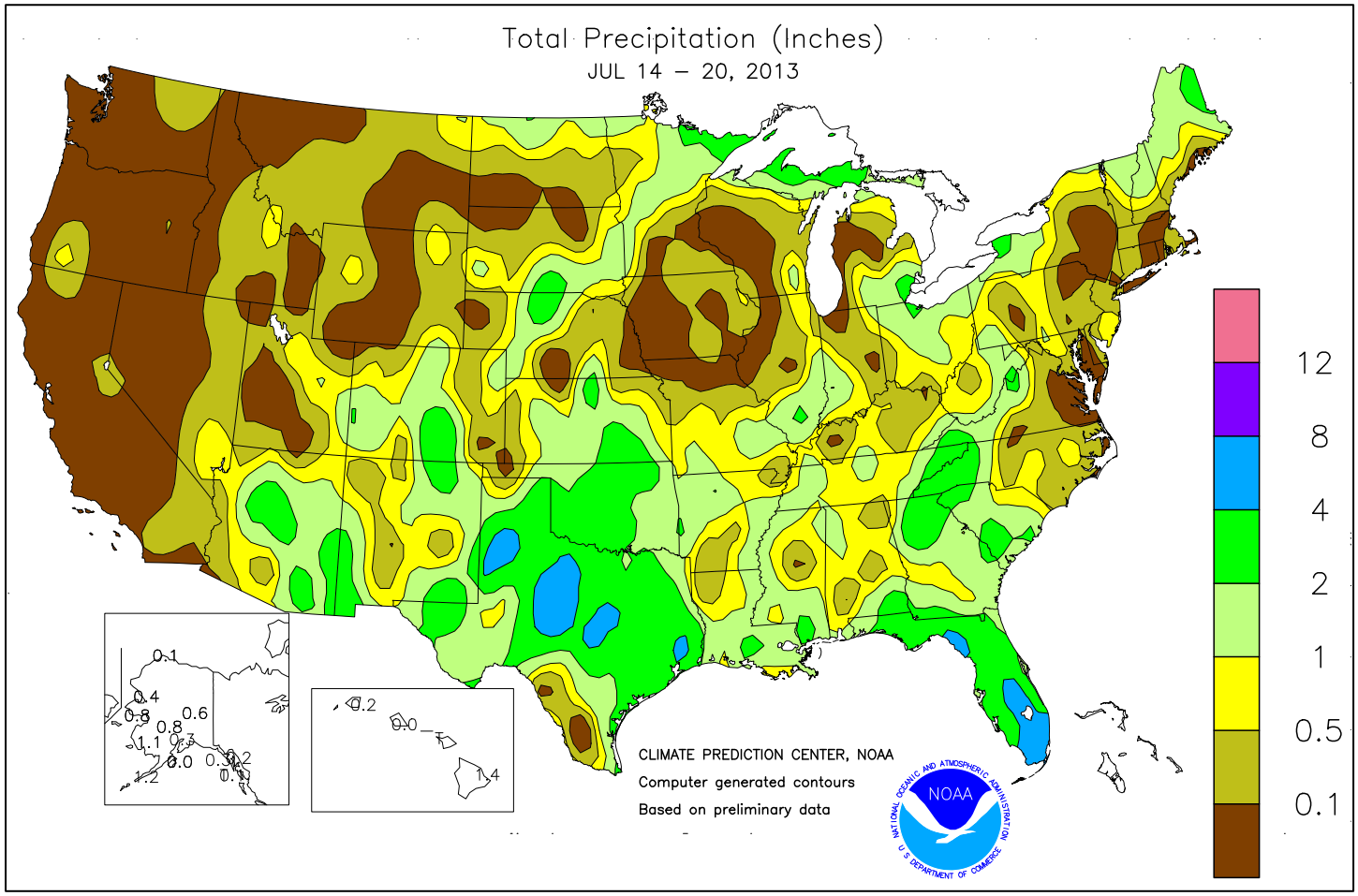
Volume 100, No. 30 http://www.usda.gov/oce/weather July 23, 2013

WEEKLY WEATHER AND CROP BULLETIN

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

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



HIGHLIGHTS

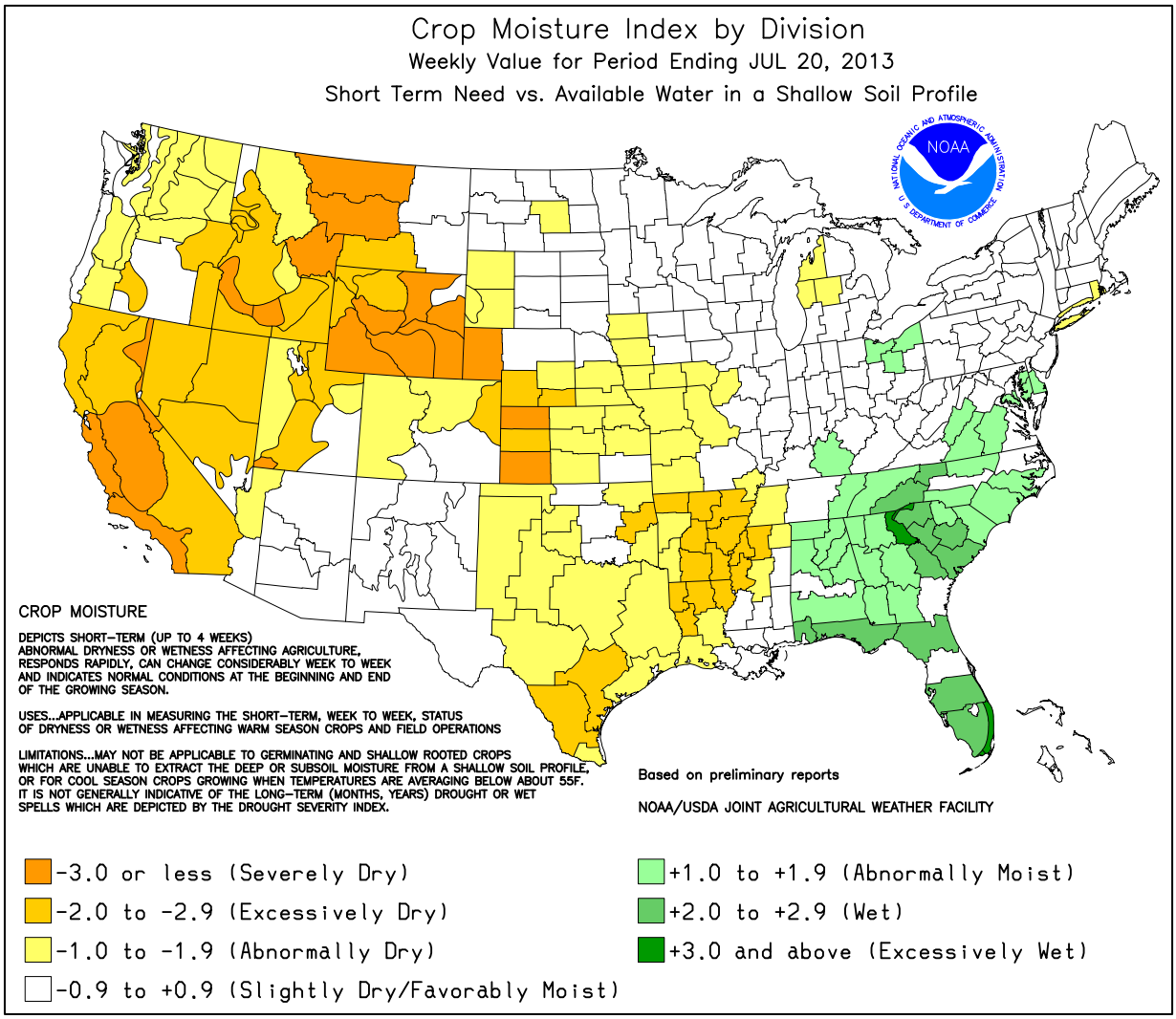
July 14 – 20, 2013

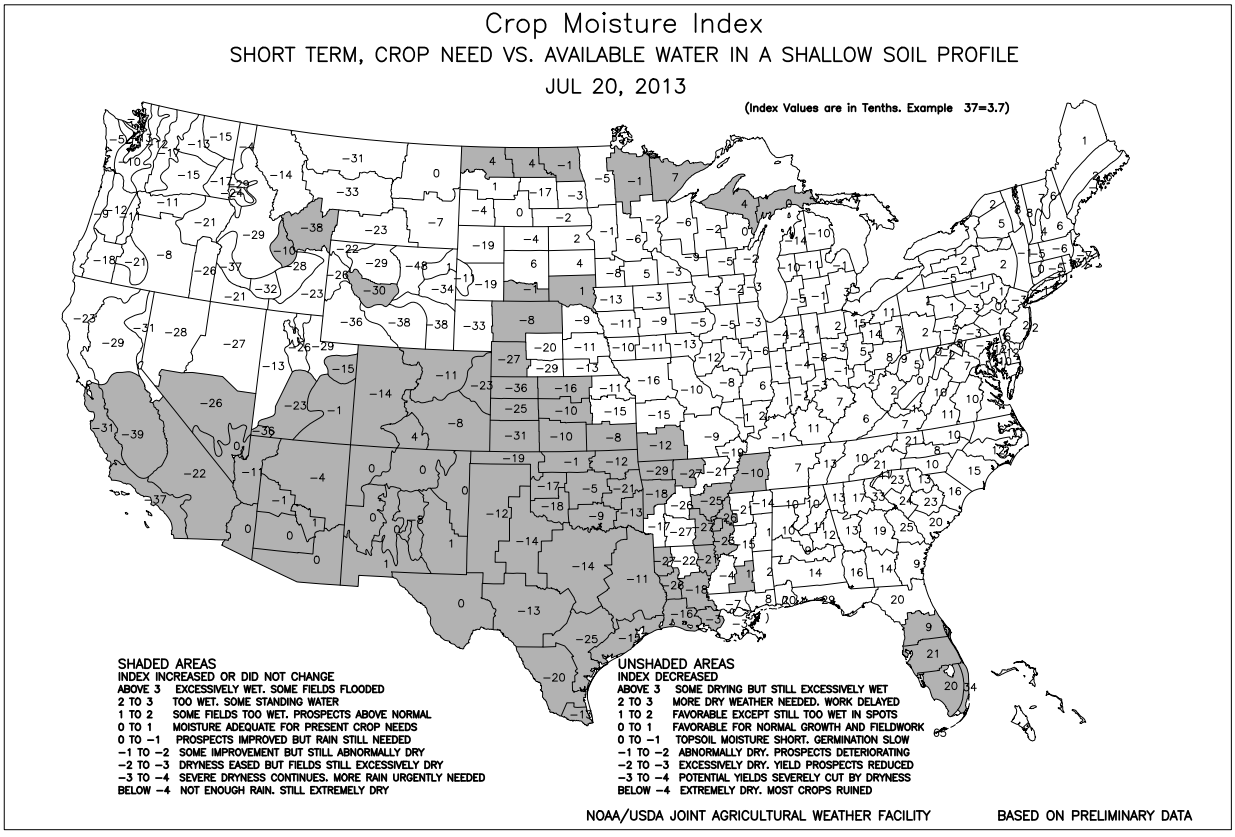
Highlights provided by USDA/WAOB

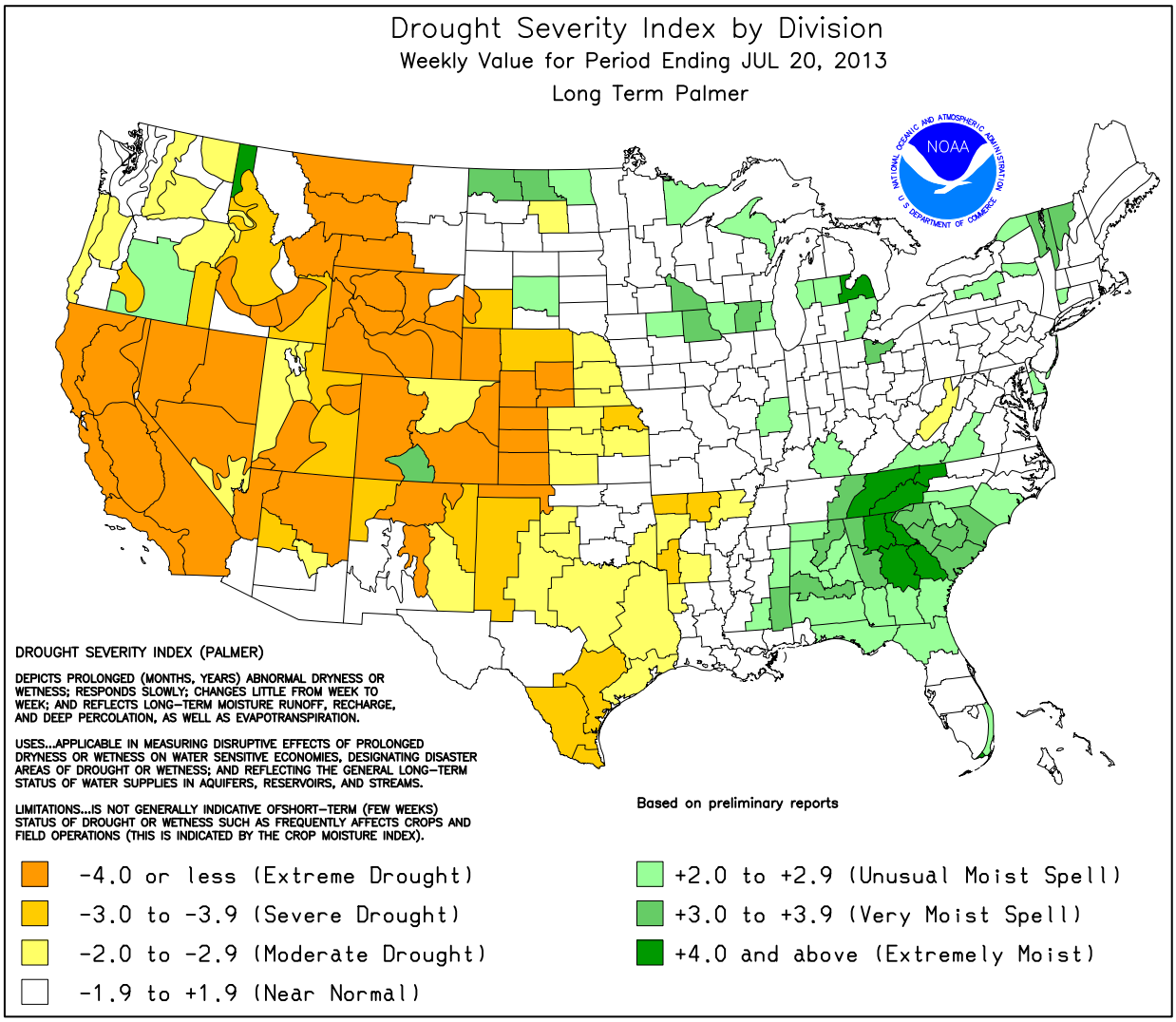
Heavy rain associated with a westward-drifting disturbance provided significant drought relief across **southern sections of the Rockies and Plains**, while short-term dryness and hot conditions increased stress on reproductive summer crops in the **southwestern Corn Belt**. Weekly rainfall totaled 2 to 4 inches or more in a broad area centered on the **southern Plains**, triggering flash flooding but aiding drought-stressed rangeland, pastures, and summer crops. In contrast, short-term rainfall deficits mounted in a **Midwestern** region centered

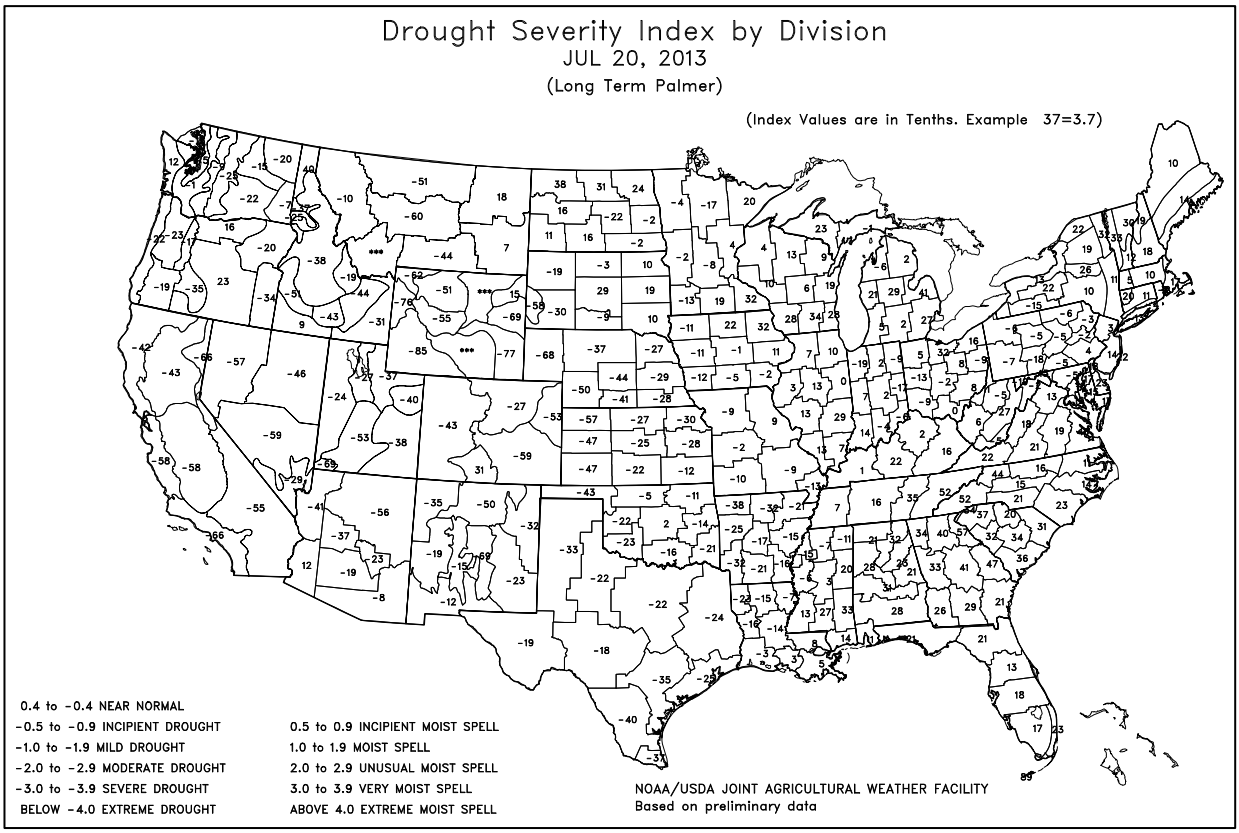
(Continued on page 7)

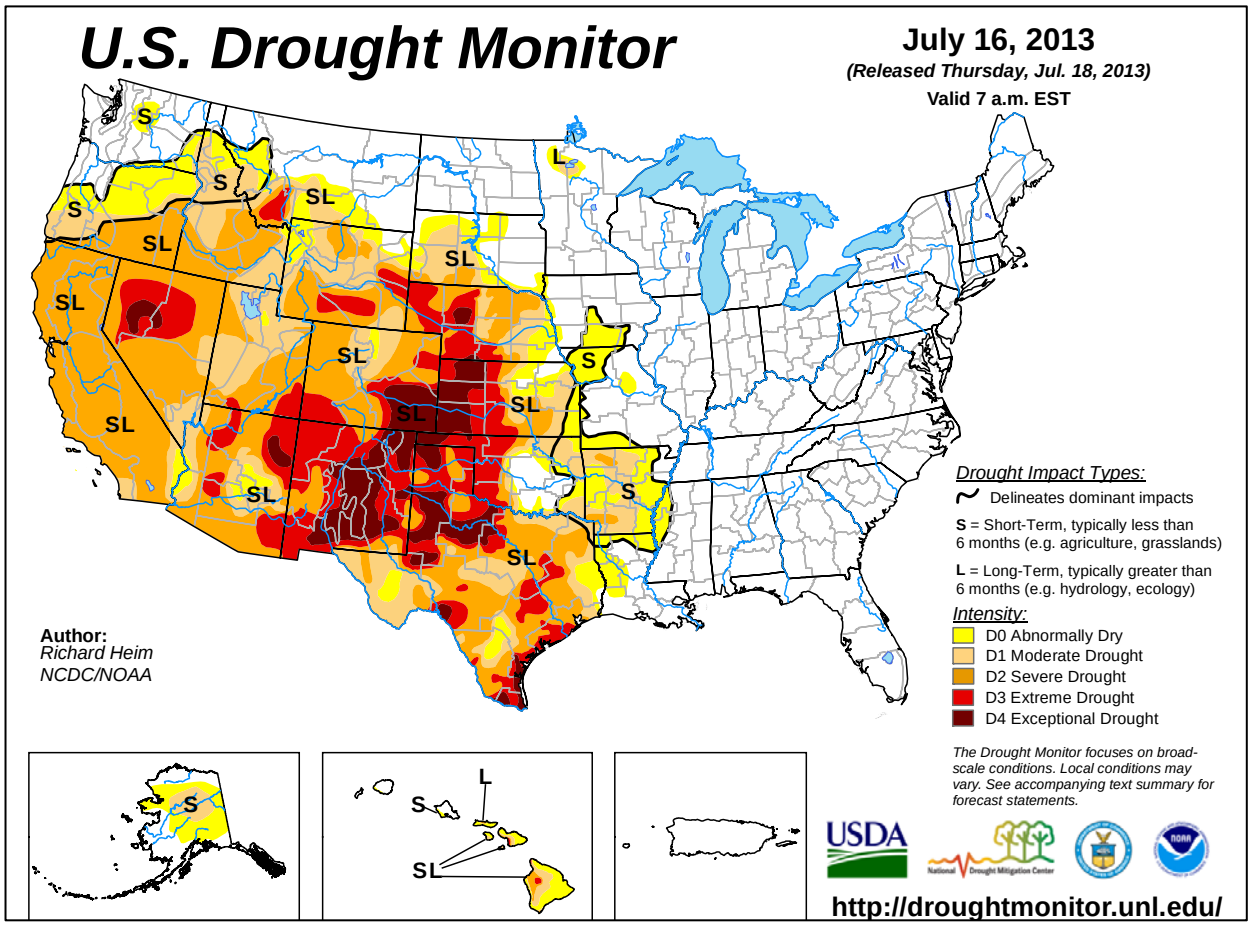
Contents

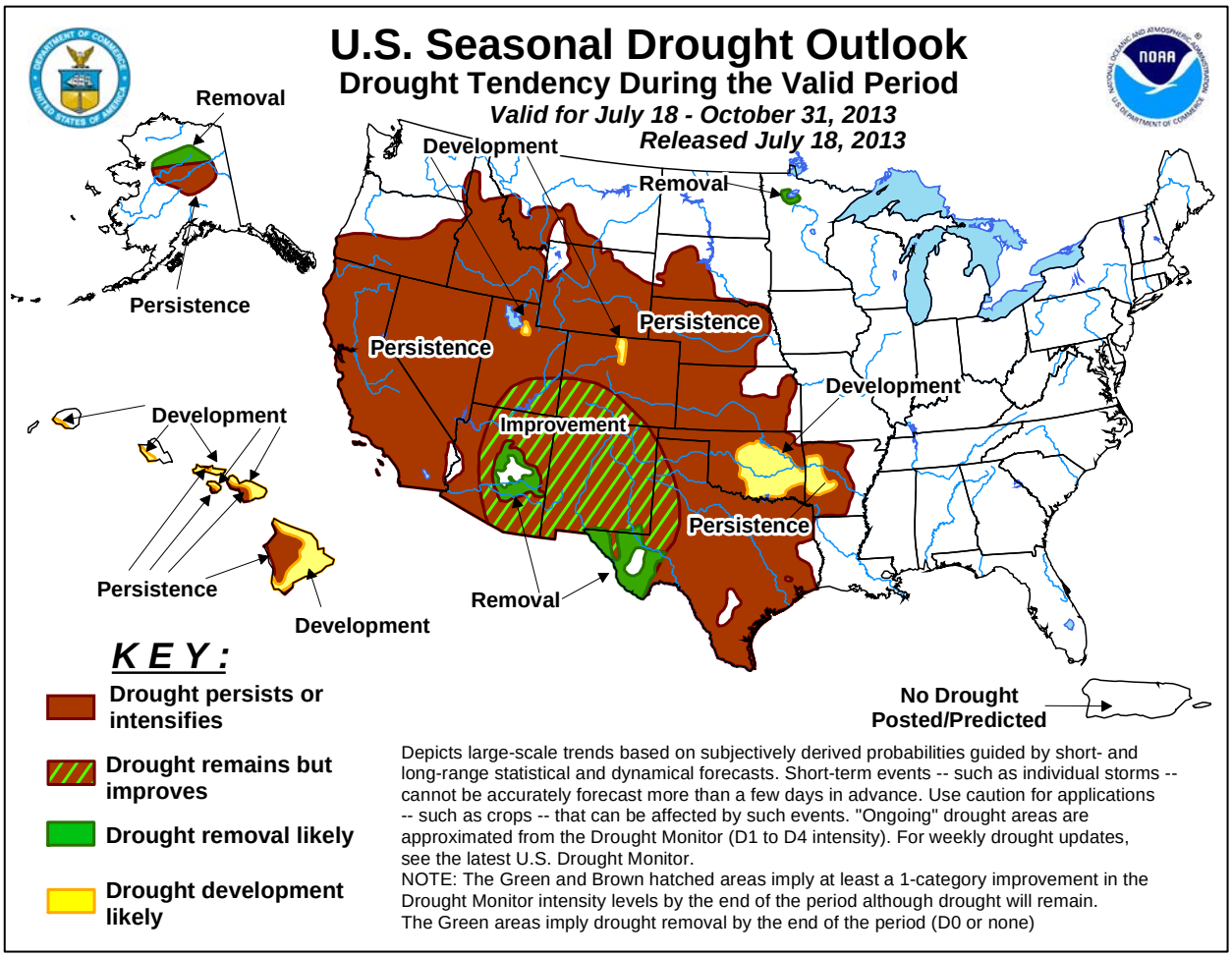

Crop Moisture Index by Division
Weekly Value for Period Ending JUL 20, 2013
Short Term Need vs. Available Water in a Shallow Soil Profile
NOAA
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND 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 SHALLOW SOIL 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.
Based on preliminary reports
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
-3.0 or less (Severely Dry)
-2.0 to -2.9 (Excessively Dry)
-1.0 to -1.9 (Abnormally Dry)
-0.9 to +0.9 (Slightly Dry/Favorably Moist)
+1.0 to +1.9 (Abnormally Moist)
+2.0 to +2.9 (Wet)
+3.0 and above (Excessively Wet)


Crop Moisture Index
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN A SHALLOW SOIL PROFILE
JUL 20, 2013
(Index Values are in Tenths. Example 37=3.7)
SHADED AREAS
INDEX INCREASED OR DID NOT CHANGE
ABOVE 3 EXCESSIVELY WET. SOME FIELDS FLOODED
2 TO 3 TOO WET. SOME STANDING WATER
1 TO 2 SOME FIELDS TOO WET. PROSPECTS ABOVE NORMAL
0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL ABNORMALLY DRY
-2 TO -3 DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY
-3 TO -4 SEVERE DRYNESS CONTINUES. MORE RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN. STILL EXTREMELY DRY
UNSHADED AREAS
INDEX DECREASED
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED. WORK DELAYED
1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT. GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY. PROSPECTS DETERIORATING
-2 TO -3 EXCESSIVELY DRY. YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DRYNESS
BELOW -4 EXTREMELY DRY. MOST CROPS RUINED
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY DATA


Drought Severity Index by Division
Weekly Value for Period Ending JUL 20, 2013
Long Term Palmer
NOAA
DROUGHT SEVERITY INDEX (PALMER)
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION, AS WELL AS EVAPOTRANSPIRATION.
USES...APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNATING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS, AND STREAMS.
LIMITATIONS...IS NOT GENERALLY INDICATIVE OFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
Based on preliminary reports
-4.0 or less (Extreme Drought)
-3.0 to -3.9 (Severe Drought)
-2.0 to -2.9 (Moderate Drought)
-1.9 to +1.9 (Near Normal)
+2.0 to +2.9 (Unusual Moist Spell)
+3.0 to +3.9 (Very Moist Spell)
+4.0 and above (Extremely Moist)

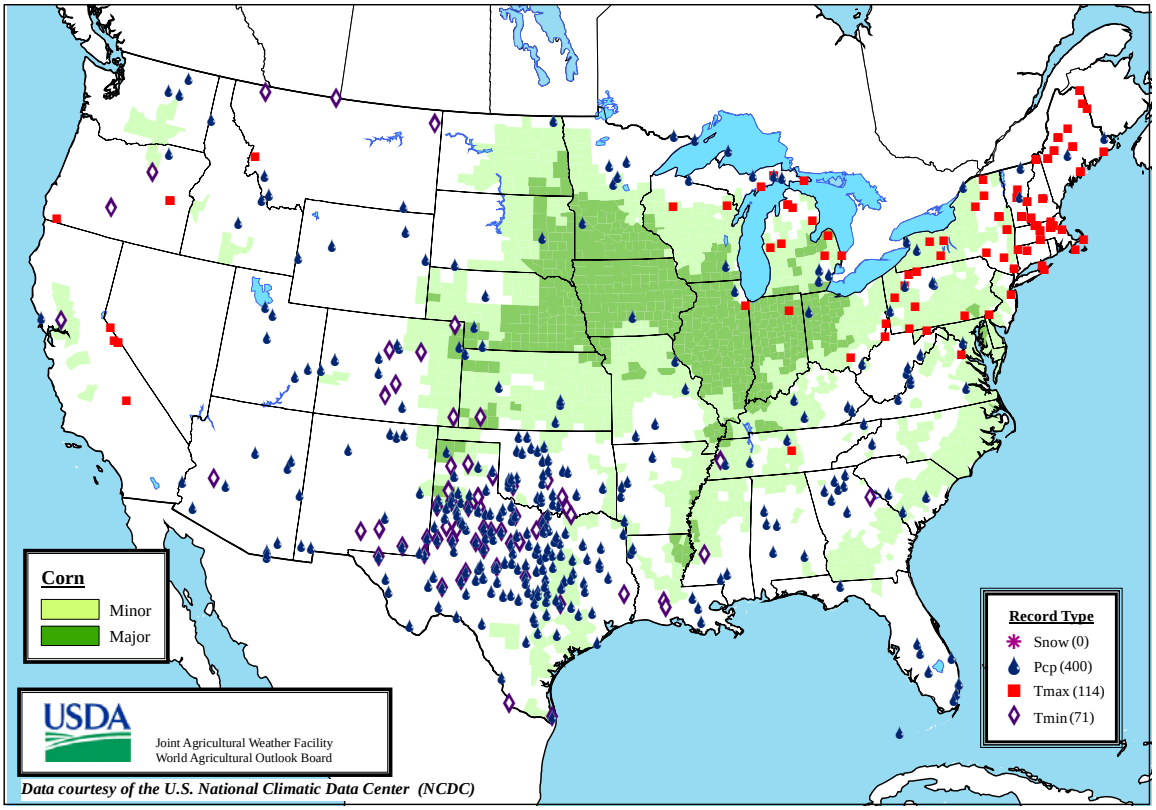

Drought Severity Index by Division
JUL 20, 2013
(Long Term Palmer)
(Index Values are in Tenths. Example 37=3.7)
0.4 to -0.4 NEAR NORMAL
-0.5 to -0.9 INCIPIENT DROUGHT
-1.0 to -1.9 MILD DROUGHT
-2.0 to -2.9 MODERATE DROUGHT
-3.0 to -3.9 SEVERE DROUGHT
BELOW -4.0 EXTREME DROUGHT
0.5 to 0.9 INCIPIENT MOIST SPELL
1.0 to 1.9 MOIST SPELL
2.0 to 2.9 UNUSUAL MOIST SPELL
3.0 to 3.9 VERY MOIST SPELL
ABOVE 4.0 EXTREME MOIST SPELL
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary data


U.S. Drought Monitor
July 16, 2013
(Released Thursday, Jul. 18, 2013)
Valid 7 a.m. EST
Author:
Richard Heim
NCDC/NOAA
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
USDA
http://droughtmonitor.unl.edu/


U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for July 18 - October 31, 2013
Released July 18, 2013
Removal
Persistence
Development
Persistence
Development
Removal
Persistence
Persistence
Development
Improvement
Persistence
Persistence
Development
Removal
No Drought Posted/Predicted
KEY:
Drought persists or intensifies
Drought remains but improves
Drought removal likely
Drought development likely
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor.
NOTE: The Green and Brown hatched areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The Green areas imply drought removal by the end of the period (D0 or none)

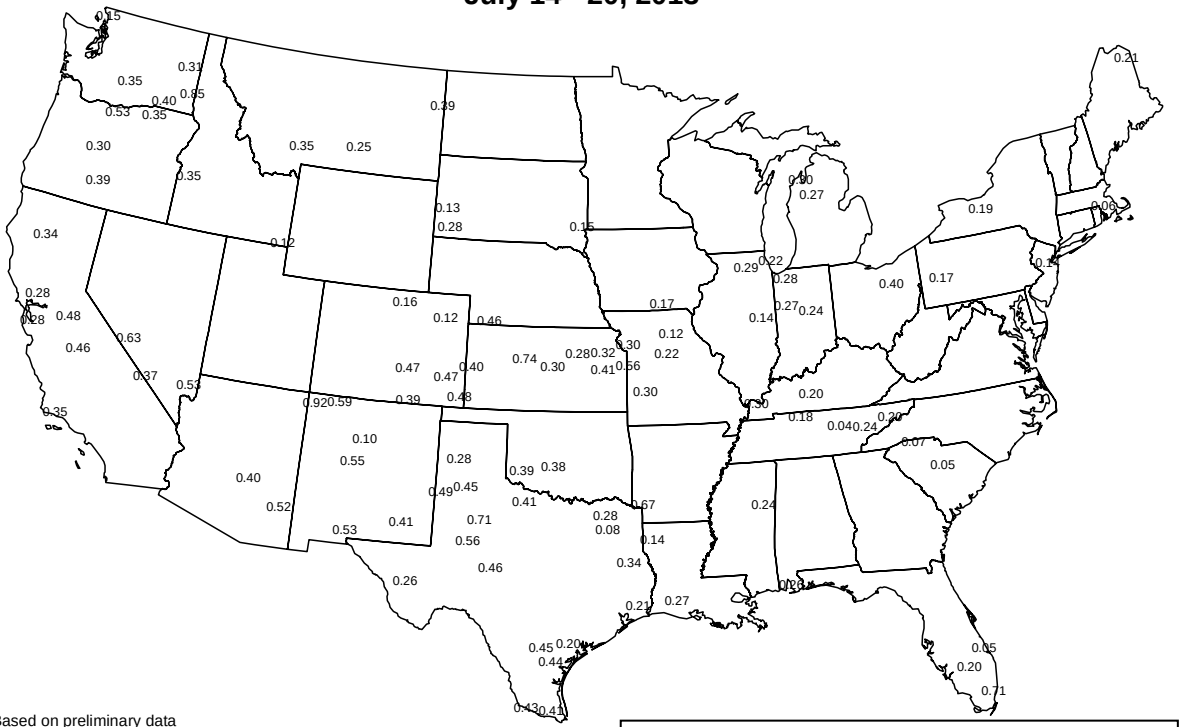
Daily Weather Records (ASOS & COOP)

July 14-20, 2013



Average Pan Evaporation (inches/day)

July 14 - 20, 2013

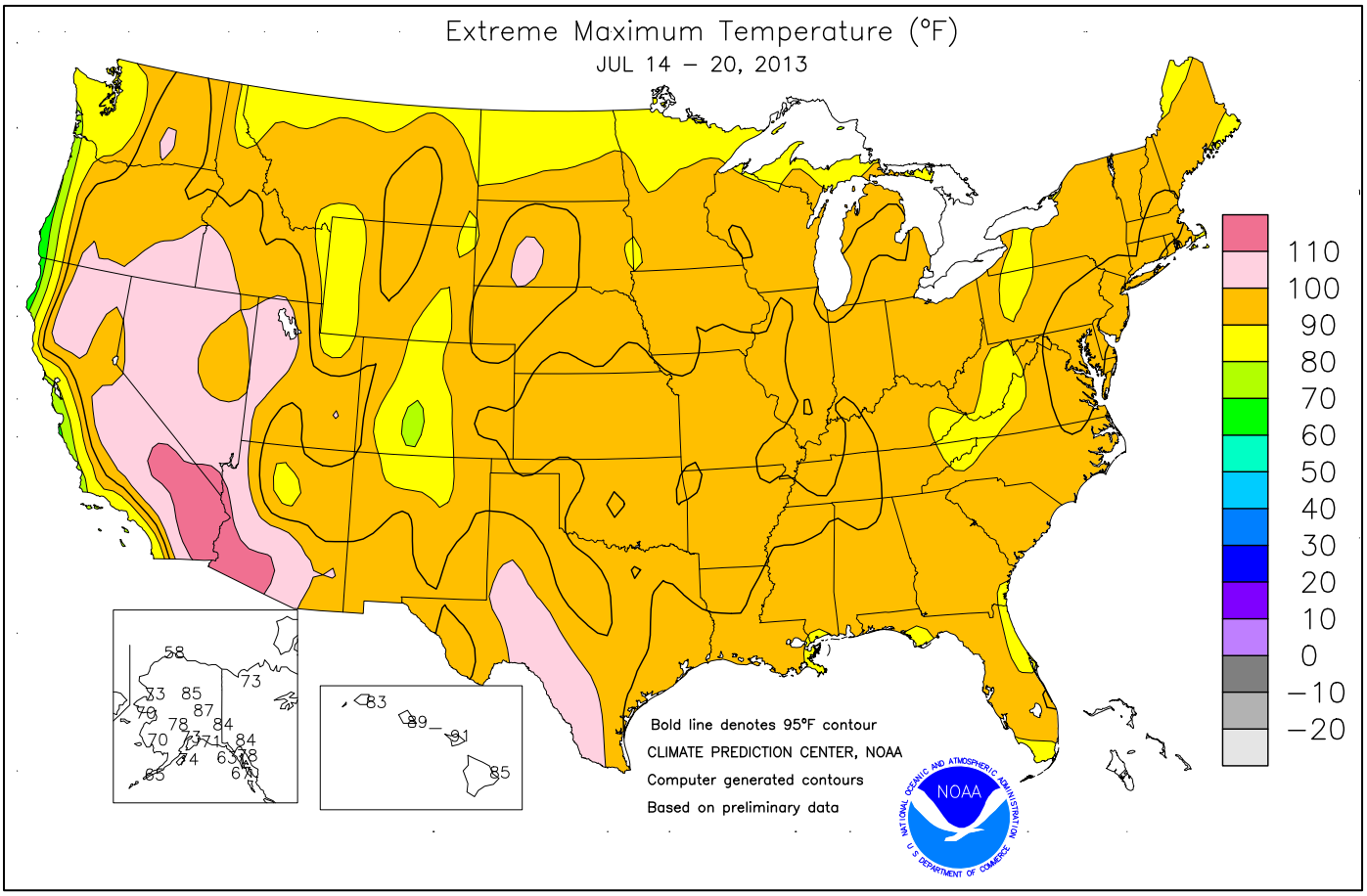


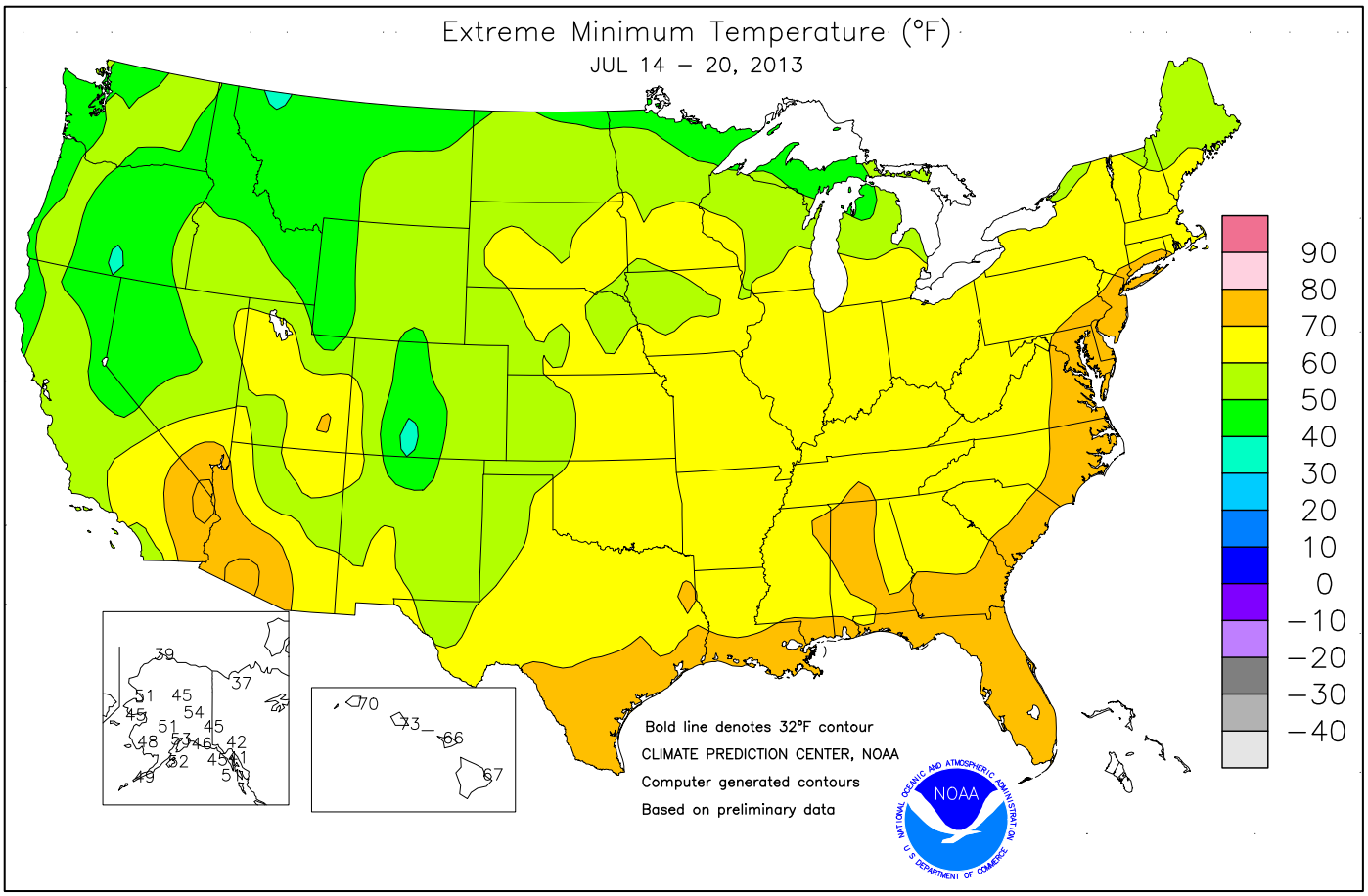
Based on preliminary data

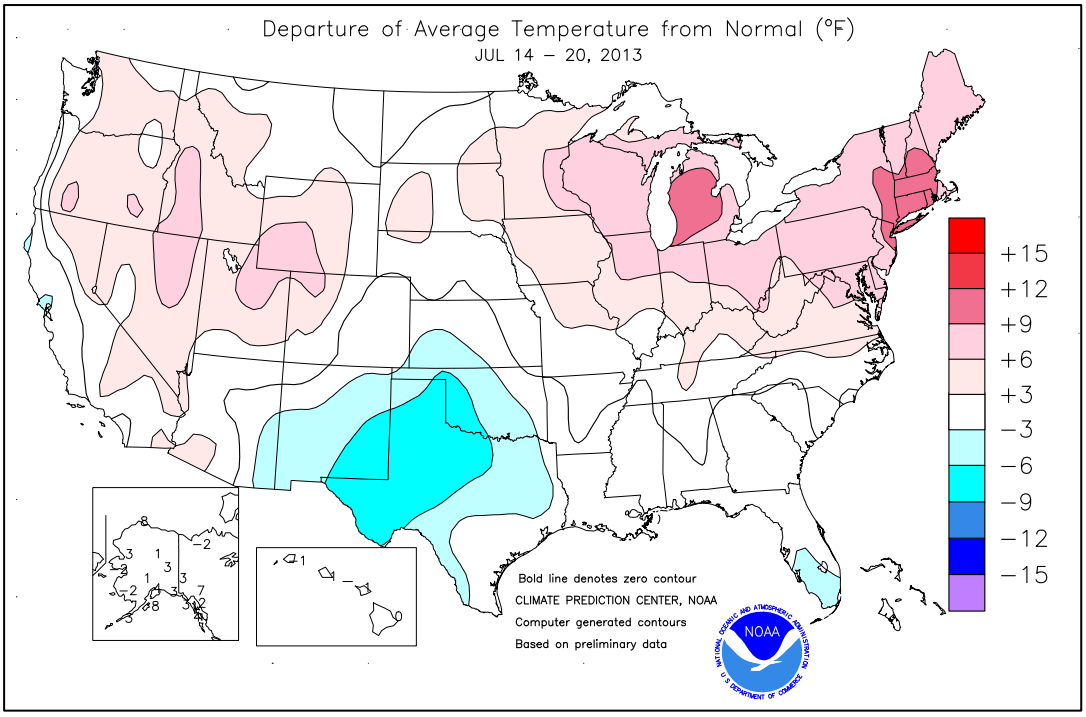
USDA Agricultural Weather Assessments

Data obtained from the NWS Cooperative Observer Network.

Due to a software error, Pan Evaporation data published in the *WWCB* in June and early July were incorrect and should be disregarded. We apologize for any inconvenience.


Extreme Maximum Temperature (°F)
JUL 14 – 20, 2013
110
100
90
80
70
60
50
40
30
20
10
0
−10
−20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA


Extreme Minimum Temperature (°F)
JUL 14 – 20, 2013
90
80
70
60
50
40
30
20
10
0
−10
−20
−30
−40
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA

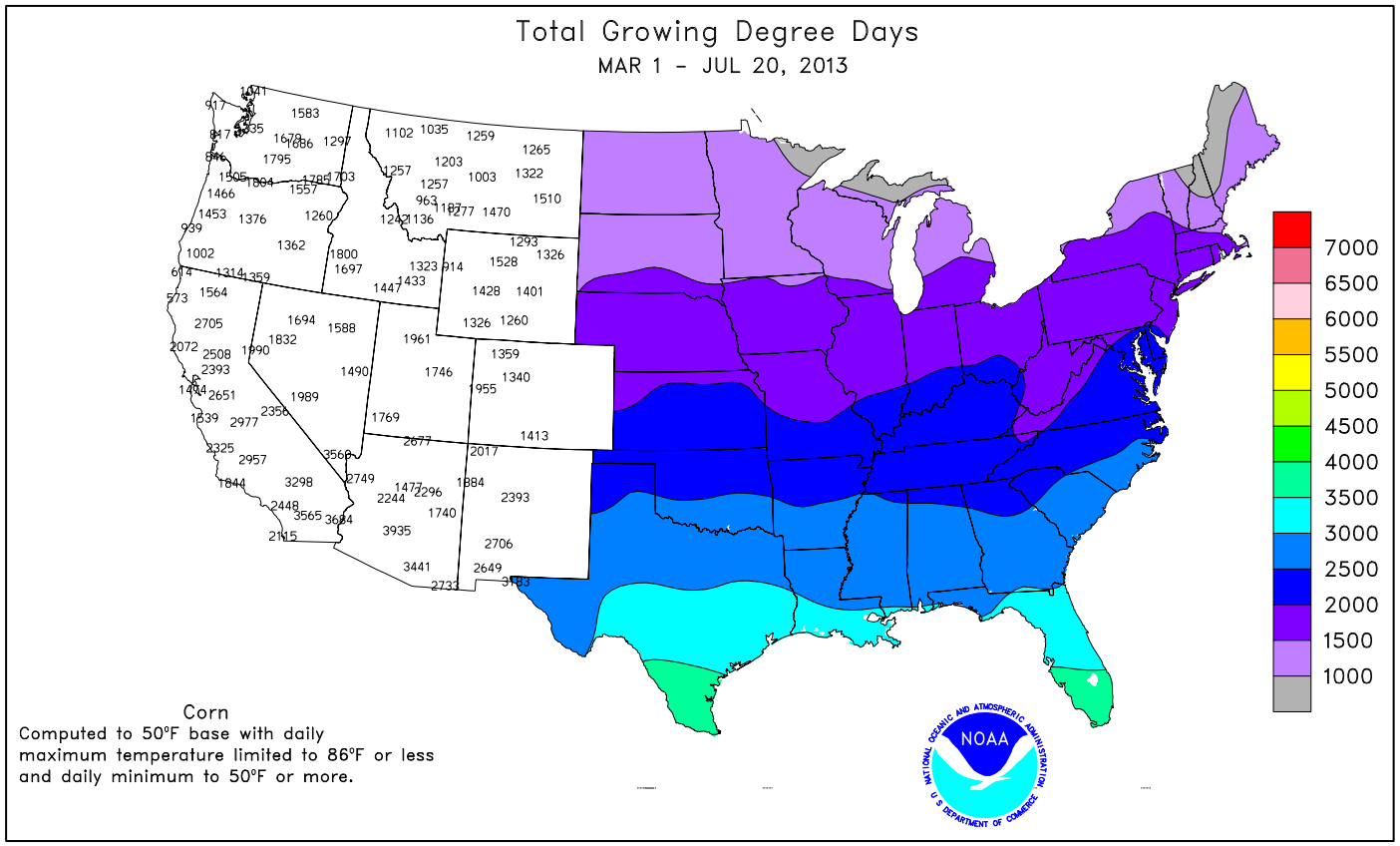


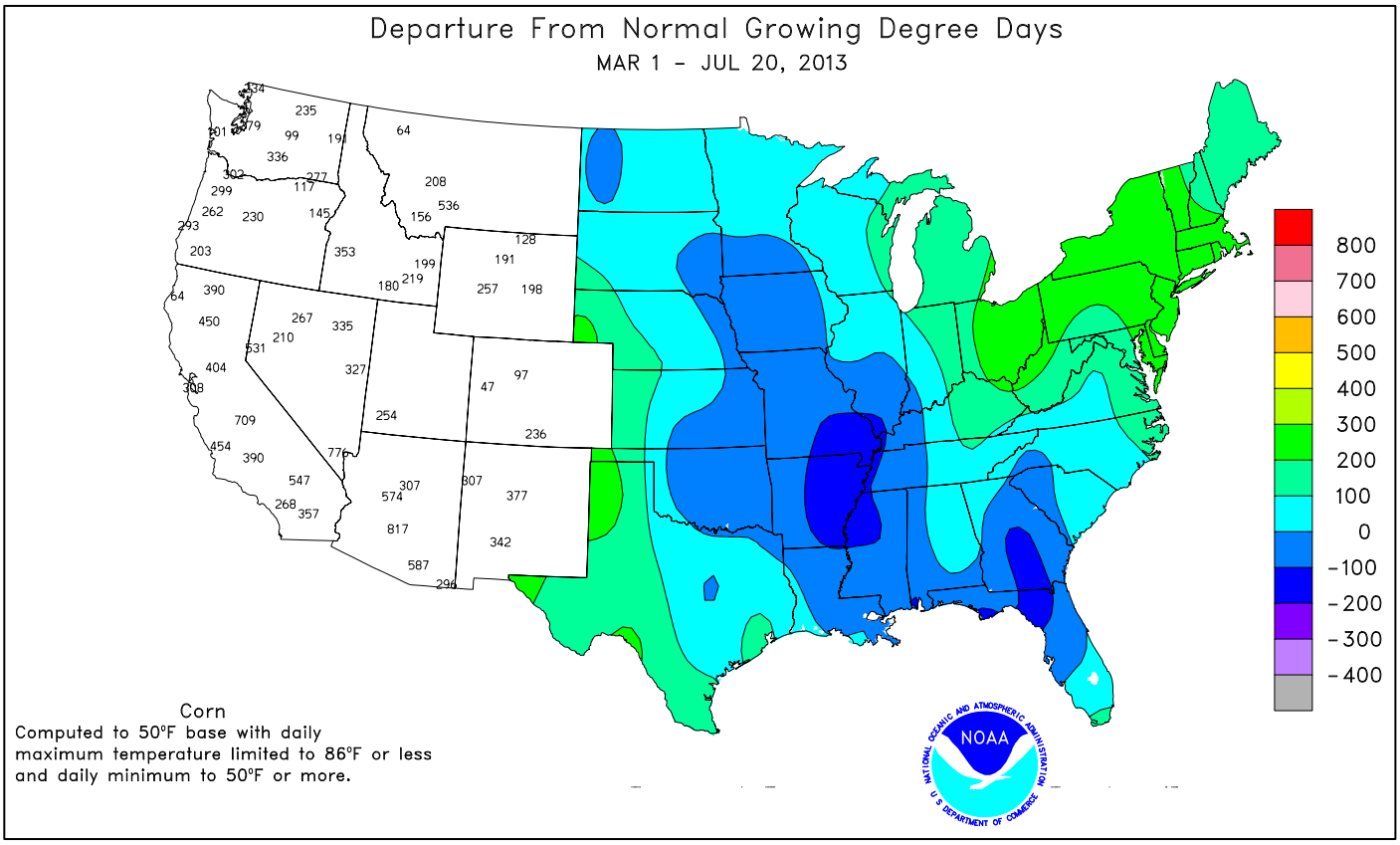
(Continued from front cover)
on **Iowa** and **northern Missouri**. Meanwhile, late-week showers provided some relief to pastures and rain-fed summer crops across the **Mid-South**, while heavy showers continued to soak the **Southeast**. Weekly rainfall totaled at least 2 to 4 inches in many locations from **Florida to the southern Appalachians**. Farther north, drier weather arrived in the **Mid-Atlantic States** and **southern New England**, accompanied by the season's most impressive heat wave. Unusual heat extended as far west as the **Great Lakes States**, and weekly temperatures averaged at least 5 to 10°F above normal from the **upper Mississippi Valley into the Northeast**. Elsewhere, hot weather also prevailed in the **Northwest** and **Intermountain West**, while the interaction between the aforementioned disturbance and the monsoon circulation resulted in heavy showers (locally 2 inches or more) in the **Four Corners States**. **Northwestern** heat promoted summer crop development and winter wheat maturation and harvesting.

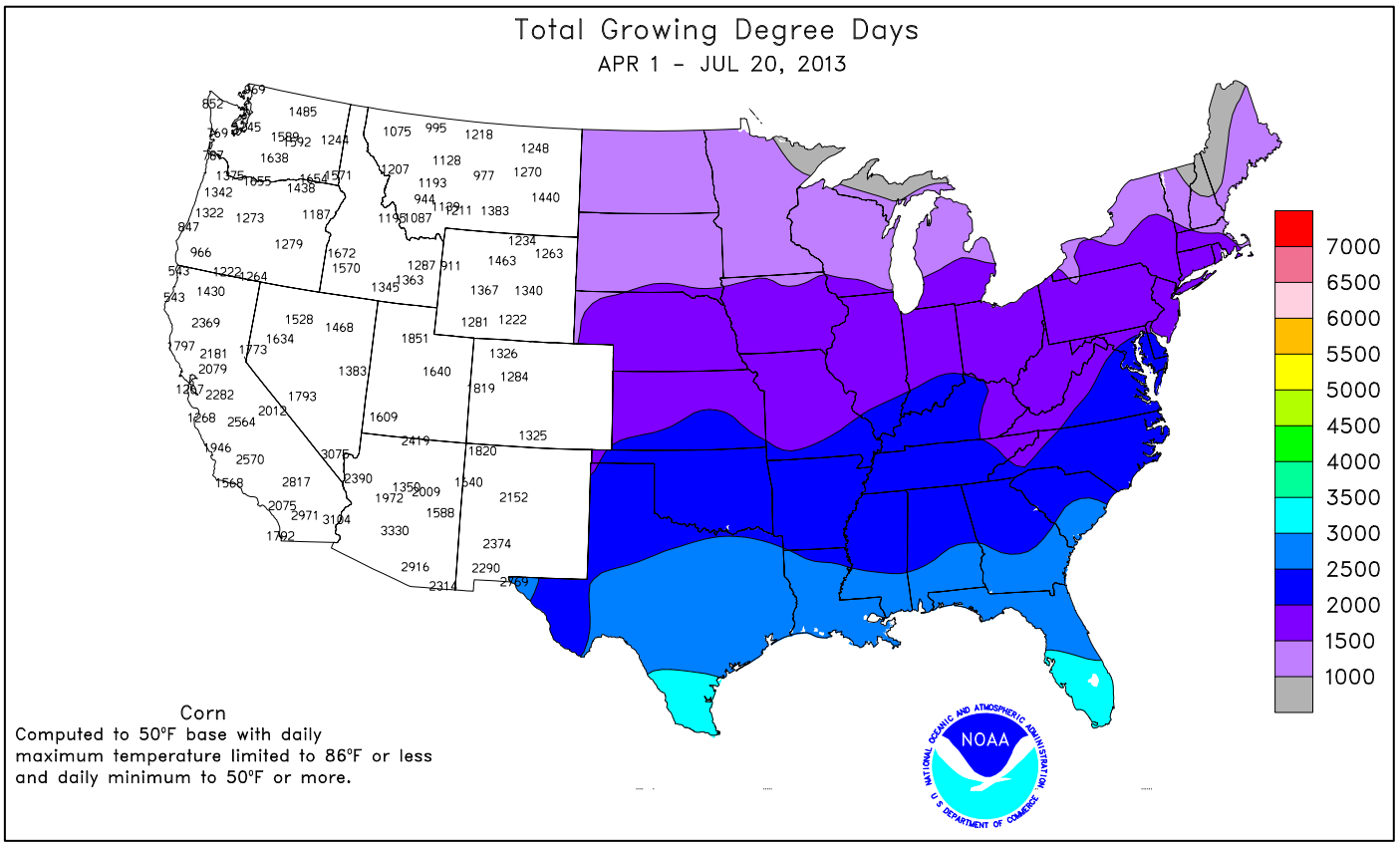
Early in the week, marine air spilling into **California's Central Valley** ended a long-running heat wave. **Fresno, CA**, experienced 19 consecutive days (June 27 – July 15) of triple-digit heat, behind 21 days in July-August 2005 and 20 days in July 1933 and 1984. **Fresno** has also endured 19-day such streaks on several other occasions, including August 6-24, 2012. Meanwhile, record-setting heat arrived in the **Northeast**. **Caribou, ME** (94°F on July 15), noted its hottest day since July 20, 1991, when the high reached 95°F. Elsewhere in **New England**, **Burlington, VT**, posted five consecutive days with 90-degree heat, including daily-record highs (93 and 98°F, respectively) on July 15 and 19. Other **Northeastern** daily-record highs included 98°F (on July 18) in **Allentown, PA**, and 95°F (on July 16) in **Bridgeport, CT**. Overall, the hottest day in the **Northeast** was July 19, when highs soared to daily-record levels in locations such as **Newark, NJ** (100°F); **Boston, MA** (99°F); and **Portland, ME** (95°F). Heat also extended westward into the **Great Lakes States**, where daily-record highs in **Michigan** included 97°F (on July 17) in **Alpena** and 96°F (on July 19) in **Grand Rapids**. Farther south, minimum temperatures of 55°F (on July 15) in **Dodge City, KS**, and 58°F (on July 16) in **Amarillo, TX**, were among a handful of daily-record lows. Late in the week, heat returned to parts of the **West**. Record-setting highs for July 20 climbed to 107°F in **Bishop, CA**, and 102°F in **Tonopah, NV**.

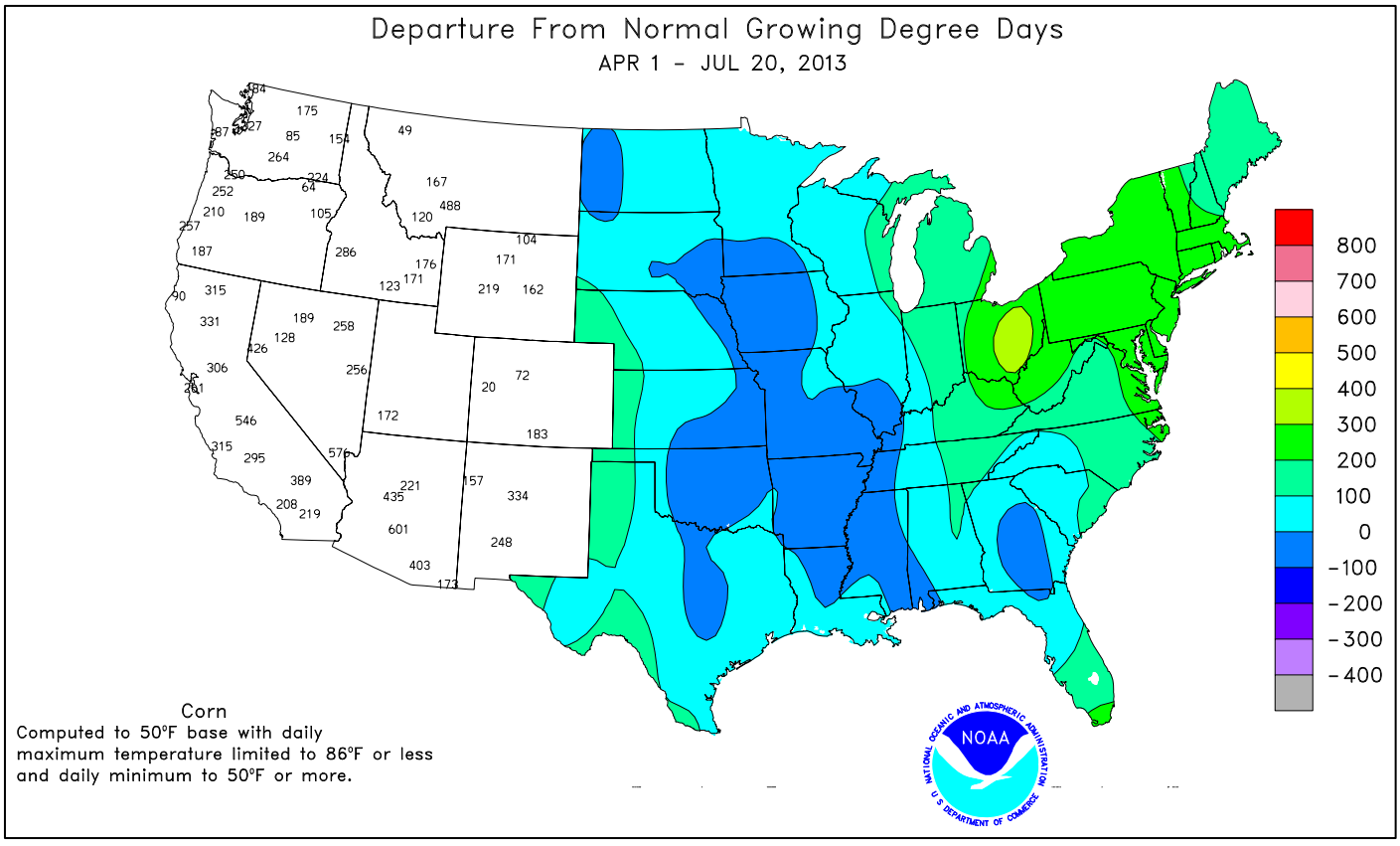
As the week began, scattered showers in the **upper Midwest** were dwarfed by the development of heavy rain in the **south-central U.S.** In **South Dakota**, record-setting rainfall totals for July 14 included 1.66 inches in **Watertown** and 1.06 inches in **Mobridge**. Farther south, July 14-17 rainfall reached 5.00 inches in **Waco, TX**; 4.39 inches in **Abilene, TX**; and 4.35 inches in **Oklahoma City, OK**. In those three locations, the remainder of the month has been dry; no measurable rain fell from July 1-13 or 18-20. **Lubbock, TX**, received 3.12 inches in a 5-day period from July 14-18, including a daily-record total (2.20 inches) on the 17th. Heavy showers eventually reached the **Four Corners States**, where daily-record totals on July 19 included 1.97 inches in **Colorado Springs, CO**, and 0.36 inch in **Cedar City, UT**. A thunderstorm wind gust to 55 mph was clocked in **Albuquerque, NM**, on July 19. Meanwhile, periodic heavy showers dotted the **Southeast**. By July 21, monthly rainfall records had been broken in locations such as **Greenville-Spartanburg, SC** (13.57 inches), and **Roanoke, VA** (11.99 inches). A July rainfall record was also broken in **Miami Beach, FL**, aided by a 6.78-inch total on July 18. Previously, **Miami Beach's** wettest July day had been July 22, 1959, when 4.90 inches fell. Extremely heavy rain also fell in parts of **eastern Puerto Rico**, where a strong tropical wave soaked **San Juan** with 9.23 inches of rain on July 18. Prior to that event, **San Juan's** wettest calendar day had been September 18, 1989, when the 8.84-inch total was associated with Hurricane Hugo's passage. Elsewhere, heavy showers put an end to the heat wave in **northern New England**, while dry conditions persisted in the **western Corn Belt**. **Caribou, ME**, received 5.04 inches of rain during the last 4 days of the week, including its wettest July day on record (3.81 inches on the 17th). Previously, **Caribou's** wettest July day had been 2.58 inches on July 4, 2011. It was also **Caribou's** wettest day since August 17, 1981, when 6.67 inches fell. In contrast, July 1-20 rainfall totaled just 0.07 inch (2 percent of normal) in **Des Moines, IA**, and 0.02 inch (less than 1 percent) in **Quincy, IL**.

Warmth covered **southern Alaska**, but near-normal temperatures prevailed across much of the interior. On July 16, **Annette Island** posted a daily-record high of 84°F. Before cooler weather arrived, **Fairbanks** noted highs of 87 and 80°F, respectively, on July 14-15. **Fairbanks'** year-to-date total of 25 days with 80-degree warmth ranks third behind 30 days in 2004 and 28 days in 1990. Meanwhile, widespread precipitation covered the state, except in **southeastern Alaska**. Weekly rainfall topped an inch in locations such as **Bethel** (1.06 inches) and **Cold Bay** (1.20 inches). Farther south, **Hawaii** continued to experience mostly drier-than-normal conditions. Through July 20, month-to-date rainfall at the state's major airport sites ranged from 0.03 inch (10 percent of normal) in **Honolulu, Oahu**, to 2.76 inches (41 percent) at **Hilo**, on the **Big Island**. However, traditionally wetter windward locations received more rain, with **Kauai's** famously wet **Mt. Waialeale** receiving a weekly total of 12.69 inches. Cool conditions lingered across **Hawaii's western islands**, where **Lihue, Kauai**, last experienced an above-normal daily average temperature on June 14.


Total Growing Degree Days
MAR 1 - JUL 20, 2013
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.
NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE


Departure From Normal Growing Degree Days
MAR 1 - JUL 20, 2013
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.
NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE


Total Growing Degree Days
APR 1 - JUL 20, 2013
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
NOAA
Corn
Computed to 50°F base with daily
maximum temperature limited to 86°F or less
and daily minimum to 50°F or more.


Departure From Normal Growing Degree Days
APR 1 - JUL 20, 2013
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
NOAA
Corn
Computed to 50°F base with daily
maximum temperature limited to 86°F or less
and daily minimum to 50°F or more.

National Weather Data for Selected Cities

Weather Data for the Week Ending July 20, 2013

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE 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	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	89	73	93	70	81	1	0.57	-0.64	0.33	11.44	162	41.95	130	91	51	2	0	5	0
	HUNTSVILLE	91	73	97	71	82	2	0.00	-1.03	0.00	10.26	144	39.38	116	89	54	5	0	0	0
	MOBILE	90	72	93	70	81	-1	0.48	-1.04	0.40	11.65	128	40.10	105	91	62	3	0	4	0
	MONTGOMERY	91	73	95	72	82	0	0.20	-1.06	0.11	6.79	88	32.49	98	90	53	5	0	4	0
AK	ANCHORAGE	69	57	73	53	63	4	0.29	-0.06	0.29	1.35	69	7.76	148	80	65	0	0	1	0
	BARROW	56	42	58	39	49	8	0.14	-0.05	0.06	1.44	189	2.68	203	93	75	0	0	3	0
	FAIRBANKS	74	58	87	54	66	3	0.60	0.23	0.33	1.43	59	3.78	85	78	59	0	0	3	0
	JUNEAU	68	49	78	41	59	2	0.16	-0.75	0.16	6.67	114	35.04	142	93	74	0	0	1	0
	KODIAK	68	56	74	52	62	8	0.00	-0.92	0.00	5.15	63	30.58	78	83	70	0	0	0	0
	NOME	56	47	70	45	51	-2	0.83	0.37	0.60	4.60	201	8.85	149	96	89	0	0	4	1
AZ	FLAGSTAFF	78	54	82	50	66	0	1.03	0.49	0.35	4.49	277	9.72	88	94	41	0	0	4	0
	PHOENIX	107	85	110	77	96	3	0.05	-0.17	0.03	0.05	9	2.66	73	50	31	7	0	2	0
	PRESCOTT	88	64	91	61	76	2	0.22	-0.43	0.08	0.38	21	3.17	37	84	31	3	0	5	0
	TUCSON	97	77	104	71	87	0	1.53	1.07	0.81	1.73	138	3.48	78	62	36	7	0	3	2
AR	FORT SMITH	94	73	98	71	83	1	0.38	-0.34	0.24	6.48	100	27.46	112	88	46	7	0	3	0
	LITTLE ROCK	94	71	98	65	83	0	0.15	-0.59	0.09	3.41	55	29.03	102	93	43	7	0	2	0
CA	BAKERSFIELD	99	70	103	64	84	1	0.00	0.00	0.00	0.00	0	2.36	51	39	21	7	0	0	0
	FRESNO	100	68	106	61	84	2	0.00	0.00	0.00	0.00	0	2.28	29	56	31	7	0	0	0
	LOS ANGELES	74	64	76	62	69	0	0.00	0.00	0.00	0.00	0	2.61	28	87	66	0	0	0	0
	REDDING	102	63	111	56	82	0	0.00	0.00	0.00	1.59	230	9.30	42	53	22	7	0	0	0
	SACRAMENTO	92	56	99	53	74	-2	0.00	0.00	0.00	0.22	110	3.91	33	83	24	5	0	0	0
	SAN DIEGO	75	66	78	63	71	0	0.00	0.00	0.00	0.04	44	3.37	44	79	66	0	0	0	0
	SAN FRANCISCO	68	54	71	53	61	-2	0.00	0.00	0.00	0.06	55	1.90	14	83	68	0	0	0	0
	STOCKTON	93	57	100	53	75	-3	0.00	0.00	0.00	0.12	133	2.95	33	79	44	5	0	0	0
CO	ALAMOSA	80	48	85	43	64	0	0.26	0.06	0.09	1.00	93	2.07	64	93	44	0	0	4	0
	CO SPRINGS	81	57	91	51	69	-1	2.61	2.01	1.97	4.81	123	7.55	79	91	34	1	0	3	2
	DENVER INTL	86	60	93	56	73	0	0.87	0.36	0.87	2.23	76	7.47	93	83	36	3	0	1	1
	GRAND JUNCTION	93	65	97	62	79	2	0.50	0.37	0.21	0.65	92	4.06	87	76	36	7	0	3	0
	PUEBLO	88	60	96	53	74	-2	1.44	1.00	1.27	1.83	75	3.75	56	84	41	4	0	3	1
CT	BRIDGEPORT	93	76	95	72	85	11	0.00	-0.85	0.00	10.12	170	23.72	96	78	54	7	0	0	0
	HARTFORD	95	72	97	69	83	9	0.16	-0.64	0.16	13.77	224	29.90	119	78	47	7	0	1	0
DC	WASHINGTON	95	79	97	75	87	8	1.04	0.21	1.04	14.07	261	26.68	125	79	49	6	0	1	1
DE	WILMINGTON	94	76	97	73	85	8	0.00	-0.99	0.00	15.46	244	28.86	120	88	49	7	0	0	0
FL	DAYTONA BEACH	87	74	90	71	80	-2	3.59	2.46	2.38	12.55	137	27.38	111	92	63	2	0	4	2
	JACKSONVILLE	88	72	89	70	80	-2	0.85	-0.49	0.55	12.26	132	29.51	111	96	62	0	0	3	1
	KEY WEST	85	76	88	72	81	-4	3.48	2.82	3.06	15.97	241	30.76	173	89	74	0	0	4	1
	MIAMI	85	74	88	72	80	-4	4.20	3.01	1.11	15.01	121	34.38	123	92	68	0	0	7	4
	ORLANDO	89	73	91	72	81	-1	2.47	0.85	1.28	11.16	91	22.04	82	96	69	2	0	6	1
	PENSACOLA	88	74	91	71	81	-2	2.17	0.32	1.59	21.54	186	43.57	120	89	66	1	0	5	1
	TALLAHASSEE	90	74	94	74	82	0	2.64	0.81	2.48	14.98	124	37.37	101	88	61	5	0	5	1
	TAMPA	89	74	92	72	81	-2	0.48	-0.95	0.30	16.06	167	25.18	114	91	61	3	0	6	0
	WEST PALM BEACH	86	76	88	74	81	-2	1.06	-0.27	0.85	17.58	149	42.53	138	81	67	0	0	4	1
GA	ATHENS	88	70	93	68	79	-1	1.09	0.10	0.84	16.00	237	39.07	139	97	68	2	0	3	1
	ATLANTA	87	71	91	69	79	-1	1.88	0.67	1.45	15.73	227	43.48	147	92	63	2	0	5	1
	AUGUSTA	90	70	95	69	80	-1	1.12	0.24	0.43	18.13	268	37.71	145	96	59	3	0	7	0
	COLUMBUS	91	73	95	72	82	0	0.86	-0.32	0.47	12.80	191	38.41	132	91	51	4	0	2	0
	MACON	90	71	94	68	80	-1	0.23	-0.76	0.13	17.79	282	46.48	173	99	59	3	0	3	0
	SAVANNAH	88	73	92	72	81	-1	1.07	-0.24	0.74	15.04	163	34.58	130	92	64	2	0	4	1
HI	HILO	84	69	85	67	76	0	1.42	-1.06	0.62	7.34	52	54.38	80	86	74	0	0	7	1
	HONOLULU	88	74	89	73	81	0	0.00	-0.10	0.00	0.25	37	8.71	91	68	60	0	0	0	0
	KAHULUI	90	70	91	66	80	1	0.02	-0.08	0.01	0.34	74	7.32	65	90	76	5	0	2	0
	LIHUE	83	72	83	70	78	-1	0.20	-0.28	0.12	1.18	38	15.99	78	85	75	0	0	3	0
ID	BOISE	100	64	103	56	82	7	0.09	0.01	0.09	0.48	47	4.40	59	44	19	7	0	1	0
	LEWISTON	97	61	100	55	79	5	0.07	-0.07	0.07	2.03	125	5.90	77	50	24	7	0	1	0
	POCATELLO	95	55	98	48	75	6	0.13	-0.01	0.07	0.85	65	3.81	51	73	28	7	0	3	0
IL	CHICAGO/O'HARE	92	73	96	71	82	9	0.73	-0.01	0.58	6.75	117	28.99	154	86	53	4	0	3	1
	MOLINE	92	70	95	63	81	5	0.00	-0.87	0.00	6.88	95	30.02	141	87	52	5	0	0	0
	PEORIA	93	73	97	68	83	8	0.02	-0.90	0.02	2.60	40	30.13	149	84	46	5	0	1	0
	ROCKFORD	91	71	94	65	81	8	0.00	-0.89	0.00	8.73	116	28.18	139	87	54	5	0	0	0
	SPRINGFIELD	92	71	94	62	81	5	0.01	-0.76	0.01	2.78	46	27.80	139	93	51	5	0	1	0
IN	EVANSVILLE	92	72	96	66	82	3	0.09	-0.76	0.09	8.10	123	30.66	116	88	57	6	0	1	0
	FORT WAYNE	90	71	92	65	80	6	0.73	-0.05	0.73	8.60	135	26.26	128	94	56	4	0	1	1
	INDIANAPOLIS	90	73	93	69	82	6	0.40	-0.59	0.39	5.35	77	27.21	117	83	53	4	0	2	0
	SOUTH BEND	90	72	94	67	81	8	0.64	-0.17	0.63	5.46	82	22.82	109	86	56	4	0	2	1
IA	BURLINGTON	92	72	95	67	82	6	0.00	-1.01	0.00	***	***	25.48	120	89	46	5	0	0	0
	CEDAR RAPIDS	89	68	92	62	79	4	0.00	-0.89	0.00	7.45	104	27.63	149	91	50	4	0	0	0
	DES MOINES	93	72	96	65	83	7	0.01	-0.90	0.01	3.33	46	21.64	111	76	46	6	0	1	0
	DUBUQUE	88	68	91	59	78	6	0.69	-0.11	0.68	4.59	72	26.19	136	94	58	2	0	2	1
	SIOUX CITY	90	64	93	56	77	2	0.00	-0.74	0.00	3.32	58	16.65	108	87	51	4	0	0	0
	WATERLOO	92	65	96	57	79	5	0.02	-0.90	0.02	4.99	66	28.57	150	85	53	5	0	1	0
KS	CONCORDIA	89	66	96	59	78	-1	0.95	-0.01	0.35	2.40	36	13.79	81	92	54	3	0	5	0
	DODGE CITY	87	64	97	55	76	-4	1.33	0.61	0.93	3.95	77	7.38	55	91	43	2	0	3	1
	GOODLAND	87	61	95	55	74	-1	0.14	-0.66	0.14	3.20	58	7.56	60	90	45	2	0	1	0
	TOPEKA	94	71	99	66	82	3	0.25	-0.59	0.12	3.43	46	17.76	88	84	44	7	0	3	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending July 20, 2013

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	90	69	98	66	80	-1	1.71	0.98	0.62	3.45	53	17.46	98	92	60	5	0	4	3
KY	JACKSON	88	70	89	68	79	4	0.22	-0.82	0.22	10.99	144	31.18	110	94	58	0	0	1	0
	LEXINGTON	92	71	95	66	81	5	0.00	-1.10	0.00	13.40	174	35.26	130	87	58	7	0	0	0
	LOUISVILLE	93	75	95	70	84	5	0.24	-0.75	0.18	7.51	116	26.56	101	83	49	7	0	3	0
	PADUCAH	91	69	94	63	80	2	0.34	-0.69	0.20	9.92	130	35.40	122	98	55	5	0	3	0
LA	BATON ROUGE	90	72	92	70	81	-1	2.34	0.99	0.92	9.39	103	47.57	131	98	55	6	0	4	2
	LAKE CHARLES	91	73	94	72	82	-1	0.34	-0.82	0.15	4.93	51	34.45	109	91	52	6	0	3	0
	NEW ORLEANS	89	76	91	74	83	0	1.57	0.18	1.03	7.97	71	42.68	114	88	64	5	0	2	2
	SHREVEPORT	92	72	98	71	82	-2	0.82	-0.08	0.53	8.73	111	25.58	84	90	51	5	0	2	1
ME	CARIBOU	84	60	94	55	72	6	5.04	4.18	3.81	11.12	196	26.85	140	91	49	2	0	3	2
	PORTLAND	88	69	95	64	79	10	0.15	-0.59	0.15	9.30	172	25.09	101	91	54	4	0	1	0
MD	BALTIMORE	94	73	97	71	84	7	0.38	-0.49	0.38	10.39	178	24.25	105	86	48	6	0	1	0
MA	BOSTON	94	74	99	69	84	10	0.01	-0.65	0.01	10.74	207	24.99	108	82	47	7	0	1	0
	WORCESTER	89	72	93	68	81	11	0.15	-0.79	0.15	11.01	165	27.80	106	90	47	4	0	1	0
MI	ALPENA	88	62	97	52	75	8	0.79	0.09	0.70	3.18	72	18.11	124	90	48	3	0	2	1
	GRAND RAPIDS	93	72	96	64	83	11	0.38	-0.42	0.31	4.72	78	27.41	144	84	45	6	0	2	0
	HOUGHTON LAKE	90	64	94	50	77	10	0.14	-0.44	0.08	2.36	51	18.30	127	85	47	5	0	2	0
	LANSING	92	70	94	64	81	11	0.12	-0.45	0.12	8.97	164	26.97	162	85	51	5	0	1	0
	MUSKEGON	90	72	92	64	81	11	0.00	-0.48	0.00	4.85	123	27.54	173	79	55	5	0	0	0
	TRAVERSE CITY	90	67	96	53	78	8	0.01	-0.68	0.01	2.49	46	20.20	117	87	39	4	0	1	0
MN	DULUTH	84	65	94	53	74	8	0.23	-0.71	0.12	5.53	78	18.87	120	82	53	3	0	3	0
	INT'L FALLS	78	58	89	44	68	2	2.55	1.81	2.15	5.83	92	18.22	144	95	61	0	0	4	1
	MINNEAPOLIS	89	73	94	66	81	8	0.00	-0.88	0.00	8.43	121	24.12	149	76	50	3	0	0	0
	ROCHESTER	86	68	92	63	77	7	0.64	-0.40	0.51	8.42	122	32.32	190	88	60	2	0	2	1
	ST. CLOUD	87	67	94	62	77	7	0.14	-0.56	0.14	6.90	102	19.20	131	93	44	3	0	1	0
MS	JACKSON	91	70	94	69	81	0	0.91	-0.16	0.73	7.21	106	40.25	120	95	56	5	0	6	1
	MERIDIAN	89	71	92	69	80	-2	0.46	-0.83	0.44	8.79	116	43.43	120	95	63	3	0	2	0
	TUPELO	91	72	96	71	82	1	0.87	0.04	0.55	3.22	44	31.65	92	89	57	5	0	5	1
MO	COLUMBIA	91	70	96	64	81	4	0.37	-0.48	0.32	3.09	48	29.80	132	89	51	4	0	2	0
	KANSAS CITY	91	70	96	66	80	1	0.03	-0.99	0.02	3.33	45	18.26	87	84	46	4	0	2	0
	SAINT LOUIS	93	75	98	68	84	4	0.62	-0.28	0.28	7.65	120	31.78	143	78	51	7	0	3	0
	SPRINGFIELD	92	70	95	64	81	2	0.55	-0.25	0.20	4.10	53	27.82	112	88	50	5	0	3	0
MT	BILLINGS	89	60	96	57	75	3	0.00	-0.28	0.00	1.42	51	7.84	83	70	29	4	0	0	0
	BUTTE	85	48	89	44	66	3	0.37	0.06	0.23	2.30	76	5.61	71	78	18	0	0	2	0
	CUT BANK	84	49	88	44	66	3	0.06	-0.27	0.06	3.74	106	8.17	104	86	22	0	0	1	0
	GLASGOW	81	55	96	49	68	-2	0.31	-0.08	0.22	4.69	137	11.95	171	90	64	2	0	3	0
	GREAT FALLS	89	53	96	47	71	5	0.14	-0.16	0.14	2.58	82	7.66	82	77	19	5	0	1	0
	HAVRE	83	53	92	47	68	0	0.07	-0.26	0.04	5.25	180	12.57	176	87	64	1	0	3	0
	MISSOULA	89	55	96	47	72	5	0.00	-0.22	0.00	1.70	69	5.83	70	59	34	5	0	0	0
NE	GRAND ISLAND	89	67	95	63	78	2	0.28	-0.41	0.16	2.01	35	15.38	98	85	50	3	0	2	0
	LINCOLN	92	67	96	60	80	2	0.00	-0.80	0.00	2.50	44	18.32	112	82	43	6	0	0	0
	NORFOLK	89	63	94	56	76	1	0.20	-0.64	0.16	2.83	42	14.25	86	89	48	3	0	2	0
	NORTH PLATTE	90	64	94	59	77	3	0.54	-0.18	0.54	2.56	49	8.72	69	86	39	3	0	1	1
	OMAHA	92	70	95	63	81	4	0.00	-0.88	0.00	5.18	80	19.52	111	80	44	5	0	0	0
	SCOTTSBLUFF	90	62	99	56	76	3	0.15	-0.33	0.11	2.29	55	7.26	66	77	42	3	0	3	0
	VALENTINE	87	67	96	63	77	3	1.14	0.37	0.63	3.96	76	13.35	109	84	56	2	0	3	1
NV	ELY	92	54	96	48	73	5	0.03	-0.08	0.02	0.07	7	3.18	56	55	19	7	0	2	0
	LAS VEGAS	107	83	109	75	95	4	0.22	0.13	0.22	0.27	104	0.88	35	30	17	7	0	1	0
	RENO	98	62	105	55	80	9	0.00	-0.04	0.00	0.38	62	1.68	37	38	17	7	0	0	0
	WINNEMUCCA	100	52	105	45	76	4	0.00	-0.05	0.00	0.53	62	2.36	46	27	11	7	0	0	0
NH	CONCORD	92	66	95	64	79	9	1.34	0.60	1.28	10.45	201	23.22	116	99	46	5	0	3	1
NJ	NEWARK	97	78	101	76	88	11	0.09	-1.00	0.09	11.83	188	28.08	109	73	45	7	0	1	0
NM	ALBUQUERQUE	85	65	97	60	75	-4	0.36	0.10	0.20	1.40	109	2.08	53	73	37	1	0	3	0
NY	ALBANY	92	72	96	67	82	11	0.01	-0.75	0.01	12.01	201	26.74	129	85	48	6	0	1	0
	BINGHAMTON	86	68	89	65	77	8	0.00	-0.78	0.00	9.50	154	22.66	107	80	56	0	0	0	0
	BUFFALO	89	71	92	65	80	9	1.88	1.21	1.50	9.45	160	23.54	113	92	60	3	0	2	1
	ROCHESTER	90	69	93	65	80	9	1.04	0.41	0.81	10.54	200	22.38	126	88	61	5	0	2	1
	SYRACUSE	91	70	95	65	80	9	0.36	-0.56	0.25	7.72	120	21.65	103	88	52	6	0	2	0
NC	ASHEVILLE	84	66	87	65	75	2	1.33	0.48	1.01	19.37	282	48.49	178	97	66	0	0	4	1
	CHARLOTTE	89	70	92	68	79	-1	0.41	-0.44	0.40	12.91	224	31.67	130	95	59	3	0	2	0
	GREENSBORO	90	72	93	69	81	3	0.00	-1.02	0.00	12.61	198	30.96	128	91	53	4	0	0	0
	HATTERAS	89	76	90	72	82	3	0.01	-1.07	0.01	7.14	108	26.33	92	89	58	3	0	1	0
	RALEIGH	91	72	94	69	82	3	0.00	-0.99	0.00	11.93	195	30.96	128	90	61	6	0	0	0
	WILMINGTON	89	74	92	71	81	0	0.46	-1.30	0.23	16.10	159	32.81	110	95	57	3	0	6	0
ND	BISMARCK	85	63	93	57	74	4	0.19	-0.39	0.19	3.28	77	13.88	142	87	54	3	0	1	0
	DICKINSON	80	57	88	52	69	0	0.07	-0.39	0.06	4.26	87	11.35	109	93	54	0	0	2	0
	FARGO	85	66	95	57	76	5	0.55	-0.08	0.35	8.55	157	21.45	179	85	53	3	0	2	0
	GRAND FORKS	82	62	90	52	72	3	0.00	-0.68	0.00	4.36	87	12.53	118	89	50	1	0	0	0
	JAMESTOWN	85	63	95	55	74	3	0.18	-0.55	0.15	2.14	41	7.73	72	94	49	3	0	2	0
	WILLISTON	79	57	88	53	68	-1	0.77	0.25	0.26	5.76	148	13.56	160	90	62	0	0	4	0
OH	AKRON-CANTON	90	72	93	69	81	9	0.56	-0.35	0.28	11.46	188	23.72	111	87	59	5	0	2	0
	CINCINNATI	91	72	93	70	82	6	0.47	-0.36	0.36	10.59	155	28.47	114	92	60	4	0	3	0
	CLEVELAND	90	73	94	68	82	10	0.71	-0.07	0.71	11.53	184	24.11	116	85	56	4	0	1	1
	COLUMBUS	90	74	94	70	82	7	0.44	-0.61	0.44	8.44	120	20.91	96	86	59	6	0	1	0
	DAYTON	91	72	96	68	82	7	0.20	-0.63	0.20	4.93	74	19.23	83	88	55	5	0	1	0
	MANSFIELD	89	71	91	67	80	9	0.95	0.03	0.95	12.33	171	26.21	109	95	56	5	0	1	1

Based on 1971-2000 normals ***** Not Available**

Weather Data for the Week Ending July 20, 2013

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	91	71	94	65	81	8	0.86	0.27	0.86	9.15	160	23.63	127	86	58	5	0	1	1
	YOUNGSTOWN	88	68	91	64	78	8	1.35	0.41	1.34	11.63	174	23.40	112	93	62	4	0	2	1
OK	OKLAHOMA CITY	88	70	95	65	79	-3	4.38	3.73	1.73	9.24	138	36.28	174	89	55	3	0	4	3
	TULSA	93	72	98	66	82	-2	0.41	-0.25	0.35	2.16	32	16.03	67	83	49	6	0	2	0
OR	ASTORIA	67	54	74	48	61	1	0.01	-0.23	0.01	2.50	71	35.01	96	89	77	0	0	1	0
	BURNS	95	50	99	46	72	6	0.00	-0.08	0.00	0.87	97	3.41	54	52	19	7	0	0	0
	EUGENE	88	51	91	47	69	3	0.00	-0.13	0.00	1.11	55	9.68	34	82	52	1	0	0	0
	MEDFORD	98	60	100	57	79	6	0.98	0.92	0.98	2.13	245	5.87	60	56	18	7	0	1	1
	PENDLETON	95	56	99	50	75	2	0.05	-0.03	0.05	0.95	92	4.95	68	48	22	6	0	1	0
	PORTLAND	84	58	92	56	71	3	0.00	-0.15	0.00	1.36	64	14.51	72	76	54	1	0	0	0
	SALEM	86	55	91	52	71	4	0.01	-0.10	0.01	1.04	54	11.63	53	81	57	1	0	1	0
PA	ALLENTOWN	95	72	98	68	83	10	0.26	-0.70	0.26	8.82	132	22.38	92	85	50	7	0	1	0
	ERIE	87	72	92	68	80	8	1.30	0.60	0.78	10.98	168	28.19	133	85	65	1	0	3	1
	MIDDLETOWN	93	75	97	72	84	8	0.01	-0.80	0.01	5.65	91	17.82	78	86	43	7	0	1	0
	PHILADELPHIA	95	78	98	74	86	8	0.39	-0.63	0.39	12.50	207	25.02	107	80	45	7	0	1	0
	PITTSBURGH	89	71	91	69	80	7	0.17	-0.73	0.10	9.61	142	21.95	101	89	54	5	0	3	0
	WILKES-BARRE	93	70	96	67	81	9	0.00	-0.85	0.00	6.16	94	15.92	77	88	43	6	0	0	0
	WILLIAMSPORT	93	70	95	68	82	10	0.02	-0.91	0.02	5.31	73	17.88	77	88	47	7	0	1	0
RI	PROVIDENCE	94	75	98	72	85	12	0.11	-0.58	0.11	11.00	205	25.61	101	80	47	6	0	1	0
SC	BEAUFORT	90	74	94	72	82	0	1.23	0.02	1.09	8.24	88	29.11	111	92	59	4	0	4	1
	CHARLESTON	91	74	96	72	83	1	0.69	-0.66	0.40	16.51	167	39.94	145	90	56	4	0	2	0
	COLUMBIA	90	72	93	69	81	-1	2.45	1.21	0.96	13.67	160	32.29	116	95	62	4	0	3	3
	GREENVILLE	87	70	92	69	79	0	1.33	0.27	0.64	21.72	320	44.87	155	96	60	2	0	4	1
SD	ABERDEEN	84	65	94	57	75	3	0.10	-0.55	0.09	4.41	81	12.91	105	91	66	1	0	2	0
	HURON	85	69	93	65	77	3	0.99	0.34	0.63	5.13	98	15.73	119	93	56	1	0	3	1
	RAPID CITY	88	63	95	61	76	4	0.59	0.15	0.31	3.68	88	11.30	104	81	39	4	0	2	0
	SIOUX FALLS	86	67	92	61	76	3	0.36	-0.28	0.28	4.94	91	17.25	121	86	55	2	0	2	0
TN	BRISTOL	88	66	91	63	77	3	3.18	2.20	1.58	14.38	216	39.07	156	96	53	3	0	5	3
	CHATTANOOGA	91	72	94	71	82	2	0.36	-0.75	0.19	11.77	165	46.44	145	91	54	5	0	3	0
	KNOXVILLE	90	70	93	67	80	2	0.26	-0.85	0.21	14.82	207	46.24	156	93	53	5	0	3	0
	MEMPHIS	93	74	96	71	84	1	0.83	-0.14	0.72	6.27	87	40.85	127	87	52	7	0	2	1
	NASHVILLE	93	72	97	71	83	4	0.77	-0.09	0.57	10.26	156	34.70	123	88	49	7	0	3	1
TX	ABILENE	84	68	92	63	76	-8	3.89	3.56	1.87	9.02	216	15.24	125	93	65	3	0	4	3
	AMARILLO	83	62	94	56	72	-6	1.23	0.65	0.81	4.14	83	10.43	94	94	50	1	0	5	1
	AUSTIN	93	71	97	69	82	-2	1.17	0.77	0.86	2.25	44	17.63	94	91	59	6	0	2	1
	BEAUMONT	91	74	95	71	82	-1	1.67	0.49	0.68	5.90	58	33.98	104	92	55	4	0	4	2
	BROWNSVILLE	92	75	97	73	84	0	1.68	1.31	0.94	2.98	70	8.58	71	98	70	5	0	4	2
	CORPUS CHRISTI	91	77	98	74	84	0	2.73	2.34	1.88	5.06	104	9.80	63	85	62	5	0	3	2
	DEL RIO	91	75	102	73	83	-2	0.57	0.12	0.28	2.35	63	5.57	54	82	55	4	0	4	0
	EL PASO	86	69	101	65	78	-5	0.52	0.19	0.35	0.77	45	1.66	48	71	43	2	0	3	0
	FORT WORTH	88	71	95	67	80	-5	1.96	1.51	0.73	4.13	92	17.29	86	89	51	4	0	5	2
	GALVESTON	89	78	92	76	83	-1	1.02	0.26	0.54	4.34	68	19.06	86	88	65	3	0	4	1
	HOUSTON	89	72	93	68	81	-3	1.61	0.94	0.83	6.62	87	15.94	60	96	67	3	0	6	1
	LUBBOCK	83	64	101	60	73	-7	2.96	2.51	2.21	4.73	106	8.15	81	86	56	1	0	4	1
	MIDLAND	83	67	101	62	75	-7	0.86	0.45	0.50	1.83	64	3.39	49	86	66	2	0	4	1
	SAN ANGELO	86	69	103	65	77	-5	2.45	2.25	0.81	3.90	120	10.28	94	86	65	2	0	5	3
	SAN ANTONIO	93	75	101	73	84	0	0.69	0.28	0.56	2.73	48	22.57	123	89	53	6	0	3	1
	VICTORIA	92	74	97	73	83	-1	2.62	1.99	1.03	3.66	52	13.04	59	94	58	6	0	4	3
	WACO	88	71	96	67	80	-5	5.00	4.50	2.40	6.64	146	20.72	110	93	63	3	0	4	2
	WICHITA FALLS	87	69	97	64	78	-7	2.61	2.31	0.88	5.46	113	12.73	78	93	61	3	0	4	2
UT	SALT LAKE CITY	99	70	102	66	85	8	0.23	0.07	0.21	1.08	93	7.21	73	58	18	7	0	2	0
VT	BURLINGTON	92	70	98	66	81	10	0.22	-0.66	0.07	13.45	227	28.75	157	89	43	5	0	5	0
VA	LYNCHBURG	92	70	93	68	81	6	0.15	-0.87	0.15	9.67	145	30.11	122	96	57	6	0	1	0
	NORFOLK	91	76	94	73	84	5	0.00	-1.17	0.00	6.39	92	23.81	94	85	56	5	0	0	0
	RICHMOND	94	75	96	73	85	7	0.01	-1.06	0.01	9.91	155	28.80	119	87	52	7	0	1	0
	ROANOKE	91	72	94	71	81	5	1.16	0.25	1.15	18.49	297	39.03	161	87	52	6	0	2	1
	WASH/DULLES	93	74	96	70	84	8	0.00	-0.78	0.00	10.42	163	24.41	105	86	52	6	0	0	0
WA	OLYMPIA	79	48	84	44	64	1	0.00	-0.17	0.00	1.87	77	21.43	79	90	64	0	0	0	0
	QUILLAYUTE	73	53	91	46	63	4	0.00	-0.50	0.00	2.92	58	58.81	107	84	70	1	0	0	0
	SEATTLE-TACOMA	81	58	88	55	69	4	0.00	-0.15	0.00	1.31	63	18.06	93	73	55	0	0	0	0
	SPOKANE	89	60	94	51	75	6	0.00	-0.16	0.00	1.87	111	6.80	72	54	17	4	0	0	0
	YAKIMA	96	58	102	50	77	8	0.00	-0.03	0.00	0.39	51	4.18	93	52	22	7	0	0	0
WV	BECKLEY	86	67	87	64	76	5	0.39	-0.71	0.38	7.55	108	22.93	93	95	65	0	0	2	0
	CHARLESTON	91	70	94	67	81	7	0.77	-0.33	0.68	12.05	168	27.50	110	93	51	5	0	2	1
	ELKINS	88	64	91	59	76	6	0.59	-0.51	0.35	6.58	85	22.96	86	96	51	1	0	3	0
	HUNTINGTON	93	71	95	68	82	6	0.22	-0.79	0.17	11.34	171	24.92	102	94	51	6	0	2	0
WI	EAU CLAIRE	91	68	97	62	79	7	0.03	-0.82	0.03	5.98	88	26.02	152	91	38	4	0	1	0
	GREEN BAY	89	68	93	61	79	9	0.68	-0.07	0.68	5.81	103	19.57	128	86	49	5	0	1	1
	LA CROSSE	94	71	98	64	82	8	0.02	-0.92	0.02	6.11	90	25.03	141	85	39	6	0	1	0
	MADISON	90	69	93	60	80	8	0.00	-0.85	0.00	12.52	190	32.61	181	83	54	5	0	0	0
	MILWAUKEE	90	74	95	66	82	10	0.00	-0.78	0.00	6.40	109	25.91	138	78	53	4	0	0	0
WY	CASPER	90	57	93	53	73	3	0.05	-0.25	0.04	1.83	81	7.80	94	79	36	5	0	2	0
	CHEYENNE	81	57	89	52	69	1	0.49	-0.02	0.43	1.28	36	6.83	72	91	48	0	0	3	0
	LANDER	93	60	96	56	76	5	0.06	-0.13	0.04	0.32	19	7.84	93	60	17	6	0	2	0
	SHERIDAN	90	57	96	54	74	5	0.00	-0.24	0.00	1.13	40	8.45	90	76	40	5	0	0	0

Based on 1971-2000 normals ***** Not Available**

National Agricultural Summary

July 15 - 21, 2013

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Below-average temperatures, coupled with widespread rainfall, helped to ease abnormally dry conditions throughout the Southwest and southern Great Plains. The rain boosted soil moisture levels and aided developing row crops. Most notably, temperatures in Texas' Southern Plains regions averaged more than 8°F below normal, while rainfall totaled more than 5 inches. Elsewhere, hot, dry weather negatively impacted row crops, but quickly matured remaining small grains ahead of harvest.

Corn: By week's end, 43 percent of this year's corn crop was at or beyond the silking stage. This was 41 percentage points behind last year and 13 points behind the 5-year average. Double-digit progress was evident in most areas, as warm weather favored rapid phenological development during the week. In portions of the southern and western Corn Belt, short-term soil moisture deficits negatively impacted some corn, as development advanced to the critical reproductive stage. Overall, 63 percent of the corn crop was reported in good to excellent condition, down 3 percentage points from last week but 37 points better than the same time last year.

Soybeans: Forty-six percent of the soybean crop was at or beyond the blooming stage by July 21, thirty-two percentage points behind last year and 13 points behind the 5-year average. In Illinois, recent shortages of soil moisture stressed the developing crop in some areas. Nationally, 8 percent of the soybean crop was setting pods by week's end, 25 percentage points behind last year and 11 points behind the 5-year average. Overall, 64 percent of the soybean crop was reported in good to excellent condition, down slightly from last week but 33 percentage points better than the same time last year.

Winter Wheat: By July 21, three-quarters of the winter wheat crop was harvested, 9 percentage points behind last year and slightly behind the 5-year average. In Idaho, hot, dry weather quickly matured the winter wheat crop, with more widespread harvest expected in the next week.

Cotton: By week's end, 77 percent of the cotton crop was at or beyond the squaring stage. This was 11 percentage points behind last year and 6 points behind the 5-year average. In Texas, widespread rainfall benefited developing cotton, and allowed producers to limit irrigation in some fields; however, cooler weather on the High Plains led to some concern about accumulating adequate heat units. Nationwide, 27 percent of the cotton crop was setting bolls by July 21, eighteen percentage points behind last year and 15 points behind the 5-year average. Overall, 44 percent of the cotton crop was reported in good to excellent condition, up 2 percentage points from last week but 3 points below the same time last year.

Sorghum: Thirty-six percent of the sorghum crop was at or beyond the heading stage by July 21, eight percentage points behind last year but on par with the 5-year average. In Kansas, reports were received of some failed sorghum due to a severe lack of rainfall or hail and wind damage. Nationally, 27 percent of the sorghum crop was coloring by week's end, 3 percentage points behind last year but 2 points ahead of the 5-year average. Heavy rain slowed harvest in portions of eastern and southern Texas. Overall, 45 percent of the sorghum crop was reported in good to excellent condition, up slightly from last week and 19 percentage points better than the same time last year.

Rice: By July 21, twenty-four percent of the rice was at or beyond the heading stage, 28 percentage points behind last year and 8 points behind the 5-year average. Felds in Louisiana were being drained in preparation for harvest. Overall, 72 percent of the rice crop was reported in good to excellent condition, up 4 percentage points from last week and 3 points better than the same time last year.

Other Small Grains: By week's end, 95 percent of the oat crop was at or beyond the heading stage, 5 percentage points behind last year and 3 points behind the 5-year average. Producers had harvested 18 percent of this year's crop by July 21, thirty-five percentage points behind last year and 8 points behind the 5-year average. Overall, 56 percent of the oat crop was reported in good to excellent condition, down 2 percentage points from last week and 3 points below the same time last year.

Ninety-one percent of the barley crop was at or beyond the heading stage by week's end, 7 percentage points behind last year but 3 points ahead of the 5-year average. Above-average temperatures, coupled with drier weather, spurred crop development in North Dakota. Overall, 65 percent of the barley crop was reported in good to excellent condition, unchanged from last week but 8 percentage points better than the same time last year.

By July 21, eighty-five percent of the spring wheat was at or beyond the heading stage, twelve percentage points behind last year and 3 points behind the 5-year average. Overall, 68 percent of the spring wheat crop was reported in good to excellent condition, down 2 percentage points from last week but 8 points better than the same time last year.

Other Crops: By week's end, 69 percent of the peanut crop was at or beyond the pegging the stage, 8 percentage points behind last year and slightly behind the 5-year average. Saturated fields in Georgia left producers struggling to apply much-needed fungicides, while standing water drowned out some fields. Overall, 61 percent of the peanut crop was reported in good to excellent condition, down 7 percentage points from last week and 6 points below the same time last year.

Crop Progress and Condition

Week Ending July 21, 2013

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

Soybeans Percent Blooming

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
AR	88	37	52	63
IL	82	32	50	56
IN	76	30	56	54
IA	83	13	36	70
KS	56	21	35	50
KY	61	11	25	48
LA	91	74	82	87
MI	74	44	56	56
MN	89	21	39	61
MS	97	66	77	94
MO	58	7	23	38
NE	79	39	65	61
NC	28	7	15	32
ND	89	26	53	63
OH	75	27	60	57
SD	85	36	56	61
TN	72	15	27	61
WI	60	13	31	45
18 Sts	78	26	46	59

These 18 States planted 95% of last year's soybean acreage.

Soybeans Percent Setting Pods

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
AR	67	NA	21	39
IL	36	NA	11	17
IN	29	NA	12	14
IA	31	NA	2	22
KS	9	NA	4	7
KY	29	NA	5	16
LA	79	NA	65	70
MI	20	NA	14	12
MN	39	NA	2	14
MS	86	NA	28	76
MO	15	NA	2	8
NE	25	NA	13	15
NC	8	NA	6	8
ND	56	NA	3	22
OH	19	NA	7	12
SD	25	NA	5	12
TN	44	NA	9	31
WI	14	NA	0	8
18 Sts	33	NA	8	19

These 18 States planted 95% of last year's soybean acreage.

Soybean Condition by Percent

	VP	P	F	G	EX
AR	6	8	31	39	16
IL	2	5	21	59	13
IN	1	4	21	53	21
IA	3	8	33	43	13
KS	3	10	46	39	2
KY	1	2	13	62	22
LA	2	5	28	50	15
MI	2	8	24	56	10
MN	1	6	28	56	9
MS	0	5	25	56	14
MO	4	12	38	41	5
NE	2	6	29	54	9
NC	1	6	29	59	5
ND	1	4	29	54	12
OH	2	7	24	47	20
SD	1	3	23	56	17
TN	1	4	16	58	21
WI	1	8	26	47	18
18 Sts	2	6	28	51	13
Prev Wk	2	6	27	52	13
Prev Yr	13	22	34	27	4

Corn Percent Silking

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
CO	53	8	29	32
IL	97	21	64	71
IN	88	22	62	60
IA	87	1	18	54
KS	81	33	56	74
KY	86	37	50	71
MI	69	9	43	43
MN	92	1	19	46
MO	94	30	59	75
NE	85	14	50	64
NC	98	93	95	98
ND	79	5	14	30
OH	80	19	63	52
PA	72	23	54	54
SD	59	6	32	23
TN	97	75	85	93
TX	87	72	84	85
WI	58	2	18	33
18 Sts	84	16	43	56

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	10	15	29	40	6
IL	1	7	27	46	19
IN	1	4	17	50	28
IA	4	10	31	43	12
KS	10	20	39	28	3
KY	1	2	10	54	33
MI	2	5	21	56	16
MN	3	6	27	54	10
MO	5	14	35	38	8
NE	4	7	23	50	16
NC	0	2	17	54	27
ND	1	5	26	52	16
OH	2	4	17	48	29
PA	1	3	11	47	38
SD	2	3	20	56	19
TN	0	4	14	56	26
TX	1	6	43	37	13
WI	3	9	26	40	22
18 Sts	3	8	26	46	17
Prev Wk	3	6	25	49	17
Prev Yr	21	24	29	23	3

Winter Wheat Percent Harvested

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
AR	100	100	100	100
CA	98	95	96	96
CO	100	44	75	70
ID	5	0	2	2
IL	100	88	97	97
IN	100	68	96	98
KS	100	98	100	100
MI	100	9	63	63
MO	100	97	100	99
MT	10	0	1	2
NE	99	29	52	68
NC	100	83	90	100
OH	100	28	93	98
OK	100	99	100	100
OR	12	9	17	17
SD	96	0	3	36
TX	100	98	100	99
WA	3	1	9	6
18 Sts	84	67	75	76

These 18 States harvested 88% of last year's winter wheat acreage.

Crop Progress and Condition

Week Ending July 21, 2013

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

Cotton Percent Squaring

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
AL	95	90	95	82
AZ	92	88	91	88
AR	100	99	100	98
CA	89	96	97	87
GA	93	68	75	87
KS	82	50	66	80
LA	100	97	98	98
MS	99	83	92	98
MO	97	62	77	93
NC	92	73	86	94
OK	59	23	39	62
SC	84	42	62	84
TN	92	52	68	94
TX	85	65	73	78
VA	97	80	84	86
15 Sts	88	69	77	83

These 15 States planted 99% of last year's cotton acreage.

Cotton Percent Setting Bolls

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
AL	71	17	23	47
AZ	57	60	64	57
AR	91	28	79	77
CA	58	50	70	50
GA	66	20	34	54
KS	25	2	7	11
LA	85	55	63	83
MS	78	20	34	68
MO	29	19	33	47
NC	38	9	36	58
OK	15	4	8	17
SC	33	3	14	32
TN	52	2	14	47
TX	34	13	18	31
VA	36	0	26	41
15 Sts	45	17	27	42

These 15 States planted 99% of last year's cotton acreage.

Cotton Condition by Percent

	VP	P	F	G	EX
AL	0	3	18	77	2
AZ	0	0	10	47	43
AR	5	6	17	43	29
CA	0	0	5	15	80
GA	2	8	35	43	12
KS	0	8	54	32	6
LA	0	1	29	60	10
MS	0	2	26	67	5
MO	0	5	31	60	4
NC	5	15	35	39	6
OK	6	18	56	19	1
SC	5	11	32	49	3
TN	2	4	21	54	19
TX	17	21	36	22	4
VA	2	2	18	72	6
15 Sts	10	14	32	34	10
Prev Wk	10	16	32	32	10
Prev Yr	5	13	35	37	10

Sorghum Percent Headed

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
AR	96	45	57	83
CO	19	4	12	22
IL	42	8	33	23
KS	17	1	3	9
LA	97	84	93	97
MO	45	5	14	24
NE	17	0	5	8
NM	5	2	4	5
OK	44	13	18	32
SD	26	4	12	12
TX	76	61	77	67
11 Sts	44	27	36	36

These 11 States planted 98% of last year's sorghum acreage.

Sorghum Percent Coloring

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
AR	54	0	1	27
CO	0	0	5	8
IL	2	0	0	1
KS	1	0	0	0
LA	81	47	61	65
MO	6	0	0	2
NE	0	0	0	0
NM	0	0	0	0
OK	16	0	1	6
SD	0	0	0	0
TX	68	55	69	60
11 Sts	30	22	27	25

These 11 States planted 98% of last year's sorghum acreage.

Sorghum Condition by Percent

	VP	P	F	G	EX
AR	2	5	35	44	14
CO	14	23	45	18	0
IL	6	6	19	67	2
KS	6	15	43	34	2
LA	0	3	34	56	7
MO	1	6	42	50	1
NE	2	16	32	30	20
NM	0	16	67	15	2
OK	0	8	34	46	12
SD	0	5	39	52	4
TX	8	8	31	42	11
11 Sts	6	11	38	38	7
Prev Wk	6	12	38	39	5
Prev Yr	15	25	34	20	6

Crop Progress and Condition

Week Ending July 21, 2013

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

Oats Percent Headed

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
IA	100	98	99	100
MN	100	80	89	97
NE	100	99	100	100
ND	99	73	80	88
OH	100	100	100	99
PA	99	98	98	99
SD	100	92	98	98
TX	100	100	100	100
WI	100	85	91	98
9 Sts	100	91	95	98

These 9 States planted 60% of last year's oat acreage.

Oats Percent Harvested

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
IA	88	4	21	39
MN	38	0	0	11
NE	93	27	66	52
ND	19	0	0	4
OH	64	4	24	30
PA	35	0	8	17
SD	72	0	3	18
TX	100	99	100	99
WI	46	2	4	14
9 Sts	53	12	18	26

These 9 States harvested 66% of last year's oat acreage.

Oat Condition by Percent

	VP	P	F	G	EX
IA	0	5	31	54	10
MN	0	4	20	64	12
NE	4	11	31	51	3
ND	3	2	17	61	17
OH	1	3	27	59	10
PA	0	2	18	54	26
SD	2	3	30	57	8
TX	11	22	44	22	1
WI	1	7	25	51	16
9 Sts	4	10	30	46	10
Prev Wk	4	9	29	48	10
Prev Yr	4	8	29	44	15

Peanuts Percent Pegging

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
AL	71	59	74	48
FL	74	71	72	70
GA	81	47	60	72
NC	82	55	82	88
OK	74	60	75	78
SC	81	56	75	79
TX	65	66	84	67
VA	78	41	59	70
8 Sts	77	55	69	70

These 8 States planted 96% of last year's peanut acreage.

Peanut Condition by Percent

	VP	P	F	G	EX
AL	0	1	21	77	1
FL	0	3	34	45	18
GA	2	7	33	48	10
NC	1	3	21	59	16
OK	0	3	32	49	16
SC	2	13	37	44	4
TX	5	9	34	52	0
VA	0	9	22	65	4
8 Sts	2	6	31	52	9
Prev Wk	1	5	26	57	11
Prev Yr	0	4	29	56	11

Spring Wheat Percent Headed

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
ID	95	80	92	87
MN	100	87	96	95
MT	90	67	77	79
ND	100	62	82	88
SD	100	97	100	99
WA	96	95	100	97
6 Sts	97	71	85	88

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

Spring Wheat Condition by Percent

	VP	P	F	G	EX
ID	0	1	33	59	7
MN	2	5	28	52	13
MT	1	4	28	51	16
ND	1	4	24	57	14
SD	6	7	36	44	7
WA	0	9	37	51	3
6 Sts	1	4	27	55	13
Prev Wk	1	4	25	57	13
Prev Yr	2	9	29	51	9

Rice Percent Headed

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
AR	64	1	8	29
CA	0	0	8	2
LA	86	53	78	74
MS	74	21	38	47
MO	20	0	3	14
TX	68	77	89	72
6 Sts	52	13	24	32

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

Rice Condition by Percent

	VP	P	F	G	EX
AR	1	6	30	46	17
CA	0	0	5	45	50
LA	0	3	24	56	17
MS	0	0	14	67	19
MO	0	3	34	39	24
TX	0	4	51	31	14
6 Sts	0	4	24	48	24
Prev Wk	1	4	27	45	23
Prev Yr	1	5	25	49	20

Crop Progress and Condition

Week Ending July 21, 2013

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

Barley Percent Headed

	Prev Year	Prev Week	Jul 21 2013	5-Yr Avg
ID	97	78	95	90
MN	100	82	97	93
MT	96	84	96	81
ND	100	64	83	90
WA	93	95	100	96
5 Sts	98	76	91	88

These 5 States planted 79% of last year's barley acreage.

Barley Condition by Percent

	VP	P	F	G	EX
ID	0	1	33	57	9
MN	1	7	34	50	8
MT	1	3	32	48	16
ND	1	3	27	60	9
WA	0	6	33	56	5
5 Sts	1	3	31	54	11
Prev Wk	1	3	31	54	11
Prev Yr	5	10	28	45	12

Pasture and Range Condition by Percent
Week Ending Jul 21, 2013

	VP	P	F	G	EX		VP	P	F	G	EX
AL	0	1	8	56	35	NH	2	2	20	71	5
AZ	61	18	17	3	1	NJ	1	3	9	51	36
AR	3	21	49	26	1	NM	44	35	17	3	1
CA	35	60	5	0	0	NY	1	5	29	55	10
CO	38	26	23	12	1	NC	0	2	24	64	10
CT	0	0	39	61	0	ND	0	2	13	56	29
DE	1	2	28	61	8	OH	2	6	23	50	19
FL	1	2	20	65	12	OK	10	16	38	34	2
GA	0	2	23	48	27	OR	7	24	43	25	1
ID	9	28	31	32	0	PA	0	2	37	48	13
IL	1	4	20	55	20	RI	0	0	75	25	0
IN	1	4	20	58	17	SC	0	1	25	59	15
IA	3	11	35	41	10	SD	1	5	20	59	15
KS	29	26	28	16	1	TN	0	2	16	65	17
KY	1	3	16	54	26	TX	18	28	36	17	1
LA	1	6	40	47	6	UT	6	21	41	32	0
ME	0	1	12	59	28	VT	0	6	13	76	5
MD	1	3	9	77	10	VA	0	1	17	60	22
MA	0	0	53	47	0	WA	5	17	28	48	2
MI	3	9	33	43	12	WV	0	2	15	71	12
MN	1	4	20	63	12	WI	3	9	29	47	12
MS	0	1	51	45	3	WY	15	26	32	24	3
MO	1	10	39	46	4	48 Sts	11	17	28	36	8
MT	4	11	33	42	10						
NE	16	23	38	22	1	Prev Wk	11	17	26	37	9
NV	45	25	20	10	0	Prev Yr	26	29	27	16	2

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

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 Crop Progress and Condition Reports published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service. The crop reports are available on the Internet through the NASS Home Page on the World Wide Web at http://www.nass.usda.gov.

ALABAMA: Days suitable for fieldwork was 4.2. Topsoil moisture 1% short, 64% adequate, and 35% surplus. Corn silked 95%, 89% last week, 100% 2012, and 98% five year average. Corn dough 64%, 58% last week, 82% 2012, and 66% five year average. Corn dented 20%, 11% last week, 57% 2012, and 32% five year average. Corn condition 1% poor, 9% fair, 67% good, and 23% excellent. Soybeans blooming 36%, 29% last week, 76% 2012, and 52% five year average. Soybeans setting pods 6%, 33% 2012, and 19% five year average. Soybeans condition 1% poor, 20% fair, 73% good, and 6% excellent. Winter wheat harvested 100%, 99% last week, 100% 2012, and 95% five year average. Livestock condition 1% poor, 11% fair, 64% good, and 24% excellent. The week's average mean temperatures ranged from 77.7 F in Crossville, to 82.2 F in Huntsville; total precipitation ranged from 0.12 inches in Montgomery, to 3.75 inches in Birmingham. According to the US Drought Monitor released on July 16, 2013, the state was currently 100.00 percent drought free compared to 93.04 percent last week. Recent rainfall caused damage to some crops planted in low areas. Less rainfall and warmer temperatures throughout the region allowed producers to harvest some hay and plant more acres of soybeans. Pastures and livestock were in good to excellent conditions. Blueberry producers were experiencing a major reduction in quality causing further profit losses.

ALASKA: Days suitable for fieldwork 5.5. Topsoil moisture 10% very short, 30% short, 60% adequate. Subsoil moisture 5% very short, 40% short, 55% adequate. Barley 10% turning color. Oats 55% headed. First cutting hay 85% complete; second cutting just underway in the Fairbanks area. Wind and rain damage 100% none. Condition of barley 15% poor, 35% fair, 50% good. Condition of oats 10% poor, 30% fair, 60% good. Condition of hay 15% poor, 30% fair, 50% good, 5% excellent. Condition of potatoes 25% fair, 60% good, 15% excellent. Main farm activities for the week were harvesting hay and vegetables, irrigating, fertilizing, weed control, equipment and fence maintenance.

ARIZONA: Temperatures were mostly above normal across the State for the week ending July 21, 2013, ranging from 4 degrees below normal at Safford and Payson to 8 degrees above normal at the Grand Canyon. The highest temperature of the week was 115 degrees recorded in Bullhead City. The lowest reading was 50 degrees at Flagstaff. Twenty-one of the 22 weather stations recorded precipitation last week. Phoenix received the least precipitation at 0.09 inches and Payson received the most at 3.46 inches. Eighteen of the 22 stations have received more than 50 percent of normal precipitation. Monsoon storms have provided needed moisture across the State, but not enough to impact overall drought conditions. Range and Pastures were rated in fair to mostly very poor condition, depending on location. Melon harvest is winding down in the central part of the State. Dairies continue to work around the clock.

ARKANSAS: Days suitable for fieldwork 6.3. Topsoil moisture 12% very short, 52% short, 34% adequate, 2% surplus. Subsoil moisture 10% very short, 55% short, 34% adequate, 1% surplus. Corn 98% silked, 100% 2012, 99% avg; 63% dough, 95% 2012, 74% avg; 25% dent, 83% 2012, 47% avg; condition 9% very poor, 6% poor, 24% fair, 46% good, 15% excellent. Soybeans 100% planted, 100% 2012, 100% avg; 99% emerged, 100% 2012, 99% avg. Scattered rain showers relieved some areas of Arkansas last week. Irrigation of row crops was the primary farming activity for the week. Overall, the major row crops were in mostly fair to good condition. Major farming activities included irrigation of crops and application of pesticides. Livestock were in mostly fair to good condition last week. Hay condition was mostly fair to good. Pasture and hay fields continued to be affected by dry weather.

CALIFORNIA: The week started out dry statewide with cooler than normal temperatures across the northern interior regions while near normal temperatures prevailed across most of the southern areas. High pressure centered over the Desert Southwest then began to shift westward with warming temperatures observed at most inland areas of the State. This shift toward the west combined with weak low pressure off Baja California allowed increased monsoonal moisture to begin to enter the southern and desert areas of California later in the week. Rainfall resulting from the monsoon moisture surge produced measurable rainfall across the Inland Empire as well as the Los Angeles and San Diego areas. Locally heavy rainfall amounts occurred across the mountain and desert areas of southern and southeast California and also along the Sierra Nevada crest. Rice continued to progress through the boot stage and began to head. Fields were treated for weed control. Cotton progressed well due to high temperatures despite increased insect pressure as a result of localized cutting of alfalfa crops. Nearly three quarters of the crop set bolls by week's end. The crop condition was rated 95 percent good to excellent. Growers cut, windrowed, raked and baled alfalfa during the week. Corn for silage was harvested during the week. Pear harvest pace was increasing and apple harvest just began. Sugarone, Superior, Flame Seedless, and Summer Royal table grape varieties were harvested in the San Joaquin Valley. Blueberry harvest ended. Stonefruit growers were enhancing fruit color by pruning leaves to allow more sunlight in. The harvest of freestone peaches, nectarines, and plums continued. Clingstone peach harvest was going well. Cherry harvest was complete. Prunes were beginning to color and harvest was expected to begin in a few weeks. Kiwifruit continued to develop. Pomegranates were gaining in size. Olives were irrigated. Valencia orange harvest continued. Ruby Red grapefruit and lemons were harvested. Almond hull split was progressing; harvest for some growers could start as early as next week. Pistachios continued to fill and growers applied alternaria and worm sprays. Walnuts were sprayed for husk fly and coddling moth. Tulare County reported harvesting of squash, eggplant, tomatoes, cucumbers and peppers for roadside stands. Harvest began for tomatoes and carrots in Fresno County. Bell peppers and jalapeno peppers finished harvest. Planting began for winter carrots; tomatoes were treated for beet armyworms. Stanislaus County reported Roma tomato fields were showing color and nearly ready for harvest. Peppers, zucchini, cantaloupes and honeydew were harvested. Cucumbers, peppers, tomatoes, basil, turnips, lettuce, onions, garlic and squash were harvested for farmer's markets. Onions, melons and squash were harvested in San Joaquin County. San Mateo County reported pumpkin plants looked healthy with steady growth. Fields were green with Brussels sprout plants. In Yuba County, cantaloupe plants were emerging and irrigated. Siskiyou County reported dehydrator onions were growing fast and progressing on schedule. Range and non-irrigated pasture deterioration from fair to very poor continued. Fire danger was high with dry winds sweeping across much of the State. Upper elevation watering holes continued to dry out while those at the lower elevations have dried. Sheep and cattle grazed on idle fields, dry land grain and alfalfa fields. Supplemental feeding of livestock increased. Bees continued to work sunflower and vine seed fields.

COLORADO: Days suitable for field work 6.3 days. Topsoil moisture 35% very short, 45% short, 20% adequate. Subsoil moisture 49% very short, 38% short, 13% adequate. Winter wheat ripe 97%, 100% 2012, 94% avg. Spring barley headed 97%, 100% 2012, 97% avg, turning

27%, 44% 2012, 51% avg, condition 2% poor, 34% fair, 58% good, 6% excellent. Spring wheat turning 43%, 37% 2012, 38% avg, harvested 2%, 4% 2012, 2% avg, condition 7% very poor, 13% poor, 37% fair, 39% good, 4% excellent. San Luis Valley potatoes condition 1% poor, 33% fair, 62% good, 4% excellent. All Other potatoes condition 64% fair, 34% good, 2% excellent. Dry Beans flowered 34%, 45% 2012, 36% avg, condition 8% poor, 45% fair, 44% good, 3% excellent. Alfalfa 2nd cutting 55%, 65% 2012, 47% avg, condition 20% very poor, 17% poor, 27% fair, 31% good, 5% excellent. Dry onions condition 1% poor, 23% fair, 65% good, 11% excellent. Livestock condition 2% very poor, 12% poor, 32% fair, 50% good, 4% excellent. Sugarbeets condition 1% poor, 19% fair, 51% good, 27% excellent. An overall increase in precipitation improved moisture supplies and crop conditions; however portions of the state still have inadequate moisture levels.

DELAWARE: Days suitable for fieldwork 6.0. Topsoil moisture 1% very short, 3% short, 72% adequate, 24% surplus. Subsoil moisture 2% short, 72% adequate, 26% surplus. Hay supplies 7% short, 72% adequate, 21% surplus. Other hay second cutting 85% this week, 75% last week, 85% last year, 85% average. Alfalfa hay second cutting 90% this week, 82% last week, 100% last year, 92% average. Corn condition 2% very poor, 7% poor, 24% fair, 46% good, 21% excellent. Soybean condition 1% very poor, 6% poor, 29% fair, 46% good, 18% excellent. Corn silked 84% this week, 59% last week, 94% last year, 85% average. Corn at the dough stage 22% this week, 0% last week, 29% last year, 28% average. Soybeans planted 96% this week, 91% last week, 100% last year, 100% average. Soybeans emerged 90% this week, 80% last week, 100% last year, 99% average. Soybeans in bloom 35% this week, 32% last week, 38% last year, 33% average. Winter wheat harvested 97% this week, 85% last week, 100% last year, 100% average. Cucumbers harvested 35% this week, 32% last week, 47% last year, 42% average. Lima Beans harvested 18% this week, 15% last week, 27% last year, 30% average. Snap beans planted 100% this week, 99% last week, 98% last year, 98% average. Sweet Corn harvested 31% this week, 9% last week, 55% last year, 35% average. Watermelons harvested 13% this week, 6% last week, 36% last year, 24% average.

FLORIDA: Topsoil moisture 1% short, 56% adequate, 43% surplus. Subsoil moisture 1% short, 59% adequate, 40% surplus. Haying delayed another week due to rain. White mold present in peanuts in Escambia, Santa Rosa counties. Harvesting of corn started in parts of Hamilton, Gilchrist counties. Panhandle, south Florida farmers prepared fields for fall crops. Citrus growing area completely drought-free. Early orange fruit golf ball size and larger, grapefruit fruit baseball size. Growers concentrated on next year's citrus crop progress. All areas doing heavy summer spraying, Psyllid control. Cattle Condition 1% very poor, 1% poor, 25% fair, 63% good, 10% excellent. Statewide; Disease, flooding limited forage condition.

GEORGIA: Days suitable for fieldwork 3.6. Topsoil moisture 1% short, 48% adequate, 51% surplus. Subsoil moisture 2% short, 62% adequate, 36% surplus. Blueberries harvested 98%, 100% 2012. Corn 1% very poor, 5% poor, 21% fair, 55% good, 18% excellent. Hay second cutting 46%, 60% 2012. Peaches harvested 80%, 99% 2012, 84% avg. Sorghum 1% very poor, 4% poor, 35% fair, 57% good, 3% excellent. Sorghum planted 89%, 99% 2012, 94% avg. Soybeans 2% very poor, 6% poor, 36% fair, 49% good, 7% excellent. Soybeans planted 88%, 99% 2012, 99% avg. Tobacco 3% very poor, 11% poor, 29% fair, 49% good, 8% excellent. Tobacco harvested 22%, 24% 2012, 20% avg. Watermelons harvested 83%, 97% 2012, 94% avg. Winter wheat harvested 94%, 100% 2012, 100% avg. Precipitation estimates for the state ranged from no rain up to 3.8 inches. Average high temperatures ranged from the mid 80s to the low 90s. Average low temperatures ranged from the low 60s to the low 70s.

HAWAII: Days suitable for fieldwork 7.0. Topsoil moisture 13% very short, 70% short, 17% adequate. Clear skies continued to dominate weather conditions throughout the week. Daytime high temperatures were in the mid to high eighties in most areas. The average weekly total rainfall across the State was 0.61 inch of measurable precipitation. The total drought free area in the State is currently 16.96 percent, compared to last week's 53.64 percent. Approximately 77 percent of the State currently remains categorized as abnormally dry or drier, but limited to Hawaii and Maui Counties and very small portions of the Oahu and Kauai Islands' leeward coast. Extreme drought was rated for the leeward coast of Maui Island and a small portion of the South Kohala and North Kohala districts on the Big Island of Hawaii. State irrigation reservoir water levels in Hawaii and Honolulu Counties were unchanged on Friday, July 19, 2013, compared to the previous Friday. The state operated reservoir's capacity on Molokai Island was down 1 percent on Friday, July 19, 2013, compared to the previous Friday. Conservation measures were still in effect for Oahu and Molokai Island reservoirs of 10 and 20 percent, respectively.

IDAHO: Days suitable for field work 6.8 days. Topsoil moisture 11% very short, 30% short, 59% adequate. Potatoes closing middles 83%, 97% 2012, 80% avg. Irrigation water supply 15% very poor, 12% poor, 37% fair, 28% good, 8% excellent. The Caribou County extension educator reports hot weather has stressed dryland crops again this week and rain is needed soon to finish crops. The Twin Falls and Jerome County extension educators report winter wheat harvest should start this week. The Caribou County extension educator reports cattle are doing well but range conditions are starting to deteriorate. No livestock problems have been reported.

ILLINOIS: Days suitable for fieldwork 6.3. Topsoil moisture 2% very short, 25% short, 64% adequate, 9% surplus. Subsoil moisture 1% very short, 14% short, 78% adequate, 7% surplus. Corn height 75 in., 72 in. 2012, 60 in. avg. Oats turning yellow 94%, 99% 2012, 92% avg; ripe 45%, 90% 2012, 61% avg; harvested 23%, 63% 2012, 38% avg; condition 1% very poor, 6% poor, 26% fair, 54% good, and 13% excellent. Alfalfa second cut 74%, 98% 2012, 86% avg; condition 1% very poor, 3% poor, 21% fair, 59% good, and 16% excellent. Red Clover 99% cut, 100% 2012, 96% avg. Crop development continued to take off last week in most parts of the state. However, weather conditions have stressed some crops and farmers will need rain in the days ahead. Meanwhile in the Southern part of the state, fields have received ample rain and in some areas a little too much. Activities included spraying, baling hay and straw, and finishing the wheat harvest.

INDIANA: Days suitable for fieldwork 6.1. Topsoil moisture 2% very short, 18% short, 71% adequate, 9% surplus. Subsoil moisture 1% very short, 13% short, 77% adequate, 9% surplus. Alfalfa second cutting 74%, 99% 2012, 78% avg. Temperatures ranged from 3o to 9o above normal with a low of 60o and a high of 96o. Precipitation ranged from 0.0 to 1.58 inches. A week of hot, dry weather placed stress on both crops and livestock. Soil moisture was rapidly being depleted with temperatures soaring above ninety degrees. Most irrigation systems were running during the week to try to keep up with the moisture loss. Farmers made good progress harvesting winter wheat with varying yields and test weights being reported. Aerial applications of fungicide were being made to both corn and soybean fields. De-tasseling was prevalent on seed corn operations. Other activities included monitoring irrigation systems, spraying soybean fields for weeds, baling straw, cutting and baling hay, hauling grain to market, mowing roadsides and taking care of livestock.

IOWA: Days suitable for fieldwork 6.7. Topsoil moisture 14% very short, 43% short, 42% adequate and 1% surplus. Subsoil moisture 4% very short, 30% short, 63% adequate and 3% surplus. Corn tasseled 35%, 95% 2012, 70 percent average. Oats turned 76%, 100% 2012, 90% average. Alfalfa 2nd cutting progress 52%, 98% 2012, 66% average. Hay 1% very poor, 7% poor, 30% fair, 50% good and 12% excellent. Crops were beginning to need rain as dry weather continued. It was the third week in a row with below average precipitation, which has caused soil moisture conditions to decline, and has led to crops needing additional moisture.

KANSAS: Days Suitable for field work 6.0. Topsoil moisture 31% very short, 40% short, 26% adequate, 3% surplus. Subsoil moisture 33% very short, 42% short, 25% adequate. Corn dough 9%, 43% 2012 19% avg. Sunflowers emerged 98%, 94% 2012, 93% avg; Blooming 10%, 18% 2012, 12% avg. Alfalfa second cutting 88%, 100% 2012, 95% avg. Alfalfa third cutting 12%, 59% 2012, 28% avg. Stock water supplies 20% very short, 22% short, 57% adequate, 1% surplus. Spotty showers were welcomed across much of the State, with most areas receiving a half inch to an inch and a half of rain. While western Kansas welcomed the showers, these were too little to improve the drought conditions, as dryland row crops and pastures continue to suffer. Failed dryland corn and sorghum crops are being reported in areas where rains have alluded, and where hail or wind damage has occurred. Average temperatures were cooler than normal in western and central Kansas, but a few degrees warmer than normal in the East Central District.

KENTUCKY: Days suitable fieldwork 5.0. Topsoil moisture 1% very short, 8% short, 67% adequate, 24% surplus. Subsoil moisture 1% very short, 4% short, 71% adequate, 24% surplus. Precipitation averaged 0.62 in., 0.36 in. below normal. Temperatures averaged 80 degrees, 3 degrees warmer than normal. Corn tasseled 70%. Corn milking 8%. Burley tobacco blooming 32%. Burley tobacco topped 12%. Dark tobacco blooming 53%. Dark tobacco topped 27%. Condition of set tobacco 5% very poor, 11% poor, 22% fair, 49% good, 13% excellent. This week consisted of exceptionally hot and humid conditions.

LOUISIANA: Days suitable for fieldwork 5.2. Soil moisture 6% very short, 29% short, 51% adequate, 14% surplus. Corn silked 100% this week, 100% last week, 100% last year, 100% average; Corn dough 100% this week, 96% last week, 100% last year, 98% average; Corn dent 87% this week, 64% last week, NA% last year, NA% average; Corn mature 12% this week, 5% last week, 39% last year, 19% average; Corn condition 29% fair, 58% good, 13% excellent. Peaches harvested 87% this week, 74% last week, 90% last year, 81% average. Hay second cutting 60% this week, 45% last week, 72% last year, 57% average. Winter Wheat harvested 100% this week, 100% last week, 100% last year, 100% average. Vegetables condition 1% very poor, 13% poor, 43% fair, 41% good, 2% excellent. Sugarcane condition 1% very poor, 6% poor, 26% fair, 50% good, 17% excellent. Livestock condition 1% very poor, 4% poor, 30% fair, 57% good, 8% excellent.

MARYLAND: Days suitable for fieldwork 6.5. Topsoil moisture 1% very short, 14% short, 79% adequate, 6% surplus. Subsoil moisture 2% very short, 10% short, 84% adequate, 4% surplus. Hay supplies 6% very short, 6% short, 85% adequate, 3% surplus. Other hay second cutting 72% this week, 52% last week, 89% last year, 75% average. Alfalfa hay second cutting 88% this week, 79% last week, 99% last year, 95% average. Corn condition 2% very poor, 4% poor, 12% fair, 51% good, 31% excellent. Soybean condition 2% very poor, 3% poor, 12% fair, 65% good, 18% excellent. Corn silked 84% this week, 45% last week, 90% last year, 78% average. Corn at the dough stage 10% this week, 5% last week, 14% last year, 16% average. Soybean planted 98% this week, 96% last week, 100% last year, 100% average. Soybean emerged 92% this week, 89% last week, 99% last year, 98% average. Soybeans in bloom 29% this week, 14% last week, 50% last year, 37% average. Winter wheat harvested 97% this week, 81% last week, 100% last year, 99% average. Cucumbers harvested 43% this week, 35% last week, 39% last year, 40% average. Lima beans harvested 16% this week, 13% last week, 18% last year, 15% average. Snap beans planted 99% this week, 98% last week, 95% last year, 98% average. Sweet Corn harvested 32% this week, 30% last week, 49% last year, 34% average. Watermelons harvested 26% this week, 12% last week, 28% last year, 17% average.

MICHIGAN: Days suitable for fieldwork 6. Topsoil 8% very short, 25% short, 60% adequate, 7% surplus. Subsoil 7% very short, 20% short, 68% adequate, 5% surplus. Winter Wheat 3% very poor, 10% poor, 22% fair, 53% good, 12% excellent. Oats 1% very poor, 3% poor, 20% fair, 62% good, 14% excellent. Oats headed 97%, 100% 2012, 99% avg. Oats turning 42%, 96% 2012, 68% avg. All hay 2% very poor, 5% poor, 25% fair, 52% good, 16% excellent. First cutting hay 98%, 100% 2012, 98% avg. Second cutting hay 44%, 73% 2012, 57% avg. Dry beans 2% very poor, 9% poor, 30% fair, 51% good, 8% excellent. Dry beans blooming 33%, 45% 2012, 29% avg. Dry beans setting pods 8%, 6% 2012, 4% avg. The hot dry weather continued this week, with some areas receiving a few inches of rain over the weekend. The lack of rain meant that producers were able to spend much of the week doing fieldwork. Producers harvested a significant amount of wheat as well as second cutting of hay. While hay cutting is progressing nicely as producers can work in the fields, the crop needs moisture. Corn condition is good and progressing rapidly due to the heat. Soybeans are looking good as well and are setting pods in some areas. There are reports that crops are beginning to show stress in some spots from the lack of moisture, especially on lighter soil. Pollinating corn and soybeans setting pods would benefit from some rainfall and moderate temperatures. Dry beans are blooming and are in good condition. Cherry and berry harvests continued. Peach and plum harvests were underway. Apples were 2.0 to 3.0 inches in the southwest and 1.6 to 1.9 inches in the northwest. McIntosh harvest was predicted to start September 11 in the southwest. Pears were 1.5 inches in the southwest and 1.25 inches in the northwest. Peach harvest included Early Star, PF5D, and Harrow Diamond. There was some leaf drop due to bacterial spot infections. Sweet cherry harvest neared completion in the southwest and southeast and was in full swing in the northwest. Tart cherries were 20 mm in the northwest; growers applied ethephon. The harvest was virtually complete in the southwest and underway in the west central. Fruit quality has been very good. Plums were 1 to 1.5 inches in the southeast; light harvest began in the southeast. Wine grapes in the northwest were at buckshot berry. Juice grapes and most wine grapes in the southwest had bunches closed. Hand harvest of Bluecrop blueberries began and mechanical harvesting of early varieties continued. Some labor shortages were reported. Blueberry maggots were caught for the first time. The raspberry harvest continued. Some early specialty peppers were being harvested in the southwest region. Green bell pepper harvest is still two to three weeks away. Squash bug activity has been observed on squash and pumpkins in the southwest. General harvest for sweet corn will begin this week in the southeast and southwest regions. Cabbage harvest continued in the southeast region; there has been an increased amount of soft rot and plant death in the fields. Harvest began for cucumbers, squash, and zucchini in the southeast region; powdery mildew was detected in squash and zucchini crops in the southeast and southwest regions. Processing and Jack o' Lantern pumpkins were bearing green fruit 2 to 5 inches in diameter in the southeast. Tomatoes were bearing green fruit in the southeast.

MINNESOTA: Days suitable for fieldwork 6.0. Topsoil moisture 2% Very Short, 13% Short, 81% Adequate, and 4% Surplus. Subsoil moisture 1% Very Short, 12% Short, 82% Adequate, and 5% Surplus. Corn height 59 inches, 75 inches 2012, 69 inches average. Soybean height 16 inches, 24 inches 2012, 20 inches average. Oats jointed 98%, 100% 2012, 100% average. Oats turning ripe 32%, 94% 2012, 61% average. Barley jointed 99%, 100% 2012, 100% average. Dry beans, blooming 42%, 90% 2012. Alfalfa, second cutting 51%. Sugarbeets condition 5% poor, 19% fair, 65% good and 11% excellent. Sunflowers condition 2% poor, 45% fair, 44% good and 9% excellent. Potatoes condition 1% very poor, 1% poor, 13% fair, 49% good and 36% excellent. Canola condition 1% poor, 47% fair, 49% good and 3% excellent. Dry Beans condition 1% very poor, 7% poor, 28% fair, 50% good and 14% excellent. Alfalfa condition 1% very poor, 6% poor, 28% fair, 49% good and 16% excellent.

MISSISSIPPI: Days suitable for fieldwork 5.8. Soil moisture 3% very short, 24% short, 69% adequate, 4% surplus. Corn silked 95%, 100% 2012, 100% avg. Corn dough 71%, 96% 2012, 93% avg. Corn dent 24%, 75% 2012, 68% avg. Corn 4% poor, 18% fair, 64% good, 14%

excellent. Hay-warm season hay harvested 65%, 71% 2012, 65% avg. Hay - warm season 52% fair, 43% good, 5% excellent. Sorghum heading 62%, 96% 2012, 88% avg. Sorghum coloring 3%, 36% 2012, 28% avg. Sorghum 2% poor, 18% fair, 76% good, 4% excellent. Watermelons harvested 91%, 91% 2012, 88% avg. Watermelons 88% fair, 12% good. Winter wheat harvested 100%, 100% 2012, 100% avg. Livestock condition 5% fair, 88% good, 7% excellent. Weather patterns are as close to normal as they have been all year. Scattered pop-up showers hampered hay harvesting activities, although most crops are responding well to the rain.

MISSOURI: Days suitable for fieldwork 6.6. Topsoil moisture 12% very short, 48% short, 40% adequate. Subsoil moisture supply 6% very short, 37% short, 56% adequate, 1% surplus. Supply of hay and other roughages 7% short, 86% adequate, 7% surplus. Stock water supplies 6% short, 91% adequate, 3% surplus. Corn dough stage 10%, 58% 2012, 24% avg. Alfalfa 2nd cutting 84%, 100% 2012, 82% avg. Alfalfa 3rd cutting 5%, 35% 2012, 15% avg. Other hay cut 91%, 100% 2012, 90% avg. Scattered showers provided some much needed rainfall across parts of the southern half of the state while the northern half remained mostly dry. All crop conditions declined except for cotton. Temperatures were average to 4 degrees above average across the state. Precipitation averaged 0.47 of an inch statewide. The south-central district reported 1.01 inches. Laclede County reported 3.52 inches.

MONTANA: Days suitable for field work 6.5, 6.6 last year. Topsoil moisture 9% very short, 34% last year; 38% short, 43% last year; 53% adequate, 23% last year; 0% surplus, 0% last year. Subsoil moisture 9% very short, 28% last year; 34% short, 37% last year; 54% adequate, 35% last year; 3% surplus, 0% last year. Barley turning 43%, 58% last year. Corn condition 0% very poor, 2% last year; 2% poor, 15% last year; 43% fair, 35% last year; 41% good, 33% last year; 14% excellent, 15% last year. Dry peas harvested 5%,26% last year. Alfalfa hay harvested – first cutting 94%, 96% last year. Other hay harvested – first cutting 86%,91% last year. Lentils blooming 98%,98% last year. Lentils harvested 10%, 10% last year. Oats headed 90%, 97% last year. Oats turning 15%, 55% last year. Oats condition 1% very poor, 12% last year; 5% poor, 19% last year; 37% fair, 25% last year; 50% good, 35% last year; 7% excellent, 9% last year. Durum wheat boot stage 99%, 98% last year. Durum wheat headed 66%, 89% last year. Durum wheat condition 6% very poor, 4% last year; 7% poor, 6% last year; 22% fair, 28% last year; 50% good, 56% last year; 15% excellent, 6% last year. Spring wheat boot stage 97%, 99% last year. Spring wheat turning 14%, 37% last year. Winter wheat turning 90%, 93% last year. Winter wheat condition 2% very poor, 4% last year; 6% poor, 15% last year; 21% fair, 28% last year; 45% good, 43% last year; 26% excellent, 10% last year. The weather during the week continued to be hot throughout the State with some scattered storms. Bredette received the highest amount of precipitation for the week with 2.10 inches of moisture. Most other stations reported receiving none to 1.01 inches of precipitation. High temperatures ranged from the upper 80s to high 90s, with the state-wide high temperature of 100 degrees recorded at Roundup. A majority of stations reported lows in the mid 40s to the low 50s with the coldest being Wisdom at 31 degrees.

NEBRASKA: Days suitable for fieldwork 6.6 days. Topsoil moisture 26% very short, 44% short, 30% adequate. Subsoil moisture 35% very short, 40% short, 25% adequate. Corn irrigated condition 82% good or excellent. Corn dryland condition 45% good or excellent. Dry Beans blooming 27%, 34% 2012, 29% avg. Dry bean condition 2% poor, 14% fair, 76% good and 8% excellent. Alfalfa condition 6% very poor, 13% poor, 30% fair, 47% good, and 4% excellent. Alfalfa 2nd cutting 73%, 92% 2012, 74% avg. Stockwater supplies rated 7% very short, 18% short, 75% adequate. Another week of limited precipitation and seasonably hot temperatures stressed dryland crops with irrigation active statewide. Pockets of rain did occur early and late in the week, but no general rainfall was received as crops neared peak moisture demands. Wheat harvest continued in the west and advanced northward but progress was limited in Panhandle counties due to high grain moisture levels.

NEVADA: Days suitable for fieldwork 7.0. Exceptionally hot weather was re-established across the State. Record high temperatures were recorded at some stations, including Reno where temperatures hit 105 degrees on Sunday. Weekly average temperatures were 4 to 7 degrees above normal in central and northern Nevada and near normal in the south. Scattered evening showers and rainfall occurred sporadically across the State. Las Vegas received 0.25 inch of rain which resulted in some flash flooding. Eureka received 0.09 inch, Ely 0.04 inch, and most stations traces. Rains assisted fire control efforts in some areas and nearly all wild land fires were well under control by the end of the week. Spring, creek, and river flows continued to decline. Hot weather pushed crop growth and development. Crop condition varied widely depending on irrigation water availability. Surface irrigation was shut off in Lovelock. Alfalfa second cutting neared completion in the north. Southern Nevada hay growers were in the third and fourth cuttings. Second cutting of Timothy hay was underway. Alfalfa seed and mint fields were advanced by the hot weather. Corn was showing good growth as were potatoes. Onion conditions rated mostly good. Garlic harvest was underway in the Mason valley. Grazing forages were drying fast and many ranges were decimated by drought. Main farm and ranch activities included hay harvest, garlic harvest, irrigation, cultivation of row crops, livestock tending, weed and insect control.

NEW ENGLAND: Days suitable for fieldwork 6.4. Topsoil moisture 6% short, 77% adequate, 17% surplus. Subsoil moisture 6% short, 66% adequate, 28% surplus. Pasture condition 3% poor, 24% fair, 65% good, 8% excellent. Maine Barley condition 8% fair, 58% good, 34% excellent. Maine Oats condition 8% fair, 56% good, 36% excellent. Maine Potatoes condition 8% fair, 50% good, 42% excellent. Massachusetts Potatoes condition 15% fair, 85% good. Rhode Island Potatoes condition 75% good, 25% excellent. Field Corn 100% emerged, 100% 2012, 100% avg, condition 6% very poor, 11% poor, 28% fair, 50% good, 5% excellent. Sweet Corn 100% emerged, 99% 2012, 99% avg, 10% harvested, 20% 2012, 10% avg, condition 2% poor, 32% fair, 63% good, 3% excellent. Broadleaf Tobacco condition 4% very poor, 16% poor, 27% fair, 53% good. Shade Tobacco 10% harvested, 40% 2012, 15% avg, condition 1% very poor, 23% fair, 76% good. First Crop Hay 80% harvested, 95% 2012, 90% avg, condition 15% very poor, 11% poor, 28% fair, 40% good, 6% excellent. Second Crop Hay 25% harvested, 55% 2012, 40% avg, condition 3% poor, 34% fair, 60% good, 3% excellent. Third Crop Hay condition 53% fair, 47% good. Apples fruit set 1% below avg, 84% avg, 15% above avg, fruit size 2% below avg, 86% avg, 12% above avg, condition 32% fair, 58% good, 10% excellent. Peaches 15% harvested, 10% 2012, 5% avg, fruit set 1% below avg, 95% avg, 4% above avg, fruit size 99% avg, 1% above avg, condition 46% fair, 52% good, 2% excellent. Pears fruit set 98% avg, 2% above avg, fruit size 100% avg, condition 25% fair, 74% good, 1% excellent. Highbush blueberries 20% harvested, 30% 2012, 20% avg, fruit size 80% avg, 20% above avg, condition 14% fair, 77% good, 9% excellent. Maine Wild Blueberry fruit set 25% below avg, 75% avg, condition 25% fair, 75% good. Massachusetts Cranberries 100% petal fall, fruit set 100% avg, fruit size 100% avg, condition 100% good. Strawberries 95% harvested, 99% 2012, 95% avg, fruit size 3% below avg, 88% avg, 8% above avg, condition 13% poor, 24% fair, 58% good, 4% excellent. Temperatures were warmer than normal across New England. Average temperatures ranged from 9 to 11 degrees above normal. Precipitation averages across the six states ranged from 0.10 to 0.88 inches. Local precipitation totals as high as 5.04 inches. Hazy, hot, and humid conditions prevailed throughout the week with high temperatures in the 90s across most of New England. Most areas received some precipitation during the week. Pasture and hay remain in good to fair condition region-wide. The drier conditions allowed for more field activities such as hay and haylage harvesting, cultivating, fertilizing, and spraying. Vegetable growers harvested beans, beets, broccoli,

green onions, peas, carrots, radishes, greens, greenhouse tomatoes, sweet corn, summer squash, and zucchini. Fruit growers continued to mowing orchard floors, monitoring for pests, and spraying if needed. Fruit crops harvested included peaches, sweet cherries, black currants, raspberries, and high bush blueberries.

NEW JERSEY: Days suitable for field work was 7.0. Topsoil moisture was 26% short, 70% adequate, and 4% surplus. Subsoil moisture was 13% short, 81% adequate, and 6% surplus. Strawberry harvesting and pumpkin planting are nearly complete. Blueberry harvesting is well over half-way done. Tomato, pepper, and eggplant harvesting are well underway. Apple harvesting has just begun. About two-thirds of corn has silked/tasseled. Many soybeans are blooming. About 50 percent of soybeans in Burlington County are reportedly setting pods. Vegetable growers in Burlington County are spraying fungicide to deal with heavy disease pressure, but some producers in the county could not get into fields because they are still wet. Monmouth County reported a heat wave that caused heat stress, sun scald, poor root growth on many summer crops, including irrigated crops, and tough field working conditions. Mercer County growers worked to keep crops as stress free as possible during high temperatures. Warren County reported that ground moisture is short and that more rain is needed. Salem County reported that there is some irrigation of crops and that milk production is down slightly due to heat stress.

NEW MEXICO: Days suitable for fieldwork 6.2. Topsoil moisture 39% very short, 41% short, 18% adequate and 2% surplus. Wind damage 18% light and 7% moderate; 39% cotton damaged and 34% sorghum. Hail damage 11% light; 8% corn, 9% cotton, 8% Chile and 33% alfalfa damaged by hail. Alfalfa 2% very poor, 4% poor, 31% fair, 46% good and 17% excellent; 91% second cutting complete; 60% third cutting complete. Cotton 1% very poor, 12% poor, 34% fair, 34% good and 19% excellent; 70% squared; 44% setting bolls. Corn 3% poor, 40% fair, 25% good and 32% excellent; 31% silked. Irrigated Sorghum 1% poor, 62% fair , 30% good and 7% excellent; 7% headed. Dryland Sorghum 23% poor, 70% fair and 7% good; 2% headed. Irrigated winter wheat 80% harvested for grain. Dry winter wheat 70% harvested for grain. Total winter wheat 74% harvested for grain. Chile 1% poor, 53% fair, 31% good and 15% excellent; 100% average pod set. Onion 31% fair, 58% good and 11% excellent; Onions 84% harvested. Pecans 1% poor, 43% fair, 46% good and 10% excellent. Cattle condition 7% very poor, 19% poor, 54% fair, 18% good and 2% excellent. Sheep condition 29% very poor, 25% poor, 33% fair and 13% good. An upper Low from the Mid-Atlantic crossed over the Central U.S into New Mexico which brought more moisture, precipitation and cooler than normal temperatures across the state. Areas with high precipitation readings were Carlsbad with 4.13 inches, Tucumcari with 1.86 inches, Red River with 1.68 inches, Animas with 1.42 inches and Las Vegas with 1.29 inches.

NEW YORK: Days suitable for fieldwork 5.7. Soil moisture 4% short, 62% adequate, 34% surplus. Oats for grain 8% harvested. Oats 2% poor, 21% fair, 64% good, 13% excellent. Winter wheat 37% harvested, 86% in 2012. Winter wheat 4% poor, 28% fair, 50% good, 18% excellent. Hay crops 11% poor, 33% fair, 46% good, 10% excellent. Soybeans 99% planted, 100% in 2012, 100% average. Soybeans 8% poor, 27% fair, 51% good, 14% excellent. Sweet corn 9% poor, 26% fair, 51% good, 14% excellent. Onions 23% poor, 21% fair, 40% good, 16% excellent. Snap beans 87% planted, 98% in 2012, 98% average. Snap beans 5% harvested. Snap beans 21% poor, 31% fair, 41% good, 7% excellent. Cabbage 99% planted, 100% in 2012, 100% average. Cabbage 54% poor, 18% fair, 9% good, 19% excellent. Apples 5% poor, 22% fair, 59% good, 14% excellent. Grapes 2% fair, 66% good, 32% excellent. Peaches 9% harvested; 33% average. Peaches 5% poor, 17% fair, 60% good, 18% excellent. Pears 7% harvested; 12% average. Pears 8% poor, 31% fair, 57% good, 4% excellent. Sweet cherries 75% harvested, 71% in 2012, 90% average. Sweet cherries 29% poor, 21% fair, 41% good, 9% excellent. Tart cherries 77% harvested, 44% in 2012, 74% average. Tart cherries 46% poor, 47% fair, 5% good, 2% excellent. Strawberries 26% poor, 29% fair, 41% good, 4% excellent. Rainfall for the state ranged from 0.00 to 4.05 inches. Temperatures ranged from a low of 56 to a high of 100.

NORTH CAROLINA: There were 4.5 days suitable for field work, compared to 2.5 days for the week ending July 14th. Statewide soil moisture levels were rated at 1% short, 52% adequate and 47% surplus. Average temperatures were above normal with several areas recording temperatures in the mid to high 90s for the week. Some areas of the state received heavy rainfall during the week causing additional delays in field work and some land is standing in water and drowning out crops. Farmers continue to wait for dryer conditions to really make head way in finishing up plantings and harvesting of hay and small grains.

NORTH DAKOTA: Days suitable for fieldwork were 6.0. Topsoil moisture 3% very short, 23% short, 62% adequate, 12% surplus. Subsoil moisture 2% very short, 18% short, 71% adequate, 9% surplus. Spring wheat jointed 95%, 100% 2012, 100% average. Spring wheat turning color 11%, 75% 2012, 27% average. Oats jointed 97%, 100% 2012, 100% average. Oats turning color 11%, 80% 2012, 29% average. Barley jointed 98%, 100% 2012, 100% average. Barley turning color 9%, 85% 2012, 35% average. Durum wheat jointed 95%, 100% 2012, 95% average. Durum wheat headed 77%, 99% 2012, 73% average. Durum wheat turning color 4%, 46% 2012, 15% average. Durum Wheat condition 2% poor, 18% fair, 74% good, and 6% excellent. Canola blooming 92%, 100% 2012, 93% average. Canola turning color 7%, 51% 2012, 19% average. Canola condition 1% very poor, 2% poor, 21% fair, 63% good, and 13% excellent. Flaxseed blooming 68%, 90% 2012, 76% average. Flaxseed turning color 1%, 24% 2012, 8% average. Flaxseed condition 2% very poor, 5% poor, 32% fair, 53% good, and 8% excellent. Sugarbeets condition 2% very poor, 7% poor, 31% fair, 48% good, and 12% excellent. Potatoes emerged 96%, 100% 2012, 100% average. Potatoes blooming 59%, 89% 2012, 78% average. Potatoes rows filled 11%, 72% 2012, 41% average. Potatoes condition 7% very poor, 14% poor, 41% fair, 30% good, and 8% excellent. Dry Edible Peas flowering 90%, 100% 2012, 96% average. Dry Edible Peas mature 4%, 72% 2012, 29% average. Dry Edible Peas condition 1% very poor, 7% poor, 18% fair, 68% good, and 6% excellent. Dry Edible Beans blooming 38%, 91% 2012, 58% average. Dry Edible Beans setting pods 2%, 53% 2012, 18% average. Dry Edible Beans condition 2% very poor, 6% poor, 35% fair, 51% good, and 6% excellent. Lentils harvested 1%, 7% 2012, 1% average. Sunflower blooming 2%, 18% 2012, 6% average. Sunflower condition 1% very poor, 4% poor, 24% fair, 60% good, and 11% excellent. 1st cuttings of alfalfa hay 94% complete. 2nd cuttings of alfalfa hay 7% complete. Alfalfa hay condition 0% very poor, 2% poor, 15% fair, 54% good, and 29% excellent. Stock water supplies 0% very short, 2% short, 80% adequate, and 18% surplus. Continued dry and above normal temperatures across much of the state pushed development of all crops. However, some areas in the northern part of the state received enough precipitation to halt all fieldwork activities. The areas across the state lacking moisture are in need of rainfall as crops are starting to show some stress.

OHIO: Days suitable for fieldwork 5. Topsoil 6% short, 69% adequate, 25% surplus. Subsoil 5% short, 70% adequate, 25% surplus. Corn dough 2%, 11% 2012, 5% avg. Winter Wheat 5% very poor, 10% poor, 27% fair, 36% good, 22% excellent. All hay 3% very poor, 8% poor, 28% fair, 49% good, 12% excellent. First cutting hay 100%, NA 2012, NA avg. Second cutting hay 39%, NA 2012, NA avg. Warm weather and low precipitation this week aided crop progress and allowed farmers to access their fields for necessary fieldwork. Producers used the warmer, drier weather to harvest winter wheat, and are now nearly even with the five-year average. Corn has recovered well after flooding and winds from last week, and condition looks good as some is even beginning to dough. Soybeans are blooming but there are reports that in some fields the crop is

looking stressed due to water damage from heavy rains in the previous couple weeks. Farmers are progressing on hay cutting. If the weather stays dry, farmers that have finished their second cutting should be able to begin on a third cutting.

OKLAHOMA: Days suitable for fieldwork 5.1. Topsoil moisture 19% very short, 33% short, 48% adequate. Subsoil moisture 29% very short, 35% short, 36% adequate. Corn condition 2% poor, 23% fair, 60% good, 15% excellent; silking 69% this week, 42% last week, 85% last year, 83% average; dough 17% this week, 7% last week, 63% last year, 48% average. Sorghum emerged 98% this week, 94% last week, 99% last year, 91% average. Soybeans condition 1% poor, 46% fair, 48% good, 5% excellent; emerged 96% this week, 89% last week, 100% last year, 98% average; blooming 11% this week, n/a last week, 40% last year, 44% average. Peanuts setting pods 26% this week, n/a last week, 11% last year, 26% average. Alfalfa hay condition 7% very poor, 12% poor, 34% fair, 42% good, 5% excellent; 2nd cutting 93% this week, 88% last week, 99% last year, 96% average; 3rd cutting 23% this week, 16% last week, 75% last year, 59% average. Other hay condition 5% very poor, 10% poor, 44% fair, 37% good, 4% excellent; 1st cutting 90% this week, 87% last week, 97% last year, 87% average; 2nd cutting 18% this week, 11% last week, 35% last year, 16% average. Watermelons harvested 16% this week, 6% last week, 45% last year, 41% average. Livestock condition 1% very poor, 3% poor, 28% fair, 58% good, 10% excellent. Row crops made significant progress over the past week, but continued behind the five-year average for various stages of development. Multiple storms during the week resulted in an average rainfall of 1.3 inches for the state. A westward moving storm continued producing beneficial rainfall early in the week, mostly in southwestern Oklahoma, and heavy rain on Sunday brought high totals to northeastern Oklahoma. More rainfall is needed to improve subsoil moisture, particularly in the Panhandle and West Central districts, where precipitation is still 53 and 62 percent of normal, respectively, for the period since March 1st. Temperatures averaged in the upper 70s, moderated by the recent rainfall. Pasture and range land continued to be rated mostly good to fair, with 26 percent rated poor to very poor. Limited availability of pasture in some areas meant continuing to supplement livestock herds with feed. Continued problems with grasshoppers were reported.

OREGON: Days suitable for field work 6.9. Topsoil Moisture 22% Very Short, 52% Short, 26% Adequate. Subsoil Moisture 15% Very Short, 52% Short, 32% Adequate, 1% Surplus. Barley Condition 2% Very Poor, 12% Poor, 33% Fair, 50% Good, 3% Excellent. Spring Wheat Condition 5% Very Poor, 17% Poor, 41% Fair, 33% Good, 4% Excellent. Alfalfa Hay 2nd Cutting 41%, 28% 2012, 44% avg. Spring Wheat Headed 97%, 99% 2012, 95% avg. Barley Headed 92%, 100% 2012, 96% avg. Most of the State experienced higher than normal temperatures & lower than normal precipitation. Some coastal area & Klamath County stations were the only stations that recorded mostly normal to below normal temperatures. No freezing temperatures were reported. Temperatures ranged from highs in the low 100's in Central & Eastern Oregon to low 60's along the coast. Low temperatures ranged from the mid 30's in South Central Oregon to upper 50's in Southeast Oregon & the Southwest Valleys. Only a few weather stations reported precipitation. Small grain harvest is in full swing throughout the State. The Sherman County reporter noted mixed conditions & yields for grain but the crop seemed to be average or better than average. Other county reports mention farming operations expecting lower yield for grain crops, mostly due to drought conditions. Grass seed harvest was in full swing with the exception of eastern Oregon where thunderstorms slowed the harvest. Warm & dry conditions have been very favorable for hay harvest in the State. Early variety potatoes were blooming in Klamath County. Irrigation continued for the southern part of Klamath County but has been shut off in the northern part. Initial reports of grain harvest from Malheur County are positive for wheat; however shrinkage is a concern with the warm temperatures. Berry harvest for blueberries, raspberries, & strawberries is wrapping up in Washington County. A reporter in Washington County noted that walnuts look good based on the crop currently on trees. Apples, pears, & hazelnuts in Lane County look to be a medium crop according to the extension service. Fortunately, many berries have avoided the Spotted Wing Drosophila (SWD) in that area of the State. Lane County reports wild blackberries have a huge crop & is up to one & a half weeks early. Orchardists were actively hand thinning summer pears in the upper Hood River Valley. Cherry harvest & routine summer orchard operations continued throughout the Hood River Valley. Sweet cherry harvests continued at higher elevations in Wasco County. The reporter in Wasco County noted the cherry crop at higher elevation is excellent because of better growing conditions. Umpqua Valley's heat sensitive crops like wine grapes, stone fruits & berries are developing about three weeks ahead of normal. Trap counts for SWD & codling moth have fallen off sharply during June & July in the area. The reporter for Douglas County commented that the berry harvest needs to be completed quickly to prevent soft fruit. The warmer than normal weather has been good for warm season veggies. Tomatoes are responding to the heat in Lane County. Plenty of vegetables are at the farmers markets in the Portland area including tomatoes, eggplants, cucumbers, garlic, kale, carrots, & zucchinis. Irrigation continues to be the main activity for nurseries. Many reporters in almost every region of the State report range & pasture condition has declined from poor weather conditions. However in Sherman County, CRP land is green & land just coming out of CRP is benefitting from grazing.

PENNSYLVANIA: Days suitable for fieldwork 6. Soil moisture 9% short, 79% adequate and 12% surplus. Corn height (inches) 82 inches this week, 62 inches last week, 70 inches last year, and 67 inches average. Barley harvested 98% this week, 91% last week, 99% last year, and 97% average. Winter wheat ripe 99% this week, 94% last week, 97% last year, and 98% average. Winter wheat harvested 88% this week, 45% last week, 98% last year, and 91% average. Oats yellow 95% this week, 50% last week, 93% last year, and 74% average. Oats ripe 34% this week, 8% last week, 61% last year, and 33% average. Alfalfa second cutting 84% this week, 55% last week, 96% last year, and 89% average. Alfalfa third cutting 23% this week, 13% last week, 32% last year, and 23% average. Timothy/Clover first cutting 96% this week, 93% last week, 98% last year, and 98% average. Timothy/Clover second cutting 29% this week, 7% last week, 67% last year, and 44% average. Peaches harvested 25% this week, 7% last week, and 51% last year, and 28% average. Apples harvested 8% this week, 0% last week, and 15% last year, and 9% average. Soybean condition 14% fair, 70% good, 16% excellent. Alfalfa stand condition 2% poor, 19% fair, 64% good, and 15% excellent. Timothy/Clover stand condition 2% poor, 18% fair, 69% good, and 11% excellent. Quality of Hay made 4% poor, 25% fair, 50% good and 21% excellent. Peaches conditions 24% fair, 64% good and 12% excellent. Apples conditions 15% fair, 55% good and 30% excellent. Field activities for the week included cutting alfalfa, hay and other forage, harvesting barley and wheat, harvesting peaches and apples, side dressing fields with nitrogen and applying other fertilizer, mowing pastures, spraying herbicides and pesticides.

SOUTH CAROLINA: Days suitable for fieldwork 4.1. Soil moisture 49% adequate, 51% surplus. Corn 1% poor, 16% fair, 65% good, 18% excellent. Soybeans 1% very poor, 9% poor, 38% fair, 48% good, 4% excellent. Tobacco 9% very poor, 9% poor, 43% fair, 37% good, 2% excellent. Hay 4% very poor, 9% poor, 29% fair, 43% good, 15% excellent. Peaches 41% fair, 59% good. Livestock condition 21% fair, 75% good, 4% excellent. Corn silked (tasseled 99%, 100% 2012, 99% avg. Corn doughed 77%, 94% 2012, 80% avg. Corn matured 14%, 43% 2012, 22% avg. Soybeans planted 96%, 100% 2012, 100% avg. Soybeans emerged 89%, 100% 2012, 99% avg. Soybeans bloomed 15%, 26% 2012, 28% avg. Soybeans pods set 0%, 9% 2012, 6% avg. Winter wheat harvested 92%, 100%

2012, 100% avg. Rye harvested 92%, 100% 2012, 100% avg. Oats harvested 99%, 100% 2012, 100% avg. Tobacco topped 85%, 93% 2012, 96% avg. Tobacco harvested 20%, 31% 2012, 29% avg. Hay other hay 82%, 71% 2012, 75% avg. Peaches harvested 58%, 84% 2012, 67% avg. Snap beans, fresh harvested 87%, 89% 2012, 95% avg. Cucumbers, fresh harvested 76%, 96% 2012, 99% avg. Watermelons harvested 70%, 81% 2012, 86% avg. Tomatoes, fresh harvested 95%, 94% 2012, 95% avg. Cantaloupes harvested 65%, 79% 2012, 83% avg. Continued rainfall was causing crops to suffer. Conditions dropped for all of the State's crops during the past week. In saturated soils, peanuts were not pegging properly. The delay in small grain harvests was hindering farmers from being able to finish soybean planting. The tobacco crop was ripening fast, and there have already been reports of producers having a shortage of barn space to cure the leaf that was ready. The crop was thin, and excessive moisture has caused conditions to continue to decline. Melon harvests continued at a slower pace, remaining behind average for this time of year. The state average temperature for the seven-day period was one degree below the long-term average. The state average rainfall for the week was 1.3 inches.

SOUTH DAKOTA: Days suitable for fieldwork 5.9. Topsoil moisture 4% very short, 21% short, 70% adequate, 5% surplus. Subsoil moisture 6% very short, 23% short, 65% adequate, 6% surplus. Winter wheat turning color 93%, 100% 2012, 99% average. Winter wheat ripe 35%, 100% 2012, 67% average. Spring wheat turning color 69%, 100% 2012, 67% average. Spring wheat ripe 3%, 91% 2012, 27% average. Barley turning color 55%, 100% 2012, 63% average. Oats turning color 63%, 99% 2012, 73% average. Oats ripe 5%, 94% 2012, 34% average. Sunflower blooming 5%, 17% 2012, 7% average. Sunflower condition 9% very poor, 10% poor, 23% fair, 55% good, 3% excellent. 1st cutting of alfalfa 97% complete, 100% 2012, 97% average. 2nd cutting of alfalfa 46% complete, 82% 2012, 51% average. Alfalfa hay condition 2% poor, 29% fair, 61% good, 8% excellent. Stock water supplies 3% very short, 15% short, 79% adequate, 3% surplus. Scattered rain showers and above normal temperatures continued to advance crop development last week. Major activities for the week included haying and spraying of row crops.

TENNESSEE: Days suitable 5. Topsoil moisture 2% very short, 9% short, 71% adequate, 18% surplus. Subsoil moisture 1% very short, 9% short, 76% adequate, 14% surplus. Tobacco 16% topped, 36% 2012, 26% avg. Damp conditions led to negative effects on tobacco, tomatoes and melons. Tobacco and cotton fair-to-good condition. Corn and soybeans in good-to-excellent condition. Farmers active scouting for insects, diseases and topping tobacco.

TEXAS: Rainfall and cooler temperatures occurred throughout the state. Areas of the High Plains, the Trans-Pecos, and South Texas received up to 1 inch of rain. Totals in areas of the Cross Timbers, Southern Low Plains, and the Edwards Plateau ranged from 5 inches up to 10 inches for the week. Cooler temperatures and light winds helped moisture received soak into the ground, providing a much-needed boost to soil moisture levels. Wheat harvest was complete for the state. Preparations for fall seedings were underway as weather permitted. Corn and sorghum harvest activities in East Texas, South Central, South Texas, and the Upper Coast slowed due to rainfall. Irrigated cotton in the High Plains benefitted from the rain, and some producers were able to limit irrigation for a few days. Producers were concerned about accumulating adequate heat units. Cotton was flowering and had begun to set bolls in the Blacklands and East Texas. Showers hampered watermelon harvest in South Texas. In the Edwards Plateau, pecans benefitted from recent moisture and some producers were able to turn off irrigation pumps. Pastures across the state greatly benefitted from significant rainfall. In areas with good runoff, stock tank and pond levels improved. Hay conditions improved, and producers were optimistic that rains would boost chances of multiple cuttings this year.

UTAH: Days Suitable For Field Work 6.8. Subsoil Moisture 26% very short, 34% short, 40% adequate. Irrigation Water Supplies 22% very short, 37% short, 41% adequate. Winter Wheat harvested 17%, 41% 2012, 16% avg. Winter Wheat Condition 7% very poor, 21% poor, 31% fair, 33% good, 8% excellent. Spring Wheat, Very Poor 2% very poor, 7% poor, 25% fair, 53% good, 13% excellent. Barley headed 99%, 99% 2012, 97% avg. Barley Condition 1% poor, 19% fair, 60% good, 20% excellent. Oats headed 92%, 92% 2012, 86% avg. Oats harvested for Hay or Silage 67%, 71% 2012, 63% avg. Corn silked (tasseled) 32%, 33% 2012, 14% avg. Corn condition 13% fair, 73% good, 14% excellent. Corn height 60 inches, 39 inches 2012, 44 inches avg. Alfalfa Hay 2nd Cutting 59%, 70% 2012, 43% avg. Other Hay Cut 82%, 80% 2012, 79% avg. Cattle and calves condition 2% poor, 22% fair, 71% good, 5% excellent. Sheep Condition 30% fair, 68% good, 2% excellent. Stock Water Supplies 20% very short, 33% short, 47% adequate,. Apricots harvested 68%, 58% 2012, 54% avg. Sweet Cherries harvested 93%, 96% 2012, 70% avg. Tart Cherries harvested 17%, 68% 2012, 33% avg. Unseasonably warm temperatures and dry conditions continued this past week. Many areas of Box Elder County have received less than 3 inches of rainfall since January. Conditions in Cache County also continue to be very dry. The mountains in Duchesne County received a pretty good amount of moisture this past week and it has helped to green up the feed. Irrigation water supplies are depleting quickly and a few companies will shut off water in the next week with others coming in the next two weeks. Irrigation water in Summit County is getting short and farmers are worried about being cut off earlier than normal. Small grain harvest is underway in Box Elder County with producers cutting fall barley and winter wheat in some locations. Producers are reporting that their fields are mostly ready to go but they still have green wheat in some of the thin spots of the fields. Harvest will continue this week and will be in full swing by the first week in August. Corn in the Bear River Valley is looking very good with a majority of the fields now tasseling and silking. Alfalfa hay producers are just getting second crop cut and baled in Box Elder County. The safflower crop looks good right now, especially on fields that have caught one of the rare scattered showers. In Cache County, second crop alfalfa is mostly harvested. In Duchesne County hay production has not been too bad on grass hay considering the irrigation water available. Farmers in Summit County are just starting to cut second crop alfalfa hay. Livestock producers are very concerned about their fall and winter range in Box Elder County. A problem facing livestock producers is the scarcity of livestock water on the summer ranges. Many of the permanent streams and ponds have gone dry and this is limiting the distribution of livestock.

VIRGINIA: Days suitable for fieldwork 5.1. Topsoil moisture 4% short, 63% adequate, 33% surplus. Subsoil moisture 4% short, 70% adequate, 26% surplus. Livestock 1% very poor, 1% poor, 10% fair, 58% good, 30% excellent. Other hay 2% very poor, 7% poor, 18% fair, 49% good, 24% excellent. Alfalfa hay 2% poor, 12% fair, 57% good, 29% excellent. Corn 1% very poor, 2% poor, 8% fair, 49% good, 40% excellent. Corn silked 81%, 81% 2012, 80% 5-yr avg. Corn dough 20%, 36% 2012, 32% 5 yr-avg. Soybeans 1% very poor, 4% poor, 15% fair, 64% good, 16% excellent. Soybeans planted 96%, 100% 2012, 100% 5-yr avg. Soybeans emerged 90%, 100% 2012, 98% 5-yr avg. Soybeans blooming 16%, 17% 2012, 22% 5-yr avg. Soybeans setting pods 2%, 3% 2012, 3% 5-yr avg. Winter wheat harvested 96%, 100% 2012, 100% 5-yr avg. Flue cured tobacco 4% poor, 18% fair, 55% good, 23% excellent. Flue cured tobacco 5% harvested. Burley tobacco 3% poor, 27% fair, 57% good, 13% excellent. Dark fire cured tobacco 1% poor, 10% fair, 82% good, 7% excellent. Summer potatoes 81%, 90% 2012, 71% 5-yr avg. All apples 4% fair, 95% good, 1% excellent. Summer apples 21%, 29% 2012, 26% 5 yr avg. Peaches 5% poor, 23% fair, 64% good, 8% excellent. Peaches harvested 36%, 34% 2012, 33% 5-yr avg. Grapes 11% poor, 6% fair, 83% good. Oats harvested 87%. It was a hot and humid week for Virginia. The average temperature was about 5 to 8 degrees above normal for this time of year. Scattered rain showers were also experienced this week. Days

suitable for fieldwork were 5.1. Making hay was difficult as farmers worked around isolates thunderstorms. Row crops made good progress with the warm weather; corn silked was one percent ahead of the 5 year average, and soybeans blooming was only six percent behind the 5 year average. Growers expressed some concerns over nitrogen depletion, fungus, blight, and weak roots for the crops. Despite concerns, the majority of crops are in good condition. Other farming activities for the week included topping tobacco, applying herbicides, scouting for pest, and making plans for autumn's cover crops and small grains.

WASHINGTON: Days suitable for fieldwork 6.7. Topsoil moisture 3% very short, 37% short, 58% adequate, 2% surplus. Subsoil moisture 3% very short, 40% short, 56% adequate, 1% surplus. Irrigation water supply 1% very short, 2% short, 94% adequate, 3% surplus. Hay and Roughage 3% very short, 18% short, 69% adequate and 10% surplus. Winter Wheat Dryland 3% very poor, 9% poor, 33% fair, 52% good, 3% excellent. Winter Wheat Irrigated 7% fair, 63% good, 30% excellent. Spring Wheat Dryland 2% very poor, 11% poor, 41% fair, 44% good, 2% excellent. Spring Wheat Irrigated 1% poor, 16% fair, 68% good, 15% excellent. Barley Dryland 6% poor, 33% fair, 56% good, 5% excellent. Barley Irrigated 1% poor, 26% fair, 51% good, 22% excellent. Potatoes 8% fair, 77% good, 15% excellent. Field Corn 30% fair, 64% good, 6% excellent. Dry Edible Beans 3% poor, 24% fair, 62% good, 11% excellent. Potatoes Harvested 5%, 4% last year, 6% five year average. Field Corn Silked 40%, 19% last year, 23% five-year average. Processing Green Peas Harvested 92%, 69% last year, 79% five-year average. Alfalfa Second Cutting 64%, 29% last year, 52% five-year average. Warm to hot conditions were the norm this past week, with a few thunder showers reported. In Whitman County, winter wheat and dry edible pea harvest yields were average for this time of year. Lincoln County reported winter wheat harvesting throughout the region with light rain showers in the north. In Grant County, winter wheat crop damage was reported due to a mid-week hail storm, but the full extent was unknown. Franklin County had high fieldwork activity with the ongoing harvest of winter wheat, early potatoes, dry edible peas, the second cutting alfalfa and timothy grass hay swathing, baling and stacking. In the Yakima Valley, scattered showers minimally impacted crops in the county. Apple growers thinned high value fruit and relied on fruit protectant and under and over-the-canopy irrigation to protect crops from heat stress and sunburn. Late harvest sweet cherries looked fantastic with minimal rain cracking problems. Peach and nectarine harvest continued. Sweet corn harvest was ongoing and field cured onions, garlic, field ripened tomatoes, peppers, cucumbers and summer squash were on vegetable stands and farmer's markets. In Klickitat County, grapes were sizing up well.

WEST VIRGINIA: Days suitable for fieldwork 4. Topsoil moisture 9% short, 64% adequate, and 27% surplus compared to 14% very short, 34% short, 48% adequate, and 4% surplus last year. Corn conditions 2% poor, 23% fair, 67% good, and 8% excellent. Corn 37% silked, 61% in 2012, and 49% 5-year avg. Soybean conditions 1% poor, 31% fair, 67% good, and 1% excellent. Soybeans were 36% blooming, 32% in 2012, and 42% 5-year avg. Soybeans were 6% setting pods, 8% in 2012, 5-year avg. not available. Winter wheat conditions were 2% poor, 31% fair, 57% good, and 10% excellent. Winter wheat was 76% harvested, comparison data not available. Hay conditions were 2% very poor, 9% poor, 32% fair, 50% good, and 7% excellent. Hay first cutting was 82%, comparison data not available. Apple conditions were 2% poor, 44% fair, 51% good, and 3% excellent. Peach conditions were 1% poor, 33% fair, 65% good, and 1% excellent. Peaches were 11% harvested, 20% in 2012, 5-year avg. not available. Cattle and calves were 2% poor, 19% fair, 76% good, and 3% excellent. Sheep and lambs were 2% poor, 15% fair, 81% good, and 2% excellent. Farming activities included making hay, harvesting peaches, wheat, and garden vegetables, and treating livestock for flies. This week, heat advisories and flash flood warnings were issued from the National Weather Service.

WISCONSIN: Days suitable for fieldwork 6.5. Topsoil moisture 5% very short, 36% short, 55% adequate, and 4% surplus. Subsoil moisture 2% very short, 20% short, 74% adequate, and 4% surplus. Average corn height (in.) 58 in., 69 in. 2012, 67 in. avg. Second cutting hay 60%, 100% 2012, 75% avg. Temperatures were above normal statewide this week, with high humidity compounding the stress on livestock and farm workers. Nights brought little relief, with average minimums in the upper sixties and low seventies. A third week of minimal precipitation saw widespread reports of corn curling on light soils, even in areas where soil moisture was excessive less than a month ago. In spite of this, corn reportedly grew rapidly in response to the heat. Corn was starting to tassel and soybeans starting to bloom in some areas; many reporters commented that rain is needed to ensure good pollination. Farmers braved the extreme heat indexes to make second crop hay, with average to good yields reported. Winter wheat was being harvested for grain in the southern parts of the state. Across the reporting stations, average temperatures last week were 7 to 10 degrees above normal. Average high temperatures ranged from 89 to 94 degrees, while average low temperatures ranged from 68 to 74 degrees. Precipitation totals ranged from 0.00 inches in Madison and Milwaukee to 0.68 inches in Green Bay.

WYOMING: Days suitable for field work 6.7. Topsoil moisture 17% very short, 45% short, 38% adequate. Barley condition 2% poor, 15% fair, 54% good, 29% excellent; boot 93%, 98% 2012, 94% avg.; headed 73%, 95% 2012, 81% avg, turning color 33%, 79% 2012, 49% avg. Oats condition 1% very poor, 0% poor, 32% fair, 66% good, 1% excellent; jointed 91% 99% 2012, 96% avg.; boot 82%, 97% 2012, 89% avg.; headed 54%, 90% 2012, 69% avg. Spring wheat condition 1% poor, 34% fair, 65% good; boot 99%, 100% 2012, 92% avg.; headed 75%, 99% 2012, 65% avg.; turning color 25%, 70% 2012, 27% avg. Winter wheat condition 5% very poor, 16% poor, 38% fair, 41% good; turning color 96%, 100% 2012, 92% avg.; mature 60%, 98% 2012, 57% avg. harvested 13%, 84% 2012, 27% avg. Corn condition 1% poor, 24% fair, 59% good, 16% excellent; tasseled 40%, 45% 2012, 29% avg; average height 43 inches. Dry beans condition 21% fair, 65% good, 14% excellent; bloom 40%, 59% 2012, 44% avg.; setting pods 6%, 24% 2012, 15% avg. Sugar beets condition 1% poor, 27% fair, 57% good, 15% excellent. Alfalfa condition 1% very poor, 3% poor, 32% fair, 56% good, 8% excellent; first cutting 93%, 97% 2012, 88% avg.; second cutting 8%, 20% 2012, 10% avg. Other hay condition 12% poor, 46% fair, 40% good, 2% excellent; 44% harvested, 58% 2012, 49% average. Crop insect infestation 70% none, 20% light, 10% moderate. Range and pasture condition 15% very poor, 26% poor, 32% fair, 24% good, 3% excellent. Irrigation water supplies 18% very short, 30% short, 52% adequate. Farm activities included baling hay, harvesting wheat and tending to livestock. Dry conditions prevailed with above normal temperatures. Lincoln County reported they almost got a frost. The county experienced hot days and cool nights with very dry conditions and some thunderstorms. Albany County reported the week was cooler with some scattered thunderstorms. Haying has started but yields are spotty. The cooler weather has helped in keeping water flowing in the streams but stock water will be a big problem as the summer progresses. Carbon County reported hay harvested nearly one month early because of lack of irrigation water. Uinta County reported that reservoirs are low. Little rainfall has occurred and hay harvest has begun with poor yields. Rangeland is extremely dry and water is being hauled to livestock. High temperatures ranged from 80 degrees in Lake Yellowstone to 99 at Greybull. Low temperatures ranged from 38 degrees at Lake Yellowstone to 59 degrees at Buffalo. Average temperatures range from 60 degrees at Lake Yellowstone to 78 degrees in Greybull. Temperatures were above normal at all but one location ranging from 1 degree below normal at Old Fort Laramie to 13 degrees above normal in Shirley Basin. Three locations received more than a half inch of rain; Afton received 0.58 inches, Gillette received 0.56, and Buford received 0.52 inches. Twelve stations reported no precipitation.

International Weather and Crop Summary

July 14-20, 2013

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

HIGHLIGHTS

EUROPE: Dry, warm weather across central and northern Europe favored a rapid harvest pace but reduced soil moisture for reproductive summer crops.

WESTERN FSU: Hot, mostly dry weather stressed reproductive summer crops in the south, while widespread showers benefited small grains and oilseeds in western and northern growing areas.

EASTERN FSU: Locally heavy rain improved spring wheat yield prospects following recent western dryness.

MIDDLE EAST: Showers provided supplemental moisture for irrigated summer crops in western Turkey, while seasonably dry, hot weather accelerated summer crop development elsewhere.

SOUTH ASIA: Heavy monsoon rain benefited most crops but caused flooding in some areas.

EASTERN ASIA: Heavy showers across much of eastern China maintained abundant to excessive soil moisture for reproductive summer crops.

SOUTHEAST ASIA: Drier weather reduced available moisture for rice in parts of Thailand.

AUSTRALIA: Widespread showers maintained good to excellent winter crop prospects throughout much of the wheat belt.

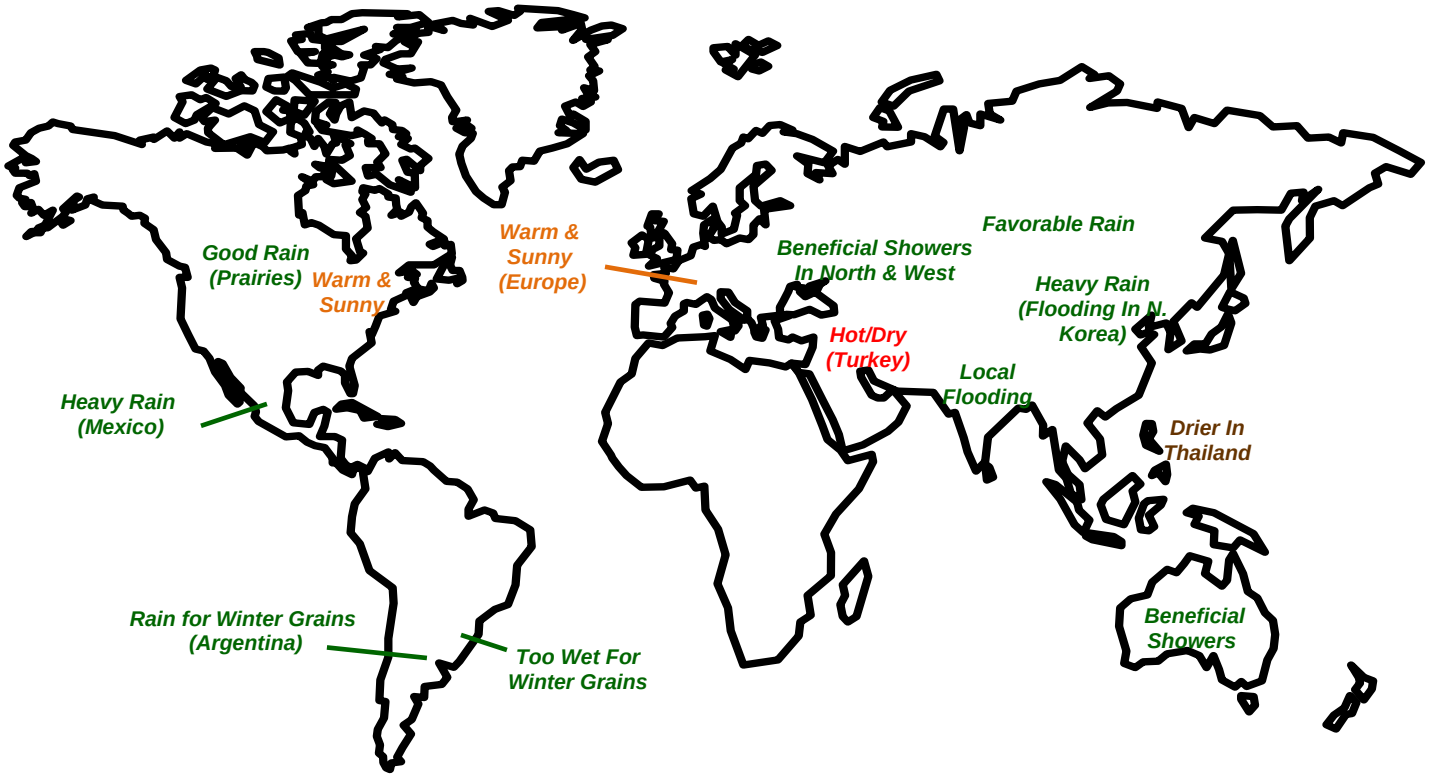
ARGENTINA: Showers provided timely moisture for emerging winter grains.

BRAZIL: Locally heavy rain returned to southern Brazil, renewing concerns for winter grains.

MEXICO: Unseasonably heavy rain boosted northern reservoir levels but likely caused some flooding.

CANADIAN PRAIRIES: Mild, showery weather maintained mostly favorable conditions for reproductive spring grains and oilseeds.

SOUTHEASTERN CANADA: In Ontario, early-week warmth and dryness aided development of summer crops and harvesting of winter wheat.



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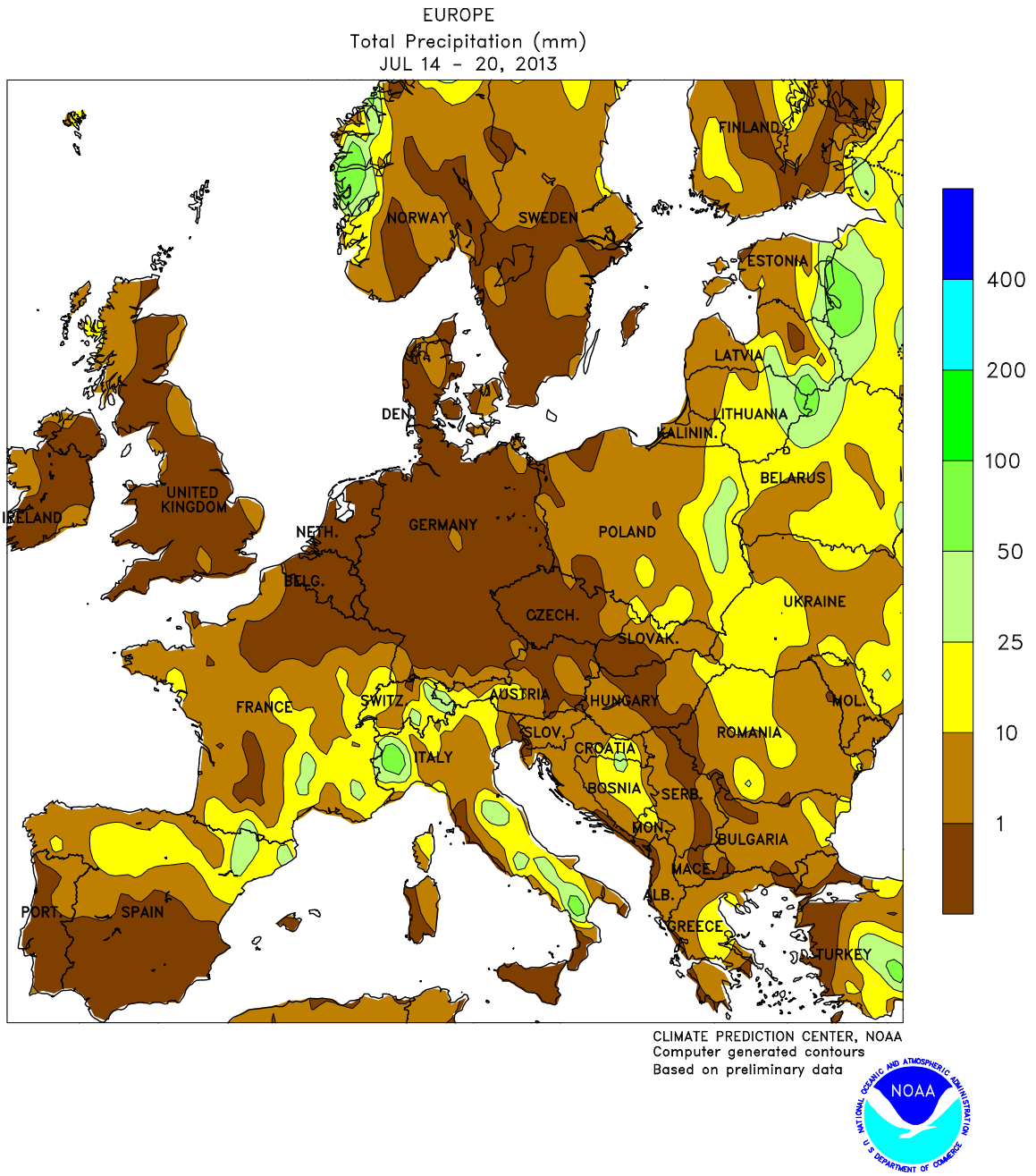

EUROPE

Dry weather prevailed across most of the continent, with increasingly hot conditions in the west contrasting with near-normal temperatures over eastern Europe. A strong area of high pressure maintained sunny skies and above-normal temperatures (2-5°C above normal) over the western half of the continent. Consequently, small grain harvesting proceeded at a rapid pace, although increasingly hot weather (30-34°C) in western and central France likely caused some stress to reproductive summer crops. Temperatures also eclipsed 30°C (locally as high as 34°C) across Italy and the Danube River Valley in southeastern Europe, stressing reproductive corn. Daytime highs were more seasonable (25-30°C) across central and northeastern Europe, maintaining favorable conditions for summer crops. However, dry weather has raised concerns over developing short-term drought in southeastern England and neighboring portions of northern France, northwestern Germany, and the Low Countries, where 60-day rainfall has totaled less than 50 percent of normal. Meanwhile, a dissipating frontal boundary triggered showers (up to 20 mm) in Greece, providing supplemental moisture for irrigated corn and cotton.

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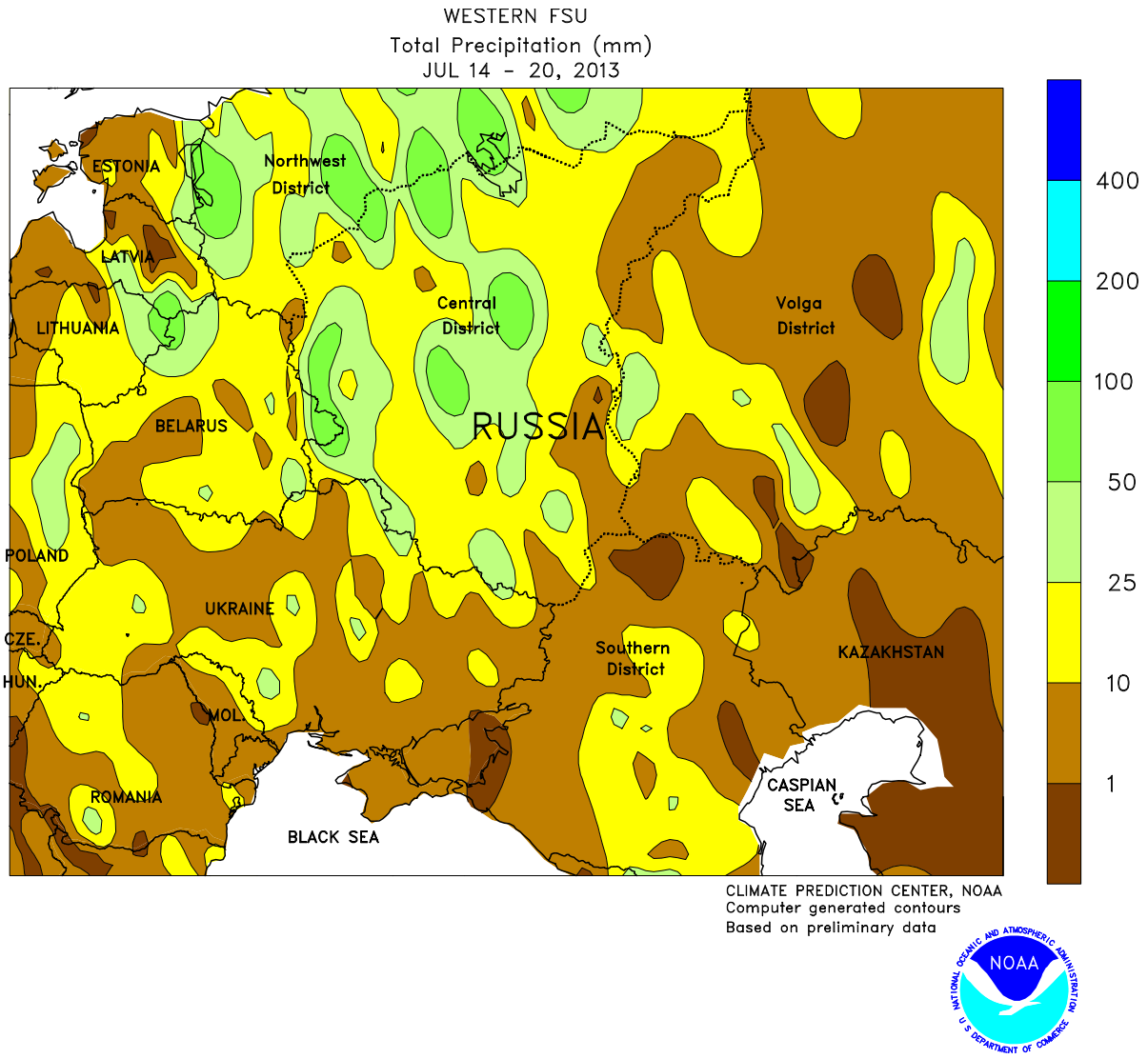

WESTERN FSU

Dry weather and above-normal temperatures across the south contrasted with widespread showers and near-normal temperatures elsewhere. An area of high pressure over southern Russia maintained hot weather (30-36°C) from eastern Ukraine into Russia's Southern District, further stressing reproductive corn and sunflowers but accelerating small grain drydown and harvesting. Rain in these locales was light and scattered, with most stations reporting 5 mm or less. Dryness has also become a concern for corn in central and northern Ukraine, where highly variable rainfall (generally 2-10 mm, but locally as much as 35 mm) did little to improve soil moisture as crops enter reproduction. Meanwhile, widespread showers and thunderstorms (10-50 mm) maintained favorable crop prospects from Belarus into the Central and Volga District.

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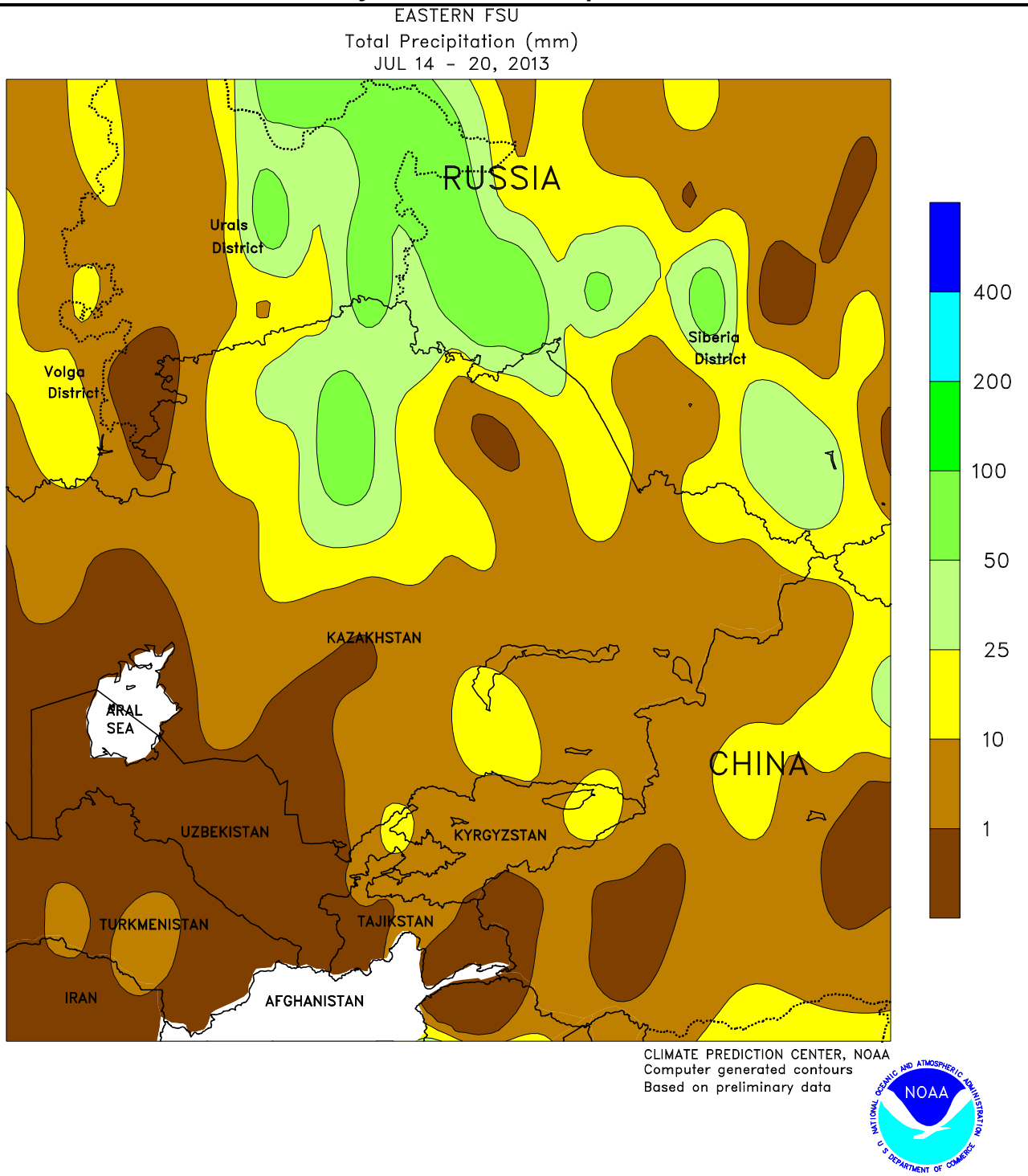

EASTERN FSU

A stationary upper-air low brought widespread rain and cooler weather to primary spring wheat areas. The rainfall, which totaled 25 to 60 mm in northeastern Kazakhstan and neighboring portions of eastern Russia (locally more than 4 times the weekly normal), improved yield prospects for heading spring wheat. Lighter showers (2-15 mm) in northwestern Kazakhstan and the southwestern Urals District provided topsoil moisture, although more rain is needed to improve conditions for spring wheat following a drier-than-normal June and early July. Temperatures averaged 2 to 5°C below normal under mostly cloudy skies and breezy northwest winds, alleviating the threat of heat stress, particularly in western growing areas. Farther south, sunny skies and near-normal temperatures promoted cotton development from Turkmenistan and Uzbekistan into Kyrgyzstan.

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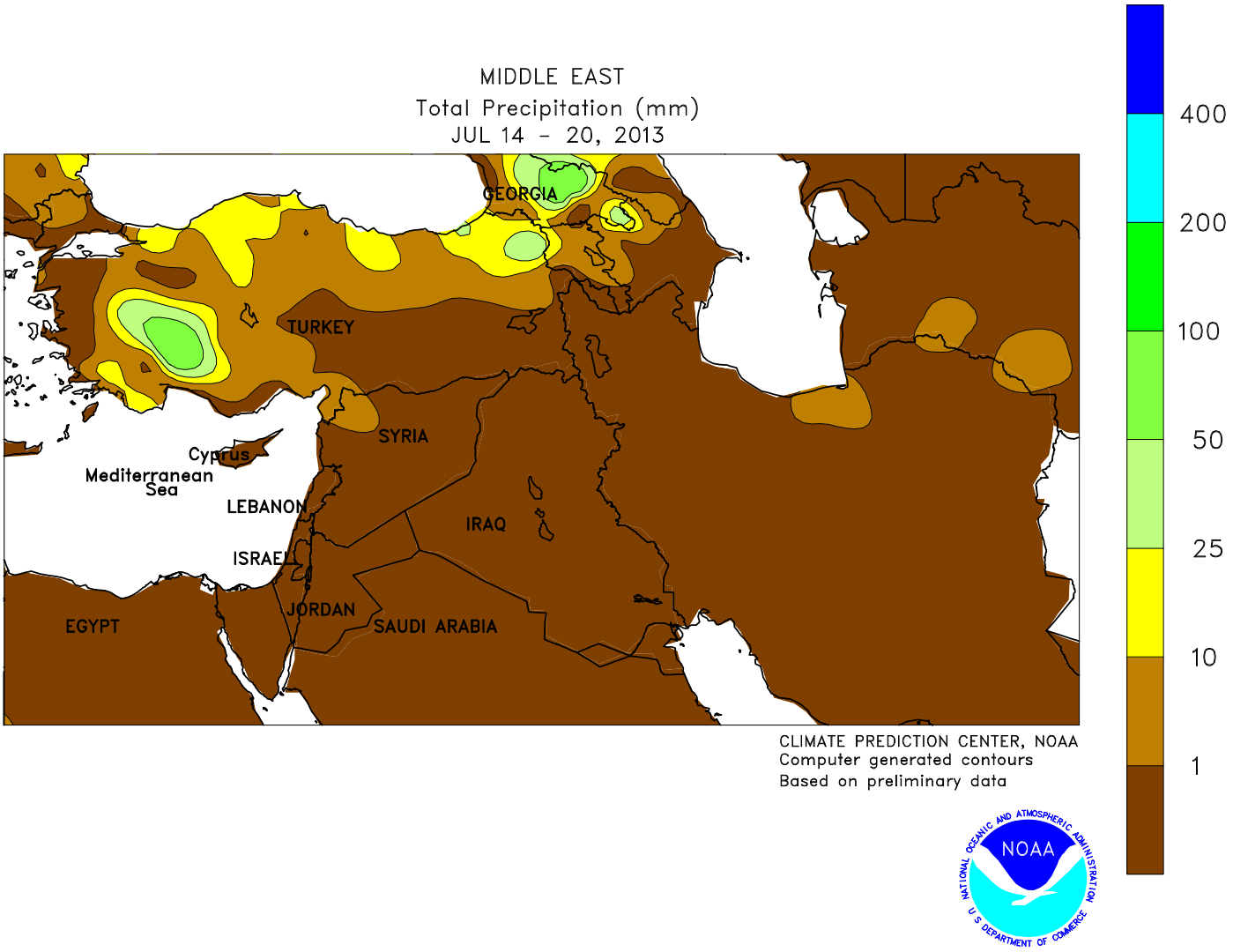

MIDDLE EAST

Locally heavy showers in western Turkey contrasted with seasonably dry, hot weather elsewhere. A slow-moving cold front generated moderate to heavy showers and thunderstorms (10-80 mm) in western-most portions of the Anatolian Plateau, providing supplemental moisture for irrigated corn and cotton. Elsewhere in the region, sunny skies in eastern Turkey, Syria, and Iraq facilitated winter wheat harvesting. Daytime highs in southeastern Turkey's cotton areas (39-42°C) continued to pose the risk for some crop stress, while heat in south-central Turkey (as high as 36°C) may also have some negative yield impacts on corn.

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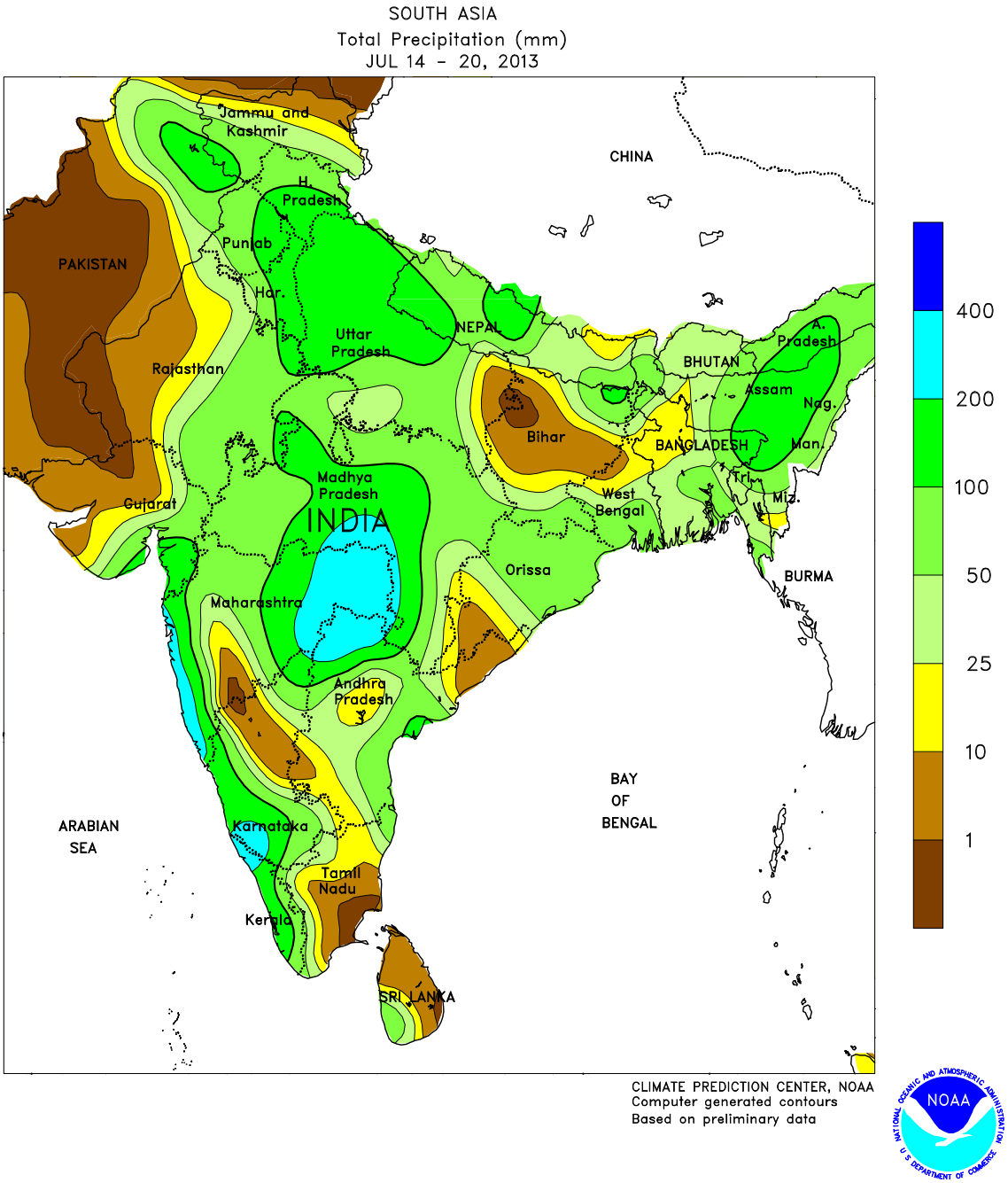

SOUTH ASIA

Monsoon rainfall remained heavy across India, benefiting summer crops but causing some flooding. In northern India, 50 to as much as 175 mm of rain early in the period provided a significant boost to irrigation water but occurred in such a brief period as to cause severe flooding in mainly rice growing areas. Flooding also occurred in parts of central India with 250 to 350 mm of rain falling in eastern Maharashtra and northern Andhra Pradesh. The flooding would have most adversely impacted vegetative soybeans and cotton. Rainfall was more favorable in other parts of India, with 25 to 100 mm benefiting cotton and groundnuts in central Maharashtra and into Gujarat as well as rice in Orissa and West Bengal. The rainfall, however, maintained excessively wet conditions for soybeans in Madhya Pradesh. In contrast, monsoon showers continued to be unseasonably light in Bihar where seasonal totals were approximately 60 percent below normal; only the areas with access to irrigation could stave off reduced rice prospects. Elsewhere in the region, heavy showers (50-150 mm) in northern Pakistan maintained adequate irrigation reserves for cotton and rice within the watershed of Punjab and Sindh, while more rain would be welcomed for summer rice being transplanted in Bangladesh and Sri Lanka.

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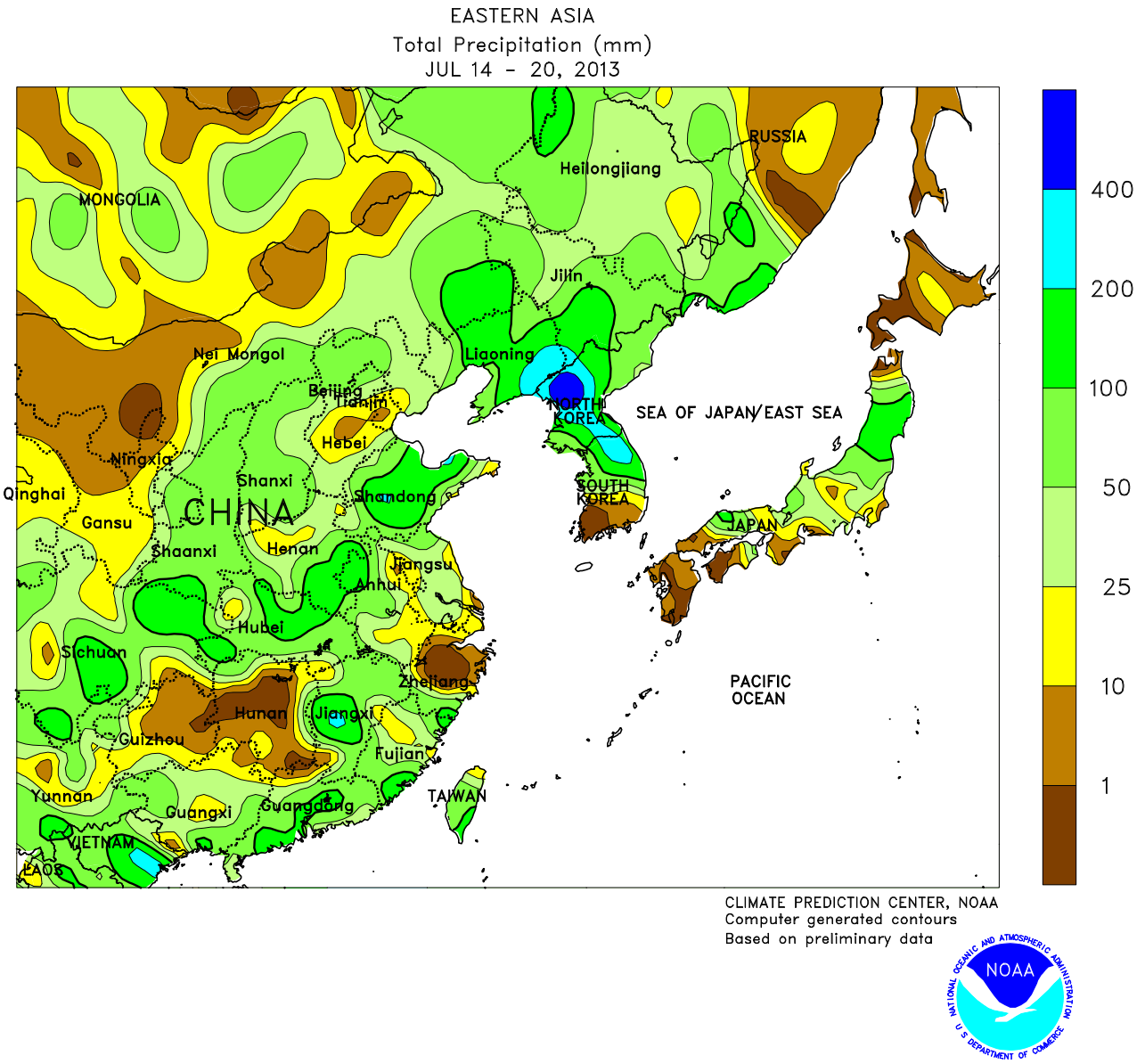

EASTERN ASIA

Waves of monsoon showers moved through the region during the week, with intermittent periods of sunny, drier weather. In all, over 100 mm of rain was reported in many areas of eastern China. In the northeast, 50 to 100 mm of rain maintained abundant soil moisture for reproductive corn, soybeans, and rice in western Heilongjiang and Jilin. Lesser rainfall amounts (25-50 mm) occurred in eastern Heilongjiang but were still highly beneficial for summer crops. Heavier showers (75-150 mm) prevailed in Liaoning and neighboring portions of Inner Mongolia, where any remaining moisture deficits from the start of the growing season (May 1) have been eradicated. Rainfall was equally heavy (75-200 mm) in the eastern North China Plain and much of the Yangtze Valley, likely resulting in saturated soils that could inhibit normal crop development for reproductive summer crops. Moisture supplies in southern and southeastern China remained high for rice, with 50 to 100 mm of rain recorded for the week. Showers were particularly heavy (over 200 mm) in southern Jiangxi as Tropical Cyclone Cimaron made landfall and the remnants stalled. Pockets of dryness continued, however, in key rice areas of Hunan and Zhejiang, where rainfall has been well below normal in July. Elsewhere in the region, severe flooding persisted in North Korea, with as much as 450 mm of rain further exacerbating conditions. In contrast, rainfall has been more seasonable during July in South Korea and most of Japan, an exception being northern rice areas of Japan where over 225 mm of rain has occurred during July. Temperatures in the region returned to more seasonable levels, with the cooler weather easing stress on reproductive corn on the North China Plain and in the Yangtze Valley.

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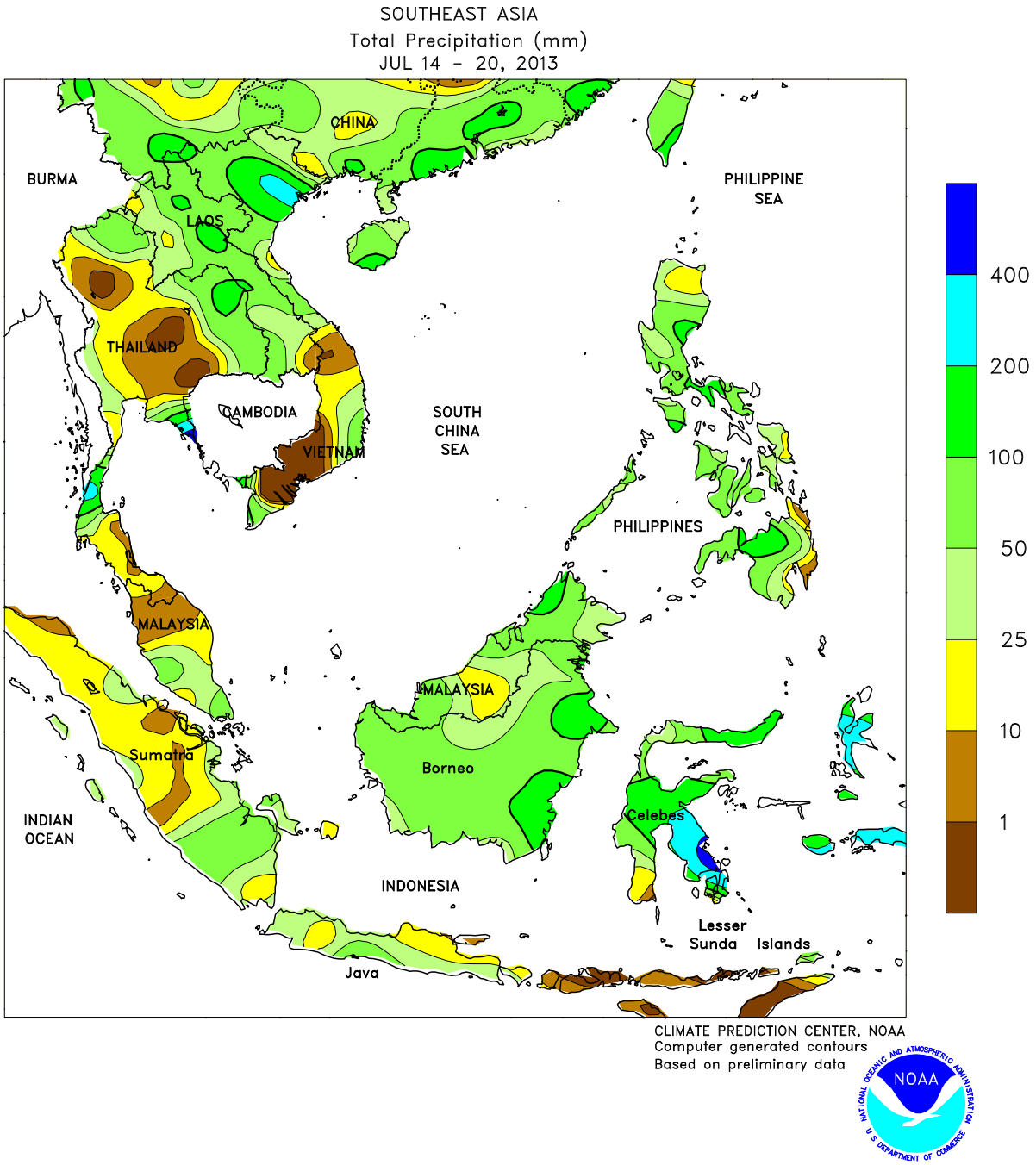

SOUTHEAST ASIA

Monsoon rains eased across portions of northern and central Thailand, which is not uncommon at this point in the season. However, the seemingly seasonable dryness put pressure on tight moisture supplies for rice. Moisture supplies have been just shy of the long-term average owing in great part to inconsistent monsoon rains during the season. Northeastern Thailand, meanwhile, received more rainfall (about 70 mm), maintaining good moisture conditions for rice. In Vietnam, mostly dry weather in the south promoted summer rice harvesting and winter rice transplanting. In northern Vietnam, heavy showers (100-300 mm) caused flooding and further delayed winter rice transplanting. Farther east, Tropical Cyclone Cimaron formed off the northeastern coast of the Philippines early in the week and passed just north of Luzon. Cimaron's maximum sustained winds were no greater than 40 knots and produced only locally heavy rainfall (75-150 mm) along eastern Luzon; rainfall elsewhere in the Philippines was generally seasonable (50-150 mm). Moisture conditions remained good for rice and corn across most of the Philippines, although significant seasonal rainfall deficits continued in western Luzon and central Mindanao, key rice and corn areas, respectively. Farther south, 10 to 50 mm of rain benefited oil palm in western Indonesia and Malaysia, while higher amounts (50-75 mm) favored oil palm in the west. Weekly rainfall averaging 25 mm maintained unfavorably wet conditions in Java, Indonesia, and further lowered corn and rice prospects.

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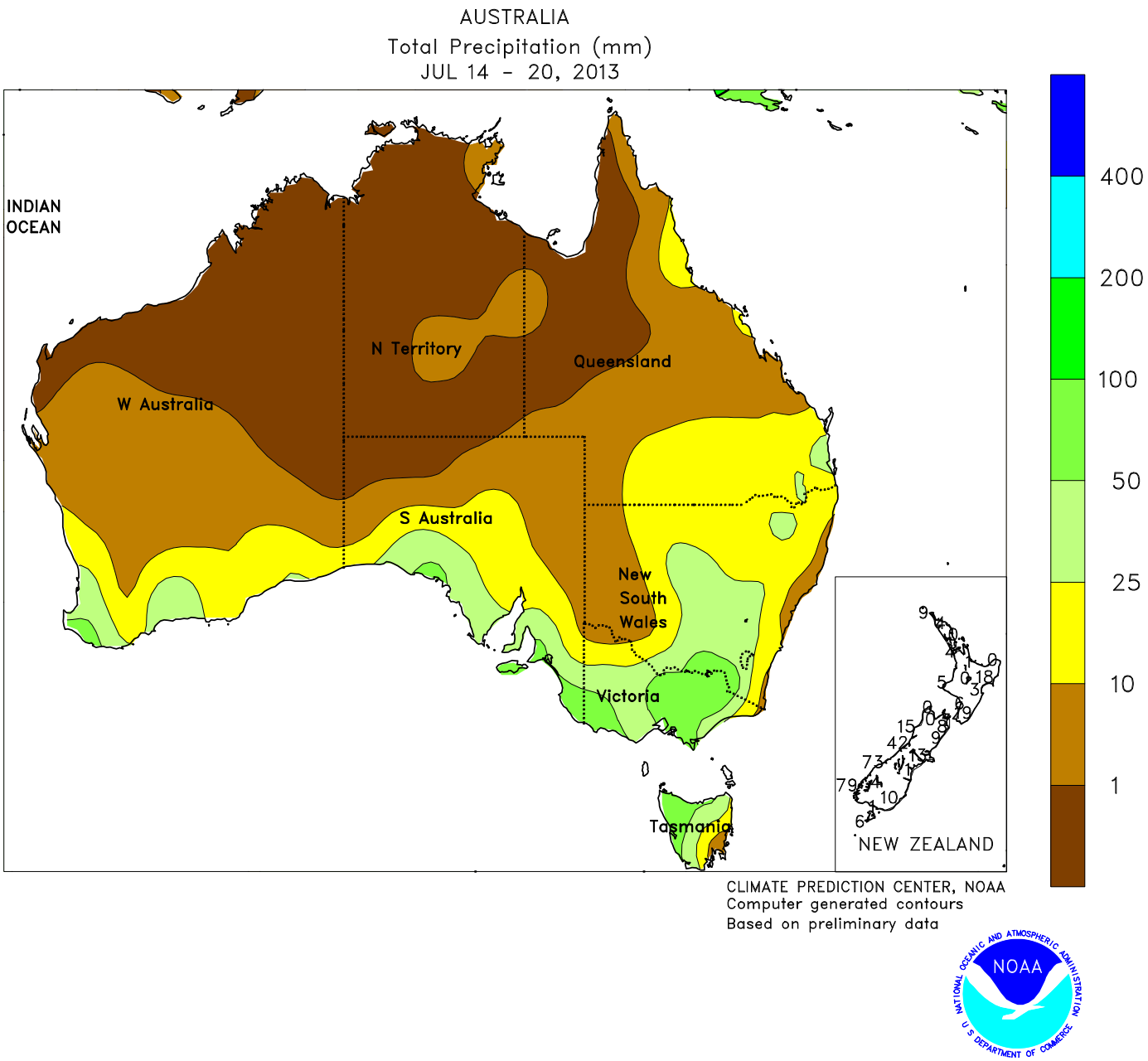

AUSTRALIA

For the second consecutive week, passing showers (10-25 mm) increased topsoil moisture in Western Australia, benefiting vegetative winter grains and oilseeds. Similarly, widespread showers (10-50 mm) in South Australia, Victoria, New South Wales, and Queensland aided wheat, barley, and canola establishment. Since May 1, rainfall in southern and eastern Australia has been near to above normal, resulting in good to excellent early season crop prospects. Unseasonable warmth accelerated crop development in southern and eastern Australia, with weekly temperatures averaging 2 to 5°C above normal. In Western Australia, temperatures averaged near normal.

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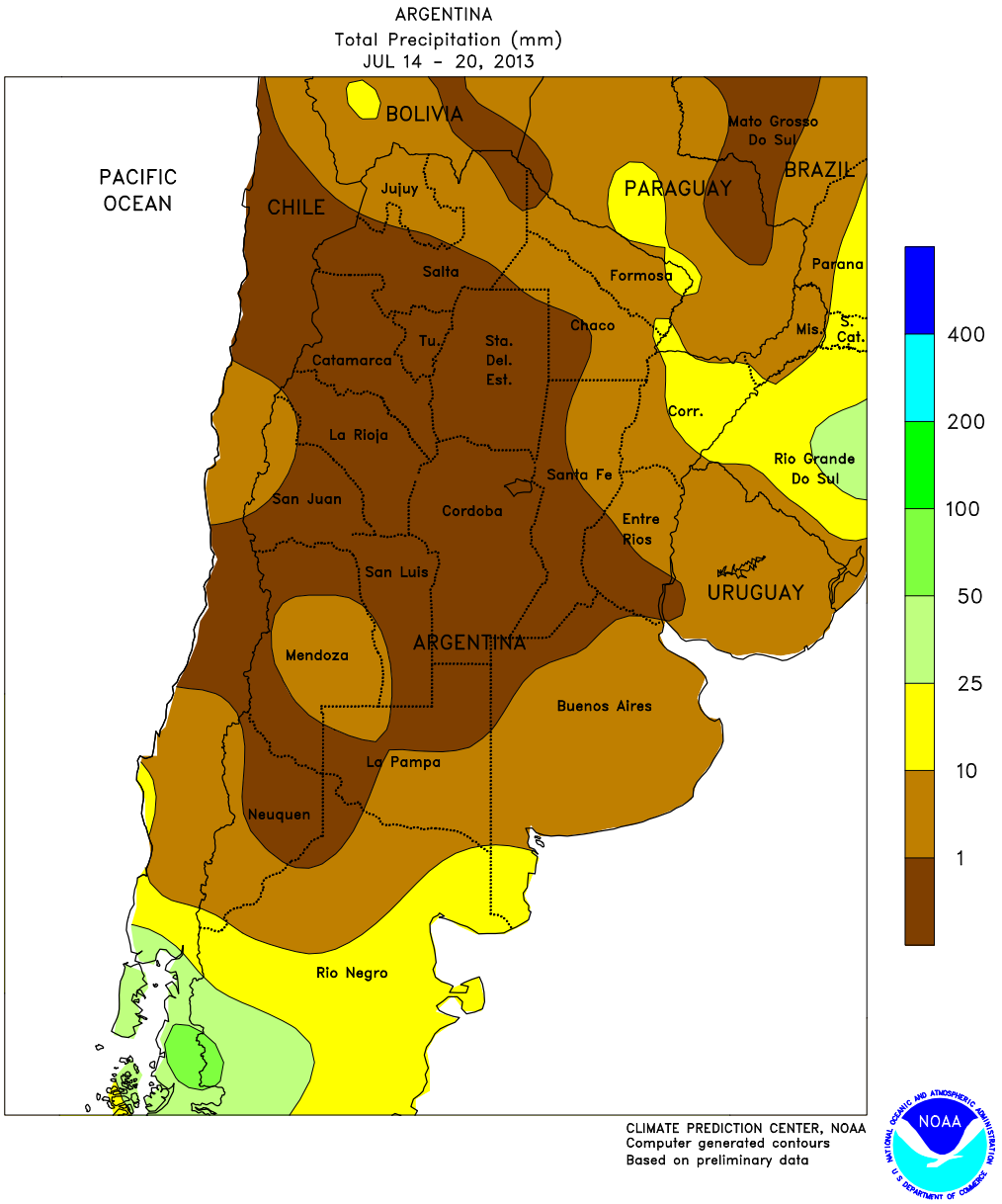

ARGENTINA

Light rain overspread the southern wheat belt, boosting topsoil moisture for emerging wheat and barley. Rainfall totaled 5 to 25 mm across southern sections of La Pampa and Buenos Aires, with drier conditions prevailing elsewhere in central Argentina. Temperatures averaged 1 to 2°C above normal across the region, but occasional freezes slowed emergence. Farther north, scattered showers (5-25 mm) slowed the final stages of the cotton harvest in eastern production areas (including Chaco, where fieldwork was reportedly nearing completion), while increasing moisture for winter wheat. Weekly average temperatures were 1 to 3°C above normal across the north, with daytime highs occasionally approaching 30°C in the far north. According to Argentina's Ministry of Agriculture, corn was 94 percent harvested as of July 18 versus 92 percent at this time last year. Meanwhile, winter wheat was 80 percent planted, slightly ahead of last year's pace.

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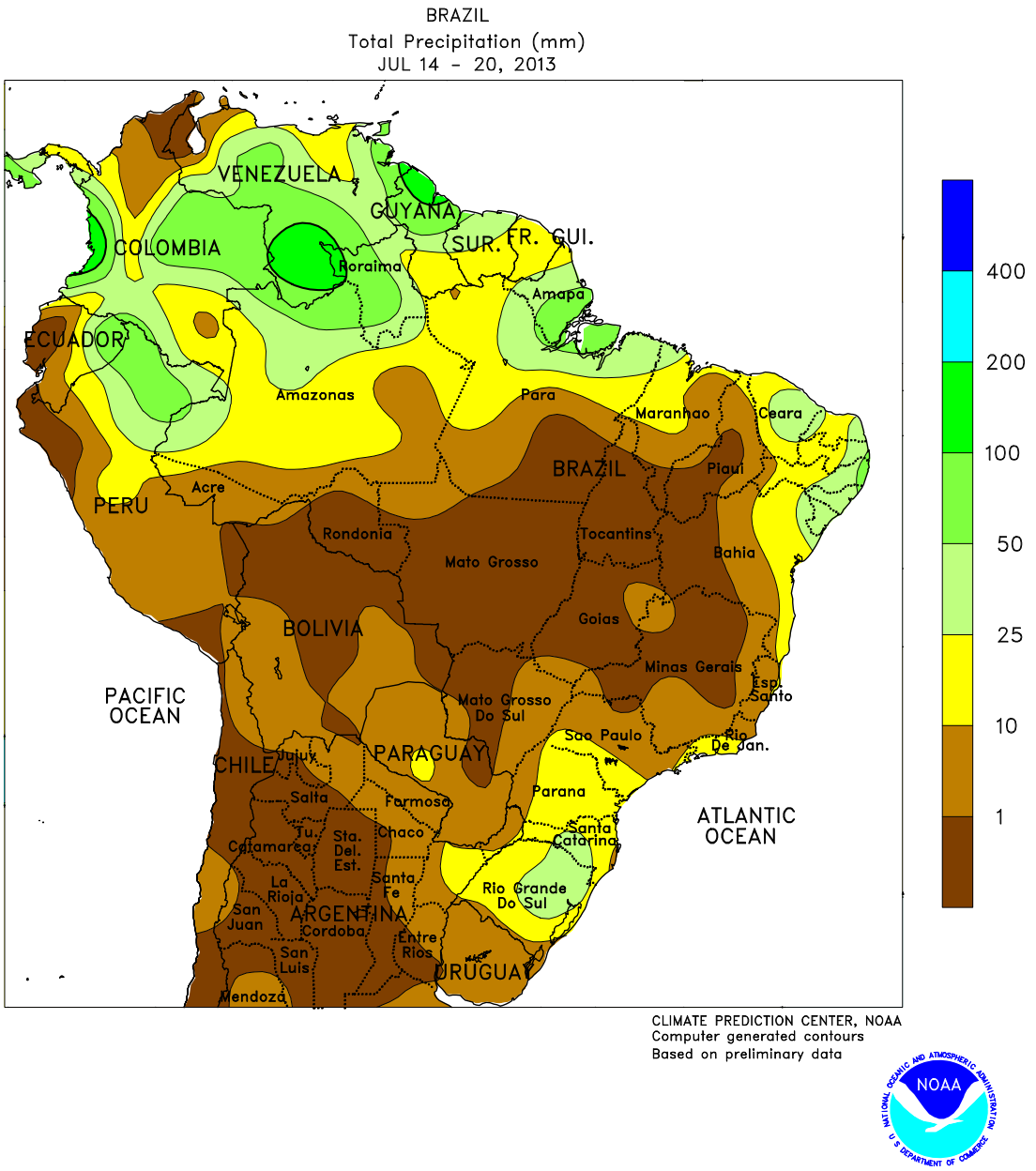

BRAZIL

Showers intensified over southern Brazil, renewing concerns for negative impacts on winter grains from excessive wetness. Rain (10-50 mm) lingered during the early part of the week over Rio Grande do Sul before moving northward into Parana and southern sections of Mato Grosso do Sul and Sao Paulo later in the week. The moisture was untimely for sugarcane harvesting but maintained abundant to locally excessive moisture for secondary (safrinha) corn and vegetative winter wheat. Light showers (less than 10 mm) also reached southern Minas Gerias, hampering local coffee harvesting. Although unseasonably warm weather (weekly temperatures averaging up to 2°C above normal, with daytime highs reaching 30°C in northern parts of the region) aided evaporation, drier weather would be welcome throughout the region for grain development and seasonal harvests. Meanwhile, dry, warmer-than-normal weather (daytime highs reaching the middle 30s degrees C) promoted rapid development of safrinha corn and cotton in central Brazil. In contrast, seasonal showers (10-50 mm, locally totaling up to 100 mm) continued along the northeast coast, increasing moisture for sugarcane and cocoa.

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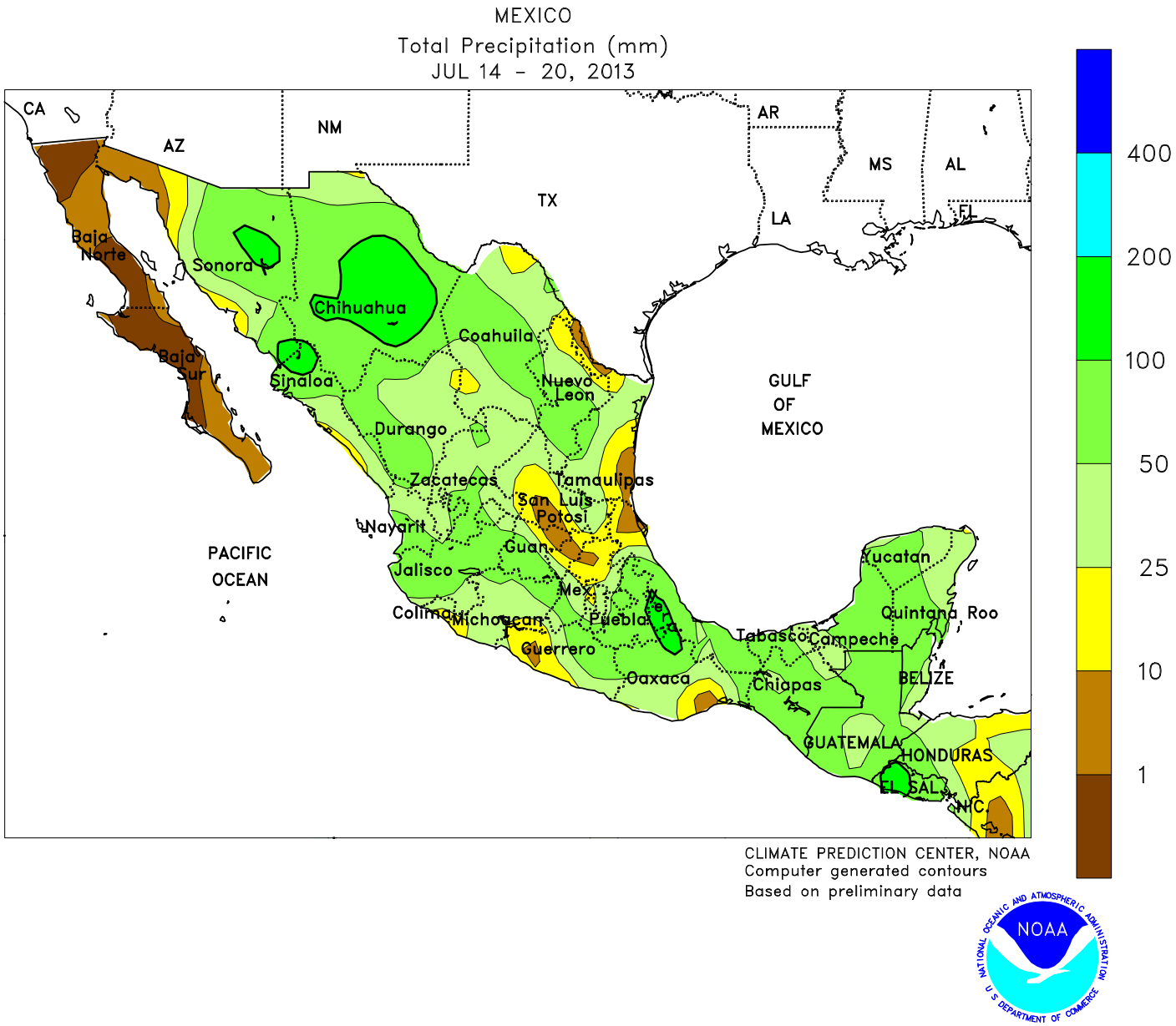

MEXICO

Cool, wet weather spread across the north, increasing reservoir reserves but likely causing localized flooding. The unseasonable conditions were the result of an unusual westward-moving low pressure system that meandered across the southern United States and eventually interacted with the regional monsoon circulation. Rainfall totaled 50 mm across a large area stretching from Sonora and northern Sinaloa to parts of Nuevo Leon, with local accumulations in excess of 100 mm. Nearly all other northern locations reported more than 10 mm. In addition to the rainfall, the cloud cover resulted in near- to below-normal weekly average temperatures, although daytime highs still reached 40°C in some traditionally warmer locations before the onset of the rain. In southern Mexico, locally heavy rain maintained generally favorable conditions for corn and other rain-fed summer crops. The heaviest rain (greater than 50 mm) was concentrated over southern Veracruz, reaching westward onto the southern plateau corn belt. Most other areas—including the Yucatan Peninsula and farming areas along the southern Pacific Coast—recorded at least 10 to 50 mm. Temperatures were generally seasonable, with daytime highs approaching 30°C in some of the warmest locations on the southern plateau.

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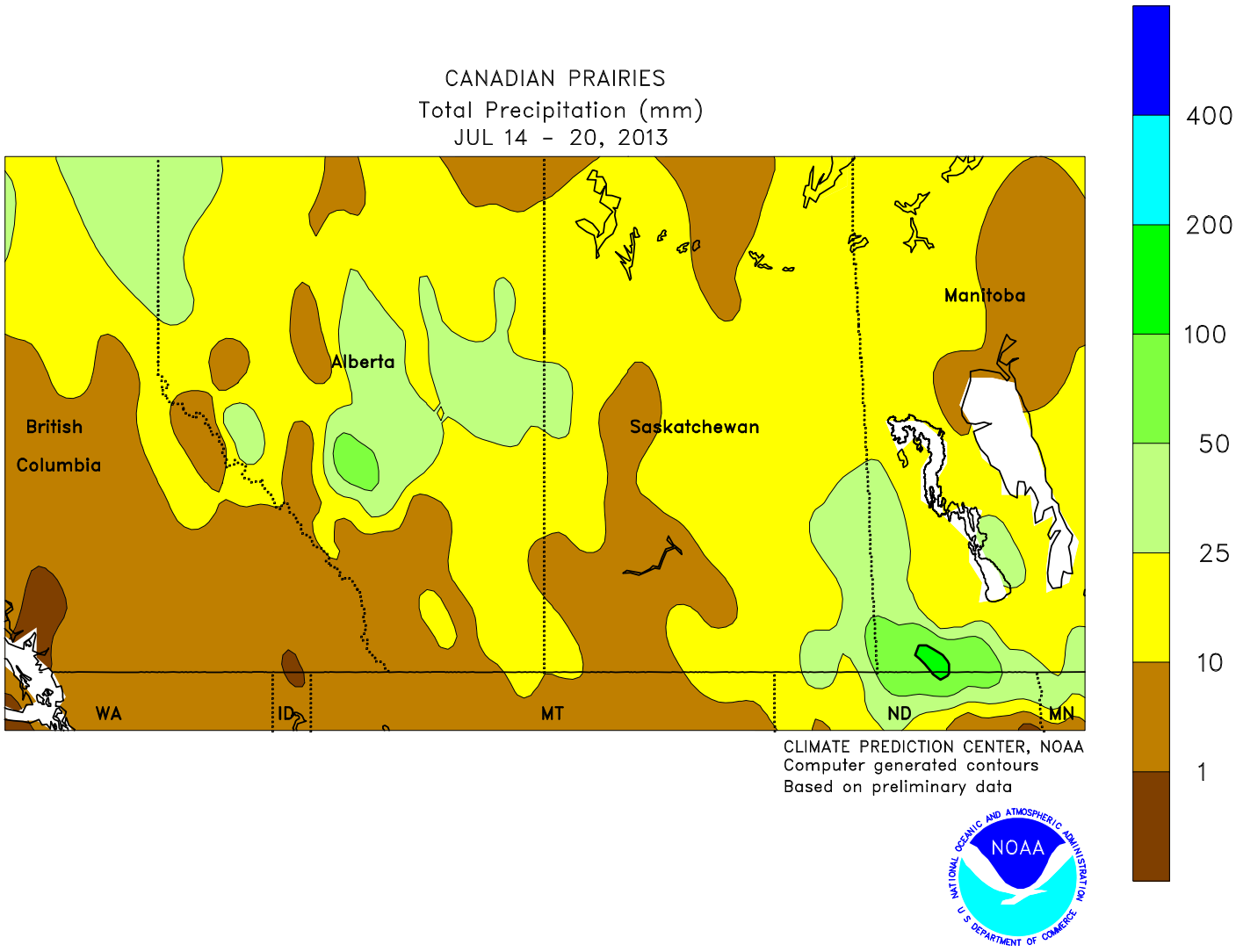

CANADIAN PRAIRIES

Mild, showery weather prevailed across the Prairies, maintaining mostly favorable conditions for reproductive to filling spring grains and oilseeds. Moderate to heavy rain (10-50 mm) fell in the east (Manitoba and parts of eastern Saskatchewan), where weekly temperatures averaged near normal (daytime highs mostly in the lower and middle 20s degrees C) after several weeks of unseasonable warmth. Similar amounts were recorded in Alberta's northern Prairie production areas and adjacent locations in Saskatchewan, but lighter rain (generally less than 10 mm) fell in southern Alberta and Alberta's Peace River Valley. Dry weather dominated much of southwestern Saskatchewan. Weekly temperatures averaged slightly below normal in the western Prairies, due mainly to an early-week cool snap that dropped nighttime lows below 5°C across the region, and capped daytime highs in the teens in the Peace River Valley. However, daytime highs reached the upper 20s in southern farming districts during the latter half of the week upon the arrival of seasonably warmer conditions.

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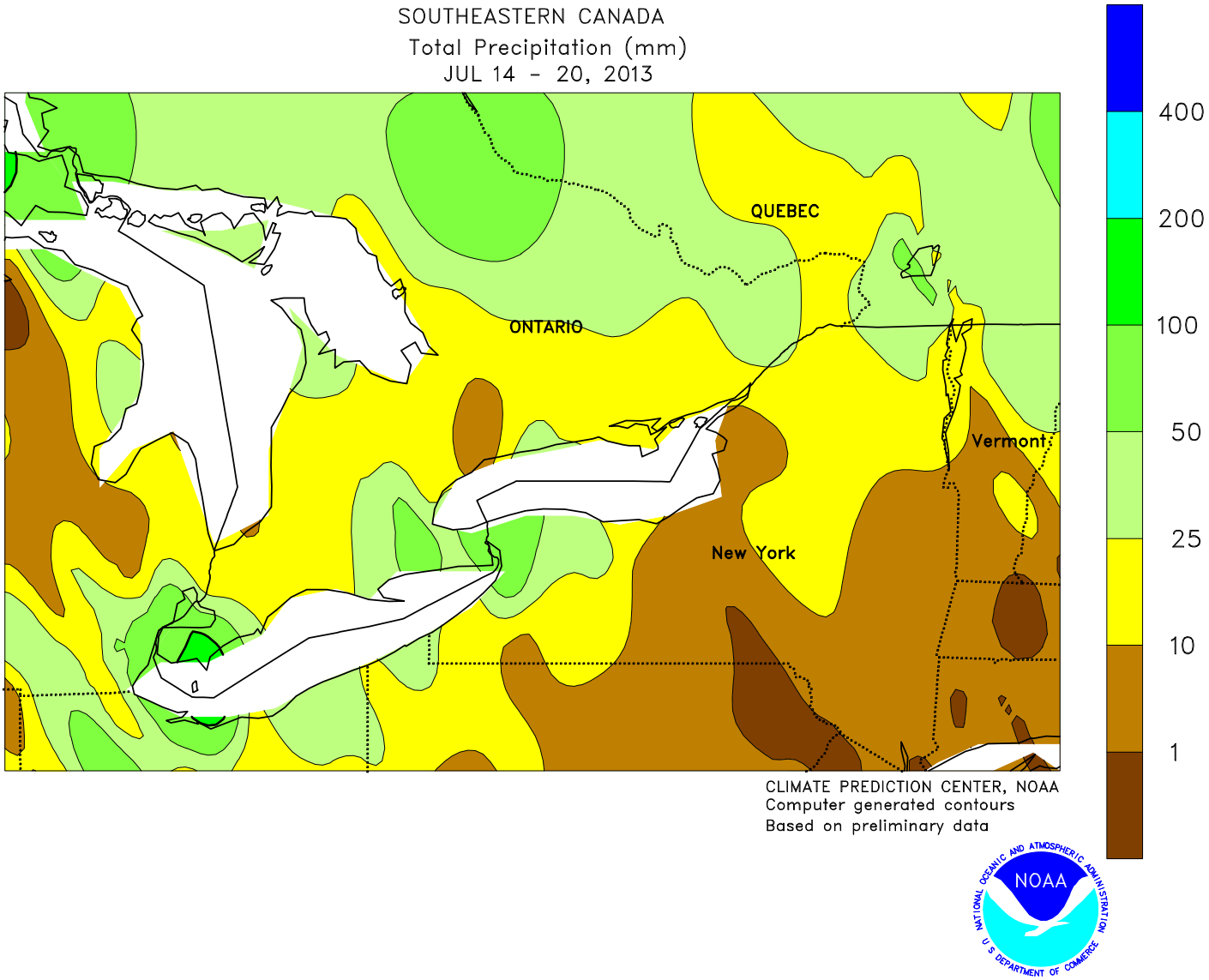

SOUTHEASTERN CANADA

Dry weather dominated southwestern Ontario for much of the week, aiding development of summer crops and facilitating harvesting of winter wheat and hay. Weekly temperatures averaging 2 to 4°C above normal (daytime highs in the 30s degrees C) spurred crop development and aided the drying process. At week's end, a strong cold front generated locally heavy showers across the region and dropped temperatures to more seasonable levels. In contrast, showery weather dominated Quebec and southeastern Ontario for much of the week, with weekly rainfall locally in excess of 25 mm. Weekly temperatures were above normal, however, with daytime highs reaching the lower 30s before the late-week passage of a cold front.

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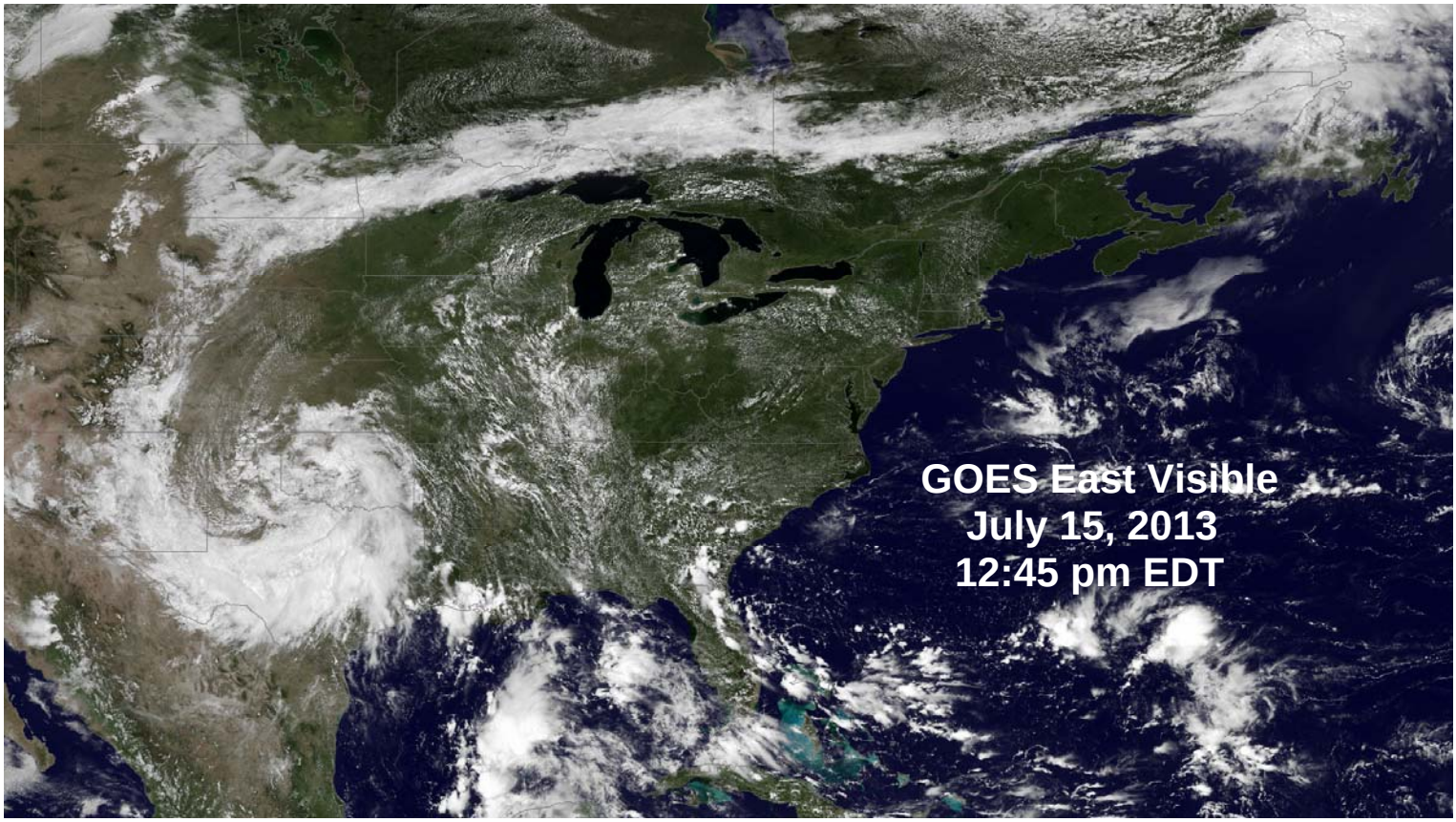

On July 15, NOAA's GOES-13 satellite captured an image that shows the interaction between a rare westbound disturbance crossing the southern Plains and the Southwestern monsoon circulation. Moisture associated with both features is also being drawn into the westerly belt—a zone of fast-moving, upper-level winds that in the summer typically separates warm, humid, subtropical air from cool, dry, continental air. During much of the week of July 14-20, the subtropical ridge was unusually strong, resulting in hot, humid weather across the Midwest and Northeast. At the same time, the ridge's strength prevented the Southern disturbance from curving northward, resulting in a westward-drifting system that produced more than 4 inches of rain and local flooding in parts of Texas. In addition, the 15th was the coolest July day on record in Texas locations such as Abilene (high of 68°F), Wichita Falls (70°F), San Angelo (71°F), and Waco (75°F). Also on July 15, Caribou, ME (94°F), experienced its hottest day since July 20, 1991, when the high reached 95°F.

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