highest rainfall amounts reported in Pemiscot County at 4.78 inches and Butler County at 5.20 inches.

**MONTANA:** Days suitable for fieldwork 4.2. Topsoil 0% very short, 7% short, 82% adequate, 11% surplus. Subsoil 10% very short, 20% short, 68% adequate, 2% surplus. Winter wheat 2% very poor, 4% poor, 17% fair, 59% good, 18% excellent. Barley 75% planted, 74% 2002, 87% 5-yr avg.; 44% emergence, 23% 2002, 53% 5-yr avg. Corn 63% planted, 63% 2002, 68% 5-yr avg.; 16% emergence, of 30% 2002, 33% 5-yr avg. Dry bean's 56% planted, 50% 2003, 51% 5-yr avg. Dry bean 30% emergence, 5% 2002. Oats 52% plantings, 58% 2002, 75% 5-yr avg.; 22% emergence, 40% 5-yr avg. Potatoes 20% planted, 68% 5-yr avg.; 16% emergence. Spring wheat 74% planted, 67% 2002, 84% 5-yr avg.; 39% emergence, 17% avg.; 48% 5-yr avg. Sugar beets is 67% Emergence, 52% 2002, 76% 5-yr avg. Livestock grazing 93% open, 2% difficult, 3% closed, with range, pasture feed 2% very poor, 15% poor, 31% fair, 42% good, 10% excellent. Calving, lambing 97%, 91% complete, compared to 97%, 89% last year.

**NEBRASKA:** Days suitable for fieldwork 4.3. Topsoil 1% very short, 5% short, 85% adequate, 9% surplus. Subsoil 12% very short, 33% short, 53% adequate, 2% surplus. Limited rainfall, near normal temperatures allowed good planting progress. Growing degree days remained behind normal across the state. Spring planting less than a week behind normal. Wheat 91% jointed, ahead of 77% 2002, 80% avg. Alfalfa 2% very poor, 5% poor, 27% fair, 47% good, 19% excellent; 1<sup>st</sup> cutting complete 3%, 3% 2002, 4% avg. Pasture, range feed 10% very poor, 20% poor, 42% fair, 24% good, 4% excellent, below year ago, average.

**NEVADA:** Temperatures warmed to above normal as only a couple of small storms passed through the State. Traces of precipitation were noted at northern weather stations. Cooler weather returned on the weekend, particularly in the north-central, northeastern areas. Ranges, pastures thrived in response to warmer weather following good soaking rains. Calving was nearing seasonal completion, branding was common. Movement to summer range was underway. Alfalfa was breaking dormancy in northern valleys with crop condition generally good. Spring grain emergence advanced. Potato planting resumed. Activities: Calving, branding, lambing, livestock movement, planting, weed control.

**NEW ENGLAND:** Days suitable for field work 4.7. Topsoil 2% very short, 5% short, 75% adequate, 18% surplus. Subsoil 4% very short, 6% short, 81% adequate, 9% surplus. Pasture feed 0% very poor, 5% poor, 19% fair, 63% good, 13% excellent. Maine Potatoes 5% planted, 20% 2002, 45% avg.; condition good. Rhode Island Potatoes 65% planted, 95% 2002, 85% avg.; condition good. Massachusetts Potatoes 75% planted, 75% 2002, 80% avg.; condition good. Maine Oats 10% planted, 30% 2002, 50% avg.; condition good. Maine Barley 10% planted, 30% 2002, 50% avg.; condition good. Field Corn 20% planted, 25% 2002, 35% avg.; condition fair/good. First Crop Hay: condition good/fair. Shade Tobacco 25% transplanted, 5% 2002, 15% avg.; condition good/fair. Sweet Corn 30% planted, 25% 2002, 35% avg.; condition good/fair. Apples: Early Bloom Stage, condition good/fair. Peaches: Full Bloom to Petal Fall Stage, condition good/fair. Pears: Full Bloom Stage, condition good/fair. Strawberries: Bud to Early Bloom Stage, condition good/fair. Massachusetts Cranberries: Bud Stage, condition fair/good. Highbush Blueberries: Bud to Early Bloom Stage, condition good/fair. Maine Wild Blueberries: Bud Stage, condition good. A cool, wet start to the week gave way to warm, dry weather by week's end, allowing growers to get back into the fields. In general, temperatures have remained below normal, slowing germination, planting progress. Frost hit many locations last week. Activities: Planting vegetables, sweet corn, field corn, potatoes, small grains; transplanting shade tobacco; spreading manure; applying fertilizer, herbicides; pruning; irrigating, plowing; tilling; discing; turning animals out to pasture.

**NEW JERSEY:** Days suitable for field work were 5.2. Top soil 89% adequate, 11% surplus. Field activities included planting corn, soybeans, vegetables. Activities: Fertilizing, spraying herbicides, side dressing, harvesting spring vegetables. There was measurable amounts of rainfall on May 16, 2003, over most of the state. Temperatures were below normal in most areas of the state for the week. Barley, wheat 100% headed in some areas of the central district. Small grains condition was rated good across most of the state. Hay crops were rated mostly good across the state, some areas of the central district were ready to cut. Corn, soybeans were beginning to emerge in various localities. Peppers, tomatoes were being transplanted from greenhouses. Cantaloupe, lima bean, eggplant planting continued in the southern district. Asparagus harvest continued across the state. Lettuce, spinach harvest continued in southern counties. Cabbage harvest had started in some localities in the southern district. Sweet corn planting continued in central counties. Pea plants continued to blossom in the south. Snap bean planting continued across the state. Potato planting was coming to a close. Sweet potato planting started in central, southern counties. Strawberry plants were still in flower in areas of the northern district; while in the southern district harvest continued. Peaches continued to size in the northern, southern counties. Apples started to size in southern areas. Blueberries began to set up in southern localities. Grape vines in the south continued to leaf out.

**NEW MEXICO:** Days suitable for fieldwork 6.9. Topsoil 44% very short, 49% short, 7% adequate. Wind damage 38% light, 14% moderate. A strong storm system brought winds that gusted over 50 mph at many places on the 15<sup>th</sup>. This system produced localized severe thunderstorms in the extreme northeast, with portions of Union County receiving large hail. Clayton measured 1.37 inches of rain during the storm. Most of the damage was to milo, corn, peanuts, wheat, caused ground erosion. Farmers were busy irrigating, cutting, baling hay, thinning cotton. Alfalfa 66% fair of the first cutting complete. Sorghum 7% planted. Corn 76% planted, 52% emerged, 17% poor, 53% fair, 14% good, 16% excellent. Cotton 78% planted, 43% fair, 42% good, 15% excellent. Winter wheat 87% headed, 50% very poor, 18% poor, 23% fair, 9% good. The dryland crop continues to suffer from dry conditions combined with strong winds. Lettuce was listed as fair to excellent, and made progress with 75% of the harvest complete. Chile conditions were reported as mostly fair to good. Onions were reported as mostly good to excellent with the harvest just beginning. Peanuts 20% planting.

Apples between poor, good, with fruit set at 98% light, 2% average. Ranchers spent the week branding, hauling water, and supplementing feed. Livestock conditions continue to drop with cattle reported as 6% very poor, 19% poor, 55% fair, 20% good. Sheep saw a slight increase with 12% very poor, 17% poor, 50% fair, 20% good, 1% excellent. Range, pasture feeds 22% very poor, 44% poor, 33% fair, 1% good.

**NEW YORK:** Days suitable 3.5. Soil 1% short, 67% adequate, 32% surplus. Oats 81% seeded, 78% 2002. Winter wheat 2% poor, 19% fair, 69% good, 10% excellent. Corn 33% planted, 27% 2002. Soybeans 16% planted. Pasture feed 6% fair, 76% good, 18% excellent. Vegetable planting picked up momentum as fields dried. Fruit developing on schedule.

**NORTH CAROLINA:** Days suitable for field work 5.0. Soil 0% very short, 5% short, 66% adequate, 29% surplus. A cool front crossed state late in the week, bringing enough rain to maintain adequate soil moisture in most areas of the state. The beginning of the week brought drier weather which allowed significant progress in planting peanuts, harvesting hay. Excessive moisture, earlier in the season, has caused previously planted corn to exhibit signs of nutrient depletion in some locations. Activities: Land preparation, fertilization; planting corn, cotton, sweet potatoes, tobacco, sorghum; applying pesticides.

**NORTH DAKOTA:** Days suitable for fieldwork 3.1 Topsoil 1% very short, 3% short, 70% adequate, 26% surplus. Subsoil 4% very short, 13% short, 67% adequate, 16% surplus. Precipitation late in the week stopped planting in most districts. Durum wheat 39% planted, 31% 2002, 43% avg.; 20% emerged, 4% 2002, 20% avg. Canola 58% planted, 63% 2002, 64% avg.; 25% emerged, 11% 2002, 31% avg. Dry Edible Beans 4% planted, 6% 2002, 14% avg. Flaxseed 38% planted, 41% 2002, 50% avg.; 9% emerged, 5% 2002, 17% avg. Potatoes 43% planted, 49% 2002, 57% avg.; 10% emerged, 4% 2002, 7% avg. Sunflowers 9% planted, 7% 2002, 11% avg. Stockwater supplies 2% very short, 8% short, 85% adequate, 5% surplus. Pasture, range feeds 4% very poor, 15% poor, 34% fair, 42% good, 5% excellent.

**OHIO:** Day suitable for fieldwork 0.7. Topsoil 0% very short, 0% short, 35% adequate, 65% surplus. Corn 86% planted, 21% 2002, 70% avg.; 72% emerged, 10% 2002, 44% avg. Soybeans 46% planted, 7% 2002, 52% avg.; 31% emerged, 3% 2002, 24% avg. Oats 99% emerged, 73% 2002, 89% avg. Winter Wheat 100% jointed, 92% 2002, 97% avg.; 17% headed, 13% 2002, 33% avg. Alfalfa hay 1st cutting complete 4%, 1% 2002, 11% avg. Other hay 1st cutting complete 2%, 1% 2002, 7% avg. Processing tomatoes 8% planted, 11% 2002, 28% avg. Potatoes 77% planted, 47% 2002, 71% avg. Winter wheat 1% very poor, 2% poor, 15% fair, 57% good, 25% excellent. Corn 1% very poor, 6% poor, 36% fair, 47% good, 10% excellent. Hay 2% very poor, 3% poor, 17% fair, 62% good, 16% excellent. Oat 0% very poor, 5% poor, 25% fair, 54% good, 16% excellent. Pasture feeds 1% very poor, 3% poor, 21% fair, 59% good, 16% excellent. Livestock conditions 0% very poor, 2% poor, 13% fair, 68% good, 17% excellent. Rain continued to fall this past week across much of the state of state keeping most farmers out of their fields. Many low lying areas are now flooded, almost all locations could use some time to dry out. Producers, waiting for the fields to dry up, took time to go turkey hunting. With the addition of rain this past week, concerns over damaged crops continue to mount. Some fear that the excess water will provide the mosquitos carrying the West Nile virus the means to build up large populations.

**OKLAHOMA:** Days suitable for fieldwork 4.6. Topsoil 14% very short, 30% short, 49% adequate, 7% surplus. Subsoil 18% very short, 32% short, 45% adequate, 5% surplus. Winter Wheat 52% soft dough, 32% last week, 58% 2002, 45% avg. Rye 4% very poor, 10% poor, 34% fair, 46% good, 6% excellent. Oats 3% very poor, 11% poor, 41% fair, 41% good, 4% excellent.; 92% jointing, 86% last week, 92% 2002,

95% avg.; 72% headed, 54% last week, 60% 2002, 75% avg.; 33% soft dough, 16% last week, 40% 2002, 35% avg. Corn 97% seedbed prepared, 96% last week, 94% 2002, 98% avg.; 72% planted, 67% last week, 92% 2002, 96% avg.; 44% emerged, 39% last week, 79% 2002, 81% avg. Sorghum 56% seedbed prepared, 51% last week, 68% 2002, 71% avg.; 14% emerged, 7% last week, 20% 2002, 13% avg. Soybeans 70% seedbed prepared, 68% last week, 76% 2002, 81% avg.; 39% planted, 28% last week, 42% 2002, 41% avg.; 25% emerged, 15% last week, 31% 2002, 23% avg. Peanuts 95% seedbed prepared, 90% last week, 95% 2002, 95% avg.; 48% emerged, 15% last week, 31% 2002, 23% avg. Cotton 96% seedbed prepared, 94% last week, 95% 2002, 95% avg.; 37% emerged, 9% last week, 32% 2002, 21% avg. Alfalfa hay 2% very poor, 6% poor, 29% fair, 56% good, 7% excellent; 1st 82% cutting, 68% last week, 71% 2002, 76% avg.; Other hay 2% very poor, 13% poor, 35% fair, 42% good, 8% excellent; 33% 1st cutting, 24% last week, 32% 2002, 36% avg. Watermelons 91% planted, 76% last week, 84% 2002, 90% avg.; 9% running, n/a last week, n/a 2002, n/a avg. Livestock 1% very poor, 3% poor, 23% fair, 57% good, 16% excellent; Pasture, Range 2% very poor, 13% poor, 34% fair, 44% good, 7% excellent; Livestock: Livestock were rated in mostly good to fair condition. Livestock insect activities were rated as light to moderate with ticks being the major problem reported especially in wooded areas. Cattle auctions reported an increase in marketings from last week. The marketing of heifers under 800 pounds was unchanged from the previous week. The price for feeder steers less than 800 pounds increased an average of ten cents per cwt. from last week with the average price being \$84.25 per cwt. The average price for feeder heifers less than 800 pounds decreased from last week by twenty-one cents averaging \$78.04 per cwt.

**OREGON:** Days suitable for fieldwork 6.5. Topsoil 0% very short, 23% short, 67% adequate, 10% surplus. Subsoil 18% very short, 16% short, 61% adequate, 5% surplus. Barley 75% planted, 72% previous week, 94% 2002, 96% 5-yr avg.; 58% emerged, 51% previous week, 77% 2002.; 0% very poor, 3% poor, 38% fair, 44% good, 15% excellent. Spring wheat 94% planted, 92% previous week, 100% 2002, 83% 5-yr avg.; 80% emerged, 68% previous week. Winter wheat headed 9%, 0% previous week, 27% 2002, 11% 5-yr avg.; 0% very poor, 9% poor, 52% fair, 37% good, 2% excellent. Range, Pasture 3% very poor, 11% poor, 36% fair, 44% good, 6% excellent. Activities: In general, first half of week warm, dry, while second half cool, wet. Crop growth, fieldwork hampered in areas experiencing cooler conditions. Some snowfall reported in Union, Hood River counties, while nighttime frost reported in Josephine County. Some areas in south central state received almost no precipitation, while precipitation in Condon, Salem almost one inch above normal. The Dalles only weather station to report temperatures above normal. Areas in southwest valleys reported high temperatures in lower eighties, all Willamette Valley weather stations experienced growing degree days below normal. Warmer weather earlier in week permitted some catch up in fieldwork in some areas. Cool temperatures, some moisture helped alleviate stress on north central wheat. Some Malheur County fields began to show stress from lack of irrigation. Positive progress reported for hay in various areas across State. In Willamette Valley areas, most fields still too wet for planting. Fields being worked, planted as soil dried; rocky, sandy ground being planted. In Jackson, Josephine counties, weather more favorable, allowing planting of corn, melons, tomatoes. Artichokes showed good growth; late rains kept plants lush. No activity reported in eastern areas of State. Cool weather continued to hamper fieldwork. Some areas needed more moisture. Greenhouses still shipping bedding plants to retail outlets, wet weather continued to slow home gardeners in northwestern state. Spring plant sales winding down in Portland area with only two reported last weekend. Iris growers in Salem area having their annual open houses. Easter lily growers on southern state on coast checking for bugs, diseases. Range, pasture land reported to be in mostly fair to good condition across State. Reports of insect, disease problems for some pastures along coast range due to mild winter conditions, extended spring

moisture. In Jackson County, most livestock in very good condition with abundance of good pasture. In Harney County, use of pasture land limited due to residual drought effects, stock water shortages. Fruit set on Willamette Valley Bartlett pears looked limited but other pears, cherries appeared to have a good set. Strawberries nearing full bloom but fields weedy during spring. Caneberries continued to leaf out, nearing bloom. Some showing buds. Grapes showing good growth on new shoots, some leafing out. Walnuts leafing out. In coastal areas, blueberry bloom continued. Cranberry development varied from unopened to scattered blooms. Most beds showing some shoot growth. In Hood River Valley, fair weather prevailed early in week, which allowed fruit growers to catch up on spring mowing, spraying. In The Dalles area, fruit orchard activity included irrigation, spraying, mowing grass strips between tree rows. Frost fans used several nights to protect setting fruit.

**PENNSYLVANIA:** Days suitable for field work 2.0. Soil 7% short, 62% adequate, 31% surplus. Spring plowing 84% complete, 81% 2002, 85% avg. Corn 55% planted, 55% 2002, 62% avg.; 30% emerged, 26% 2002, 31% avg.; 2% poor, 20% fair, 42% good, 36% excellent. Barley 77% heading, 84% 2002, 85% avg. Winter wheat 15% heading, 58% 2002, 46% avg.; 1% very poor, 3% poor, 19% fair, 50% good, 27% excellent. Oats 89% planted, 84% 2002, 92% avg.; 77% emerged, 79% 2002, 76% avg.; 1% poor, 23% fair, 61% good, 15% excellent. Soybeans 13% planted, 16% 2002, 25% avg. Potatoes 40% planted, 58% 2002, 63% avg. Peach 99% good, 1% excellent. Apple 3% very poor, 1% poor, 8% fair, 86% good, 2% excellent. Pasture feeds 2% very poor, 4% poor, 16% fair, 51% good, 27% excellent. Activities: Planting corn, soybeans, vegetables, oats; making haylage, ryelage; cutting hay; spraying herbicides; spreading manure; spreading lime, fertilizer; caring for livestock; building, fixing fences; repairing equipment.

**SOUTH CAROLINA:** Days suitable for field work 5.4. Soil 1% short, 86% adequate, 13% surplus. Corn 93% planted, 100% 2002, 100% avg.; 86% emerged, 100% 2002, 98% avg.; 2% poor, 31% fair, 62% good, 5% excellent. Soybeans 15% planted, 36% 2002, 25% avg. Sorghum 57% planted, 63% 2002, 58% avg.; 50% fair, 50% good. Cotton 43% planted, 73% 2002, 65% avg.; 2% poor, 45% fair, 53% good. Peanuts 57% planted, 76% 2002, 70% avg.; 100% good. Winter wheat 98% headed, 100% 2002, 99% avg.; 58% turning color, 94% 2002, 73% avg.; 3% ripe, 48% 2002, 26% avg.; 1% very poor, 8% poor, 22% fair, 67% good, 2% excellent. Barley 95% headed, 100% 2002, 96% avg.; 37% turning color, 79% 2002, 63% avg.; 1% ripe, 34% 2002, 28% avg.; 1% poor, 26% fair, 72% good, 1% excellent. Pastures 1% poor, 9% fair, 74% good, 16% excellent. Rye 95% headed, 100% 2002, 100% avg.; 55% turning color, 80% 2002, 68% avg.; 7% ripe, 46% 2002, 33% avg.; 3% poor, 17% fair, 78% good, 2% excellent. Oats 94% headed, 100% 2002, 100% avg.; 40% turning color, 82% 2002, 73% avg.; 7% ripe, 51% 2002, 41% avg.; 1% poor, 23% fair, 73% good, 3% excellent. Sweetpotatoes 40% planted, 46% 2002, 43% avg.; 20% fair, 80% good. Tobacco 100% transplanted, 100% 2002, 100% avg.; 5% poor, 37% fair, 49% good, 9% excellent. Grain Hay 72% harvested, 76% 2002, 76% avg.; 16% fair, 73% good, 11% excellent. Peaches 2% very poor, 5% poor, 13% fair, 54% good, 26% excellent. Apples 100% good. Snapbeans 100% planted, 100% 2002, 94% avg.; 1% fair, 72% good, 27% excellent. Cucumbers 72% good, 28% excellent. Watermelons 95% planted, 98% 2002, 98% avg.; 29% fair, 67% good, 4% excellent. Tomatoes 42% good, 58% excellent. Cantaloups 95% planted, 94% 2002, 94% avg.; 48% fair, 38% good, 14% excellent. Livestock 14% fair, 68% good, 18% excellent.

**SOUTH DAKOTA:** Days suitable for fieldwork 3.5. Topsoil 1% very short, 5% short, 84% adequate, 10% surplus. Subsoil 5% very short, 21% short, 68% adequate, 6% surplus. Feed supplies 10% very short, 32% short, 56% adequate, 2% surplus. Stock water supplies 10% very short, 24% short, 64% adequate, 2% surplus. Winter Wheat 41% boot,

14% 2002, 37% avg.; 2% poor, 39% fair, 48% good, 11% excellent; 18% boot, 18% 2002, 36% avg.; 1% headed, 0% 2002, 7% avg. Sorghum 15% planted, 11% 2002, 13% avg. Sunflower 3% planted, 4% 2002, 9% avg. Cattle 3% poor, 21% fair, 63% good, 13% excellent. Sheep 4% poor, 17% fair, 61% good, 18% excellent. Range, Pasture 7% very poor, 20% poor, 36% fair, 30% good, 7% excellent. Calving 94% complete. Lambing 93% complete. Cattle moved to pasture 57% complete. Planting progress continues, but cool, wet conditions have slowed row crop emergence. Farmers are keeping busy with row crop planting, spraying, applying fertilizers, fixing fences, moving cattle to pasture.

**TENNESSEE:** Days suitable for fieldwork 3.0. Topsoil 59% adequate, 41% surplus. Subsoil 65% adequate, 35% surplus. Wheat 95% headed, 95% 2002, 98% avg.; 23% turning color, 12% 2002, 26% avg.; 4% very poor, 8% poor, 23% fair, 52% good, 13% excellent. Tobacco 18% transplanted, 21% 2002, 30% avg. Pastures 1% very poor, 4% poor, 15% fair, 62% good, 18% excellent. Alfalfa hay 1st cutting 30%, 28% 2002, 52% avg.; 1% very poor, 5% poor, 29% fair, 55% good, 10% excellent. Other hay 1st cutting 17%, 18% 2002, 35% avg.; 3% very poor, 8% poor, 25% fair, 52% good, 12% excellent. Rainfall throughout the State delayed field activity for the second consecutive week. Prolonged wet conditions hindered all crops' progress, especially corn, soybean planting, hay harvesting, tobacco transplanting. Corn growers have assessed some of the flood damage in low-lying areas and were able to re-plant some acreage last week. Nursery growers were busy with fertilization, weed control last week. Farmers are concerned about the amount of acreage loss, hay quality since some fields remain under water. Farmers are hoping for drier weather conditions to continue cutting hay before fields become too ripe. Temperatures, rainfall averaged well above normal for most parts of the State.

**TEXAS:** Agricultural Summary: There was little or no relief to the hot, dry conditions across the state. The Plains region experienced temperatures in the 90's with most of the region receiving no rainfall. Some isolated locations reported severe thunderstorms with strong winds, tornadoes, golf ball sized hail. Rainfall amounts ranged from .5 to 2 inches. Trace amounts of rain were recorded throughout Central, North, East state, with a few isolated locations reporting between .5 and 1.5 inches. Some of the same areas also reported small hail. Crop damage, if any, was still being assessed. The Trans Pecos, Edwards Plateau were very hot, dry as temperatures broke the 100° mark in a few places. There were a couple of thunderstorms in the region, including a cloud burst that dropped 3 inches of rain in the Big Bend area. In most areas of the State, high temperatures, winds continued to deplete topsoil moisture as well as affect newly seeded crop stands. Emerged crops with shallow roots were wilting in the midday sun. Many crops were being watered to aid in emergence, in development. Many dryland crop producers were still waiting on rain to plant. Grasshopper populations were increasing in many areas. Supplemental feeding of livestock increased as range, pasture forages declined across many locations. Livestock continued to be in good condition in most areas. Small Grains: Winter wheat was drying very quickly, maturity was ahead of 2002. Many areas reported heavy baling. Some producers in the Plains were plowing up fields, filing insurance claims. Irrigated wheat looked somewhat favorable, but dryland wheat continued to suffer due to lack of moisture. Low head weights were reported in some fields. Harvest for grain was gaining momentum into the Low Rolling Plains, many other regions were gearing up to combine within a couple of weeks. Wheat 44% of normal compared with 42% 2002. Corn: Planting of corn was mostly completed in the Panhandle. Emerged irrigated stands in the region were favorable. Fields required excessive irrigation due to lack of moisture. Dryland acreage across the state was in dire need of rain. Corn in some central areas was stunted, had started to tassel. Rain has become critical for this season's corn crop in central, southern locations. Corn 68% of normal compared with 64% 2002. Cotton: Planting of irrigated fields was in full swing in areas of the Plains. Many dryland producers were waiting for rain before planting.

Emerging cotton was showing thrip infestations in some locations. Some dryland cotton had to be replanted because the lack of moisture prevented seed germination. Central state cotton was showing moisture stress. Coastal Bend fields were reported to be holding up well, but rain will definitely be needed soon. Moisture shortages continued to be a concern in all areas of the state. Sorghum: Land preparations continued in the Plains. Producers were still waiting for rains before planting. Irrigation was being used on corn, wheat rather than pre-watering sorghum fields. Grain sorghum made good progress in the Blacklands, but moisture was desperately needed. Some fields had started to wilt in the afternoon heat. Sorghum 69% of normal compared with 54% 2002. Peanuts: Planting was in full swing in areas of the High, Low Plains. Irrigation was heavy, emergence was favorable. Rice: Emergence made progress during the week. Producers were scouting for aphids. Earlier planted fields were being flooded. Rice 86% of normal compared to 91% 2002. Soybeans: Land preparation and planting were active in the Panhandle. Many producers were delaying planting until rain is received, but some producers were planting dry, hoping for rain to germinate the crop. Commercial Vegetables, Fruit, Pecans In the Rio Grande Valley harvest activities continued for carrots, greens, cabbage, onions, sugarcane. Melon harvest was gaining momentum. Dryland crops were suffering from lack of precipitation. In the San Antonio-Winter Garden onion harvest began. Carrot, cabbage harvest was beginning to wind down. Watermelons continued to do well. In East state, Sweet potato producers continued transplanting slips. Watermelon planting continued. Insects, disease were still a problem. Fruits, and vegetables were in need of moisture for continued growth. Pecans: Development continued in most areas of the state. Pecan Nut Casebearer was a problem in most areas, however many producers were optimistic about this year's crop. Range, Livestock: Range pasture feeds continued to decline due to the lack of available moisture for plant growth. Range land was turning brown. Cattle were grazing out the last of the wheat pastures. Drought conditions were present or increasing in most locations. Livestock condition remained good in most areas, but body scores were beginning to decline as forage was depleted. In areas where range, pastures were the worst, stocker cattle were being moved into feedlots. Producers were weaning fall calves. Supplemental feeding was necessary for livestock in many areas. Horn flies continued to cause problems.

**UTAH:** Days suitable for fieldwork 5.6. Topsoil 3.0% very short, 18% short, 76% adequate, 3.0% surplus. Subsoil 9.0% very short, 32% short, 59% adequate. Stock water supplies 7.0% very short, 28% short, 65% adequate. Irrigation water supplies 18% very short, 40% short, 42% adequate. Alfalfa hay 1st cutting 7.0%, 12% 2002, 5.0% avg.; Height 14 inches, 13 inches 2002, 14 inches avg. Barley 10% fair, 78% good, 12% excellent. Cattle/Calves cattle moved to summer range 33%, 29% 2002, 31% avg.; 2.0% very poor, 5.0% poor, 27% fair, 55% good, 11% excellent. Corn 65% planted, 67% 2002, 65% avg.; 9.0% emerged, 23% 2002, 20% avg. Ewes Lambled on Range 92%, 99% 2002, 94% avg. Sheep Sheared on Range 93%, 100% 2002, 100% avg. Sheep/lambs sheep moved to summer range 21%, 28% 2002, 25% avg.; 2.0% very poor, 4.0% poor, 23% fair, 64% good, 7.0% excellent. Oats 93% planted, 86% 2002, 87% avg.; 78% emerged, 67% 2002, 63% avg. Potatoes 46% planted, 89% 2002, 85% avg. Activities: Planting corn, spraying for pests, irrigating fields, tending to livestock. Precipitation ranged from 0.00" in several counties up to 0.75" in Garfield county last week. Low temperatures dipped below freezing Sunday night raising concern about potential frost damage. For the week, low temperatures were between the mid 20s to mid 60s while highs ranged between the low 50s to low 90s. Average height of alfalfa was 14 inches, first cutting of alfalfa hay has begun in several counties with more expecting to start next week. Corn planting continued and the crop has begun emerging. Aphids have started showing up on alfalfa. A USU Extension Entomologist has identified cow pea aphids on alfalfa hay in Millard county. They are smaller than regular aphids, dark green to black in color, can cause more damage than regular aphids if numbers are large

enough. Ranchers continued moving livestock to summer ranges. Reports indicated that overall condition of livestock is still good.

**VIRGINIA:** Days suitable for fieldwork 4.1. Topsoil 5% short, 54% adequate, 41% surplus. Subsoil 3% short, 78% adequate, 19% surplus. Pasture 3% poor, 19% fair, 60% good, 18% excellent. Livestock 2% poor, 13% fair, 69% good, 16% excellent. Other Hay 2% poor, 19% fair, 64% good, 15% excellent. Alfalfa Hay 1% poor, 19% fair, 61% good, 19% excellent. Corn 80% planted, 88% 2002, 79% 5-yr avg.; Grain 57% emerged, 74% 2002, NA 5-yr avg. Soybeans 13% planted, 23% 2002, 16% 5-yr avg.; 3% emerged, 10% 2002, NA 5-yr avg. Winter Wheat 5% very poor, 12% poor, 33% fair, 39% good, 11% excellent. Winter Wheat 82% headed, 96% 2002, NA 5-yr avg. Barley 2% very poor, 13% poor, 33% fair, 43% good, 9% excellent. Greenhouse Tobacco 1% very poor, 3% poor, 14% fair, 49% good, 33% excellent. Tobacco Plantbeds 3% very poor, 5% poor, 18% fair, 72% good, 2% excellent. Flue Tobacco 65% transplanted, 78% 2002, 70% 5-yr avg. Burley Tobacco 12% transplanted, 19% 2002, 20% 5-yr avg. Dark Fire Tobacco 40% transplanted, 61% 2002, 52% 5-yr avg. Sun Tobacco 47% planted, 56% 2002, 49% 5-yr avg. Peanuts 60% planted, 82% 2002, 77% 5-yr avg. Cotton 12% fair, 66% good, 22% excellent; 85% planted, 95% 2002, 91% 5-yr avg. Summer Potatoes 5% very poor, 10% poor, 49% fair, 27% good, 9% excellent. Apples 41% fair, 58% good, 1% excellent. Peaches 7% very poor, 22% fair, 61% good, 10% excellent. Most of state experienced cold, wet weather conditions this week. Some areas reported flooding, causing them to run behind schedule in their fieldwork. Despite wet weather, many farmers continued making progress when they were able to get in their fields. Hay reached maturity in many parts of the state, was in need of being cut to prevent over-ripening. A couple of counties had to replant tobacco due to the hail, wind, rain late last week. In several counties, weather caused some lodging in small grains, which were also under some disease pressure. Vegetable planting was in full swing. Livestock are generally doing well. Activities: Shearing sheep, building, fixing fences, working on equipment, spraying wheat for cereal leaf beetle, preparing fields for full season soybean planting, applying post-emergence herbicides to corn, scouting, applying lime, fertilizer, pesticides.

**WASHINGTON:** Days suitable for fieldwork averaged 5.3. Topsoil 8% short, 79% adequate, 13% surplus. Subsoil 9% short, 88% adequate, 3% surplus. Irrigation water supplies were 100% adequate. The highest temperature in the state was 80% in Pasco. The lowest temperature in the state was 27% in Stampede Pass. Winter wheat 12% headed, 2% very poor, 7% poor, 19% fair, 52% good, 20% excellent. Spring wheat 99% planted, 90% emerged, 33% fair, 50% good, 17% excellent. Barley 99% planted, 93% emerged, 31% fair, 40% good, 29% excellent. Palouse growers continued to monitor closely for stripe rust in susceptible grains. In Adams County, stripe rust was widely reported in winter, spring cereals, limited improving crop conditions. Potatoes emerging in the Central Basin. Potatoes 99% planted, 62% emerged. Potato 8% fair, 59% good, 33% excellent. Corn 87% planted, 40% emerged, 1% fair, 99% good. Dry peas 98% planted. Dry edible beans 49% planted, 4% fair, 44% good, 52% excellent. Processing green peas 97% planted. Alfalfa 1st cutting 22% complete. Hay, other roughage supplies 9% short, 91% adequate. Range, pasture feeds 1% poor, 51% fair, 46% good, 2% excellent. Most spring pasture feeds were good due to the spring rains. Western state experienced heavy rain, hail, cold temperatures later in the week. Conditions around the Yakima Valley remained too cold for ideal crop development, frost protection was still required. The Douglas, Chelan County cherry crops were expected to be average in the lower elevations, above average

in the higher elevations. Pear crop in the region also appeared above average. In Benton County, first cover sprays were being applied on treefruit, asparagus was being harvested, hops were being strung.

**WEST VIRGINIA:** Days suitable for field work 2.0. Topsoil 45% adequate, 55% surplus, 55% adequate, 45% surplus 2002. Intended acreage prepared for Spring 75% planting, 70% in 2002, 85% 5-yr avg. Hay, roughage supplies 5% very short, 30% short, 65% adequate. Feed grain supplies 2% very short, 14% short, 84% adequate. Corn 30% planted, 50% 2002, 61% 5-yr avg.; 11% emerged, 35% in 2002. Soybeans 9% planted, 25% 2002, 39% 5-yr avg.: 4% emerged, 5% in 2002. Winter Wheat 1% poor, 27% fair, 71% good, 1% excellent, 21% headed, 80% 2002, 56% 5-yr avg. Oats 84% planted, 80% 2002, 87% 5-yr avg.; 69% emerged, 50% 2002, 56% 5-yr avg. Tobacco beds 97% emerged, 98% 2002, 99% 5-yr avg.: 1% transplanted, 1% in 2002, 4% 5-yr avg. Hay 2% poor, 44% fair, 46% good, 8% excellent. Apples 37% fair, 63% good. Peaches 34% fair, 65% good and 1% excellent. Cattle, calves 1% poor, 31% fair, 64% good, 4% excellent; 96% calved. Sheep, Lambs 1% poor, 40% fair, 56% good, 3% excellent; 97% lambed. Activities: Planting when conditions allowed, repairing fences, cleaning debris from areas hit by flooding, high winds. Rainfall continues to be a problem in most areas, delaying hay harvesting, causing concern for crops planted.

**WISCONSIN:** Days suitable for fieldwork 3.6. Soil 0% very short, 1% short, 67% adequate, 32% surplus. Tractors were back in the fields, but they had to pick the right fields to continue spring work. The rains of the previous two weeks made for difficult field conditions in many areas. Rainfall amounts for the week ranged from .25 to 1.25 inches, with local areas getting heavier rains. The problem was the total rainfall in the last three weeks. Farmers were appreciative of the rain, but would like a respite from it to finish planting. Temperatures for the past week were very close to normal conditions for this time of year, averaged just 1 to 2 ° below normal for the week. The sufficient moisture, temperatures improved pasture field conditions around the state. Pasture feed 1% very poor, 4% poor, 21% fair, 48% good, 26% excellent.

**WYOMING:** Days suitable for field work 6.1. Topsoil 8% very short, 36% short, 56% adequate. Subsoil 13% very short, 61% short, 26% adequate. Winter wheat 1% very poor, 2% poor, 24% fair, 72% good, 1% excellent; 87% jointed, 43% 2002, 46% 5-yr avg.; 27% boot, 18% 2002, 5% 5-yr avg. Barley 93% planted, 93% 2002, 92% 5-yr avg.; 72% emerged, 60% 2002, 71% 5-yr avg.; 17% fair, 74% good, 9% excellent. Oats 85% planted, 66% 2002, 78% 5-yr avg.; 52% emerged, 34% 2002, 40% 5-yr avg. Spring wheat 88%, planted 51% 2002, 78% 5-yr avg.; 45% emerged, 30% 2002, 40% 5-yr avg. Sugarbeets 99% planted, 96% 2002, 99% 5-yr avg.; 50% emerged, 43% 2002, 66% 5-yr avg. Corn 74% planted, 59% 2002, 69% 5-yr avg.; 9% emerged, 29% 2002, 29% 5-yr avg. Dry beans 6% planted, 5% 2002, 8% 5-yr avg. Stock water supplies 14% very short, 39% short, 46% adequate, 1% surplus. Range, pasture feed 5% very poor, 19% poor, 40% fair, 35% good, 1% excellent. Range flock sheep shorn 96%, 91% 2002, 92% 5-yr avg.; 71% ewes lambed, 61% 2002, 63% 5-yr avg. Lamb losses 17% light, 83% normal. Livestock 4% poor, 32% fair, 63% good, 1% excellent. Cattle moved to summer pastures 29%. Sheep moved to summer pastures 24%. Weekly temperatures averaged near normal in the State. Most stations received below normal precipitation. The heaviest moisture fell in Laramie with 0.66 inch. Annual precipitation totals remain above normal in eastern areas, 2 inches or less below normal elsewhere.

## May 19 ENSO Update

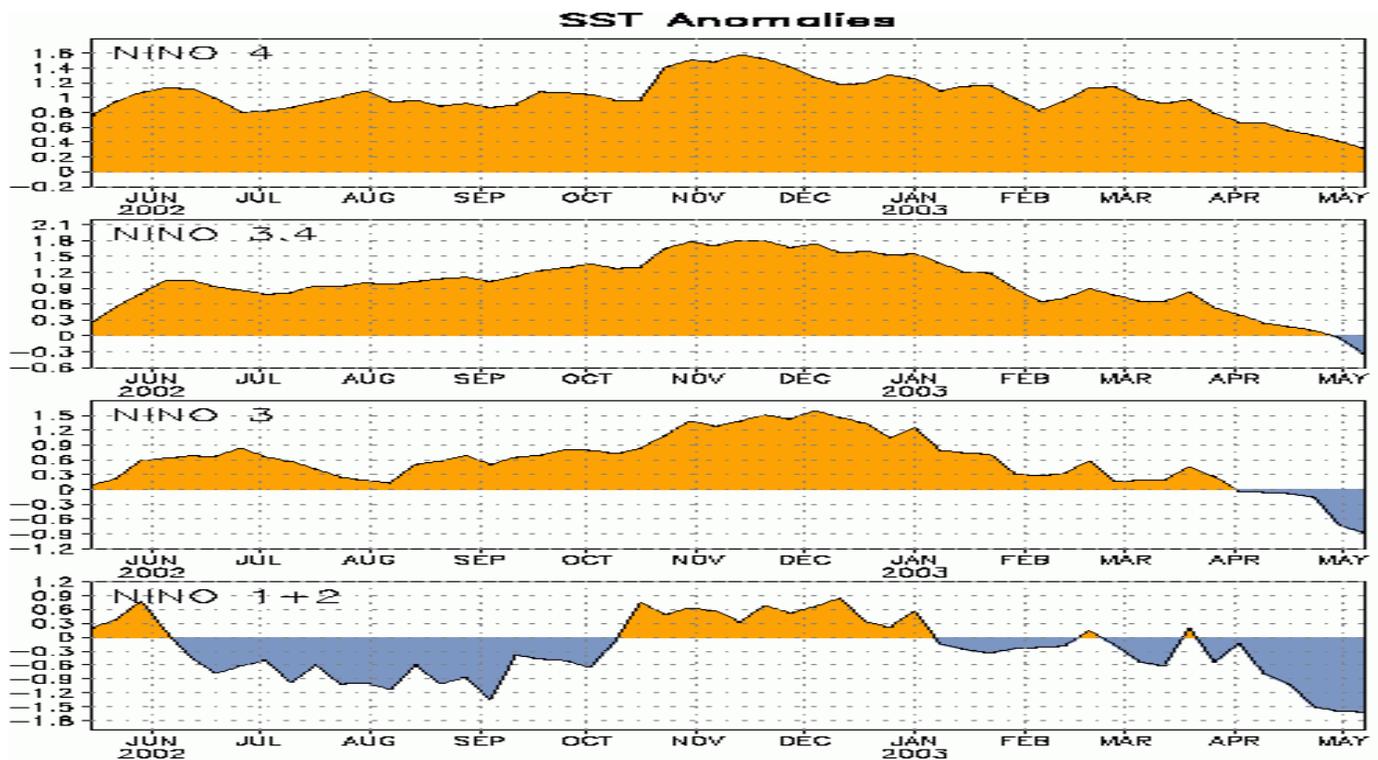


Figure 1. Time series of Sea Surface Temperature (SST) anomalies ( $^{\circ}\text{C}$ ) for the Niño regions. The SST analysis is obtained from the NCEP/Ocean Data Assimilation system that incorporates NOAA/PMEL TAO buoy data, NOAA/AVHRR satellite data, and ships of opportunity.

Warm episode (El Niño) conditions rapidly dissipated in the tropical Pacific during March and April 2003, as sea-surface temperature anomalies continued to decrease across the central and eastern equatorial Pacific and drier-than-average conditions developed over the central equatorial Pacific. Significant decreases in SST anomalies occurred in all of the Niño regions during April and early May (Fig. 1). By mid-May, equatorial SSTs were near or below normal between  $165^{\circ}\text{W}$  and the South American coast, with only a small area of residual positive SST anomalies west of the dateline between  $155^{\circ}\text{E}$  and  $175^{\circ}\text{E}$ .

Consistent with the cooling trend in SSTs, the equatorial easterlies have been stronger than average over the central and west-central equatorial Pacific since late February, and the equatorial SOI has switched from negative to positive. In addition, in recent months the depth of the oceanic thermocline has steadily decreased across the central and eastern equatorial Pacific, and negative subsurface temperature departures have developed and intensified in the upper ocean of this region. By late-April, subsurface temperatures at thermocline depth were below average throughout the eastern

Pacific, with negative anomalies ranging between  $-1^{\circ}\text{C}$  and  $-3^{\circ}\text{C}$ . These observed trends in oceanic and atmospheric variables indicate that a transition to La Niña is underway and that La Niña conditions are likely to develop over the next few months.

The latest statistical and coupled model forecasts show a large spread in the forecasts for the next several months. While some indicate the possibility that La Niña will develop during the second half of 2003, others indicate a resurgence of El Niño conditions by the end of the year. However, based on current conditions and recent observed trends, it appears likely that cold episode (La Niña) conditions will develop in the tropical Pacific during the next few months.

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

# International Weather and Crop Summary

May 11 - 17, 2003

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

## HIGHLIGHTS

**EUROPE:** In southeastern Europe and Italy, warm, dry weather stressed vegetative rainfed summer crops, while widespread rain benefited crops across northern Europe.

**FSU-WESTERN:** Continued dry weather helped planting activities in the eastern two-thirds of Ukraine and most of Russia, although rain was needed for spring-sown crop emergence and early plant establishment.

**FSU-NEW LANDS:** Several days of mild, dry weather helped spring grain planting in Siberia, Russia, and north-central Kazakhstan, while occasional rain slowed fieldwork in the southern Urals and adjacent areas in western Kazakhstan.

**MIDDLE EAST:** Rain favored vegetative to reproductive winter grains in central Turkey and northwestern Iran, while seasonably warm, dry weather prevailed elsewhere.

**NORTHWESTERN AFRICA:** Warm, dry weather favored winter grain maturation and early harvesting.

**CANADA:** On the Prairies, spring crop planting was underway, while in Ontario, cool weather slowed winter wheat development.

**SOUTH AFRICA:** In the corn belt, dry weather continued to favor summer crop drydown and collection, but hampered winter wheat planting and stressed tender vegetation.

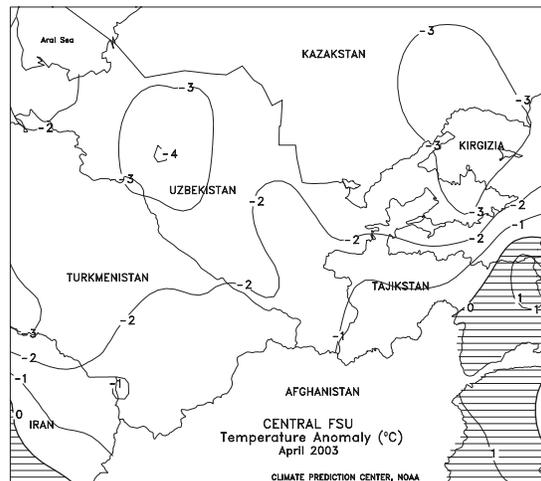
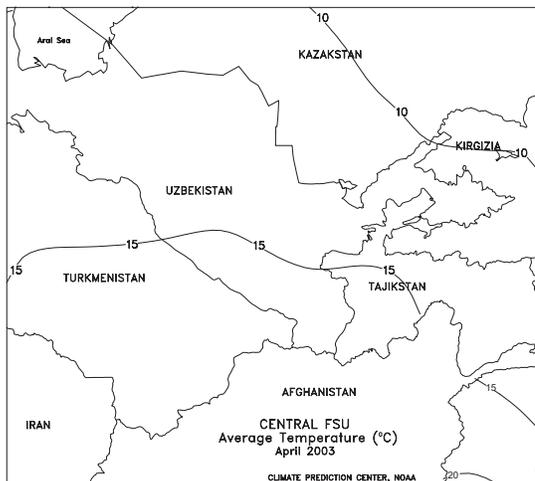
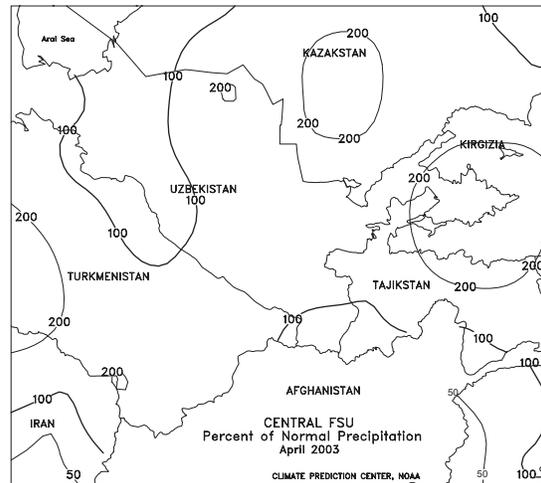
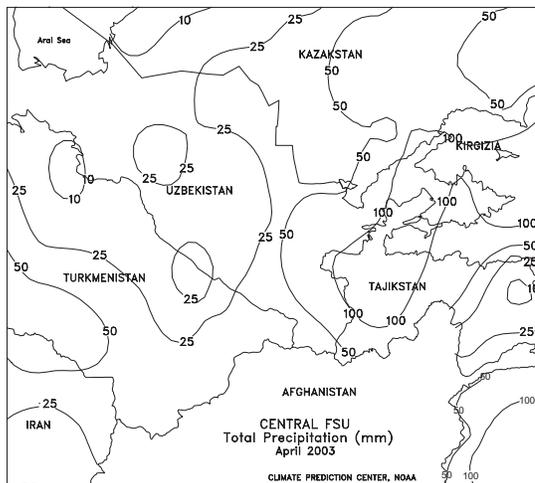
**MEXICO:** Rain in southeastern Mexico boosted soil moisture for summer crop pre-planting activities, while extreme heat in northeastern Mexico increased stress on livestock.

**AUSTRALIA:** Widespread, soaking rain in Western Australia benefited vegetative winter grains, while scattered showers in southeastern Australia offered some drought relief.

**EASTERN ASIA:** Moisture remained limited for summer crop germination in northern Manchuria.

**SOUTHEAST ASIA:** Showers boosted moisture supplies for rice and corn throughout Indochina and the Philippines.

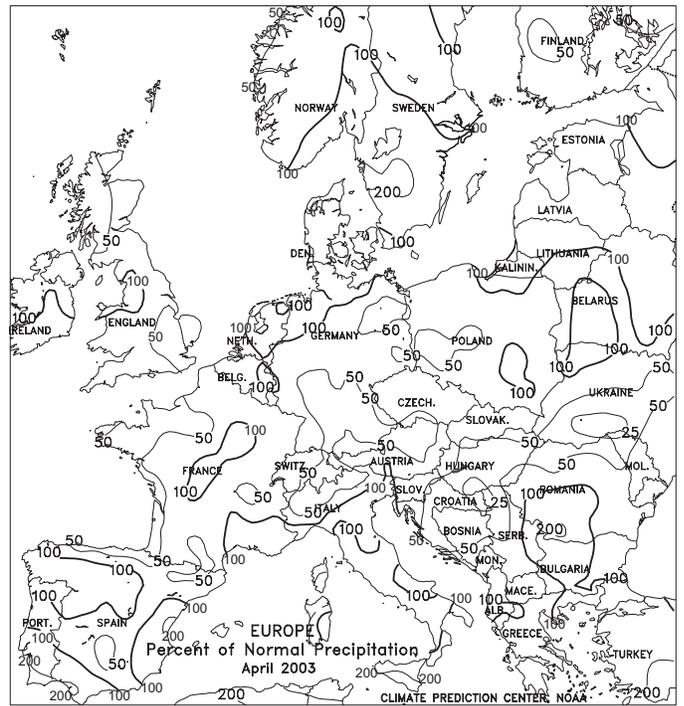
**SOUTHAMERICA:** Showers returned to Argentina, but dry weather promoted summer crop harvesting in Brazil.

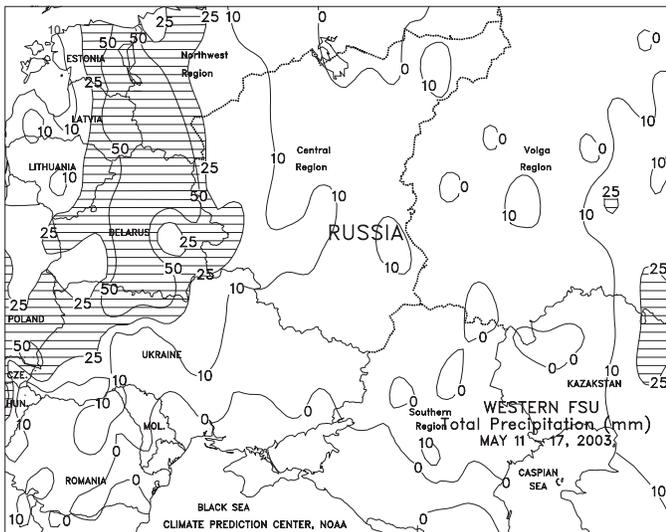
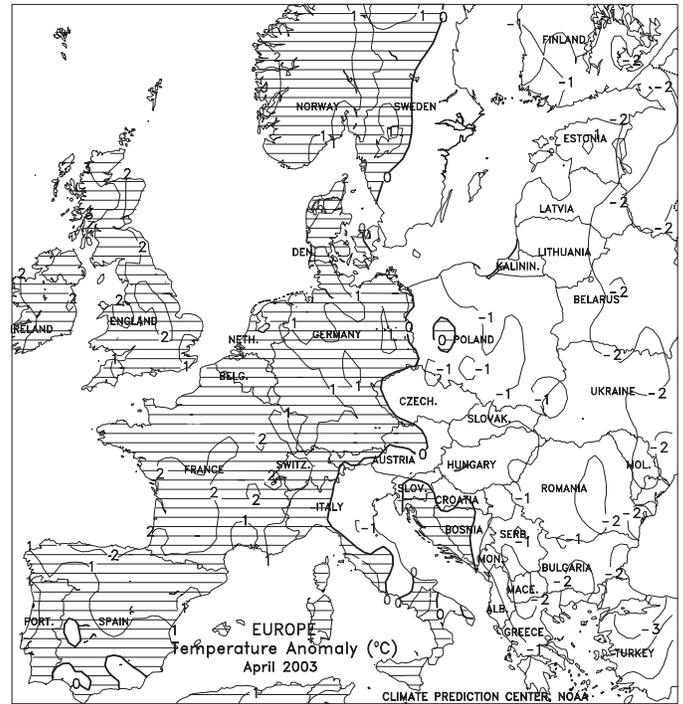




**EUROPE**

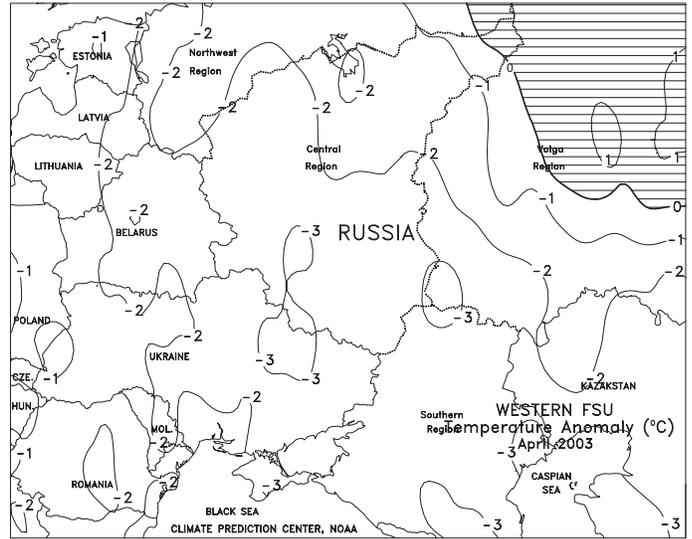
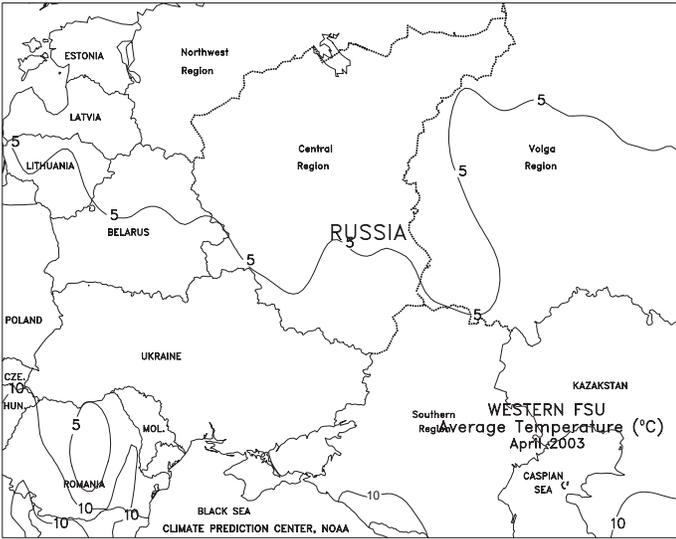
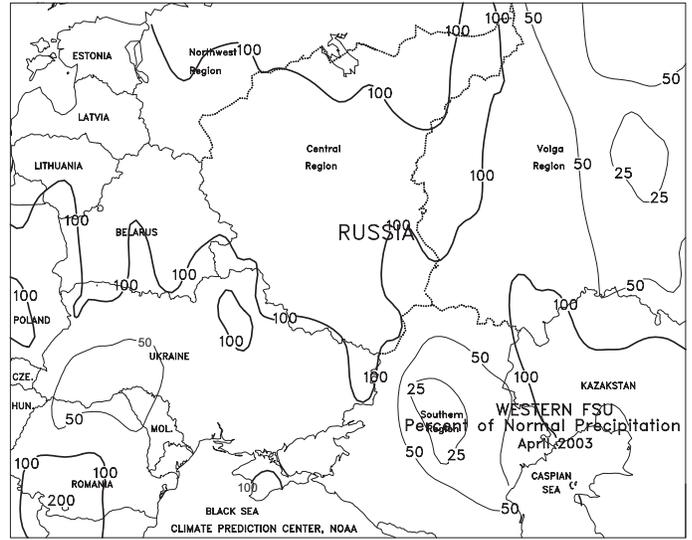
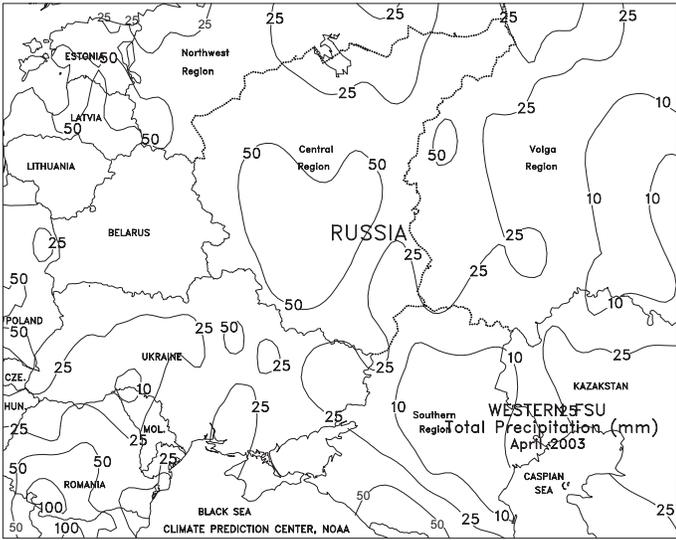
Across England, the Low Countries, and northern France, widespread rain (10-30 mm) favored vegetative to reproductive winter grains, filling winter oilseeds, and vegetative summer crops. In the rest of France, however, dry weather prevailed and reduced topsoil moisture for winter and summer crops. In Sweden, scattered rain (5-20 mm) partially increased limited soil moisture supplies for winter and summer crops. Widespread rain (5-20 mm) covered central and northeastern Europe (Germany to Hungary), boosting soil moisture for winter and summer crops. Heavier rain (20-50 mm) fell across Austria, the Czech Republic, and most of Poland. Winter grains are approaching the heading stage in Germany but are still vegetative across eastern Europe (Poland to Romania). In southeastern Europe, mostly dry, warm weather (less than 5 mm) continued to reduce soil moisture for winter and summer crops. Only southern Bulgaria received significant rain (5-20 mm). The warm weather continued to favor winter grain development, which has been behind schedule. Across Italy, warm, dry weather also reduced soil moisture for rainfed crops, especially in the Po Valley, but adequate irrigation supplies existed. Across the Iberian Peninsula, mostly dry weather prevailed, easing excessive wetness in northeast Spain. Temperatures averaged 1 to 2 degrees C below normal from France and England northeastward into Poland and 2 to 5 degrees C above normal across southern Europe from Spain to Italy to southeastern Europe. Maximum temperatures above 30 degrees C were confined to southwestern Spain and the lower Danube Plain. During April, below-normal rainfall in portions of England and France reduced soil moisture for spring and winter crops and stressed newly planted crops. However, late-April and early-May rainfall provided beneficial moisture, especially in France. Across central and most of eastern Europe, below-normal rainfall favored spring and summer crop fieldwork, but reduced soil moisture for germination and early crop establishment. Near- to above-normal April rainfall continued to maintain adequate to favorable moisture supplies across the Iberian Peninsula, and most of Italy, Poland, Romania, and Bulgaria.

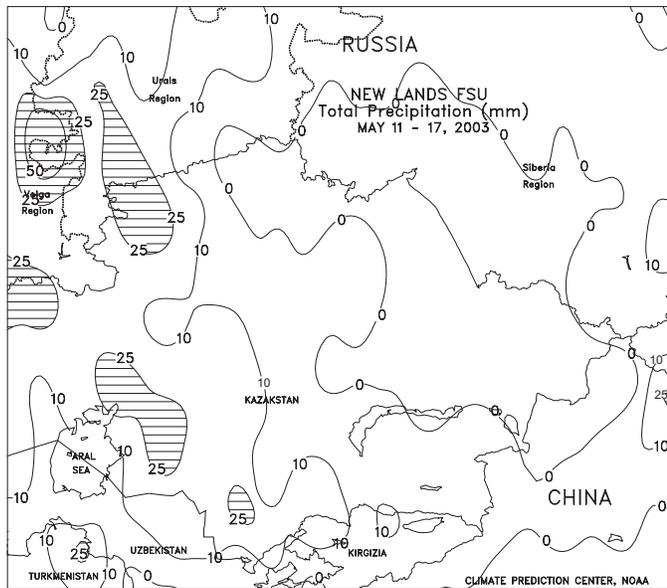




**FSU-WESTERN**

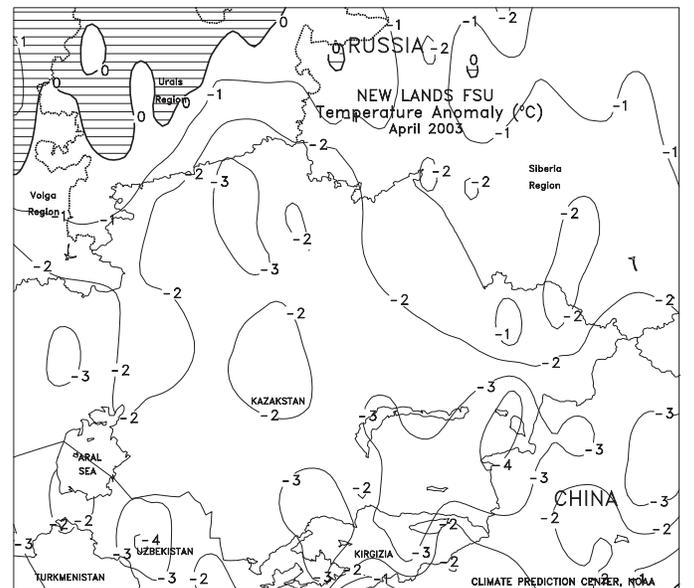
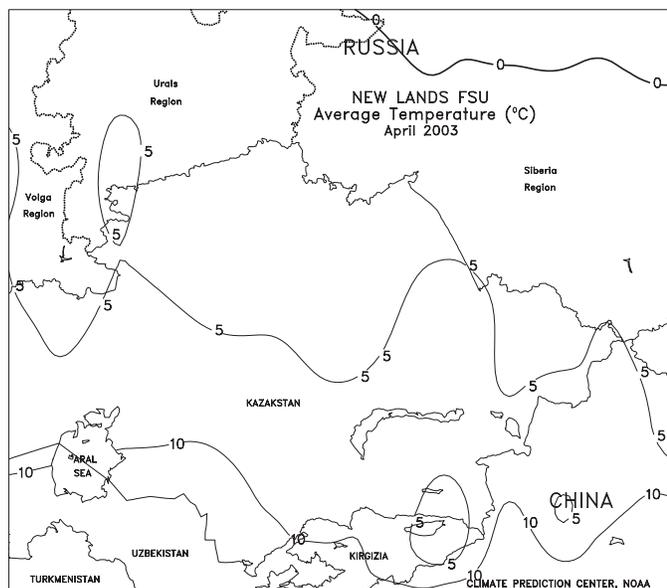
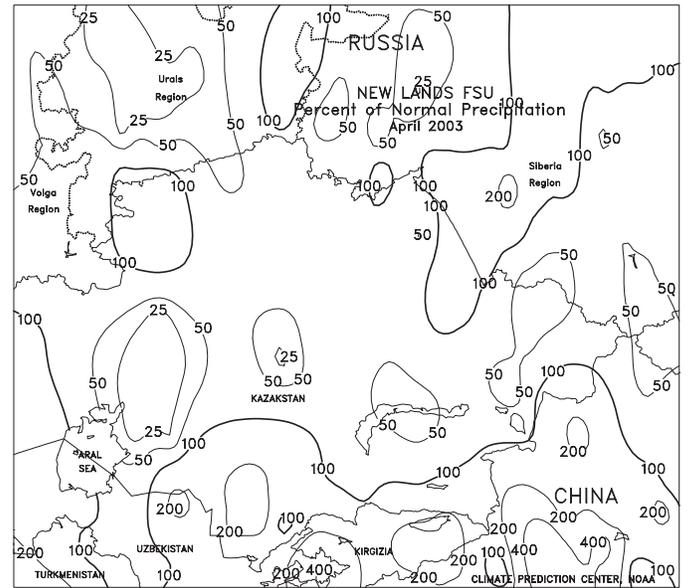
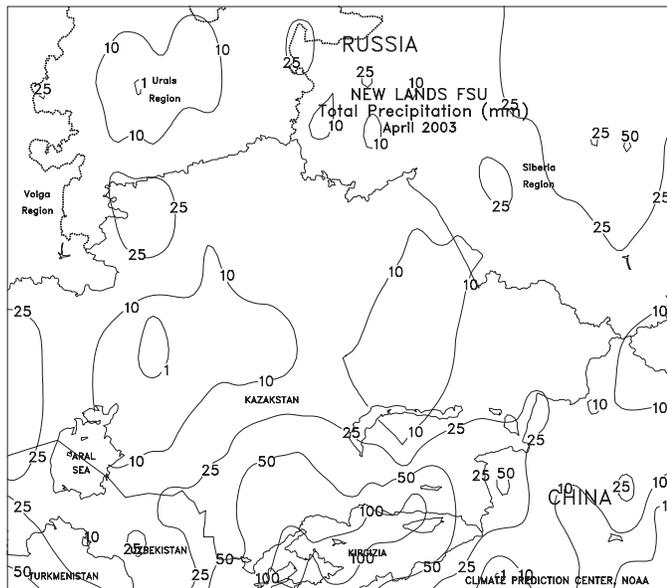
Unseasonably warm, dry weather persisted over the eastern two-thirds of Ukraine and most of Russia, helping spring grain, sugar beet, and sunflower planting. Reports from Ukraine indicated that spring crops were about 91 percent planted by May 15. Corn and sugar beets were 86 and 90 percent planted, respectively, by May 14. Reports from Russia as of May 13 indicated that spring grains were about 36 percent planted, compared with 44 percent last year. Corn, sunflowers, and sugar beets were about 50, 47, and 75 percent planted, respectively. Rain was needed in the eastern two-thirds of Ukraine and the Southern Region in Russia, where several weeks of dryness have depleted topsoil moisture. Elsewhere, a slow-moving cold front brought widespread rainfall (25-50 mm or more) to the eastern Baltics, Belarus, and northwest Ukraine. Little or no rain fell in Moldova. Weekly temperatures averaged 3 to 7 degrees C above normal in Ukraine, 1 to 5 degrees C above normal in Russia and Belarus, and near normal in the Baltics. From May 11-15, maximum temperatures exceeded 30 degrees C in Ukraine, Moldova, and the Southern Region in Russia, increasing evaporation rates. In April, unseasonably cold weather persisted through the first half of the month, delaying the usual arrival of spring warmth. The late arrival of spring kept winter grains dormant and delayed spring planting activities in Ukraine, Russia, and Belarus. Gradual warming in most areas during the second half of April melted an unusually late snow cover in northern Russia and prompted the greening of winter grains in Ukraine and southern Russia, about 2 to 3 weeks later than usual. Furthermore, the warmer weather raised soil temperatures to sufficient levels for spring grain planting. By month's end, crop progress for winter grains ranged from greening in northern areas to jointing in Ukraine, central and southern Russia, and most of Belarus.

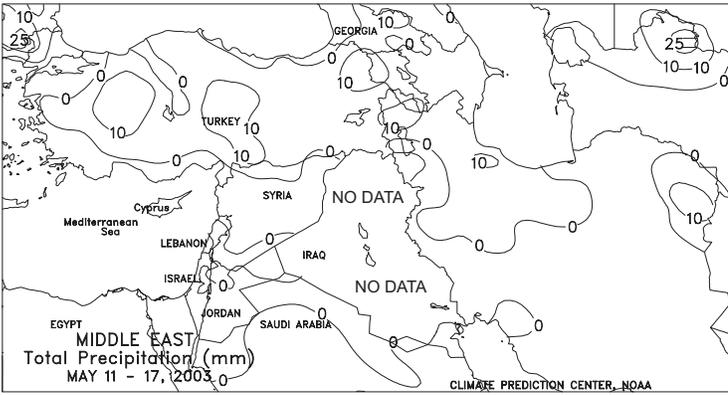




**FSU-NEW LANDS**

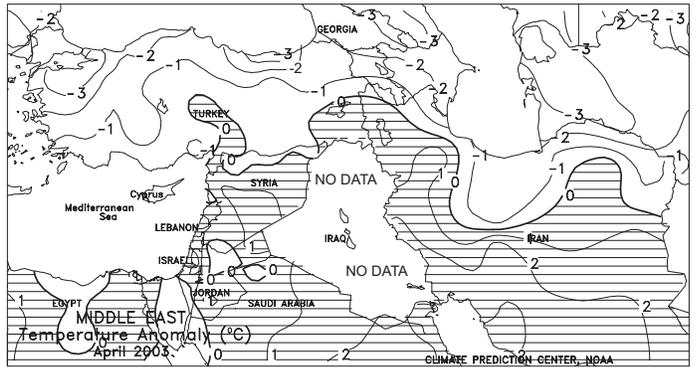
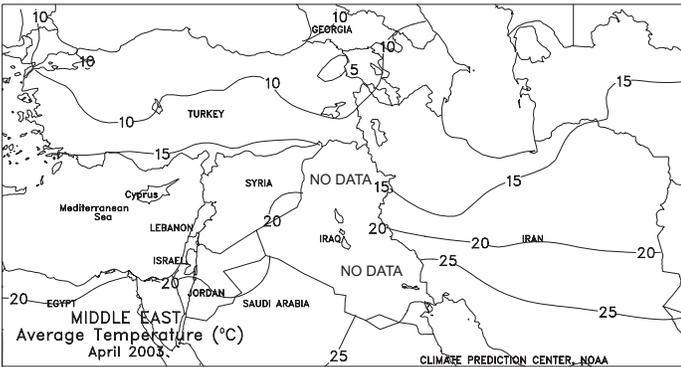
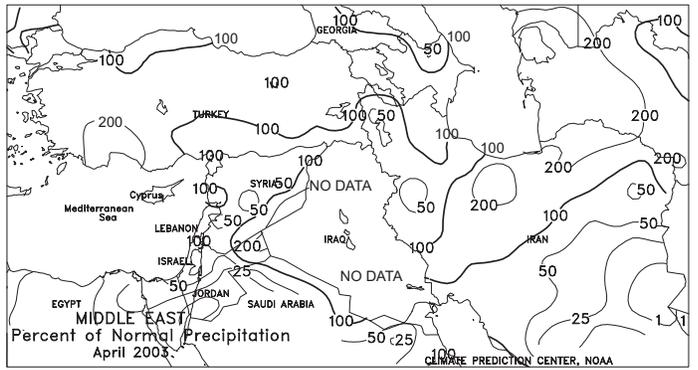
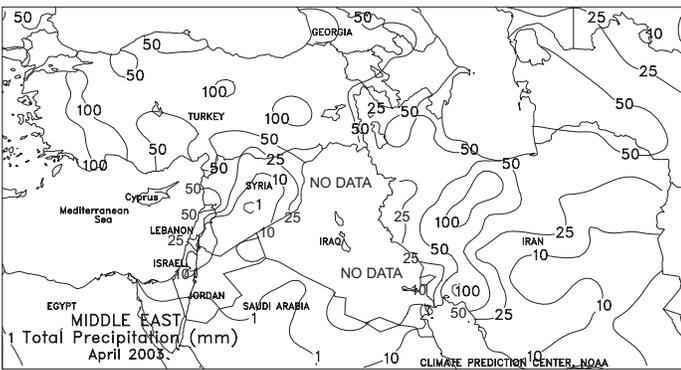
Winter and spring precipitation was near to above normal, but below last season's accumulations. In April, dry weather accompanied a warming trend throughout Russia and Kazakstan, helping to condition topsoils for early spring fieldwork. Spring grain planting typically begins in May. Unseasonably warm, dry weather prevailed across major spring grain-producing areas of Kazakstan and Siberia, Russia, helping to accelerate the planting pace. Elsewhere, occasional showers (10-36 mm or more) fell from the southern Urals southward into western Kazakstan, hampering planting activities. Weekly temperatures averaged 4 to 8 degrees C above normal in Siberia, Russia, and north-central Kazakstan, and 1 to 4 degrees C above normal across the remainder of the region. In major cotton-producing areas of Central Asia, mostly dry weather helped cotton planting, although unseasonably cold weather slowed crop emergence and early growth.

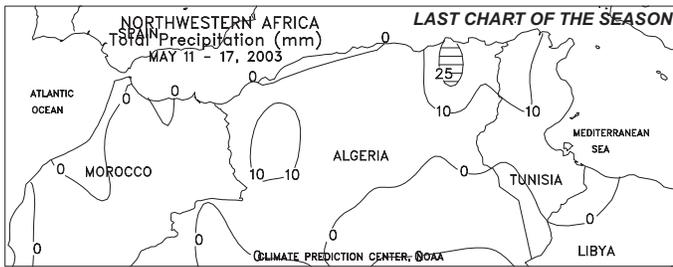




**MIDDLE EAST**

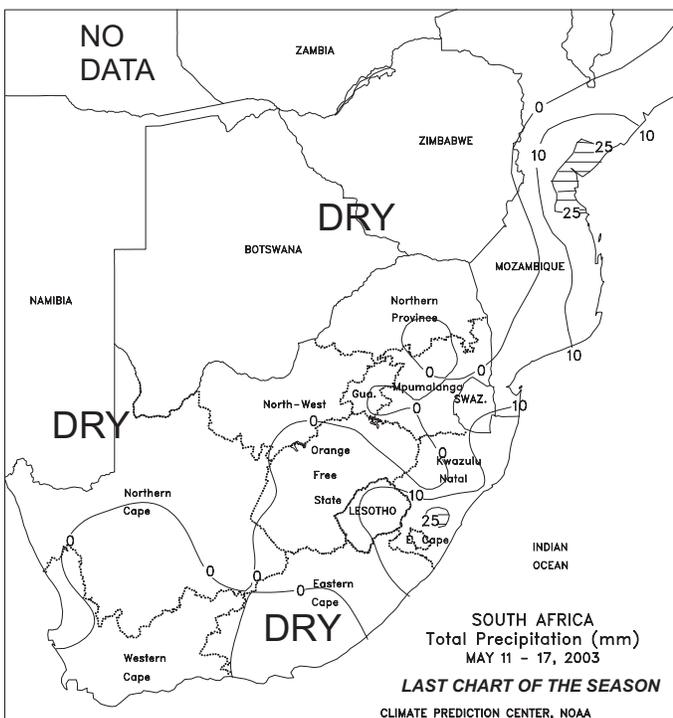
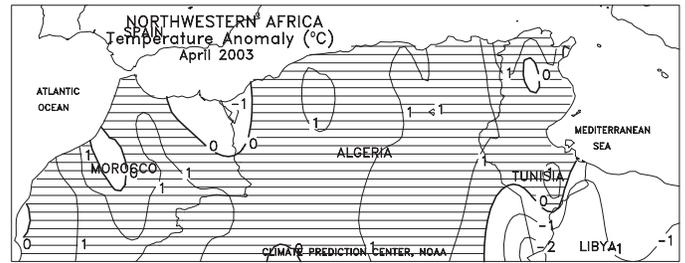
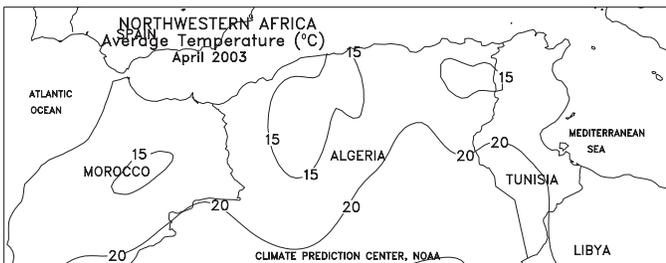
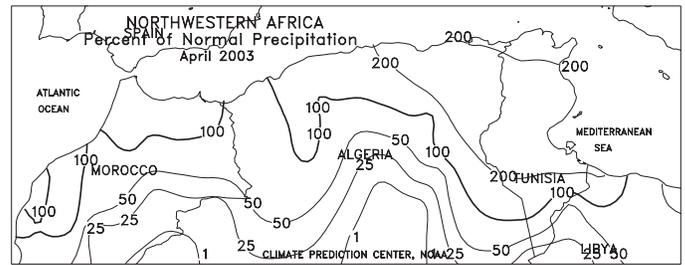
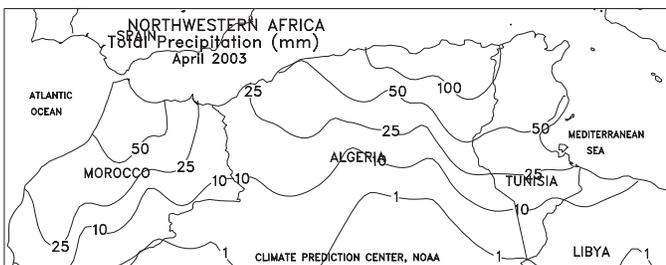
In central Turkey and extreme northwestern Iran, light rain (5-20 mm or more) favored vegetative to reproductive winter grains. Typically during the summer months of June, July, and August, only northern and central Turkey and northwestern Iran receive significant rain. Elsewhere, seasonably warm, dry weather prevailed across western cotton areas of Turkey, the eastern Mediterranean, and the rest of Iran. Based on weather reports from neighboring countries, dry weather covered northern Iraq. Temperatures averaged 2 to 5 degrees C above normal across most of the region, favoring winter grain maturation in the eastern Mediterranean, but increasing irrigation demands for summer crops. Across Turkey and the eastern Mediterranean during April, near- to above-normal precipitation increased moisture supplies for winter crops and topsoil moisture for summer crops, especially for cotton in western Turkey. In western Iran, near- to above-normal April rainfall greatly benefited vegetative winter grains, but pockets of dryness persisted. Seasonably warmer weather favored winter grain development in central Turkey and Iran.





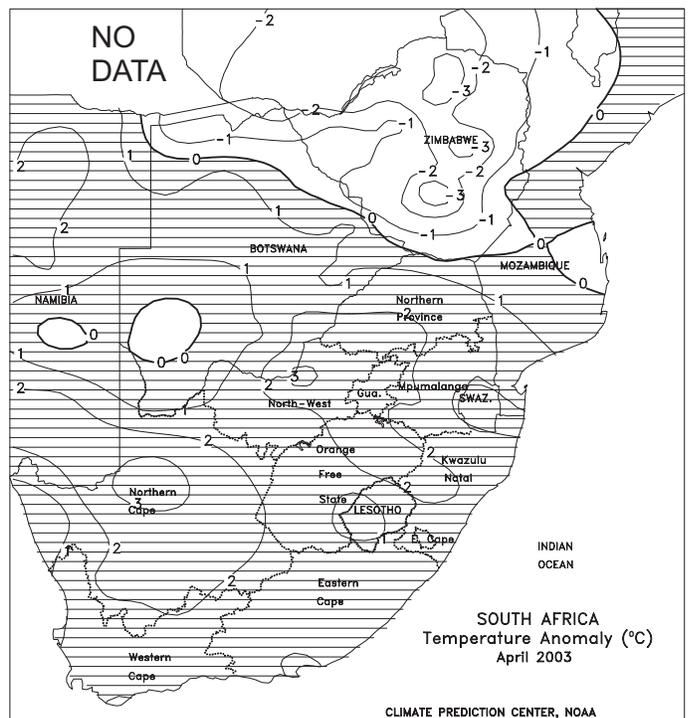
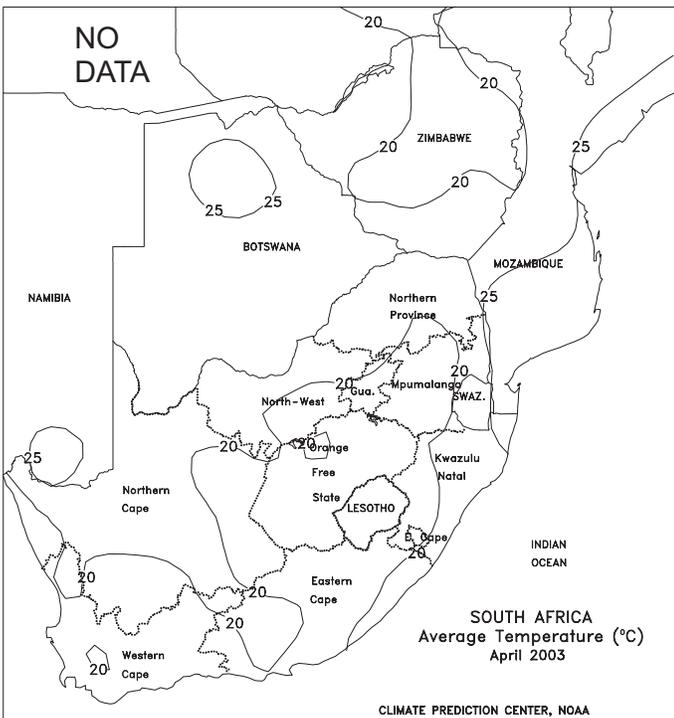
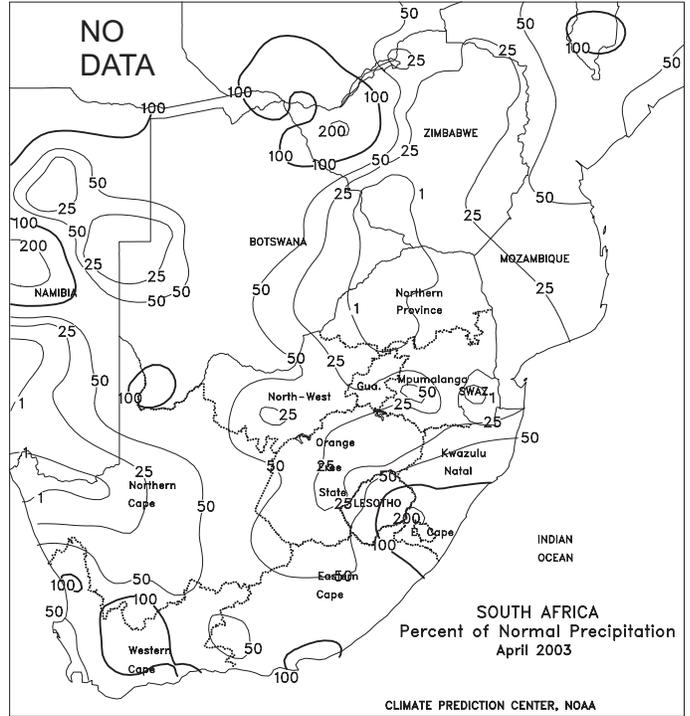
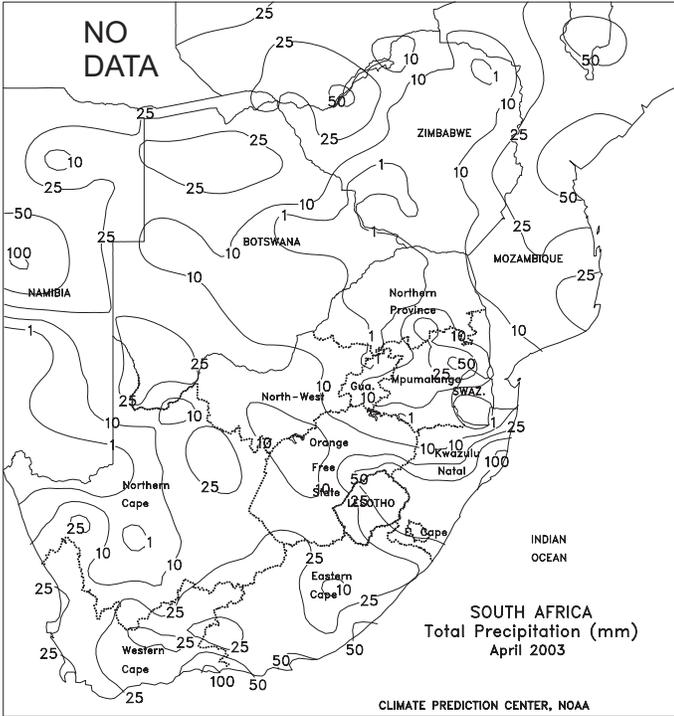
**NORTHWESTERN AFRICA**

Across most of the region, seasonably warm, dry weather favored maturing winter grains and early harvesting. In eastern Algeria and Tunisia, 2 days of light to moderate rain (10-20 mm, with an isolated amount greater than 50 mm) did not hamper winter grain maturation. Typically, winter grain harvesting begins in May and extends through July. Cooler weather prevailed across the region after last weeks of unseasonably hot weather. Temperatures averaged near normal across Tunisia and 1 to 4 degrees C above normal across Morocco and Algeria. During April, widespread near- to above-normal rainfall maintained adequate to abundant soil moisture for reproductive to filling winter grains across northern Morocco, Algeria, and Tunisia. In southern Morocco, however, below-normal April rainfall reduced soil moisture for filling winter grains. During late April and early May, hot, dry weather hastened winter grain maturity and favored grain quality. *(Weekly summaries for northwestern Africa will be discontinued until next year's planting season).*



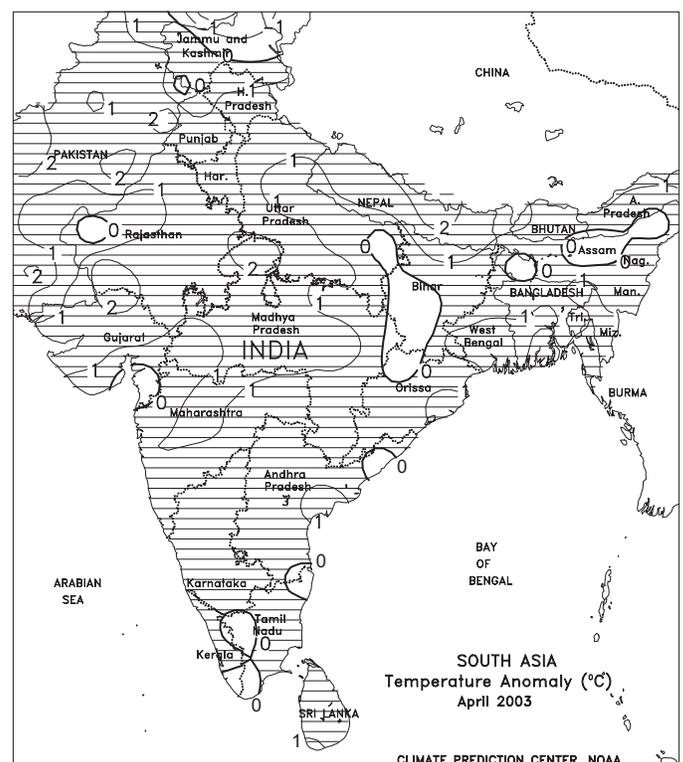
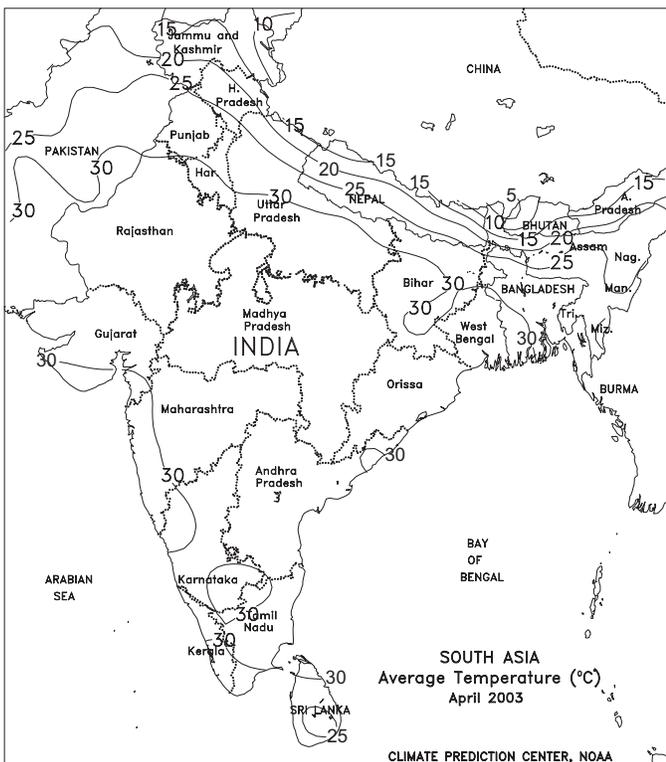
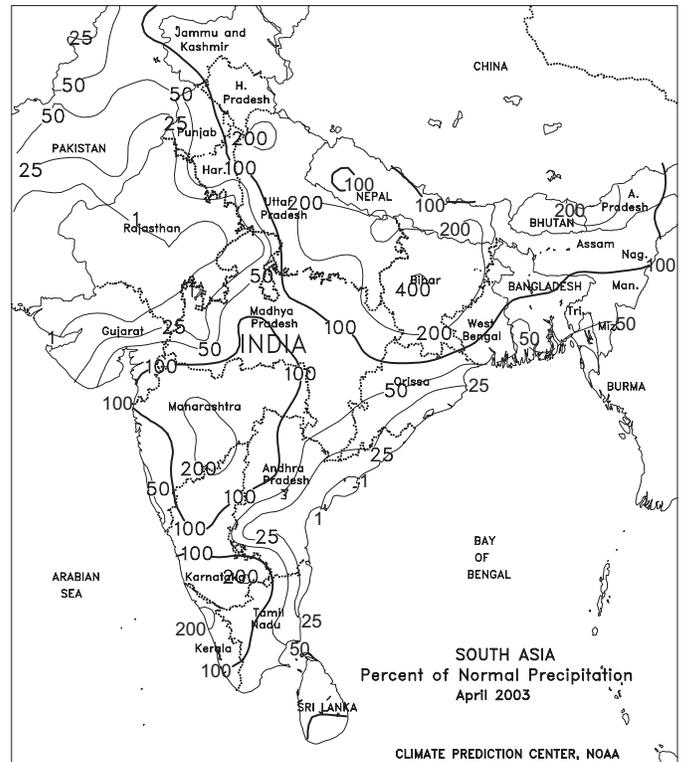
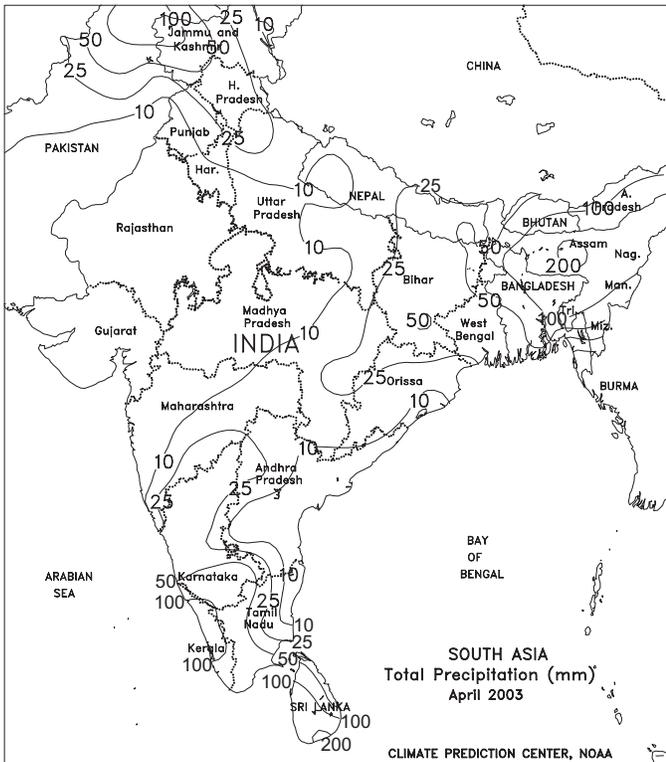
**SOUTH AFRICA**

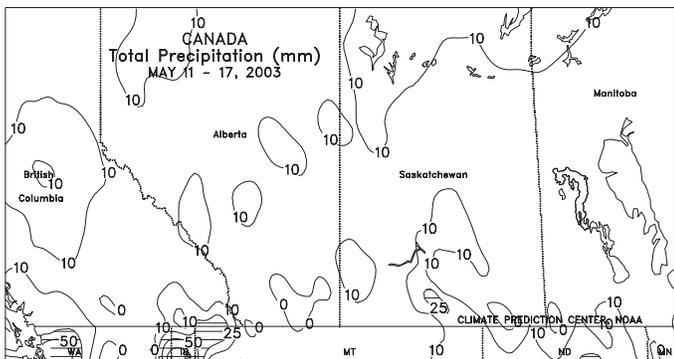
For the 8<sup>th</sup> consecutive week, dry weather prevailed in the corn belt, favoring summer crop drydown and collection. In Free State, the prolonged dryness has been unfavorable for winter wheat, slowing planting and stressing tender vegetation. Although dry weather prevailed in Western Cape as well, moisture supplies remained adequate for early winter wheat development. Farther east, showers (1-21 mm or more) in Eastern Cape and southern KwaZulu Natal maintained moisture supplies, but slowed summer crop harvesting. Temperatures in major crop-producing areas were generally seasonable. In April, dry weather in the corn belt favored summer crop maturation and early harvesting, but hampered early winter wheat development in Free State. In Western Cape, seasonable rainfall benefited winter wheat. *(This is the final weekly summary of the season. Coverage will resume in October as summer crop planting begins.)*



SOUTH ASIA

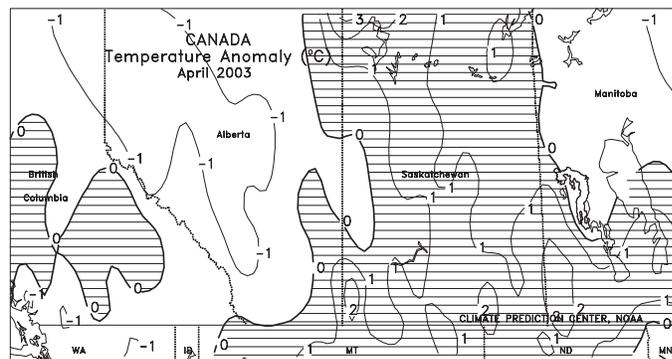
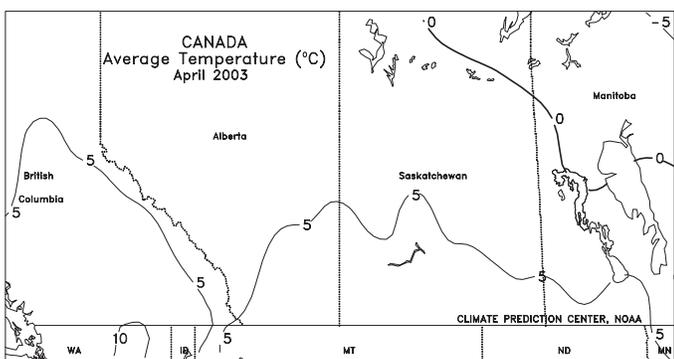
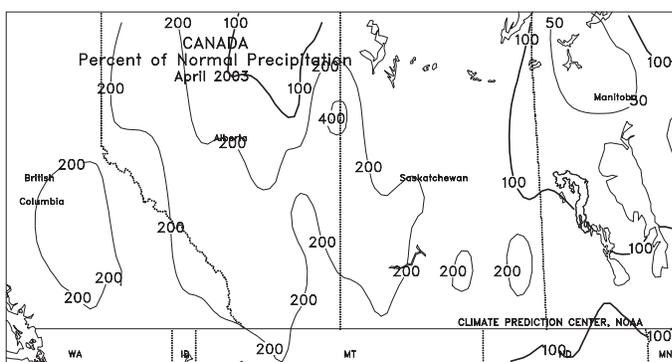
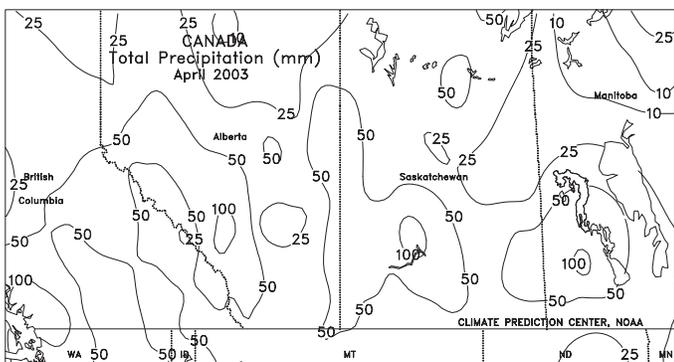
In April, dry weather favored winter grain harvesting in Pakistan, while unseasonably wet weather hampered winter grain and oilseed harvesting in northern India. The pre-monsoon moisture helped recharge water supplies depleted from last summer's drought.

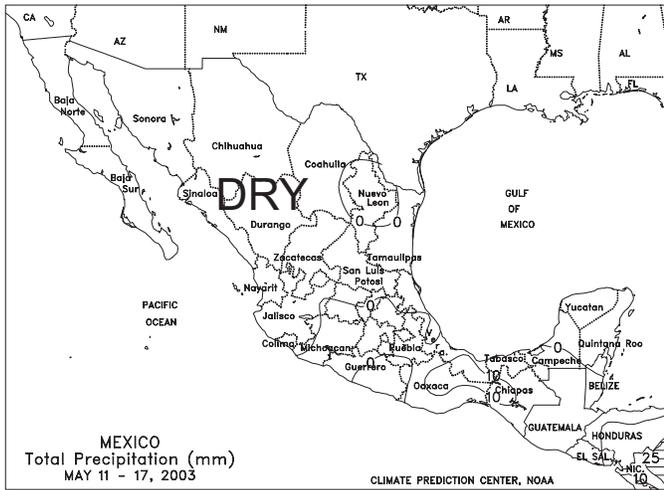




**CANADA**

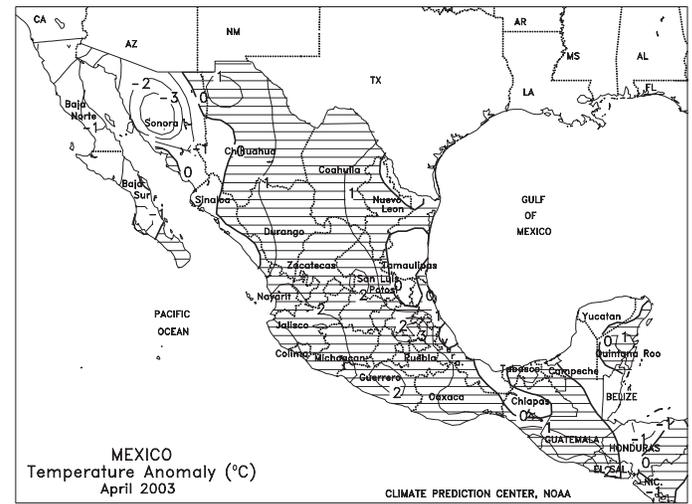
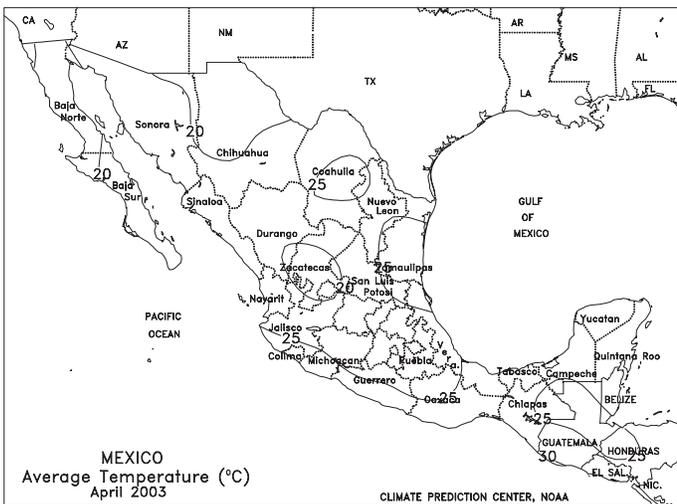
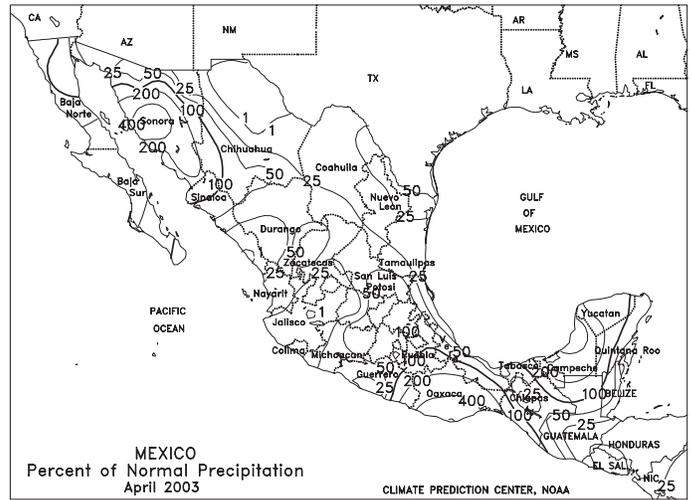
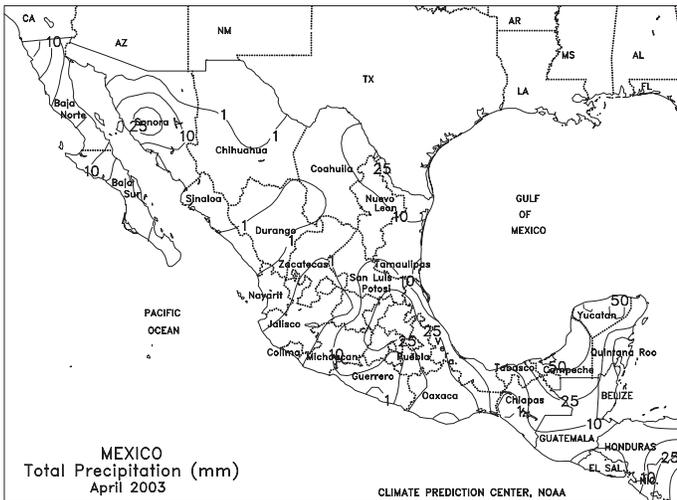
Mostly dry weather covered the Prairies, although lingering showers (greater than 10 mm) boosted local topsoil moisture levels. Temperatures averaged near to below normal in western and southern growing areas, and above normal in the north and east, but nearly all locations continued to record sub-freezing temperatures. Spring crop planting was slowly progressing following last week's locally heavy precipitation, with Saskatchewan crops 8 percent planted as of May 12 (compared with the 5-year average of 33 percent), according to Saskatchewan Agriculture, Food, and Rural Revitalization. In eastern Canada, cool, showery weather increased moisture reserves in Quebec and farmland north of Lake Ontario. Mostly dry, unseasonably cool weather continued to slow crop development in primary winter wheat and summer crop areas of southwestern Ontario. During April, above-normal precipitation covered nearly all Prairie crop districts but long-term drought remained a concern in some western growing areas. In the east, cooler- and drier-than-normal weather raised additional concern for winter wheat as it broke dormancy under locally stressful conditions.

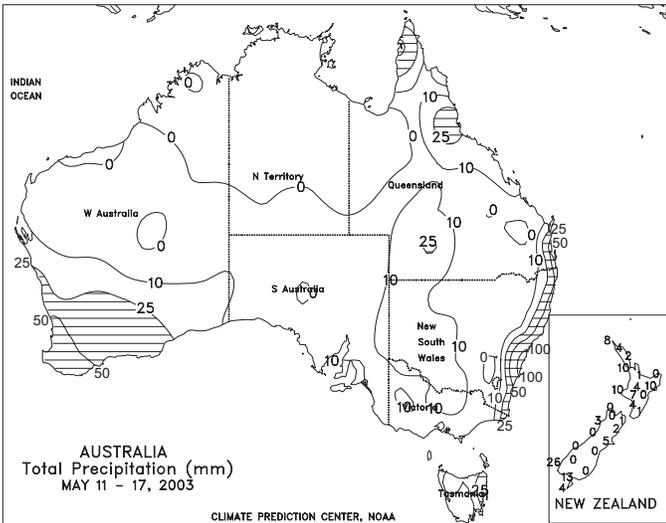




**MEXICO**

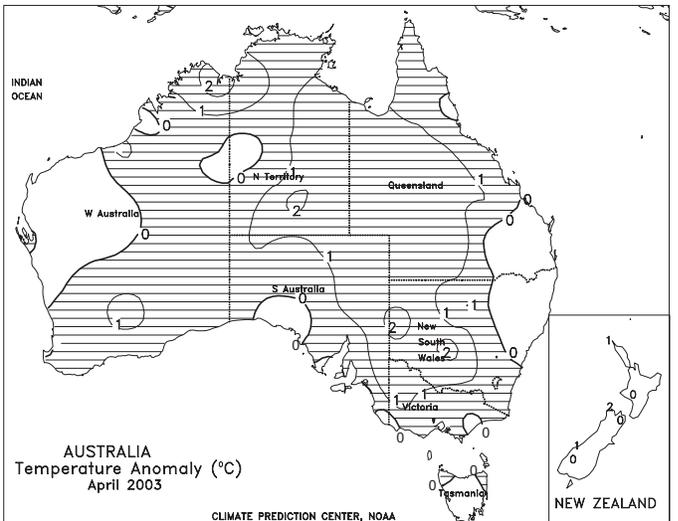
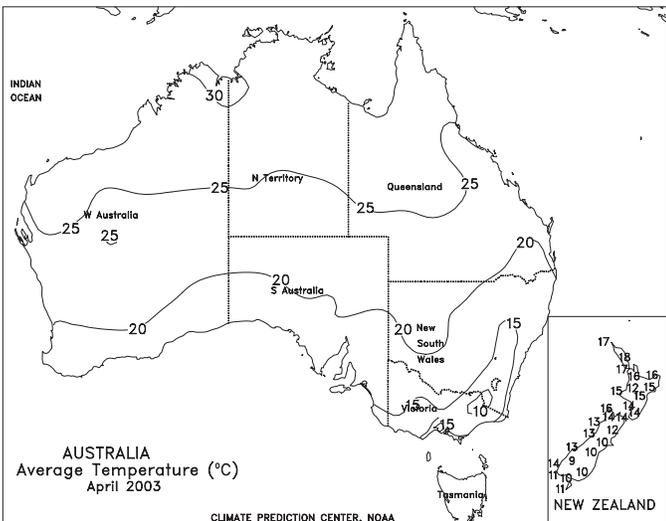
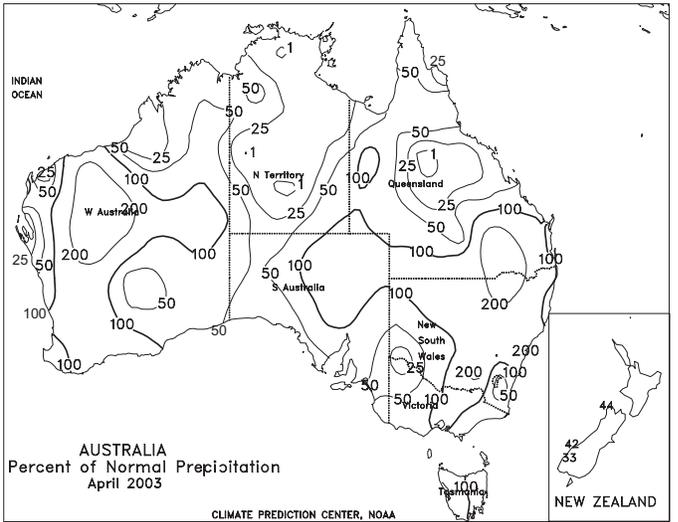
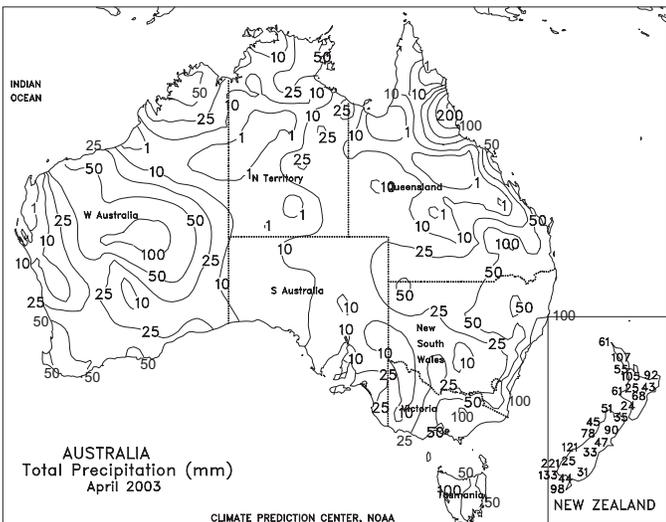
Light to moderate rain (10-35 mm) fell across southeastern Mexico, from Puebla and Oaxaca into Chiapas, increasing soil moisture for pre-planting fieldwork for summer crops. Elsewhere, mostly dry weather prevailed. Temperatures averaged 2 to 5 degrees C above normal across north-central and central Mexico, with maximum temperatures above 35 degrees C across the northern one-third of Mexico. In northern Coahuila and Nuevo Leon, maximum temperatures exceeded 40 degrees C, increasing stress on livestock. During April, near- to above-normal rains across east-central and southeastern Mexico favored winter grains and increased pre-planting soil moisture for summer crops. In the lower Rio Grande River Valley, however, April rainfall was below normal, with monthly totals ranging from 15 to 25 mm. Meanwhile across the western Sierra Madre, mostly dry weather favored winter vegetable fieldwork, but further reduced irrigation supplies. Winter drought across the western Sierra Madre reduced irrigation supplies to extremely low levels. April temperatures averaged 1 to 3 degrees C below normal in the northwest, near normal in the southeast and northeast, and 1 to 2 degrees C above normal across the remainder of Mexico.

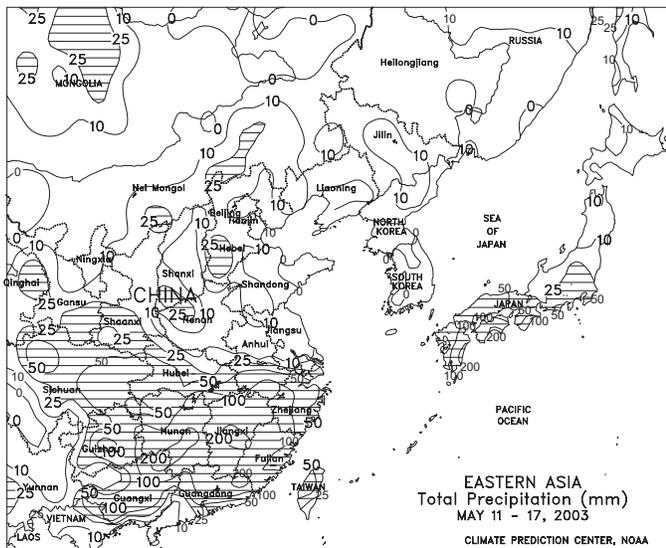




**AUSTRALIA**

Widespread, soaking rain (20-45 mm) in Western Australia was very beneficial for winter wheat and barley, boosting soil moisture for germinating to emerging crops. Scattered, generally light showers (2-13 mm, locally more) fell in South Australia, northern Victoria, and southern New South Wales, helping to condition topsoils for winter grain planting. Much more rain was still needed, however, to end the severe to extreme drought gripping much of southeastern Australia and to ensure good winter grain establishment once planting is accomplished. In northern New South Wales and southern Queensland, light showers (2-10 mm) maintained moisture supplies for vegetative winter grains, but did not significantly delay additional winter grain planting and other fieldwork. Slightly above-normal temperatures (1-2 degrees C) throughout major crop-producing areas in Australia favored crop development. In April, rain in southern Queensland and northern New South Wales slowed summer crop harvesting, but boosted topsoil moisture for winter grain planting. In contrast, mostly dry weather in the southeast maintained extreme drought and kept winter grain planting to a minimum. In Western Australia, showers in early April spurred winter grain planting, but dry weather in late April and early May slowed crop emergence.

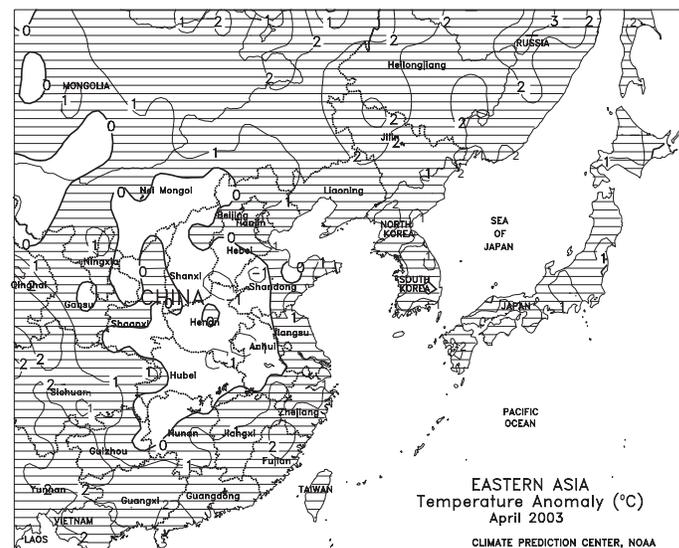
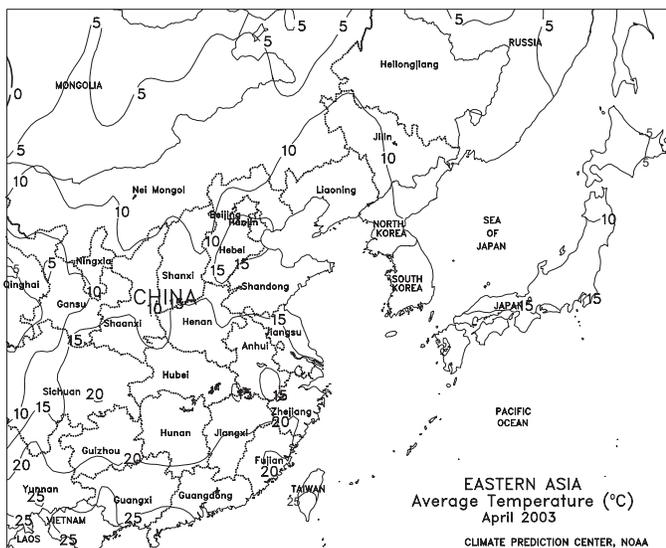
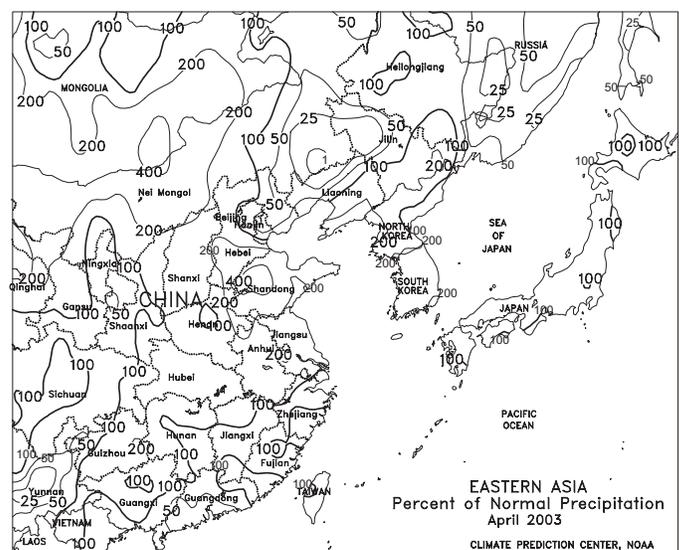


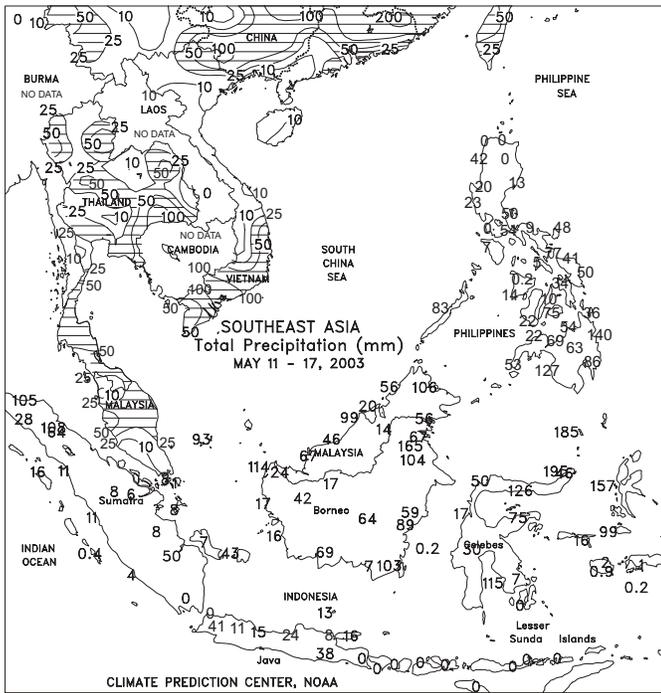


**EASTERN ASIA**

A warming trend (highs in the middle 20s degrees C, with minimum temperatures staying above freezing) spurred summer crop germination in Manchuria, although soil moisture was limited in northern growing areas (Heilongjiang). Showers (5-10 mm or more) boosted moisture reserves in the south (Jilin and Liaoning), but most of the region needed a widespread, soaking rain to ensure even germination and establishment. On the North China Plain, lingering showers (5-25 mm or more) and seasonable warmth (highs in the middle to upper 20s degrees C) maintained generally favorable prospects for filling winter wheat and germinating summer crops. However, locally heavy rain (25-50 mm or more) was untimely for filling to maturing winter grains in western growing areas (Sichuan to Shaanxi). Widespread, locally heavy rain (25-100 mm or more) also overspread southern China, increasing moisture reserves for rice and other summer crops, including those grown in previously dry farmland along the southeastern coast (Guangdong to Zhejiang), but causing some flooding. Elsewhere, beneficial rain (10-25 mm or more) continued over southern Japan, but rainfall was lighter other areas in Japan and on the Korean Peninsula. During April, timely showers improved prospects of reproductive winter wheat on the North China Plain. Frequent, widespread rain maintained irrigation reserves in southern China, including the Yangtze Valley, although a drying trend developed later in the month in rice and

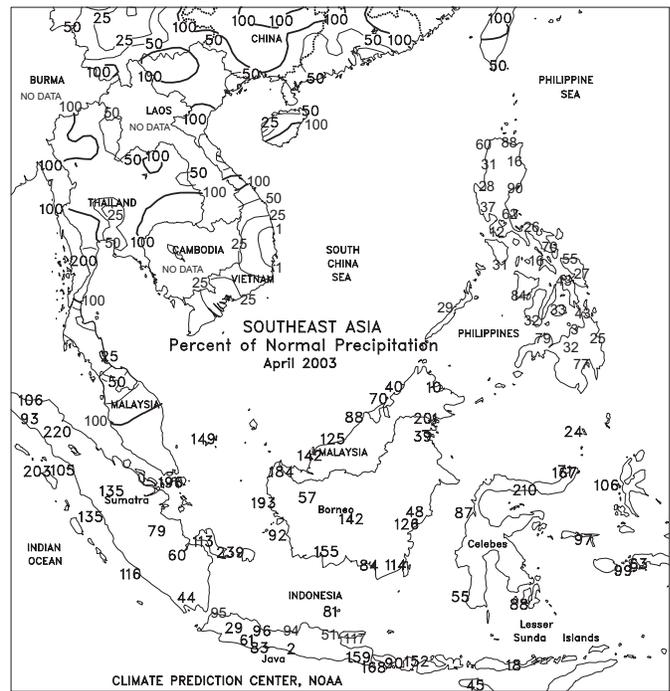
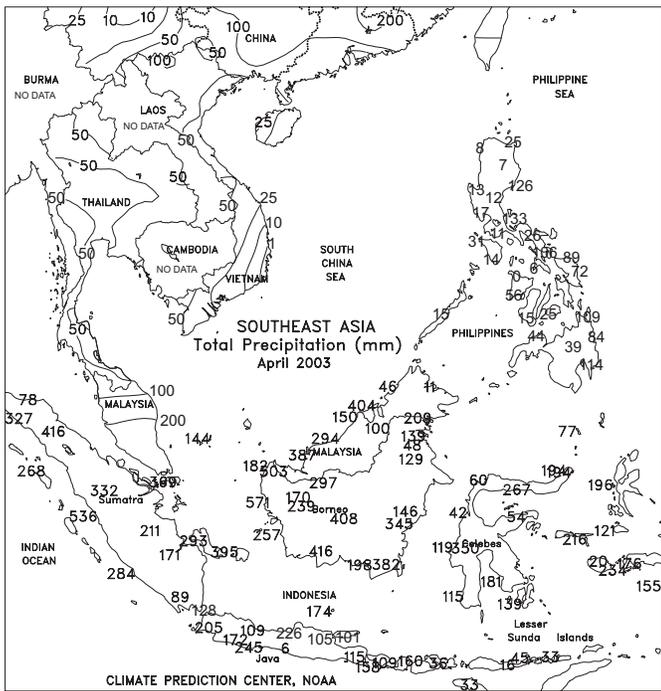
sugarcane areas in the southeast. In Manchuria, April precipitation was near normal in many locations, but total accumulations were under 25 mm in northern and western growing areas. Near- to above-normal precipitation increased irrigation reserves for rice and other crops in Japan and on the Korean Peninsula.

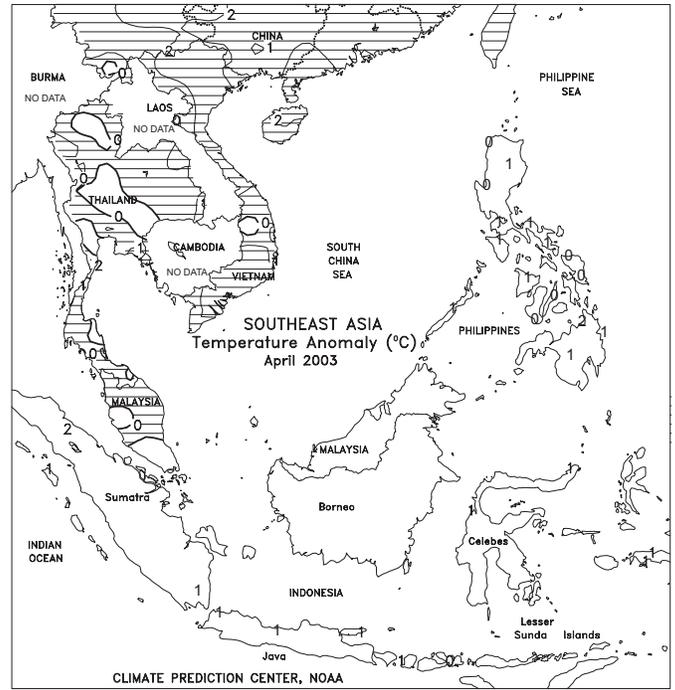
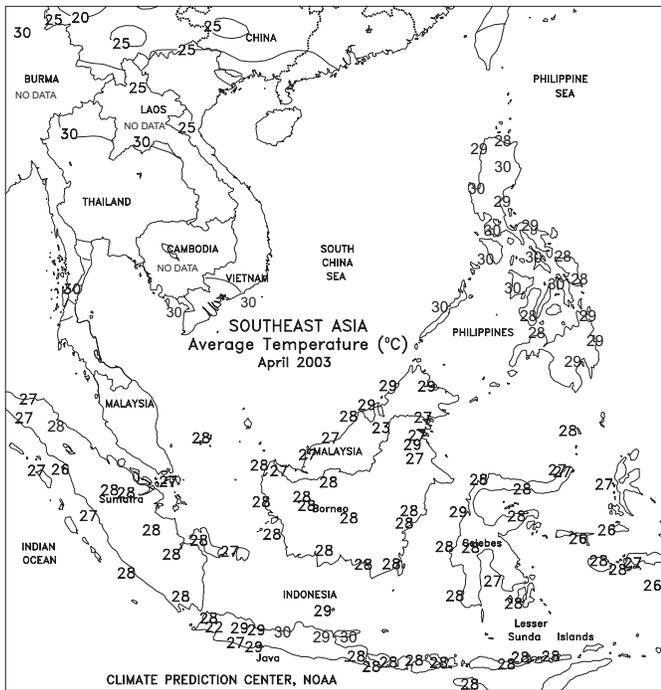




**SOUTHEAST ASIA**

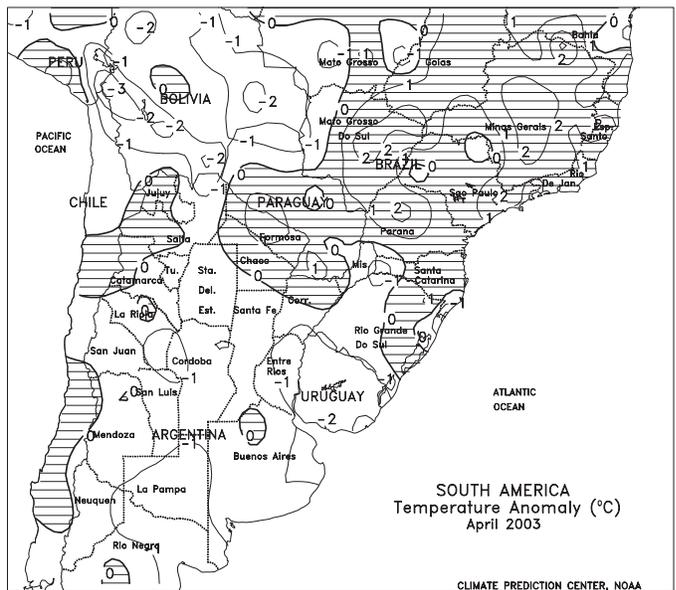
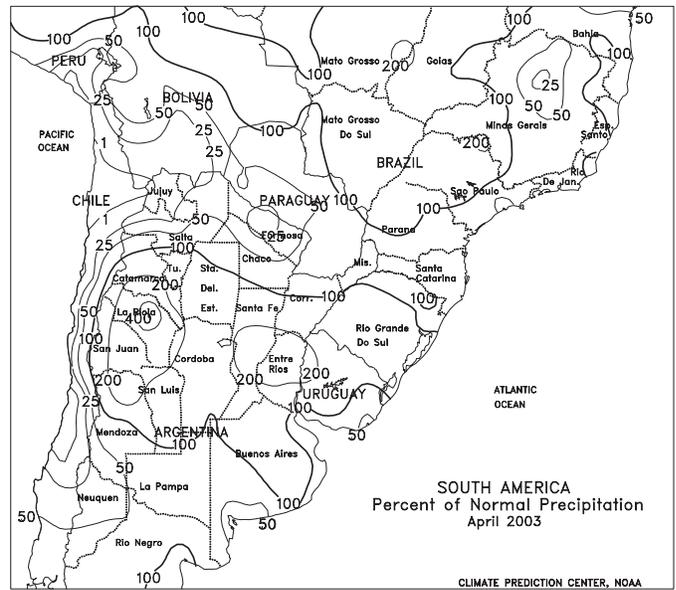
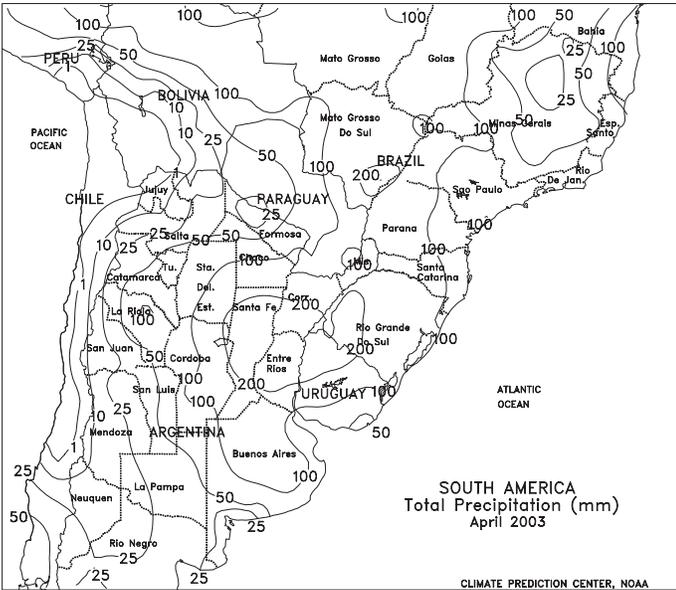
Variable showers (10-150 mm) fell throughout Thailand, boosting moisture supplies for vegetative corn and rice. In Vietnam, showers (25-125 mm, the heaviest amounts in the south) increased moisture supplies for vegetative summer-autumn rice. Widespread showers (10-150 mm) favored vegetative corn and rice throughout the Philippines, however, dry weather in northern Luzon reduced moisture supplies for crops. Scattered showers fell in Java, Indonesia, while light rain fell in peninsular Malaysia and Sumatra. In April, near- to above-normal rainfall slowed second-season rice maturation in Thailand. In Vietnam, dry weather favored rice maturation and harvesting. A slow start to the rainy season in the Philippines delayed corn planting. Mostly dry weather in Java, Indonesia, benefited main-season rice harvesting. In peninsular Malaysia and Sumatra, above-normal rainfall boosted moisture supplies for oil palm.



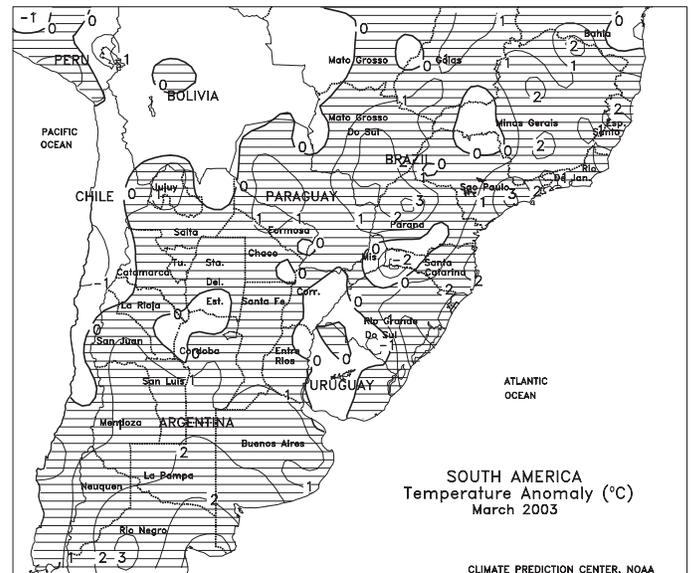
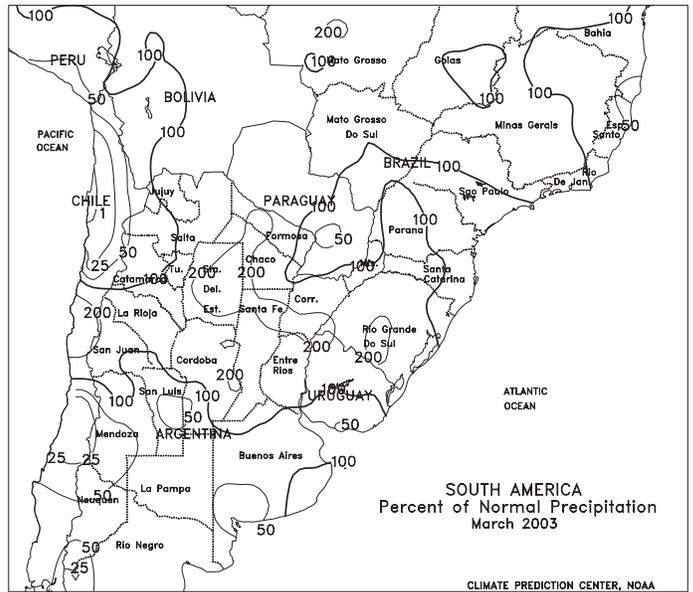
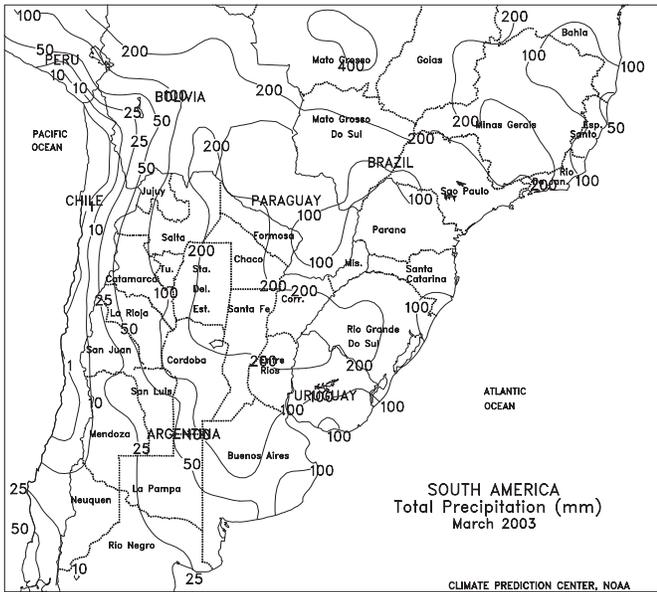


**SOUTH AMERICA**

Showers (25-50 mm or more) returned to primary crop areas of central Argentina, causing additional fieldwork delays and renewing the potential for flooding. Heavy rain (50-100 mm) likely flooded some soybean fields in eastern Entre Rios. In southern Buenos Aires, the moisture hampered winter wheat planting but increased moisture levels for crop germination and establishment. Dry, warmer-than-normal weather favored maturing cotton in northern crop areas (Chaco and Formosa). According to independent reports from within Argentina, corn and soybeans were 77 and 80 percent harvested, respectively, as of May 17. These figures represent the sluggish pace of last week's harvesting, but depict overall completion rates above that of last season. In Brazil, dry, warm weather favored final soybean harvests and boosted growth rates of winter corn. Winter wheat planting is usually underway by now in Rio Grande do Sul and should be progressing well after 2 weeks of dryness. During April, wetter-than-normal weather caused delays in summer crop harvesting in central Argentina and southern Brazil. However, fieldwork in Argentina still progressed at a pace that exceeded that of recent years. Periodic dryness supported soybean harvesting in Brazil's northern growing areas (Mato Grosso to Minas Gerais), especially during the latter half of the month.



SOUTH AMERICA - CORRECTED MARCH 2003



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