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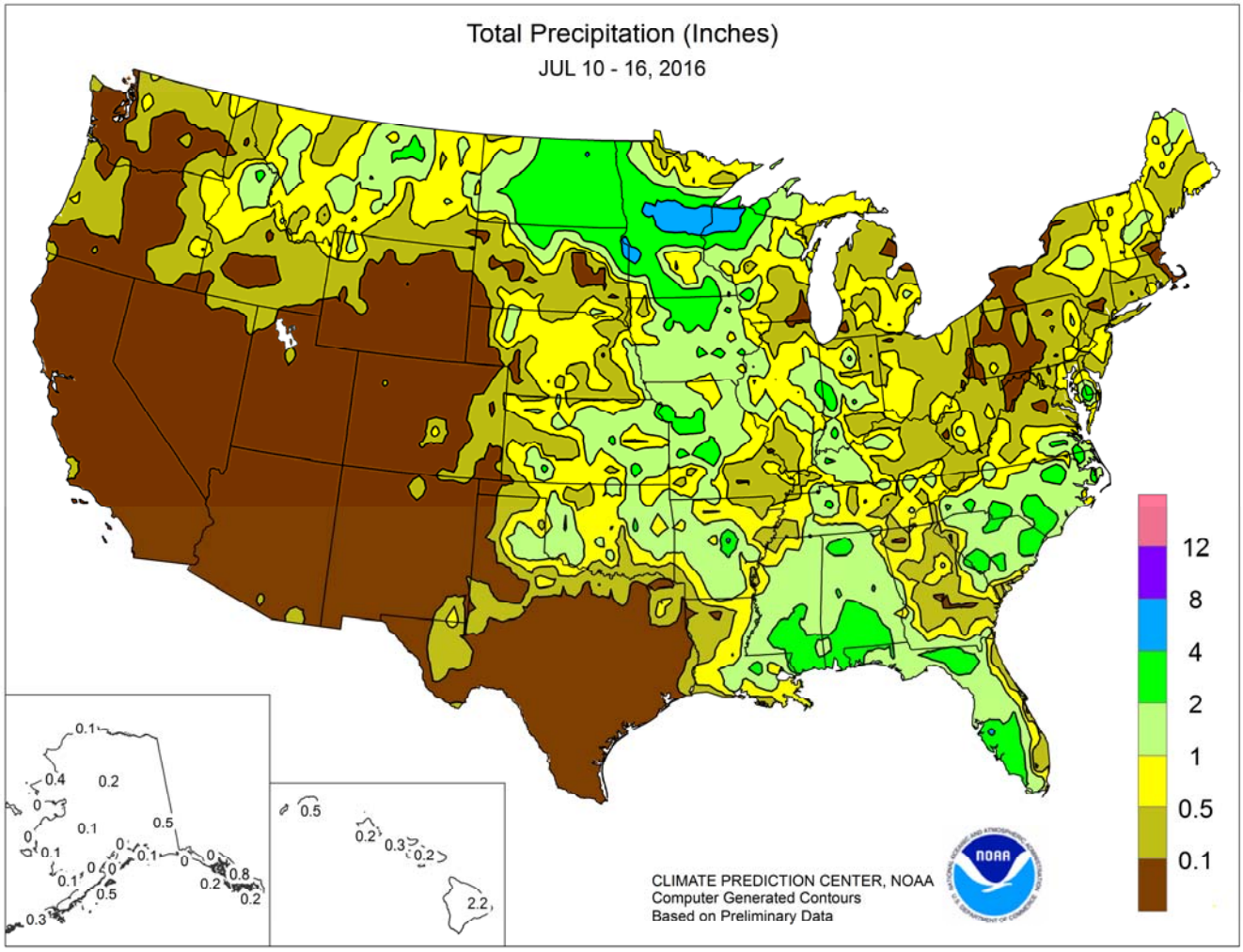
WEEKLY WEATHER AND CROP BULLETIN

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 10 – 16, 2016

Highlights provided by USDA/WAOB

Midwestern corn and soybeans experienced another mostly favorable week, with widespread rainfall and near-normal temperatures. However, pockets of drought persisted in the **lower Great Lakes region**, where only light rain fell, while locally excessive rainfall (4 inches or more) triggered flooding in the **far upper Midwest**. Showers also dotted the **Plains** and the **South**, although hot weather in the latter region increased moisture demands for pastures and crops. In fact, drought remained deeply entrenched across the **southern Appalachians**,

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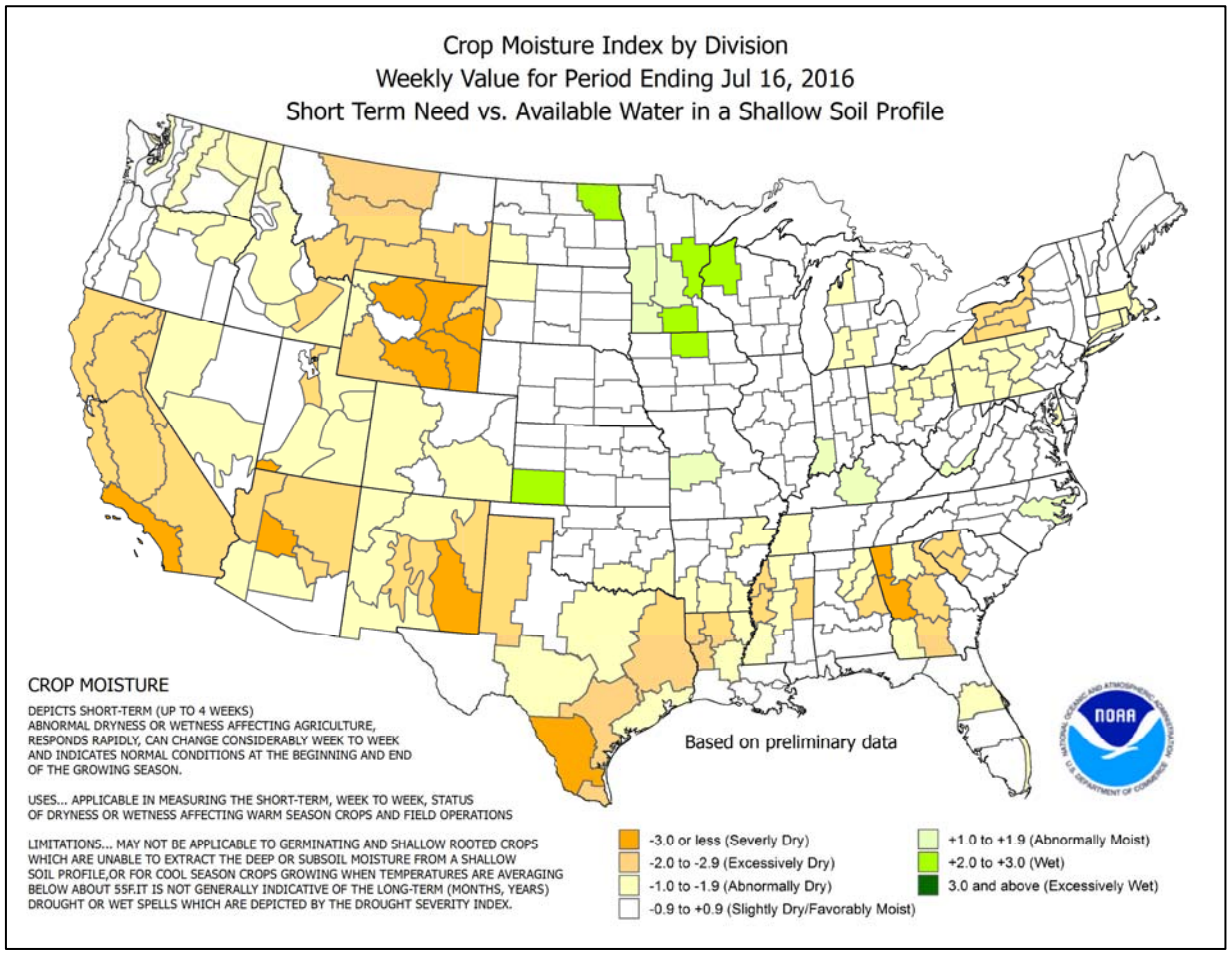
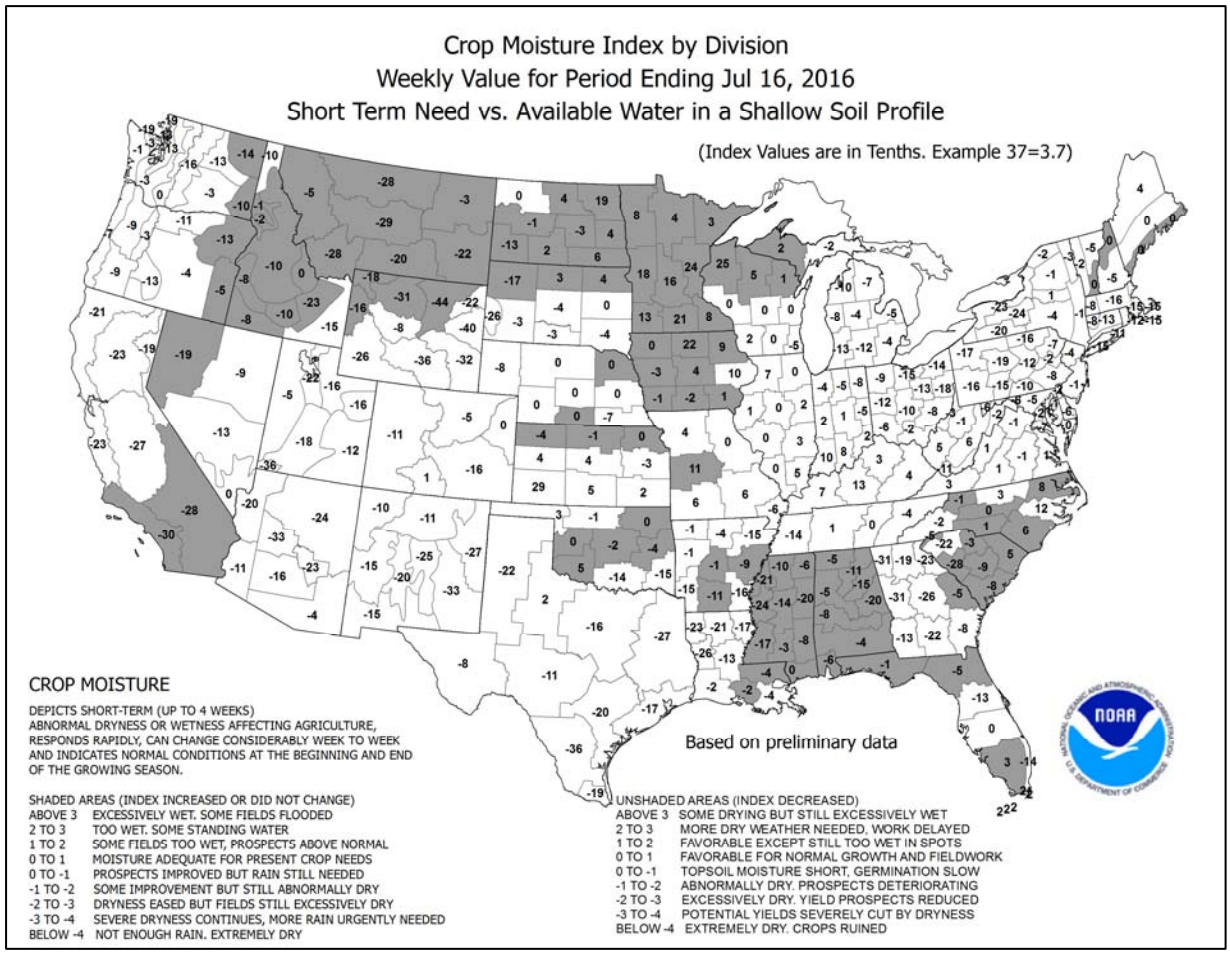
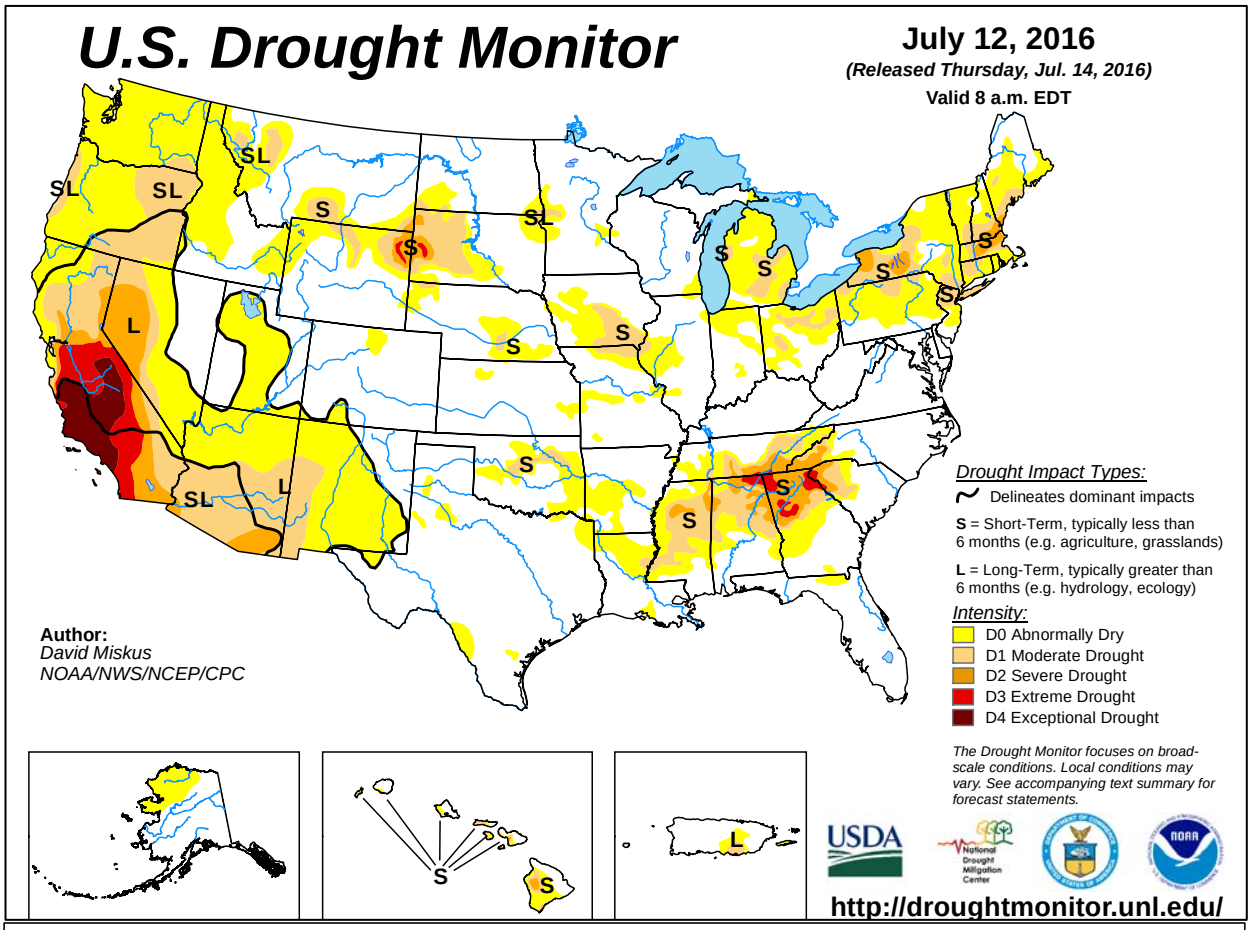
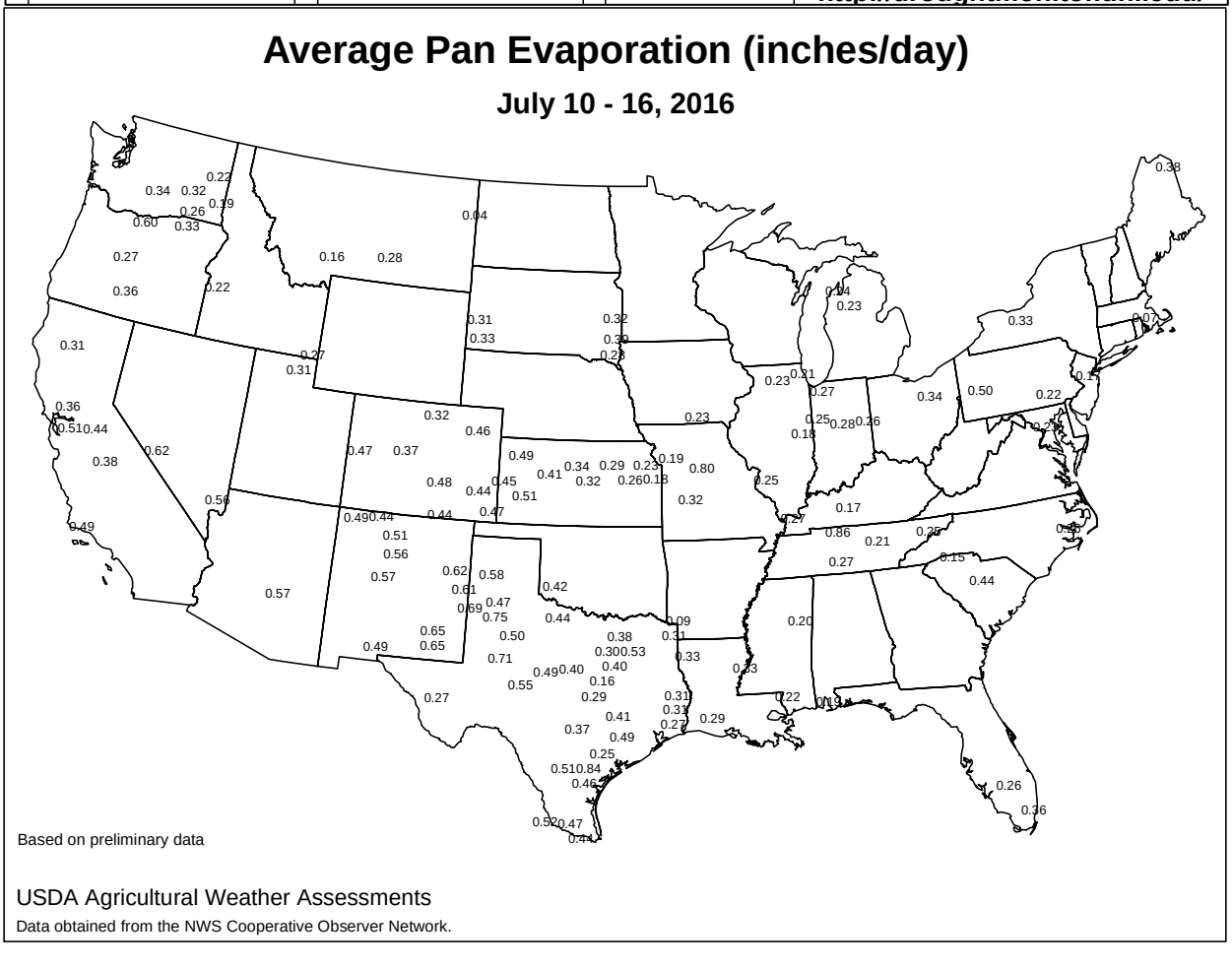
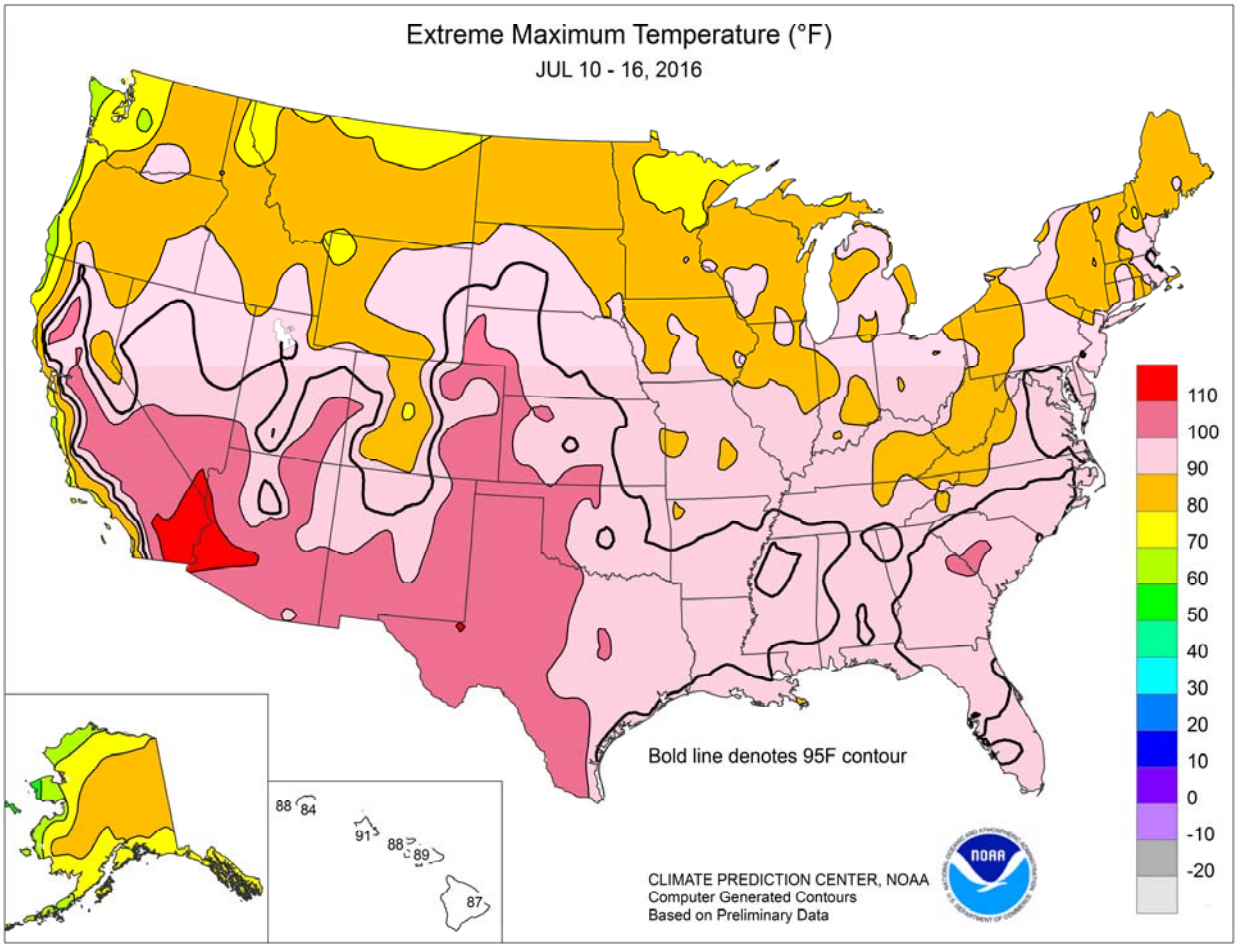
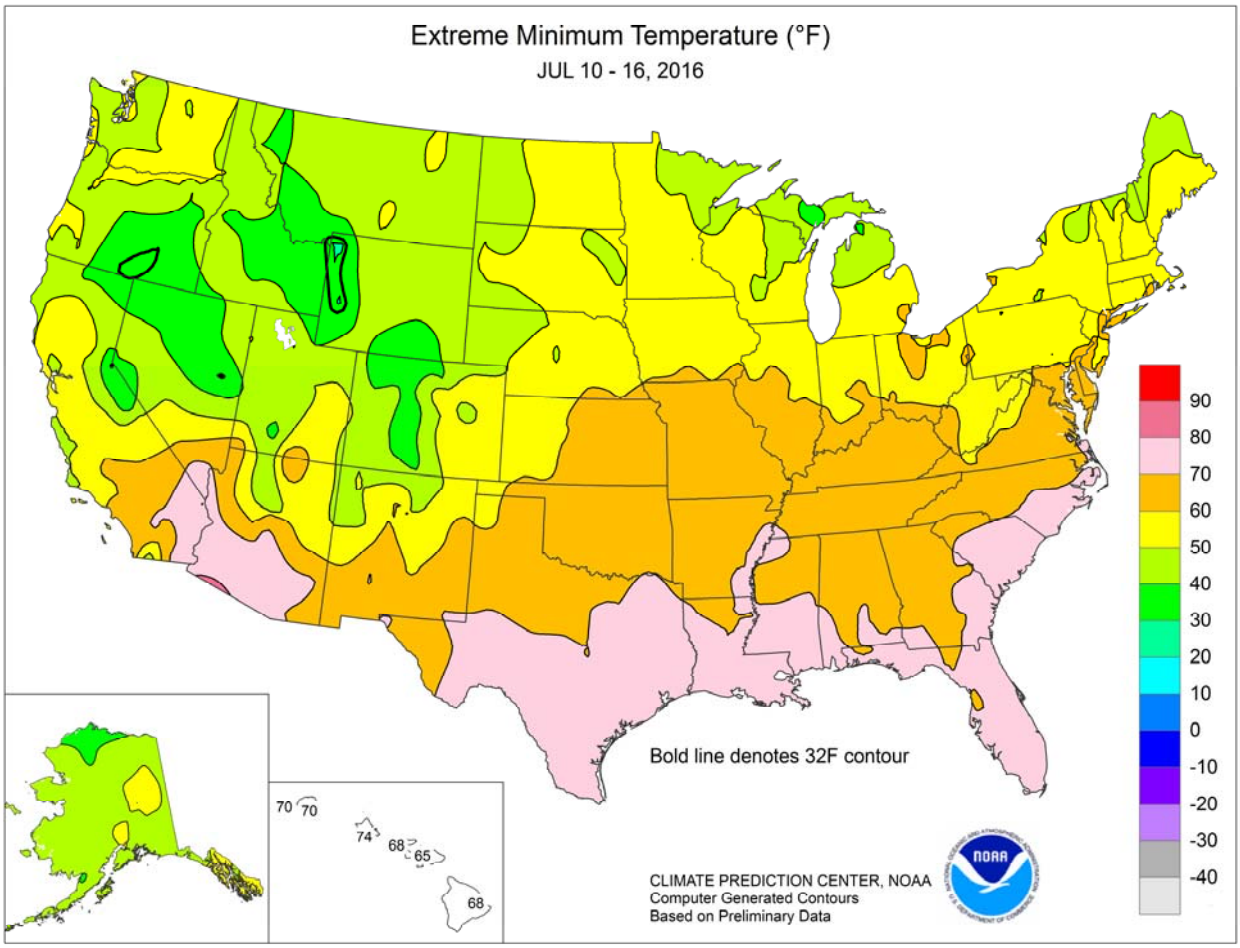

Crop Moisture Index by Division
Weekly Value for Period Ending Jul 16, 2016
Short Term Need vs. Available Water in a Shallow Soil Profile
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES 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)


Crop Moisture Index by Division
Weekly Value for Period Ending Jul 16, 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

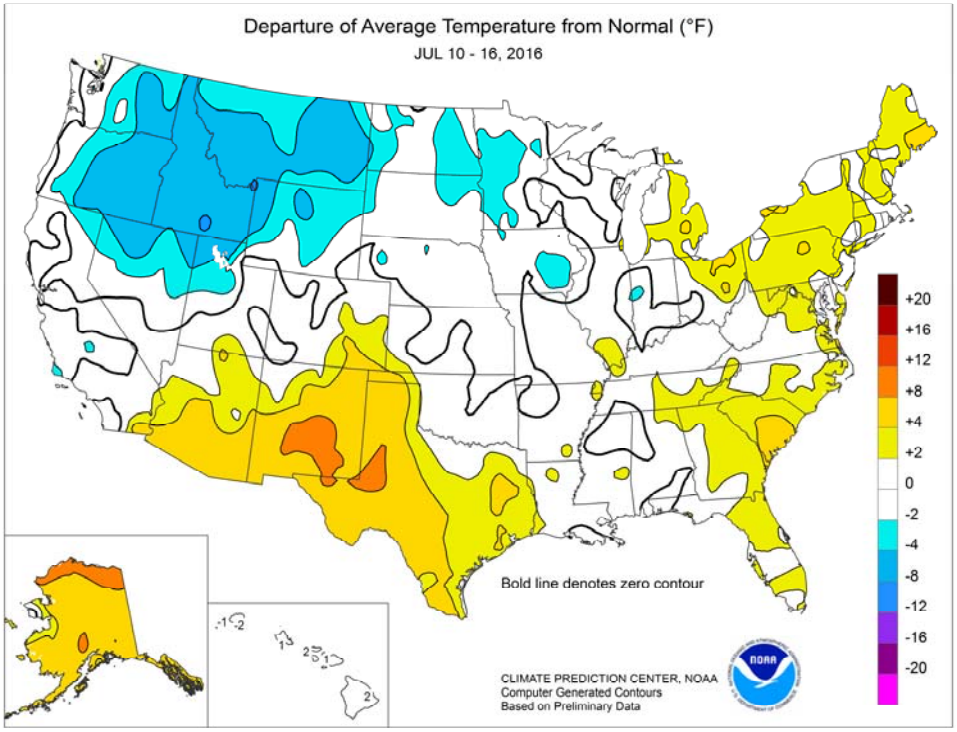

U.S. Drought Monitor
July 12, 2016
(Released Thursday, Jul. 14, 2016)
Valid 8 a.m. EDT
Author:
David Miskus
NOAA/NWS/NCEP/CPC
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. 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.
http://droughtmonitor.unl.edu/


Average Pan Evaporation (inches/day)
July 10 - 16, 2016
Based on preliminary data
USDA Agricultural Weather Assessments
Data obtained from the NWS Cooperative Observer Network.


Extreme Maximum Temperature (°F)
JUL 10 - 16, 2016
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
88
84
91
88
89
87
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Minimum Temperature (°F)
JUL 10 - 16, 2016
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
70
70
74
68
65
68
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA

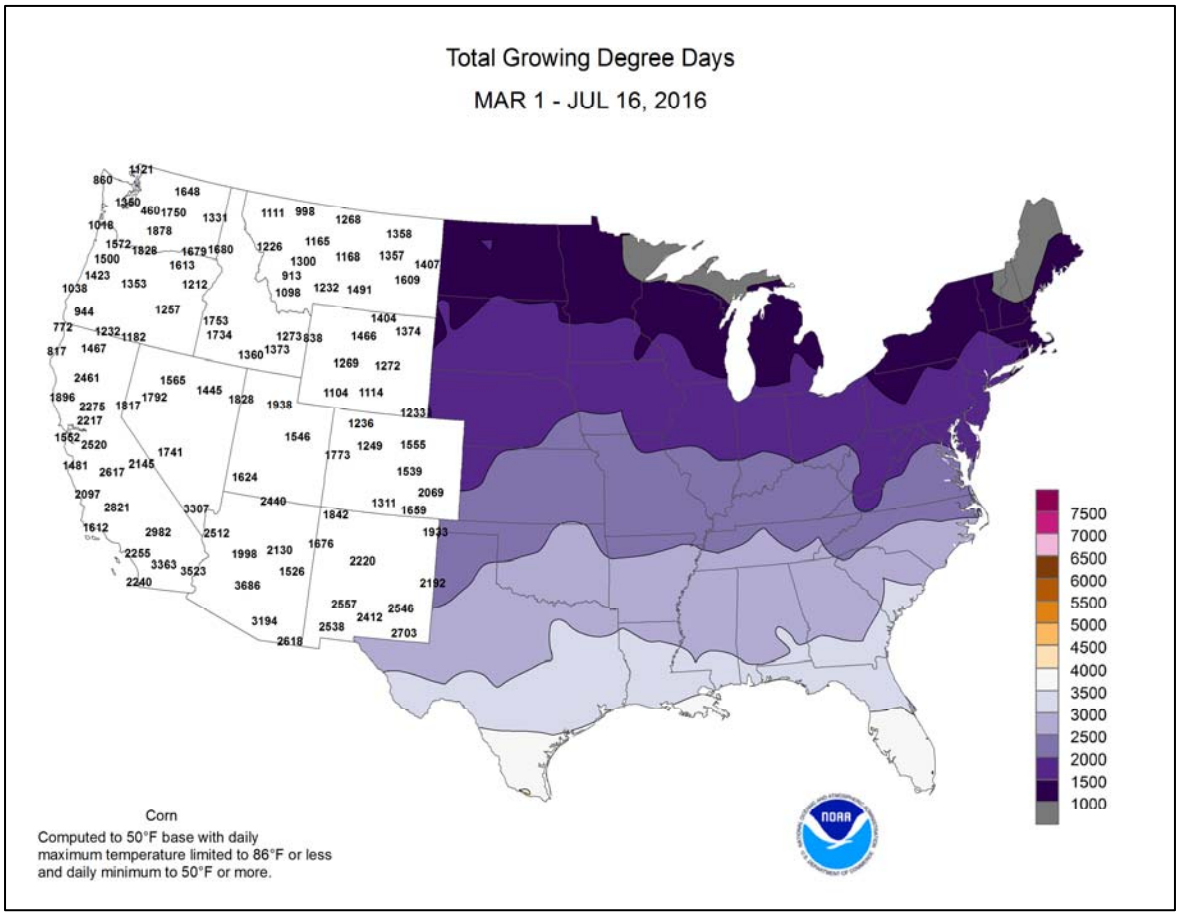
(Continued from front cover)
despite a few showers. Similarly, mostly dry weather persisted in the **Northeast**, resulting in further drought expansion. Meanwhile, record-setting heat gripped the **southern High Plains** and environs, depleting topsoil moisture and increasing stress on rangeland, pastures, and rain-fed summer crops. The consistently hot weather boosted temperatures at least 5 to 10°F above normal from **southern Arizona to the southern High Plains**. Late in the week, however, showers developed in a few areas, including **Texas' northern panhandle**. Elsewhere, cool weather in the **Northwest** contrasted with hot, dry weather farther south. Weekly temperatures averaged at least 5°F below normal from interior sections of **Washington and Oregon to Montana**, with occasional showers accompanying the cool spell.

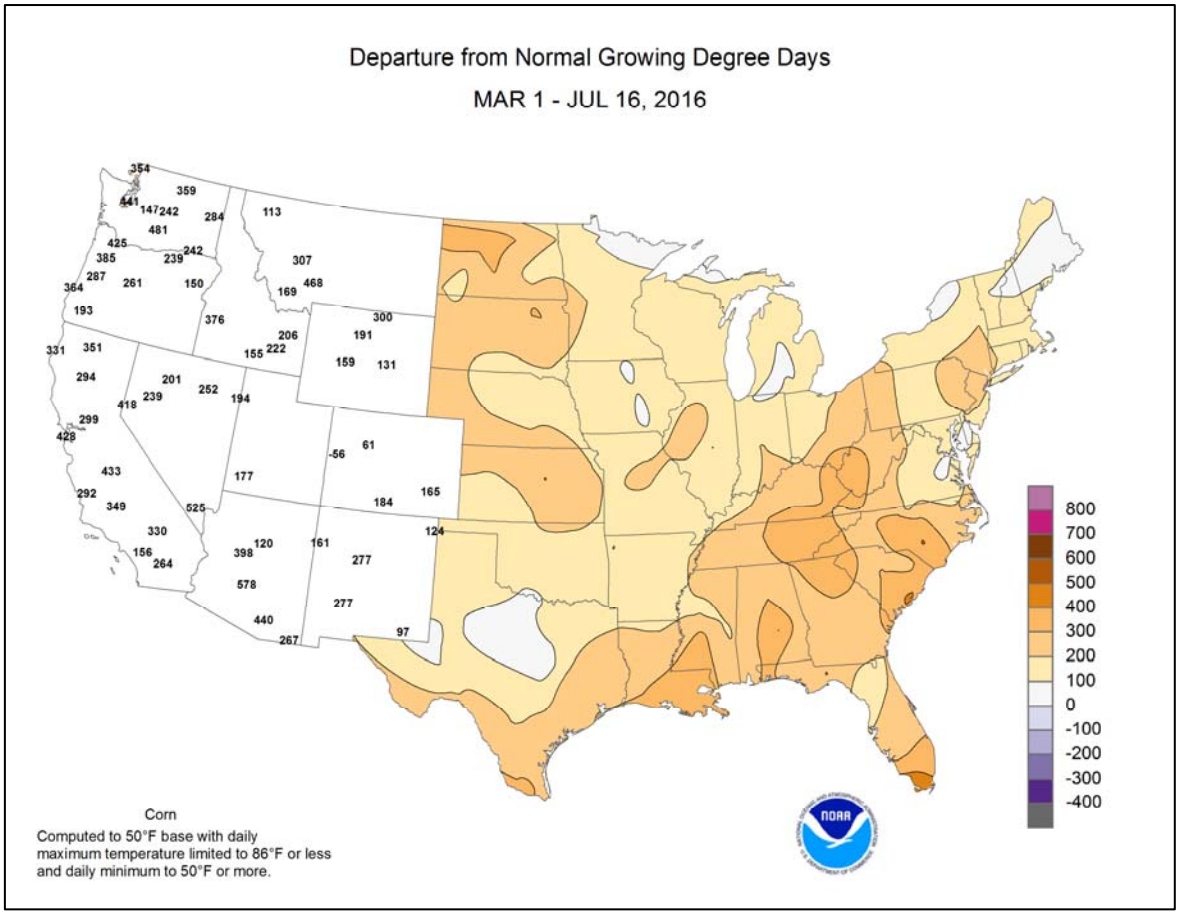


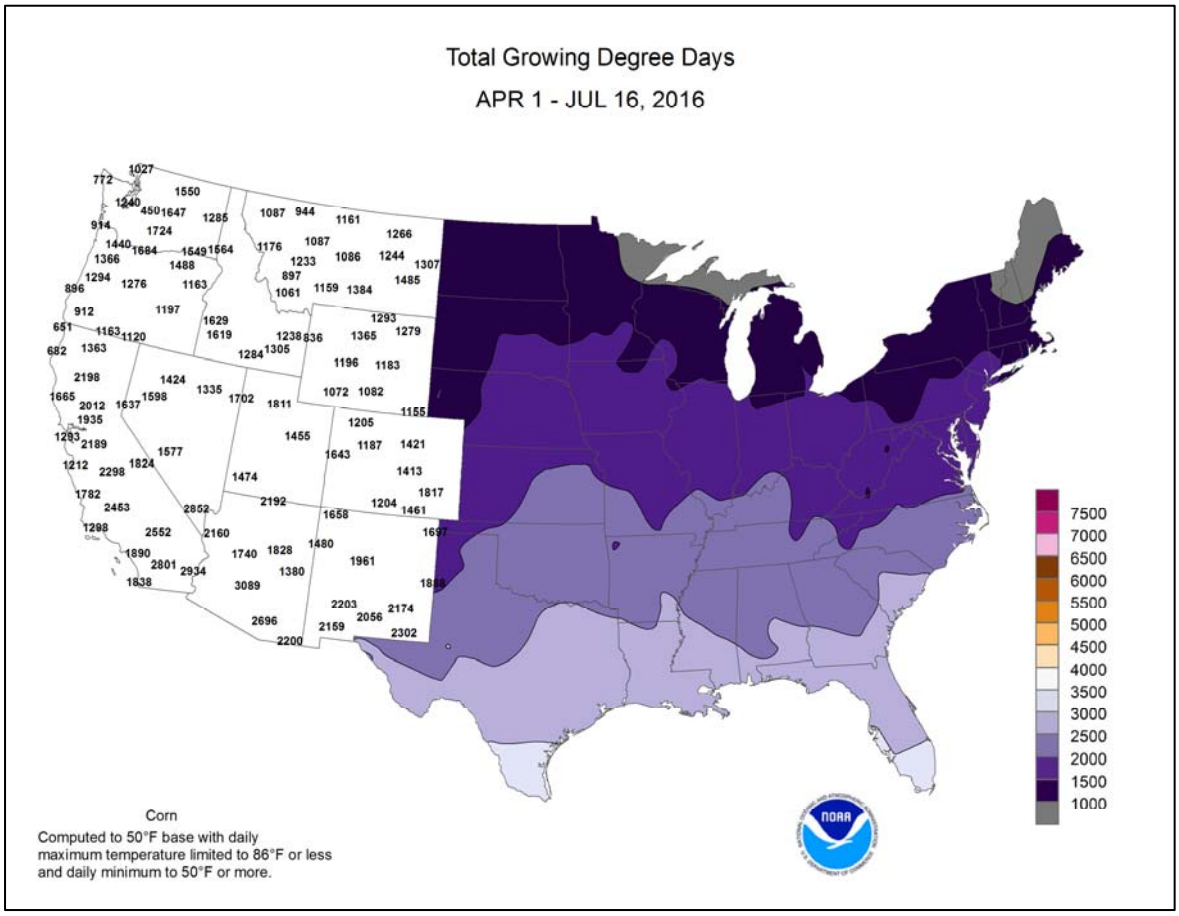
Locally severe thunderstorms accompanied the unsettled weather across the **central and eastern U.S.** On July 10 in **North Dakota**, wind gusts of 70 to 80 mph were clocked in several communities, including **Mott**, **Mandan**, and **Medina**. Torrential rainfall developed from **central Minnesota into northwestern Wisconsin**; a few 8- to 10-inch totals were reported in a 48-hour period ending July 12. Unofficial totals reached 9.80 inches near **Saxon, Iron County, WI**, and 8.90 inches near **Brainerd, Crow Wing County, MN**. Resultant flooding led to record-high crests in **Wisconsin** gauge locations such as the **White River near Ashland** and the **Bad River near Odanah**. In **Ashland**, the high-water mark on July 12 exceeded the July 1953 record by nearly 8 inches. In **Odanah**, the river surged 5.08 feet above the June 1946 crest record. Farther south, thunderstorm wind gusts on July 14 were measured at 80 mph in **Wichita, KS**, and 68 mph in **Little Rock, AR**. For **Wichita**, it was the eighth-highest gust in the last 45 years. In **Little Rock**, a July wind-gust record was established (previously, 56 mph on July 27, 1960). It was also **Little Rock's** highest gust since August 7, 2011. The stormy weather resulted in numerous daily-record rainfall totals, especially on July 11. On that date, record-setting amounts included 3.33 inches in **Sisseton, SD**, and 2.63 inches in **St. Cloud, MN**. During the second half of the week, daily-record totals reached 3.17 inches (on July 15) in **Little Rock, AR**; 1.70 inches (on July 14) in **Huntsville, AL**; and 1.53 inches (on July 15, accompanied by hail) in **Amarillo, TX**. A few heavy showers also occurred in the **Northwest**, where daily-record amounts totaled 1.43 inches (on July 11) in **Lewistown, MT**, and 1.32 inches (on July 10) in **McCall, ID**.

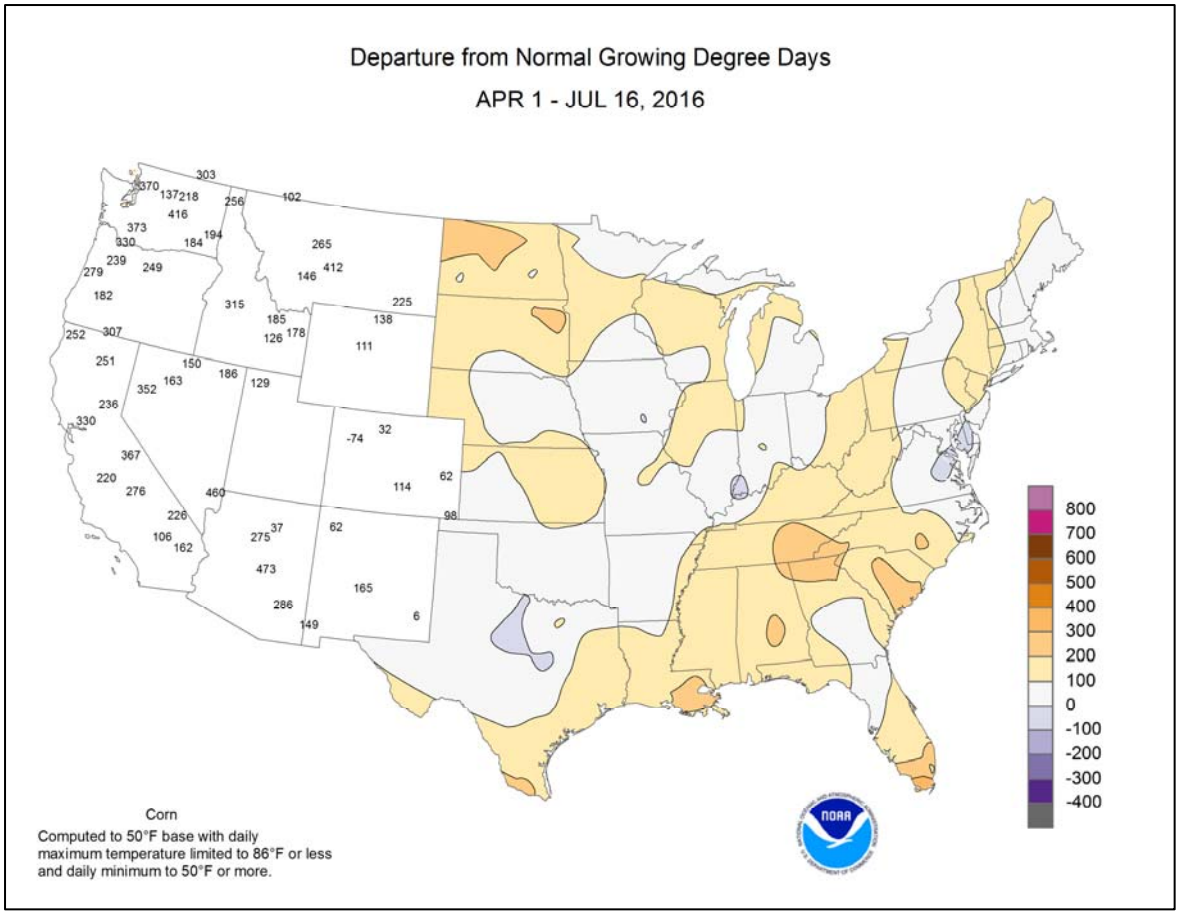
Very cool weather trailed the **Northwestern** showers. Freezes (and daily-record lows) were noted in a few spots, including **Ely, NV** (31°F on July 11), and **Big Piney, WY** (29°F on July 12). Later, a push of cool air into the **Great Lakes region** led to a daily-record low of 39°F (on July 16) in **Marquette, MI**. However, hot weather covered many other areas, particularly the **southern High Plains**. In **northern Texas**, **Dalhart** tied a monthly record with highs of 107°F on July 7, 10, and 11. Previously, **Dalhart** had reached 107°F on July 9, 2011. Elsewhere in **Texas**, **Borger** (110°F) and **Amarillo** (108°F) shattered monthly record highs on July 11. In **New Mexico**, all-time records were tied or broken on July 13 in locations such as **San Jon** (111°F; previously, 110°F on June 24, 1990) and **Portales** (109°F; previously, 109°F on June 25, 2011). Meanwhile, **McAllen, TX**, noted 20 consecutive triple-digit days (June 29 – July 18), including a daily-record high of 104°F on July 14. At times, record-setting heat also reached northward across the **central High Plains** or into the **South** and **East**. For example, daily-record highs surged to 100°F (on July 10) in **Denver, CO**, and 95°F (on July 13) in **Cleveland, OH**. On July 13, **Columbia, SC**, reached or exceeded the 100-degree mark for the tenth time in July and the fourteenth time this year; **Columbia's** highs soared to 101°F each day from July 11-13.

Record-setting warmth covered **northern Alaska**, pushing weekly temperatures as much as 10°F above normal. The remainder of the state also experienced warm weather (generally 5 to 10°F above normal), with widely scattered showers. Daily-record highs soared to 88°F in **Fairbanks** (on July 13) and **Bettles** (on July 14). In **southwestern Alaska**, **St. Paul Island** set an all-time record with a high of 68°F on July 11 (previously, 66°F on August 25, 1987). And near the **Arctic Coast**, all-time records were established in locations such as **Kuparuk** (86°F on July 14) and **Deadhorse** (85°F on July 13). Farther south, showers continued to fall across windward sections of **Hawaii**. On the **Big Island**, **Hilo's** month-to-date rainfall through the 16th totaled 3.59 inches, with 1.11 inches occurring on July 15. Meanwhile, **Kauai's** famously wet **Mt. Waialeale** netted 5.80 inches of rain in a 48-hour period from July 13-15.


Total Growing Degree Days
MAR 1 - JUL 16, 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 - JUL 16, 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 - JUL 16, 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 - JUL 16, 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 July 16, 2016

Data Provided by Climate Prediction Center

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 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	92	71	94	70	82	2	1.41	0.21	0.95	7.92	124	29.53	93	95	49	6	0	5	1
	HUNTSVILLE	93	71	95	70	82	3	1.87	0.83	1.70	8.36	127	26.65	80	85	60	7	0	3	1
	MOBILE	90	73	93	71	81	0	1.86	0.37	0.90	9.70	118	37.86	101	93	77	4	0	7	2
	MONTGOMERY	94	72	96	71	83	1	1.90	0.63	1.50	6.45	92	28.82	89	89	49	7	0	3	1
AK	ANCHORAGE	72	56	77	52	64	6	0.00	-0.33	0.00	2.36	135	4.52	90	80	63	0	0	0	0
	BARROW	60	40	66	34	50	9	0.10	-0.07	0.08	0.84	125	2.18	177	92	60	0	0	2	0
	FAIRBANKS	80	59	88	52	69	6	0.65	0.29	0.42	4.52	204	6.40	151	87	56	0	0	3	0
	JUNEAU	68	56	72	53	62	5	0.08	-0.81	0.03	4.07	77	26.86	111	86	72	0	0	3	0
	KODIAK	66	54	74	48	60	6	0.47	-0.48	0.42	4.56	59	47.33	123	87	71	0	0	4	0
	NOME	55	46	60	40	50	-3	0.02	-0.41	0.01	0.98	48	4.06	71	96	85	0	0	2	0
AZ	FLAGSTAFF	85	48	88	41	67	1	0.00	-0.49	0.00	1.58	118	8.60	80	49	12	0	0	0	0
	PHOENIX	110	87	111	81	98	5	0.00	-0.20	0.00	0.01	2	1.89	54	23	16	7	0	0	0
	PRESCOTT	93	62	96	58	78	5	0.00	-0.59	0.00	0.59	40	4.37	53	38	11	7	0	0	0
	TUCSON	106	81	106	79	94	7	0.00	-0.42	0.00	2.42	240	4.95	118	38	23	7	0	0	0
AR	FORT SMITH	92	72	94	68	82	0	0.41	-0.34	0.30	5.23	86	22.44	93	86	51	6	0	4	0
	LITTLE ROCK	94	73	96	70	83	1	4.77	4.00	3.17	7.81	135	37.00	132	87	51	7	0	3	3
CA	BAKERSFIELD	97	69	105	64	83	0	0.00	0.00	0.00	0.00	0	4.10	89	39	21	6	0	0	0
	FRESNO	97	66	104	61	82	1	0.00	0.00	0.00	0.06	26	9.08	116	52	28	6	0	0	0
	LOS ANGELES	75	65	77	63	70	1	0.00	0.00	0.00	0.00	0	6.00	64	87	67	0	0	0	0
	REDDING	97	65	105	57	81	0	0.00	0.00	0.00	2.46	357	30.63	140	51	27	6	0	0	0
	SACRAMENTO	93	58	100	55	76	1	0.00	0.00	0.00	0.00	0	12.75	107	76	19	5	0	0	0
	SAN DIEGO	75	65	77	64	70	-1	0.00	0.00	0.00	0.00	0	5.01	66	83	70	0	0	0	0
	SAN FRANCISCO	72	55	77	54	63	0	0.00	0.00	0.00	0.00	0	12.44	93	85	65	0	0	0	0
	STOCKTON	95	59	103	56	77	0	0.00	0.00	0.00	0.00	0	12.12	135	70	36	6	0	0	0
CO	ALAMOSA	87	44	89	37	65	1	0.00	-0.19	0.00	0.80	82	5.17	165	68	29	0	0	0	0
	CO SPRINGS	90	59	96	55	75	5	0.26	-0.31	0.26	2.34	66	10.27	111	69	17	5	0	1	0
	DENVER INTL	92	58	102	51	75	3	0.02	-0.46	0.02	2.40	90	10.22	131	66	17	4	0	1	0
	GRAND JUNCTION	96	59	101	48	78	1	0.00	-0.12	0.00	0.38	59	5.35	117	28	12	6	0	0	0
	PUEBLO	98	61	105	56	80	5	0.01	-0.40	0.01	1.24	57	8.42	130	67	30	7	0	1	0
CT	BRIDGEPORT	84	70	93	64	77	3	0.44	-0.39	0.35	4.31	79	19.85	82	83	59	1	0	2	0
	HARTFORD	88	64	94	56	76	2	0.22	-0.58	0.19	3.13	55	17.07	69	85	57	3	0	2	0
DC	WASHINGTON	91	74	98	70	82	3	0.43	-0.39	0.43	5.30	108	20.64	98	77	45	4	0	1	0
DE	WILMINGTON	87	70	93	62	79	2	0.40	-0.59	0.27	5.63	97	23.49	100	88	51	3	0	3	0
FL	DAYTONA BEACH	94	74	95	73	84	2	0.00	-1.17	0.00	4.20	50	24.20	101	96	54	7	0	0	0
	JACKSONVILLE	96	72	99	70	84	2	0.53	-0.83	0.49	4.70	55	19.16	74	99	49	7	0	2	0
	KEY WEST	91	81	93	76	86	1	0.28	-0.39	0.19	1.72	28	13.37	77	83	67	6	0	3	0
	MIAMI	92	78	93	75	85	1	1.03	-0.21	0.60	11.01	94	31.40	116	85	61	7	0	4	1
	ORLANDO	95	76	96	73	86	4	0.24	-1.44	0.08	8.79	78	28.88	112	86	53	7	0	4	0
	PENSACOLA	88	76	89	73	82	-1	1.10	-0.74	0.63	9.30	88	33.56	95	92	66	0	0	2	1
	TALLAHASSEE	95	73	97	72	84	2	2.24	0.42	0.87	14.65	133	38.04	106	90	67	7	0	4	2
	TAMPA	93	77	94	73	85	2	0.95	-0.48	0.52	12.73	145	28.63	135	85	57	7	0	4	1
	WEST PALM BEACH	93	80	95	78	87	4	0.37	-1.02	0.16	4.93	45	26.30	88	79	58	7	0	3	0
GA	ATHENS	96	71	99	68	83	3	0.02	-0.97	0.02	4.26	69	19.43	71	88	62	7	0	1	0
	ATLANTA	92	72	94	70	82	2	0.03	-1.17	0.03	4.87	78	24.01	83	83	62	6	0	1	0
	AUGUSTA	97	71	101	69	84	3	0.87	-0.01	0.54	3.89	62	22.62	89	87	53	7	0	2	1
	COLUMBUS	94	71	95	69	83	1	0.46	-0.70	0.26	3.01	50	22.45	79	94	41	7	0	6	0
	MACON	97	71	99	69	84	3	0.39	-0.60	0.39	2.47	43	20.43	78	90	36	7	0	1	0
	SAVANNAH	98	75	99	74	86	4	0.02	-1.28	0.02	7.04	83	29.71	115	78	52	7	0	1	0
HI	HILO	86	70	87	68	78	2	2.23	-0.23	1.05	14.81	116	39.75	60	88	75	0	0	4	2
	HONOLULU	89	75	91	74	82	1	0.17	0.08	0.10	0.42	68	4.47	47	79	66	1	0	4	0
	KAHULUI	88	71	89	65	80	1	0.15	0.06	0.05	1.02	249	8.75	78	82	72	0	0	6	0
	LIHUE	82	72	84	70	77	-2	0.49	0.03	0.28	1.92	68	8.35	41	90	84	0	0	5	0
ID	BOISE	83	54	92	47	69	-5	0.28	0.20	0.28	0.46	48	4.98	67	62	37	2	0	1	0
	LEWISTON	80	56	91	51	68	-5	0.32	0.17	0.29	2.56	167	9.37	123	72	45	1	0	2	0
	POCATELLO	82	47	94	39	64	-5	0.14	0.00	0.14	0.19	16	7.00	94	68	35	1	0	1	0
IL	CHICAGO/O'HARE	83	65	90	57	74	1	0.20	-0.54	0.14	4.97	93	18.60	101	85	57	1	0	2	0
	MOLINE	84	66	90	58	75	0	1.81	0.93	1.42	8.67	129	18.67	90	87	68	1	0	3	1
	PEORIA	85	68	90	63	77	2	1.70	0.77	1.70	6.75	113	15.86	81	88	58	1	0	1	1
	ROCKFORD	84	63	92	55	74	1	0.17	-0.75	0.13	3.75	53	15.81	80	91	65	1	0	2	0
	SPRINGFIELD	88	69	91	64	78	2	1.55	0.77	0.98	5.32	96	18.91	97	93	55	3	0	2	2
IN	EVANSVILLE	88	69	91	66	79	0	1.14	0.28	0.81	10.36	170	32.11	124	91	68	2	0	3	1
	FORT WAYNE	86	63	92	57	75	1	0.12	-0.68	0.07	5.65	95	19.84	99	89	48	2	0	2	0
	INDIANAPOLIS	86	66	90	60	76	1	1.23	0.24	0.77	7.14	112	24.64	109	89	55	1	0	3	1
	SOUTH BEND	84	62	92	55	73	0	0.34	-0.50	0.34	4.06	65	19.17	94	91	63	1	0	1	0
IA	BURLINGTON	83	66	90	62	75	-1	1.83	0.81	0.80	5.42	79	16.27	79	98	65	1	0	3	2
	CEDAR RAPIDS	81	63	88	55	72	-3	1.15	0.24	0.64	9.92	150	20.44	113	100	67	0	0	3	2
	DES MOINES	86	67	94	60	77	1	1.70	0.79	0.72	4.38	65	15.62	82	86	65	1	0	3	2
	DUBUQUE	80	62	88	52	71	-1	0.29	-0.51	0.25	9.55	161	20.50	109	94	78	0	0	3	0
	SIOUX CITY	86	62	91	54	74	-1	0.02	-0.72	0.02	2.62	49	18.35	122	90	63	1	0	1	0
	WATERLOO	81	62	89	53	72	-2	1.53	0.59	0.90	10.82	153	21.25	115	91	70	0	0	3	1
KS	CONCORDIA	89	68	96	64	79	0	1.16	0.20	0.61	4.24	70	17.11	104	90	66	4	0	5	1
	DODGE CITY	91	66	96	58	79	-1	0.89	0.19	0.49	7.53	159	18.65	142	87	47	4	0	2	0
	GOODLAND	92	61	101	56	76	1	0.33	-0.47	0.24	2.58	51	9.94	82	85	55	5	0	2	0
	TOPEKA	88	69	93	64	79	1	1.55	0.69	1.08	6.89	99	26.20	133	91	66	2	0	2	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending July 16, 2016

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	92	72	101	67	82	1	0.63	-0.13	0.50	11.23	186	26.79	154	86	65	6	0	3	1
KY	JACKSON	86	68	89	64	77	2	0.17	-0.88	0.14	9.26	131	32.06	116	93	58	0	0	2	0
	LEXINGTON	87	68	90	64	78	2	0.98	-0.12	0.61	7.49	106	26.42	100	88	62	1	0	4	1
	LOUISVILLE	89	72	93	68	80	2	0.82	-0.16	0.60	6.83	115	25.89	101	83	51	3	0	3	1
	PADUCAH	91	72	93	68	81	3	0.45	-0.62	0.23	7.73	110	31.93	112	92	53	6	0	2	0
LA	BATON ROUGE	93	73	96	72	83	1	2.75	1.40	0.87	10.63	127	40.83	115	93	54	6	0	6	1
	LAKE CHARLES	92	77	93	74	85	2	0.98	-0.22	0.97	10.37	117	40.69	132	93	61	7	0	2	1
	NEW ORLEANS	93	77	96	75	85	2	2.10	0.66	0.95	12.68	123	42.00	115	88	70	6	0	5	2
	SHREVEPORT	95	74	98	71	85	2	1.93	0.99	1.93	6.37	87	40.60	135	87	47	7	0	1	1
ME	CARIBOU	80	57	88	50	68	2	1.45	0.61	0.90	7.52	145	23.44	125	91	51	0	0	3	2
	PORTLAND	81	62	91	56	72	3	0.65	-0.09	0.43	5.51	111	21.02	86	91	51	1	0	2	0
MD	BALTIMORE	89	69	96	63	79	2	0.79	-0.07	0.47	6.22	116	24.06	106	83	57	3	0	2	0
MA	BOSTON	85	66	96	59	76	2	0.03	-0.64	0.03	1.98	41	18.32	81	83	51	3	0	1	0
	WORCESTER	80	63	88	56	72	2	0.65	-0.29	0.60	2.83	46	18.54	72	92	51	0	0	2	1
MI	ALPENA	82	59	94	47	70	3	0.09	-0.59	0.05	2.96	74	17.74	125	90	44	2	0	3	0
	GRAND RAPIDS	84	65	91	58	74	3	0.31	-0.51	0.26	2.20	39	19.21	103	85	52	3	0	2	0
	HOUGHTON LAKE	80	58	88	42	69	2	0.26	-0.32	0.23	5.20	122	19.27	137	90	61	0	0	3	0
	LANSING	84	63	92	56	74	4	0.48	-0.12	0.27	2.51	49	15.42	95	82	59	1	0	2	0
	MUSKEGON	82	62	89	53	72	2	0.73	0.26	0.73	3.19	87	17.13	109	87	60	0	0	1	1
	TRAVERSE CITY	83	61	94	48	72	2	0.47	-0.24	0.23	3.17	63	14.76	88	88	44	2	0	4	0
MN	DULUTH	73	57	81	49	65	0	2.61	1.65	2.27	7.91	122	18.02	119	97	72	0	0	6	1
	INT'L FALLS	74	56	79	43	65	-1	0.82	0.04	0.30	8.67	148	16.45	134	93	62	0	0	4	0
	MINNEAPOLIS	82	66	90	61	74	1	0.85	-0.04	0.40	6.63	103	15.55	99	84	55	1	0	5	0
	ROCHESTER	79	62	86	55	71	1	1.13	0.10	0.55	7.77	123	19.46	118	95	69	0	0	7	1
	ST. CLOUD	77	61	82	52	69	-1	4.00	3.27	2.63	7.88	124	14.25	100	98	57	0	0	5	2
MS	JACKSON	94	72	96	71	83	2	1.57	0.50	1.46	6.12	98	38.56	117	92	50	7	0	2	1
	MERIDIAN	96	73	99	72	84	2	1.00	-0.30	0.67	6.09	89	31.08	87	89	62	7	0	3	1
	TUPELO	92	71	95	69	81	0	0.69	-0.17	0.41	7.27	106	29.37	87	89	64	5	0	3	0
MO	COLUMBIA	88	69	90	67	79	2	1.54	0.69	0.93	9.57	160	19.71	89	94	64	2	0	3	1
	KANSAS CITY	87	68	91	64	78	0	1.63	0.59	1.09	8.67	128	29.20	143	88	61	2	0	2	2
	SAINT LOUIS	91	73	95	70	82	2	1.73	0.82	1.15	5.58	96	18.62	86	79	57	4	0	3	2
	SPRINGFIELD	88	69	90	63	78	0	0.55	-0.31	0.43	7.66	107	18.91	78	86	66	2	0	2	0
MT	BILLINGS	80	54	88	52	67	-4	0.14	-0.16	0.09	0.39	15	5.79	62	74	29	0	0	3	0
	BUTTE	69	41	80	34	55	-7	0.79	0.47	0.68	1.85	65	5.38	70	84	33	0	0	2	1
	CUT BANK	72	47	81	42	59	-4	0.61	0.27	0.26	1.90	57	6.38	83	95	40	0	0	6	0
	GLASGOW	74	55	78	53	64	-6	1.17	0.76	0.50	5.41	170	13.69	203	93	70	0	0	6	1
	GREAT FALLS	75	48	82	44	62	-4	0.78	0.48	0.75	1.87	63	7.89	87	87	31	0	0	2	1
	HAVRE	75	53	80	49	64	-4	1.43	1.09	0.79	3.52	130	11.41	164	94	69	0	0	6	2
	MISSOULA	74	46	84	40	60	-6	1.72	1.49	0.70	2.81	122	7.94	98	91	60	0	0	3	2
NE	GRAND ISLAND	87	64	95	59	76	0	0.98	0.29	0.97	2.25	42	16.93	111	88	59	3	0	2	1
	LINCOLN	88	66	94	59	77	-1	0.89	0.10	0.73	4.76	90	17.07	107	91	72	3	0	2	1
	NORFOLK	85	62	92	53	74	-1	0.83	-0.04	0.83	5.86	93	22.31	139	87	70	2	0	1	1
	NORTH PLATTE	87	58	96	53	72	-2	0.71	-0.01	0.69	4.39	91	15.57	127	88	41	1	0	2	1
	OMAHA	88	66	94	58	77	0	1.94	1.06	1.59	4.89	82	17.88	105	86	70	3	0	3	1
	SCOTTSBLUFF	90	58	103	46	74	1	0.15	-0.36	0.15	1.55	40	10.66	100	73	44	4	0	1	0
	VALENTINE	87	58	95	49	73	0	0.59	-0.18	0.59	5.52	116	19.44	165	74	57	2	0	1	1
NV	ELY	88	42	93	31	65	-2	0.00	-0.11	0.00	1.61	185	8.41	150	34	14	4	1	0	0
	LAS VEGAS	105	81	110	76	93	2	0.00	-0.08	0.00	0.66	314	3.51	142	14	11	7	0	0	0
	RENO	90	57	96	50	74	3	0.00	-0.05	0.00	0.00	0	5.21	115	36	17	4	0	0	0
	WINNEMUCCA	88	44	97	35	66	-6	0.00	-0.06	0.00	0.01	1	4.58	91	45	20	4	0	0	0
NH	CONCORD	85	61	93	54	73	3	0.20	-0.54	0.20	2.76	58	15.49	79	91	47	2	0	1	0
NJ	NEWARK	88	71	94	65	80	3	0.69	-0.38	0.57	4.47	78	19.68	78	78	55	3	0	2	1
NM	ALBUQUERQUE	98	67	100	62	83	4	0.00	-0.24	0.00	0.20	18	1.39	37	31	10	7	0	0	0
NY	ALBANY	85	64	91	54	75	4	0.46	-0.31	0.25	5.38	97	16.13	80	90	53	2	0	3	0
	BINGHAMTON	81	61	87	53	71	2	0.26	-0.54	0.12	3.57	63	16.36	79	89	61	0	0	4	0
	BUFFALO	83	66	90	61	75	4	0.00	-0.69	0.00	2.06	38	13.30	65	80	49	1	0	0	0
	ROCHESTER	86	64	94	58	75	4	0.12	-0.53	0.12	1.73	35	13.34	77	81	51	2	0	1	0
	SYRACUSE	84	62	94	55	73	2	0.37	-0.57	0.19	3.26	55	18.02	88	92	51	2	0	4	0
NC	ASHEVILLE	85	65	88	64	75	2	1.41	0.56	0.49	5.96	94	20.84	78	93	68	0	0	7	0
	CHARLOTTE	93	70	97	69	82	2	0.70	-0.14	0.40	3.99	75	19.28	81	88	45	6	0	2	0
	GREENSBORO	91	71	94	69	81	3	0.12	-0.90	0.10	6.09	105	25.06	106	90	49	5	0	2	0
	HATTERAS	88	76	91	74	82	3	0.32	-0.71	0.30	11.54	192	45.60	163	95	68	1	0	2	0
	RALEIGH	91	71	95	69	81	2	3.93	2.95	1.98	13.84	248	33.44	141	91	64	5	0	3	2
	WILMINGTON	92	75	97	73	83	2	1.56	-0.17	1.14	9.13	100	31.81	110	94	55	5	0	5	1
ND	BISMARCK	80	59	87	51	69	-1	1.87	1.29	1.22	7.76	197	14.94	158	87	59	0	0	3	2
	DICKINSON	78	52	87	44	65	-4	2.03	1.52	1.63	5.16	111	9.89	97	94	39	0	0	3	1
	FARGO	77	60	84	52	68	-2	2.36	1.71	2.11	6.87	135	12.34	107	90	62	0	0	4	1
	GRAND FORKS	77	58	85	53	68	-1	1.79	1.10	1.28	6.61	143	13.50	132	94	57	0	0	5	1
	JAMESTOWN	77	58	83	52	67	-3	1.92	1.18	0.98	6.32	133	12.23	118	93	60	0	0	3	2
	WILLISTON	78	58	84	48	68	-1	0.94	0.40	0.34	4.63	129	9.70	118	89	64	0	0	5	0
OH	AKRON-CANTON	87	65	91	59	76	4	0.53	-0.38	0.31	4.57	82	19.24	92	83	52	2	0	2	0
	CINCINNATI	87	66	90	62	76	0	0.54	-0.29	0.25	4.79	75	24.40	100	93	68	1	0	4	0
	CLEVELAND	87	68	95	63	78	6	0.28	-0.52	0.16	3.32	57	19.25	94	78	43	2	0	2	0
	COLUMBUS	87	66	92	61	77	2	0.35	-0.70	0.20	6.15	95	20.88	98	87	61	1	0	2	0
	DAYTON	85	65	91	59	75	1	0.59	-0.25	0.42	5.23	84	21.44	95	93	51	1	0	2	0
	MANSFIELD	86	64	91	60	75	4	0.41	-0.52	0.38	2.82	42	19.22	82	93	45	2	0	2	0

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***** Not Available**

Weather Data for the Week Ending July 16, 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	86	64	92	59	75	2	0.48	-0.14	0.48	3.06	57	16.82	93	86	57	2	0	1	0
	YOUNGSTOWN	85	62	90	56	74	4	0.29	-0.67	0.23	4.78	78	19.88	98	88	54	2	0	2	0
OK	OKLAHOMA CITY	92	73	96	68	82	0	1.14	0.45	1.14	4.74	75	17.15	84	83	53	5	0	1	1
	TULSA	93	74	97	67	84	1	1.29	0.60	1.12	2.77	43	16.62	70	86	59	6	0	2	1
OR	ASTORIA	69	56	71	52	63	3	0.54	0.26	0.46	3.10	92	40.33	111	89	75	0	0	2	0
	BURNS	76	41	90	32	59	-6	0.10	0.02	0.10	0.54	64	4.39	70	69	43	1	1	1	0
	EUGENE	78	52	86	48	65	-1	0.11	-0.04	0.11	1.03	53	20.96	75	85	64	0	0	1	0
	MEDFORD	85	56	94	52	71	-1	0.05	-0.01	0.05	1.02	123	10.00	102	73	29	2	0	1	0
	PENDLETON	81	54	89	52	68	-4	0.07	-0.01	0.07	1.73	177	7.32	101	67	42	0	0	1	0
	PORTLAND	76	58	81	54	67	-1	0.03	-0.13	0.02	1.78	88	21.52	108	77	61	0	0	2	0
	SALEM	77	56	84	52	67	0	0.18	0.05	0.18	1.45	79	21.74	100	78	59	0	0	1	0
PA	ALLENTOWN	88	65	94	58	77	4	0.02	-0.94	0.02	2.71	44	19.44	81	80	49	3	0	1	0
	ERIE	82	68	90	61	75	3	0.15	-0.58	0.12	4.35	71	18.12	87	72	59	1	0	3	0
	MIDDLETOWN	89	71	94	63	80	4	0.10	-0.72	0.10	7.85	137	25.04	112	80	43	2	0	1	0
	PHILADELPHIA	89	71	96	65	80	3	0.25	-0.75	0.12	2.50	46	20.50	89	81	55	3	0	3	0
	PITTSBURGH	87	66	94	60	76	3	0.41	-0.51	0.40	4.02	64	17.64	83	84	40	1	0	2	0
	WILKES-BARRE	87	64	91	54	76	4	0.29	-0.59	0.25	2.40	40	15.22	75	89	44	3	0	3	0
	WILLIAMSPORT	89	65	93	56	77	5	0.57	-0.40	0.42	5.29	78	17.23	76	78	43	3	0	3	0
RI	PROVIDENCE	84	65	93	58	75	2	0.85	0.16	0.53	2.72	55	20.86	83	88	63	1	0	3	1
SC	BEAUFORT	98	77	99	75	87	5	0.08	-1.14	0.07	5.18	60	23.57	92	84	44	7	0	2	0
	CHARLESTON	97	77	100	75	87	5	0.44	-0.93	0.27	3.86	42	24.61	92	86	47	7	0	2	0
	COLUMBIA	99	74	101	73	87	5	1.27	0.03	0.59	3.92	50	17.84	66	83	48	7	0	5	2
	GREENVILLE	94	70	98	68	82	3	1.02	-0.02	0.73	2.48	40	20.01	71	90	42	6	0	4	1
SD	ABERDEEN	81	55	86	49	68	-4	2.26	1.59	1.19	4.11	81	11.05	93	88	59	0	0	3	2
	HURON	85	58	88	53	72	-1	0.01	-0.65	0.01	2.41	50	11.22	87	85	42	0	0	1	0
	RAPID CITY	85	54	93	51	70	-1	0.29	-0.16	0.22	1.72	44	6.36	60	74	34	1	0	3	0
	SIOUX FALLS	84	60	91	51	72	-1	0.17	-0.48	0.16	2.54	50	14.03	101	94	62	1	0	2	0
TN	BRISTOL	88	65	91	61	76	2	0.12	-0.87	0.07	2.86	47	19.77	81	96	46	2	0	2	0
	CHATTANOOGA	94	72	96	71	83	3	0.02	-1.11	0.02	2.36	36	19.60	62	84	58	7	0	1	0
	KNOXVILLE	89	70	93	69	80	2	0.08	-1.03	0.07	7.91	121	27.18	94	90	50	2	0	2	0
	MEMPHIS	92	74	95	72	83	0	0.36	-0.64	0.36	3.93	59	39.02	123	86	52	6	0	1	0
	NASHVILLE	91	72	95	70	81	2	0.26	-0.61	0.19	9.41	155	23.85	86	85	50	5	0	2	0
TX	ABILENE	99	75	102	68	87	4	0.00	-0.34	0.00	3.53	89	21.33	178	80	46	7	0	0	0
	AMARILLO	101	70	108	62	85	7	1.54	0.96	1.54	2.93	63	8.82	82	71	24	7	0	1	1
	AUSTIN	99	77	100	74	88	4	0.04	-0.37	0.04	2.67	55	30.96	168	88	58	7	0	1	0
	BEAUMONT	95	77	96	75	86	3	0.19	-1.04	0.15	10.13	106	39.63	124	95	53	7	0	3	0
	BROWNSVILLE	96	79	97	78	88	4	0.00	-0.41	0.00	2.98	74	12.97	109	94	60	7	0	0	0
	CORPUS CHRISTI	94	80	95	77	87	3	0.00	-0.41	0.00	2.95	64	21.17	138	93	63	7	0	0	0
	DEL RIO	103	78	105	76	91	6	0.00	-0.46	0.00	2.93	85	11.54	116	74	45	7	0	0	0
	EL PASO	105	77	108	71	91	7	0.05	-0.26	0.05	0.38	25	1.02	31	34	12	7	0	1	0
	FORT WORTH	96	76	99	71	86	1	0.43	-0.01	0.43	6.80	160	23.56	118	78	45	7	0	1	0
	GALVESTON	91	82	92	79	87	3	0.00	-0.79	0.00	7.94	134	28.47	132	89	66	7	0	0	0
	HOUSTON	97	79	99	77	88	4	0.00	-0.71	0.00	13.40	187	42.35	163	87	57	7	0	0	0
	LUBBOCK	103	73	108	67	88	8	0.31	-0.17	0.28	1.62	39	6.89	71	65	37	7	0	3	0
	MIDLAND	104	76	108	72	90	8	0.01	-0.40	0.01	3.19	120	6.93	103	58	34	7	0	1	0
	SAN ANGELO	101	76	103	72	88	6	0.00	-0.22	0.00	7.02	225	22.65	210	77	42	7	0	0	0
	SAN ANTONIO	99	78	100	76	88	4	0.00	-0.44	0.00	2.39	44	24.21	134	85	38	7	0	0	0
	VICTORIA	96	77	98	73	86	2	0.02	-0.66	0.02	3.20	48	23.42	109	93	61	7	0	1	0
	WACO	98	77	99	73	88	3	0.00	-0.50	0.00	4.59	107	27.24	147	81	53	7	0	0	0
	WICHITA FALLS	97	73	101	67	85	0	1.15	0.82	1.11	5.01	108	21.50	133	82	59	7	0	3	1
UT	SALT LAKE CITY	90	62	98	51	76	-1	0.00	-0.15	0.00	0.52	49	8.17	83	41	13	4	0	0	0
VT	BURLINGTON	83	64	91	57	73	2	0.92	0.04	0.39	4.86	90	15.71	88	84	49	1	0	3	0
VA	LYNCHBURG	87	66	92	62	77	2	0.33	-0.69	0.25	7.26	119	26.91	112	96	61	1	0	3	0
	NORFOLK	90	75	97	73	83	4	0.20	-0.95	0.16	7.80	124	30.03	121	86	55	3	0	2	0
	RICHMOND	90	70	96	67	80	2	0.38	-0.67	0.38	9.30	160	29.93	127	87	63	3	0	1	0
	ROANOKE	88	68	91	63	78	2	0.21	-0.70	0.21	8.27	145	26.00	110	85	59	2	0	1	0
	WASH/DULLES	90	68	95	62	79	3	0.16	-0.64	0.16	7.45	126	25.11	110	82	57	4	0	1	0
WA	OLYMPIA	73	51	77	46	62	0	0.00	-0.19	0.00	1.68	72	27.06	100	90	63	0	0	0	0
	QUILLAYUTE	65	53	68	49	59	1	0.07	-0.44	0.06	5.63	119	57.46	105	96	86	0	0	2	0
	SEATTLE-TACOMA	74	57	76	56	66	1	0.00	-0.18	0.00	2.16	110	23.23	120	85	68	0	0	0	0
	SPOKANE	76	54	85	51	65	-3	0.02	-0.15	0.02	0.71	45	8.57	92	67	33	0	0	1	0
	YAKIMA	86	54	92	49	70	1	0.00	-0.04	0.00	0.39	53	5.84	131	57	33	1	0	0	0
WV	BECKLEY	81	63	83	58	72	1	1.13	0.03	0.82	12.70	200	31.73	132	92	67	0	0	4	1
	CHARLESTON	87	66	90	61	76	2	0.55	-0.55	0.35	7.27	111	27.17	111	96	53	1	0	4	0
	ELKINS	84	61	87	56	72	2	1.28	0.18	0.90	8.10	114	26.52	102	93	49	0	0	3	1
	HUNTINGTON	87	67	91	63	77	2	0.85	-0.14	0.40	10.68	176	30.39	127	92	57	2	0	4	0
WI	EAU CLAIRE	81	62	89	52	72	1	0.37	-0.49	0.24	8.57	136	20.98	126	93	54	0	0	4	0
	GREEN BAY	80	60	88	50	70	0	0.97	0.21	0.39	5.67	109	16.85	114	97	67	0	0	5	0
	LA CROSSE	84	66	93	60	75	1	0.18	-0.78	0.10	8.67	139	21.27	124	88	48	1	0	3	0
	MADISON	82	63	90	51	73	1	0.03	-0.84	0.01	6.00	99	19.93	114	85	60	1	0	3	0
	MILWAUKEE	83	66	90	57	74	2	0.02	-0.77	0.02	3.64	67	15.45	84	82	62	2	0	1	0
WY	CASPER	87	47	95	43	67	-3	0.00	-0.30	0.00	1.17	56	10.63	131	73	30	2	0	0	0
	CHEYENNE	85	54	95	45	69	2	0.00	-0.50	0.00	2.62	81	12.48	135	64	32	2	0	0	0
	LANDER	86	52	91	46	69	-1	0.00	-0.19	0.00	0.57	36	16.72	200	53	12	3	0	0	0
	SHERIDAN	83	50	90	40	66	-2	0.16	-0.10	0.16	0.56	21	9.91	107	78	40	1	0	1	0

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

National Agricultural Summary

July 11 – 17, 2016

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Cool weather dominated from the Northwest to the northern Plains. Temperatures averaged more than 6°F below normal in much of Idaho and Montana. Above-average temperatures were noted across most of the South and east of the Mississippi River. Temperatures averaged more than 9°F above normal in parts of New Mexico and Texas. Rain in the upper Midwest boosted soil moisture and aided developing row crops. Parts of Minnesota and Wisconsin received more than 6 inches of rain. Precipitation across the rest of the nation was generally within 1.5 inches of normal, with scattered storms in the Mississippi Valley and southern Atlantic States.

Corn: By week's end, 56 percent of the crop was at or beyond the silking stage, 9 percentage points ahead of last year and 10 points ahead of the 5-year average. Favorable weather accelerated corn development in the western Corn Belt, with silking advancing 26 percentage points or more during the week in Iowa, Minnesota, Nebraska, and Wisconsin. Overall, 76 percent of the corn was reported in good to excellent condition, unchanged from last week but 7 percentage points above the same time last year. Illinois corn was rated at 80 percent in the good to excellent categories, improving by 4 percentage points from last week.

Soybeans: Fifty-nine percent of this year's soybeans were at or beyond the blooming stage by July 17, eight percentage points ahead of last year and 10 points ahead of the 5-year average. All major estimating states had double-digit blooming advances during the last week except Louisiana and North Carolina. By week's end, 18 percent of the soybean crop was setting pods, 4 percentage points ahead of last year and 5 points ahead of the 5-year average. Overall, 71 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.

Winter Wheat: Harvest of this year's winter wheat crop was 76 percent complete by July 17, four percentage points ahead of last year and 3 points ahead of the 5-year average. Harvest progress was well ahead of normal in the central Great Plains, 31 percentage points ahead of the 5-year average in South Dakota and 23 points ahead in Nebraska. Winter wheat harvest was complete or nearing completion in ten of the 18 estimating states.

Cotton: By week's end, 77 percent of this year's cotton was at or beyond the squaring stage, 5 percentage points ahead of last year and slightly ahead of the 5-year average. Warm weather spurred cotton development in the southern Great Plains, with squaring progress advancing 28 percentage points during the week in Texas. Nationally, 28 percent of the crop was setting bolls, slightly behind last year and 2 percentage points behind the 5-year average. Overall, 54 percent of the cotton was reported in good to excellent condition, unchanged from last week but 3 percentage points below the same time last year.

Sorghum: By July 17, thirty-nine percent of the sorghum was at or beyond the heading stage, 7 percentage points ahead of last year and 6 points ahead of the 5-year average. By week's end, 19 percent of the sorghum was at or beyond the coloring stage, equal to last year but 4 percentage points behind the 5-year average. Producers in the Southern Low Plains of Texas reported sugarcane aphids in some sorghum fields. Overall, 68 percent of the sorghum was reported in good to excellent condition, down slightly from last week but slightly better than at the same time last year.

Rice: Forty-one percent of this year's rice was at or beyond the heading stage by week's end, 4 percentage points ahead of last year and 11 points ahead of the 5-year average. Overall, 68 percent of the rice was reported in good to excellent condition, unchanged from last week but 4 percentage points below the same time last year.

Small Grains: By week's end, producers had harvested 22 percent of the nation's oat crop. This was 7 percentage points ahead last year and 2 points ahead of the 5-year average. Harvest progress was ahead of the 5-year average in all estimating states except Minnesota, Pennsylvania, and Wisconsin. Overall, 66 percent of the oat crop was reported in good to excellent condition, down slightly from last week and slightly below the same time last year.

Ninety-five percent of the barley was at or beyond the heading stage by week's end, 4 percentage points behind last year but 9 points ahead of the 5-year average. In North Dakota, the barley crop advanced to 98 percent headed, 19 percentage points ahead of the 5-year average. Overall, 73 percent of the barley was reported in good to excellent condition, down slightly from last week but 2 percentage points above the same time last year.

By week's end, 96 percent of the spring wheat was at or beyond the heading stage, slightly ahead of last year and 15 percentage points ahead of the 5-year average. Heading progress was 16 percentage points ahead of the 5-year average in Montana and 22 points ahead in North Dakota. Overall, 69 percent of the spring wheat was reported in good to excellent condition, down slightly from last week and slightly below the same time last year.

Other Crops: Seventy-seven percent of the peanut crop was pegging by July 17, eight percentage points ahead of last year and 12 points ahead of the 5-year average. Overall, 69 percent of the peanut crop was reported in good to excellent condition, down slightly from last week and 5 percentage points below the same time last year. In Alabama, good to excellent peanut condition ratings were 36 percentage points below last year.

Crop Progress and Condition

Week Ending July 17, 2016

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

Soybeans Percent Blooming

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
AR	72	73	84	62
IL	49	39	60	54
IN	46	38	56	50
IA	56	40	66	55
KS	28	20	38	34
KY	32	18	31	34
LA	87	81	89	86
MI	51	21	43	47
MN	72	48	72	51
MS	73	66	77	79
MO	18	28	43	31
NE	56	28	54	56
NC	34	25	32	27
ND	65	50	67	49
OH	43	25	49	40
SD	47	52	65	53
TN	38	35	55	41
WI	43	45	70	35
18 Sts	51	40	59	49

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

Soybeans Percent Setting Pods

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
AR	38	44	57	34
IL	12	7	15	13
IN	14	2	19	13
IA	12	6	20	10
KS	5	1	5	4
KY	9	0	8	9
LA	73	54	68	67
MI	8	1	8	7
MN	17	3	12	10
MS	44	32	50	46
MO	1	2	10	4
NE	13	0	1	13
NC	12	2	14	9
ND	17	6	19	11
OH	8	0	8	5
SD	5	5	17	7
TN	16	10	28	16
WI	9	5	23	5
18 Sts	14	7	18	13

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

Soybean Condition by Percent

	VP	P	F	G	EX
AR	7	7	30	43	13
IL	2	4	18	59	17
IN	2	5	21	53	19
IA	1	3	16	62	18
KS	1	6	33	54	6
KY	1	5	24	58	12
LA	0	5	21	66	8
MI	4	9	27	49	11
MN	1	3	18	61	17
MS	1	8	24	47	20
MO	2	6	25	56	11
NE	1	3	19	62	15
NC	0	4	25	57	14
ND	1	5	22	61	11
OH	1	6	27	55	11
SD	1	6	27	59	7
TN	0	4	20	51	25
WI	0	1	14	56	29
18 Sts	2	5	22	57	14
Prev Wk	1	5	23	57	14
Prev Yr	3	8	27	50	12

Corn Percent Silking

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
CO	22	7	16	19
IL	69	53	77	68
IN	43	24	50	51
IA	45	29	67	42
KS	59	47	63	59
KY	68	62	75	61
MI	23	3	22	27
MN	36	16	51	30
MO	65	81	92	71
NE	51	29	55	48
NC	92	89	93	94
ND	14	17	25	18
OH	36	7	31	38
PA	48	11	31	40
SD	32	19	37	23
TN	86	81	91	86
TX	75	67	74	81
WI	17	4	33	19
18 Sts	47	32	56	46

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	1	2	14	65	18
IL	2	3	15	58	22
IN	3	5	18	53	21
IA	1	3	15	58	23
KS	1	5	25	58	11
KY	2	5	21	57	15
MI	2	10	29	46	13
MN	1	3	14	61	21
MO	2	4	21	55	18
NE	1	3	16	62	18
NC	3	5	23	53	16
ND	1	4	17	63	15
OH	1	5	30	53	11
PA	1	4	24	57	14
SD	3	8	26	54	9
TN	2	7	23	45	23
TX	1	5	31	51	12
WI	0	2	12	52	34
18 Sts	1	4	19	57	19
Prev Wk	1	4	19	58	18
Prev Yr	2	7	22	52	17

Winter Wheat Percent Harvested

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
AR	100	100	100	100
CA	94	97	97	91
CO	62	33	70	66
ID	10	2	5	4
IL	89	95	97	94
IN	68	83	96	86
KS	95	91	98	97
MI	6	15	43	37
MO	86	98	98	96
MT	10	0	2	4
NE	52	38	75	52
NC	100	98	99	97
OH	51	83	96	76
OK	98	98	100	99
OR	41	12	22	16
SD	17	21	53	22
TX	96	97	100	99
WA	27	4	10	9
18 Sts	72	66	76	73

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

Crop Progress and Condition

Week Ending July 17, 2016

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

Cotton Percent Squaring

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
AL	90	85	90	80
AZ	89	85	90	88
AR	99	97	100	99
CA	94	83	85	89
GA	86	81	90	82
KS	31	34	44	54
LA	95	85	91	97
MS	88	75	82	90
MO	76	76	78	79
NC	87	68	83	88
OK	41	30	43	46
SC	68	60	75	73
TN	72	75	83	76
TX	63	43	71	69
VA	83	58	73	86
15 Sts	72	57	77	76

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

Cotton Percent Setting Bolls

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
AL	46	38	51	35
AZ	46	40	50	51
AR	69	66	86	69
CA	75	0	5	60
GA	49	33	52	45
KS	1	5	5	7
LA	64	46	65	71
MS	51	33	51	46
MO	15	7	7	21
NC	38	12	24	40
OK	6	7	10	13
SC	29	12	24	31
TN	22	17	33	24
TX	19	13	18	20
VA	19	5	21	15
15 Sts	29	19	28	30

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

Cotton Condition by Percent

	VP	P	F	G	EX
AL	1	4	47	43	5
AZ	4	1	4	54	37
AR	5	2	16	45	32
CA	0	0	25	25	50
GA	2	6	29	52	11
KS	0	1	32	64	3
LA	0	5	17	72	6
MS	2	8	34	44	12
MO	2	9	46	39	4
NC	3	7	28	56	6
OK	0	0	46	47	7
SC	0	1	59	34	6
TN	1	2	19	60	18
TX	1	12	40	41	6
VA	0	4	21	74	1
15 Sts	1	9	36	45	9
Prev Wk	1	10	35	45	9
Prev Yr	1	7	35	46	11

Sorghum Percent Headed

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
AR	73	57	74	74
CO	4	3	6	9
IL	23	1	27	22
KS	2	11	13	5
LA	95	91	95	94
MO	21	14	24	21
NE	15	0	7	8
NM	3	3	10	2
OK	32	19	30	28
SD	27	15	23	18
TX	64	63	76	70
11 Sts	32	31	39	33

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

Sorghum Percent Coloring

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
AR	22	1	12	21
CO	0	0	0	0
IL	1	0	0	1
KS	0	0	1	0
LA	57	38	62	61
MO	0	0	1	1
NE	0	0	0	1
NM	0	0	0	0
OK	2	1	2	3
SD	0	0	1	0
TX	48	44	48	60
11 Sts	19	16	19	23

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

Sorghum Condition by Percent

	VP	P	F	G	EX
AR	3	9	27	46	15
CO	0	0	34	62	4
IL	3	6	25	61	5
KS	0	2	23	66	9
LA	0	6	27	55	12
MO	0	3	30	61	6
NE	0	0	18	68	14
NM	0	2	77	20	1
OK	0	3	23	71	3
SD	0	2	35	63	0
TX	0	4	34	45	17
11 Sts	0	3	29	57	11
Prev Wk	0	2	29	58	11
Prev Yr	3	4	26	56	11

Crop Progress and Condition

Week Ending July 17, 2016

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

Oats Percent Harvested

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
IA	24	16	35	30
MN	1	0	2	6
NE	25	26	49	43
ND	0	0	3	2
OH	6	7	40	19
PA	6	0	3	7
SD	13	20	38	15
TX	97	97	100	97
WI	5	2	8	10
9 Sts	15	13	22	20

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

Oat Condition by Percent

	VP	P	F	G	EX
IA	0	2	19	64	15
MN	1	3	15	61	20
NE	1	1	26	64	8
ND	3	9	20	63	5
OH	1	2	24	66	7
PA	1	5	21	64	9
SD	1	6	29	61	3
TX	8	15	38	34	5
WI	0	1	14	55	30
9 Sts	3	7	24	55	11
Prev Wk	3	6	24	56	11
Prev Yr	4	7	22	55	12

Barley Percent Headed

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
ID	99	82	88	92
MN	98	92	97	89
MT	99	86	95	86
ND	95	97	98	79
WA	100	92	96	93
5 Sts	99	89	95	86

These 5 States planted 82% of last year's barley acreage.

Peanuts Percent Pegging

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
AL	78	53	61	59
FL	81	80	85	71
GA	71	79	90	66
NC	64	40	65	75
OK	34	50	55	61
SC	81	80	84	74
TX	33	34	42	51
VA	39	25	37	52
8 Sts	69	67	77	65

These 8 States planted 97% of last year's peanut acreage.

Peanut Condition by Percent

	VP	P	F	G	EX
AL	0	0	53	41	6
FL	0	5	28	60	7
GA	1	4	23	55	17
NC	0	2	16	68	14
OK	0	0	8	90	2
SC	0	0	16	66	18
TX	0	1	41	53	5
VA	0	0	8	91	1
8 Sts	0	3	28	57	12
Prev Wk	0	2	28	58	12
Prev Yr	0	2	24	59	15

Barley Condition by Percent

	VP	P	F	G	EX
ID	0	1	22	66	11
MN	4	7	25	54	10
MT	1	4	33	40	22
ND	1	3	16	69	11
WA	0	0	11	83	6
5 Sts	1	3	23	58	15
Prev Wk	1	3	22	59	15
Prev Yr	1	5	23	52	19

Rice Percent Headed

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
AR	27	14	34	22
CA	18	25	25	7
LA	82	70	81	75
MS	48	29	43	42
MO	32	3	3	14
TX	60	71	83	66
6 Sts	37	28	41	30

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

Rice Condition by Percent

	VP	P	F	G	EX
AR	3	8	27	44	18
CA	0	0	15	75	10
LA	0	5	30	58	7
MS	0	2	23	46	29
MO	1	3	23	51	22
TX	3	4	36	48	9
6 Sts	2	5	25	53	15
Prev Wk	2	5	25	53	15
Prev Yr	2	4	22	49	23

Spring Wheat Percent Headed

	Prev Year	Prev Week	Jul 17 2016	5-Yr Avg
ID	95	89	96	90
MN	99	94	97	91
MT	96	75	90	74
ND	92	96	98	76
SD	96	99	100	96
WA	100	95	100	95
6 Sts	95	91	96	81

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	22	68	9
MN	3	6	21	52	18
MT	1	4	30	50	15
ND	2	5	20	64	9
SD	3	11	42	41	3
WA	0	1	14	78	7
6 Sts	2	5	24	58	11
Prev Wk	2	5	23	60	10
Prev Yr	1	6	23	55	15

Crop Progress and Condition

Week Ending July 17, 2016

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

Pasture and Range Condition by Percent
Week Ending MMDD, YYYY

	VP	P	F	G	EX		VP	P	F	G	EX
AL	8	16	32	39	5	NH	1	21	65	13	0
AZ	16	19	40	22	3	NJ	1	2	41	51	5
AR	2	8	33	47	10	NM	3	21	47	27	2
CA	10	25	25	30	10	NY	4	9	42	39	6
CO	3	5	22	58	12	NC	3	12	37	42	6
CT	14	39	40	7	0	ND	4	10	26	54	6
DE	3	8	38	46	5	OH	3	16	29	43	9
FL	3	6	26	47	18	OK	1	7	35	49	8
GA	14	20	38	24	4	OR	13	22	27	35	3
ID	1	3	31	51	14	PA	8	16	38	33	5
IL	1	6	19	60	14	RI	0	12	35	53	0
IN	2	5	21	59	13	SC	10	24	20	42	4
IA	2	7	30	50	11	SD	5	14	34	45	2
KS	1	4	23	63	9	TN	4	16	32	42	6
KY	1	6	22	59	12	TX	3	11	37	39	10
LA	1	9	35	49	6	UT	1	8	35	48	8
ME	0	9	15	36	40	VT	10	35	41	14	0
MD	1	5	24	63	7	VA	2	6	30	54	8
MA	15	40	35	10	0	WA	2	8	18	63	9
MI	5	19	30	38	8	WV	1	5	28	56	10
MN	1	5	15	64	15	WI	1	3	19	57	20
MS	2	11	34	46	7	WY	6	10	21	57	6
MO	1	7	37	49	6	48 Sts	4	10	30	47	9
MT	10	16	36	33	5						
NE	2	2	19	64	13	Prev Wk	3	10	30	48	9
NV	5	10	35	40	10	Prev Yr	3	8	26	49	14

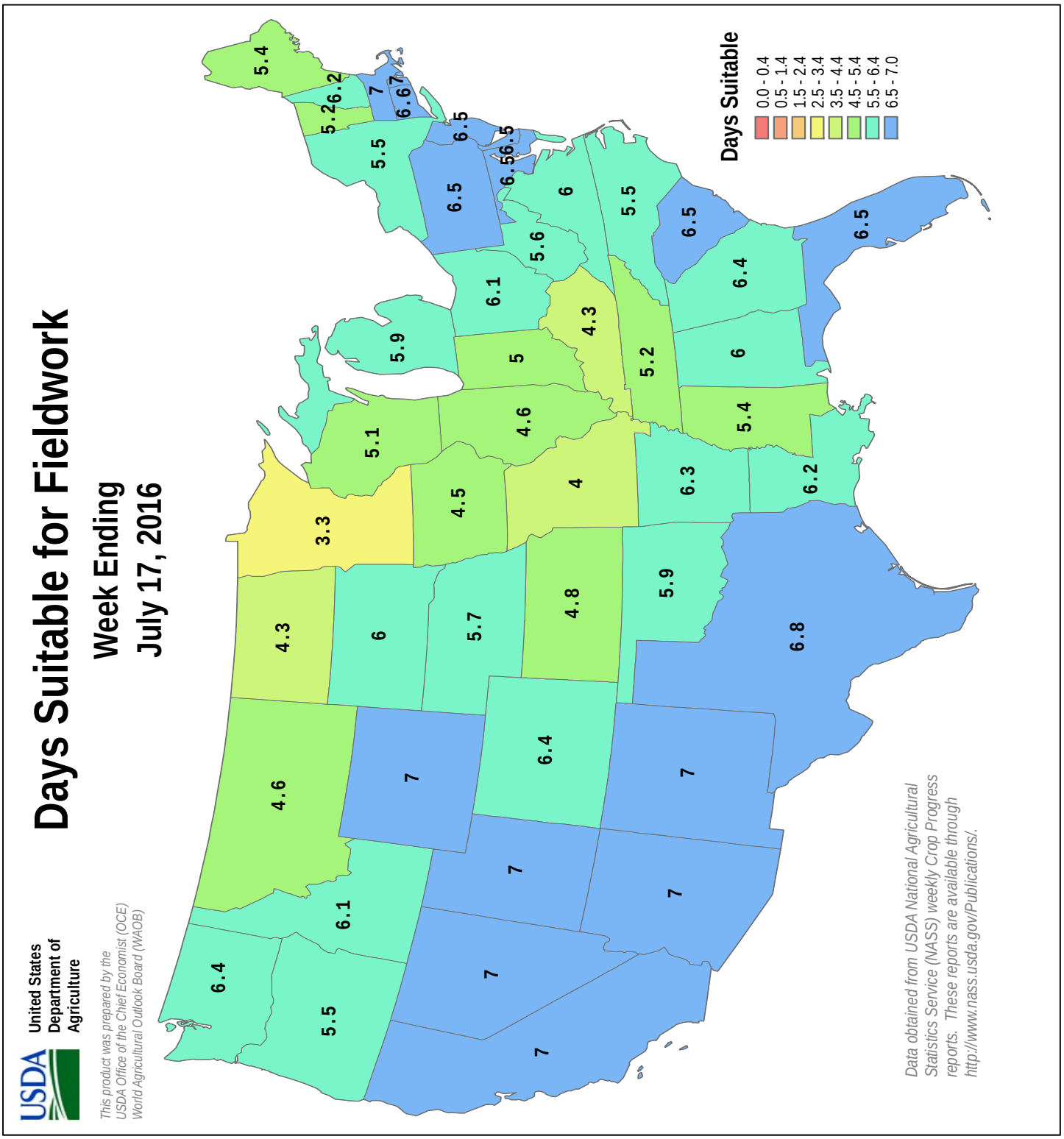
VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

NA - Not Available
*** Revised**

Crop Progress and Condition

Week Ending July 17, 2016

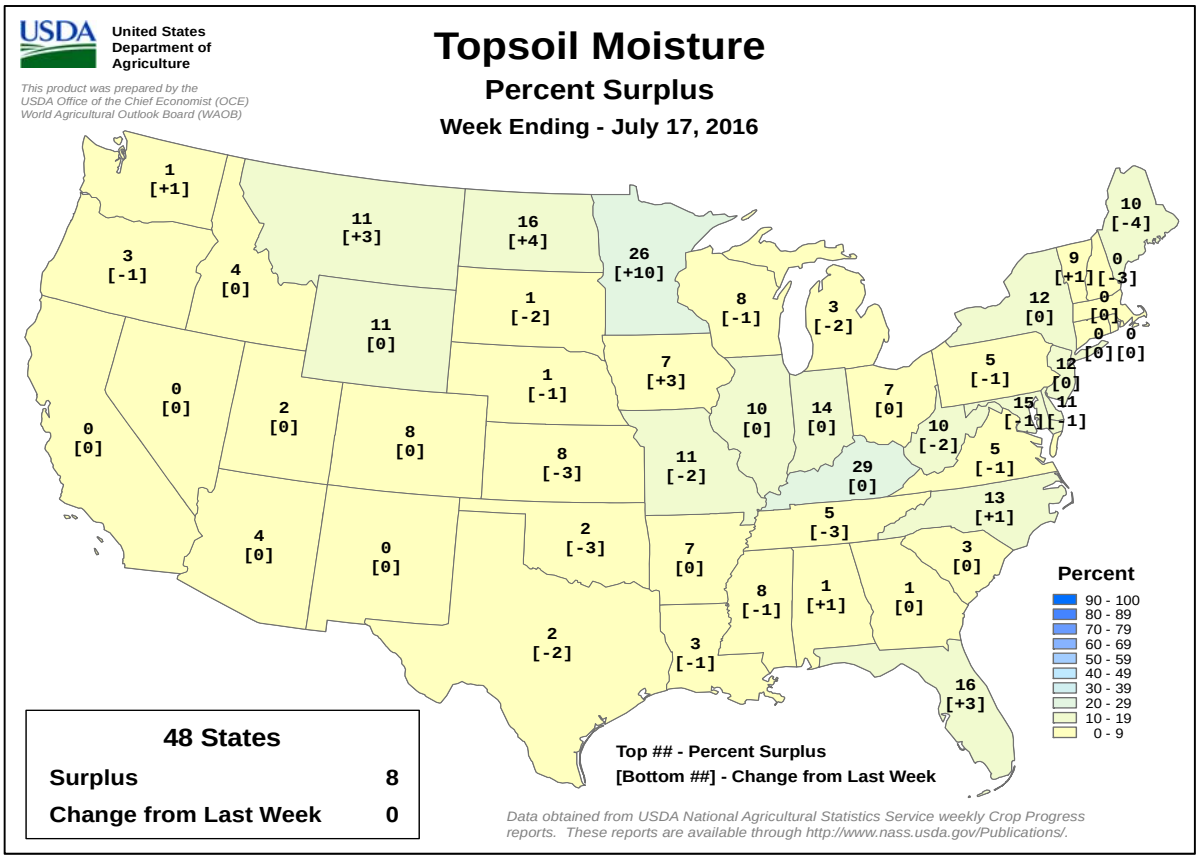
Weekly U.S. Progress and Condition Data provided by USDA/NASS

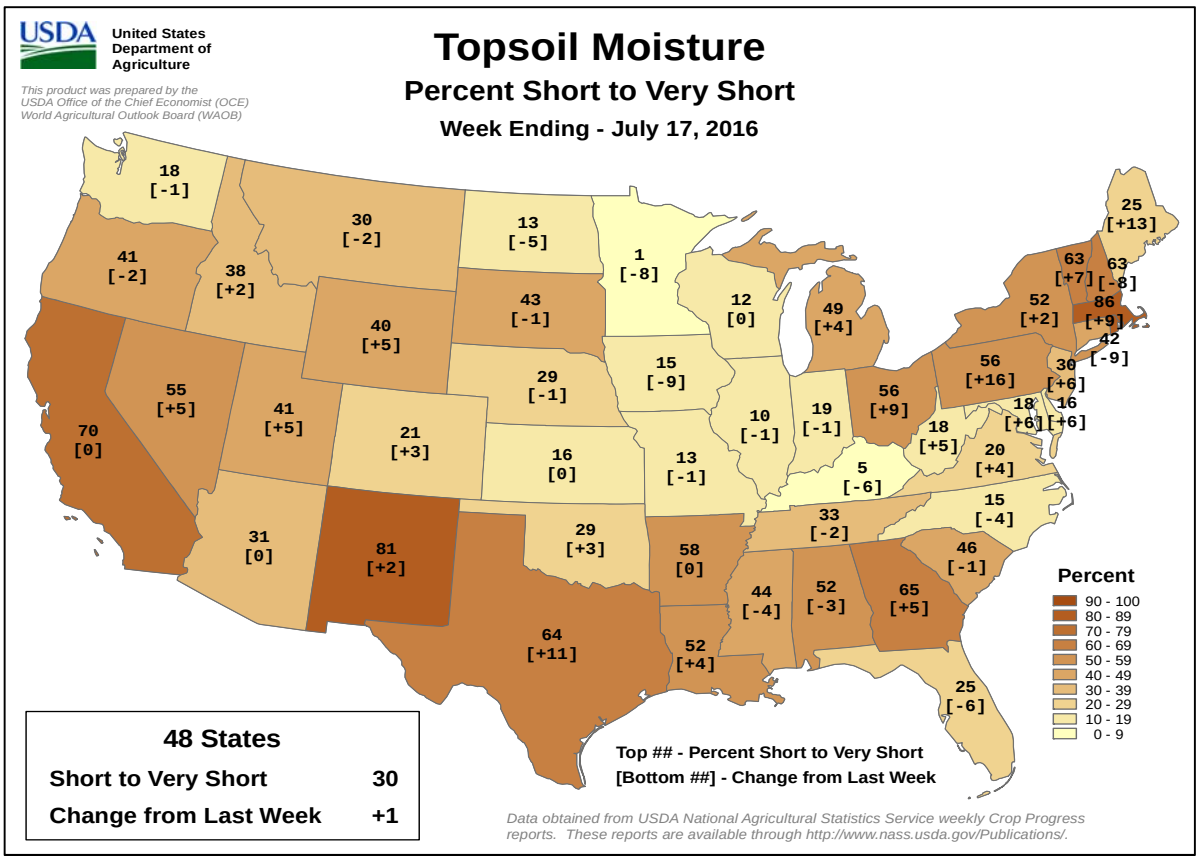


Crop Progress and Condition

Week Ending July 17, 2016

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

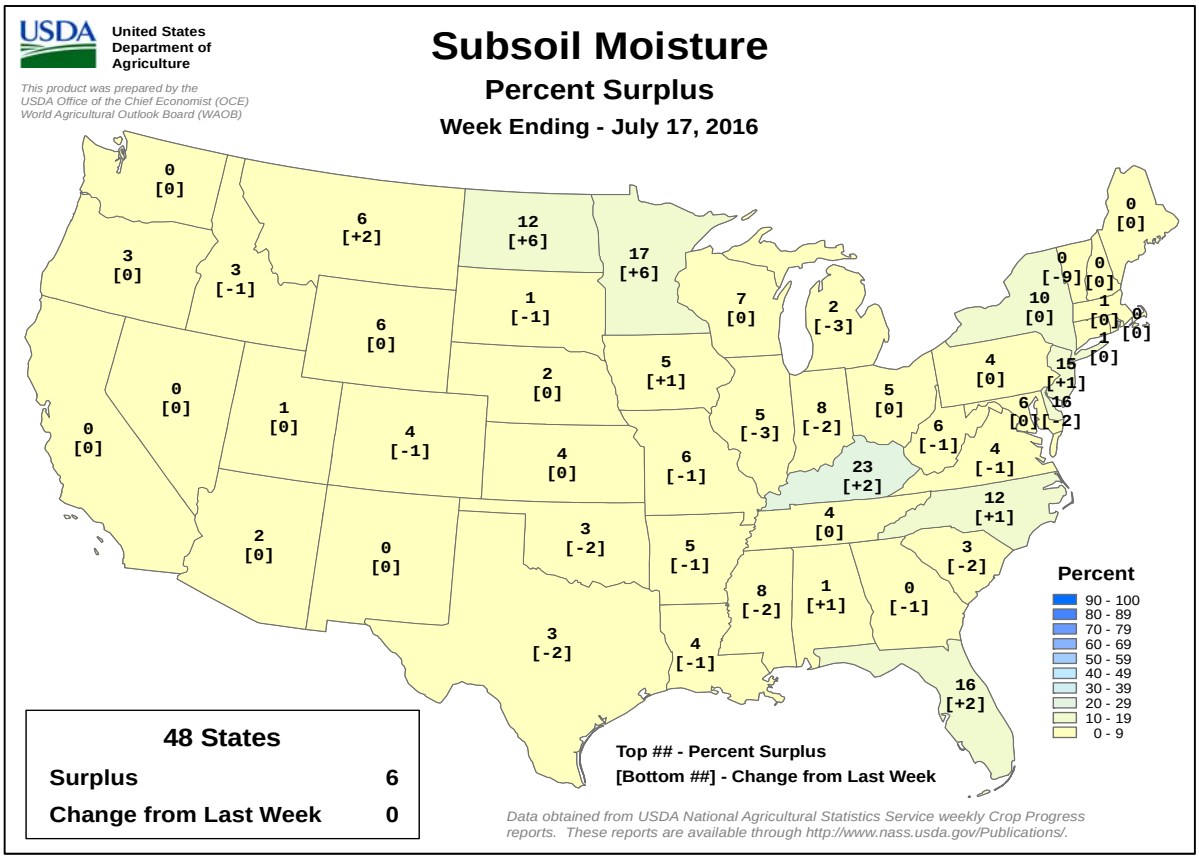


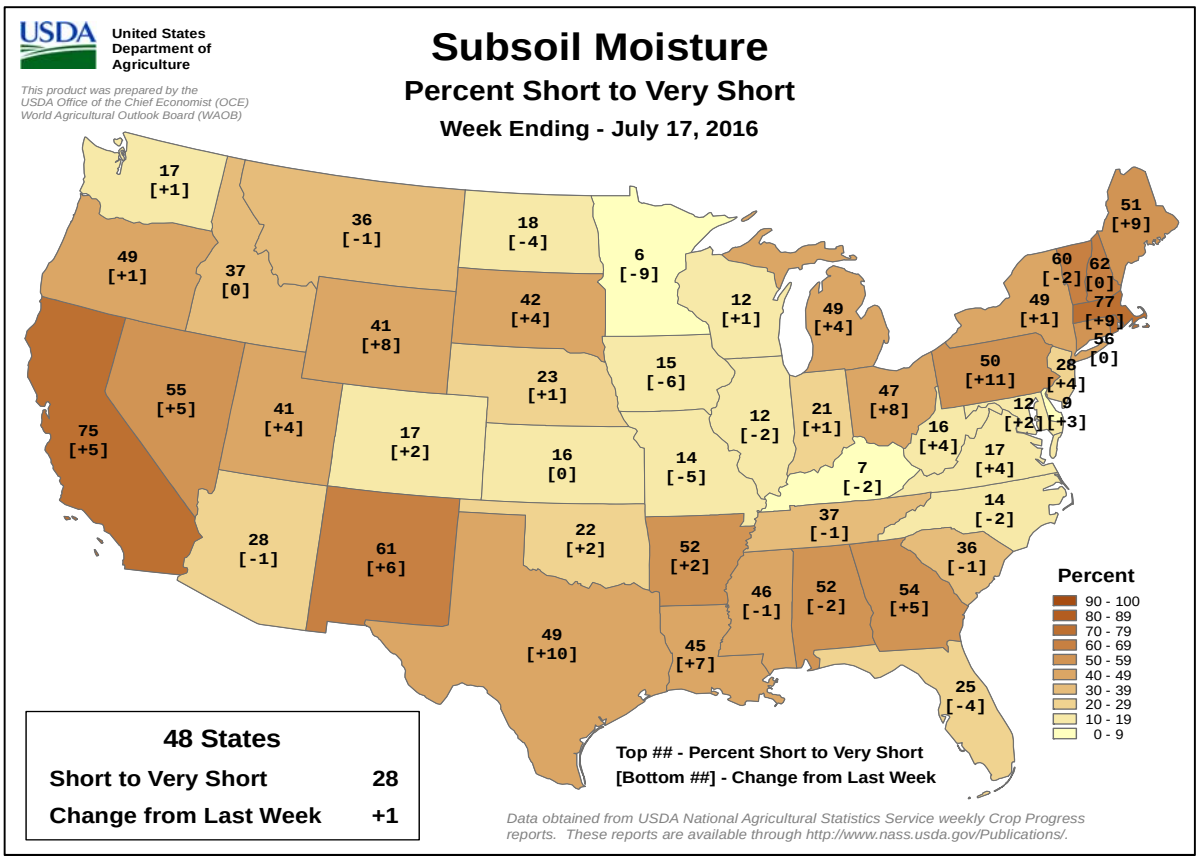


Crop Progress and Condition

Week Ending July 17, 2016

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





International Weather and Crop Summary

July 10-16, 2016

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

HIGHLIGHTS

EUROPE: Rain shifted into eastern Europe, boosting moisture supplies for reproductive summer crops while allowing favorably dry weather to facilitate winter crop harvesting in the west.

WESTERN FSU: Hot, dry weather favored winter wheat drydown and harvesting but increased stress on reproductive corn.

EASTERN FSU: Additional showers maintained ample moisture supplies for heading spring wheat, while heat in the south raised concerns for flowering cotton.

MIDDLE EAST: Locally excessive heat in Turkey was untimely for reproductive cotton and corn, though winter wheat harvesting proceeded without delay.

SOUTH ASIA: Monsoon showers covered most growing areas of India, adding to rainfall totals that are a marked improvement over the last two years.

EAST ASIA: Dryness continued for reproductive corn and soybeans in northeastern China, while heavy showers farther south maintained abundant to excessive soil moisture for summer crops.

SOUTHEAST ASIA: Monsoon showers kept rice and other summer crops adequately watered throughout the region.

AUSTRALIA: Showers persisted in southern and western Australia, favoring winter crop development.

ARGENTINA: Showers overspread the southern winter wheat belt, as drier conditions elsewhere favored summer crop harvests.

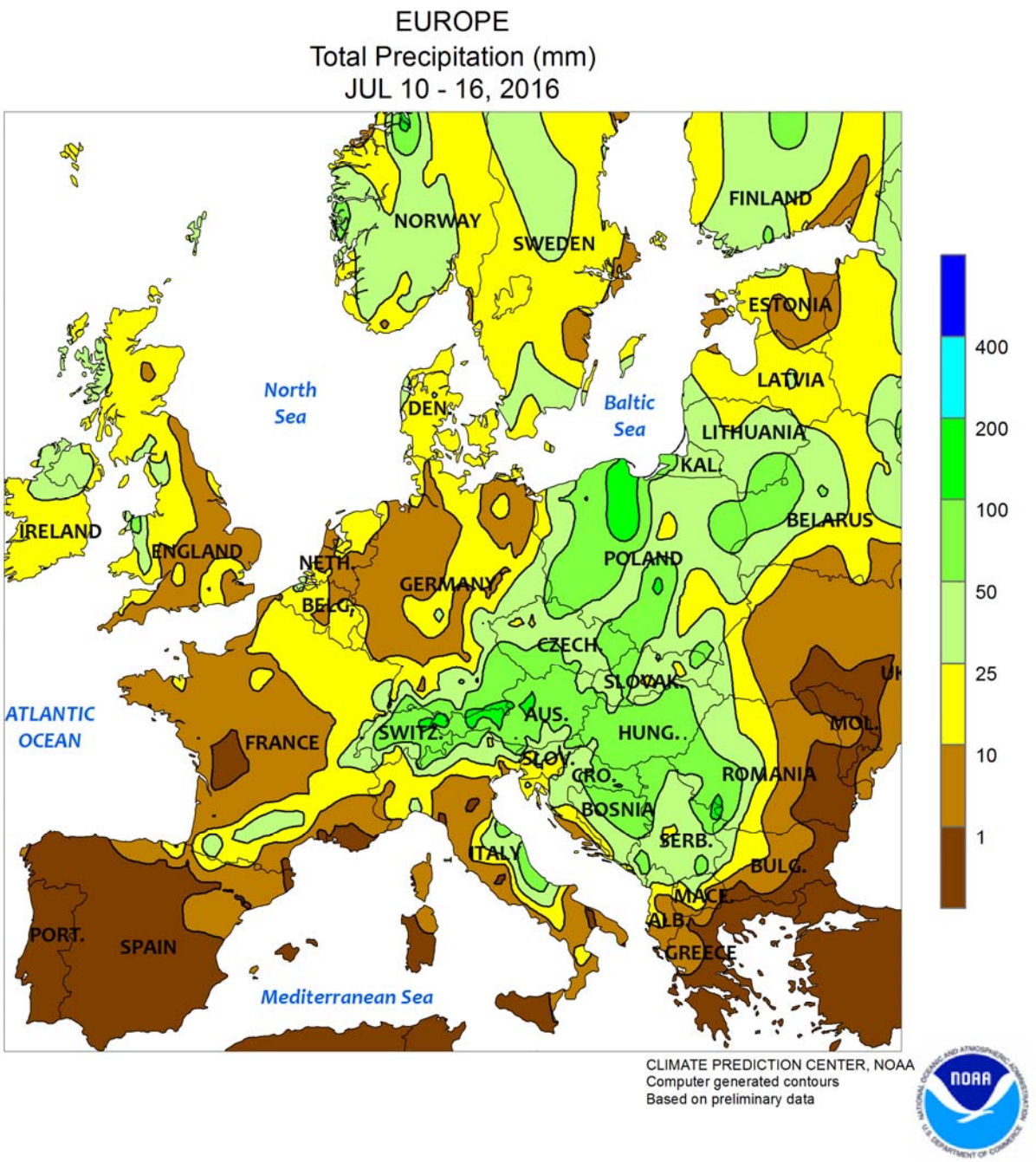
BRAZIL: Rain benefited winter wheat in southern areas, but warmth and dryness fostered rapid maturation of corn and cotton farther north.

MEXICO: Beneficial rain continued across the southern plateau, as well as in the country's northwestern watersheds.

CANADIAN PRAIRIES: Widespread, locally heavy showers maintained overall favorable conditions for spring grains and oilseeds.

SOUTHEASTERN CANADA: Pockets of dryness persisted in key corn and soybean areas.

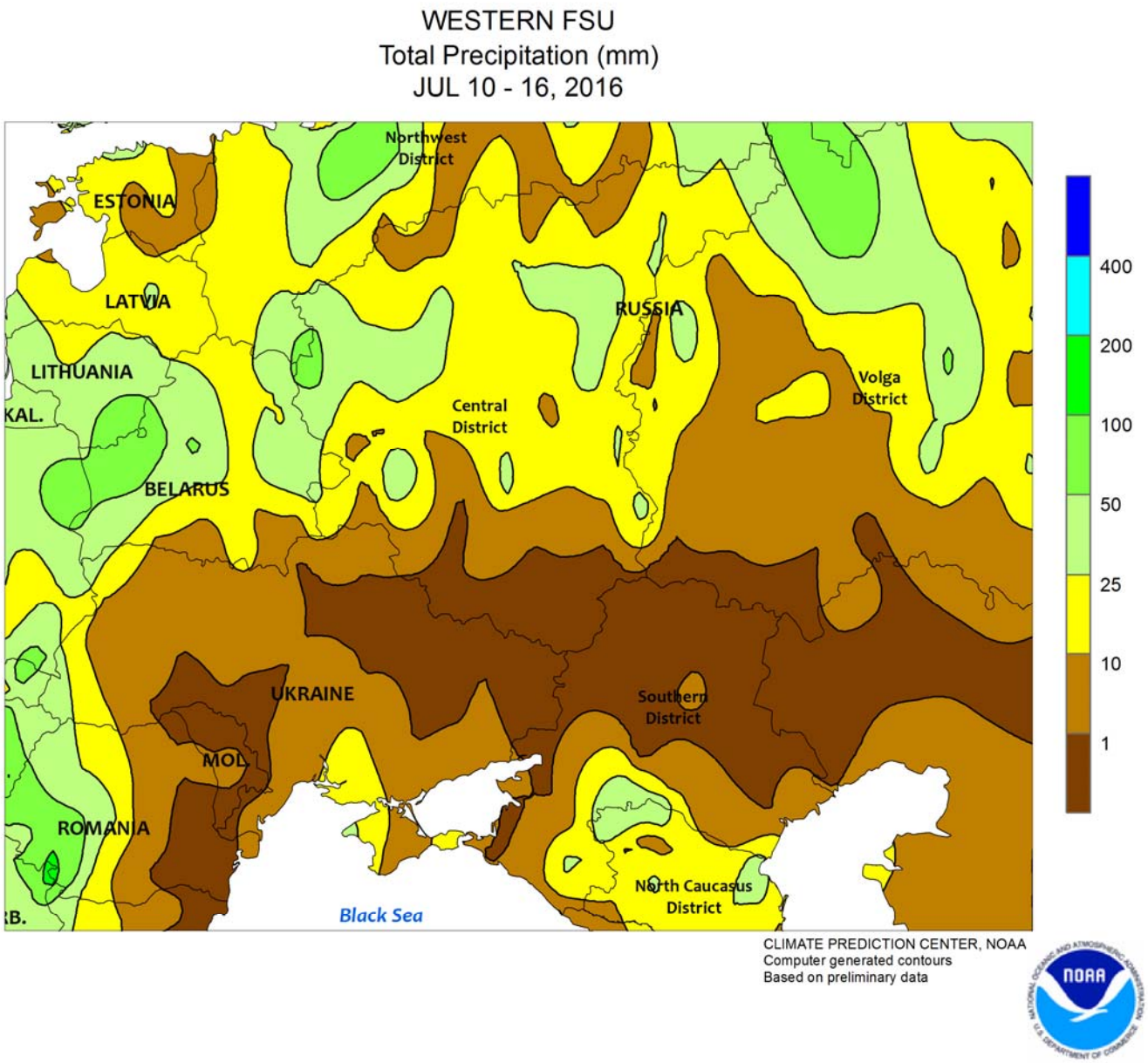
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Rain shifted east and intensified, boosting soil moisture supplies for reproductive summer crops while allowing previously-delayed fieldwork in western growing areas to gain momentum. A developing storm system and its attendant cold front tracked eastward, producing widespread soaking rainfall (25-150 mm, locally more) from northern Italy and southern Germany into eastern Europe, though rain bypassed Greece and eastern portions of the Balkans. The wet weather was beneficial for reproductive spring grains and summer crops, but winter wheat and rapeseed harvesting efforts were temporarily halted by the rainfall. Early-week showers (1-30 mm) in England, France, northern Germany, and the Low Countries were beneficial for reproductive summer crops, with drier conditions later in the period benefiting winter crop drydown and harvesting. In Spain, sunny skies promoted the development of irrigated corn and sunflowers, though high heat (39-41°C) over the southern half of the country caused some stress to crops progressing through reproductive stages of development.

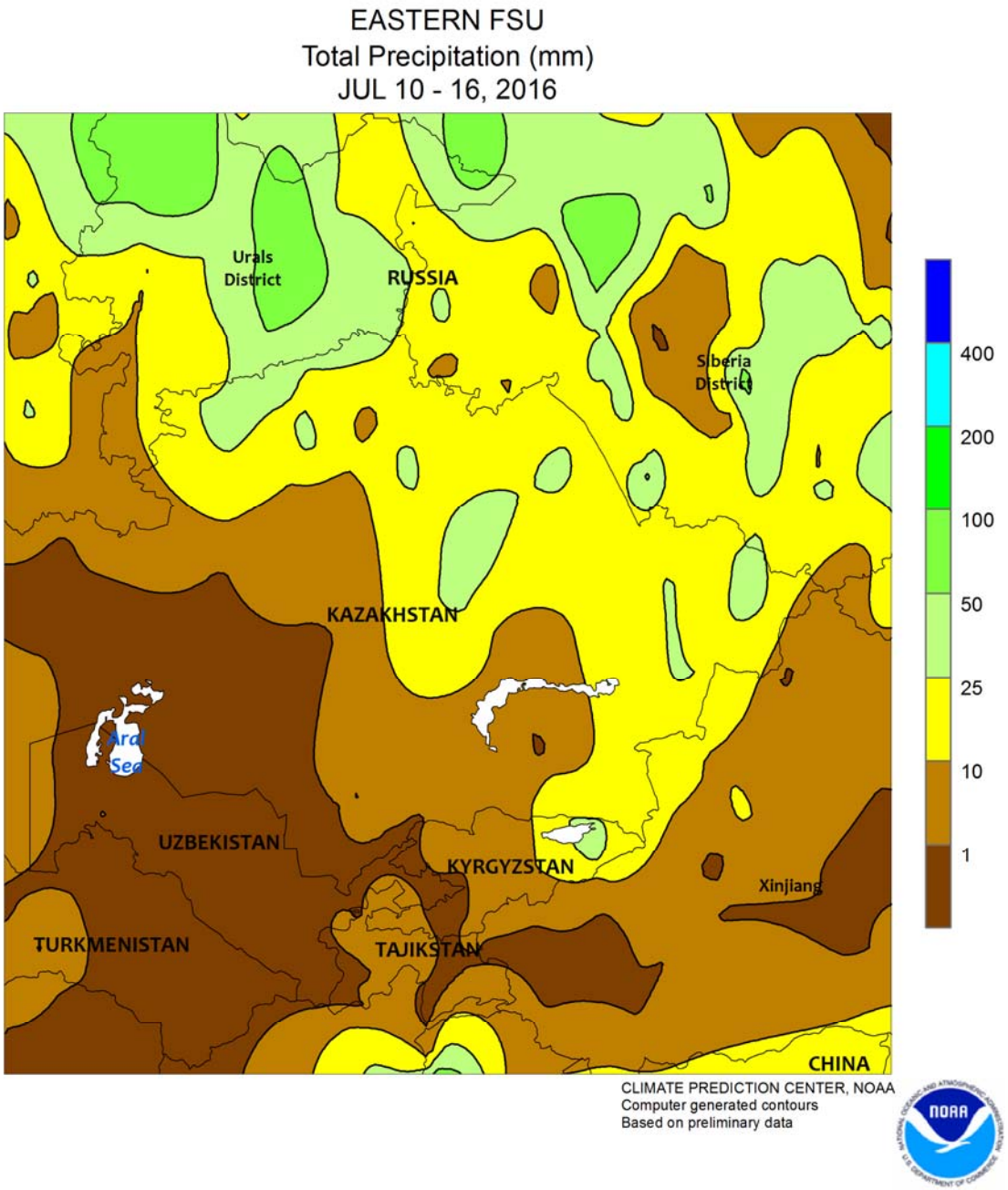
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

Dry, hot conditions promoted fieldwork but increased stress on reproductive summer crops. For much of the week, sunny skies and above-normal temperatures (2-6°C above normal) accelerated winter wheat drydown and harvesting from south-central Ukraine into western and southern Russia. However, highly variable showers and thunderstorms (2-54 mm) in the North Caucasus District and environs caused localized harvest delays. More notably, the dry weather was accompanied by increasing heat, with daytime highs of 38 to 40°C stressing reproductive corn and sunflowers from eastern Ukraine into western and southern Russia. In fact, temperatures continued to climb in the southwestern Southern District (Krasnodar Krai, a key corn area), with a peak value of 40.7°C on June 17. Growing degree day data indicated corn was likely in the silking stage when the heat arrived, making the crop especially vulnerable to heat damage. In contrast, a swath of moderate to heavy rain (10-90 mm, locally more) favored spring grains and summer crops from Belarus into northern Russia.

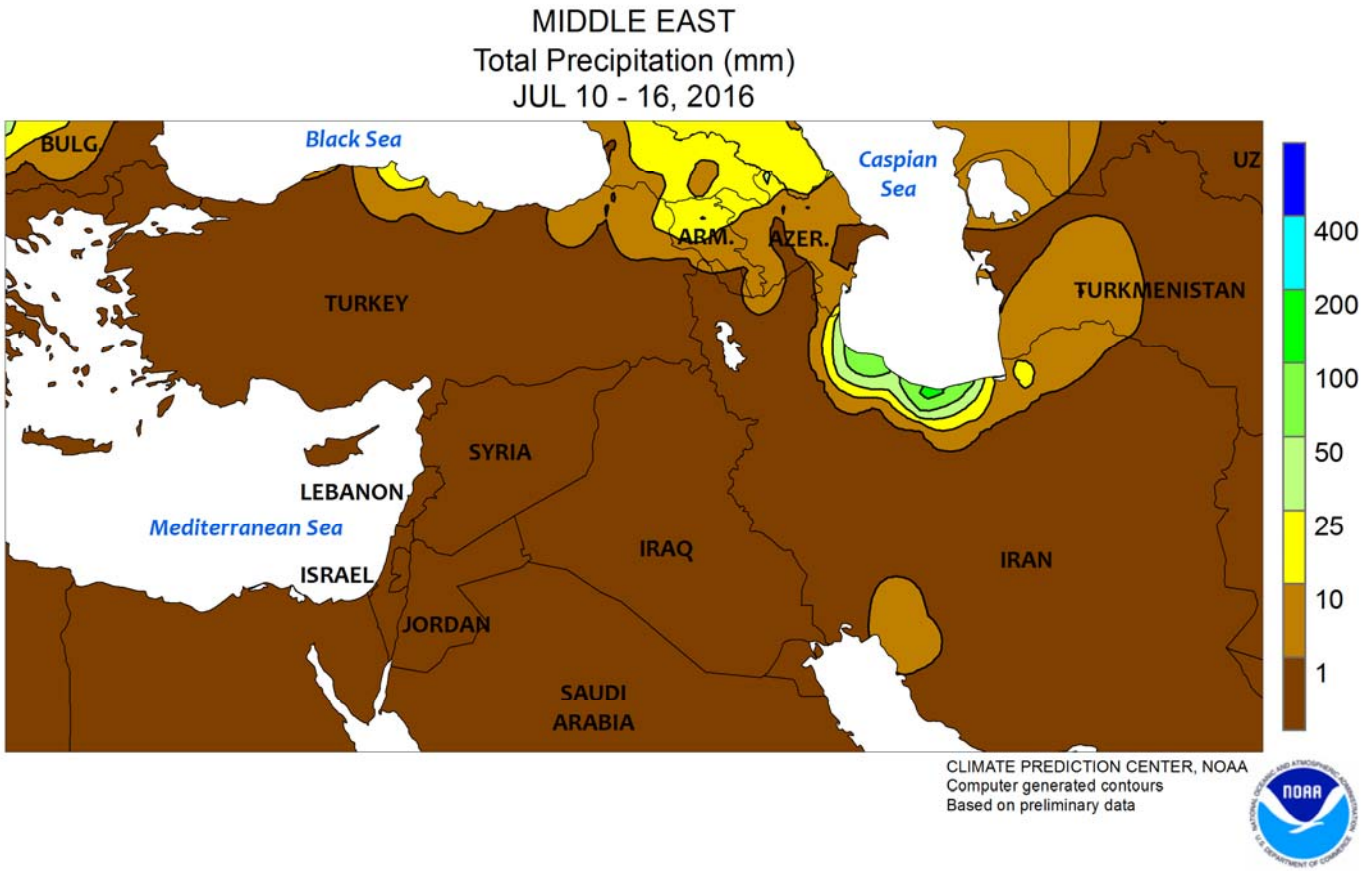
For additional information contact: mbrusberg@oce.usda.gov



EASTERN FSU

Widespread showers and near-normal temperatures maintained favorable prospects for spring wheat, while heat in Uzbekistan caused some stress to flowering cotton. A slow-moving storm system maintained cloudy, showery weather over central and eastern portions of the region. Rainfall amounts generally totaled 10 to 50 mm (locally more than 70 mm) over primary spring wheat areas of northern Kazakhstan and central Russia, boosting soil moisture supplies as the crop enters reproduction. Farther south, the return of seasonably dry weather was accompanied by excessive heat (40-45°C) in Uzbekistan, causing some stress to irrigated cotton which was progressing through the flowering stage of development.

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



MIDDLE EAST

Seasonably dry weather prevailed over much of the region, though unfavorable heat returned to summer crop areas of Turkey. Sunny skies allowed any remaining winter grain harvesting to near completion from the eastern Mediterranean Coast into Iran. Winter wheat harvesting also proceeded without delay in Turkey. However, the return of sunny, hot weather (35-40°C) in southern Turkey's primary corn areas arrived during the silking stage of development, reducing the crop's yield potential. Extreme heat (40-43°C) was also recorded in western Turkey, adversely impacting flowering cotton. However, northwestern Turkey's sunflower areas escaped the scorching heat, with daytime highs in the lower to middle 30s (degrees C).

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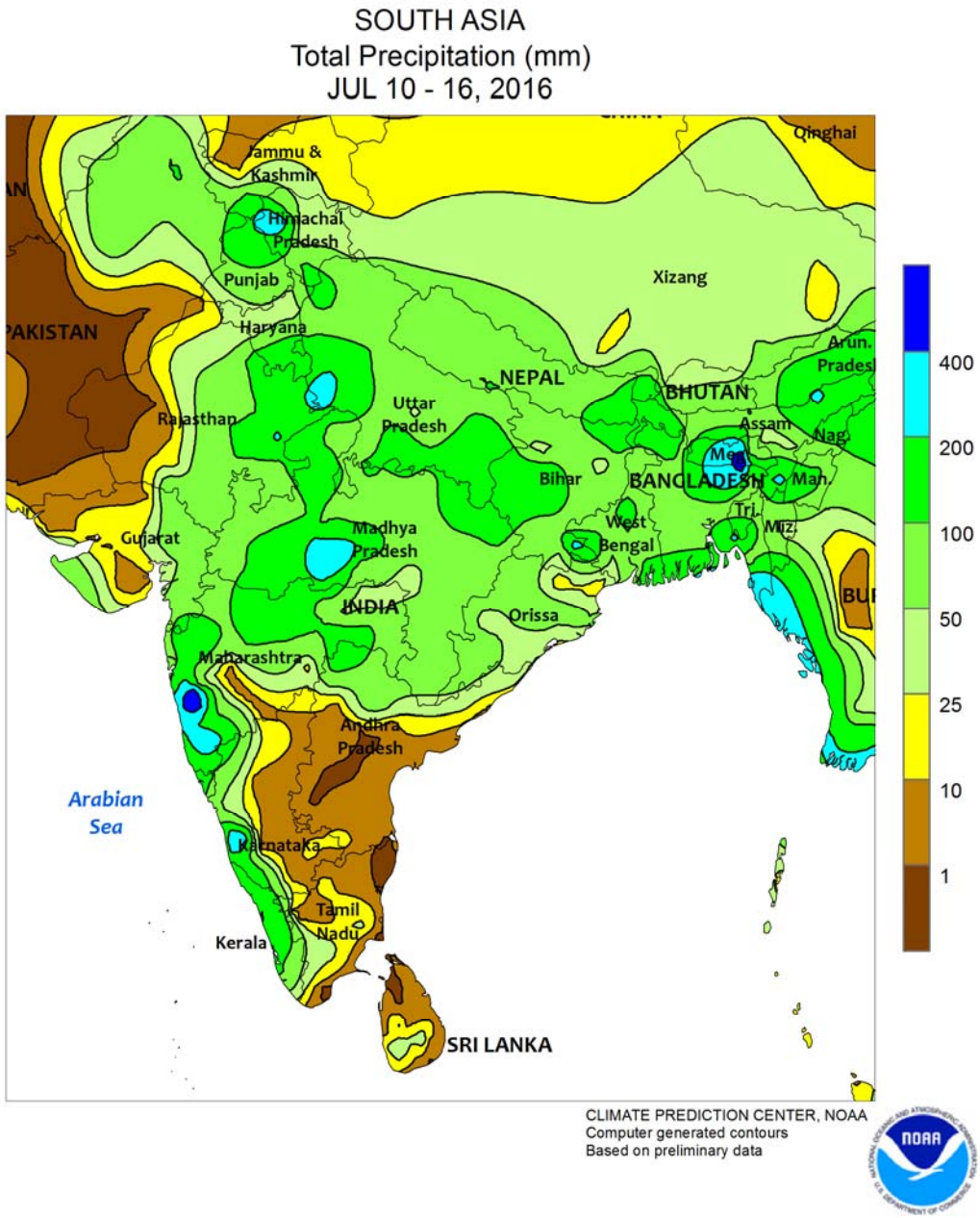

SOUTH ASIA

Monsoon showers were observed throughout India. Rainfall amounts easily surpassed 50 mm in most areas and were locally in excess of 200 mm. The widespread showers stemmed developing dryness for rice in the East, while keeping western soybeans unfavorably wet. Meanwhile, pockets of drier-than-normal weather continued for cotton in Gujarat. Despite the late start to the monsoon season, rainfall totals thus far have been markedly better than the previous two years and the highest in the last ten years. In other parts of the region, showers (25-100 mm) soaked northern Pakistan, providing ample irrigation water for rice and cotton in downstream growing areas of the Indus River Basin. Rain (50-100 mm or more) in Bangladesh kept rice adequately watered, while unseasonably light showers (less than 25 mm) in Sri Lanka continued the drying trend for rice dating back to mid-June.

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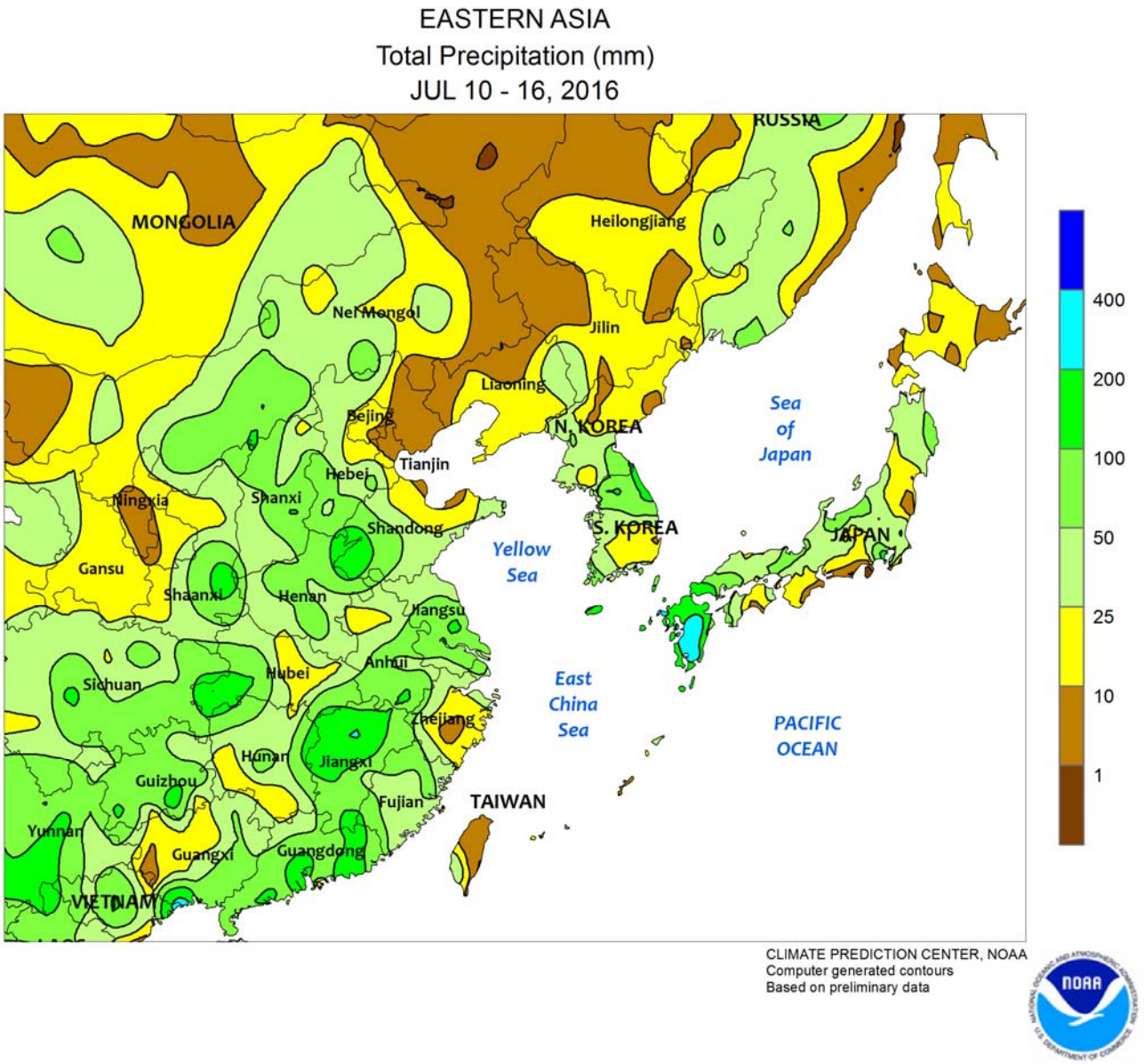

EASTERN ASIA

Showers overspread most of eastern China, maintaining abundant to excessive soil moisture for summer crops. The highest rainfall totals (25-100 mm, locally over 200 mm) occurred across a wide area extending from the North China Plain to the far southern provinces. Seasonal rainfall (since June 1) has been exceptional in these areas, with few locales reporting moisture deficits, and portions of the Yangtze River Basin experiencing significant flooding. In fact for some provinces, this has been the wettest summer in over 25 years. And while rice has not been hampered by the wet weather, the flooding and saturated soils have been detrimental to other crops. Meanwhile in northeastern China, mostly dry weather continued, as rainfall for the last two weeks has totaled less than 15 mm (averaged across the northeast). The dryness has been untimely as corn and soybeans progressed through reproduction. Elsewhere in the region, showers remained unseasonably light (less than 50 mm) on the Korean Peninsula and in Japan, but irrigation supplies kept rice adequately watered.

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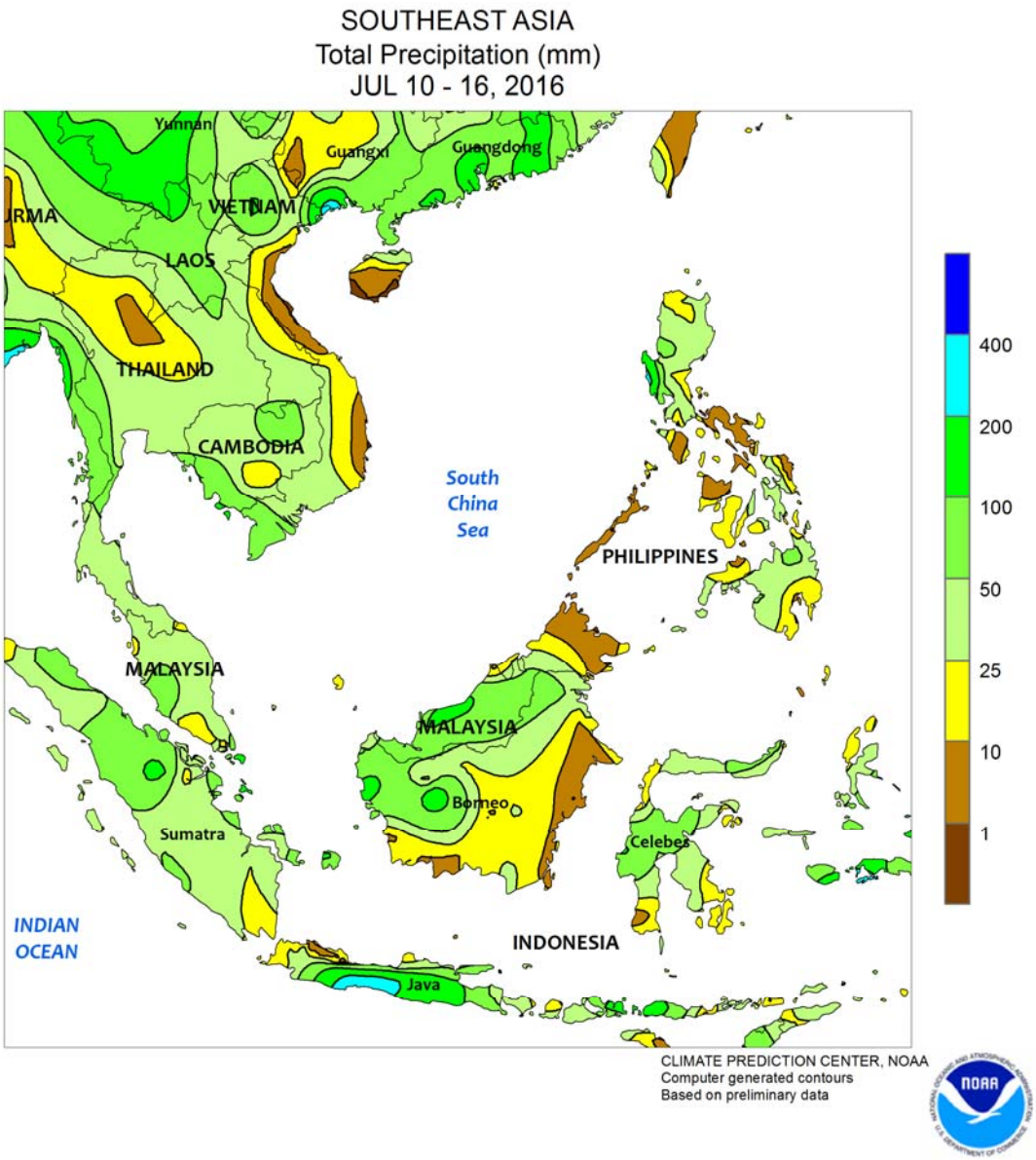

SOUTHEAST ASIA

Monsoon showers (25-50 mm or more) continued to keep rice adequately watered across Indochina (Thailand and environs), but portions of northern Thailand (within the Chao Phraya River Basin) experienced unseasonably light rainfall. Nevertheless, seasonal rainfall totals (starting May 15) across Thailand are the highest in the last five years. In the Philippines, drier conditions overset minor rice areas in the central regions, while soil moisture and water supplies in the north continued to improve on up to 50 mm of rain. Meanwhile, more seasonable rainfall returned to oil palm areas of Malaysia and Indonesia after a brief dry spell last week. However, Sabah in eastern Malaysia remained dry for a second week. In Java, Indonesia, unseasonable wetness (over 25 mm, locally approaching 400 mm) continued to bolster water supplies during what is supposed to be the middle of the dry season. So far, the current dry season is the third wettest over the last 25 years.

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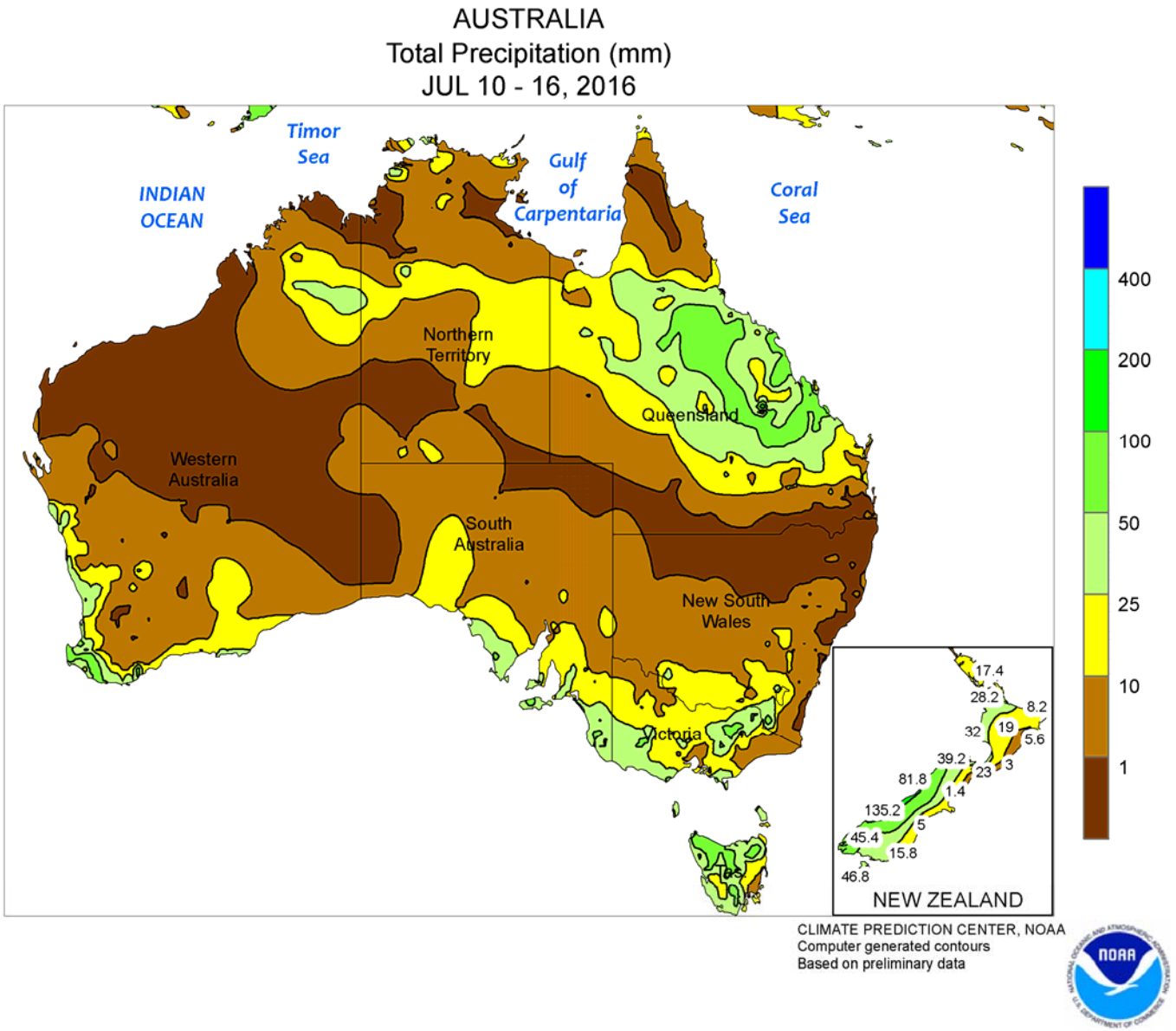
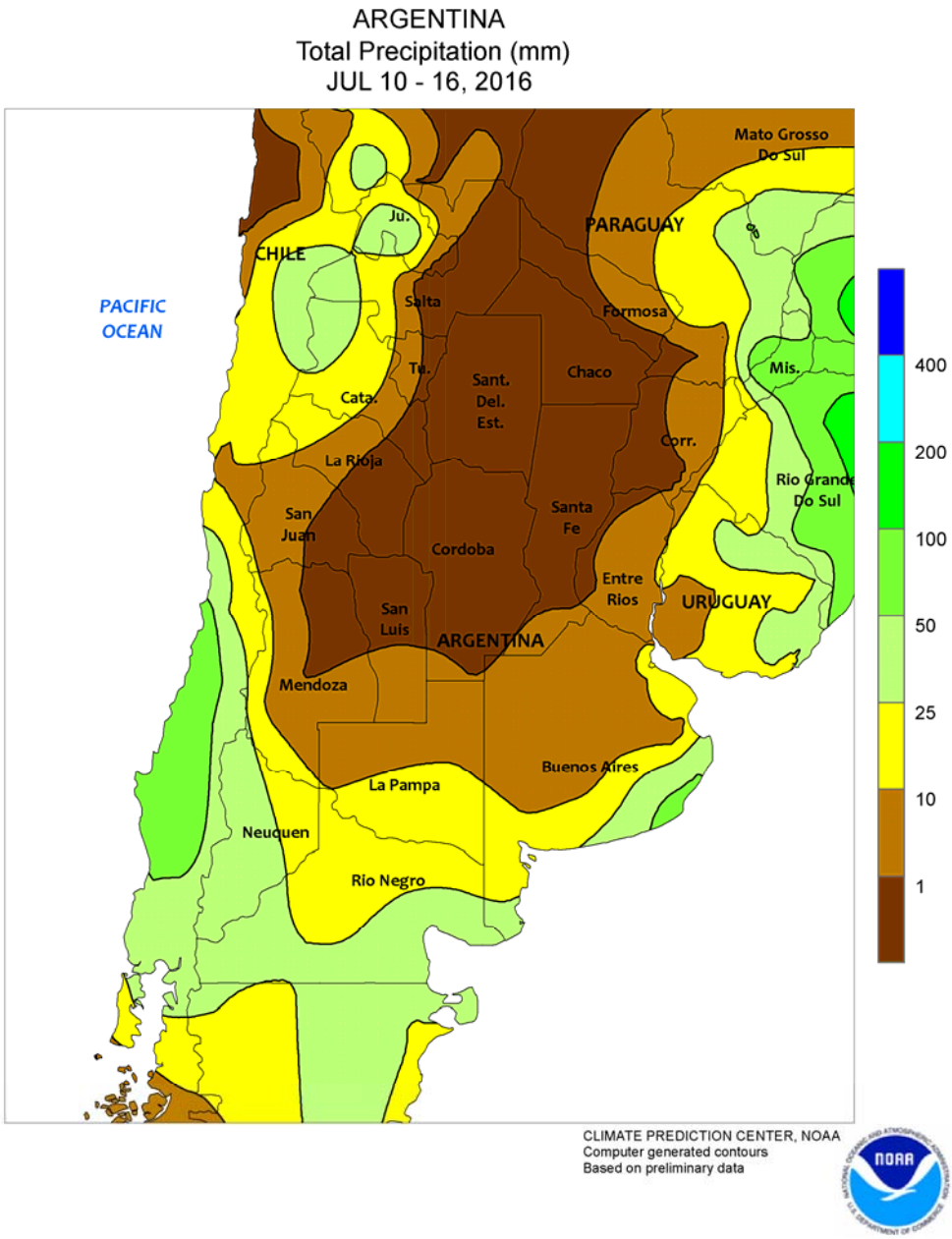


AUSTRALIA

Widespread showers (5-25 mm, locally more) persisted in western and southeastern Australia, maintaining adequate to abundant topsoil moisture for vegetative winter crops. In contrast, mostly dry weather (generally less than 5 mm) overspread northern New South Wales and extreme southern Queensland. Despite the dryness, growing conditions remained near ideal for agriculture, with sunny skies and abundant moisture supplies further benefiting vegetative wheat and other winter crops. Elsewhere in the wheat belt, heavy rain (25-100 mm, locally more) overspread portions of central and southern Queensland, causing local flooding. Most winter grains are grown south of the hardest hit areas, however, minimizing any potential negative impact on crops. Temperatures fluctuated throughout the week but averaged near normal (within 1°C of normal) for the time period.

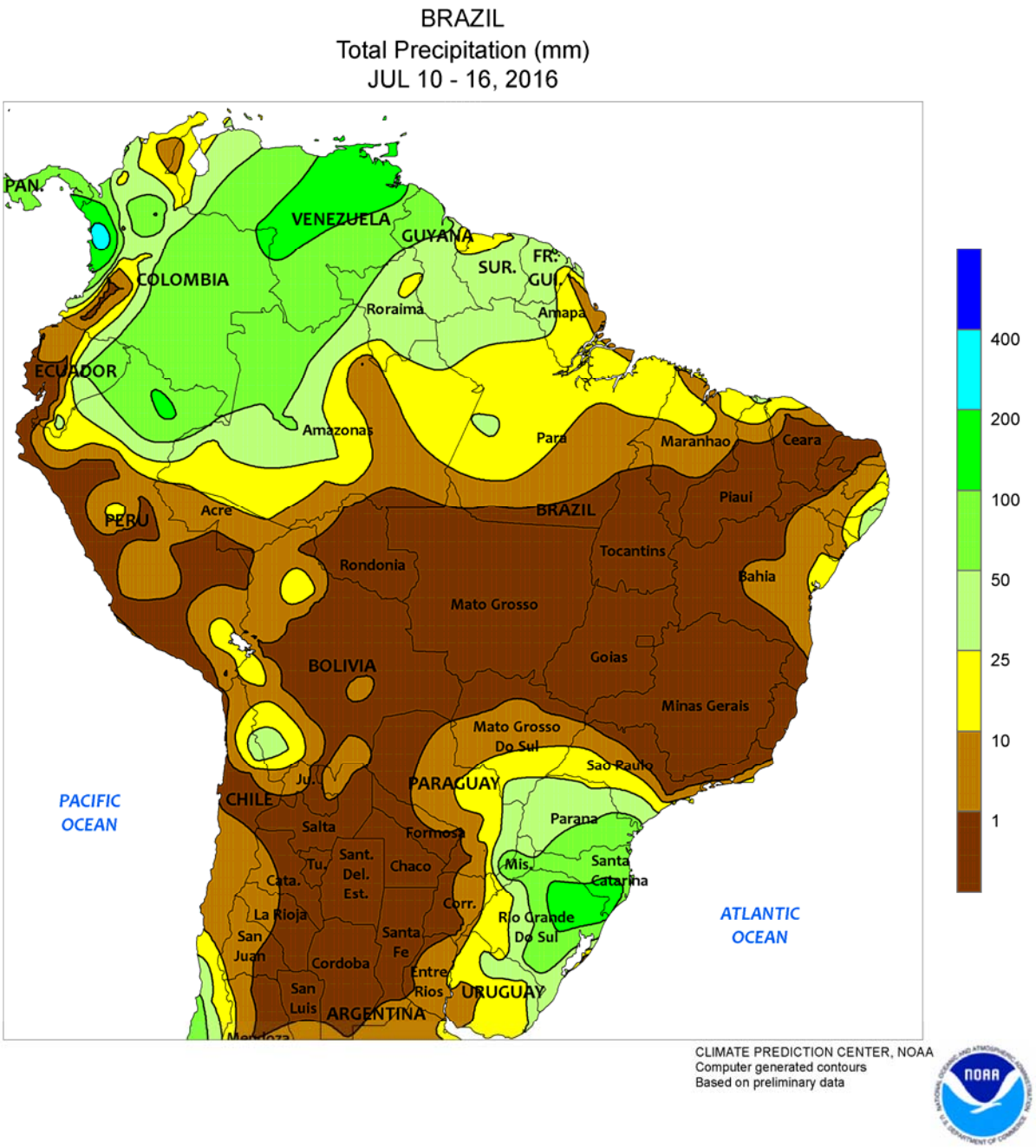
For additional information contact: mbrusberg@oce.usda.gov



ARGENTINA

Showers swept across the southern winter grain belt as drier weather developed farther north. Rainfall totaling more than 10 mm overspread southern production areas of La Pampa and Buenos Aires; locally higher amounts (greater than 25 mm) were recorded in southeastern Buenos Aires. While slowing autumn fieldwork, the moisture will ultimately favor winter grains. Mostly dry weather prevailed elsewhere, aiding drydown and harvesting of corn and cotton. Weekly average temperatures were near to slightly above normal, with the week's highest temperatures ranging from the middle 10s (degrees C) in Buenos Aires and La Pampa to the lower 30s in Formosa. Freezes were recorded as far north as northern Cordoba. According to Argentina's Ministry of Agriculture, corn was 57 harvested as of July 14, compared with 77 percent last year. Wheat was 73 percent planted, 9 points behind last year's pace.

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



BRAZIL

Rain intensified from the previous week over southern Brazil, increasing moisture for winter wheat while slowing the harvest of corn. Moderate to heavy rain (25-100 mm) fell over major farming areas of Rio Grande do Sul, Santa Catarina, and Parana; lighter rain (greater than 10 mm) fell in southern sections of Mato Grosso do Sul and Sao Paulo. According to the government of Parana, wheat planting was virtually complete, as of July 11, with 8 percent of the crop reportedly flowering. In contrast, second-crop corn was 42 percent harvested, and 84 percent of the remaining acreage was maturing. Drier conditions prevailed elsewhere, including northern Sao Paulo, Minas Gerais, and Espirito Santo, where sugarcane and coffee harvesting was underway. Above-normal temperatures dominated much of the region, with daytime highs reaching the middle and upper 30s (degrees C) in Mato Grosso and the northeastern interior (Tocantins, Piaui, and Maranhao), hastening maturation of corn and cotton. Seasonal rainfall tapered off along the northeastern coast, with most locations receiving less than 10 mm.

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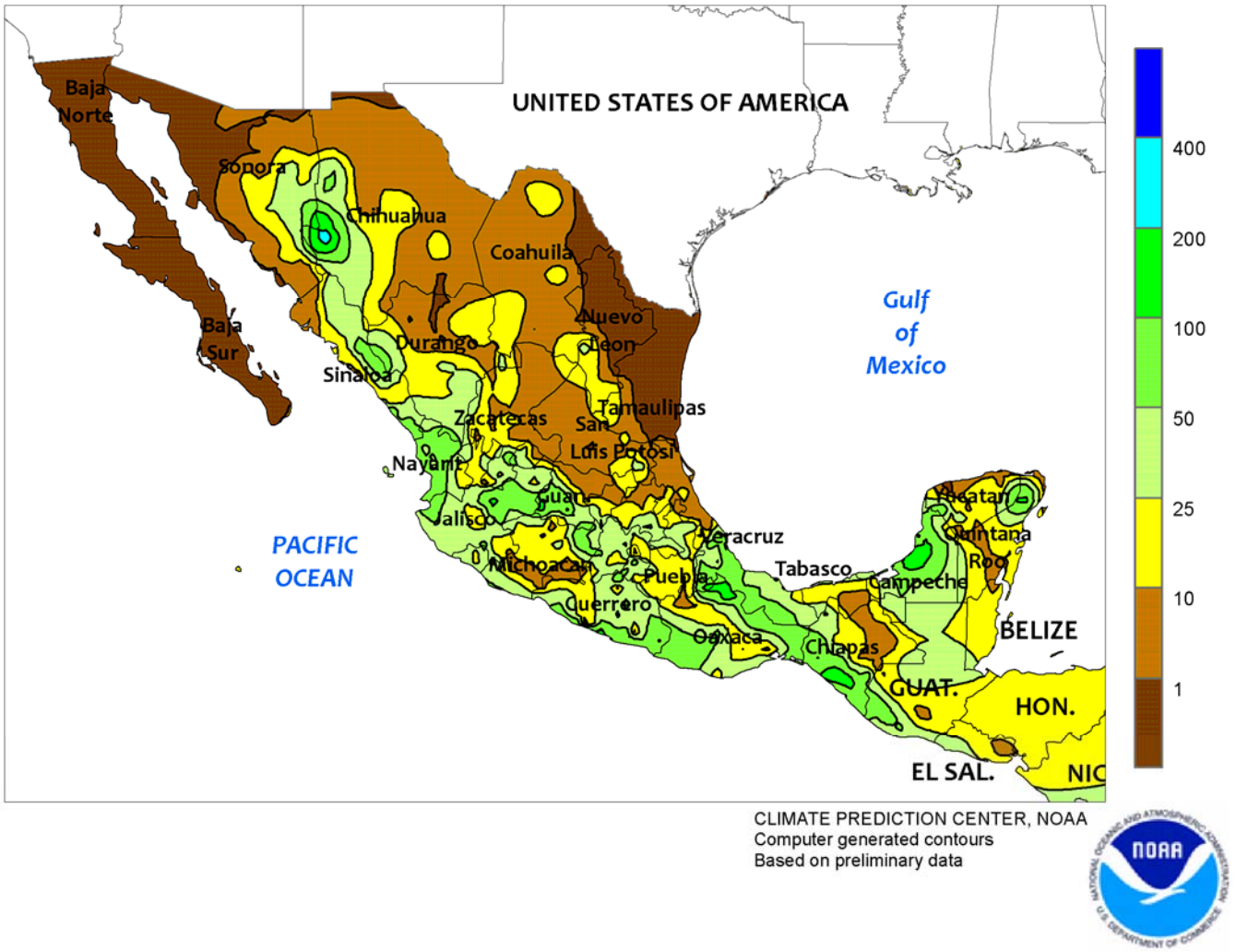
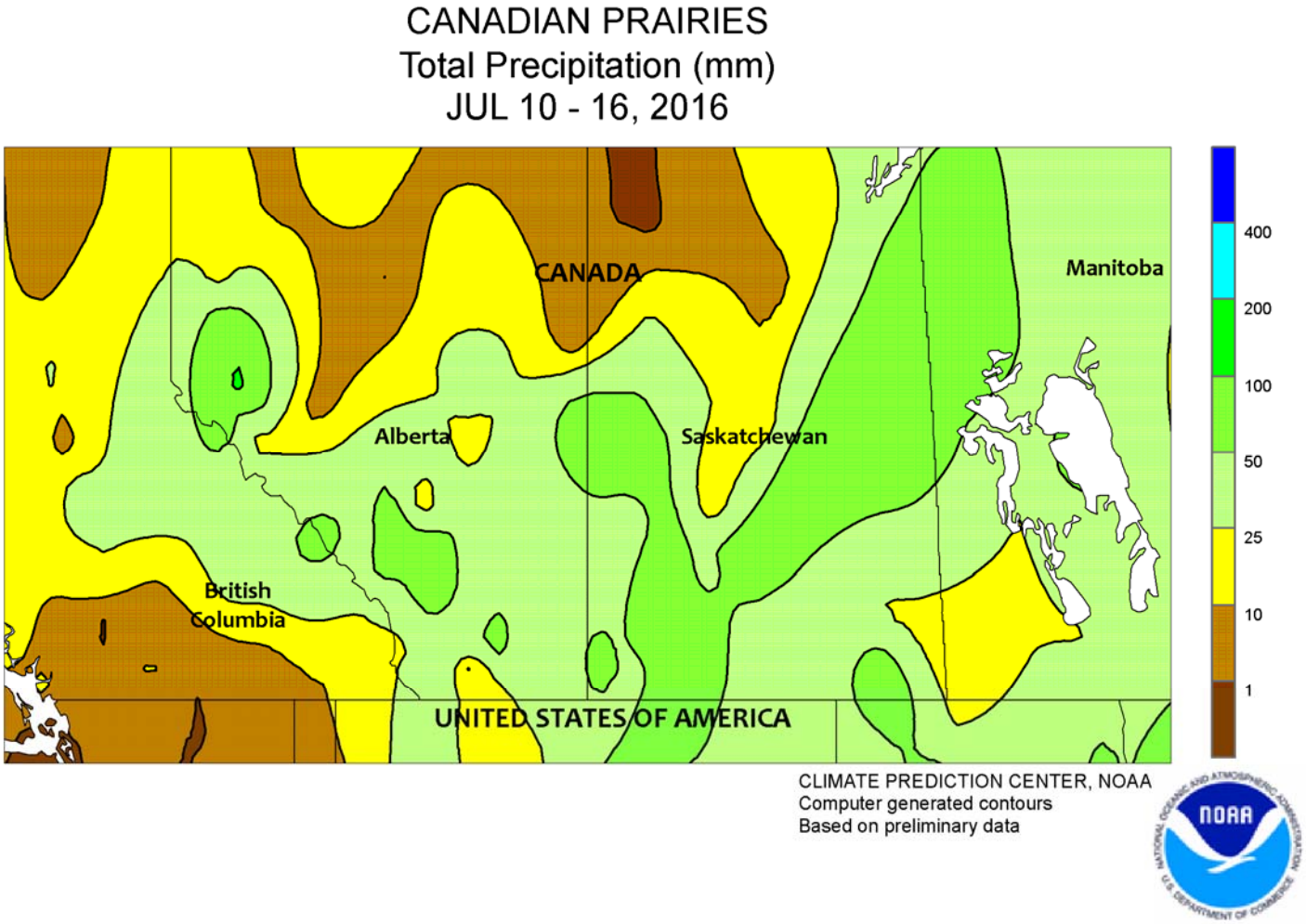


MEXICO

Beneficial rain maintained mostly favorable conditions for corn and other rain-fed summer crops across southern Mexico. Most areas received at least 10 mm, with higher amounts (25-100 mm) concentrated over sections of the southern plateau, along the southern Pacific Coast, and from southern Veracruz to Chiapas. Locally heavy rain (greater than 50 mm) also fell in Campeche on the Yucatan Peninsula. In contrast, drier conditions prevailed in the northeast, including for a second week sugarcane areas of northern Veracruz. Daytime highs reached the upper 30s and lower 40s (degrees C) in the lower Rio Grande Valley, maintaining high moisture demands for crops and livestock. Monsoon showers (locally exceeding 50 mm) further replenished irrigation reserves in northwestern watersheds.

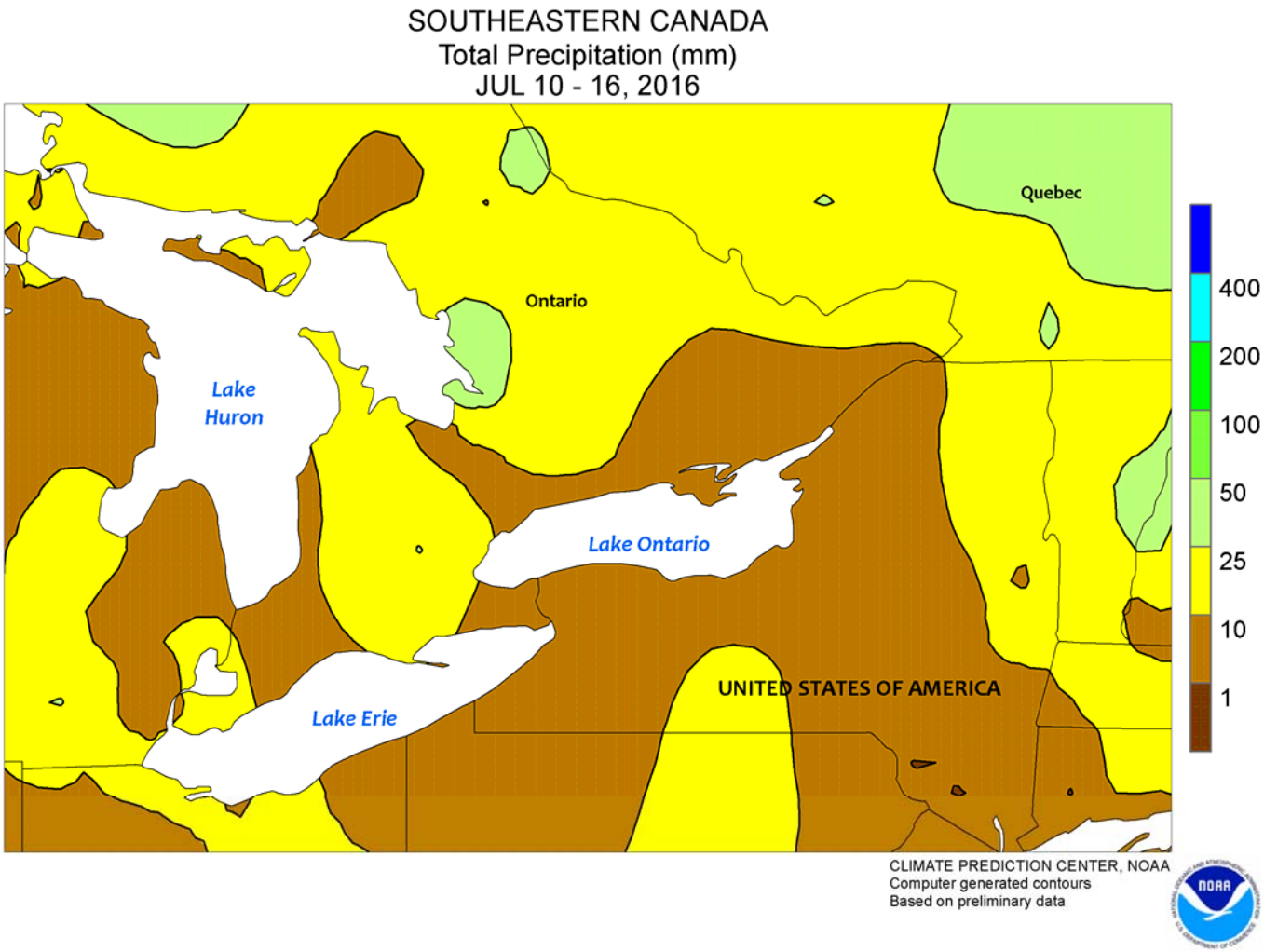
For additional information contact: mbrusberg@oce.usda.gov



CANADIAN PRAIRIES

Stormy weather overspread the Prairies, providing abundant rain for spring grains and oilseeds but reportedly causing localized damage from hail and winds. All agricultural districts reported at least 10 mm, with amounts in excess of 50 mm reported over large parts of Alberta and Saskatchewan. Much of the rain fell early in the week, with several locations recording daily amounts in excess of 40 mm. Weekly temperatures averaged near to below normal across the southern Prairies and up to 2°C above normal in northern farming districts. Daytime highs reached the middle and upper 20s (degrees C) in Manitoba, eastern Saskatchewan, and southern Alberta but were generally lower elsewhere, promoting spring grain and oilseed growth in the absence of stressful heat. According to reports emanating from Canada, crops are progressing well and are rated in relatively good condition but the impacts of the wet weather and storms are evident and damage from hail is being assessed.

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

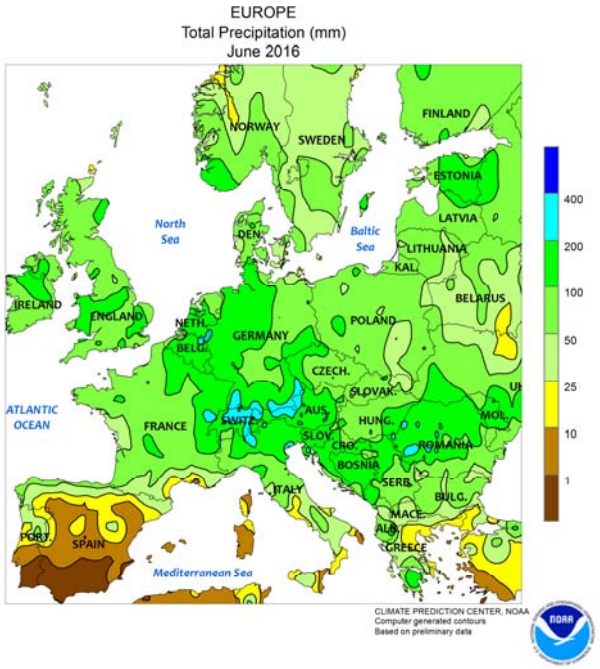


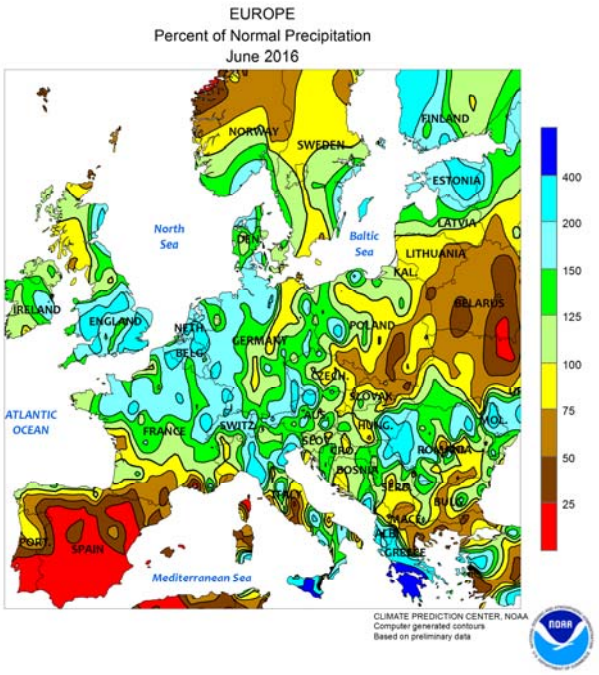
SOUTHEASTERN CANADA

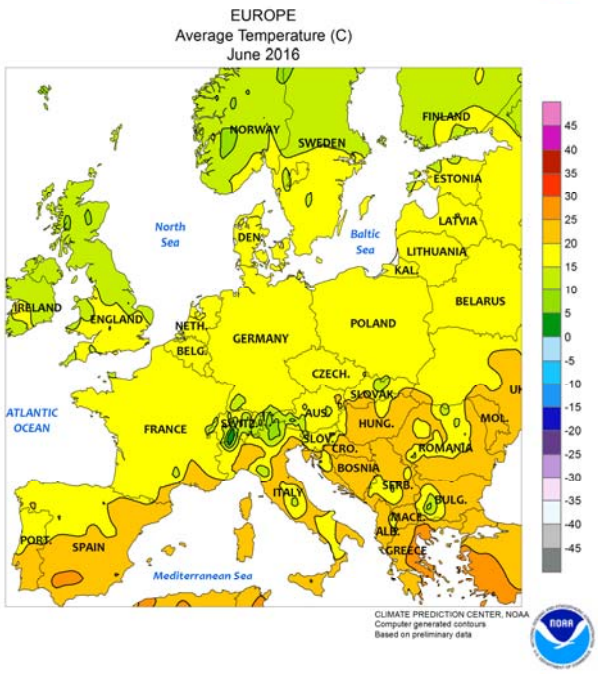
Light showers accompanied above-normal temperatures across Ontario, providing limited relief from growing drought. Most areas recorded less than 10 mm, and weekly temperatures averaged up to 2°C above normal, with daytime highs reaching the lower 30s (degrees C) on several days. Early-planted corn and soybeans are in or approaching reproductive phases of development and need moisture soon to prevent further declines in yield potential. In Quebec, somewhat higher amounts of rainfall (10-40 mm) and more seasonable temperatures favored summer crops and pastures, with temperatures only briefly exceeding the lower 30s.

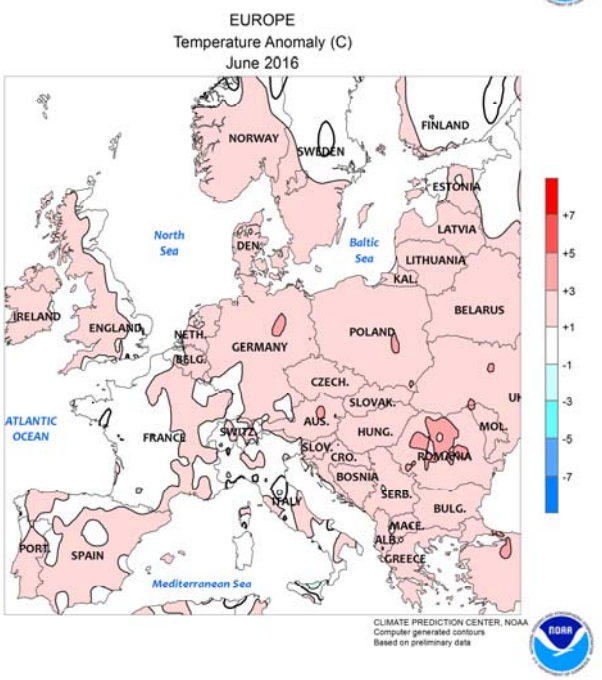
For additional information contact: mbrusberg@oce.usda.gov

June International Temperature and Precipitation Maps



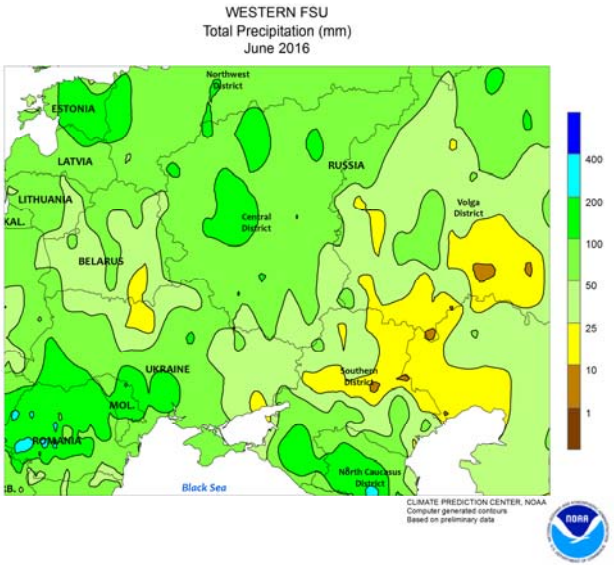


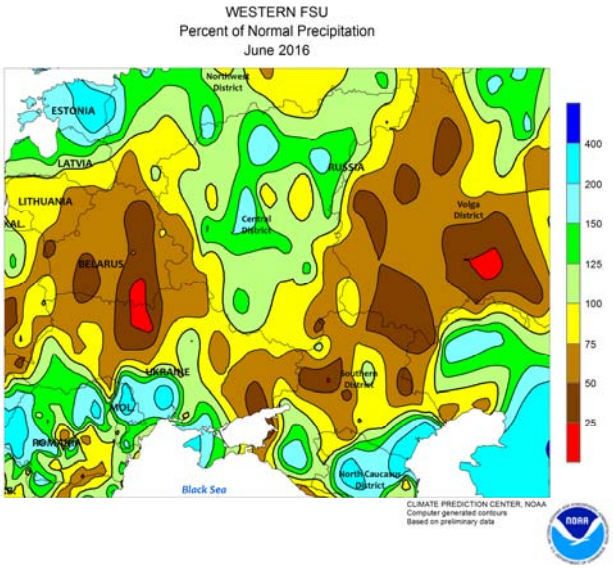


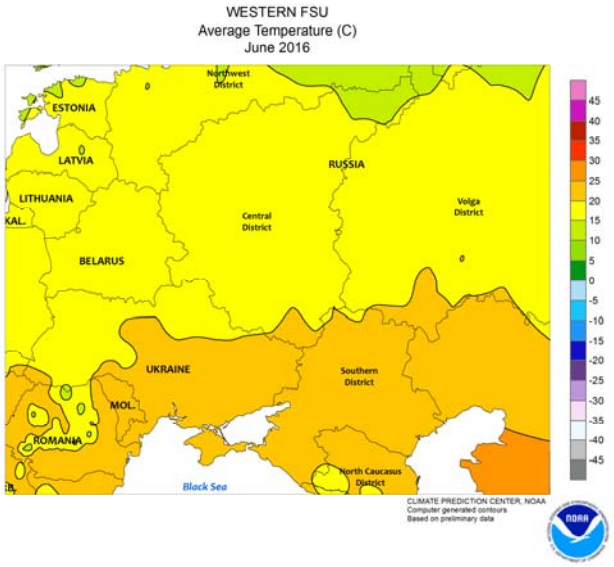


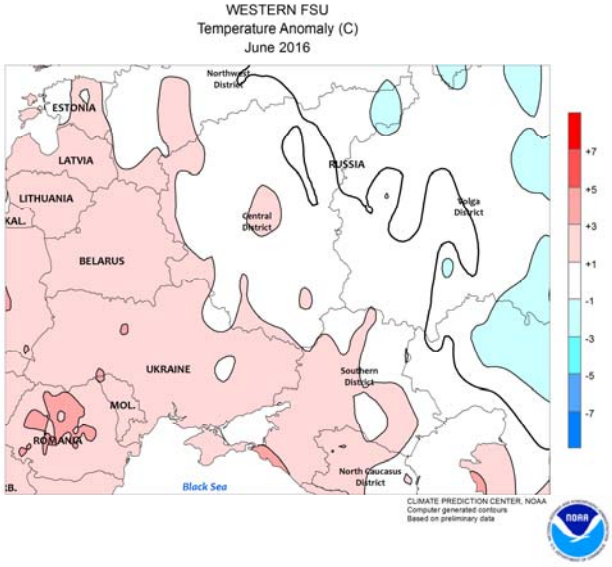
EUROPE

A second consecutive month of much-above-normal rainfall caused lodging, lowered quality, and reduced yield prospects for reproductive to filling winter wheat and rapeseed. Rain was heaviest in England, France, and Germany, with monthly totals averaging 100 to 200 mm (150-300 percent of normal). In many of these locales, the persistent wet weather further reduced yield prospects for filling winter crops following excessive rainfall during May. Heavy showers and thunderstorms (50-200 mm, locally more) in Italy and the Balkans boosted soil moisture for vegetative corn, soybeans, and sunflowers. Occasional rain in Poland and the Baltic States likewise improved soil moisture for spring grains and later-developing winter crops. Dry, warm weather in Spain favored wheat and barley harvesting.





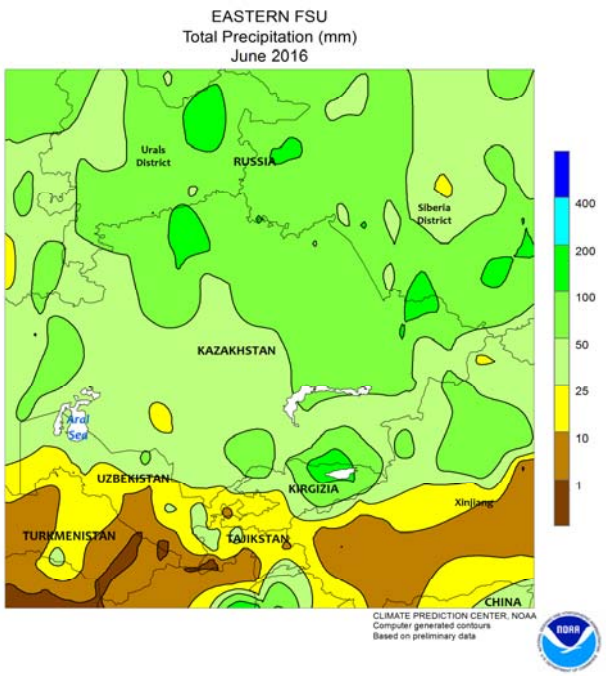


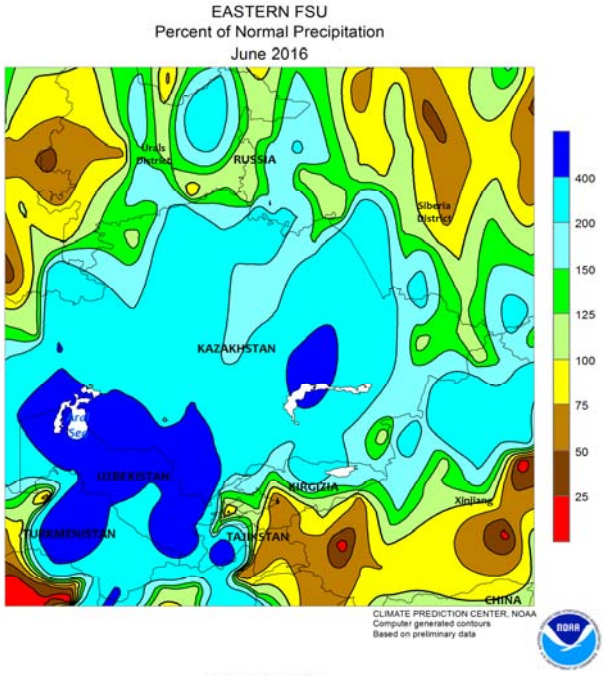


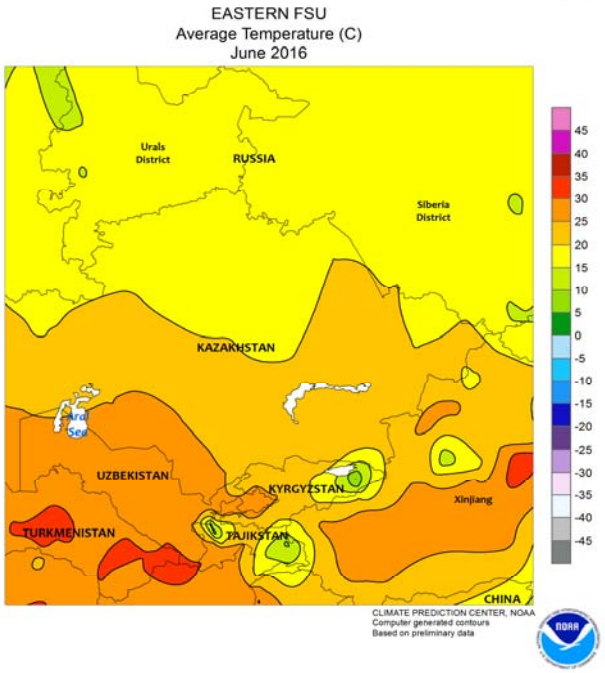
WESTERN FSU

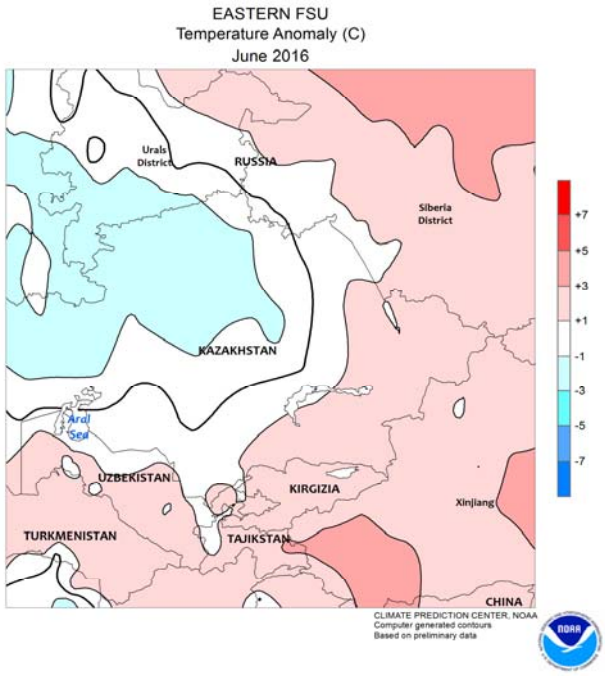
Wet weather during early June maintained or boosted winter crop prospects in the region. Winter wheat yields in Ukraine and Russia further benefited from warm, dry weather later in the month during grain fill. Despite the appearance of heat (35°C or greater) in southern Russia at the end of June, corn had not yet reached reproductive stages of development. Furthermore, soil moisture was in good supply as a result of locally heavy early-June rainfall (100 mm or greater), enabling crops to better withstand the heat.

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



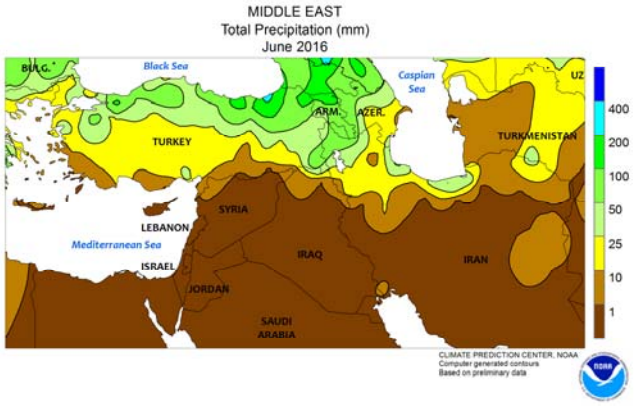


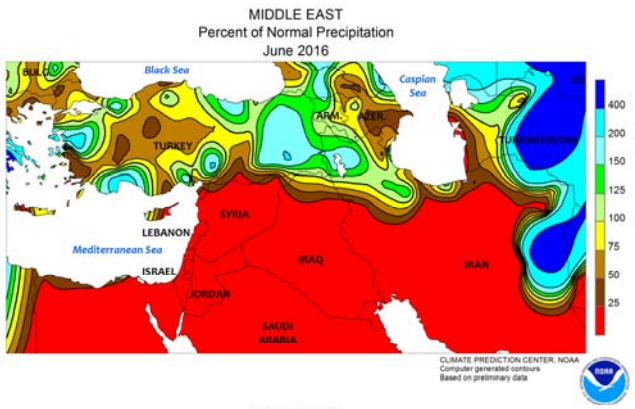


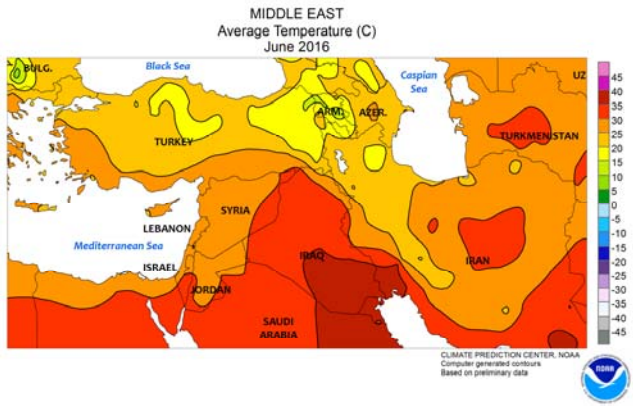


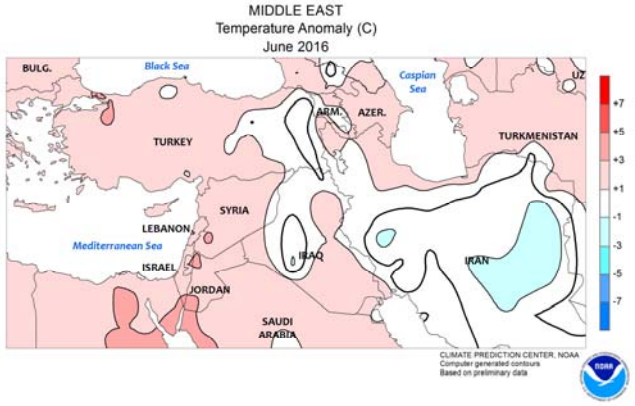
EASTERN FSU

After a favorably dry May for spring wheat planting, above-normal June rainfall boosted soil moisture supplies for crop establishment in Kazakhstan and central Russia. Monthly rainfall tallied 50 to 150 mm (130-340 percent of normal) over the region's spring wheat belt, keeping vegetative crops abundantly watered and boosting soil moisture reserves for potential incursions of dryness and heat. Warm, occasionally showery weather (10-40 mm) in Uzbekistan favored the development of irrigated cotton.



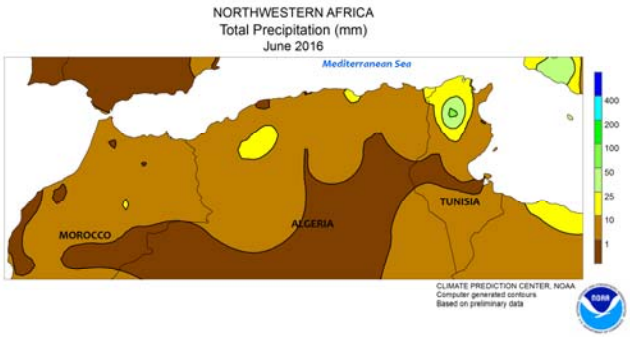


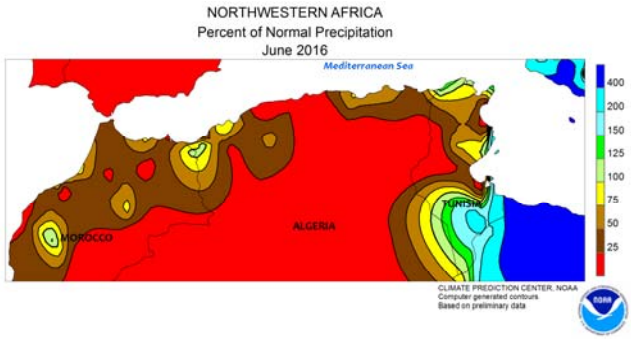


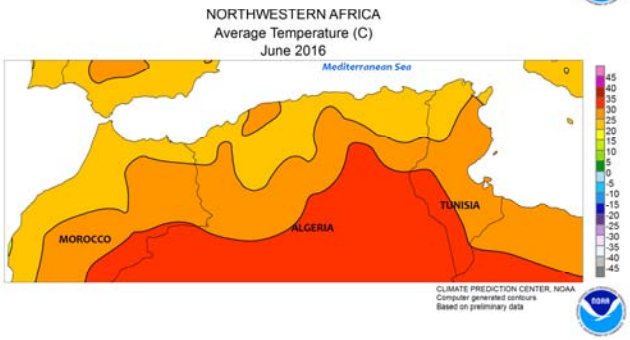


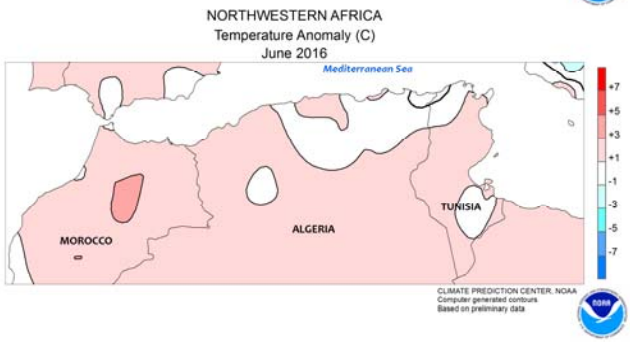
MIDDLE EAST

In Turkey, excessive heat during late June had little adverse impact on corn, which had not yet reached the tassel stage of development. By early July, the heat abated as corn entered reproduction, though heat has since returned. Meanwhile, showers over much of Turkey provided supplemental soil moisture for irrigated summer crops. Elsewhere, seasonably dry, hot weather promoted winter grain harvesting.



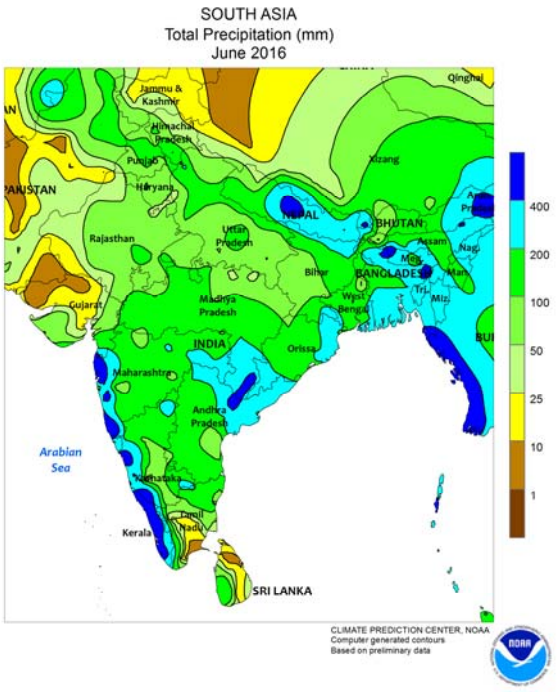


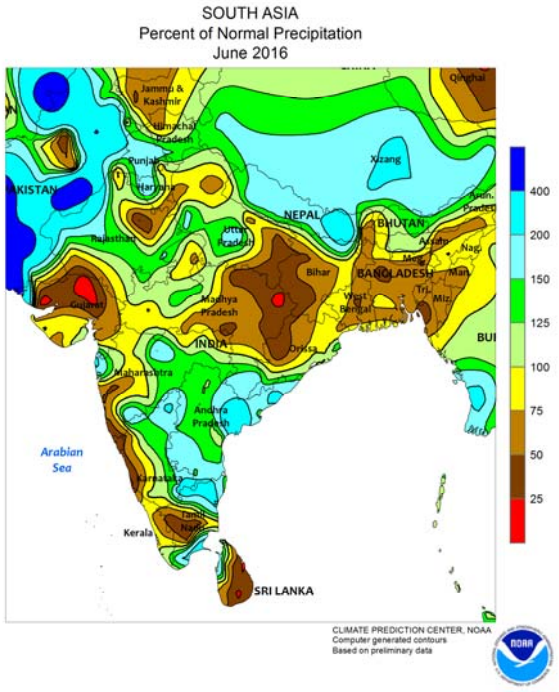


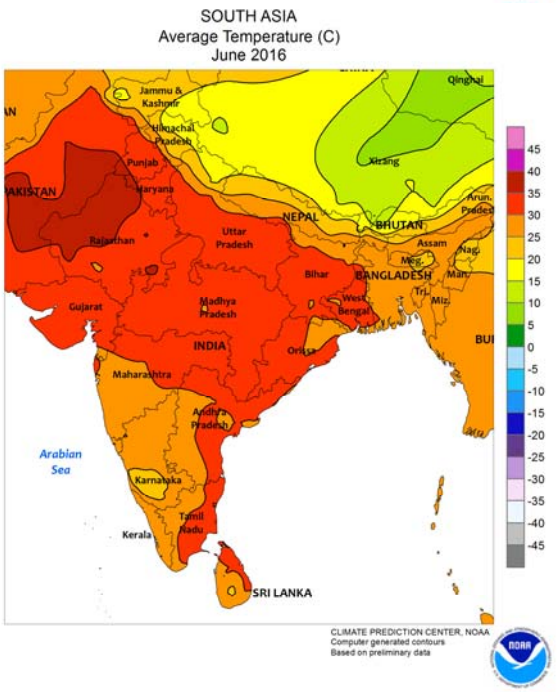


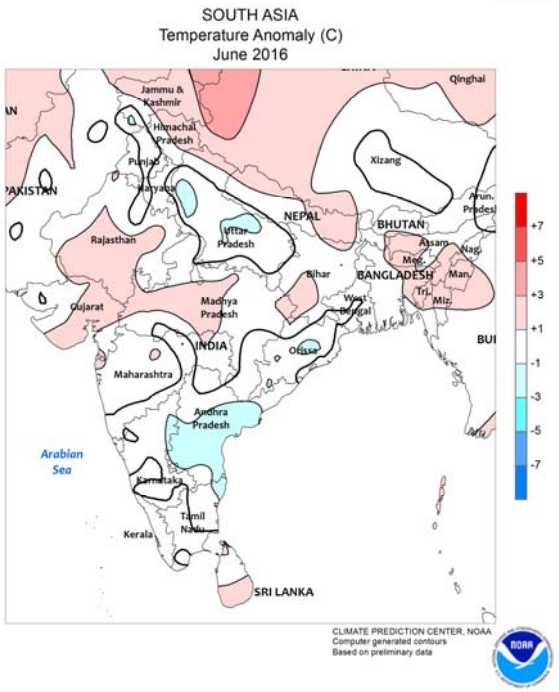
NORTHWESTERN AFRICA

Dry, warm weather during June prevailed over much of the region, though unusual late-season showers lingered in eastern-most growing areas. In Morocco, winter grain harvesting neared completion after this season's severe drought. Likewise, warm, mostly dry weather allowed winter grain drydown and harvesting to proceed with little delay in Algeria. Winter crops in Algeria were also impacted by drought, especially in western portions of the country. In contrast, showers and thunderstorms (10-65 mm) slowed winter wheat and barley harvesting in Tunisia.



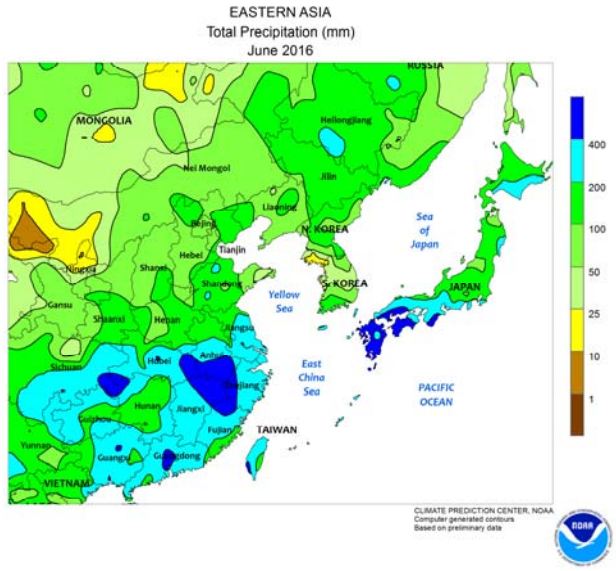


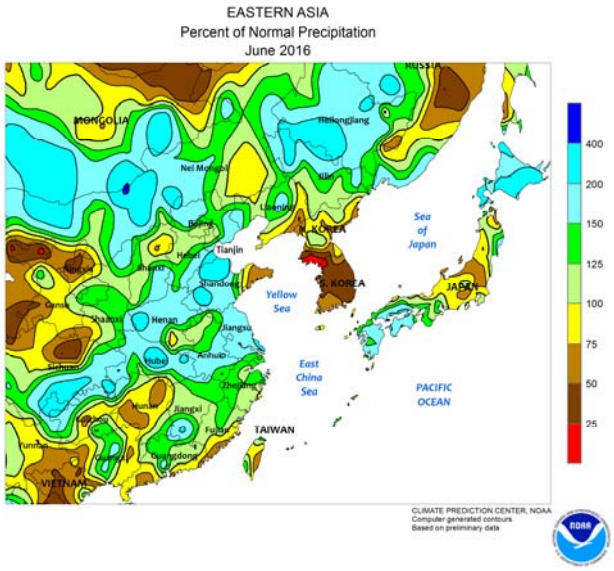


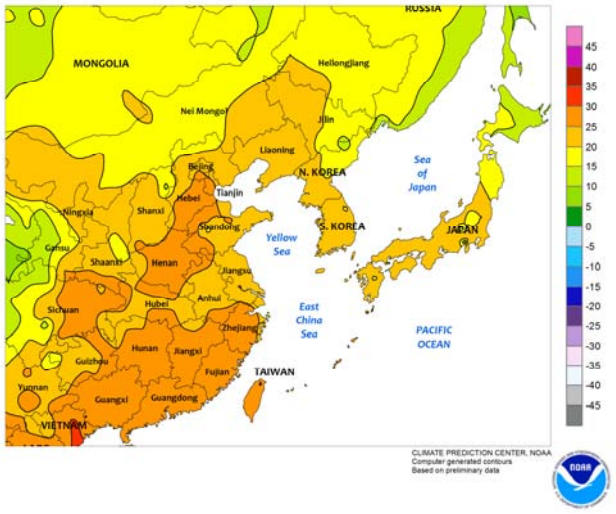


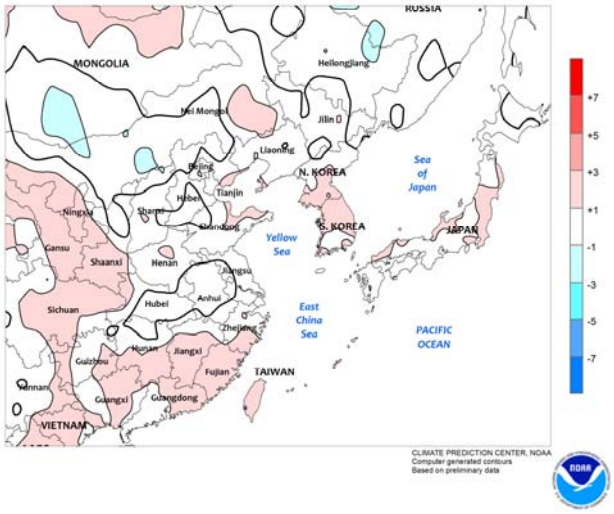
SOUTH ASIA

In June, monsoon showers arrived later than usual across India (up to ten days) and slowly overspread the country during the month. But even with the late onset of the monsoon, most areas received near- to above-normal rainfall, owing to heavy showers (in excess of 100 mm) toward the end of the month. The key exceptions were cotton in Gujarat and rice in the lower Ganges River Basin (both areas received less than half the normal rainfall). Planting delays were also reported with the late-arriving rainfall. As of June 30, planted area for most major crops was behind last year's amount. In other parts of the region, rainfall was below normal for rice in Bangladesh and Sri Lanka, but water supplies remained adequate to make up the deficit. Meanwhile, monsoon showers were moving into Pakistan by month's end, as rice and cotton planting continued.



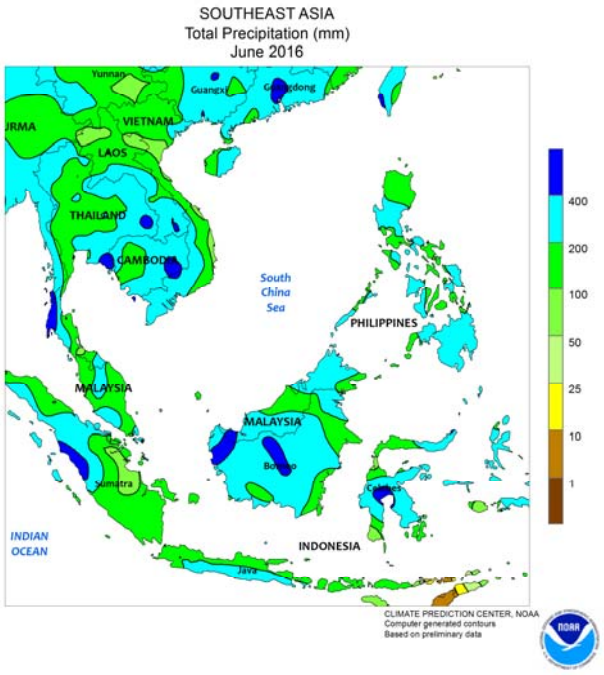


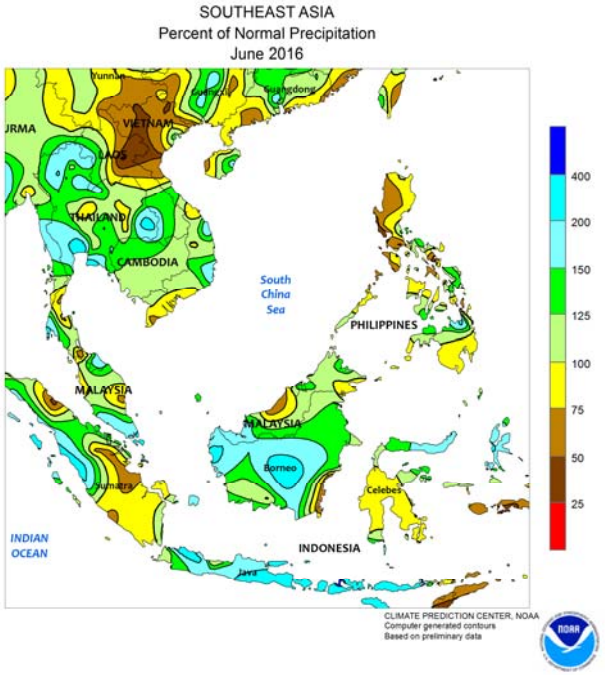


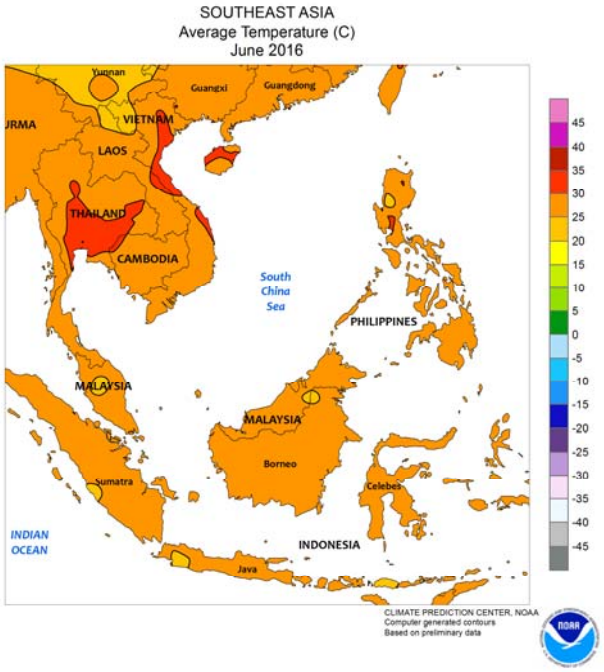


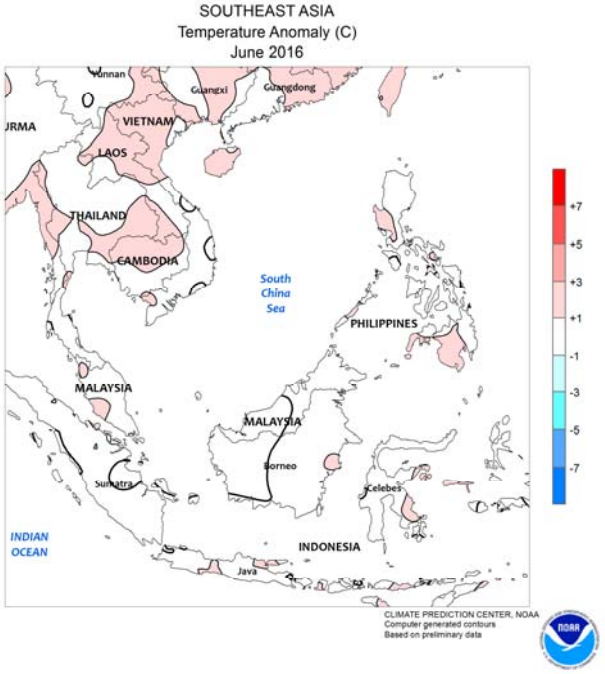
EASTERN ASIA

Wet June weather hampered winter wheat harvesting on the North China Plain, while also lowering wheat quality and potentially yields as well. Rainfall averaged over 150 mm (occurring mainly after mid-month) across key wheat areas, nearly twice the normal amount. Above-normal rainfall was also reported in the Yangtze River Basin. Portions of the eastern basin received over 500 mm of rain which caused flooding and damage to summer crops. Meanwhile, above-normal rainfall was welcomed in northeastern China, benefiting vegetative corn and soybeans. Elsewhere in the region, drier-than-normal weather occurred in most rice areas on the Korean Peninsula, with portions of South Korea experiencing less than half the normal rainfall for the month. Meanwhile, rainfall was near to above normal in Japan, benefiting rice.



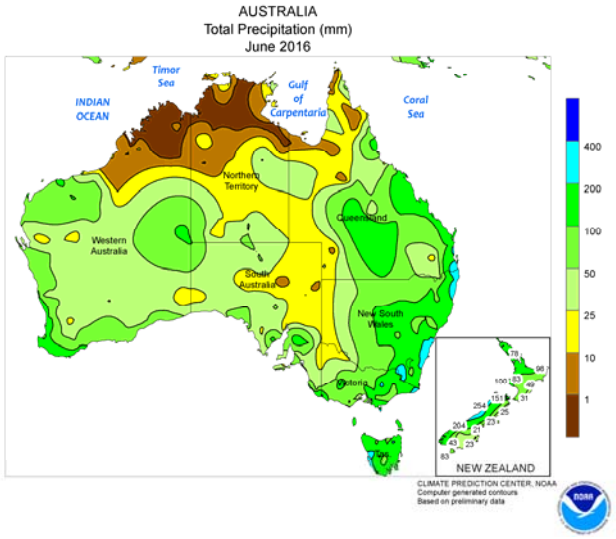


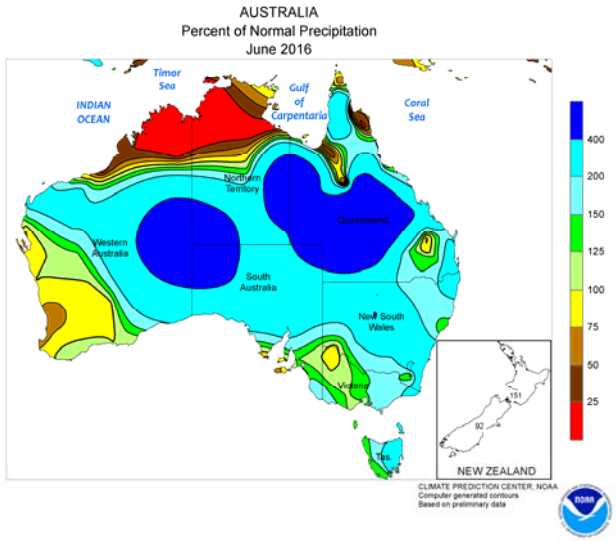


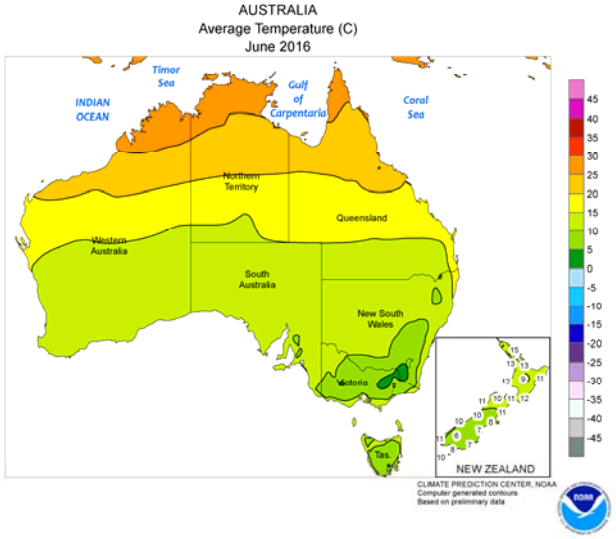


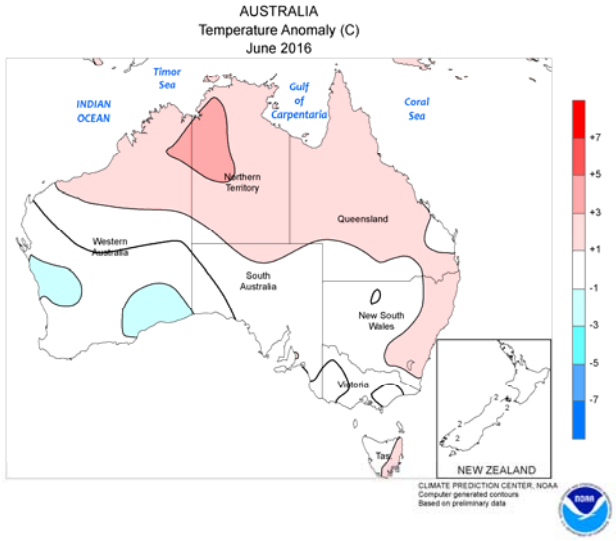
SOUTHEAST ASIA

Near- to above-normal June rainfall was reported across Indochina (based on satellite-derived estimates and surface reports), with amounts in excess of 150 mm. The rain benefited wet-season rice growing throughout Thailand, Laos, Cambodia, and southern Vietnam, while also increasing water supplies (for irrigation) that have been nearly depleted from two consecutive years of poor seasonal rain. Similarly, seasonable rainfall throughout much of the Philippines kept rice and corn well watered, although regions in the north continued to be drier than normal. Meanwhile, oil palm areas in most of Indonesia and Malaysia received near-normal rainfall. However, portions of Sumatra (Indonesia) experienced drier-than-normal conditions, while long-term moisture deficits continued in Malaysia.



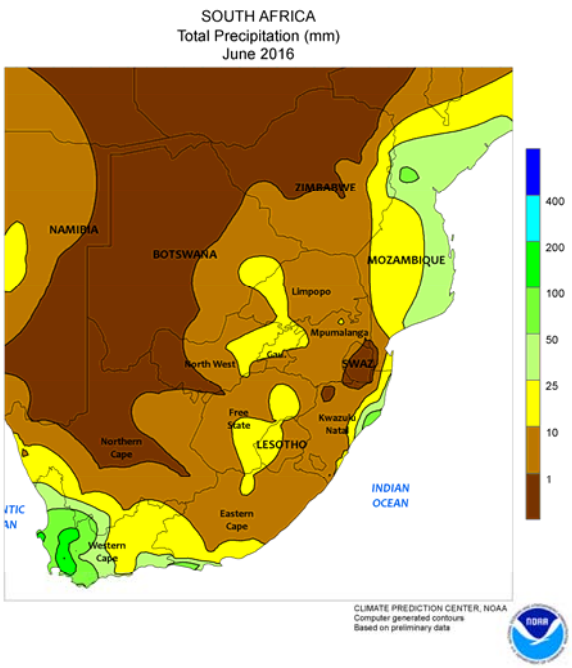


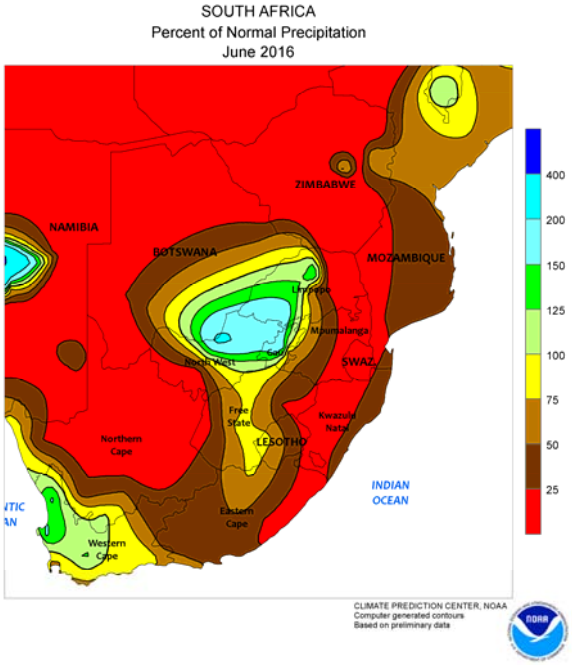


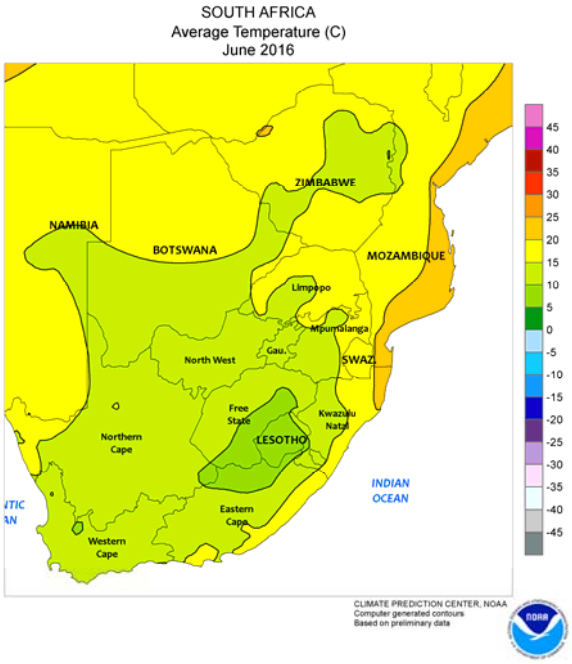


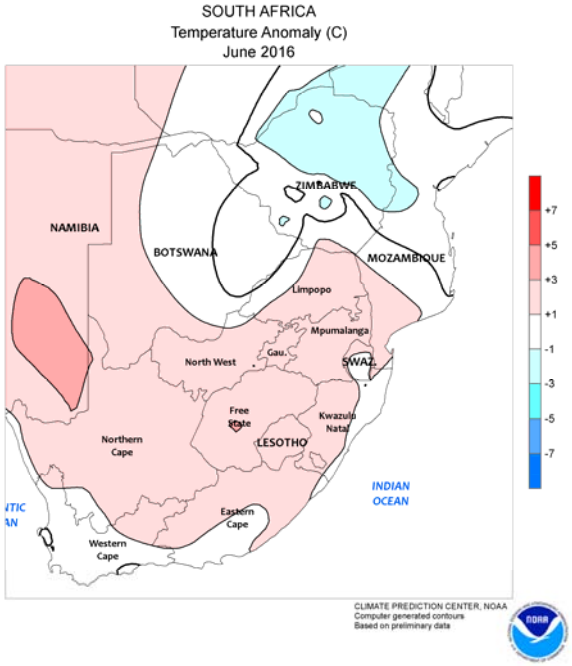
AUSTRALIA

During June, above-normal rainfall in southern and eastern Australia further boosted moisture supplies for vegetative winter grains and oilseeds, maintaining good to excellent early-season yield prospects. Similarly, near-normal rainfall in Western Australia sustained adequate topsoil moisture for winter crops, favoring wheat, barley, and canola development.



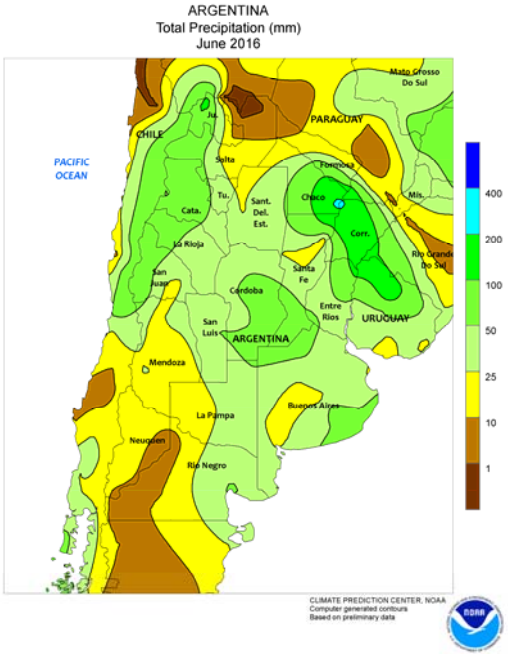


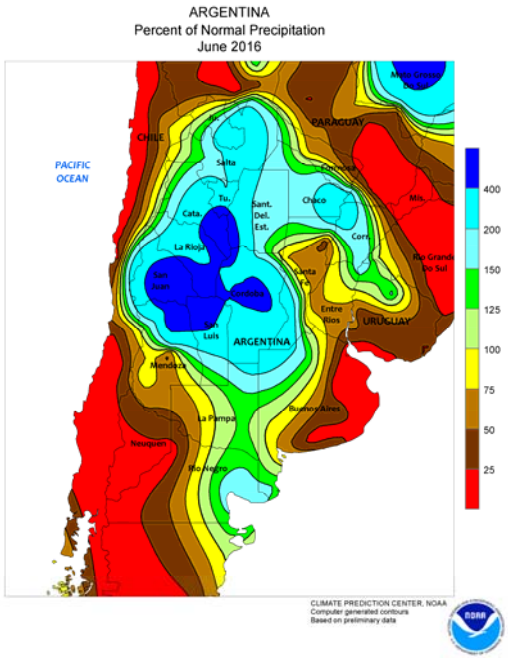


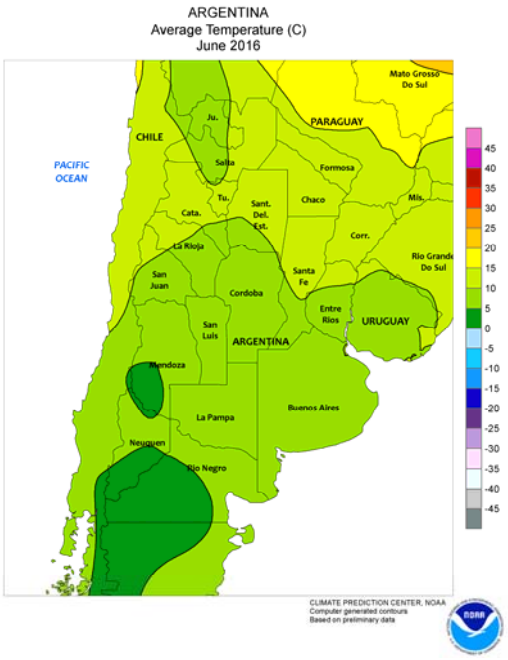


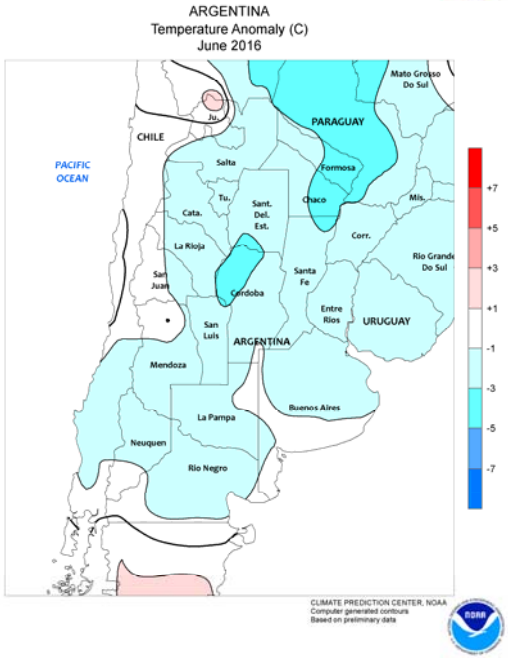
SOUTH AFRICA

In June, mild, showery weather maintained generally favorable conditions for overwintering wheat in key production areas of Western Cape. Monthly rainfall totaled 10 to 50 mm in the main western production areas; higher amounts (locally exceeding 100 mm) in southwestern sections of the province increased long-term moisture reserves for tree and fruit crops. June temperatures were generally seasonable, though patchy frost was possible toward the end of the month. Elsewhere, showers were infrequent and generally light in the corn belt (notably North West, Free State, and Mpumalanga), allowing harvesting to progress. Mild weather favored overwintering wheat. Mostly dry, unseasonably warm weather promoted sugarcane harvesting in KwaZulu-Natal and eastern Mpumalanga, though showers were recorded in locations closest to the coast.



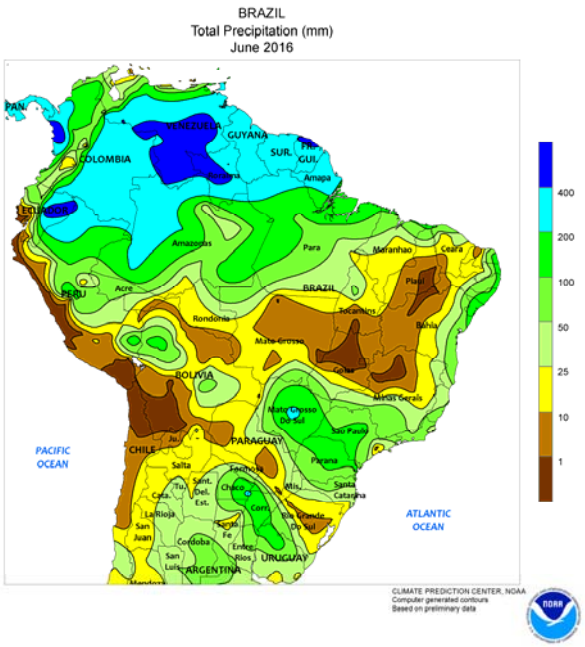


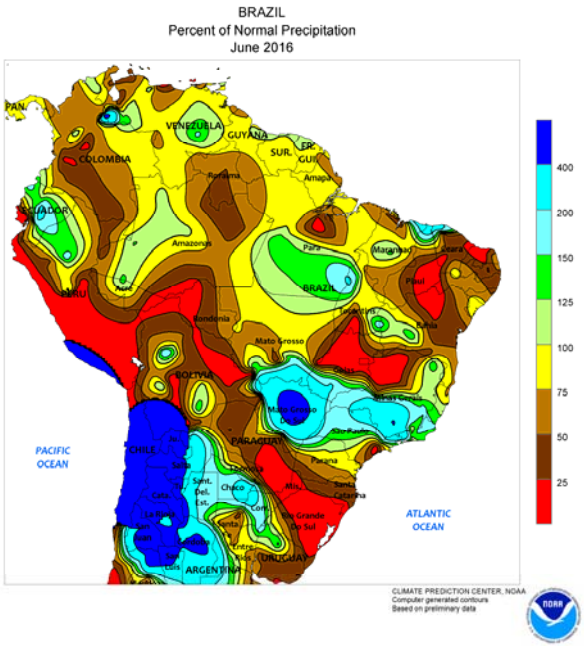


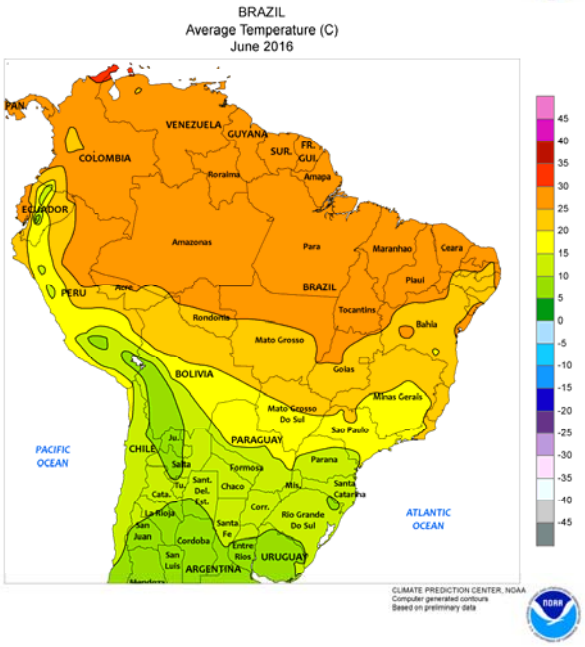


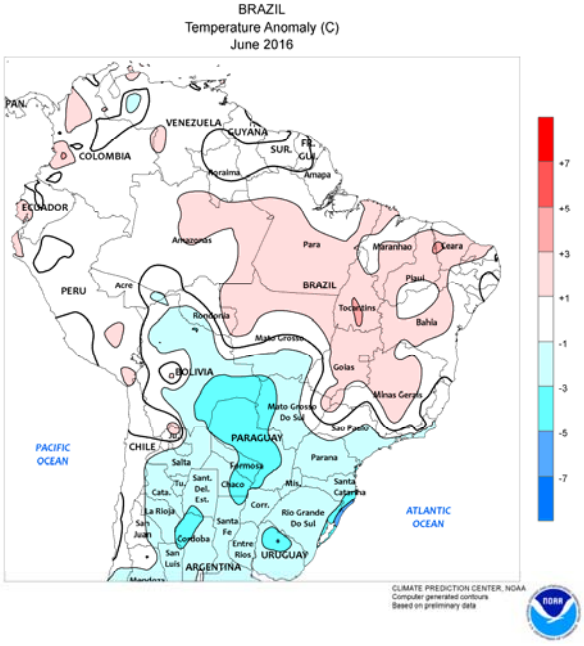
ARGENTINA

In June, late-month rain renewed delays in fieldwork, following an extended period of favorable dryness. According to reports emanating from Argentina, soybean harvesting was nearing completion prior to the onset of the showers; corn harvesting continued to lag last year's pace in spite of nearly 3 weeks of complete dryness in major farming areas of central Argentina (La Pampa, Buenos Aires, and southern sections of Cordoba, Santa Fe, and Entre Rios). Concerns for open-boll cotton were also noted. While the late-month rain (accumulations exceeding 50 mm in spots, with amounts exceeding 100 mm from eastern Chaco to northern Uruguay) — though lighter than recent events — was untimely for fieldwork, the moisture will ultimately benefit winter grains. June temperatures averaged near to slightly below normal, with the coolest weather relative to normal recorded in the north. Freezing temperatures were recorded as far north as Formosa as seasonal cooling continued, favoring drydown of later-maturing northern row crops.



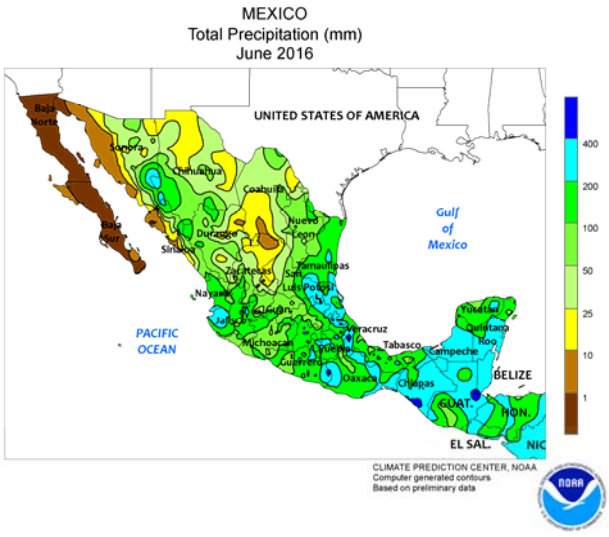


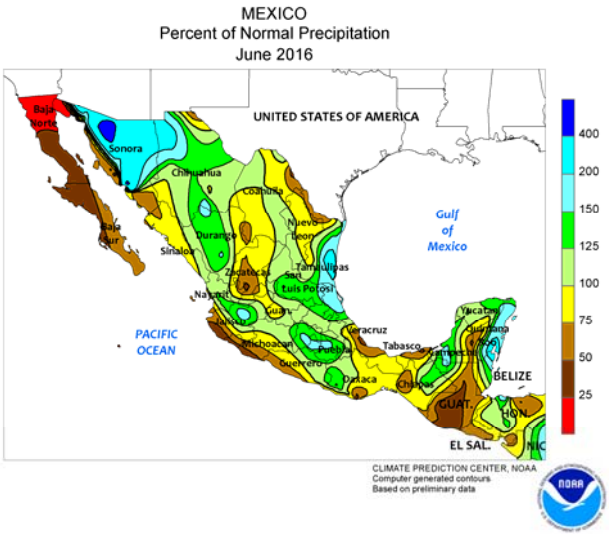


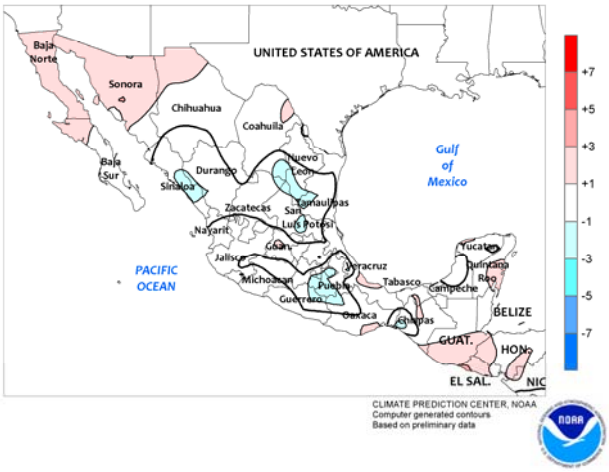


BRAZIL

An unusual June freeze caused some damage to immature crops in southern Brazil. The unseasonable cold (nighttime lows falling below 0°C) overspread the region from June 6 to 13, with freezes reported in corn and sugarcane areas of southern and western Parana toward the end of the period. However, the cold stayed well south of the main coffee areas (Minas Gerais and Espirito Santos). Showery weather returned to the region during the latter half of June, boosting moisture for newly-sown winter wheat but disrupting harvesting of sugarcane and corn. Meanwhile, warm, seasonably dry weather dominated much of the Center-West and northeastern interior (Mato Grosso eastward to western Bahia and environs) for most of the month, hastening maturation of second-crop corn and cotton. In contrast, seasonal showers prevailed along the northeastern coast, providing moisture for sugarcane, cocoa, and coffee.

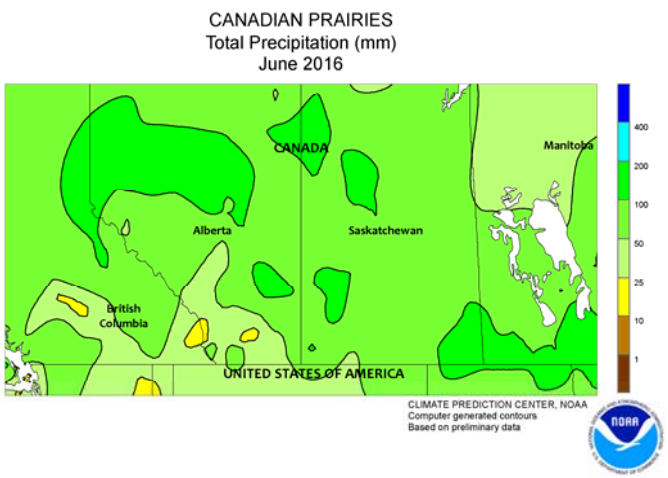


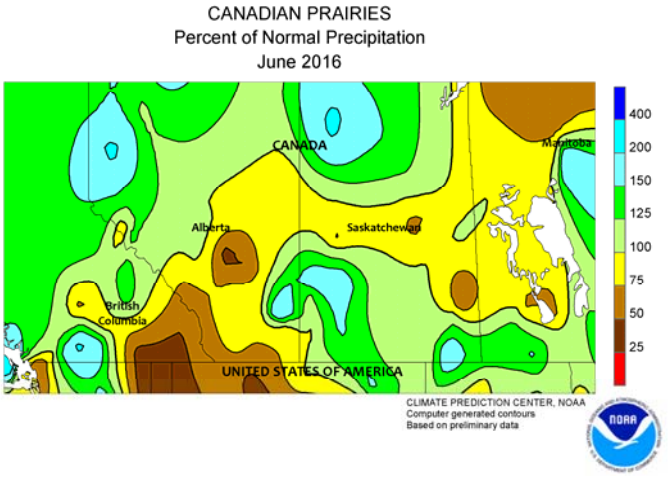


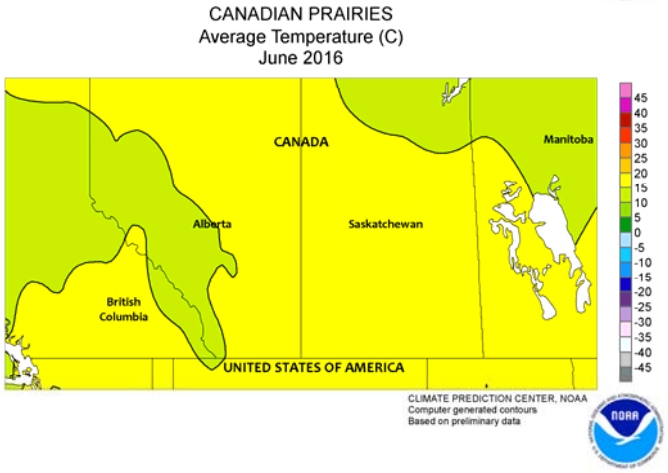


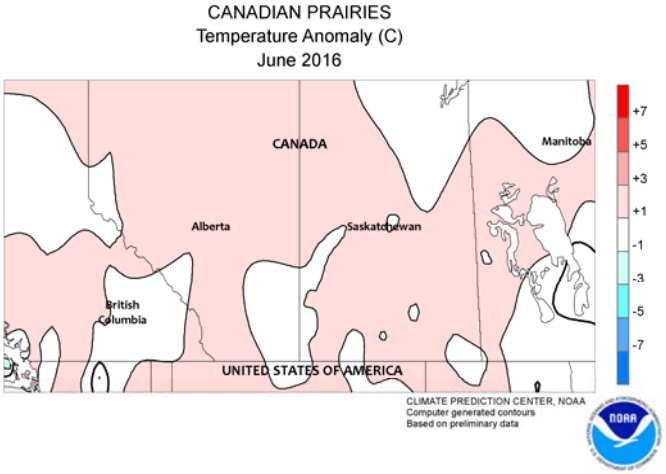
MEXICO

During June, seasonal showers improved prospects for corn and other rain-fed summer crops. The intensification of rain was particularly welcome in western sections of the southern plateau (Jalisco and Michoacan), where the late start to the rainy season likely resulted in some planting delays. Frequent rain also benefited most agricultural areas along the southern Pacific Coast and in the southeast, including sugarcane in and around Veracruz. Elsewhere, monsoon showers developed over northwestern watersheds toward the end of the month, signaling the start of the southern rainy season. Showers were more sporadic in nature in the northeast (Coahuila to Tamaulipas), and seasonal warming drove daytime highs into the lower 40s (degrees C), sustaining high moisture reserves for crops and livestock.



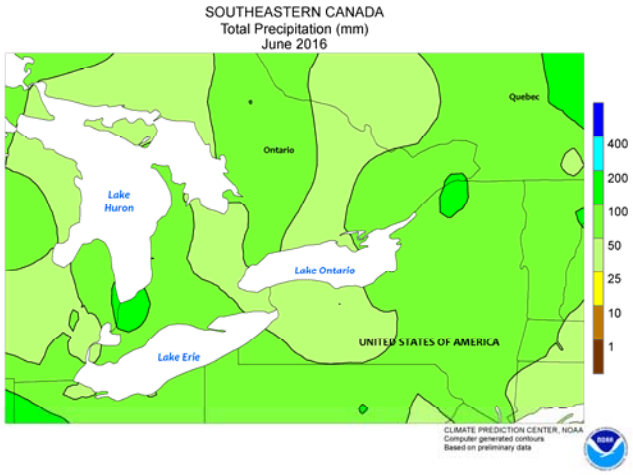


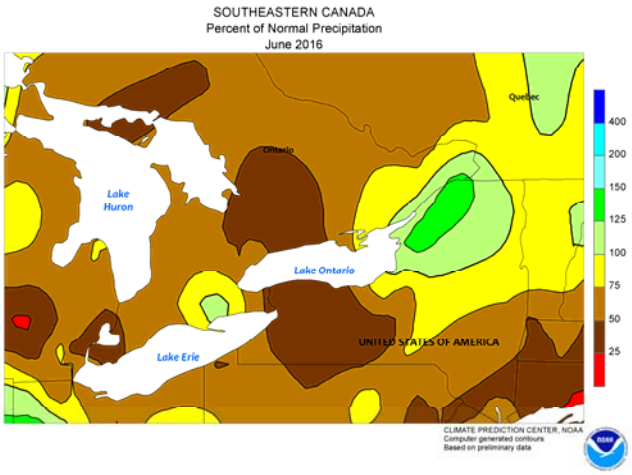


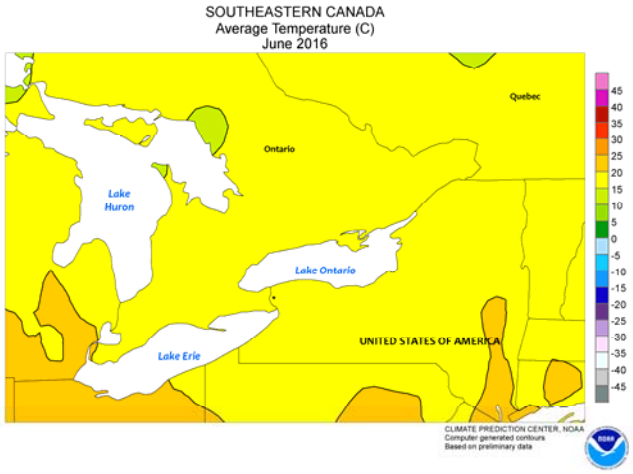


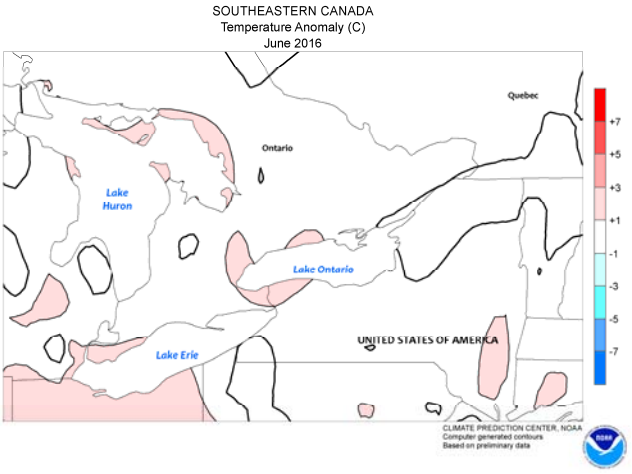
CANADIAN PRAIRIES

During June, showers and seasonable warmth maintained overall favorable conditions for vegetative spring crops. Monthly rainfall accumulations totaled between 50 and 100 mm in most areas, though heavier amounts would have been welcome in northern farming areas of Saskatchewan that experienced earlier periods of dryness. Lighter amounts were recorded in southern Alberta, which received above-normal rainfall in May; heavier rain elsewhere in the province helped to alleviate drought that lingered into the spring planting season. June temperatures averaged 1°C or more above normal in most Prairie farming areas; patchy frost was recorded in traditionally cooler western areas through the middle part of the month, but seasonal warming had reduced the possibility of a late spring freeze by month's end. Daytime highs briefly reached into the lower 30s (degrees C) across the southern Prairies, otherwise temperatures generally peaked at the middle and upper 20s.





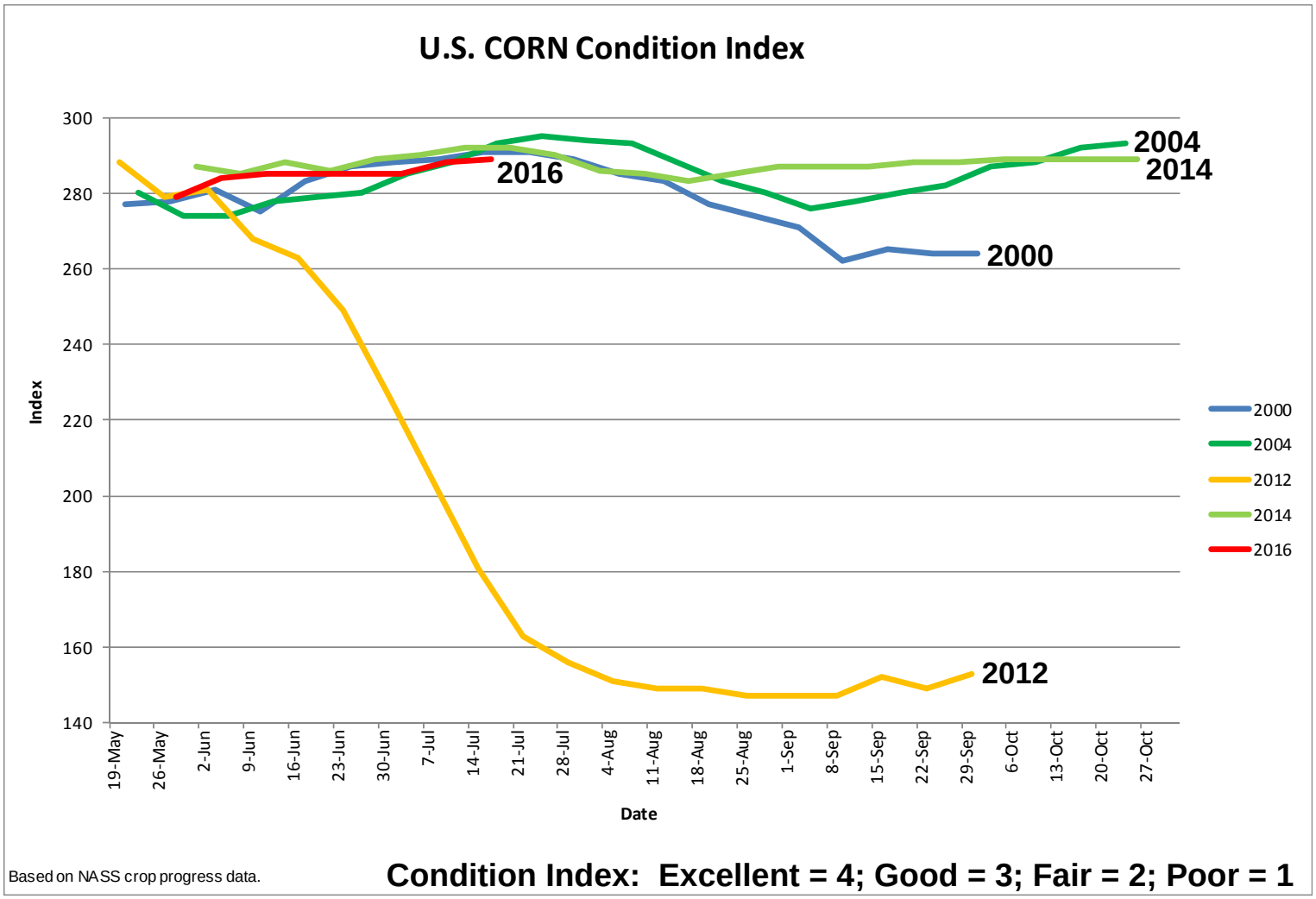




SOUTHEASTERN CANADA

Drought intensified as Ontario recorded its third consecutive month of below-normal rainfall. The persistent, unseasonable dryness lowered yield prospects of corn and other summer crops, while drying pastures and hastening development of winter wheat. Rainfall averaged near normal in Quebec, as early-month heavy rain gave way to drier conditions by mid-June. Monthly average temperatures were generally near normal, though nighttime lows in southwestern Ontario fell below 5°C on several evenings during the first part of the month, slowing development of emerging to vegetative corn and soybeans.

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



Based on NASS crop progress data.

Condition Index: Excellent = 4; Good = 3; Fair = 2; Poor = 1

Since 1995, the nation's mid-July corn condition index (CCI) has been higher than 2016 only three times: 2000, 2004, and 2014. U.S. corn had generally favorable outcomes in each of the 3 years. Despite late-summer 2000 drought development in the western Corn Belt, the final corn yield of 136.9 bushels/acre was second only to 138.6 bushels/acre in 1994. In 2004, a then-record U.S. corn yield of 160.3 bushels/acre was achieved. And in 2014, an all-time-record U.S. yield of 171.0 bushels/acre was observed. The CCI for the worst modern drought year on record, 2012, is also shown.

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