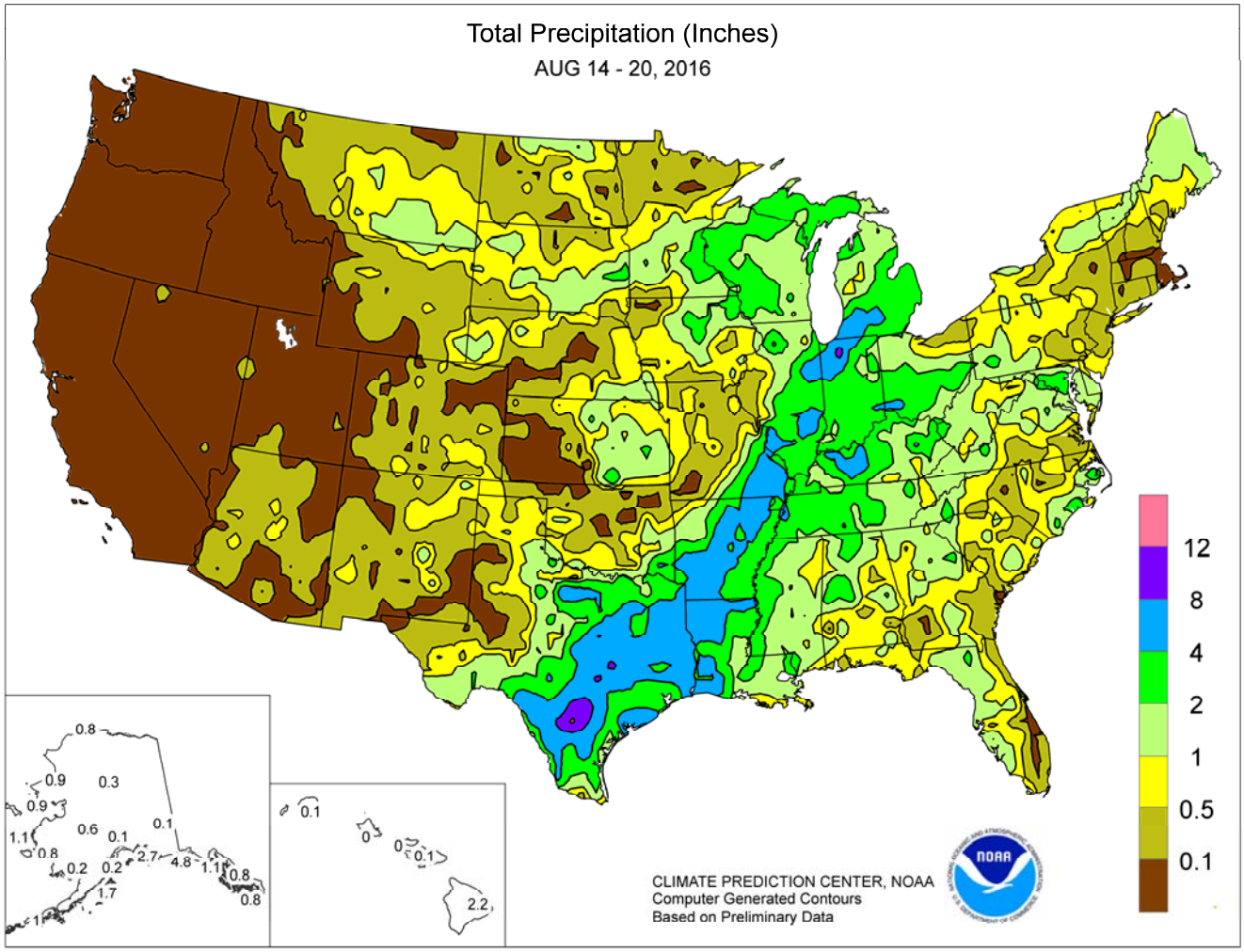
Volume 103, No. 34 http://www.usda.gov/oce/weather August 23, 2016

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

August 14 – 20, 2016

Highlights provided by USDA/WAOB

An active weather pattern in most areas from the **Rockies eastward** contrasted with hot, dry conditions in much of the **West**. Torrential rain shifted westward and northward from the hardest-hit areas of **southern Louisiana**, but flooding continued as runoff slowly moved through creeks, rivers, and bayous toward the **Gulf of Mexico**. Weekly rainfall totaled 2 to 5 inches or more in a broad area stretching from the **western Gulf Coast region into the lower Ohio Valley**, with some flash flooding noted. Portions of the **Midwest** also experienced heavy rain,

(Continued on page 5)

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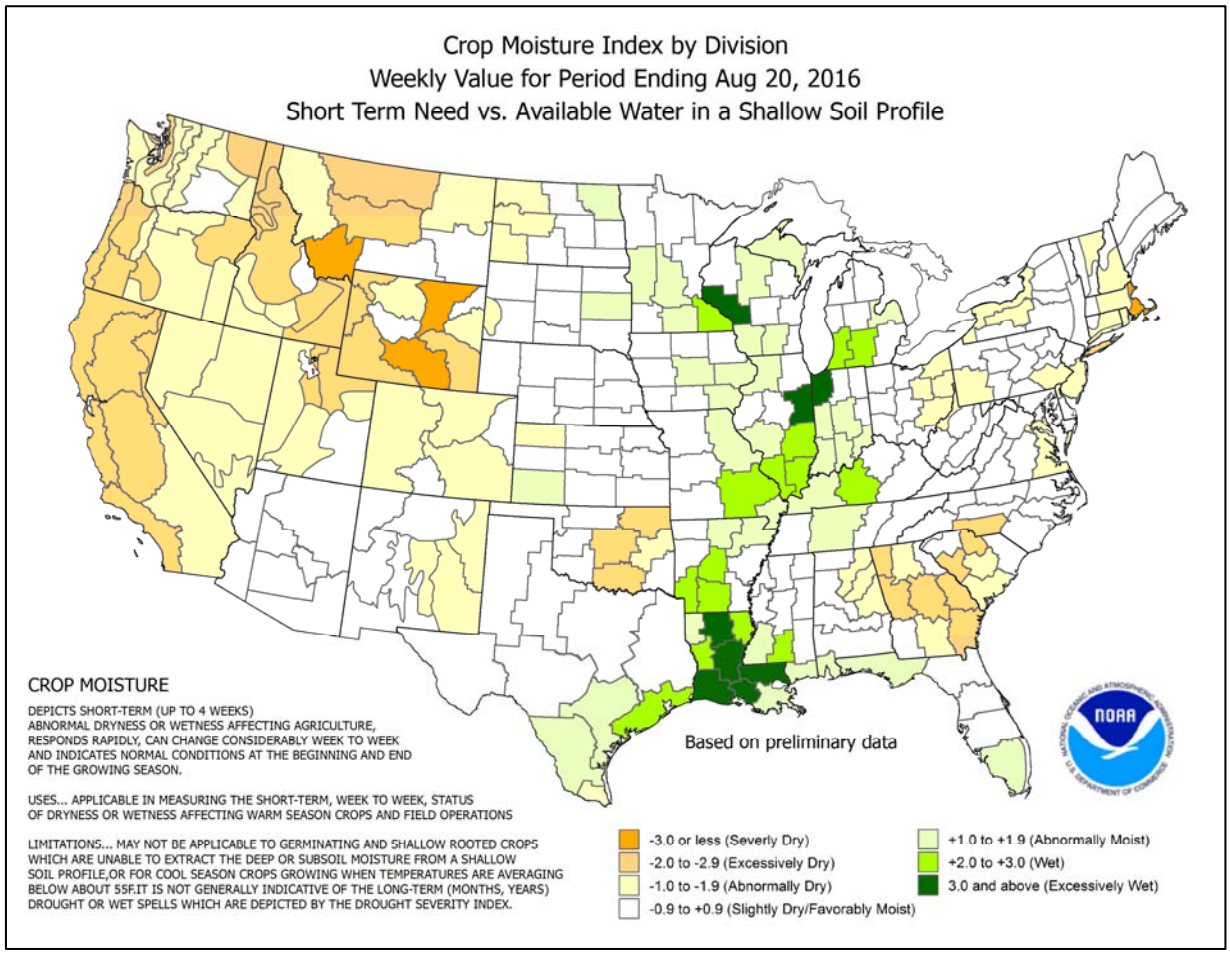
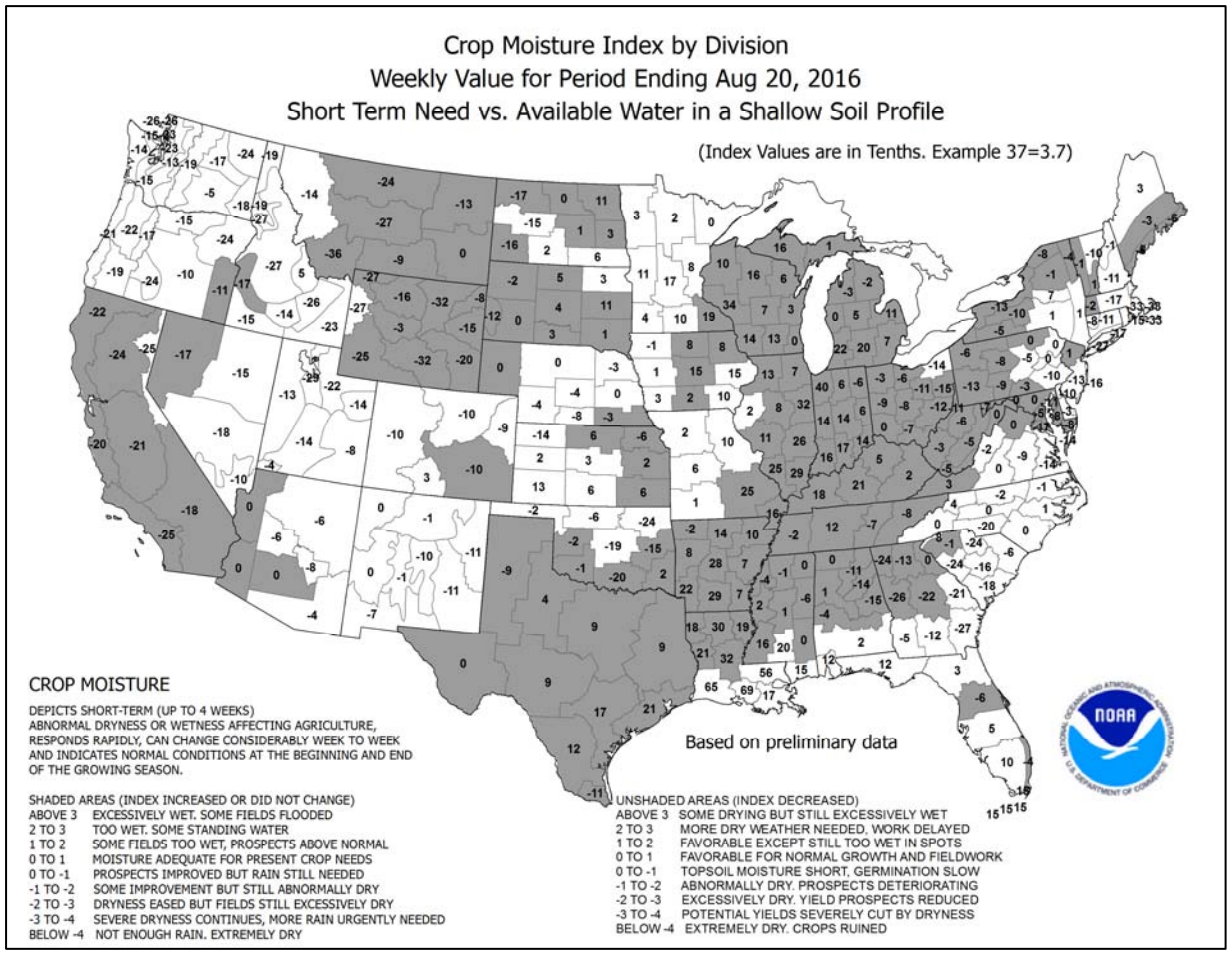
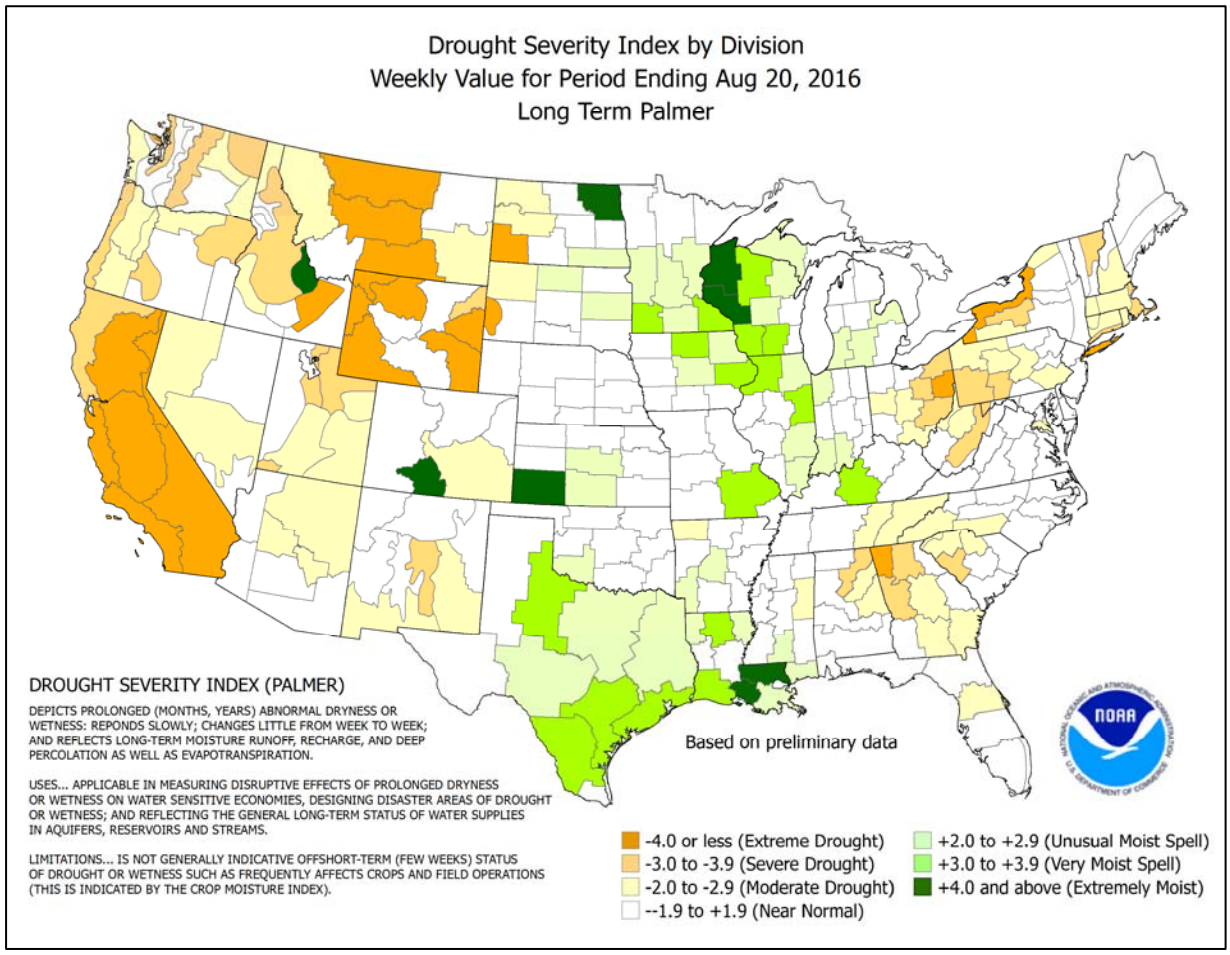
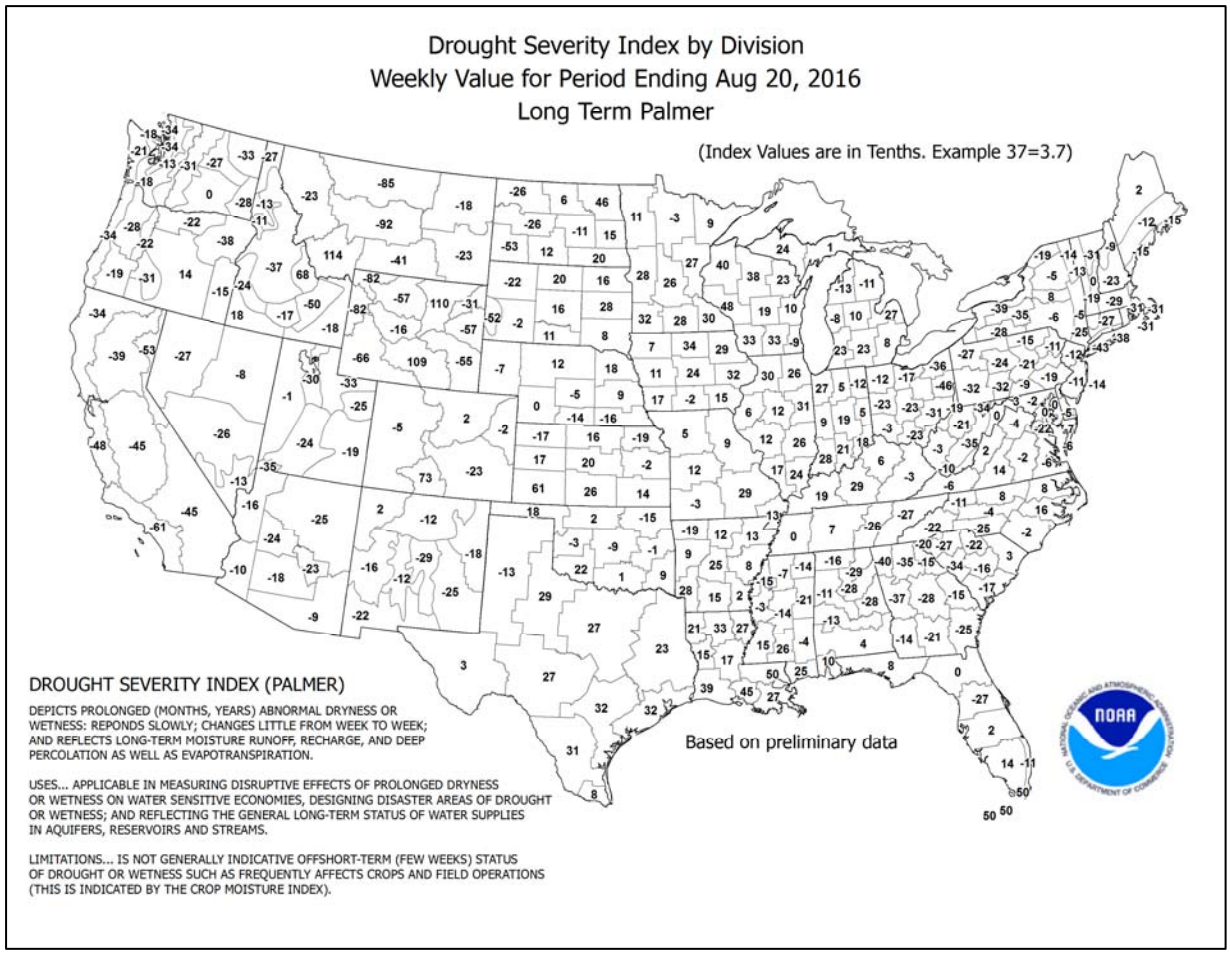

Crop Moisture Index by Division
Weekly Value for Period Ending Aug 20, 2016
Short Term Need vs. Available Water in a Shallow Soil Profile
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES 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 data
-3.0 or less (Severly 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 +3.0 (Wet)
3.0 and above (Excessively Wet)
NOAA


Crop Moisture Index by Division
Weekly Value for Period Ending Aug 20, 2016
Short Term Need vs. Available Water in a Shallow Soil Profile
(Index Values are in Tenths. Example 37=3.7)
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.
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. 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. CROPS RUINED
Based on preliminary data
NOAA


Drought Severity Index by Division
Weekly Value for Period Ending Aug 20, 2016
Long Term Palmer
DROUGHT SEVERITY INDEX (PALMER)
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS: REPONDS 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, DESIGNING 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 OFFSHORT-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 data
NOAA
-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)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Weekly Value for Period Ending Aug 20, 2016
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(Index Values are in Tenths. Example 37=3.7)
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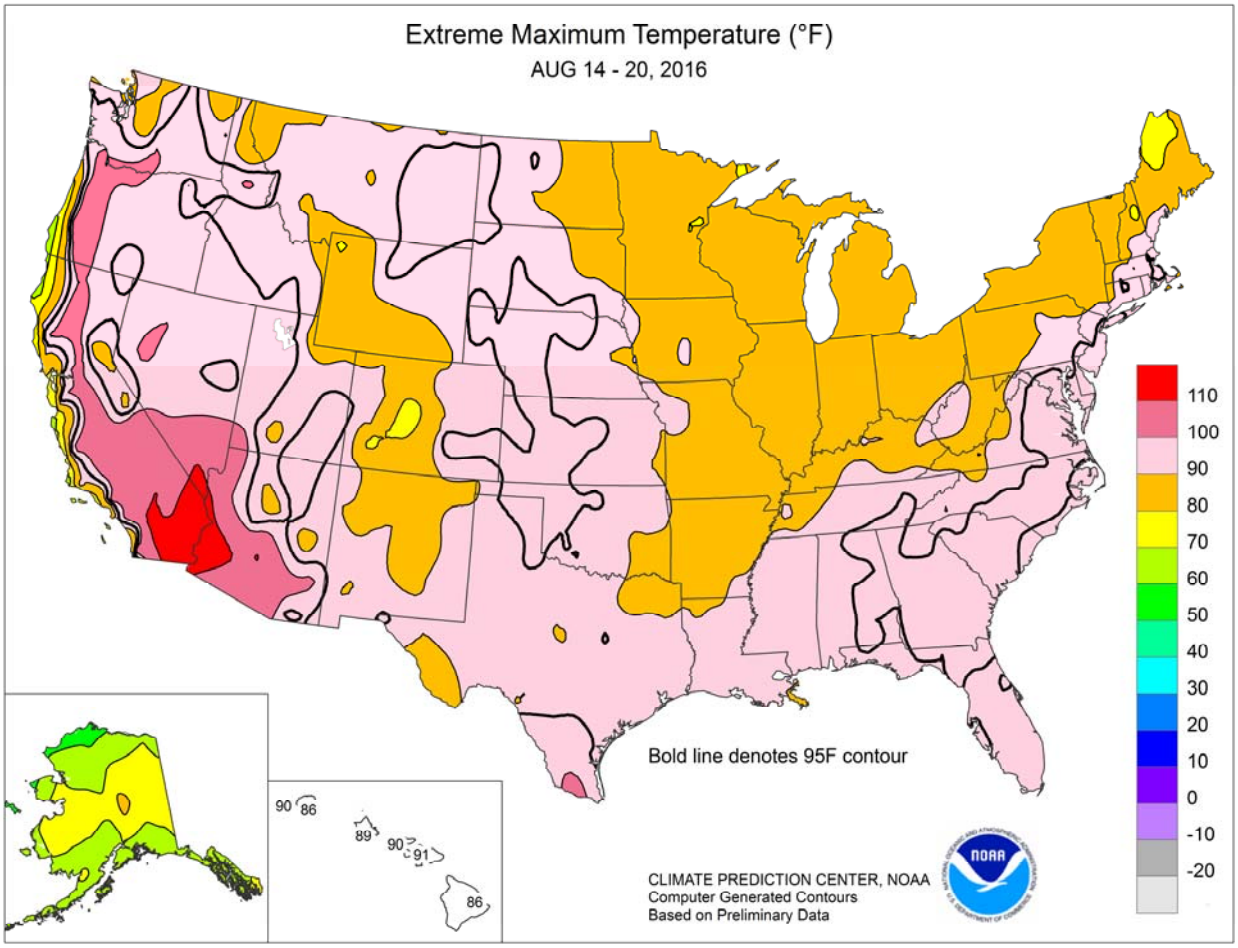
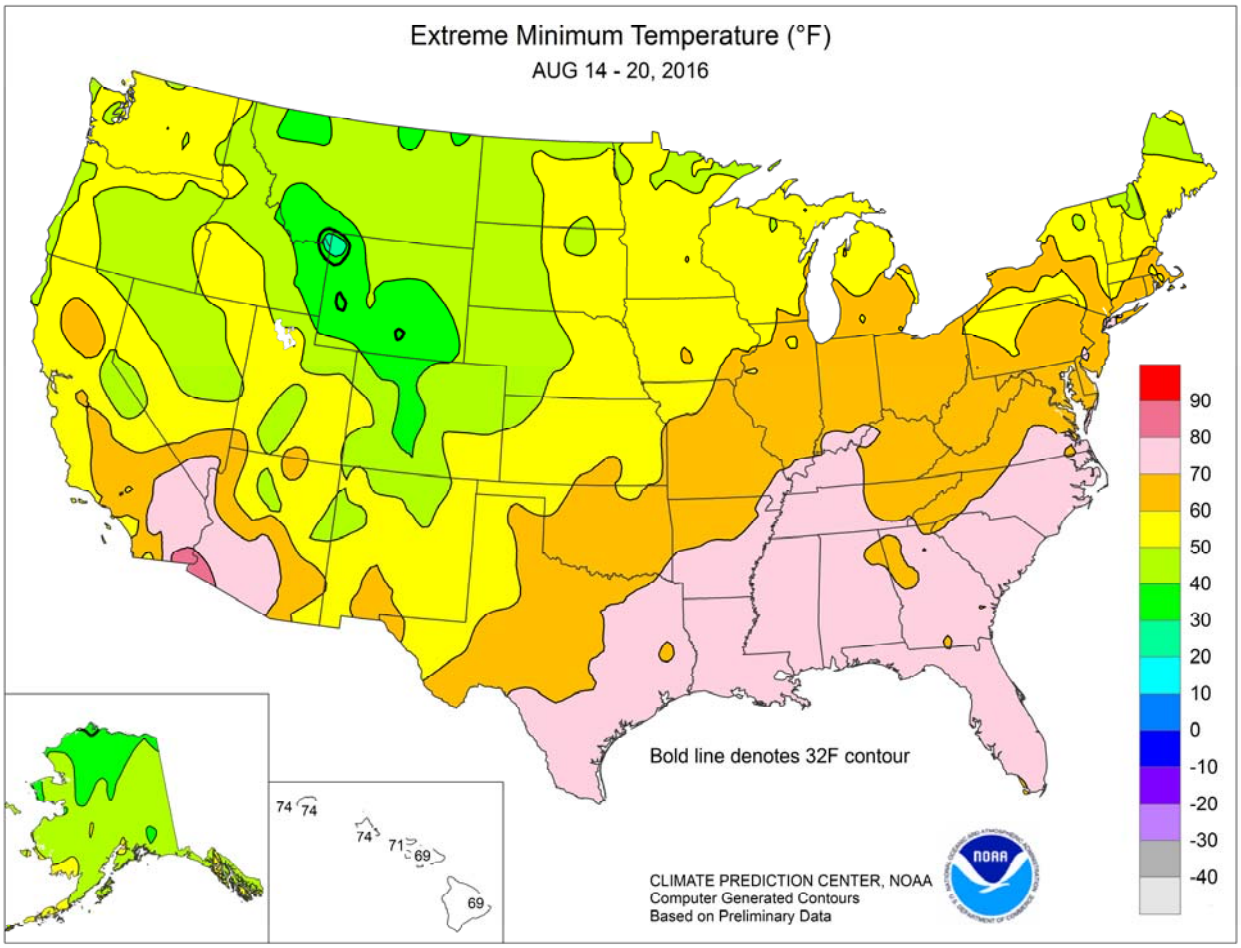
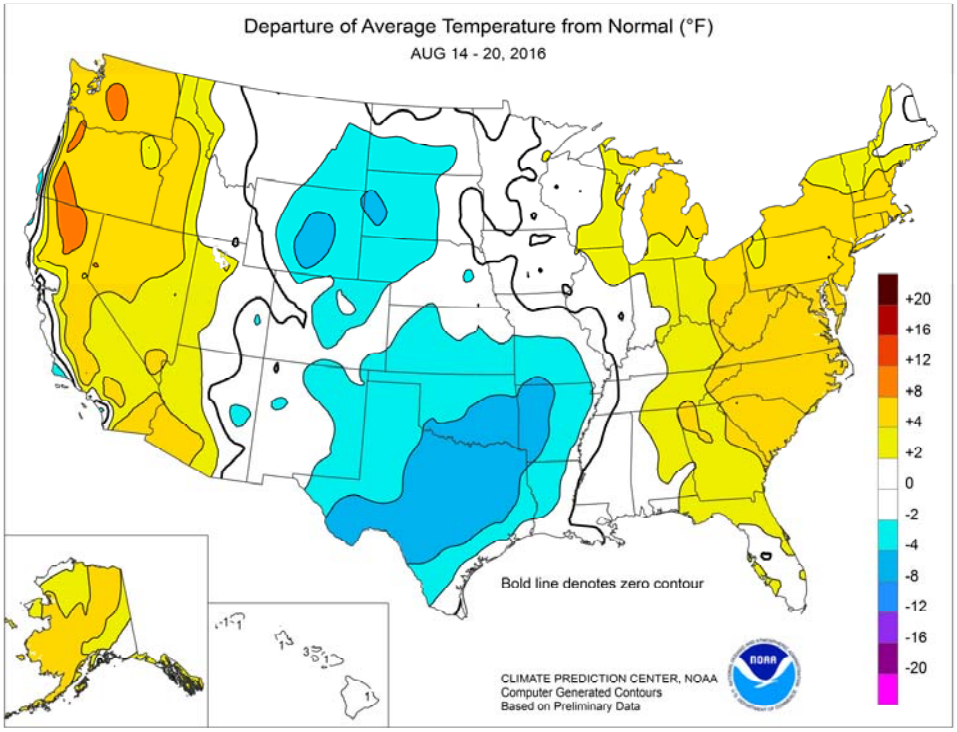
Based on preliminary data
NOAA


Extreme Maximum Temperature (°F)
AUG 14 - 20, 2016
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
90 86
89
90
91
86
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
AUG 14 - 20, 2016
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
74 74
74
71
69
69
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)

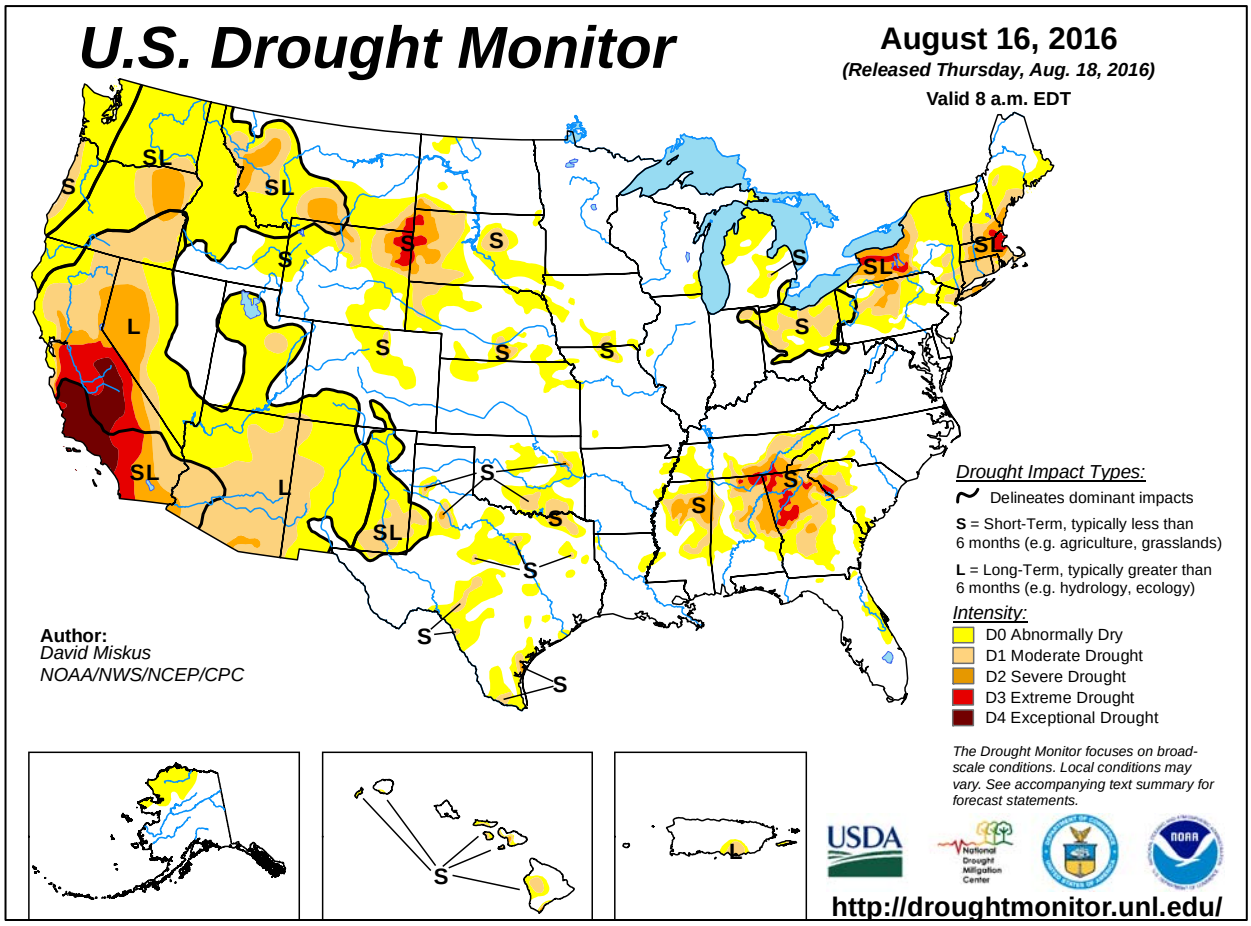


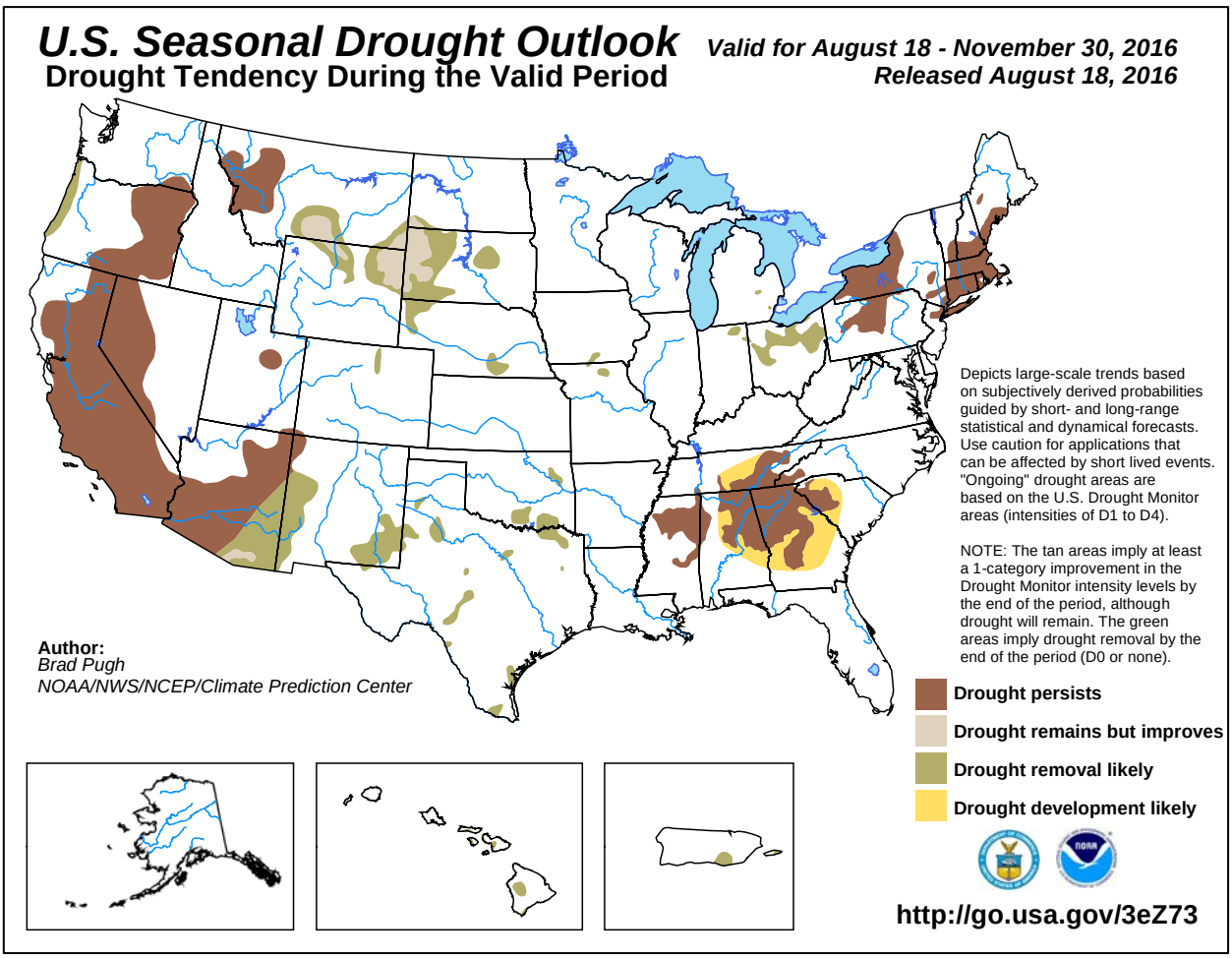
sparking local flooding but maintaining generally favorable conditions for summer crops. In particular, improving soil moisture in the **eastern Corn Belt** continued to benefit immature crops, such as soybeans. Farther east, however, hot, humid weather persisted for several days in the **Atlantic Coast States**. Eventually, spotty showers and cooler conditions provided local drought relief in the **Northeast**, but heat lingered in the **southern Atlantic States**. Meanwhile, occasional showers also dotted the **nation's mid-section**. At times, the rain briefly slowed fieldwork, including spring wheat harvesting. Late in the week, a significant surge of cool air overspread the **Plains** and **Midwest**. In contrast, hot, mostly dry weather dominated the **Far West**. The heat favored fieldwork, including **Northwestern** small grain harvesting, but contributed to a rash of new wildfires. One particularly destructive incident, the Blue Cut fire, scorched more than 37,000 acres of vegetation by week's end, and destroyed at least 105 homes and more than 200 outbuildings near **Lytle Creek, CA**, northwest of **San Bernardino**. Weekly temperatures averaged as much as 10°F above normal across interior sections of **Washington**, **Oregon**, and **northern California**, and at least 5°F above normal from the **Carolinas northward into the lower Great Lakes region and southern New England**. However, near- to below-normal temperatures covered areas from the **Rockies to the Mississippi River**.

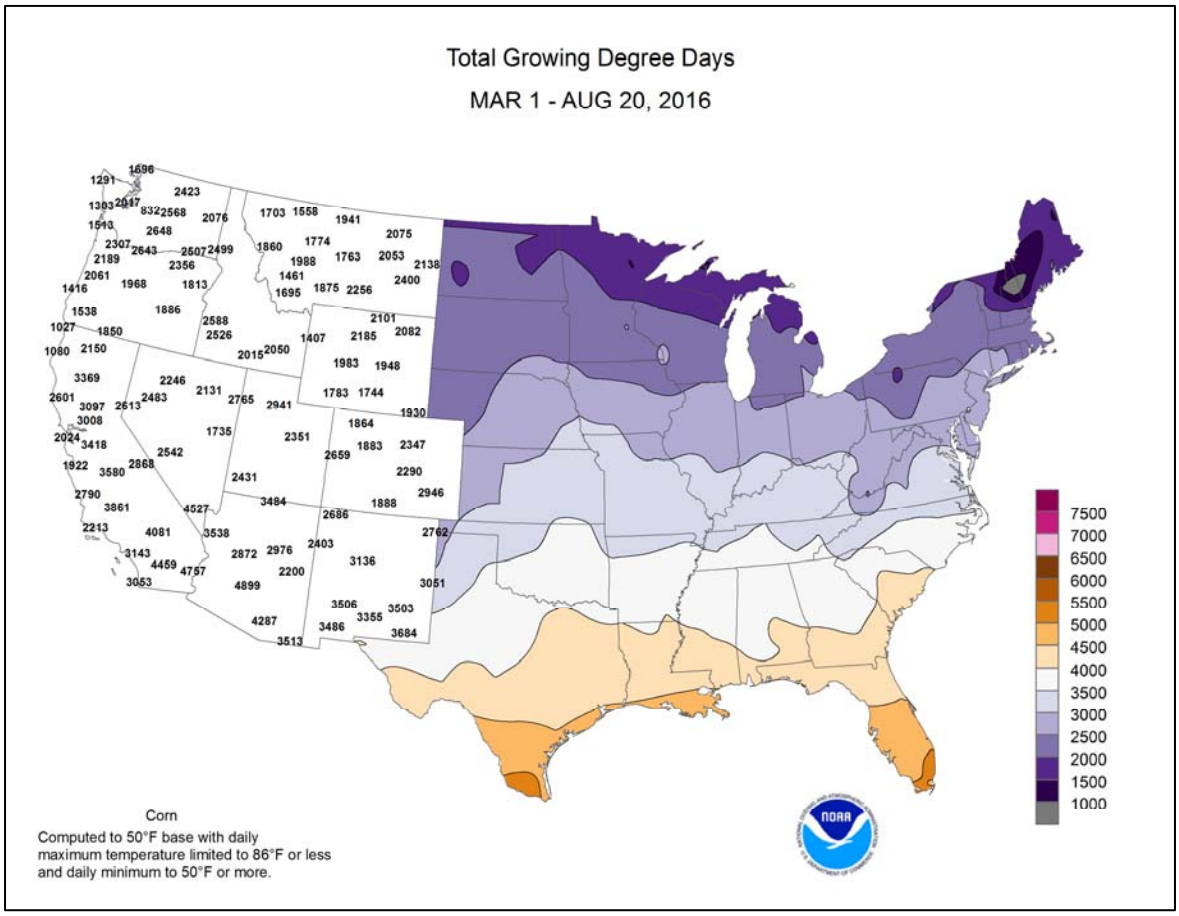
Early in the week, lingering heat in the **East** led to several more daily-record highs. From August 13-15, **Washington, DC**, posted at least three triple-digit readings in a row (101, 100, and 100°F) for the first time since July 5-8, 2012. **Washington** had not experienced consecutive triple-digit readings in August since 1997. Elsewhere in the **East**, daily-record highs for August 14 included 98°F in **Atlantic City, NJ**, and **Salisbury, MD**. Later, as the **East** gradually cooled, the focus for extreme heat shifted into the **West**. In **southern California**, daily-record highs soared to 117°F (on August 15) in **Needles** and 115°F (on August 16) in **Palm Springs**. In contrast, slightly cooler air arrived on the **Plains**. From August 14-18, **Dalhart, TX**, reported five consecutive lows below the 60-degree mark—including a daily-record low of 51°F on the 15th—for the first time since early June. During the mid- to late-week period, **Western** heat shifted northward. **Redding, CA**, notched a daily-record high of 108°F on August 17. In the **Pacific Northwest**, the week ended on August 18-20 with a trio of daily-record highs in locations such as **Quillayute, WA** (96, 96, and 86°F); **Medford, OR** (108, 109, and 105°F); and **Montague, CA** (104, 106, and 103°F). At week's end, a new surge of cool air arrived across **northern sections of the Rockies and Plains**. By August 20, daily-record lows in **Wyoming** dipped to 31°F in **Rawlins**; 36°F in **Rock Springs**; and 37°F in **Cheyenne**.

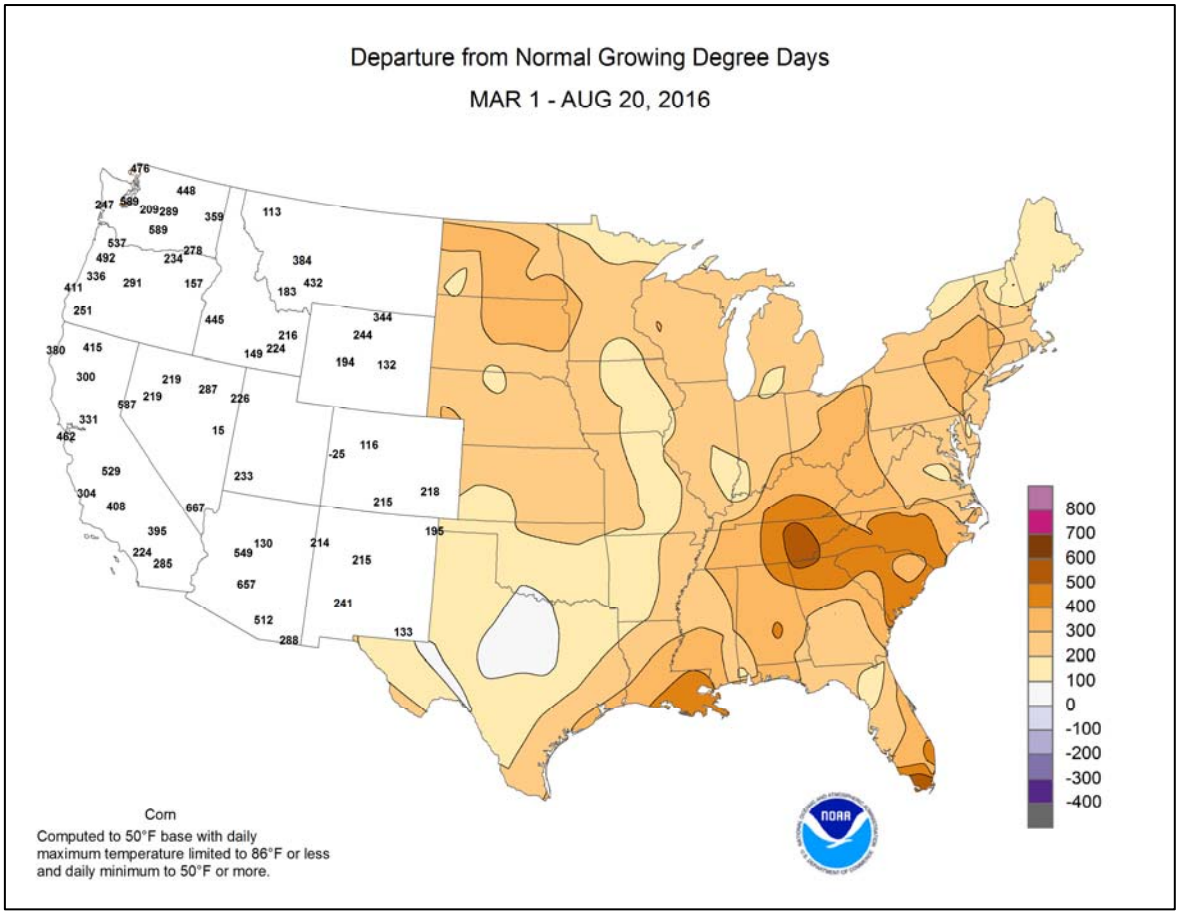
Southern Louisiana's flooding ultimately resulted in more than a dozen fatalities and damaged or destroyed more than 60,000 homes. Record-setting floods persisted for days in several basins, including the **Amite**, where the river crested 5.21 feet above flood stage at **French Settlement** on August 16. The previous high-water mark along the **Amite River** in that location was 3.40 feet above flood stage on April 25, 1977. Farther north and west, rain fell on each day during the week in several locations, totaling 7.43 inches in **Austin, TX**, and 4.10 inches in **Little Rock, AR**. Heavy rain also extended into the **eastern Corn Belt**, where **South Bend, IN**, experienced its wettest day on record. **South Bend's** total for August 15 reached 7.69 inches, toppling the standard of 6.58 inches set on September 13, 2008. Elsewhere in the **lower Midwest**, daily-record amounts for August 15 included 2.14 inches in **Lincoln, IL**, and 1.79 inches in **Cincinnati, OH**. A day later, record-setting totals in **Michigan** for August 16 climbed to 1.76 inches in **Lansing** and 1.74 inches in **Grand Rapids**. Farther east, **Northeastern** daily-record totals reached 1.64 inches (on August 15) in **Baltimore, MD**, and 1.11 inches (on August 17) in **Houlton, ME**. After mid-week, showers spread from the **northern Plains into the Midwest**. On August 18, daily rainfall records were set in **Montana** locations such as **Lewistown** (0.90 inch) and **Billings** (0.37 inch). **Madison, WI**, set a rainfall record for August 19, when 2.74 inches fell. At week's end, rainfall re-intensified from **southern and eastern Texas into the Great Lakes States**. Daily-record amounts for August 20 totaled 4.19 inches in **Mount Ida, AR**; 3.12 inches in **Del Rio, TX**; and 1.59 inches in **Marquette, MI**.

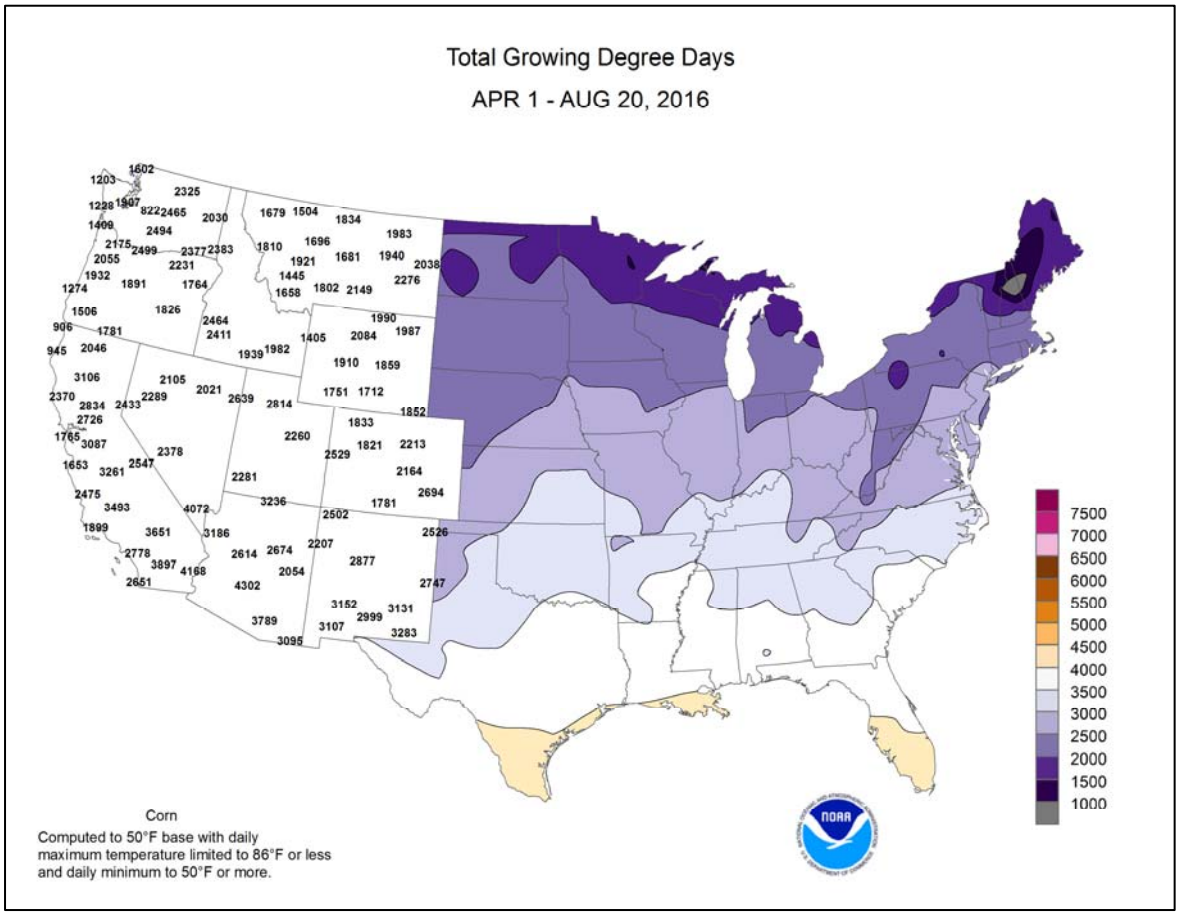
Above-normal temperatures covered much of **Alaska**, accompanied by widespread showers. Daily-record highs were set in a few locations, including **Cold Bay** (66°F on August 17). Across **northern and western Alaska**, heavy, late-week precipitation eradicated any lingering dryness and resulted in some early-season snowfall. **Barrow** received a daily-record snowfall (1.6 inches) on August 19. Rainfall on August 19-21 totaled 1.53 inches in **McGrath**, 1.44 inches in **Bethel**, and 1.43 inches in **Nome**. Meanwhile in **southern Alaska**, **Valdez** netted 9.08 inches of rain in a 12-day period from August 7-18. Farther south, mostly dry weather prevailed in **Hawaii**, except for some locally heavy showers in windward locations. On the **Big Island**, several 24-hour totals of 3 to 5 inches were noted on August 15-16, with **Glenwood** recording 4.46 inches. Through August 20, month-to-date rainfall at the state's major airport observation sites ranged from 0.12 inch (33 percent of normal) in **Honolulu, Oahu**, to 5.43 inches (82 percent) in **Hilo**, on the **Big Island**.

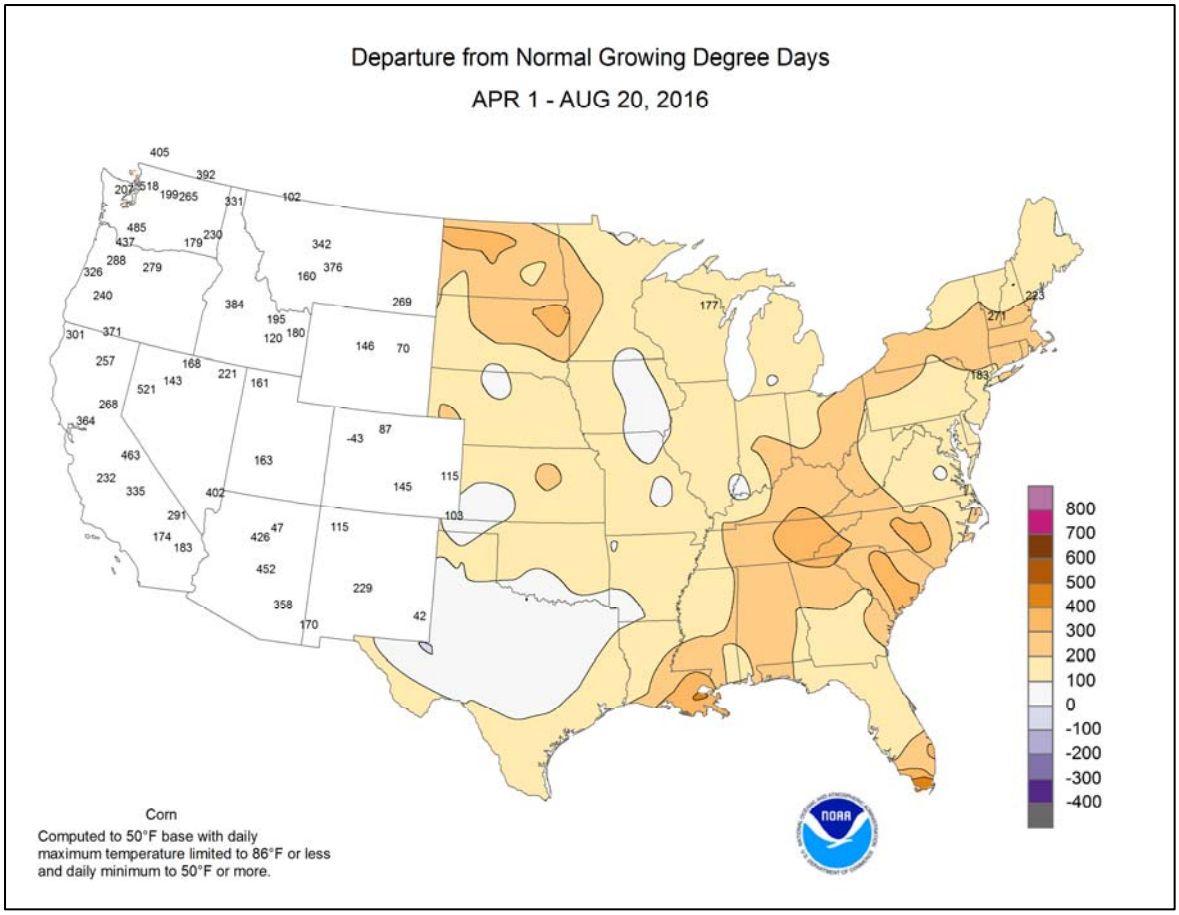

U.S. Drought Monitor
August 16, 2016
(Released Thursday, Aug. 18, 2016)
Valid 8 a.m. EDT
Author:
David Miskus
NOAA/NWS/NCEP/CPC
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (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 August 18 - November 30, 2016
Released August 18, 2016
Author:
Brad Pugh
NOAA/NWS/NCEP/Climate Prediction Center
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).
NOTE: The tan 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).
Drought persists
Drought remains but improves
Drought removal likely
Drought development likely
http://go.usa.gov/3eZ73


Total Growing Degree Days
MAR 1 - AUG 20, 2016
7500
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.


Departure from Normal Growing Degree Days
MAR 1 - AUG 20, 2016
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.


Total Growing Degree Days
APR 1 - AUG 20, 2016
7500
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.


Departure from Normal Growing Degree Days
APR 1 - AUG 20, 2016
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.

National Weather Data for Selected Cities

Weather Data for the Week Ending August 20, 2016

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	90	74	93	73	82	2	0.93	0.23	0.51	12.95	116	34.56	95	93	55	5	0	4	1
	HUNTSVILLE	93	72	97	71	83	4	1.58	0.90	1.04	12.46	117	30.75	82	84	61	5	0	4	1
	MOBILE	90	75	92	74	82	1	1.27	-0.06	0.55	18.51	120	46.68	105	95	70	6	0	4	2
	MONTGOMERY	95	74	96	72	84	3	0.28	-0.46	0.16	10.65	91	33.02	89	86	50	7	0	4	0
AK	ANCHORAGE	66	54	70	53	60	3	0.20	-0.47	0.09	8.12	180	10.28	132	89	74	0	0	4	0
	BARROW	45	35	54	30	40	1	0.75	0.53	0.41	2.32	127	3.66	154	92	75	0	1	6	0
	FAIRBANKS	70	52	76	45	61	5	0.55	0.16	0.40	9.54	223	11.42	182	91	77	0	0	3	0
	JUNEAU	62	54	66	50	58	2	1.14	-0.05	0.54	11.74	110	34.53	117	92	86	0	0	5	1
	KODIAK	63	52	65	47	57	2	1.66	0.71	0.92	8.35	70	51.12	119	96	85	0	0	4	2
	NOME	59	47	69	39	53	2	0.93	0.19	0.57	6.61	125	9.69	108	87	80	0	0	2	1
AZ	FLAGSTAFF	78	48	84	45	63	-2	0.39	-0.26	0.25	7.43	156	14.45	102	88	29	0	0	6	0
	PHOENIX	106	83	111	79	95	4	0.11	-0.09	0.10	2.03	118	3.91	81	40	24	7	0	2	0
	PRESCOTT	88	61	93	59	75	4	1.00	0.26	0.17	5.25	95	9.04	74	72	24	3	0	4	1
	TUCSON	100	76	104	71	88	3	0.01	-0.51	0.01	6.05	155	8.58	121	48	28	7	0	1	0
AR	FORT SMITH	84	72	89	68	78	-4	2.08	1.55	1.23	9.24	103	26.45	98	91	64	0	0	4	2
	LITTLE ROCK	83	75	89	73	79	-3	4.10	3.48	2.02	16.62	184	45.81	146	90	73	0	0	7	4
CA	BAKERSFIELD	104	74	107	70	89	7	0.00	0.00	0.00	0.00	0	4.10	89	28	19	7	0	0	0
	FRESNO	102	70	107	68	86	6	0.00	0.00	0.00	0.06	25	9.08	115	49	28	7	0	0	0
	LOS ANGELES	75	63	78	61	69	-2	0.00	-0.02	0.00	0.00	0	6.00	63	88	70	0	0	0	0
	REDDING	105	68	108	66	86	7	0.00	-0.03	0.00	2.46	304	30.63	139	58	32	7	0	0	0
	SACRAMENTO	94	59	101	55	77	2	0.00	0.00	0.00	0.00	0	12.75	106	77	23	6	0	0	0
	SAN DIEGO	80	68	84	67	74	1	0.00	0.00	0.00	0.00	0	5.01	65	85	68	0	0	0	0
	SAN FRANCISCO	70	56	73	54	63	-1	0.00	0.00	0.00	0.00	0	12.44	93	87	72	0	0	0	0
	STOCKTON	97	60	101	56	78	2	0.00	0.00	0.00	0.00	0	12.12	134	71	41	7	0	0	0
CO	ALAMOSA	78	43	83	40	61	-1	0.00	-0.26	0.00	1.31	58	5.68	128	87	49	0	0	0	0
	CO SPRINGS	83	53	92	49	68	0	0.20	-0.62	0.20	5.03	66	12.96	98	73	24	1	0	1	0
	DENVER INTL	87	55	92	47	71	0	0.02	-0.35	0.02	2.74	53	10.56	102	66	21	5	0	1	0
	GRAND JUNCTION	91	61	94	54	76	1	0.00	-0.17	0.00	1.03	65	6.00	109	43	25	5	0	0	0
	PUEBLO	90	57	98	52	73	-1	0.77	0.25	0.40	2.99	61	10.17	110	74	40	5	0	4	0
CT	BRIDGEPORT	88	74	94	71	81	8	0.09	-0.74	0.09	8.83	91	24.37	85	81	60	3	0	1	0
	HARTFORD	88	68	96	61	78	6	0.60	-0.28	0.58	7.29	73	21.23	73	85	50	1	0	2	1
DC	WASHINGTON	95	75	100	72	85	8	2.04	1.30	1.16	8.91	99	24.25	97	86	45	7	0	2	2
DE	WILMINGTON	91	73	96	68	82	7	0.38	-0.36	0.25	10.47	104	28.33	102	91	47	6	0	3	0
FL	DAYTONA BEACH	92	76	96	74	84	3	0.06	-1.30	0.04	5.40	37	25.40	85	98	59	7	0	2	0
	JACKSONVILLE	94	74	97	72	84	3	0.07	-1.45	0.04	7.02	46	21.48	66	99	55	7	0	2	0
	KEY WEST	90	80	91	77	85	1	0.15	-1.10	0.09	7.88	72	19.53	88	89	70	4	0	2	0
	MIAMI	91	78	93	75	84	0	1.15	-0.85	0.55	23.55	122	43.94	127	90	64	6	0	6	1
	ORLANDO	92	76	94	74	84	1	3.35	1.97	2.62	19.33	105	39.42	120	93	71	6	0	3	2
	PENSACOLA	88	79	89	77	84	2	0.04	-1.46	0.04	20.82	110	45.08	103	88	67	0	0	1	0
	TALLAHASSEE	96	75	96	73	85	3	1.28	-0.29	1.01	22.71	116	46.10	103	91	59	7	0	3	1
	TAMPA	93	77	95	75	85	2	1.16	-0.56	0.79	23.79	143	39.69	137	90	61	7	0	3	1
	WEST PALM BEACH	91	80	92	75	85	2	0.91	-0.55	0.35	8.84	51	30.21	83	79	63	7	0	3	0
GA	ATHENS	93	71	95	70	82	3	3.70	2.88	1.74	15.41	142	30.58	95	99	75	6	0	6	3
	ATLANTA	93	73	97	71	83	4	0.94	0.18	0.85	8.83	79	27.97	83	92	62	6	0	5	1
	AUGUSTA	96	72	98	71	84	5	0.79	-0.23	0.47	6.73	61	25.46	84	97	63	7	0	3	0
	COLUMBUS	93	73	96	71	83	2	1.53	0.72	1.27	7.61	68	27.05	81	94	46	7	0	3	1
	MACON	95	73	99	71	84	4	0.95	0.12	0.71	6.21	60	24.17	78	94	54	7	0	6	1
	SAVANNAH	96	75	98	73	85	4	0.17	-1.48	0.17	11.10	69	33.77	101	86	59	7	0	1	0
HI	HILO	85	70	86	69	77	1	2.22	0.07	1.16	23.94	98	48.88	63	92	81	0	0	6	1
	HONOLULU	88	76	89	74	82	0	0.00	-0.09	0.00	3.02	244	7.07	70	73	66	0	0	0	0
	KAHULUI	89	73	91	69	81	1	0.07	-0.04	0.04	1.83	178	9.56	80	76	67	1	0	4	0
	LIHUE	86	75	86	74	81	1	0.12	-0.28	0.06	3.70	72	10.13	45	79	73	0	0	5	0
ID	BOISE	95	65	99	59	80	6	0.00	-0.04	0.00	0.45	37	4.97	65	40	25	7	0	0	0
	LEWISTON	97	63	99	58	80	6	0.00	-0.16	0.00	2.82	123	9.63	115	40	24	7	0	0	0
	POCATELLO	90	50	96	40	70	1	0.00	-0.14	0.00	0.44	22	7.25	88	60	30	4	0	0	0
IL	CHICAGO/O'HARE	84	67	88	63	76	4	1.36	0.29	0.75	11.42	114	25.05	108	90	65	0	0	5	1
	MOLINE	84	66	89	63	75	2	0.99	-0.03	0.94	16.42	143	26.42	103	91	68	0	0	2	1
	PEORIA	85	67	89	63	76	3	1.05	0.37	0.61	11.89	120	21.00	89	99	66	0	0	4	1
	ROCKFORD	84	66	88	61	75	4	0.93	-0.02	0.42	12.50	109	24.56	101	91	70	0	0	4	0
	SPRINGFIELD	84	69	89	63	76	2	2.15	1.39	1.66	19.58	206	33.18	141	96	65	0	0	3	1
IN	EVANSVILLE	83	73	86	71	78	1	1.94	1.25	0.95	16.57	168	38.32	129	93	78	0	0	5	1
	FORT WAYNE	82	67	87	65	75	4	1.01	0.19	0.37	7.89	80	22.08	92	95	71	0	0	6	0
	INDIANAPOLIS	82	70	86	68	76	2	2.71	1.87	1.25	14.32	129	31.82	116	96	76	0	0	4	2
	SOUTH BEND	81	66	85	63	73	2	8.91	8.02	7.70	17.58	170	32.69	133	98	82	0	0	5	2
IA	BURLINGTON	83	66	87	60	75	0	0.33	-0.52	0.33	12.41	109	23.26	92	100	65	0	0	1	0
	CEDAR RAPIDS	83	64	88	58	73	1	0.31	-0.65	0.16	18.85	169	29.36	130	100	66	0	0	3	0
	DES MOINES	86	67	92	62	77	3	0.75	-0.29	0.39	12.35	106	23.59	99	91	65	2	0	3	0
	DUBUQUE	81	63	86	58	72	2	0.80	-0.25	0.38	17.49	164	28.44	121	95	74	0	0	4	0
	SIOUX CITY	85	64	92	55	74	2	0.35	-0.28	0.35	6.03	69	21.76	118	89	63	1	0	1	0
	WATERLOO	83	62	89	58	73	2	1.72	0.79	1.45	17.84	153	28.27	123	95	72	0	0	3	1
KS	CONCORDIA	88	65	94	58	76	-1	0.63	-0.07	0.60	9.78	94	22.65	109	88	56	3	0	2	1
	DODGE CITY	91	62	97	57	76	-3	0.00	-0.61	0.00	9.07	111	20.19	122	83	34	4	0	0	0
	GOODLAND	88	56	94	47	72	-2	0.00	-0.55	0.00	5.16	60	12.52	80	79	40	4	0	0	0
	TOPEKA	88	64	93	58	76	-1	0.49	-0.36	0.49	8.79	79	28.10	118	90	69	3	0	1	0

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

Weather Data for the Week Ending August 20, 2016

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
	WICHITA	88	67	92	62	78	-2	1.13	0.50	1.13	20.62	220	36.18	175	88	60	3	0	1	1
KY	JACKSON	84	70	90	68	77	3	3.65	2.74	1.40	17.76	149	40.57	125	96	68	1	0	6	2
	LEXINGTON	84	71	90	69	78	3	2.84	2.02	0.99	15.99	134	34.92	111	91	74	1	0	5	2
	LOUISVILLE	86	74	92	72	80	3	4.14	3.41	1.69	14.58	141	33.64	112	90	63	1	0	5	3
	PADUCAH	83	73	86	72	78	2	2.70	2.07	0.63	16.74	154	40.94	127	94	71	0	0	6	3
LA	BATON ROUGE	91	74	93	72	82	1	5.32	4.00	3.81	40.09	266	70.29	166	98	63	6	0	4	2
	LAKE CHARLES	87	75	90	74	81	-2	3.25	2.21	1.17	23.87	170	54.19	150	97	75	1	0	6	2
	NEW ORLEANS	92	79	95	76	86	3	2.23	0.86	0.91	23.70	142	53.02	124	87	73	6	0	5	2
	SHREVEPORT	86	74	91	73	80	-3	3.95	3.37	1.41	13.32	123	47.55	142	98	78	1	0	7	3
ME	CARIBOU	75	55	82	51	65	1	1.73	0.79	0.70	13.51	137	29.43	126	95	64	0	0	4	2
	PORTLAND	85	61	94	59	73	5	0.45	-0.21	0.45	7.27	85	22.78	81	91	49	1	0	1	0
MD	BALTIMORE	92	71	98	68	81	6	3.20	2.39	1.64	12.87	134	30.71	114	93	63	4	0	3	2
MA	BOSTON	87	69	96	66	78	6	0.16	-0.59	0.16	3.02	36	19.36	74	84	50	3	0	1	0
	WORCESTER	82	65	89	63	74	5	0.25	-0.66	0.13	6.28	58	21.99	72	89	51	0	0	2	0
MI	ALPENA	83	61	87	59	72	7	0.41	-0.38	0.13	4.98	63	19.76	109	93	56	0	0	5	0
	GRAND RAPIDS	82	65	85	61	74	4	3.28	2.46	1.52	13.35	142	30.36	136	94	61	0	0	4	3
	HOUGHTON LAKE	82	60	85	55	71	6	1.76	0.91	1.40	8.42	106	22.49	127	95	64	0	0	3	1
	LANSING	83	65	84	62	74	5	3.88	3.10	1.78	9.77	119	22.68	117	91	68	0	0	4	3
	MUSKEGON	82	67	86	63	75	6	0.66	-0.20	0.62	9.97	141	23.91	125	94	65	0	0	2	1
	TRAVERSE CITY	83	66	90	62	74	6	1.90	1.15	0.78	6.55	77	18.14	90	93	53	1	0	3	2
MN	DULUTH	78	59	84	54	69	5	1.06	0.13	0.75	11.72	107	21.83	111	97	70	0	0	4	1
	INT'L FALLS	78	51	83	47	64	0	0.04	-0.65	0.03	11.56	125	19.34	124	97	57	0	0	2	0
	MINNEAPOLIS	81	64	86	58	73	2	1.02	0.09	0.44	14.70	134	23.62	117	87	64	0	0	3	0
	ROCHESTER	79	60	84	56	70	2	2.23	1.26	1.61	15.75	138	27.44	127	99	79	0	0	4	1
	ST. CLOUD	78	58	83	56	68	0	0.93	0.02	0.62	14.28	139	20.65	113	100	64	0	0	4	1
MS	JACKSON	91	74	93	72	82	1	1.42	0.63	0.87	18.45	169	50.89	135	93	65	5	0	6	1
	MERIDIAN	92	74	94	72	83	2	1.15	0.47	0.41	11.66	99	36.65	91	89	74	7	0	6	0
	TUPELO	91	74	92	73	82	2	2.36	1.81	1.11	12.31	122	34.41	93	92	62	6	0	5	2
MO	COLUMBIA	83	66	88	62	75	-1	0.20	-0.63	0.17	17.72	174	27.86	106	98	69	0	0	3	0
	KANSAS CITY	87	64	93	56	76	-1	1.06	0.32	1.06	11.31	102	31.84	129	91	49	3	0	1	1
	SAINT LOUIS	85	72	92	69	79	1	2.88	2.25	2.52	14.87	155	27.91	110	85	73	1	0	2	1
	SPRINGFIELD	83	66	89	61	75	-3	0.08	-0.63	0.06	13.22	128	24.47	89	91	68	0	0	2	0
MT	BILLINGS	85	56	93	48	70	-1	1.01	0.84	0.69	2.35	64	7.75	75	69	32	4	0	2	1
	BUTTE	82	43	88	34	62	0	0.19	-0.11	0.16	2.15	49	5.68	61	75	17	0	0	2	0
	CUT BANK	78	47	90	38	63	0	0.26	-0.13	0.22	3.79	74	8.27	88	91	32	1	0	2	0
	GLASGOW	84	56	97	48	70	0	0.60	0.33	0.38	7.70	161	15.98	192	80	43	3	0	3	0
	GREAT FALLS	82	49	94	41	66	0	0.31	-0.05	0.31	3.27	70	9.29	86	79	25	1	0	1	0
	HAVRE	84	51	93	44	68	0	0.15	-0.10	0.11	5.35	129	13.24	158	89	46	2	0	2	0
	MISSOULA	90	51	95	43	70	3	0.12	-0.13	0.12	3.07	88	8.19	88	66	35	5	0	1	0
NE	GRAND ISLAND	85	62	95	54	73	-1	0.32	-0.37	0.31	4.59	52	19.27	103	90	61	2	0	2	0
	LINCOLN	87	64	93	57	75	-1	0.24	-0.50	0.24	8.32	90	20.63	104	88	59	3	0	1	0
	NORFOLK	84	60	92	52	72	-1	0.09	-0.52	0.08	7.26	74	23.71	121	91	61	1	0	2	0
	NORTH PLATTE	87	56	97	45	72	-1	0.04	-0.43	0.04	7.90	100	19.08	124	93	44	4	0	1	0
	OMAHA	86	65	91	60	75	0	1.76	1.07	1.30	11.02	112	24.01	115	87	63	2	0	3	1
	SCOTTSBLUFF	87	52	96	43	69	-2	0.17	-0.07	0.17	3.61	65	12.72	103	87	50	3	0	1	0
	VALENTINE	87	55	100	48	71	-2	0.54	0.07	0.30	7.99	101	21.91	146	91	54	4	0	4	0
NV	ELY	90	46	93	42	68	2	0.00	-0.19	0.00	1.91	106	8.71	133	38	15	4	0	0	0
	LAS VEGAS	106	83	111	81	95	6	0.08	0.00	0.08	0.82	103	3.67	120	17	12	7	0	1	0
	RENO	97	62	98	60	79	9	0.00	-0.05	0.00	0.00	0	5.21	110	41	21	7	0	0	0
	WINNEMUCCA	98	52	100	45	75	5	0.00	-0.06	0.00	0.01	1	4.58	86	37	17	7	0	0	0
NH	CONCORD	87	60	94	56	73	5	0.18	-0.52	0.18	4.54	53	17.27	74	92	44	1	0	1	0
NJ	NEWARK	91	75	97	72	83	7	0.31	-0.55	0.21	9.27	87	24.48	81	79	53	4	0	2	0
NM	ALBUQUERQUE	87	63	91	59	75	-1	0.11	-0.28	0.08	1.96	64	3.15	55	67	27	1	0	2	0
NY	ALBANY	85	65	90	60	75	6	0.26	-0.57	0.22	11.95	126	22.70	94	89	55	1	0	2	0
	BINGHAMTON	80	63	82	59	72	5	0.64	-0.09	0.29	9.74	105	22.53	93	92	72	0	0	3	0
	BUFFALO	85	68	89	64	76	7	0.98	0.11	0.72	4.57	49	15.81	65	88	53	0	0	3	1
	ROCHESTER	86	67	90	64	76	7	1.72	0.92	1.12	4.53	54	16.14	77	90	61	1	0	3	2
	SYRACUSE	84	66	88	62	75	6	0.41	-0.35	0.41	8.07	82	22.83	94	94	58	0	0	1	0
NC	ASHEVILLE	85	68	89	67	76	4	2.33	1.36	1.53	13.50	124	28.38	91	91	70	0	0	4	1
	CHARLOTTE	95	73	97	71	84	5	0.15	-0.66	0.11	5.57	58	20.86	74	87	47	7	0	2	0
	GREENSBORO	92	74	94	72	83	7	0.25	-0.53	0.25	10.74	104	29.71	105	94	52	6	0	1	0
	HATTERAS	90	77	94	74	84	5	1.31	-0.18	1.13	16.27	126	50.33	144	95	68	3	0	3	1
	RALEIGH	94	75	97	74	85	8	0.38	-0.42	0.38	16.93	168	36.53	130	89	64	7	0	1	0
	WILMINGTON	92	75	94	73	84	4	1.53	-0.07	1.40	16.91	96	39.59	106	95	56	7	0	2	1
ND	BISMARCK	80	54	89	50	67	-3	0.29	-0.18	0.29	11.36	172	18.54	153	93	59	0	0	1	0
	DICKINSON	81	49	94	43	65	-4	0.31	-0.02	0.31	7.17	114	11.90	101	89	29	1	0	1	0
	FARGO	80	58	89	52	69	-1	0.29	-0.26	0.28	9.69	121	15.16	105	89	56	0	0	2	0
	GRAND FORKS	82	57	88	50	69	1	0.78	0.17	0.43	11.79	149	18.68	139	92	45	0	0	4	0
	JAMESTOWN	78	56	86	51	67	-3	1.00	0.49	0.98	12.91	164	18.82	140	97	53	0	0	3	1
	WILLISTON	85	54	97	49	70	1	0.17	-0.13	0.17	6.67	119	11.74	115	83	38	3	0	1	0
OH	AKRON-CANTON	84	69	87	65	76	5	1.06	0.26	0.64	7.67	77	22.34	89	90	72	0	0	3	1
	CINCINNATI	84	71	86	68	77	2	4.55	3.70	1.79	12.63	119	32.24	112	99	78	0	0	4	3
	CLEVELAND	85	71	89	68	78	8	0.43	-0.39	0.18	6.48	68	22.41	93	85	59	0	0	5	0
	COLUMBUS	82	69	85	67	76	2	2.82	2.01	1.34	11.12	100	25.85	100	97	77	0	0	5	2
	DAYTON	81	69	86	67	75	3	2.32	1.54	1.12	9.46	92	25.67	96	98	74	0	0	5	2
	MANSFIELD	81	68	86	66	75	6	0.95	-0.10	0.60	6.68	57	23.08	81	100	67	0	0	4	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending August 20, 2016

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	81	67	88	63	74	3	1.66	0.94	0.75	7.44	88	21.20	100	99	85	0	0	4	1
	YOUNGSTOWN	83	66	87	60	75	6	0.24	-0.49	0.10	10.82	107	25.92	107	94	71	0	0	6	0
OK	OKLAHOMA CITY	89	67	92	62	78	-3	0.08	-0.43	0.08	7.04	78	19.45	84	93	47	4	0	1	0
	TULSA	89	69	92	63	79	-4	0.12	-0.47	0.12	6.69	73	20.54	78	94	64	3	0	1	0
OR	ASTORIA	75	56	98	52	65	4	0.00	-0.24	0.00	3.54	83	40.77	109	92	78	1	0	0	0
	BURNS	95	49	97	43	72	8	0.00	-0.08	0.00	0.54	42	4.39	65	49	19	7	0	0	0
	EUGENE	95	54	104	50	74	8	0.00	-0.20	0.00	1.03	40	20.96	73	78	44	6	0	0	0
	MEDFORD	102	64	109	61	83	10	0.00	-0.10	0.00	1.02	84	10.00	99	55	20	7	0	0	0
	PENDLETON	94	59	97	57	77	5	0.00	-0.11	0.00	1.80	122	7.38	95	46	28	6	0	0	0
	PORTLAND	92	61	100	59	76	7	0.00	-0.19	0.00	2.17	79	21.91	106	74	50	3	0	0	0
	SALEM	95	58	104	52	76	9	0.00	-0.13	0.00	1.69	74	21.98	99	72	43	5	0	0	0
PA	ALLENTOWN	90	70	93	64	80	9	0.48	-0.47	0.20	9.80	89	26.53	92	83	56	5	0	4	0
	ERIE	84	69	89	63	76	5	0.41	-0.53	0.35	11.31	114	25.08	102	87	69	0	0	4	0
	MIDDLETOWN	91	72	94	68	82	8	0.63	-0.09	0.41	11.24	118	28.43	109	95	50	5	0	3	0
	PHILADELPHIA	92	75	97	73	84	8	0.79	-0.04	0.42	6.85	68	24.85	90	85	54	6	0	4	0
	PITTSBURGH	83	68	88	64	76	5	1.33	0.60	0.47	8.87	87	22.49	89	92	60	0	0	4	0
	WILKES-BARRE	86	68	90	62	77	6	0.48	-0.17	0.23	7.91	83	20.73	87	93	56	1	0	4	0
	WILLIAMSPORT	88	68	92	64	78	7	0.79	0.07	0.38	10.48	99	22.42	85	88	61	1	0	4	0
RI	PROVIDENCE	88	69	96	67	79	7	0.02	-0.86	0.02	6.57	74	24.71	85	84	55	1	0	1	0
SC	BEAUFORT	96	76	97	74	86	6	0.53	-1.20	0.53	7.92	49	26.31	80	93	50	7	0	1	1
	CHARLESTON	94	75	96	74	85	5	0.03	-1.53	0.03	10.78	66	31.54	93	88	53	7	0	1	0
	COLUMBIA	96	76	97	74	86	6	0.55	-0.67	0.55	8.66	62	22.58	68	87	60	7	0	1	1
	GREENVILLE	90	72	93	71	82	4	0.30	-0.59	0.21	10.55	94	28.08	84	91	54	5	0	3	0
SD	ABERDEEN	82	57	88	48	70	-1	0.46	-0.08	0.16	7.09	89	14.03	95	90	61	0	0	4	0
	HURON	83	59	88	53	71	-1	0.77	0.33	0.41	6.07	81	14.88	96	94	55	0	0	5	0
	RAPID CITY	81	53	92	42	67	-5	0.43	0.08	0.22	4.78	80	9.42	75	82	40	2	0	4	0
	SIOUX FALLS	84	62	92	55	73	2	0.19	-0.48	0.12	5.72	69	17.21	100	89	63	1	0	2	0
TN	BRISTOL	88	68	95	66	78	5	1.83	1.20	0.64	6.66	66	23.57	83	98	54	4	0	7	1
	CHATTANOOGA	93	73	98	71	83	4	0.91	0.17	0.71	4.77	44	22.01	61	87	58	6	0	4	1
	KNOXVILLE	90	72	96	70	81	4	0.93	0.34	0.32	11.15	104	30.42	92	92	60	3	0	7	0
	MEMPHIS	86	75	91	74	80	-1	2.55	1.92	1.04	11.92	114	47.01	132	89	72	1	0	6	2
	NASHVILLE	87	73	93	71	80	2	1.72	1.02	0.90	14.79	150	29.23	93	91	65	2	0	5	2
TX	ABILENE	87	69	90	63	78	-5	2.63	2.03	2.52	7.05	113	24.85	174	91	64	2	0	2	1
	AMARILLO	86	59	91	57	73	-3	1.28	0.60	0.79	7.76	99	13.65	98	84	37	4	0	2	1
	AUSTIN	85	73	93	70	79	-6	7.62	7.10	2.50	16.18	225	44.47	214	96	84	1	0	7	4
	BEAUMONT	89	75	93	72	82	-1	2.13	1.09	0.83	21.17	145	50.67	137	97	70	3	0	6	2
	BROWNSVILLE	95	77	97	75	86	2	0.30	-0.33	0.30	3.46	57	13.45	96	93	64	7	0	1	0
	CORPUS CHRISTI	91	77	94	74	84	0	1.95	1.16	1.33	4.90	66	23.12	128	94	75	4	0	4	2
	DEL RIO	88	73	92	72	81	-4	6.55	6.22	3.23	11.72	220	20.33	172	97	79	1	0	6	4
	EL PASO	92	69	96	64	81	0	0.00	-0.39	0.00	2.62	76	3.26	63	63	26	5	0	0	0
	FORT WORTH	86	73	92	70	79	-6	3.44	2.99	2.10	11.75	175	28.51	127	85	67	2	0	5	2
	GALVESTON	87	79	90	74	83	-1	2.68	1.77	1.31	15.77	161	36.31	143	94	74	1	0	4	2
	HOUSTON	87	74	92	72	81	-2	7.98	7.12	2.05	23.00	214	51.95	176	95	83	2	0	7	5
	LUBBOCK	88	62	94	58	75	-3	0.09	-0.43	0.09	2.42	37	7.69	64	85	54	4	0	1	0
	MIDLAND	88	68	92	61	78	-3	0.00	-0.37	0.00	6.03	129	9.77	112	81	50	3	0	0	0
	SAN ANGELO	88	70	91	63	79	-3	0.78	0.32	0.76	9.83	210	25.46	206	88	68	3	0	2	1
	SAN ANTONIO	86	74	93	71	80	-4	3.61	3.03	1.42	6.45	82	28.27	138	94	70	2	0	6	4
	VICTORIA	89	74	93	71	82	-2	2.64	1.99	0.74	6.50	69	26.72	110	97	78	5	0	4	4
	WACO	86	73	96	71	80	-6	2.96	2.57	1.36	7.89	122	30.54	147	96	79	2	0	5	3
	WICHITA FALLS	87	67	93	63	77	-7	0.29	-0.25	0.24	5.85	89	22.34	124	89	63	4	0	2	0
UT	SALT LAKE CITY	94	69	98	61	82	6	0.00	-0.14	0.00	0.59	31	8.24	78	35	14	7	0	0	0
VT	BURLINGTON	83	63	88	57	73	5	0.96	0.08	0.93	7.83	79	18.68	84	86	51	0	0	3	1
VA	LYNCHBURG	89	70	92	68	79	5	0.15	-0.57	0.06	13.46	130	33.11	117	97	59	4	0	4	0
	NORFOLK	92	76	96	72	84	7	1.15	0.09	1.02	19.60	162	41.83	137	88	60	4	0	4	1
	RICHMOND	94	73	99	69	83	7	0.20	-0.71	0.20	12.80	117	33.43	116	89	60	6	0	1	0
	ROANOKE	89	71	94	69	80	5	1.41	0.60	1.09	15.05	150	32.78	117	91	70	3	0	4	1
	WASH/DULLES	93	70	97	65	82	7	0.85	0.01	0.66	10.24	103	27.90	104	90	50	6	0	3	1
WA	OLYMPIA	88	52	96	50	70	7	0.00	-0.23	0.00	2.07	67	27.45	98	88	58	2	0	0	0
	QUILLAYUTE	78	54	96	49	66	7	0.00	-0.59	0.00	5.96	80	57.79	101	93	66	2	0	0	0
	SEATTLE-TACOMA	86	60	95	56	73	7	0.00	-0.21	0.00	2.65	96	23.72	118	81	49	2	0	0	0
	SPOKANE	91	62	93	56	77	8	0.00	-0.14	0.00	0.94	40	8.80	87	42	16	6	0	0	0
	YAKIMA	97	62	100	53	79	10	0.00	-0.07	0.00	0.44	44	5.89	125	47	24	7	0	0	0
WV	BECKLEY	83	66	87	63	75	6	0.74	0.01	0.54	17.20	156	36.23	126	92	66	0	0	4	1
	CHARLESTON	89	70	94	68	79	6	1.25	0.36	0.84	12.22	105	32.12	109	95	56	3	0	5	1
	ELKINS	86	66	88	65	76	7	0.84	-0.10	0.50	11.87	97	30.29	98	93	51	0	0	5	1
	HUNTINGTON	87	71	92	69	79	5	2.35	1.49	0.69	16.29	148	36.00	125	95	62	3	0	5	3
WI	EAU CLAIRE	81	60	87	56	71	2	1.39	0.33	0.57	14.32	129	26.74	125	99	53	0	0	3	1
	GREEN BAY	82	61	87	58	72	4	1.21	0.36	0.60	9.18	100	20.36	108	100	68	0	0	3	2
	LA CROSSE	83	64	88	59	73	1	2.51	1.55	1.41	17.28	158	29.88	137	98	56	0	0	5	2
	MADISON	82	63	86	60	73	4	3.50	2.51	2.74	16.86	158	30.78	139	95	73	0	0	4	1
	MILWAUKEE	85	68	88	64	77	6	0.54	-0.38	0.27	6.13	64	17.94	80	85	63	0	0	3	0
WY	CASPER	81	45	92	38	63	-6	0.29	0.15	0.24	2.32	72	11.78	128	86	44	2	0	2	0
	CHEYENNE	82	50	88	37	66	0	0.51	0.12	0.34	4.43	79	14.29	124	74	38	0	0	2	0
	LANDER	80	52	90	42	66	-4	0.40	0.29	0.28	1.38	59	17.53	193	68	24	2	0	3	0
	SHERIDAN	84	50	96	42	67	-2	0.80	0.65	0.47	2.36	67	11.71	116	81	46	3	0	2	0

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

National Agricultural Summary

August 15 – 21, 2016

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

The central U.S. experienced below-normal weekly temperatures. Some areas in Wyoming, Texas, Oklahoma, and Arkansas recorded weekly average temperatures more than 6°F below normal. Conversely, hot conditions prevailed in the western and eastern portions of the nation, with temperatures averaging more than 6°F above normal in parts of the Pacific Northwest and Atlantic Coast States. A band of precipitation from the southern Great Plains to the Great Lakes negatively impacted fieldwork activities in the Delta and eastern Corn Belt. Some parts of the lower Mississippi Valley, Indiana, and Texas received more than 6 inches of rain during the week.

Corn: Eighty-five percent of the corn was at or beyond the dough stage by week's end, 4 percentage points ahead of last year and 9 points ahead of the 5-year average. The percentage of corn in the dough stage advanced by more than 20 percentage points in Colorado, North Dakota, and Wisconsin. Corn dented or beyond advanced to 40 percent by August 21, six percentage points ahead of last year and 5 points ahead of the 5-year average. Double-digit advances of corn in the dent stage were observed in 17 of the 18 estimating states. Overall, 75 percent of the corn was reported in good to excellent condition, up slightly from last week and 6 percentage points above the same time last year.

Soybeans: By August 21, eighty-nine percent of the soybeans were at or beyond the pod setting stage, 4 percentage points ahead of both last year and the 5-year average. Overall, 72 percent of the soybean crop was reported in good to excellent condition, unchanged from last week but 9 percentage points above the same time last year. This represents the greatest portion of the soybean crop in good to excellent condition at this point in the season since 1992.

Cotton: Boll setting was 92 percent complete by August 21, twelve percentage points ahead of last year and 3 points ahead of the 5-year average. Ninety percent or more of the cotton acreage had set bolls in 12 of the 15 estimating states. By week's end, bolls were opening in 16 percent of the nation's cotton fields, 3 percentage points ahead of last year and slightly ahead of the 5-year average. Overall, 47 percent of the cotton was reported in good to excellent condition, down slightly from last week and 6 percentage points lower than at the same time last year.

Sorghum: Heading of this year's sorghum was 89 percent complete by week's end, slightly ahead of last year and 8 percentage points ahead of the 5-year average. Nationally, coloring advanced to 52 percent complete by August 21, seven percentage points ahead last year and 9 points ahead of the 5-year average. Twenty-nine percent of the nation's sorghum was reported as mature by week's end, 3 percentage points ahead of last year and slightly ahead of the 5-year average. Texas producers had harvested 46 percent of the sorghum acreage in the state by week's end, 8 percentage points behind the 5-year average. Overall, 65 percent of the sorghum was reported in good to excellent condition, unchanged from last week but 3 percentage points lower than at the same time last year.

Rice: By week's end, 97 percent of the rice was headed, 5 percentage points ahead of last year and 7 points ahead of the 5-year average. Producers had harvested 15 percent of the nation's crop, 2 percentage points behind last year but slightly ahead of the 5-year average. Overall, 61 percent of the rice crop was reported in good to excellent condition, down 4 percentage points from last week and 5 points below the same time last year.

Small Grains: By week's end, 89 percent of the oat crop was harvested, 2 percentage points ahead of last year and 7 points ahead of the 5-year average. An additional seventeen percent of the crop in North Dakota was harvested last week to reach 80 percent overall—32 percentage points ahead of the 5-year average.

Producers had harvested 70 percent of this year's barley by week's end, 10 percentage points behind last year but 18 points ahead of the 5-year average. Harvest progress advanced more than 20 percentage points in Minnesota and North Dakota.

By August 21, spring wheat producers had harvested 65 percent of the nation's crop, 4 percentage points behind last year but 19 points ahead of the 5-year average. Double-digit harvest progress was observed in four of the six estimating states.

Other Crops: Sixty-seven percent of this year's peanut crop was reported in good to excellent condition, unchanged from last week but 8 percentage points lower than at the same time last year. In Florida, peanut harvesting activities have begun in Lafayette County, and are expected to begin soon in Dixie, Gilchrist, Levy, and Suwannee Counties.

Crop Progress and Condition

Week Ending August 21, 2016

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

Corn Percent Dough

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
CO	59	30	56	58
IL	89	79	89	88
IN	75	72	84	76
IA	85	80	90	74
KS	84	78	87	86
KY	75	70	80	73
MI	69	48	67	64
MN	83	78	90	67
MO	88	85	93	90
NE	81	76	87	84
NC	96	97	98	96
ND	73	49	71	59
OH	72	59	77	73
PA	75	48	65	60
SD	75	69	83	72
TN	96	94	97	96
TX	88	91	96	86
WI	66	51	72	54
18 Sts	81	73	85	76

These 18 States planted 93% of last year's corn acreage.

Corn Percent Dented

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
CO	25	2	20	15
IL	50	25	47	50
IN	29	23	44	32
IA	28	23	45	34
KS	47	29	51	49
KY	52	49	63	53
MI	10	1	15	12
MN	28	12	31	23
MO	59	41	63	64
NE	30	17	42	37
NC	86	87	92	87
ND	15	6	19	13
OH	30	13	26	25
PA	32	6	25	25
SD	21	8	23	20
TN	68	65	81	74
TX	63	60	70	71
WI	16	7	25	12
18 Sts	34	21	40	35

These 18 States planted 93% of last year's corn acreage.

Corn Condition by Percent

	VP	P	F	G	EX
CO	1	2	17	66	14
IL	1	2	13	57	27
IN	3	6	18	54	19
IA	1	3	13	56	27
KS	1	6	25	57	11
KY	2	6	19	55	18
MI	5	10	29	43	13
MN	1	2	11	59	27
MO	2	5	18	53	22
NE	1	5	19	58	17
NC	2	7	25	50	16
ND	1	3	17	63	16
OH	7	14	33	40	6
PA	3	13	32	40	12
SD	5	12	30	46	7
TN	2	7	24	43	24
TX	2	11	31	46	10
WI	0	2	10	45	43
18 Sts	2	5	18	54	21
Prev Wk	2	5	19	53	21
Prev Yr	3	7	21	50	19

Cotton Percent Setting Bolls

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
AL	95	91	97	91
AZ	96	91	95	97
AR	99	100	100	100
CA	97	78	90	95
GA	96	93	96	93
KS	60	38	50	64
LA	99	97	99	99
MS	93	88	90	95
MO	72	56	78	90
NC	93	89	93	95
OK	77	51	72	75
SC	98	87	92	87
TN	84	91	97	91
TX	71	88	92	86
VA	93	87	92	96
15 Sts	80	88	92	89

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

Cotton Percent Bolls Opening

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
AL	19	8	16	9
AZ	42	33	45	44
AR	14	11	16	15
CA	2	0	0	9
GA	12	10	18	11
KS	3	0	2	6
LA	25	34	44	38
MS	28	13	18	17
MO	4	0	1	7
NC	11	7	11	8
OK	2	1	4	4
SC	9	1	2	6
TN	7	5	9	8
TX	12	15	17	17
VA	10	0	5	7
15 Sts	13	12	16	15

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

Cotton Condition by Percent

	VP	P	F	G	EX
AL	2	5	42	43	8
AZ	4	0	5	51	40
AR	6	5	15	43	31
CA	0	0	30	30	40
GA	3	10	30	47	10
KS	1	2	29	64	4
LA	0	5	31	59	5
MS	2	8	32	42	16
MO	2	8	46	39	5
NC	3	8	25	57	7
OK	0	0	46	47	7
SC	0	1	55	39	5
TN	1	2	17	58	22
TX	5	20	38	32	5
VA	0	4	8	87	1
15 Sts	4	14	35	39	8
Prev Wk	3	15	34	40	8
Prev Yr	1	8	38	44	9

Crop Progress and Condition

Week Ending August 21, 2016

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

Sorghum Percent Headed

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
AR	100	100	100	100
CO	82	78	89	72
IL	82	78	82	86
KS	86	82	90	75
LA	100	100	100	100
MO	90	77	87	86
NE	97	87	95	88
NM	51	34	56	39
OK	84	78	85	74
SD	93	91	96	93
TX	90	85	88	89
11 Sts	88	83	89	81

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

Sorghum Percent Coloring

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
AR	94	84	92	90
CO	28	20	27	28
IL	52	52	63	47
KS	25	15	32	18
LA	99	100	100	99
MO	43	27	44	37
NE	24	27	44	21
NM	5	11	24	5
OK	40	36	45	40
SD	16	26	43	31
TX	71	75	76	76
11 Sts	45	42	52	43

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

Sorghum Percent Mature

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
AR	57	53	76	47
CO	1	0	0	2
IL	0	1	3	1
KS	1	0	1	1
LA	92	86	93	90
MO	4	1	3	4
NE	0	0	0	0
NM	0	0	0	0
OK	11	4	11	11
SD	1	0	3	0
TX	61	57	68	70
11 Sts	26	23	29	28

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

Sorghum Condition by Percent

	VP	P	F	G	EX
AR	3	13	32	40	12
CO	0	5	26	62	7
IL	2	5	24	64	5
KS	1	3	22	60	14
LA	0	15	30	43	12
MO	0	2	29	59	10
NE	0	0	16	66	18
NM	0	3	77	19	1
OK	0	1	32	64	3
SD	0	3	43	53	1
TX	2	11	31	41	15
11 Sts	1	6	28	52	13
Prev Wk	1	6	28	52	13
Prev Yr	2	5	25	56	12

Peanut Condition by Percent

	VP	P	F	G	EX
AL	0	0	52	42	6
FL	0	3	19	69	9
GA	3	7	24	48	18
NC	0	4	14	68	14
OK	0	0	10	87	3
SC	0	2	19	65	14
TX	1	11	34	38	16
VA	0	0	3	96	1
8 Sts	1	5	27	53	14
Prev Wk	1	5	27	53	14
Prev Yr	1	3	21	57	18

Soybeans Percent Setting Pods

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
AR	90	95	97	89
IL	86	81	89	89
IN	87	78	89	86
IA	88	87	92	89
KS	68	57	71	67
KY	71	60	73	69
LA	96	96	98	97
MI	93	75	87	91
MN	97	89	95	89
MS	91	89	92	93
MO	48	55	71	66
NE	88	81	92	89
NC	65	64	75	61
ND	97	86	94	93
OH	87	80	92	86
SD	87	89	94	88
TN	78	80	87	80
WI	88	90	94	85
18 Sts	85	80	89	85

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

Soybean Condition by Percent

	VP	P	F	G	EX
AR	7	7	26	45	15
IL	1	3	17	58	21
IN	2	5	19	55	19
IA	1	3	14	58	24
KS	1	5	29	56	9
KY	2	5	19	57	17
LA	2	10	25	54	9
MI	2	9	28	51	10
MN	1	3	16	57	23
MS	1	6	22	46	25
MO	1	4	23	56	16
NE	1	4	19	61	15
NC	1	5	28	52	14
ND	2	5	20	60	13
OH	3	10	32	47	8
SD	3	9	29	51	8
TN	0	4	18	48	30
WI	1	2	10	48	39
18 Sts	2	5	21	54	18
Prev Wk	2	5	21	55	17
Prev Yr	3	8	26	49	14

Crop Progress and Condition

Week Ending August 21, 2016

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

Rice Percent Headed

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
AR	94	97	98	91
CA	84	88	94	75
LA	99	97	98	99
MS	96	94	95	93
MO	82	85	95	78
TX	99	98	100	99
6 Sts	92	94	97	90

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

Rice Percent Harvested

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
AR	5	2	4	4
CA	0	0	0	0
LA	72	55	60	56
MS	8	1	2	6
MO	0	0	0	0
TX	49	67	70	57
6 Sts	17	13	15	14

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

Rice Condition by Percent

	VP	P	F	G	EX
AR	5	14	29	37	15
CA	0	0	15	75	10
LA	6	11	30	50	3
MS	0	2	23	47	28
MO	1	3	24	51	21
TX	3	4	25	55	13
6 Sts	4	9	26	48	13
Prev Wk	2	6	27	49	16
Prev Yr	2	4	28	47	19

Oats Percent Harvested

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
IA	98	95	97	99
MN	89	74	85	81
NE	96	89	95	98
ND	71	63	80	48
OH	95	94	98	97
PA	82	74	81	86
SD	93	95	96	91
TX	100	100	100	100
WI	84	74	88	79
9 Sts	87	80	89	82

These 9 States harvested 70% of last year's oat acreage.

Spring Wheat Percent Harvested

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
ID	76	57	60	47
MN	88	57	77	60
MT	62	37	53	39
ND	63	44	64	39
SD	82	84	89	76
WA	96	44	66	59
6 Sts	69	48	65	46

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

Barley Percent Harvested

	Prev Year	Prev Week	Aug 21 2016	5-Yr Avg
ID	74	56	64	51
MN	90	61	85	66
MT	77	52	66	53
ND	84	56	77	51
WA	93	51	65	55
5 Sts	80	55	70	52

These 5 States harvested 86% of last year's barley acreage.

Crop Progress and Condition

Week Ending August 21, 2016

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

Pasture and Range Condition by Percent
Week Ending Aug 21, 2016

	VP	P	F	G	EX			VP	P	F	G	EX
AL	10	10	29	46	5		NH	22	48	20	10	0
AZ	11	17	36	30	6		NJ	0	1	38	55	6
AR	2	9	28	48	13		NM	3	23	46	25	3
CA	20	20	25	30	5		NY	6	13	40	35	6
CO	3	6	25	57	9		NC	3	12	37	43	5
CT	5	73	22	0	0		ND	5	11	28	51	5
DE	6	13	36	40	5		OH	12	17	29	34	8
FL	2	2	25	57	14		OK	2	9	41	42	6
GA	9	22	37	28	4		OR	24	25	29	19	3
ID	5	22	37	32	4		PA	12	26	35	23	4
IL	1	3	17	58	21		RI	19	61	20	0	0
IN	3	6	24	56	11		SC	4	20	30	43	3
IA	2	6	28	52	12		SD	7	18	37	37	1
KS	1	4	23	62	10		TN	5	12	36	40	7
KY	1	5	19	63	12		TX	7	15	36	36	6
LA	3	12	35	45	5		UT	2	9	39	44	6
ME	37	25	19	13	6		VT	0	37	52	11	0
MD	1	9	35	48	7		VA	3	8	30	49	10
MA	31	41	21	7	0		WA	10	14	26	46	4
MI	9	20	28	36	7		WV	1	5	34	56	4
MN	2	6	16	59	17		WI	1	4	18	52	25
MS	1	6	30	53	10		WY	10	18	31	36	5
MO	1	3	32	54	10		48 Sts	6	12	31	43	8
MT	13	20	34	28	5							
NE	3	6	24	57	10		Prev Wk	5	12	32	44	7
NV	20	25	30	25	0		Prev Yr	4	12	32	43	9

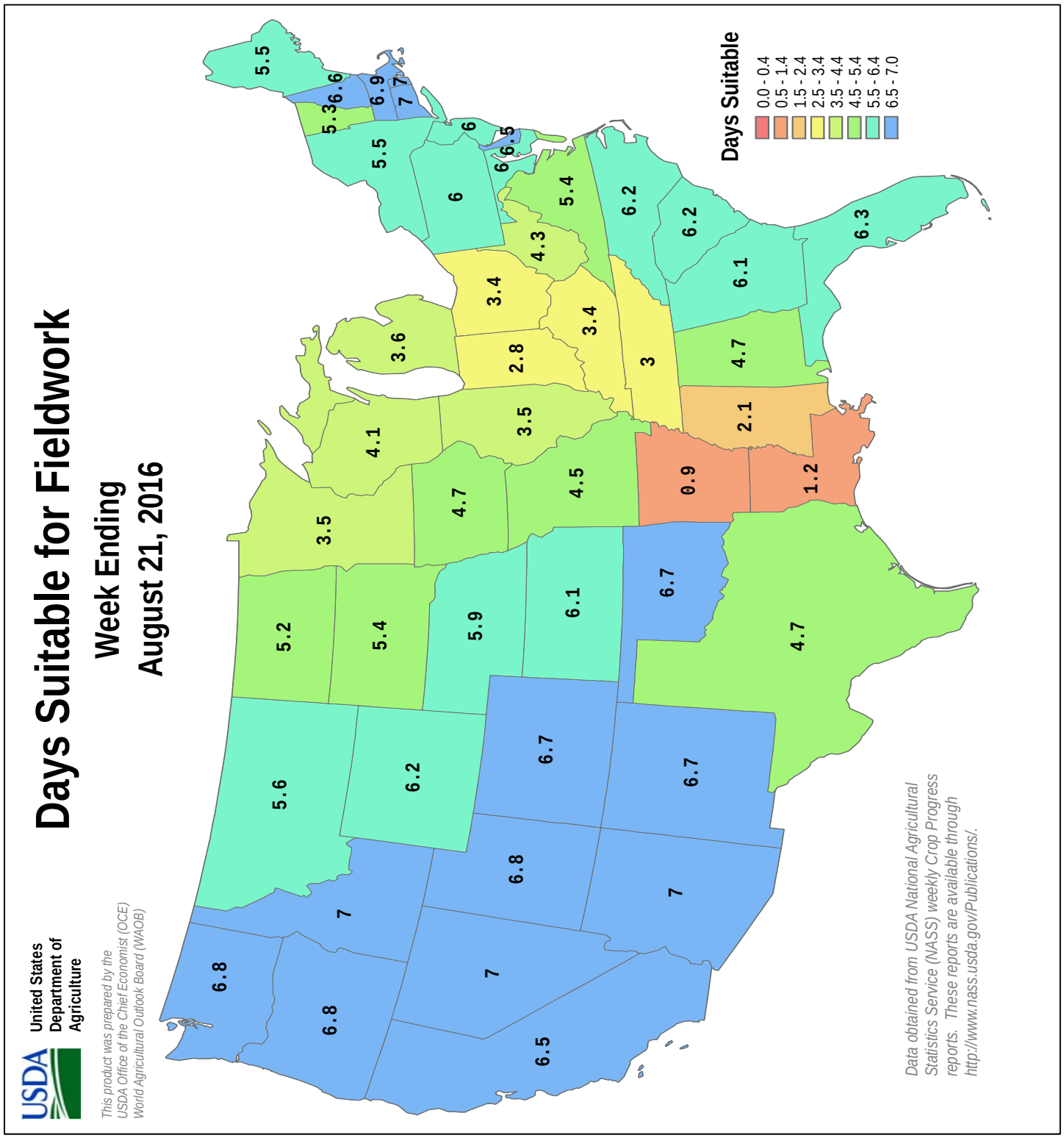
VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

NA - Not Available
*** Revised**

Crop Progress and Condition

Week Ending August 21, 2016

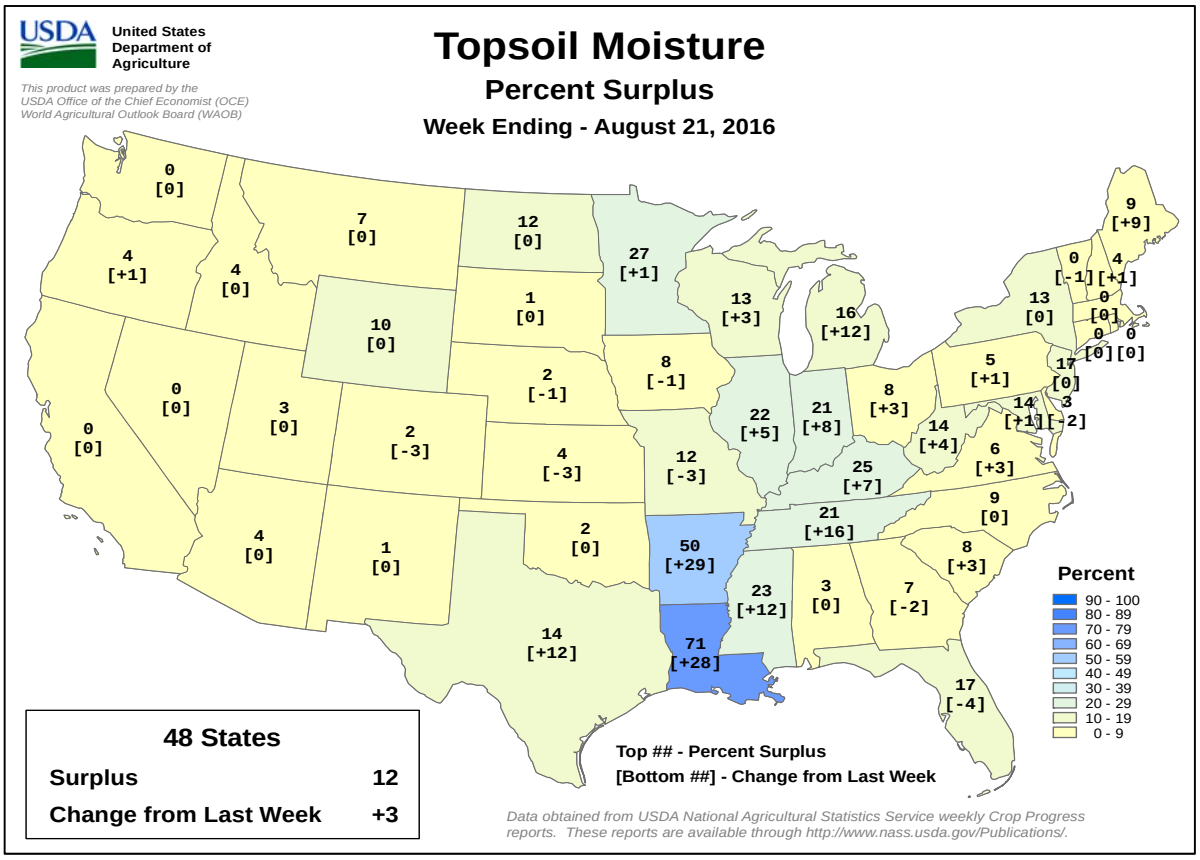
Weekly U.S. Progress and Condition Data provided by USDA/NASS

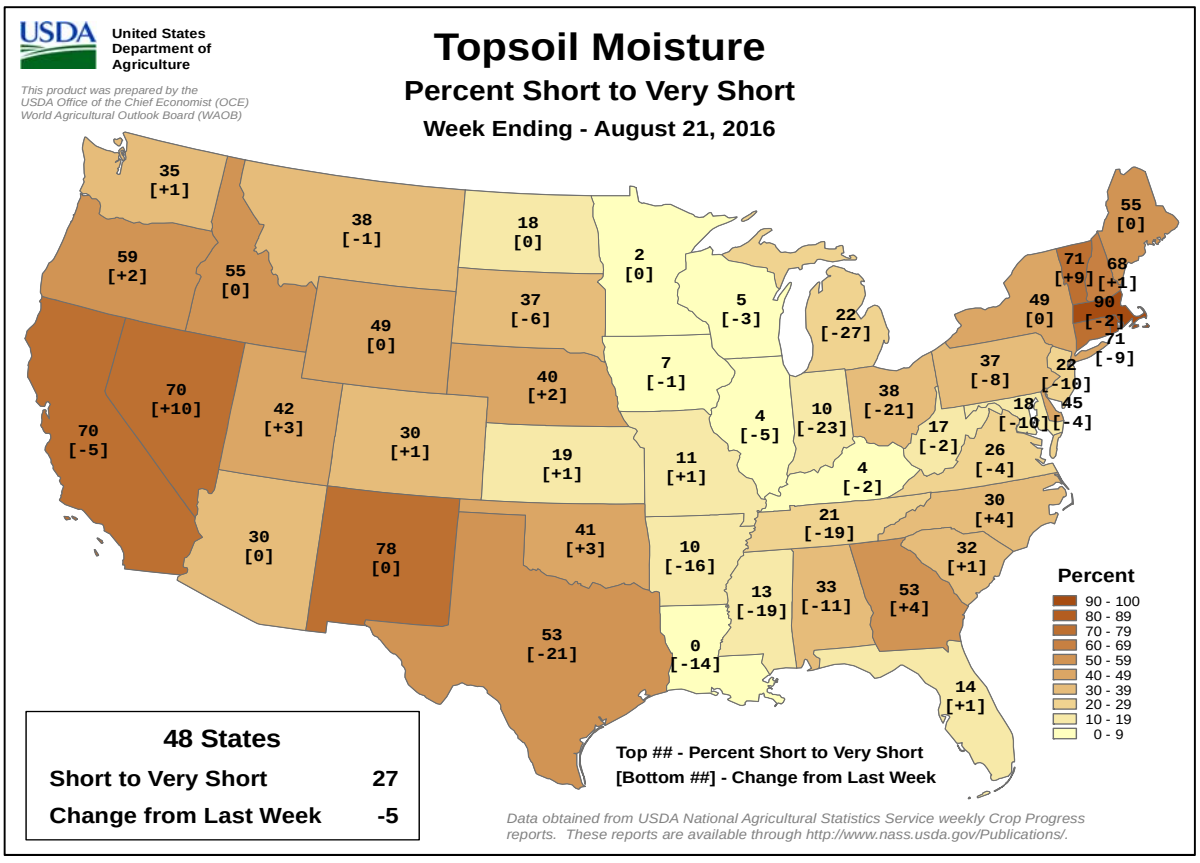


Crop Progress and Condition

Week Ending August 21, 2016

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

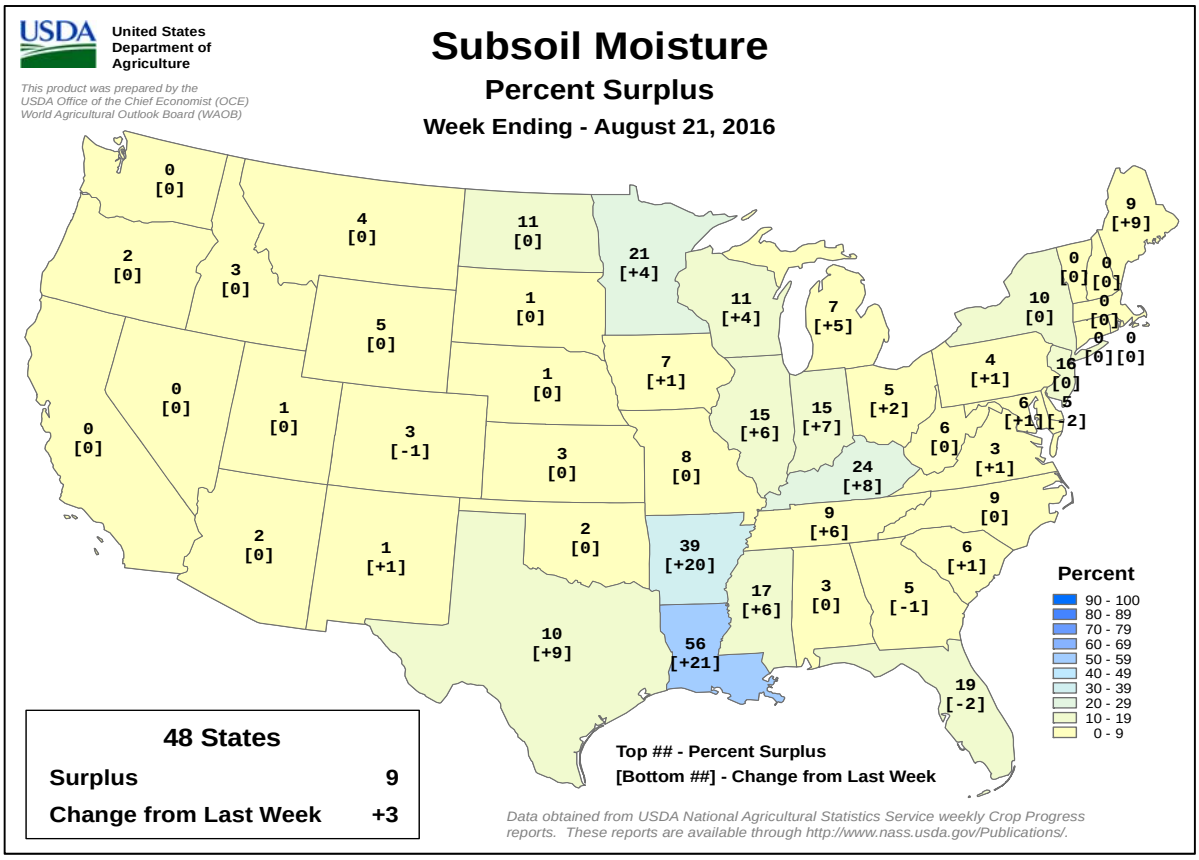


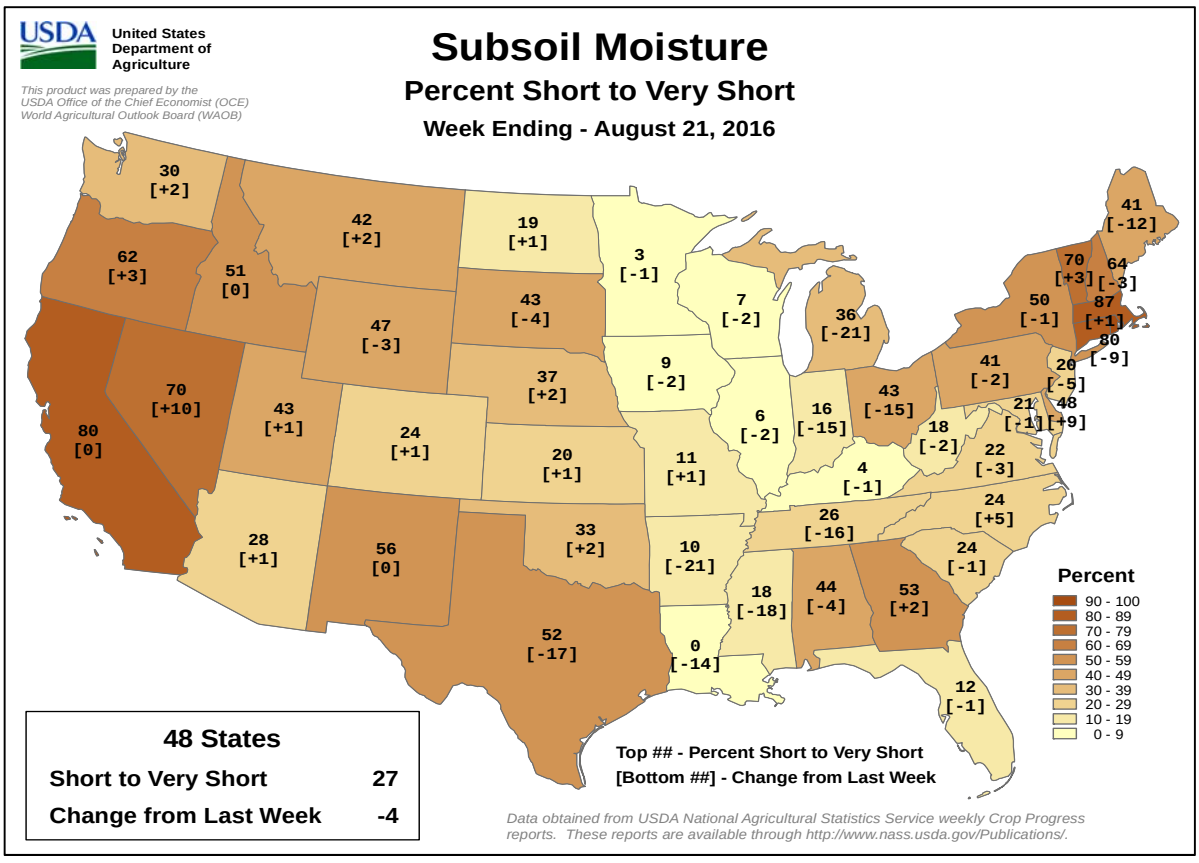


Crop Progress and Condition

Week Ending August 21, 2016

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





International Weather and Crop Summary

August 14-20, 2016

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

HIGHLIGHTS

EUROPE: Dry weather for much of the week favored fieldwork and summer crop maturation.

WESTERN FSU: Early-week rainfall benefited filling summer crops, while sunny skies later in the period promoted crop development.

EASTERN FSU: Conditions remained overall good to excellent for filling spring wheat, although excessive heat and short-term drought trimmed yield prospects in western-most growing areas.

MIDDLE EAST: Sunny skies promoted summer crop maturation and harvesting.

SOUTH ASIA: Heavy showers benefited rice in eastern India, but maintained ponding in soybean fields to the west.

EAST ASIA: Dryness continued for corn and soybeans in portions of northeastern China.

SOUTHEAST ASIA: Heavy showers caused flooding in northern portions of the region.

AUSTRALIA: Showers maintained good to excellent yield prospects for winter grains and oilseeds.

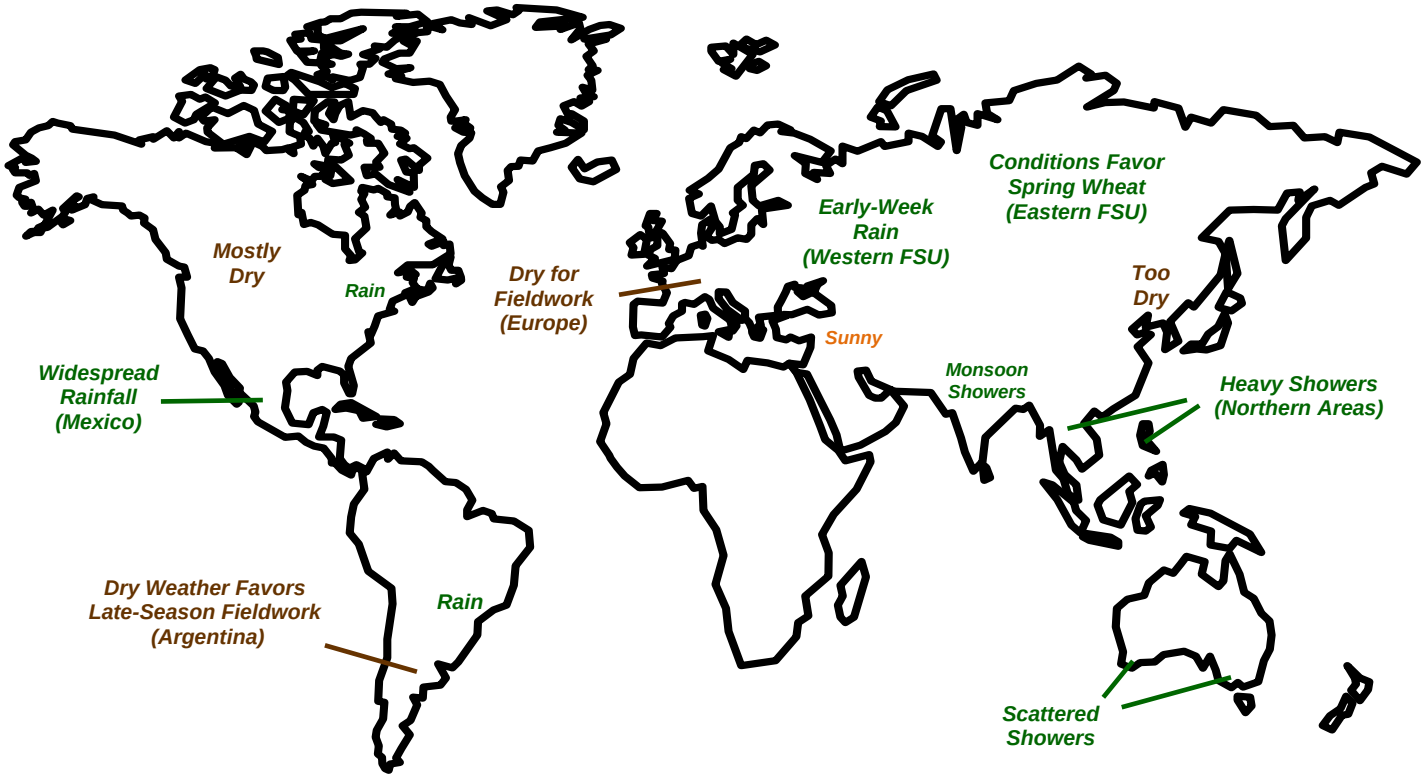
ARGENTINA: Warm, generally dry weather favored fieldwork delayed by previous periods of wetness.

BRAZIL: Rain provided abundant moisture for wheat in southern production areas.

MEXICO: Widespread rain benefited summer crops and northwestern watersheds.

CANADIAN PRAIRIES: Conditions favored drydown and harvesting of early-planted spring grains and oilseeds.

SOUTHEASTERN CANADA: Warm, showery weather continued, benefiting soybeans and late-planted corn.



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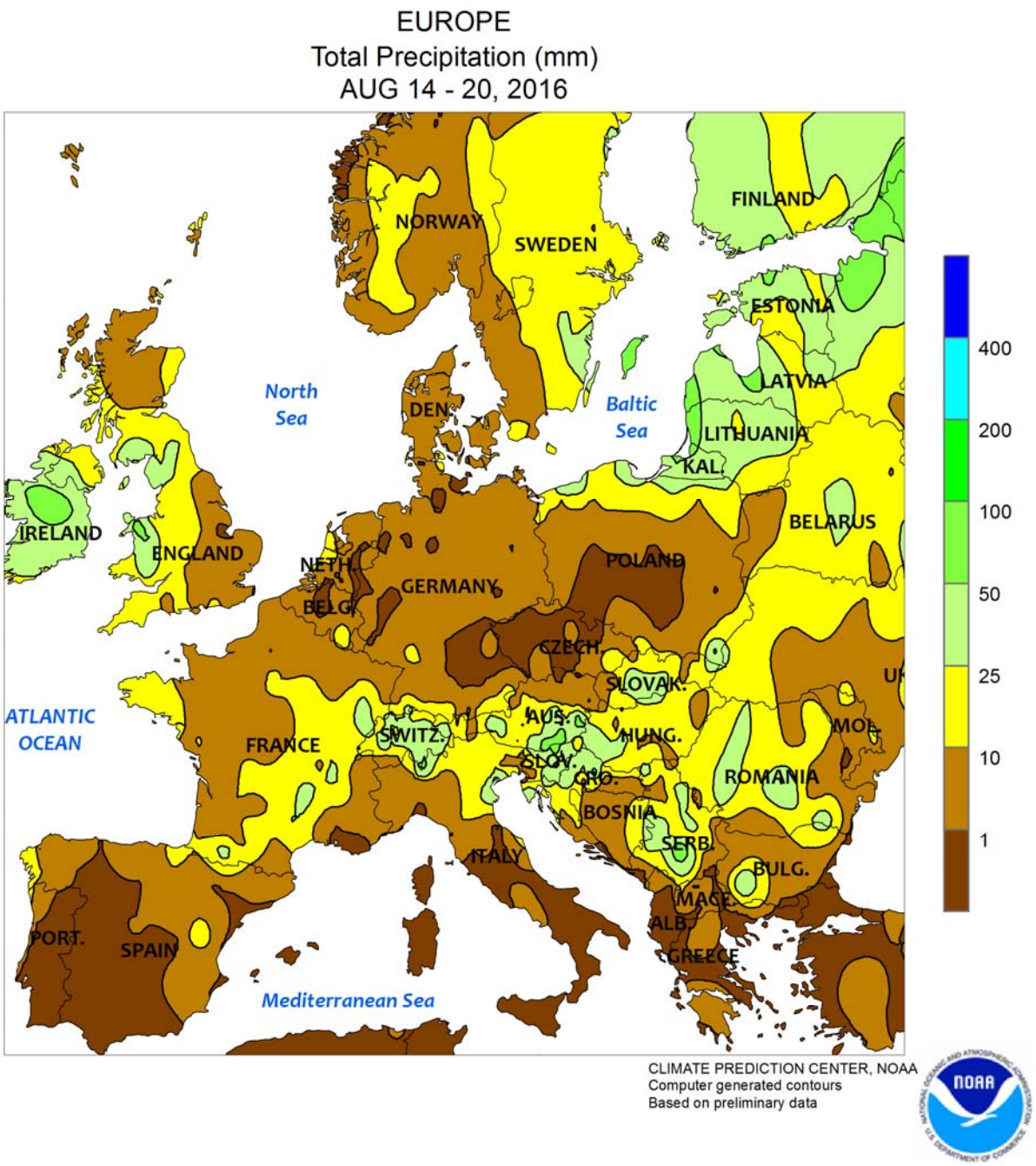
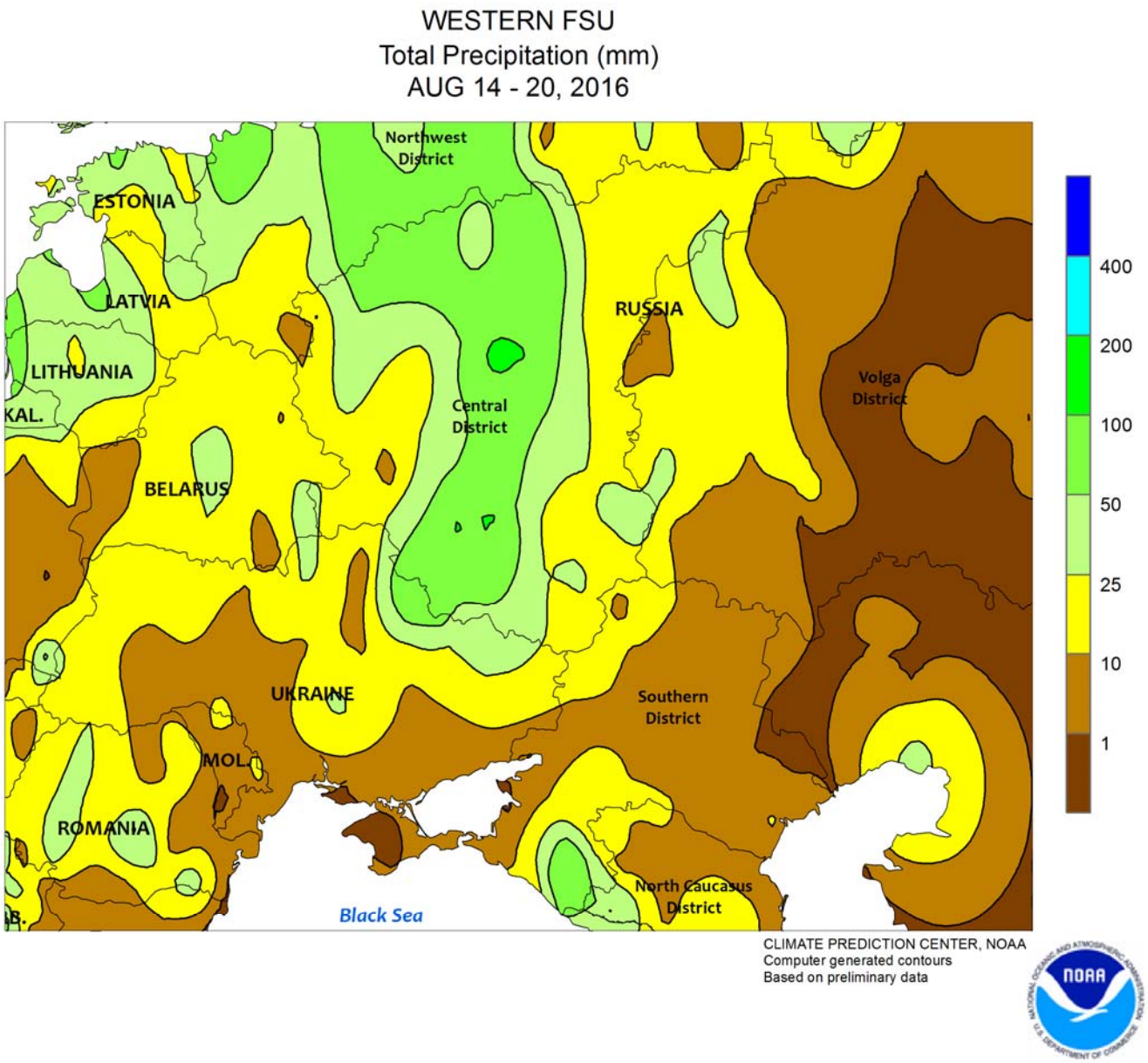


EUROPE

Dry weather for much of the week promoted fieldwork and summer crop maturation. Over northern and western Europe, sunny skies favored the final stages of winter wheat harvesting while promoting summer crop drydown and early harvesting. However, short-term dryness in southwestern France has likely lowered corn yield potential somewhat, with rainfall over the past 60 days totaling less than 50 percent of normal. By week's end, widespread showers (2-25 mm, locally more) associated with a slow-moving storm system and its attendant cold front arrived in England, France, and Germany, slowing fieldwork but improving topsoil moisture for winter crop planting and establishment. Meanwhile, early-week showers and thunderstorms (10-50 mm) maintained good to excellent prospects for filling spring grains and summer crops from Serbia and western Romania north into the Baltic States, though southwestern Poland was mostly dry (2 mm or less). Furthermore, sunny skies during the latter half of the period facilitated summer crop maturation and harvesting. Light to moderate showers (3-25 mm) in northern Italy benefited filling corn and soybeans while maintaining favorable moisture reserves for upcoming winter crop planting. Somewhat lighter showers (1-15 mm) were observed in the lower Danube River Valley, where short-term drought (less than 50 percent of normal over the past 60 days) has lowered yield prospects for corn and sunflowers, which are now in the filling to mature stages of development.

For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

Early-week rainfall was followed by sunny skies, aiding fieldwork later in the period. Widespread moderate to heavy showers and thunderstorms (10-110 mm) maintained adequate to abundant soil moisture for filling corn and sunflowers over key growing areas from north-central Ukraine into western and southern Russia. Rain was lighter, however, in west-central Ukraine (4-15 mm), where short-term drought (25-60 percent of normal over the past 90 days) has lowered yield prospects for soybeans and corn in this part of the country. Drier weather in Ukraine and Russia later in the period promoted summer crop maturation and harvesting. Despite the overall favorable conditions for summer crops, spring wheat in the southern Volga District was subjected to excessive heat (38-41°C), which coupled with increasing short-term drought (25-50 percent of normal over the past 60 days) has reduced yield potential as the crop progressed through the filling stages of development.

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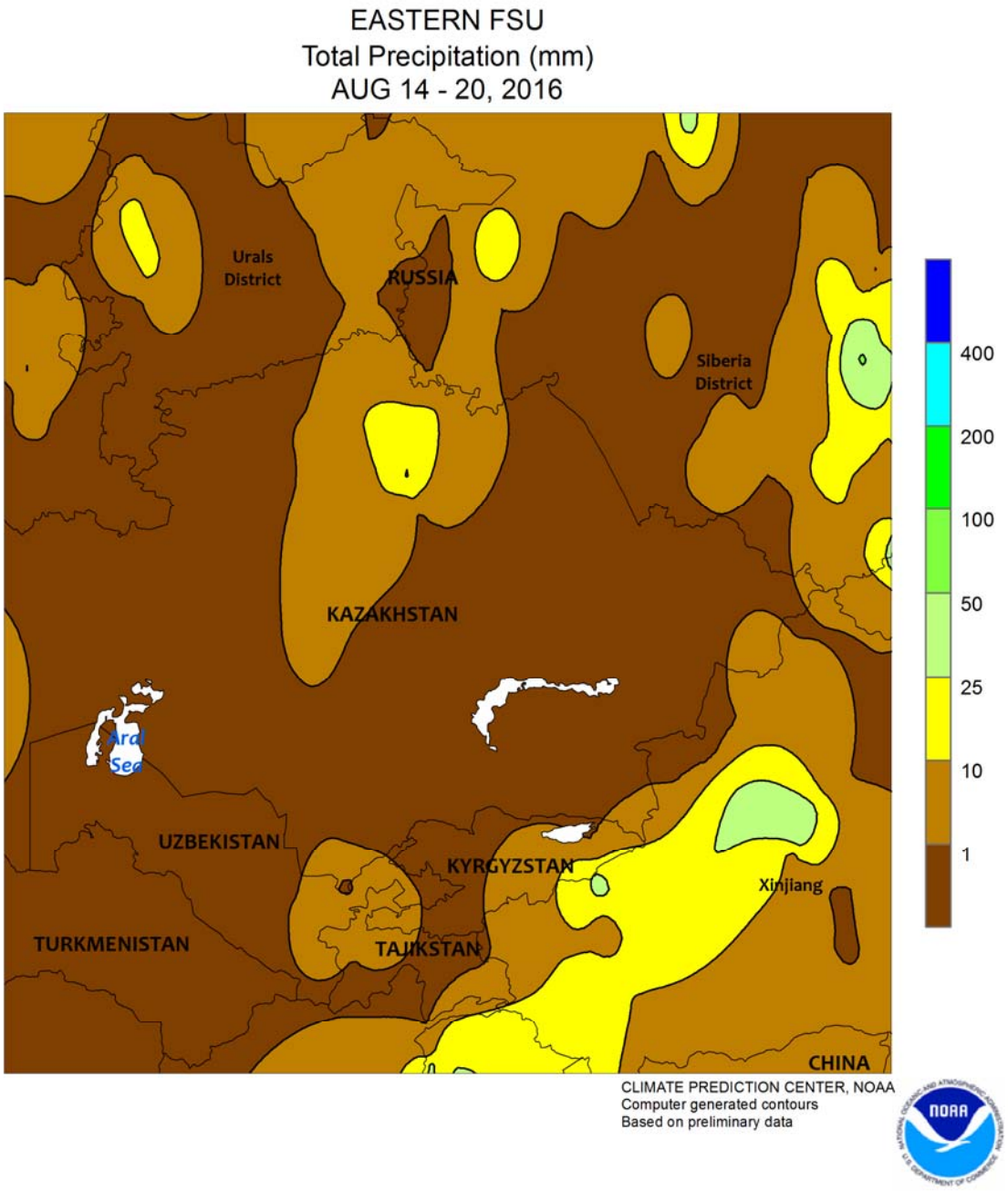
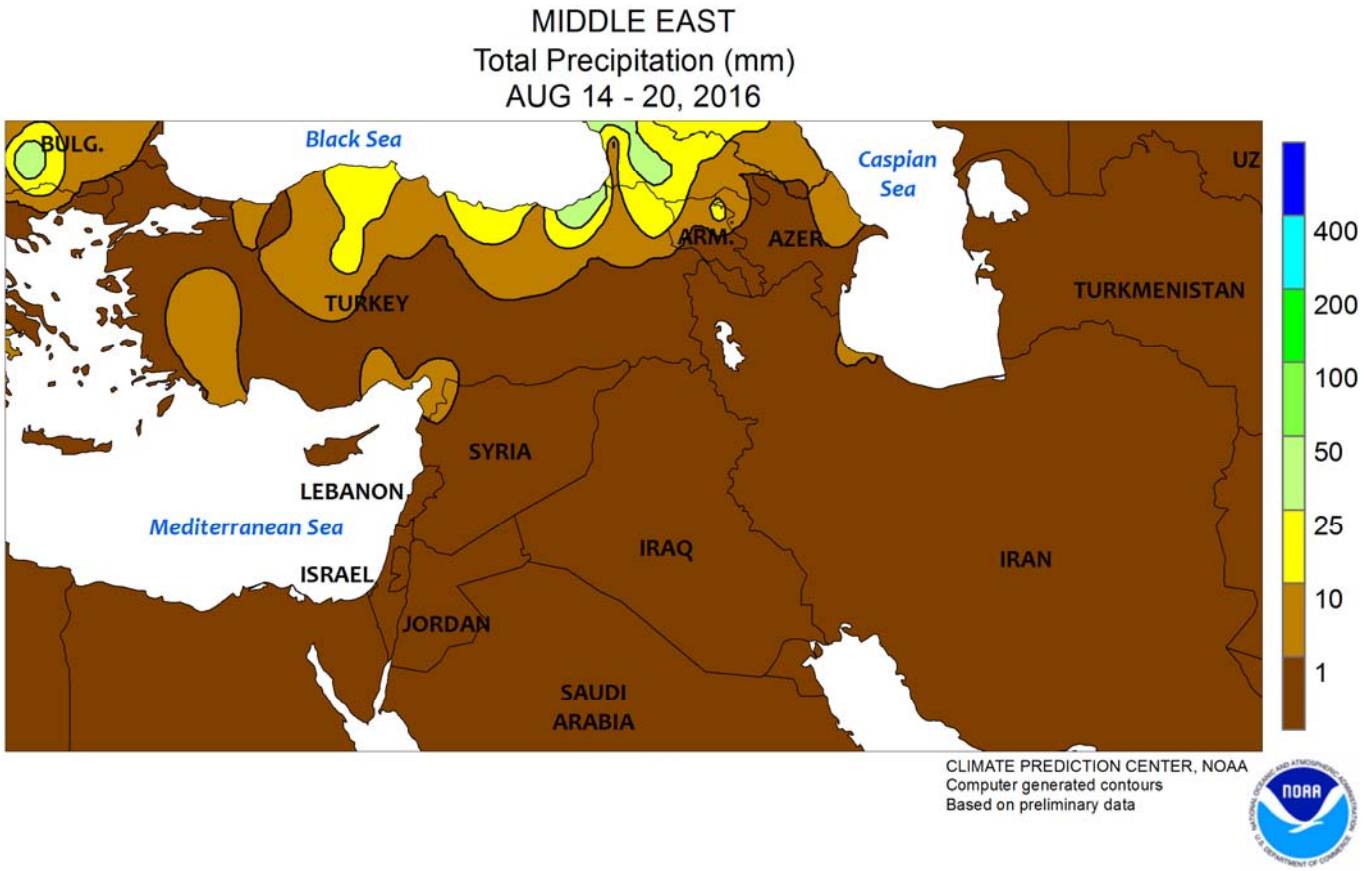


EASTERN FSU

Sunny, increasingly warm weather accelerated spring wheat (north) and cotton (south) toward maturity. Following plentiful precipitation during the growing season over much of northern Kazakhstan and neighboring portions of central Russia, sunny skies and above-normal temperatures (3-7°C above normal) favored spring wheat maturation. Despite the nearly-ideal conditions, western-most spring wheat areas (southwestern Urals District and southeastern Volga District) experienced heat (33-38°C) and intensifying short-term drought (25-60 percent of normal over the past 60 days), reducing the yield potential for filling spring wheat in these areas. The negative impacts are most pronounced in the southeastern Volga District, where satellite-derived vegetation health imagery depicts fair to poor crop conditions. Elsewhere in Russia and northern Kazakhstan, satellite imagery shows good to excellent conditions in the spring wheat belt as the crop progresses through the filling stages of development. Farther south, seasonable heat (35-39°C) and dryness in Uzbekistan accelerated cotton toward maturity, with the harvest typically beginning during the second half of September.

For additional information contact: mbrusberg@oce.usda.gov



MIDDLE EAST

Sunny skies and near- to above-normal temperatures promoted fieldwork and accelerated summer crops toward maturity. In Turkey, seasonably dry, hot weather (32-42°C) was beneficial for corn and sunflower drydown and harvesting. Cotton was in the open-boll stage of development or beyond, and did not suffer any adverse impacts from the late-season heat; the cotton harvest typically starts in early September.

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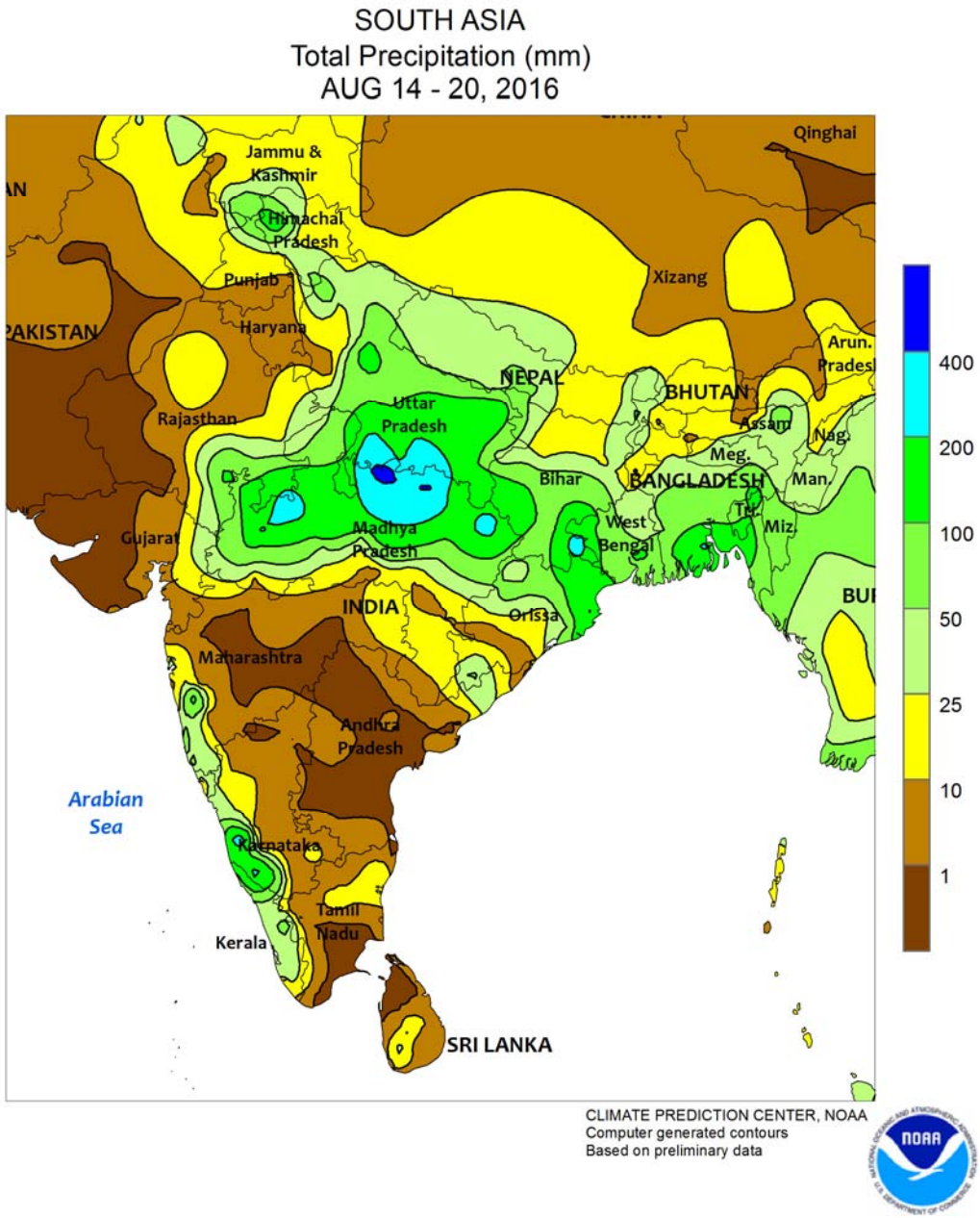
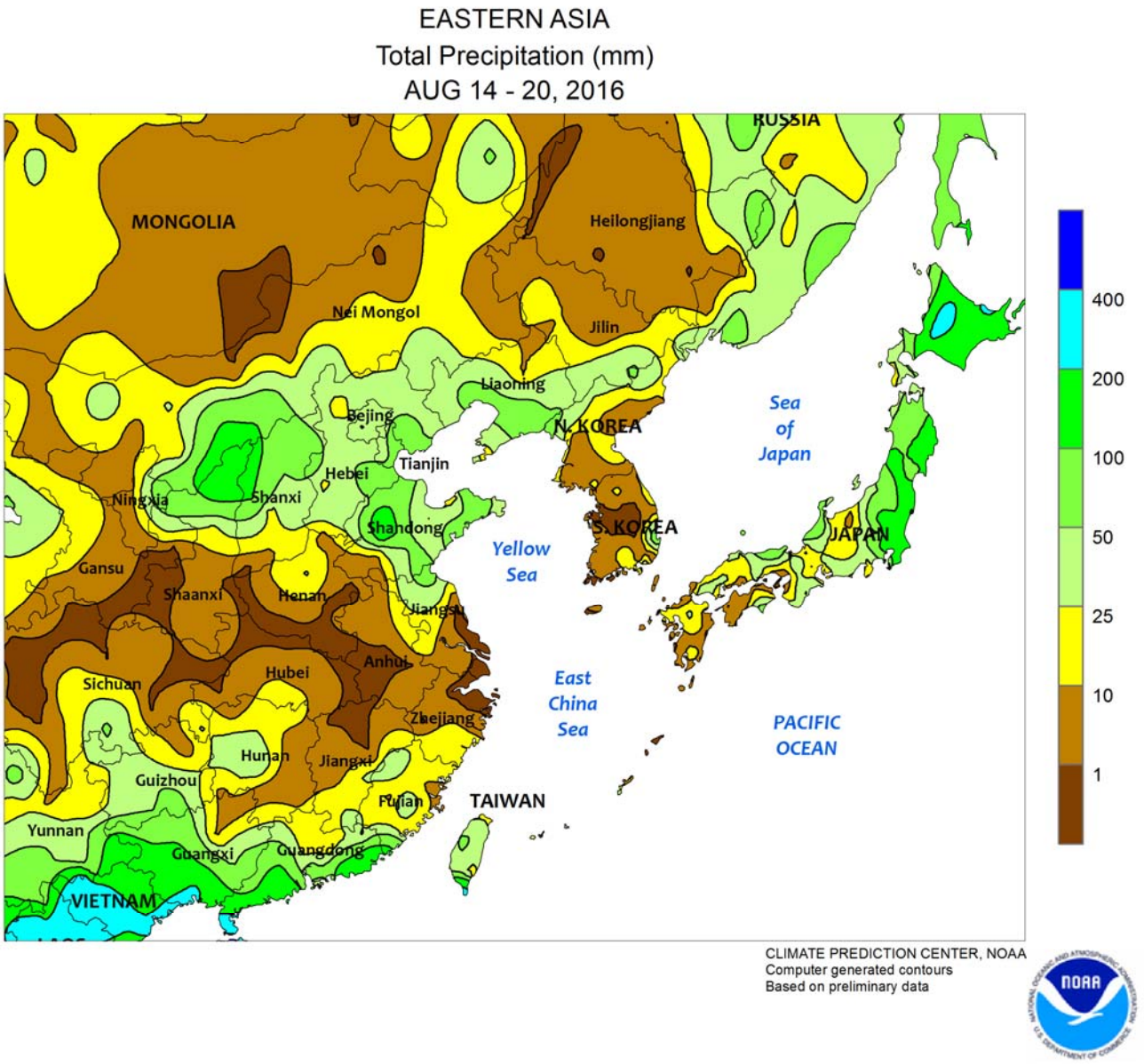


SOUTH ASIA

A strong monsoon low pressure area moved across northern sections of India, bringing soaking rainfall to rice and soybeans. The low tracked across Orissa and Madhya Pradesh, where rainfall amounts topped 500 mm in some areas (totals of 100-200 mm were more common). The deluge added more water to already saturated soybean fields in Madhya Pradesh; rainfall totals since July 1 were over 800 mm. Heavy showers were also reported in the central and lower Ganges River Basin to the north. While the rainfall was welcome in eastern and northern rice areas, the wetness further reduced soybean yield prospects in the west. Unseasonably dry weather occurred elsewhere in India as the monsoon low drew moisture away from other areas. In western cotton areas (Gujarat), more rain would be welcome to maintain the improved moisture conditions and prevent yield declines.

For additional information contact: mbrusberg@oce.usda.gov



EASTERN ASIA

Unfavorably dry weather continued across key corn and soybean areas of northeastern China. Rainfall (25-50 mm) was only reported in far eastern Heilongjiang and Liaoning. Barely 50 mm of rain has been recorded in western Heilongjiang since July 1. The dryness has been untimely as corn and soybeans progressed through the moisture sensitive reproductive stages. Going forward, though, any lingering dryness will have less of an impact on yields as crops begin to fill and mature. To the south, heavy showers (25-50 mm, locally more) in northern and eastern portions of the North China Plain (Hebei, Shandong, and northern Jiangsu) maintained favorable soil moisture for summer crops. Less than 25 mm of rain occurred in the remainder of the North China Plain (Henan and northern Anhui), where short-term dryness has been ongoing since the start of August. In the Yangtze River Basin, mostly dry weather had little impact on favorable moisture conditions for reproductive to maturing single-crop rice. Meanwhile in southern China, a tropical cyclone (Dianmu) passing along the coast spawned heavy showers (25-100 mm or more) that benefited vegetative to reproductive late-crop rice. Elsewhere in the region, an unusual series of five tropical cyclones produced heavy showers in much of Japan. Chanthu and Conson affected northern Japan early in the week, while Mindulle, Lionrock, and Kompasu were just off the southern Honshu coast as of the end of the period.

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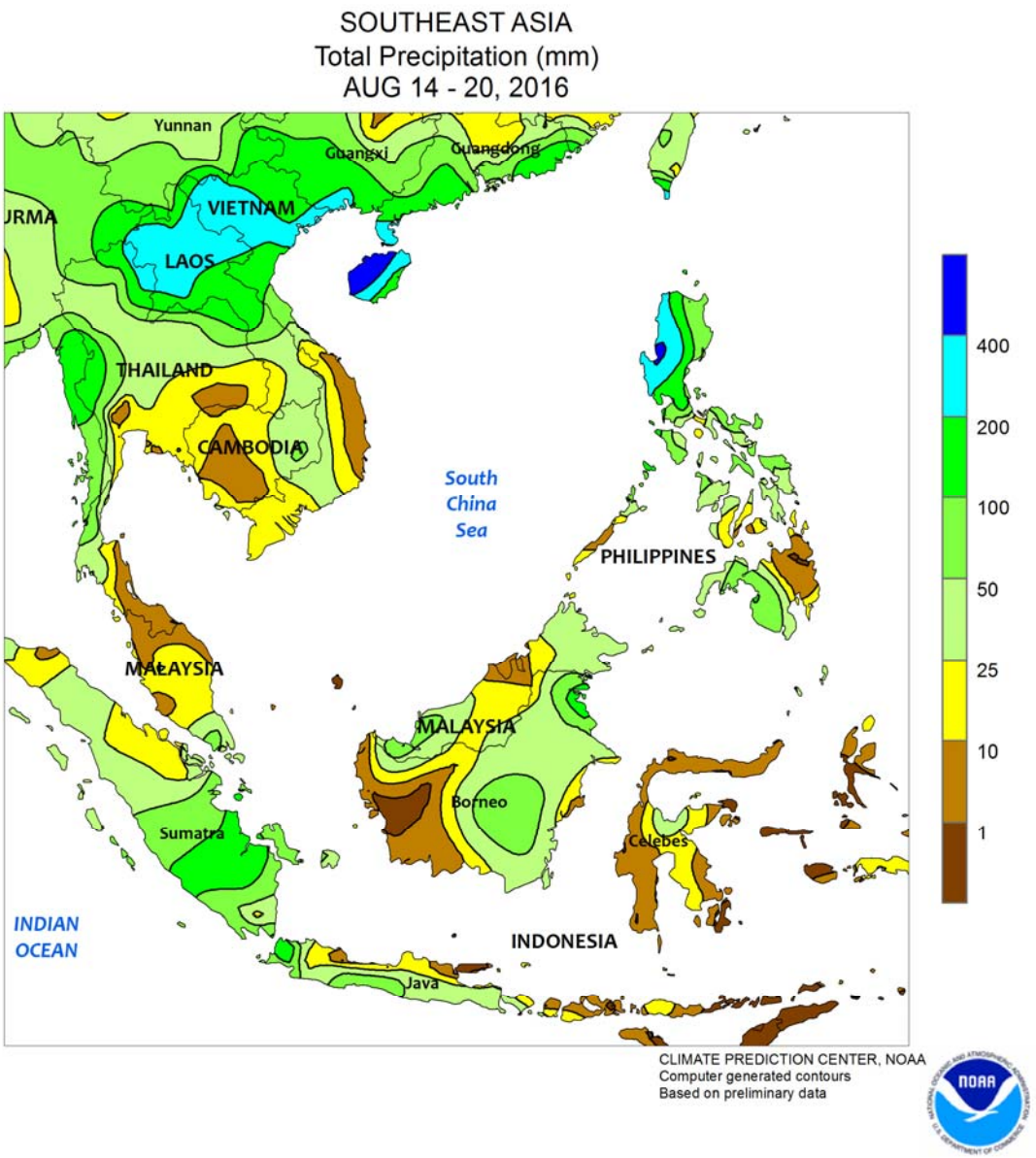
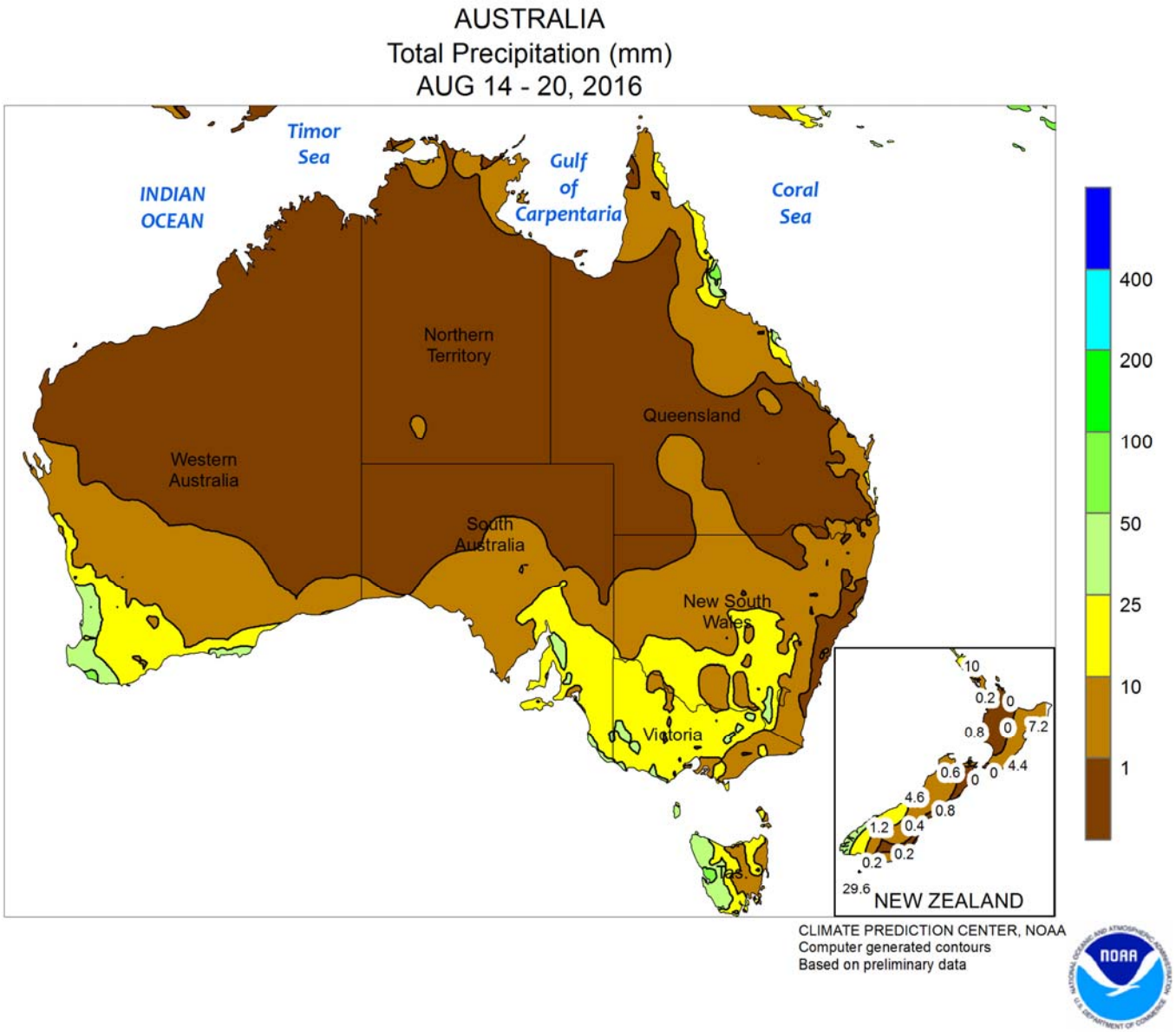


SOUTHEAST ASIA

Tropical Cyclone Dianmu made landfall in northern Vietnam and produced over 200 mm of rain across rice areas in the Red River Delta and into northern Laos. Meanwhile, unseasonably light showers (less than 25 mm) prevailed across Thailand and the remainder of Indochina. Moisture conditions for rice and other summer crops continued to be excellent and far above the past two years in most areas. However, parts of northeastern Thailand have experienced rainfall deficits dating back to early July. In the Philippines, Dianmu enhanced the monsoon flow, producing more drenching rain in the north, with over 200 mm (locally over 400 mm) reported in western Luzon. Over the last 30 days, western Luzon has received nearly 900 mm of rain. In southern sections of the region, showers (25-50 mm) kept oil palm adequately watered in Indonesia and eastern Malaysia, although pockets of drier weather occurred in Peninsular Malaysia and neighboring areas of Sumatra, Indonesia.

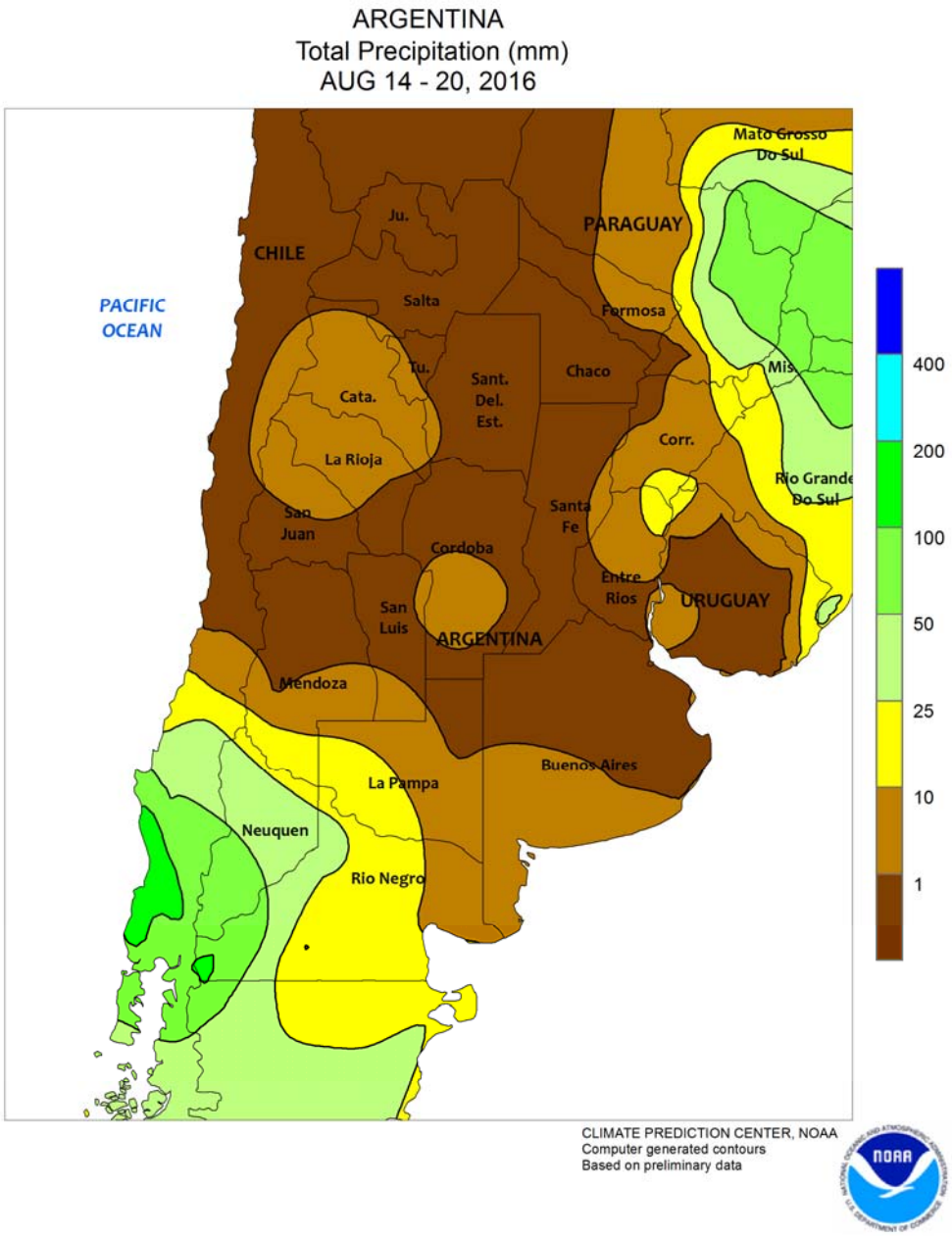
For additional information contact: mbrusberg@oce.usda.gov



AUSTRALIA

In western and southeastern Australia, widespread showers and favorably mild weather maintained good to excellent yield prospects for winter grains and oilseeds. Rainfall amounts ranged from 10 to 25 mm, with isolated lower and higher amounts. Temperatures averaged near normal in Western Australia and 1 to 3°C above normal in southeastern Australia, spurring crop development. In northern New South Wales and southern Queensland, mostly dry (less than 5 mm), seasonably mild weather benefited wheat and other winter crops. In addition, the dry weather aided fieldwork in advance of upcoming summer crop planting. Wheat has entered the heading and flowering stages of development across a large part of southern Queensland and northern New South Wales, while wheat is generally in the jointing stage of development elsewhere in Australia.

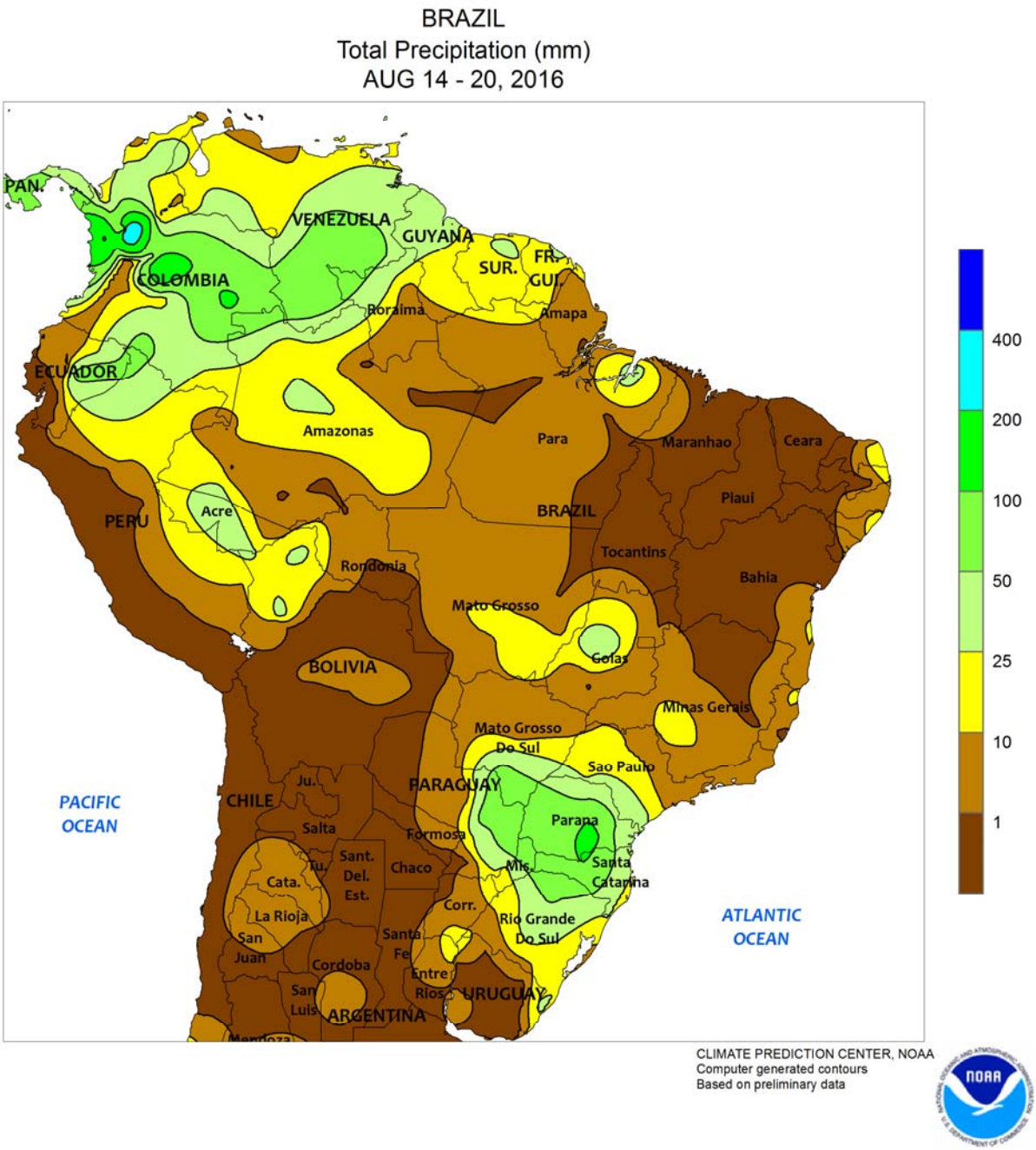
For additional information contact: mbrusberg@oce.usda.gov



ARGENTINA

Warm, mostly dry weather supported the final stages of fieldwork throughout the region. Little to no rain fell for a third consecutive week. The dryness was accompanied by near- to above-normal temperatures, with daytime highs reaching the upper 30s (degrees C) in north-central agricultural areas (Santiago del Estero northward). Nighttime lows at or below 0°C limited early growth of emerged wheat in major production areas of central Argentina. According to Argentina's Ministry of Agriculture, corn was 86 harvested as of August 18, compared with 97 percent last year. Wheat was 97 percent planted, 2 points behind last year's pace.

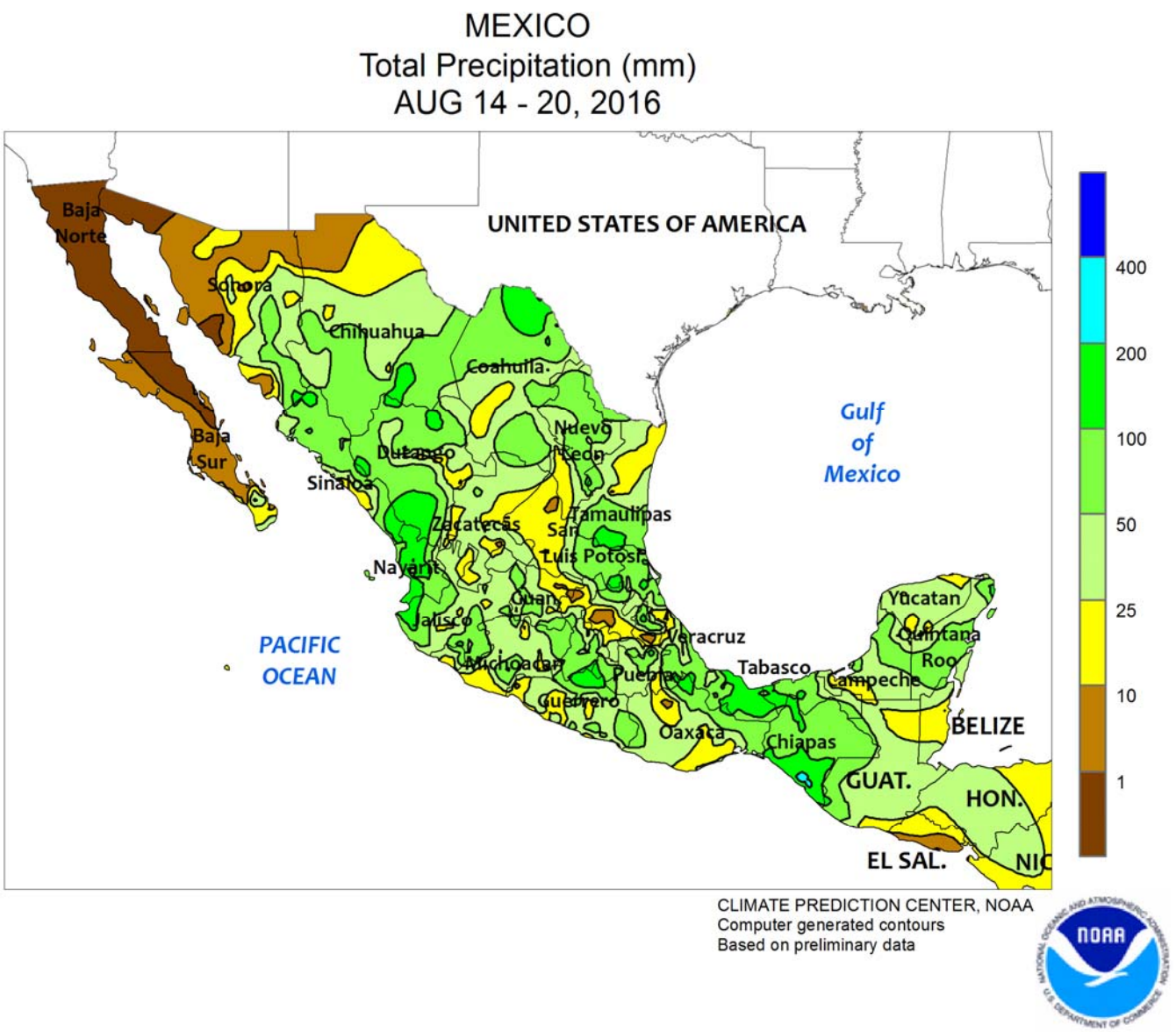
For additional information contact: mbrusberg@oce.usda.gov



BRAZIL

Locally heavy rain provided abundant moisture for wheat in key southern production areas. Rainfall totaled more than 50 mm over a broad area centered over Parana, with amounts of 10 mm reaching as far north as Sao Paulo. It was the second week of wet weather in Parana, which now needs drier, sunny weather for normal wheat growth; according to the government of Parana, wheat was more than 70 percent flowering to filling (2 percent mature) as of August 15. In contrast, the rainfall ended an extended period of dryness in Rio Grande do Sul, where wheat is reportedly entering the flowering stage in good condition. Elsewhere, scattered showers (locally greater than 10 mm) caused some localized harvest delays in sugarcane and coffee areas of Sao Paulo and Minas Gerais. Similar amounts were recorded across a stretch of southern Mato Grosso and west-central Goias; otherwise, dry, seasonably hot weather (daytime highs reaching the lower 40s degrees C) dominated agricultural areas of the central and northeastern interior.

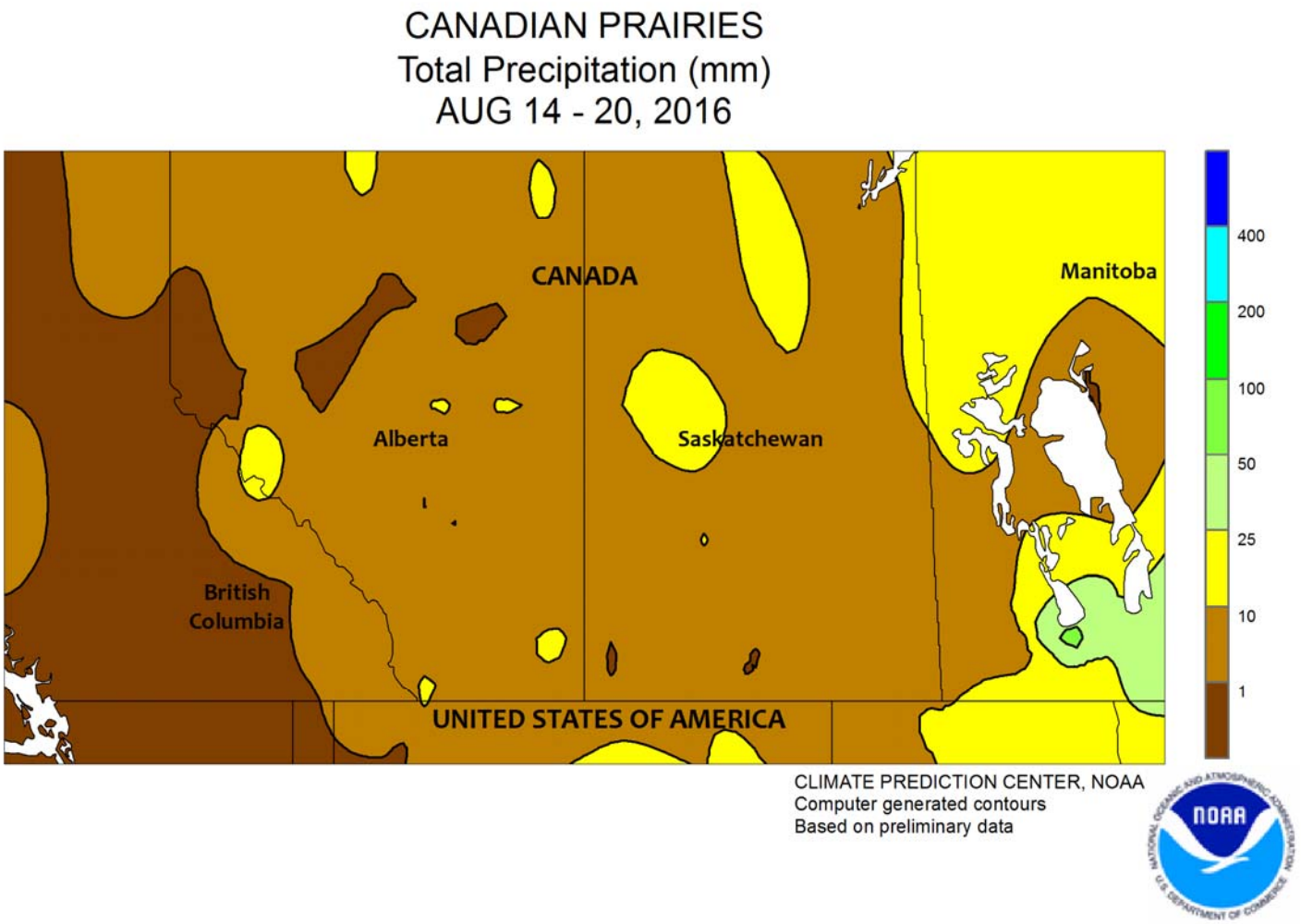
For additional information contact: mbrusberg@oce.usda.gov



MEXICO

Widespread, locally heavy rain covered the region, boosting reservoir levels and maintaining overall favorable conditions for rain-fed summer crops. Large sections of central and southern Mexico recorded at least 25 mm, including the southern plateau (Jalisco to Puebla) and the southeast, with pockets of heavy rain (greater than 100 mm) concentrated over Tabasco and Chiapas. Moderate to heavy rain (25-100 mm) also continued over sugarcane areas in and around Veracruz. Meanwhile, monsoon showers intensified across the northwest; a strong plume of moisture brought heavy rain (50-100 mm, locally higher) not only to the traditional wet areas of Sinaloa and southern sections of Sonora and Chihuahua but also to north-central Mexico (eastern sections of Durango and Chihuahua eastward through Nuevo Leon and Tamaulipas). The moisture in north-central and northeastern Mexico helped to replenish reservoirs used to irrigate cotton and other summer crops, while bringing some relief from excessive warmth to livestock.

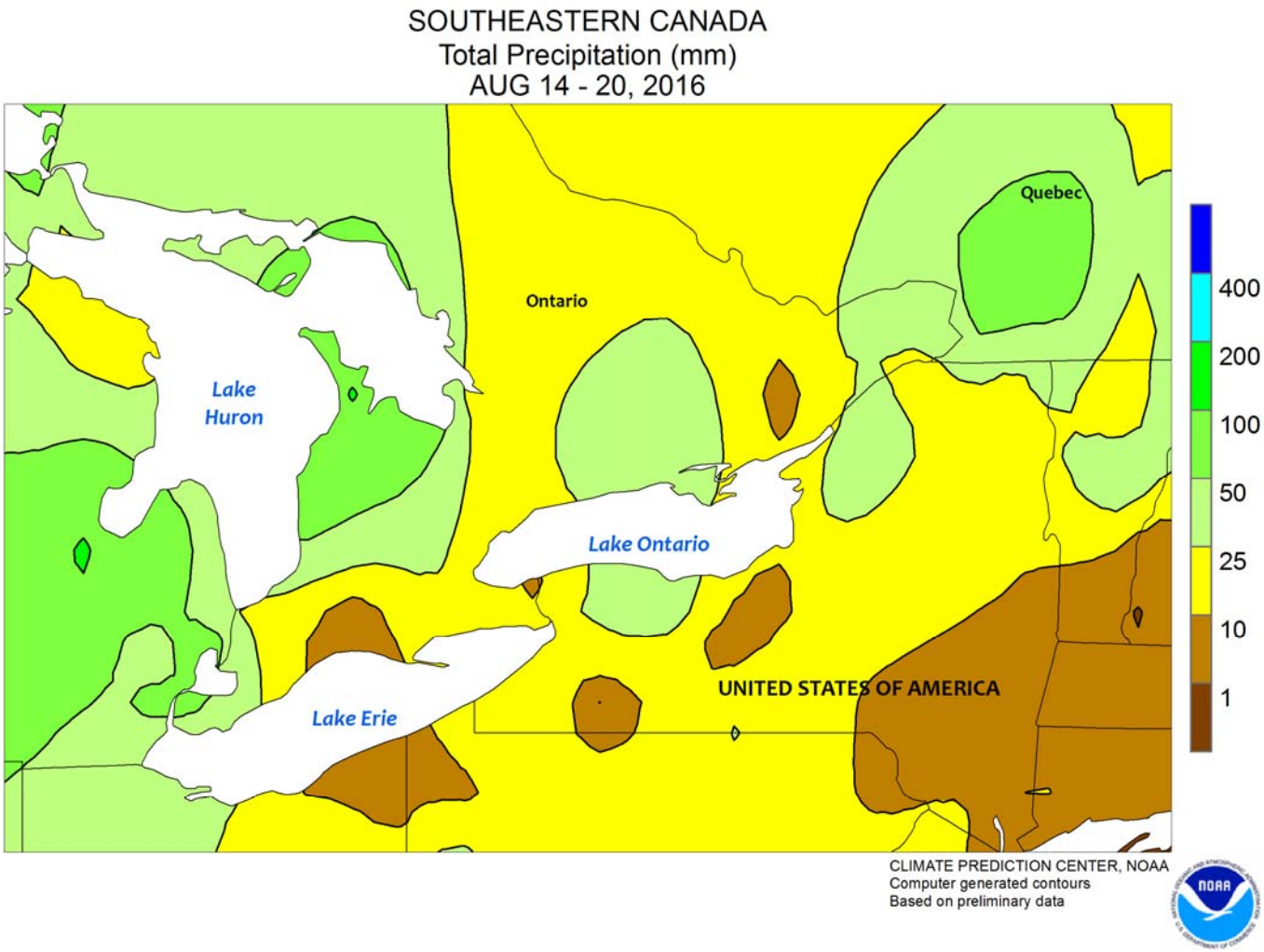
For additional information contact: mbrusberg@oce.usda.gov



CANADIAN PRAIRIES

Dry weather supported harvesting of early-planted spring grains and oilseeds. Aside from a few pockets of moderate showers (rainfall totaling more than 10 mm), dryness prevailed across the region; an exception was south-central Manitoba, where light rain fell on several days. Weekly temperatures averaged 1 to 2°C above normal in northern production areas of Alberta and Saskatchewan, and near to slightly below normal elsewhere. Daytime highs continued to reach the lower 30s (degrees C) in southern farming areas until the middle part of the week, favoring maturation and drydown of spring crops. A cooler air mass arrived at week's end, dropping nighttime lows below 5°C; however, no freezes were reported. The first autumn freeze typically arrives in late August or early September, depending on location.

For additional information contact: mbrusberg@oce.usda.gov



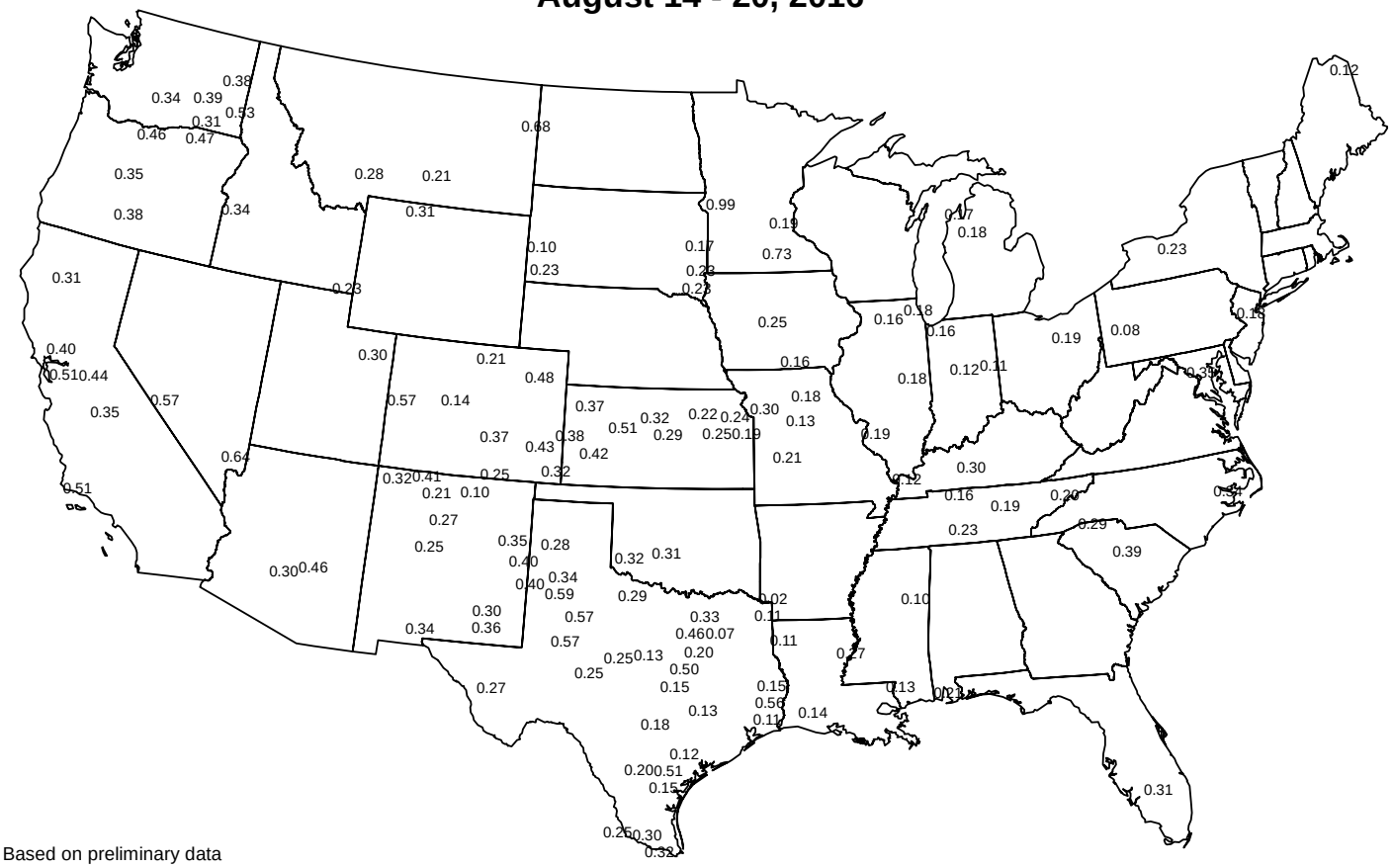
SOUTHEASTERN CANADA

Warm, showery weather continued, providing a beneficial late-season boost in moisture to immature summer crops. Rainfall totaled 10 to 50 mm across the region, with pockets of heavier rain concentrated in Ontario (east of Lake Huron) and over Quebec. While beneficial for soybeans and other later developing summer crops, the moisture likely came too late to significantly improve prospects of most corn. Weekly average temperatures were 2 to 3°C above normal, maintaining high crop moisture demands; daytime highs occasionally reached 30°C in spots, continuing this summer's trend of unseasonable warmth.

For additional information contact: mbrusberg@oce.usda.gov

Average Pan Evaporation (inches/day)

August 14 - 20, 2016



Based on preliminary data

USDA Agricultural Weather Assessments

Data obtained from the NWS Cooperative Observer Network.

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