

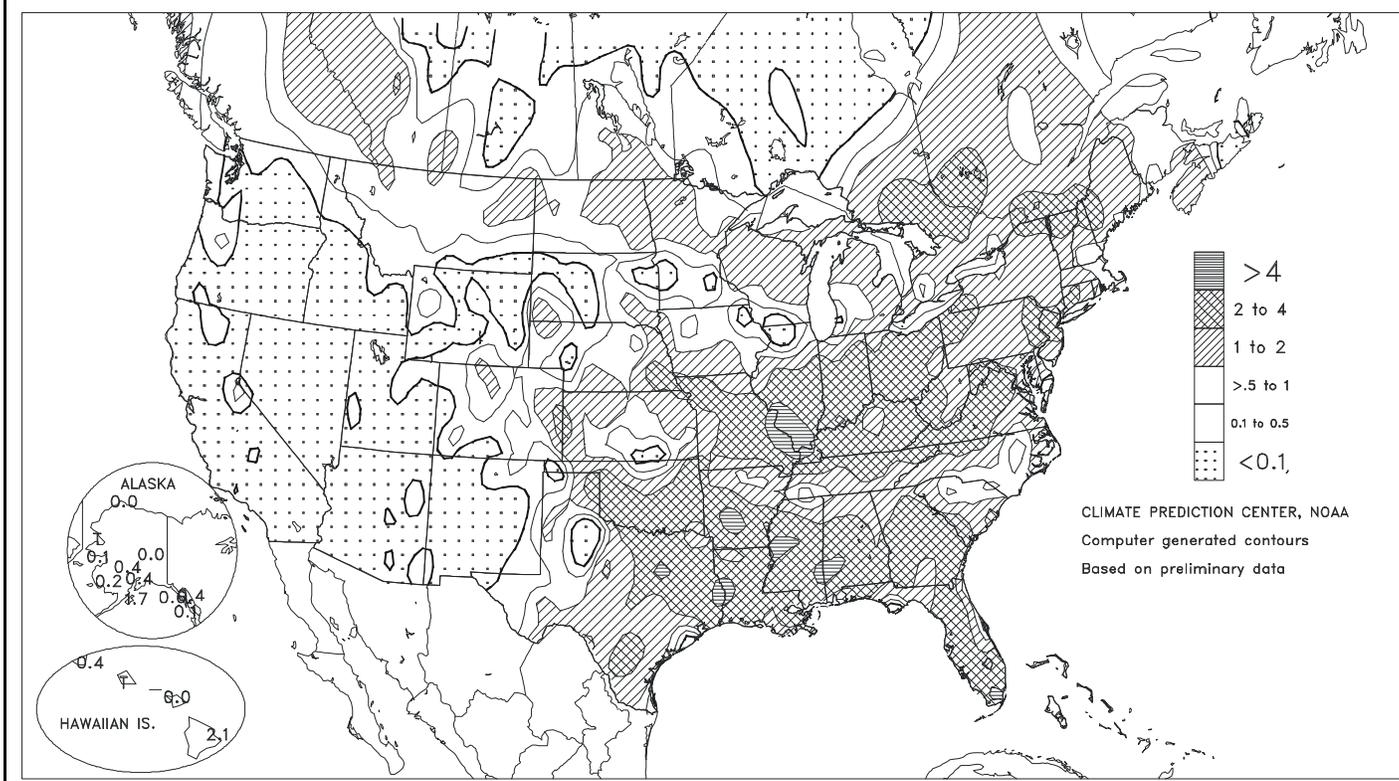
WEEKLY WEATHER AND CROP BULLETIN

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)

JUN 8 - 14, 2003



HIGHLIGHTS

June 8 - 14, 2003

Highlights provided by USDA/WAOB

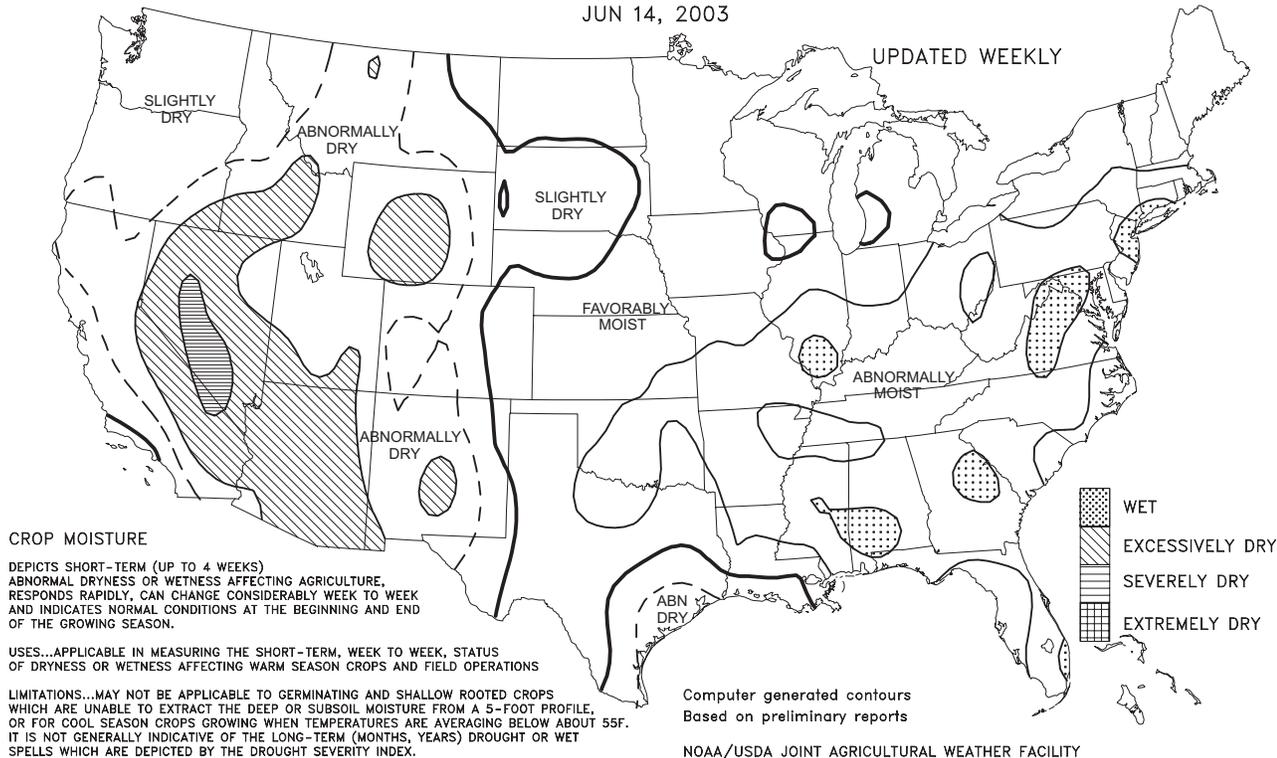
Hot, dry weather continued in the **West** for a fourth consecutive week, providing favorable conditions for irrigated crops but maintaining heavy irrigation demands and increasing stress on rangelands and some dryland crops. Weekly temperatures up to 7°F above normal were noted in the **Great Basin**, and irrigation supplies remained significantly below normal for this time of year across the **Southwest** and **Intermountain West**. Farther east, temperatures on the **Plains** averaged as much as 5°F below normal. Scattered showers and thunderstorms on the **southern Plains** slowed winter wheat harvesting, but continued to benefit pastures, immature winter wheat, (Continued on page 5)

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Crop Moisture
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-F.T. SOIL PROFILE
JUN 14, 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.

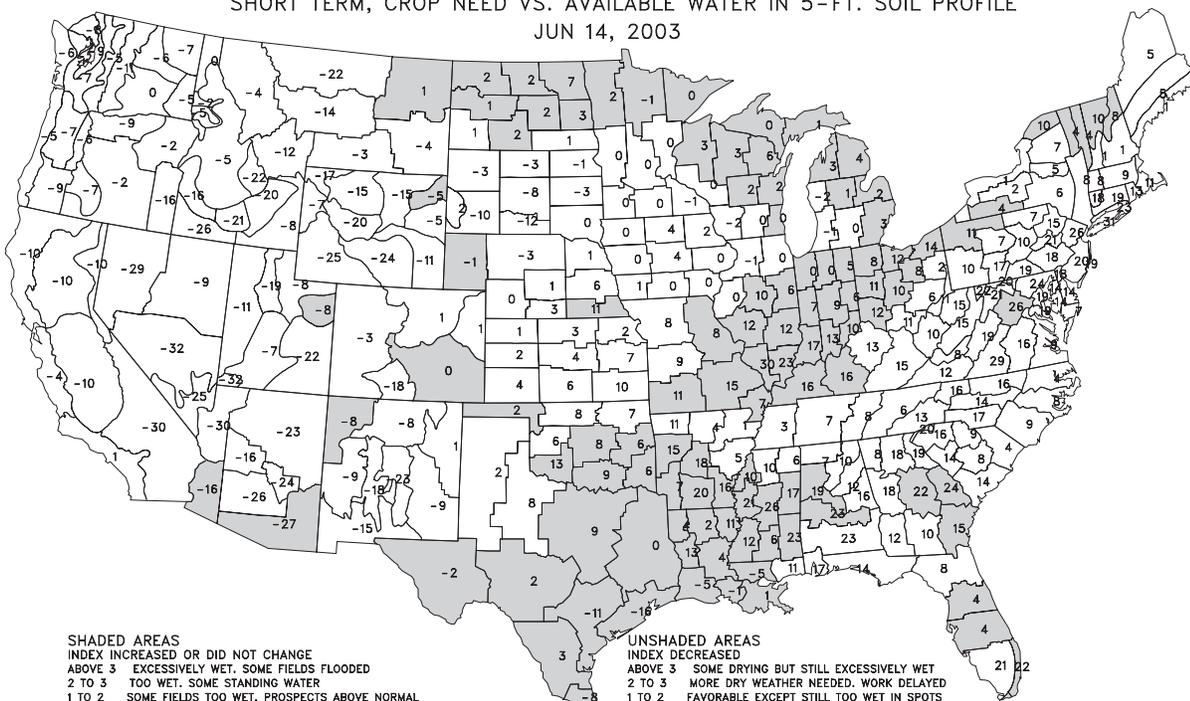
USES...APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

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-F.T. SOIL PROFILE
JUN 14, 2003



SHADED AREAS

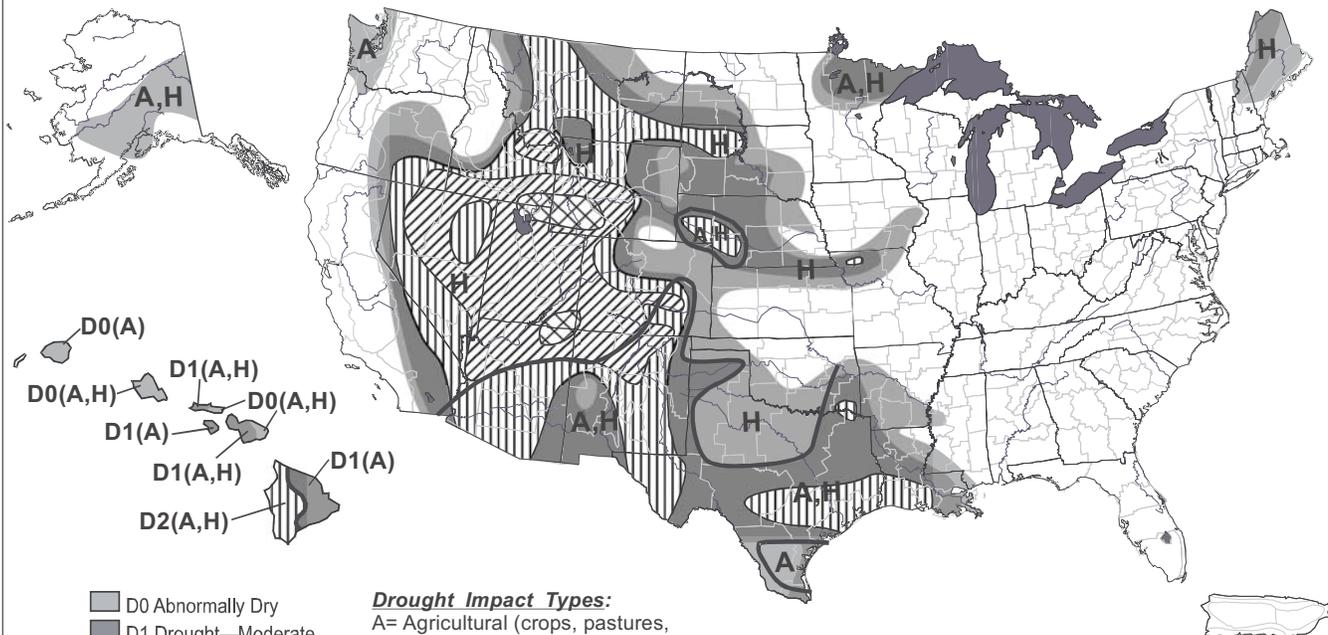
INDEX INCREASED OR DID NOT CHANGE
 ABOVE 3 EXCESSIVELY WET. SOME FIELDS FLOODED
 2 TO 3 TOO WET. SOME STANDING WATER
 1 TO 2 SOME FIELDS TOO WET. PROSPECTS ABOVE NORMAL
 0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
 0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
 -1 TO -2 SOME IMPROVEMENT BUT STILL 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

U.S. Drought Monitor

June 10, 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.

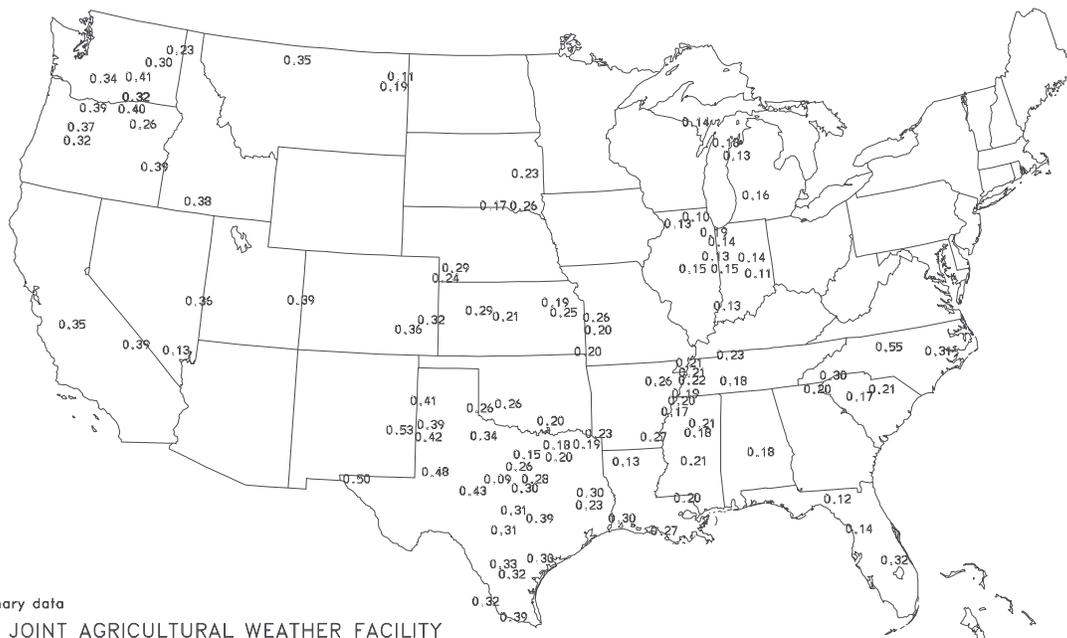
<http://drought.unl.edu/dm>



Released Thursday, June 12, 2003
 Author: Mark Svoboda, NDMC

Average Pan Evaporation (Inches)

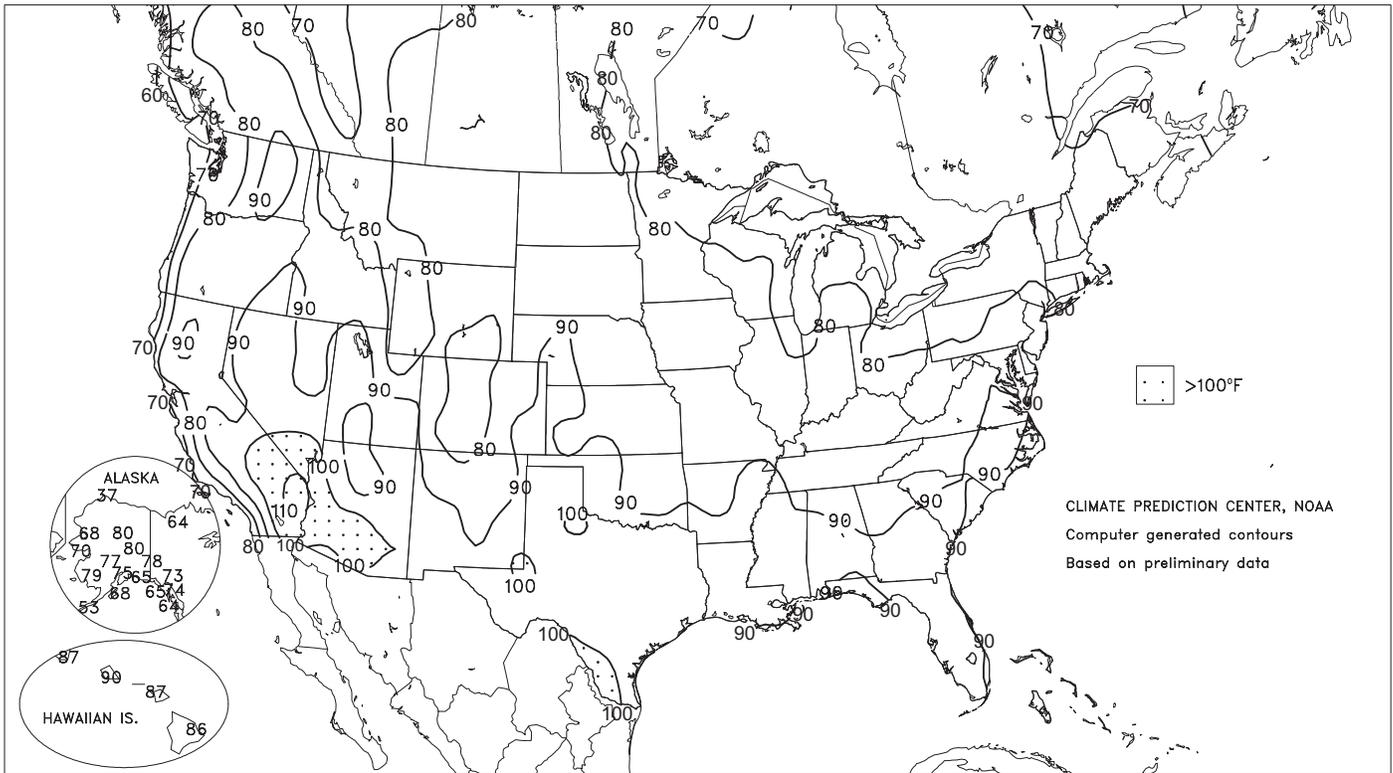
JUN 8 - 14, 2003



Based on preliminary data
 NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

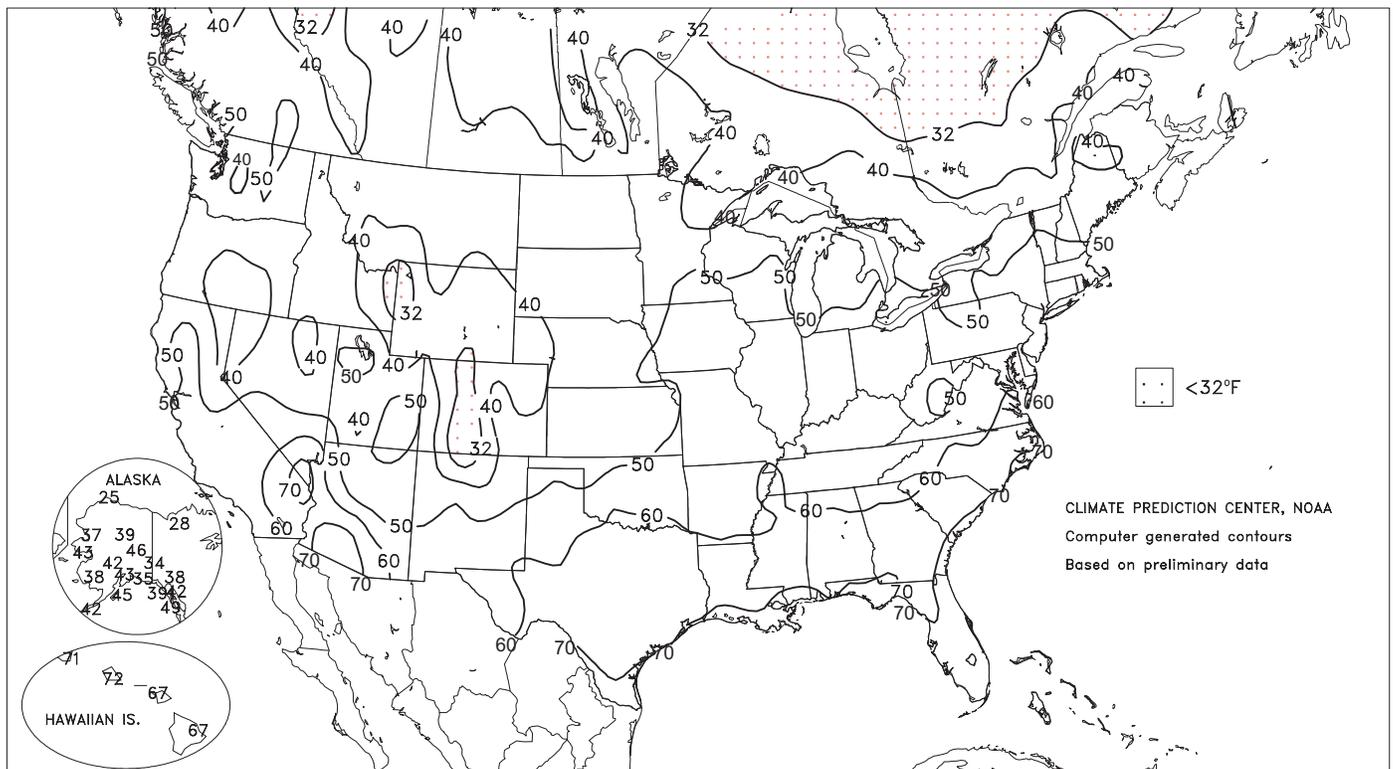
Extreme Maximum Temperature (°F)

JUN 8 - 14, 2003



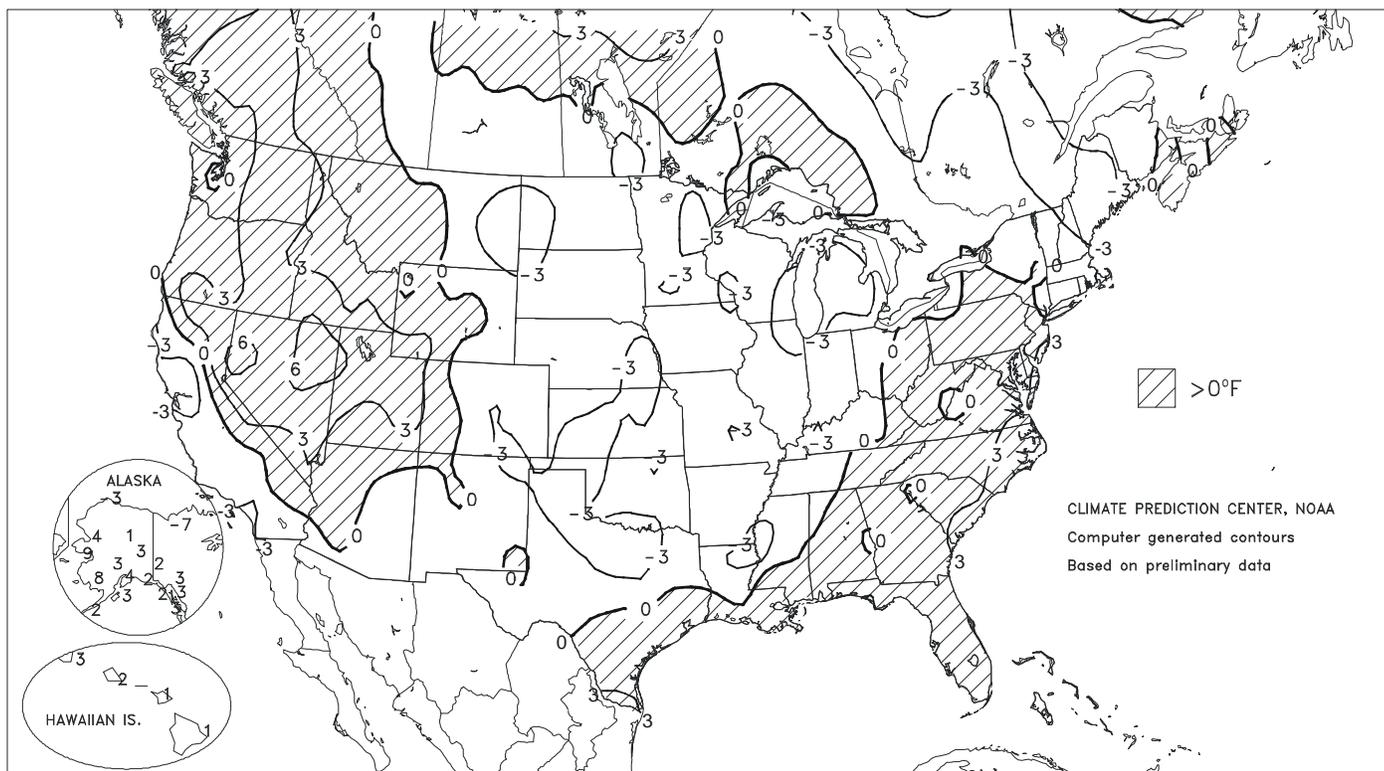
Extreme Minimum Temperature (°F)

JUN 8 - 14, 2003



Departure of Average Temperature from Normal (°F)

JUN 8 - 14, 2003



(Continued from front cover)

and spring-sown crops. However, some locations on the **High Plains** required additional moisture to ensure drought recovery. Meanwhile, **Midwestern** conditions remained mostly favorable for summer crop emergence and establishment. Soil moisture ranged from slightly short in parts of the **northern and western Corn Belt** to locally excessive in the **Ohio and middle Mississippi Valleys**, where wet conditions slowed final summer crop planting. Elsewhere, warm, humid weather and locally heavy showers continued across the **South and East**. Wet conditions caused fieldwork delays and disease concerns in the **Southeast**, but pastures and summer crops along the **Texas coast** needed additional rain.

Early in the week, record heat prevailed in the **Northwest**, while cool weather settled across areas from the **Plains eastward**. On Sunday, daily-record highs in **Washington** included 95°F in **Kennewick** and 91°F in **Wenatchee**. In **Oregon**, **Portland's** high temperature only reached 79°F on Sunday, ending its longest streak of 90-degree heat (4 days from June 4-7) since August 9-12, 1997, and longest such hot spell in June since June 21-24, 1992. One of the few exceptions to the **Western** heat was in **southern California**, where **El Cajon** (68°F on June 8 and 9) posted consecutive daily-record low maximum temperatures. Farther east, daily-record lows were established on June 8 in locations such as **Burlington, CO** (39°F), and **Garden City, KS** (43°F). The push of cool weather across the **western half of the Nation** allowed for some warmer air to overspread the **Midwest and East**. For example, **Indianapolis, IN**, reported an above-normal daily-average temperature on Wednesday, ending a 22-day spell (May 20 - June 10) of below-normal temperatures. A 29-day spell (May 13 - June 10) of cooler-than-normal weather ended on the same day in **Washington, DC**. Following a respite from hot conditions, record heat returned at week's end to the **Northwest**, where **Washington's Grand Coulee Dam** (92°F on June 14) collected a daily-record high.

Locally heavy showers peppered **Florida** for most of the week, resulting in daily-record totals in locations such as **Vero Beach** (1.81 inches on June 9 and 1.45 inches on June 12) and **Naples** (1.46 inches on June 13). Meanwhile in **Missouri**, **St. Louis** netted 6.65 inches (354 percent of normal) during the first half of the month, aided by totals of 2.68 inches

on June 10 and 2.09 inches on June 12. In the **Ohio Valley**, daily-record totals on June 11 included 3.08 inches in **Paducah, KY**, and 1.69 inches in **Evansville, IN**. The following day, record totals were broken in several places, including **Lincoln, NE** (3.01 inches), and **Lufkin, TX** (2.28 inches). Elsewhere in **Texas**, **Abilene's** June 1-15 rainfall totaled 6.85 inches (415 percent of normal). Along the **Texas coast**, however, year-to-date precipitation through June 15 remained as low as 6.11 inches (48 percent of normal) in **Corpus Christi** and 8.24 inches (47 percent) in **Victoria**. Farther north and east, **Charleston, WV** (2.73 inches on June 11), was among the locations affected by torrential rains and flash flooding. By June 16, **Charleston's** month-to-date rainfall reached 8.52 inches (400 percent of normal), its third highest June total on record behind 10.56 inches in 1998 and 8.61 inches in 1910.

Cool weather lingered across **northern Alaska**, but mild weather prevailed across the remainder of the State. Weekly temperatures ranged from 3 to 9°F above normal across the majority of **interior and western Alaska**, and **Bethel** posted a daily-record high of 79°F on June 13. The first half of June featured near- to above-normal precipitation in much of **Alaska**, except for below-normal totals in many northern and western locations. June 1-15 **Alaskan** totals of 0.14 inch (29 percent of normal) in **Nome** and 0.33 inch (46 percent) in **Bethel** contrasted with sums of 0.79 inch (155 percent) in **Anchorage** and 2.69 inches (179 percent) in **Valdez**. Meanwhile in **Hawaii**, the return of scattered showers at midweek helped to end a period of record warmth, but failed to significantly dent recent precipitation deficits. Weekly temperatures averaged up to 3°F above normal on the western islands, where **Lihue, Kauai**, notched daily-record highs on June 9 and 11 (87°F on both days). **Honolulu, Oahu**, also collected a record high (90°F) on June 9. Some of the most significant precipitation fell from June 11-13, when 48-hour Big Island totals reached 2.00 inches in **Glenwood** and 2.17 inches in **Mountain View**. **Hawaiian** precipitation totals for June 1-15 included 2.57 inches (76 percent of normal) in **Hilo**, on the **Big Island**, and 0.17 inch (63 percent) in **Honolulu**. Year-to-date (January 1 - June 15) totals in those two locations were 29.47 inches (52 percent of normal) and 5.32 inches (58 percent), respectively.

Weather Data for Mississippi and the Missouri Bootheel

Weather Data for the Week Ending June 14, 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 Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F				
																90 AND ABOVE	80 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
MS BATESVILLE X	83	65	89	55	74	-2	1.32	0.10	1.32	3.17	128	33.25	118	-	-	0	0	1	1	
MS BELZONI X	88	68	95	64	78	-1	3.49	2.60	2.00	3.99	208	24.64	81	-	-	1	0	3	2	
MS CLARKSDALE X	86	69	96	59	77	-1	-	-	-	-	-	-	-	-	-	3	0	-	-	
MS CLEVELAND X	85	65	92	58	75	-4	1.43	0.24	1.38	2.56	108	22.14	76	-	-	1	0	2	1	
MS GREENVILLE X	85	66	90	57	76	-3	3.15	2.10	2.00	4.09	189	-	-	-	-	1	0	2	2	
MS GREENWOOD X	85	67	91	59	76	-4	1.28	0.23	0.46	2.57	121	21.53	76	-	-	1	0	4	0	
MS INDIANOLA 1S	86	67	92	61	76	-	1.97	-	2.95	5.34	-	21.24	-	81	75	1	0	3	2	
MS INVERNESS 5E	85	67	92	62	76	-	3.58	-	2.77	4.74	-	19.58	-	87	76	1	0	3	1	
MS LYON	85	66	92	59	76	-	1.31	-	0.82	2.55	-	26.33	-	79	72	1	0	2	1	
MS MACON	86	67	91	64	77	-	2.30	-	1.01	3.49	-	28.63	-	86	74	2	0	5	2	
MS MOORHEAD X	85	66	91	60	75	-4	3.75	2.77	2.90	4.55	226	24.02	83	-	-	1	0	3	2	
MS ONWARD	85	66	93	61	76	-	3.20	-	2.09	3.33	-	-	-	83	77	1	0	4	2	
MS PERTHSHIRE	85	66	92	59	75	-	4.71	-	3.81	5.54	-	29.61	-	80	73	1	0	2	2	
MS ROLLING FORK X	90	68	95	63	79	0	3.60	2.59	2.15	4.04	196	25.16	85	-	-	3	0	3	3	
MS SCOTT	85	66	92	59	75	-	1.55	-	0.99	2.71	-	-	-	85	75	1	0	3	1	
MS SIDON	86	67	92	63	77	-	2.62	-	1.84	4.26	-	20.09	-	89	76	2	0	4	2	
MS STARKVILLE	85	68	90	63	77	0	4.79	3.88	2.83	5.88	311	31.34	108	86	75	1	0	4	3	
MS TUNICA X	85	67	94	60	76	-2	1.28	0.02	1.22	2.19	86	-	-	-	-	1	0	3	1	
MS TUNICA 1W	86	65	94	55	75	-	1.64	-	0.85	2.88	-	-	-	75	72	1	0	4	2	
MS VANCE	83	65	91	58	74	-	1.38	-	1.00	2.64	-	24.33	-	76	73	1	0	2	1	
MS VERONA	85	65	91	60	75	-	1.17	-	0.94	2.58	-	27.18	-	85	71	1	0	3	1	
MS VICKSBURG X	87	68	91	66	77	-1	4.35	3.37	2.60	4.39	217	34.54	113	-	-	2	0	2	2	
MS YAZOO CITY X	87	66	92	62	76	-2	5.53	4.59	4.15	6.24	318	25.29	80	-	-	2	0	3	3	
MS STONEVILLE X	86	68	92	60	77	0	2.81	1.90	2.09	4.06	215	21.98	76	76	54	1	0	3	2	
MO DELTA	81	62	84	52	71	-4	3.11	2.39	1.87	3.88	244	19.53	88	79	67	0	0	4	2	
MO STEELE	85	67	94	60	76	0	0.74	-0.44	0.41	1.16	51	27.18	111	81	73	1	0	2	0	
MO GLENNONVILLE	84	64	89	53	74	-2	0.79	0.04	0.68	1.07	63	15.41	72	80	69	0	0	2	1	
MO PORTAGEVILLE LF	83	66	88	59	74	-2	2.89	2.01	2.59	3.27	161	22.73	98	85	70	0	0	3	1	
MO CLARKTON	85	65	92	58	74	-2	1.29	0.54	1.28	1.71	101	19.80	92	80	69	1	0	2	1	
MO CARDWELL	85	67	94	60	76	0	1.21	0.45	0.88	1.85	104	26.07	106	83	71	1	0	3	1	
MO CHARLESTON	81	63	84	55	72	-2	4.77	3.97	2.66	4.94	281	22.12	95	79	67	0	0	3	3	
MO PORTAGEVILLE DC	84	66	88	58	74	-2	3.76	2.88	2.92	4.11	203	21.88	94	84	71	0	0	4	2	

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

X Based on 1971-2000 normals.

- Sufficient data not available.

Weather and Crop Summary: A very wet week seriously disrupted fieldwork, including winter wheat harvesting. The weather also remained somewhat cool due to extensive cloud cover. Nevertheless, summer crops fared well in many areas. Rice remained unaffected, while corn, soybeans, and cotton rapidly grew. However, applications of crop-protection measures were delayed due to the timing and duration of rain events. In addition, some fields had standing water for most of the week, which was a significant concern due to the threat of additional heavy rainfall.

U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on June 11, 2003. Forecasts refer to June 1.

Winter wheat production is forecast at 1.63 billion bushels, up 4 percent from the May 1 forecast and 42 percent above 2002. The yield is forecast at 44.6 bushels per acre, up 1.7 bushels from the previous forecast. Grain area totals 36.4 million acres, unchanged from May 1.

Hard Red production is up 7 percent from a month ago to 1.01 billion bushels. Soft Red is down 1 percent from last month, and now totals 368 million bushels. White production totals 253 million bushels, up 1 percent from last month.

The **all orange** forecast for the 2002-03 crop is 11.5 million tons, virtually unchanged from the May 1 forecast but 8 percent

below last season's utilization. Florida's all orange forecast, at 201 million boxes (9.05 million tons), is up 0.5 percent from the previous forecast but 13 percent below last season's final utilization. If attained, it will be Florida's lowest utilized production since the 186 million boxes of the 1998-99 season. Early and midseason varieties in Florida are forecast at 112 million boxes (5.04 million tons), unchanged from the May 1 forecast but 12 percent lower than last season. Harvest of these varieties is complete. Florida's Valencia forecast is 89 million boxes (4.01 million tons), 1 percent above the previous forecast but 13 percent below last season's final utilization. Arizona, California, and Texas orange production forecasts are carried forward from April 1.

National Weather Data for Selected Cities

Weather Data for the Week Ending June 14, 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 Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE		50 INCH OR MORE	
																		TEMP. °F	PRECIP		
AL	BIRMINGHAM	85	67	90	62	76	0	2.53	1.73	0.85	4.03	241	37.96	141	98	63	1	0	4	3	
	HUNTSVILLE	85	65	90	59	75	0	0.65	-0.31	0.39	3.12	155	27.85	96	92	57	1	0	3	0	
	MOBILE	89	73	91	71	81	2	2.29	1.18	1.42	8.13	352	31.69	101	89	61	4	0	4	1	
	MONTGOMERY	89	69	92	65	79	1	2.22	1.35	1.63	3.01	177	22.76	84	10	68	4	0	3	2	
AK	ANCHORAGE	66	50	75	43	58	4	0.36	0.14	0.28	0.42	100	2.86	77	87	60	0	0	4	0	
	BARROW	33	27	37	25	30	-4	0.00	-0.04	0.00	0.00	0	0.60	95	96	92	0	7	0	0	
	FAIRBANKS	72	50	80	46	61	2	0.00	-0.30	0.00	0.07	13	1.48	58	60	35	0	0	0	0	
	JUNEAU	66	47	74	42	57	4	0.40	-0.36	0.28	1.34	88	15.78	78	87	66	0	0	3	0	
	KODIAK	56	47	68	45	51	3	1.67	0.38	0.48	3.87	147	39.05	116	96	87	0	0	7	0	
	NOME	63	47	70	43	55	9	0.06	-0.17	0.05	0.14	33	3.69	90	85	61	0	0	2	0	
AZ	FLAGSTAFF	76	40	82	35	58	-1	0.00	-0.03	0.00	0.04	57	5.23	55	52	16	0	0	0	0	
	PHOENIX	102	77	108	73	90	3	0.00	0.00	0.00	0.00	0	4.41	143	23	12	7	0	0	0	
	TUCSON	97	68	104	63	83	0	0.00	0.00	0.00	0.00	0	1.77	55	25	14	7	0	0	0	
	YUMA	100	72	107	68	86	-2	0.00	0.00	0.00	0.00	0	1.35	126	44	28	7	0	0	0	
AR	FORT SMITH	85	64	90	57	75	-2	1.11	0.08	0.67	3.23	150	14.10	70	96	55	1	0	4	1	
	LITTLE ROCK	84	66	90	58	75	-3	1.70	0.78	1.17	2.60	138	17.29	71	97	59	1	0	3	2	
CA	BAKERSFIELD	89	62	98	58	76	-1	0.00	-0.03	0.00	0.00	0	3.37	74	70	44	2	0	0	0	
	FRESNO	88	59	96	55	74	-1	0.00	-0.06	0.00	0.00	0	5.78	74	77	47	3	0	0	0	
	LOS ANGELES	69	60	71	59	65	-1	0.00	-0.01	0.00	0.00	0	8.05	86	87	73	0	0	0	0	
	REDDING	88	63	94	59	75	1	0.00	-0.19	0.00	0.00	0	17.98	83	78	53	3	0	0	0	
	SACRAMENTO	79	54	87	53	67	-4	0.00	-0.04	0.00	0.00	0	8.26	70	91	45	0	0	0	0	
	SAN DIEGO	68	62	71	60	65	-2	0.00	-0.02	0.00	0.00	0	8.00	106	84	69	0	0	0	0	
	SAN FRANCISCO	64	54	69	53	59	-2	0.00	-0.02	0.00	0.00	0	10.17	76	85	74	0	0	0	0	
	STOCKTON	82	53	87	51	68	-4	0.00	-0.01	0.00	0.00	0	4.80	54	89	53	0	0	0	0	
CO	ALAMOSA	78	36	81	30	57	-1	0.05	-0.06	0.05	0.12	48	1.27	53	78	22	0	1	1	0	
	CO SPRINGS	76	48	84	40	62	-1	1.82	1.27	1.59	2.86	253	6.34	93	88	29	0	0	3	1	
	DENVER INTL	78	50	83	40	64	-1	0.23	-0.15	0.23	1.04	120	8.72	146	85	30	0	0	1	0	
	GRAND JUNCTION	88	56	92	50	72	2	0.00	-0.09	0.00	0.00	0	3.31	80	42	27	1	0	0	0	
	PUEBLO	85	50	92	42	68	-1	0.83	0.54	0.70	1.52	258	6.71	137	86	41	2	0	2	1	
CT	BRIDGEPORT	71	59	79	56	65	-2	1.75	0.93	0.94	5.17	310	23.68	116	94	78	0	0	4	2	
	HARTFORD	74	58	81	55	66	-1	1.54	0.63	0.73	3.68	198	20.49	99	94	76	0	0	5	2	
DC	WASHINGTON	82	66	88	62	74	1	2.27	1.56	1.13	4.18	281	25.93	148	98	63	0	0	6	1	
DE	WILMINGTON	80	63	86	57	71	1	2.27	1.47	1.38	5.07	311	23.43	121	10	69	0	0	5	2	
FL	DAYTONA BEACH	88	72	90	71	80	1	0.24	-1.08	0.14	3.56	141	21.58	120	96	60	1	0	2	0	
	JACKSONVILLE	90	71	91	69	80	2	0.85	-0.34	0.51	3.10	137	23.79	121	99	63	6	0	6	1	
	KEY WEST	89	80	90	77	84	1	0.24	-0.89	0.13	0.51	23	13.32	100	82	66	1	0	2	0	
	MIAMI	89	76	89	74	83	1	2.72	0.61	2.10	3.25	80	19.95	102	88	66	0	0	6	1	
	ORLANDO	90	73	93	72	82	1	2.20	0.55	1.50	3.97	128	18.38	104	95	69	5	0	3	2	
	PENSACOLA	88	73	89	69	81	1	1.20	-0.19	0.50	4.55	170	26.43	96	95	76	0	0	6	1	
	TALLAHASSEE	89	71	92	70	80	0	2.74	1.18	1.18	9.40	308	28.67	102	96	67	3	0	5	2	
	TAMPA	89	76	91	75	83	2	2.43	1.21	1.25	2.99	131	16.72	114	89	60	3	0	5	1	
	WEST PALM	88	76	89	73	82	1	3.13	1.34	2.61	4.67	134	29.55	132	89	67	0	0	4	1	
GA	ATHENS	85	66	89	61	76	1	2.04	1.16	1.10	4.79	268	27.31	118	94	69	0	0	5	2	
	ATLANTA	85	68	86	65	76	0	1.12	0.37	0.63	2.51	165	28.56	118	92	62	0	0	4	1	
	AUGUSTA	88	68	90	64	78	1	2.32	1.34	0.69	5.94	311	30.72	145	94	65	2	0	5	2	
	COLUMBUS	89	71	92	68	80	2	2.78	2.04	1.22	5.94	404	29.91	125	99	56	2	0	5	2	
	MACON	89	70	92	65	79	2	3.98	3.21	2.50	7.21	481	32.10	146	94	59	4	0	5	2	
	SAVANNAH	89	72	91	70	81	3	0.62	-0.64	0.30	2.76	114	25.26	127	99	64	3	0	4	0	
HI	HILO	84	68	86	67	76	1	2.12	0.59	1.32	2.28	76	29.45	52	82	67	0	0	4	1	
	HONOLULU	88	74	90	72	81	2	0.04	-0.05	0.03	0.16	80	5.35	59	73	60	1	0	2	0	
	KAHULUI	86	70	87	67	78	1	0.00	-0.03	0.00	0.00	0	8.79	80	78	65	0	0	0	0	
	LIHUE	86	74	87	71	80	3	0.39	-0.02	0.29	0.64	73	18.37	101	78	67	0	0	6	0	
ID	BOISE	86	56	93	50	71	5	0.00	-0.17	0.00	0.00	0	6.85	100	53	27	1	0	0	0	
	LEWISTON	82	55	90	53	69	4	0.20	-0.08	0.17	0.20	34	9.72	146	67	46	1	0	2	0	
	POCATELLO	84	46	87	38	65	4	0.00	-0.22	0.00	0.00	0	4.22	63	65	28	0	0	0	0	
IL	CHICAGO/O'HARE	72	54	78	52	63	-4	0.49	-0.36	0.47	0.76	45	12.64	86	94	71	0	0	2	0	
	MOLINE	77	59	86	53	68	-2	0.50	-0.60	0.39	1.35	62	12.96	80	94	72	0	0	2	0	
	PEORIA	78	60	83	54	69	-1	1.60	0.75	1.24	2.52	146	12.70	82	96	60	0	0	3	1	
	ROCKFORD	75	54	83	49	65	-3	0.16	-0.96	0.16	0.48	22	9.27	62	92	69	0	0	1	0	
	SPRINGFIELD	79	61	83	55	70	-2	2.23	1.34	1.37	3.22	178	12.95	82	95	67	0	0	5	1	
IN	EVANSVILLE	79	64	82	58	71	-3	3.33	2.38	1.68	4.12	210	23.25	107	91	76	0	0	6	3	
	FORT WAYNE	75	59	80	55	67	-2	2.46	1.52	1.17	2.99	160	17.45	109	97	70	0	0	5	2	
	INDIANAPOLIS	78	62	82	53	70	-1	1.62	0.68	0.76	2.08	109	20.33	112	95	65	0	0	5	1	
	SOUTH BEND	75	57	82	53	66	-2	0.18	-0.79	0.07	0.54	29	13.85	86	91	67	0	0	4	0	
IA	BURLINGTON	79	60	84	54	69	-2	0.49	-0.53	0.46	1.92	94	12.29	77	97	56	0	0	3	0	
	CEDAR RAPIDS	77	57	84	51	67	-3	0.28	-0.76	0.18	1.45	71	9.93	74	98	59	0	0	2	0	
	DES MOINES	80	61	88	54	71	1	0.84	-0.23	0.43	1.98	93	16.58	115	89	69	0	0	3	0	
	DUBUQUE	75	56	83	51	66	-1	0.26	-0.71	0.13	1.24	63	9.90	67	92	71	0	0	2	0	
	SIoux CITY	80	55	87	47	68	-2	1.09	0.24	1.03	1.95	113	11.71	102	90	62	0	0	2	1	
	WATERLOO	81	58	88	52	70	1	0.60	-0.53	0.47	3.26	146	15.00	110	89	63	0	0	3	0	
KS	CONCORDIA	83	57	88	48	70	-2	0.24	-0.67	0.21	0.62	33	10.58	86	89	55	0	0	4	0	
	DODGE CITY	83	57	90	46	70	-3	0.10	-0.63	0.09	1.28	87	9.59	97	92	49	1	0	2	0	
	GOODLAND	81	53	90	42	67	-1	1.26	0.50	0.80	4.29	273	10.41	121	91	50	1	0	5	1	
	TOPEKA	84	61	89	48	73	0	0.02	-1.16	0.02	1.85	77	14.20	94	93	55	0	0	1	0	

Weather Data for the Week Ending June 14, 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 Jun 1	PCT. NORMAL SINCE Jun 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	84	60	88	48	72	-2	0.00	-1.02	0.00	1.84	88	14.49	108	92	58	0	0	0	0
KY JACKSON	80	62	81	56	71	0	2.26	1.17	0.82	3.94	177	26.53	116	98	65	0	0	6	3
KY LEXINGTON	79	62	81	55	71	0	1.42	0.37	0.40	4.26	200	24.98	116	94	72	0	0	6	0
KY LOUISVILLE	80	65	83	60	73	0	1.54	0.69	0.59	2.29	129	22.04	102	93	64	0	0	5	1
KY PADUCAH	80	64	85	55	72	-2	3.87	2.87	3.04	4.17	212	25.91	111	96	58	0	0	2	2
LA BATON ROUGE	90	71	93	68	80	1	0.44	-0.76	0.33	1.46	62	15.01	51	96	56	4	0	3	0
LA LAKE CHARLES	90	72	94	69	81	1	1.40	-0.04	0.87	3.04	104	14.48	58	10	69	4	0	3	1
LA NEW ORLEANS	90	74	93	71	82	2	3.47	1.91	2.24	7.95	271	26.37	90	93	68	5	0	5	2
LA SHREVEPORT	88	68	95	64	78	-1	1.39	0.20	0.72	2.06	86	16.57	66	94	57	3	0	4	1
ME CARIBOU	65	48	74	40	56	-4	0.82	0.08	0.37	2.19	145	13.02	87	95	51	0	0	4	0
ME PORTLAND	67	52	76	51	60	-2	0.63	-0.11	0.47	1.44	95	15.25	73	97	63	0	0	3	0
MD BALTIMORE	82	64	88	57	73	2	1.23	0.45	0.39	3.58	222	26.30	139	96	62	0	0	6	0
MA BOSTON	70	57	79	55	63	-4	0.43	-0.31	0.21	2.51	168	20.58	106	96	78	0	0	3	0
MA WORCESTER	69	55	75	53	62	-2	1.43	0.50	0.61	3.29	174	21.65	100	10	84	0	0	5	2
MI ALPENA	68	46	78	40	57	-3	1.44	0.86	0.71	1.53	132	8.87	78	99	64	0	0	3	2
MI GRAND RAPIDS	71	54	81	50	63	-3	0.40	-0.42	0.30	0.64	40	11.84	81	96	66	0	0	3	0
MI HOUGHTON LAKE	71	45	81	40	58	-3	0.85	0.16	0.58	1.05	77	8.18	73	97	66	0	0	2	1
MI LANSING	72	52	80	46	62	-3	0.73	-0.12	0.49	0.97	60	9.89	77	93	73	0	0	3	0
MI MUSKEGON	73	52	82	49	62	-2	0.34	-0.28	0.30	0.40	31	7.61	57	96	71	0	0	3	0
MI TRAVERSE CITY	68	48	78	45	58	-5	1.32	0.57	0.92	1.45	104	9.26	70	10	63	0	0	3	1
MN DULUTH	67	45	77	38	56	-3	1.20	0.24	0.69	1.39	75	8.47	80	94	74	0	0	2	2
MN INT'L FALLS	71	44	80	36	57	-4	0.76	-0.17	0.30	1.93	109	4.76	58	94	51	0	0	5	0
MN MINNEAPOLIS	75	57	82	52	66	-1	0.01	-1.01	0.01	1.05	53	11.83	105	90	62	0	0	1	0
MN ROCHESTER	74	54	82	48	64	-1	0.93	0.04	0.51	2.55	146	13.04	110	95	64	0	0	4	1
MS ST. CLOUD	73	51	81	43	62	-2	0.72	-0.37	0.40	0.91	43	11.68	116	97	56	0	0	5	0
MS JACKSON	86	68	91	64	77	-1	3.12	2.29	1.95	4.66	279	35.71	126	96	65	2	0	5	3
MS MERIDIAN	88	67	91	63	77	-1	1.43	0.60	0.56	3.57	213	29.90	98	98	75	2	0	5	1
MS TUPELO	84	64	89	58	74	-2	0.70	-0.46	0.58	2.35	98	30.58	104	93	73	0	0	4	1
MO COLUMBIA	80	59	84	51	70	-2	1.15	0.21	0.55	2.60	134	17.03	94	95	60	0	0	4	1
MO KANSAS CITY	82	60	85	48	71	-2	0.48	-0.54	0.42	3.33	158	13.09	83	95	54	0	0	5	0
MO SAINT LOUIS	80	64	83	58	72	-2	5.81	4.96	2.67	6.66	387	20.67	118	86	64	0	0	4	3
MO SPRINGFIELD	80	60	87	52	70	-2	2.34	1.16	1.01	4.16	179	18.64	96	92	63	0	0	5	3
MT BILLINGS	77	52	85	47	65	1	0.32	-0.13	0.18	1.21	127	6.55	85	81	38	0	0	3	0
MT BUTTE	72	40	77	34	56	1	0.48	-0.02	0.29	0.54	53	6.17	105	89	26	0	0	3	0
MT GLASGOW	74	50	84	45	62	-1	0.46	-0.06	0.18	1.72	169	5.46	119	92	62	0	0	3	0
MT GREAT FALLS	75	47	83	43	61	2	0.70	0.14	0.33	1.01	86	6.19	85	92	35	0	0	4	0
MT HAVRE	77	48	89	42	62	0	0.52	0.08	0.18	0.86	95	5.03	98	94	58	0	0	6	0
MT KALISPELL	70	45	76	42	58	1	0.74	0.19	0.42	0.75	68	6.03	75	95	63	0	0	6	0
MT MISSOULA	76	47	79	42	62	3	0.38	-0.05	0.24	0.39	44	8.63	128	88	48	0	0	3	0
NE GRAND ISLAND	79	56	85	49	68	-2	0.19	-0.70	0.10	2.17	118	10.78	92	90	57	0	0	2	0
NE LINCOLN	80	55	88	52	68	-4	4.38	3.56	3.01	5.75	336	14.64	118	89	62	0	0	2	2
NE NORFOLK	80	54	86	47	67	-2	0.14	-0.85	0.08	1.30	66	10.33	88	90	55	0	0	4	0
NE NORTH PLATTE	80	51	90	39	65	-2	1.43	0.70	0.89	2.91	195	10.96	123	96	47	1	0	4	2
NE OMAHA	79	56	86	50	67	-4	0.26	-0.66	0.14	1.35	72	11.55	89	92	61	0	0	2	0
NE SCOTTSBLUFF	83	49	90	35	66	0	0.49	-0.12	0.20	1.14	92	5.82	73	97	43	1	0	6	0
NE VALENTINE	81	53	90	44	67	1	0.16	-0.51	0.13	0.44	33	7.61	90	88	56	1	0	2	0
NV ELY	82	44	86	38	63	5	0.04	-0.12	0.03	0.04	11	4.68	92	55	21	0	0	2	0
NV LAS VEGAS	99	76	105	72	87	3	0.00	0.00	0.00	0.00	0	2.85	126	25	16	7	0	0	0
NV RENO	88	55	94	50	72	9	0.01	-0.10	0.01	0.01	4	1.58	38	48	23	2	0	1	0
NV WINNEMUCCA	89	48	95	43	68	5	0.01	-0.16	0.01	0.01	3	5.27	115	50	24	3	0	1	0
NH CONCORD	70	53	80	49	62	-2	0.65	-0.05	0.36	1.30	92	18.50	114	99	63	0	0	4	0
NJ NEWARK	78	62	85	57	70	-1	1.95	1.22	1.03	7.03	456	23.74	113	92	71	0	0	5	2
NM ALBUQUERQUE	87	61	89	56	74	0	0.00	-0.14	0.00	0.15	54	2.71	93	43	18	0	0	0	0
NY ALBANY	72	58	77	52	65	0	0.65	-0.23	0.30	1.47	84	17.32	105	92	62	0	0	5	0
NY BINGHAMTON	71	58	74	52	65	2	0.73	-0.14	0.30	2.37	139	16.27	97	92	76	0	0	3	0
NY BUFFALO	70	57	78	52	63	-2	1.01	0.10	0.57	1.50	84	15.45	92	98	71	0	0	4	1
NY ROCHESTER	73	56	80	49	65	0	1.13	0.34	0.59	2.00	130	13.79	98	96	81	0	0	5	1
NY SYRACUSE	73	57	79	49	65	0	1.07	0.26	0.73	1.89	120	16.67	104	94	65	0	0	4	1
NC ASHEVILLE	80	59	83	52	70	2	0.60	-0.45	0.33	2.74	128	26.30	117	94	65	0	0	5	0
NC CHARLOTTE	84	65	87	60	75	-1	0.50	-0.29	0.32	4.15	258	35.75	177	96	63	0	0	3	0
NC GREENSBORO	85	67	88	63	76	3	0.21	-0.56	0.19	3.54	227	29.51	152	95	59	0	0	3	0
NC HATTERAS	81	73	83	69	77	3	0.51	-0.38	0.47	1.26	69	28.03	118	97	82	0	0	3	0
NC RALEIGH	88	67	90	59	77	3	0.30	-0.45	0.19	1.73	112	22.20	113	92	60	1	0	2	0
NC WILMINGTON	87	73	89	67	80	4	0.40	-0.74	0.25	1.56	70	26.59	121	98	64	0	0	3	0
ND BISMARCK	73	51	84	48	62	-2	0.21	-0.38	0.15	1.35	116	8.07	121	89	60	0	0	2	0
ND DICKINSON	70	48	82	41	59	-3	0.79	0.01	0.41	1.51	101	6.86	98	95	55	0	0	4	0
ND FARGO	76	54	83	49	65	0	0.90	0.07	0.46	1.13	69	7.81	96	97	49	0	0	5	0
ND GRAND FORKS	74	51	81	45	63	-1	0.89	0.20	0.47	1.09	81	7.23	104	99	47	0	0	3	0
ND JAMESTOWN	72	52	81	50	62	-3	0.60	-0.08	0.32	1.47	112	8.57	124	98	53	0	0	4	0
ND WILLISTON	70	47	83	41	59	-4	0.95	0.43	0.69	1.64	159	8.43	150	97	70	0	0	2	1
OH AKRON-CANTON	76	60	79	54	68	1	1.15	0.35	0.56	1.59	99	18.41	109	97	72	0	0	4	1
OH CINCINNATI	78	61	81	56	69	-2	1.46	0.40	0.50	2.11	98	19.13	94	93	72	0	0	6	1
OH CLEVELAND	77	61	80	55	69	3	2.54	1.64	0.95	2.68	152	18.69	114	90	62	0	0	4	3
OH COLUMBUS	78	62	80	57	70	0	3.59	2.68	2.71	4.54	254	19.94	121	96	72	0	0	6	1
OH DAYTON	76	62	79	56	69	0	2.28	1.29	0.67	2.97	152	17.05	93	94	68	0	0	6	3
OH MANSFIELD	75	59	79	53	67	1	1.41	0.36	0.54	1.92	92	15.21	81	98	65	0	0	5	2

Based on 1971-2000 normals

Weather Data for the Week Ending June 14, 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 Jun 1	PCT. NORMAL SINCE Jun 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	75	57	80	52	66	-2	2.35	1.44	1.23	2.49	141	16.05	110	95	71	0	0	3	2
OK YOUNGSTOWN	75	58	78	49	66	1	1.89	1.03	1.02	2.17	130	17.16	108	99	78	0	0	4	1
OK OKLAHOMA CITY	85	62	88	53	73	-3	1.51	0.36	0.67	3.59	150	9.35	56	97	54	0	0	5	1
OR TULSA	86	64	90	55	75	-2	1.15	-0.02	0.75	3.65	148	16.32	83	94	58	1	0	5	1
OR ASTORIA	62	53	66	51	58	2	0.39	-0.24	0.16	0.39	30	39.67	115	93	79	0	0	6	0
OR BURNS	81	39	87	32	60	3	0.00	-0.16	0.00	0.00	0	5.53	96	73	33	0	1	0	0
OR EUGENE	71	47	82	42	59	0	0.12	-0.27	0.09	0.12	14	21.95	81	94	70	0	0	3	0
OR MEDFORD	83	52	91	48	67	3	0.00	-0.16	0.00	0.00	0	11.19	120	74	28	1	0	0	0
OR PENDLETON	82	54	91	48	68	4	0.00	-0.19	0.00	0.00	0	7.80	117	63	36	1	0	0	0
OR PORTLAND	70	55	79	52	63	1	0.14	-0.25	0.11	0.14	17	22.23	118	81	66	0	0	2	0
OR SALEM	70	49	78	47	60	0	0.35	0.00	0.32	0.35	47	22.62	109	94	69	0	0	2	0
PA ALLENTOWN	79	61	87	53	70	3	1.84	0.92	0.78	3.48	185	17.25	88	93	72	0	0	6	1
PA ERIE	74	58	81	53	66	0	1.45	0.44	0.90	1.84	94	17.77	107	94	82	0	0	5	1
PA MIDDLETOWN	79	63	83	55	71	1	2.30	1.41	0.94	4.92	270	23.81	130	92	59	0	0	7	3
PA PHILADELPHIA	83	64	88	60	74	3	1.54	0.82	0.70	5.20	356	22.68	120	99	70	0	0	4	1
PA PITTSBURGH	77	61	80	52	69	2	0.67	-0.27	0.52	1.83	98	17.01	101	96	63	0	0	3	1
PA WILKES-BARRE	75	60	82	51	68	2	0.50	-0.39	0.14	2.94	167	14.36	90	95	70	0	0	5	0
PA WILLIAMSPORT	77	61	83	53	69	2	1.31	0.30	0.69	2.23	114	17.60	98	97	69	0	0	5	1
RI PROVIDENCE	71	57	80	56	64	-2	1.12	0.32	0.56	3.21	201	21.73	100	93	79	0	0	3	1
SC BEAUFORT	89	74	90	71	81	3	0.34	-1.00	0.26	2.36	93	21.93	113	97	58	3	0	2	0
SC CHARLESTON	89	72	91	71	81	4	0.73	-0.63	0.24	3.29	126	23.90	118	97	62	3	0	4	0
SC COLUMBIA	89	69	91	64	79	1	0.76	-0.37	0.58	2.91	135	26.33	123	95	57	3	0	4	1
SC GREENVILLE	85	66	88	59	75	1	0.77	-0.12	0.54	4.06	218	31.54	132	95	59	0	0	3	1
SD ABERDEEN	76	53	84	45	64	-2	0.19	-0.63	0.14	1.06	66	8.66	103	92	57	0	0	3	0
SD HURON	78	51	84	47	65	-2	0.47	-0.30	0.33	1.32	87	7.14	75	95	47	0	0	3	0
SD RAPID CITY	77	46	82	40	62	-1	0.18	-0.51	0.11	0.96	68	6.06	75	89	43	0	0	4	0
SD SIOUX FALLS	77	52	84	44	64	-2	0.33	-0.50	0.18	1.28	78	8.85	84	94	55	0	0	3	0
TN BRISTOL	82	60	87	54	71	1	1.28	0.41	1.03	2.14	120	25.79	128	98	52	0	0	2	1
TN CHATTANOOGA	85	66	88	59	75	1	1.14	0.28	0.40	3.44	197	32.04	120	96	59	0	0	4	0
TN KNOXVILLE	84	65	90	59	75	2	0.71	-0.18	0.70	1.35	74	29.33	121	93	56	1	0	2	1
TN MEMPHIS	84	67	92	58	76	-2	0.49	-0.47	0.33	3.04	157	30.03	111	90	58	1	0	3	0
TN NASHVILLE	83	64	85	57	73	-1	1.15	0.19	0.59	2.84	142	27.77	118	96	59	0	0	4	1
TX ABILENE	87	64	95	59	76	-3	2.95	2.17	1.56	6.86	434	10.75	112	88	68	4	0	4	2
TX AMARILLO	82	57	92	51	70	-3	0.74	-0.06	0.70	3.75	239	6.59	85	87	40	2	0	3	1
TX AUSTIN	92	68	96	64	80	0	1.93	0.94	1.91	3.76	177	10.50	67	86	64	5	0	3	1
TX BEAUMONT	92	73	95	69	83	2	2.69	1.13	1.71	3.46	111	14.19	55	96	57	6	0	3	2
TX BROWNSVILLE	93	78	94	73	86	3	0.30	-0.40	0.30	1.67	123	4.07	44	95	64	7	0	1	0
TX CORPUS CHRISTI	90	74	92	70	82	1	1.36	0.47	1.03	2.33	129	6.12	49	96	72	6	0	3	1
TX DEL RIO	91	73	96	67	82	-1	0.74	0.21	0.49	0.82	78	9.29	123	90	68	4	0	3	0
TX EL PASO	94	68	95	61	81	0	0.00	-0.17	0.00	0.00	0	1.59	80	42	16	7	0	0	0
TX FORT WORTH	86	67	93	64	76	-4	3.88	3.05	1.34	4.34	237	12.93	74	97	60	3	0	5	3
TX GALVESTON	89	77	90	72	83	1	0.58	-0.36	0.41	3.44	184	8.14	46	96	73	2	0	2	0
TX HOUSTON	94	73	96	69	83	2	0.85	-0.48	0.48	1.31	49	12.08	56	93	54	7	0	3	0
TX LUBBOCK	86	61	95	54	74	-3	0.80	0.08	0.48	2.46	176	5.24	75	92	53	2	0	4	0
TX MIDLAND	90	66	97	61	78	-1	0.83	0.44	0.75	1.75	224	5.52	114	86	56	4	0	2	1
TX SAN ANGELO	90	66	96	59	78	0	0.69	0.04	0.39	1.90	139	5.60	62	87	58	4	0	3	0
TX SAN ANTONIO	92	71	95	64	81	0	1.77	0.66	0.97	3.06	133	7.26	49	92	49	5	0	2	2
TX VICTORIA	91	73	94	68	82	1	1.08	-0.14	1.05	2.93	118	8.08	47	96	66	5	0	3	1
TX WACO	87	68	93	64	77	-4	1.55	0.80	0.52	3.86	240	12.13	76	92	77	3	0	4	1
TX WICHITA FALLS	86	64	93	58	75	-4	3.01	2.06	1.27	6.12	314	11.64	87	94	61	3	0	6	3
UT SALT LAKE CITY	86	62	92	55	74	6	0.00	-0.19	0.00	0.00	0	6.65	73	47	17	1	0	0	0
VT BURLINGTON	72	55	78	51	63	-2	1.38	0.61	1.07	2.18	144	11.71	84	89	57	0	0	4	1
VA LYNCHBURG	82	61	88	52	71	1	1.12	0.29	0.50	4.04	239	29.00	147	97	64	0	0	6	1
VA NORFOLK	86	70	92	63	78	5	0.54	-0.29	0.46	1.07	65	22.62	112	93	61	3	0	2	0
VA RICHMOND	84	66	89	59	75	3	0.66	-0.12	0.25	2.57	161	27.57	142	96	70	0	0	4	0
VA ROANOKE	81	62	87	54	72	1	1.93	1.10	0.65	3.07	180	29.02	147	96	69	0	0	5	2
VA WASH/DULLES	82	63	87	57	73	3	0.89	-0.08	0.35	3.78	192	26.77	143	98	63	0	0	5	0
WA OLYMPIA	66	49	75	41	57	0	0.12	-0.31	0.10	0.12	14	25.56	99	91	72	0	0	2	0
WA QUILLAYUTE	60	51	64	49	56	2	0.68	-0.19	0.40	0.71	39	45.50	88	93	80	0	0	5	0
WA SEATTLE-TACOMA	65	52	72	49	59	-1	0.13	-0.23	0.10	0.13	18	20.24	112	91	73	0	0	3	0
WA SPOKANE	77	52	87	45	65	5	0.16	-0.12	0.16	0.16	27	9.10	109	75	35	0	0	1	0
WA YAKIMA	82	55	93	49	69	7	0.00	-0.14	0.00	0.00	0	4.30	108	62	35	1	0	0	0
WV BECKLEY	77	58	80	50	68	2	0.97	0.12	0.43	1.86	106	21.07	109	91	64	0	0	5	0
WV CHARLESTON	80	60	83	53	70	1	3.96	3.05	2.74	5.99	324	25.42	129	98	58	0	0	5	2
WV ELKINS	77	55	83	48	66	1	0.13	-0.93	0.05	2.02	94	22.28	106	99	57	0	0	5	0
WV HUNTINGTON	81	62	83	55	71	1	0.92	0.03	0.35	3.31	181	25.81	131	98	60	0	0	6	0
WI EAU CLAIRE	74	53	84	48	64	-2	1.38	0.37	0.91	2.12	107	13.00	106	96	53	0	0	3	1
WI GREEN BAY	69	54	79	52	62	-2	1.87	1.09	1.47	2.74	180	11.76	106	10	76	0	0	2	1
WI LA CROSSE	76	56	84	51	66	-3	0.98	0.08	0.55	1.64	95	11.66	92	98	56	0	0	4	1
WI MADISON	74	55	81	53	64	-2	0.23	-0.70	0.20	0.40	22	9.64	73	92	72	0	0	2	0
WI MILWAUKEE	68	51	74	47	59	-6	0.79	-0.02	0.79	0.88	57	9.58	66	93	75	0	0	1	1
WI CASPER	80	45	83	34	63	2	0.15	-0.18	0.14	0.85	116	4.50	67	83	35	0	0	2	0
WI CHEYENNE	73	47	77	37	60	0	0.58	0.10	0.49	1.85	187	6.32	91	80	41	0	0	4	0
WI LANDER	79	48	82	38	64	2	0.18	-0.10	0.14	0.86	139	5.58	76	69	29	0	0	2	0
WI SHERIDAN	75	45	82	34	60	0	0.00	-0.49	0.00	1.34	133	7.71	102	94	52	0	0	0	0

Based on 1971-2000 normals

*** Not Available

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

Spring Weather Review

Review provided by USDA/WAOB

Highlights: A stormy spring provided drought relief to many areas from the Rockies westward, excluding the Southwest. In addition, very cool weather prevailed across the West in April and early May, followed by an abrupt turn toward hot weather later in the month. The late-May Western heat wave began to tax irrigation reserves, which remained significantly below-normal across the Southwest and Intermountain West. Meanwhile on the Plains, abundant spring precipitation from Kansas northward contrasted with unfavorably dry conditions across much of Oklahoma, Texas, and eastern New Mexico. Although rain returned to the southern Plains toward the end of spring, the moisture came too late to help some winter grains. Farther east, spring rains arrived in late April and early May across the Midwest, largely eradicating long-term precipitation deficits and providing nearly ideal conditions for summer crop emergence and establishment. However, the Midwestern rains also slowed fieldwork, delaying soybean and final corn planting operations. Farther south, excessive spring wetness in the Southeast contrasted with extremely dry conditions in the western Gulf Coast region.

Spring temperatures balanced to near-normal levels in the West, despite large week-to-week changes. March-May readings were mostly near to slightly above normal from the central and southern Plains to the southern Atlantic States, but averaged as much as 4°F below normal across the Nation's northern tier from Montana to New England and the northern Mid-Atlantic region.

March: Stormy weather across much of the West boosted soil moisture reserves and improved high-elevation snow packs. Perhaps most noteworthy was the tremendous, but fairly localized, storm system that struck the central Rockies and adjacent High Plains from March 17-19. Nevertheless, Western water-supply concerns persisted due to the combination of near- to below-normal reservoir levels and prospects for below-normal spring and summer runoff in most watersheds. Farther east, a variety of conditions existed on the Plains. In winter wheat areas on the southern Plains, short-term precipitation deficits (3 months or less) were superimposed on mostly favorable long-term moisture conditions. As a result, topsoil moisture depletion was apparent in parts of northern Texas and western and central Oklahoma, although subsoil moisture remained generally adequate. Meanwhile, long-term drought persisted on the northern and central High Plains, despite near- to above-normal precipitation during March. Similar variability was noted in the Midwest. Drier-than-normal weather in the Ohio Valley followed previously wet conditions, while late-month precipitation elsewhere in the Corn Belt moistened topsoils but failed to reverse long-term precipitation deficits. By month's end, Midwestern drought was most severe in a band from northern Missouri and southern Iowa to Lower Michigan, but was also worsening across parts of the upper Midwest. Farther south, drier-than-normal weather favored an acceleration of spring planting operations from the western Gulf Coast region to Tennessee Valley, including the Delta. In contrast, frequently heavy showers slowed fieldwork and caused lowland flooding in the southern Atlantic States.

Significantly cooler-than-normal March weather (as much as 7°F below normal) was confined to the Nation's northern tier from Montana to Maine. In contrast, monthly temperatures generally ranged from 3 to 7°F above normal in Florida, where near-record to record warmth prevailed. Elsewhere, March temperatures were slightly above normal in the Southeast and in a broad area from the

West Coast to the central High Plains, but near to slightly below normal from the Southwest to the Delta.

April: Cool, wet weather slowed fieldwork and crop development in California but provided drought relief across the Great Basin, Northwest, and northern and central Rockies. In contrast, unfavorably dry weather prevailed in the Four Corners region. Farther east, abundant rain and snow aided winter grains on the northern and central Plains, although some pastures and rangelands continued to exhibit the adverse effects of long-term drought. On the southern Plains, however, warm, breezy, mostly dry weather depleted topsoil moisture and increased stress on winter wheat and emerging summer crops. Meanwhile, widespread Midwestern showers boosted topsoil moisture reserves for winter wheat and newly planted summer crops. Although long-term precipitation deficits persisted in much of the Midwest, underlying dryness allowed spring fieldwork to proceed with few delays. Across the South, mostly dry weather west of the Delta contrasted with wet conditions in the Southeast. By month's end, warm, dry weather in the western Gulf Coast region hastened winter wheat maturation but stressed emerging summer crops. Meanwhile, frequently heavy rainfall slowed fieldwork in the southern Atlantic Coast States.

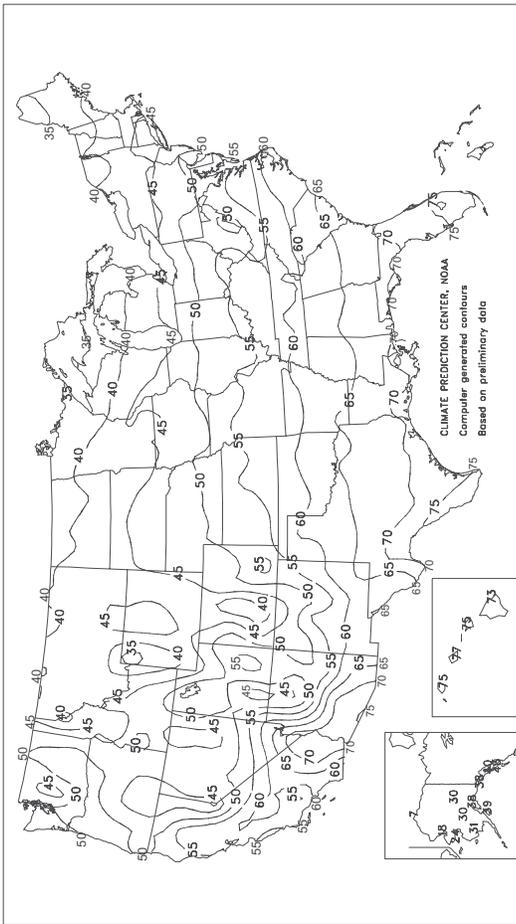
Monthly temperatures were mostly above normal in areas from the High Plains to the Appalachians, excluding the Great Lakes region. The passage of several high-pressure systems across southeastern Canada and the Northeastern United States not only brought late-season cold outbreaks and freezes to the Great Lakes States and New England, but also kept cool air frequently locked into place east of the Appalachians. Areas west of the Rockies were also unusually cool, largely due to the persistence of an upper-level trough near the West Coast. Monthly temperatures averaged as much as 8°F below normal in California's Central Valley and ranged from 2 to 6°F below normal in New England, but were up to 4°F above normal on the Plains.

May: East of the Rockies, the only large-scale area of concern for dryness by month's end was the western Gulf Coast region, where little rain fell. In contrast, near-record to record May rainfall inundated the interior South and much of the Southeast, causing fieldwork delays and lowland flooding. Farther north, early- to mid-May rains slowed Midwestern corn and soybean planting, but largely eradicated long-term precipitation deficits. Dry weather returned to the Corn Belt during the second half of the month, allowing corn planting to near completion, promoting an acceleration of soybean planting, and providing nearly ideal conditions for summer crop germination and establishment. Meanwhile on the northern and central Plains, soil moisture remained mostly adequate, despite a late-month drying trend. On the southern Plains, late-month showers eased stress on pastures, immature winter wheat, and rain-fed summer crops. In the West, cool, showery conditions early in the month suddenly yielded to hot, dry weather. Toward month's end, high temperatures resulted in an increase in irrigation demands and left some dryland crops in need of rain.

Late-May heat offset the effects of earlier cool weather in California and the Northwest, resulting in near-normal monthly temperatures. Heat was more persistent across the Southwest and in the Gulf Coast region, producing month readings generally 2 to 6°F above normal. In contrast, persistently cool weather blanketed the northern Plains, Midwest, and Northeast, slowing crop development and holding monthly temperatures as much as 6°F below normal.

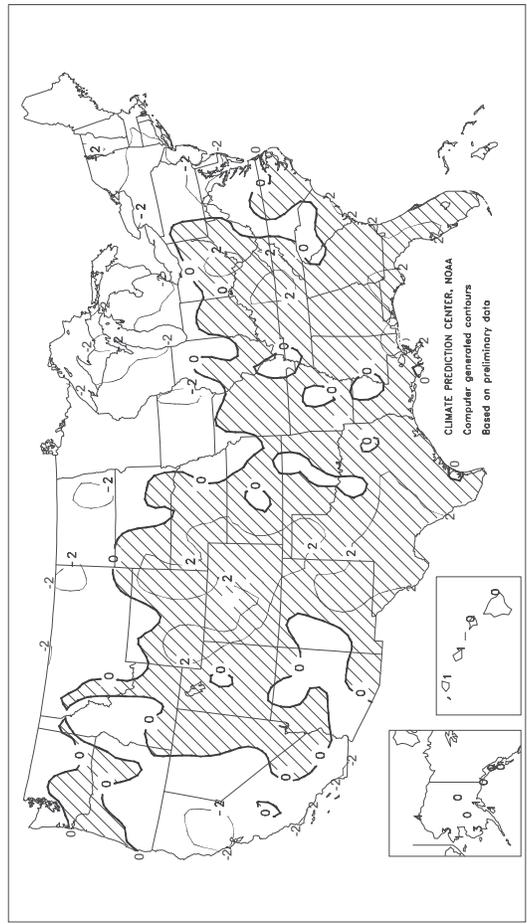
Average Temperature (°F)

MAR - MAY 2003



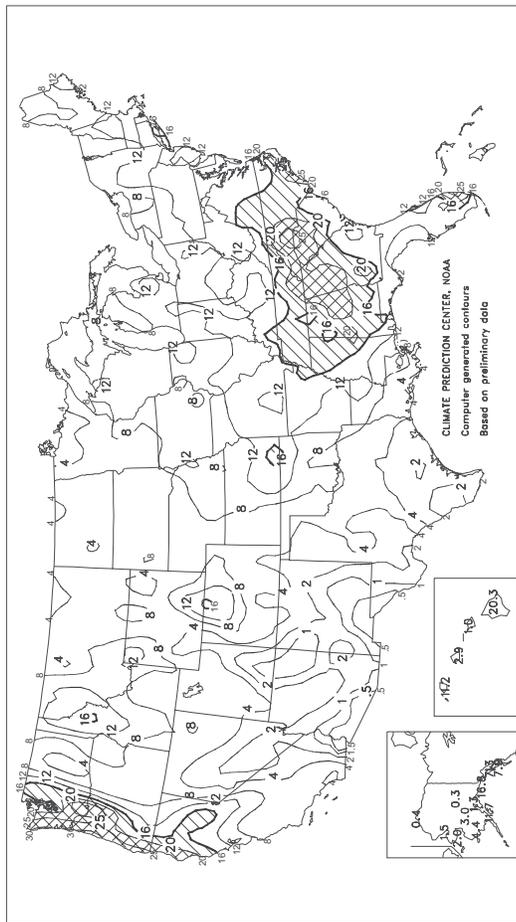
Departure of Average Temperature from Normal (°F)

MAR - MAY 2003



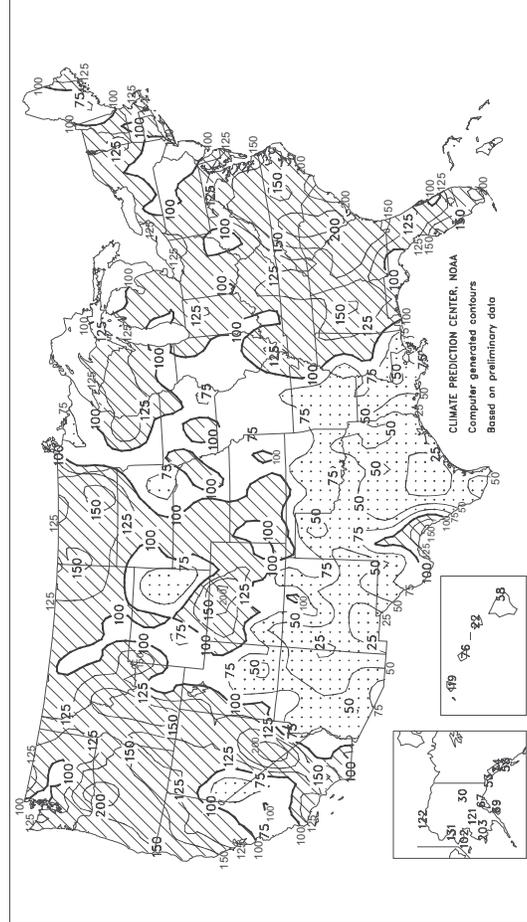
Total Precipitation (inches)

MAR - MAY 2003



Percent Of Normal Precipitation

MAR - MAY 2003



TEMPERATURE AND PRECIPITATION SUMMARY

Spring 2003

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	64	2	25.91	10.31	LEXINGTON	56	1	14.92	2.06	COLUMBUS	53	1	10.79	0.77
AL HUNTSVILLE	62	2	15.45	-1.01	LA LONDON-CORBIN	57	1	14.18	0.87	DAYTON	51	0	10.79	-0.70
AL MOBILE	69	2	17.44	-0.92	LA LOUISVILLE	58	2	14.49	1.29	MANSFIELD	49	2	10.01	-1.94
AL MONTGOMERY	66	1	14.96	0.05	LA PADUCAH	58	1	13.99	0.02	TOLEDO	47	-1	10.39	1.39
AK ANCHORAGE	38	2	1.30	-0.56	ME BATON ROUGE	69	2	5.77	-10.2	OK YOUNGSTOWN	47	0	11.06	1.23
AK BARROW	7	5	0.41	0.08	ME LAKE CHARLES	69	1	4.88	-8.36	OK OKLAHOMA CITY	59	-1	4.88	-6.46
AK COLD BAY	37	3	5.98	-1.45	ME NEW ORLEANS	71	2	13.66	-1.22	OR TULSA	60	-1	10.75	-2.88
AK FAIRBANKS	30	0	0.33	-0.76	ME SHREVEPORT	66	0	6.42	-7.43	OR ASTORIA	50	1	21.77	6.19
AK JUNEAU	40	-1	7.32	-2.63	ME BANGOR	40	-3	9.43	-0.73	OR BURNS	44	0	4.18	1.04
AK KING SALMON	34	1	2.95	-0.13	ME CARIBOU	34	-4	6.73	-1.75	OR EUGENE	51	1	12.37	0.25
AK KODIAK	39	1	11.73	-5.28	ME PORTLAND	41	-3	9.33	-2.89	OR MEDFORD	52	0	6.97	2.60
AK NOME	24	2	2.24	0.25	MD BALTIMORE	52	-1	13.43	2.61	OR PENDLETON	52	1	3.82	0.21
AZ FLAGSTAFF	44	1	2.30	-2.41	MA BOSTON	46	-3	12.17	1.48	OR PORTLAND	53	1	11.73	3.00
AZ PHOENIX	73	2	0.67	-0.81	MA WORCESTER	44	-1	11.57	-0.93	PA SALEM	52	1	12.11	3.05
AZ TUCSON	68	1	0.67	-0.66	MI ALPENA	38	-2	6.84	-0.21	PA ALLENTOWN	48	-1	9.25	-2.27
AR FORT SMITH	62	1	7.17	-5.97	MI DETROIT	46	-2	8.23	-0.39	PA ERIE	45	-2	10.04	0.19
AR LITTLE ROCK	62	0	8.97	-6.43	MI FLINT	44	-1	8.03	-0.06	PA MIDDLETOWN	49	-3	12.35	1.57
CA BAKERSFIELD	63	-1	1.72	-0.38	MI GRAND RAPIDS	44	-2	9.69	0.27	PA PHILADELPHIA	53	0	10.51	-0.67
CA EUREKA	50	-1	17.60	7.52	MI HOUGHTON LAKE	40	-2	6.78	-0.13	PA PITTSBURGH	51	1	10.16	0.18
CA FRESNO	62	0	4.13	0.78	MI LANSING	44	-2	8.36	0.23	PA WILKES-BARRE	47	-2	8.39	-1.27
CA LOS ANGELES	60	-1	3.23	-0.04	MI MUSKEGON	44	-1	6.69	-1.53	PA WILLIAMSPORT	48	-1	10.36	-0.13
CA REDDING	58	-1	8.97	-0.24	MI TRAVERSE CITY	40	-3	7.11	0.11	PR SAN JUAN	80	1	12.76	1.62
CA SACRAMENTO	58	-2	5.59	1.24	MN DULUTH	37	-2	6.65	-0.08	RI PROVIDENCE	46	-3	12.72	0.47
CA SAN DIEGO	61	-1	3.11	-0.10	MN INT'L FALLS	38	-1	2.64	-2.25	SC CHARLESTON	66	1	17.13	6.69
CA SAN FRANCISCO	56	0	6.26	1.45	MN MINNEAPOLIS	46	0	10.00	2.59	SC COLUMBIA	64	1	18.46	7.72
CA STOCKTON	59	-2	3.12	-0.62	MS ROCHESTER	44	0	9.53	1.10	SC FLORENCE	63	0	10.71	0.61
CO ALAMOSA	43	2	0.86	-0.84	MS ST. CLOUD	42	-1	10.01	3.41	SC GREENVILLE	60	1	21.54	8.11
CO CO SPRINGS	49	3	2.89	-2.18	MS JACKSON	65	1	20.63	4.05	SC MYRTLE BEACH	64	2	18.07	9.17
CO DENVER	49	3	7.18	2.52	MS MERIDIAN	65	1	17.96	0.54	SD ABERDEEN	43	-2	6.91	1.05
CO GRAND JUNCTION	54	2	2.17	-0.67	MO TUPELO	62	1	18.99	1.95	SD HURON	45	-1	4.57	-2.39
CO PUEBLO	55	5	4.37	0.66	MO COLUMBIA	55	1	12.17	-0.07	SD RAPID CITY	46	1	4.57	-1.28
CT BRIDGEPORT	47	-2	12.96	0.79	MO JOPLIN	58	1	10.14	-2.87	SD SIOUX FALLS	45	0	6.61	-1.24
CT HARTFORD	47	-2	11.26	-0.87	MO KANSAS CITY	55	1	8.54	-2.67	TN BRISTOL	57	2	14.86	3.40
DC WASHINGTON	54	-2	13.90	3.71	MO SPRINGFIELD	56	0	10.43	-2.27	TN CHATTANOOGA	61	1	18.19	3.49
DE WILMINGTON	50	-2	11.32	-0.19	MO ST JOSEPH	54	0	9.20	-1.34	TN JACKSON	60	0	17.47	1.59
FL DAYTONA BEACH	72	2	12.34	2.70	MO ST LOUIS	57	1	11.06	-0.34	TN KNOXVILLE	60	2	16.10	2.26
FL FT LAUDERDALE	78	4	25.53	12.49	MT BILLINGS	46	0	4.13	-1.21	TN MEMPHIS	63	1	17.87	1.35
FL FT MYERS	76	2	8.80	0.97	MT BUTTE	39	0	4.08	0.21	TN NASHVILLE	60	1	14.88	1.01
FL JACKSONVILLE	69	2	15.94	5.39	MT GLASGOW	43	-1	3.35	0.41	TX ABILENE	66	1	2.76	-3.15
FL KEY WEST	78	1	11.02	3.62	MT GREAT FALLS	43	0	4.45	-0.49	TX AMARILLO	58	2	2.60	-2.36
FL MELBOURNE	74	3	6.35	-2.59	MT HELENA	44	0	4.29	0.97	TX AUSTIN	68	0	1.18	-8.51
FL MIAMI	78	2	15.43	3.99	MT KALISPELL	44	1	4.21	-0.16	TX BEAUMONT	70	1	3.31	-10.1
FL ORLANDO	74	2	12.05	2.35	MT MILES CITY	45	-1	4.80	0.63	TX BROWNSVILLE	75	1	1.14	-4.23
FL PENSACOLA	69	1	15.98	1.29	MT MISSOULA	45	0	5.59	1.59	TX COLLEGE STATION	69	1	2.47	-8.62
FL ST PETERSBURG	74	1	14.63	6.62	NE GRAND ISLAND	51	1	6.97	-1.75	TX CORPUS CHRISTI	73	1	1.43	-5.83
FL TALLAHASSEE	69	2	12.09	-2.92	NE HASTINGS	51	1	9.08	-0.46	TX DALLAS/FT WORTH	66	1	5.29	-6.12
FL TAMPA	74	2	10.71	3.22	NE LINCOLN	51	0	6.86	-2.48	TX DEL RIO	74	3	7.70	2.72
FL WEST PALM BEACH	77	3	22.95	10.31	NE MCCOOK	52	2	7.06	0.17	TX EL PASO	66	1	0.22	-0.65
GA ATHENS	61	0	16.24	4.04	NE NORFOLK	49	0	7.91	-0.57	TX GALVESTON	71	1	1.81	-7.21
GA ATLANTA	62	0	20.51	7.56	NE NORTH PLATTE	49	1	7.20	0.65	TX HOUSTON	71	2	4.61	-7.50
GA AUGUSTA	64	1	19.06	8.44	NE OMAHA/EPPLEY	51	0	8.53	-0.98	TX LUBBOCK	62	2	2.68	-1.68
GA COLUMBUS	67	2	16.15	2.94	NE SCOTTSBLUFF	49	2	3.97	-1.68	TX MIDLAND	67	3	2.78	-0.16
GA MACON	65	2	18.27	7.26	NE VALENTINE	47	1	6.58	0.30	TX SAN ANGELO	67	2	1.81	-3.87
GA SAVANNAH	67	1	18.43	7.86	NV ELKO	46	1	3.82	0.95	TX SAN ANTONIO	71	2	1.06	-8.15
HI HILO	73	0	20.47	-14.4	NV ELY	43	0	3.94	0.70	TX VICTORIA	71	1	1.46	-8.87
HI HONOLULU	77	1	2.87	-0.91	NV LAS VEGAS	67	0	0.72	-0.26	TX WACO	67	1	5.12	-4.81
HI KAHULUI	75	1	1.03	-3.73	NV RENO	51	2	1.18	-0.65	TX WICHITA FALLS	64	1	4.61	-4.20
HI LIHUE	75	1	11.22	1.77	NH WINNEMUCCA	47	-1	3.37	0.60	UT SALT LAKE CITY	52	1	4.96	-1.06
ID BOISE	51	0	4.37	0.42	NH CONCORD	42	-3	11.30	1.86	VT BURLINGTON	42	-2	7.56	-0.96
ID LEWISTON	51	0	5.83	1.85	NJ ATLANTIC CITY	49	-2	8.94	-1.95	VA LYNCHBURG	55	0	17.69	6.29
ID POCATELLO	47	1	2.80	-1.27	NJ NEWARK	51	-1	9.85	-2.74	VA NORFOLK	58	0	13.98	2.78
IL CHICAGO/O'HARE	47	-1	11.34	1.63	NM ALBUQUERQUE	57	1	1.54	-0.17	VA RICHMOND	56	-1	18.62	7.40
IL MOLINE	49	-1	10.71	-0.28	NY ALBANY	45	-2	10.24	0.18	VA ROANOKE	56	0	18.70	7.01
IL PEORIA	51	0	8.58	-1.98	NY BINGHAMTON	43	-1	9.17	-0.84	VA WASH/DULLES	52	-1	15.17	4.18
IL ROCKFORD	47	-1	8.29	-1.74	NY BUFFALO	44	-2	8.98	-0.40	WA OLYMPIA	49	1	13.66	2.52
IL SPRINGFIELD	53	0	7.83	-2.74	NY ROCHESTER	44	-1	7.80	-0.35	WA QUILLAYUTE	47	0	27.60	3.67
IN EVANSVILLE	56	0	13.07	-0.71	NY SYRACUSE	44	-1	10.75	0.95	WA SEATTLE-TACOMA	50	-1	10.35	2.24
IN FORT WAYNE	48	-1	11.77	1.62	NC ASHEVILLE	56	2	17.91	5.41	WA SPOKANE	47	0	5.04	0.63
IN INDIANAPOLIS	53	1	13.54	2.14	NC CHARLOTTE	59	-2	26.02	15.02	WA YAKIMA	51	2	1.81	0.07
IN SOUTH BEND	48	-1	11.18	1.17	NC GREENSBORO	58	0	18.70	7.47	WV BECKLEY	52	1	12.36	0.92
IA BURLINGTON	50	-2	8.71	-2.26	NC HATTERAS	60	0	21.22	9.06	WV CHARLESTON	56	2	10.16	-1.29
IA CEDAR RAPIDS	48	-1	7.59	-1.71	NC RALEIGH	59	0	13.94	3.32	WV ELKINS	51	2	13.69	1.47
IA DES MOINES	50	0	12.44	2.40	NC WILMINGTON	63	0	19.31	7.75	WV HUNTINGTON	57	2	15.31	3.74
IA DUBUQUE	46	-1	7.99	-2.19	ND BISMARCK	42	-1	6.22	1.69	WI EAU CLAIRE	44	-1	9.92	1.46
IA SIOUX CITY	48	-1	8.58	0.08	ND DICKINSON	41	-2	5.20	0.47	WI GREEN BAY	41	-3	7.87	0.50
IA WATERLOO	48	0	10.89	1.38	ND FARGO	42	-1	6.22	1.07	WI LA CROSSE	46	-2	8.93	0.17
KS CONCORDIA	53	0	8.74	-0.26	ND GRAND FORKS	39	-3	5.74	1.41	WI MADISON	44	-2	8.39	-0.49
KS DODGE CITY	54	0	6.93	-0.16	ND JAMESTOWN	40	-3	6.95	2.49	WI MILWAUKEE	43	-2	7.91	-1.52
KS GOODLAND	51	2	5.28	-0.89	ND MINOT	41	-1	4.25	-0.66	WI WAUSAU	42	-2	9.90	1.60
KS HILL CITY	53	2	6.81	-0.36	OH WILLISTON	40	-2	5.83	2.16	WY CASPER	45	2	3.03	-1.77
KS TOPEKA	55	1	10.47	-0.09	OH AKRON-CANTON	49	1	13.11	2.61	WY CHEYENNE	46	4	4.17	-0.91
KS WICHITA	56	1	10.59	1.15	OH CINCINNATI	54	0	11.77	-0.68	WY LANDER	46	2	3.31	-2.38
KY JACKSON	58	2	12.61	-0.72	OH CLEVELAND	48	0	11.29	1.48	WY SHERIDAN	44	0	5.20	0.02

Based on 1971-2000 normals.

*** Not Available.

National Agricultural Summary

June 9 - 15, 2003

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Warm and dry weather conditions continued in the Pacific Northwest, which resulted in irrigating some crops earlier or more than normal. In northern California, the warm and dry conditions accelerated crop development after a wetter and cooler than normal spring. Temperatures remained above freezing in the northern Rocky Mountains, enhancing crop development. Widely scattered showers in the Great Plains delayed spraying and stopped some growers from planting. Severe weather moved across most of the southern Great Plains

and Delta States, providing beneficial precipitation for crop development. Soil moisture levels were mostly adequate in the central Great Plains. Rain fell across the Corn Belt with the heaviest showers occurring in the central and eastern portions. This precipitation along with warm temperatures promoted growth and crop development. Fieldwork and crop development were delayed by continued wet conditions across the Southeast and along the Atlantic Coastal Plains.

Corn: Ninety-six percent of the crop was emerged, the same as last year but 2 percentage points behind the 5-year average. Rain in the southern Great Plains was beneficial to fields that were not damaged by hail and wind. Fields quickly emerged in Pennsylvania due to warm weather conditions, but emergence remained well behind their 5-year average. Fields also quickly emerged in Michigan, South Dakota, and Wisconsin, despite below-normal temperatures. Virtually all fields were emerged in the western Corn Belt and adjacent areas of the Great Plains. Rain continued in the middle Mississippi Valley and Ohio Valley, which caused standing water in some fields.

Soybeans: Eighty-nine percent of acreage was planted, 2 percentage points behind last year and 3 points behind the 5-year average. Planting advanced more than 10 points in Arkansas, Kansas, Kentucky, Louisiana, Michigan, and Tennessee. However, progress is still slightly behind normal in the eastern Corn Belt and well behind normal in Louisiana, North Carolina, and Tennessee. Emergence, at 79 percent, was 1 point behind last year and 5 points behind the average. The crop rapidly emerged in the Great Lakes region and Dakotas. However, most States remained behind their 5-year average emergence pace. In Louisiana, the early month dry weather conditions delayed planting which resulted in emergence being two weeks behind normal. Warmer and drier weather conditions favored crop development in Tennessee as soybean fields recovered from saturated soils.

Winter Wheat: Ninety-four percent of the crop was at the heading stage or beyond, and 13 percent was harvested. Acreage headed or beyond was 2 percentage points ahead of last year but 1 point behind the 5-year average. Above normal temperatures, including some

temperatures above 90 degrees temperatures, influenced ripening in the Intermountain Region. Wheat headed advanced 43 percentage points in Michigan and 36 percent of South Dakota's wheat headed during the week. In Montana, 35 percent of the wheat was ripe, compared to 3 percent last year. Development was behind normal in Illinois, Indiana, Michigan, Montana, and Washington. The harvest pace was slightly behind last year and the 5-year average for this date. Harvest rapidly progressed in the southern Great Plains and the lower Mississippi Valley. Harvest began in Kansas and Missouri. Conditions deteriorated in central and eastern Corn Belt due to wet weather conditions.

Cotton: Planting was 94 percent complete, 3 percentage points behind last year and 2 points behind normal. Planting was complete or virtually complete in all states except Oklahoma and Texas. Twenty percent of the cotton was at or beyond the squaring stage, 9 points behind last year and the 5-year average. Squaring in California, Louisiana, and Missouri was two weeks behind the 5-year average due to early season planting delays. Seasonal temperatures and adequate moisture promoted growth and development in the Southeast, however, squaring of the crop remained about a week behind the 5-year average.

Sorghum: Planting advanced to 76 percent complete, 4 percentage points behind last year and 8 points behind the 5-year average. Of the 11 major-producing States, only Arkansas, Colorado, and South Dakota were ahead of their 5-year average pace. Planting accelerated with double-digit increases in Colorado, Kansas, Nebraska, New Mexico, and South Dakota. Under cool but clear conditions, South Dakota led the way by planting 22 percent of their crop during the week. Early week rain limited planting in Illinois. Fourteen percent of the

sorghum was at or beyond the heading stage. Thirty-nine percent of Texas crop was at the heading stage or beyond, 6 percent behind last year and 1 point behind average.

Rice: The crop was 96 percent emerged, 2 percentage points behind last year and 1 point behind the average. Warm, dry weather promoted rapid emergence in California, where emergence rose by 10 points, but continued to lag behind last year and the average pace. The rice crop was completely emerged in Texas and Louisiana, and almost all emerged in Arkansas, Mississippi, and Missouri.

Small grains: Spring wheat was 4 percent headed, the same as last year. Heading started in Minnesota and North Dakota. Washington's spring wheat is 33 percent headed, 13 percent behind last year and 19 percent behind the normal. The wet weather in Washington's Yakima Valley has limited development of the crop and deteriorated condition ratings.

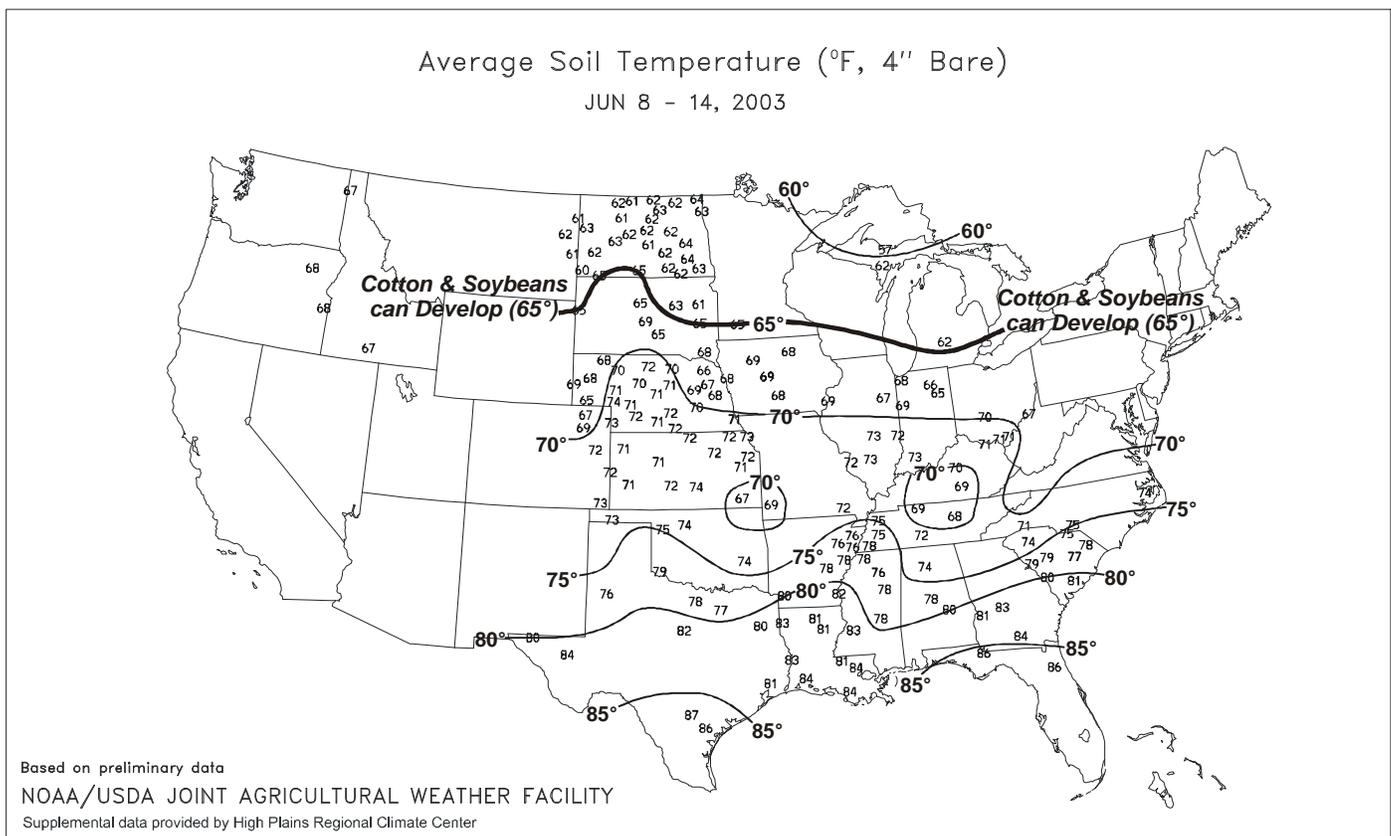
The barley crop was 98 percent emerged, the same as last year and 1 percentage point ahead of the 5-year average. Barley was completely emerged in Washington and nearly completely emerged in the other four major producing States. Barley headed was 8 percent,

compared to 5 percent last year. Heading was most advanced in Idaho and Washington, where 27 and 23 percent were headed, respectively.

The oat crop was at 17 percent headed or beyond, 1 percentage point behind last year and 4 points behind the average. The oat crop was most advanced in Nebraska and Ohio, where 69 and 41 percent were headed, respectively. The cool, wet conditions delayed growth and development in Iowa and Pennsylvania.

Other crops: Seven percent of the peanut acreage was pegging. Acreage pegging gained momentum in Oklahoma, where the crop was 26 percentage points ahead of last year and 22 points ahead of the 5-year average. Pegging was behind normal in the Southeast.

Sunflower planting progressed to 86 percent in the four major-producing States, behind last year's pace by 4 percentage points. The weather was generally cool and clear in the 4 major-producing States. Planting accelerated in South Dakota with a 28-point increase this week, but remained 12 points behind last year's progress and 5 points behind their average pace. Colorado, Kansas, and North Dakota also posted double-digit planting increases this week.



Crop Progress and Condition

Week Ending June 15, 2003

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

Winter Wheat Percent Headed				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
AR	100	100	100	100
CA	100	100	100	100
CO	98	96	98	98
ID	47	24	34	45
IL	98	97	100	100
IN	99	98	99	100
KS	100	100	100	100
MI	82	39	86	95
MO	100	100	100	100
MT	35	9	3	45
NE	97	83	93	95
NC	100	100	100	100
OH	100	99	99	100
OK	100	100	100	100
OR	88	75	94	87
SD	86	50	63	74
TX	100	100	100	100
WA	85	66	72	87
18 Sts	94	89	92	95

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

Soybeans Percent Planted				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
AR	79	67	80	79
IL	87	86	93	94
IN	85	78	84	94
IA	99	96	100	97
KS	88	76	80	87
KY	54	44	65	70
LA	77	66	89	94
MI	94	79	95	89
MN	99	98	99	98
MS	97	94	97	96
MO	81	75	79	80
NE	98	94	100	99
NC	54	46	79	69
ND	99	95	100	98
OH	83	77	83	93
SD	98	91	99	97
TN	60	45	66	71
WI	96	90	94	94
18 Sts	89	84	91	92

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

Cotton Percent Planted				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
AL	99	94	100	100
AZ	98	*96	100	100
AR	99	97	100	100
CA	100	100	100	100
GA	97	94	99	98
LA	100	99	100	100
MS	99	98	100	100
MO	98	98	99	100
NC	97	95	100	100
OK	95	88	92	95
SC	97	92	99	98
TN	98	97	100	100
TX	87	78	93	91
VA	100	100	100	100
14 Sts	94	89	97	96

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

Cotton Percent Squaring				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
AL	14	9	19	25
AZ	37	36	58	50
AR	26	14	39	38
CA	4	0	29	27
GA	35	19	41	37
LA	35	20	48	57
MS	33	10	30	47
MO	7	1	16	31
NC	10	4	27	22
OK	12	0	1	3
SC	6	1	17	18
TN	9	0	13	27
TX	19	18	26	22
VA	3	1	4	2
14 Sts	20	13	29	29

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

Winter Wheat Percent Harvested				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
AR	39	19	61	59
CA	30	18	34	28
CO	0	0	0	0
ID	0	0	0	0
IL	0	0	3	6
IN	0	0	2	4
KS	1	0	3	10
MI	0	0	0	0
MO	2	0	11	18
MT	0	0	0	0
NE	0	0	0	0
NC	25	10	65	46
OH	0	0	0	0
OK	39	20	39	54
OR	0	0	0	0
SD	0	0	0	0
TX	52	38	48	49
WA	0	0	0	0
18 Sts	13	7	15	19

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

Soybeans Percent Emerged				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
AR	66	54	67	67
IL	78	63	80	86
IN	72	56	66	87
IA	91	74	96	91
KS	76	58	67	77
KY	39	23	54	59
LA	63	58	81	88
MI	71	45	79	79
MN	94	76	93	91
MS	93	89	93	91
MO	67	52	64	72
NE	86	68	95	92
NC	39	32	64	57
ND	90	61	96	89
OH	77	62	61	83
SD	82	57	90	84
TN	42	26	51	58
WI	77	55	82	84
18 Sts	79	62	80	84

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

Sunflowers Percent Planted				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
CO	66	50	58	NA
KS	66	42	62	76
ND	96	85	98	96
SD	76	48	88	81
4 Sts	86	69	90	NA

These 4 States planted 91% of last year's sunflower acreage.

Crop Progress and Condition

Week Ending June 15, 2003

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

Corn Percent Emerged				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
CO	97	89	97	99
IL	96	92	97	98
IN	89	82	86	96
IA	99	96	100	99
KS	99	97	99	99
KY	86	86	97	97
MI	92	75	91	94
MN	99	97	99	99
MO	97	92	95	98
NE	98	96	100	99
NC	95	92	100	99
ND	98	91	98	97
OH	96	90	83	96
PA	71	58	84	90
SD	97	87	97	96
TN	99	98	99	99
TX	100	100	100	100
WI	89	76	89	93
18 Sts	96	91	96	98

These 18 States planted 92% of last year's corn acreage.

Oats Percent Headed				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
IA	37	NA	50	47
MN	8	NA	4	12
NE	69	NA	65	54
ND	0	NA	1	2
OH	41	NA	39	58
PA	10	NA	46	37
SD	15	NA	15	20
WI	17	NA	11	20
8 Sts	17	NA	18	21

These 8 States planted 53% of last year's oat acreage.

Spring Wheat Percent Headed				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
ID	9	NA	4	14
MN	2	NA	0	7
MT	0	NA	0	NA
ND	1	NA	1	3
SD	13	NA	10	21
WA	33	NA	46	52
6 Sts	4	NA	4	NA

These 6 States planted 99% of last year's spring wheat acreage.

Sorghum Percent Planted				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
AR	100	100	100	99
CO	73	63	66	71
IL	33	31	72	82
KS	78	61	82	88
LA	98	97	99	99
MO	82	78	82	89
NE	91	75	96	95
NM	50	32	35	57
OK	48	43	55	62
SD	85	63	85	80
TX	73	69	81	82
11 Sts	76	65	80	84

These 11 States planted 97% of last year's sorghum acreage.

Sorghum Percent Headed				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
AR	0	NA	3	1
CO	0	NA	0	0
IL	0	NA	1	0
KS	0	NA	0	0
LA	7	NA	15	12
MO	1	NA	0	0
NE	0	NA	0	0
NM	0	NA	0	0
OK	0	NA	NA	NA
SD	0	NA	0	0
TX	39	NA	45	40
11 Sts	14	NA	NA	NA

These 11 States planted 97% of last year's sorghum acreage.

Peanuts Percent Pegging				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
AL	1	NA	1	6
FL	20	NA	29	32
GA	8	NA	13	14
NC	0	NA	NA	NA
OK	29	NA	3	7
TX	4	NA	5	3
VA	0	NA	0	0
7 Sts	7	NA	NA	NA

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

Rice Percent Emerged				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
AR	98	97	98	98
CA	80	70	94	89
LA	100	98	100	100
MS	99	95	100	100
MO	97	92	99	99
TX	100	100	100	100
6 Sts	96	92	98	97

These 6 States planted 100% of last year's rice acreage.

Rice Percent Headed				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
AR	0	NA	0	0
CA	0	NA	0	0
LA	4	NA	16	14
MS	0	NA	0	1
MO	3	NA	0	0
TX	12	NA	17	14
6 Sts	2	NA	4	3

These 6 States planted 100% of last year's rice acreage.

Barley Percent Emerged				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
ID	99	95	100	99
MN	99	99	99	96
MT	97	93	96	97
ND	98	93	98	96
WA	100	99	100	100
5 Sts	98	94	98	97

These 5 States planted 81% of last year's barley acreage.

Barley Percent Headed				
	Jun 15 2003	Prev Week	Prev Year	5-Yr Avg
ID	27	NA	6	17
MN	5	NA	2	6
MT	0	NA	0	NA
ND	3	NA	1	2
WA	23	NA	40	48
5 Sts	8	NA	5	NA

These 5 States planted 81% of last year's barley acreage.

Crop Progress and Condition

Week Ending June 15, 2003

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

Winter Wheat Crop Condition by Percent					
	VP	P	F	G	EX
AR	2	15	33	42	8
CA	0	5	15	70	10
CO	4	8	26	44	18
ID	0	3	9	67	21
IL	11	19	30	33	7
IN	4	10	18	51	17
KS	5	11	31	42	11
MI	2	4	18	56	20
MO	1	10	30	45	14
MT	2	5	15	51	27
NE	2	8	26	48	16
NC	1	8	49	41	1
OH	1	3	16	56	24
OK	3	8	26	47	16
OR	5	28	40	25	2
SD	1	7	28	48	16
TX	25	25	32	15	3
WA	3	8	21	43	25
18 Sts	7	12	28	40	13
Prev Wk	7	12	26	42	13
Prev Yr	21	21	30	25	3

Soybeans Crop Condition by Percent					
	VP	P	F	G	EX
AR	1	7	33	43	16
IL	1	6	29	53	11
IN	2	8	37	47	6
IA	0	3	18	61	18
KS	0	1	27	66	6
KY	2	7	35	47	9
LA	0	10	56	33	1
MI	1	5	32	59	3
MN	1	2	22	63	12
MS	1	5	22	53	19
MO	1	5	31	56	7
NE	0	2	21	64	13
NC	0	8	41	49	2
ND	0	2	11	69	18
OH	3	8	33	47	9
SD	0	1	17	73	9
TN	0	7	27	56	10
WI	1	4	19	64	12
18 Sts	1	5	26	57	11
Prev Wk	1	5	28	56	10
Prev Yr	1	6	31	52	10

Sorghum Crop Condition by Percent					
	VP	P	F	G	EX
AR	1	7	35	51	6
CO	0	4	24	50	22
IL	1	17	59	22	1
KS	0	2	38	58	2
LA	0	4	30	60	6
MO	1	6	36	54	3
NE	0	4	32	60	4
NM	0	4	88	8	0
OK	0	2	11	82	5
SD	1	5	27	63	4
TX	4	11	34	45	6
11 Sts	1	6	35	53	5
Prev Wk	NA	NA	NA	NA	NA
Prev Yr	5	14	41	35	5

Oats Crop Condition by Percent					
	VP	P	F	G	EX
IA	0	1	12	64	23
MN	0	2	20	64	14
NE	1	1	14	61	23
ND	0	1	13	72	14
OH	1	5	30	55	9
PA	0	12	34	44	10
SD	1	2	19	69	9
WI	1	3	18	62	16
8 Sts	0	2	17	66	15
Prev Wk	0	1	19	66	14
Prev Yr	4	10	29	47	10

Corn Crop Condition by Percent					
	VP	P	F	G	EX
CO	0	2	10	37	51
IL	1	5	20	55	19
IN	2	8	32	50	8
IA	1	3	16	60	20
KS	1	6	32	54	7
KY	3	13	29	39	16
MI	1	9	37	49	4
MN	1	3	20	66	10
MO	1	5	24	56	14
NE	0	2	19	61	18
NC	4	5	34	53	4
ND	0	1	14	71	14
OH	3	12	33	43	9
PA	3	7	41	35	14
SD	0	1	19	68	12
TN	5	10	24	51	10
TX	15	19	26	34	6
WI	1	4	24	57	14
18 Sts	1	5	23	56	15
Prev Wk	1	5	25	55	14
Prev Yr	2	7	29	50	12

Cotton Crop Condition by Percent					
	VP	P	F	G	EX
AL	2	8	33	48	9
AZ	0	5	20	50	25
AR	1	10	43	39	7
CA	0	5	30	55	10
GA	0	3	19	58	20
LA	1	4	31	56	8
MS	1	7	22	48	22
MO	5	11	39	43	2
NC	3	8	51	38	0
OK	1	8	31	58	2
SC	0	2	38	60	0
TN	5	15	37	43	0
TX	21	19	31	23	6
VA	5	20	32	43	0
14 Sts	9	12	32	38	9
Prev Wk	8	12	34	39	7
Prev Yr	6	12	35	40	7

Peanuts Crop Condition by Percent					
	VP	P	F	G	EX
AL	0	0	15	59	26
FL	0	0	30	45	25
GA	0	4	23	57	16
NC	0	8	56	33	3
OK	0	4	20	63	13
TX	0	4	19	63	14
VA	0	14	38	48	0
8 Sts	0	4	24	56	16
Prev Wk	0	3	27	58	12
Prev Yr	1	6	29	54	10

Crop Progress and Condition

Week Ending June 15, 2003

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

	VP	P	F	G	EX
ID	0	1	15	67	17
MN	0	1	16	59	24
MT	0	1	29	59	11
ND	0	1	12	65	22
SD	0	2	23	63	12
WA	0	8	37	37	18
6 Sts	0	1	19	62	18
Prev Wk	0	1	17	63	19
Prev Yr	4	9	31	47	9

	VP	P	F	G	EX
AR	1	8	31	42	18
CA	0	10	60	25	5
LA	0	1	19	69	11
MS	0	3	16	59	22
MO	0	3	22	53	22
TX	0	0	16	73	11
6 Sts	0	6	31	48	15
Prev Wk	1	8	32	44	15
Prev Yr	2	4	26	53	15

	VP	P	F	G	EX
ID	0	3	17	69	11
MN	0	1	14	65	20
MT	0	1	13	62	24
ND	0	1	10	66	23
WA	0	8	24	36	32
5 Sts	0	2	14	62	22
Prev Wk	0	1	13	65	21
Prev Yr	1	4	30	57	8

VP - Very Poor
 P - Poor
 F - Fair
 G - Good
 EX - Excellent

* - Revised
 NA - Not Available

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

	VP	P	F	G	EX		VP	P	F	G	EX
AL	0	2	13	57	28	NH	0	0	4	55	41
AZ	9	41	28	16	6	NJ	0	0	23	56	24
AR	0	1	21	61	17	NM	30	36	29	5	0
CA	0	10	45	45	0	NY	0	1	9	64	26
CO	4	11	33	45	7	NC	0	1	11	71	17
CT	0	0	25	62	13	ND	1	6	28	54	11
DE	0	4	11	72	13	OH	1	4	21	58	16
FL	0	0	10	85	5	OK	1	10	26	51	12
GA	0	2	14	64	20	OR	5	14	36	38	7
ID	0	2	33	50	15	PA	0	2	16	52	30
IL	0	1	15	66	18	RI	0	0	20	60	20
IN	1	3	19	59	18	SC	0	1	11	66	22
IA	0	2	13	67	18	SD	3	13	33	43	8
KS	9	17	35	31	8	TN	0	3	13	64	20
KY	0	2	12	56	30	TX	12	23	39	21	5
LA	4	21	38	34	3	UT	7	16	33	42	2
ME	3	11	12	39	35	VT	0	0	16	61	23
MD	0	7	19	51	23	VA	0	3	19	47	31
MA	0	0	6	67	27	WA	0	0	42	48	10
MI	1	3	18	64	14	WV	0	2	18	68	12
MN	1	2	20	63	14	WI	1	5	26	56	12
MS	1	9	22	55	13	WY	7	13	35	44	1
MO	0	4	26	55	15	48 Sts	4	10	27	47	12
MT	1	10	29	41	19						
NE	5	11	37	40	7	Prev Wk	4	11	27	47	11
NV	2	6	18	44	30	Prev Yr	12	17	29	34	8

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 3.0. Topsoil 0% very short, 1% short, 44% adequate, 55% surplus. Corn 23% silked, 24% 2002, 32% avg.; 4% dough, 2002 and avg not available.; 1% very poor, 6% poor, 23% fair, 45% good, 25% excellent. Soybeans 51% planted, 69% 2002, 70% avg.; 38% emerged, 47% 2002, 56% avg.; 0% very poor, 4% poor, 39% fair, 55% good, 2% excellent. Winter wheat 1% very poor, 4% poor, 45% fair, 44% good, 6% excellent. Pasture feed 0% very poor, 2% poor, 13% fair, 57% good, 28% excellent. Livestock condition 0% very poor, 3% poor, 16% fair, 60% good, 21% excellent. Activities: Applying post emergence herbicides in cotton, cutting, fertilizing hayfields, repairing fences, spraying fruit, vegetable crops.

ALASKA: Days suitable for fieldwork 6.0. Topsoil 60% short, 40% adequate. Subsoil 50% short, 50% adequate. Daytime high temperatures varied from the sixties to the eighties. Lows were in the thirties and forties. The Tanana Valley received only scattered showers while the Kenai, Mat-Su Valley received a half inch or more of rain. Barley, oats 100% pre-boot. 45% fair, 55% good. Oat 30% fair, 70% good. Planting of potatoes was reported as 99% complete with 20% emerged. Hay harvest was underway. Hay 30% poor, 20% fair, 45% good, 5% excellent; 25% slow, 70% moderate, 5% rapid. Wind or rain damage was 95% none, 5% light.

ARIZONA: Temperatures for the State were above average for the week. Cotton 37% squaring, 58% 2002, 50% 5- yr avg.; 8% setting bolls, 11% 2002. Alfalfa conditions were mostly good, with harvest progressing at a normal rate. Small grain development still remains behind normal. Precipitation was reported at 1 of the 17 reporting stations with 0.01 inches. Range, pasture feeds have not improved.

ARKANSAS: Days suitable for fieldwork 4. Soil 0% very short, 5% short, 69% adequate, 26% surplus. Corn 100% emerged, 100% 2002, 100% 5- yr avg.; 1% very poor, 7% poor, 33% fair, 43% good, 16% excellent. Soybeans 79% planted, 80% 2002, 79% 5- yr avg.; 66% emerged, 67% 2002, 67% 5- yr avg.; 1% very poor, 7% poor, 35% fair, 51% good, 6% excellent. Sorghum 100% planted, 100% 2002, 99% 5- yr avg.; 100% emerged, 99% 2002, 97% 5- yr avg.; 1% very poor, 7% poor, 35% fair, 51% good, 6% excellent. Cotton 99% planted, 100% 2002, 100% 5- yr avg.; 96% emerged, 99% 2002, 99% 5- yr avg.; 26% squaring, 39% 2002, 38% 5- yr avg.; 1% very poor, 8% poor, 31% fair, 42% good, 18% excellent. Rice 100% planted, 99% 2002, 100% 5- yr avg.; 98% emerged, 98% 2002, 98% 5- yr avg.; 1% very poor, 8% poor, 31% fair, 42% good, 18% excellent. Winter Wheat: 39% harvested, 61% 2002, 51% 5 yr avg.; 2% very poor, 15% poor, 33% fair, 42% good, 8% excellent. Hay -other: 1% very poor, 3% poor, 31% fair, 56% good, 9% excellent. Hay - Alfalfa: 0% very poor, 2% poor, 35% fair, 58% good, 5% excellent. Pasture, Range 0% very poor, 1% poor, 21% fair, 61% good, 17% excellent. CROPS: When weather permitted, the main activities of the week were spraying herbicides, fertilizing, applying nitrogen to crops. Limited replanting is still occurring with cotton. Wheat harvest is in full swing across the state, with yields varying widely. In the eastern portion of the state, farmers were planting soybeans as weather conditions allowed. Due to wet weather, pesticide applications have been delayed, some aphid build-up on cotton has been reported. Tomatoes, peaches, blackberries are being harvested, watermelon crops are expected to begin producing in late June or early July. LIVESTOCK: Livestock were reported to be in good condition. Producers are spraying for flies. Hay harvest has been slow due to rain showers, poor drying conditions.

CALIFORNIA: Ideal growing conditions prevailed during the week in most locations, helping cotton, corn, alfalfa, sugar beets, other field

crops to develop rapidly. Cotton fields were cultivated, irrigated, while pesticide applications to control weeds, army worms, mites were made by aircraft, ground equipment. Wheat, oats, barley were harvested in several areas. Wheat was harvested for certified seed. A number of oat fields grown for certified seed were drying down, nearly ready for harvest. Wheat harvesting was nearly complete in the Imperial Valley with good yields reported. Wheat harvested in the San Joaquin Valley continued to show the effects of stripe rust, with low bushel weights, below average yields noted. Growers continued to knock down field borders in unharvested grain fields to prepare for harvest operations. Growth, development of grain, silage corn continued to improve. Applications of pesticides to control mites continued. Alfalfa hay was cut, windrowed, baled, stacked, with excellent drying conditions reported. Seed alfalfa and alfalfa hay fields were irrigated, treated to control insect pests as necessary. Irrigation of sugar beet fields continued. Fungicides to control disease problems were applied in some fields. Planting of dry lima beans continued. Blackeye bean plantings emerged, were showing good growth. Planting of rice was winding down. Rice fields continued to emerge, while aerial herbicide applications continued. Planting of sweet potatoes was ongoing. Safflower was blooming. Sunflower planting was nearly finished, with plants starting to flower. Stone fruit harvesting continued as favorable weather conditions promoted fruit maturity. Harvested varieties included Crimson Lady, Spring Bright peaches, Red Beaut, Black Beaut plums, June Pearl, Rose Diamond nectarines, Castlebrite, Early Cot apricots, Flavor Rose pluots. Bing cherry picking neared its peak in San Joaquin County. A few cherries were harvested in southern areas of the State. Growers continued cultural activities in tree fruit orchards, grape vineyards. Fruit thinning, irrigation, cultivation were among the activities taking place. Raisin, wine, table grape vineyards were treated to control mildew, insect pests. Leaf pulling, cane training, sizing sprays continued in many table grape vineyards. Tender grape leaves were harvested from a few select vineyards for culinary use. Pomegranate orchards continued to bloom. Blackberries were picked, packed in Fresno County. In southern areas, strawberry harvesting was primarily limited to a few fields for sale at roadside stands, but harvest remained active in other parts of the State. Olive trees continued to be pruned. Foliar feeding, irrigation, thrip spraying was underway in many citrus orchards. Navel orange harvesting was mostly complete, but a few handlers were still trying to finish up the season. Valencia harvesting continued. Lemons were harvested in Ventura County. Cooler temperatures slowed the crop's color development. Grapefruit were harvested in the Coachella Valley, southern coastal areas. Treenut orchards were irrigated, treated with herbicides for weed control. Nut development in almond, walnut, pistachio orchards continued under ideal weather conditions. Planting of tomato transplants continued in some parts of the Sacramento Valley. Planting of eggplants, beans, assorted peppers was in full swing. Picking of eggplant, cucumber, zucchini, yellow squash continued. Sweet corn harvesting in early variety fields began in the San Joaquin Valley. Harvesting of onions for fresh market use was winding down. Fields of onions, garlic for processing were maturing. Many fields were being prepared for harvest. Melon fields exhibited good fruit development. Melon harvesting in the earliest fields was expected to begin by the end of the month. Asparagus harvesting was completed. The following vegetables were also harvested: artichokes, basil, broccoli, cabbage, carrots, cauliflower, celery, cilantro, green onions, leaf lettuce, parsley, spinach. Ranges, pastures throughout the State continued to dry out. Many cattle were moved to market or to summer pastures. Spring calves were being weaned. Cattle grazed on foothill rangeland in the Central Valley. Stocker cattle weight gains were good as the volume, nutritional value of available vegetation remained high. Sheep were grazing in fallow fields, harvested grain fields, pastures. Bees were active in vegetable and melon fields. Leafcutter bees were used to aid pollination in some seed

alfalfa fields. In the southern San Joaquin Valley, higher temperatures resulted in a decrease in milk production.

COLORADO: Days suitable for field work 5.7. Top soil 5% very short, 17% short, 73% adequate, 5% surplus. Subsoil 8% very short, 38% short, 52% adequate, 2% surplus. The Front Range, eastern plains received scattered showers throughout much of the week. The West Slope, San Luis Valley areas remain very dry. Spring wheat 25% headed, 28% 2002, 29% avg.; 5% poor, 18% fair, 59% good, 18% excellent. Spring barley 30% headed, 30% 2002, 39% avg.; 1% very poor, 4% poor, 16% fair, 51% good, 28% excellent. Sunflower 66% planted, 58% 2002, NA avg.; 1% poor, 23% fair, 31% good, 45% excellent. Alfalfa 53% 1st cutting, 45% 2002, 56% avg.; 2% very poor, 8% poor, 30% fair, 41% good, 19% excellent. Dry beans 73% planted, 73% 2002, 79% avg.; 25% emerged, 41% 2002, 45% avg. Sugar beets 2% very poor, 3% poor, 10% fair, 60% good, 25% excellent. Summer potatoes 86% emerged, 87% 2002, 97% avg.; 1% very poor, 1% poor, 8% fair, 47% good, 43% excellent. Fall potatoes 70% emerged, 64% 2002, 67% avg.; 11% poor, 31% fair, 54% good, 4% excellent. Dry onions 1% very poor, 2% poor, 11% fair, 55% good, 31% excellent.

DELAWARE: Days suitable for fieldwork 4.1. Topsoil 43% adequate, 57% surplus. Subsoil 56% adequate and 44% surplus. Corn 12% poor, 30% fair, 50% good, 8% excellent; 90% emerged, 99% 2002, 78% avg. Soybeans 31% planted, 64% 2002, 50% avg.; 21% emerged, 54% 2002, 38% avg.; 6% poor, 24% fair, 63% good, 7% excellent. Sorghum 35% planted, 63% 2002, 61% avg. Barley 5% poor, 20% fair, 54% good, 21% excellent; 92% turned, 95% 2002, 99% avg. Winter wheat 7% poor, 16% fair, 59% good, 18% excellent; 47% turned, 79% 2002, 76% avg. Strawberries 70% harvested, 94% 2002, 88% avg. Snap beans 89% planted, 84% 2002, 66% avg. Sweet corn 70% planted, 88% 2002, 80% avg. Green peas 37% harvested, 53% 2002, 49% avg. Lima beans 22% planted, 35% 2002, 44% avg. Watermelons 60% planted, 73% 2002, 81% avg. Cantaloupes 65% planted, 67% 2002, 78% avg. Hay supplies 9% very short, 41% short, 45% adequate, 5% surplus. Pasture feed 4% poor, 11% fair, 72% good, 13% excellent. Other hay 1st cutting 45%, 100% 2002, 91% avg. Alfalfa hay 1st cutting 40%, 100% 2002, 94% avg. Soybean planting is behind schedule due to wet field conditions. A small amount of hay was harvested. Barley is ready to harvest but showers in the forecast may delay harvest. Some corn, melon, vegetable acreage has been replanted due to extended wet, cool soil conditions. Winter wheat will begin harvest in about three to four weeks.

FLORIDA: Topsoil 5% short, 80% adequate, 15% surplus. Subsoil 5% short, 85% adequate, 10% surplus. Temperature average: normal to 2° above, major cities: 80s, 90s. Most nighttime lows: 70s. Rainfall range: about 0.25 in., Daytona Beach to about 4.50 in., Avalon; Funnel clouds, tornadoes sighted in a few localities during storms; strong winds downed tree limbs, damaged some buildings, cars; however, scattered nature of rains left a few areas dry, especially Big Bend area. Peanuts 20% pegged, 29% 2002, 32% 5-yr avg. Soil moisture mostly adequate to surplus; spotty short supplies reported Big Bend, Panhandle. Rains delayed some hay cutting, baling; most on schedule. A few hay producers combating armyworms. Most peanut, cotton, tobacco, corn, soybean fields dried sufficiently for tilling tasks. However, wet conditions delayed some herbicide treatments; growers waiting for a few dry days to apply pesticides. Some fertilizer leached from tobacco, vegetable, melon fields; producers hoping to make additional applications. Most cotton planted; only a few growers still seeding. Corn silage harvest underway northern Peninsula localities. Peanuts mostly good to excellent; a small acreage, northern Peninsula, Panhandle, reportedly, only fair. Tobacco harvest gaining momentum. Most vegetable supplies declining seasonally; hot temperatures limiting plant growth. Vegetables, non-citrus fruit available: cantaloupes, cucumbers, eggplant, okra, peppers, potatoes, tomatoes, watermelons. Squash harvesting virtually finished. Typical summer weather conditions: hot days, humid nights, afternoon rains in citrus areas. These conditions promote abundant new growth. New crop fruit in good condition; most trees have completed dropping excessive little green fruit they cannot carry next season. Valencia harvest slowing with very little fruit remaining. Grapefruit, Honey tangerine harvest all but

complete. Caretakers cutting cover crops, spraying, herbiciding. Dead trees being cut out, burned. New resets going in older groves. Pasture feed: 10% fair, 85% good, 5% excellent. Cattle 10% fair, 85% good, 5% excellent. Panhandle: some pastures have standing water. Hay, forage growth good. South: pasture feed improved following rain. Statewide: cattle condition mostly good.

GEORGIA: Days suitable for field work 4.3. Soil 3% short, 66% adequate, 31% surplus. Corn 50% silked, 69% 2002, 65% avg.; 16% dough, 31% 2002, 30% avg.; 0% dent, 6% 2002, 5% avg. Cotton 1% setting bolls, 7% 2002, 4% avg. Hay 1% poor, 22% fair, 61% good, 16% excellent. Peanuts 32% blooming, 40% 2002, 40% avg. Sorghum 2% poor, 21% fair, 71% good, 6% excellent; 80% planted, 83% 2002, 81% avg. Soybeans 11% fair, 80% good, 9% excellent; 1% blooming, 4% 2002, 2% avg. Tobacco 2% poor, 21% fair, 64% good, 13% excellent; 2% harvested, 3% 2002, 1% avg. Watermelons 3% very poor, 10% poor, 41% fair, 37% good, 9% excellent; 7% harvested, 27% 2002, 12% avg. Apples 8% poor, 52% fair, 29% good, 11% excellent. Peaches 5% fair, 95% good; 34% harvested, 29% 2002, 31% avg. Pecans 2% poor, 27% fair, 61% good, 10% excellent. Rain further delayed hay, small grain harvesting last week. Quality of rye, oat, wheat declined rapidly due to wet fields. Rains delayed herbicide applications which caused weed problems. Completion of planting continued to be delayed due to wet weather. Excessive rainfall created disease problems in seedling cotton, leaf spot in peanuts. Fieldwork was limited due to wet field conditions. Recent rains replenished water shortages. Growers were baling hay in between showers. Fungicides were applied to peanut, cotton fields. Activities: Applying sucker control treatments to tobacco, managing livestock, poultry operations.

HAWAII: Hot, dry conditions with midweek showers continued throughout the State during the past week. East state banana orchards remained in fair to good condition with active harvest. Big Island papaya orchards were in fair to good condition with some new fields coming into harvest. Vegetables remained in mostly fair to good condition, but some areas are showing the adverse effects of the drier weather.

IDAHO: Days suitable for fieldwork 6.8. Topsoil 6% very short, 33% short, 59% adequate, 2% surplus. Irrigation Water Supply is 3% very poor, 11% poor, 46% fair, 38% good, 2% excellent. Above normal temperatures this past week stimulated rapid crop growth across the state. Various insect populations are causing damage to several crops. Farmers are keeping an eye on them, spraying heavily infested fields. Oats 98% Emerged, 98% 2002, 94% avg. Lentils 100% Emerged, 100% 2002, 100% avg. Corn 97% Emerged, 98% 2002, 96% avg. Potatoes 86% Emerged, 87% 2002, 86% avg.; 12" high 8%, 14% 2002, 18% avg. Dry Beans 91% Planted, 95%, 2002, 88% avg.; 70% Emerged, 70% 2002, 54% avg. Cherries 5% Harvested, 6% 2002, 2% avg. Winter Wheat 98% Jointed, 99% 2002, 99% avg.; Boot Stage 82%, 80% 2002, 82% avg.; 47% Headed, 34% 2002, 45% avg. Spring Wheat. 65% Jointed, 75% 2002, 72% avg.; 34% Booted, 20% 2002, 35% avg.; 9% Headed, 4% 2002, 14% avg. Barley 70% Jointed, 66% 2002, 70% avg.; 50% Booted, 22% 2002, 37% avg.; 27% Headed 6% 2002, 17% avg. Alfalfa Hay 1st cutting harvested 65%, 51% 2002, 53% avg. Activities: Planting dry beans, cutting hay, harvesting cherries, spraying insects, irrigating, caring for livestock.

ILLINOIS: Days suitable for fieldwork 3.7. Topsoil 9% short, 63% adequate, 28% surplus. Corn average height 16 in., 11 in. 2002, 19 in. avg. Soybeans 1% blooming, 0% 2002, 1% avg. Winter wheat 96% filled, 94% 2002, 97% avg.; 79% Turning yellow, 82% 2002, 84% avg.; Ripe 5%, 40% 2002, 35% avg. Oats 45% headed, 63% 2002, 67% avg.; Filled 20%, 24% 2002, 28% avg.; 4% Turning yellow, 5% 2002, 5% avg.; 0% Ripe, 0% 2002, 1% avg.; 2% poor, 17% fair, 69% good, 12% excellent. Alfalfa hay 1st 85%, 74% 2002, 83% avg.; 2nd crop 4%, 7% 2002, 8% avg.; 3% poor, 20% fair, 61% good, 16% excellent. Red clover cut 72%, 70% 2002, 69% avg.; 4% poor, 34% fair, 50% good, 12% excellent. Farmers across southern state were able to return to their fields with soybean planting being their first priority last week. Wet field conditions, heavy weed infestations have some farmers in this region using heavy disks to open the fields up in an attempt to dry them

out. Unfortunately rains fell again near the beginning of the week in this area stopping the progress that was just getting started. Elsewhere across the state the warmer temperatures were improving the outlook of the corn, soybean crops. Rain showers were common in most areas of the state but were generally welcomed in the north where topsoils are dry. The wheat crop condition continues to decline as wet, cool weather across the south is promoting disease. Concerns now are not if the crop will deteriorate but how much it will deteriorate, when can harvest begin with the saturated soils. Activities: Baling hay, spraying herbicides, cultivating corn.

INDIANA: Days suitable for fieldwork 2.7. Topsoil 2% short, 49% adequate, 49% surplus. Subsoil 4% short, 61% adequate, 35% surplus. Cool, wet weather continued to be the pattern for the week. Rain, thunderstorms slowed field activities during most of the week, especially in the southern regions of the state. Many farmers trying to decide on taking prevented planting for this year. Corn planting virtually complete in the central, northern regions of the state. Soils remain wet in many southern fields. Ponding evident again in many fields. Cool, wet weather has slowed growth, development of major crops. Sunshine is needed. Soybean planting remains far behind average. Temperatures averaged 5° below to 2° above normal for the week. Precipitation averaged 0.18 to 3.33 inches. Spreading of fertilizer, spraying for weeds, insects continued. Winter wheat 68% good to excellent compared with 52% 2002. Wheat is being affected by the wet weather. Diseases showing up in some wheat fields. Evidence of wheat scab in some fields. Harvest of wheat will soon start in the southwestern region. Weeds remain active. Livestock are in mostly good condition. Cows looking good, gaining weight. Alfalfa hay 1st cutting of 70% complete, 70% 2002, 83% avg. Tobacco plants being set 49% complete. Pastures 1% very poor, 3% poor, 19% fair, 59% good, 18% excellent. Activities: Spraying, planting corn, soybeans, moving grain to market, hauling manure, mowing hay, baling hay, side dressing corn, cleaning up, repairing equipment, taking care of livestock.

IOWA: Days suitable for fieldwork 4.8. Topsoil 0% very short, 5% short, 85% adequate, 10% surplus across state. During the past week, crop development advanced due to warmer temperatures. The second half of last week brought good growth in crops, yet hay quality was an issue because of the wet weather and delay of putting up hay. Livestock conditions continued to be rated good. Oat 37% headed, 13% last week. Oat 0% very poor, 1% poor, 12% fair, 64% good, 23% excellent. Corn 99% emergence, 92% of normal, 1% very poor, 3% poor, 16% fair, 60% good, 20% excellent; 96% planting, 91% emergence, 96% 2002, 91% 5-yr avg.; 0% very poor, 3% poor, 18% fair, 61% good, 18% excellent. Alfalfa hay 1st cutting 72% complete. Hay 0% very poor, 2% poor, 18% fair, 58% good, 22% excellent. Pasture, Range feed 0% very poor, 2% poor, 13% fair, 67% good, 18% excellent.

KANSAS: Days suitable for fieldwork to 4.6. Topsoil 9% short, 85% adequate, 6% surplus. Subsoil 7% very short, 26% short, 66% adequate, 1% surplus. Wheat harvesting is off to a slow start in many areas because of wet conditions. Sorghum, soybean, sunflower planting continues. Cool, wet weather has slowed cotton development, caused some fungal problems. Range, pasture feeds 9% very poor, 17% poor, 35% fair, 31% good, 8% excellent.

KENTUCKY: Days suitable for fieldwork 1.9. Topsoil 25% adequate, 75% surplus. Subsoil 36% adequate, 64% surplus. Precipitation ranged from 1 to 6 in. this week halting fieldwork, causing localized flooding, standing water in planted fields. Since April 1, 12 to 20 in. of rain have fallen making this period the 7th wettest on record with more rain in the forecast. Temperatures averaged 1° below normal, making five consecutive weeks with below normal temperatures. Burley tobacco 65% set, 85% 2002, 87% avg. Dark tobacco 85% set, 89% 2002, 89% avg. Disease, insect problems beginning to show up. Availability of transplants becoming a concern. Set tobacco 1% very poor, 11% poor, 32% fair, 45% good, 11% excellent. Small grain harvest at a standstill due to wet conditions. Grain sorghum seeding 56% complete, 69% 2002, 70% avg. Hay crop poor. Producers wrapping bales, making

haylage to salvage some of the first cutting. Pasture feeds 2% poor, 12% fair, 56% good, 30% excellent.

LOUISIANA: Days suitable for fieldwork 3.8. Soil 5% very short, 14% short, 51% adequate, 30% surplus. Corn 1% very poor, 3% poor, 31% fair, 50% good, 15% excellent; 86% silked, 52% last week, 89% 2002, 81% avg.; 5% dough stage, 0% last week, 25% 2002, 30% avg. Cotton 99% emerged, 98% last week, 99% 2002, 99% avg.; 1% setting bolls, 0% last week, 2% 2002, 4% avg. Planting of cotton completed. Hay 85% 1st cutting, 79% last week, 84% 2002, 84% avg. Peaches 25% harvested, 16% last week, 24% 2002, 34% avg. Sorghum 97% emerged, 90% last week, 96% 2002, 98% avg. Soybeans 7% blooming, 5% last week, 20% 2002, 19% avg. Planting of soybeans made good progress due to the much needed moisture. Sugarcane 4% very poor, 8% poor, 38% fair, 42% good, 8% excellent. Sweet potatoes 65% planted, 50% last week, 77% 2002, 77% avg. Winter wheat 97% harvested, 87% last week, 96% 2002, 98% avg. Livestock 7% poor, 35% fair, 53% good, 5% excellent. Vegetables 7% very poor, 14% poor, 43% fair, 30% good, 6% excellent.

MARYLAND: Days suitable for fieldwork 2.5. Topsoil 27% adequate, 73% surplus. Subsoil 40% adequate, 60% surplus. Corn 86% emerged, 97% 2002, 78% avg.; 5% very poor, 14% poor, 36% fair, 45% good. Soybeans 36% planted, 68% 2002, 62% avg.; 25% emerged, 58% 2002, 50% avg.; 6% very poor, 30% poor, 45% fair, 19% good. Sorghum 39% planted, 91% 2002, 76% avg. Strawberries 62% harvested, 87% 2002, 84% avg. Apple condition 23% fair, 72% good, 5% excellent. Peach condition 16% fair, 75% good, 9% excellent. Snap Beans 54% planted, 54% 2002, 72% avg. Sweet Corn 75% planted, 91% 2002, 93% avg. Lima Beans 41% planted, 56% 2002, 57% avg. Green peas 30% harvested, 77% 2002, 58% avg. Barley 3% very poor, 11% poor, 30% fair, 52% good, 4% excellent; 81% turned, 100% 2002, 99% avg. Hay supplies 26% very short, 38% short, 32% adequate, 4% surplus. Other Hay 1st cutting 32%, 89% 2002, 88% avg. Alfalfa Hay 1st cutting 40%, 95% 2002, 95% avg. Winter Wheat 4% very poor, 10% poor, 37% fair, 42% good, 7% excellent; 38% turned, 87% 2002, 77% avg. Pasture feed 7% poor, 19% fair, 51% good, 23% excellent. Tobacco 63% transplanted, 92% 2002, 76% avg. Cantaloupes 80% planted, 93% 2002, 94% avg. Watermelons 77% planted, 87% 2002, 88% avg. Barley harvest is beginning, winter wheat harvest will hopefully begin in three to four weeks. Heavy rain has caused lodging in winter wheat, barley. A small amount of hay was harvested but most of it is still in the fields. Some grain farmers are switching from corn to soybeans due to the extended wet, cool weather.

MICHIGAN: Days suitable for fieldwork 5.0. Topsoil 1.0% very short, 10% short, 72% adequate, 17% surplus. Subsoil 2.0% very short, 17% short, 76% adequate, 5.0% surplus. All Hay 1st cutting 44%, 38% 2002, 51% avg. Asparagus 91% harvested, 81% 2002, 93% avg. Corn Height 5 inches, 5 inches 2002, 7 inches avg. Dry beans 20% planted, 43% 2002, 48% avg.; 2.0% emerged, 12% 2002, 11% avg. Oats 10% headed, 5.0% 2002, 26% avg. Strawberries 7.0% harvested, 12% 2002, 24% avg. Temperatures ranged from 1 to 5° below normal State. Average rainfall amounts ranged from 0.10 inches southwest Lower Peninsula to 1.02 inches western Upper Peninsula. Precipitation since April 1 has ranged from 2.12 inches below normal west central Lower Peninsula to 1.43 inches above normal western Upper Peninsula. Cool, wet weather early week followed by warm, sunny weather for end of week. Many farmers took advantage of favorable weather to make hay. Rainfall last week slowed fieldwork, completion of planting. Crop growth, emergence good last week due to abundance of rain that kept soil moisture at a good level. Cutting of alfalfa slowed due to rainfall last week. Corn growth stages varied from V1 to V2. Corn getting greener, need of more warm temperatures. Soybeans progressing slowly. Late planted soybeans emerging. Wheat had finished flowering most areas of State. Most of advanced fields beginning to fill kernels. The Feeke's growth stage for wheat varied from 9 to 10.5. Rye flowering. Flag leaves had appeared on early planted oats. Sugarbeets growing well, stands continued to look good. Dry beans progressing slowly around State. Apple growers continued to apply chemical thinners. Codling moth catches high. Apple king fruit 1 inch diameter southwest, 10 to 18 mm on Ridge. Fire blight symptoms increased. Apples 14 to 16 mm

southeast. Peaches continued to size well across State. In west central, peaches out of shuck, exceeded 10 mm diameter. Bacterial leaf spot, powdery mildew becoming more of a problem some blocks. In northwest, peaches just coming out of shuck. High winds, hail on June 8 caused some tart cherry loss in the southwest. Bacterial canker observed both tart and sweet cherries. Early sweet cherry varieties southwest beginning to turn yellow. June drop ending plums southwest. The European plum crop thinned well, looked good. Bacterial spot symptoms found on plum leaves. Japanese plum pits hardening. The Japanese plum crop highly variable southwest. Blueberries pea sized southwest. Fields appeared pale, yellow. Cool weather made virus symptoms apparent in older fields. In west central, Bluecrop, Blueray early green fruit while Jersey petal fall. Concord, Niagara grape flower buds separating from cluster southwest. In Berrien county, grape bloom began. Grape berry moths flying. Strawberry harvest began southwest, south central. Raspberries full bloom southwest. Cranberries jewel stage southwest. Bloom began on advanced shoots. Vegetables still need more sun, warm weather. Towards end of week, temperatures warmed some districts. A grower southeast noted that vegetables three weeks behind. Several sweet corn producers commented on how late crop was, at least one grower southwest district forced to replant. A farmer northwest noted that insects less of a problem thanks to cool weather. Asparagus harvest neared completion. Carrots progressing, with first plantings at 7 leaf stage, but plants could use some warm weather. Transplanting wrapping up. Onions progressed further, celery continued to be planted. Snap bean planting moved ahead. Cabbage looked good but flea beetles heavy. Cucumbers in tunnels at petal fall. Tomatoes in tunnels grew well, outside crops looked a little better. Early crops of lettuce, onions from sets, spinach, radishes harvested for farmer's markets southeast.

MINNESOTA: Days suitable for fieldwork 3.9. Topsoil 0% very short, 3% short, 85% adequate, 12% surplus. Corn 10 in. height, 9 in. 2002, 12 in. avg. Soybeans 4 in. height, 3 in. 2002, 3 in. avg. Spring Wheat 60% jointed, 23% 2002, 45% avg. Oats 70% jointed, 47% 2002, 60% avg. Barley 66% jointed, 32% 2002, 46% avg. Potatoes 99% planted, 99% 2002, 97% avg. Sweet corn 84% planted, 84% 2002, 89% avg. Green peas 99% planted, 99% 2002, 98% avg. Alfalfa 69% 1st cutting, 45% 2002, 69% avg. Dry Beans 99% planted, 99% 2002, 96% avg. Pasture feed 1% very poor, 2% poor, 20% fair, 63% good, 14% excellent. A few scattered showers, a warm dry weekend were welcomed by most farmers. Some scattered showers throughout the week, in parts of the state, did not keep farmers from continuing with field activities. Farmers are reporting that crops are progressing well, that corn, soybean spraying have been taking place.

MISSISSIPPI: Days suitable for fieldwork 2.6. Soil 37% adequate, 63% surplus. Corn 58% silked, 52% 2002, 49% avg.; 5% poor, 16% fair, 53% good, 26% excellent. Cotton 99% planted, 100% 2002, 100% avg.; 98% emerged, 100% 2002, 98% avg.; 33% squaring, 30% 2002, 47% avg.; 1% very poor, 7% poor, 22% fair, 48% good, 22% excellent. Rice 100% planted, 100% 2002, 100% avg.; 99% emerged, 100% 2002, 100% avg.; 3% poor, 16% fair, 59% good, 22% excellent. Sorghum 100% planted, 100% 2002, 100% avg.; 100% emerged, 99% 2002, 97% avg.; 2% poor, 20% fair, 59% good, 19% excellent. Soybeans 97% planted, 97% 2002, 96% avg.; 93% emerged, 93% 2002, 91% avg.; 30% blooming, 18% 2002, 22% avg.; 1% very poor, 5% poor, 22% fair, 53% good, 19% excellent. Wheat 99% mature, 98% 2002, 97% avg.; 71% harvested, 77% 2002, 76% avg.; 8% poor, 29% fair, 54% good, 9% excellent. Hay 96% harvested (cool season), 99% 2002, 99% avg.; 37% harvested (warm season), 28% 2002, 30% avg.; 4% poor, 30% fair, 53% good, 13% excellent. Sweet potatoes 60% planted, 56% 2002, 59% avg.; 14% poor, 20% fair, 66% good. Watermelons 20% poor, 27% fair, 43% good, 10% excellent. Blueberries 5% poor, 36% fair, 49% good, 10% excellent. Cattle 1% very poor, 8% poor, 23% fair, 57% good, 11% excellent. Pasture 1% very poor, 9% poor, 22% fair, 55% good, 13% excellent. While rain fell across most all of the state, the lower two-thirds received the majority of precipitation. Drier weather conditions are needed to progress more rapidly with wheat, hay harvesting, insect control applications.

MISSOURI: Days suitable for fieldwork 3.3. Topsoil 6% short, 77% adequate, 17% surplus. Crops are making good growth in most of the State with the exception of low lying areas where flash flooding submerged crops for a brief time. Corn is doing well in all areas, developing on schedule. Sorghum planting ranges from 46% south-central, 80% west-central to virtually complete northwest, southwest, southeast. Soybean planting ranges from 40% southwest to 92% north-central, 99% northwest. Some soybean fields are expected to be replanted due to flooding, particularly in the southeastern district along the Mississippi River. Wheat crop turning color ranges from 65% northeast to 99% southeast. Wet weather is causing some decline in wheat condition. Alfalfa hay 1st cutting 87%, 85% 2002, 86% avg.; 2nd cut 6%, 8% 2002, 12% avg. Other hay cut 54%, 48% 2002, 55% avg. Pasture feed 4% poor, 26% fair, 55% good, 15% excellent. Rainfall averaged 1.96 inches, ranging from 0.80 inch in west-central district, about 1.50 inches across the northern third of State, to over 3 inches in the east-central, southeast districts.

MONTANA: Days suitable for fieldwork 5.2. Topsoil 5% very short, 14% short, 75% adequate, 6% surplus. Subsoil 16% very short, 25% short, 57% adequate, 2% surplus. Barley 97% emerged, 96% 2002, 97% 5-yr avg.; 14% boot stage, 0% very poor, 1% poor, 13% fair, 62% good, 24% excellent. Corn 99% emerged, 0% very poor, 0% poor, 10% fair, 61% good, 24% excellent. Dry beans 99% planted, 87% emerged, 0% very poor, 0% poor, 20% fair, 75% good, 5% excellent. Alfalfa hay 1st cutting of harvested 10%, 5% of other hay has been cut. Oats 97% emerged, 94% 2002, 95% 5-yr avg.; 11% boot stage, 0% very poor, 1% poor, 11% fair, 65% good, 23% excellent. Potato 100% planting, 93% 2002, 96% 5-yr avg.; 47% emerged, 0% very poor, 0% poor, 29% fair, 47% good, 24% excellent. Spring wheat 98% emerged, 94% 2002, 97% 5-yr avg.; 6% boot stage, 0% very poor, 1% poor, 29% fair, 59% good, 11% excellent. Sugar beet 0% very poor, 0% poor, 16% fair, 43% good, 41% excellent. Winter wheat 87% entered the boot stage, 35% headed, 2% very poor, 5% poor, 15% fair, 51% good, 27% excellent. Livestock, Pasture, Range Report: Cattle, calves moved to summer ranges is at 88% with 85% of the sheep, lambs moved. Last year at this time 82% of cattle and 84% of sheep had been moved. Lambing 97% complete compared to 97% 2002. Range, pasture feeds 1% very poor, 10% poor, 29% fair, 41% good, 19% excellent.

NEBRASKA: Days suitable for fieldwork 4.5. Topsoil 1% very short, 20% short, 73% adequate, 6% surplus. Subsoil 10% very short, 38% short, 52% adequate, 0% surplus. Temperatures ranged from 4^o below normals in the east to just above normals in the west. Precipitation fell statewide with largest amounts, over four inches, in the southeast. Dry beans 73% planted, 85% 2002, 84% avg. Proso millet 37% planted, 53% 2002. Oats 69% headed, 65% 2002, 54% avg. Alfalfa 4% poor, 21% fair, 52% good, 23% excellent; 1st cutting 82% complete, 81% 2002, 79% avg. Wild hay 2% very poor, 6% poor, 26% fair, 55% good, 11% excellent. Pasture, range feed 5% very poor, 11% poor, 37% fair, 40% good, 7% excellent, above a year ago but below average

NEVADA: Warm temperatures continued with daily averages about 5^o above normal. High temperatures were breaking 100^o in the south by week's end. Afternoon thundershowers brought traces of precipitation to northern state. Stream flows remained high with rapid snow melt in the higher elevations. High temperatures promoted crop growth, the mostly dry weather was conducive to haying. Crop conditions were predominately good. First cutting of alfalfa hay was complete south, advanced the north. Grass hay harvest was underway in some northern, central valleys. Corn emergence was accelerated by the high temperatures, cultivation was underway. Potato emergence advanced. Small grain heading advanced. Weed spraying was common. Ranges, pastures were in generally good condition, excellent in some areas, very poor in some others. Although most livestock had already been moved to summer range, some movement to forest allotments was noted. Grasshoppers, Mormon crickets were active with some bad infestations in the north. Activities: Haying, irrigating, corn cultivation, weed control, moving livestock, bating grasshoppers, crickets.

NEW ENGLAND: Days suitable for field work 4.5. Topsoil 1% very short, 8% short, 65% adequate, 26% surplus. Subsoil 2% very short, 9% short, 74% adequate, 15% surplus. Pasture feed 0% very poor, 3% poor, 14% fair, 57% good, 26% excellent. Maine Potatoes 99% planted, 100% 2002, 99% avg.; 25% emerged, 25% 2002, 65% avg.; condition good/excellent. Rhode Island Potatoes 85% emerged, 99% 2002, 99% avg.; condition good/excellent. Massachusetts Potatoes 100% planted, 99% 2002, 100% avg.; 80% emerged, 85% 2002, 95% avg.; condition good. Maine Oats 100% planted, 100% 2002, 100% avg.; 90% emerged, 95% 2002, 90% avg.; condition good/excellent. Maine Barley 100% planted, 100% 2002, 100% avg.; 90% emerged, 95% 2002, 95% avg.; condition good/excellent. Field Corn 80% planted, 85% 2002, 90% avg.; 55% emerged, 70% 2002, 80% avg.; condition good/fair. First Crop Hay 20% harvested, 35% 2002, 45% avg.; condition good/fair. Shade Tobacco condition good/fair. Broadleaf Tobacco 50% transplanted, 65% 2002, 75% avg.; condition good/fair. Sweet Corn 75% planted, 85% 2002, 85% avg.; 50% emerged, 65% 2002, 70% avg.; condition good/fair. Apples: condition good/fair. Peaches: condition fair/good. Pears: condition good/fair. Strawberries: Petal Fall Stage, condition good/fair. Massachusetts Cranberries: Bud to Early Bloom Stage, condition good/fair. Highbush Blueberries: Petal Fall Stage, condition good/fair. Maine Wild Blueberries: Full Bloom to Petal Fall Stage, condition good. Yet another cooler than normal, rainy week in state last week, which gave way to sun at week's end. Farmers finding it difficult to get equipment on wet fields. Crops need heat, sunshine soon, progress is 1-2 weeks behind schedule. Activities: Planting vegetables, sweet corn, field corn, potatoes; finishing planting small grains; transplanting broadleaf tobacco; cutting haylage; spreading manure; mowing; discing; plowing; cultivating; applying herbicides, insecticides, fungicide.

NEW JERSEY: Days suitable for field work were 3.5. Top soil 17% adequate, 83% surplus. There were measurable amounts of rainfall during the week over most of the state. Temperatures were above normal in most areas for the week. Cool, damp conditions hampered plant growth in most areas. Activities: Spraying pesticides, herbicides, harvesting spring vegetables. Soybean plants continued to emerge in many fields. Some planted soybean fields were immersed in standing water, will require replanting. Nitrogen deficiency symptoms seen in corn stands due to cool, wet weather conditions. Hay crop condition were rated fair to good. Wet conditions continued to delay hay harvest activities in many localities. Wet conditions were preventing cutting, drying, baling hay in many fields. Clear weather, heat needed for hay harvest activities to resume. Vegetables, from greenhouse transplants, were in place in some fields. Sweet corn, pumpkin, snap bean planting continued. Harvest of cabbage, spinach, lettuce, collards, kale, onion, dill, arugula continued. Strawberry harvest continued in the north, the south. Apple fruit drop is heavy, but no disease problems, good fruit set reported. Disease pressure was high on blueberry, grape vineyards.

NEW MEXICO: Days suitable for fieldwork 6.7. Topsoil 53% very short, 36% short, 11% adequate. It was a typical mid-June week for state, with hit, miss thunderstorms favoring the eastern plains. Clovis (.92) reported the greatest amount of rain. A number of severe thunderstorm warnings were issued for the Eastern counties Friday through Sunday afternoons for hail, associated wind. Temperatures were close to normal at most locations. Extremes ranged from 29 at Chama on the 12th to 100 at Animas on the 15th. The week's scattered storms brought rain, hail, causing damage mostly to cotton, chile. Wind damage 23% light, 6% moderate, 1% severe. Hail damage 8% light, 1% moderate, 1% severe. Farmers spent the week watering, cutting, baling alfalfa. They were also busy tending to their gardens, fertilizing, watering other crops. Leaf hoppers were reported in northwest Dona Ana County. Alfalfa conditions saw some improvement, but were still listed as mostly fair to good. The first cutting was getting close to completion with 94% cut, the second made good progress with 45% cut. Corn remained in mostly fair to good condition, with the crop 100% emerged. Cotton was reported as mostly fair to excellent, with 24% squaring. Sorghum 50% planted. Winter wheat 33% harvested, 46% very poor, 23% poor, 20% fair, 11% good. Peanuts 6% planted, and of the crop was pegging. Peanut conditions remained in mostly fair to good condition. Onions were listed as fair to excellent, 53% harvested. Chile conditions were reported as mostly fair to good, apples were reported

as poor to good, pecans were reported as fair to excellent. Ranchers spent the week branding, watering, feeding. Cattle 6% very poor, 18% poor, 36% fair, 40% good. Sheep 16% very poor, 29% poor, 39% fair, 16% good. Pasture, range feeds dropped slightly to 30% very poor, 36% poor, 29% fair, and 5% good.

NEW YORK: Days suitable 2.5. Topsoil 27% adequate, 73% surplus. Cool, rainy conditions continued. Planting, harvesting progress well behind normal. Many acres will go unplanted. Pasture feed 1% poor, 9% fair, 64% good, 26% excellent. Hay 5% poor, 31% fair, 55% good, 9% excellent. Oats 22% fair, 72% good, 6% excellent. Wheat 2% poor, 23% fair, 63% good, 12% excellent. Corn 82% planted, 82% 2002. Soybeans 51% drilled, 52% 2002. Long Island vineyards not yet in bloom, 2 weeks behind normal. Heavy set on Lake Ontario apples, peaches, pears; sizing rapidly.

NORTH CAROLINA: Days suitable for field work 4.0. Soil 0% very short, 1% short, 57% adequate, 42% surplus. State weather allowed more field work, provided adequate moisture, warmth for crop maturation. Unfortunately, rain amounts were excessive in some areas, detracted from corn, cotton quality as pest pressures accelerated. Some hay harvest was delayed by the scattered summer storms. Activities: Harvesting small grains, vegetables, planting soybeans, cotton, transplanting sweet potatoes, burley tobacco, fertilizing crops, spraying for pests.

NORTH DAKOTA: Days suitable for fieldwork 5.0. Topsoil 1% very short, 5% short, 82% adequate, 12% surplus. Subsoil 2% very short, 12% short, 76% adequate, 10% surplus. Rain showers delayed spraying, stopped some producers from finishing planting. Durum wheat 95% emerged or beyond, 93% 2002, 92% avg. 23% jointing or beyond, 12% 2002, 19% avg. 3% in the boot stage, beyond, 3% 2002, 4% avg. Canola 98% emerged or beyond, 98% 2002, 95% avg.; 48% rosette stage, beyond, 19% 2002, 43% avg.; 4% blooming, beyond, 0% 2002, 4% avg. Dry Edible Beans 75% emerged or beyond, 85% 2002, 85% avg. Flaxseed 95% emerged or beyond, 96% 2002, 93% avg. Potatoes 76% emerged or beyond, 93% 2002, 86% avg. Sunflowers 96% planted, 98% 2002, 96% avg.; 65% was emerged or beyond, 66% 2002, 71% avg. Durum Wheat 0% very poor, 1% poor, 21% fair, 70% good, 8% excellent. Canola 0% very poor, 1% poor, 14% fair, 63% good, 22% excellent. Dry Edible Beans 0% very poor, 2% poor, 18% fair, 64% good, 16% excellent. Flaxseed 0% very poor, 2% poor, 21% fair, 64% good, 13% excellent. Potatoes 0% very poor, 1% poor, 22% fair, 61% good, 16% excellent. Sugarbeets 0% very poor, 1% poor, 19% fair, 52% good, 28% excellent. Sunflower 0% very poor, 1% poor, 16% fair, 68% good, 15% excellent. All hay 0% very poor, 4% poor, 25% fair, 60% good, 11% excellent. Broadleaf, wild oat spraying 60%, 70% complete, respectively. Alfalfa 1st cutting was 6% complete, 1% of all other hay had been cut. Stockwater supplies 1% very short, 6% short, 89% adequate, 4% surplus. Pasture, range feeds 1% very poor, 6% poor, 28% fair, 54% good, 11% excellent.

OHIO: Day suitable for fieldwork 1.6. Topsoil 0% very short, 0% short, 29% adequate, 71% surplus. Alfalfa hay 1st cutting, 29% 57% 2002, 73% avg. Corn 97% planted, 96% 2002, 99% avg.; 96% emerged, 83% 2002, 96% avg. Oats 41% headed, 39% 2002, 58% avg. Other hay 1st cutting complete, 21%, 40% 2002, 60% avg. Potatoes 94% planted, 98% 2002, 98% avg. Processing tomatoes 94% planted, 94% 2002, 94% avg. Soybeans 83% planted, 83% 2002, 93% avg.; 77% emerged, 61% 2002, 83% avg. Strawberries 44% harvested, 44% 2002, 60% avg. Winter wheat 28% changing color, 27% 2002, 56% avg. Corn 3% very poor, 12% poor, 33% fair, 43% good, 9% excellent. Hay conditions 4% very poor, 14% poor, 33% fair, 43% good, 6% excellent. Oat conditions 1% very poor, 5% poor, 30% fair, 55% good, 9% excellent. Pasture feeds 1% very poor, 4% poor, 21% fair, 58% good, 16% excellent. Soybean 3% very poor, 8% poor, 33% fair, 47% good, 9% excellent. Strawberry 2% very poor, 4% poor, 19% fair, 57% good, 18% excellent. Winter wheat 1% very poor, 3% poor, 16% fair, 56% good, 24% excellent. Warmer temperatures across state have some of us thinking summer is finally on the way. However, wet conditions continue to persist throughout much of the state. The corn

planting season is nearing its end with some in the farming community giving up on this years crop. Many have reported that field crops are a few weeks behind normal development, a direct result of the cool, wet weather. Activities : Planting, replanting grain crops in certain spots, pesticide, fertilizer application, a little hay bailing. Vegetable producers harvested cabbage, broccoli, green beans.

OKLAHOMA: Days suitable for fieldwork 3.3. Topsoil 2% very short, 8% short, 78% adequate, 12% surplus. Subsoil 6% very short, 23% short, 67% adequate, 4% surplus. Rye 1% very poor, 10% poor, 38% fair, 48% good, 3% excellent. Oats 2% very poor, 10% poor, 45% fair, 38% good, 5% excellent; 98% headed, 96% last week, 96% 2002, 99% avg.; 89% soft dough, 77% last week, 87% 2002, 94% avg.; 22% harvested, 9% last week, 32% 2002, 40% avg. Corn 1% poor, 6% fair, 31% good, 62% excellent; 8% silking, 5% last week, 9% 2002, 8% avg. Sorghum 81% seedbed prepared, 79% last week, 86% 2002, 94% avg.; 37% emerged, 34% last week, 46% 2002, 44% avg. Soybeans 1% poor, 20% fair, 63% good, 16% excellent; 89% seedbed prepared, 87% last week, 91% last year, 96% avg; 66% planted, 62% last week, 75% 2002, 73% avg.; 58% emerged, 55% last week, 67% 2002, 58% avg. Peanuts 99% emerged, 95% last week, 93% 2002, 90% avg.; 29% pegging, 3% last week, 3% 2002, 7% avg. Cotton 91% emerged, 79% last week, 88% 2002, 83% avg. Alfalfa Hay 3% poor, 21% fair, 62% good, 14% excellent; 57% 2nd cutting, 38% last week, 44% 2002, 50% avg. Other Hay 2% very poor, 7% poor, 33% fair, 50% good, 8% excellent; 64% 1st cutting, 57% last week, 65% 2002, 65% avg. Watermelons 83% running, 72% last week, 75% 2002, 77% avg.; 35% setting fruit, 19% last week, 37% 2002, 27% avg. Livestock 3% poor, 20% fair, 60% good, 17% excellent; Pasture, Range 1% very poor, 10% poor, 26% fair, 51% good, 12% excellent; Livestock: Livestock conditions were rated mostly fair to good. Activities: Light to moderate. Cattle auctions reported average marketings for the week. The price for feeder steers less than 800 pounds increased nearly a dollar per cwt. from last week, averaged \$88.39 per cwt. The average price for feeder heifers less than 800 pounds decreased slightly over a dollar per cwt. from last week, averaged \$82.78 per cwt.

OREGON: Days suitable for fieldwork 6.8. Topsoil 9% very short, 46% short, 44% adequate, 1% surplus. Subsoil 19% very short, 31% short, 48% adequate, 2% surplus. Barley 96% emerged, 93% previous week, 98% 2002, 46% headed, 41% previous week, 72% 2002, 1% very poor, 16% poor, 52% fair, 30% good, 1% excellent. Spring wheat 61% headed. Winter wheat 88% headed, 75% previous week, 94% 2002, 87% 5-yr avg.; 5% very poor, 28% poor, 40% fair, 25% good, 2% excellent. Range, Pasture 5% very poor, 14% poor, 36% fair, 38% good, 7% excellent. Activities: Hot temperatures subsided somewhat in most areas across State, approaching their normal highs, lows. Precipitation lacking, however. Many north central areas received almost no precipitation, while precipitation in northeast, some Willamette Valley areas tended to be measurable but small. Effects of these conditions were to start irrigation earlier than usual in some areas, further plant growth, fruit maturity in other areas, stress dryland areas. Klamath Falls, Lakeview did receive precipitation more than one inch above normal. The Dalles, Ontario both recorded 44 growing degree days above normal. Weather mostly warm, dry, which allowed fieldwork to continue but also made it necessary to irrigate some crops earlier or more than usual. Hot windy conditions continued to impact wheat crop in north-central state. Lack of any stored moisture showed its effect. Water applied to some grass seed fields in middle of pollination process. Red Clover seed cut for hay or silage, made good re-growth. Crops looked good in west. Haying made good progress across State. In Willamette Valley, vegetables mostly planted, growing pretty much on schedule, even most tender of plants. Some growers had started weeding, cultivating. Corn, green beans, most fresh produce up, growing in Lane County; a lot of produce will come on first part of August. Tomatoes, corn, other tender edible crops all up, showing good growth in Josephine County. Potatoes up, looked good in Baker County, although acreage contracts reduced. Nursery operations are into summer irrigation, maintenance routine. A few greenhouses still shipping bedding plants to retail outlets. Easter lily growers on southern state coast disbudding plants in field. Livestock reported to be in good condition as pastures still in pretty good condition

across State. However, with recent hot temperatures, pastures have begun to show signs of stress across eastern state, lower level ranges drying rapidly. Precipitation needed to preserve good forage conditions. Strawberries harvested in Willamette Valley. Wine grapes showed good growth. Codling moth appeared to be a problem in many growing areas. Chelan cherry harvest began on June 13 in Wasco County. Royal Ann harvest expected to begin shortly thereafter. Fruit thinning, mowing, irrigating began in upper Hood River Valley, continued in mid, lower Hood River Valley orchards. Cooler temperatures in Yamhill County brought pace of fruit maturity back to about normal. Southern coast cranberries continued in bloom. Josephine County nut trees showing some problems from last year's killing frost.

PENNSYLVANIA: Days suitable for field work 2.0. Soil 31% adequate, 69% surplus. Spring 94% plowing, 98% 2002, 99% avg. Corn 81% planted, 92% 2002, 97% avg.; 71% emerged, 84% 2002, 90% avg.; height 6 inches, 13 inches 2002, 11 inches avg.; 3% very poor, 7% poor, 41% fair, 35% good, 14% excellent. Barley 55% turning yellow, 87% 2002, 88% avg. Winter wheat 95% heading, 99% 2002, 98% avg.; 6% turning yellow, 33% 2002, 34% avg.; 1% very poor, 1% poor, 17% fair, 56% good, 25% excellent. Oats 10% headed, 46% 2002, 37% avg.; 12% poor, 34% fair, 44% good, 10% excellent. Soybeans 61% planted, 83% 2002, 86% avg.; 48% emerged, 67% 2002, 74% avg.; 1% very poor, 4% poor, 34% fair, 49% good, 12% excellent. Tobacco 33% transplanted, 96% 2002, 89% avg. Potatoes 89% planted, 98% 2002, 98% avg. Alfalfa 1st cutting 49% complete, 76% 2002, 76% avg. Timothy clover 1st cutting 19% complete, 41% 2002, 44% avg. Peach crop condition 10% fair, 84% good, 6% excellent. Apple crop condition 1% very poor, 1% poor, 15% fair, 64% good, 19% excellent. Quality of hay made 28% very poor, 26% poor, 26% fair, 15% good, 5% excellent. Pasture feeds 2% poor, 16% fair, 52% good, 30% excellent. Activities: Planting corn, soybeans, potatoes; cutting hay; maintaining machines; caring for livestock; spreading manure; spraying herbicides, pesticides; fixing fences.

SOUTH CAROLINA: Days suitable for field work 5.1. Soil 2% short, 71% adequate, 27% surplus. Corn 100% planted, 100% 2002, 100% avg.; 98% emerged, 100% 2002, 100% avg.; 38% silked, 67% 2002, 51% avg.; 3% doughed, 14% 2002, 9% avg.; 25% fair, 52% good, 23% excellent. Soybeans 68% planted, 86% 2002, 73% avg.; 45% emerged, 65% 2002, 57% avg.; 1% poor, 17% fair, 81% good, 1% excellent. Sorghum 85% planted, 87% 2002, 82% avg.; 30% headed, 43% 2002, 33% avg.; 1% turned color, 4% 2002, 1% avg.; 10% fair, 90% good. Cotton 97% planted, 99% 2002, 98% avg.; 6% squared, 17% 2002, 18% avg.; 2% poor, 38% fair, 60% good. Peanuts 100% planted, 99% 2002, 97% avg.; 4% pegged, 11% 2002, 6% avg.; 10% fair, 89% good, 1% excellent. Winter Wheat 99% turning color, 100% 2002, 100% avg.; 96% ripe, 100% 2002, 99% avg.; 53% harvested, 87% 2002, 78% avg.; 4% poor, 35% fair, 58% good, 3% excellent. Barley 99% turning color, 100% 2002, 100% avg.; 80% ripe, 97% 2002, 97% avg.; 45% harvested, 74% 2002, 79% avg.; 49% fair, 50% good, 1% excellent. Pastures 1% poor, 11% fair, 66% good, 22% excellent. Rye 100% headed, 100% 2002, 100% avg.; 99% turning color, 100% 2002, 100% avg.; 94% ripe, 100% 2002, 98% avg.; 47% harvested, 86% 2002, 80% avg.; 4% poor, 32% fair, 61% good, 3% excellent. Oats 99% turning color, 100% 2002, 100% avg.; 89% ripe, 99% 2002, 98% avg.; 52% harvested, 89% 2002, 83% avg.; 9% poor, 41% fair, 50% good. Sweet potatoes 75% planted, 79% 2002, 84% avg.; 10% fair, 90% good. Tobacco 10% topped, 11% 2002, 12% avg.; 4% poor, 23% fair, 56% good, 17% excellent. Grain Hay 95% harvested, 100% 2002, 99% avg.; 1% very poor, 2% poor, 19% fair, 69% good, 9% excellent. Peaches 17% harvested, 22% 2002, 21% avg.; 2% very poor, 4% poor, 13% fair, 54% good, 27% excellent. Apples 24% fair, 76% good. Snapbeans 46% harvested, 64% 2002, 53% avg.; 12% fair, 88% good. Cucumbers 54% harvested, 80% 2002, 61% avg.; 17% fair, 83% good. Watermelons 98% planted, 100% 2002, 100% avg.; 1% harvested, 7% 2002, 8% avg.; 29% fair, 71% good. Tomatoes 28% harvested, 28% 2002, 19% avg.; 88% good, 12% excellent. Cantaloups 100% planted, 100% 2002, 100% avg.; 11% harvested, 12% 2002, 15% avg.; 37% fair, 63% good. Livestock 14% fair, 62% good, 24% excellent.

SOUTH DAKOTA: Days suitable for fieldwork 5.5. Topsoil 5% very short, 22% short, 70% adequate, 3% surplus. Subsoil 10% very short, 25% short, 62% adequate, 3% surplus. Feed supplies 10% very short, 24% short, 64% adequate, 2% surplus. Stock water supplies 13% very short, 27% short, 59% adequate, 1% surplus. Winter Rye 1% poor, 32% fair, 57% good, 10% excellent; 99% in boot, 84% 2002, 91% avg.; 61% headed, 46% 2002, 63% avg.; 2% turning color, 0% 2002, 6% avg.; 100% in boot, 87% 2002, 92% avg.; 3% turning color, 0% 2002, 6% avg. Barley in boot 62%, 47% 2002, 52% avg. Oats in boot 70%, 54% 2002, 54% avg. Spring Wheat in boot 72%, 55% 2002, 61% avg. Average corn height (inches) 7 in, 9 in 2002, 9 in avg. Corn cultivated or sprayed once 56%, 50% 2002, 38% avg. Corn cultivated or sprayed twice 13%, 3% 2002, NA% avg. Sunflower 76% planted, 88% 2002, 81% avg. Alfalfa hay 1% very poor, 7% poor, 28% fair, 52% good, 12% excellent; 1st cutting harvested 53%, 41% 2002, 45% avg. Other hay harvested 16%, 9% 2002, 11% avg. Cattle condition 1% poor, 19% fair, 62% good, 18% excellent. Sheep condition 1% poor, 14% fair, 65% good, 20% excellent. Range, Pasture 3% very poor, 13% poor, 33% fair, 43% good, 8% excellent. Cattle moved to pasture 96% complete. Planting of soybeans is virtually complete. Scattered rains delayed hay baling for some farmers. Activities: Spraying, haying, planting row crops, cutting alfalfa, fixing fences, moving cattle to pasture.

TENNESSEE: Days suitable for fieldwork 3.0. Topsoil 1% short, 70% adequate, 29% surplus. Subsoil 1% short; 76% adequate, 23% surplus. Wheat 100% headed, 100% 2002, 100% avg.; 98% turning color, 98% 2002, 98% avg.; 86% ripe 85% 2002, 91% avg.; 10% harvested, 27% 2002 41% avg.; 4% very poor, 9% poor, 27% fair, 50% good, 10% excellent. Tobacco 80% transplanted, 88% 2002, 86% avg.; 9% poor, 32% fair, 50% good, 9% excellent. Pastures 3% poor, 13% fair, 64% good, 20% excellent. Alfalfa hay 94% 1st cutting, 98% 2002, 99% avg; 1% very poor, 3% poor, 27% fair, 57% good, 12% excellent. Other hay 80% 1st cutting, 90% 2002, 91% avg; 3% very poor, 8% poor, 29% fair, 49% good, 11% excellent. Wet weather last week has once again hindered producers from progressing with agricultural activities, especially winter wheat harvest. Soybean planting was also slowed by the recent wet weather, development remains a full week behind the normal schedule. Virtually, all the State's remaining cotton acreage was planted last week. Growers made good progress with transplanting tobacco, but there were a few reports of the weather causing stress, erosion in fields, effecting plant populations. Although both alfalfa and other hay remain in mostly good condition, some producers are concerned about the quality as a result of the wet conditions. The recent moisture has helped pastures as they continue to be rated good-to-excellent condition. Other agricultural activities taking place last week were spraying for weeds, insects. Last week, several fronts moved through the State bringing showers, thunderstorms.

TEXAS: Agricultural Summary: Soil moisture conditions improved over most of the state, giving producers optimism about second hay cuttings, improved pastures, and summer crops that could still benefit. Stormy weather continued across many areas of the State as Gulf moisture collided with cooler dry air from the northwest. The High Plains received rainfall ranging from a trace to about 2 inches. While the moisture was welcomed, the hail, high winds, lightning were not. Crop acreage continued to be lost or damaged by strong winds, hail storms, water erosion. Widespread areas of North, East, Central state, the Coastal Bend, the Edwards Plateau received at least 2 inches of rain with many locations reporting 3 to 5 inches, up to 7 inches in parts of East state. The Trans Pecos region reported isolated thunderstorms with most locations recording little rain. Only trace amounts of moisture were realized in the Rio Grande Valley. Field work was suspended in most regions because of the rain. Thrips, disease continued to cause problems in cotton fields. Some farmers missed the insurance deadline to plant, alternative crops were being discussed. Small Grains: Winter wheat harvest was suspended in many areas because of weather. Where conditions allowed, combining was active on the Low Rolling Plains, North state, was gaining momentum on the High Plains. Some acreage was lost to hail, lodging occurred in some fields due to wind. The total amount of acres lost was still being accessed. Wheat 44% of normal, 39% 2002. Corn: Many fields on the High Plains were destroyed

or damaged by hail, wind. The rain was very beneficial to those fields that were able to avoid the severe conditions. All corn fields in southern regions were just about fully developed, but many were too far gone to benefit from this rain. In parts of South state, some corn was being harvested for silage or was being zeroed-out. Corn 58% of normal, 60% 2002. Cotton: Severe weather continued to wreak havoc on cotton fields on the High Plains. Hail, high winds, blowing sand destroyed or damaged emerging seedlings. Cooler temperatures, moist conditions resulted in an increase in disease. Some producers were replanting where conditions allowed and others were evaluating alternative crops such as sorghum, soybeans. Planting was delayed in many locations, many producers missed getting acreage planted prior to insurance deadlines. Thrips continued to be a problem for producers on the High Plains. Fields that were not destroyed by hail varied from poor to good condition on the Plains. In Central state, cotton was mostly in fair to good condition. Cotton in the Coastal Bend benefitted from the rain, was starting to bloom. Rio Grande Valley cotton was progressing well but in need of moisture. Cotton 52% of normal, 59% 2002. Sorghum: Many acres received damage from the storms. Hail, wind damage were common. Those fields that were not adversely affected by severe weather benefitted from the added moisture. Where conditions allowed planting was active on the High Plains. Additional acreage was expected to be planted after disaster cotton, fields that missed the planting deadline. Sorghum in southern areas made good progress. In the Coastal Bend, fields had turned color, were expected to be harvested in the next few weeks. Some combining was occurring in the Rio Grande Valley. Sorghum 70% of normal, 56% 2002. Peanuts: Planting was delayed in remaining fields but was completed in most locations. Some peanuts were damaged or destroyed by storms. Some producers were discussing planting Spanish peanuts after disaster cotton. Fields in southern regions benefitted greatly from the increased moisture. Peanut 85% of normal, 85% 2002. Rice: Fields were flooded and development was progressing. Rice 87% normal, 91% 2002. Soybeans: Planting on the Plains was delayed due to the weather. Some producers were evaluating soybeans whether to plant after disaster cotton. When conditions allowed, planting continued in Southeast state. Commercial Vegetables, Fruit, Pecans In the Rio Grande Valley harvest was wrapping up for onions, other vegetables. Watermelon harvest continued. In the San Antonio-Winter Garden onion harvest was delayed by rain. Carrot, cabbage harvest was near completion. Watermelons, cantaloupes needed spraying for aphids. In East state, vegetables that were not too far gone from drought benefitted greatly from the rain. Watermelons were turning color, sweet potato producers were completing slip transplanting. Pecans: Additional rain helped to reduce Pecan Nut Casebearer problems. Development was favorable with recent rainfall. Range, Livestock: Range, pastures were greening up after a few weeks of rain. Much of the green up actually consisted of fast growing weeds with limited food value, but producers were optimistic about the improving conditions. Some ranchers were delaying stocker sell off due to the improved pasture. Stock tanks, which had been getting low, were filled by rains. Horn, heel flies remained a nuisance. In some areas, supplemental feeding was still necessary.

UTAH: Days suitable for fieldwork 6.9. Topsoil 14% very short, 32% short, 54% adequate. Subsoil 16% very short, 36% short, and 48% adequate. Irrigation water supplies 15% very short, 44% short, 41% adequate. Stock water supplies 9.0% very short, 34% short, 56% adequate, 1.0% surplus. Alfalfa hay 1st cutting 62%, 72% 2002, 65% avg. Barley 71% headed, 44% 2002, 40% avg.; 18% fair, 69% good, 13% excellent. Cattle/Calves moved to summer range 71%, 82% 2002, 84% avg. Cattle/Calves condition 1.0% very poor, 4.0% poor, 26% fair, 57% good, 12% excellent. Corn 96% emerged, 94% 2002, 94% avg. Corn Height 10 inches, 10 inches 2002, 9.0 inches avg.; 12% fair, 81% good, 7.0% excellent. Oats 35% headed, 16% 2002, 20% avg. Other Hay cut 29%, 38% 2002, 22% avg. Range, Pasture feed 7.0% very poor, 16% poor, 33% fair, 42% good, 2.0% excellent. Sheep/lambs moved to summer range 74%, 79% 2002, 82% avg. Sheep condition 2.0% very poor, 5.0% poor, 20% fair, 65% good, 8.0% excellent. Spring Wheat 52% headed, 34% 2002, 41% avg.; 29% fair, 60% good, 11% excellent. Winter Wheat 88% headed, 65% 2002, 65% avg.; 27% fair, 58% good, 15% excellent. Farmers spent an average of 6.9 days in the field last week. Activities: Cutting, stacking hay, irrigating crops, tending to livestock. Low temperatures ranged from the upper 30s to

upper 60s while highs were between the low 70s to upper 90s with locations in southwest state topping out over 100. Parts of east-central state including areas in Daggett, Duchesne, Summit, Uintah, state counties received up to 0.5 inches of rain last week. Livestock continued to be in good condition but Rich, Beaver counties have expressed concerns about rapidly drying range, pasture land. The majority of corn has emerged and the crop averaged 10 inches in height. Weber county has reported poor germination of corn due to dry soil conditions. First cutting of alfalfa hay was still in full swing, both Cache and Millard counties reported that last week was great for cutting, drying, stacking alfalfa hay. Grasshoppers, Mormon Crickets, Russian wheat aphids, alfalfa weevil continued to damage crops throughout state. The severity of this year's Mormon Cricket infestation has received national media attention, is reportedly one of the worst on record.

VIRGINIA: Days suitable for fieldwork 3.1. Topsoil 35% adequate, 65 surplus. Subsoil 50% adequate, 50% surplus. Pasture 3% poor, 19% fair, 47% good, 31% excellent. Livestock 2% poor, 9% fair, 69% good, 20% excellent. Other Hay 2% very poor, 11% poor, 30% fair, 42% good, 15% excellent. Alfalfa Hay 6% poor, 33% fair, 45% good, 16% excellent. Corn for Grain 1% very poor, 7% poor, 30% fair, 46% good, 16% excellent; 92% planted, 100% 2002, 98% 5-yr avg.; 85% emerged, 100% 2002, NA 5-yr avg. Soybeans 36% planted, 62% 2002, 56% 5-yr avg.; 29% emerged, 49% 2002, NA 5-yr avg. Winter Wheat 8% very poor, 16% poor, 38% fair, 34% good, 4% excellent; 11% harvested, 16% 2002, 11% 5-yr avg. Barley 1% very poor, 17% poor, 42% fair, 36% good, 4% excellent; 20% harvested, 73% 2002, 48% 5-yr avg. Flue Tobacco 13% poor, 40% fair, 47% good; 91% transplanted, 100% 2002, 100% 5-yr avg. Burley Tobacco 36% fair, 61% good, 3% excellent; 87% transplanted, 96% 2002, 91% 5-yr avg. Dark Fire Tobacco 9% poor, 43% fair, 41% good; 67% transplanted, 100% 2002, 98% 5-yr avg. Sun Tobacco 87% fair, 13% good. 85% planted, 100% 2002, 99% 5-yr avg. Peanuts 14% poor, 38% fair, 48% good, 98% planted, 100% 2002, 100% 5-yr avg. Cotton 5% very poor, 20% poor, 32% fair, 43% good, 100% planted, 100% 2002, 100% 5-yr avg.; 3% squaring, 4% 2002, 2% 5-yr avg. Summer Potatoes 14% fair, 50% good, 36% excellent. Apples 3% poor, 29% fair, 66% good, 2% excellent. Peaches 12% very poor, 1% poor, 22% fair, 47% good, 18% excellent. Although rainfall predominated state weather, amounts were generally less than the previous week, temperatures were mostly warmer. Parts of state dried off enough for some farmers to side-dress corn, plant corn for silage, harvest barley, plant double crop soybeans. With temperature highs ranging between the low 80's to the low 90's, most of state soybeans, cotton, peanuts seeds have germinated. Nevertheless, many of state crops still suffered from the excessive rain, wet conditions. Some fields are still too wet to enter. A few farmers abandoned their original planting intentions, feeling that the window of opportunity has passed for peanuts, full-season soybeans. Activities: Farmers preparing equipment for small grain harvest, salvaging rained on hay, preparing to cut overgrown hay.

WASHINGTON: Days suitable for fieldwork 6.8. Topsoil 4% very short, 28% short, 67% adequate, 1% surplus. Subsoil 1% very short, 18% short, 81% adequate. Irrigation water 100% adequate. The highest temperature in the state was 93° in Whitman Mission. The lowest temperature in the state was 37° in Stampede Pass, Deer Park. Winter wheat 85% headed, 3% very poor, 8% poor, 21% fair, 43% good, 25% excellent. Spring wheat 100% emerged, 33% headed, 8% poor, 37% fair, 37% good, 18% excellent. Barley 100% emerged, 23% headed, 8% poor, 24% fair, 36% good, 32% excellent. Cereal crop conditions declined due to hot, dry weather. Spokane, Pend Oreille Counties received some hail from passing thunderstorms which cause little damage. Spokane County found leaf bugs infesting cereal grain fields causing damage to the flag leaf, turning the plant white. Warm weather caused heat scorch to Christmas trees. Turfgrass growers raced to keep grass irrigated. Potatoes 100% emerged, 85% good, 15% excellent. Corn 100% planted, 87% emerged, 100% good. Dry edible beans 100% planted, 65% good, 35% excellent. Alfalfa 1st cutting of was 85% complete, 2nd cutting 5% complete. Hay, other roughage 1% short, 99% adequate. Range, pasture feeds 42% fair, 48% good, 10% excellent. Hay producers were taking advantage of the warm dry

weather. Dairymen were in full swing making green chop. Douglas, Chelan county cattlemen were hauling water to their cattle herd as springs, watering holes began to dry up. Oyster seeding was nearly complete, oyster shucking, single oyster processing continued. Strawberry harvest began. Early Cherry harvest continued. Blueberry, raspberry, cucumber growers were busy irrigating their crops. Beekeepers were beginning to collect blackberry-honey. Cucumber fields were in need of irrigation, fields that lacked moisture showed spotty germination. Tent caterpillars were beginning to form cocoons causing their leaf damage to slow on ornamental, fruit trees. Hot House tomatoes reported that the first of their crop was ripe. Asparagus harvest was winding down.

WEST VIRGINIA: Days suitable for field work 2.0. Topsoil 21% adequate, 79% surplus 8% short, 84% adequate, 8% surplus 2002. Intended acreage prepared for Spring 85% planting, 100% 2002, 100% 5-yr avg. Hay, roughage 11% very short, 15% short, 74% adequate. Feed grain 3% very short, 13% short, 84% adequate. Corn 17% poor, 22% fair, 58% good, 3% excellent; 60% planted, 93% 2002, 94% 5-yr avg.; 50% emerged, 70% in 2002. Soybeans 1% fair, 99% good; 50% planted, 84% 2002, 86% 5-yr avg.; 30% emerged, 62% in 2002. Winter Wheat 16% poor, 19% fair, 65% good; 98% headed, 97% 2002, 94% 5-yr avg. Oats 2% very poor, 7% poor, 35% fair, 56% good; 97% emerged, 95% 2002, 90% 5-yr avg.; 12% headed, 33% 2002, 32% 5-yr avg. Tobacco 40% poor, 8% fair, 52% good; beds 50% transplanted, 72% 2002, 73% 5-yr avg. Hay 2% very poor, 6% poor, 25% fair, 53% good, 14% excellent, 1st cutting 13% complete, 53% in 2002, 48% 5-yr avg. Apples 25% poor, 25% fair, 45% good, 5% excellent; Peaches 10% fair, 85% good, 5% excellent. Cattle, calves 2% poor, 19% fair, 76% good, 3% excellent. Sheep, Lambs 3% poor, 14% fair, 78% good, 5% excellent. Heavy rains continue to cause major problems for crop, livestock across the state. Very little dry hay was cut, but some haylage was wrapped. Fields are too wet for machinery. Heavy rains, high winds have caused lodging.

WISCONSIN: Days suitable for fieldwork 4.3. Soil 1% very short, 9% short, 78% adequate, 12% surplus. Summer seems to be slow in arriving in state this year. Welcome rains started the week off around the state. Most of the spring planting is near completion. Rains continued over the upper two-thirds of the state, totaled over 2 inches in some areas. The lower third of the state missed most of the precipitation late in the week, is falling behind in moisture levels. Temperatures were 2 to 6° cooler than normal for the week, continuing a six-week trend of below normal temperatures. Clouds, cool nights contributed to slowing the pace of the growing season. Pasture feeds 1% very poor, 5% poor, 26% fair, 56% good, 12% excellent.

WYOMING: Days suitable for field work 6.4. Topsoil 19% very short, 39% short, 41% adequate, 1% surplus. Subsoil 24% very short, 49% short, 27% adequate. Winter wheat 2% very poor, 4% poor, 22% fair, 71% good, 1% excellent; 95% boot, 94% 2002, 92% 5-yr avg.; 82% headed, 81% 2002, 78% 5-yr avg.; Barley 65% boot, 28% 2002, 50% 5-yr avg.; 39% headed, 1% 2002, 22% 5-yr avg.; 5% poor, 27% fair, 60% good, 8% excellent. Oats 54% jointed, 24% 2002, 54% 5-yr avg.; 25% boot, 8% 2002, 26% 5-yr avg.; 4% poor, 32% fair, 54% good, 10% excellent. Spring wheat 81% jointed, 18% 2002, 67% 5-yr avg.; 20% boot, 12% 2002, 39% 5-yr avg.; 54% fair, 46% good. Sugarbeets 16% fair, 79% good, 5% excellent. Corn 98% emerged, 95% 2002, 97% 5-yr avg.; Average height of corn 8 inches, 2002 7 inches, 5-year average 8 inches; 2% poor, 17% fair, 72% good, 9% excellent. Dry beans 97% planted, 92% 2002, 92% 5-yr avg.; 73% emerged, 67% 2002, 66% 5-yr avg. Alfalfa 1st cutting harvested 24%, 6% 2002, 13% 5-yr avg. Stock water supplies 11% very short, 31% short, 58% adequate. Range, pasture feed 7% very poor, 13% poor, 35% fair, 44% good, 1% excellent. Livestock condition 3% poor, 21% fair, 74% good, 2% excellent. Western stations again reported above normal temperatures, below normal precipitation; eastern stations reported below normal temperatures, below normal precipitation, except for the northeast that reported above normal precipitation. The heaviest moisture fell in Kaycee, Newcastle with 1 inch.

June 12 ENSO Update

Average SST Anomalies 1–7 June 2003

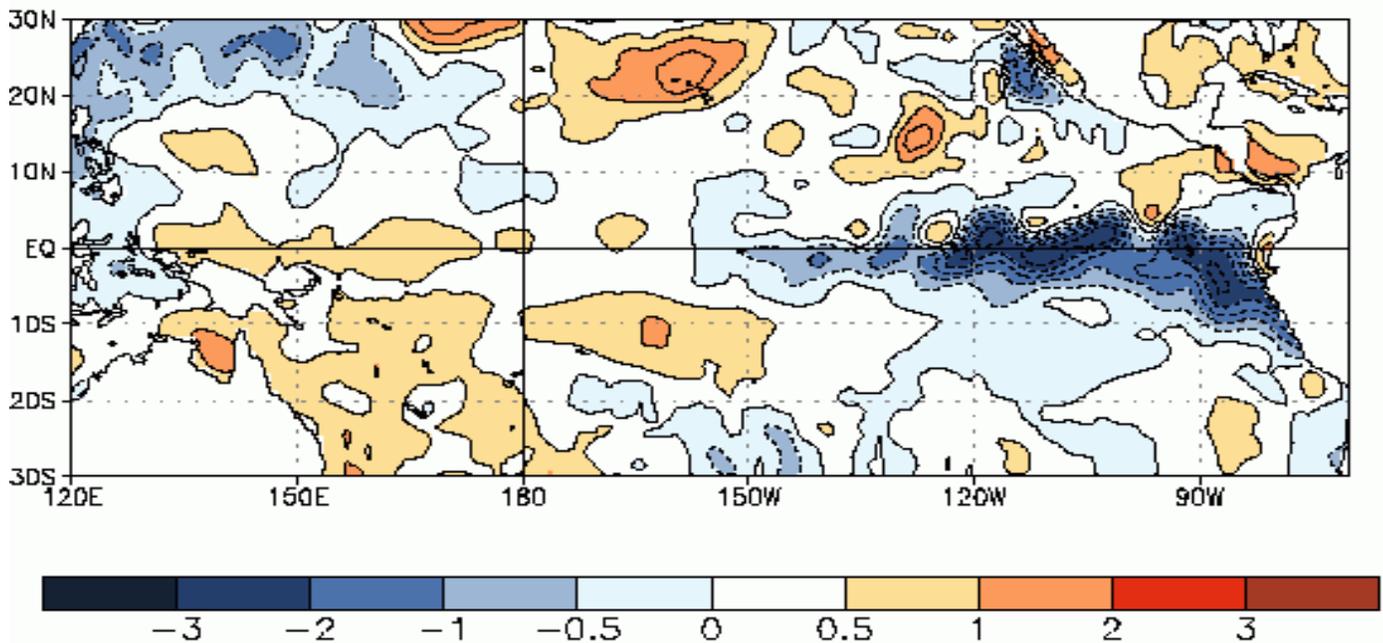


Figure 1. Sea Surface Temperature (SST) anomalies ($^{\circ}\text{C}$) for the equatorial Pacific Ocean for Jun 1 - 7, 2003. The SST analysis is obtained from the NCEP/Ocean Data Assimilation system that incorporates NOAA/PMEL TAO buoy data, NOAA/AVHRR satellite data, and ships of opportunity.

Oceanic and atmospheric conditions in the tropical Pacific during May were consistent with a developing cold episode. Negative sea-surface temperature anomalies strengthened across the central and eastern equatorial Pacific during May, as significant decreases in SST anomalies occurred in all of the Niño regions. By early June equatorial SSTs were near or below normal between 165°W and the South American coast, with only a small area of residual positive SST anomalies west of the dateline between 155°E and 175°E (Fig. 1).

Consistent with the trend in SST anomalies, the equatorial easterlies have been near or slightly stronger than average over the central and west-central equatorial Pacific, and the equatorial SOI has been slightly positive during the last two months. In addition, the depth of the oceanic thermocline has steadily decreased across the central and eastern equatorial Pacific in recent months, and negative subsurface temperature departures have developed and intensified in the upper ocean of this region. By mid-May subsurface temperatures at thermocline depth were below average throughout

the eastern Pacific, with negative anomalies ranging between -1°C and -4°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.

Most statistical and coupled model forecasts indicate that either near-neutral or La Niña conditions will occur during the last half of 2003. However, current conditions and recent trends favor the development of cold episode (La Niña) conditions 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

June 8 - 14, 2003

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

HIGHLIGHTS

EUROPE: Across southern Europe, a severe heat wave stressed summer crops but benefited maturing winter grains. Rain favored summer crops in north-central Europe.

FSU-WESTERN: On-going drought conditions stretched from Moldova eastward through Ukraine into southern Russia, negatively affecting winter wheat in the filling stage and increasing stress on spring-sown crops.

FSU-NEW LANDS: Warm, showery weather favored rapid spring grain emergence in Siberia, Russia, while unseasonably cool weather hampered crop emergence in Kazakhstan.

MIDDLE EAST: Across the Middle East, seasonably warm, dry weather benefited filling to maturing winter grains.

EASTERN ASIA: Beneficial rain covered Manchuria and the North China Plain.

SOUTHEAST ASIA: Dry weather reduced moisture supplies for rice and corn in Thailand.

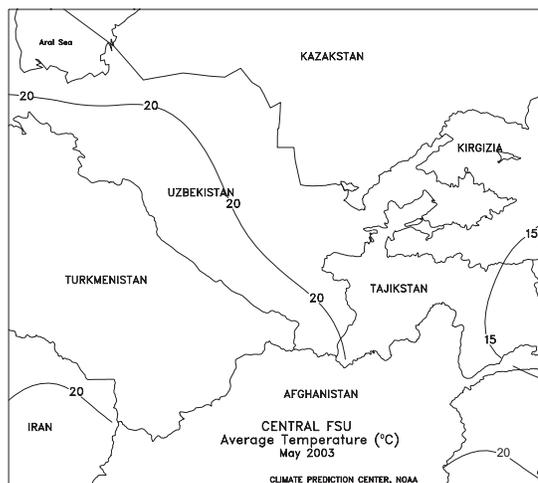
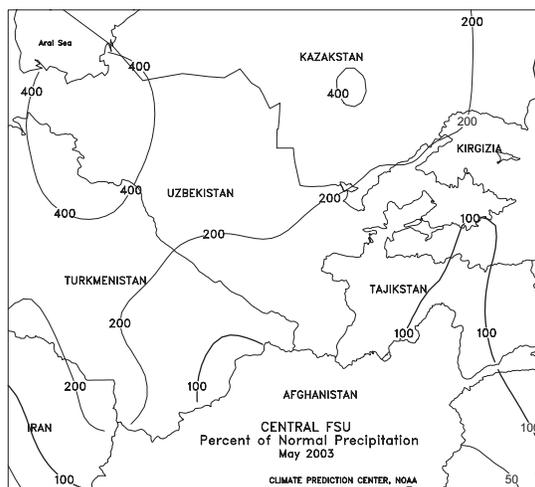
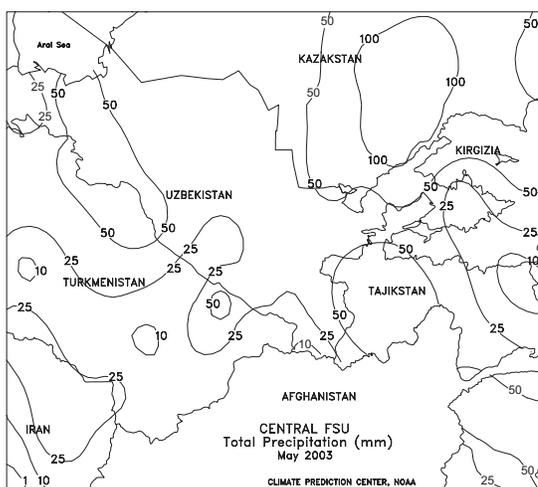
SOUTH ASIA: The monsoon continued its northward progression into central India.

AUSTRALIA: Light showers maintained topsoil moisture in parts of South Australia and western Victoria, while dry weather elsewhere reduced moisture supplies for winter grains.

CANADA: On the Prairies, mild, showery weather benefited emerging spring grains and oilseeds.

MEXICO: Widespread showers covered the entire Corn Belt, boosting soil moisture for summer crop planting and germination, especially in the west.

SOUTH AMERICA: Mostly dry, warmer-than-normal weather aided fieldwork and protected crops from potential freeze damage.

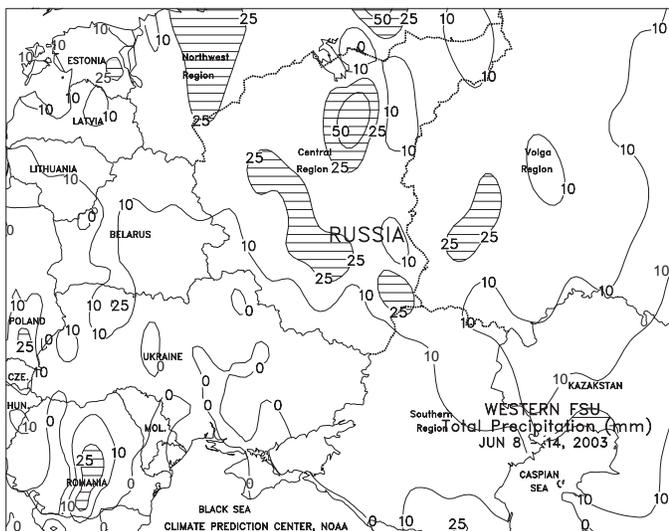




EUROPE

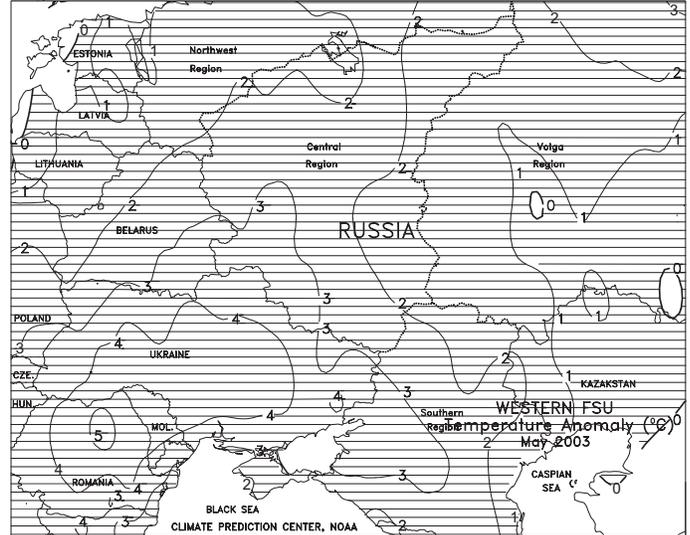
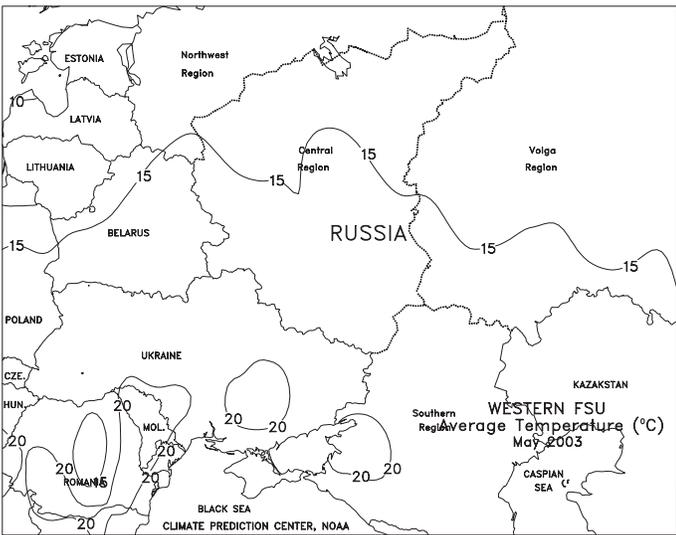
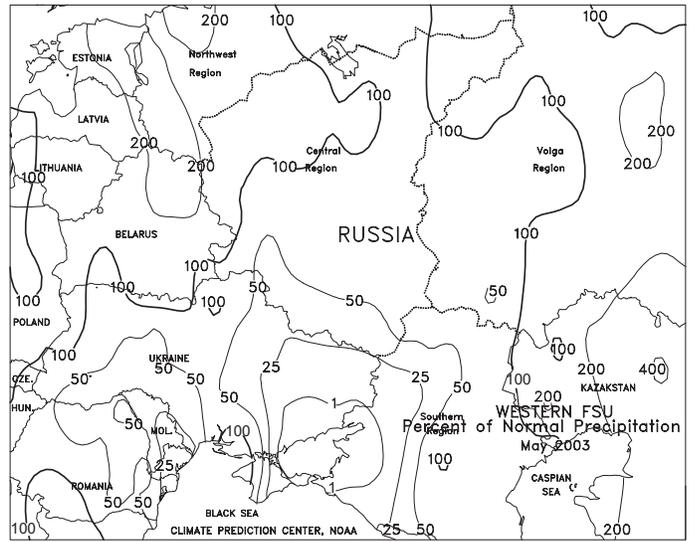
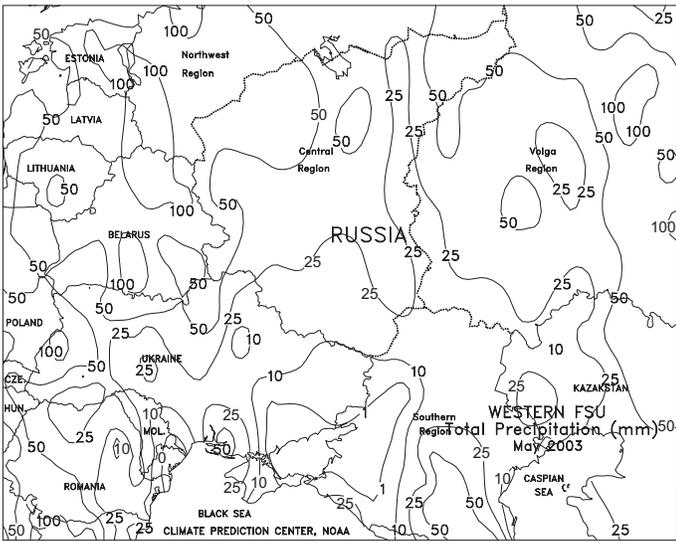
A stationary upper-air high pressure system over south-central Europe helped to create a severe heat wave across most of Europe, especially in the south. Significant rain (10-25 mm) was confined to England and extreme northeastern France eastward into southern Poland and southward into the Alps. The heaviest rain (25-50 mm) fell in portions of extreme northeastern France, Belgium, and central Germany, maintaining adequate moisture supplies for summer crops and immature winter grains. In areas with little or no rain, such as the rest of France, northern Poland, and the Balkans, the hot, dry weather reduced soil moisture for summer crops and immature winter grain in the east. Extremely hot weather (temperatures averaged 3-9 degrees C above-normal) prevailed across most of Europe, stressing vegetative summer crops and increasing irrigation demands but favoring winter grain and oilseed maturation. Maximum temperatures exceeded 35 degrees C for several days across most of southern Spain and Portugal, southern France, southern Germany, northern Italy, the Balkans and southeastern Europe. In isolated portions of southern France, northern Italy, southwestern Spain, maximum temperatures exceeded 38 degrees C, possibly damaging summer crops. During May in northwestern and southeastern Europe, near- to slightly above-normal rainfall eased dryness and boosted soil moisture for winter and summer crops. Across central and the rest of eastern Europe, near-normal May rainfall favored reproductive winter grains and vegetative summer crops, but unseasonably warm weather in late-May and early-June increased crop water use. Below-normal May rainfall reduced soil moisture supplies in Hungary and the Balkans. Across the Iberian Peninsula, seasonably dry, warm weather favored filling to maturing winter grains.

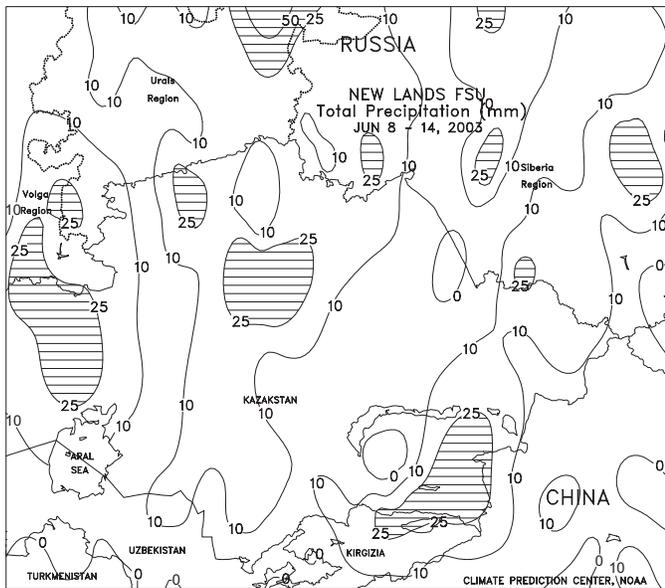




FSU-WESTERN

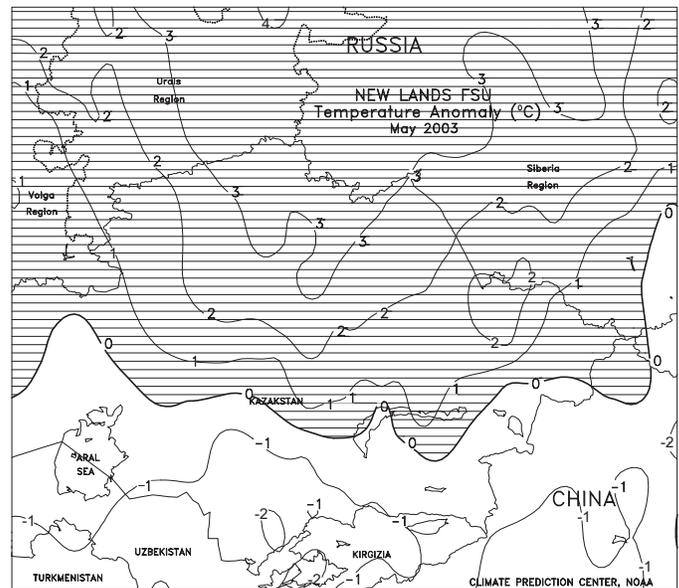
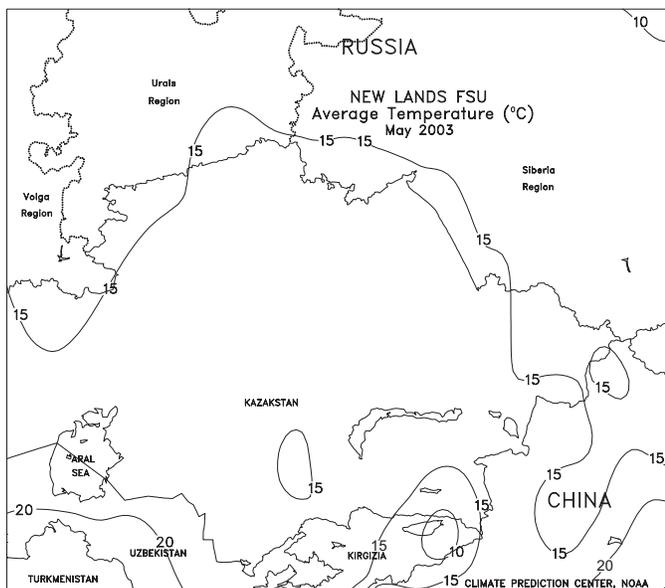
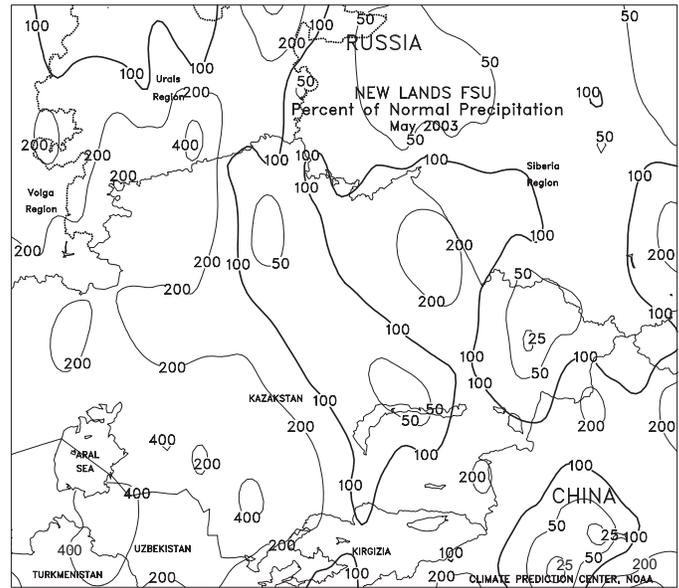
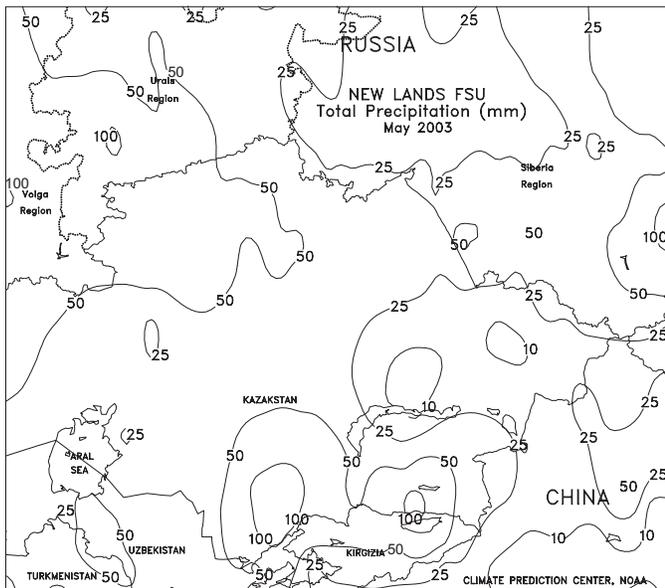
Unfavorably hot, dry weather worsened drought conditions from Moldova, eastward through southern and eastern Ukraine, into the Southern Region in Russia. Weekly temperatures in these areas averaged 2 to 5 degrees C above normal, with daytime highs ranging from 30 to 33 degrees C. Rain and cooler weather was needed to halt further declines in yield prospects for winter wheat in the filling stage, and to improve conditions for spring-sown crops, mostly in the vegetative stage. Elsewhere, timely rains (10-25 mm or more) spread from the Baltics and northern Belarus eastward across the Central and Volga Regions in Russia, benefiting reproductive winter grains and spring-sown crops in the vegetative stage. Weekly temperatures averaged slightly above normal in the Baltics and Belarus, and 2 to 4 degrees C below normal in the Central and Volga Regions in Russia. In May, unfavorably hot, dry weather extended from Moldova, eastward through southern and eastern Ukraine, into Russia's Southern Region. Crops in these areas experienced one of the driest Mays in at least the past 26 years, continuing a drying trend that began in early April. While the dryness favored rapid planting progress, it hampered the emergence of spring-sown crops and lowered yield prospects for winter grains that progressed through the reproductive phase of development. Temperatures in May averaged 3 to 5 degrees C above normal in Ukraine, exacerbating the dryness. Temperatures averaged 1 to 3 degrees C above normal in southern Russia. Farther north, May precipitation ranged from 25 to 75 percent of normal in the Central and Volga Regions in Russia, continuing a pattern of below normal rainfall that began in the middle of April. Timely rains were needed for winter grains, approaching the heading stage, and newly emerging spring-sown crops.

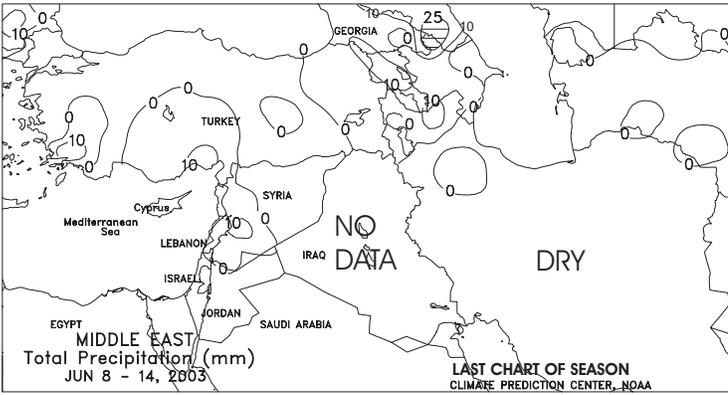




FSU-NEW LANDS

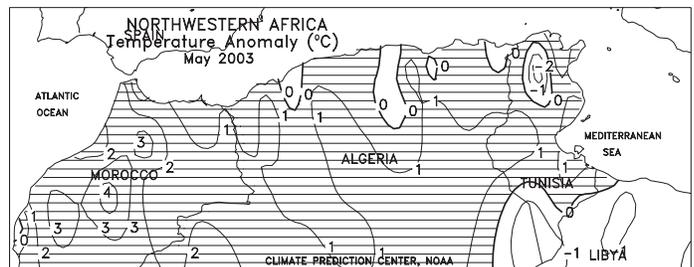
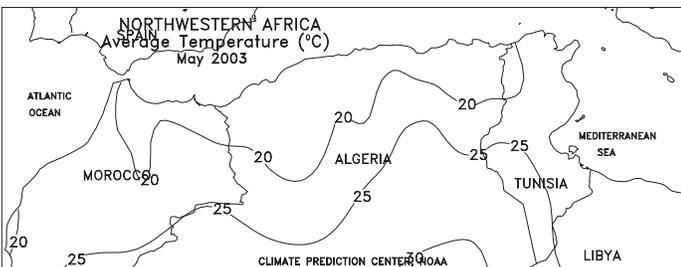
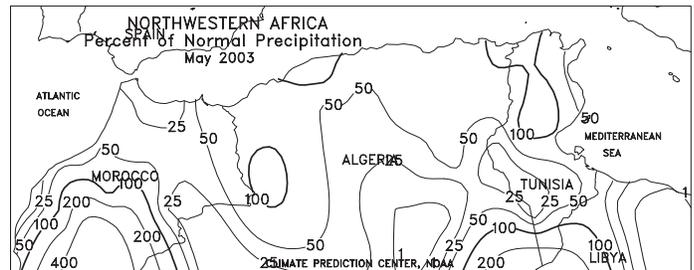
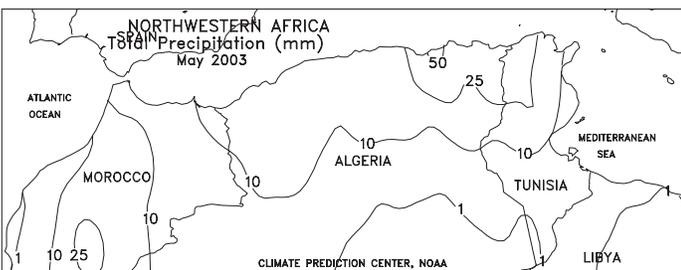
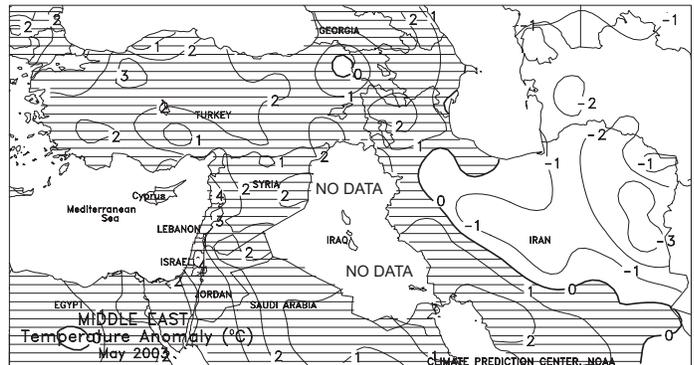
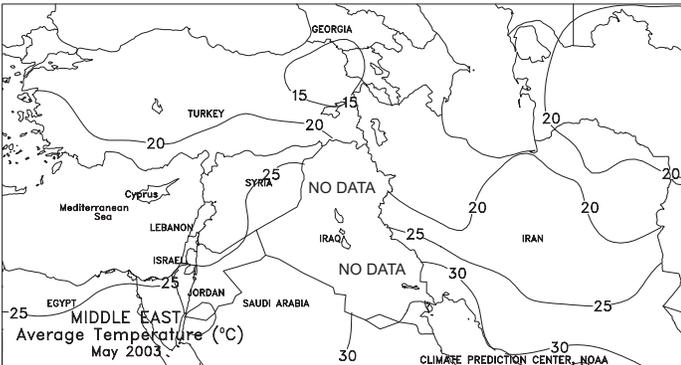
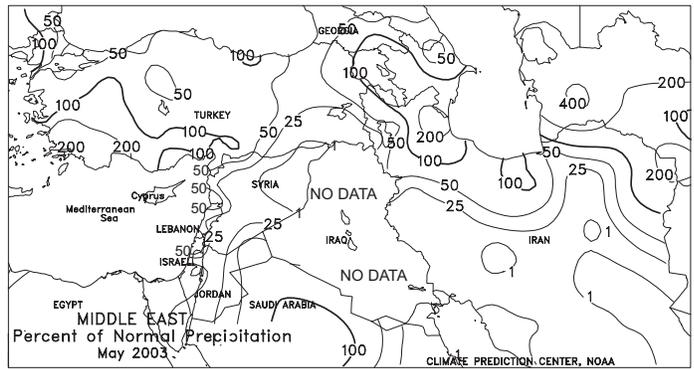
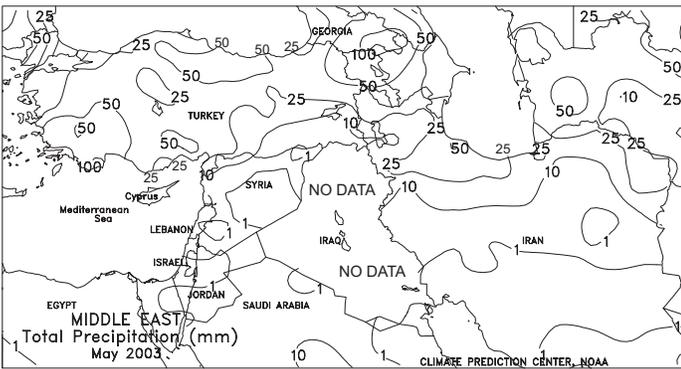
In Russia, light to moderate showers (3-25 mm or more) spread from the Urals eastward through Siberia, maintaining adequate topsoil moisture for spring grain emergence and early plant establishment. Unseasonably cool weather (weekly temperatures averaging 2 to 5 degrees C below normal) slowed spring grain emergence in the Urals, while unseasonably mild weather (weekly temperatures averaging 2 to 5 degrees C above normal) promoted rapid crop emergence farther east in Siberia. In Kazakstan, cool (weekly temperatures averaging 3 to 5 degrees C below normal), showery weather (10-30 mm or more) covered primary spring grain producing areas in the north-central portion of the country, slowing crop emergence. Reports from Kazakstan as of June 12 indicated that spring grain planting was complete. In May, above-normal precipitation fell across most of Kazakstan, delaying spring grain planting. More than twice the normal amount of rain was observed in the western portion of the country. In Russia, wet weather during the first half of May delayed spring grain planting in the Urals and southern areas in Siberia. Total precipitation for the month was above normal in these areas. Below-normal precipitation helped planting activities in western and northern areas in Siberia. Monthly temperatures averaged 1 to 3 degrees C above normal across most of Russia and Kazakstan.

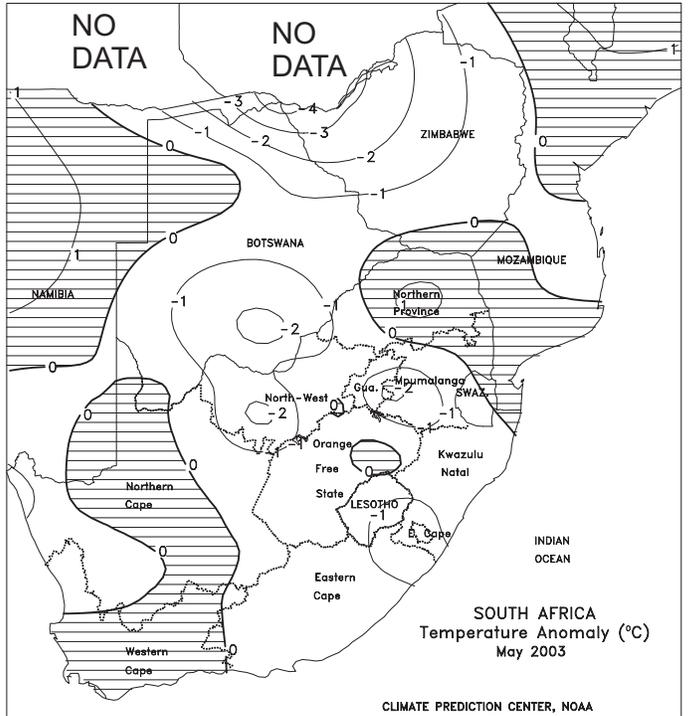
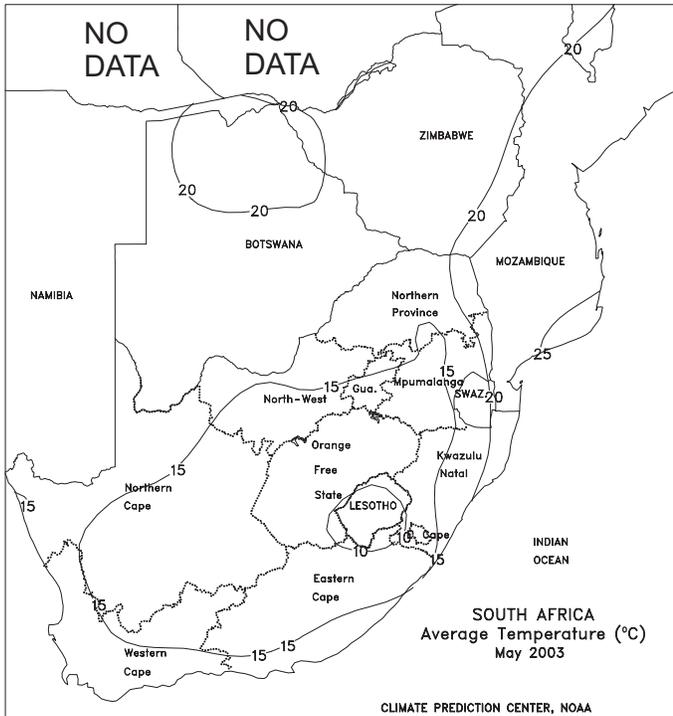
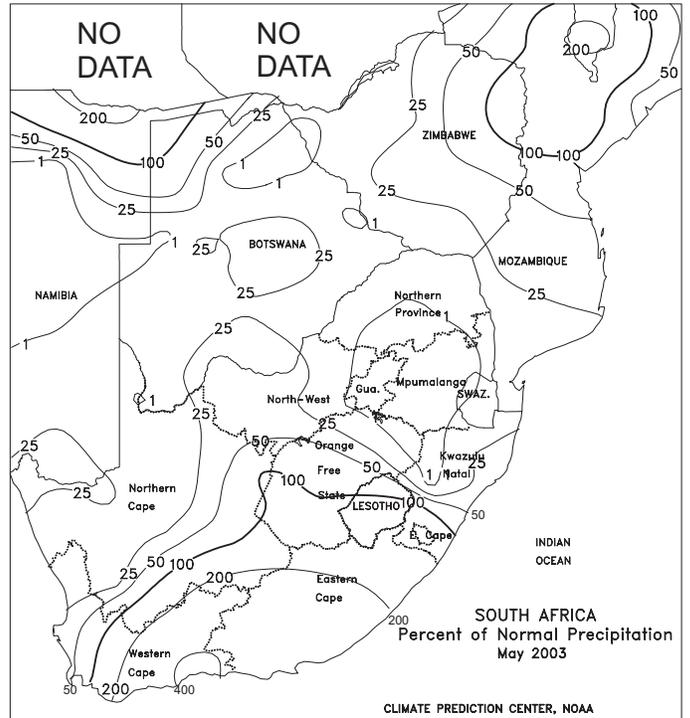
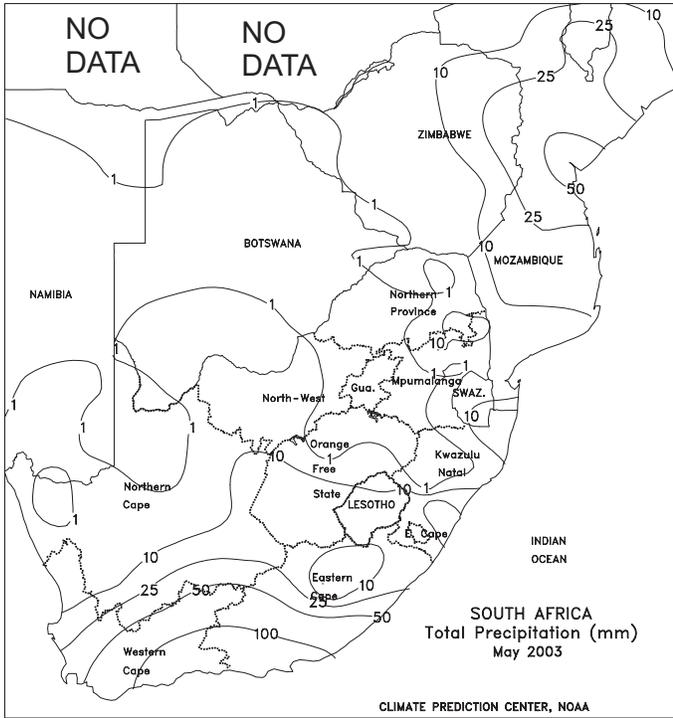




MIDDLE EAST

Across Turkey, Iran, and the eastern Mediterranean, seasonably warm, dry weather favored filling to maturing winter grains. Based on weather reports from neighboring countries, dry weather prevailed across northern Iraq. Temperatures averaged 1 to 3 degrees C above normal across the region, increasing irrigation demands on summer crops. In May, above-normal rainfall across southwestern Turkey increased moisture supplies for summer crops. Elsewhere in Turkey near-normal rainfall favored vegetative to reproductive winter grains. In western Iran, May rainfall averaged below normal, except near the Caspian Sea coast. However, late-May and early-June rain benefited winter grains. Across the eastern Mediterranean, seasonably dry, warm weather favored filling to maturing winter grains. (*Weekly summaries for the Middle East will be discontinued until next year's planting season. Monthly summaries will continue each month.*)



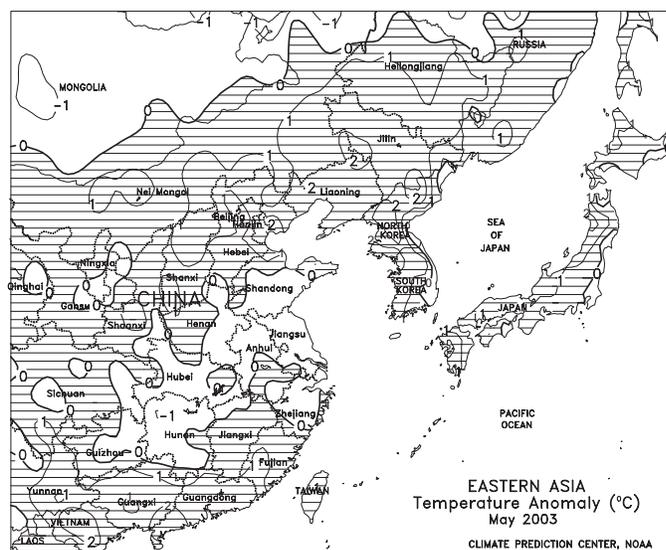
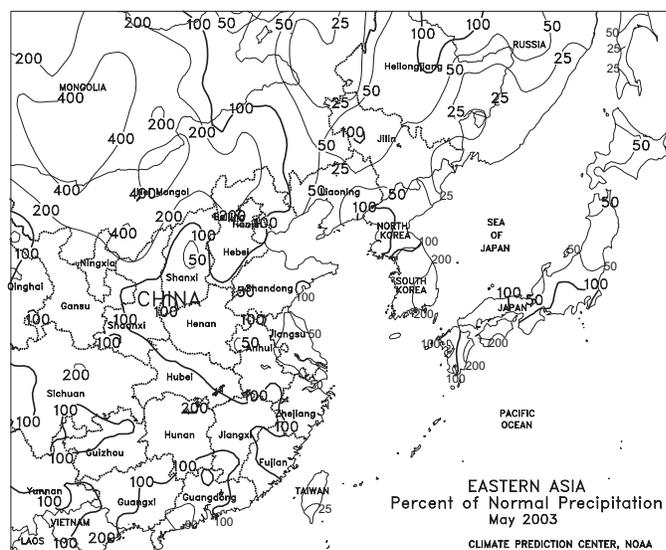
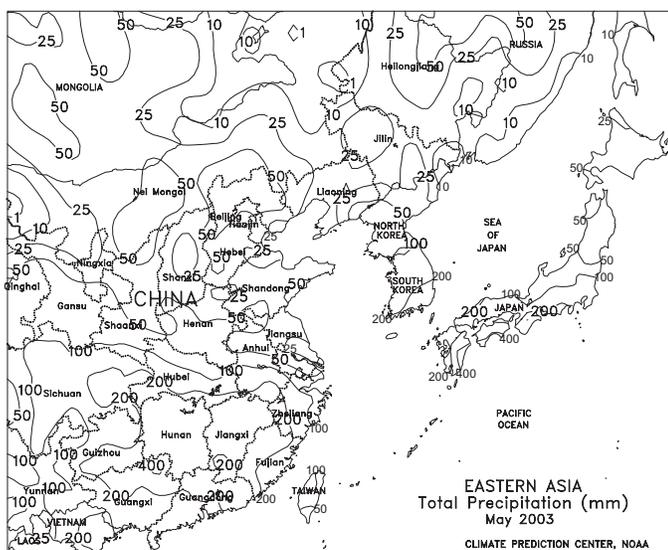


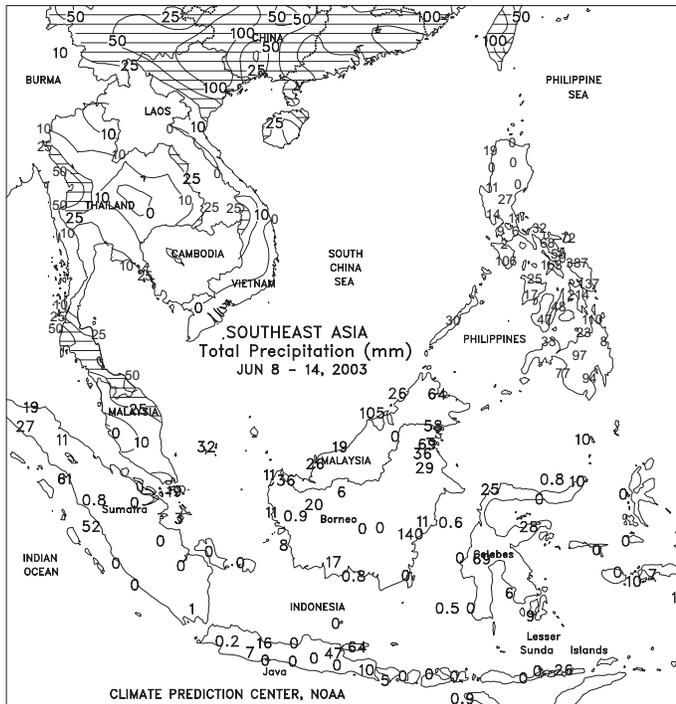


EASTERN ASIA

A slow-moving storm brought highly beneficial rain to vegetative summer crops in Manchuria and on the North China Plain. Some pockets of dryness persisted in northern growing areas (portions of Heilongjiang) but elsewhere, rainfall totaled 10-50 mm or more, with heaviest amounts recorded in previously dry areas of southwestern Manchuria. The showers also helped to lower temperatures in northeastern China, but summer warmth (highs in the upper 20s and lower 30s degrees C) returned by week's end. On the North China Plain, the return to sunny skies and drier, warmer weather improved conditions for unharvested winter wheat. In southern China, widespread showers (25-50 mm or more) maintained irrigation levels for rice and other summer crops in most interior growing areas, including those in the lower Yangtze Valley that had been trending dry. Inundating rain (100-200 mm or more) brought local flooding to the southern coast (Guangdong). Temperatures in the south averaged near to below normal, with highs in the lower to middle 30s degrees C. Southern China's early double-crop rice harvesting begins in June, followed by late double-crop rice planting. Elsewhere, moderate to heavy rain (50-100 mm or more) covered the Korean Peninsula and southern Japan, with lighter showers (10-25 mm) from central Honshu, Japan, northward through Hokkaido. In May, a drying trend intensified across Manchuria, and gradually enveloped the North China Plain, limiting moisture for

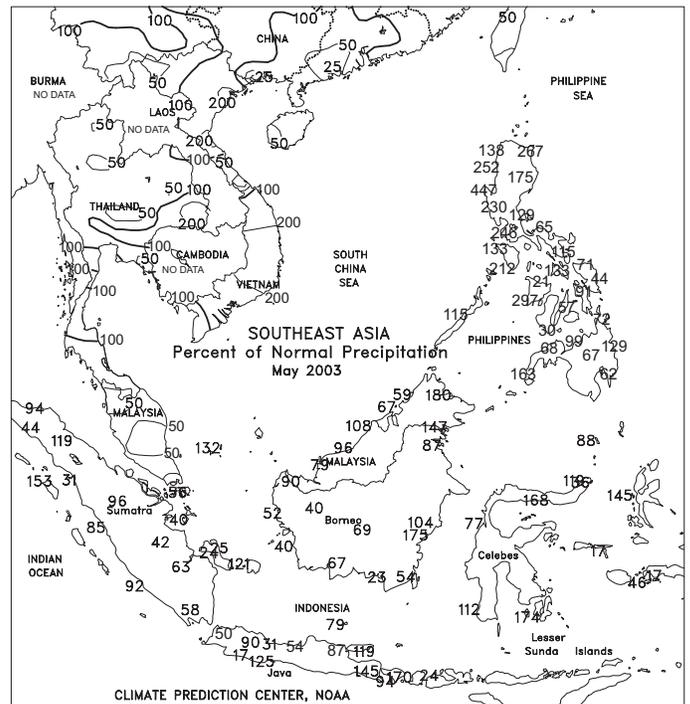
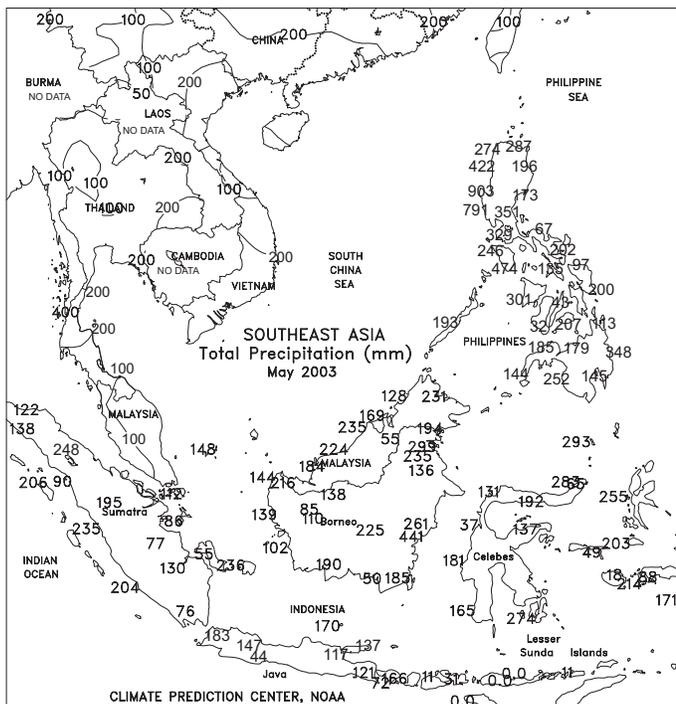
summer crop establishment. However, the dry weather promoted winter wheat harvesting and early maturation. A drying trend also began in the lower Yangtze Valley, spurring development of rice and other summer crops but increasing irrigation requirements. Elsewhere in southern China, frequent, widespread rain maintained irrigation levels for rice and other summer crops throughout the month. May precipitation was near to above normal on most of the Korean Peninsula and in southern Japan, but below normal in northeastern North Korea and in Japan's northern crop areas.

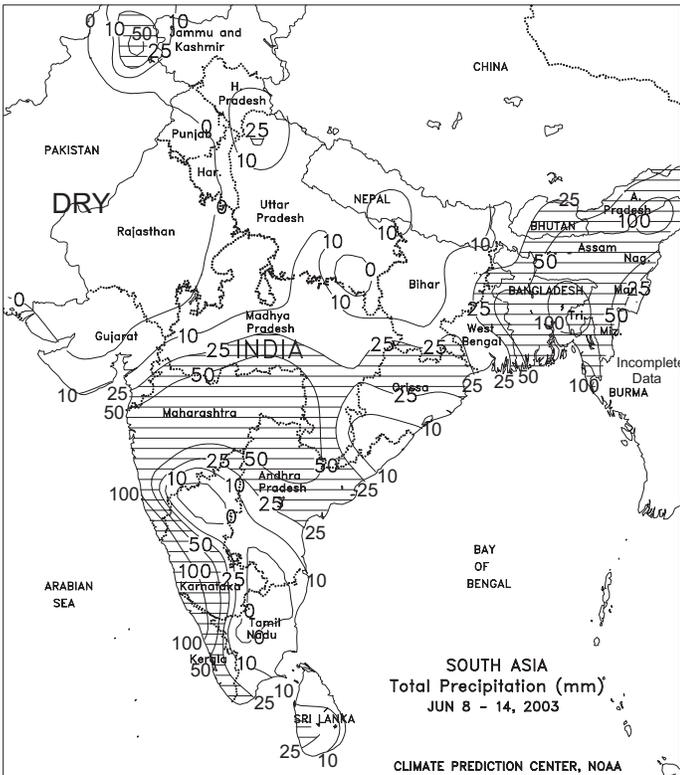
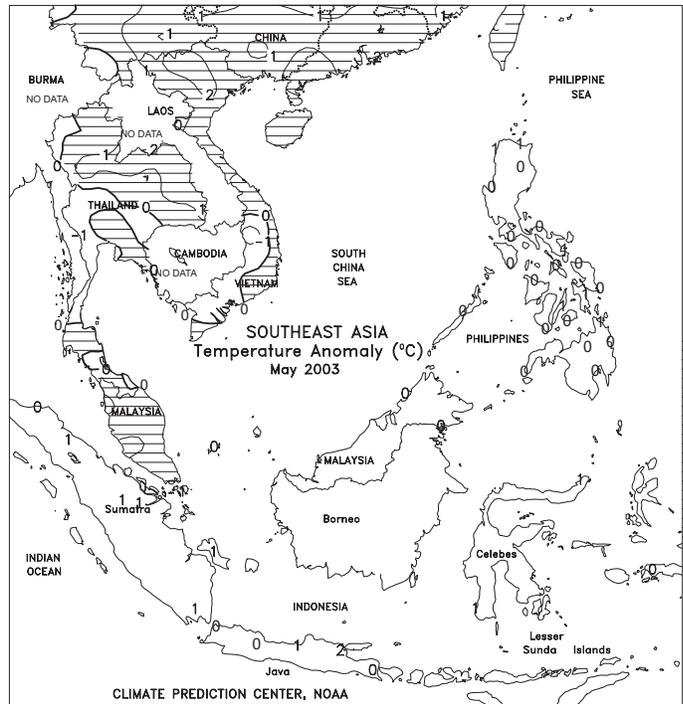
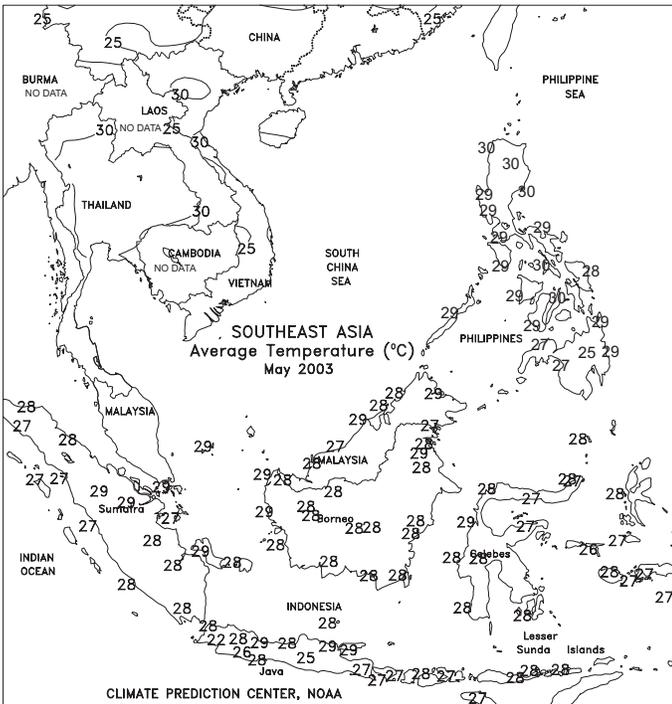




SOUTHEAST ASIA

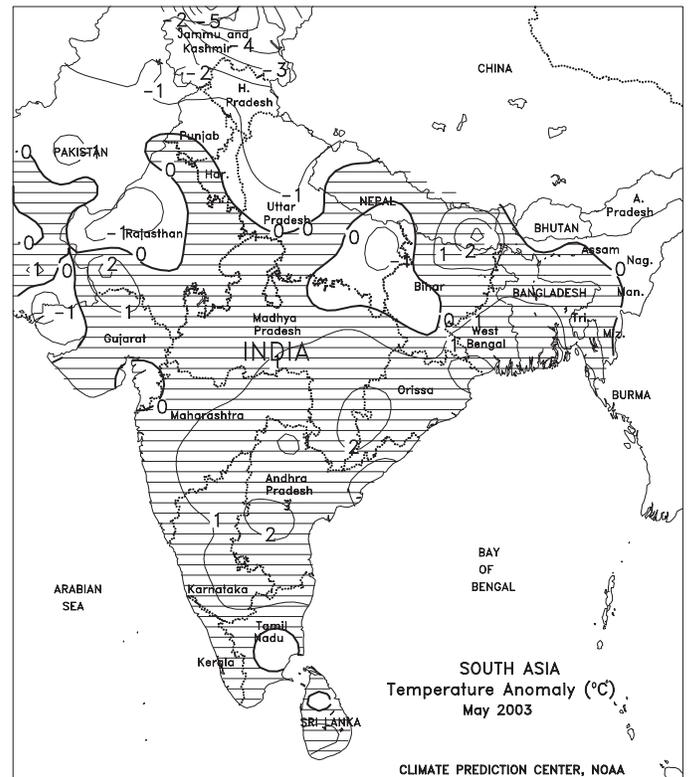
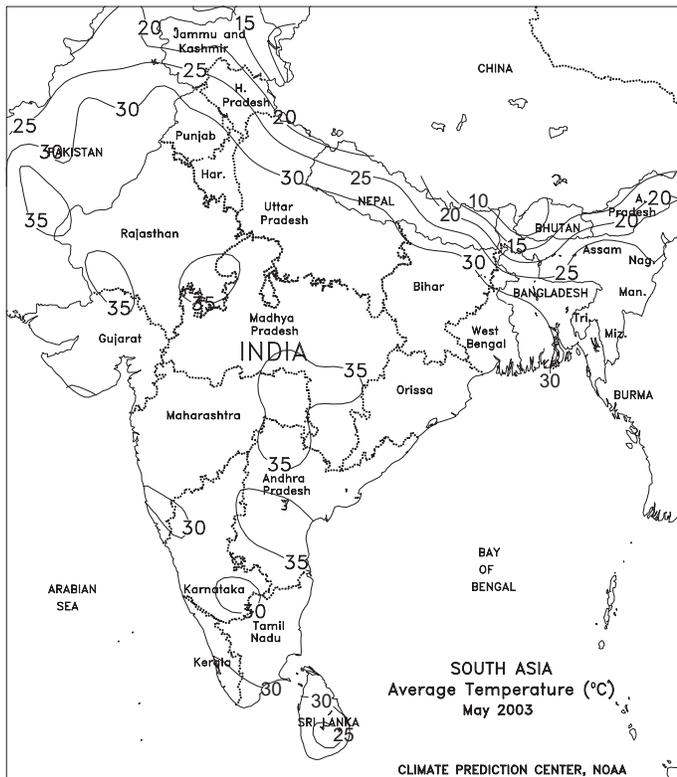
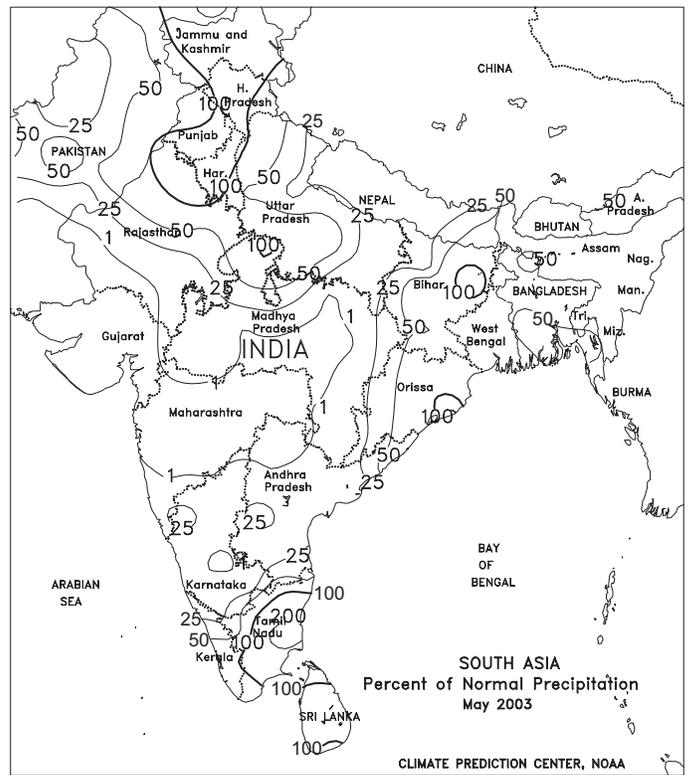
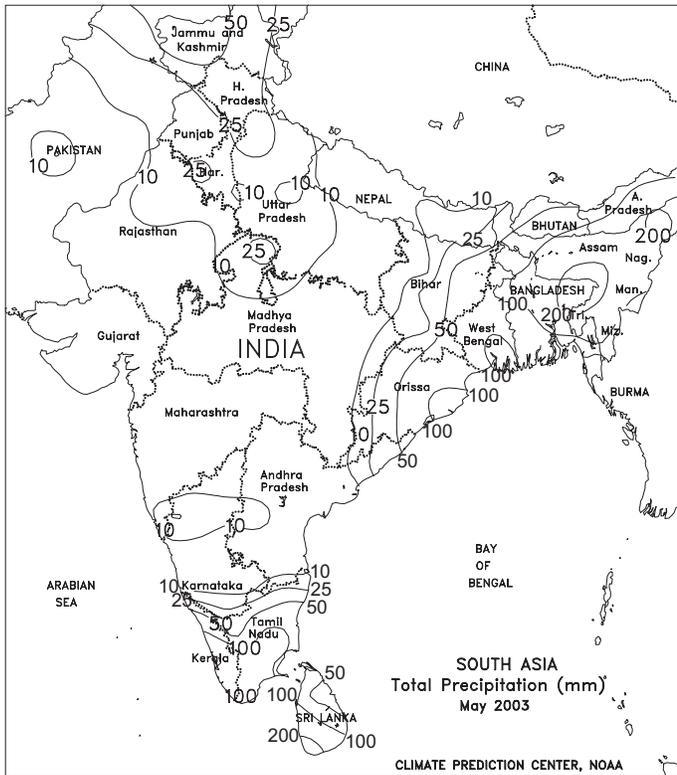
Generally dry weather prevailed in Thailand, reducing moisture supplies for rice nearing reproduction and corn that is in the moisture critical silking stage. Showers (25-100 mm) in northern Vietnam boosted moisture supplies for summer-autumn and 10th month rice nearing reproduction. Dry weather eased excessive wetness in the northern Philippines, while showers (25-100 mm) favored rice and corn in central and southern Philippines. Generally light showers fell over oil palm areas of peninsular Malaysia and Sumatra. In May, below-normal rainfall reduced moisture supplies for pre-planting activities in Thailand. In Vietnam, above-normal rainfall favored vegetative summer-autumn rice. Tropical storm Linfa brought heavy showers to the northern Philippines, causing some damage to rice and corn. Generally dry weather prevailed in peninsular Malaysia and Sumatra, reducing moisture supplies for oil palm.

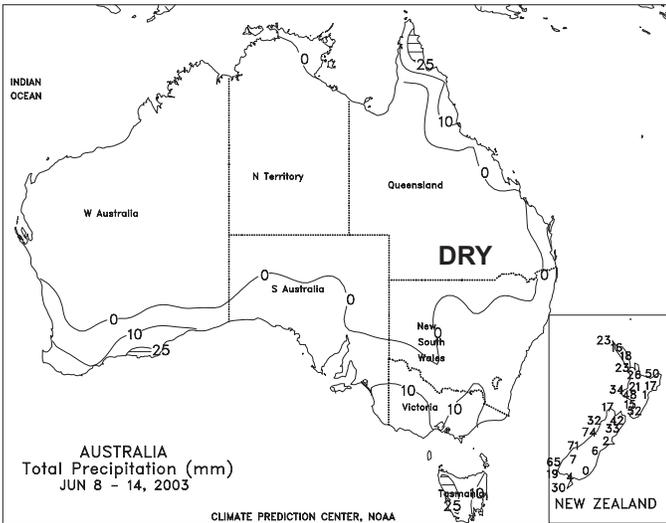




SOUTH ASIA

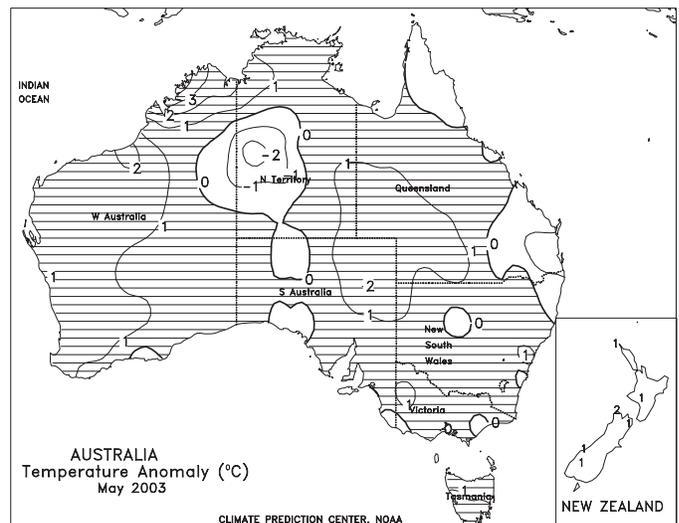
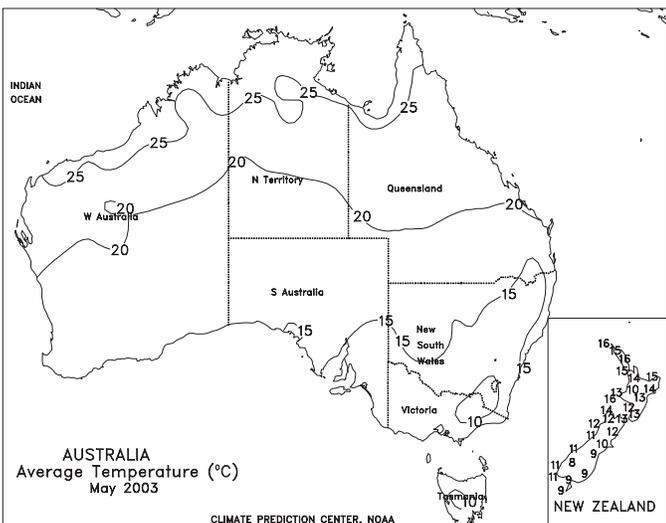
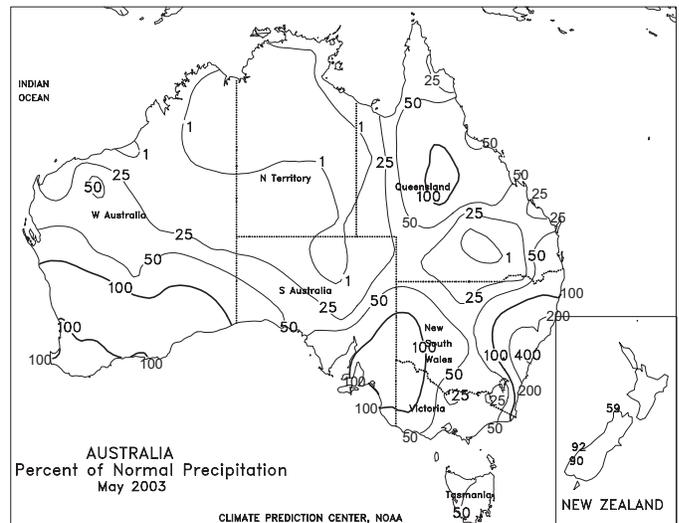
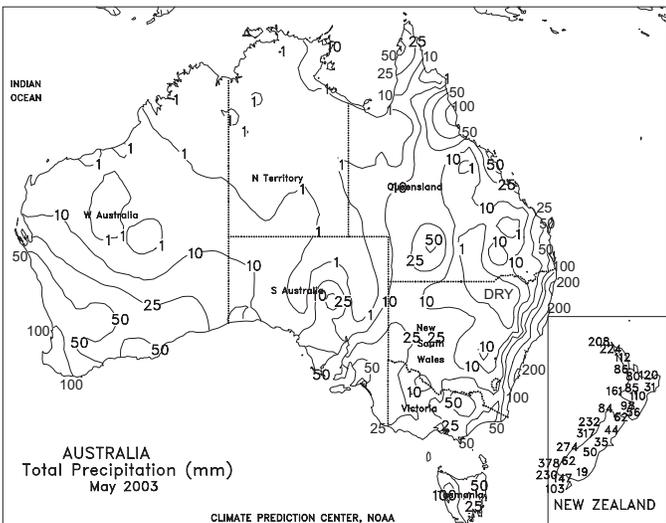
Monsoon showers progressed northward into the central region of India, allowing groundnut and cotton planting to begin in Maharashtra and Andhra Pradesh. Showers remained heavy in northeastern India and Bangladesh, causing some flooding. Temperatures remained 1 to 5 degrees C above normal. Typically by mid-June, the monsoon is well established in central India. However, the monsoon remained about one week behind schedule. Seasonably dry weather prevailed during the first half of May, while light pre-monsoon showers fell near the end of the month. Intense heat began to build by the end of May, and a delay in the onset of the monsoon prevented planting activities.

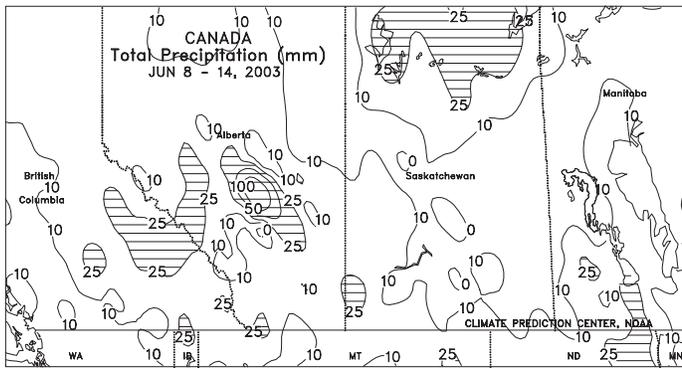




AUSTRALIA

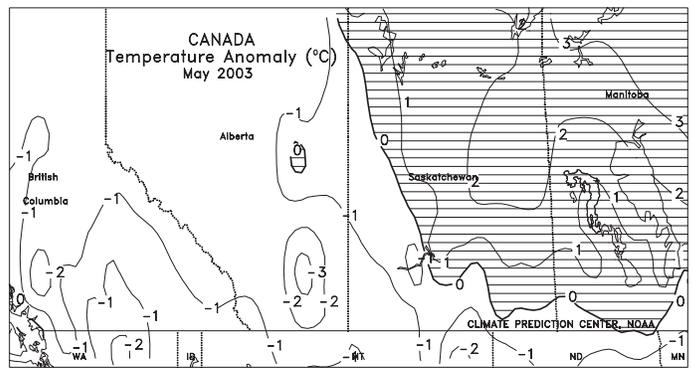
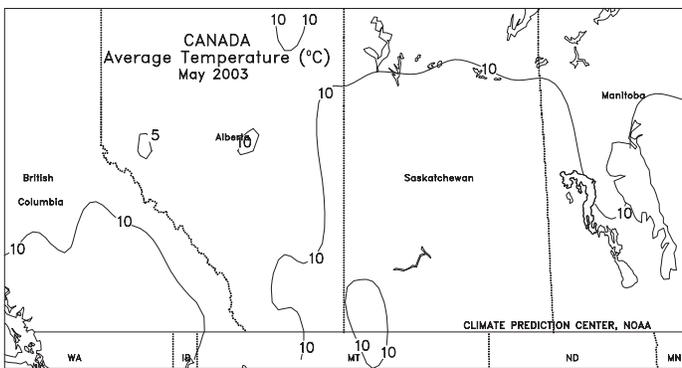
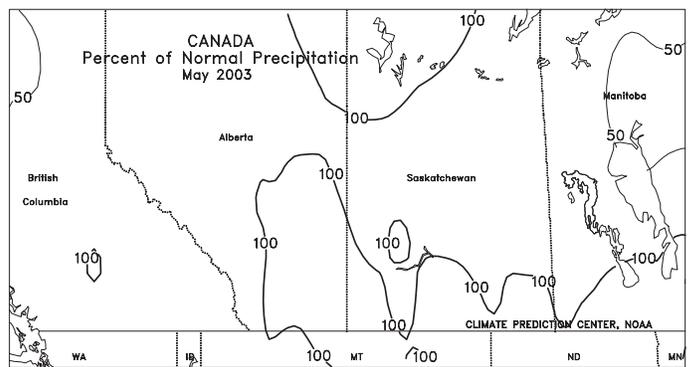
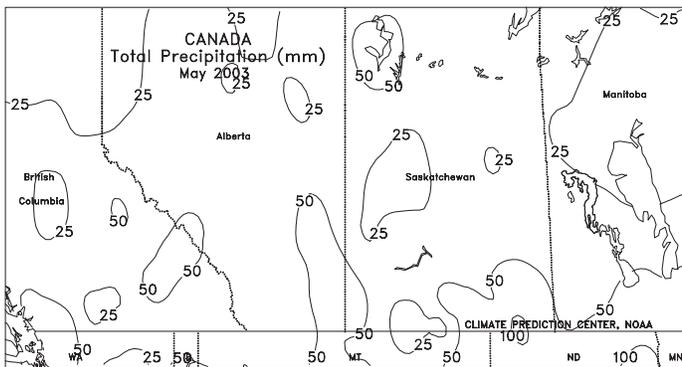
Mostly dry (less than 2 mm) weather in Western Australia spurred fieldwork, but reduced topsoil moisture for vegetative winter grains. Although this region experienced net evaporative losses, unseasonably cool (temperatures 2 degrees C below normal) weather minimized these losses. In contrast, light showers (2-13 mm) maintained topsoil moisture in parts of South Australia and western Victoria, likely encouraging additional winter grain planting and helping early development. The rainfall during the past two weeks has been beneficial for winter grains, although rainfall must continue to improve subsoil moisture and end the year-long drought that has gripped this region. Similarly, soaking rains are still needed throughout the remainder of Victoria and southern New South Wales to eradicate the extreme drought plaguing this region. Widely scattered showers (generally less than 2 mm) were welcomed this week, but were much too light to significantly improve drought-depleted moisture supplies or encourage widespread winter grain planting. Farther north, mostly dry (generally less than 2 mm) weather continued across northern New South Wales and southern Queensland, further reducing soil moisture for vegetative winter grains. Temperatures in southern and eastern Australia were generally seasonable. In May, soaking rains and periods of dryness favored winter wheat planting and early crop development in Western Australia. In southeastern Australia, showers boosted topsoil moisture in the west, while dry weather maintained extreme drought in the east. Following early autumn rains, recent dryness in northern New South Wales and southern Queensland slowed wheat development.





CANADA

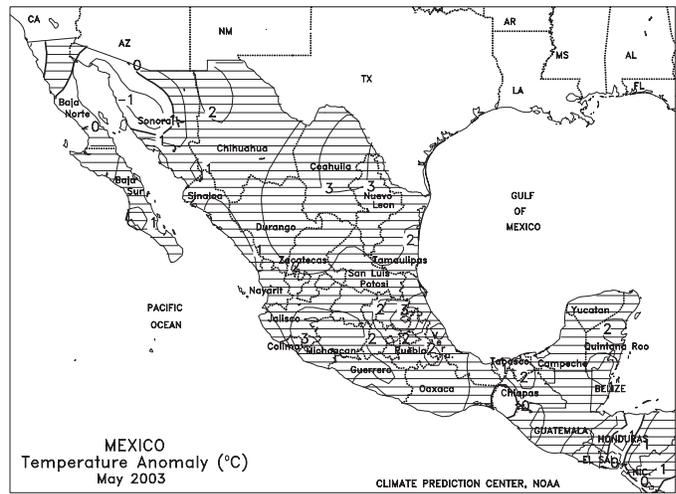
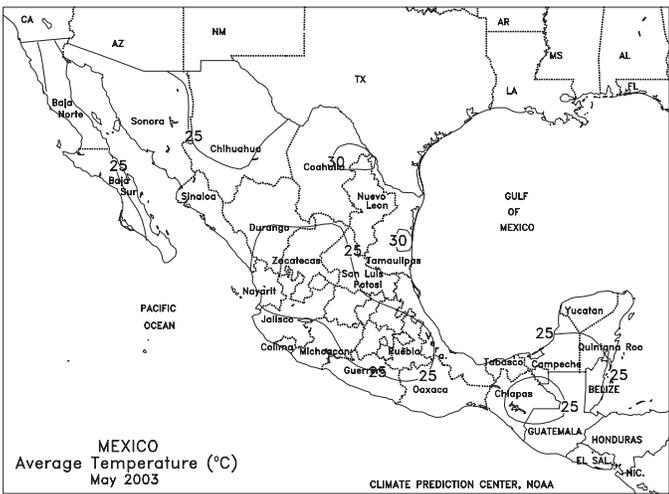
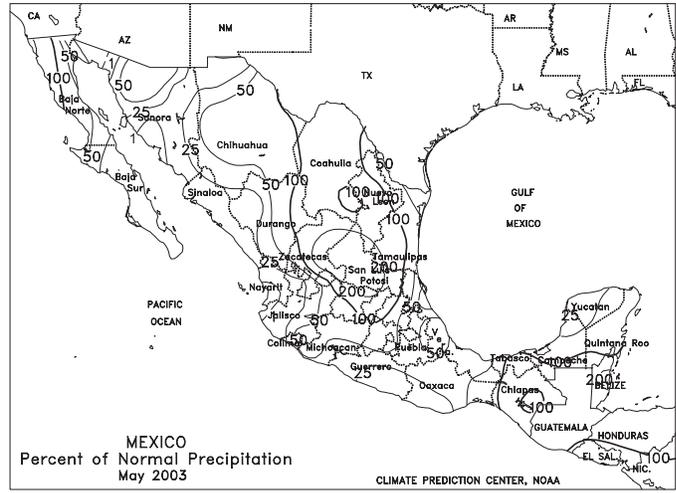
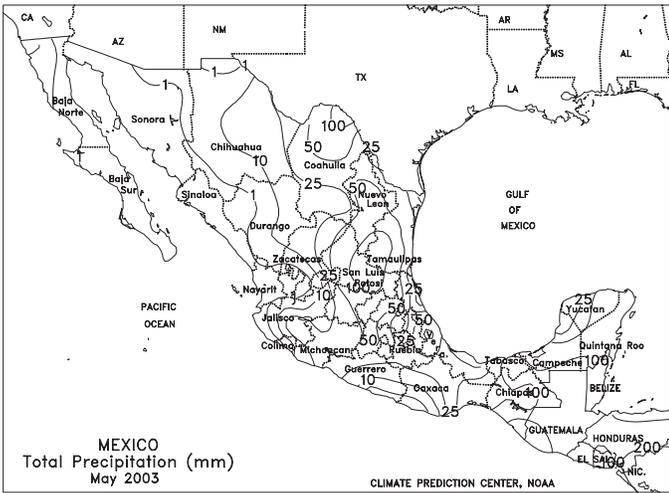
Showers (5-25 mm, locally exceeding 50 mm) continued across the Prairies, increasing topsoil moisture for emerging spring grains and oilseeds. Temperatures averaged near to below normal in the main growing areas, with lows staying above freezing at most locations. However, temperatures surged to the upper 20s degrees C late in the week, spurring germination and early development. Conditions are generally favorable for spring crop establishment, although long-term dryness remains a concern in some northern growing areas of Saskatchewan, Manitoba, and Alberta's Peace River Valley. In eastern Canada, mild, showery weather (highs reaching the middle 20s degrees C, with rainfall exceeding 25 mm in most areas) increased moisture for summer crop establishment and winter wheat development, but likely caused additional local delays in soybean planting. During May, showers and seasonal warming aided germination of Prairie spring crops, but freezing temperatures (lows of -2 degrees C or less) reportedly necessitated local replanting of emerged grains and oilseeds. Cool, wet weather in eastern Canada slowed development of winter wheat and pastures, and caused early delays in corn and soybean planting.

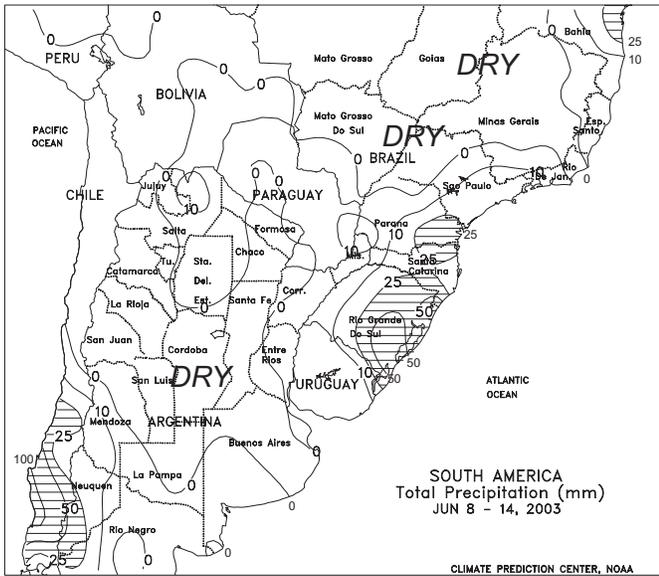




MEXICO

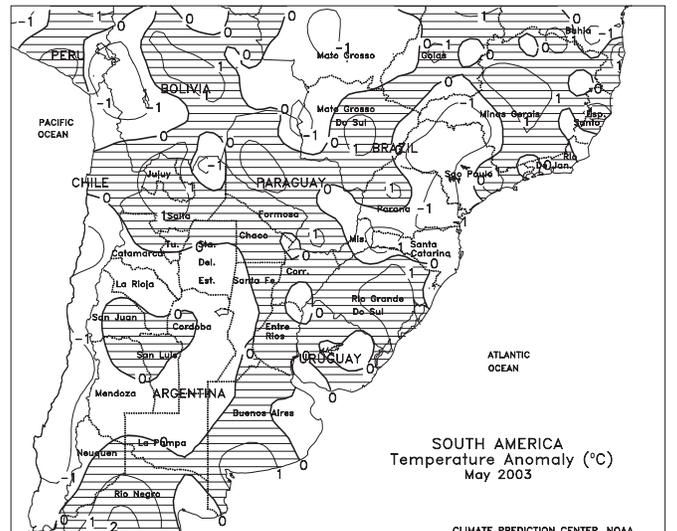
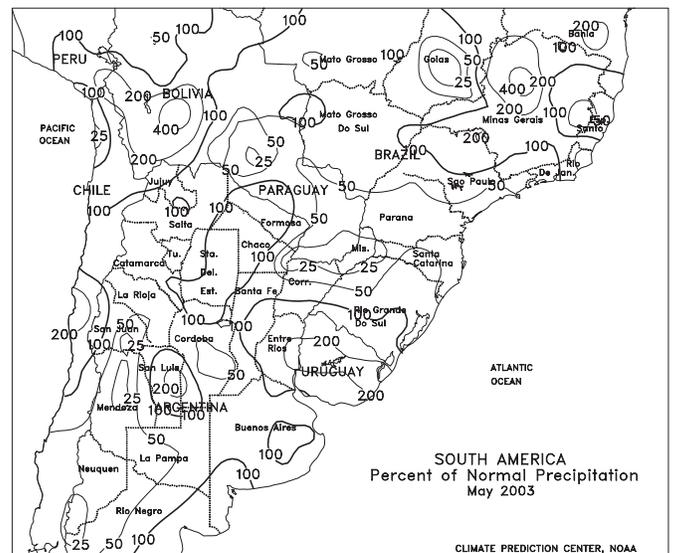
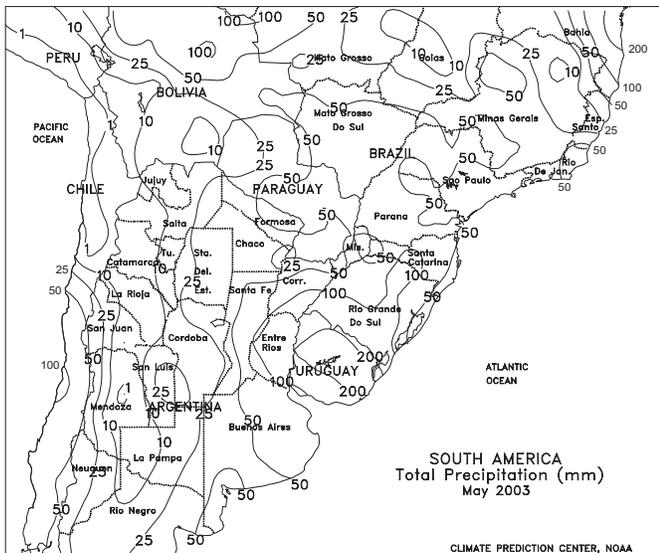
Widespread moderate showers (10-60 mm or more) covered the entire Southern Plateau Corn Belt, boosting soil moisture for summer crop planting and germination. This was the first significant rain of the season across the western Corn Belt. Scattered showers (5-25 mm or more) fell across northeastern Mexico, providing some moisture for summer crops and pastures, but more rain is needed. Dry weather prevailed across western Mexico, favoring vegetable fieldwork. However, rain is needed alleviate the long-term drought along western Sierra Madre. This region typically receives the majority of it's rain during the summer monsoon season (July to October). Widespread showers (25-100 mm) maintained adequate moisture supplies across Honduras. Temperatures averaged 1 to 2 degrees C above-normal across most of Mexico and near to slightly below-normal across northwestern Mexico. During May, near- to above-normal rainfall fell across northeastern, east-central, and southeastern Mexico, increasing soil moisture supplies for pre-planting fieldwork for summer crops. Below-normal rainfall was reported across southern and western Mexico, where drought continued across the western Sierra Madre watershed. Temperatures averaged 1 to 3 degrees C above normal across most of the country, increasing irrigation demands for spring vegetables.





SOUTH AMERICA

Mostly dry, warmer-than-normal weather dominated primary agricultural areas of Argentina and Brazil. In Argentina, conditions were especially favorable for late summer crop harvesting and winter wheat planting, with a warming trend in southern growing areas (La Pampa and Buenos Aires) helping to warm soils for germination following frosty weather (lows from -5 to 0 degrees C) on June 7 and 8. In Brazil, moderate showers (10-25 mm or more) were confined to eastern growing areas from southeastern Rio Grande do Sul to eastern Sao Paulo. Above-normal temperatures spurred winter wheat emergence and establishment, and benefited filling to maturing second-crop corn. In addition, the lack of cold weather was favorable for citrus and coffee, currently being harvested. In May, Argentine summer crop harvesting generally made good progress, although lingering wetness plagued previously flooded soybean areas of Santa Fe and Entre Rios. Occasional showers maintained generally favorable winter wheat prospects from Buenos Aires, Argentina, northeastward into southern Brazil. The moisture in southern Brazil was also favorable for immature second-crop corn. In Brazil's northeastern interior, a drying trend beginning in early- to mid-May likely reduced moisture levels for immature crops, including corn and cotton.



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PERMIT NO. G-19

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300
