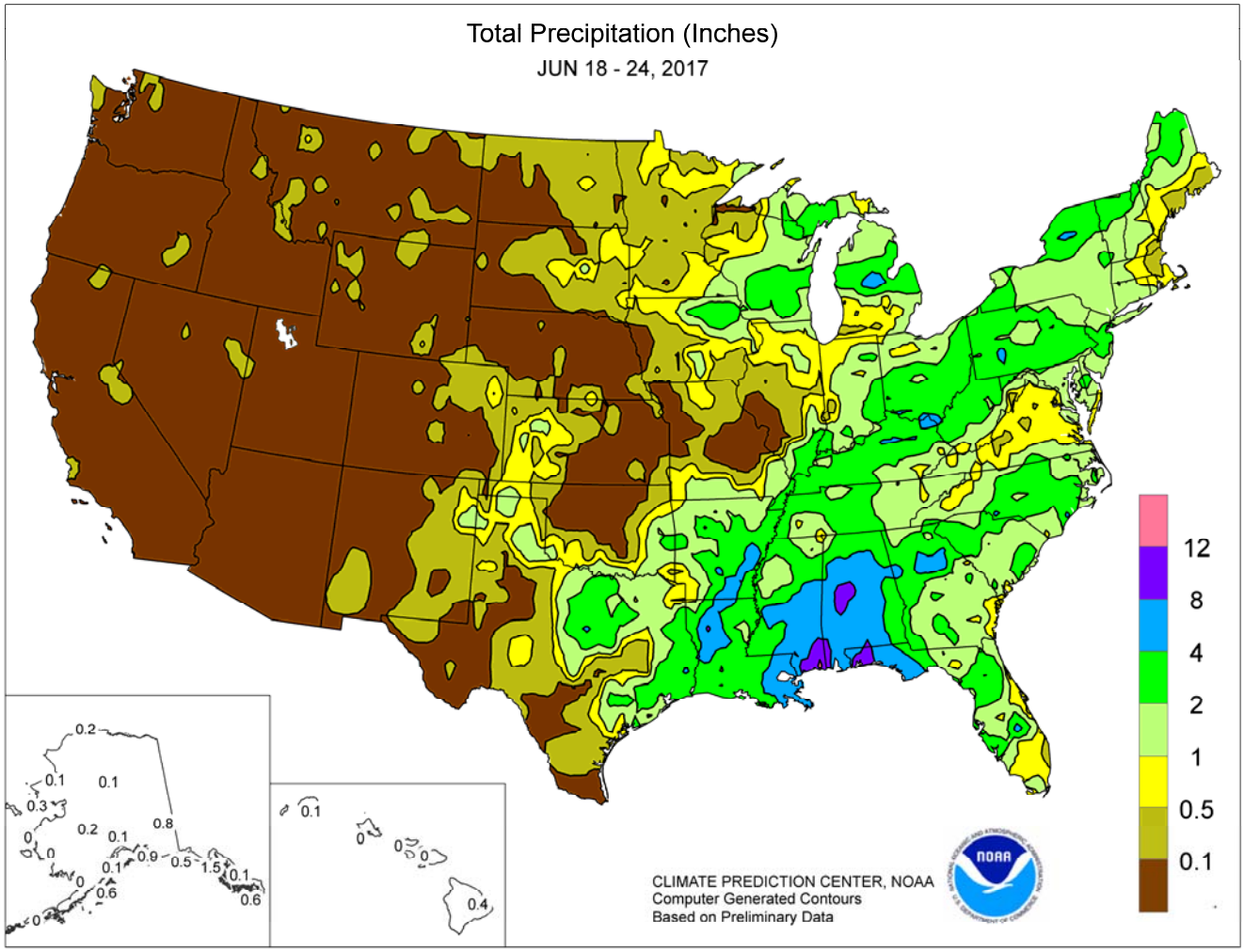
Volume 104, No. 26 http://www.usda.gov/oce/weather June 27, 2017

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

June 18 – 24, 2017

Highlights provided by USDA/WAOB

Minimal Tropical Storm Cindy made landfall near the **Texas-Louisiana border** before daybreak on June 22, contributing to a storm surge along the **Gulf Coast**; flooding rains (locally a foot or more) in the **central Gulf Coast region**; and heavy showers and locally severe thunderstorms in parts of the **Southeast** and from the **Mississippi Delta into the Ohio Valley**. Cindy's remnant circulation was ultimately absorbed by a strong cold front crossing the **Mid-Atlantic region**. Prior to interacting with the former tropical storm, the cold front sparked

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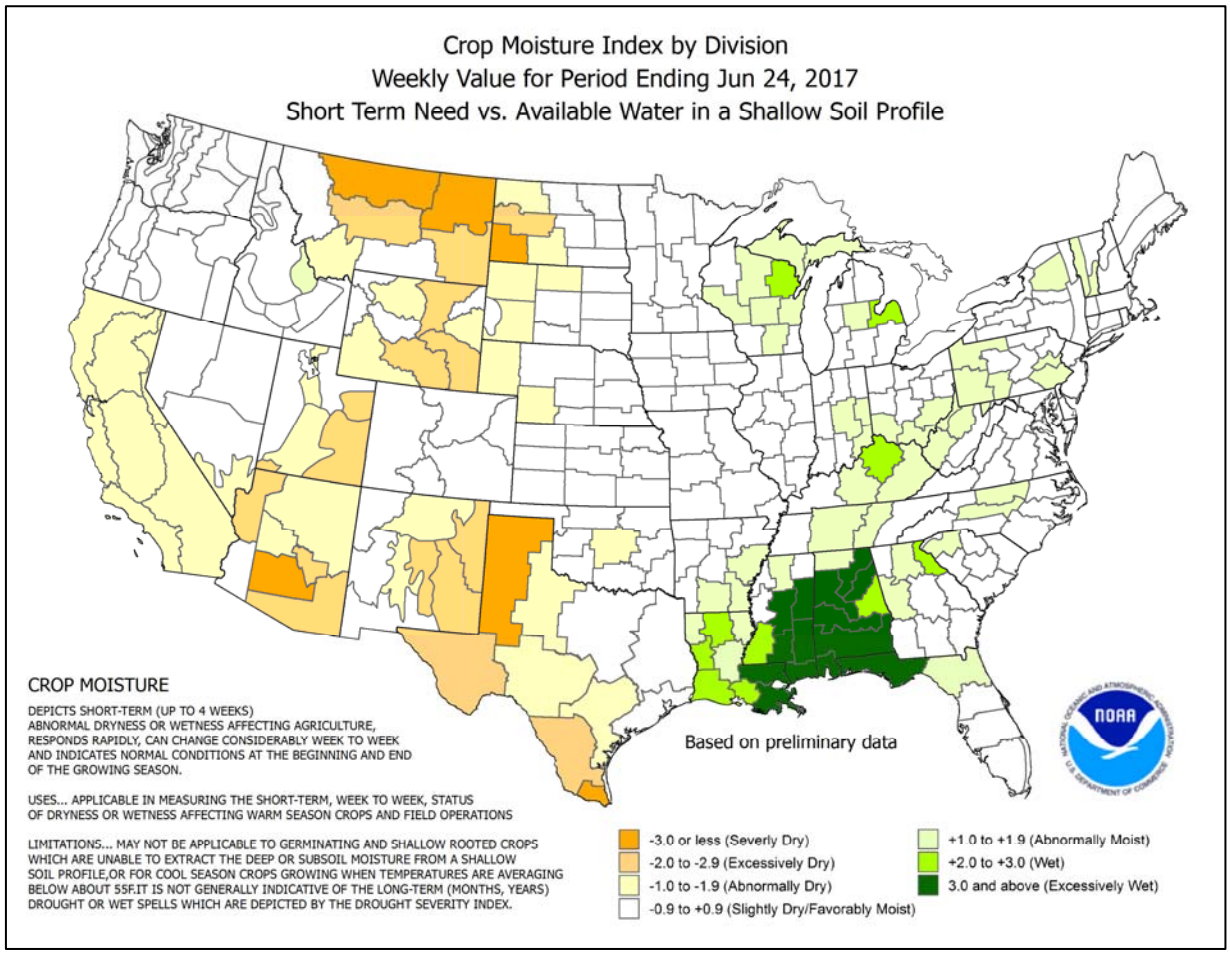
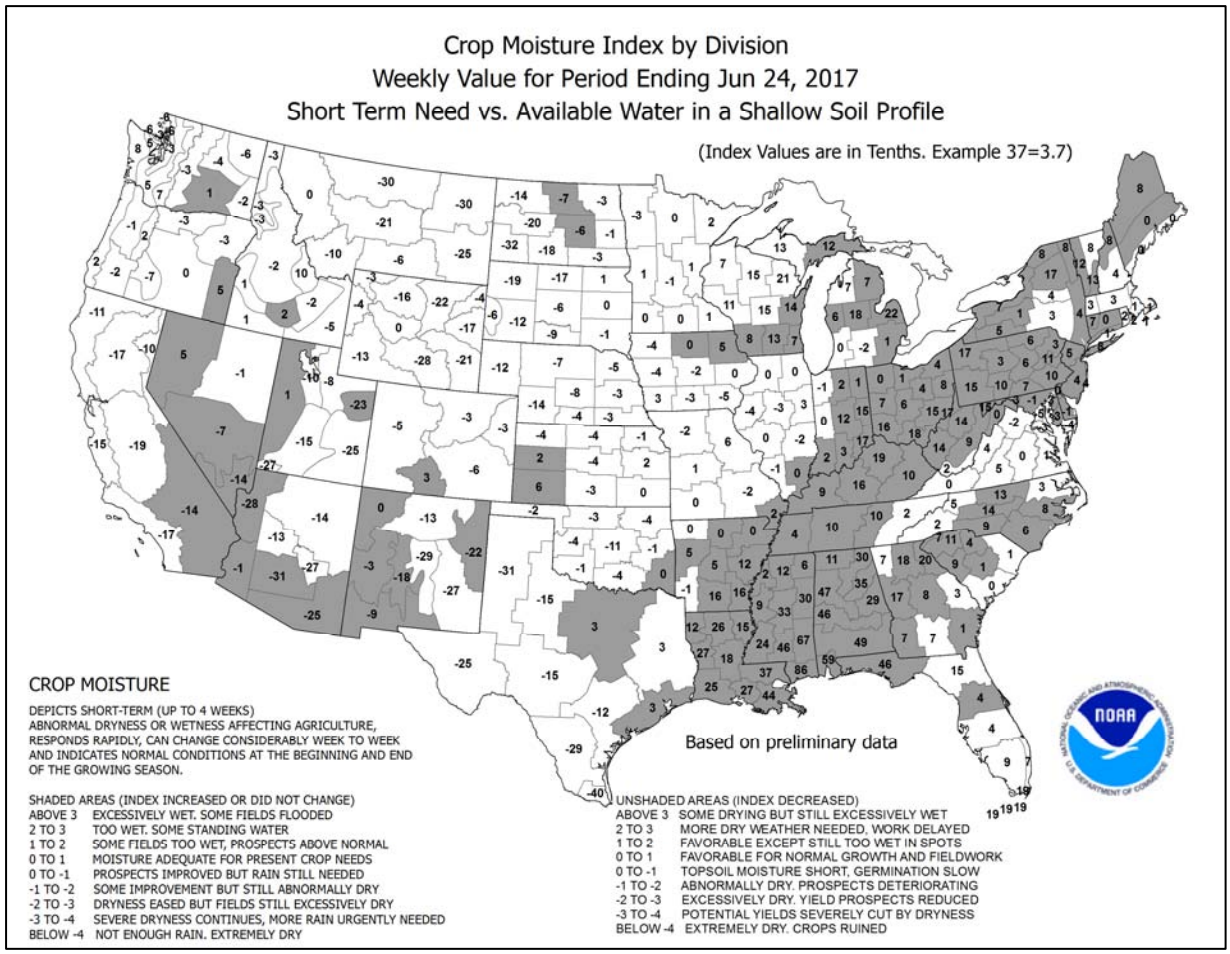
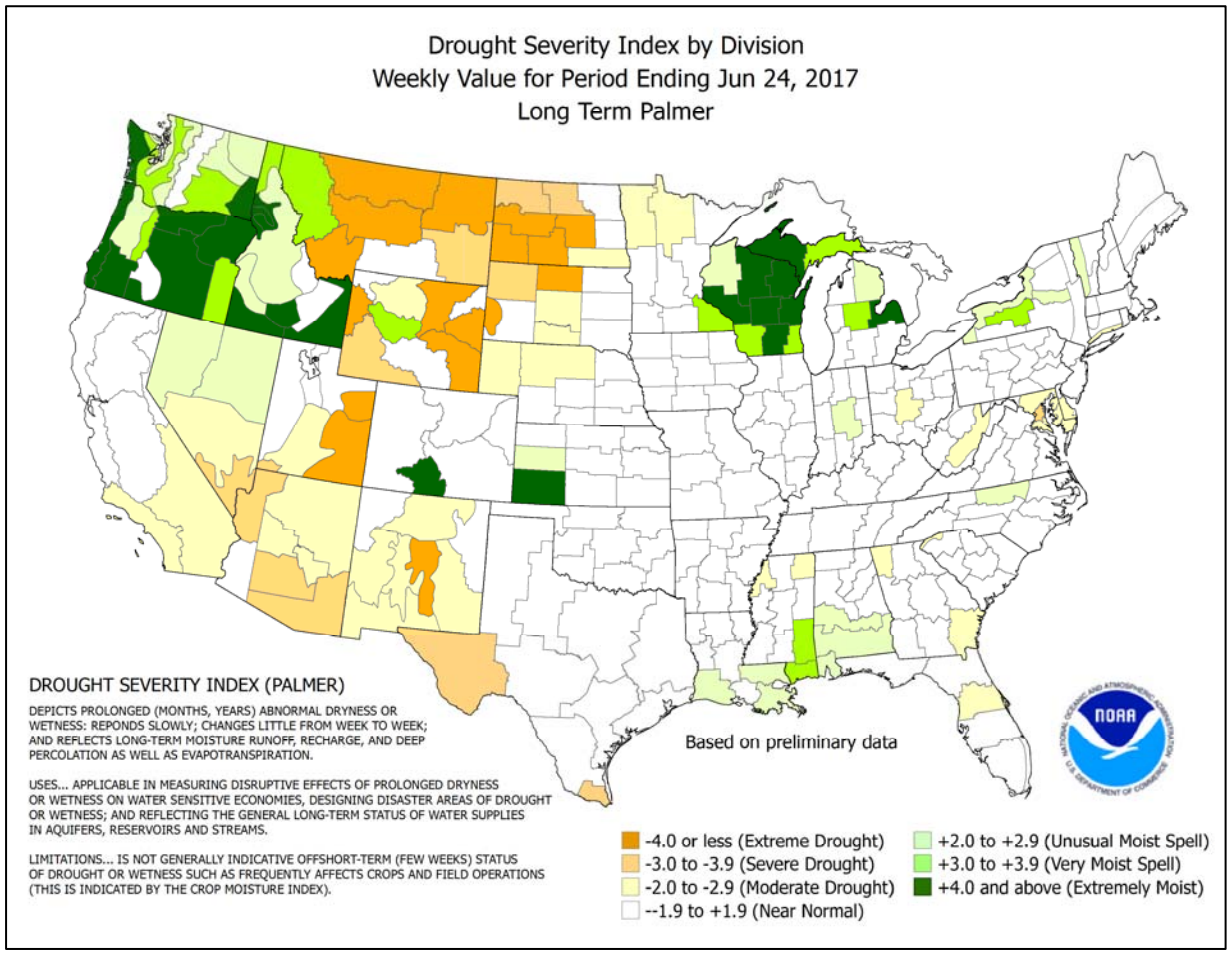
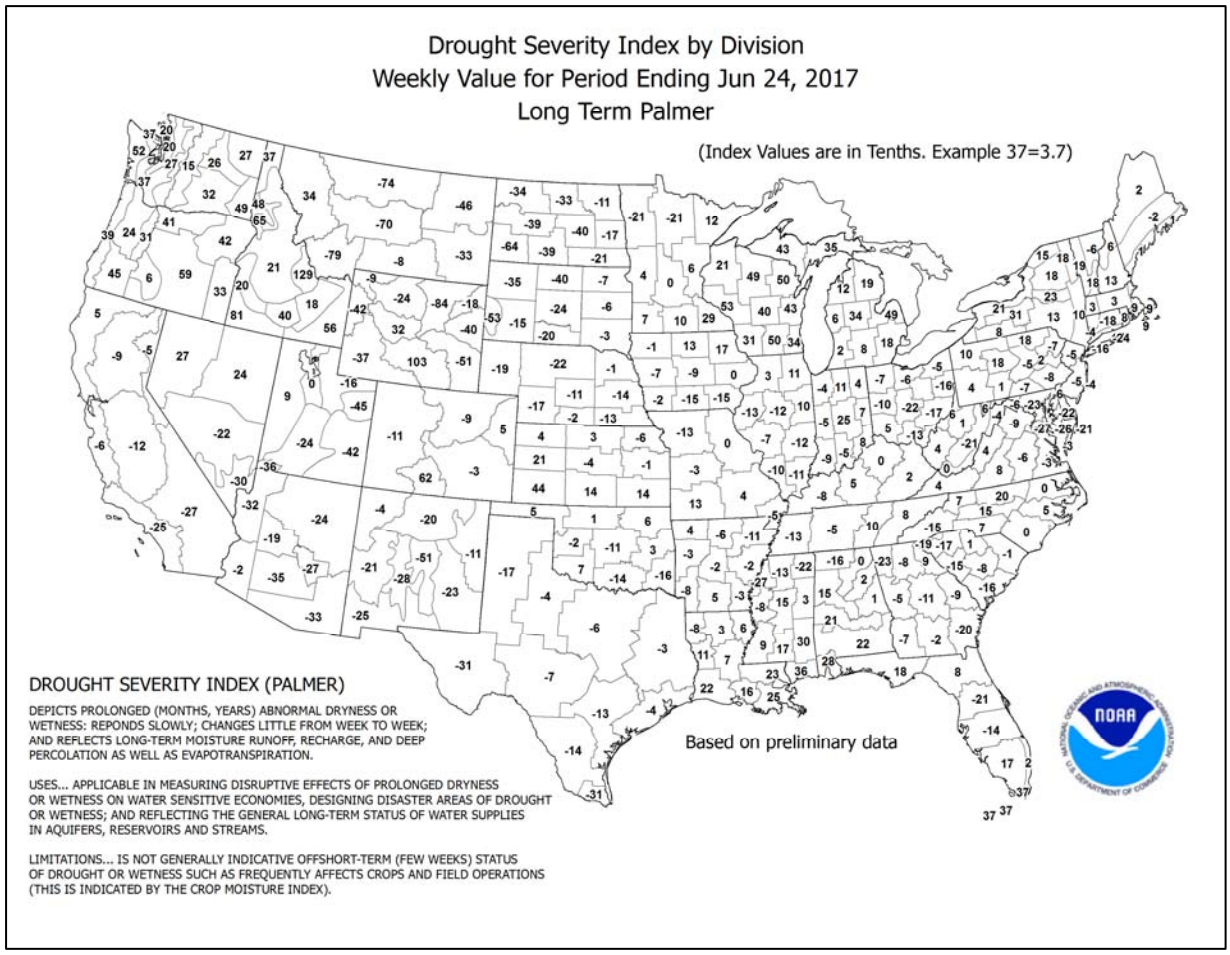

Crop Moisture Index by Division
Weekly Value for Period Ending Jun 24, 2017
Short Term Need vs. Available Water in a Shallow Soil Profile
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES 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 Jun 24, 2017
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


Drought Severity Index by Division
Weekly Value for Period Ending Jun 24, 2017
Long Term Palmer
DROUGHT SEVERITY INDEX (PALMER)
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS: REPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.
USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.
LIMITATIONS... IS NOT GENERALLY INDICATIVE OFFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
Based on preliminary data
NOAA
-4.0 or less (Extreme Drought)
-3.0 to -3.9 (Severe Drought)
-2.0 to -2.9 (Moderate Drought)
--1.9 to +1.9 (Near Normal)
+2.0 to +2.9 (Unusual Moist Spell)
+3.0 to +3.9 (Very Moist Spell)
+4.0 and above (Extremely Moist)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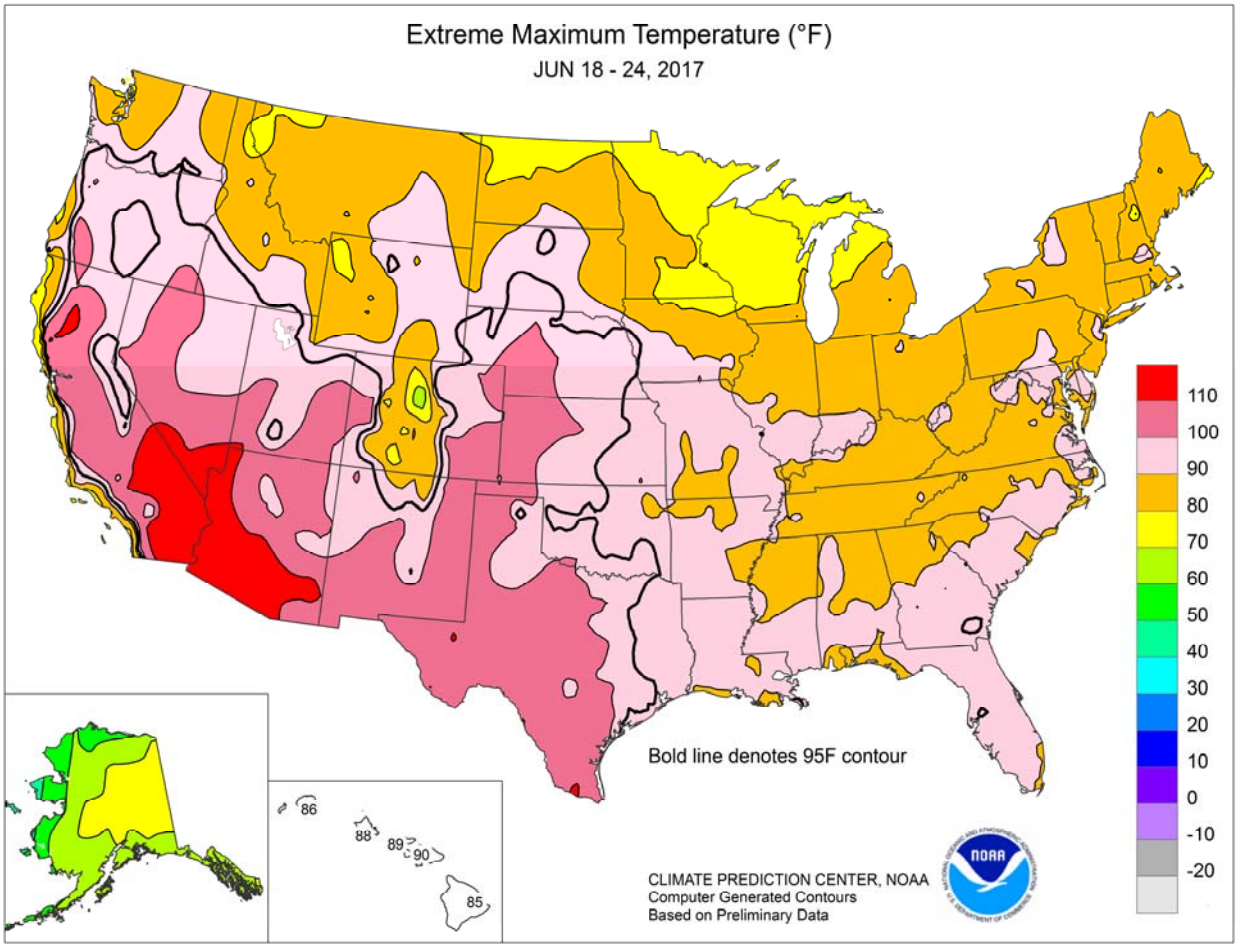
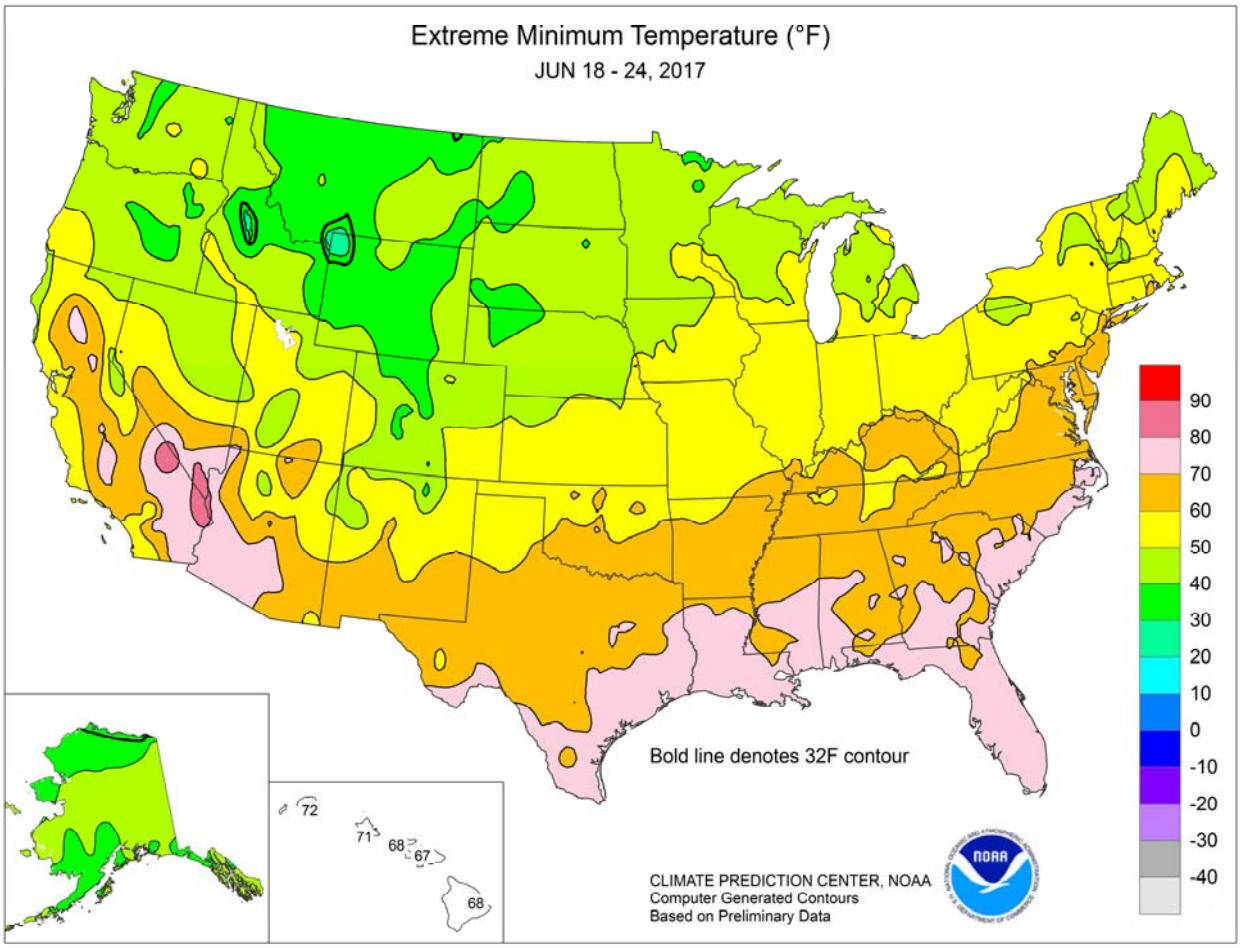
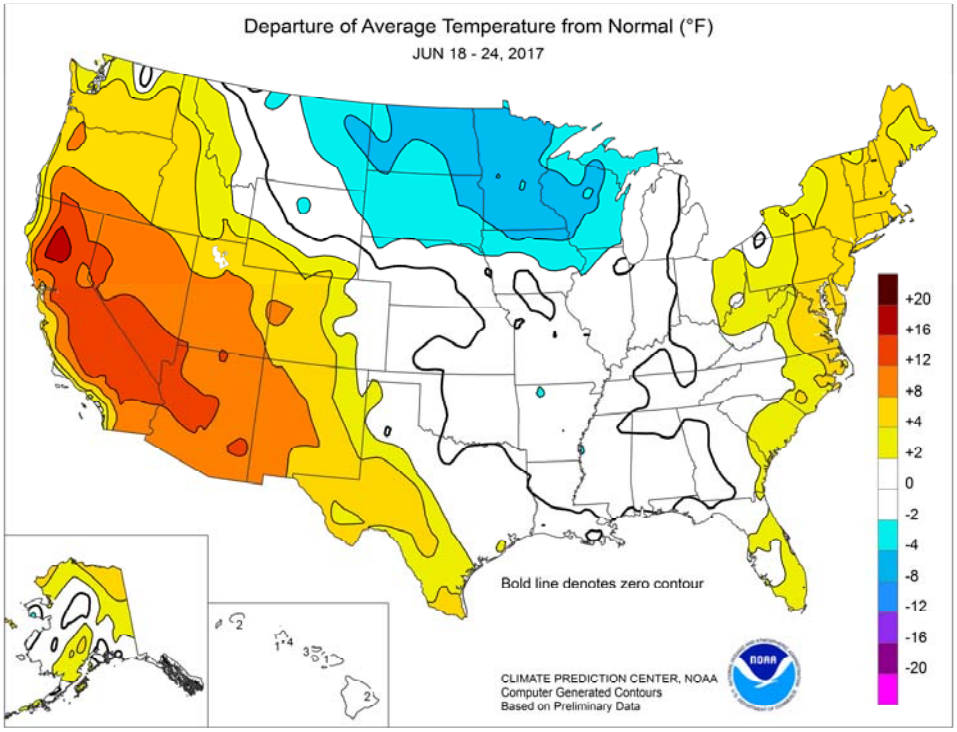
Based on preliminary data
NOAA


Extreme Maximum Temperature (°F)
JUN 18 - 24, 2017
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
86
88
89
90
85
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Minimum Temperature (°F)
JUN 18 - 24, 2017
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
72
71
68
67
68
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA

(Continued from front cover)

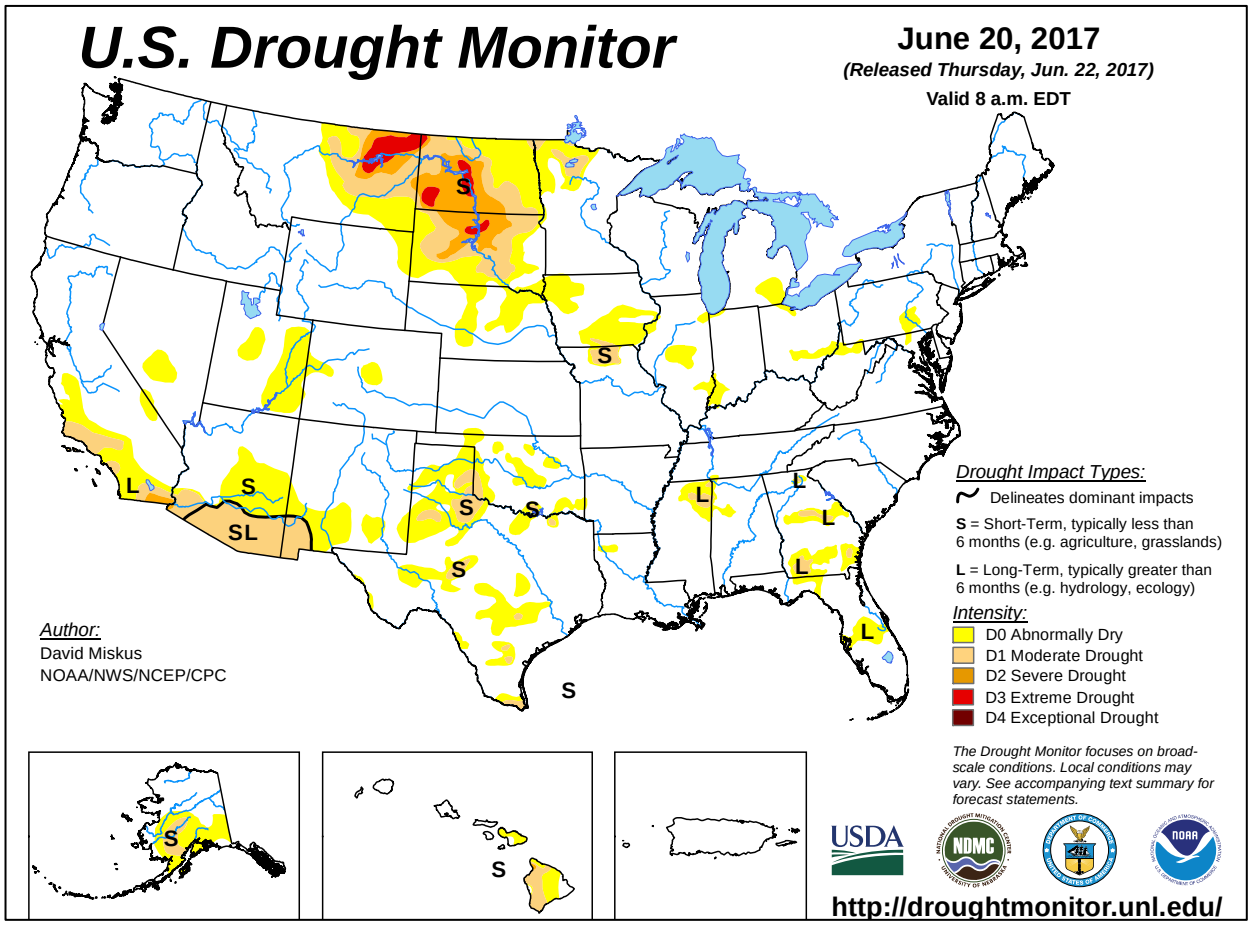


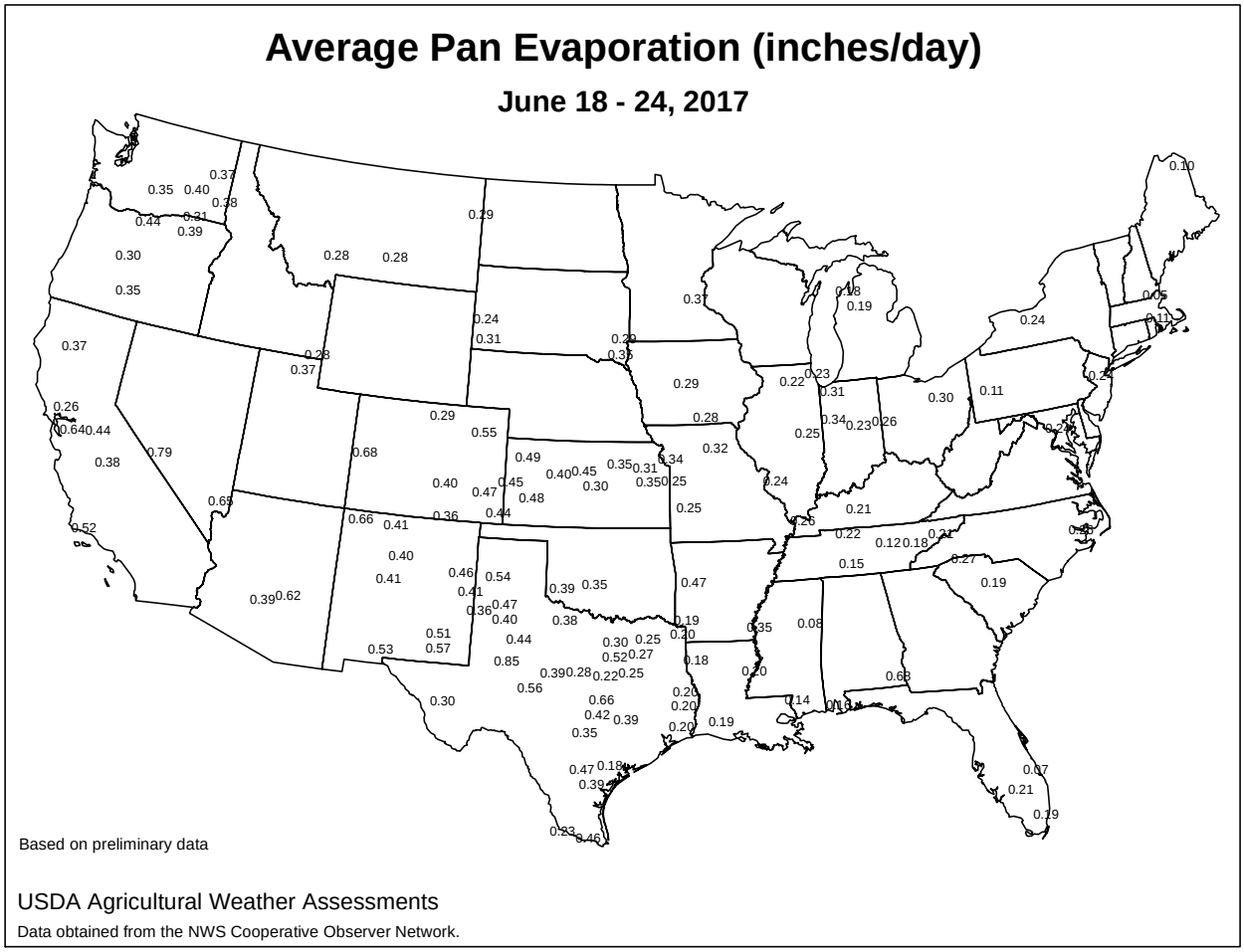
showers and thunderstorms in the **Midwest**. In addition, cool air trailed that front, as well as a previous one, helping to hold weekly temperatures as much as 5°F below normal across the **northern Plains** and **upper Midwest**. However, rain again mostly bypassed the driest areas of **eastern Montana** and the **western Dakotas**, maintaining stress on rangeland, pastures, winter wheat, and summer crops, despite the lower temperatures. Farther south, short-term dryness on the **central and southern Plains** favored winter wheat maturation and harvesting, but remained a concern with respect to diminishing grass growth and stress on rain-fed crops. Spotty showers brought local relief, but only after a mid-week heat wave had pushed temperatures to 100°F or higher throughout the **central and southern High Plains**. Unlike the **Plains'** fleeting hot spell, sustained, record-breaking heat—with temperatures averaging at least 10°F above normal—gripped **California**, the **Great Basin**, and the **Southwest**. Weekly readings averaged as much as 20°F above normal in **northern California**, while all-time-record highs were tied on June 20 in locations such as **Needles, CA** (125°F), and **Las Vegas, NV** (117°F). The **Western** heat boosted irrigation demands; melted much of the remaining high-elevation snow; and spurred fieldwork and crop development that had been previously delayed by a cool, wet spring.

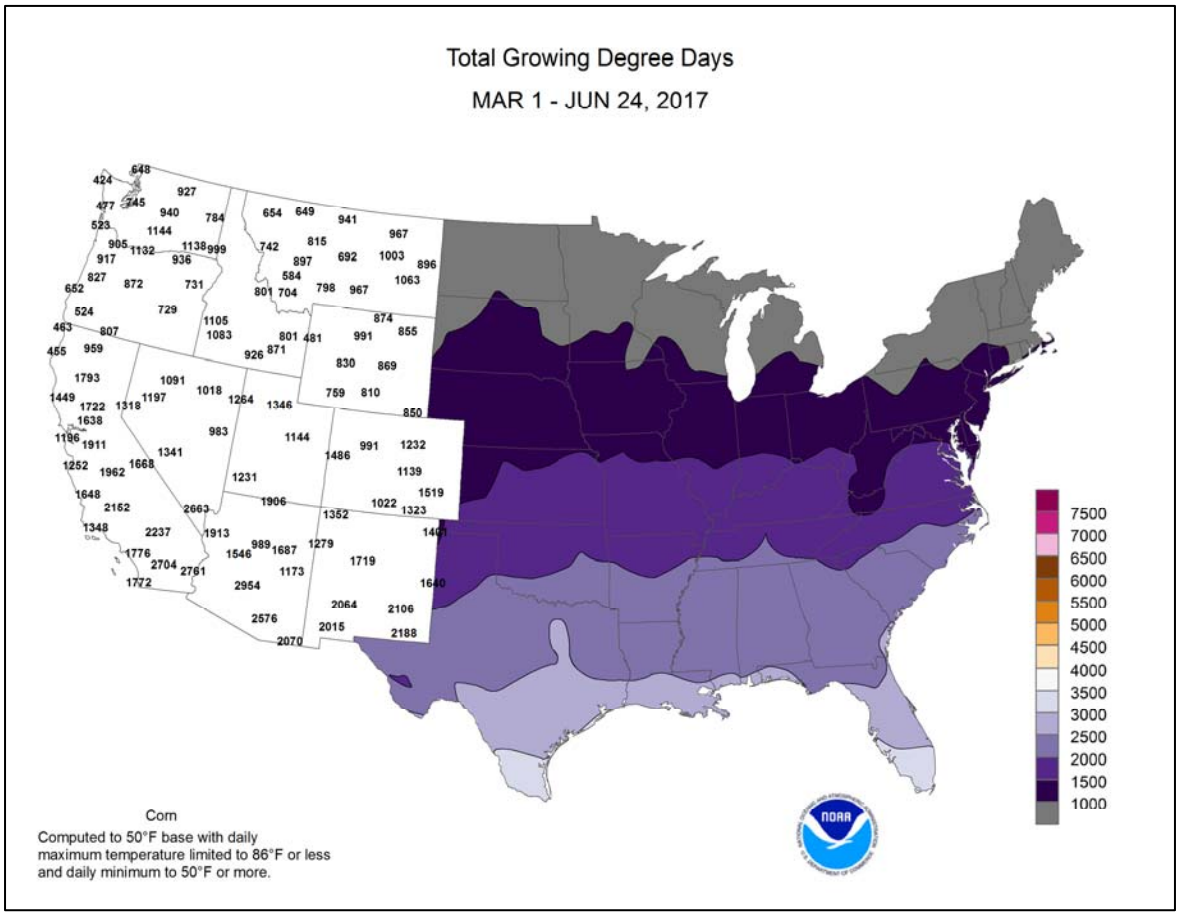
Some of the heaviest rain associated with Tropical Storm Cindy's approach fell along the **central Gulf Coast** on June 20-21, when 2-day totals reached 8.37 inches in **Gulfport, MS**, and 7.83 inches in **Pensacola, FL**. Weekly (June 18-24) totals climbed to 9.70 in **Gulfport** and 9.51 inches in **Pensacola**, while unofficial rainfall amounts reached 10 to 18 inches in isolated locations near the **Gulf Coast** from **southeastern Louisiana to western Florida**. Other June 18-24 totals included 8.97 inches in **New Orleans, LA**, and 8.77 inches in **Tuscaloosa, AL**. During the course of the week, which featured complex interactions between Cindy and a pair of cold fronts, daily-record rainfall totals topped 3 inches in locations such as **Apalachicola, FL** (4.83 inches on June 20); **Dallas-Ft. Worth, TX** (3.84 inches on June 24); **Montgomery, AL** (3.59 inches on June 18); and **Watertown, NY** (3.28 inches on June 23). On June 23, **Midwestern** daily-record amounts included 2.86 inches in **Dayton, OH**; 1.84 inches in **Saginaw, MI**; and 1.79 inches in **Fort Wayne, IN**. Cindy's remnant circulation was fully absorbed by a cold front by June 24, but **Northeastern** daily-record totals for that date reached 1.94 inches in **Trenton, NJ**, and 1.72 inches in **Harrisburg, PA**.

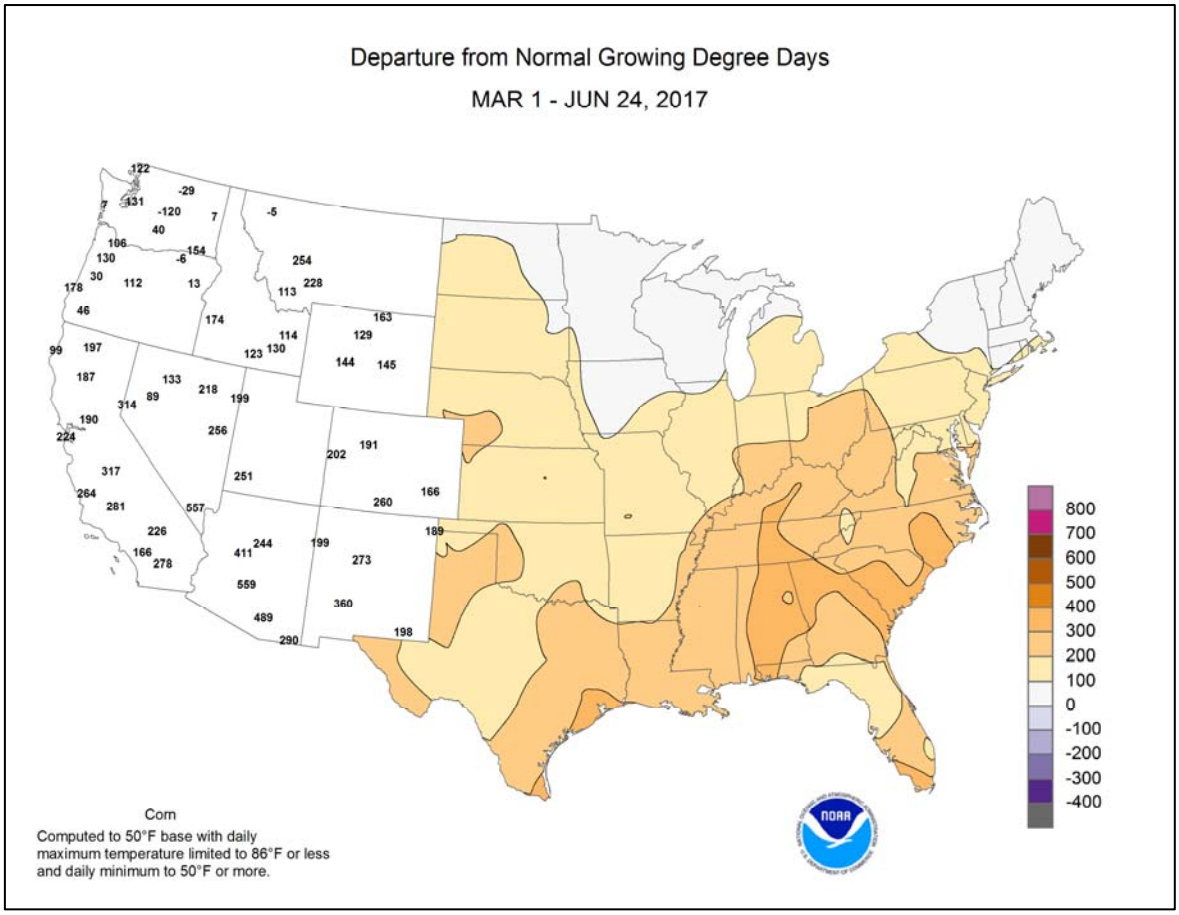
Sweltering conditions blanketed much of the **West** all week. A streak with highs of 120°F or greater began in **Death Valley, CA**, on June 17 and lasted at least 10 days, with the temperature peaking at 127°F on the 20th and 24th. All-time records for the hottest day were tied on June 20 in locations such as **Needles, CA** (125°F; previously, June 20, 2016), and **Las Vegas, NV** (117°F; previously, June 30, 2013). With highs of 122°F on June 20, 24, and 25, **Palm Springs, CA**, tied a monthly record previously attained on June 29, 2013, and June 20, 2016. **Tucson, AZ**, tallied a high of 116°F on June 20, tying with June 29, 1994, for its second-hottest day on record. **Tucson's** highest reading remains 117°F on June 26, 1990. However, **Tucson** recorded its first-ever daily average temperature above the 100-degree mark, with a high of 116°F and a low of 87°F. Extreme heat extended as far east as the **lower Rio Grande Valley**, where **McAllen, TX**, set an all-time record with a high of 111°F on June 22. Previously, **McAllen** had reached 110°F on June 15, 1998, and May 4, 1999. On June 21, heat briefly expanded northward across the **Plains**, where **North Platte, NE**, tied a monthly record with a high of 107°F. **North Platte** had also reported 107°F on June 15, 1952, and June 26, 2012. Late in the week, heat surged into the **Pacific Northwest**. With a high of 103°F on June 24, **Roseburg, OR**, achieved its highest June reading since June 30, 1942, when the temperature soared to 104°F. In stark contrast, a late-week cool surge reached the **northern Plains**, **upper Midwest**, and **interior Northwest**. Record-setting lows for June 24 dipped to 37°F in **Casper, WY**, and 39°F in **Aberdeen SD**. **Lake Yellowstone, WY**, ended the week with consecutive freezes (27 and 28°F, respectively) on June 23-24.

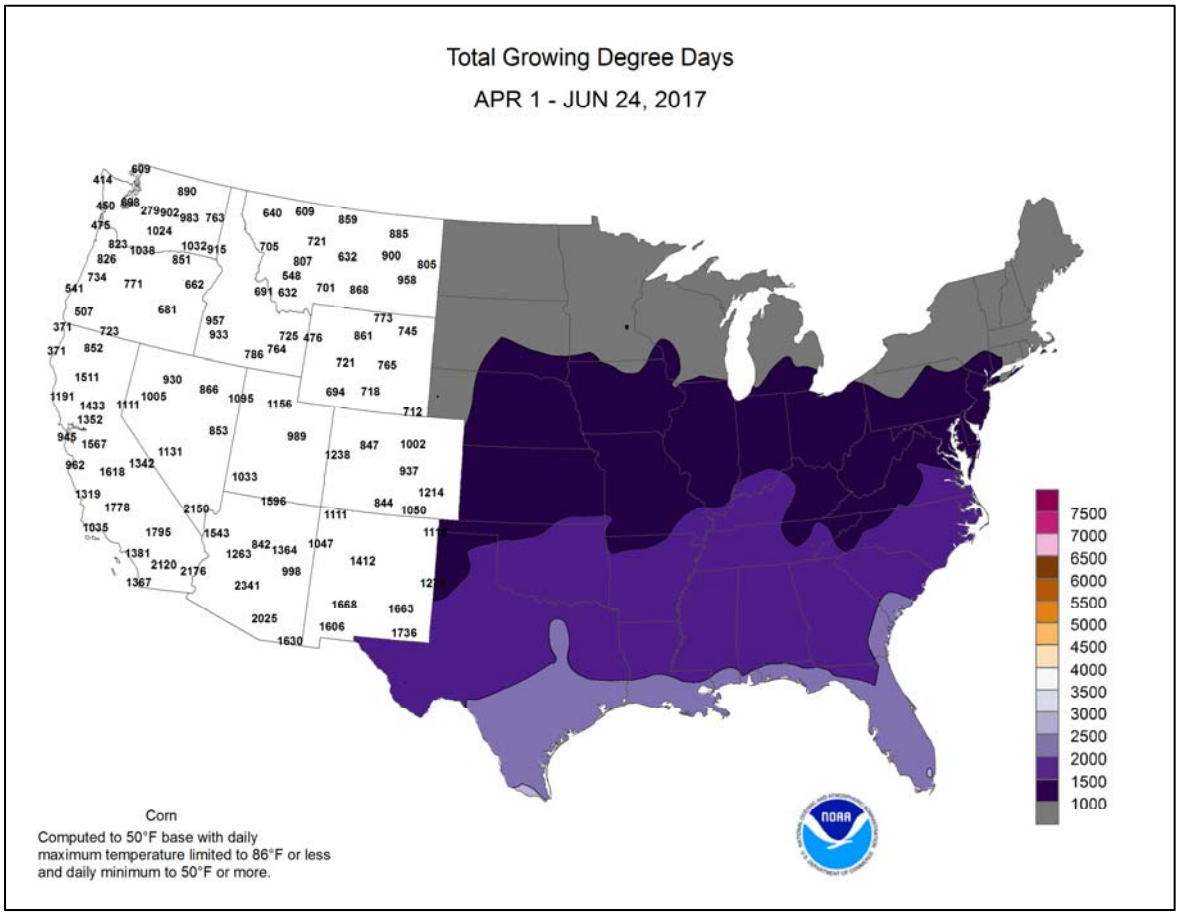
Scattered showers accompanied near-normal temperatures in **Alaska**. Some cool weather prevailed early in the week, when daily-record lows included 34°F (on June 19) in **King Salmon** and 42°F (on June 18) in **Sitka**. In **southeastern Alaska**, where **Auke Bay** received 1.50 inches of rain in a 24-hour period on June 19-20, showery weather trailed the cool spell. Farther south, **Hawaii** experienced warm, mostly dry weather. **Kahului, Maui**, registered highs of 90°F on June 16, 19, and 24, followed by a daily-record high of 92°F on June 25. It was **Kahului's** highest temperature since September 28, 2016, when it was also 92°F. Although much of **Hawaii** experienced dry weather, **Honolulu, Oahu**, achieved a daily-record rainfall (0.23 inch) on June 20. On the **Big Island**, however, **Hilo's** June 1-24 rainfall totaled just 2.85 inches (50 percent of normal).

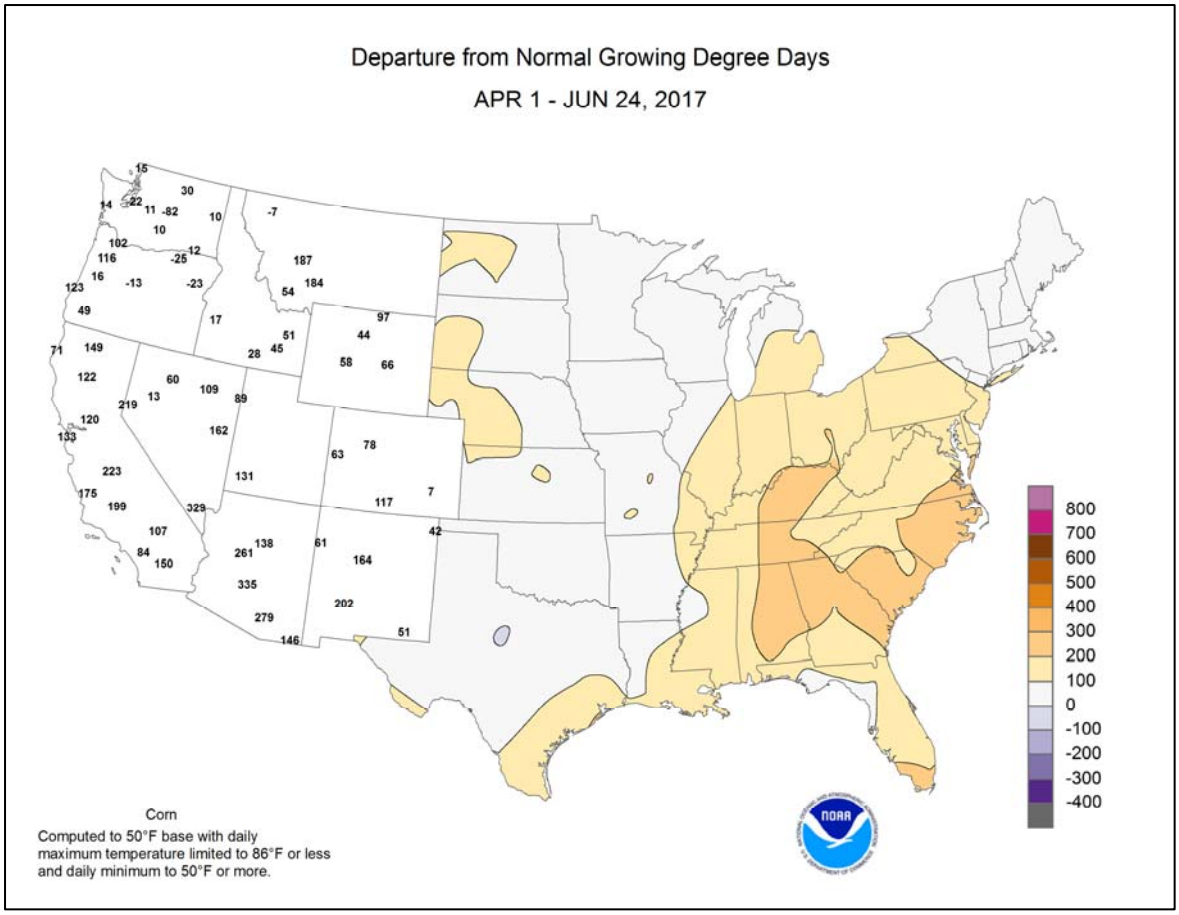

U.S. Drought Monitor
June 20, 2017
(Released Thursday, Jun. 22, 2017)
Valid 8 a.m. EDT
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
Author:
David Miskus
NOAA/NWS/NCEP/CPC
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
USDA
NDMC
NOAA
http://droughtmonitor.unl.edu/


Average Pan Evaporation (inches/day)
June 18 - 24, 2017
Based on preliminary data
USDA Agricultural Weather Assessments
Data obtained from the NWS Cooperative Observer Network.


Total Growing Degree Days
MAR 1 - JUN 24, 2017
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 - JUN 24, 2017
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 - JUN 24, 2017
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.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APR 1 - JUN 24, 2017
800
700
600
500
400
300
200
100
0
-100
-200
-300
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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 June 24, 2017

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	84	72	88	71	78	1	5.32	4.48	2.36	8.37	290	36.03	128	95	67	0	0	7	3
	HUNTSVILLE	85	70	89	65	78	1	4.83	3.90	1.70	6.00	177	28.73	95	98	74	0	0	4	4
	MOBILE	85	74	90	71	79	-1	4.99	3.89	2.65	9.86	251	41.85	126	93	79	2	0	5	3
	MONTGOMERY	86	73	92	70	80	0	7.83	6.86	3.59	11.53	379	45.45	160	86	68	3	0	5	3
AK	ANCHORAGE	61	48	67	44	54	-1	0.39	0.14	0.39	0.67	88	5.49	136	86	70	0	0	1	0
	BARROW	46	35	52	30	40	3	0.22	0.15	0.20	0.22	138	3.52	489	96	77	0	3	3	0
	FAIRBANKS	74	53	78	50	63	2	0.30	-0.03	0.23	1.73	173	4.77	159	85	48	0	0	3	0
	JUNEAU	62	47	67	41	55	0	1.45	0.68	0.87	3.00	114	25.17	118	94	80	0	0	4	1
	KODIAK	58	47	70	41	53	3	0.60	-0.61	0.31	3.10	70	23.82	67	87	72	0	0	3	0
	NOME	47	42	50	36	45	-3	0.27	0.01	0.24	0.76	97	3.32	75	97	88	0	0	4	0
AZ	FLAGSTAFF	92	52	93	49	72	11	0.12	0.04	0.12	0.12	67	9.76	101	44	9	7	0	1	0
	PHOENIX	115	87	119	80	101	11	0.00	0.00	0.00	0.00	0	2.41	78	22	12	7	0	0	0
	PRESCOTT	102	65	103	59	83	14	0.00	-0.07	0.00	0.00	0	4.90	71	35	7	7	0	0	0
	TUCSON	112	81	116	71	97	12	0.00	-0.05	0.00	0.00	0	1.60	49	25	13	7	0	0	0
AR	FORT SMITH	88	68	94	63	78	0	3.12	2.18	2.80	5.89	165	27.96	129	85	43	2	0	2	1
	LITTLE ROCK	87	68	90	63	78	-1	1.79	0.90	0.70	3.10	97	28.92	113	100	60	2	0	4	2
CA	BAKERSFIELD	108	81	110	79	94	15	0.00	0.00	0.00	0.00	0	4.79	105	43	28	7	0	0	0
	FRESNO	107	78	110	73	92	15	0.00	-0.03	0.00	0.00	0	12.64	162	58	37	7	0	0	0
	LOS ANGELES	73	62	75	61	67	0	0.00	0.00	0.00	0.00	0	12.07	128	96	78	0	0	0	0
	REDDING	111	81	113	73	96	20	0.00	-0.10	0.00	0.59	86	28.30	129	37	20	7	0	0	0
	SACRAMENTO	103	68	107	60	86	14	0.00	-0.03	0.00	0.10	63	23.64	199	74	26	7	0	0	0
	SAN DIEGO	75	64	79	62	69	1	0.00	0.00	0.00	0.02	40	7.75	102	90	75	0	0	0	0
	SAN FRANCISCO	78	58	97	54	68	6	0.00	0.00	0.00	0.05	71	21.97	165	82	64	1	0	0	0
	STOCKTON	106	69	109	64	88	14	0.00	0.00	0.00	0.03	43	15.62	174	65	35	7	0	0	0
CO	ALAMOSA	87	46	90	42	67	7	0.04	-0.07	0.04	0.19	46	4.44	173	83	31	2	0	1	0
	CO SPRINGS	83	57	95	50	70	5	0.05	-0.47	0.05	0.14	7	6.26	83	67	26	3	0	1	0
	DENVER INTL	86	56	99	45	71	4	0.10	-0.22	0.10	0.12	9	6.43	99	67	26	3	0	1	0
	GRAND JUNCTION	98	65	102	59	81	9	0.00	-0.06	0.00	0.03	9	2.86	67	32	15	7	0	0	0
	PUEBLO	89	59	102	52	74	3	0.11	-0.17	0.06	1.57	157	10.63	201	67	32	3	0	2	0
CT	BRIDGEPORT	85	68	90	63	77	8	1.67	0.87	0.85	2.04	72	21.87	101	87	53	1	0	3	2
	HARTFORD	86	64	90	55	75	6	1.55	0.69	1.51	2.89	92	21.16	96	89	49	1	0	4	1
DC	WASHINGTON	89	73	92	70	81	6	0.73	0.04	0.53	1.09	43	15.88	86	90	50	2	0	3	1
DE	WILMINGTON	88	70	90	66	79	7	1.29	0.49	0.77	3.87	138	21.05	102	97	51	1	0	4	1
FL	DAYTONA BEACH	90	75	94	74	83	3	0.39	-0.99	0.29	4.80	109	13.03	65	97	64	3	0	3	0
	JACKSONVILLE	91	74	94	72	82	2	2.06	0.75	1.78	8.56	213	24.41	114	99	61	5	0	4	1
	KEY WEST	88	80	89	76	84	0	0.25	-0.81	0.20	5.66	151	14.71	99	85	72	0	0	2	0
	MIAMI	90	80	91	76	85	2	1.60	-0.44	1.48	13.01	187	26.49	119	80	63	6	0	3	1
	ORLANDO	90	73	92	71	81	0	0.52	-1.29	0.38	5.14	93	11.57	58	100	65	6	0	4	0
	PENSACOLA	84	78	88	74	81	0	6.19	4.65	3.14	9.30	195	37.78	128	86	74	0	0	6	3
	TALLAHASSEE	88	73	94	70	81	0	2.65	1.02	1.93	7.21	136	27.01	89	99	78	4	0	3	2
	TAMPA	91	77	95	76	84	2	1.10	-0.25	0.67	6.94	169	12.91	78	88	57	6	0	4	1
	WEST PALM BEACH	89	80	90	75	84	3	0.51	-1.30	0.34	9.40	157	20.81	83	80	64	2	0	2	0
GA	ATHENS	85	70	90	68	77	0	4.33	3.43	1.57	6.39	208	31.50	129	100	81	1	0	6	3
	ATLANTA	83	71	88	70	77	-1	2.96	2.13	1.72	6.14	228	29.22	115	95	76	0	0	7	2
	AUGUSTA	91	74	95	69	83	5	2.03	1.04	1.10	3.10	94	23.04	102	91	61	5	0	5	2
	COLUMBUS	86	73	93	71	79	-1	1.77	0.96	0.69	2.66	102	28.23	113	93	66	2	0	5	1
	MACON	87	72	92	70	79	0	1.59	0.76	0.55	4.59	173	28.32	122	95	65	4	0	4	1
	SAVANNAH	91	75	95	71	83	4	1.08	-0.24	0.54	2.20	52	25.95	120	85	57	5	0	2	2
HI	HILO	84	70	85	68	77	2	0.40	-1.35	0.20	2.86	53	37.52	64	91	72	0	0	5	0
	HONOLULU	86	73	88	71	79	-1	0.23	0.15	0.23	0.48	145	13.96	152	73	66	0	0	1	0
	KAHULUI	88	70	90	67	79	1	0.00	-0.03	0.00	0.07	58	14.70	134	77	65	2	0	0	0
	LIHUE	85	74	86	72	80	2	0.11	-0.28	0.04	0.75	51	15.31	82	80	71	0	0	4	0
ID	BOISE	88	59	96	50	73	5	0.00	-0.14	0.00	1.20	200	10.99	155	55	32	2	0	0	0
	LEWISTON	87	58	95	50	72	5	0.00	-0.24	0.00	0.62	65	10.37	148	58	36	3	0	0	0
	POCATELLO	85	50	94	42	67	4	0.00	-0.17	0.00	1.14	148	11.05	158	71	35	1	0	0	0
IL	CHICAGO/O'HARE	81	62	88	55	72	3	0.76	-0.09	0.71	2.12	74	20.23	127	79	44	0	0	3	1
	MOLINE	83	62	91	55	73	1	0.89	-0.18	0.57	2.44	66	17.20	97	81	47	1	0	4	1
	PEORIA	82	63	88	56	73	1	0.69	-0.19	0.28	1.59	53	20.08	120	94	47	0	0	4	0
	ROCKFORD	80	59	88	53	70	0	0.61	-0.52	0.45	3.00	80	21.85	132	86	49	0	0	4	0
	SPRINGFIELD	85	64	91	59	75	1	0.36	-0.49	0.18	1.16	38	18.08	106	95	44	1	0	4	0
IN	EVANSVILLE	84	66	92	60	75	-1	2.31	1.40	1.86	3.55	107	23.87	103	83	58	2	0	3	1
	FORT WAYNE	80	61	88	57	71	0	2.54	1.60	1.79	4.08	128	28.53	165	87	51	0	0	4	2
	INDIANAPOLIS	82	63	89	58	72	-1	2.60	1.66	2.12	4.40	135	28.67	147	88	56	0	0	4	1
	SOUTH BEND	79	59	87	51	69	-1	0.21	-0.78	0.13	1.31	40	20.54	117	89	53	0	0	3	0
IA	BURLINGTON	83	63	89	56	73	0	0.35	-0.67	0.17	0.87	25	15.02	87	92	44	0	0	3	0
	CEDAR RAPIDS	79	57	87	50	68	-3	0.65	-0.40	0.42	2.16	61	14.54	97	99	50	0	0	3	0
	DES MOINES	86	62	93	54	74	2	0.79	-0.27	0.67	1.47	40	16.44	103	79	43	2	0	2	1
	DUBUQUE	77	58	83	50	68	-1	0.52	-0.41	0.42	1.69	51	15.40	95	90	54	0	0	4	0
	SIOUX CITY	85	57	96	44	71	-1	0.00	-0.81	0.00	0.59	20	11.06	88	72	42	2	0	0	0
	WATERLOO	79	58	86	51	68	-3	2.40	1.27	1.67	5.12	134	18.14	119	83	51	0	0	3	2
KS	CONCORDIA	90	65	98	52	78	3	0.00	-0.88	0.00	0.68	22	19.06	141	72	35	4	0	0	0
	DODGE CITY	87	62	98	59	75	-1	0.26	-0.46	0.25	2.72	109	21.45	197	82	35	3	0	2	0
	GOODLAND	86	59	100	50	73	2	1.05	0.33	0.79	2.87	109	15.26	158	77	39	3	0	3	1
	TOPEKA	86	65	93	56	76	1	0.10	-1.00	0.08	4.46	112	19.61	117	87	46	2	0	2	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending June 24, 2017

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	88	64	93	59	76	-1	0.36	-0.60	0.36	3.14	90	21.98	149	85	50	3	0	1	0
KY	JACKSON	82	66	87	62	74	2	3.12	2.07	1.72	6.21	165	29.63	122	93	57	0	0	5	2
	LEXINGTON	85	66	90	62	75	2	4.38	3.33	3.17	5.68	156	25.12	109	86	54	1	0	5	3
	LOUISVILLE	87	68	93	62	77	2	1.91	1.08	1.13	2.67	88	21.81	96	86	49	1	0	3	1
	PADUCAH	85	67	90	59	76	0	4.40	3.33	2.82	6.25	181	28.59	115	85	61	1	0	3	2
LA	BATON ROUGE	87	73	92	69	80	0	3.12	1.87	1.35	7.49	182	39.14	125	96	66	4	0	7	3
	LAKE CHARLES	89	77	94	75	83	2	2.80	1.42	2.50	6.41	130	32.54	121	96	59	3	0	4	1
	NEW ORLEANS	88	75	92	71	81	0	8.98	7.30	3.47	14.72	283	40.62	129	95	73	3	0	6	4
	SHREVEPORT	89	74	92	73	82	1	1.72	0.55	1.48	2.88	71	20.32	76	98	67	4	0	4	1
ME	CARIBOU	76	57	83	50	66	4	1.91	1.17	0.78	2.79	108	19.36	120	92	58	0	0	5	2
	PORTLAND	81	61	85	54	71	7	0.34	-0.40	0.33	1.82	70	25.86	117	91	54	0	0	2	0
MD	BALTIMORE	89	69	92	65	79	6	1.22	0.46	0.91	1.40	51	18.53	92	92	50	3	0	3	1
MA	BOSTON	86	68	90	65	77	8	0.24	-0.50	0.13	4.70	184	25.52	125	88	47	1	0	3	0
	WORCESTER	80	63	85	57	71	5	0.62	-0.29	0.42	2.91	91	23.91	105	89	48	0	0	4	0
MI	ALPENA	75	55	80	51	65	3	2.65	2.07	0.82	4.24	214	20.11	166	100	55	0	0	6	3
	GRAND RAPIDS	77	59	89	51	68	0	1.39	0.52	0.85	4.09	146	20.70	131	95	50	0	0	4	1
	HOUGHTON LAKE	74	55	80	50	65	2	1.52	0.85	0.84	4.46	191	20.37	168	93	61	0	0	6	1
	LANSING	81	59	90	51	70	3	1.27	0.40	0.98	3.64	129	21.10	151	76	44	1	0	4	1
	MUSKEGON	75	59	82	51	67	1	0.61	0.04	0.44	1.99	94	16.47	116	88	63	0	0	2	0
	TRAVERSE CITY	75	56	81	52	66	1	1.02	0.21	0.56	3.30	132	17.30	121	92	50	0	0	4	1
MN	DULUTH	69	50	77	45	59	-2	0.45	-0.57	0.26	2.97	92	14.20	119	94	57	0	0	5	0
	INT'L FALLS	69	48	77	38	58	-4	0.37	-0.59	0.29	2.98	96	9.60	101	92	52	0	0	4	0
	MINNEAPOLIS	74	59	81	54	66	-3	0.75	-0.27	0.49	3.21	94	14.75	117	76	51	0	0	3	0
	ROCHESTER	72	56	75	49	64	-3	0.95	0.01	0.76	2.85	93	18.61	141	89	61	0	0	4	1
	ST. CLOUD	73	53	82	49	63	-3	0.38	-0.69	0.29	1.41	39	11.71	101	97	44	0	0	3	0
MS	JACKSON	87	73	90	71	80	1	3.51	2.64	1.55	8.08	277	39.57	133	93	70	2	0	6	3
	MERIDIAN	87	74	92	72	81	2	5.44	4.53	2.60	9.96	336	38.60	122	95	82	2	0	7	3
	TUPELO	85	71	89	67	78	0	1.97	0.91	1.22	8.37	209	30.13	98	90	68	0	0	3	2
MO	COLUMBIA	84	64	90	59	74	0	0.09	-0.81	0.07	2.84	87	23.04	119	93	47	1	0	3	0
	KANSAS CITY	85	64	91	57	74	-1	0.08	-0.91	0.08	2.92	82	19.19	111	90	44	2	0	1	0
	SAINT LOUIS	88	70	97	64	79	2	1.06	0.21	1.06	2.02	69	24.91	133	75	44	2	0	1	1
	SPRINGFIELD	83	62	90	57	73	-1	2.01	0.83	1.91	3.42	86	32.12	152	93	60	1	0	2	1
MT	BILLINGS	80	54	93	46	67	1	0.16	-0.24	0.16	1.95	125	10.88	131	69	24	1	0	1	0
	BUTTE	75	43	86	34	59	2	0.06	-0.40	0.04	2.16	127	7.49	114	75	23	0	0	2	0
	CUT BANK	71	44	80	39	58	0	0.01	-0.54	0.01	2.47	120	7.34	115	86	31	0	0	1	0
	GLASGOW	78	48	87	40	63	-2	0.06	-0.44	0.05	0.27	16	2.88	55	72	27	0	0	2	0
	GREAT FALLS	75	47	87	37	61	0	0.00	-0.48	0.00	2.09	110	9.51	118	79	27	0	0	0	0
	HAVRE	78	46	90	37	62	-2	0.00	-0.42	0.00	0.54	35	3.07	53	75	29	1	0	0	0
	MISSOULA	79	49	87	40	64	3	0.04	-0.33	0.04	1.63	113	9.70	133	78	39	0	0	1	0
NE	GRAND ISLAND	87	58	97	47	73	1	0.01	-0.81	0.01	1.64	54	11.89	91	76	36	3	0	1	0
	LINCOLN	88	60	96	47	74	0	0.00	-0.77	0.00	4.76	166	17.87	132	78	38	3	0	0	0
	NORFOLK	84	56	95	45	70	-1	0.00	-0.98	0.00	1.56	46	13.17	100	71	36	1	0	0	0
	NORTH PLATTE	90	53	107	45	71	1	0.00	-0.72	0.00	0.01	0	10.34	104	82	25	3	0	0	0
	OMAHA	87	62	97	52	75	2	0.00	-0.88	0.00	1.90	60	13.41	94	72	40	3	0	0	0
	SCOTTSBLUFF	85	54	98	48	70	2	0.00	-0.61	0.00	0.07	3	8.85	100	67	34	2	0	0	0
	VALENTINE	86	50	100	39	68	-1	0.00	-0.68	0.00	0.24	10	10.68	114	69	28	2	0	0	0
NV	ELY	93	47	97	41	70	9	0.00	-0.11	0.00	0.02	3	6.20	117	54	19	7	0	0	0
	LAS VEGAS	114	87	117	86	101	14	0.00	0.00	0.00	0.00	0	1.59	70	12	11	7	0	0	0
	RENO	99	66	104	63	82	16	0.00	-0.08	0.00	0.12	32	11.27	261	43	19	7	0	0	0
	WINNEMUCCA	95	57	103	47	76	11	0.00	-0.13	0.00	1.23	208	6.47	135	59	20	6	0	0	0
NH	CONCORD	85	62	88	51	73	7	0.62	-0.08	0.54	3.64	150	22.99	134	95	48	0	0	3	1
NJ	NEWARK	88	69	91	65	78	5	3.50	2.75	1.53	5.14	195	27.67	125	88	53	1	0	3	3
NM	ALBUQUERQUE	99	71	103	67	85	9	0.00	-0.14	0.00	0.00	0	2.61	84	45	15	7	0	0	0
NY	ALBANY	83	63	89	53	73	6	1.54	0.68	1.12	4.06	135	22.97	130	87	49	0	0	4	1
	BINGHAMTON	75	62	83	57	68	3	1.04	0.15	0.91	3.87	131	28.31	157	87	66	0	0	3	1
	BUFFALO	77	63	86	56	70	3	1.06	0.17	0.77	1.46	48	23.73	132	88	58	0	0	4	1
	ROCHESTER	80	62	90	55	71	4	1.08	0.28	0.48	2.91	110	22.89	151	89	57	1	0	5	0
	SYRACUSE	78	61	90	53	70	3	1.32	0.44	0.68	3.44	123	25.27	146	97	58	1	0	6	1
NC	ASHEVILLE	80	66	86	62	73	3	1.19	0.21	0.46	2.26	63	25.28	105	88	60	0	0	6	0
	CHARLOTTE	86	70	91	65	78	1	1.97	1.21	0.55	3.97	145	24.89	117	90	60	2	0	7	1
	GREENSBORO	85	70	88	68	77	3	3.73	2.93	2.51	9.81	363	30.83	150	100	62	0	0	4	3
	HATTERAS	84	76	86	73	80	4	1.16	0.32	0.60	2.32	76	28.49	114	89	74	0	0	5	1
	RALEIGH	88	70	92	66	79	3	1.68	0.92	0.68	6.11	231	27.98	135	95	67	4	0	6	1
	WILMINGTON	88	75	93	72	82	4	1.73	0.47	0.71	3.41	86	23.90	101	98	65	1	0	4	2
ND	BISMARCK	77	52	91	47	64	-2	0.00	-0.61	0.00	1.20	60	5.73	76	77	38	1	0	0	0
	DICKINSON	74	45	84	40	60	-4	0.00	-0.80	0.00	0.58	22	4.28	53	84	22	0	0	0	0
	FARGO	74	53	87	46	63	-4	0.04	-0.78	0.04	1.94	70	6.75	73	85	45	0	0	1	0
	GRAND FORKS	73	51	86	47	62	-4	0.23	-0.49	0.16	1.37	59	5.92	75	91	46	0	0	3	0
	JAMESTOWN	72	52	87	47	62	-4	0.22	-0.50	0.18	2.08	90	6.19	78	88	42	0	0	4	0
	WILLISTON	78	49	84	45	63	-2	0.08	-0.47	0.04	1.15	64	4.62	72	79	32	0	0	2	0
OH	AKRON-CANTON	82	63	87	58	72	4	2.32	1.52	1.32	2.96	107	29.07	161	81	57	0	0	3	2
	CINCINNATI	83	64	89	60	73	0	4.55	3.55	2.29	5.21	144	28.61	132	91	60	0	0	4	2
	CLEVELAND	82	64	90	60	73	5	2.17	1.26	1.26	2.83	93	26.28	149	84	52	1	0	5	2
	COLUMBUS	83	65	90	59	74	2	2.22	1.27	1.31	3.25	104	23.93	134	89	57	1	0	3	2
	DAYTON	81	62	86	56	71	0	3.28	2.30	2.86	6.27	187	28.51	144	91	58	0	0	3	1
	MANSFIELD	80	61	87	57	70	2	1.57	0.52	1.05	5.48	153	26.63	131	93	53	0	0	3	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending June 24, 2017

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	81	59	88	56	70	0	1.08	0.18	0.69	1.54	51	19.40	123	89	57	0	0	5	1
	YOUNGSTOWN	79	59	85	55	69	2	3.68	2.75	2.03	3.95	134	25.25	147	90	61	0	0	5	2
OK	OKLAHOMA CITY	89	65	94	59	77	-1	0.00	-1.01	0.00	0.11	3	14.68	81	86	36	5	0	0	0
	TULSA	88	67	92	63	77	-2	0.24	-0.78	0.24	1.16	29	25.08	118	88	59	2	0	1	0
OR	ASTORIA	73	53	93	45	63	6	0.14	-0.43	0.12	2.48	116	49.61	141	85	66	1	0	2	0
	BURNS	87	44	95	34	66	7	0.06	-0.06	0.06	0.10	18	8.33	139	72	28	2	0	1	0
	EUGENE	85	50	96	48	68	7	0.00	-0.31	0.00	1.38	104	25.45	93	90	56	1	0	0	0
	MEDFORD	97	61	107	56	79	12	0.00	-0.13	0.00	0.37	65	12.94	136	72	25	6	0	0	0
	PENDLETON	86	54	93	43	70	4	0.00	-0.15	0.00	1.05	159	10.19	147	71	33	2	0	0	0
	PORTLAND	85	57	98	51	71	8	0.00	-0.33	0.00	1.08	80	29.26	151	76	54	2	0	0	0
	SALEM	85	60	101	48	73	11	0.00	-0.31	0.00	0.70	58	33.26	157	63	41	2	0	0	0
PA	ALLENTOWN	86	66	90	59	76	7	2.78	1.89	1.13	4.74	149	22.32	107	85	53	1	0	3	3
	ERIE	77	61	86	56	69	1	5.27	4.25	3.58	7.31	216	28.30	157	87	67	0	0	6	2
	MIDDLETOWN	88	69	92	62	78	6	2.88	2.01	1.34	3.02	98	19.46	99	92	48	1	0	5	2
	PHILADELPHIA	89	72	90	69	80	7	1.26	0.52	0.67	1.61	64	19.56	98	84	48	2	0	4	2
	PITTSBURGH	81	64	88	58	72	3	2.29	1.33	0.81	3.20	99	23.21	127	92	57	0	0	5	3
	WILKES-BARRE	84	62	87	55	73	5	1.10	0.17	0.39	3.31	108	21.94	127	91	55	0	0	4	0
	WILLIAMSPORT	85	63	89	57	74	5	1.87	0.81	1.40	3.58	104	22.90	118	92	59	0	0	4	1
RI	PROVIDENCE	84	65	87	60	74	5	0.79	0.02	0.66	4.06	150	29.08	128	94	60	0	0	4	1
SC	BEAUFORT	89	76	94	74	83	4	0.35	-1.06	0.19	2.34	53	19.14	90	96	65	5	0	3	0
	CHARLESTON	88	75	93	73	82	3	0.68	-0.75	0.46	4.01	88	19.17	87	92	65	3	0	3	0
	COLUMBIA	90	74	95	72	82	3	0.70	-0.50	0.29	4.28	113	28.56	124	87	61	4	0	3	0
	GREENVILLE	84	69	88	67	77	2	1.48	0.63	0.58	2.90	93	28.27	112	95	61	0	0	5	1
SD	ABERDEEN	77	50	91	39	64	-4	0.10	-0.72	0.04	3.81	138	7.69	80	83	47	1	0	4	0
	HURON	78	52	87	44	65	-4	0.83	0.07	0.83	2.96	114	8.65	82	89	42	0	0	1	1
	RAPID CITY	81	49	94	43	65	-1	0.00	-0.63	0.00	1.38	59	6.31	70	67	26	2	0	0	0
	SIOUX FALLS	77	54	87	44	66	-3	0.36	-0.43	0.36	1.93	69	10.76	92	80	58	0	0	1	0
TN	BRISTOL	84	64	89	60	74	3	0.94	0.06	0.44	2.04	67	25.64	120	98	54	0	0	5	0
	CHATTANOOGA	85	70	89	68	78	2	1.54	0.63	1.23	3.09	101	31.94	114	90	63	0	0	4	1
	KNOXVILLE	83	68	88	62	76	1	1.12	0.21	0.43	4.06	130	28.79	113	94	56	0	0	4	0
	MEMPHIS	88	71	92	69	80	0	2.14	1.15	1.63	4.52	135	23.36	82	91	58	2	0	4	1
	NASHVILLE	87	69	90	63	78	2	2.38	1.49	1.30	3.98	119	24.24	97	89	53	2	0	3	2
TX	ABILENE	94	69	103	63	82	1	0.39	-0.29	0.39	1.67	64	9.54	90	89	54	6	0	1	0
	AMARILLO	90	63	101	55	77	2	0.45	-0.31	0.45	0.80	30	8.95	102	82	34	4	0	1	0
	AUSTIN	95	75	102	73	85	3	0.06	-0.74	0.06	2.00	59	16.78	99	84	53	6	0	1	0
	BEAUMONT	88	76	92	73	82	1	0.32	-1.21	0.31	5.11	97	22.67	82	92	67	5	0	2	0
	BROWNSVILLE	97	78	102	75	87	4	0.00	-0.69	0.00	0.00	0	5.86	57	91	50	7	0	0	0
	CORPUS CHRISTI	97	77	102	73	87	5	0.00	-0.79	0.00	0.90	30	14.16	103	90	54	7	0	0	0
	DEL RIO	99	73	105	69	86	3	0.03	-0.52	0.03	1.77	97	12.86	154	80	50	7	0	1	0
	EL PASO	104	76	111	70	90	7	0.11	-0.10	0.11	0.27	48	1.64	72	50	15	7	0	1	0
	FORT WORTH	93	75	100	70	84	2	3.56	2.91	3.27	7.33	253	19.18	103	88	50	6	0	3	1
	GALVESTON	87	79	92	76	83	0	1.45	0.52	0.77	5.15	160	16.03	85	95	71	2	0	2	2
	HOUSTON	93	77	96	74	85	3	1.93	0.71	1.64	5.26	117	23.49	101	90	61	5	0	3	1
	LUBBOCK	93	68	99	62	81	3	0.20	-0.50	0.20	0.78	33	6.27	79	74	44	5	0	1	0
	MIDLAND	99	74	108	69	87	7	0.05	-0.34	0.04	1.60	120	7.32	136	64	35	7	0	2	0
	SAN ANGELO	102	73	109	66	87	7	0.00	-0.54	0.00	0.21	10	6.69	68	66	36	7	0	0	0
	SAN ANTONIO	96	75	101	71	86	4	0.00	-0.94	0.00	0.29	8	13.35	82	81	38	6	0	0	0
	VICTORIA	97	76	102	73	86	4	0.76	-0.36	0.76	1.09	26	20.67	109	90	52	6	0	1	1
	WACO	92	73	100	69	83	1	0.41	-0.24	0.32	1.50	57	20.81	123	93	69	5	0	2	0
	WICHITA FALLS	90	68	100	63	79	-2	0.68	-0.13	0.68	2.43	76	12.74	87	88	58	5	0	1	1
UT	SALT LAKE CITY	92	65	101	59	78	8	0.00	-0.12	0.00	0.25	36	11.25	120	47	17	3	0	0	0
VT	BURLINGTON	82	63	89	56	73	6	3.01	2.22	1.45	4.71	179	21.39	142	92	55	0	0	5	2
VA	LYNCHBURG	85	66	88	61	76	4	0.83	-0.04	0.44	2.12	72	21.21	101	93	60	0	0	4	0
	NORFOLK	90	74	93	69	82	7	0.91	0.04	0.44	3.27	118	25.09	118	90	55	5	0	4	0
	RICHMOND	88	70	90	67	79	4	0.87	0.08	0.70	2.33	85	20.86	102	91	62	3	0	5	1
	ROANOKE	86	67	87	64	76	3	0.41	-0.42	0.30	4.46	153	25.48	122	85	54	0	0	4	0
	WASH/DULLES	87	67	91	63	77	5	1.04	0.13	0.62	1.15	35	20.23	101	86	51	1	0	3	1
WA	OLYMPIA	78	50	92	44	64	5	0.01	-0.39	0.01	1.36	94	34.31	130	94	62	1	0	1	0
	QUILLAYUTE	71	48	92	43	60	5	0.44	-0.31	0.38	4.30	143	66.90	126	97	74	1	0	2	0
	SEATTLE-TACOMA	76	55	89	50	66	5	0.01	-0.32	0.01	1.57	131	28.43	153	83	64	0	0	1	0
	SPOKANE	82	57	88	51	70	8	0.00	-0.24	0.00	0.47	48	13.73	157	62	23	0	0	0	0
	YAKIMA	90	56	96	50	73	9	0.00	-0.13	0.00	0.19	40	7.61	182	64	34	3	0	0	0
WV	BECKLEY	79	62	84	58	70	2	1.30	0.41	0.67	7.37	244	27.83	135	89	59	0	0	4	1
	CHARLESTON	84	64	90	59	74	3	2.98	2.05	1.56	8.33	262	29.06	138	92	49	1	0	4	2
	ELKINS	81	60	89	52	70	3	2.85	1.80	1.54	3.69	101	24.38	108	89	60	0	0	6	2
	HUNTINGTON	85	66	91	61	75	3	4.23	3.38	2.66	4.85	157	24.86	119	92	52	1	0	5	3
WI	EAU CLAIRE	72	55	78	48	64	-4	1.24	0.25	0.71	4.80	142	19.28	141	96	48	0	0	5	1
	GREEN BAY	75	57	78	52	66	0	1.22	0.42	0.55	3.07	116	16.17	132	97	59	0	0	5	1
	LA CROSSE	77	59	80	54	68	-3	2.07	1.12	1.35	4.30	141	21.98	157	93	47	0	0	4	1
	MADISON	75	58	79	51	66	-2	1.91	0.95	0.83	5.08	162	21.74	150	90	62	0	0	6	2
	MILWAUKEE	78	61	87	56	70	2	1.80	0.95	1.42	3.33	122	21.12	135	83	55	0	0	4	1
WY	CASPER	81	44	94	37	63	-1	0.00	-0.28	0.00	0.69	58	8.49	118	82	35	2	0	0	0
	CHEYENNE	80	51	92	45	66	3	0.02	-0.45	0.02	0.68	40	9.31	122	65	31	2	0	1	0
	LANDER	81	48	93	40	65	0	0.00	-0.21	0.00	0.26	27	12.85	166	66	23	2	0	0	0
	SHERIDAN	78	48	91	39	63	0	0.08	-0.36	0.08	1.09	65	13.66	167	82	35	1	0	1	0

Based on 1971-2000 normals

***** Not Available**

Spring Weather Review

Weather summary provided by USDA/WAOB

Highlights: Active weather led to a net decrease in U.S. drought coverage, as widespread, frequent storm systems bypassed only a few areas, such as the northern Plains and the lower Southeast. However, an extended period of well-placed storms ended in late April, when too much rain in a short period of time across the mid-South and lower Midwest caused extensive planting delays and lowland flooding.

Other spring highlights included a variety of weather extremes. In March, for example, significant events included early-month wildfires on the central and southern Plains and mid-month freezes in the Southeast. The Southeastern freezes followed a mid-March Northeastern blizzard. Several weeks later, in late April, an historic, late-season snow storm on the central and southern High Plains flattened winter wheat and resulted in noteworthy livestock losses.

Meanwhile, an impressive Western snow-accumulation season finally peaked in April, following a final flurry of storms. The early part of the snow-melt season proceeded mostly in an orderly fashion, although periods of warm and/or wet weather led to localized lowland flooding. Lingering effects from the wet winter and early spring included planting and crop developmental delays, especially in California and the Northwest.

Drought covered just 4.52% of the country—a U.S. Drought Monitor-era record low—by May 23, down from a March peak of 15.97%. The record-low drought coverage occurred on the strength of late-spring rainfall in the Southeast, and in spite of emerging drought on the northern Plains.

Historical Perspective: According to preliminary information provided by the National Centers for Environmental Information, the contiguous U.S. experienced its eighth-warmest, eleventh-wettest spring during the 123-year period of record. The nation's spring average temperature of 53.5°F was 2.6°F above the 20th century mean, while precipitation averaged 9.39 inches—118% of normal. The spring temperature was at least 2°F above the 1901-2000 mean for the third year in a row and the eighth time in the last 18 years.

Temperatures across the entire country were in the warm half of the historical distribution (figure 1). It was among the ten warmest springs on record in Texas, Wyoming, and the Four Corners States, along with eight Southeastern and Mid-Atlantic States. Meanwhile, precipitation rankings ranged from the ninth-driest spring in North Dakota to the second-wettest spring in Washington (figure 2). Overall, spring dryness was largely limited to the northern Plains, Desert Southwest, and Florida, while wetness broadly covered the Northwest, central Plains, Midwest, and Mid-Atlantic. It was among the ten wettest springs in eleven states.

March: Early-March wildfires on the central and southern Plains and mid-month freezes in the Southeast highlighted an active weather pattern. The Southeastern cold snap, which

Figure 1 Statewide Average Temperature Ranks
March–May 2017
Period: 1895–2017

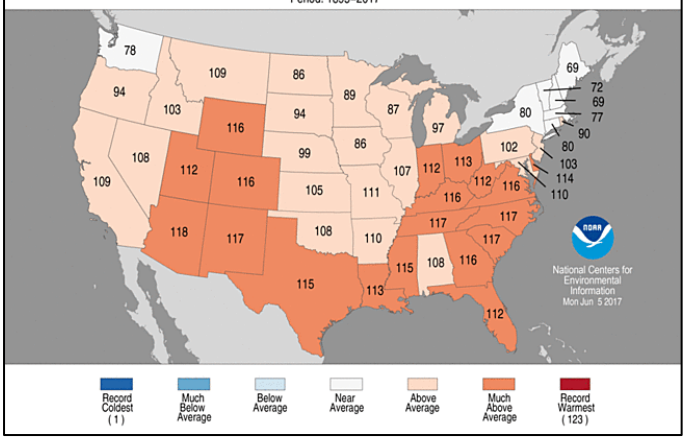
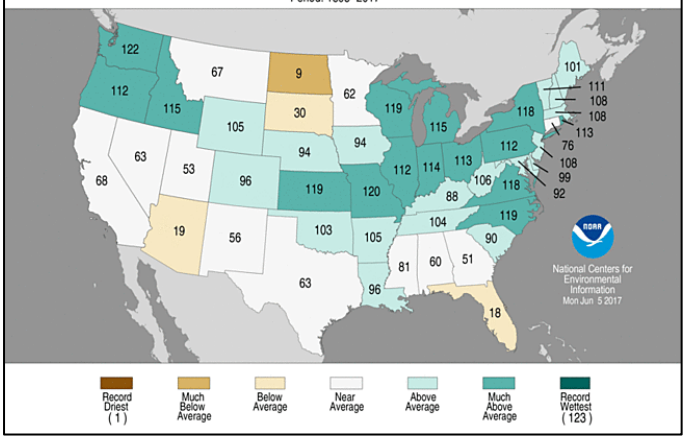


Figure 2 Statewide Precipitation Ranks
March–May 2017
Period: 1895–2017



caused extensive fruit (e.g. peach, blueberry) losses in Georgia, South Carolina, and portions of neighboring states, peaked from March 15-17, immediately in the wake of a Northeastern blizzard. From March 13-15, wind, rain, sleet, and snow caused extensive travel disruptions from the Mid-Atlantic States to New England.

In contrast, drier-than-normal March weather dominated the nation's southern tier, from southern California to the southern Atlantic States, except in parts of southern Texas. The dry weather promoted a rapid fieldwork pace, allowing planting of corn and other summer crops to quickly proceed. However, in areas experiencing drought, such as parts of the Southeast, dry weather, mid-month freezes, and periods of unusual warmth resulted in declining crop and pasture conditions.

Meanwhile, beneficial precipitation fell across the central and southern Plains, reviving rangeland, pastures, and winter wheat that had been experiencing drought stress. However, the rain arrived in the wake of wildfires that charred hundreds of thousands of acres of grassland, along with fences and other

farm infrastructure, in eastern Colorado, western Kansas, western Oklahoma, and northern Texas.

Similarly, increasingly showery weather in the central and eastern Corn Belt boosted soil moisture but ultimately slowed pre-planting fieldwork. However, most of the precipitation bypassed the upper Midwest.

Elsewhere, California experienced a break from heavy precipitation, as the primary storm track shifted across the Northwest. Late in the month, however, rain showers and high-elevation snow returned to northern California.

Persistently cold March weather was limited to the Northeast, although other parts of the northern and eastern U.S. experienced some sharp cold waves. In contrast, significantly above-normal temperatures stretched from the Southwest and Intermountain West to the central and southern Plains and the mid-South.

April: Unsettled April weather reduced drought coverage to a U.S. Drought Monitor-era record low, but culminated in a late-month storm that blasted the southern High Plains with heavy snow and high winds and triggered widespread flooding from the mid-South into the lower Midwest. Still, April rainfall generally benefited pastures and winter wheat, with the portion of the latter crop rated in good to excellent condition increasing from 51 to 54% between April 2 and 30.

The U.S. Drought Monitor showed just 4.98% of the country in drought on May 2, down from 15.97% on March 21. The previous record for the contiguous U.S. in the 18-year Drought Monitor history was 7.74% drought coverage on July 6, 2010. Ironically, worsening drought was noted during April across the lower Southeast, including southern Georgia and portions of Florida's peninsula, maintaining heavy agricultural irrigation demands.

Farther north and west, however, U.S. planting activities proceeded between rainfall events that, until month's end, were fairly well distributed both spatially and temporally. By April 30, planting progress was at or ahead of the respective 5-year averages for rice (73% complete), corn (34%), sorghum (27%), peanuts (12%), and soybeans (10%). U.S. cotton planting, 14% complete by April 30, was slightly behind schedule, but significant Northern planting delays were noted due to cool, damp conditions for crops such as sugarbeets (48% planted, 12 percentage points behind the 5-year average); barley (32% planted, 21 points behind); and spring wheat (31% planted, 15 points behind).

The late-month storm curtailed nearly all planting activities in a broad area from the central and southern Plains into the mid-South and lower Midwest. At risk from the powerful storm were livestock and winter wheat due to blizzard conditions and low temperatures on the High Plains, as well as recently planted and/or newly emerged summer crops (e.g. rice, corn, cotton, and soybeans) in flooded areas of the Mississippi Valley and environs.

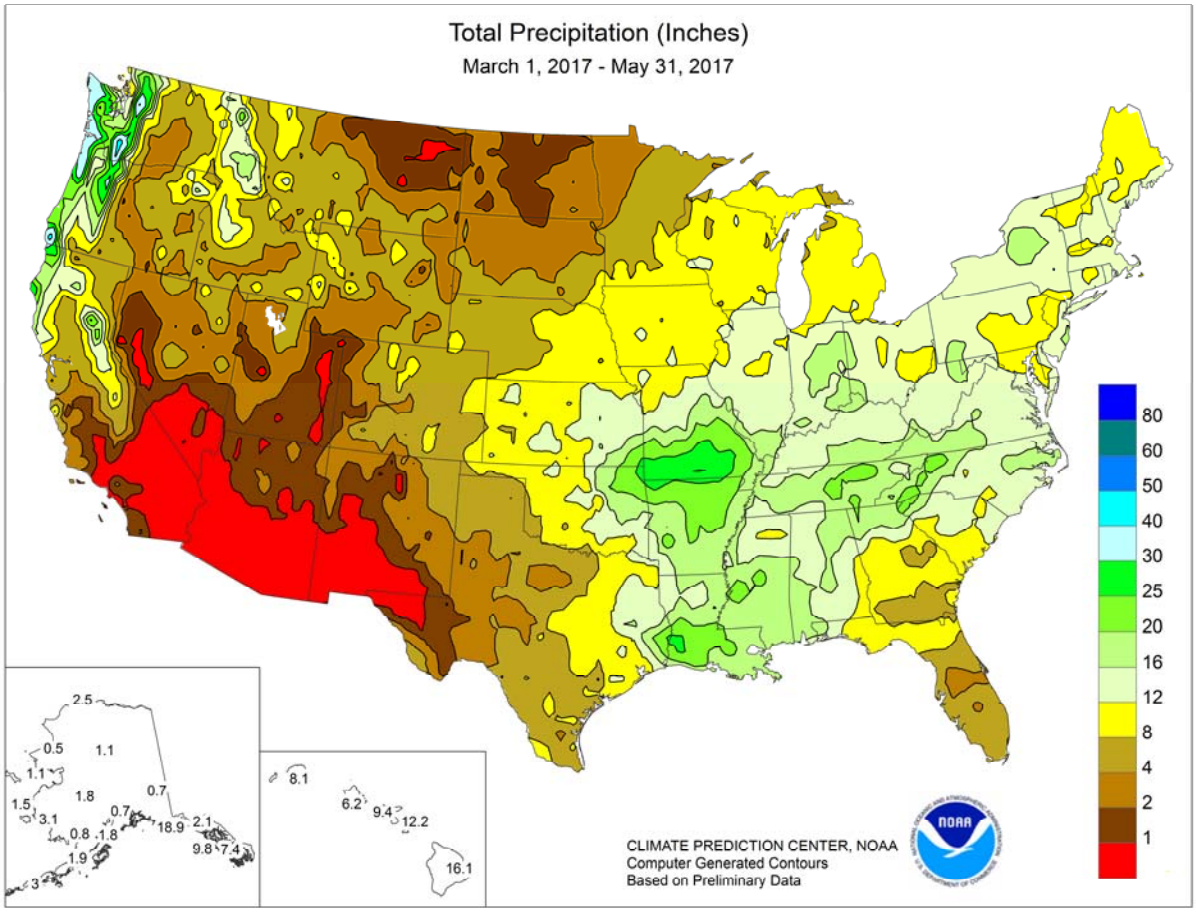
Near- to below-normal April temperatures dominated California, the northern Plains, and the Northwest, while warmer-than-normal weather covered the remainder of the country. April average temperatures approached or attained record-high levels east of the Mississippi River, promoting a rapid crop development pace. Still, lingering impacts from mid-March freezes were apparent in Southeastern crops such as Georgia blueberries (rated 79% very poor to poor on April 30) and South Carolina peaches (89% very poor to poor).

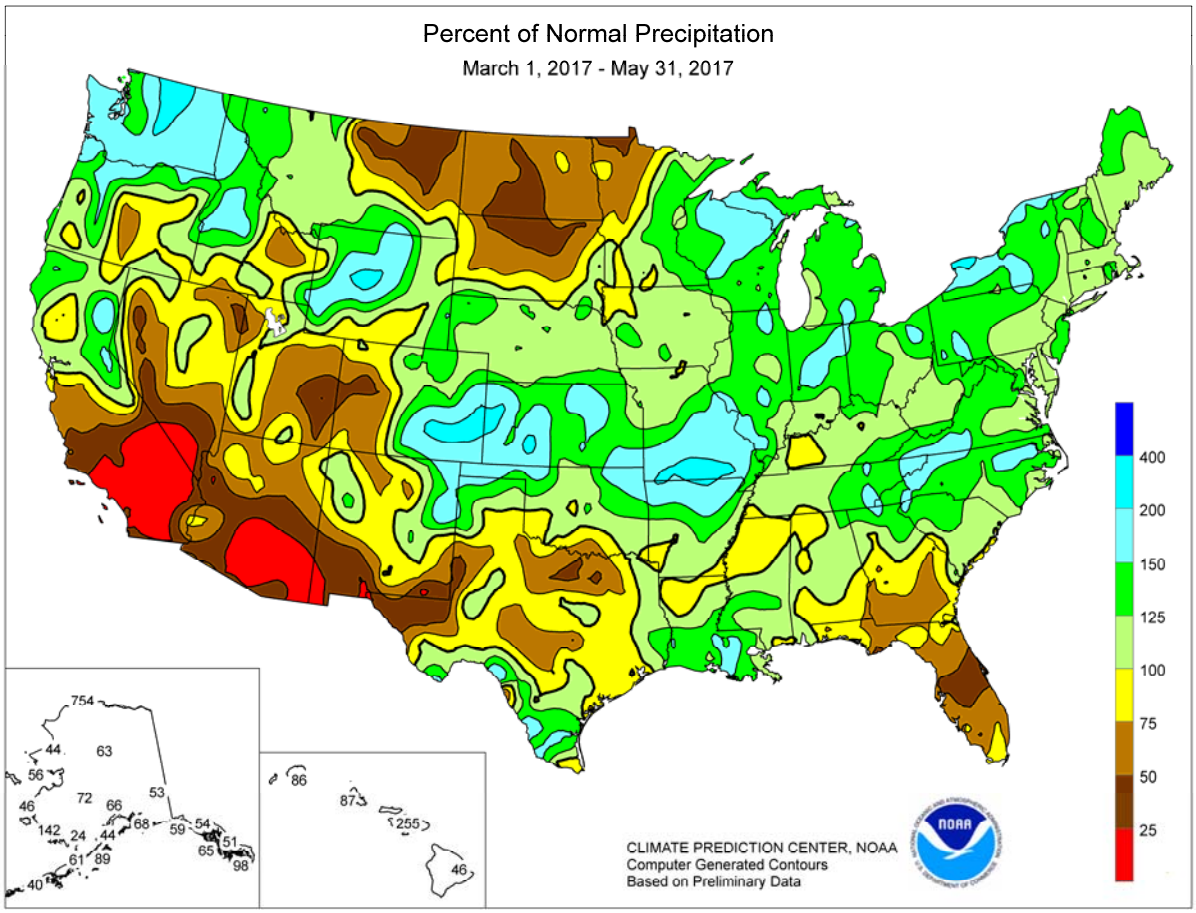
May: Abundant rainfall across the central Plains, as well as the Midwest, South, and East, periodically slowed fieldwork but kept pastures and summer crops well-watered. However, early-May river rises in the wake of late-April downpours led to extensive lowland flooding across the mid-South and lower Midwest, resulting in some submerged acreage and poor crop establishment. By June 4, at least one-tenth of the corn was rated in very poor to poor condition in Indiana (17%), Illinois (11%), and Ohio (10%). Similarly, 14% of Arkansas' rice crop was rated very poor to poor on June 4, a residual effect of earlier flooding.

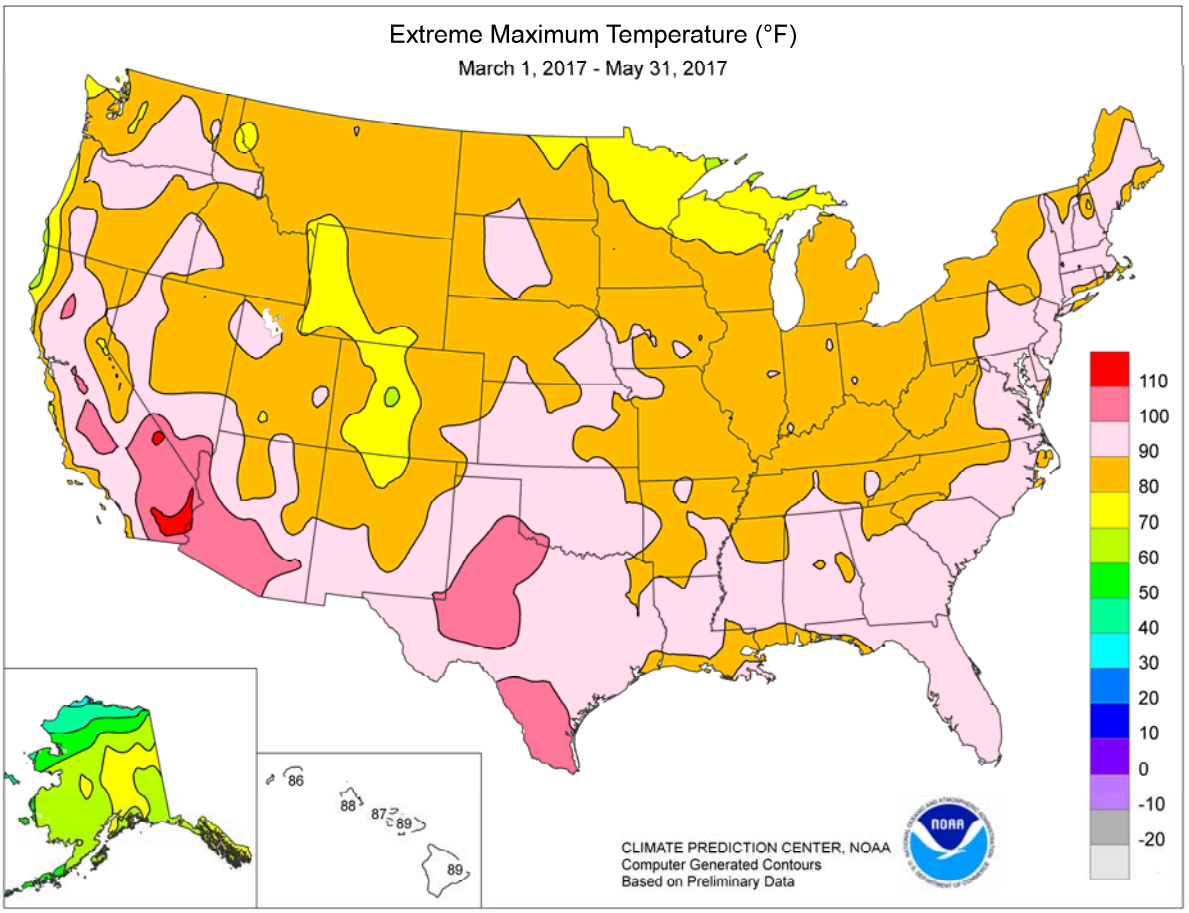
In stark contrast, mostly dry weather on the northern Plains—accompanied by late-month heat—led to worsening crop and pasture conditions. By June 4, more than one-third of the rangeland and pastures were rated in very poor to poor condition in South Dakota (40%) and North Dakota (35%). On the same date, nearly one-third (32%) of South Dakota's spring wheat was rated very poor to poor. And, during the 2-week period from May 21 – June 4, the portion of South Dakota's winter wheat rated very poor to poor surged from 11 to 38%. Prior to the arrival of hot weather across the northern Plains, generally cool conditions were accompanied by several episodes of patchy frost and sub-freezing temperatures.

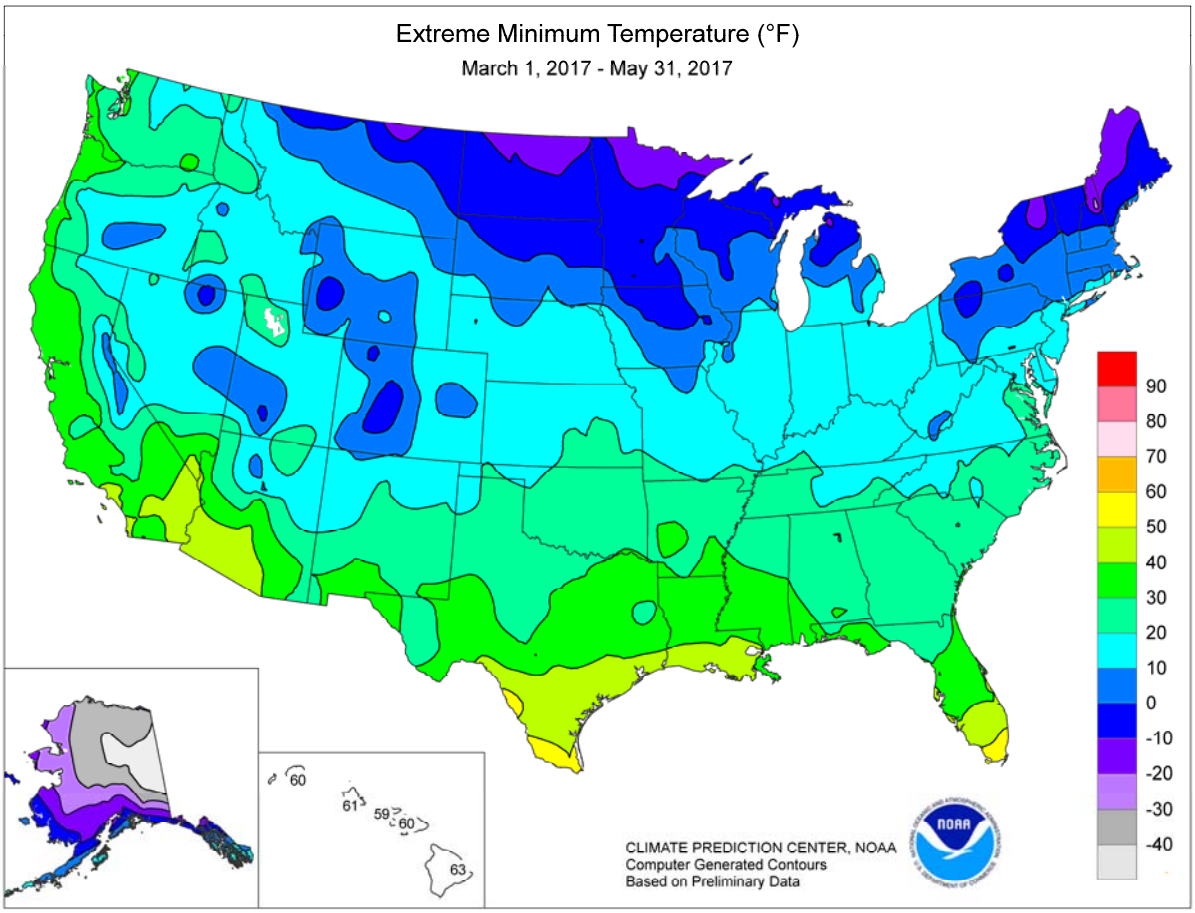
Despite a late-May increase in shower activity, significant drought persisted through month's end across southern Georgia and much of Florida. (Much more rain fell across the lower Southeast in early June, significantly reducing drought coverage and intensity.) By May 30, Florida was experiencing the nation's only extreme drought (D3), according to the U.S. Drought Monitor. And, the lightning-sparked West Mims fire, near the Florida-Georgia line mostly in the Okefenokee National Wildlife Refuge, burned more than 150,000 acres of timber, brush, and grass.

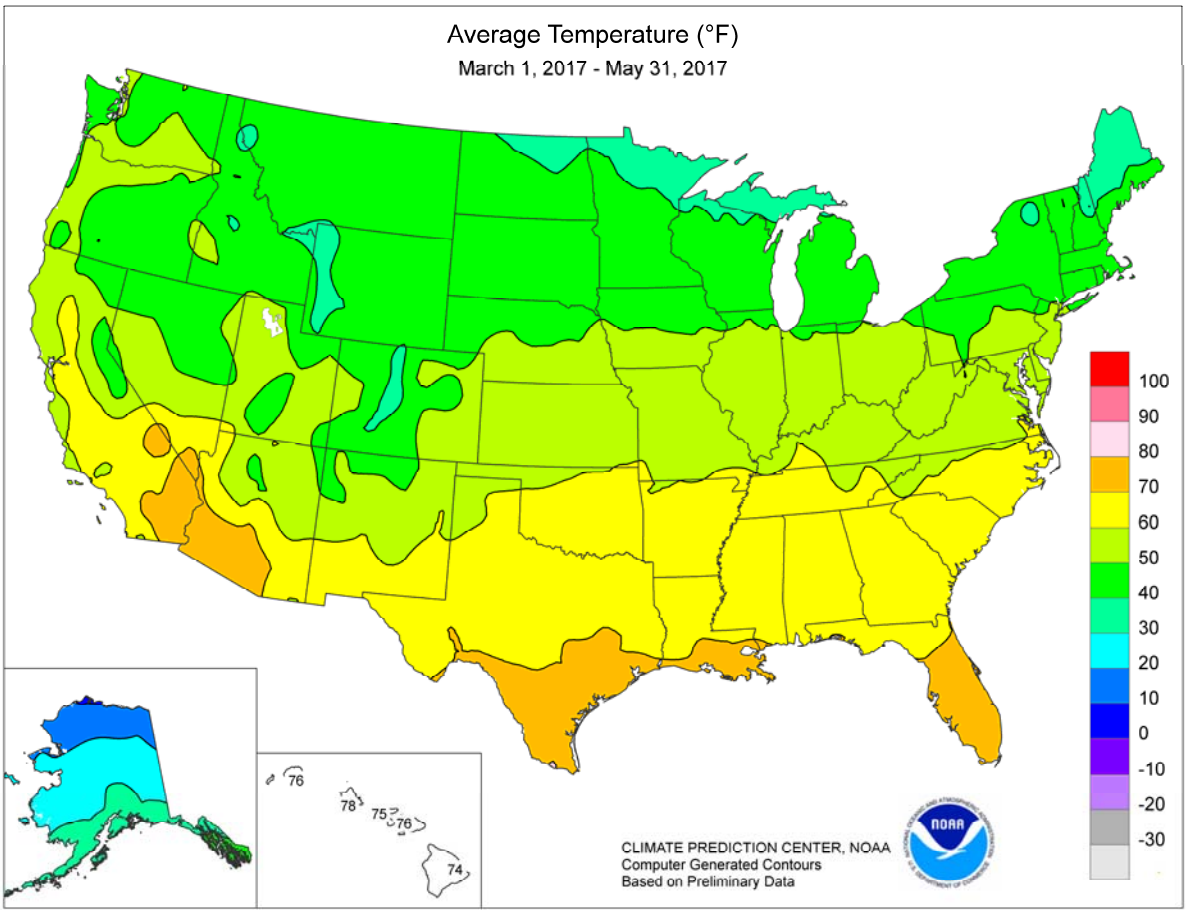
Elsewhere, warm, mostly dry weather in California and the Northwest favored fieldwork and crop development that had been previously delayed by cool, damp conditions. Nevertheless, only 30% of California's rice crop had emerged by June 4, compared to the 5-year average of 79%. Northwestern warmth accelerated the snow-melt rate and elevated river levels, although substantial snow remained on the ground by month's end across higher peaks of the Sierra Nevada, Cascades, and northern Rockies. The California Department of Water Resources noted that the remaining Sierra Nevada snowpack still contained an average of 17 inches of liquid by May 31, down from a seasonal peak of 48 inches.

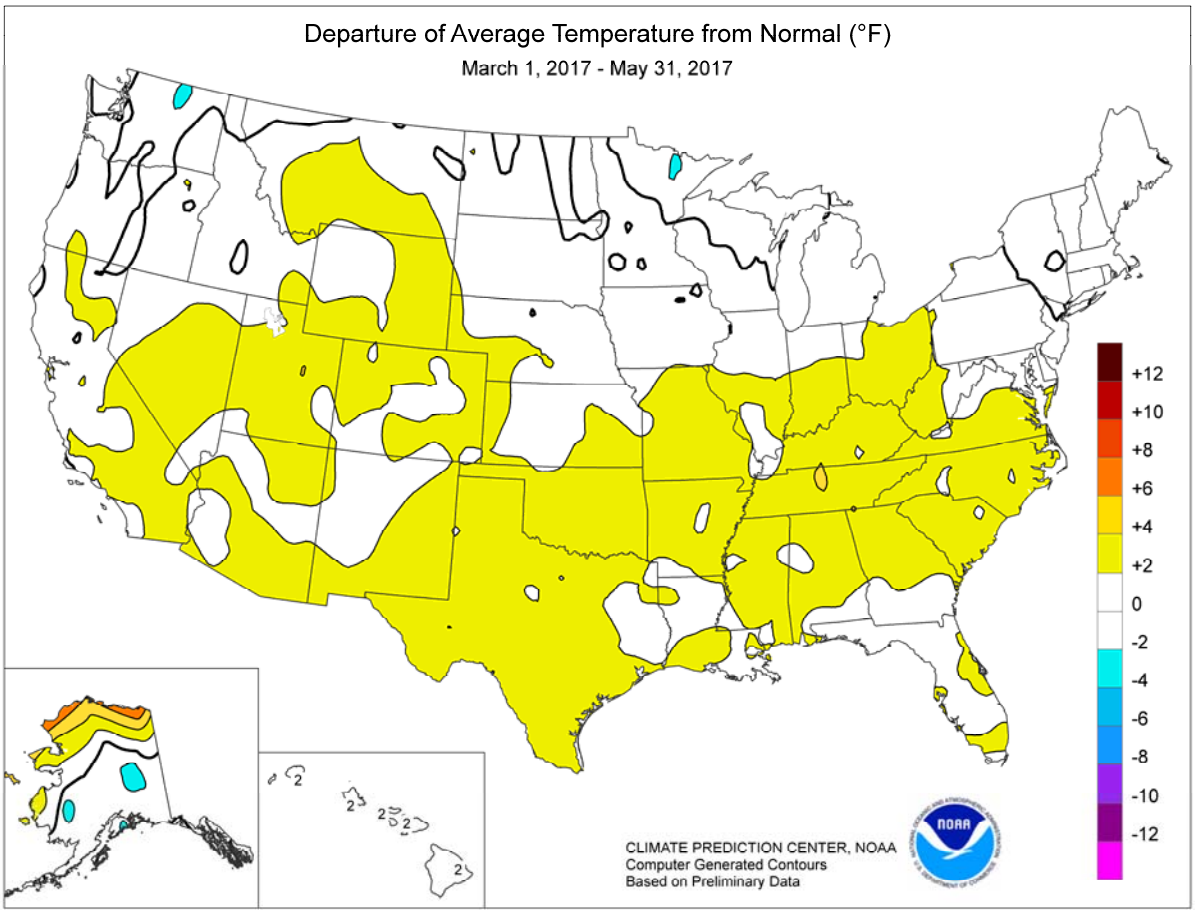

Total Precipitation (Inches)
March 1, 2017 - May 31, 2017
80
60
50
40
30
25
20
16
12
8
4
2
1
2.5
0.5
1.1
1.1
1.8
0.7
1.5
3.1
0.7
0.8
1.8
18.9
2.1
1.9
9.8
7.4
3
8.1
6.2
9.4
12.2
16.1
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Percent of Normal Precipitation
March 1, 2017 - May 31, 2017
400
200
150
125
100
75
50
25
754
44
63
56
72
66
53
46
142
24
44
68
59
54
61
89
65
51
40
98
86
87
255
46
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Maximum Temperature (°F)
March 1, 2017 - May 31, 2017
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
86
88
87
89
89
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
March 1, 2017 - May 31, 2017
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
60
61
59
60
63
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Average Temperature (°F)
March 1, 2017 - May 31, 2017
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
76
78
75
76
74
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Departure of Average Temperature from Normal (°F)
March 1, 2017 - May 31, 2017
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
2
2
2
2
2
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

National Weather Data for Selected Cities

Spring 2017

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, ˚F		PRECIP.		STATES AND STATIONS	TEMP, ˚F		PRECIP.		STATES AND STATIONS	TEMP, ˚F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	66	4	18.00	2.40	LEXINGTON	58	3	11.34	-1.52	COLUMBUS	55	3	14.22	4.20
HUNTSVILLE	65	5	13.85	-2.61	LONDON-CORBIN	58	2	17.37	4.06	DAYTON	53	2	16.90	5.41
MOBILE	69	2	19.78	1.42	LOUISVILLE	61	5	12.87	-0.33	MANSFIELD	51	4	13.29	1.34
MONTGOMERY	68	3	19.22	4.31	PADUCAH	61	3	17.51	3.54	TOLEDO	49	1	12.09	3.09
AK ANCHORAGE	36	0	2.12	0.26	LA BATON ROUGE	70	3	20.22	4.25	YOUNGSTOWN	49	2	13.42	3.59
BARROW	8	6	2.46	2.13	LAKE CHARLES	70	2	19.19	5.95	OK OKLAHOMA CITY	62	2	9.89	-1.45
COLD BAY	35	1	2.99	-4.44	NEW ORLEANS	71	2	18.26	3.38	TULSA	63	2	19.33	5.70
FAIRBANKS	28	-2	0.84	-0.25	SHREVEPORT	68	2	13.31	-0.54	OR ASTORIA	50	1	29.25	13.67
JUNEAU	40	-1	11.59	1.64	ME BANGOR	41	-2	12.41	2.25	BURNS	44	0	3.23	0.09
KING SALMON	32	-1	1.89	-1.19	CARIBOU	38	0	10.95	2.47	EUGENE	51	1	10.69	-1.43
KODIAK	38	0	15.17	-1.84	PORTLAND	43	-1	15.84	3.62	MEDFORD	55	3	3.57	-0.80
NOME	24	2	1.11	-0.88	MD BALTIMORE	55	2	12.98	2.16	PENDLETON	51	0	5.22	1.61
AZ FLAGSTAFF	46	3	2.75	-1.96	MA BOSTON	47	-2	13.35	2.66	PORTLAND	53	1	13.69	4.96
PHOENIX	76	5	0.07	-1.41	WORCESTER	44	-1	14.65	2.15	SALEM	52	1	13.75	4.69
TUCSON	72	5	0.23	-1.10	MI ALPENA	42	2	10.02	2.97	PA ALLENTOWN	51	2	12.49	0.97
AR FORT SMITH	64	3	17.26	4.12	DETROIT	50	2	12.20	3.58	ERIE	48	1	13.57	3.72
LITTLE ROCK	63	1	20.82	5.42	FLINT	47	2	10.88	2.79	MIDDLETOWN	53	1	12.06	1.28
CA BAKERSFIELD	66	2	0.57	-1.53	GRAND RAPIDS	48	2	11.04	1.62	PHILADELPHIA	55	2	13.74	2.56
EUREKA	50	-1	14.74	4.66	HOUGHTON LAKE	43	1	10.43	3.52	PITTSBURGH	52	2	13.71	3.73
FRESNO	64	2	4.62	1.27	LANSING	48	2	11.18	3.05	WILKES-BARRE	49	0	12.40	2.74
LOS ANGELES	63	2	0.59	-2.68	MUSKEGON	47	2	8.78	0.56	WILLIAMSPORT	51	2	14.02	3.53
REDDING	62	3	8.68	-0.53	TRAVERSE CITY	44	1	7.84	0.84	PR SAN JUAN	80	1	16.81	5.67
SACRAMENTO	61	1	5.36	1.01	MN DULUTH	40	1	8.27	1.54	RI PROVIDENCE	48	-1	17.84	5.59
SAN DIEGO	64	2	1.01	-2.20	INT'L FALLS	38	-1	3.87	-1.02	SC CHARLESTON	67	2	10.98	0.54
SAN FRANCISCO	59	3	5.16	0.35	MINNEAPOLIS	47	1	9.92	2.51	COLUMBIA	67	4	15.64	4.90
STOCKTON	62	1	4.11	0.37	ROCHESTER	45	1	11.99	3.56	FLORENCE	65	2	9.84	-0.26
CO ALAMOSA	45	4	2.60	0.90	ST. CLOUD	44	1	8.78	2.18	GREENVILLE	62	3	19.65	6.22
CO SPRINGS	50	4	5.73	0.66	MS JACKSON	67	3	21.28	4.70	MYRTLE BEACH	65	3	8.52	-0.38
DENVER	51	5	5.54	0.88	MERIDIAN	67	3	19.07	1.65	SD ABERDEEN	44	-1	2.70	-3.16
GRAND JUNCTION	55	3	1.28	-1.56	TUPELO	64	3	13.29	-3.75	HURON	46	0	4.28	-2.68
PUEBLO	54	4	8.14	4.43	MO COLUMBIA	58	4	18.68	6.44	RAPID CITY	47	2	3.81	-2.04
CT BRIDGEPORT	50	1	14.65	2.48	JOPLIN	60	3	21.94	8.93	SIOUX FALLS	47	2	6.98	-0.87
HARTFORD	48	-1	12.29	0.16	KANSAS CITY	56	2	14.82	3.61	TN BRISTOL	58	3	18.51	7.05
DC WASHINGTON	59	3	11.36	1.17	SPRINGFIELD	59	3	24.24	11.54	CHATTANOOGA	64	4	20.43	5.73
DE WILMINGTON	54	2	13.16	1.65	ST JOSEPH	55	1	12.06	1.52	JACKSON	62	2	17.82	1.94
FL DAYTONA BEACH	71	1	4.22	-5.42	ST LOUIS	60	4	20.60	9.20	KNOXVILLE	62	4	18.19	4.35
FT LAUDERDALE	77	3	8.32	-4.72	MT BILLINGS	49	3	7.17	1.83	MEMPHIS	65	3	13.18	-3.34
FT MYERS	76	2	4.13	-3.70	BUTTE	42	3	4.54	0.67	NASHVILLE	63	4	15.36	1.49
JACKSONVILLE	69	2	10.45	-0.10	GLASGOW	46	2	1.59	-1.35	TX ABILENE	66	1	4.49	-1.42
KEY WEST	78	1	6.00	-1.40	GREAT FALLS	46	3	6.00	1.06	AMARILLO	59	3	4.47	-0.49
MELBOURNE	75	4	3.45	-5.49	HELENA	48	4	2.53	-0.79	AUSTIN	71	3	7.47	-2.22
MIAMI	78	2	8.77	-2.67	KALISPELL	44	1	5.89	1.52	BEAUMONT	72	3	16.13	2.71
ORLANDO	73	1	3.50	-6.20	MILES CITY	48	2	1.98	-2.19	BROWNSVILLE	78	4	4.32	-1.05
PENSACOLA	71	3	13.14	-1.55	MISSOULA	46	1	4.77	0.77	COLLEGE STATION	71	3	9.59	-1.50
ST PETERSBURG	75	2	4.58	-3.43	NE GRAND ISLAND	51	1	8.93	0.21	CORPUS CHRISTI	74	2	10.42	3.16
TALLAHASSEE	69	2	9.87	-5.14	HASTINGS	52	2	10.74	1.20	DALLAS/FT WORTH	70	5	5.13	-6.28
TAMPA	76	4	3.05	-4.44	LINCOLN	53	2	11.46	2.12	DEL RIO	73	2	10.12	5.14
WEST PALM BEACH	75	1	7.87	-4.77	MCCOOK	53	3	7.33	0.44	EL PASO	70	5	0.17	-0.70
GA ATHENS	64	3	17.41	5.21	NORFOLK	49	0	9.37	0.89	GALVESTON	75	5	6.61	-2.41
ATLANTA	65	3	13.03	0.08	NORTH PLATTE	50	2	8.35	1.80	HOUSTON	72	3	9.72	-2.39
AUGUSTA	67	4	7.71	-2.91	OMAHA/EPPLEY	53	2	9.41	-0.10	LUBBOCK	64	4	2.57	-1.79
COLUMBUS	68	3	11.31	-1.90	SCOTTSBLUFF	50	3	6.56	0.91	MIDLAND	69	5	3.88	0.94
MACON	66	3	10.53	-0.48	VALENTINE	49	3	8.03	1.75	SAN ANGELO	69	4	3.77	-1.91
SAVANNAH	69	3	14.92	4.35	NV ELKO	49	4	3.17	0.30	SAN ANTONIO	71	2	6.73	-2.48
HI HILO	74	1	16.15	-18.81	ELY	45	2	2.93	-0.31	VICTORIA	73	3	10.98	0.65
HONOLULU	78	2	6.16	2.38	LAS VEGAS	71	4	0.13	-0.85	WACO	69	3	13.15	3.22
KAHULUI	76	2	12.15	7.39	RENO	54	5	2.16	0.33	WICHITA FALLS	65	2	6.35	-2.46
LIHUE	76	2	8.08	-1.37	WINNEMUCCA	49	1	2.65	-0.12	UT SALT LAKE CITY	54	3	7.34	1.32
ID BOISE	53	2	5.61	1.66	NH CONCORD	44	-1	14.12	4.68	VT BURLINGTON	44	0	12.01	3.49
LEWISTON	52	1	6.97	2.99	NJ ATLANTIC CITY	53	2	16.11	5.22	VA LYNCHBURG	57	2	14.71	3.31
POCATELLO	47	1	3.96	-0.11	NEWARK	52	0	15.80	3.21	NORFOLK	61	3	16.75	5.55
IL CHICAGO/O'HARE	50	2	13.72	4.01	NM ALBUQUERQUE	59	3	1.22	-0.49	RICHMOND	60	3	13.53	2.31
MOLINE	52	2	12.35	1.36	NY ALBANY	47	0	12.93	2.87	ROANOKE	58	2	16.38	4.69
PEORIA	54	3	15.83	5.27	BINGHAMTON	44	0	18.18	8.17	WASH/DULLES	56	3	15.65	4.66
ROCKFORD	50	2	14.82	4.79	BUFFALO	46	0	17.09	7.71	WA OLYMPIA	49	1	19.95	8.81
SPRINGFIELD	56	3	15.25	4.68	ROCHESTER	47	2	14.89	6.74	QUILLAYUTE	48	1	42.55	18.62
IN EVANSVILLE	60	4	17.05	3.27	SYRACUSE	45	0	15.25	5.45	SEATTLE-TACOMA	52	1	13.80	5.69
FORT WAYNE	51	2	17.98	7.83	NC ASHEVILLE	58	4	18.60	6.10	SPOKANE	48	1	7.02	2.61
INDIANAPOLIS	55	3	18.82	7.42	CHARLOTTE	62	1	14.01	3.01	YAKIMA	53	4	2.85	1.11
SOUTH BEND	48	-1	12.24	2.23	GREENSBORO	61	3	15.42	4.19	WV BECKLEY	53	2	14.09	2.65
IA BURLINGTON	53	1	12.29	1.32	HATTERAS	65	5	19.86	7.70	CHARLESTON	57	3	12.43	0.98
CEDAR RAPIDS	49	0	10.21	0.91	RALEIGH	62	3	17.43	6.81	ELKINS	52	3	13.44	1.22
DES MOINES	53	3	12.46	2.42	WILMINGTON	65	2	14.95	3.39	HUNTINGTON	58	3	12.21	0.64
DUBUQUE	48	1	9.90	-0.28	ND BISMARCK	44	1	2.73	-1.80	WI EAU CLAIRE	45	0	10.42	1.96
SIOUX CITY	50	1	7.88	-0.62	DICKINSON	42	-1	2.92	-1.81	GREEN BAY	45	1	9.75	2.38
WATERLOO	48	0	9.09	-0.42	FARGO	44	1	3.04	-2.11	LA CROSSE	49	1	13.83	5.07
KS CONCORDIA	54	1	16.53	7.53	GRAND FORKS	42	0	3.30	-1.03	MADISON	47	1	11.96	3.08
DODGE CITY	56	2	16.16	9.07	JAMESTOWN	42	-1	3.00	-1.46	MILWAUKEE	47	2	13.78	4.35
GOODLAND	52	3	11.45	5.28	MINOT	43	1	2.01	-2.90	WAUSAU	43	-1	11.85	3.55
HILL CITY	54	3	9.97	2.80	WILLISTON	44	2	2.33	-1.34	WY CASPER	46	3	6.25	1.45
TOPEKA	57	3	13.76	3.20	OH AKRON-CANTON	51	3	17.61	7.11	CHEYENNE	46	4	7.19	2.11
WICHITA	58	3	15.22	5.78	CINCINNATI	56	2	16.18	3.73	LANDER	46	2	10.11	4.42
KY JACKSON	59	3	15.85	2.52	CLEVELAND	52	4	14.59	4.78	SHERIDAN	46	2	10.27	5.09

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

National Agricultural Summary

June 19 – 25, 2017

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Below-average temperatures blanketed the central U.S., while most of the West recorded above-average temperatures. Temperatures ranged from more than 15°F above normal in parts of California to 6°F below normal in portions of the upper Midwest. Meanwhile, areas from the Mississippi Valley to the Atlantic Coast experienced above-normal weekly rainfall, slowing fieldwork. Tropical Storm Cindy and its remnants brought heavy precipitation to Alabama, Florida, Louisiana, and Mississippi.

Corn: By June 25, silking was estimated at 4 percent complete, slightly behind both last year and the 5-year average. Overall, 67 percent of the corn was reported in good to excellent condition, unchanged from last week but 8 percentage points below the same time last year. Corn in Iowa and Illinois, the two largest corn-producing states, was rated at 79 percent and 62 percent, respectively, in good to excellent condition.

Soybeans: Ninety-four percent of the nation's soybean crop was emerged by June 25, equal to last year but 3 percentage points ahead of the 5-year average. Nationally, 9 percent of the soybean crop was blooming by week's end, slightly ahead of last year and 2 percentage points ahead of the 5-year average. Progress was most advanced in the Lower Mississippi Valley, with 79 percent blooming in Louisiana, 61 percent in Mississippi, and 60 percent in Arkansas. Overall, 66 percent of the soybeans were reported in good to excellent condition, down slightly from last week and 6 percentage points below the same time last year.

Winter Wheat: By June 25, producers had harvested 41 percent of the winter wheat, slightly behind last year but 2 percentage points ahead of the 5-year average. Drier conditions in Kansas spurred harvest progress, where producers harvested 26 percent of the winter wheat during the week. However, six of the eighteen estimating states had not yet started the winter wheat harvest by week's end. Overall, 49 percent of the winter wheat was reported in good to excellent condition, unchanged from last week but 13 percentage points lower than at the same time last year.

Cotton: Nationally, 98 percent of the cotton was planted by June 25, equal to last year but slightly behind the 5-year average. Thirty-four percent of the cotton was squaring by June 25, six percentage points ahead of last year and 4 points ahead of the 5-year average. Late planting continued to affect squaring progress in California, which was 26 percentage points behind the 5-year average. Nationally, 7 percent of this year's cotton was setting bolls by week's end, slightly ahead of last year and 2 percentage points ahead of the 5-year average. Overall, 57 percent of the cotton was reported in good to excellent condition, down 4 percentage points from last week but slightly better than at the same time last year.

Sorghum: By June 25, ninety-five percent of the nation's sorghum was planted, slightly ahead of last year and 2 percentage points ahead of the 5-year average. By week's end, 20 percent of the sorghum was at or beyond the heading stage, 5 percentage points behind last year and 2 points behind the 5-year average. Heading progress was most advanced in Arkansas, Louisiana, and Texas. Overall, 65 percent of the sorghum was reported in good to excellent condition, down slightly from last week and 5 percentage points lower than at the same time last year.

Rice: By June 25, nine percent of the rice was at or beyond the heading stage, 6 percentage points behind last year and 2 points behind the 5-year average. Heading advanced 14 percentage points during the week in Mississippi and 19 points in Texas. Overall, 73 percent of the rice was reported in good to excellent condition, up 3 percentage points from last week and 4 points above the same time last year.

Small Grains: Heading of this year's oat crop advanced to 73 percent complete by week's end, 8 percentage points behind last year and slightly behind the 5-year average. Heading progress advanced 26 percentage points in Minnesota and Wisconsin during the week. Overall, 54 percent of the oats were reported in good to excellent condition, down 2 percentage points from last week and 13 points lower than at the same time last year.

Twenty-seven percent of the barley was at or beyond the heading stage by June 25, twenty-three percentage points behind last year and 11 points behind the 5-year average. Crop development was behind normal in all estimating states except Idaho. Overall, 60 percent of the barley was reported in good to excellent condition, down 4 percentage points from last week and 15 points lower than at the same time last year.

By week's end, 36 percent of the spring wheat was at or beyond the heading stage, 16 percentage points behind last year but slightly ahead of the 5-year average. Overall, 40 percent of the spring wheat was reported in good to excellent condition, down slightly from last week and 32 percentage points lower than at the same time last year.

Other Crops: Thirty-one percent of the peanut crop was pegging by week's end, 2 percentage points behind last year but 7 points ahead of the 5-year average. Pegging was 38 percent complete in Georgia, 15 percentage points ahead of the 5-year average. Overall, 75 percent of the peanut crop was reported in good to excellent condition, down 3 percentage points from last week but 5 points above the same time last year.

By week's end, 97 percent of this year's sunflower crop was planted, slightly ahead of last year and 8 percentage points ahead of the 5-year average. Favorable planting conditions allowed for double-digit planting progress in Colorado and Kansas.

Crop Progress and Condition

Week Ending June 25, 2017

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

Soybeans Percent Emerged

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
AR	94	90	94	88
IL	93	92	97	93
IN	94	84	90	94
IA	99	92	96	94
KS	82	78	86	81
KY	73	70	82	77
LA	98	97	99	96
MI	96	86	92	98
MN	100	97	100	95
MS	98	94	95	95
MO	87	81	89	77
NE	99	96	98	97
NC	76	67	79	72
ND	99	95	97	93
OH	95	85	96	95
SD	97	97	100	95
TN	77	69	80	73
WI	99	84	94	93
18 Sts	94	89	94	91

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

Soybeans Percent Blooming

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
AR	47	46	60	34
IL	6	1	7	5
IN	3	NA	2	6
IA	4	NA	2	4
KS	0	0	5	2
KY	1	NA	2	4
LA	60	45	79	52
MI	1	NA	2	1
MN	1	NA	1	2
MS	41	55	61	37
MO	5	1	7	3
NE	7	NA	7	8
NC	1	NA	4	2
ND	17	0	1	6
OH	1	NA	1	3
SD	4	0	6	5
TN	5	2	6	6
WI	5	NA	0	1
18 Sts	8	NA	9	7

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

Soybean Condition by Percent

	VP	P	F	G	EX
AR	2	5	24	56	13
IL	2	6	22	59	11
IN	3	10	36	44	7
IA	1	4	21	63	11
KS	0	2	29	63	6
KY	1	3	17	71	8
LA	1	6	20	58	15
MI	1	5	25	61	8
MN	0	4	20	62	14
MS	0	6	29	48	17
MO	1	5	30	55	9
NE	2	5	23	63	7
NC	0	3	14	77	6
ND	4	12	31	49	4
OH	1	6	33	48	12
SD	9	12	40	36	3
TN	0	1	12	60	27
WI	1	5	20	61	13
18 Sts	2	6	26	56	10
Prev Wk	2	5	26	57	10
Prev Yr	1	4	23	60	12

Corn Percent Silking

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
CO	1	NA	0	1
IL	3	NA	2	6
IN	5	NA	2	4
IA	0	NA	0	1
KS	15	4	8	13
KY	16	4	20	13
MI	0	NA	0	0
MN	0	NA	0	0
MO	18	NA	6	14
NE	1	0	0	2
NC	53	35	60	55
ND	11	0	0	3
OH	0	NA	1	1
PA	0	NA	0	1
SD	0	NA	0	0
TN	21	12	38	28
TX	45	53	56	55
WI	0	NA	0	0
18 Sts	5	NA	4	5

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	0	6	11	68	15
IL	2	7	29	51	11
IN	5	13	36	40	6
IA	1	3	17	63	16
KS	1	6	32	50	11
KY	1	3	11	74	11
MI	0	4	29	57	10
MN	1	3	18	63	15
MO	1	5	28	57	9
NE	1	5	20	62	12
NC	1	5	17	57	20
ND	3	10	31	53	3
OH	1	7	34	46	12
PA	0	2	13	68	17
SD	7	13	34	43	3
TN	0	1	12	50	37
TX	0	5	25	56	14
WI	2	5	24	50	19
18 Sts	2	6	25	55	12
Prev Wk	2	6	25	55	12
Prev Yr	1	4	20	59	16

Rice Percent Headed

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
AR	3	0	1	4
CA	20	0	0	7
LA	43	28	37	34
MS	20	3	17	10
MO	0	0	0	1
TX	36	10	29	23
6 Sts	15	5	9	11

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

Rice Condition by Percent

	VP	P	F	G	EX
AR	1	6	27	48	18
CA	0	0	0	50	50
LA	1	3	18	61	17
MS	0	0	35	55	10
MO	0	4	27	44	25
TX	0	0	35	53	12
6 Sts	1	4	22	50	23
Prev Wk	1	5	24	56	14
Prev Yr	2	5	24	54	15

Crop Progress and Condition

Week Ending June 25, 2017

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

Cotton Percent Planted

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
AL	100	98	98	100
AZ	100	100	100	100
AR	100	100	100	100
CA	100	100	100	100
GA	99	97	99	99
KS	78	89	93	90
LA	100	100	100	100
MS	100	98	100	100
MO	100	100	100	100
NC	99	97	99	99
OK	95	96	97	91
SC	99	97	98	99
TN	100	99	100	100
TX	97	91	97	98
VA	96	98	100	99
15 Sts	98	94	98	99

These 15 States planted 98% of last year's cotton acreage.

Cotton Percent Squaring

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
AL	50	17	42	53
AZ	63	54	64	63
AR	82	60	85	74
CA	54	20	30	56
GA	48	26	40	43
KS	12	1	5	9
LA	56	54	69	60
MS	51	25	34	48
MO	56	14	24	35
NC	17	26	39	30
OK	11	13	20	15
SC	20	23	32	25
TN	38	23	36	35
TX	17	17	29	20
VA	34	40	50	37
15 Sts	28	22	34	30

These 15 States planted 98% of last year's cotton acreage.

Cotton Percent Setting Bolls

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
AL	3	NA	0	3
AZ	19	14	20	15
AR	8	2	10	6
CA	0	NA	0	3
GA	3	NA	2	5
KS	0	NA	0	0
LA	7	8	15	8
MS	5	0	5	5
MO	0	NA	0	1
NC	0	NA	0	0
OK	0	NA	0	0
SC	0	NA	1	2
TN	1	0	2	1
TX	7	6	9	7
VA	0	NA	0	0
15 Sts	6	NA	7	5

These 15 States planted 98% of last year's cotton acreage.

Cotton Condition by Percent

	VP	P	F	G	EX
AL	0	8	37	52	3
AZ	0	3	8	75	14
AR	0	4	13	55	28
CA	0	0	0	25	75
GA	1	4	23	58	14
KS	1	3	19	70	7
LA	0	3	36	54	7
MS	0	9	23	51	17
MO	0	12	39	43	6
NC	1	4	20	69	6
OK	0	9	15	75	1
SC	0	0	12	48	40
TN	0	2	8	69	21
TX	2	11	41	37	9
VA	0	0	10	90	0
15 Sts	1	9	33	46	11
Prev Wk	1	5	33	51	10
Prev Yr	1	7	36	46	10

Oats Percent Headed

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
IA	89	67	84	84
MN	74	31	57	54
NE	91	94	97	85
ND	57	18	33	33
OH	83	71	86	79
PA	84	49	62	75
SD	78	74	87	70
TX	100	100	100	99
WI	66	22	48	60
9 Sts	81	60	73	74

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

Oat Condition by Percent

	VP	P	F	G	EX
IA	0	2	22	59	17
MN	1	1	16	66	16
NE	1	9	33	50	7
ND	13	26	36	24	1
OH	0	1	29	62	8
PA	0	2	13	82	3
SD	17	23	33	25	2
TX	4	15	34	40	7
WI	0	3	18	59	20
9 Sts	6	12	28	45	9
Prev Wk	5	11	28	47	9
Prev Yr	2	6	25	56	11

Barley Percent Headed

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
ID	50	30	52	50
MN	66	17	45	46
MT	41	0	5	28
ND	55	8	30	31
WA	82	10	44	63
5 Sts	50	10	27	38

These 5 States planted 83% of last year's barley acreage.

Barley Condition by Percent

	VP	P	F	G	EX
ID	2	2	17	49	30
MN	0	1	14	63	22
MT	1	8	37	29	25
ND	10	15	30	41	4
WA	0	4	18	77	1
5 Sts	4	8	28	42	18
Prev Wk	4	7	25	49	15
Prev Yr	0	2	23	60	15

Crop Progress and Condition

Week Ending June 25, 2017

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

Sorghum Percent Planted

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
AR	100	100	100	100
CO	95	85	96	92
IL	75	78	81	88
KS	93	77	92	90
LA	100	100	100	100
MO	97	90	96	89
NE	99	98	99	99
NM	82	64	73	78
OK	91	83	95	84
SD	99	95	98	93
TX	95	97	100	95
11 Sts	94	86	95	93

These 11 States planted 99% of last year's sorghum acreage.

Sorghum Percent Headed

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
AR	22	2	10	23
CO	0	0	0	0
IL	0	0	0	2
KS	8	0	0	2
LA	71	42	61	62
MO	5	0	1	3
NE	0	2	3	0
NM	0	0	0	0
OK	8	0	1	3
SD	7	0	0	2
TX	55	52	59	55
11 Sts	25	17	20	22

These 11 States planted 99% of last year's sorghum acreage.

Sorghum Condition by Percent

	VP	P	F	G	EX
AR	1	2	37	55	5
CO	1	3	19	71	6
IL	11	7	26	49	7
KS	1	3	26	65	5
LA	0	2	19	77	2
MO	0	4	31	64	1
NE	0	1	35	57	7
NM	0	7	58	35	0
OK	2	1	24	71	2
SD	9	21	60	10	0
TX	0	3	37	45	15
11 Sts	1	3	31	57	8
Prev Wk	1	4	29	61	5
Prev Yr	0	3	27	61	9

Peanuts Percent Pegging

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
AL	32	6	27	35
FL	41	13	42	32
GA	41	21	38	23
NC	9	2	18	16
OK	9	1	11	14
SC	37	11	33	32
TX	12	1	8	8
VA	3	1	10	11
8 Sts	33	13	31	24

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

Peanut Condition by Percent

	VP	P	F	G	EX
AL	0	8	25	65	2
FL	0	3	14	71	12
GA	0	4	21	58	17
NC	0	2	12	78	8
OK	0	0	8	87	5
SC	0	0	5	64	31
TX	0	0	44	52	4
VA	0	0	10	90	0
8 Sts	0	3	22	62	13
Prev Wk	0	2	20	66	12
Prev Yr	0	2	28	59	11

Sunflowers Percent Planted

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
CO	79	67	84	78
KS	80	67	86	80
ND	100	98	99	95
SD	95	92	98	86
4 Sts	96	93	97	89

These 4 States planted 87% of last year's sunflower acreage.

Spring Wheat Percent Headed

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
ID	60	23	28	48
MN	69	22	42	46
MT	22	0	14	16
ND	55	9	33	33
SD	70	65	85	58
WA	82	28	63	66
6 Sts	52	15	36	35

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

Spring Wheat Condition by Percent

	VP	P	F	G	EX
ID	22	2	23	39	14
MN	0	0	14	62	24
MT	9	27	42	11	11
ND	9	18	34	36	3
SD	31	31	26	11	1
WA	0	4	28	66	2
6 Sts	10	18	32	33	7
Prev Wk	9	18	32	35	6
Prev Yr	1	4	23	62	10

Crop Progress and Condition

Week Ending June 25, 2017

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

Winter Wheat Percent Harvested

	Prev Year	Prev Week	Jun 25 2017	5-Yr Avg
AR	94	88	98	86
CA	86	5	25	77
CO	2	0	1	12
ID	0	0	0	0
IL	71	65	78	47
IN	31	23	35	30
KS	53	22	48	47
MI	0	0	0	1
MO	77	52	76	55
MT	0	0	0	0
NE	3	0	1	8
NC	78	64	83	76
OH	3	3	10	7
OK	82	77	90	79
OR	0	0	0	0
SD	0	0	0	0
TX	76	74	87	73
WA	1	0	0	0
18 Sts	42	28	41	39

These 18 States harvested 91% of last year's winter wheat acreage.

Winter Wheat Condition by Percent

	VP	P	F	G	EX
AR	3	7	20	62	8
CA	0	0	0	60	40
CO	5	13	36	33	13
ID	1	4	17	42	36
IL	5	8	23	46	18
IN	1	5	23	52	19
KS	8	15	31	40	6
MI	2	7	19	62	10
MO	0	7	25	55	13
MT	2	13	46	25	14
NE	3	13	36	42	6
NC	3	10	27	45	15
OH	0	3	15	65	17
OK	2	6	45	44	3
OR	5	6	8	50	31
SD	21	35	34	10	0
TX	1	14	49	33	3
WA	1	1	15	69	14
18 Sts	4	12	35	40	9
Prev Wk	5	11	35	41	8
Prev Yr	2	7	29	48	14

Pasture and Range Condition by Percent
Week Ending Jun 25, 2017

	VP	P	F	G	EX		VP	P	F	G	EX
AL	0	8	22	54	16	NH	0	2	21	62	15
AZ	3	19	29	37	12	NJ	0	2	14	82	2
AR	0	7	27	45	21	NM	7	24	45	19	5
CA	10	10	20	30	30	NY	1	2	15	56	26
CO	0	3	19	65	13	NC	0	2	14	76	8
CT	0	65	15	20	0	ND	31	30	24	14	1
DE	2	7	30	56	5	OH	0	2	20	67	11
FL	2	7	23	61	7	OK	1	3	35	55	6
GA	3	10	26	53	8	OR	2	3	25	55	15
ID	0	2	11	42	45	PA	0	4	25	53	18
IL	1	5	28	55	11	RI	0	0	5	60	35
IN	1	7	28	54	10	SC	0	0	11	82	7
IA	2	6	26	55	11	SD	28	25	26	19	2
KS	0	2	18	65	15	TN	1	6	24	56	13
KY	1	2	14	70	13	TX	3	12	35	42	8
LA	4	7	28	49	12	UT	0	3	28	58	11
ME	0	0	8	55	37	VT	6	6	18	64	6
MD	1	11	23	61	4	VA	0	6	24	62	8
MA	0	0	5	70	25	WA	1	2	16	62	19
MI	1	10	29	46	14	WV	0	1	14	71	14
MN	0	4	18	62	16	WI	1	2	18	53	26
MS	1	5	24	55	15	WY	1	8	22	60	9
MO	0	4	25	63	8	48 Sts	4	9	27	49	11
MT	8	18	30	29	15						
NE	1	7	36	50	6	Prev Wk	4	8	25	50	13
NV	0	0	25	25	50	Prev Yr	2	8	29	50	11

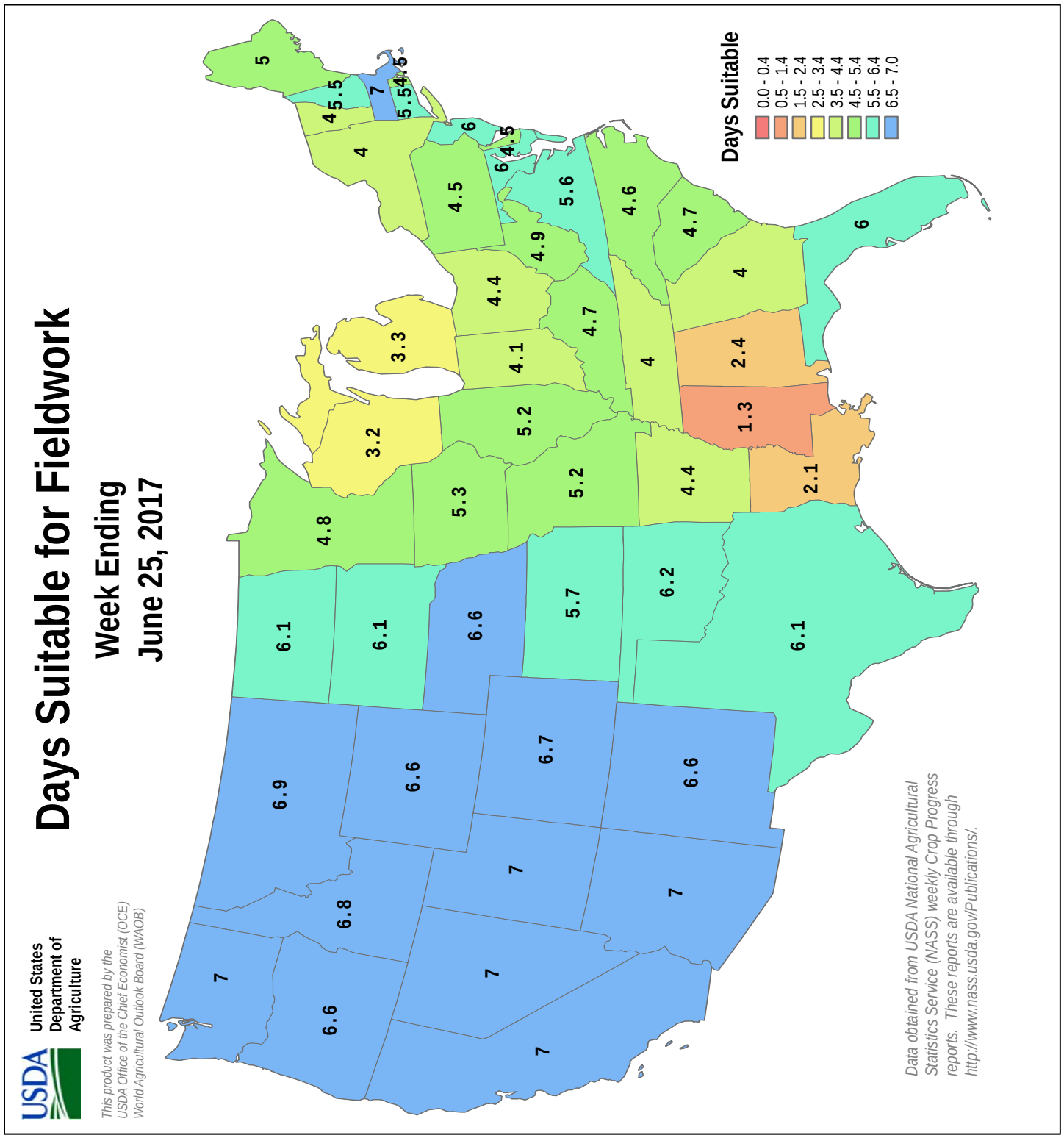
VP - Very Poor; P - Poor; F - Fair; G - Good; EX - Excellent

NA - Not Available; *Revised

Crop Progress and Condition

Week Ending June 25, 2017

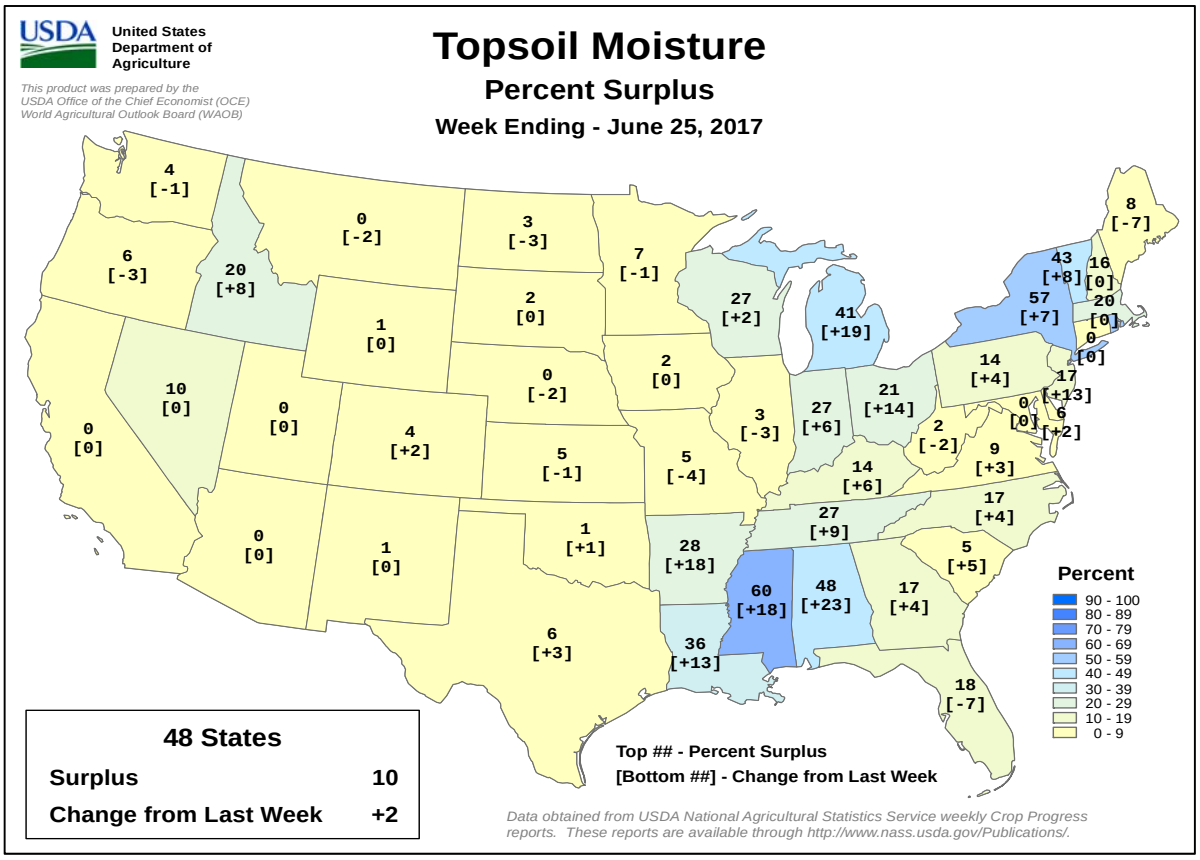
Weekly U.S. Progress and Condition Data provided by USDA/NASS

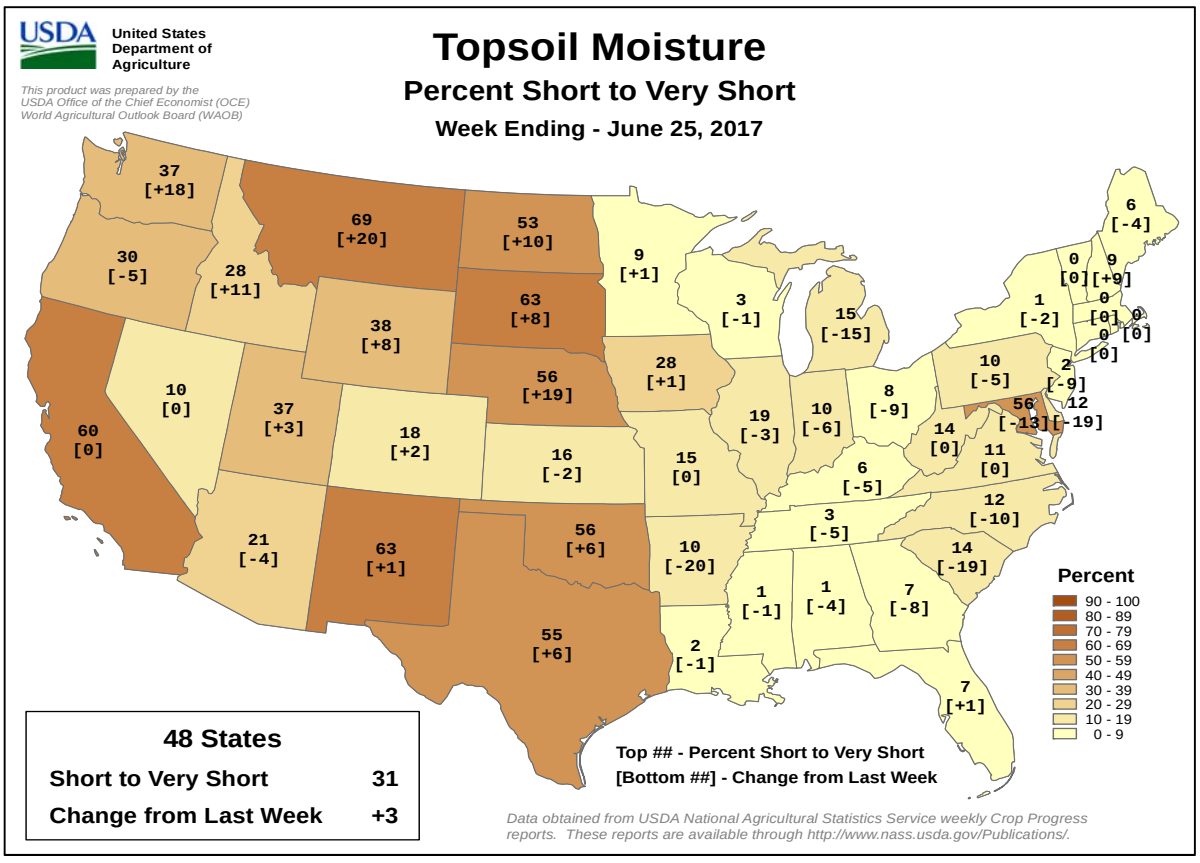


Crop Progress and Condition

Week Ending June 25, 2017

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

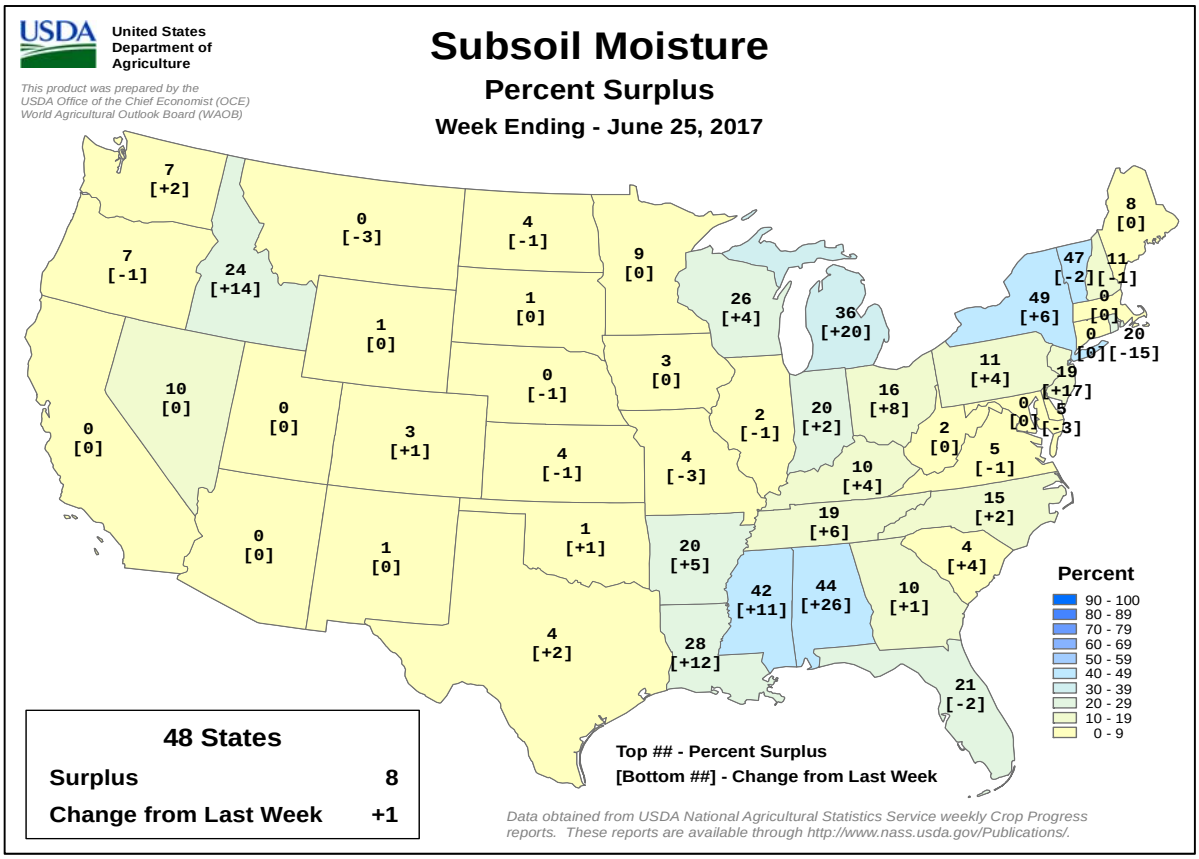


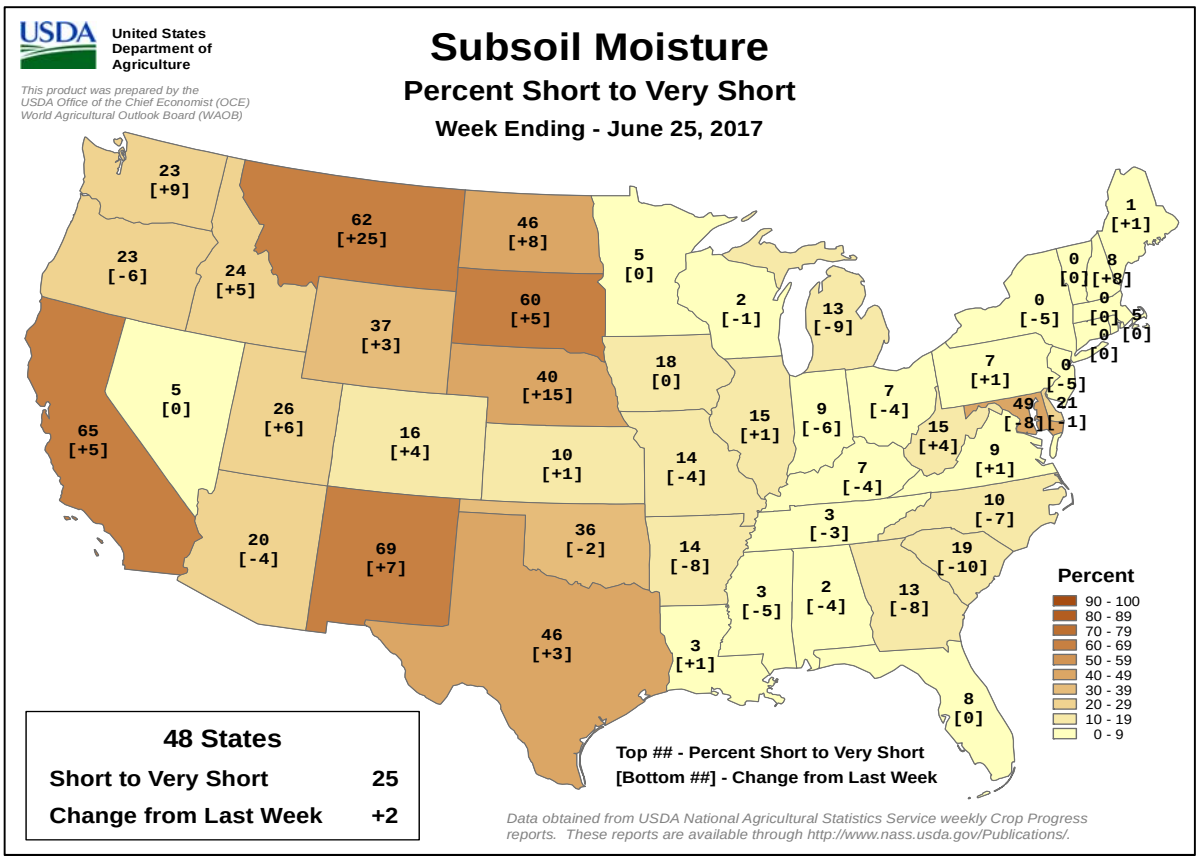


Crop Progress and Condition

Week Ending June 25, 2017

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





International Weather and Crop Summary

June 18-24, 2017

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

HIGHLIGHTS

EUROPE: Dry, hot weather promoted winter crop drydown and harvesting but cut summer crop yield potential across Spain, France, and Italy.

WESTERN FSU: Cool, showery weather in Russia benefited vegetative summer crops but hampered winter wheat drydown and harvesting, while drought intensified in north-central Ukraine.

EASTERN FSU: Showers benefited vegetative spring grains in the north, while sunny, seasonably hot weather promoted cotton development in southern portions of the region

MIDDLE EAST: Widespread showers in Turkey maintained good early-season prospects for summer crops but hampered winter wheat drydown and harvesting.

SOUTH ASIA: The monsoon spread into western India but continued to lag in parts of the northeast.

EAST ASIA: Showers throughout eastern China maintained or improved soil moisture for summer crops.

SOUTHEAST ASIA: Monsoon showers kept rice and other summer crops well watered.

AUSTRALIA: Some showers fell across the west and east, but more abundant and frequent rain was needed to promote early-season crop development.

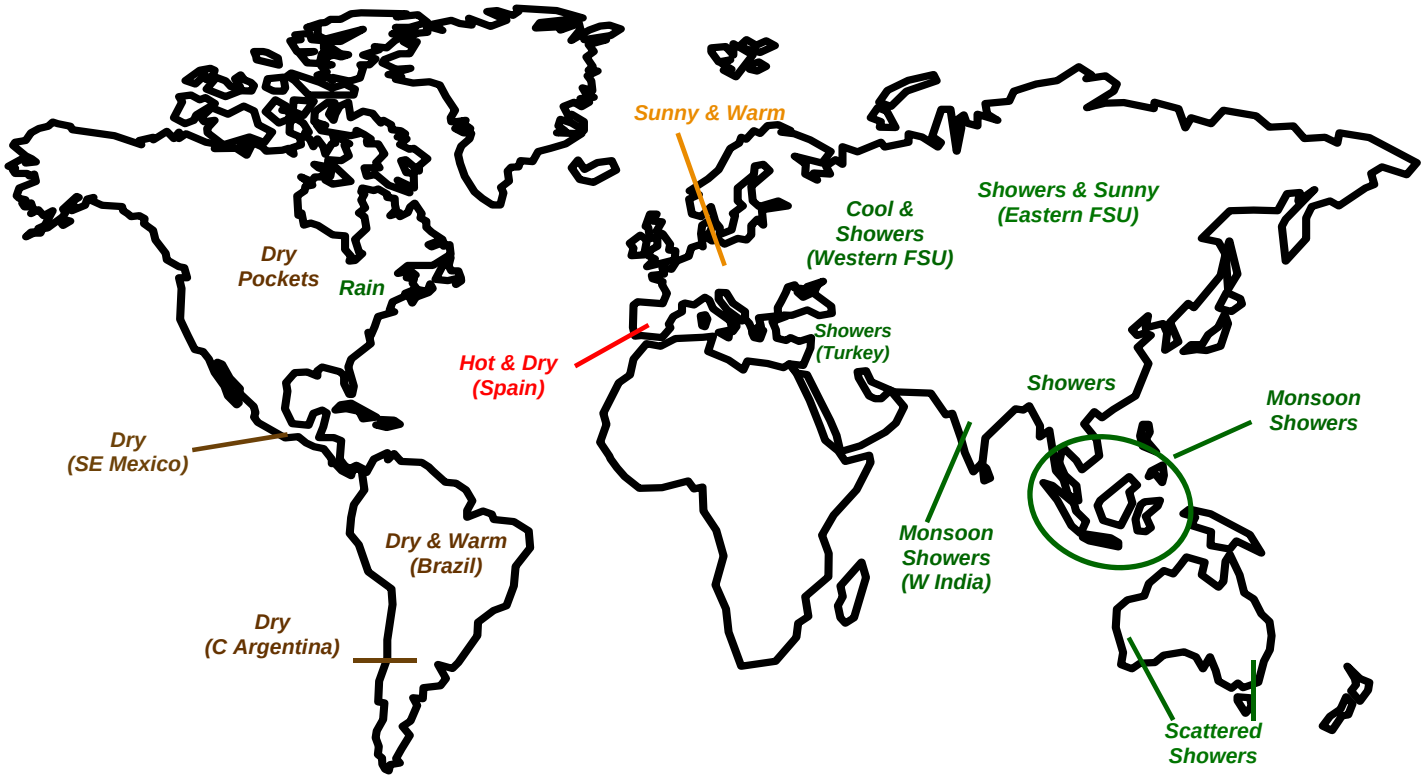
ARGENTINA: Mostly dry weather supported summer crop harvests.

BRAZIL: Warmth and dryness promoted seasonal fieldwork in nearly all agricultural areas.

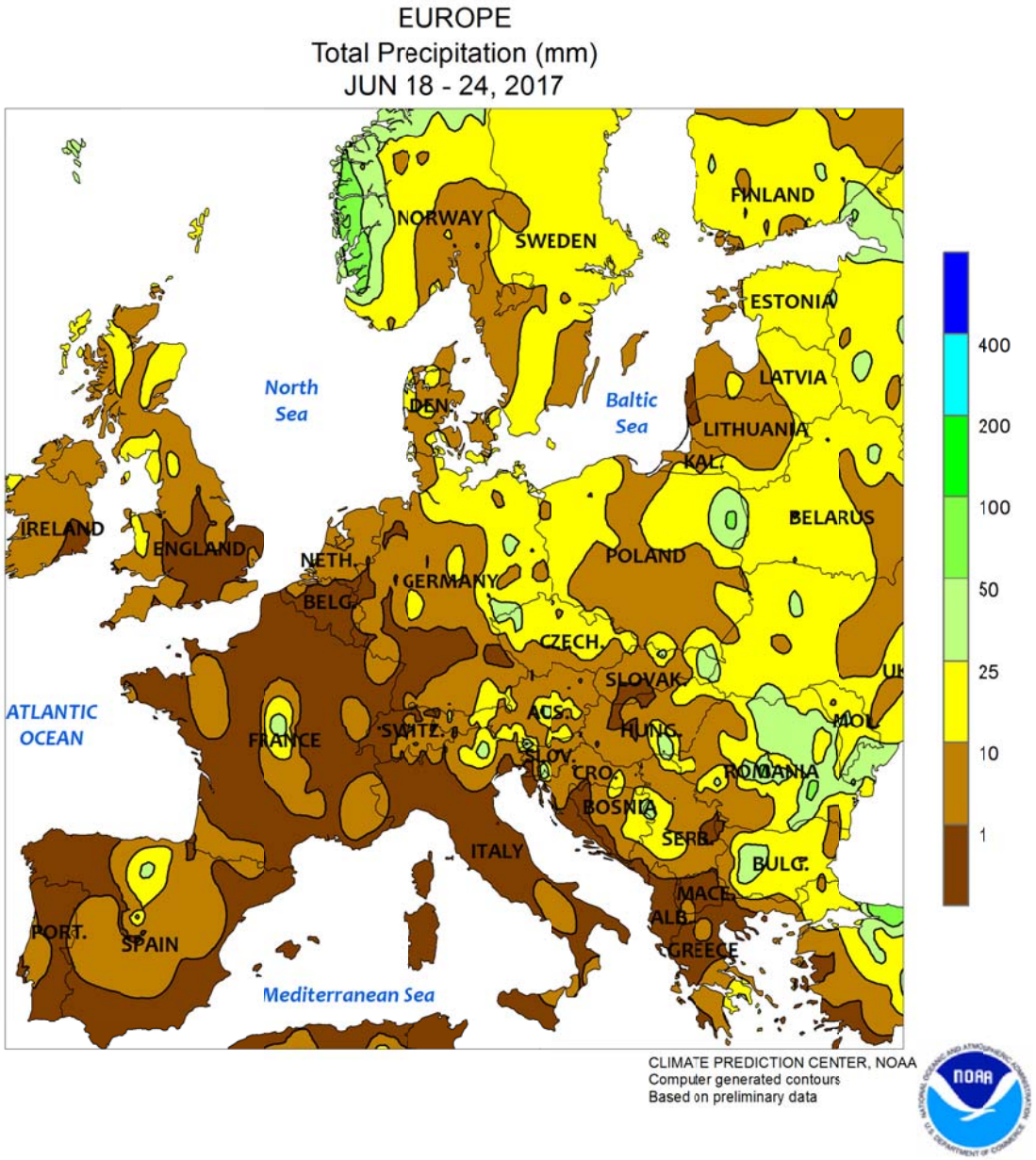
MEXICO: Dryness on the southern plateau limited moisture for corn establishment.

CANADIAN PRAIRIES: Rain was needed for spring crop establishment in some southern growing areas, but lingering wetness remained a problem farther north.

SOUTHEASTERN CANADA: Rain continued, but soybean planting was nearly complete in Ontario and Quebec.



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



EUROPE

Dry, excessively hot weather adversely impacted spring grains and summer crops across the western half of the continent, while showers maintained favorable growing conditions in eastern Europe. Temperatures during the 7-day period averaged 5 to 9°C above normal over western and central Europe. Daytime highs topped 40°C in central and southern Spain, while temperatures reached into the middle and upper 30s from northern Italy into France and western Germany. The heat was most detrimental on the Iberian Peninsula, where summer crops were approaching or progressing through reproduction 2 to 4 weeks ahead of average. In Spain, crops most likely impacted by the June heat wave included: vegetative (north) to reproductive corn was exposed to 14 days of highs greater than 35°C; budding to reproductive sunflowers in central and southern Spain were subjected to 13 days above 38°C; squaring to flowering cotton in southern Spain (Andalucía) was impacted by 8 days of 40-degree heat since June 12. As a result, heat and drought have lowered summer crop yield potential over most of the Iberian Peninsula, though the arrival of cooler weather on June 26 signaled an end to the record-setting heat wave. Excessive heat (36-38°C) also pushed into key summer crop areas of southwestern France, but corn had not yet reached the temperature-sensitive tassel stage. Warmth and dryness also cut the yield potential for non-irrigated summer crops in northern Italy, though the heat (31-37°C) has not been as widespread or intense. On the other hand, the sunny, hot weather facilitated winter crop drydown and harvesting, particularly over northern France and southeastern England. Meanwhile, widespread showers (3-20 mm, locally more) over eastern Europe moistened topsoils for vegetative summer crops in advance of the approaching heat.

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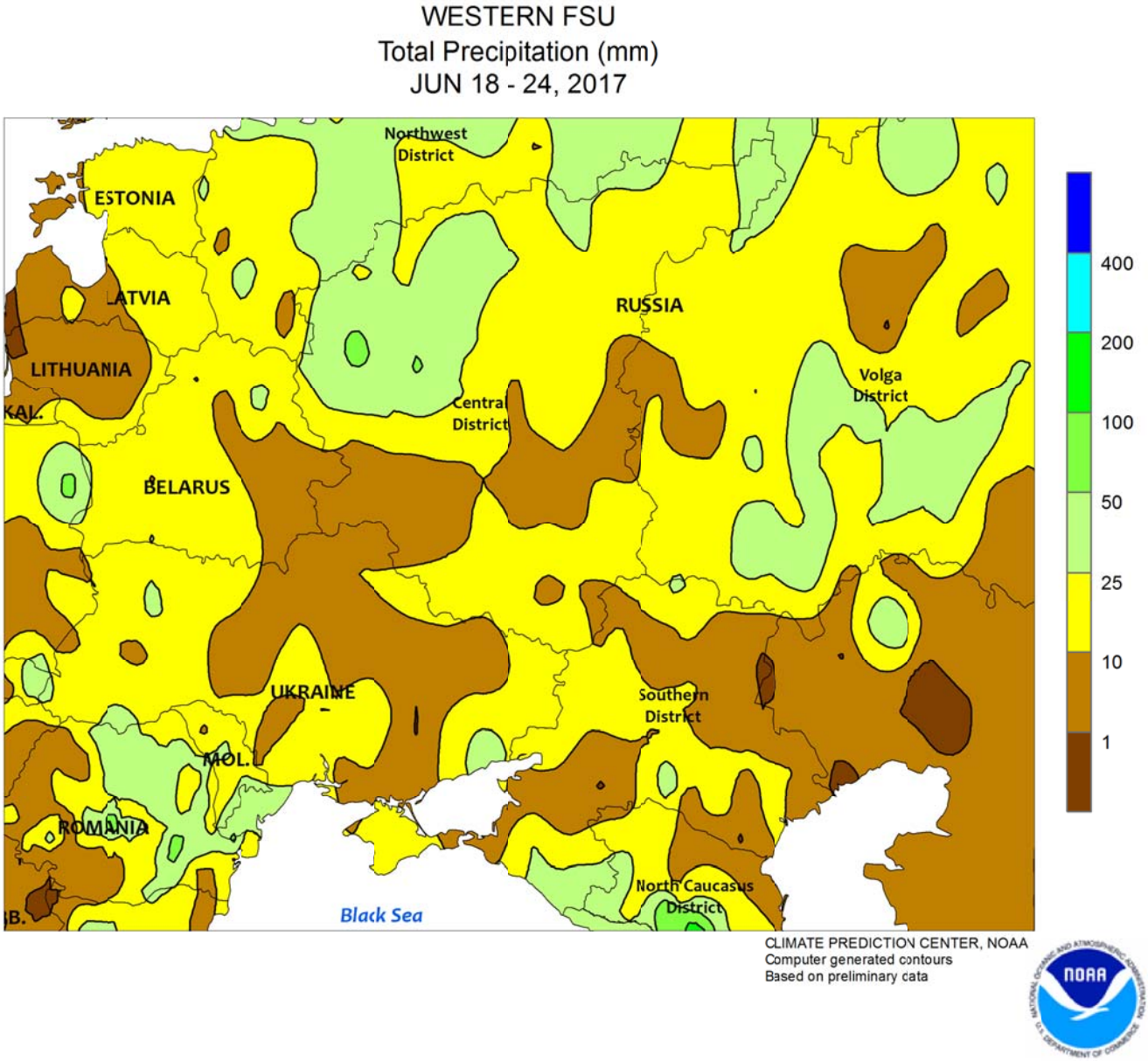

WESTERN FSU

Persistent wet weather in Russia contrasted with intensifying drought in north-central Ukraine. Over western and southern Russia's primary growing areas, another week with widespread moderate to heavy showers (5-50 mm, locally more) maintained adequate to abundant soil moisture for reproductive (north) to filling (south) winter wheat as well as vegetative small grains, corn, and sunflowers. However, the persistent wetness raised concerns over grain quality and made early drydown and harvesting efforts difficult. In Ukraine, moderate to heavy showers (10-40 mm) were reported in all but drought-afflicted north-central growing areas. As a result, crop areas bordering Russia, Belarus, and the immediate Black Sea Coast continued to experience good to excellent growing conditions for vegetative corn and soybeans (north and west) as well as sunflowers (east). However, dryness and drought continued to adversely impact filling winter wheat and vegetative summer crops from west-central Ukraine into primary corn and soybean areas in north-central portions of the country (90-day rainfall locally less than 50 percent of normal). Latest satellite-derived vegetation health data depicted a sharp gradient between severe crop stress in north-central Ukraine and good to excellent vegetation health from the Black Sea Coast into eastern Ukraine.

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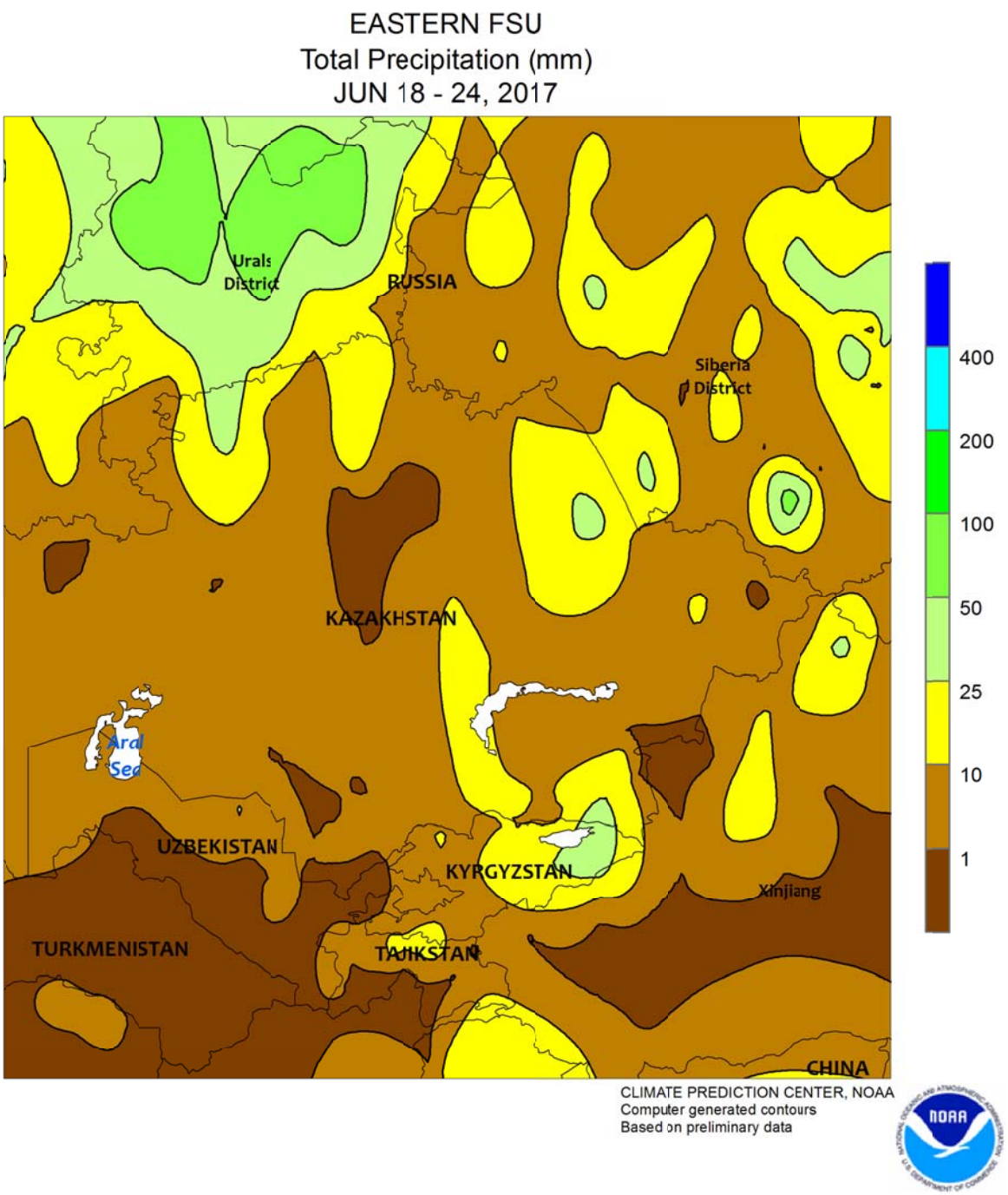

EASTERN FSU

Widespread showers in the north contrasted with sunny skies and seasonable heat in the south. A slow-moving cold front triggered 10 to 50 mm of rain over western spring grain areas, while more intermittent but locally heavy showers (2-33 mm) were reported in northeastern Kazakhstan and Russia's Siberia District. Moisture supplies remained good to excellent for vegetative spring wheat and barley in northern Kazakhstan and neighboring portions of central Russia. Meanwhile, seasonably dry, hot weather (35-40°C) in Uzbekistan and southern Kazakhstan promoted the development of irrigated cotton, which was approaching the flowering stage of development by week's end.

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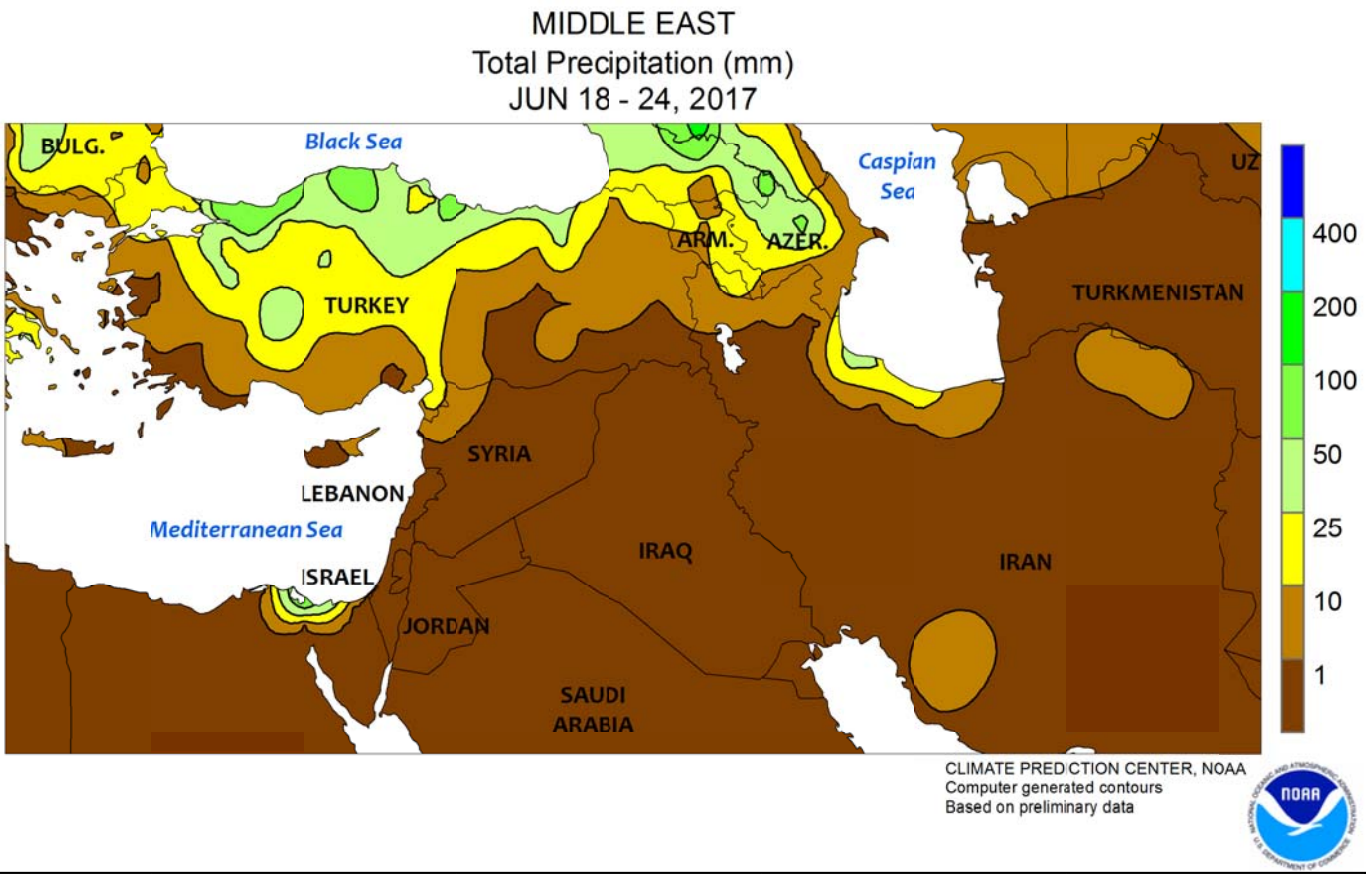

MIDDLE EAST

Additional late-season showers in Turkey maintained favorable conditions for summer crops but slowed winter grain maturation and drydown. Rain on central Turkey's Anatolian Plateau totaled 10 to 40 mm, hampering wheat and barley maturation and harvesting efforts. However, prospects for irrigated summer crops remained good to excellent due to the supplemental moisture; in particular, satellite-derived vegetation health data indicated good to excellent prospects for vegetative corn (southeast), squaring cotton (west), and vegetative sunflowers (northwest). Elsewhere, sunny weather with seasonal heat and dryness favored late winter wheat harvesting in Iran but maintained high irrigation demands for specialty crops near the Mediterranean Coast.

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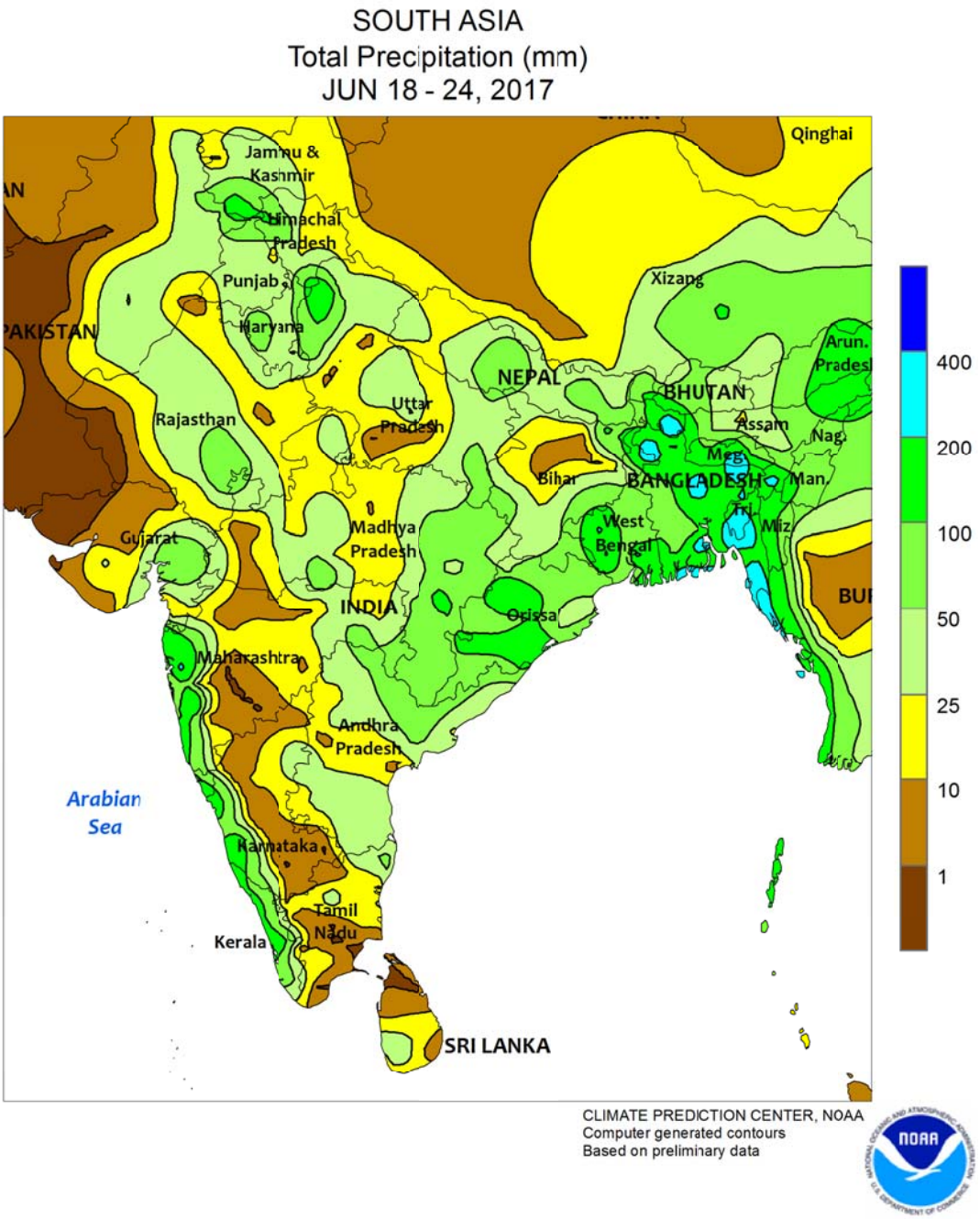
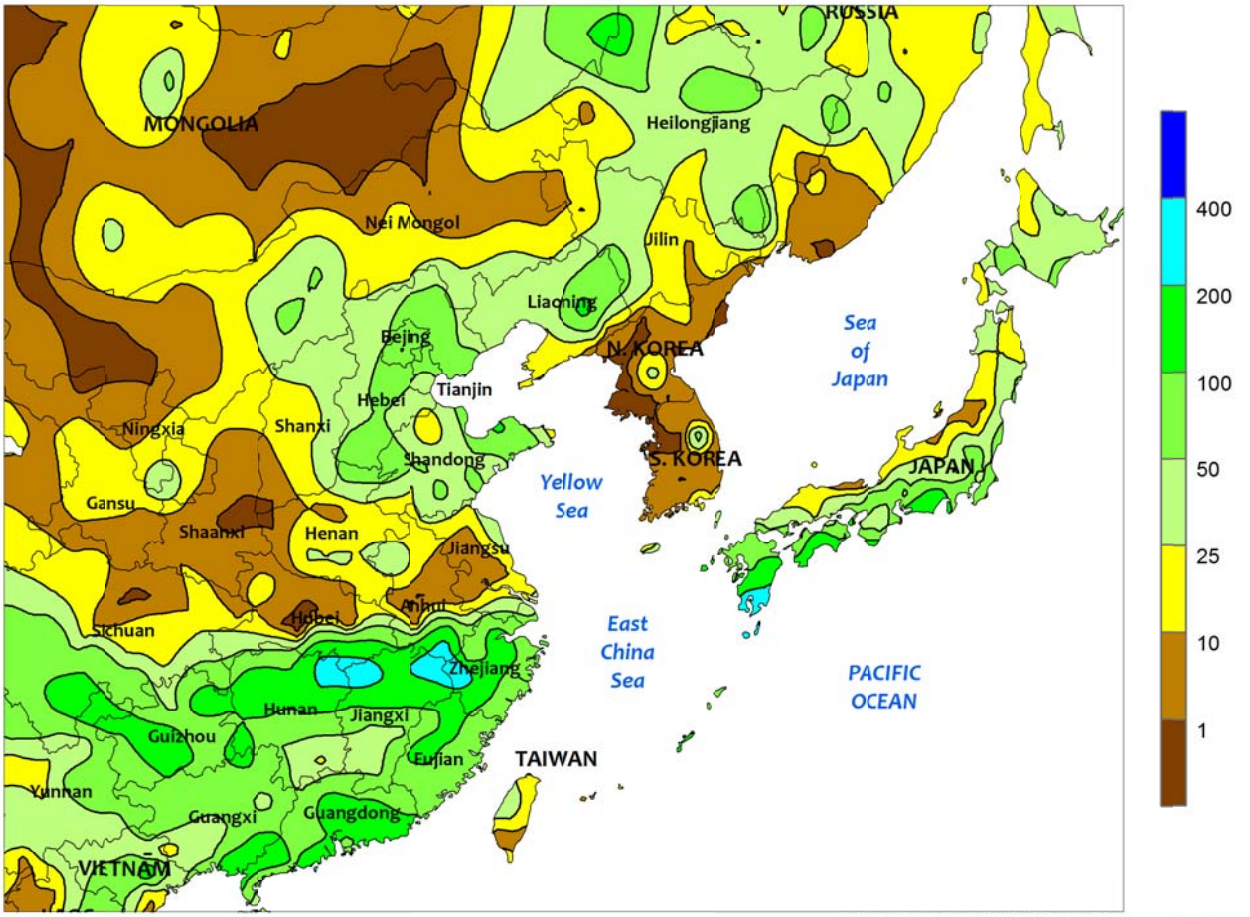


SOUTH ASIA

The monsoon surged into western India but still lagged in northeastern areas (Bihar and Uttar Pradesh) as reported by the Indian Meteorological Department. Despite the delayed onset in some areas, showers were widespread in India with pockets of drier weather interspersed. Most of the country received at least 10 mm of rain with eastern and northern states as well as the western coast receiving 25 to over 100 mm. The increase in soil moisture spurred cotton and oilseed planting in Gujarat, Madhya Pradesh and Maharashtra; planting typically won't begin in earnest until July. Even with the increasing showers, the delay in the monsoon left many crop areas with rainfall deficits for June thus far. Meanwhile in other parts of the region, flooding rainfall (50-200 mm) returned to Bangladesh maintaining concerns over reduced rice production, while more seasonable showers (10-25 mm or more) benefited rice and cotton in Pakistan and rice in southwestern Sri Lanka.

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

EASTERN ASIA
Total Precipitation (mm)
JUN 18 - 24, 2017



EASTERN ASIA

Wet weather overspread much of eastern China, benefiting summer crops. In northeastern China, 10 to locally over 50 mm of rain increased soil moisture for vegetative corn and soybeans. The moisture was particularly welcomed in southern and western prefectures following nearly four weeks with little to no rainfall. Farther south, showers on the North China Plain (10-25 mm south, 25-50 mm north) slowed lingering wheat harvesting but further improved soil moisture for corn, groundnut, and other summer crop sowing. Meanwhile, heavy showers (50-200 mm or more) in southern China maintained or improved water supplies for rice, although Jiangxi, Guangdong, and Guangxi were still experiencing rainfall deficits (beginning May 1). In addition, little if any rainfall in Hubei and neighboring sections of Anhui and Jiangsu increased short-term (less than 4 weeks) dryness. Elsewhere in the region, dry weather persisted on the Korean Peninsula, where rainfall totals since May 1 have been less than 50 percent of normal: and while irrigation supplies were reportedly sufficient for rice development, more rain would be welcome. In contrast, increased showers in Japan (25-50 mm, more in the south) improved soil moisture and water supplies for rice following a drier-than-normal start to the growing season.

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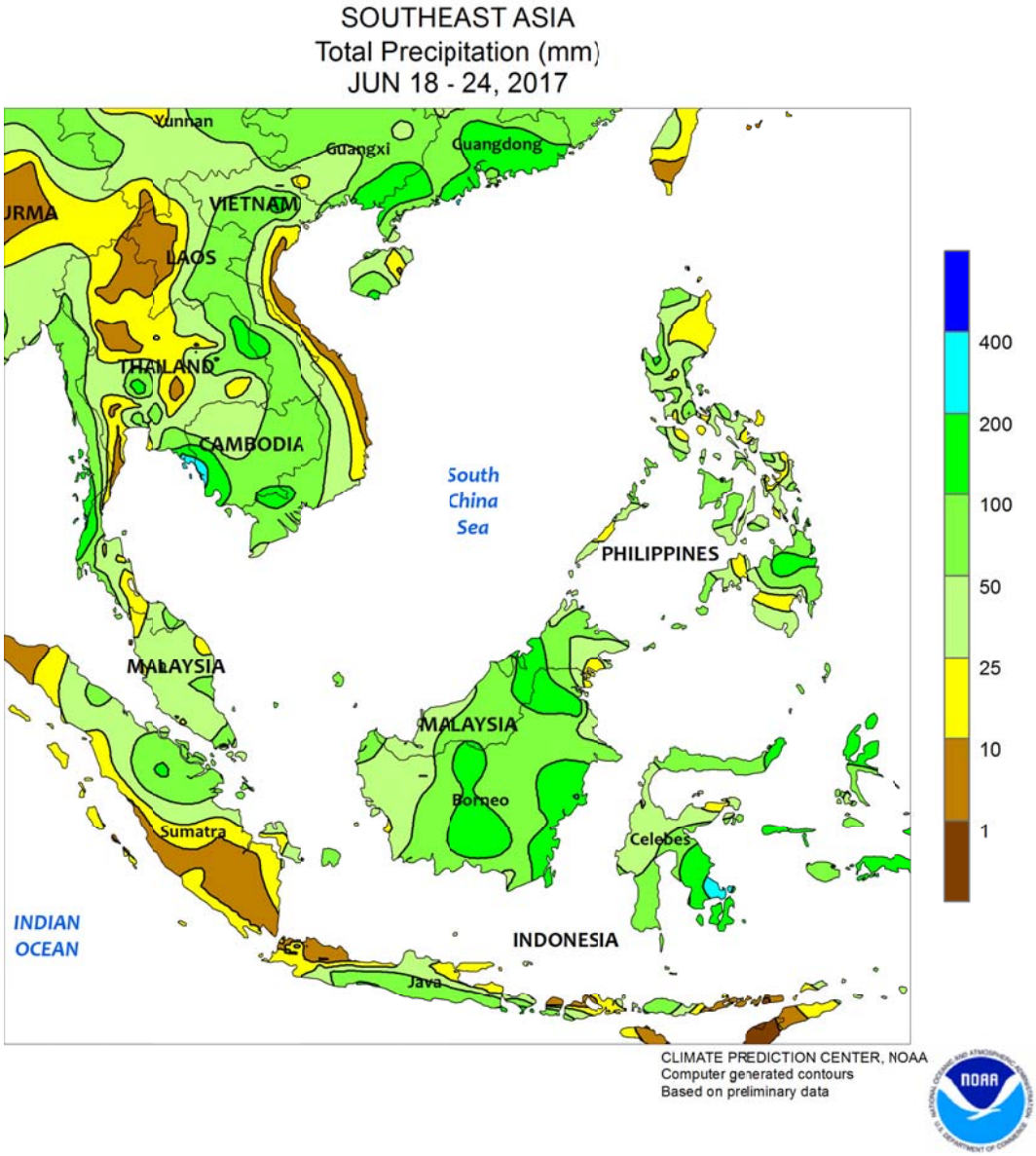

SOUTHEAST ASIA

Seasonal showers maintained favorable moisture conditions and water supplies for rice and other summer crops across Indochina and the Philippines. Rainfall eased somewhat in Thailand; with most of the country received 10 to 25 mm, with portions of the Central Plain and Northeast Region receiving over 50 mm. Showers were lighter (less than 10 mm) in the far northern districts but seasonal totals since May 1 remained above normal. Rainfall remained heavier (25-100 mm or more) in Cambodia, Laos, and Vietnam, keeping rice well watered. In the Philippines, showers returned to nearly all regions, with 25 to over 50 mm of rain recorded in Luzon, the Visayan Islands, and Mindanao. All major rice and corn areas continued to report seasonal (since May 1) rainfall totals near to well above normal. Meanwhile, showers across oil palm areas of Malaysia (25-50 mm west, 50-100 mm east) maintained or improved soil moisture for trees. The wet weather was especially welcomed in the west, where rainfall has been below normal for most of June. In addition, showers (25-100 mm) in most major oil palm areas of Indonesia maintained favorable soil moisture, although portions of southern Sumatra were dry.

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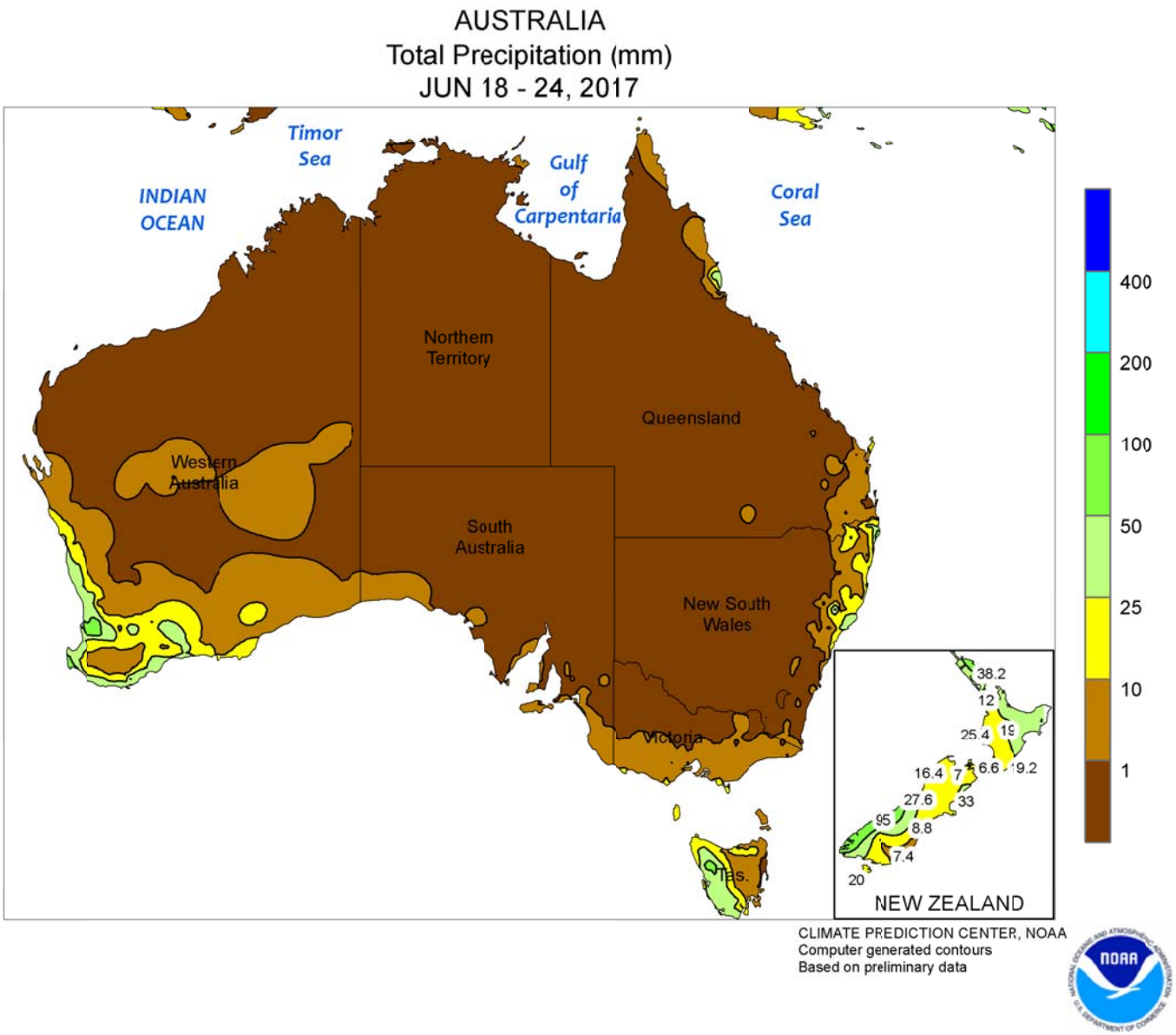

AUSTRALIA

For the second consecutive week, scattered showers (5-25 mm) overspread Western Australia, helping to moisten topsoils for vegetative wheat, barley, and canola. Rainfall has been well below normal in this region since May 1, averaging about 30 percent of normal. Consequently, this week's rainfall was welcome, but continued rainfall is necessary to promote uniform crop emergence and establishment. Farther east, scattered showers overspread South Australia and northern Victoria, but the rainfall was generally light (1-10 mm). Similar to Western Australia, more frequent, soaking rains are needed throughout this region to promote early-season crop development. Elsewhere in the wheat belt, dry weather prevailed throughout most of New South Wales and southern Queensland, with showers (10-25 mm) mainly confined to easternmost areas. The dryness allowed fieldwork to proceed without delay but was unfavorable for recently planted wheat and other winter crops. Comparable to the other regions, more rain would be welcome throughout eastern Australia to spur early crop development. Temperatures in Australia's wheat belt averaged near to above normal (up to 2ºC above normal).

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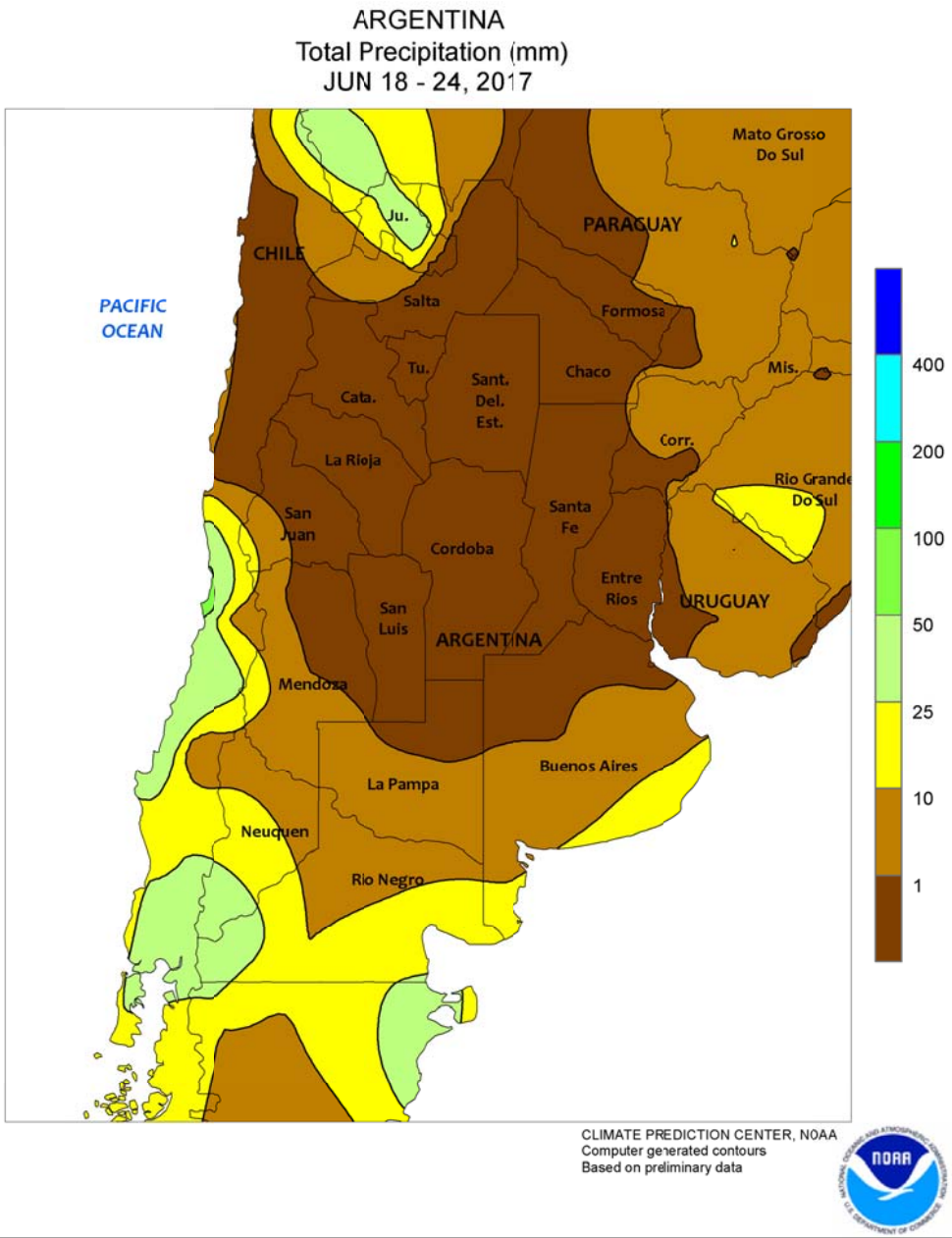

ARGENTINA

Dry weather dominated much of the country, favoring drydown and harvesting of corn, soybeans, and cotton. Similar to last week, rain (5-20 mm) was confined to southern production areas of Buenos Aires, where wheat and barley planting was underway. Virtually no rain fell elsewhere. Weekly average temperatures were near to below normal in western agricultural areas (La Pampa to Salta), due to an early-week cold snap that dropped nighttime lows below -5°C as far north as Santiago del Estero. Warmer weather returned during the latter half of the week, with daytime temperatures across the north ranging from 25 to 30°C on several days. According to the government of Argentina, corn and soybeans were 62 and 97 percent harvested, respectively, as of June 22. In addition, wheat planting advanced to 46 percent complete, slightly behind last year's pace (48 percent). Planting reached 28 percent complete in Buenos Aires — Argentina's largest producer — 10 points ahead of last year's pace. Similarly, barley in Buenos Aires was 34 percent planted versus 21 percent at this time last season.

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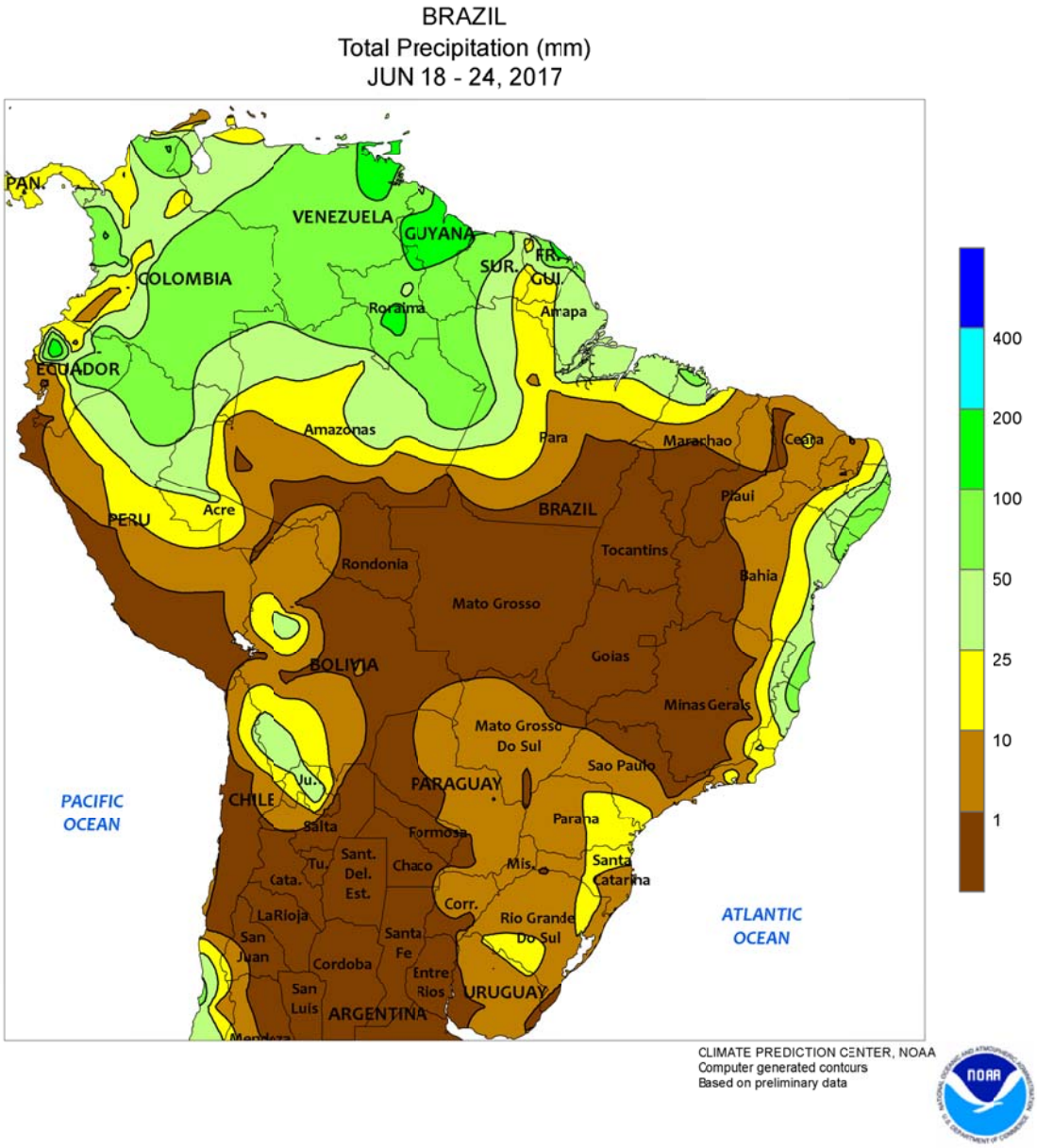

BRAZIL

Dry weather dominated nearly all agricultural areas, favoring a rapid pace of seasonal fieldwork. For a second week, little to no rain fell in the main winter wheat areas of Rio Grande do Sul; as reported by the government on June 22, planting of wheat jumped nearly 40 points to 53 percent complete but still lagged the average pace of 74 percent. Mostly dry weather also prevailed in Parana's western farming areas, with light showers (greater than 10 mm) confined to the east. Virtually no rain fell from Sao Paulo and Mato Grosso do Sul northward to Mato Grosso and the northeast interior. The dryness was accompanied by near- to above normal-temperatures, with daytime highs reaching the middle 30s (degrees C) from Mato Grosso and Goias northeastward to Maranhao and Piaui. The warmth and dryness further improved conditions for sugarcane and coffee harvesting in major production areas of Sao Paulo and Minas Gerais. In the Center-West and northeastern interior regions, the seasonable weather prompted rapid development of second-crop corn and cotton. Elsewhere, seasonal showers (10-50 mm, locally higher) intensified along the northeastern coast (Rio de Janeiro northward), boosting moisture for coffee, cocoa, and other regionally important crops.

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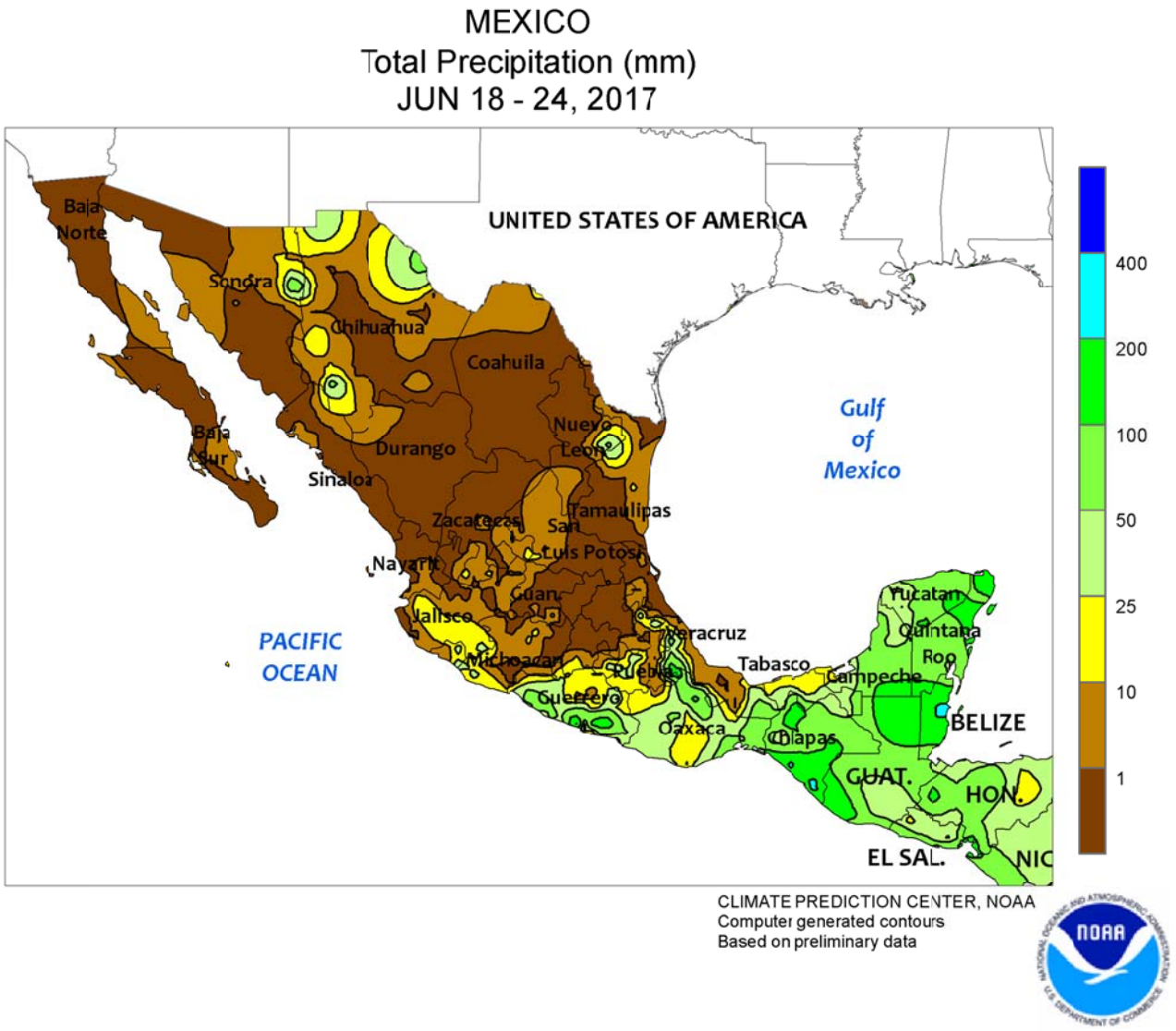
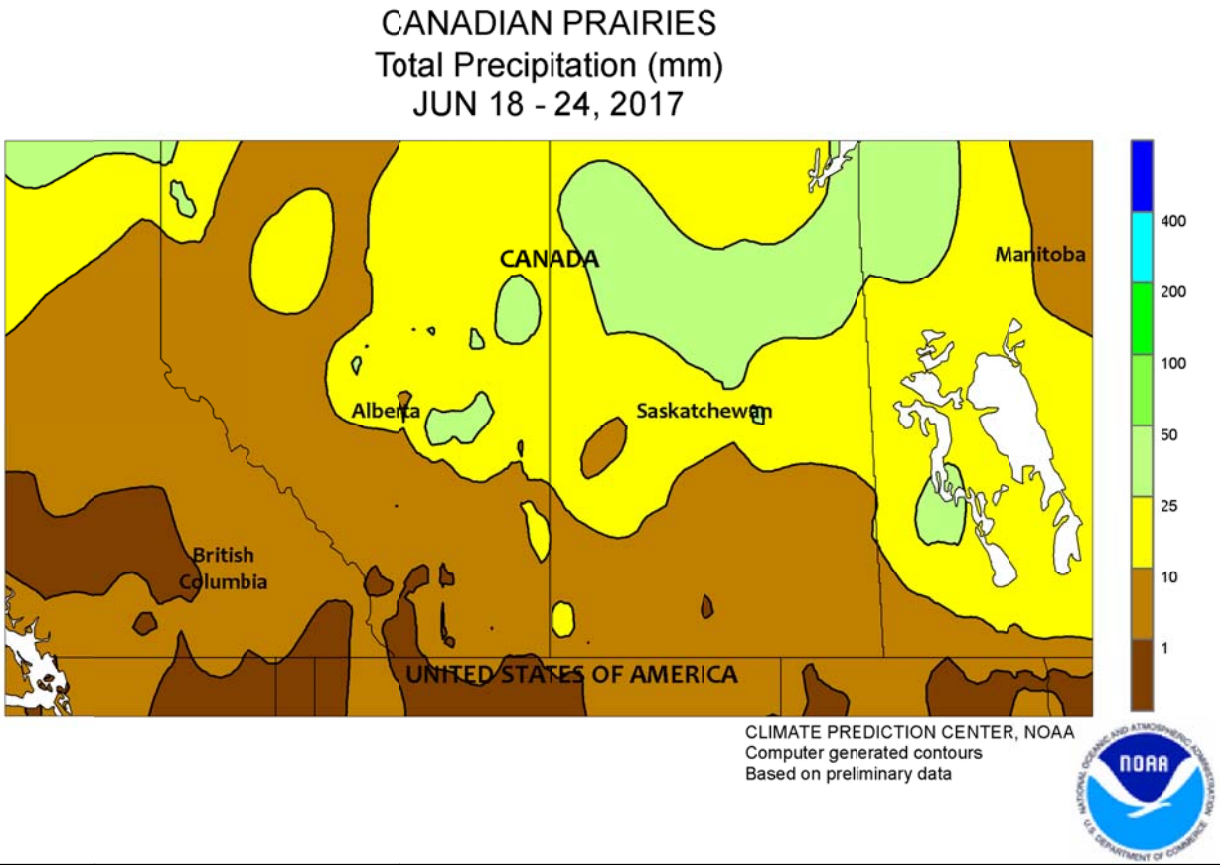


MEXICO

Showers tapered off from last week's levels across the southern plateau, reducing moisture for establishment of corn and other summer crops. Light rain (greater than 10 mm) lingered over parts of Jalisco, as well as from northern Guerrero to Puebla, but little to no rain was recorded elsewhere in the region. Daytime highs reaching the upper 20s and lower 30s (degrees C) exacerbated evaporative losses in the driest locations. On the year, much of the region has received near- to above-normal rainfall, though pockets of dryness have lingered in some northern and western locations. Elsewhere, moderate to heavy rain (10-50 mm, locally higher) fell along the southern Pacific Coast (Guerrero to Chiapas), though amounts were generally less than those generated by last week's tropical storm remnants. Showers (25-50 mm in spots) also continued in the vicinity of southern Veracruz but drier conditions persisted in the northern half of the state, as well as most of northeastern Mexico (Tamaulipas and San Luis Potosi northwestward to Coahuila); hot weather (daytime highs reaching 40°C) accompanied the dryness, maintaining high evaporative losses and increasing moisture requirements for crops and livestock. The heat emanated from the northwest, where temperatures reached into the middle 40s in northern sections of Sonora and Chihuahua. Showers were generally scattered and light in northwestern watersheds, with just a few locations recording rainfall in excess of 10 mm.

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



CANADIAN PRAIRIES

Unfavorably dry weather continued in southwestern agricultural districts, even as some more northerly production areas struggled with lingering wetness. The driest area continued to be southwestern Saskatchewan, which recorded little to no rain this week and has trended below normal since early May; this is reinforced by reports out of Canada as well as the *U.S. Drought Monitor*, which has closely followed the deteriorating conditions in adjacent areas in the United States northern High Plains. Dry weather was also recorded this week in southern sections of Alberta, southeastern Saskatchewan, and Manitoba, areas which received beneficial, locally heavy rain last week. In contrast to the southern dryness, light to moderate rain (5-25 mm, locally higher) continued across northern agricultural districts, hindering the final stages of spring planting, cutting hay, and treatments for pests and diseases. Reports emanating from Canada indicated the continuation of waterlogging in some fields which, at this late point in the growing season, would likely go unplanted with a major spring crop. Weekly temperatures averaged near to below normal across the region, with nighttime lows approaching 0°C in some of the colder parts of Alberta and Saskatchewan.

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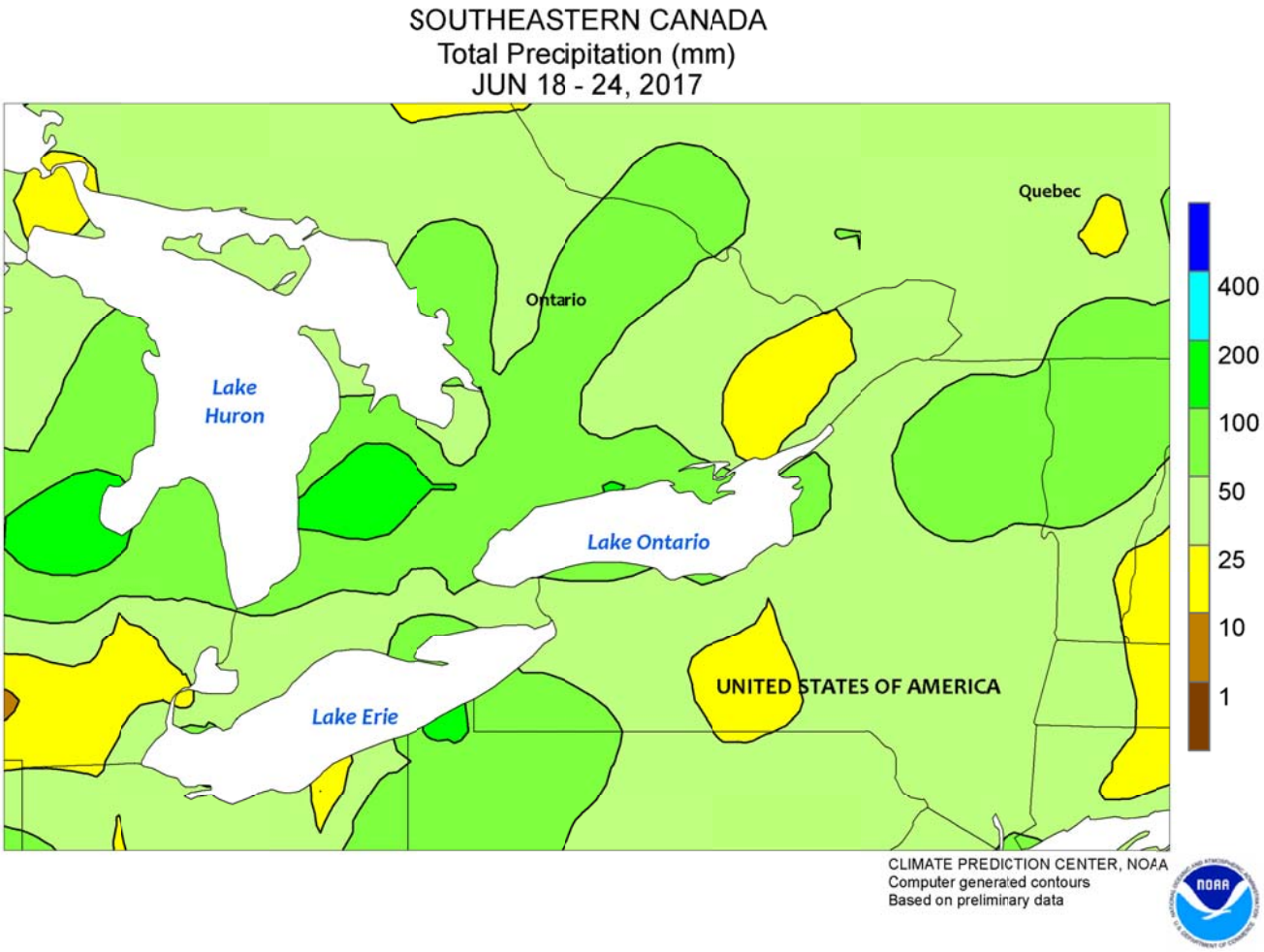

SOUTHEASTERN CANADA

Rainy weather continued, and planting was nearly complete in most areas. Rainfall totaled 25 to 50 mm across Ontario, with higher amounts around Lake Huron (50-150 mm), and lower amounts in eastern Ontario (less than 25mm). Rainfall provided well-above-normal amounts of moisture for agriculture (especially in major growing areas), which compounded on the already wet start to summer that continued to disrupt crop planting and treatments for diseases and pests. Slightly above-normal temperatures (1-3°C) were coupled with wet weather, as daytime highs reached the upper 20s (degrees C) for much of the week, and isolated areas in southern Quebec exceeded 30°C. Overnight lows continued to drop into the low teens, with only a few places recording single digit nighttime low temperatures.

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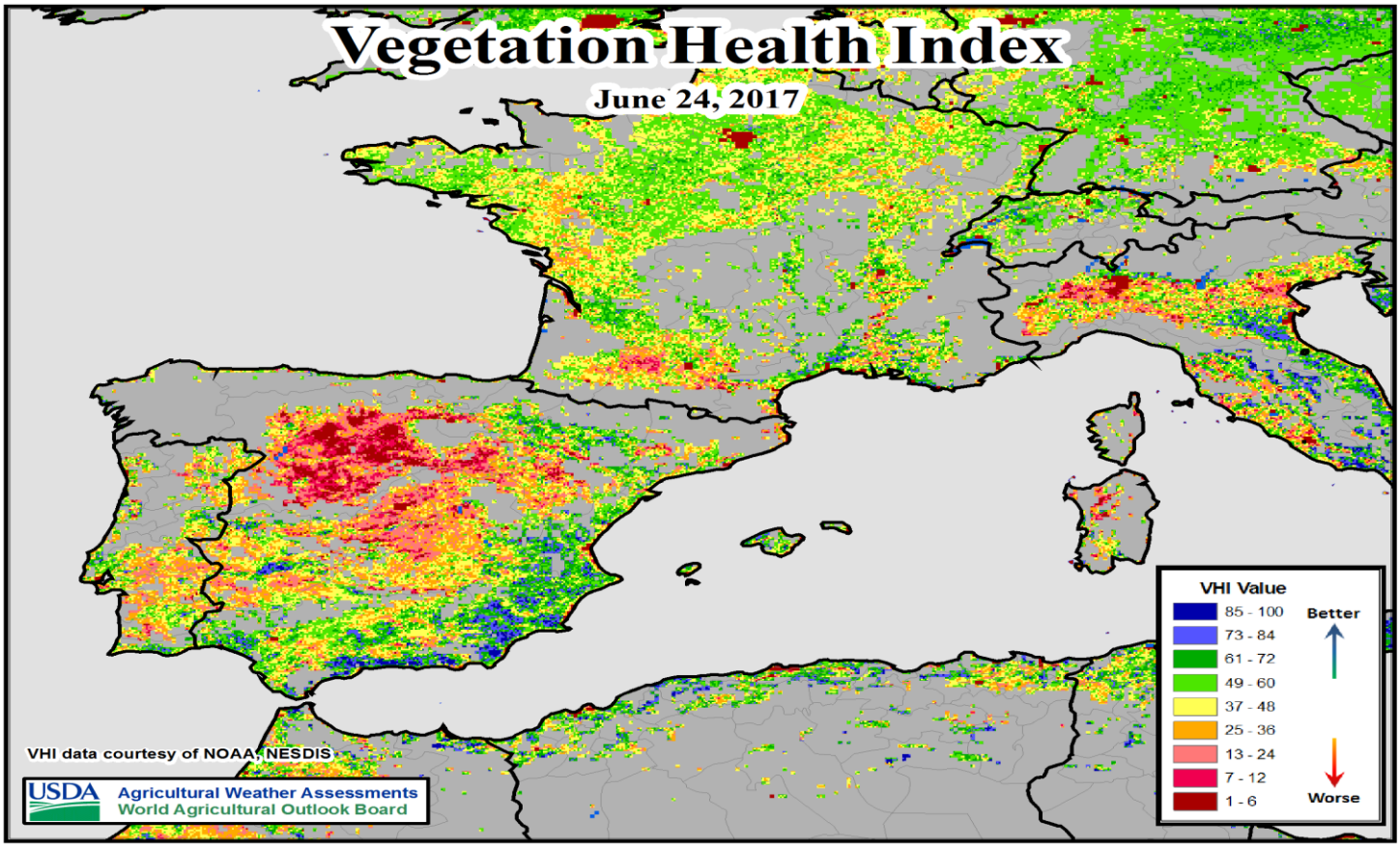

An excessive heat wave has impacted vegetative to reproductive summer crops over much of southwestern Europe. Spain, in particular, has been hit hard by the untimely record-setting heat, with a variety of crops likely suffering yield losses. Corn, grown primarily in the north (Castilla y León), has been subjected to nearly two weeks of highs above 35°C, which has the crop either entering reproduction up to 4 weeks early (in the north) or suffering yield losses due to heat during tassel and silk in the middle of the country. Sunflowers, grown primarily in the south (Andalucía), have been blistered by 13 days with highs above 38°C (the damage threshold for the more heat tolerant sunflower), with readings as high as 44.5°C. Even cotton, also grown in Andalucía, suffers yield losses above 40°C; there have been 8 days with highs above 40°C in southern Spain. The Vegetation Health Index from this past week (above) clearly shows the impact of the heat.

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