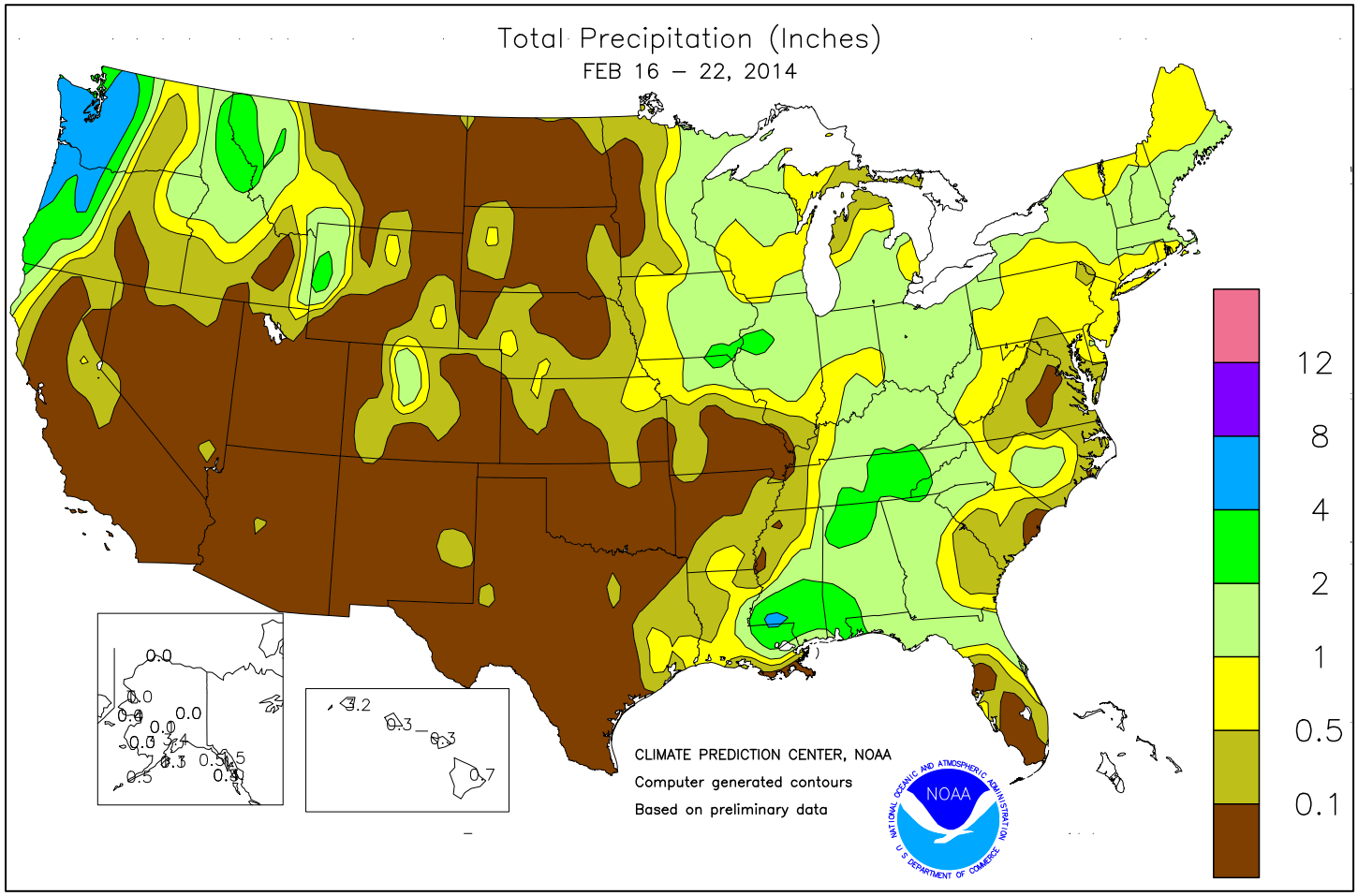
Volume 101, No. 8 http://www.usda.gov/oce/weather February 25, 2014

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

February 16 – 22, 2014

Highlights provided by USDA/WAOB

The year's first widespread severe weather outbreak, accompanied by locally heavy showers, struck the **Southeast** and **lower Midwest** on February 20-21. Preliminary data suggested that there were more than two dozen tornadoes, along with several hundred reports of straight-line wind damage. In the **central and eastern Corn Belt**, heavy rain combined with melting snow to produce minor to locally moderate flooding. The same storm was responsible for wind-driven snow, which created blizzard conditions on February 20-21 in some

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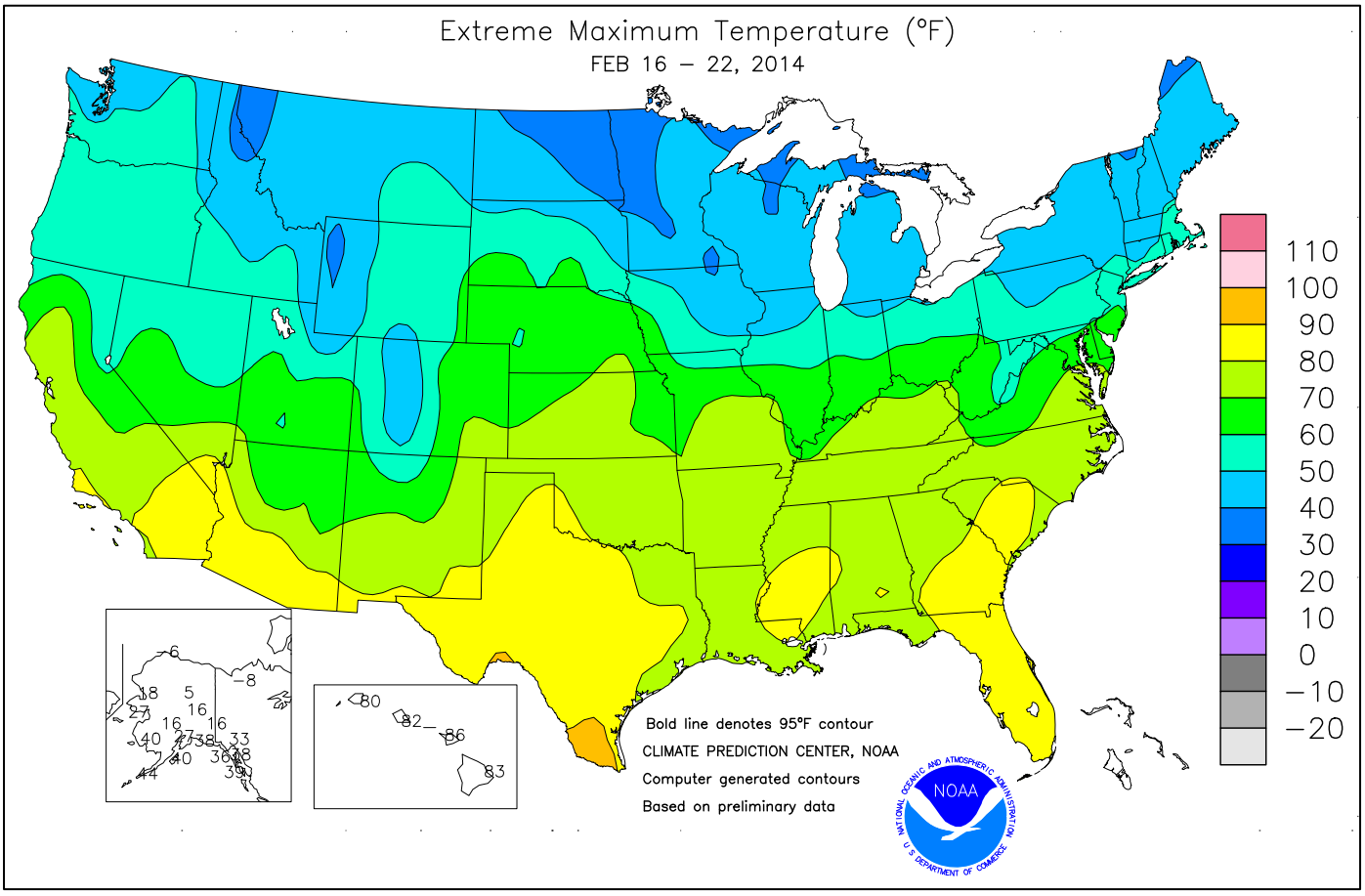
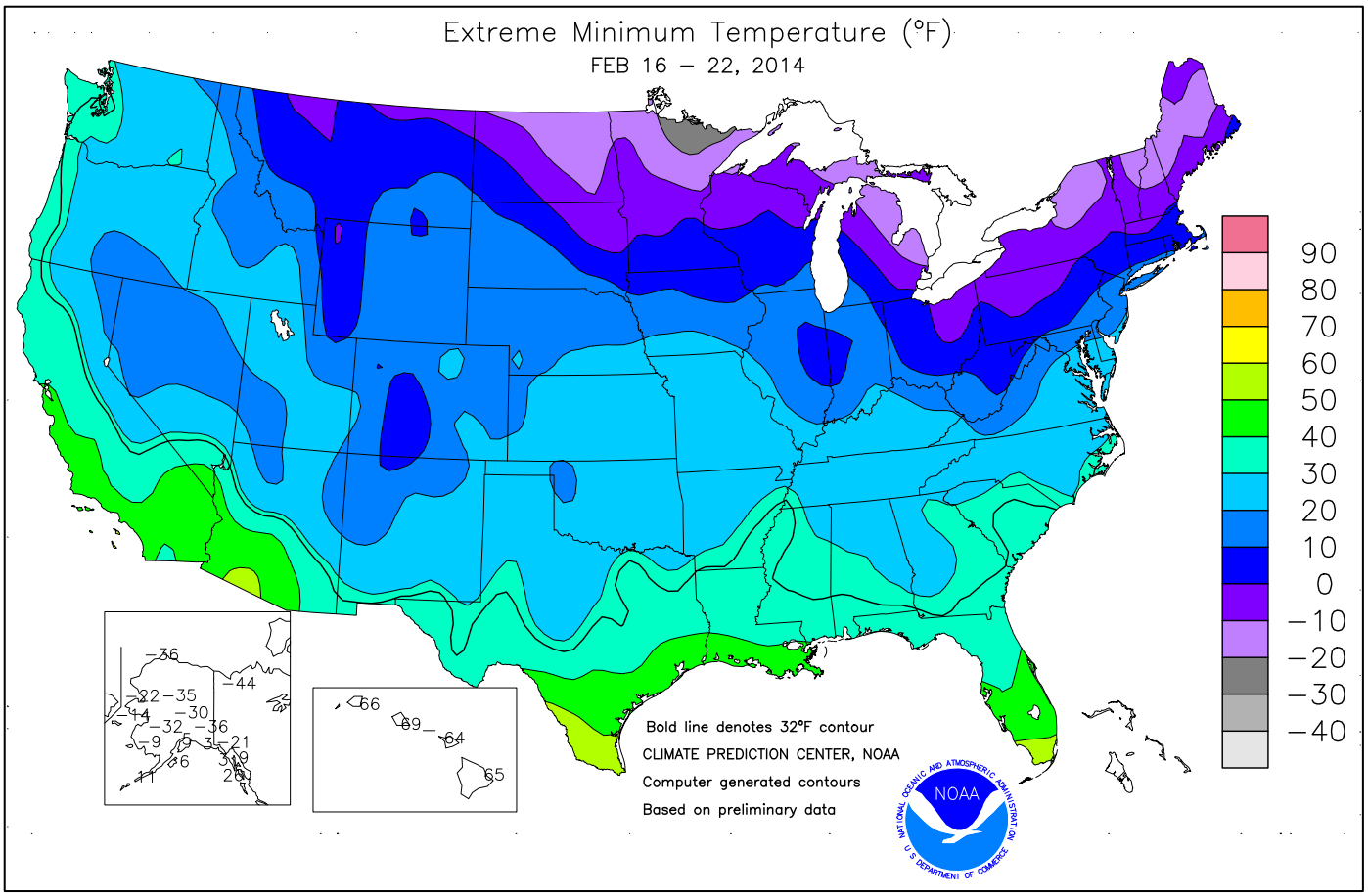
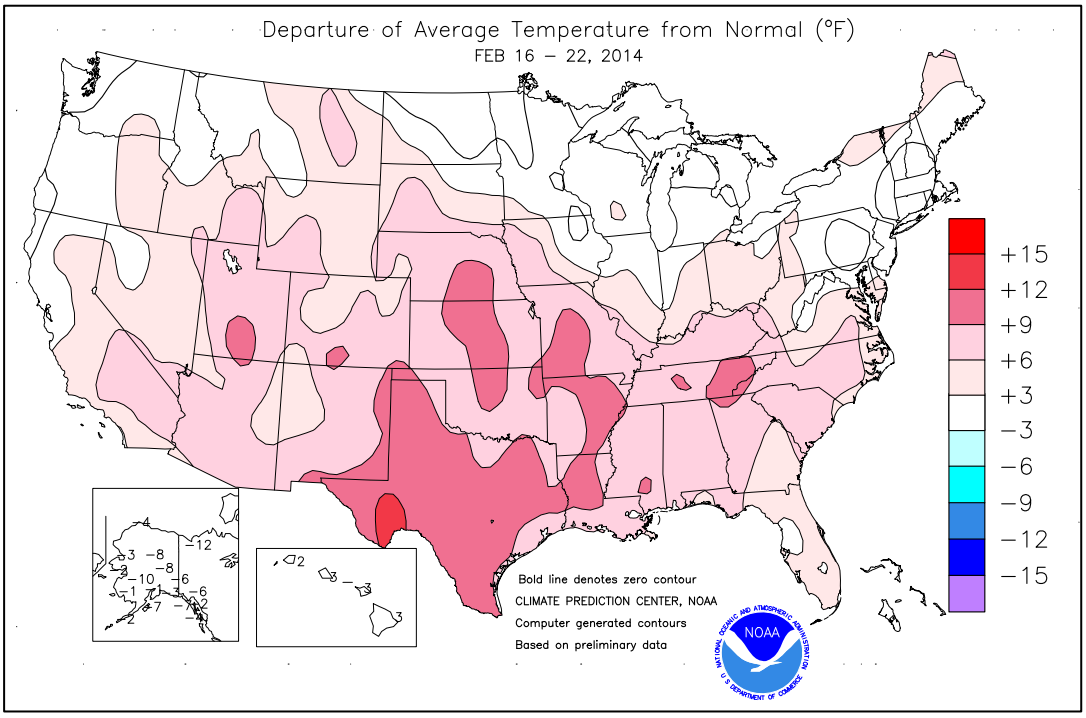

Extreme Maximum Temperature (°F)
FEB 16 – 22, 2014
110
100
90
80
70
60
50
40
30
20
10
0
−10
−20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA


Extreme Minimum Temperature (°F)
FEB 16 – 22, 2014
90
80
70
60
50
40
30
20
10
0
−10
−20
−30
−40
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA

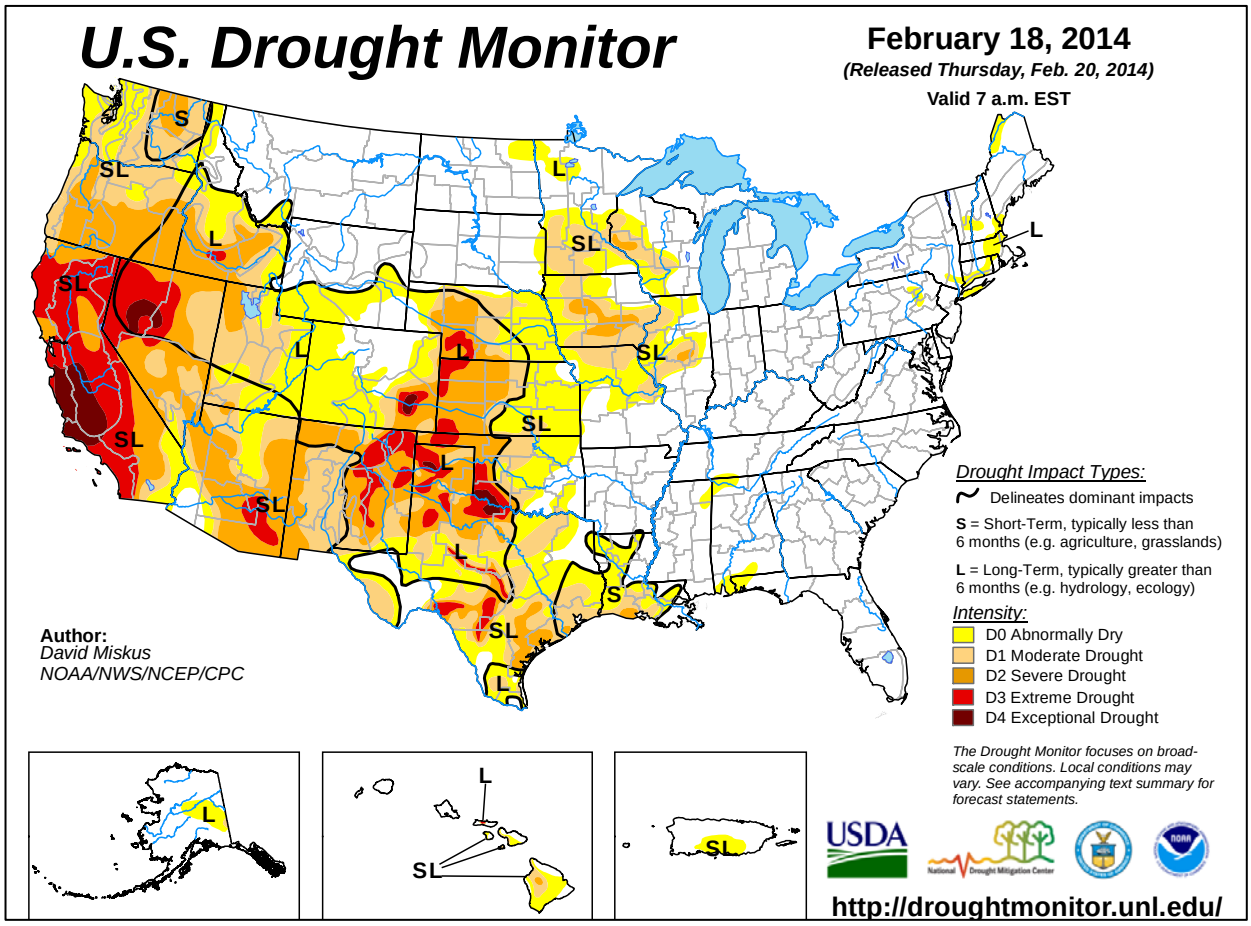


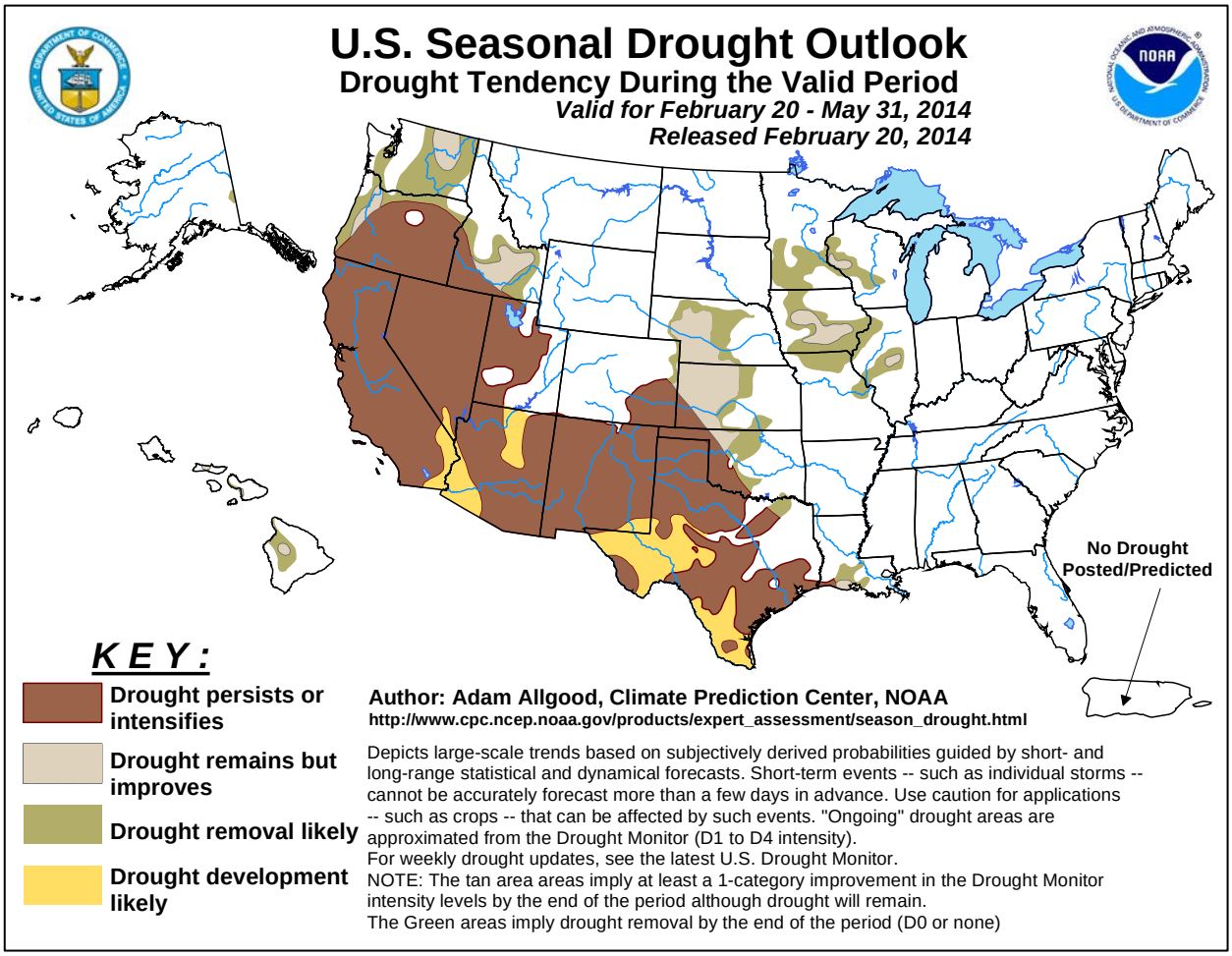
(Continued from front cover) areas from **Iowa northward into the upper Great Lakes region**. Meanwhile, generally dry weather covered the **northern and southern Plains**, while light precipitation affected the **central Plains**. Concerns persisted with respect to the effects of weather extremes on the **Plains'** winter wheat, as well as ongoing drought on the **central and southern High Plains**. Weekly temperatures averaged as much as 10°F above normal from the **central and southern Plains into the Mid-South**. Elsewhere, beneficial precipitation spread from the **Pacific Northwest to the northern Rockies**, but unfavorably warm, dry weather prevailed in **California**, the **Great Basin**, and the **Southwest**. General warmth continued in the West, particularly from **California to the southern Rockies**.

Although the **Plains** and **South** warmed, chilly conditions lingered early in the week in the **Midwest**. However, **Marquette, MI**, warmed to 41°F on February 19, marking its first reading above the freezing mark since December 5. **Marquette's** spell at or below 32°F, which lasted 75 days, broke a record originally set with a 72-day cold spell in 1978-79. Elsewhere in **Michigan**, **Grand Rapids** reported a snow depth of 20 inches or greater on 16 consecutive days (previously, 9 days from February 13-21, 1936, and January 14-22, 1979). **Grand Rapids** also set a February record with a 24-inch snow depth on February 18 (previously, 23 inches on February 16-17, 1936, and February 7-10, 2014). For the remainder of the country, however, warmth dominated. In **Arizona**, **Phoenix** posted five consecutive daily-record highs (85, 86, 84, 88, and 86°F) from February 14-18. Similarly, **Tucson, AZ**, reported three daily-record highs in a row (88, 85, and 86°F) from February 15-17. **Sandberg, CA**, notched daily-record highs on February 18 and 22 (72 and 70°F, respectively), extending its record to 6 February days with highs of 70°F or greater. Previously, **Sandberg** reported a record-high 4 days of 70-degree warmth in February 1963. On February 19, **Needles, CA**, tallied its earliest 90-degree reading on record. Prior to this year, **Needles'** earliest 90-degree reading had occurred on February 24, 1904. During the second half of the week, warmth spread into the **South** and **East** in advance of a cold front. On February 20, **Columbia, SC** (84°F), tied a monthly record most recently achieved on February 28, 2011. Elsewhere, daily-record highs included 82°F (on February 20) in **Hattiesburg, MS**, and 87°F (on February 21) in **Vero Beach, FL**.

Early in the week, moisture spread across the **nation's northern tier**. On February 16, **Hoquiam, WA**, received a daily-record rainfall of 1.82 inches. The following day, widespread snow affected the **Midwest**. Record-setting snowfall totals for February 17 reached 6.7 inches in **Milwaukee, WI**; 5.6 inches in **Grand Rapids, MI**; and 4.7 inches in **Waterloo, IA**. By February 18, snow shifted into the **Northeast**, where **Concord, NH**, received a daily-record total of 12.2 inches. A few days later, the severe weather outbreak associated with a cold front hit **Illinois** particularly hard, but affected most areas from the **middle and lower Mississippi Valley eastward**. **Springfield, IL**, noted a wind gust to 64 mph on February 20, supplanting its monthly record of 63 mph set on February 27, 1948. Elsewhere on the 20th, daily-record rainfall totals reached 2.14 inches in **Huntsville, AL**, and 1.64 inches in **South Bend, IN**. Meanwhile in **Minnesota**, **Rochester** set daily records on February 20 for both precipitation (0.99 inch) and snowfall (8.8 inches). **Mason City, IA**, received 7.1 inches of snow on February 20-21 to increase its depth to 19 inches, while **Minneapolis-St. Paul, MN**, collected 9.9 inches to boost its depth to 24 inches. By February 21, showers and gusty winds swept into the **East**, resulting in daily-record totals in locations such as **Watertown, NY** (0.86 inch), and **Burlington, VT** (0.65 inch).

Cold, dry weather covered most of the **Alaskan mainland**, while mild conditions prevailed across the southwestern part of the state. In the **Aleutians**, wet weather accompanied the warmth. For example, **Cold Bay** netted a weekly precipitation total of 2.66 inches, aided by a daily-record sum of 1.86 inches on February 21. Meanwhile, **Hawaiian** showers ended early in the week in most areas, but lingered on **Kauai**. **Lihue, Kauai**, netted a weekly rainfall of 3.17 inches, more than half of which fell on February 16. After the showers ended, **Kahului, Maui**, posted a daily-record high of 86°F on February 20.


U.S. Drought Monitor
February 18, 2014
(Released Thursday, Feb. 20, 2014)
Valid 7 a.m. EST
Author:
David Miskus
NOAA/NWS/NCEP/CPC
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
http://droughtmonitor.unl.edu/


U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for February 20 - May 31, 2014
Released February 20, 2014
No Drought Posted/Predicted
KEY:
Drought persists or intensifies
Drought remains but improves
Drought removal likely
Drought development likely
Author: Adam Allgood, Climate Prediction Center, NOAA
http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.html
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity).
For weekly drought updates, see the latest U.S. Drought Monitor.
NOTE: The tan area areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain.
The Green areas imply drought removal by the end of the period (D0 or none)

National Weather Data for Selected Cities

Weather Data for the Week Ending February 22, 2014

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 DEC 1	PCT. NORMAL SINCE DEC 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	67	44	72	30	56	9	1.27	0.28	0.82	13.10	100	6.04	70	91	43	0	1	4	1
	HUNTSVILLE	66	41	73	30	54	9	***	***	***	***	***	***	***	89	51	0	2	**	**
	MOBILE	73	50	77	35	61	7	1.40	0.18	1.37	12.46	88	5.09	53	91	64	0	0	2	1
	MONTGOMERY	72	46	80	30	59	8	1.16	-0.21	1.15	16.41	116	7.45	82	89	42	0	1	2	1
AK	ANCHORAGE	24	13	27	5	18	-1	***	***	***	***	***	***	***	79	67	0	7	**	**
	BARROW	-13	-27	-6	-36	-20	-4	0.00	-0.03	0.00	1.78	539	0.62	295	76	68	0	7	0	0
	FAIRBANKS	3	-24	16	-30	-11	-8	0.00	-0.08	0.00	1.00	64	0.22	27	78	69	0	7	0	0
	JUNEAU	34	21	38	9	28	-2	1.49	0.50	0.51	21.97	165	13.45	170	92	83	0	7	5	2
	KODIAK	30	16	40	6	23	-7	1.26	-0.10	0.64	21.37	104	16.93	132	80	67	0	6	3	2
	NOME	12	-4	27	-14	4	-2	0.36	0.19	0.32	4.33	173	2.32	155	78	59	0	7	2	0
AZ	FLAGSTAFF	56	23	60	19	39	7	0.00	-0.65	0.00	1.64	28	0.29	7	67	16	0	7	0	0
	PHOENIX	82	54	88	50	68	9	0.00	-0.18	0.00	0.39	17	0.00	0	33	17	0	0	0	0
	PRESCOTT	66	33	69	28	50	10	0.00	-0.47	0.00	0.36	9	0.05	2	48	12	0	4	0	0
	TUCSON	81	49	86	43	65	10	0.00	-0.22	0.00	0.84	32	0.01	1	26	14	0	0	0	0
AR	FORT SMITH	72	35	77	30	53	9	0.00	-0.65	0.00	5.83	77	1.73	41	76	23	0	2	0	0
	LITTLE ROCK	70	38	79	32	54	8	0.00	-0.81	0.00	12.45	115	5.51	90	83	25	0	1	0	0
CA	BAKERSFIELD	69	46	73	43	58	4	0.00	-0.29	0.00	0.26	9	0.16	8	73	52	0	0	0	0
	FRESNO	70	47	73	45	59	7	0.00	-0.52	0.00	1.62	32	1.47	39	79	59	0	0	0	0
	LOS ANGELES	69	54	78	50	61	3	0.00	-0.77	0.00	0.53	7	0.23	4	86	61	0	0	0	0
	REDDING	66	42	75	34	54	5	0.19	-1.14	0.19	5.85	38	5.47	50	76	51	0	0	1	0
	SACRAMENTO	68	42	73	36	55	3	0.00	-0.86	0.00	3.36	37	2.93	44	91	31	0	0	0	0
	SAN DIEGO	70	55	76	53	63	4	0.00	-0.50	0.00	0.82	16	0.36	9	81	59	0	0	0	0
	SAN FRANCISCO	64	48	69	45	56	3	0.02	-0.95	0.01	2.96	28	2.61	34	86	73	0	0	2	0
	STOCKTON	67	41	71	35	54	2	0.06	-0.53	0.06	1.81	28	1.47	32	87	65	0	0	1	0
CO	ALAMOSA	49	21	56	11	35	11	0.01	-0.03	0.01	0.28	42	0.11	32	73	29	0	7	1	0
	CO SPRINGS	56	27	66	18	41	9	0.07	-0.01	0.07	0.97	113	0.90	205	64	11	0	6	1	0
	DENVER INTL	55	26	68	20	41	9	0.03	-0.02	0.03	1.35	229	1.10	393	70	16	0	6	1	0
	GRAND JUNCTION	53	28	63	23	41	6	0.06	-0.05	0.06	2.25	160	1.29	145	72	45	0	6	1	0
	PUEBLO	62	30	71	25	46	11	0.05	0.00	0.03	0.77	93	0.74	168	58	23	0	5	2	0
CT	BRIDGEPORT	40	24	47	14	32	0	0.67	-0.02	0.27	11.57	123	7.24	121	86	62	0	6	5	0
	HARTFORD	36	17	51	5	27	-2	***	***	***	***	***	***	***	85	59	0	7	**	**
DC	WASHINGTON	55	32	69	25	44	5	0.32	-0.31	0.12	12.18	149	6.65	129	80	36	0	3	4	0
DE	WILMINGTON	47	25	66	17	36	2	0.71	0.03	0.40	13.55	152	8.33	151	89	46	0	7	3	0
FL	DAYTONA BEACH	76	52	83	40	64	4	0.07	-0.59	0.07	6.89	87	5.20	100	94	45	0	0	1	0
	JACKSONVILLE	75	47	84	34	61	5	0.48	-0.26	0.48	9.56	109	8.70	142	98	40	0	0	1	0
	KEY WEST	79	69	81	61	74	3	0.00	-0.35	0.00	8.52	153	7.43	217	86	65	0	0	0	0
	MIAMI	81	65	85	52	73	4	0.71	0.19	0.71	8.23	145	3.56	102	85	53	0	0	1	1
	ORLANDO	80	53	86	39	66	3	0.20	-0.37	0.12	4.86	75	4.59	111	89	54	0	0	2	0
	PENSACOLA	71	54	76	41	63	8	2.19	1.06	2.19	11.65	91	7.89	89	87	56	0	0	1	1
	TALLAHASSEE	76	44	81	31	60	5	1.22	0.09	1.22	11.39	88	6.50	74	86	46	0	1	1	1
	TAMPA	77	57	82	44	67	4	0.24	-0.43	0.21	5.56	85	4.75	112	91	50	0	0	2	0
	WEST PALM BEACH	81	63	84	48	72	5	0.03	-0.53	0.03	15.56	173	11.22	192	82	53	0	0	1	0
GA	ATHENS	67	41	77	31	54	8	1.21	0.13	1.20	16.18	138	8.56	106	78	53	0	1	2	1
	ATLANTA	68	44	76	31	56	9	0.73	-0.41	0.65	14.75	119	6.95	81	79	45	0	1	2	1
	AUGUSTA	72	37	82	26	54	5	0.36	-0.64	0.36	12.84	119	5.94	77	93	41	0	3	1	0
	COLUMBUS	70	46	76	30	58	7	1.32	0.22	1.32	16.88	135	8.01	99	90	38	0	1	1	1
	MACON	71	40	78	26	56	7	0.62	-0.49	0.62	16.26	130	7.22	85	96	37	0	3	1	1
	SAVANNAH	74	47	82	32	61	8	0.42	-0.26	0.42	6.11	67	3.73	59	87	40	0	1	1	0
HI	HILO	81	67	83	65	74	3	0.67	-1.47	0.45	28.08	104	7.88	48	94	81	0	0	3	0
	HONOLULU	80	71	82	69	76	3	0.33	-0.25	0.19	7.43	100	3.77	83	85	75	0	0	3	0
	KAHULUI	83	67	86	64	75	3	0.28	-0.26	0.27	7.53	86	5.48	96	92	84	0	0	2	0
	LIHUE	79	69	80	66	74	2	3.15	2.38	1.55	14.76	124	9.49	133	96	89	0	0	5	3
ID	BOISE	51	33	57	29	42	5	0.06	-0.22	0.05	3.48	96	2.82	125	82	51	0	4	2	0
	LEWISTON	48	35	53	32	42	3	0.14	-0.08	0.14	2.51	86	1.78	96	59	46	0	1	1	0
	POCATELLO	47	30	56	23	38	7	0.01	-0.23	0.01	2.03	69	1.60	86	73	51	0	6	1	0
IL	CHICAGO/O'HARE	38	24	49	16	31	3	***	***	***	***	***	***	***	77	61	0	6	**	**
	MOLINE	39	21	49	11	30	2	1.73	1.36	1.29	5.00	103	3.78	143	84	62	0	6	3	1
	PEORIA	41	26	53	18	34	5	1.39	0.98	0.78	6.23	123	4.74	179	83	54	0	6	3	2
	ROCKFORD	36	20	44	10	28	3	1.08	0.76	0.69	9.14	206	7.45	313	83	66	0	6	2	1
	SPRINGFIELD	45	28	63	19	36	5	1.08	0.63	0.63	6.42	120	4.82	170	82	56	0	6	3	1
IN	EVANSVILLE	53	31	69	23	42	6	0.35	-0.42	0.34	11.26	129	3.93	76	73	56	0	4	2	0
	FORT WAYNE	37	23	49	10	30	2	***	***	***	***	***	***	***	87	66	0	7	**	**
	INDIANAPOLIS	44	28	62	18	36	4	0.44	-0.15	0.22	11.60	160	7.16	169	84	56	0	5	3	0
	SOUTH BEND	38	23	49	15	31	3	1.95	1.48	1.64	8.24	121	5.91	158	78	63	0	7	4	1
IA	BURLINGTON	40	25	50	19	33	4	2.26	1.87	1.79	4.80	108	3.72	159	89	57	0	6	3	1
	CEDAR RAPIDS	34	20	45	14	27	1	0.89	0.63	0.66	2.29	69	1.61	88	88	63	0	7	2	1
	DES MOINES	42	25	55	21	33	6	0.91	0.62	0.67	4.51	140	3.70	197	80	60	0	7	3	1
	DUBUQUE	32	17	44	12	25	1	0.76	0.42	0.49	3.53	89	2.29	100	91	74	0	7	3	0
	SIOUX CITY	46	21	62	14	33	7	0.34	0.20	0.19	0.79	50	0.61	66	84	55	0	7	2	0
	WATERLOO	32	13	43	7	23	-1	1.03	0.78	0.64	3.39	127	2.45	157	89	76	0	7	2	1
KS	CONCORDIA	55	30	72	26	43	10	0.14	-0.03	0.14	1.61	86	1.07	106	75	43	0	6	1	0
	DODGE CITY	58	29	73	23	44	7	0.00	-0.16	0.00	1.27	73	0.79	81	74	27	0	6	0	0
	GOODLAND	55	27	63	19	41	8	0.05	-0.05	0.05	0.86	82	0.81	125	76	35	0	7	1	0
	TOPEKA	55	29	70	22	42	8	0.30	0.01	0.28	1.96	63	1.40	83	80	47	0	4	2	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending February 22, 2014

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 DEC 1	PCT. NORMAL SINCE DEC 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	62	32	71	22	47	10	0.03	-0.23	0.03	3.03	111	2.43	175	72	35	0	3	1	0
KY	JACKSON	58	35	71	23	47	9	1.38	0.45	1.08	14.56	138	7.47	119	81	35	0	2	4	1
	LEXINGTON	56	35	70	23	45	8	1.21	0.39	0.67	12.52	129	6.94	122	78	50	0	2	5	1
	LOUISVILLE	55	36	72	25	46	8	0.79	-0.02	0.51	12.19	131	6.76	120	73	43	0	2	2	1
	PADUCAH	57	34	70	21	46	7	0.58	-0.41	0.45	13.32	123	5.18	80	82	44	0	3	3	0
LA	BATON ROUGE	74	52	82	37	63	9	1.19	-0.03	1.18	11.35	73	7.63	74	92	46	0	0	2	1
	LAKE CHARLES	73	54	76	42	63	8	0.49	-0.24	0.49	7.27	56	5.22	63	97	57	0	0	1	0
	NEW ORLEANS	75	55	80	42	65	9	0.81	-0.52	0.79	9.57	62	6.36	62	92	64	0	0	2	1
	SHREVEPORT	75	46	80	34	60	8	0.43	-0.61	0.43	8.05	65	3.07	39	86	38	0	0	1	0
ME	CARIBOU	28	8	41	-17	18	4	0.95	0.47	0.45	9.61	124	6.03	132	91	61	0	7	5	0
	PORTLAND	35	14	47	-2	25	0	1.82	1.08	0.82	12.67	118	8.32	127	88	53	0	7	4	2
MD	BALTIMORE	51	26	63	19	38	2	0.76	0.02	0.36	12.90	143	7.63	134	87	52	0	7	4	0
MA	BOSTON	39	24	50	14	32	0	0.77	-0.03	0.25	11.60	113	6.98	107	82	46	0	4	4	0
	WORCESTER	34	19	46	8	27	0	0.75	0.02	0.26	11.10	108	6.68	104	91	48	0	7	4	0
MI	ALPENA	31	9	44	-18	20	1	0.70	0.39	0.25	4.60	101	2.46	90	90	55	0	7	5	0
	GRAND RAPIDS	35	19	44	8	27	2	0.98	0.62	0.51	7.98	135	5.28	164	85	58	0	7	5	1
	HOUGHTON LAKE	30	9	42	-11	20	0	0.62	0.34	0.42	4.93	115	2.73	107	84	62	0	7	4	0
	LANSING	36	19	45	2	27	2	1.00	0.67	0.63	5.81	119	3.93	145	80	63	0	7	5	1
	MUSKEGON	35	21	46	10	28	2	0.92	0.56	0.46	7.55	124	4.85	141	78	64	0	7	6	0
	TRAVERSE CITY	33	11	43	-8	22	0	0.30	-0.09	0.16	6.30	88	3.71	82	88	51	0	7	5	0
MN	DULUTH	27	10	41	-14	19	3	***	***	***	***	***	***	***	81	68	0	7	**	**
	INT'L FALLS	25	5	41	-27	15	3	0.63	0.49	0.34	3.30	162	1.86	139	84	62	0	7	3	0
	MINNEAPOLIS	29	12	44	4	20	-1	***	***	***	***	***	***	***	89	75	0	7	**	**
	ROCHESTER	27	12	38	3	19	0	1.15	0.98	0.99	3.57	143	2.47	167	81	74	0	7	3	1
	ST. CLOUD	28	6	43	-2	17	0	1.09	0.98	0.61	4.28	230	2.51	215	85	60	0	7	3	1
MS	JACKSON	73	45	82	33	59	9	1.75	0.68	1.75	11.34	78	6.84	74	92	41	0	0	1	1
	MERIDIAN	72	43	81	30	57	6	1.39	0.08	1.00	16.35	107	9.00	90	97	60	0	1	2	1
	TUPELO	67	39	77	27	53	8	0.60	-0.57	0.49	12.03	82	5.85	68	90	53	0	1	5	0
MO	COLUMBIA	54	31	72	27	43	9	0.21	-0.35	0.14	3.97	69	2.26	68	75	45	0	4	2	0
	KANSAS CITY	52	31	65	25	41	7	0.58	0.25	0.37	4.16	114	3.36	168	75	40	0	4	2	0
	SAINT LOUIS	55	33	73	26	44	8	0.32	-0.24	0.23	5.68	86	3.72	99	69	47	0	3	2	0
	SPRINGFIELD	63	31	73	24	47	9	0.16	-0.40	0.16	4.35	63	1.79	47	71	36	0	3	1	0
MT	BILLINGS	42	28	53	13	35	4	0.08	-0.04	0.08	7.04	378	5.06	425	68	36	0	5	1	0
	BUTTE	34	16	45	9	25	2	0.07	-0.04	0.03	0.79	59	0.57	70	88	43	0	7	4	0
	CUT BANK	35	18	43	-2	27	3	0.04	-0.02	0.03	0.94	106	0.50	89	88	50	0	7	2	0
	GLASGOW	37	17	50	4	27	7	0.02	-0.04	0.02	1.16	130	0.29	56	85	57	0	7	1	0
	GREAT FALLS	39	20	50	-3	30	3	0.12	0.01	0.06	2.74	164	1.80	180	83	39	0	7	2	0
	HAVRE	38	23	47	8	31	8	0.04	-0.04	0.04	1.80	153	0.51	76	76	57	0	7	1	0
	MISSOULA	37	23	44	5	30	0	0.60	0.43	0.23	3.34	121	2.22	139	87	70	0	5	6	0
NE	GRAND ISLAND	53	26	66	22	40	11	0.03	-0.13	0.03	0.65	42	0.54	60	73	37	0	6	1	0
	LINCOLN	51	24	69	20	38	9	0.27	0.12	0.24	0.94	50	0.72	71	80	45	0	7	2	0
	NORFOLK	49	24	62	18	36	9	0.20	0.02	0.12	0.58	35	0.44	44	78	44	0	7	2	0
	NORTH PLATTE	52	20	60	14	36	6	0.20	0.08	0.17	0.95	89	0.79	118	86	31	0	7	2	0
	OMAHA	47	26	64	22	37	8	0.38	0.19	0.30	1.78	82	1.58	126	85	56	0	7	2	0
	SCOTTSBLUFF	49	26	68	21	38	7	0.06	-0.07	0.06	1.85	126	1.22	134	74	44	0	6	1	0
	VALENTINE	47	23	59	18	35	8	0.22	0.11	0.14	1.14	127	0.43	75	84	46	0	7	3	0
NV	ELY	50	21	54	14	35	4	0.01	-0.16	0.01	2.13	122	1.14	92	75	31	0	7	1	0
	LAS VEGAS	74	48	81	43	61	8	0.00	-0.17	0.00	0.05	3	0.00	0	24	16	0	0	0	0
	RENO	59	31	64	25	45	6	0.01	-0.24	0.01	1.13	42	0.72	39	63	38	0	5	1	0
	WINNEMUCCA	53	23	59	15	38	1	0.06	-0.08	0.05	2.11	101	1.50	118	73	41	0	6	2	0
NH	CONCORD	34	10	48	-7	22	-2	1.75	1.20	0.77	10.77	139	7.38	154	90	54	0	7	4	2
NJ	NEWARK	42	26	52	15	34	0	1.61	0.92	1.10	17.25	176	12.63	202	83	56	0	5	4	1
NM	ALBUQUERQUE	63	33	70	22	48	6	0.00	-0.10	0.00	0.65	52	0.25	32	34	11	0	2	0	0
NY	ALBANY	36	16	51	2	26	1	***	***	***	***	***	***	***	86	51	0	7	**	**
	BINGHAMTON	34	20	46	2	27	3	0.51	-0.10	0.26	9.13	121	5.69	127	83	57	0	6	5	0
	BUFFALO	37	21	49	-2	29	3	***	***	***	***	***	***	***	86	52	0	5	**	**
	ROCHESTER	38	21	50	-2	29	3	***	***	***	***	***	***	***	78	57	0	5	**	**
	SYRACUSE	36	17	46	-8	26	1	***	***	***	***	***	***	***	88	50	0	5	**	**
NC	ASHEVILLE	62	35	72	23	48	9	0.87	-0.07	0.69	13.02	125	5.35	77	84	58	0	3	3	1
	CHARLOTTE	65	38	77	28	52	7	1.70	0.83	1.44	14.05	143	6.92	104	82	34	0	2	2	1
	GREENSBORO	61	36	72	29	48	6	0.50	-0.25	0.29	11.41	127	6.22	105	75	35	0	3	2	0
	HATTERAS	59	43	71	33	51	4	0.76	-0.15	0.72	13.86	103	9.96	111	94	62	0	0	3	1
	RALEIGH	63	38	73	28	51	8	0.90	0.06	0.50	10.90	112	4.99	75	77	51	0	2	2	1
	WILMINGTON	68	41	78	28	55	6	0.21	-0.67	0.21	7.04	63	5.31	72	91	41	0	1	1	0
ND	BISMARCK	33	10	46	-4	22	3	0.09	-0.02	0.09	1.76	142	0.50	63	79	59	0	7	1	0
	DICKINSON	35	15	44	6	25	3	0.01	-0.08	0.01	0.52	50	0.14	20	85	53	0	7	1	0
	FARGO	28	6	41	-8	17	2	0.05	-0.08	0.03	4.94	287	3.73	324	83	67	0	7	2	0
	GRAND FORKS	23	3	34	-11	13	-1	0.26	0.12	0.15	2.09	126	1.27	114	87	70	0	7	2	0
	JAMESTOWN	27	6	37	-10	17	0	0.08	-0.03	0.08	1.02	72	0.39	40	87	69	0	7	1	0
	WILLISTON	34	12	46	0	23	5	0.07	-0.01	0.07	1.48	108	0.41	51	78	60	0	7	1	0
OH	AKRON-CANTON	42	21	52	-4	32	3	***	***	***	***	***	***	***	91	62	0	6	**	**
	CINCINNATI	49	30	67	15	40	5	1.18	0.50	0.45	11.92	145	7.00	141	80	58	0	3	6	0
	CLEVELAND	45	22	59	-5	34	5	***	***	***	***	***	***	***	85	47	0	5	**	**
	COLUMBUS	48	26	63	7	37	4	0.98	0.46	0.59	11.16	157	6.86	164	76	56	0	4	4	1
	DAYTON	47	28	65	12	37	6	1.07	0.52	0.54	10.91	147	6.33	146	82	57	0	4	4	2
	MANSFIELD	44	22	56	1	33	5	1.10	0.58	0.39	8.44	112	4.37	102	97	55	0	5	6	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending February 22, 2014

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 DEC 1	PCT. NORMAL SINCE DEC 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	40	21	52	3	30	3	2.11	1.64	1.74	10.26	171	7.19	214	83	68	0	6	4	1
	YOUNGSTOWN	42	20	53	-4	31	3	***	***	***	***	***	***	***	84	61	0	5	**	**
OK	OKLAHOMA CITY	68	37	75	25	53	10	0.00	-0.40	0.00	1.69	41	0.43	19	74	23	0	2	0	0
	TULSA	68	37	74	32	53	10	0.08	-0.41	0.05	2.19	41	0.41	14	64	24	0	2	2	0
OR	ASTORIA	49	40	51	32	45	1	3.51	1.59	1.48	18.18	69	13.18	83	88	72	0	1	6	3
	BURNS	45	26	50	22	36	5	0.07	-0.20	0.03	2.28	70	2.07	105	87	62	0	7	3	0
	EUGENE	52	37	55	29	44	1	1.56	0.02	0.69	11.27	54	9.79	77	93	80	0	1	5	1
	MEDFORD	55	34	59	29	45	1	0.45	-0.05	0.36	5.66	81	5.30	129	91	60	0	3	4	0
	PENDLETON	50	35	57	32	43	4	0.15	-0.13	0.15	2.97	77	2.17	91	75	55	0	1	1	0
	PORTLAND	50	39	54	30	45	2	2.03	1.01	1.14	9.65	68	8.03	96	90	77	0	1	5	1
	SALEM	52	39	56	30	46	3	1.89	0.64	0.67	9.60	59	8.33	84	89	73	0	1	5	2
PA	ALLENTOWN	39	18	49	10	29	-1	0.65	0.00	0.34	13.03	145	8.99	160	79	61	0	7	3	0
	ERIE	42	22	55	-7	32	3	1.02	0.46	0.61	11.35	143	5.39	127	80	50	0	5	6	1
	MIDDLETOWN	42	21	54	9	31	-1	0.56	-0.17	0.26	10.43	126	6.69	133	83	42	0	7	3	0
	PHILADELPHIA	47	27	63	19	37	2	0.68	0.03	0.36	13.76	155	8.56	153	76	56	0	6	3	0
	PITTSBURGH	46	24	57	1	35	4	0.79	0.22	0.35	7.56	103	4.30	96	87	48	0	5	6	0
	WILKES-BARRE	39	21	52	8	30	1	0.45	-0.05	0.22	8.24	124	4.90	120	78	47	0	7	4	0
	WILLIAMSPORT	39	18	50	6	28	-1	0.50	-0.13	0.22	7.44	95	3.80	78	80	51	0	7	4	0
RI	PROVIDENCE	41	22	51	10	32	1	1.19	0.36	0.55	13.16	117	8.34	118	81	53	0	5	4	1
SC	BEAUFORT	72	47	82	30	59	8	0.23	-0.49	0.23	6.52	67	3.74	57	91	37	0	1	1	0
	CHARLESTON	73	46	83	35	59	8	0.08	-0.64	0.08	6.48	67	4.33	67	87	41	0	0	1	0
	COLUMBIA	71	41	84	33	56	8	0.28	-0.63	0.28	12.11	110	6.23	82	83	42	0	0	1	0
	GREENVILLE	66	39	75	31	53	8	1.28	0.22	1.03	12.91	113	6.24	83	82	32	0	3	3	1
SD	ABERDEEN	32	6	43	-12	19	-1	0.00	-0.11	0.00	1.22	107	0.34	45	88	69	0	7	0	0
	HURON	40	15	57	0	27	5	0.00	-0.13	0.00	1.46	123	0.43	54	82	54	0	7	0	0
	RAPID CITY	48	20	64	13	34	6	0.02	-0.09	0.02	0.93	90	0.37	59	76	36	0	7	1	0
	SIOUX FALLS	37	15	50	-1	26	4	0.18	0.07	0.16	2.90	221	1.77	224	82	62	0	7	2	0
TN	BRISTOL	63	31	75	22	47	9	1.04	0.20	0.54	11.40	120	5.06	83	85	28	0	5	4	1
	CHATTANOOGA	67	40	73	30	53	9	1.35	0.17	1.07	15.58	112	7.60	84	87	46	0	3	5	1
	KNOXVILLE	66	37	74	25	51	9	1.56	0.58	1.37	15.59	129	7.37	97	89	33	0	3	3	1
	MEMPHIS	68	41	74	35	55	9	0.05	-1.03	0.03	12.79	97	7.97	107	73	35	0	0	2	0
	NASHVILLE	65	37	78	28	51	9	0.96	0.05	0.82	15.68	140	7.70	115	83	32	0	4	3	1
TX	ABILENE	77	42	86	31	60	11	0.00	-0.29	0.00	1.58	52	0.47	27	67	38	0	1	0	0
	AMARILLO	69	33	77	23	51	10	0.00	-0.13	0.00	0.69	44	0.37	38	50	13	0	4	0	0
	AUSTIN	77	48	82	33	63	8	0.00	-0.51	0.00	1.69	29	0.83	25	76	54	0	0	0	0
	BEAUMONT	75	55	79	45	65	9	0.58	-0.17	0.58	4.85	35	3.56	42	96	49	0	0	1	1
	BROWNSVILLE	81	64	87	55	72	9	0.00	-0.27	0.00	4.29	124	0.77	33	95	66	0	0	0	0
	CORPUS CHRISTI	79	60	87	48	69	9	0.00	-0.47	0.00	1.07	23	0.78	26	89	61	0	0	0	0
	DEL RIO	81	52	89	43	66	9	0.00	-0.25	0.00	0.51	25	0.03	2	82	64	0	0	0	0
	EL PASO	75	46	82	38	61	10	0.00	-0.08	0.00	0.26	18	0.00	0	20	8	0	0	0	0
	FORT WORTH	74	46	82	34	60	10	0.00	-0.63	0.00	3.47	57	0.71	20	80	38	0	0	0	0
	GALVESTON	69	57	73	52	63	5	0.00	-0.58	0.00	3.32	34	2.67	43	97	70	0	0	0	0
	HOUSTON	76	56	80	44	66	10	0.06	-0.66	0.06	3.88	40	2.22	37	87	58	0	0	1	0
	LUBBOCK	74	35	83	30	55	11	0.00	-0.17	0.00	0.76	46	0.16	16	41	19	0	2	0	0
	MIDLAND	77	41	85	33	59	10	0.00	-0.14	0.00	1.68	107	0.24	26	53	22	0	0	0	0
	SAN ANGELO	80	41	89	28	61	11	0.00	-0.30	0.00	1.23	47	0.08	5	78	42	0	1	0	0
	SAN ANTONIO	79	57	86	47	68	13	0.00	-0.44	0.00	1.01	21	0.46	16	82	42	0	0	0	0
	VICTORIA	78	57	84	43	68	11	0.00	-0.50	0.00	1.80	28	1.35	34	91	62	0	0	0	0
	WACO	75	44	80	26	60	9	0.00	-0.64	0.00	1.91	30	0.57	16	84	56	0	1	0	0
	WICHITA FALLS	73	38	82	27	55	9	0.00	-0.41	0.00	1.67	43	0.38	17	67	32	0	2	0	0
UT	SALT LAKE CITY	53	33	60	31	43	8	0.05	-0.27	0.04	3.78	106	2.11	90	70	30	0	3	2	0
VT	BURLINGTON	33	13	46	-7	23	3	0.74	0.35	0.65	6.77	118	4.23	120	82	44	0	7	4	1
VA	LYNCHBURG	54	29	67	20	41	3	0.39	-0.36	0.24	12.77	140	7.08	120	73	33	0	5	2	0
	NORFOLK	60	37	79	24	49	7	0.76	-0.04	0.72	11.07	116	6.32	97	81	45	0	2	2	1
	RICHMOND	59	34	71	24	47	7	0.43	-0.29	0.36	12.42	140	6.31	110	72	41	0	3	4	0
	ROANOKE	53	29	66	20	41	2	0.35	-0.40	0.35	11.76	139	7.38	132	65	47	0	4	1	0
	WASH/DULLES	50	26	62	19	38	3	0.33	-0.35	0.19	11.97	146	6.39	124	80	48	0	7	4	0
WA	OLYMPIA	46	35	48	28	41	0	4.08	2.58	1.67	14.05	69	12.03	96	94	85	0	2	6	4
	QUILLAYUTE	48	37	51	32	43	1	3.50	0.42	0.99	26.68	70	20.52	87	88	74	0	1	6	4
	SEATTLE-TACOMA	47	40	50	37	43	-1	2.58	1.57	0.98	10.78	76	9.12	107	88	79	0	0	7	3
	SPOKANE	41	29	45	26	35	2	0.42	0.06	0.34	4.60	88	3.92	132	82	51	0	6	3	0
	YAKIMA	53	29	56	24	41	5	0.00	-0.18	0.00	2.02	64	1.70	95	73	53	0	5	0	0
WV	BECKLEY	50	27	61	13	39	5	0.43	-0.30	0.23	14.11	165	7.75	142	73	47	0	4	4	0
	CHARLESTON	57	29	70	18	43	6	1.13	0.34	0.52	14.13	158	7.89	140	86	36	0	4	4	1
	ELKINS	50	20	61	6	35	3	0.67	-0.12	0.37	12.08	130	5.81	100	88	34	0	6	5	0
	HUNTINGTON	58	32	73	20	45	8	1.16	0.39	0.94	12.76	144	7.21	131	76	37	0	2	4	1
WI	EAU CLAIRE	30	12	41	2	21	1	0.99	0.82	0.87	4.15	157	2.62	162	91	62	0	7	2	1
	GREEN BAY	31	10	41	-5	20	-1	0.84	0.62	0.44	4.45	133	2.56	133	88	69	0	7	2	0
	LA CROSSE	32	14	42	5	23	-1	1.03	0.81	0.73	3.75	118	2.23	114	86	59	0	7	3	1
	MADISON	34	19	45	11	27	4	0.76	0.46	0.49	3.43	89	1.81	82	80	64	0	6	2	0
	MILWAUKEE	36	22	47	16	29	3	***	***	***	***	***	***	***	81	64	0	6	**	**
WY	CASPER	43	23	56	15	33	6	0.15	0.00	0.11	2.29	140	1.09	108	68	43	0	7	2	0
	CHEYENNE	45	24	56	17	34	5	0.09	0.00	0.08	2.22	188	1.72	239	64	32	0	7	2	0
	LANDER	42	22	52	15	32	6	0.07	-0.05	0.07	1.44	99	0.75	88	74	30	0	7	1	0
	SHERIDAN	45	23	58	7	34	6	0.23	0.12	0.13	2.52	136	1.40	120	73	44	0	7	4	0

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

February 17 - 23, 2014

Weekly National Agricultural Summary provided by USDA/NASS

Temperatures were generally above average across the nation, with only parts of the northern United States experiencing below-average temperatures. Dry conditions stretched across much of the West, although portions of Washington received several inches of precipitation. Precipitation was more widespread in the eastern United States, but amounts were generally less than an inch above normal.

California experienced a relatively quiet weather pattern for the week. Two storm systems brought no significant precipitation and none reached southern California. Temperatures were mild at the start of the week but there was a warming trend toward week's end. Wheat and small grain conditions continued to improve due to recent rains but remained behind schedule. Rice fields were drained. Dryland oat conditions remained below average due to drought. Alfalfa was sprayed for aphids. Aphid pressure on alfalfa was compounded by lack of precipitation. Preparation was underway for the planting of corn fields. Stone fruit tree bloom was increasing. Cherries were starting bud break. Canes continued to be pruned and tied in kiwi and grape vineyards. Some grape growers applied sulfur to their vineyards. Pre-emergent sprays were applied in grape vineyards and tree fruit orchards. Navel orange, Murcott tangerine, lemon, and Minneola tangelo harvests continued. Almond orchards were in full bloom. Growers were applying bloom sprays. Pruning remained active in walnut, pecan, and pistachio orchards. In Fresno County, dry conditions allowed for winter vegetable harvest, as winter harvest was near completion and planting for spring began. Planting of the last fresh onion crop was ongoing. Asparagus was harvested in Monterey County. In Kern County, fall potato harvest was winding down, while growers were in the midst of planting for summer potatoes. In Monterey County, lettuce transplants were growing well. Sutter County reported winter carrots and onion seed crops were developing well, and processing tomato fields were bedded. Range and non-irrigated pasture are reported to be in poor to fair condition. Extreme drought conditions continued across much of the state. More precipitation is needed to sustain grass growth. Supplemental feeding of hay and grain for livestock continued. Bees were active in the San Joaquin Valley most days of the week.

Arizona's alfalfa condition was rated in poor to excellent condition, depending on location. Harvesting occurred on over three-quarters of the alfalfa acreage across the state. Sheep continue to graze on various alfalfa fields in many areas. Barley conditions are mostly fair to excellent. Winter wheat conditions are very poor to excellent, depending on location. Fifty-six percent of the winter wheat crop was planted, 24 percentage points behind last year and 20 percentage points behind the 5-year average. Central Arizona growers shipped Bok Choy, broccoli, cilantro, green and red cabbage, Chinese cabbage, kale, lemons, and parsley. Western Arizona growers shipped anise, arugula, broccoli, Bok Choy, green and red cabbage, cauliflower, celery, Chinese cabbage, cilantro, endive, escarole, frisee, kale, parsley, radicchio, spinach, and various lettuces, including Boston, iceberg, romaine, green, and red leaf lettuce. Range conditions continue to be dry throughout the state, with depleted moisture levels. Range and pastures were rated in very poor to good condition, depending on location.

Mild weather occurred early in the week in Texas, but many areas reached 80°F by the end of the week. North East Texas and the Upper Coast saw precipitation totals as high as 1.5 inches. The remainder of the state received little to no precipitation. Most areas of the state reported below normal accumulated precipitation levels. Wheat fields began to show signs of growth with warmer weather in areas with adequate moisture. Producers continued to fertilize fields. Irrigation of oat fields continued in South Texas. Alfalfa emerged from dormancy in the Trans-Pecos. Producers in the Coastal Bend resumed corn planting and prepared to plant sorghum for grain. Low soil temperatures delayed corn planting in the Blacklands. Late spinach planting drew to an end in South East Texas and producers were reported having an emerged crop just in time for baby spinach cutting in the next 10 to 15 days. Fruit tree producers in North East Texas continued to prune and thin tree limbs. Spinach and cabbage continued to be harvested in South Texas. Onions were reported growing at the 4 leaf stage. Cattle continued to be fed with supplemental feeds, due to deteriorating pastures. Cattle continued to graze on wheat fields.

Maximum temperatures in Florida ranged from the 70s to the 80s. Farmers in Washington and Gadsden counties were preparing ground for peanut and corn planting. Sugarcane harvest is in the last 5 weeks of the season. Gadsden farmers were laying plastic for tomatoes. Strawberries were still being harvested in Bradford County. Harvesting of cabbage continued in Flagler and Putnam Counties, and planting of potatoes continued. Vegetables and fruits marketed in the state included beets, cabbage, cucumbers, peppers, squash, tomatoes, herbs, and a variety of specialty items. Rain was widespread but generally light in the citrus area. Field workers reported small sizes on all varieties. Some growers are noticing various sizes in the same blocks, from slightly larger than golf-ball size to larger than baseball size on oranges. Grove activity included harvesting on mostly early oranges and grapefruit, hedging and topping after harvest, care for new trees, and pulling out declining or dead trees. Blooms have been noted in several of the more southern areas of the citrus growing region, signaling the beginning of next year's crop. Growers in the Indian River area are experimenting with tenting young trees to eradicate or control the psyllid population that is causing greening. Other methods are being used or tested to keep unaffected trees from getting the Huanglongbing (HLB, Citrus Greening) virus. Warm weather in the Panhandle helped improve winter grazing and started to green up pastures in the south. The cattle condition for the state was good but the pasture condition was mostly fair. Cattlemen were feeding hay across the state.

International Weather and Crop Summary

February 16-22, 2014

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

HIGHLIGHTS

EUROPE: Unsettled weather persisted across western and southern Europe, while unseasonably warm conditions in eastern crop areas began easing winter crops out of dormancy up to a month earlier than normal.

WESTERN FSU: Unseasonable warmth melted the area's protective snow cover and rapidly reduced winter crop cold hardiness.

MIDDLE EAST: Unseasonably warm, dry weather in northern portions of the region eased winter crops out of dormancy up to a month earlier than normal.

NORTHWEST AFRICA: Showers maintained abundant soil moisture for vegetative winter grains.

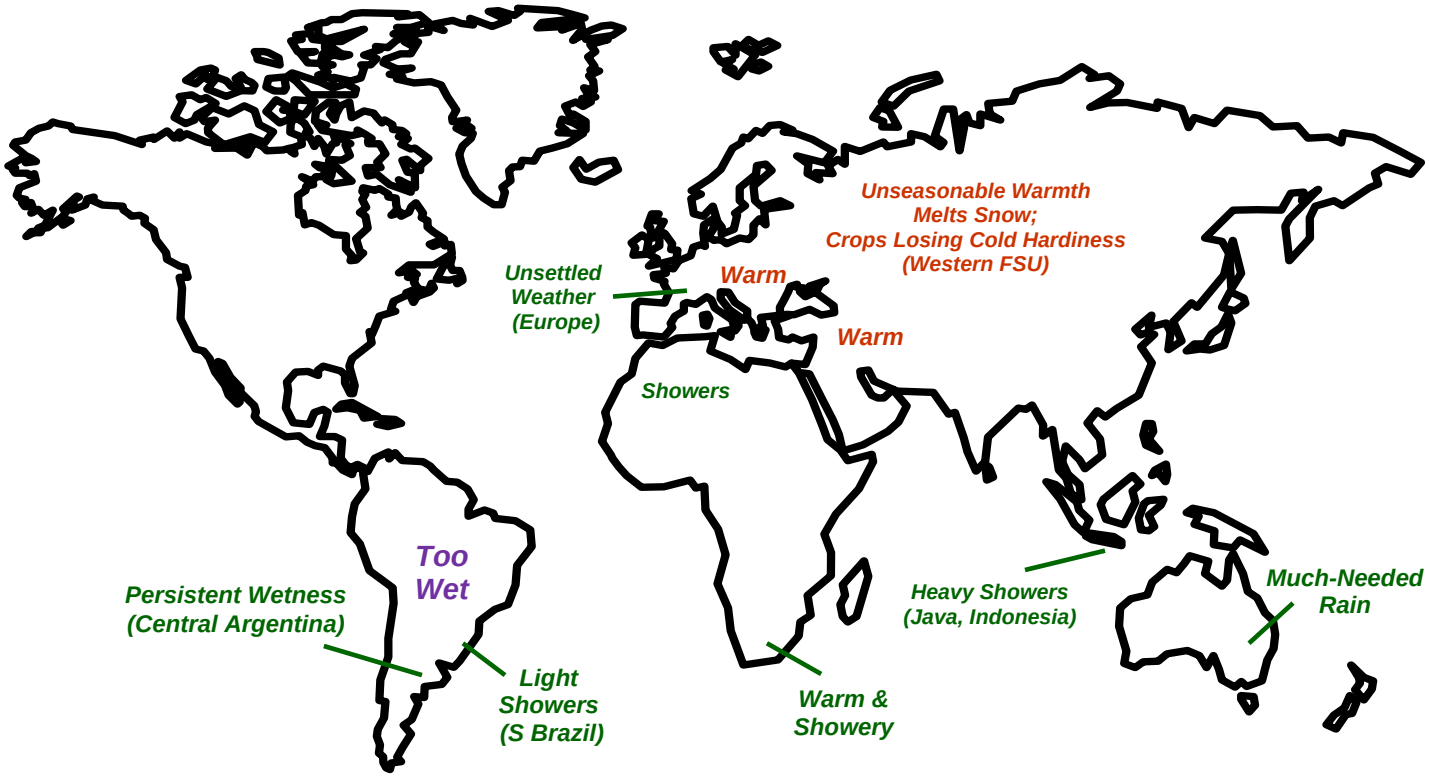
SOUTHEAST ASIA: Heavy showers renewed flooding concerns as rice harvesting rapidly approaches in western Java, Indonesia.

AUSTRALIA: Much-needed rain helped stabilize prospects for immature summer crops.

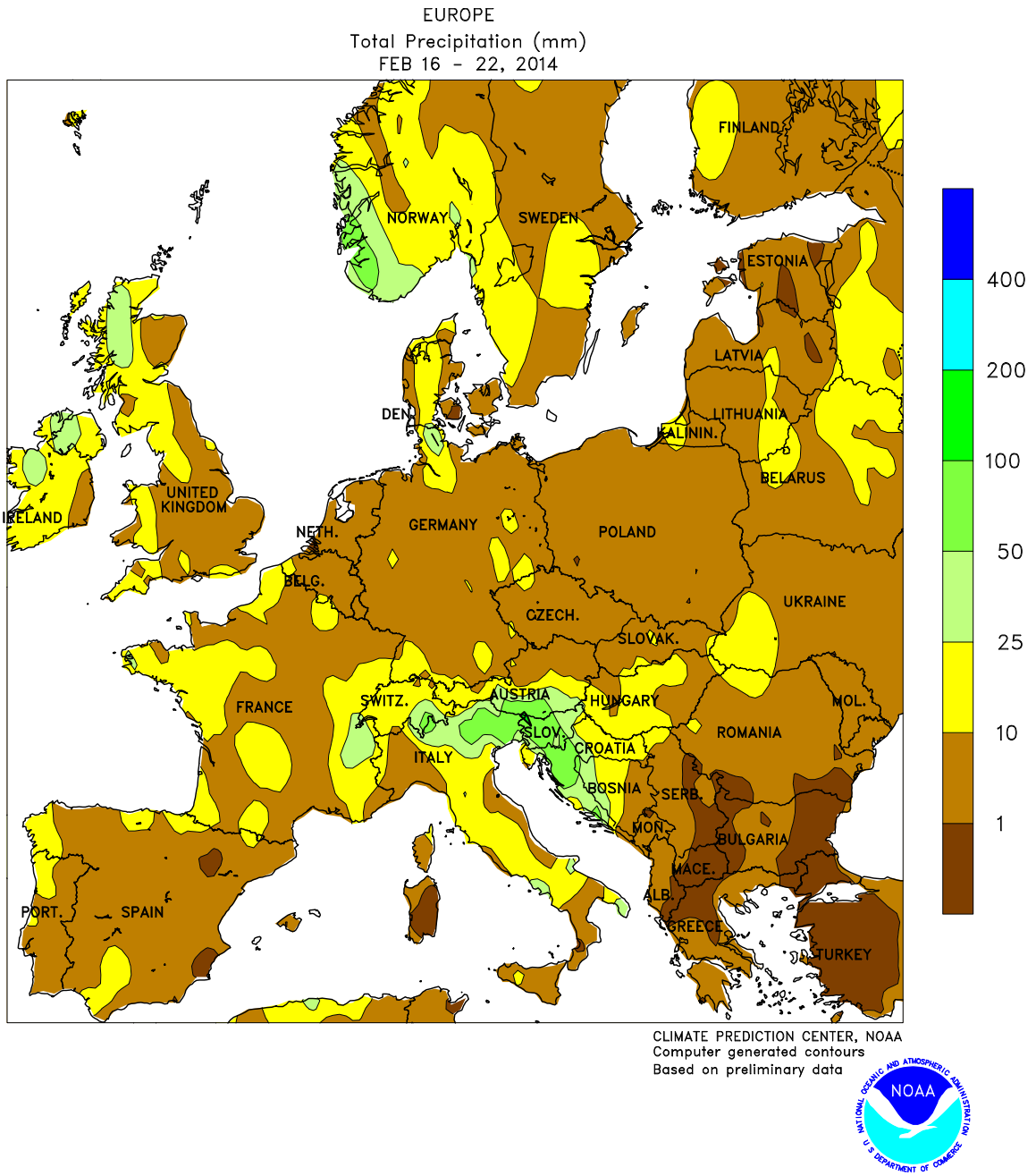
SOUTH AFRICA: Warm, showery weather benefited summer crops, although pockets of dryness lingered in sections of the corn belt.

ARGENTINA: Wet weather persisted across central Argentina, maintaining locally excessive levels of moisture for corn and soybeans.

BRAZIL: Rain intensified over central Brazil, reportedly affecting soybean harvesting and planting of secondary (safrinha) corn.



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



EUROPE

Unsettled weather continued in western and southern Europe, while warmer-than-normal conditions intensified over eastern growing areas. A series of Atlantic storms continued to generate periods of rain and strong, gusty winds across western growing areas. Rainfall totaled 5 to 40 mm from Ireland and the western United Kingdom southward into France, while showers were somewhat lighter (2-12 mm) on the Iberian Peninsula. Soil moisture reserves remained adequate to abundant for greening winter crops in France and the United Kingdom, while prospects for vegetative wheat and barley in Spain remained good to excellent. However, the rainy weather continued to hamper seasonal fieldwork — including cotton planting and citrus harvesting — in southern crop areas. Meanwhile, another slow-moving Mediterranean storm system generated heavy rain and mountain snow (25-130 mm liquid equivalent) in northern Italy, sustaining abundant to excessive soil moisture for winter wheat while boosting mountain snowpacks and reservoir levels for irrigated summer crops. In contrast, generally dry weather prevailed from Germany into Poland and the Balkans, although light to moderate rain (2-24 mm) fell in northern portions of the Danube River Valley. More notably, temperatures across central and eastern Europe averaged 5 to 10°C above normal, causing winter crops from southwestern Poland into southeastern Europe to break dormancy up to a month earlier than normal.

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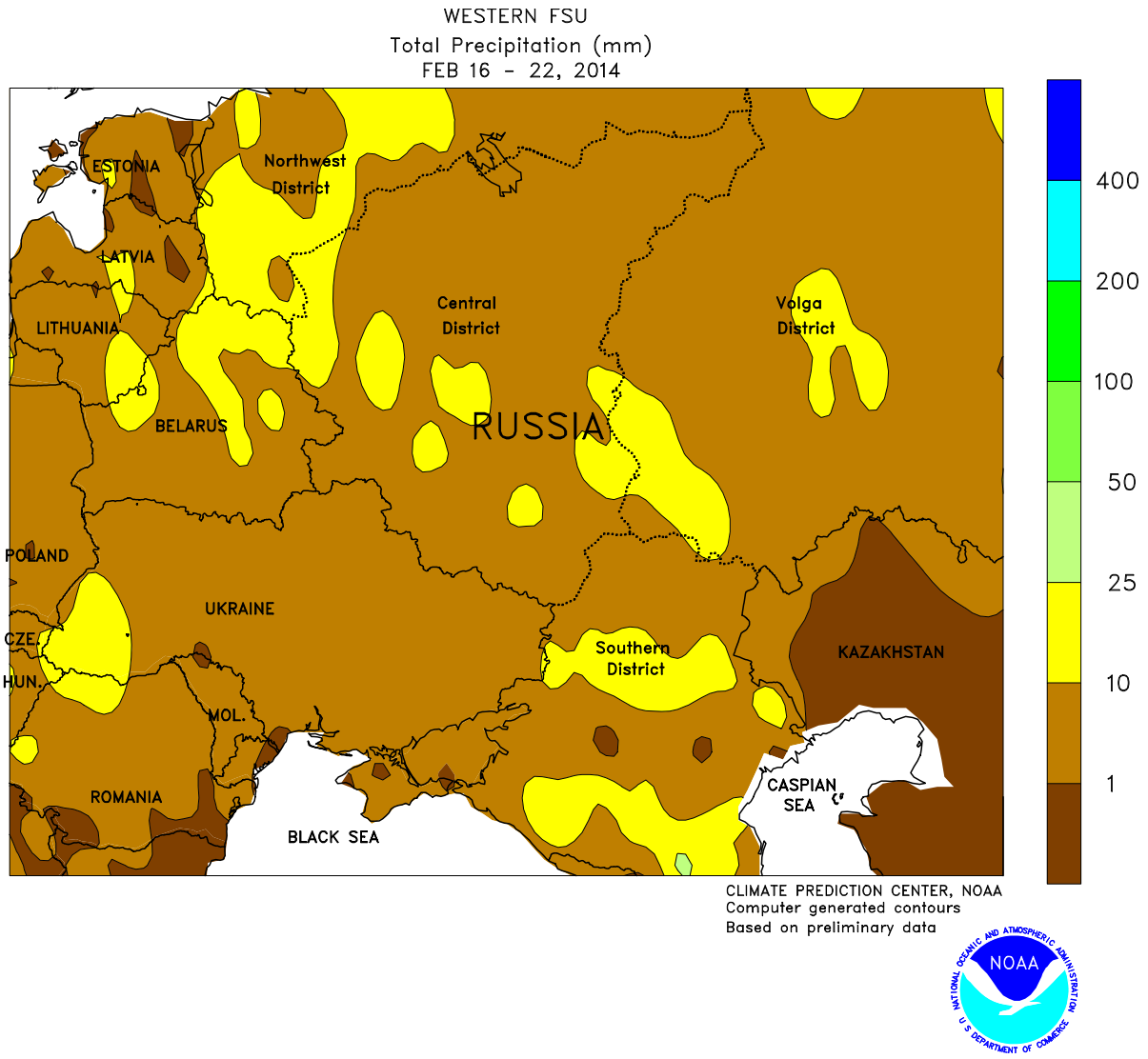

WESTERN FSU

Unseasonable warmth intensified across the region, with dry weather in Ukraine contrasting with light to moderate rain and snow in Russia and Belarus. Temperatures across the entire region continued to climb following January's bitter cold, with readings averaging 6 to 11°C above normal for the week. The persistent month-long warm spell has rapidly reduced winter crop cold hardiness in Ukraine and southern portions of Russia's Southern District, and wheat is beginning to break dormancy in the Krasnodar Oblast a month ahead of normal. Light to moderate rain (2-20 mm) in the Southern District improved soil moisture for winter grains; early-spring rainfall will be especially important given the lack of snow melt. Rain and snow (5-15 mm liquid equivalent) were reported from Belarus into northern Russia, maintaining adequate moisture reserves for spring growth. At week's end, snow cover (20-60 cm) was mostly confined to Russia's Volga District and surrounding environs.

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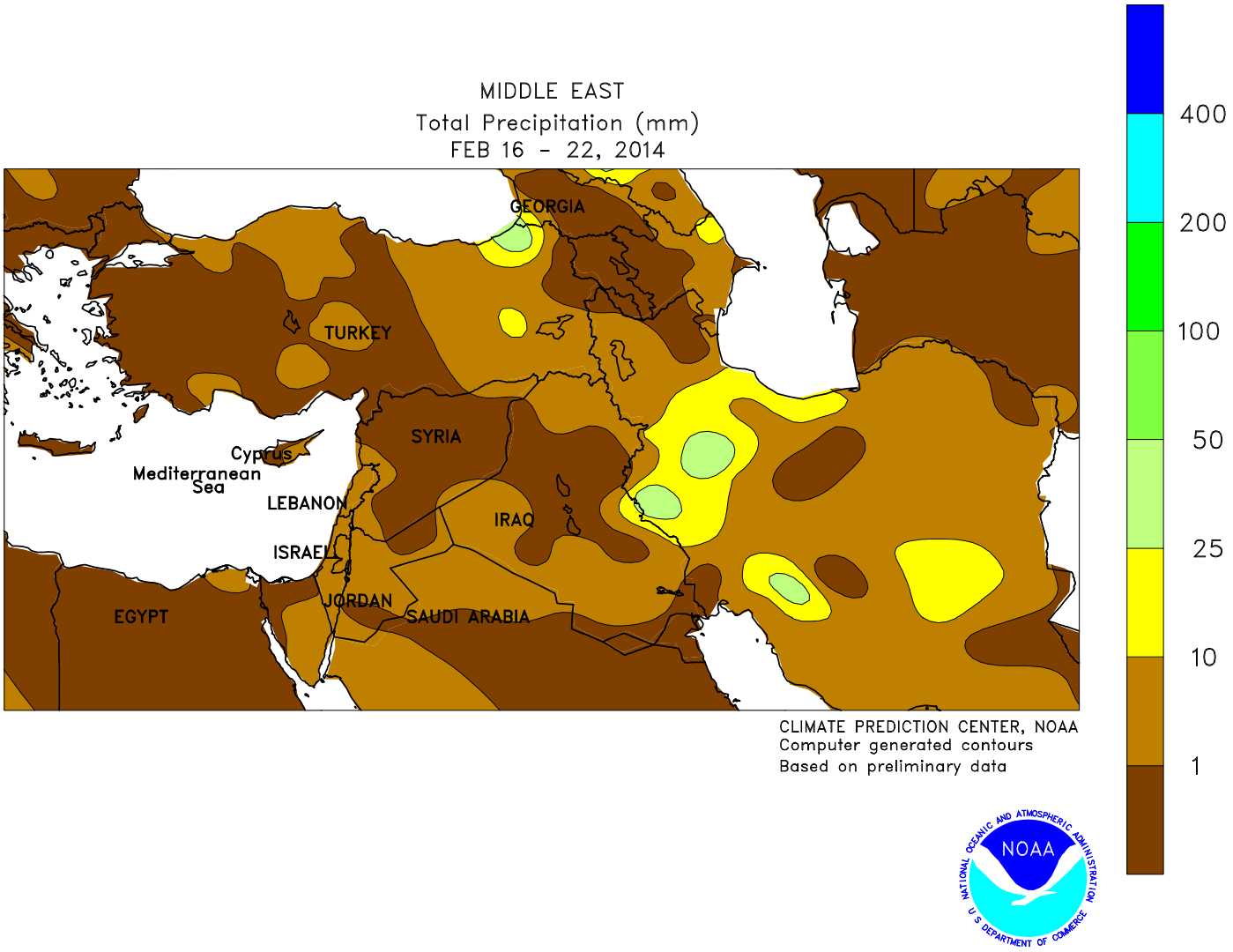

MIDDLE EAST

Unseasonably warm weather continued in the north, while showers lingered in the southeast. In Turkey, temperatures averaged up to 8°C above normal, causing winter wheat on the Anatolian Plateau to break dormancy up to a month ahead of normal. Likewise, above-normal temperatures (up to 5°C above normal) in northern Iran reduced winter crop cold hardiness and likely encouraged some early greening. Showers (2-40 mm) continued to maintain overall good to excellent crop prospects in Iran, although a drier-than-normal winter in eastern-most growing areas has left winter wheat with limited soil moisture for spring growth.

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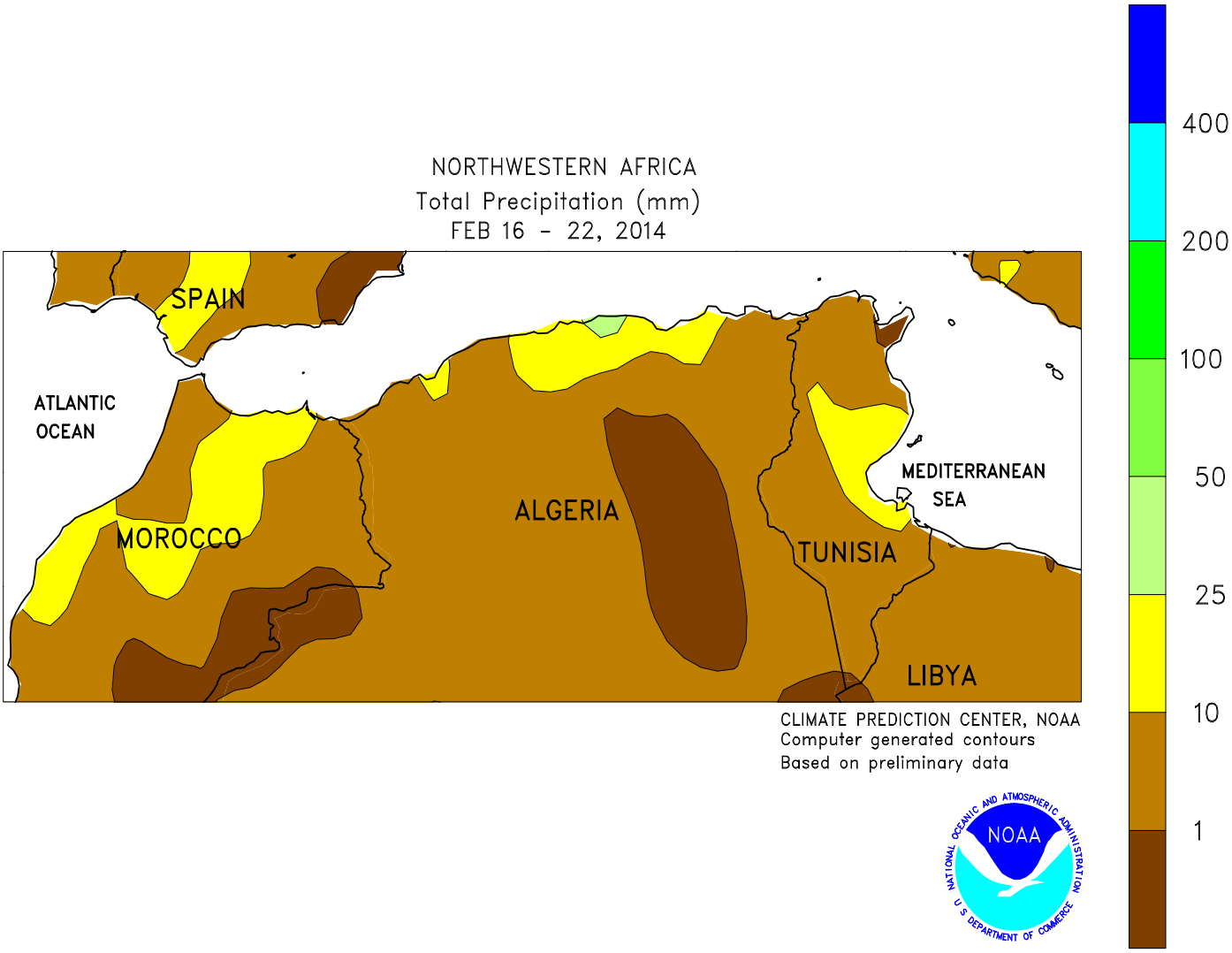

NORTHWESTERN AFRICA

Mild, unsettled weather maintained favorable conditions for vegetative winter wheat and barley. Additional light to moderate showers (2-15 mm, locally more than 25 mm) from northern Morocco into Algeria sustained abundant to locally excessive soil moisture for winter grains. Dry weather returned to northern Tunisia, promoting fieldwork and crop development. Daytime highs (18-28°C) were optimal for wheat growth across the north-African wheat belt, with no excessive heat or untimely freezes observed.

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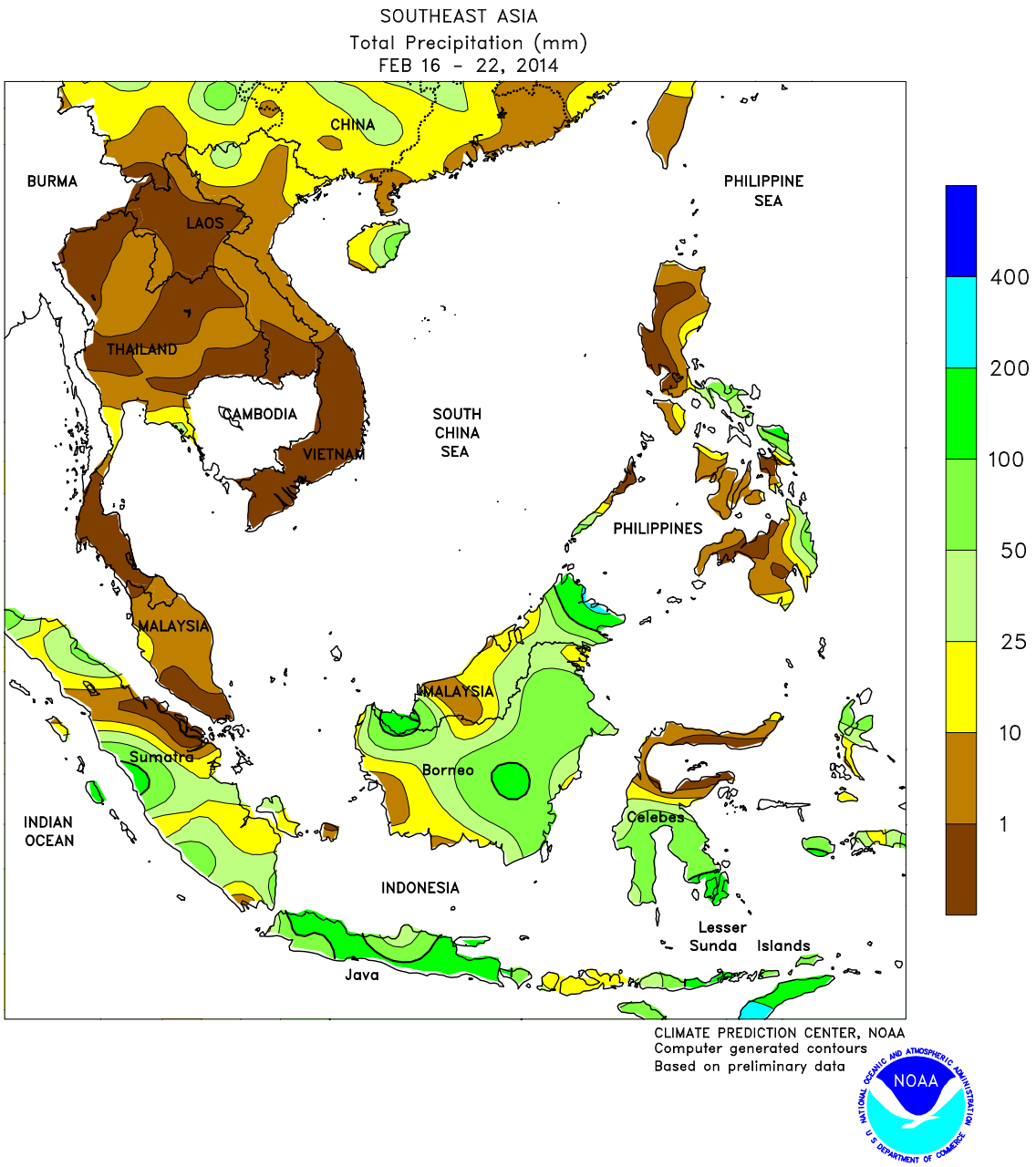

SOUTHEAST ASIA

Heavy showers returned to portions of western Java, Indonesia, with nearly 250 mm of rain in some locations. The wetness was unwelcome as rice in the west was likely ripening as the beginning of harvesting rapidly approached. With this latest rainfall, seasonal totals (since the beginning of the rainy season in late October) were approaching 2,000 mm, well above normal. Rainfall (75-150 mm) was much more seasonable in central and eastern areas (responsible for over 60 percent of rice production) where rice was in variable stages of development, ranging from vegetative to ripening. In oil palm areas to the north, increased showers (25-100 mm) boosted moisture supplies after a prolonged period of poor rainfall, but more consistent moisture is needed to prevent yield reductions. Meanwhile, in the Philippines, showers (50-85 mm) in the eastern Visayan Islands and Mindanao maintained beneficial moisture to corn and rice that will be harvested in April and May, but slowed harvesting for currently mature crops. Since October, only portions of southern Luzon have experienced below-normal rainfall and these deficits have been minor. In Vietnam, spring rice harvesting was likely underway in far southern growing areas under favorably warm, sunny conditions, while light showers (1-10 mm) in the north added to generally ample irrigation supplies for spring rice growth.

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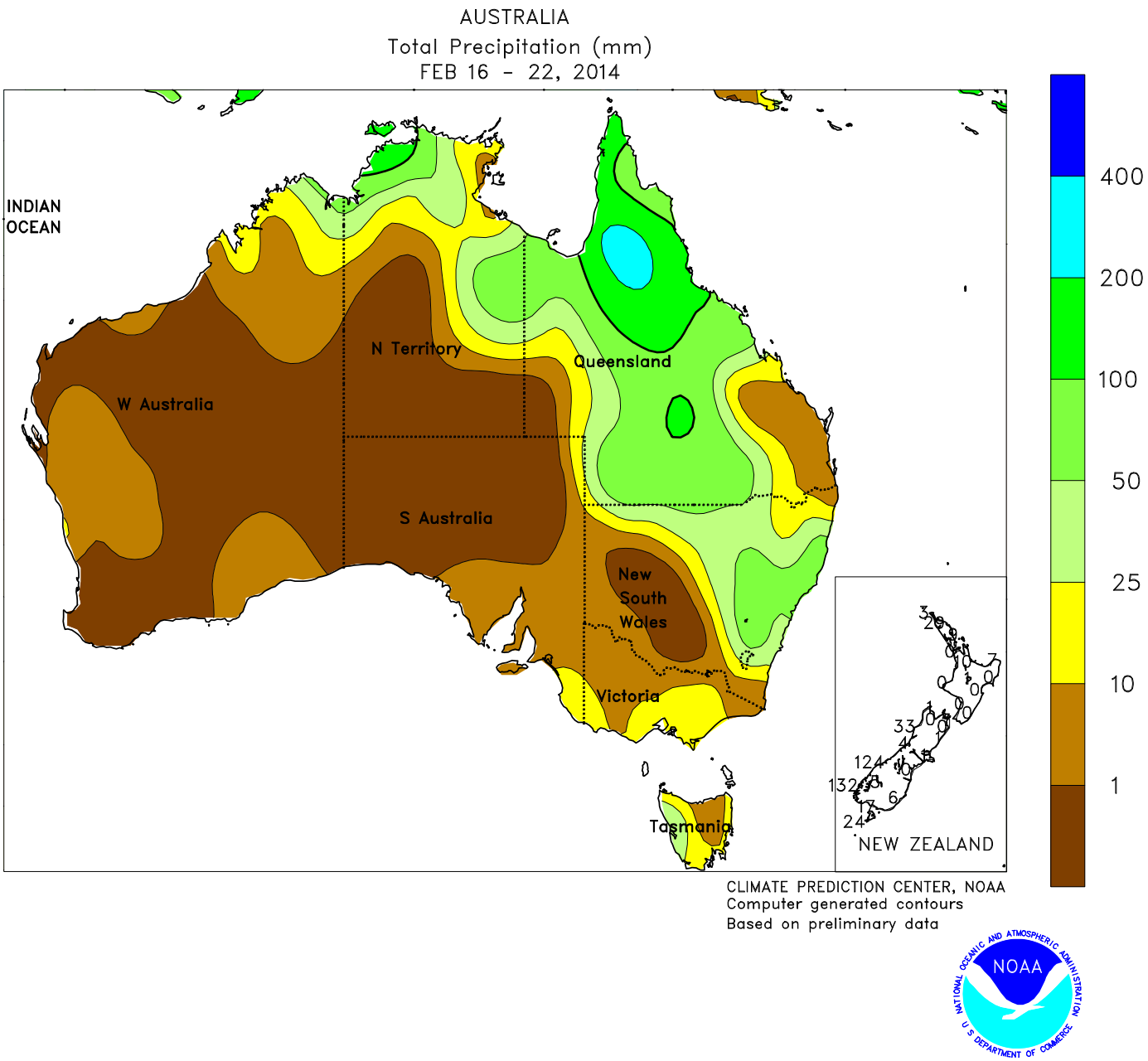

AUSTRALIA

Following an extended period of dry weather, much-needed rain (5-50 mm, locally near 75 mm) overspread major summer crop producing areas in southern Queensland and northern New South Wales. The rain came too late in the growing season to improve yield expectations for most crops, but the wet weather should help stabilize prospects for immature cotton and sorghum. Temperatures were generally seasonable, averaging within about 1°C of normal with maximum temperatures generally in the lower to middle 30s degrees C.

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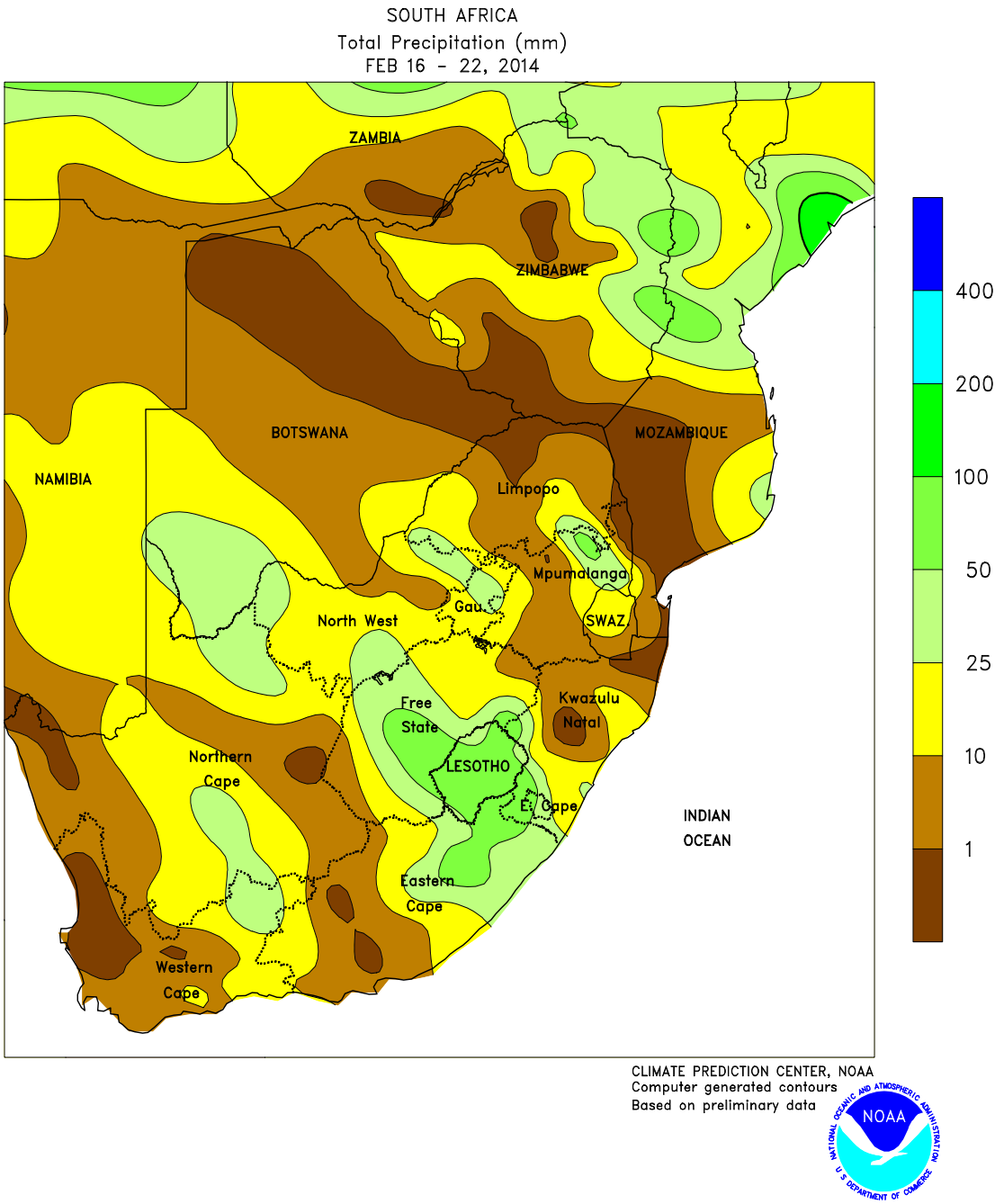

SOUTH AFRICA

Showers increased from the previous week throughout the main eastern production areas, although pockets of dryness lingered in sections of the corn belt. Rainfall intensified from the previous week in western production areas of North West and Free State, with amounts varying from 10 to 50 mm. The rain benefited reproductive to filling corn and helped keep daytime highs from rising above the upper 20s and lower 30s (degrees C), although weekly temperatures still averaged 1 to 2°C above normal. Showers (10-75 mm) also returned from northeastern North West to central Mpumalanga; however, drier conditions prevailed across northern Free State, southern Mpumalanga, and northern KwaZulu-Natal, limiting moisture for later-planted crops but aiding maturation of earlier-planted eastern crops. Weekly temperatures averaged near normal in the drier spots, though daytime highs were generally in the middle and upper 20s at week's end. Elsewhere, scattered showers (10-50 mm) increased moisture for rain-fed sugarcane in southern KwaZulu-Natal, although seasonable warmth (daytime highs in the lower 30s) maintained high crop moisture demands. Meanwhile, above-normal rainfall (10-50 mm) continued throughout the Cape Provinces, increasing irrigation reserves for summer row crops. In contrast, hot (daytime highs reaching 40°C), mostly dry weather aided development of ripening tree and vine crops in Western Cape.

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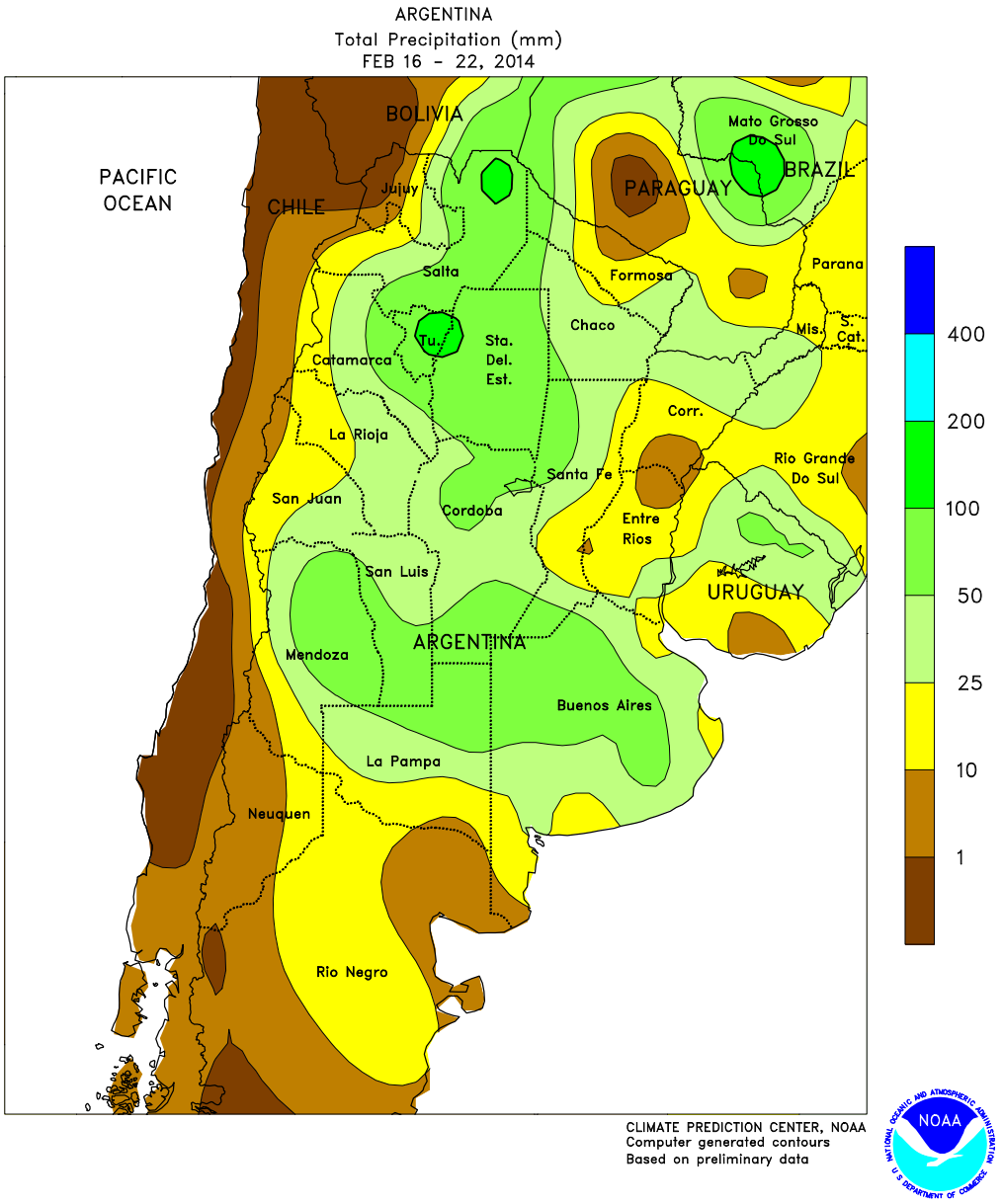

ARGENTINA

Lingering wetness maintained locally excessive levels of moisture in the key summer grain and oilseed area of central Argentina. Rainfall totaled more than 50 mm over the main crop areas of La Pampa, central Buenos Aires, and southern Cordoba; previously-dry southern farming areas of La Pampa and Buenos Aires recorded 10 to 50 mm. Lighter rain (5-25 mm) fell in the lower Parana Valley (northernmost Buenos Aires and nearby locations in Entre Rios and Santa Fe), maintaining local flood concerns even though amounts were much less than in recent weeks. Weekly average temperatures were generally within 1°C of normal throughout the region, with daytime highs reaching the upper 20s and lower 30s (degrees C) on several days. Farther north, rain intensified in western areas, totaling more than 50 mm from northern Cordoba to Salta; lighter amounts (10-25 mm, most areas) were reported in the eastern cotton belt (Chaco and nearby locations in Formosa and Santa Fe). Temperature departures were similar to those recorded in central Argentina, though the warmest locations recorded daytime highs in the middle 30s. According to Argentina's Ministry of Agriculture, sunflowers were 25 percent harvested as of February 20, compared with 37 percent last year.

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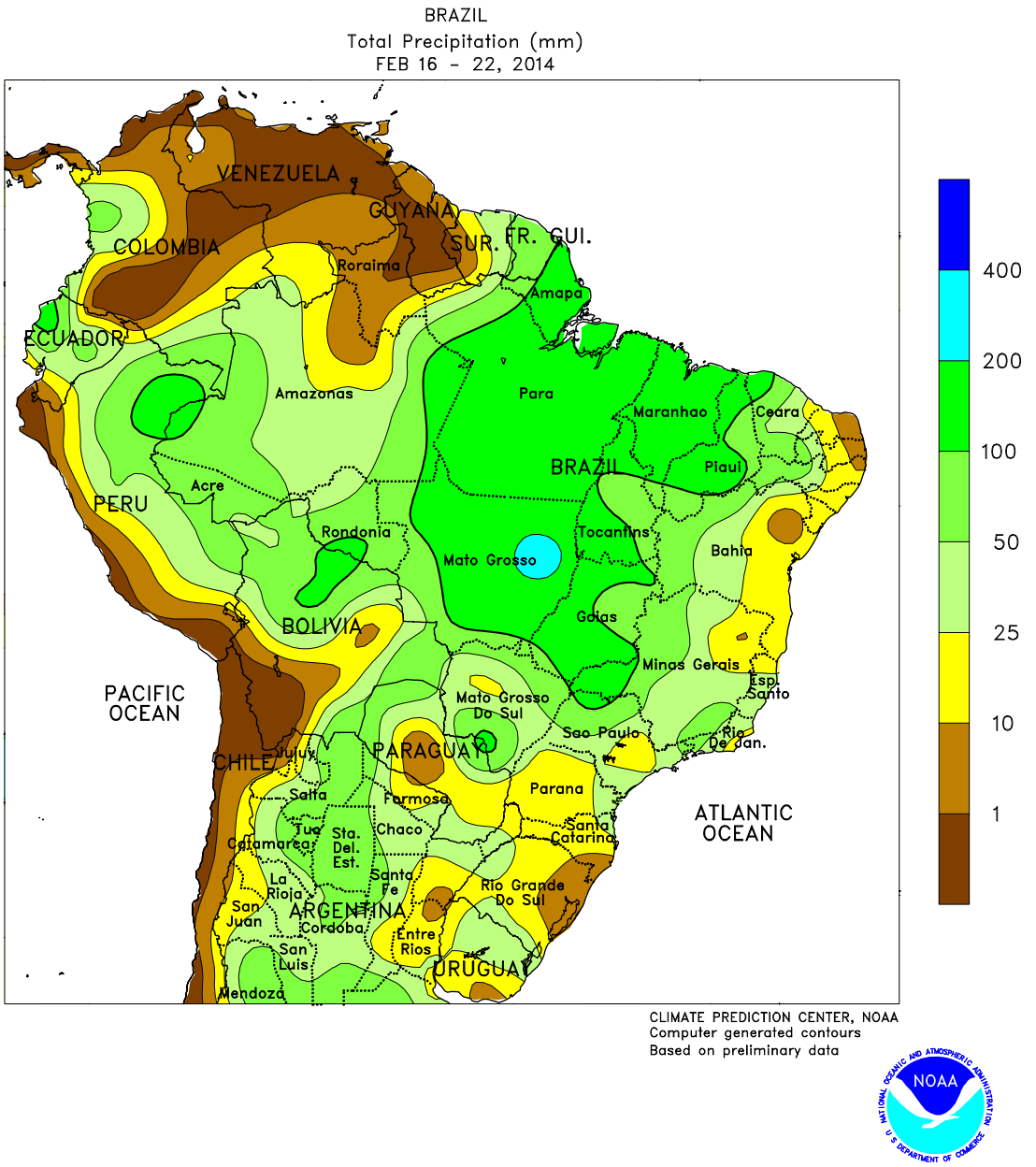
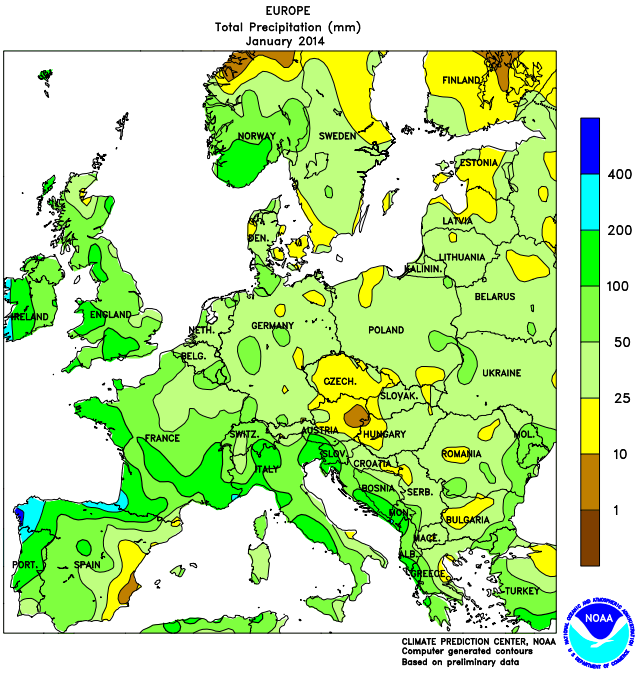


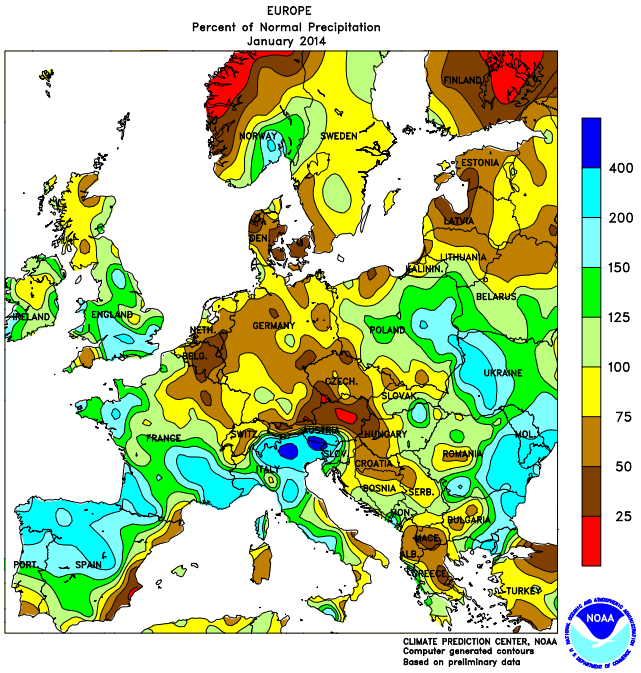
BRAZIL

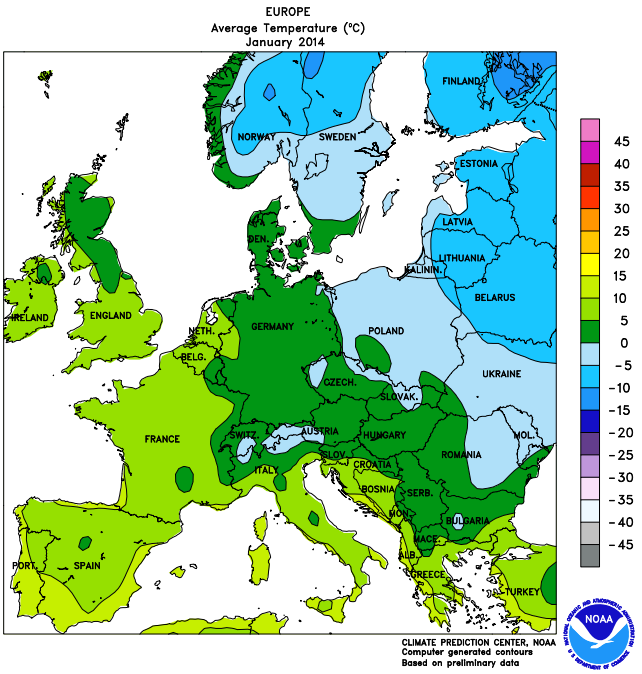
Showers tapered off again in southern Brazil, but heavy rain overspread key central and northeastern farming areas. Following last week's beneficial rain, weekly rainfall dipped below 25 mm in most agricultural districts of Parana, Santa Catarina, and Rio Grande do Sul. In spite of the drier conditions, however, temperatures averaged near normal, with daytime highs reaching the lower 30s (degrees C) before light showers returned later in the week. Farther north, heavy rain (greater than 100 mm) soaked a broad area of the Center-West Region (Mato Grosso and much of Goias), greatly increasing moisture for second-crop (safrinha) corn and cotton but disrupting fieldwork, including soybean harvesting and planting safrinha corn. Moderate to heavy rain (25-100 mm) stretched from Sao Paulo to western Bahia, including previously-dry coffee areas of southern Minas Gerais and Espirito Santo; it was the first substantial rain in the southeastern coffee belt since late January. Weekly average temperatures were generally near normal, with daytime highs ranging from the upper 20s and lower 30s in the southeast to the middle 20s in western Bahia. Meanwhile, scattered, light showers (locally greater than 10 mm) and summer warmth (daytime highs reaching the lower 30s) benefited irrigated crops such as sugarcane and cocoa.

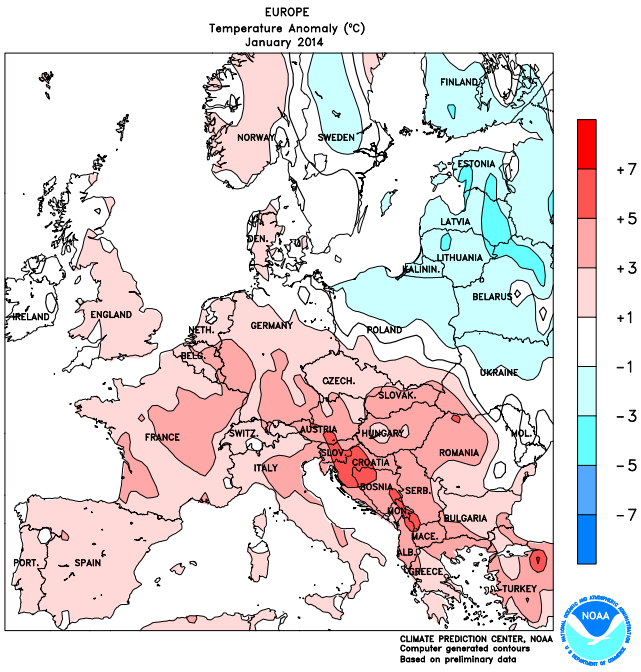
For additional information contact: mbrusberg@oce.usda.gov

January International Temperature and Precipitation Maps



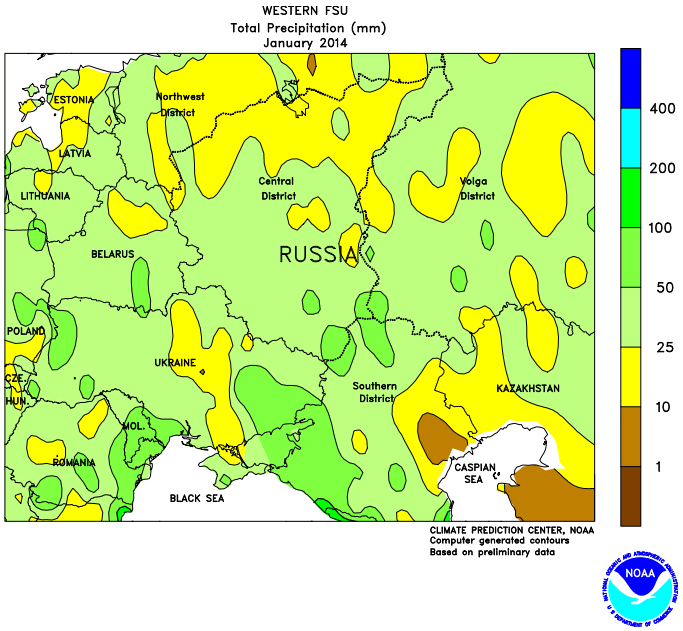


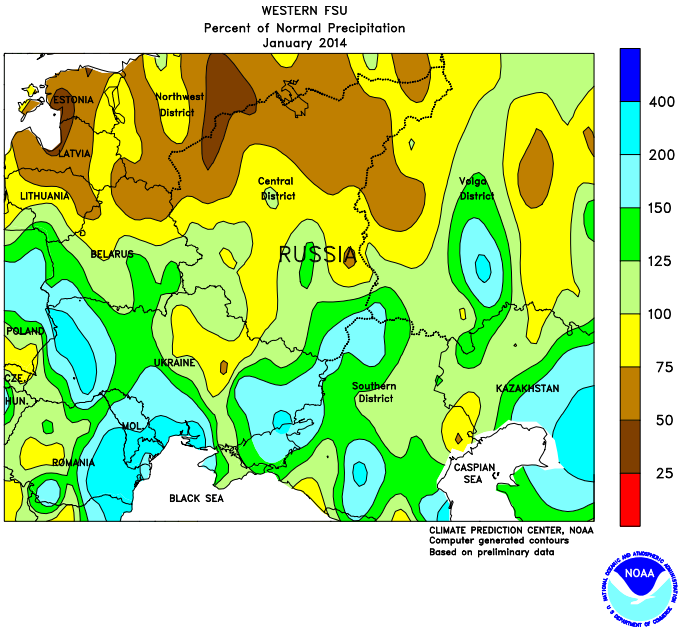


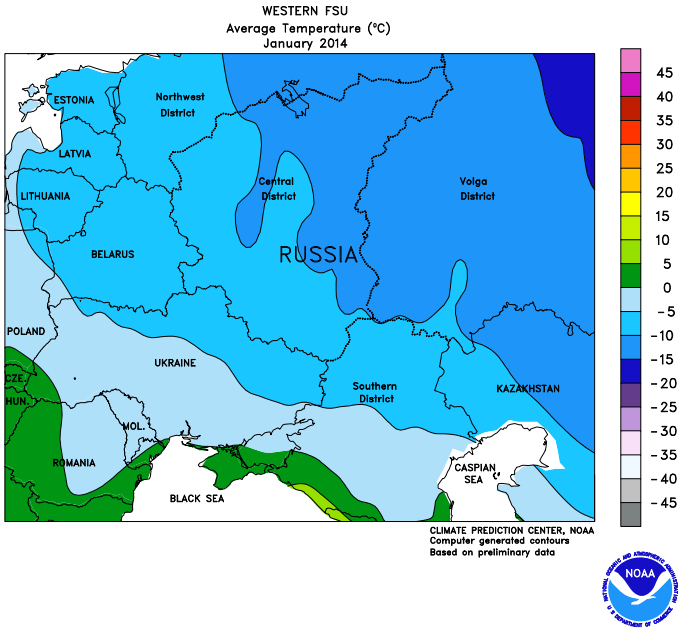


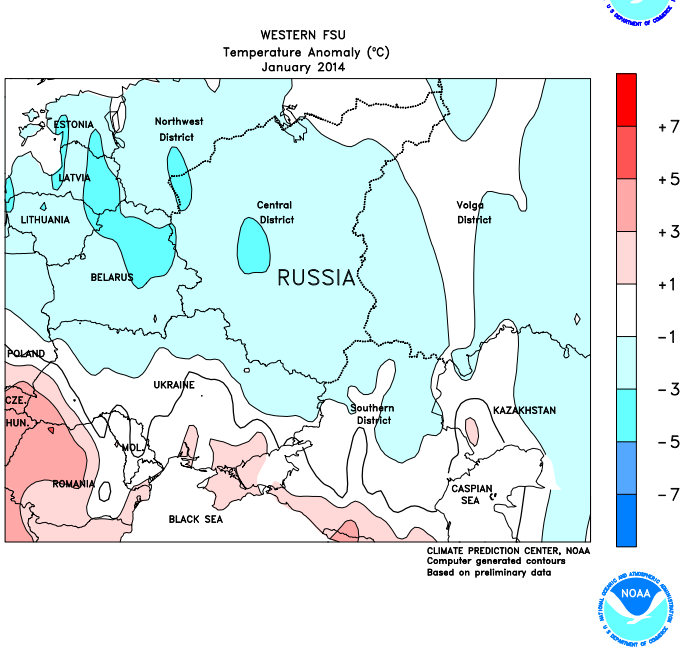
EUROPE

During January, mild, wet weather across much of the continent maintained favorable overwintering conditions for dormant winter grains and oilseeds. However, drier-than-normal conditions were noted from Germany into the northern Balkans. Locally heavy rain and mountain snow in Spain and Italy improved prospects for vegetative wheat and barley and boosted mountain snowpacks and irrigation reserves for warm-season crops. By month's end, colder, snowier weather briefly settled over eastern Europe.



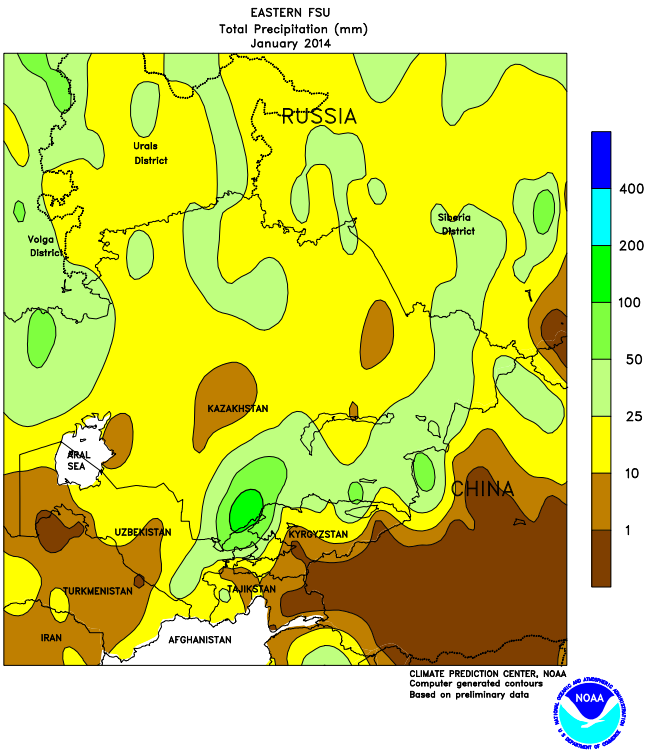


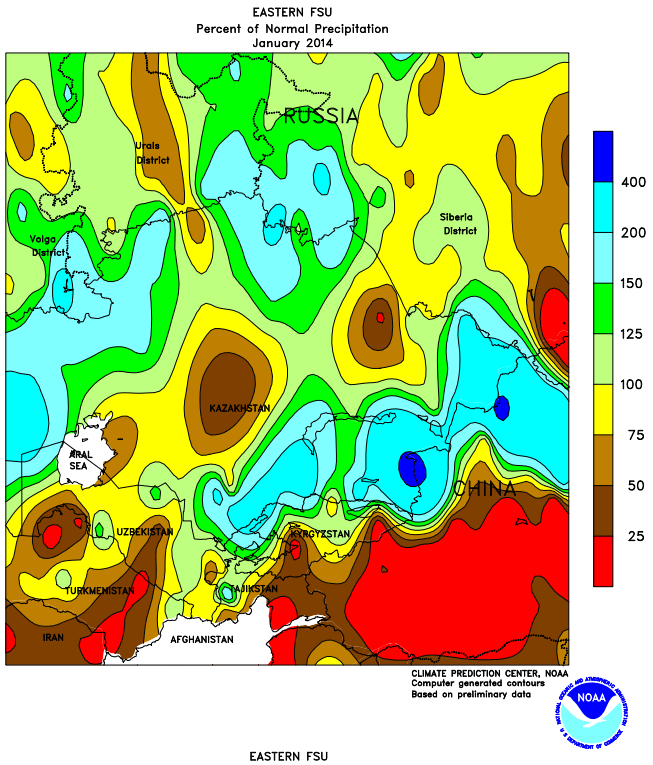


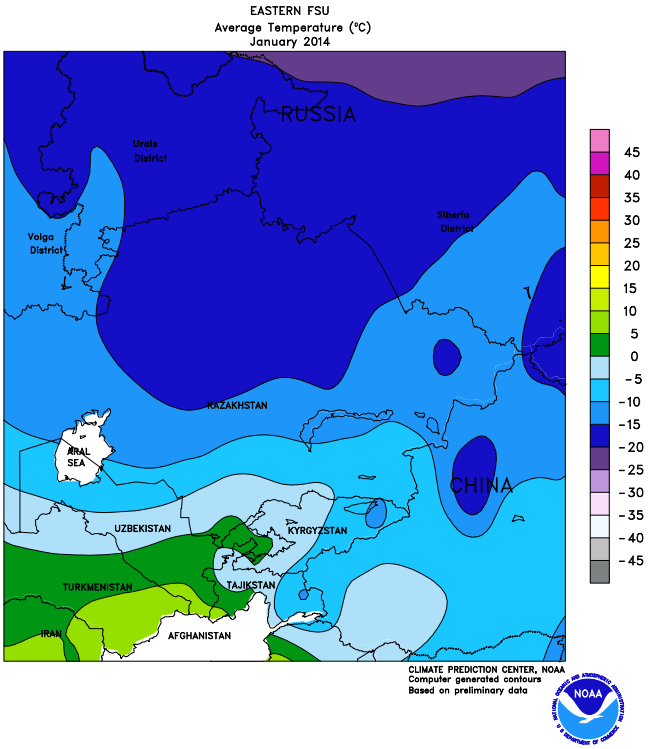


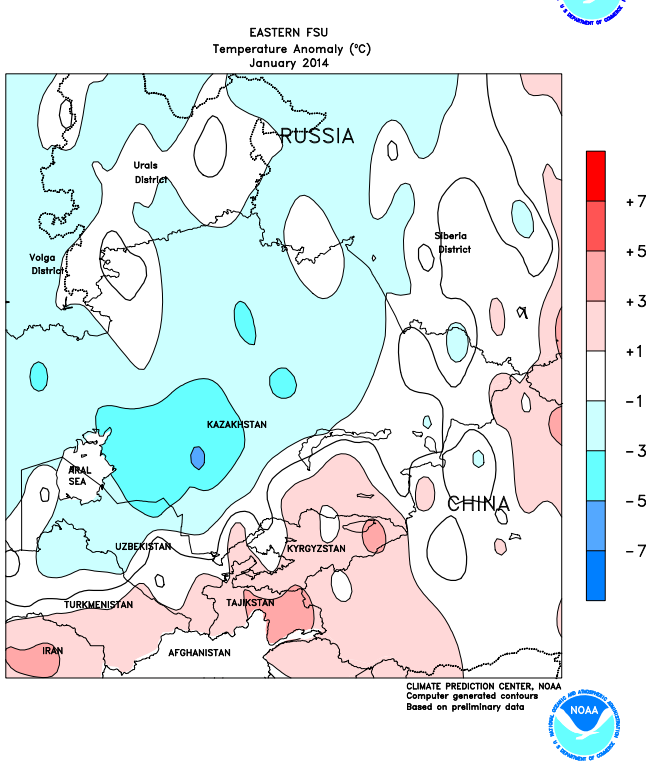
WESTERN FSU

In January, unseasonably warm weather during the first half of the month gave way to sharply colder conditions by month's end. Temperatures plunged to -30°C or lower across central and eastern crop areas, with values dropping below -20°C from central Ukraine into southern portions of the Southern District. Some localized burnback or winterkill was possible in areas with shallow snow cover, but most crops were sufficiently protected by snow to avoid widespread freeze damage. The cold snap began to abate by month's end, and was followed by a rapid warming trend.



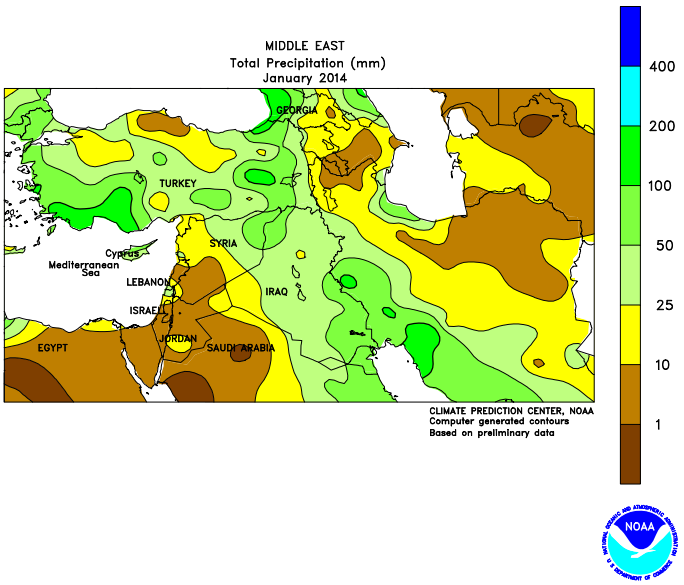


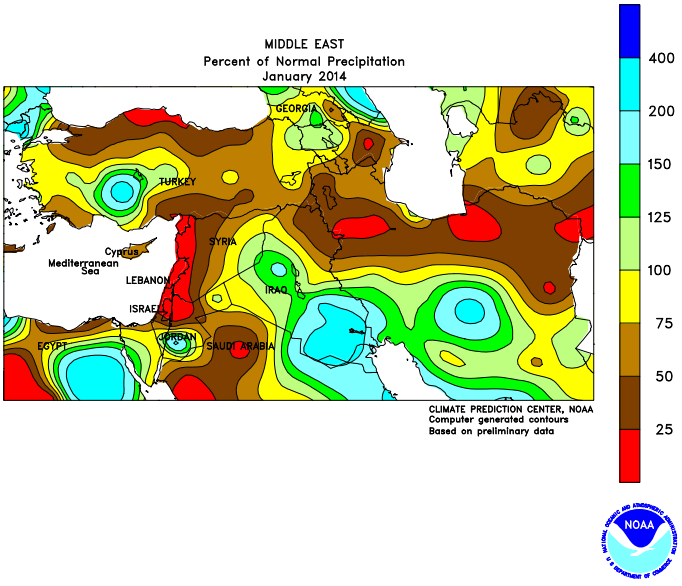


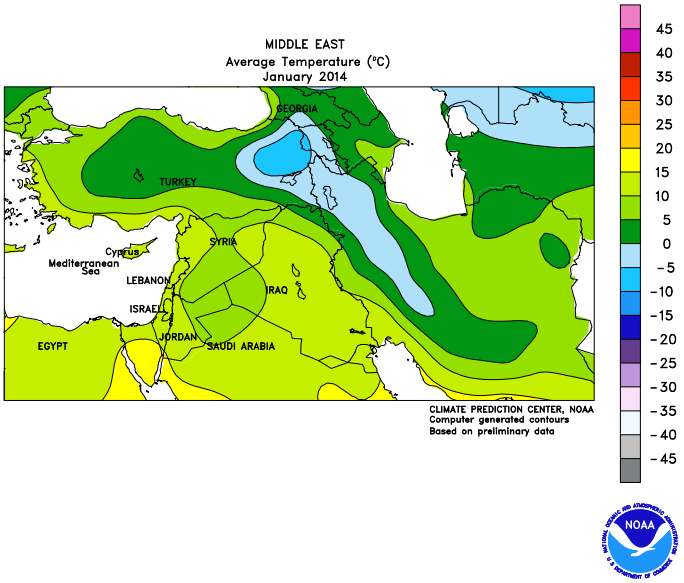


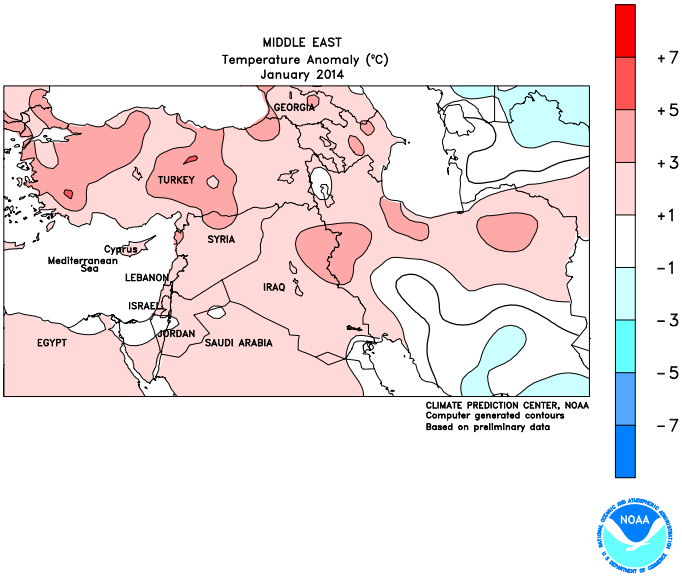
EASTERN FSU

During January, bitter cold settled over northern portions of the region. Temperatures reached -35°C (or lower) in Russia and northern portions of Kazakhstan, with daytime highs staying below freezing. In the south, locally heavy rain and mountain snow boosted irrigation reserves for the upcoming summer growing season.



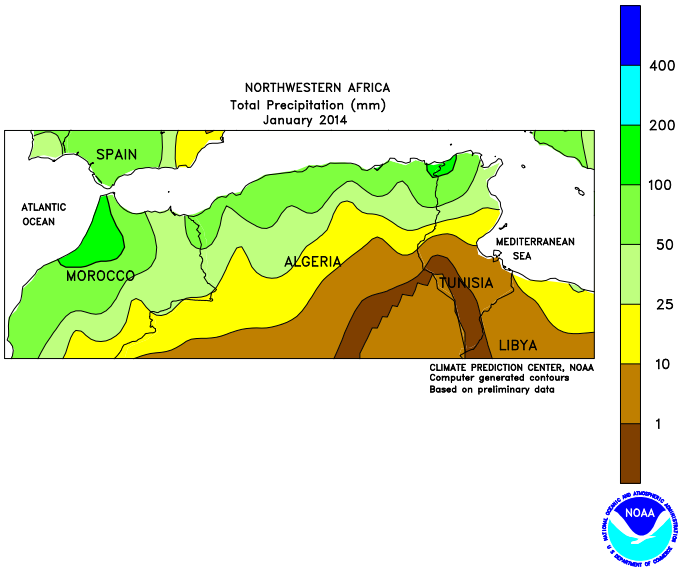


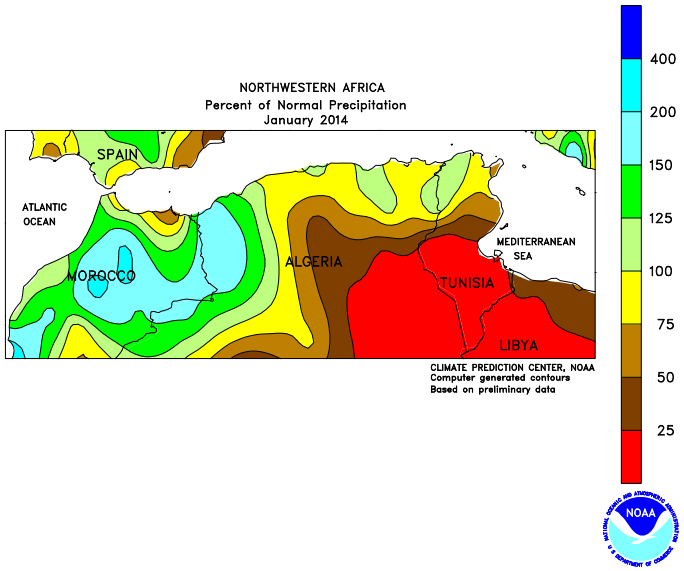


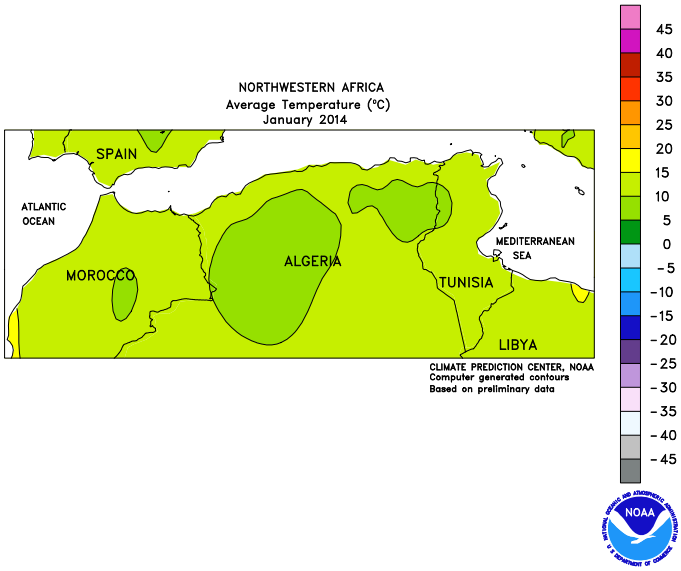


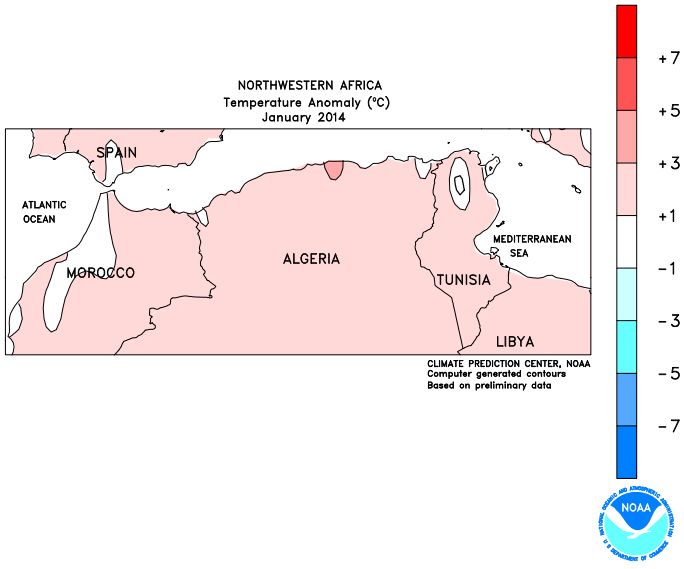
MIDDLE EAST

During January, abnormally wet weather in the south contrasted with lighter-than-normal precipitation in the north. Unseasonably heavy rain and mountain snow persisted across southern crop areas, maintaining abundant supplemental moisture for irrigated wheat and barley from central Iraq into central and southern Iran. Meanwhile, much-needed, albeit still lighter than normal, rain in Turkey moistened topsoils for spring growth. Concerns still exist for Turkey's winter wheat, which was subjected to an abnormally dry autumn and a sharp cold snap in December. In northern Iran, mostly dry weather reduced soil moisture reserves for dormant winter grains.



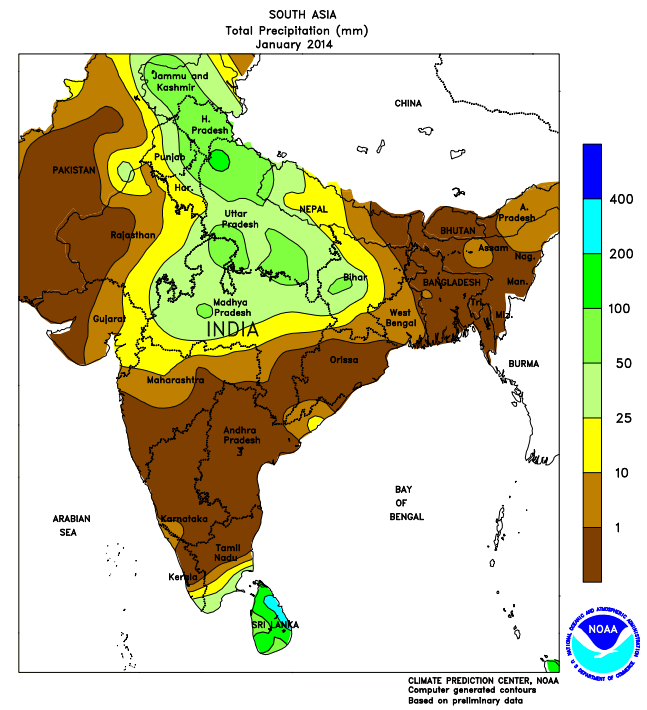


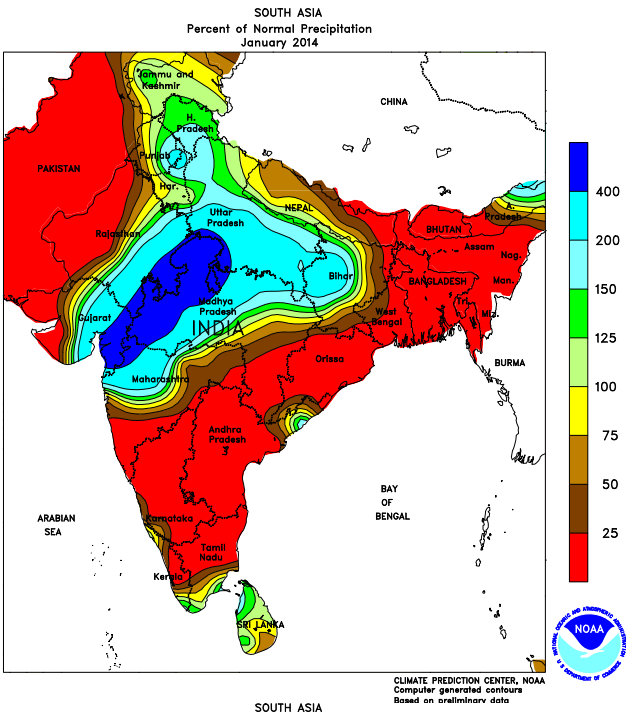


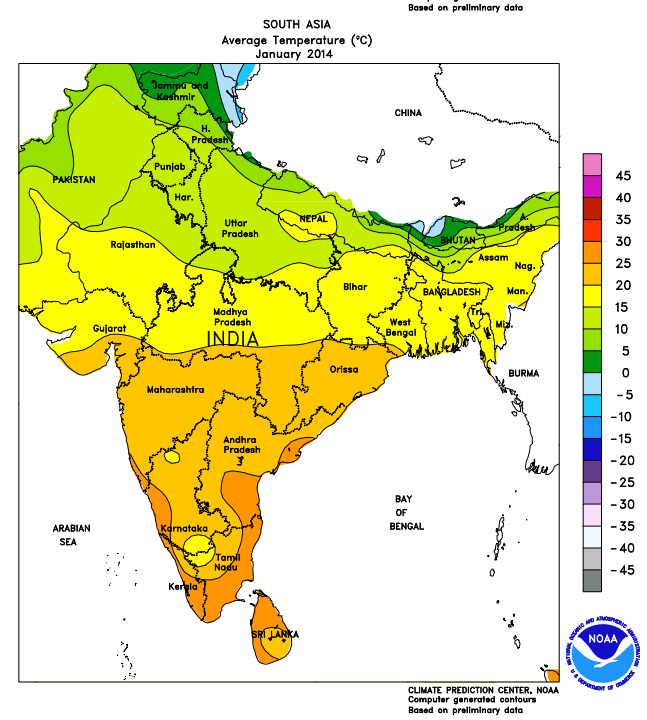


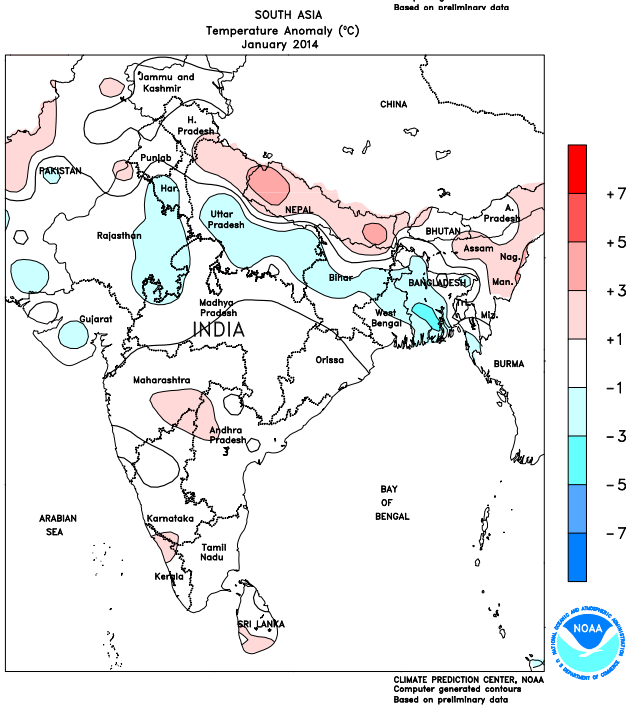
NORTHWESTERN AFRICA

During January, rain persisted in eastern crop districts and returned to western growing areas. In particular, heavy rain (locally more than 100 mm) in Morocco during the latter half of the month alleviated concerns over short-term dryness. Rainfall likewise approached or exceeded 100 mm in northern portions of Algeria and Tunisia. Overall, prospects for winter wheat and barley remained excellent in northern Africa.



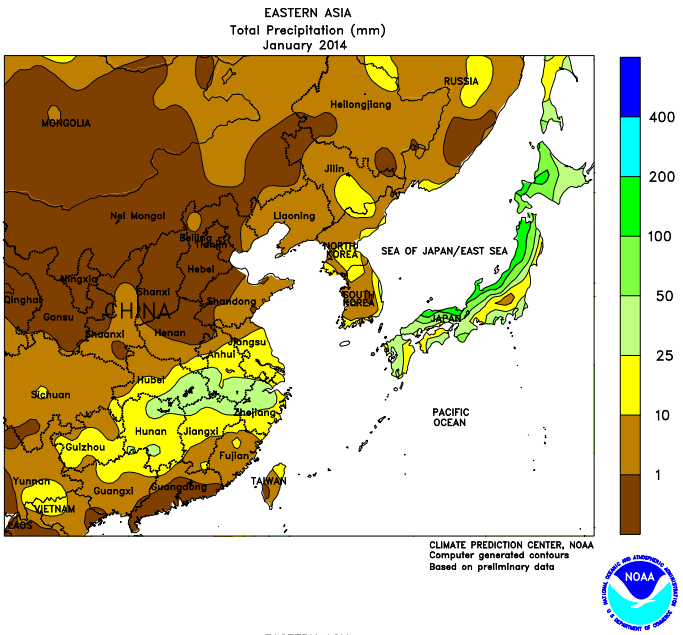


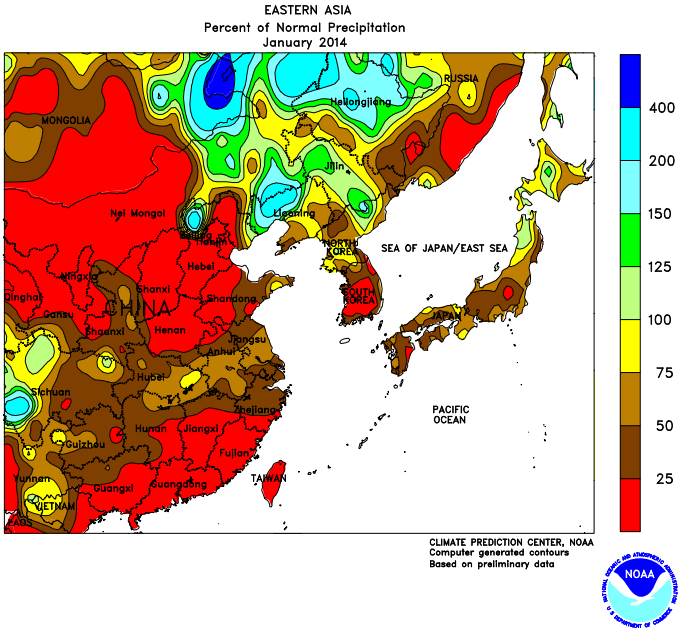


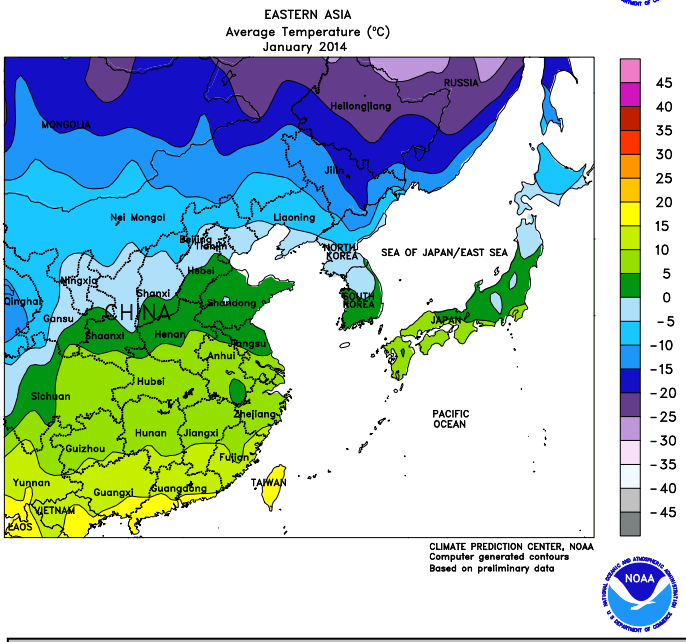


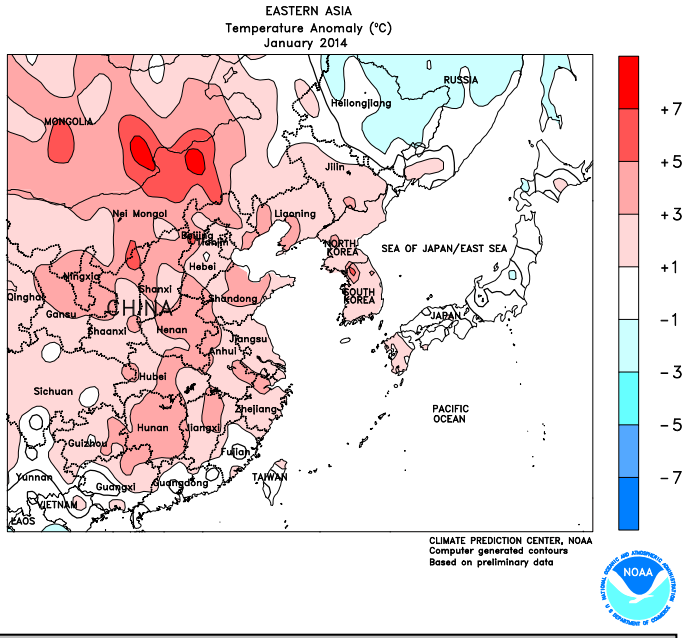
SOUTH ASIA

In January, above-normal rainfall across northern India provided supplemental moisture to irrigated wheat and rapeseed progressing through reproduction. Irrigation recharge from the summer monsoon was very good, with nearly 1,000 mm of rain in most northern states of India and particularly across the Ganges River Basin where most wheat is grown. In addition, near-ideal temperatures (averaging between 10 and 15°C for the month) aided development and increased yield prospects for wheat and rapeseed. Elsewhere in India, seasonably warm, sunny weather facilitated late-season cotton development and harvesting in portions of western and southern India.



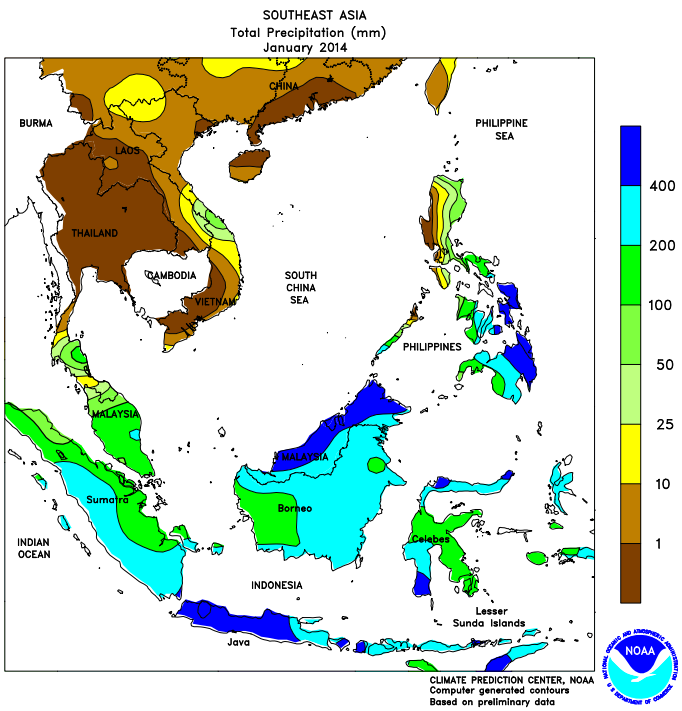


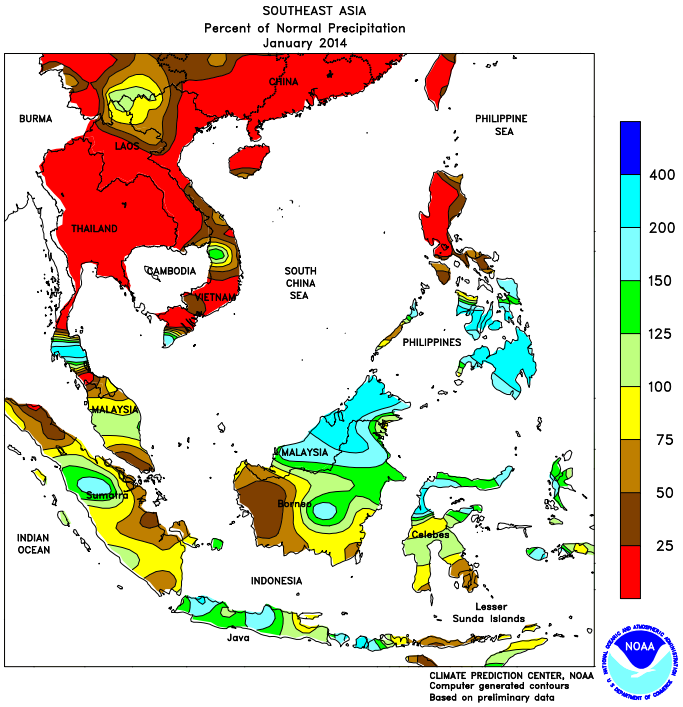


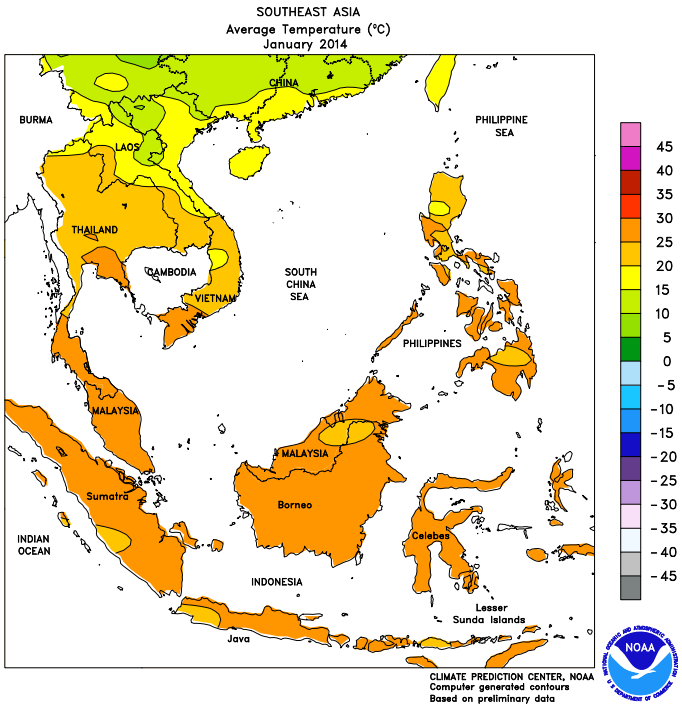


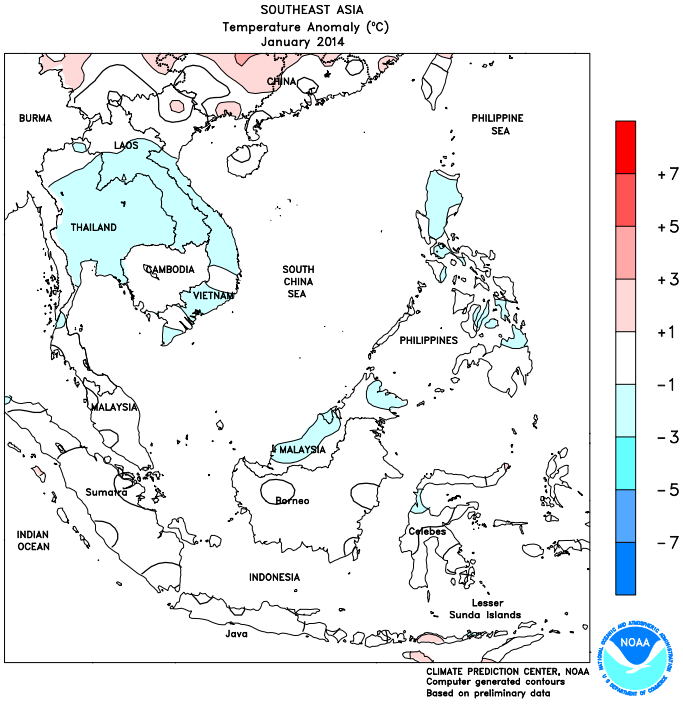
EASTERN ASIA

Seasonably dry weather continued during January across the North China Plain and Yangtze Valley. While little rainfall typically occurs on the North China Plain during the winter, showers in the Yangtze Valley are usually more prevalent. However, despite the drier-than-usual conditions in the Yangtze Valley, January deficits were minimal (ranging between 10 and 20 mm), given adequate irrigation supplies and minimal water needs of dormant crops. Overly mild weather, however, reduced cold hardiness for crops in many areas, making crops more susceptible to potential cold outbreaks. In southern China, a lack of significant rainfall for the season resulted in diminished recharge of water supplies needed for spring rice transplanting in March but was nearly identical to last year's conditions.



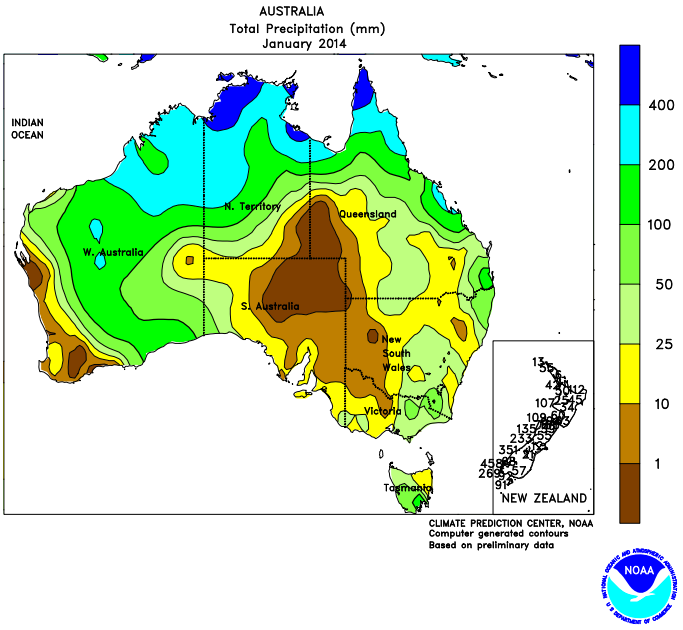


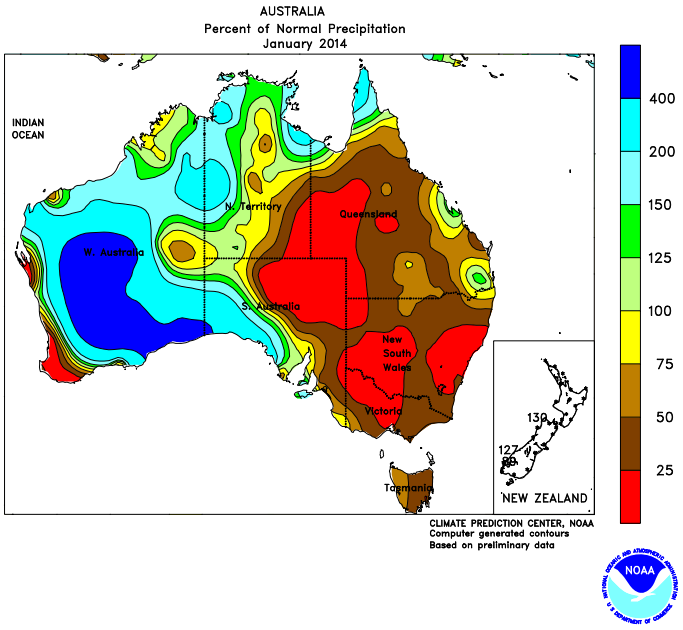


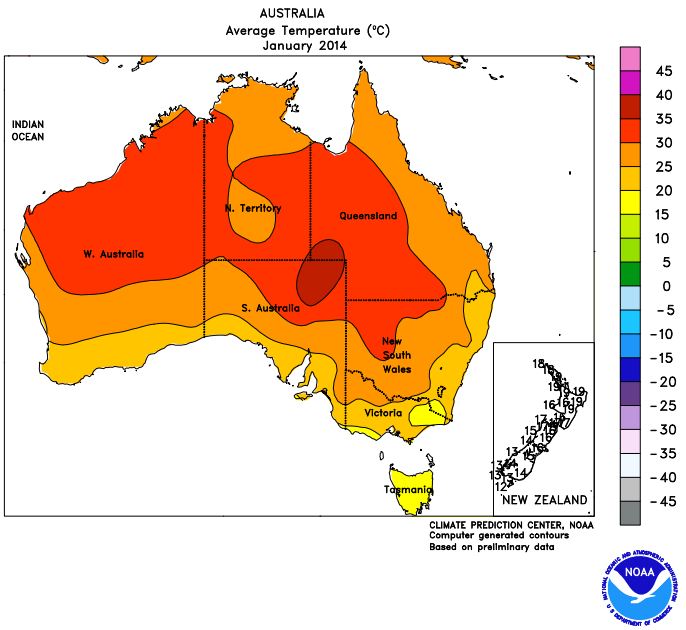


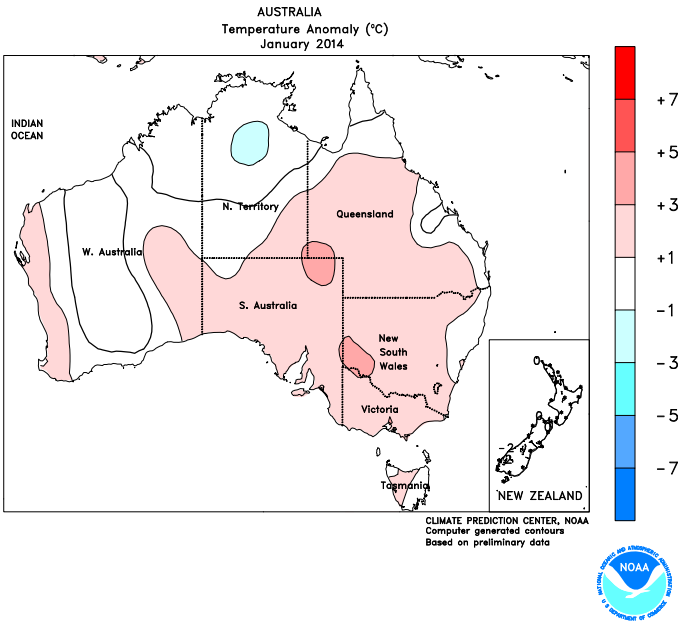
SOUTHEAST ASIA

Well-above-normal rainfall in January caused flooding in parts of western and central Java, Indonesia, but had minimal impact on reproductive rice. Rainfall was more seasonable in eastern Java, where a slow start to the rainy season was followed by much-improved moisture conditions over the last 2 months. A pair of early-season tropical cyclones brought heavy rainfall to the southeastern Philippines, causing some minor flooding outside major agricultural areas, while drier weather elsewhere eased excessive wetness in the north.



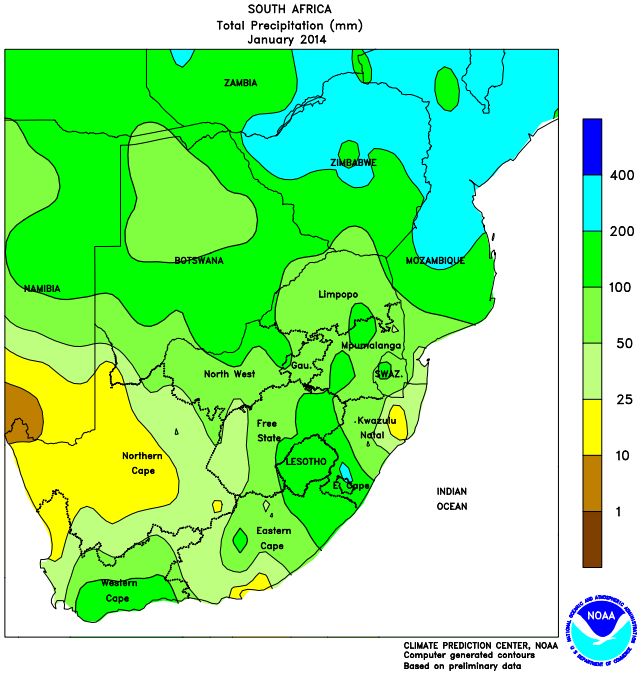


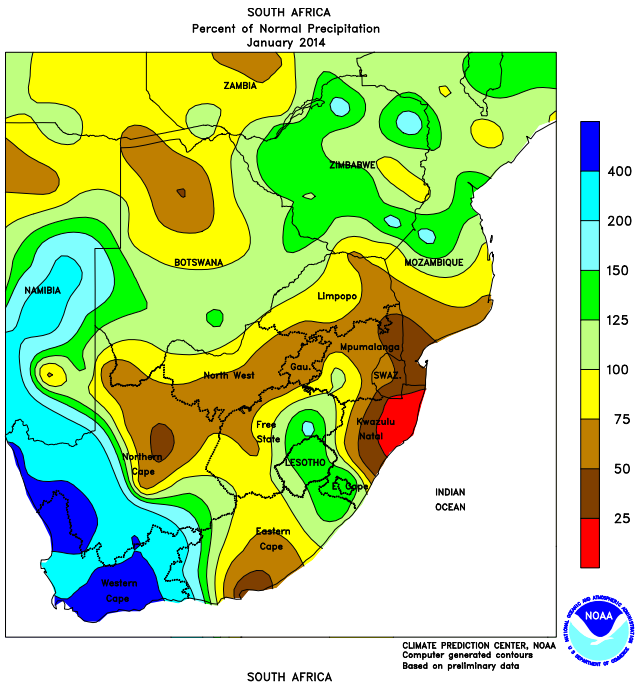


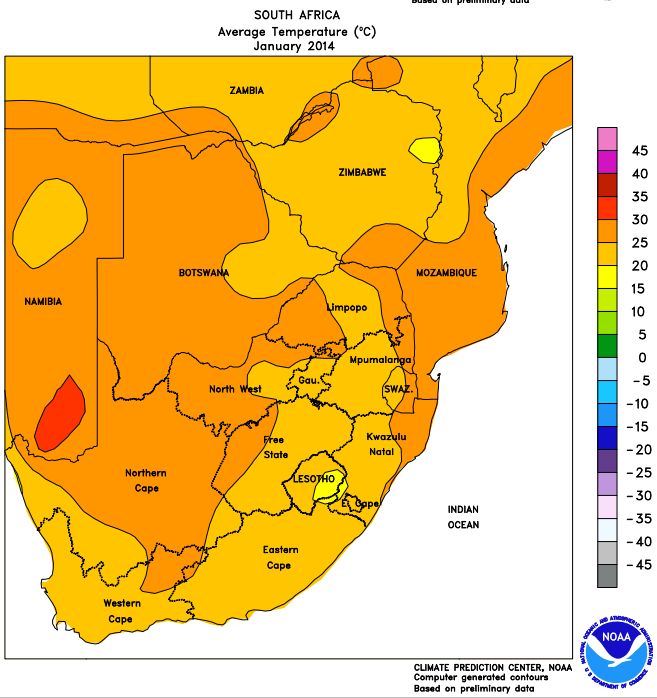


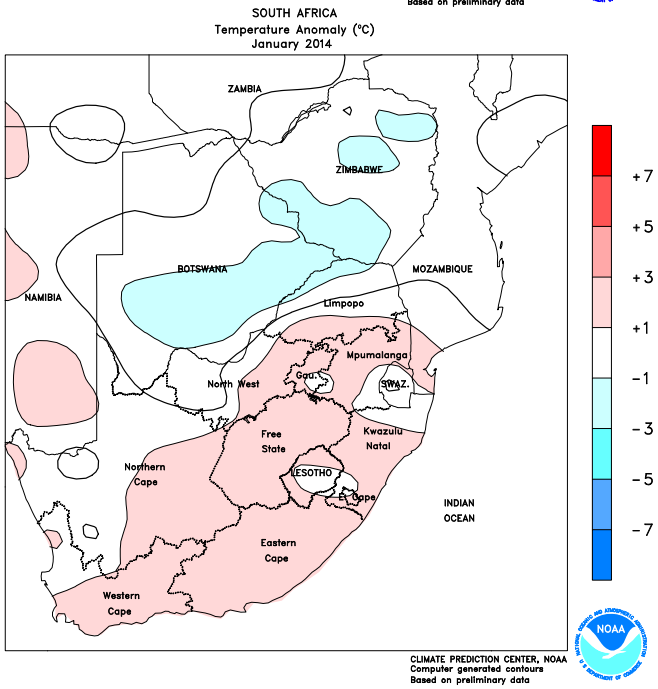
AUSTRALIA

In January, below-normal rainfall and above-normal temperatures plagued major summer crop areas in southern Queensland and northern New South Wales. The persistent heat and dryness increased irrigation requirements for cotton and stressed dryland crops, such as sorghum, likely reducing local yield prospects.



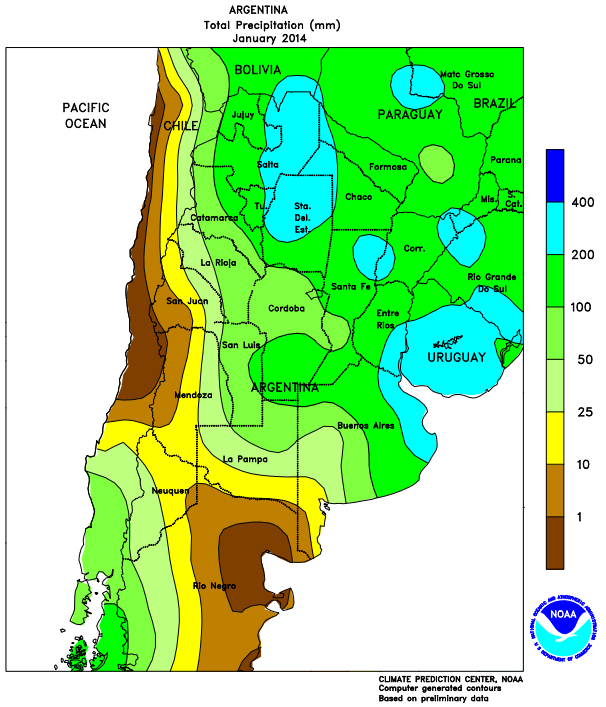


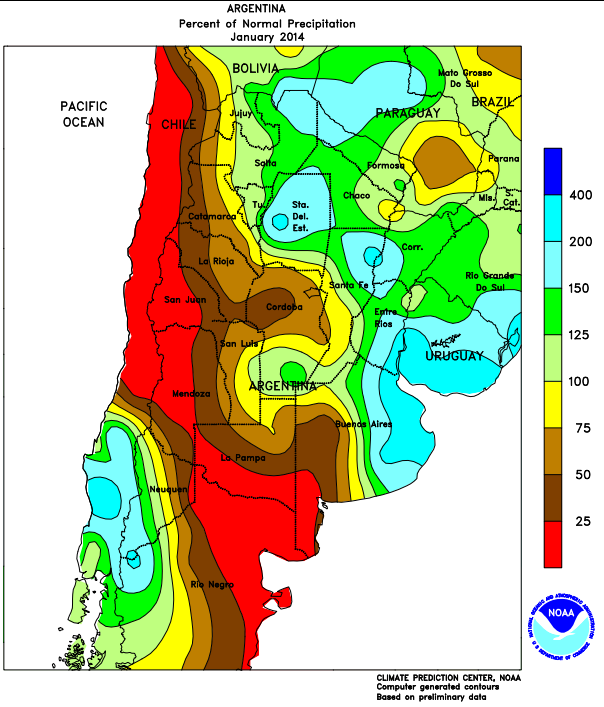


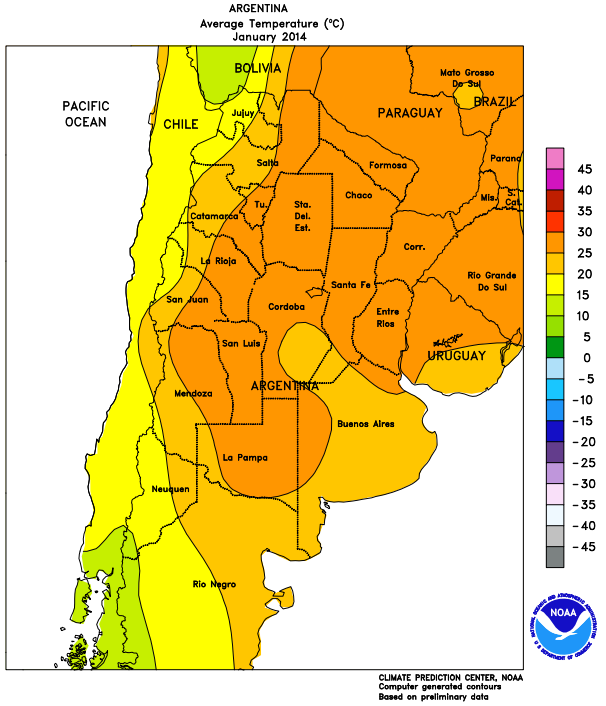


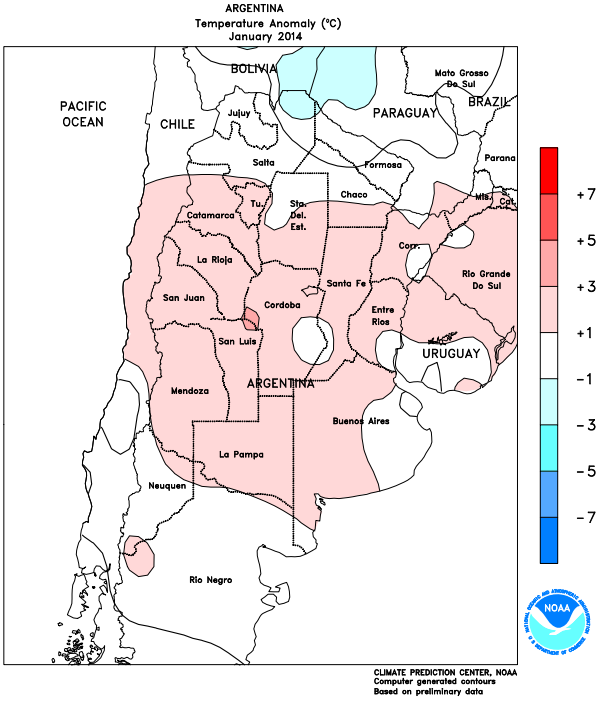
SOUTH AFRICA

During January, periods of warmth and dryness reduced moisture for summer crops, including corn in or approaching reproduction. Although rainfall intensified in the eastern commercial farming areas during the latter half of the month, January rainfall was near to below normal throughout much of the corn belt (Northwest and Free State to Mpumalanga) and the sugarcane areas of KwaZulu-Natal. The dryness also fostered above-normal temperatures, which averaged 1 to 2°C above normal over the entire month. Daytime highs reached the upper 30s (degrees C) several times in the traditionally warmer western sections of the corn belt, with temperatures commonly reaching the middle 30s in white corn areas of Free State and North West. Somewhat milder conditions prevailed in the eastern corn belt (notably Mpumalanga) and southern KwaZulu-Natal's rain-fed sugarcane region, with daytime highs staying in the upper 20s and lower 30s. In early January, unseasonably heavy rain provided the southern Cape Provinces with abundant moisture for crops and livestock, although excessive rainfall (greater than 100 mm) over a short duration caused some flooding in southern parts of Western Cape. Warm (daytime highs approaching 40°C in some locations), dry weather the remainder of the month fostered development of tree and vine crops and supported harvesting.



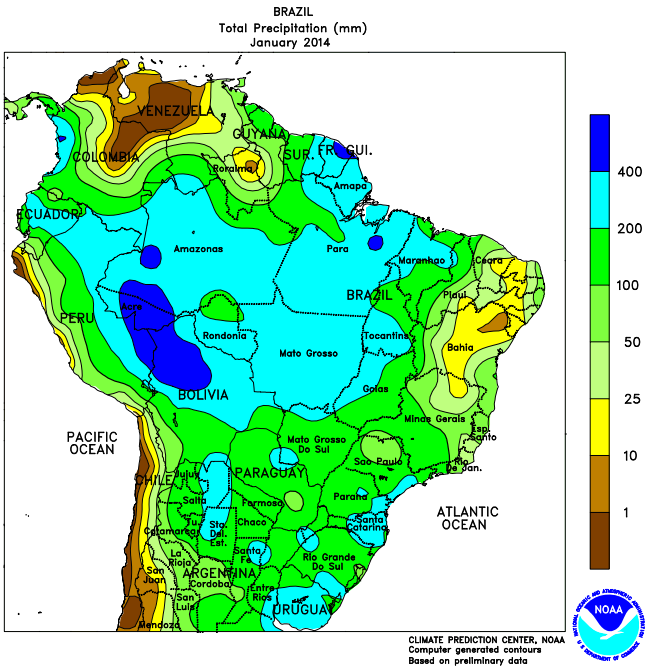


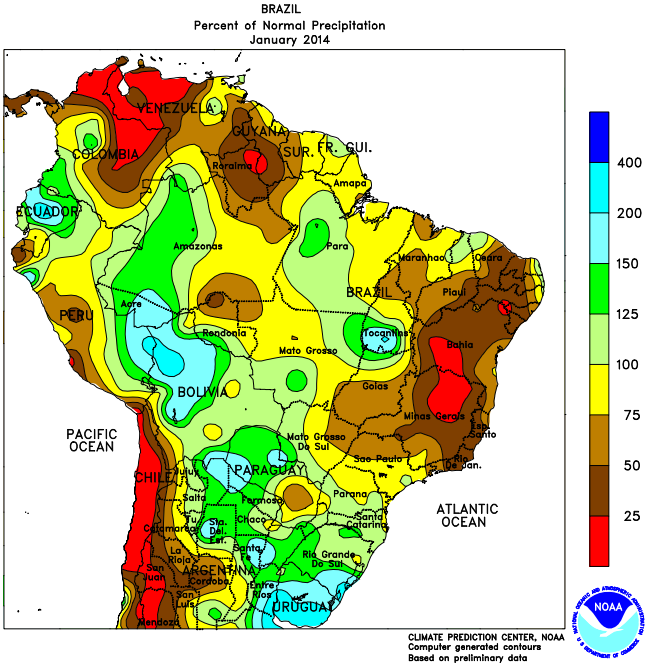


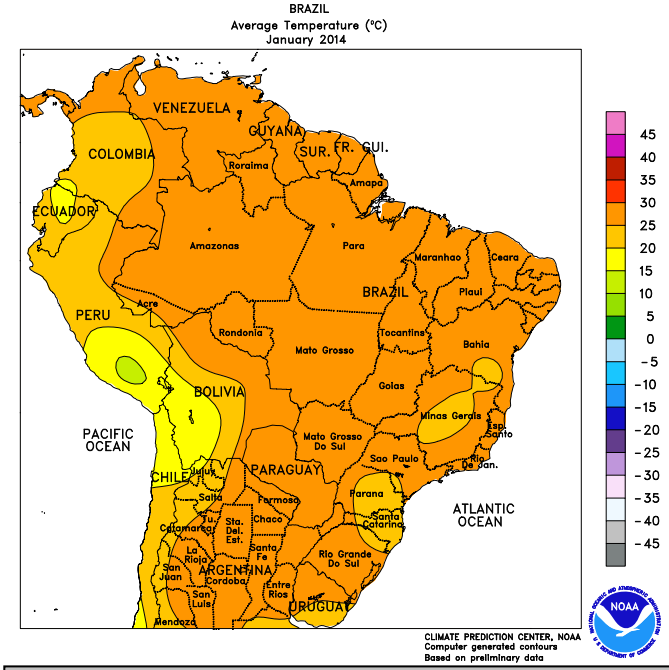


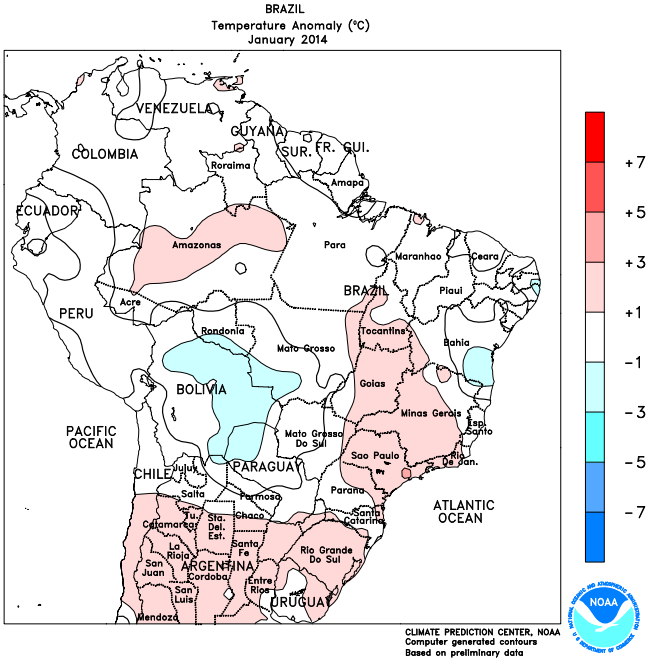
ARGENTINA

In January, a milder, wetter pattern gradually developed, but not before central farming areas experienced another bout of stressful warmth and dryness. Monthly average temperatures were 1 to 2°C above normal throughout the country's main agricultural areas. In central Argentina, early-month showers gave way to drier conditions during January, with temperatures again reaching into the upper 30s (degrees C) in the high-yield soybean areas stretching from southern Cordoba to northeastern Buenos Aires. In fact, the region experienced several days of stressful weather before the passage of a strong cold front brought locally heavy rain to the region. While helping to stabilize the condition of reproductive to filling corn and soybeans, the moisture was excessive in some areas, likely causing flooding in the lower Parana River Valley (northern Buenos Aires and southern sections of Entre Rios). More consistent rainfall was recorded farther north, improving prospects of later-planted row crops — including corn and cotton — after a dry December. However, as in central Argentina, above-normal temperatures (daytime highs in the upper 30s) maintained high evaporative losses until milder weather developed toward the end of January.





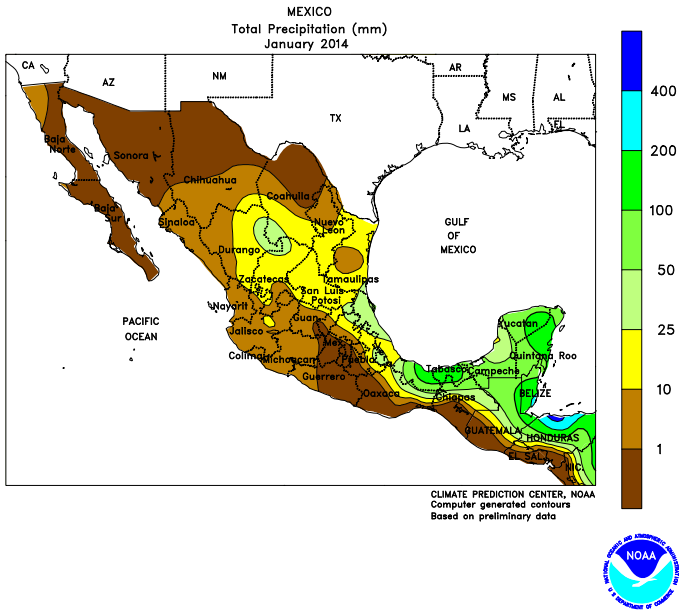


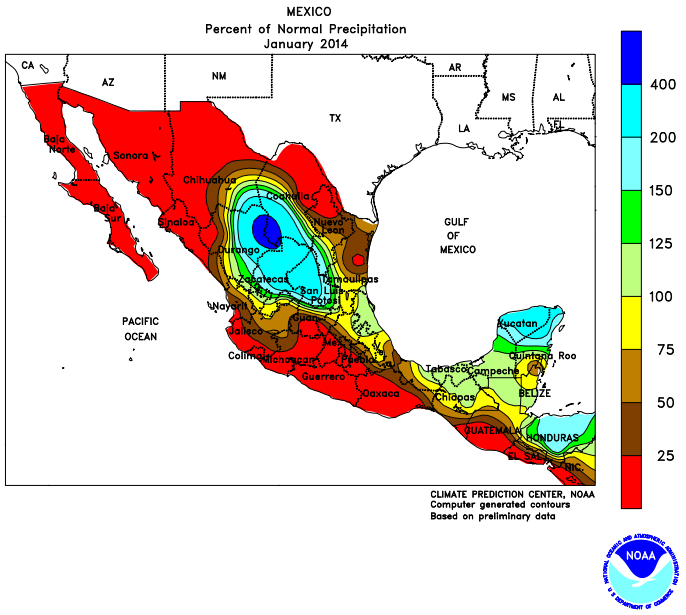


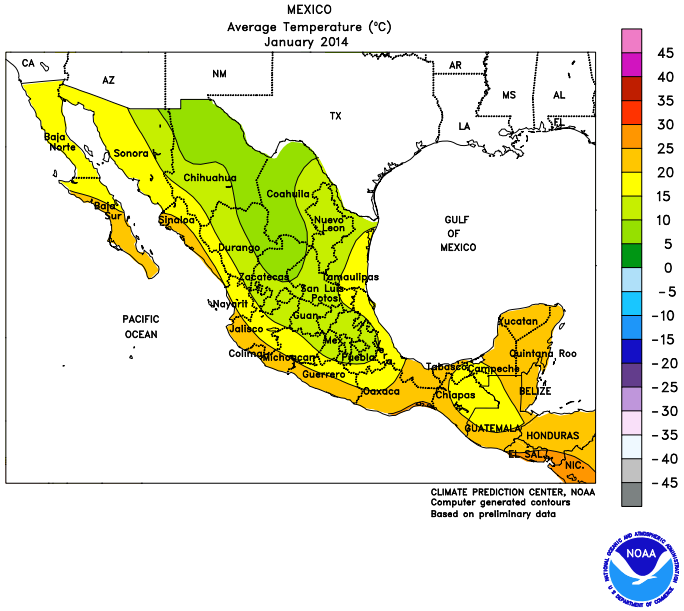
BRAZIL

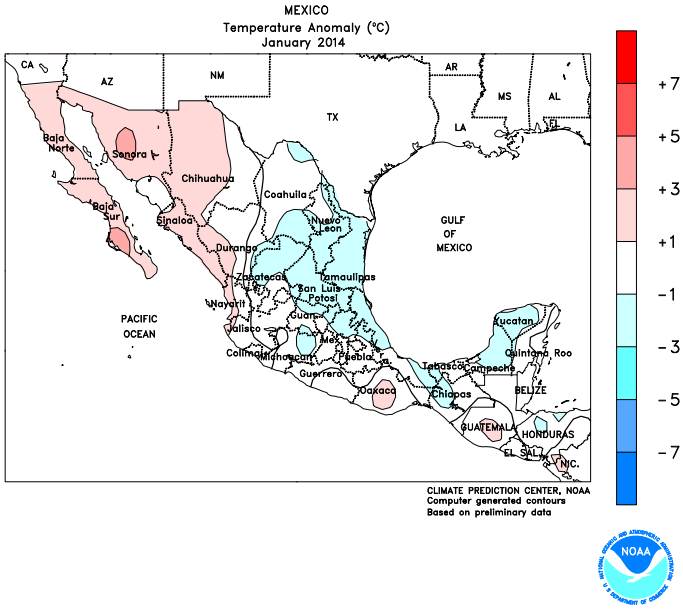
Showers brought some relief from dryness to southern Brazil during the early part of January, but warmer- and drier-than-normal conditions returned later in the month. Monthly rainfall was near to above normal from Rio Grande do Sul to Parana, with most of the rain falling in the first half of the month. As rainfall tapered off, above-normal temperatures (daytime highs at or above 35°C) developed, raising crop moisture requirements and rates of evapotranspiration. Still drier conditions (less than half of the normal monthly amounts in some locations) prevailed in Sao Paulo and neighboring locations in western Minas Gerais, impacting sugarcane, citrus, and coffee. Monthly average temperatures were as much as 3°C above normal in these areas, although daytime highs reached the middle 30s (degrees C) only occasionally. The pattern of unseasonable warmth and dryness extended northward into western Bahia and surrounding areas, which continued to experience sporadic showers intermixed with extended periods of dryness. However, timely rain (more than 100 mm over the course of 2 weeks) helped to stabilize soybeans, cotton, and other summer crops during the middle part of the month. Similarly, a relatively brief period of heavy rainfall brought some relief from dryness to coffee areas of southern Minas Gerais and Esperito Santo. Wetter conditions (monthly rainfall totals above 200 mm) prevailed in most farming areas of Mato Grosso, Tocantins, and western sections of Goias.

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



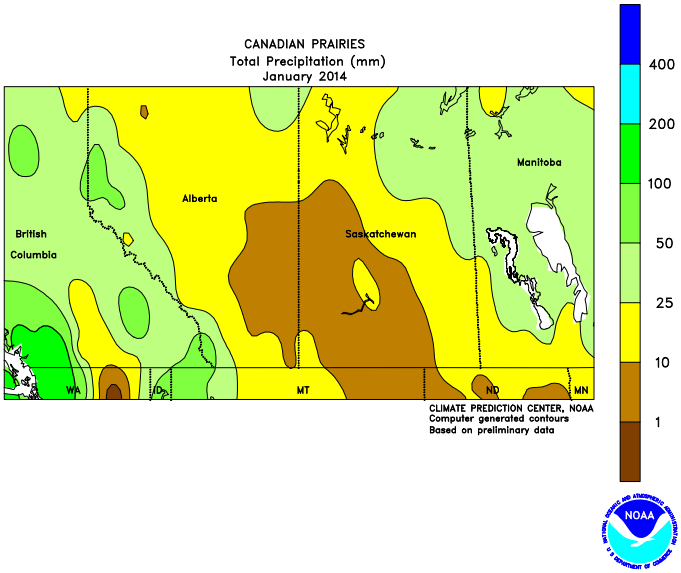


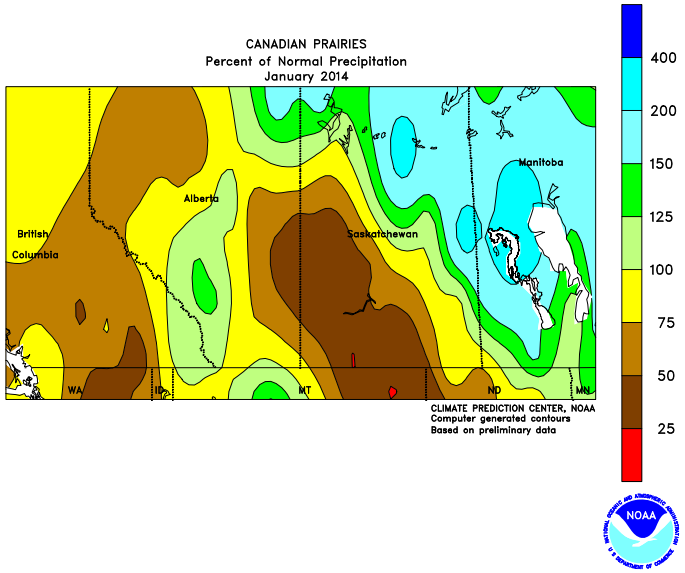


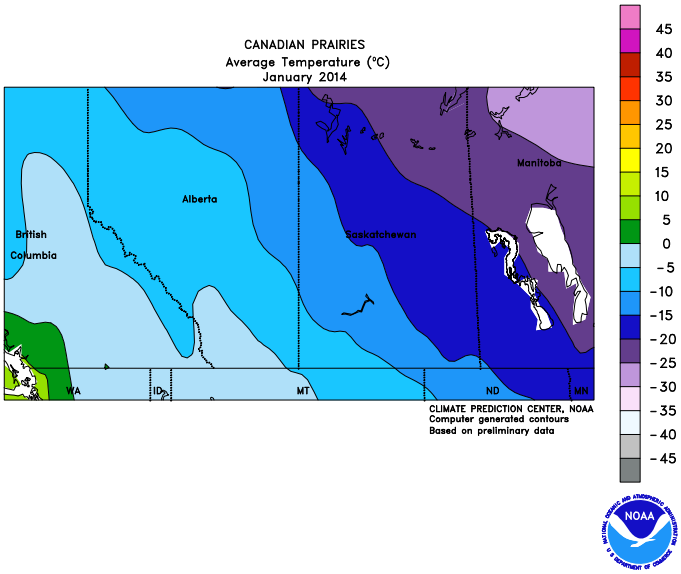


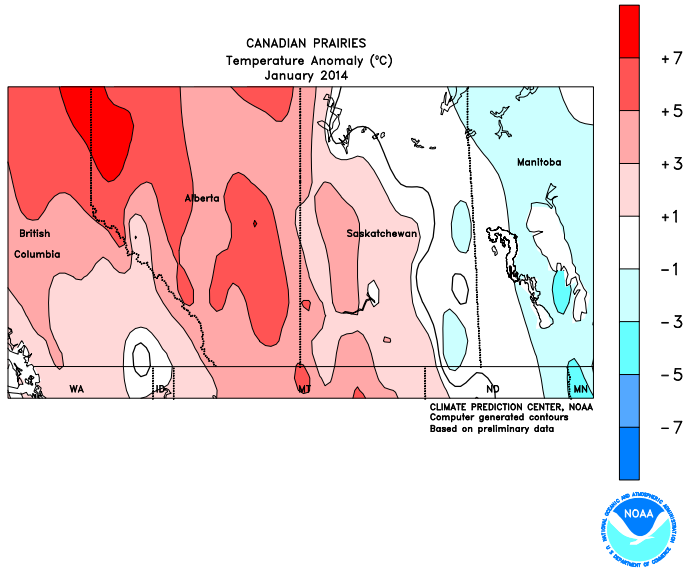
MEXICO

In January, mostly dry, occasionally warm weather promoted growth of irrigated crops — including winter grains — in northern and central sections of the country. The exception was the northeast (including Tamaulipas, Nuevo Leon, and San Luis Potosi), which experienced several periods of cool, showery weather. Though rainfall was below-normal in the northeast, moisture conditions were likely overall favorable for rain-fed winter sorghum due to the heavy rain that fell in late December. Elsewhere, dry weather prevailed along the southern Pacific Coast (Michoacan to Chiapas) but locally heavy showers developed at times over crop areas near the Gulf Coast, boosting moisture reserves for winter-grown fruits and vegetables. According to the government of Mexico, total national reservoir capacity was at 49.4 percent as of January 30, compared with 43.0 percent last year and 52.6 percent in 2012.



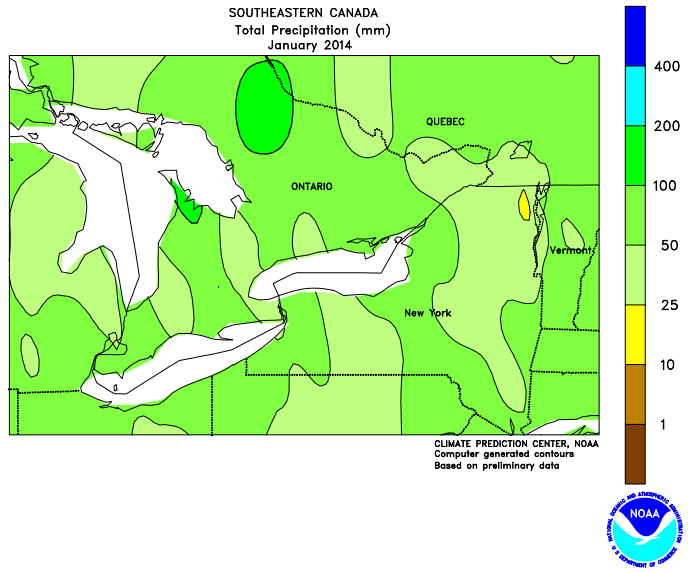


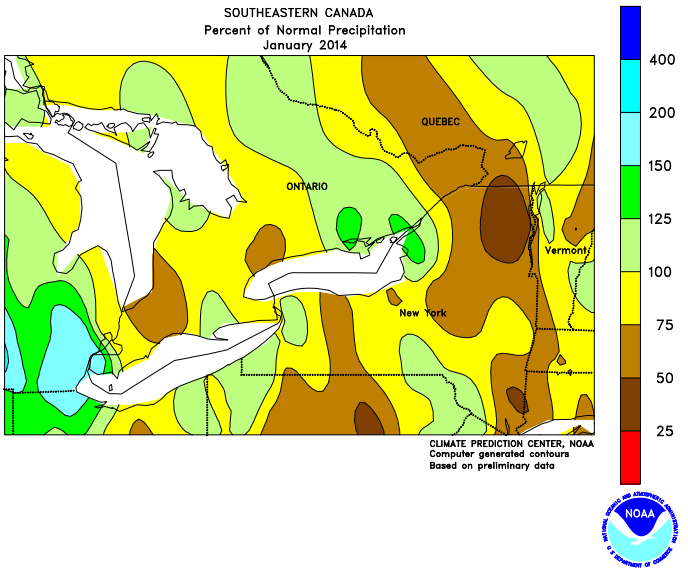


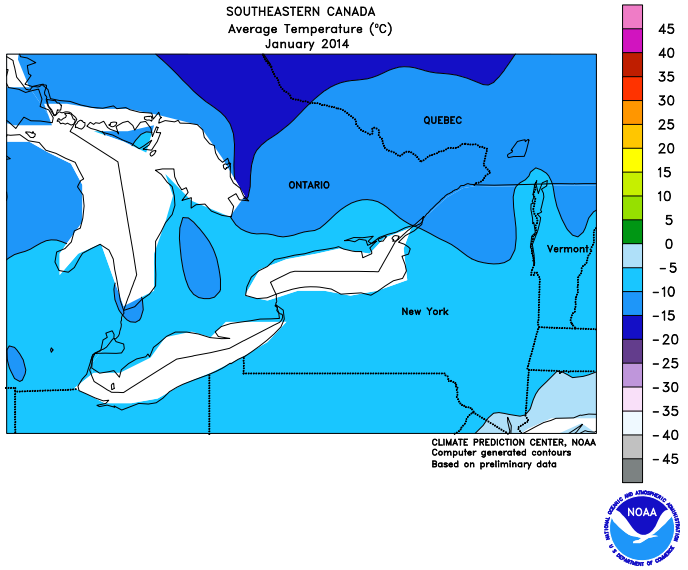


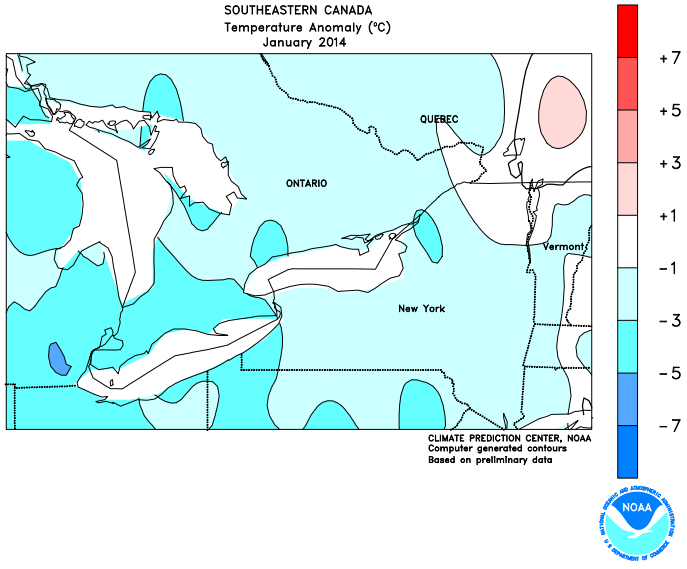
CANADIAN PRAIRIES

Following an early-month outbreak of bitter cold, warmer-than-normal weather developed across the Prairies, partially eroding portions of the snowpack. During the warm spell, daytime highs often rose above freezing, contributing to gradual melting; satellite-based estimates depicted the complete elimination of snow cover in portions of southern Alberta and southwestern Saskatchewan. Unseasonable cold returned to the Prairies at month's end, but the southwest picked up some light snow ahead of the coldest weather (nighttime lows falling below -20°C), offering some protection to overwintering wheat and pastures. Farther north and east, temperatures fell below -25°C during the late-month cool down, though a deep layer of protective snow cover blanketed the region. This was particularly true for agricultural districts in northern and eastern Saskatchewan and Manitoba, which recorded above-normal precipitation for the month (10-25 mm liquid equivalent, locally higher). January temperatures averaged near to slightly below normal in Manitoba and nearby locations in Saskatchewan as the cold weather at the beginning and end of the month offset the mid-month warming. This was in contrast to the relatively warmer conditions recorded in Alberta and western Saskatchewan, where monthly average temperatures were as much as 7°C above normal.







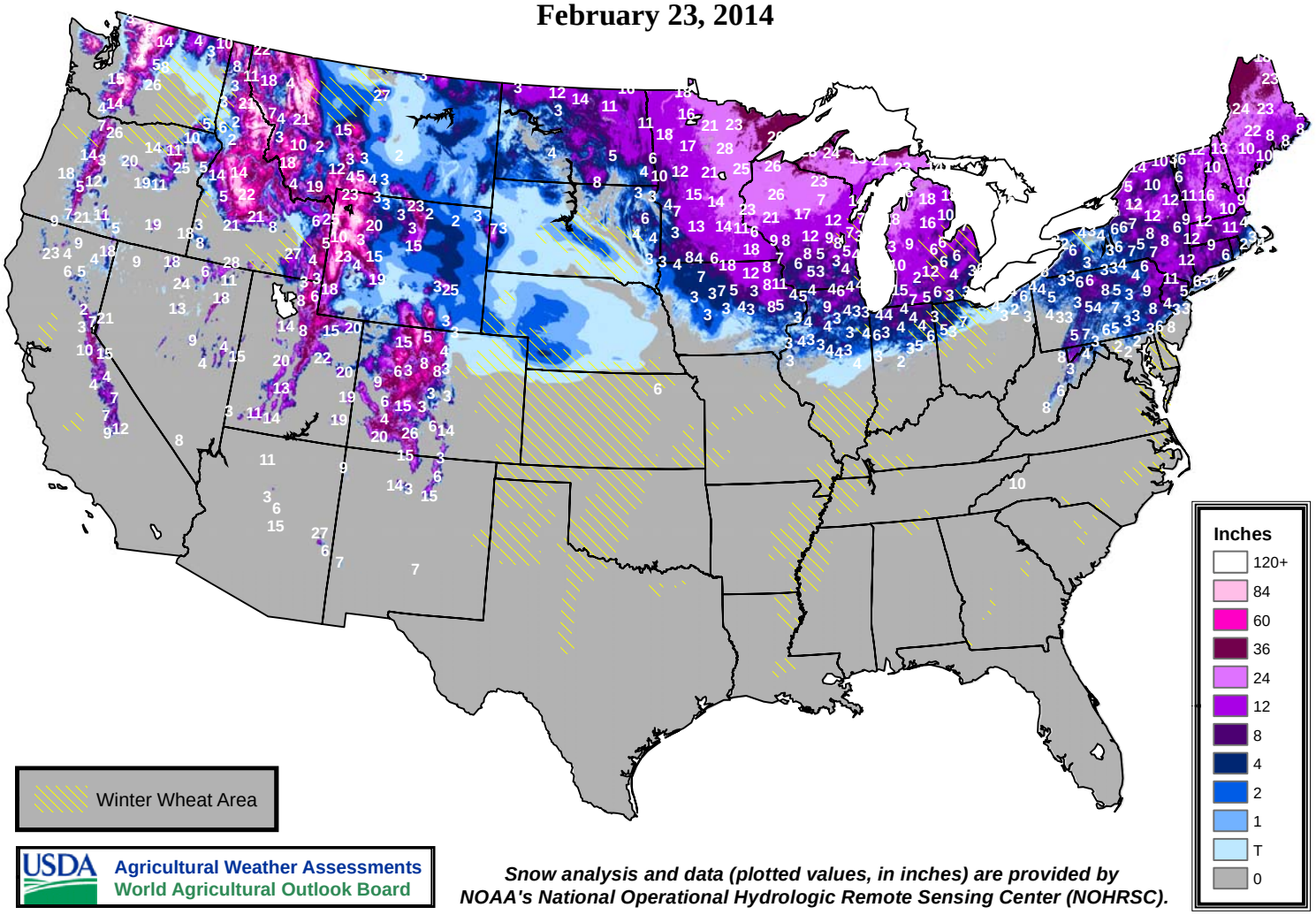


SOUTHEASTERN CANADA

Temperatures were highly variable in January, with bitter cold weather early in the month shifting to warmer-than-normal conditions within a few weeks. As with temperatures, January precipitation was variable, with above-normal amounts in western Ontario contrasting with below-normal precipitation near the Quebec border. During the first week of the month, most areas in Ontario and Quebec recorded temperatures below -20°C. A fresh layer of light snow offered dormant wheat and pastures some protection from the cold in southernmost Ontario, which (according to satellite estimates) had been snow-free prior to the cold. A warming trend quickly followed, allowing temperatures to rise above freezing across the region. The warm-up eroded the protective layer of snow cover in southwestern Ontario, leaving overwintering crops susceptible to damage from bitter cold weather. Temperatures returned to normal later in the month, with nighttime lows again falling below -20°C on several days. In southwestern Ontario, light snow (up to 10 mm liquid equivalent) preceded the return of colder weather, though snow cover may have been patchy and light in some areas, increasing the potential for damage. Most other agricultural districts enjoyed a moderate to deep layer of protective snow cover (estimated greater than 10 cm) for the entire month.

Snow Depth

February 23, 2014



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