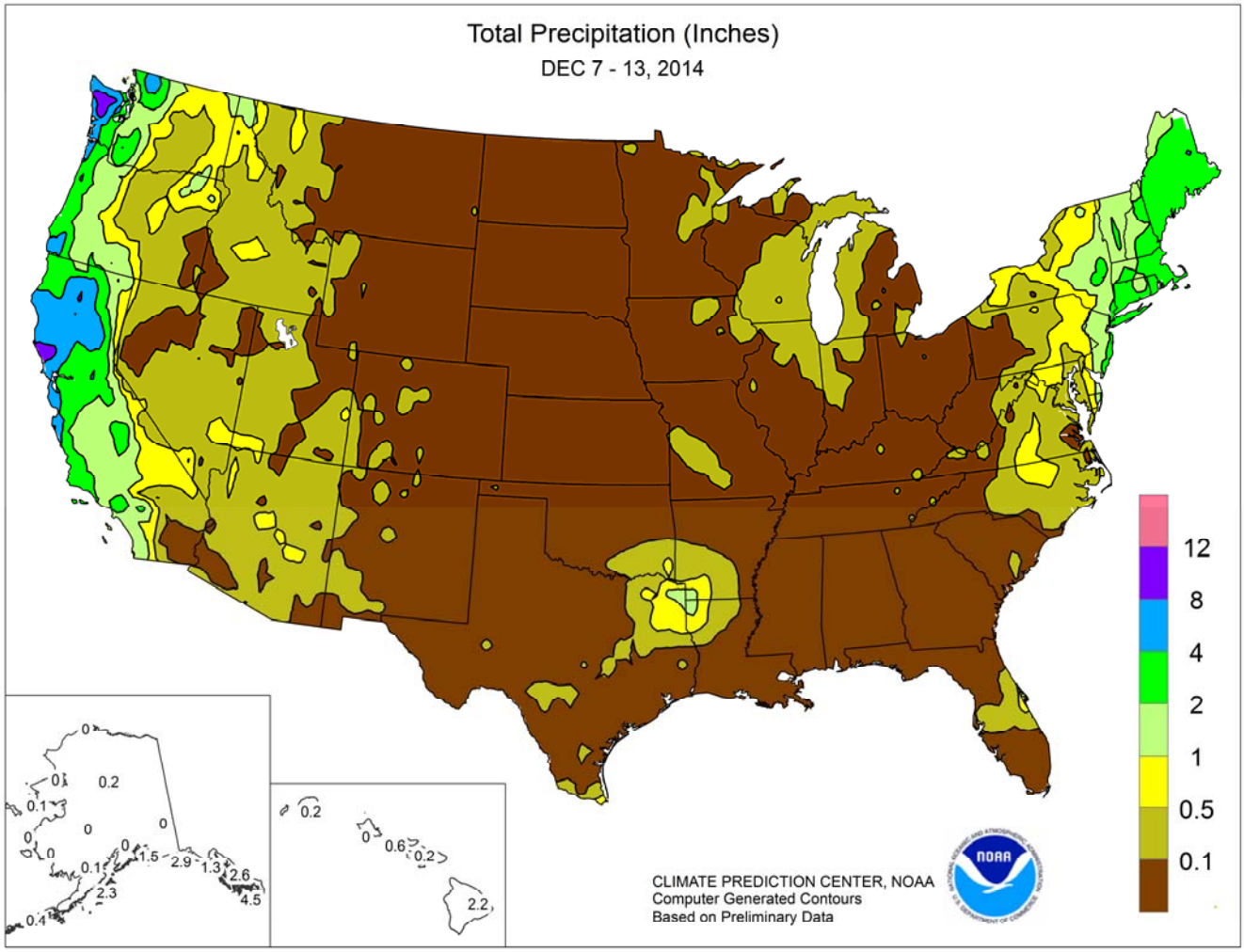
Volume 101, No. 50 http://www.usda.gov/oce/weather December 16, 2014

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

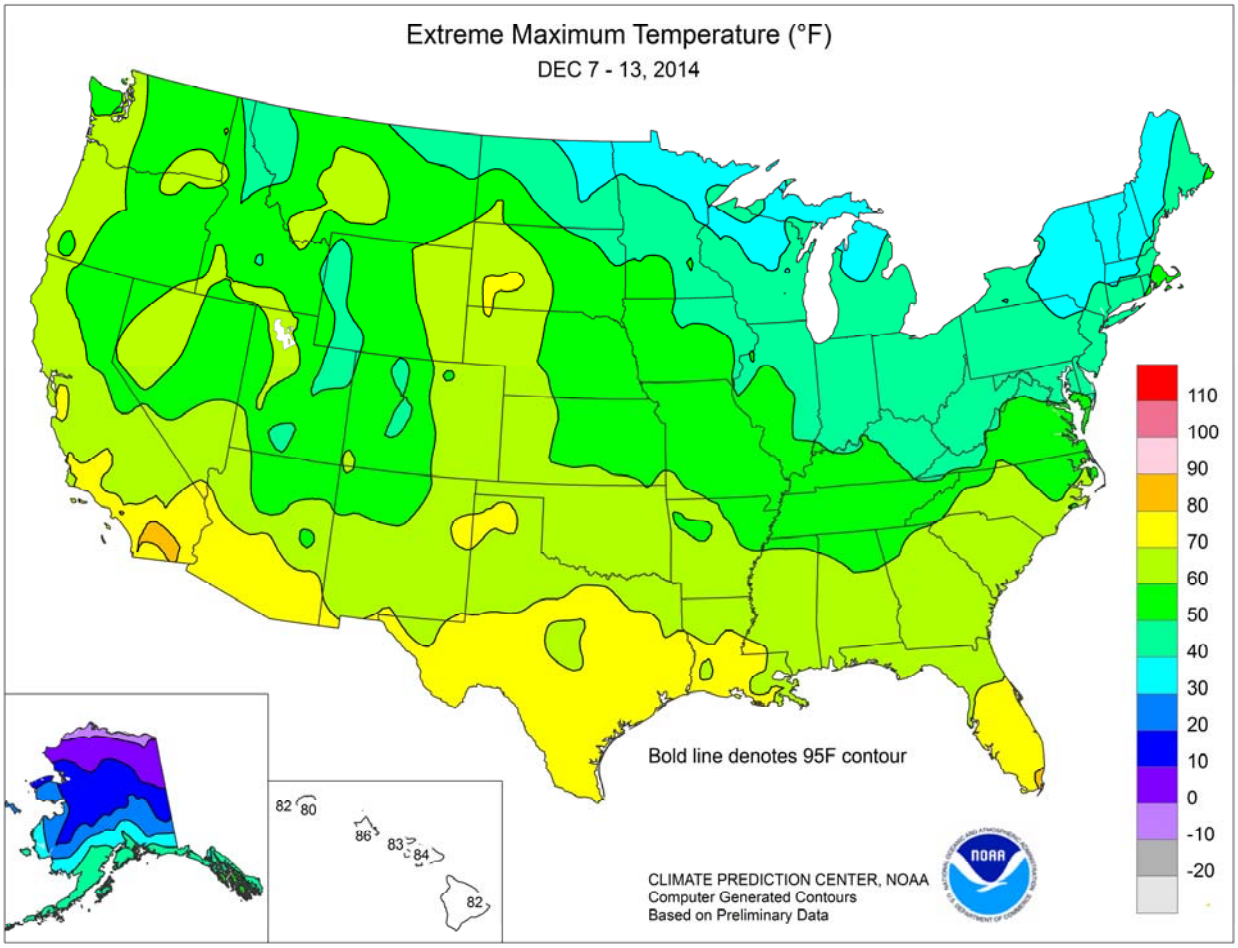
December 7 – 13, 2014

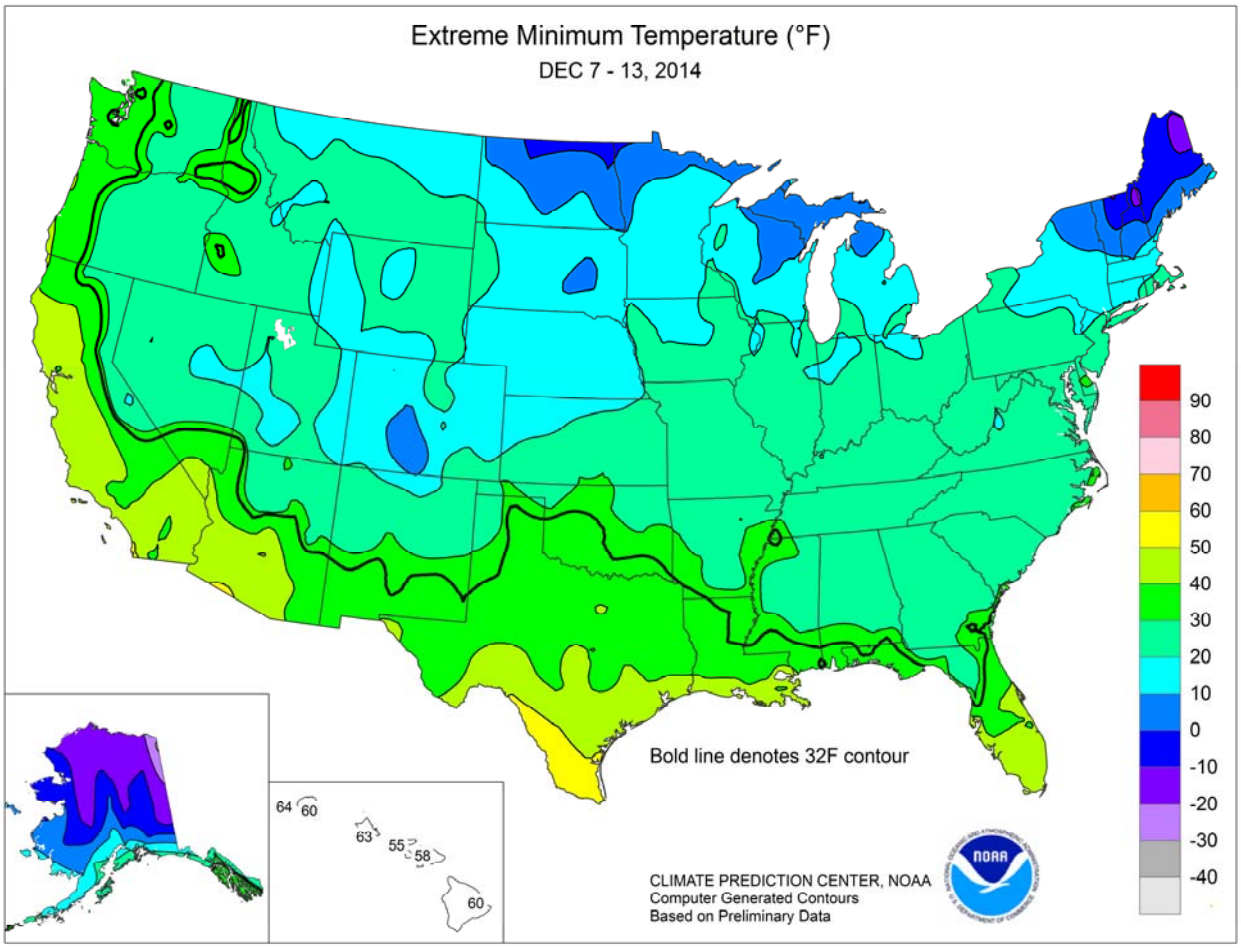
Highlights provided by USDA/WAOB

Drought relief came to **California** in the form of heavy rain and high-elevation snow. The heaviest precipitation struck **California** on December 11, with showers lingering through week's end. Since late November, increasingly wet weather in **California** has boosted topsoil moisture and helped to revive rangeland and pastures. However, the lack of cold air associated with the storms has resulted in only minor snowfall accumulations in the **Sierra Nevada**. Effects from **California's** storminess spread to other parts

(Continued on page3)

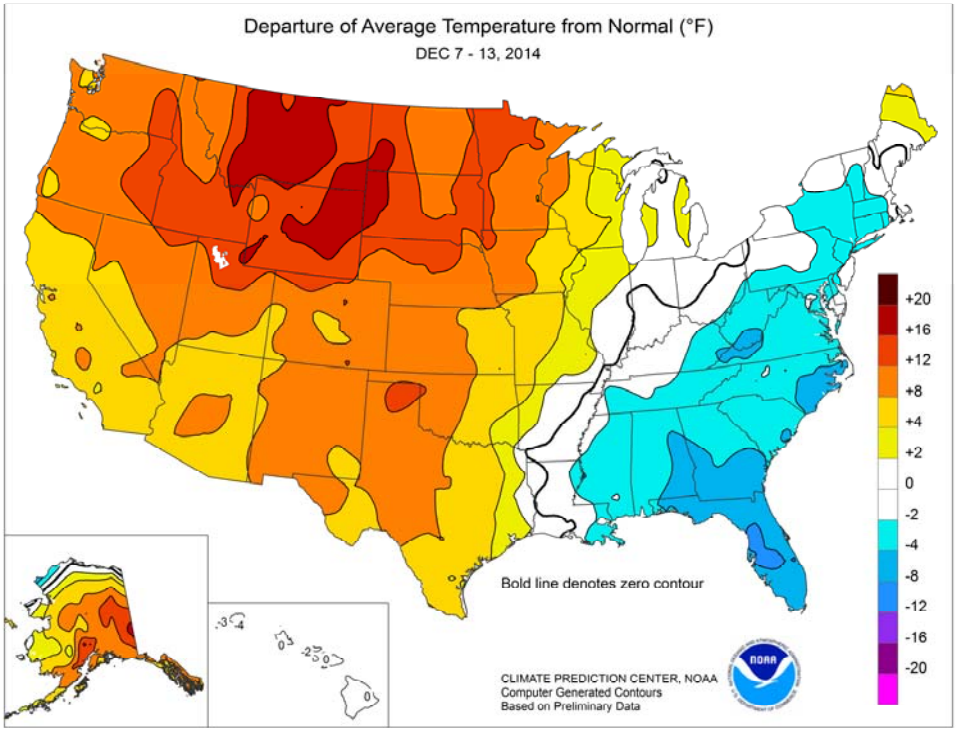
Contents


Extreme Maximum Temperature (°F)
DEC 7 - 13, 2014
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
82
80
86
83
84
82
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
DEC 7 - 13, 2014
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
64
60
63
55
58
60
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)

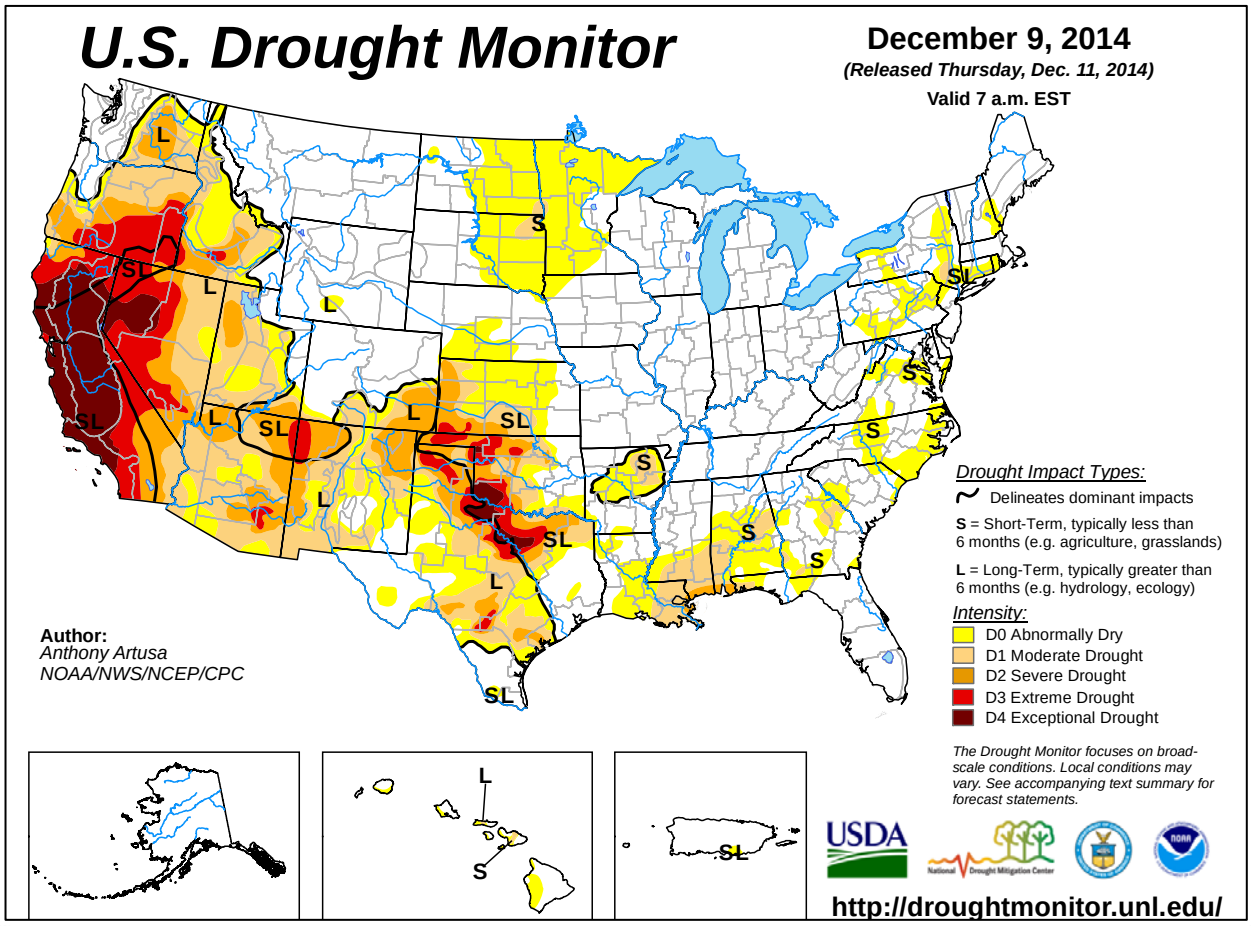
of the **West**, although precipitation was generally light. Briefly heavy precipitation reached the **Pacific Northwest**, but little or no moisture crossed the **Rockies**. As a result, mostly dry weather covered the **central and southeastern U.S.** Across the **Plains**, in particular, unusually mild weather accompanied the dry conditions. In fact, weekly temperatures averaged at least 10°F above normal across a broad area stretching from the **Northwest to the upper Midwest**, and southward through the **High Plains**. The warmth favored late-season fieldwork, including cotton harvesting on the **southern High Plains**, as well as some additional winter wheat development. Dry weather also favored fieldwork in the **Southeast**, although cold conditions lingered. Cool weather was especially prominent in **Florida**, where temperatures averaged as much as 10°F below normal. Multiple freezes were noted—primarily from December 11-13—as far south as **northern Florida**. Elsewhere, a slow-moving storm led to blustery conditions in the **Northeast**, along with widespread, locally heavy rain and snow. Some of the heaviest precipitation (2 inches or more) fell in **New England**, while significant snow (locally in excess of a foot) was primarily confined to the **interior Northeast**.

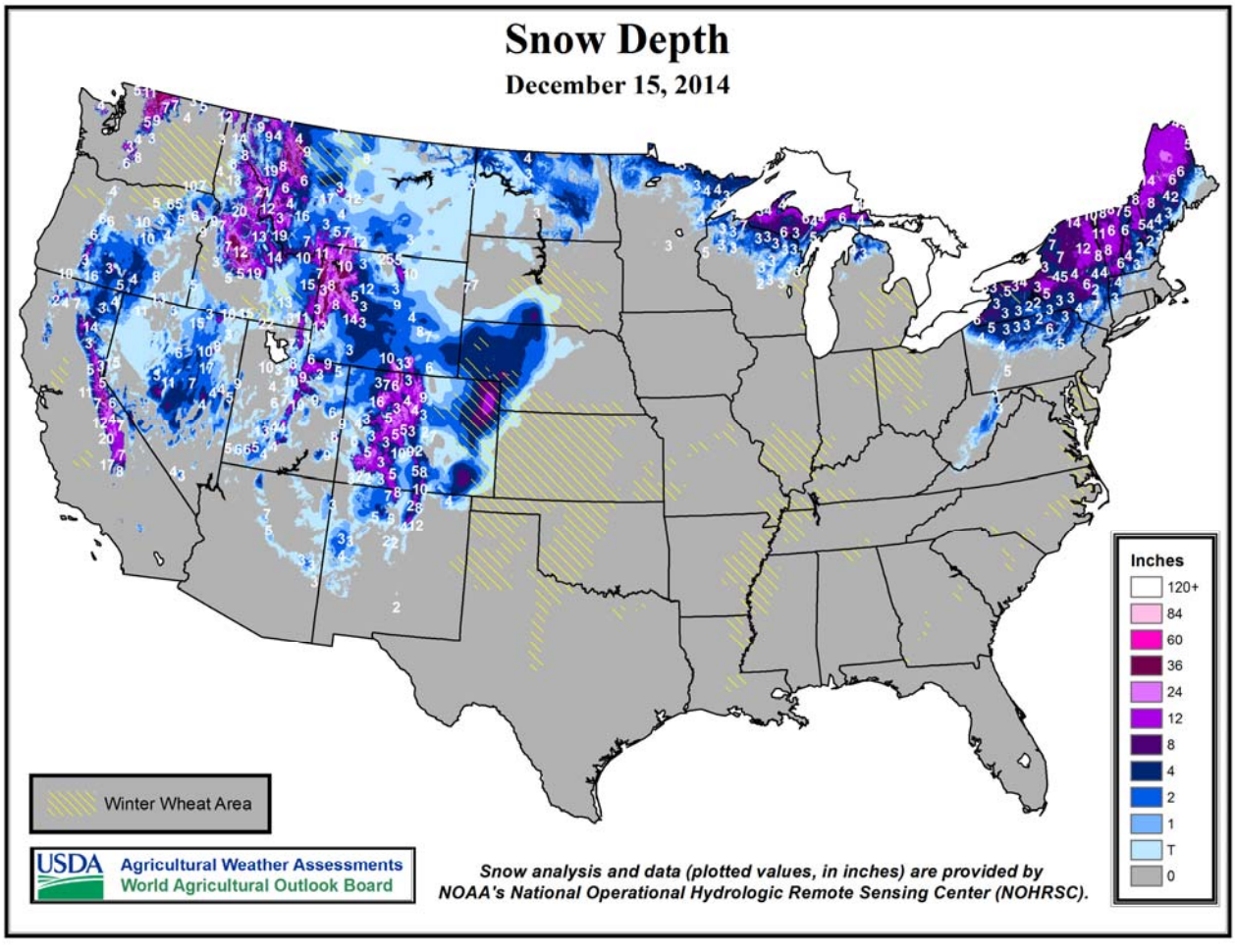


For much of the week, record-setting warmth dominated the **Pacific Northwest**. From December 7-11, **Hoquiam, WA**, posted five consecutive daily-record highs (56, 56, 59, 60, and 60°F). Elsewhere in **Washington**, **Seattle** noted four daily-record highs during the week, including a reading of 66°F on December 10. During the mid- to late-week period, warmth expanded to other areas of the **West**. **Walla Walla, WA**, collected consecutive daily-record highs (71 and 68°F, respectively) on December 10-11. Record-breaking highs for December 11 climbed to 64°F in **Pendleton, OR**; 64°F in **Winnemucca, NV**; and 63°F in **Boise, ID**. By December 12, daily-record highs included 64°F in **Cheyenne, WY**, and 63°F in **Salt Lake City, UT**. Toward week's end, warmth also reached the **Plains**. In **South Dakota**, **Rapid City** logged consecutive daily-record highs of 71°F on December 11-12. Other daily-record highs for December 12 soared to 72°F in **Chadron, NE**, and 63°F in **Great Falls, MT**. Elsewhere in **Montana**, **Livingston** (64°F on December 12) achieved a monthly record high, previously established with maxima of 62°F on December 26, 1980, and December 1, 1995. In **Wyoming**, **Casper** set a December record with highs of 50°F or greater on 11 consecutive days (December 3-13); the previous record of 10 days was set in 1939. Farther east, **Dickinson, ND**, closed the week with consecutive daily-record highs (61 and 60°F, respectively) on December 12-13. In **Nebraska**, monthly records were set on December 13 for the highest minimum temperature in locations such as **Grand Island** (low of 47°F) and **Norfolk** (46°F).

Periods of heavy precipitation in the **Pacific Northwest** led to a weekly rainfall total of 7.89 inches in **Quillayute, WA**. **Quillayute** also received daily-record totals (2.30 and 3.36 inches, respectively) on December 8 and 10. Meanwhile, heavy precipitation developed across the **Northeast** on December 9, when record-setting totals reached 3.04 inches at **JFK Airport, NY**; 2.90 inches in **Boston, MA**; and 2.74 inches in **Providence, RI**. December 9-11 precipitation totaled 2.58 inches in **Albany, NY**, including 11.3 inches of snow. Daily-record snowfall amounts for December 10 climbed to 11.8 inches in **Syracuse, NY**, and 9.4 inches in **Burlington, VT**. December 9-11 snowfall totaled more than a foot in **Syracuse** (14.4 inches) and **Burlington** (15.0 inches). On December 11, the focus for heavy precipitation shifted to **northern California**, where daily-record totals surged to 4.06 inches in **Mt. Shasta City**, 2.88 inches in **Red Bluff**, and 2.39 inches in **Sacramento**. High winds in **California** preceding and accompanying the December 11 rain gusted to 63 mph in **Redding** and 55 mph in **Red Bluff** and **Bakersfield**. In the **central Sierra Nevada**, winds above 100 mph were common, with gusts approaching 150 mph. By December 12, heavy rain moved across **southern California**, where daily-record amounts totaled 2.40 inches in **Camarillo**, 1.57 inches in **Paso Robles**, 1.12 inches in **Bakersfield**, and 1.05 inches in **San Diego**.

Mild, mostly dry weather across the **Alaskan mainland** contrasted with occasional rain and snow in the southeastern part of the state. **King Salmon** opened the week with a daily-record high of 47°F on December 7. Mild weather also prevailed in **southeastern Alaska**, where daily-record highs on December 7 included 55°F on **Annette Island** and 54°F in **Ketchikan**. However, **Annette Island** also received measurable rainfall each day of the week, totaling 4.52 inches. Farther south, cool weather prevailed across **western Hawaii**, where the weekly average temperature was nearly 4°F below normal in **Lihue, Kauai**. Generally mild weather covered the remainder of **Hawaii**, accompanied by late-week showers in windward locations. On the **Big Island**, rainfall in **Hilo** totaled 2.18 inches on December 12-13.


U.S. Drought Monitor
December 9, 2014
(Released Thursday, Dec. 11, 2014)
Valid 7 a.m. EST
Author:
Anthony Artusa
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/


Snow Depth
December 15, 2014
Inches
120+
84
60
36
24
12
8
4
2
1
T
0
Winter Wheat Area
USDA Agricultural Weather Assessments
World Agricultural Outlook Board
Snow analysis and data (plotted values, in inches) are provided by
NOAA's National Operational Hydrologic Remote Sensing Center (NOHRSC).

National Weather Data for Selected Cities

Weather Data for the Week Ending December 13, 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	55	33	60	27	44	-3	0.00	-0.98	0.00	1.79	96	44.40	86	87	41	0	4	0	0
	HUNTSVILLE	52	34	57	27	43	-2	0.00	-1.27	0.00	1.56	65	49.28	91	81	54	0	4	0	0
	MOBILE	62	39	66	33	50	-3	0.00	-1.07	0.00	0.19	9	67.63	106	92	49	0	0	0	0
	MONTGOMERY	61	33	66	28	47	-3	0.00	-1.18	0.00	0.03	1	43.73	84	84	34	0	5	0	0
AK	ANCHORAGE	33	22	39	13	28	10	0.01	-0.23	0.01	0.32	74	18.23	118	85	82	0	7	1	0
	BARROW	-8	-13	-5	-16	-10	-1	0.00	0.00	0.00	0.03	300	7.93	197	80	73	0	7	0	0
	FAIRBANKS	16	4	24	-7	10	15	0.00	-0.15	0.00	0.00	0	16.23	165	75	68	0	7	0	0
	JUNEAU	41	34	44	32	37	7	1.35	0.15	0.45	1.92	88	67.30	122	99	95	0	1	7	0
	KODIAK	43	35	47	27	39	8	2.26	0.64	0.76	5.20	176	80.85	114	95	91	0	4	6	1
	NOME	19	7	29	-7	13	3	0.06	-0.17	0.06	0.20	45	13.85	87	76	66	0	7	1	0
AZ	FLAGSTAFF	49	27	53	25	38	7	0.63	0.24	0.62	2.42	327	19.64	90	95	60	0	7	2	1
	PHOENIX	75	54	78	51	65	10	0.08	-0.11	0.08	0.73	221	8.18	106	81	49	0	0	1	0
	PRESCOTT	59	35	62	32	47	9	0.24	-0.04	0.24	1.81	355	12.12	66	84	43	0	1	1	0
	TUCSON	74	48	78	44	61	8	0.44	0.24	0.44	1.13	332	9.15	80	72	43	0	0	1	0
AR	FORT SMITH	53	39	61	33	46	3	0.00	-0.88	0.00	0.19	11	40.02	95	88	63	0	0	0	0
	LITTLE ROCK	53	38	64	30	45	0	0.03	-1.15	0.03	1.51	66	46.46	96	86	56	0	1	1	0
CA	BAKERSFIELD	67	48	72	46	57	9	1.12	0.98	1.12	1.56	600	3.56	60	90	74	0	0	1	1
	FRESNO	61	47	68	45	54	8	1.38	1.13	1.38	1.80	391	6.96	67	95	84	0	0	1	1
	LOS ANGELES	68	55	75	50	61	3	1.52	1.18	1.50	2.75	451	7.01	59	88	62	0	0	2	1
	REDDING	57	49	60	41	53	7	3.66	2.72	2.35	6.35	365	29.91	98	98	92	0	0	5	2
	SACRAMENTO	59	49	63	44	54	7	2.94	2.44	2.15	6.06	652	16.20	99	98	72	0	0	2	2
	SAN DIEGO	70	57	77	54	63	5	1.05	0.82	1.05	3.58	852	6.84	69	86	65	0	0	1	1
	SAN FRANCISCO	63	54	68	48	58	8	3.81	3.23	3.26	7.62	712	17.66	97	97	86	0	0	3	2
	STOCKTON	59	49	66	43	54	8	2.40	2.03	1.63	3.78	540	11.92	94	98	89	0	0	2	2
CO	ALAMOSA	50	6	55	2	28	9	0.06	0.00	0.06	0.07	54	5.38	76	76	46	0	7	1	0
	CO SPRINGS	58	26	61	22	42	12	0.00	-0.07	0.00	0.02	18	16.89	99	61	17	0	7	0	0
	DENVER INTL	58	28	66	24	43	13	0.00	-0.06	0.00	0.00	0	18.18	135	55	22	0	6	0	0
	GRAND JUNCTION	50	23	52	18	37	7	0.31	0.23	0.31	0.36	200	11.25	130	84	51	0	7	1	0
	PUEBLO	59	18	62	15	38	6	0.00	-0.06	0.00	0.00	0	11.58	95	78	49	0	7	0	0
CT	BRIDGEPORT	40	29	45	21	34	-3	2.16	1.41	2.13	4.18	294	44.70	106	79	61	0	5	3	1
	HARTFORD	37	26	41	17	32	-1	2.02	1.22	1.77	3.35	220	44.61	101	75	63	0	6	3	1
DC	WASHINGTON	47	36	51	31	41	-1	0.33	-0.33	0.32	1.68	135	42.58	113	65	40	0	1	2	0
DE	WILMINGTON	42	33	47	28	38	0	0.39	-0.35	0.30	1.75	124	49.64	122	82	53	0	3	4	0
FL	DAYTONA BEACH	66	47	70	39	56	-6	0.24	-0.34	0.17	0.24	22	61.22	128	92	49	0	0	2	0
	JACKSONVILLE	61	39	68	31	50	-6	0.01	-0.54	0.01	0.01	1	51.73	102	95	50	0	1	1	0
	KEY WEST	71	63	76	56	67	-6	0.00	-0.44	0.00	0.01	1	34.38	91	81	60	0	0	0	0
	MIAMI	72	56	80	48	64	-7	0.00	-0.52	0.00	0.88	88	63.16	110	88	49	0	0	0	0
	ORLANDO	67	48	73	41	57	-7	0.18	-0.34	0.15	0.72	72	54.46	116	91	58	0	0	2	0
	PENSACOLA	63	41	67	37	52	-3	0.00	-0.84	0.00	0.21	13	79.88	129	77	39	0	0	0	0
	TALLAHASSEE	63	37	69	29	50	-5	0.04	-0.79	0.04	0.04	3	59.73	98	80	42	0	4	1	0
	TAMPA	66	50	72	43	58	-6	0.18	-0.34	0.13	0.18	19	56.48	130	87	53	0	0	2	0
	WEST PALM BEACH	72	52	77	46	62	-7	0.00	-0.79	0.00	0.41	25	59.93	100	89	55	0	0	0	0
GA	ATHENS	57	32	67	25	45	-1	0.00	-0.78	0.00	0.18	12	40.92	90	85	41	0	4	0	0
	ATLANTA	56	36	63	32	46	-1	0.00	-0.85	0.00	0.35	21	42.46	88	76	37	0	1	0	0
	AUGUSTA	59	32	68	22	45	-3	0.00	-0.60	0.00	0.04	4	34.53	81	87	48	0	4	0	0
	COLUMBUS	59	35	66	30	47	-4	0.00	-0.98	0.00	0.35	19	47.85	104	81	32	0	1	0	0
	MACON	59	32	66	26	45	-4	0.00	-0.83	0.00	0.02	1	42.61	100	91	34	0	5	0	0
	SAVANNAH	62	40	69	31	51	-2	0.00	-0.53	0.00	0.02	2	46.55	98	77	40	0	2	0	0
HI	HILO	81	64	82	60	72	0	2.22	-0.49	1.73	3.33	61	112.45	93	86	74	0	0	2	1
	HONOLULU	82	68	86	63	75	0	0.00	-0.61	0.00	0.31	28	20.08	122	83	70	0	0	0	0
	KAHULUI	83	64	84	58	74	0	0.17	-0.44	0.17	0.22	20	18.48	110	83	74	0	0	1	0
	LIHUE	77	63	80	60	70	-4	0.16	-0.89	0.09	0.22	11	30.91	84	94	83	0	0	3	0
ID	BOISE	54	38	63	33	46	14	0.19	-0.12	0.18	0.95	161	13.06	115	76	58	0	0	2	0
	LEWISTON	54	41	66	34	48	13	0.35	0.13	0.33	0.83	189	11.08	91	85	72	0	0	2	0
	POCATELLO	52	29	59	23	41	14	0.24	0.01	0.23	0.28	64	12.16	102	88	73	0	6	2	0
IL	CHICAGO/O'HARE	37	28	47	23	33	3	0.20	-0.39	0.20	0.20	17	38.88	111	85	76	0	6	1	0
	MOLINE	39	25	51	20	32	3	0.04	-0.49	0.04	0.05	5	38.62	105	86	75	0	7	1	0
	PEORIA	39	29	52	22	34	3	0.09	-0.52	0.09	0.11	9	38.64	111	82	69	0	5	1	0
	ROCKFORD	36	27	45	22	31	4	0.15	-0.37	0.15	0.15	15	32.72	92	87	77	0	7	1	0
	SPRINGFIELD	40	29	54	22	35	2	0.03	-0.59	0.03	0.68	58	44.17	129	90	70	0	5	1	0
IN	EVANSVILLE	44	32	50	23	38	0	0.00	-0.89	0.00	1.96	114	45.73	108	78	68	0	2	0	0
	FORT WAYNE	38	26	45	21	32	0	0.08	-0.59	0.05	0.46	37	41.58	119	93	76	0	6	2	0
	INDIANAPOLIS	39	28	46	22	34	0	0.07	-0.67	0.06	1.04	73	40.05	102	89	71	0	6	2	0
	SOUTH BEND	38	27	49	19	33	2	0.19	-0.56	0.18	0.19	13	40.15	106	87	75	0	5	2	0
IA	BURLINGTON	38	29	48	24	34	3	0.07	-0.46	0.07	0.07	7	39.88	108	92	75	0	7	1	0
	CEDAR RAPIDS	37	28	53	23	33	7	0.01	-0.37	0.01	0.01	1	37.91	116	95	76	0	6	1	0
	DES MOINES	43	31	57	23	37	9	0.00	-0.32	0.00	0.00	0	40.94	120	85	72	0	5	0	0
	DUBUQUE	34	25	43	21	30	5	0.15	-0.27	0.15	0.15	18	36.71	106	95	78	0	7	1	0
	SIOUX CITY	43	29	56	20	36	11	0.00	-0.15	0.00	0.00	0	39.96	156	88	78	0	5	0	0
	WATERLOO	37	26	50	19	32	8	0.05	-0.23	0.05	0.05	9	33.31	102	95	83	0	7	1	0
KS	CONCORDIA	47	32	58	20	40	8	0.00	-0.20	0.00	0.01	3	26.47	95	95	81	0	3	0	0
	DODGE CITY	52	37	60	26	44	9	0.00	-0.17	0.00	0.47	152	22.66	104	93	73	0	3	0	0
	GOODLAND	57	25	66	14	41	10	0.00	-0.07	0.00	0.00	0	16.41	84	86	59	0	5	0	0
	TOPEKA	47	36	57	27	41	7	0.05	-0.30	0.03	1.09	156	29.97	86	92	81	0	2	2	0

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

Weather Data for the Week Ending December 13, 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
	WICHITA	51	39	60	30	45	10	0.03	-0.28	0.03	0.60	100	24.90	84	88	71	0	2	1	0
KY	JACKSON	42	31	46	24	37	-3	0.03	-0.99	0.02	1.57	82	52.94	113	83	53	0	4	2	0
	LEXINGTON	43	31	48	21	37	-1	0.02	-0.89	0.02	2.61	154	53.50	123	85	67	0	4	1	0
	LOUISVILLE	46	34	51	25	40	0	0.01	-0.86	0.01	2.58	157	42.28	100	78	58	0	2	1	0
	PADUCAH	46	32	51	23	39	0	0.00	-1.09	0.00	1.00	48	44.94	96	90	60	0	4	0	0
LA	BATON ROUGE	66	41	72	36	54	1	0.01	-1.15	0.01	0.01	0	56.02	93	90	39	0	0	1	0
	LAKE CHARLES	67	44	71	41	55	1	0.00	-1.00	0.00	0.01	1	66.60	122	93	49	0	0	0	0
	NEW ORLEANS	64	46	69	42	55	-1	0.00	-1.20	0.00	0.00	0	50.78	83	80	53	0	0	0	0
	SHREVEPORT	59	43	71	37	51	1	1.05	0.02	0.75	1.26	65	38.71	80	92	59	0	0	2	1
ME	CARIBOU	31	17	40	-12	24	4	2.51	1.82	1.13	3.13	241	43.54	123	89	74	0	4	5	2
	PORTLAND	37	26	42	11	31	1	2.74	1.78	1.95	3.86	212	53.46	123	85	67	0	5	4	2
MD	BALTIMORE	43	32	49	27	37	-2	0.76	0.04	0.68	1.94	144	50.94	128	78	49	0	4	3	1
MA	BOSTON	41	29	49	18	35	-2	3.29	2.46	2.91	5.00	318	43.69	108	89	69	0	6	5	1
	WORCESTER	33	23	37	12	28	-3	1.78	0.95	1.53	3.52	224	52.21	112	94	73	0	7	3	1
MI	ALPENA	35	23	40	11	29	2	0.07	-0.33	0.07	0.08	11	33.17	121	96	71	0	7	1	0
	GRAND RAPIDS	37	26	43	20	32	2	0.11	-0.57	0.06	0.12	9	38.78	108	89	68	0	6	2	0
	HOUGHTON LAKE	35	21	38	11	28	2	0.06	-0.34	0.06	0.09	12	29.64	108	91	75	0	7	1	0
	LANSING	37	25	43	18	31	2	0.15	-0.40	0.15	0.15	14	36.06	119	89	71	0	6	1	0
	MUSKEGON	38	29	44	20	34	3	0.34	-0.29	0.32	0.37	30	37.25	118	87	73	0	6	2	0
	TRAVERSE CITY	36	24	40	16	30	1	0.23	-0.35	0.21	0.23	21	37.67	118	93	66	0	6	2	0
MN	DULUTH	31	24	41	16	27	10	0.17	-0.07	0.16	0.17	32	29.52	97	88	82	0	6	2	0
	INT'L FALLS	30	21	37	9	26	14	0.20	0.03	0.15	0.20	59	29.59	125	93	82	0	6	2	0
	MINNEAPOLIS	35	24	51	15	29	7	0.02	-0.21	0.01	0.02	4	34.58	120	92	80	0	6	2	0
	ROCHESTER	33	25	45	20	29	9	0.01	-0.25	0.01	0.01	2	32.23	104	96	87	0	6	1	0
	ST. CLOUD	35	26	44	12	30	13	0.06	-0.09	0.04	0.06	19	36.02	135	89	76	0	5	2	0
MS	JACKSON	60	37	68	30	48	-1	0.00	-1.19	0.00	0.05	2	52.32	99	92	48	0	2	0	0
	MERIDIAN	59	35	65	28	47	-3	0.00	-1.19	0.00	0.20	9	45.81	82	93	55	0	3	0	0
	TUPELO	53	35	61	30	44	-1	0.00	-1.40	0.00	1.81	70	53.81	103	83	56	0	2	0	0
MO	COLUMBIA	44	33	55	29	39	5	0.03	-0.61	0.03	1.26	100	43.20	111	92	73	0	3	1	0
	KANSAS CITY	44	33	56	23	39	6	0.03	-0.38	0.03	0.67	83	38.83	104	95	79	0	2	1	0
	SAINT LOUIS	45	34	56	29	39	3	0.00	-0.72	0.00	1.46	103	42.16	113	77	67	0	3	0	0
	SPRINGFIELD	48	35	57	27	42	4	0.02	-0.84	0.01	0.50	29	37.32	86	90	77	0	2	2	0
MT	BILLINGS	54	37	60	28	46	19	0.00	-0.11	0.00	0.00	0	13.35	93	62	40	0	2	0	0
	BUTTE	47	26	53	18	36	17	0.18	0.07	0.18	0.18	90	14.45	116	87	46	0	6	1	0
	CUT BANK	47	31	56	16	39	16	0.05	-0.01	0.05	0.05	45	14.98	122	83	58	0	3	1	0
	GLASGOW	40	25	46	14	32	14	0.03	-0.03	0.03	0.03	30	14.93	136	87	77	0	6	1	0
	GREAT FALLS	55	36	63	26	46	20	0.13	0.02	0.13	0.18	86	19.19	133	70	36	0	3	1	0
	HAVRE	47	24	57	16	36	15	0.01	-0.08	0.01	0.01	6	11.38	102	86	72	0	7	1	0
	MISSOULA	38	27	47	24	33	9	0.07	-0.18	0.02	0.37	82	14.75	112	93	82	0	7	1	0
NE	GRAND ISLAND	45	29	57	13	37	10	0.00	-0.17	0.00	0.00	0	26.79	105	93	83	0	4	0	0
	LINCOLN	45	31	58	15	38	9	0.00	-0.20	0.00	0.00	0	33.52	120	88	75	0	4	0	0
	NORFOLK	43	29	56	15	36	10	0.00	-0.17	0.00	0.00	0	28.51	108	91	76	0	5	0	0
	NORTH PLATTE	51	25	60	12	38	11	0.00	-0.08	0.00	0.00	0	20.48	105	93	57	0	5	0	0
	OMAHA	44	32	55	21	38	10	0.01	-0.23	0.01	0.01	2	37.47	126	90	80	0	5	1	0
	SCOTTSBLUFF	55	21	60	18	38	11	0.00	-0.13	0.00	0.00	0	17.79	111	90	61	0	7	0	0
	VALENTINE	58	22	62	13	40	15	0.00	-0.07	0.00	0.00	0	20.89	108	87	60	0	6	0	0
NV	ELY	52	26	58	19	39	12	0.20	0.12	0.13	0.32	213	8.85	92	85	62	0	5	2	0
	LAS VEGAS	65	48	68	46	57	9	0.04	-0.03	0.04	0.28	233	1.79	43	65	47	0	0	1	0
	RENO	53	34	63	27	43	9	0.00	-0.19	0.00	0.69	192	4.75	68	83	62	0	5	0	0
	WINNEMUCCA	52	30	64	24	41	10	0.05	-0.12	0.05	0.12	39	7.51	96	80	64	0	5	1	0
NH	CONCORD	35	23	38	6	29	0	1.73	1.06	1.10	3.14	243	44.10	123	91	70	0	6	3	1
NJ	NEWARK	41	31	45	23	36	-3	1.35	0.55	1.34	3.12	204	47.54	108	77	56	0	4	2	1
NM	ALBUQUERQUE	59	35	61	32	47	10	0.52	0.44	0.40	0.94	627	8.61	94	83	41	0	1	2	0
NY	ALBANY	33	23	36	12	28	-3	2.59	1.97	1.61	3.70	311	38.02	104	81	64	0	7	4	2
	BINGHAMTON	30	22	34	15	26	-4	0.82	0.09	0.39	1.99	143	38.30	104	92	76	0	7	4	0
	BUFFALO	36	27	45	23	31	-1	0.56	-0.33	0.44	0.90	53	41.16	107	84	63	0	6	3	0
	ROCHESTER	36	26	46	21	31	-1	0.78	0.14	0.63	1.29	107	31.94	98	82	68	0	7	3	1
	SYRACUSE	32	23	37	18	27	-4	1.08	0.31	0.81	1.82	121	39.30	102	92	74	0	7	3	1
NC	ASHEVILLE	47	31	57	28	39	-2	0.02	-0.73	0.02	0.07	5	44.57	99	72	43	0	5	1	0
	CHARLOTTE	55	30	66	22	43	-3	0.14	-0.52	0.14	0.30	24	43.19	104	76	29	0	4	1	0
	GREENSBORO	51	32	61	26	42	-1	0.30	-0.36	0.28	0.46	37	34.61	84	72	32	0	4	2	0
	HATTERAS	52	41	60	34	47	-5	0.54	-0.37	0.47	1.14	66	60.53	110	94	66	0	0	4	0
	RALEIGH	51	30	60	26	41	-4	0.68	0.05	0.52	0.84	71	51.12	124	77	45	0	4	2	1
	WILMINGTON	56	36	61	29	46	-5	0.12	-0.70	0.07	0.34	22	55.12	101	90	46	0	3	2	0
ND	BISMARCK	41	17	49	8	29	11	0.00	-0.08	0.00	0.00	0	13.81	83	91	80	0	7	0	0
	DICKINSON	50	28	61	19	39	19	0.00	-0.08	0.00	0.00	0	21.79	135	85	51	0	6	0	0
	FARGO	35	24	45	5	30	15	0.01	-0.10	0.01	0.01	5	19.95	96	89	79	0	6	1	0
	GRAND FORKS	32	20	39	1	26	12	0.01	-0.10	0.01	0.03	14	22.87	119	94	80	0	7	1	0
	JAMESTOWN	31	21	39	12	26	10	0.00	-0.08	0.00	0.00	0	21.00	115	95	83	0	7	0	0
	WILLISTON	41	19	47	8	30	15	0.01	-0.10	0.01	0.01	4	10.67	77	92	73	0	7	1	0
OH	AKRON-CANTON	38	28	43	24	33	0	0.08	-0.62	0.03	1.13	84	44.51	121	83	64	0	6	3	0
	CINCINNATI	43	31	48	23	37	0	0.08	-0.67	0.07	2.13	151	40.82	100	77	58	0	4	2	0
	CLEVELAND	39	29	46	24	34	1	0.09	-0.68	0.04	0.96	65	43.18	117	85	63	0	6	3	0
	COLUMBUS	42	28	45	21	35	-1	0.00	-0.70	0.00	1.57	116	36.96	100	83	59	0	5	0	0
	DAYTON	42	28	47	20	35	1	0.05	-0.67	0.03	1.69	123	34.86	92	90	66	0	5	2	0
	MANSFIELD	38	26	44	20	32	0	0.02	-0.77	0.02	1.00	66	35.66	86	93	64	0	5	1	0

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

Weather Data for the Week Ending December 13, 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
	TOLEDO	38	25	45	18	31	-1	0.10	-0.54	0.09	0.15	12	30.76	97	91	69	0	6	2	0
	YOUNGSTOWN	38	29	45	27	34	1	0.02	-0.70	0.02	1.08	78	38.03	104	84	64	0	6	1	0
OK	OKLAHOMA CITY	58	42	67	33	50	9	0.00	-0.41	0.00	0.14	18	27.81	80	91	65	0	0	0	0
	TULSA	55	41	65	28	48	6	0.00	-0.62	0.00	0.27	22	27.88	68	90	72	0	1	0	0
OR	ASTORIA	59	46	63	38	53	10	3.48	1.02	2.21	4.12	89	66.41	108	88	77	0	0	6	2
	BURNS	47	31	54	23	39	13	0.13	-0.15	0.10	0.73	143	9.18	94	90	77	0	6	3	0
	EUGENE	56	41	62	34	48	8	1.20	-0.78	0.56	2.81	74	36.59	79	94	87	0	0	3	1
	MEDFORD	56	42	64	34	49	10	0.79	0.10	0.27	0.90	68	18.86	112	96	70	0	0	6	0
	PENDLETON	52	39	64	31	45	10	0.71	0.38	0.66	1.26	197	11.70	98	89	70	0	1	3	1
	PORTLAND	54	43	64	35	48	7	1.29	-0.06	0.61	3.02	118	37.07	109	95	82	0	0	4	1
	SALEM	58	42	63	34	50	9	1.43	-0.12	0.73	2.85	97	37.16	102	94	83	0	0	4	1
PA	ALLENTOWN	39	28	45	19	34	0	1.09	0.32	1.06	1.95	133	43.01	99	73	58	0	7	3	1
	ERIE	39	31	44	27	35	0	0.42	-0.49	0.29	1.10	64	39.41	97	74	63	0	5	3	0
	MIDDLETOWN	39	29	45	23	34	-2	0.49	-0.29	0.34	1.85	124	42.24	109	84	54	0	6	3	0
	PHILADELPHIA	42	33	48	27	38	-2	0.70	-0.03	0.65	2.15	157	46.25	115	68	53	0	2	3	1
	PITTSBURGH	38	28	45	25	33	-2	0.00	-0.67	0.00	1.84	144	36.04	99	86	60	0	7	0	0
	WILKES-BARRE	35	27	39	23	31	-3	0.71	0.10	0.37	1.92	161	29.99	83	81	59	0	7	3	0
	WILLIAMSPORT	38	28	44	22	33	0	0.32	-0.40	0.20	1.95	139	36.52	91	80	60	0	7	3	0
RI	PROVIDENCE	40	28	49	21	34	-2	3.23	2.30	2.74	4.61	263	45.29	103	85	68	0	6	3	1
SC	BEAUFORT	60	38	67	30	49	-3	0.00	-0.60	0.00	0.09	8	48.31	101	87	41	0	3	0	0
	CHARLESTON	59	37	67	27	48	-4	0.11	-0.54	0.11	0.26	22	49.85	101	87	41	0	3	1	0
	COLUMBIA	58	33	67	24	46	-2	0.01	-0.65	0.01	0.04	3	38.35	83	83	39	0	4	1	0
	GREENVILLE	55	35	68	28	45	0	0.00	-0.83	0.00	0.46	30	46.72	98	71	30	0	3	0	0
SD	ABERDEEN	38	23	51	12	31	12	0.00	-0.06	0.00	0.00	0	17.54	88	89	84	0	6	0	0
	HURON	43	23	58	7	33	12	0.00	-0.08	0.00	0.00	0	15.68	76	93	68	0	6	0	0
	RAPID CITY	57	26	71	21	42	16	0.00	-0.06	0.00	0.00	0	21.11	129	82	35	0	7	0	0
	SIOUX FALLS	39	27	53	19	33	12	0.00	-0.12	0.00	0.00	0	27.93	114	91	82	0	5	0	0
TN	BRISTOL	45	27	50	19	36	-3	0.00	-0.77	0.00	1.28	89	36.38	92	89	47	0	5	0	0
	CHATTANOOGA	50	33	55	27	41	-3	0.00	-1.09	0.00	0.74	35	41.61	80	83	53	0	4	0	0
	KNOXVILLE	46	31	51	22	39	-4	0.04	-0.96	0.00	1.48	79	38.89	85	82	51	0	3	1	0
	MEMPHIS	52	39	59	33	46	1	0.00	-1.41	0.00	1.56	58	56.60	110	78	54	0	0	0	0
	NASHVILLE	48	33	55	22	40	-2	0.00	-1.07	0.00	1.44	71	48.81	107	87	54	0	3	0	0
TX	ABILENE	66	50	71	39	58	11	0.00	-0.26	0.00	0.00	0	14.49	63	89	70	0	0	0	0
	AMARILLO	63	37	70	31	50	12	0.00	-0.10	0.00	0.02	12	19.29	100	96	52	0	1	0	0
	AUSTIN	67	46	73	34	57	4	0.18	-0.36	0.09	0.24	24	27.59	86	92	70	0	0	2	0
	BEAUMONT	69	46	72	41	58	3	0.01	-1.12	0.01	0.03	1	48.74	86	95	53	0	0	1	0
	BROWNSVILLE	76	60	78	56	68	6	0.87	0.61	0.48	0.88	176	28.04	104	94	67	0	0	2	0
	CORPUS CHRISTI	71	56	78	47	63	4	0.10	-0.27	0.10	0.21	31	28.53	92	92	67	0	0	1	0
	DEL RIO	67	57	73	52	62	9	0.04	-0.13	0.04	0.04	13	15.48	87	90	77	0	0	1	0
	EL PASO	70	44	72	41	57	11	0.00	-0.17	0.00	0.00	0	8.45	94	71	39	0	0	0	0
	FORT WORTH	61	46	71	36	54	6	0.00	-0.56	0.00	0.03	3	20.21	61	96	71	0	0	0	0
	GALVESTON	66	56	70	50	61	2	0.01	-0.77	0.01	0.35	23	28.36	68	95	68	0	0	1	0
	HOUSTON	69	50	75	42	60	5	0.02	-0.81	0.02	0.13	8	38.25	84	92	62	0	0	1	0
	LUBBOCK	63	41	66	32	52	11	0.00	-0.14	0.00	0.00	0	22.17	121	95	78	0	1	0	0
	MIDLAND	63	48	72	39	55	9	0.01	-0.13	0.01	0.01	4	7.46	52	94	80	0	0	1	0
	SAN ANGELO	67	49	71	39	58	11	0.00	-0.20	0.00	0.00	0	16.35	80	90	72	0	0	0	0
	SAN ANTONIO	70	54	73	46	62	8	0.63	0.19	0.63	0.75	91	27.69	87	88	59	0	0	1	1
	VICTORIA	72	51	79	43	62	6	0.00	-0.55	0.00	0.14	14	28.11	73	92	61	0	0	0	0
	WACO	63	44	70	34	53	3	0.01	-0.62	0.01	0.03	3	29.59	93	94	75	0	0	1	0
	WICHITA FALLS	60	45	68	38	53	9	0.01	-0.36	0.01	0.01	1	22.82	82	96	84	0	0	1	0
UT	SALT LAKE CITY	56	36	63	30	46	14	0.06	-0.20	0.06	0.11	22	13.18	84	77	42	0	2	1	0
VT	BURLINGTON	32	22	36	8	27	-1	1.57	1.05	0.86	1.99	191	35.47	102	85	70	0	7	4	1
VA	LYNCHBURG	48	30	57	23	39	-1	0.45	-0.26	0.39	1.46	111	43.07	104	78	36	0	5	2	0
	NORFOLK	48	37	54	30	43	-3	0.15	-0.46	0.10	0.48	42	47.08	107	81	51	0	1	2	0
	RICHMOND	50	31	55	27	40	-2	0.03	-0.62	0.03	0.49	41	33.09	79	78	41	0	4	1	0
	ROANOKE	48	32	57	28	40	-1	0.04	-0.61	0.03	1.06	85	37.93	93	66	41	0	4	2	0
	WASH/DULLES	42	29	48	23	36	-2	0.52	-0.17	0.41	1.66	128	44.46	111	76	51	0	6	2	0
WA	OLYMPIA	54	39	64	32	47	9	2.29	0.42	0.99	2.61	74	51.12	110	97	85	0	1	5	1
	QUILLAYUTE	56	45	59	35	51	10	7.89	4.49	3.44	8.98	140	99.91	107	98	88	0	0	7	4
	SEATTLE-TACOMA	58	46	66	40	52	11	1.53	0.19	0.60	1.97	77	45.66	134	84	66	0	0	4	1
	SPOKANE	48	37	57	29	42	14	1.48	0.94	0.98	1.82	180	14.84	96	95	76	0	1	5	1
	YAKIMA	49	35	53	27	42	12	0.23	-0.07	0.13	0.47	85	6.06	82	88	76	0	2	3	0
WV	BECKLEY	37	27	42	23	32	-5	0.15	-0.54	0.08	1.61	126	38.72	97	86	59	0	7	2	0
	CHARLESTON	43	30	45	27	37	-2	0.00	-0.78	0.00	2.12	141	45.46	108	83	52	0	6	0	0
	ELKINS	40	26	48	20	33	-2	0.14	-0.65	0.14	2.88	193	41.26	93	92	52	0	6	1	0
	HUNTINGTON	42	31	46	24	36	-3	0.03	-0.73	0.03	2.54	178	47.82	118	84	55	0	6	1	0
WI	EAU CLAIRE	33	24	44	13	28	7	0.00	-0.25	0.00	0.00	0	42.30	134	92	76	0	6	0	0
	GREEN BAY	33	22	41	11	28	4	0.25	-0.10	0.25	0.27	38	30.71	108	93	79	0	6	1	0
	LA CROSSE	36	27	45	22	32	7	0.14	-0.17	0.14	0.14	22	36.73	116	90	72	0	6	1	0
	MADISON	35	25	44	16	30	4	0.23	-0.19	0.23	0.23	28	34.51	107	91	80	0	7	1	0
	MILWAUKEE	37	28	47	21	32	3	0.17	-0.37	0.17	0.20	19	31.28	93	84	73	0	5	1	0
WY	CASPER	56	32	60	23	44	19	0.00	-0.14	0.00	0.00	0	10.86	86	56	36	0	4	0	0
	CHEYENNE	57	27	64	25	42	14	0.00	-0.10	0.00	0.02	10	17.12	113	62	28	0	7	0	0
	LANDER	51	26	56	22	38	16	0.00	-0.14	0.00	0.00	0	9.88	75	72	35	0	6	0	0
	SHERIDAN	50	26	60	20	38	14	0.00	-0.14	0.00	0.00	0	14.34	100	83	59	0	5	0	0

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

December 8 – 14, 2014

Weekly National Agricultural Summary provided by USDA/NASS

Average temperatures were above normal in the western U.S., especially in the northern Rocky Mountains, where temperatures were as much as 15 to 20°F above normal. Conversely, most areas of the eastern U.S. experienced below-average temperatures. Many locations across the nation received near- or below-normal levels of precipitation, with the exception of northern California, northwestern Washington, and eastern Maine. Parts of California received weekly precipitation totals in excess of 5 inches.

In Arizona, cotton harvest was 85 percent complete, identical to both last year and the 5-year average. Alfalfa conditions were mostly fair to excellent, depending on location. Harvesting occurred on three-fourths of the alfalfa acreage across the state. There were 7.0 days suitable for fieldwork, while most areas of the state received much-needed rain. Rangeland conditions varied widely from very poor to good, depending on location. Central Arizona growers shipped broccoli, Bok Choy, Chinese cabbage, red and green cabbage, cantaloupes, cilantro, collard greens, dandelion greens, kale, lemons, mustard, parsley, turnips, Swiss chard, and spinach. Western Arizona growers shipped anise, arugula, broccoli, Bok Choy, cauliflower, celery, Chinese cabbage, red and green cabbage, cilantro, endive, escarole, kale, various lettuce (including Boston, iceberg, romaine, green and red leaf lettuce), parsley, and spinach.

Every day, various locations in California received some precipitation. The heaviest precipitation occurred on Thursday, when a strong Pacific storm slammed into the state, battering parts of the Sierra Nevada with wind gusts to 100 mph or greater and deluging other areas with more than 5 inches of rain. Parts of the Sierra Nevada received nearly 3 feet of snow during this event. The mountain snowpack has become established, with some locations around Lake Tahoe reporting nearly 4 feet of snow depth. The southern part of the state received around a half-inch to an inch of precipitation at most locations. The exception was the extreme south and southeast, where very little rainfall occurred. Wheat was in excellent condition, except in flooded areas where standing water had the potential to drown newly emerged plants. Emergence was considered excellent due to recent rainfall. Ninety percent of wheat was emerged and condition was rated as 80 percent good to excellent. Pasture and rangeland condition was 30 percent good to excellent. The last cutting of alfalfa for silage was ongoing. Field preparation and planting of winter wheat for grain and silage continued. Planted winter forage crops continued to grow and received a boost from recent rains. Fields were being prepared for winter crops. Cotton producers were working to comply with the Cotton Plowdown Regulations, whereby all fields must be shredded and disked by December 20, 2014. The last cutting of alfalfa for silage was ongoing. Grapes and other fruit were pruned and herbicides were applied. Olive and table grape harvest neared completion. Vines were not pruned yet, as most still had leaves. Due to heavy rains, most field and orchard work was halted. Persimmons were harvested. Grapefruit, limes, lemons, and oranges were packed and exported. Color in Navel oranges was improving. Orchard ground was saturated by the end of the week, but very few trees fell during 50 mph valley wind gusts and heavy rain. Pruning of almond and walnut orchards continued early in the week before the storm. Field and orchard activity stopped during the rain storm. Days suitable for fieldwork were reported as less than 4. Shelling and processing of stored almonds was ongoing. In Monterey County**,** fields were mostly empty with very few vegetables growing. There was some brassica to harvest, but rain made field access difficult. In San Joaquin County, winter vegetables were emerging and getting close to harvest. In Fresno County, organic broccoli was harvested, with reported excellent yield and quality. Onions were up to good stand and beds were put up for tomatoes. In Tulare County, spring spinach and broccoli were planted. Recent precipitation gave grasses a chance to grow but conditions were still dry. Sheep continued to graze on small grains fields, alfalfa fields, or on retired farmlands. Ranchers were supplementing feed with baled hay.

Rainfall across Florida was less than an inch. Dover (Hillsborough County) received the most rain with 0.33 inch. Per the U.S. Drought Monitor, Florida was 98 percent drought-free. Temperatures ranged from 26 to 76°F. There was an average of 6.5 days suitable for fieldwork. Almost all summer crops were harvested. Planting of small grain winter forage and wheat for grain was ongoing. Small pines were being planted. In Glades and Hendry Counties, sugarcane harvest continued. Flagler and Putnam County farmers were planting cabbage and cold crops, and preparing fields to plant potatoes. Spring season vegetable crop planting began. Some u-pick strawberry fields opened in Orange County. Vegetable harvesting continued in southwest Florida, where farmers harvested green beans, beets, cucumbers, eggplant, herbs, kale, peppers, squash, tomatoes, and watermelon. Crop planting continued in Miami-Dade County for green beans, yellow squash, zucchini, peppers, tomato, eggplant, sweet corn, boniato, bitter melon, and malanga. Crops harvested included green beans, pole beans, yellow squash, zucchini, okra, boniato, malanga, and avocado. Cattle and horse owners were feeding hay. Hardee County reported standing water in low-lying areas but flooding was not an issue. Statewide, the cattle condition was mostly good while pasture condition was fair to good. Early orange harvest was in full swing, primarily for juice. Thirteen of fifteen processing plants have opened and are beginning to run fruit. Fieldwork surveys showed early orange sizes are running extremely small this season, and ratios are lower than normal. White and colored grapefruit harvest is picking up, with a majority of white grapefruit going to the plants for processing. Colored grapefruit was being harvested primarily for the fresh market. Sunburst tangerines and Navel oranges were being harvested at peak amounts from now until the end of their seasons. Fresh fruit quality was overall good, but much of it was still coming in very small. Grove activity included irrigation, mowing in preparation for harvest, aerial spraying, and fertilizing. Field workers across the citrus growing region reported resets being planted, and old, non-productive trees being pushed.

Wisconsin farmers took advantage of a window of clear weather early in the week to harvest corn, spread manure, and complete fall chores. There were 4.2 days suitable for fieldwork. As of December 14, corn for grain was 91 percent harvested, with grain moisture at harvest averaging 20 percent. Temperatures climbed steadily until reaching the middle 40s over the weekend, with nights above freezing across much of the state. Precipitation was light and patchy, and the combination of warm weather and melting snow cover produced dense fog on several days. Fieldwork stalled as soils thawed into a muddy mess and the humidity drove already high grain moisture even higher. Though a few reporters commented that the thaw might allow for some late tillage, many noted that fields would be inaccessible until the ground refreezes. A few intrepid farmers may keep plugging away at the last of the standing corn and soybeans, but reports indicate that some fields will be left standing through the winter months. Overall, this long and challenging harvest season has produced mixed results; some reporters commented that yields were low, while others thought the crop was better than expected.

International Weather and Crop Summary

December 7-13, 2014

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

HIGHLIGHTS

EUROPE: Wetter weather in the north contrasted with drier but mild conditions in southern crop areas.

WESTERN FSU: The return of warmer weather melted the protective snow cover in key southern winter wheat areas.

MIDDLE EAST: Rain and mountain snow boosted moisture supplies for winter grains over much of the region.

NORTHWESTERN AFRICA: Locally heavy rain eased short-term dryness over eastern growing areas.

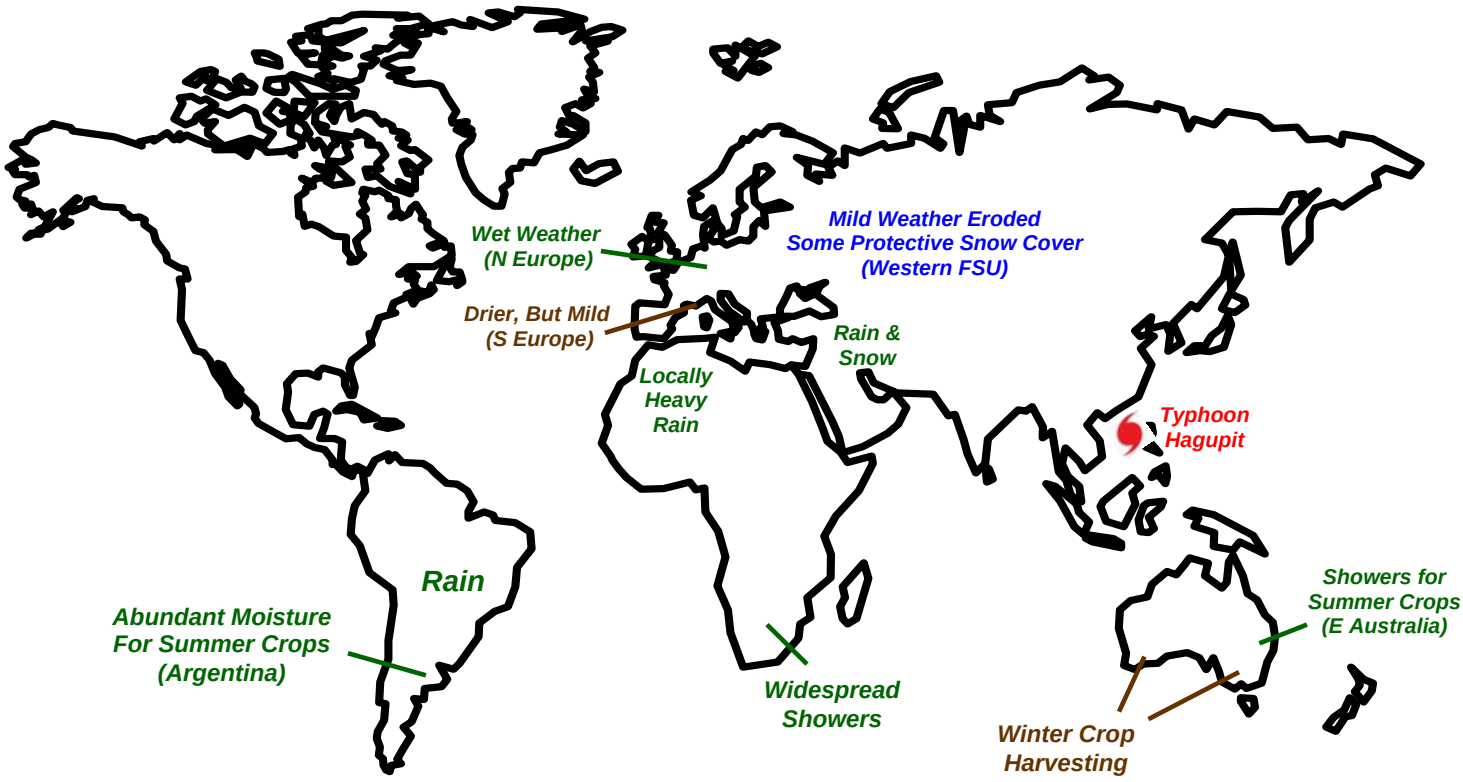
SOUTHEAST ASIA: Typhoon Hagupit continued to weaken down to a tropical storm as it crossed the Philippines, causing minor damage to rice and corn.

AUSTRALIA: Rain further improved conditions for summer crops in the east, while mostly dry weather elsewhere favored winter crop harvesting.

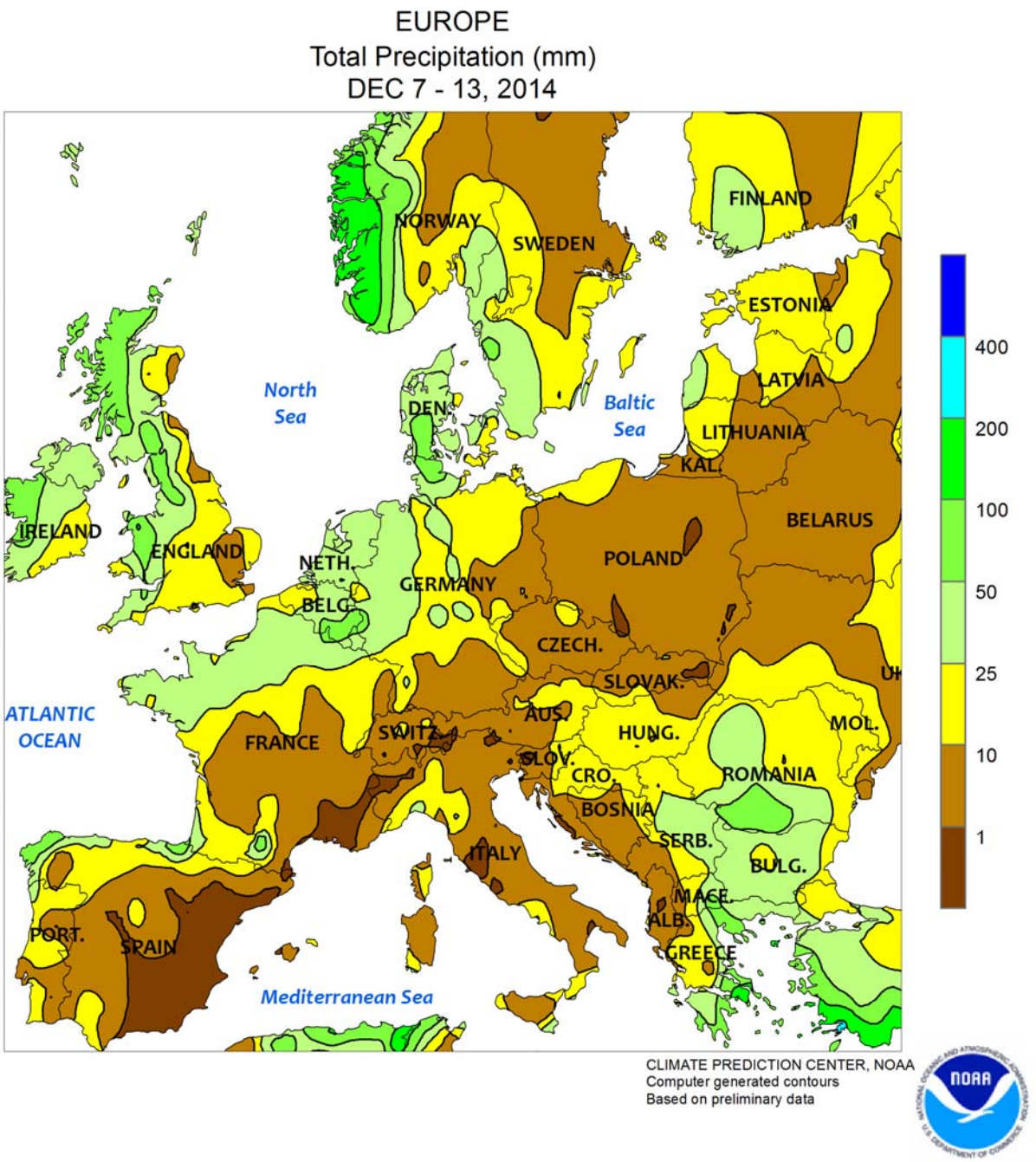
SOUTH AFRICA: Conditions were mostly favorable for germination and establishment of corn and other rain-fed summer crops.

ARGENTINA: Widespread, locally heavy rain slowed winter wheat harvesting, while maintaining adequate to abundant levels of moisture for summer crops.

BRAZIL: Unseasonably heavy rain increased moisture for soybeans and other crops throughout major agricultural areas.



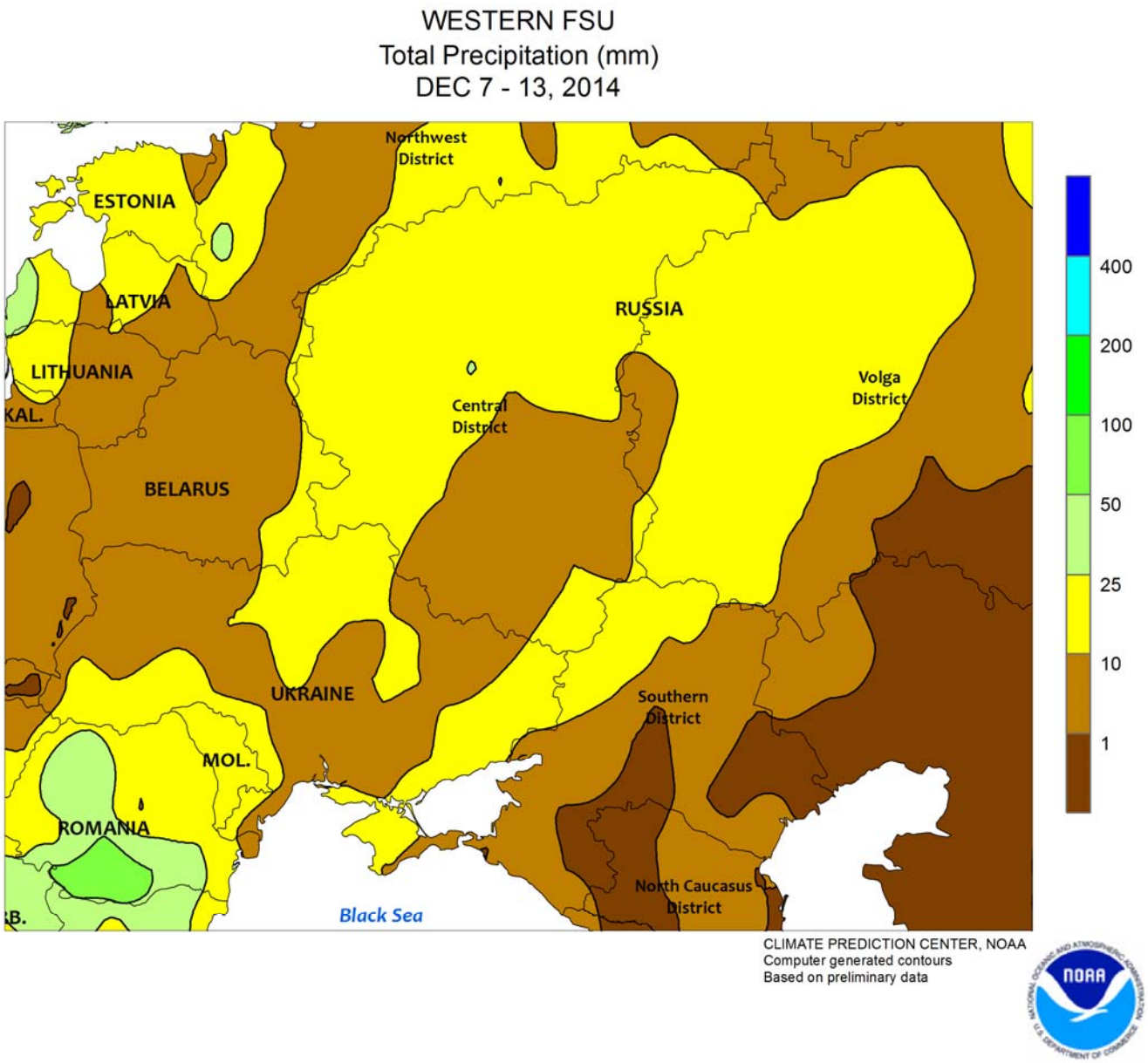
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Stormy weather arrived across northern growing areas, while drier conditions returned to southern Europe. Wet, windy weather accompanied a strong area of low pressure from the United Kingdom into northern portions of France, Germany, and Poland, with rainfall totaling 10 to more than 50 mm. The rain maintained adequate to abundant soil moisture in the west and improved soil moisture reserves in eastern winter wheat and rapeseed areas of northern Europe. In contrast, drier conditions over Spain and Italy enabled fieldwork, though light to moderate showers (2-25 mm) lingered over northern Italy. Farther east, a slowly departing Mediterranean storm system generated moderate to heavy rain and mountain snow (10-50 mm liquid equivalent) in the Balkans, maintaining favorable moisture supplies for dormant winter crops. Temperatures averaged near to above normal over much of the continent, with cooler-than-normal conditions confined to Spain and the United Kingdom. Persistent warmth has left most major winter crop areas devoid of a protective snow cover and exposed to any potential incursions of bitter cold.

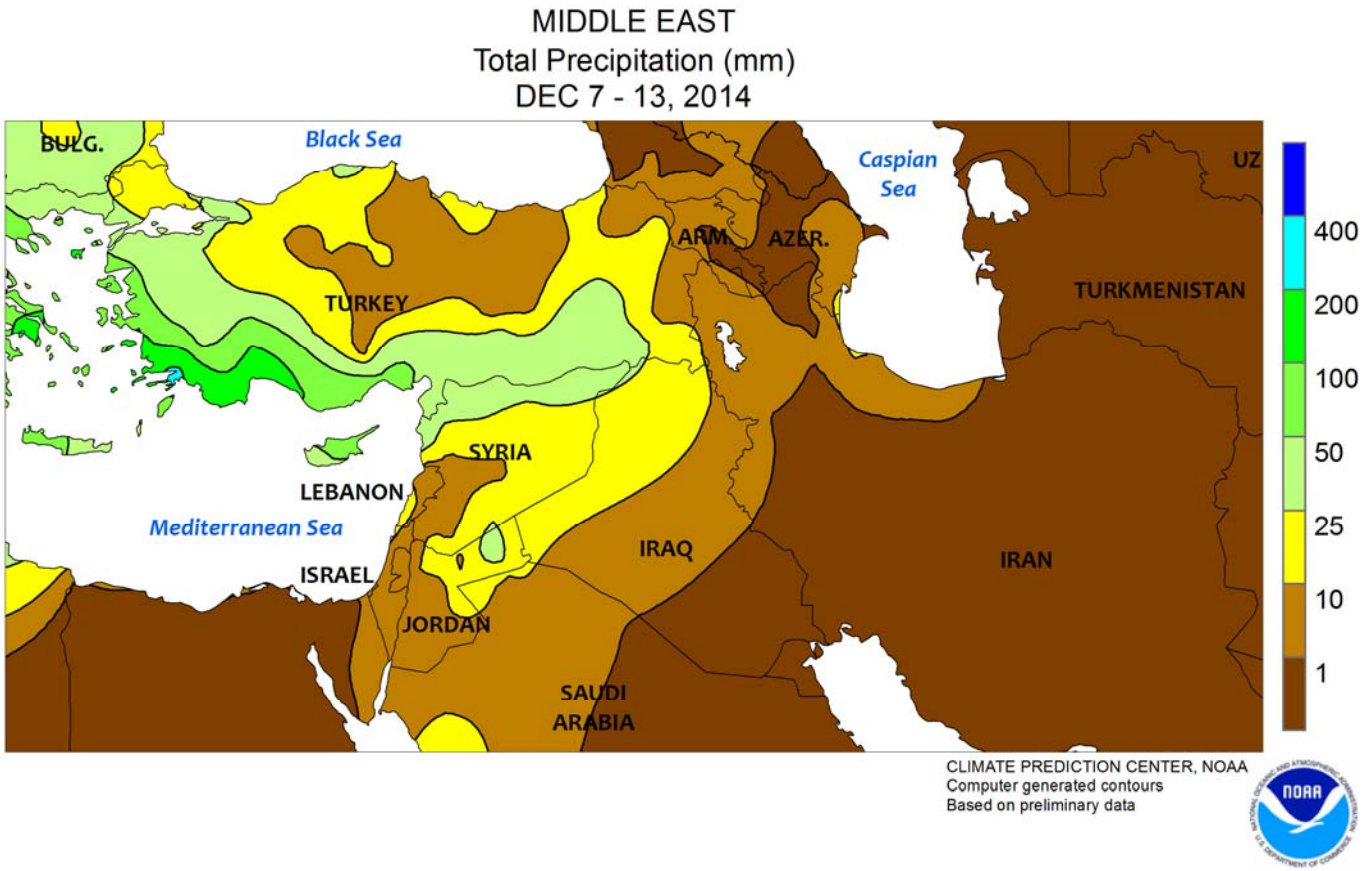
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

Wet, warmer weather maintained favorable conditions for dormant winter crops. Across primary winter wheat areas of southern Russia and Ukraine, temperatures averaged 3 to 5°C above normal, melting the protective snow cover and leaving winter crops exposed to potential incursions of bitter cold. However, these key winter wheat areas have benefited from consistent, timely moisture for much of the autumn and crops are generally in good condition. Meanwhile, widespread rain (5-25 mm) accompanied sharply warmer weather (high temperatures above freezing) from Belarus and northern Ukraine into central Russia, melting much of the existing snowpack but improving soil moisture reserves for dormant winter crops. Winter grains and oilseeds in these more northerly growing areas are likely poorly established due to autumn drought, and will need nearly ideal conditions through the winter to emerge with favorable yield prospects in the spring.

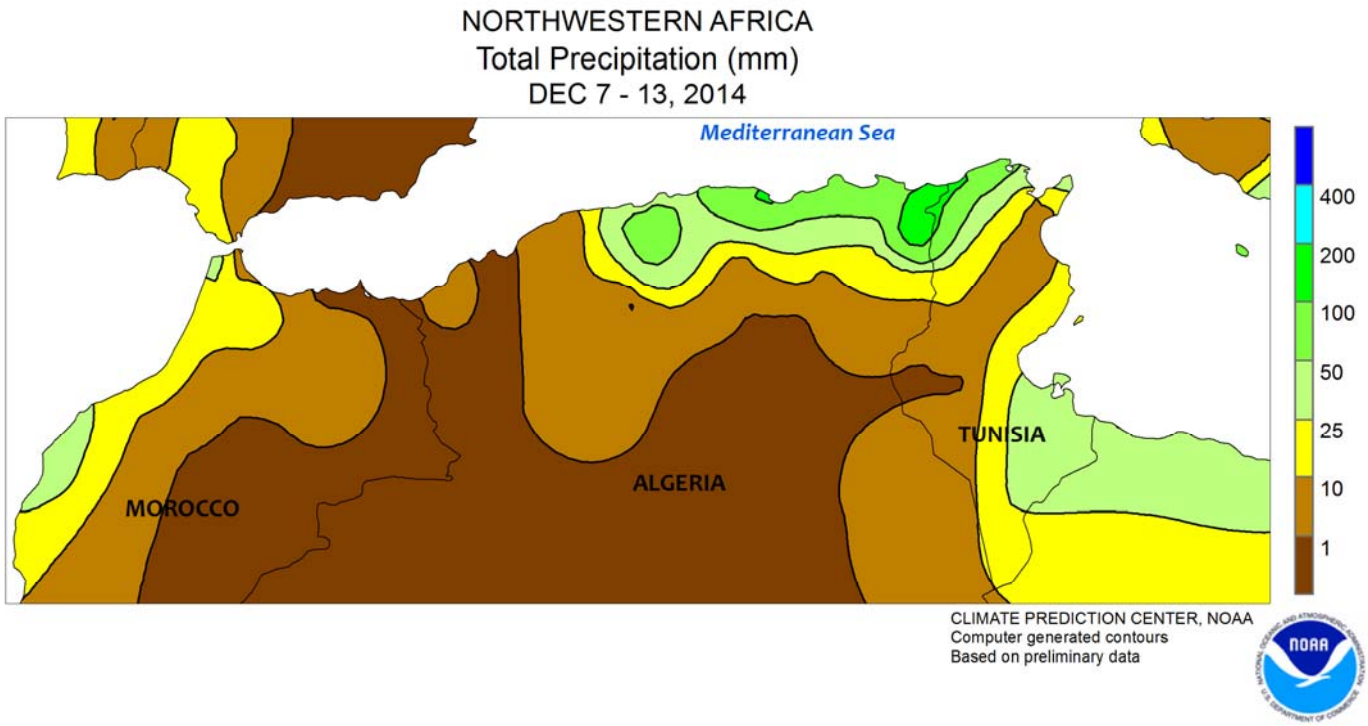
For additional information contact: mbrusberg@oce.usda.gov



MIDDLE EAST

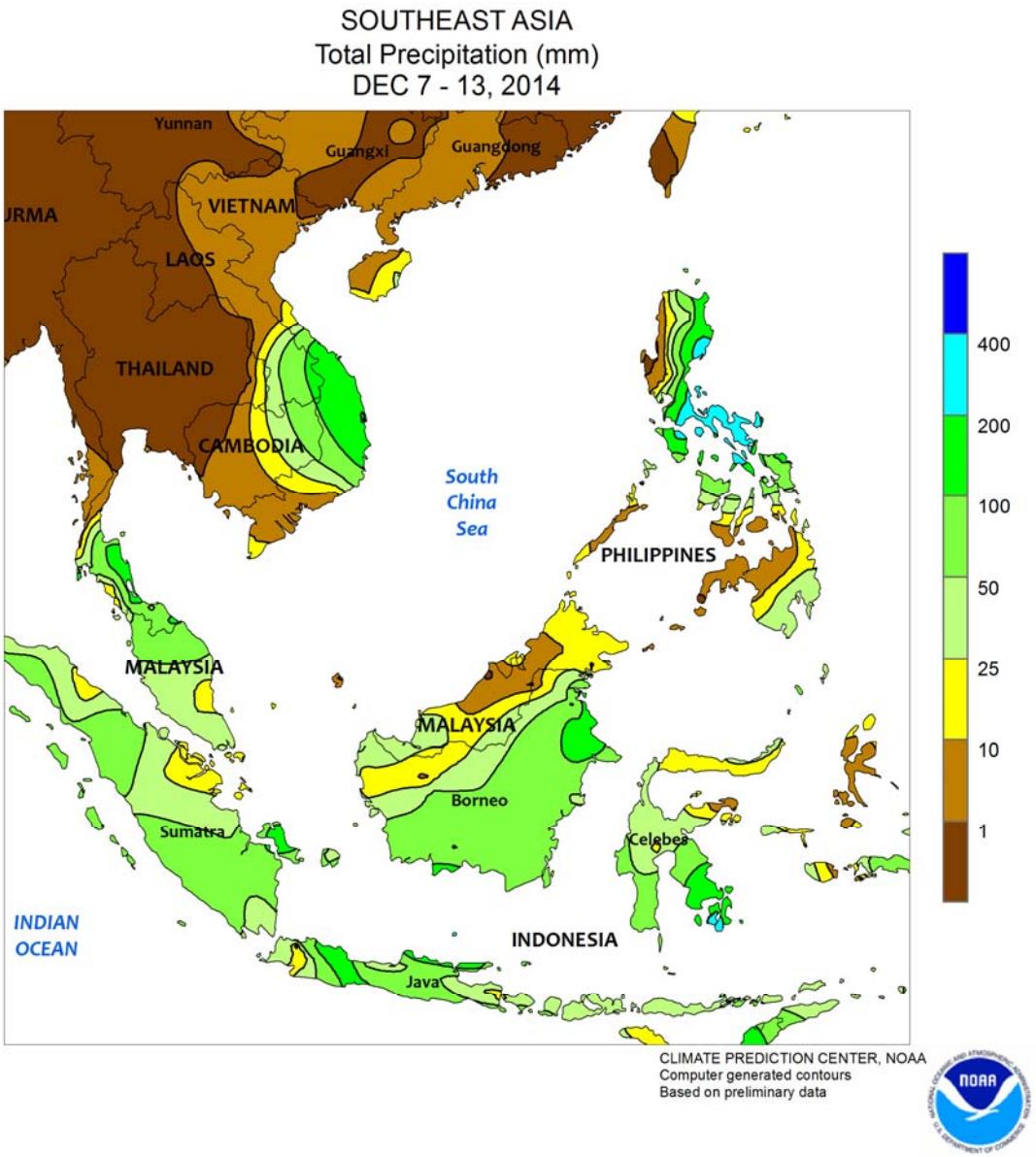
Rain and mountain snow maintained abundant moisture reserves for winter crops over much of the region, though drier weather returned to eastern-most growing areas. After a dry start to the week, a slow-moving Mediterranean storm brought moderate to heavy rain (20-100 mm, locally more) to southern and western Turkey as well as areas along the eastern Mediterranean Coast, with somewhat lighter showers (5-25 mm) noted in central Turkey and northern Iraq. The rainfall continued the promising start to the 2014-15 wet season and sustained favorable prospects for vegetative winter wheat and barley. Light rain and mountain snow (1-10 mm liquid equivalent) was reported in northwestern Iran, where producers have benefited from a wet autumn for winter grain establishment. Dry conditions were noted in northeastern Iran, though winter crop prospects in this part of the country are vastly improved over last year's drought. Temperatures averaged 4 to 8°C above normal over most of the region, keeping winter crops devoid of a protective snow cover but minimizing the risk for freeze damage and allowing wheat and barley to add vegetative growth.

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



NORTHWESTERN AFRICA

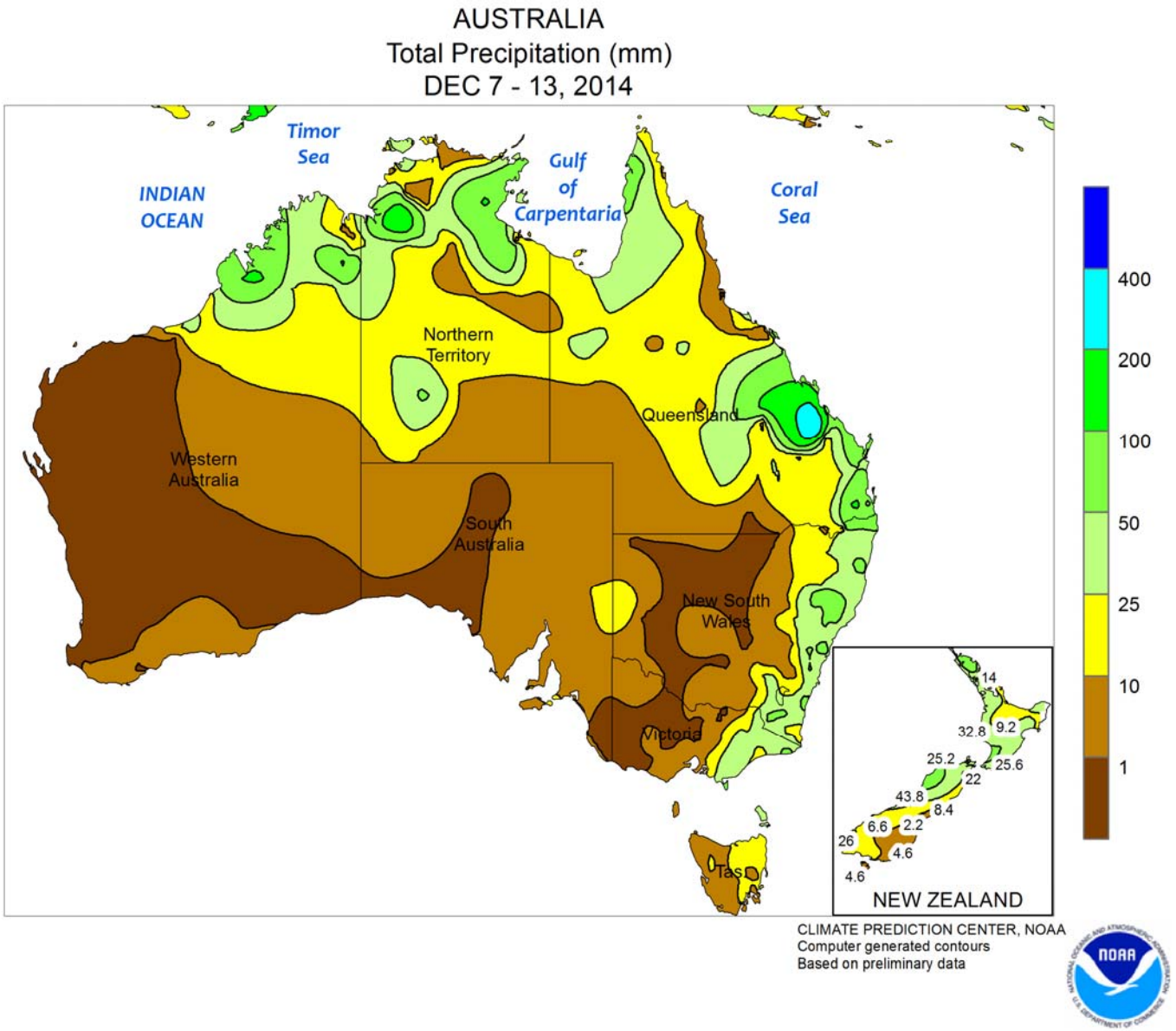
A slow-moving Mediterranean storm generated beneficial rainfall over the eastern half of the region, while showers returned to western-most growing areas. Moderate to heavy showers (25-100 mm, locally more) fell in previously-dry portions of northeastern Algeria and northern Tunisia, improving soil moisture for winter grain establishment following an unfavorably dry November. Farther west, an influx of Atlantic moisture maintained light to moderate showers (5-25 mm) in Morocco, sustaining the positive start to the 2014-15 growing campaign for winter wheat and barley. Temperatures cooled somewhat, with readings up to 3°C below normal ending the recent spell of unseasonable warmth in eastern growing areas.



SOUTHEAST ASIA

Typhoon Hagupit continued to weaken as it crossed the northern Philippines early in the period. Hagupit, once a super typhoon with winds in excess of 155 knots, crossed the Philippines with winds barely over 40 knots. Storm rainfall totals were over 200 mm in southern Luzon, with localized amounts over 300 mm in eastern Luzon. Beyond these areas, rainfall totals were more moderate at 50 to 100 mm. Little damage to corn and rice was reported due to the rapid weakening of Hagupit and the limited extent of heavy rainfall. Hagupit made final landfall in central Vietnam, with upwards of 200 mm of rain occurring in generally minor agricultural areas. Elsewhere in the region, showers in Java, Indonesia, continued to boost moisture supplies for main-season rice. An average of 70 mm of rain in western Java kept seasonal rainfall totals (since November 1) above normal and above last year for the same period. Central and eastern Java continued to trail both the long-term average and last year as rainfall remained unseasonably light.

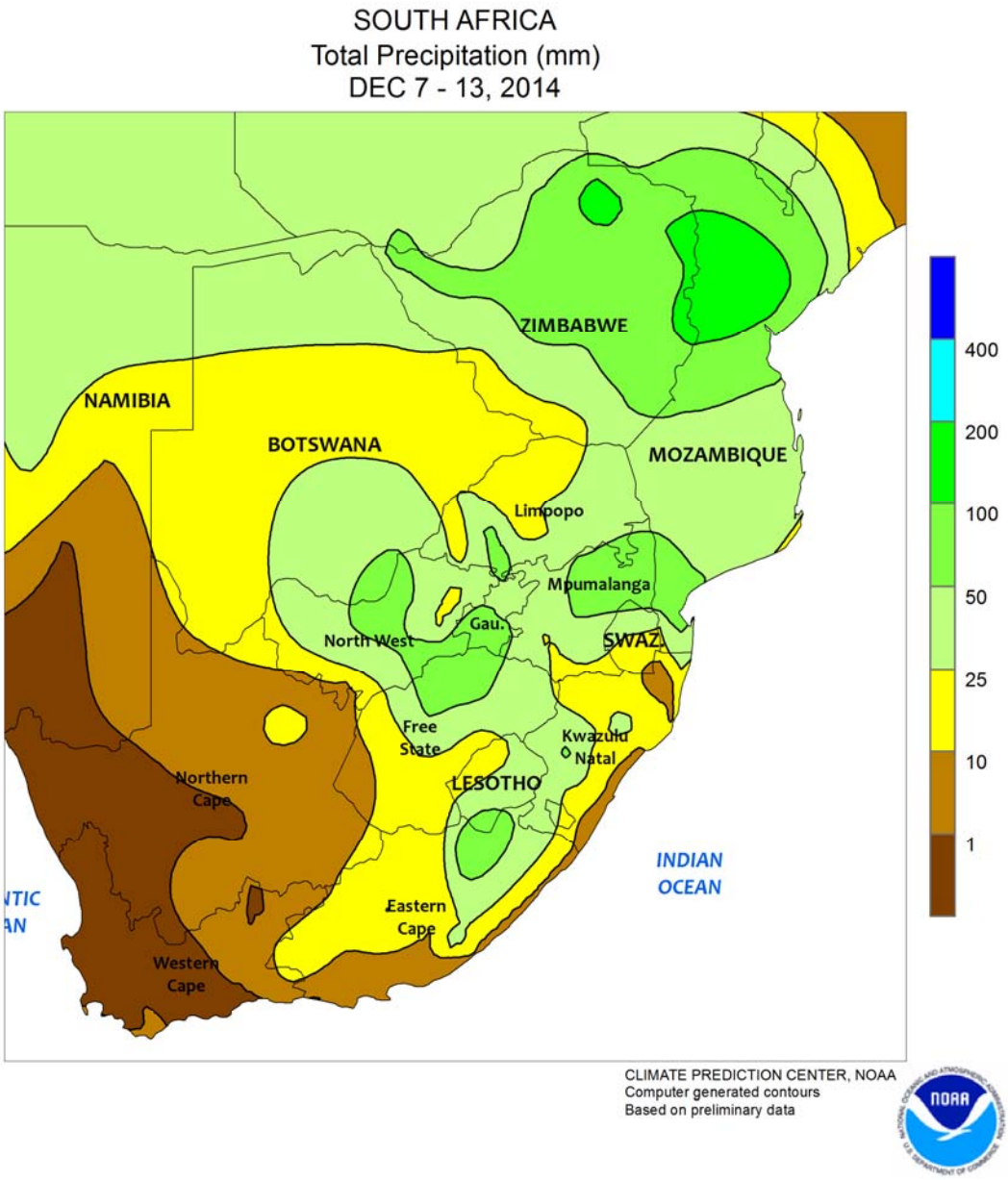
For additional information contact: mbrusberg@oce.usda.gov



AUSTRALIA

For the second consecutive week, seasonably warm, dry weather in Western Australia promoted winter grain and oilseed harvesting. In South Australia, passing mid-week showers (1-5 mm, locally near 10 mm) may have caused brief harvest delays, but dry weather the remainder of the week favored fieldwork. Elsewhere in southeastern Australia, mostly dry weather encouraged wheat, barley, and canola harvesting in Victoria and southern New South Wales. Farther north, widespread, locally heavy rain in northern New South Wales (5-25 mm) and Queensland (10-50 mm, with more than 100 mm in some areas) benefited vegetative summer crops but caused local flooding. The rain boosted topsoil moisture for dryland crops, such as sorghum, while easing water requirements for irrigated crops, such as cotton. Temperatures in southern and eastern Australia averaged near to slightly above normal (up to 1°C above normal), with maximum temperatures generally in the lower to middle 30s degrees C.

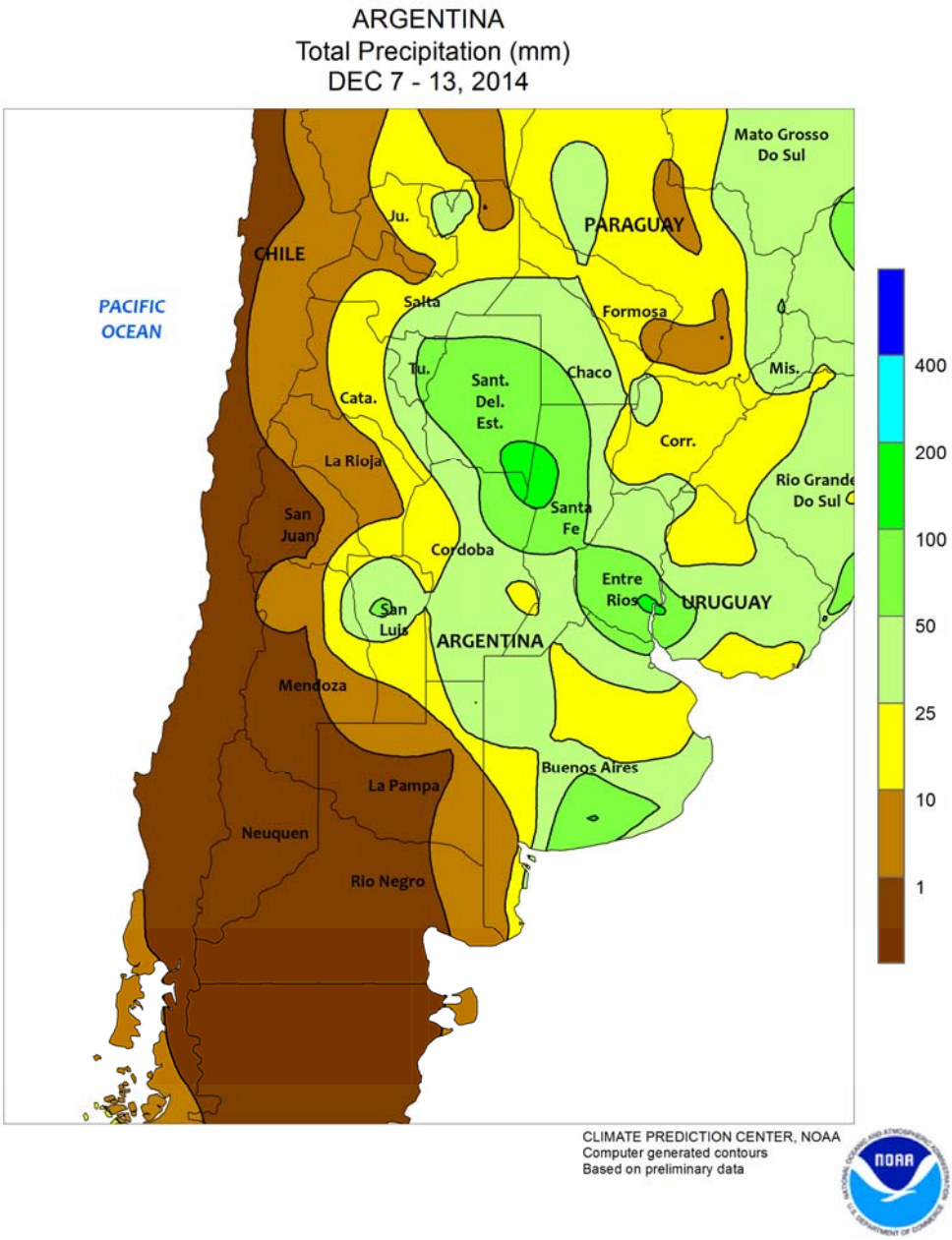
For additional information contact: mbrusberg@oce.usda.gov



SOUTH AFRICA

Showers increased from the previous week across the corn belt, benefiting emerging summer crops and conditioning fields for planting in western agricultural areas. Rainfall totaled 25 to 70 mm in North West and nearby locations in Free State, improving prospects for commercially produced white corn. Similar amounts of rainfall in Gauteng and Mpumalanga boosted moisture reserves for corn establishment, with lighter rain (less than 25 mm) in outlying production areas in Limpopo and northern KwaZulu-Natal. Weekly temperatures averaged near to slightly above normal throughout the corn belt, with daytime highs ranging from the upper 20s (degrees C) in eastern production areas to the lower 30s in the traditionally warmer west. Elsewhere, warm, showery weather prevailed in sugarcane areas of KwaZulu-Natal and eastern Mpumalanga, though rainfall continued to be below normal (less than 25 mm) in KwaZulu-Natal's irrigated southern production areas. Meanwhile, locally heavy rain (10-50 mm) fell in Eastern Cape but mostly dry, warmer-than-normal weather (daytime highs approaching 40°C in spots) dominated Northern and Western Cape Provinces, hastening development of irrigated summer row crops, as well as tree and vine crops.

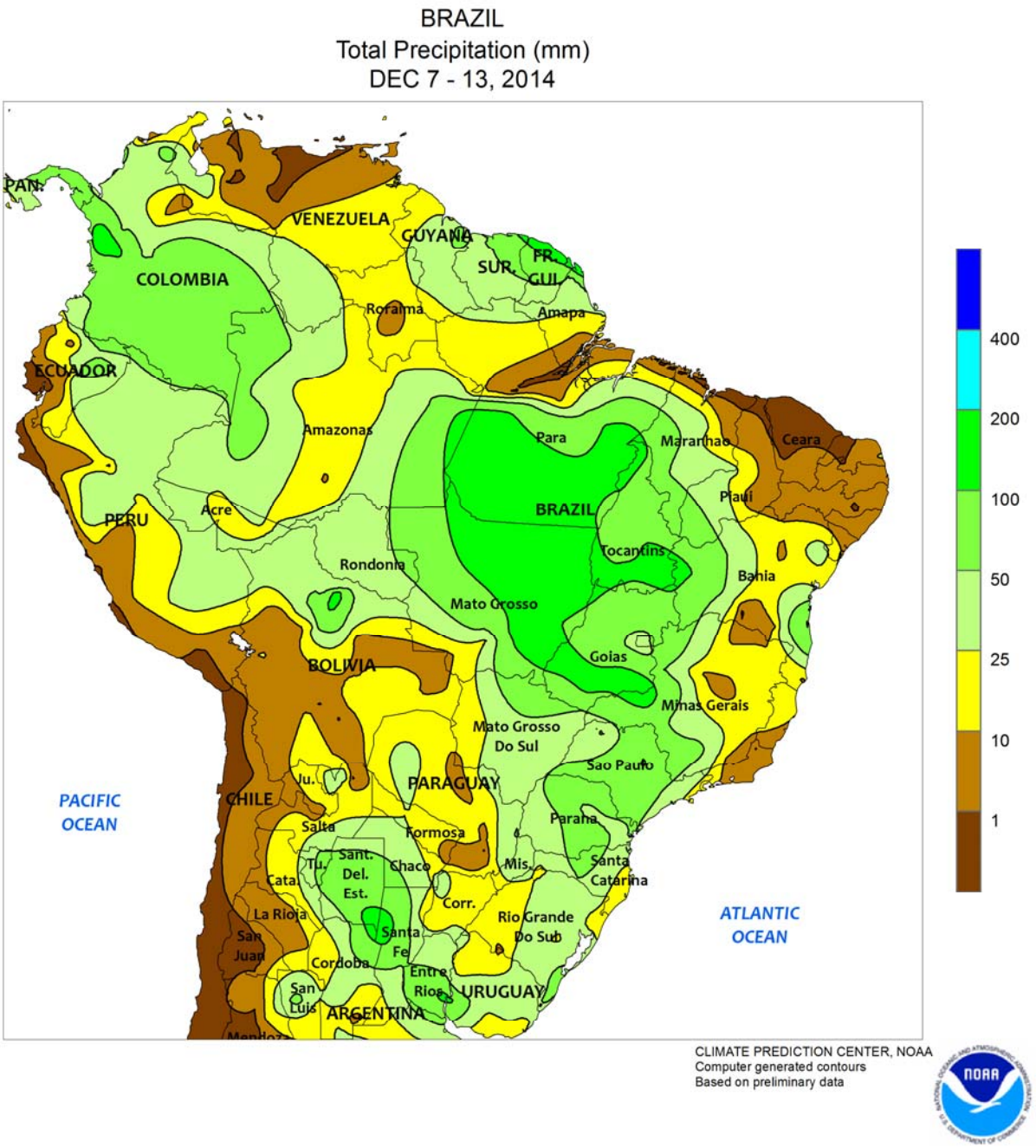
For additional information contact: mbrusberg@oce.usda.gov



ARGENTINA

Widespread, locally heavy rain maintained adequate to abundant levels of moisture for summer crops, but many areas continued to experience delays in fieldwork, including winter wheat harvesting. Unlike recent weeks, beneficial rain (25-50 mm, locally higher) extended into northwestern agricultural areas (in and around Salta), providing much-needed moisture for planting summer grains and oilseeds. In contrast, the rainfall in eastern farming areas (Buenos Aires to Corrientes and Misiones) was lower than in recent weeks, although residual wetness and the resulting disruptions in fieldwork remained a concern in some of the wetter locations. Weekly temperatures averaged near to slightly above normal, with daytime highs ranging from the low 30s (degrees C) in Buenos Aires to the low 40s in parts of Salta and Formosa.

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

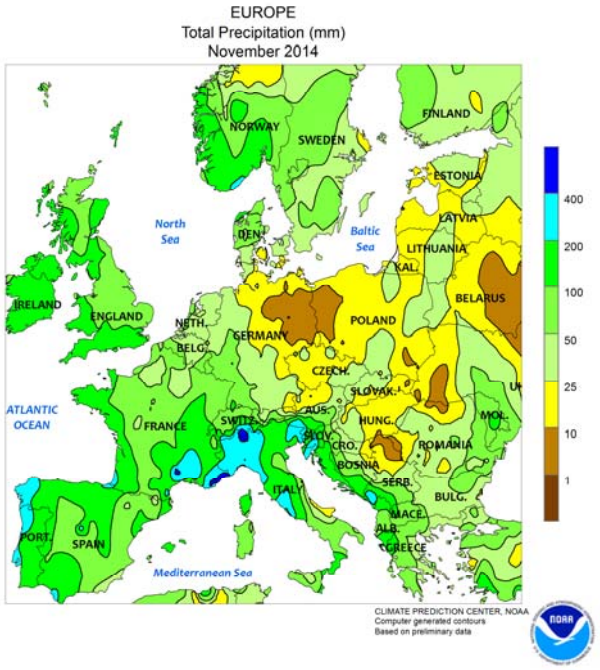


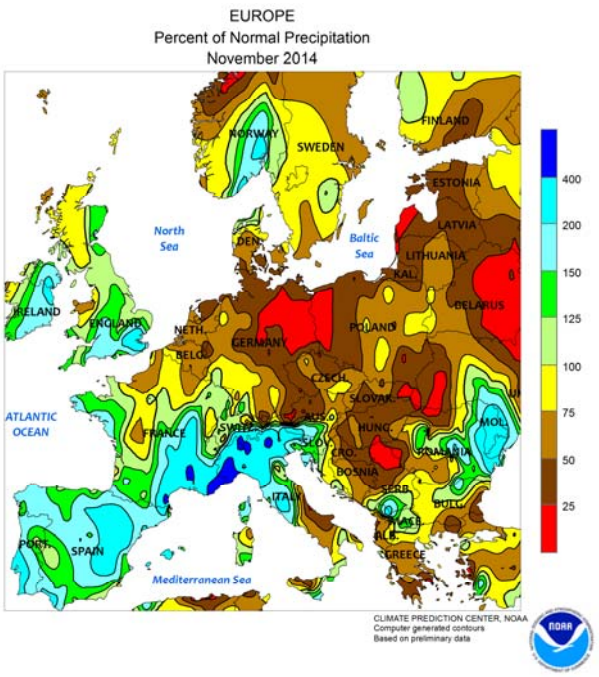
BRAZIL

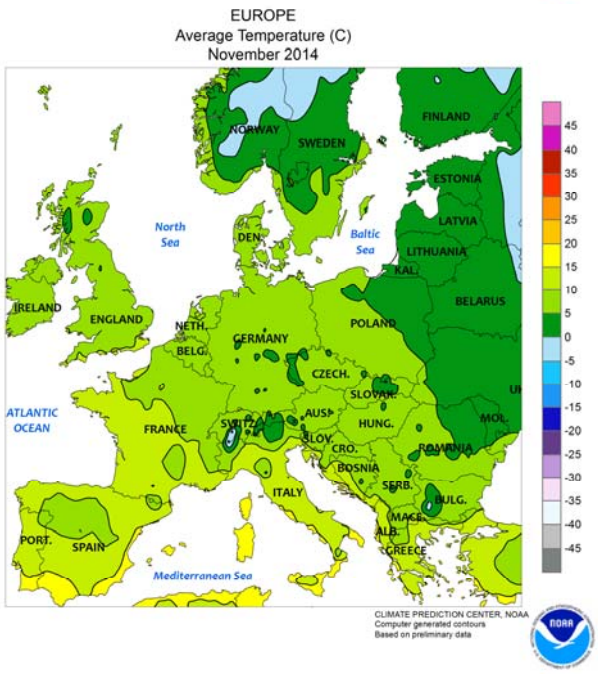
Wet weather maintained overall favorable levels of moisture for soybeans and other summer row crops in central and southern Brazil. Most major agricultural areas recorded 25 to 100 mm, with large sections of Mato Grosso, Goias, and Tocantins reporting more than 100 mm. Light to moderate showers (10-50 mm) boosted moisture for sugarcane and coffee in Sao Paulo and Minas Gerais, but drier conditions prevailed in coastal production areas (notably Espirito Santo). Similarly, seasonable dryness prevailed in the northeast, supporting harvesting of sugarcane and other seasonal crops. Weekly temperatures averaged near normal in most areas, with warmer-than-normal conditions (daytime highs reaching the lower and middle 30s degrees C) in the south. Daytime highs also reached the lower and middle 30s from Mato Grosso into the northeastern interior, though these levels were more consistent with normal temperatures.

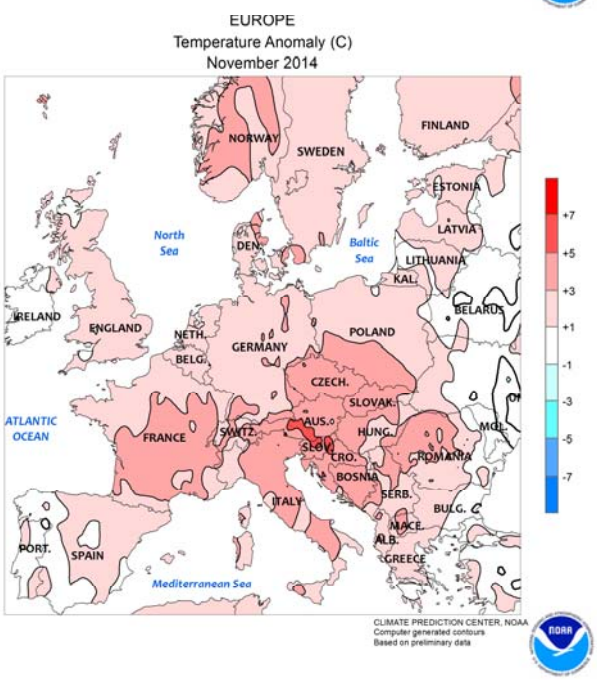
For additional information contact: mbrusberg@oce.usda.gov

November International Temperature and Precipitation Maps



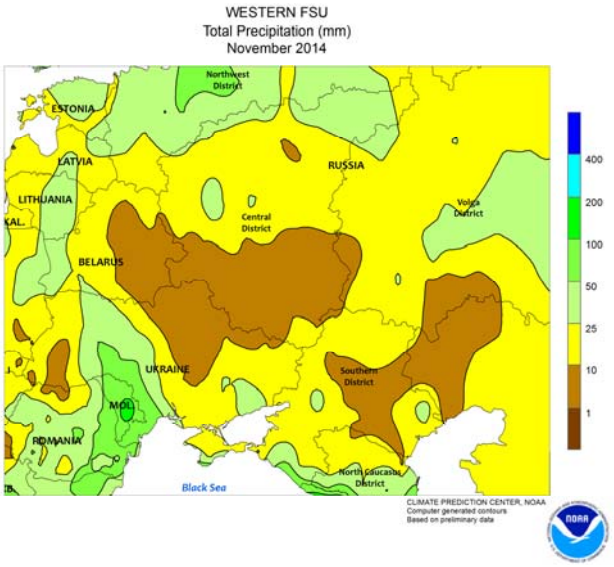


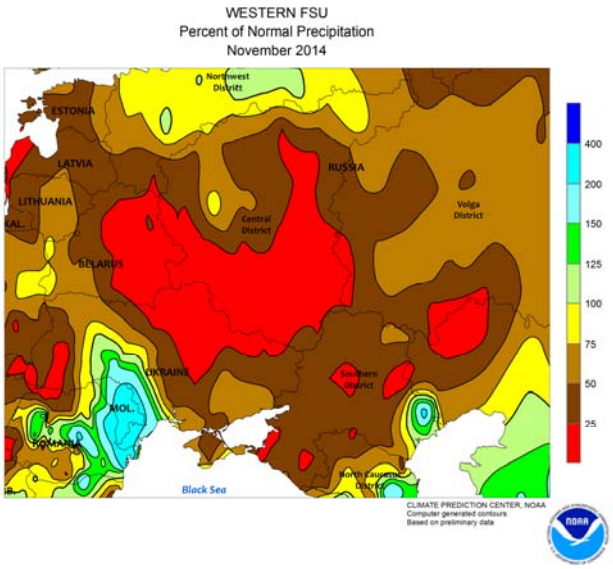


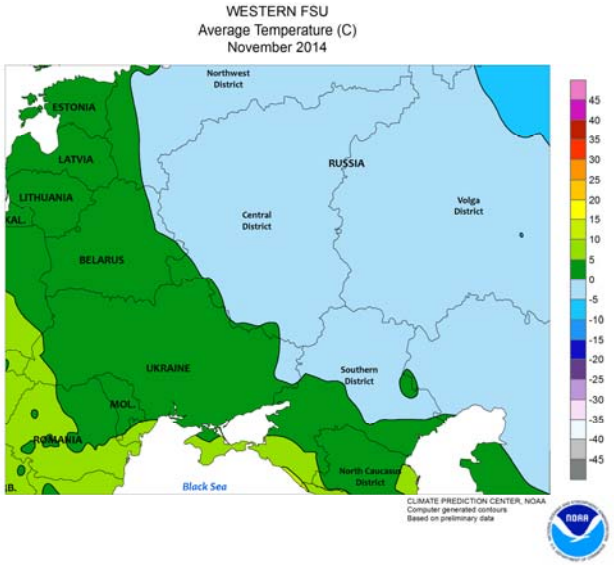


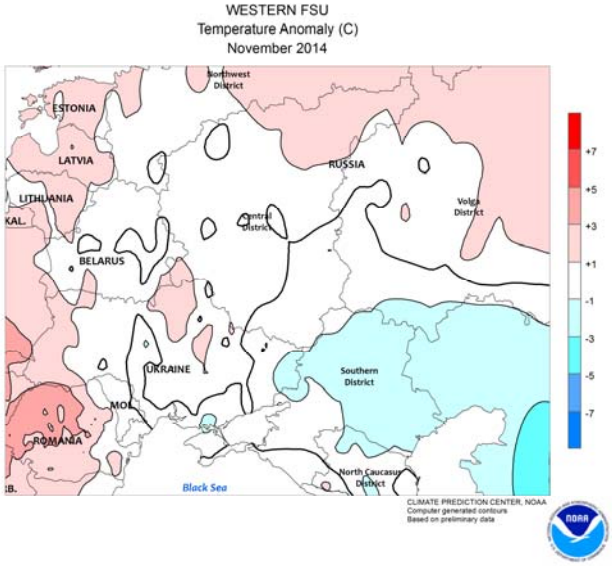
EUROPE

During November, locally excessive moisture in the south contrasted with dry weather in parts of northern Europe. A southward-displaced storm track resulted in persistent, moderate to heavy rainfall (150-400 percent of normal) from the Iberian Peninsula into northern Italy, with some precipitation falling as heavy snow in the mountains. The wet conditions signaled a favorable start to the Iberian Peninsula's rainy season and boosted irrigation reserves for warm-season crops in northern Italy. Consistent, timely rainfall also aided winter crop establishment in France and the United Kingdom. In contrast, dry November weather (locally less than 25 percent of normal) accelerated fieldwork but reduced soil moisture for winter crops from northern Germany into Poland and the northern Balkans. However, wetter conditions (90-150 percent of normal) prevailed in key winter wheat areas of the lower Danube River Valley, favoring crop establishment. Temperatures for the month averaged 3 to 5°C above normal over much of the continent, promoting winter crop establishment in the south and delaying the onset of dormancy over central and northern growing areas.



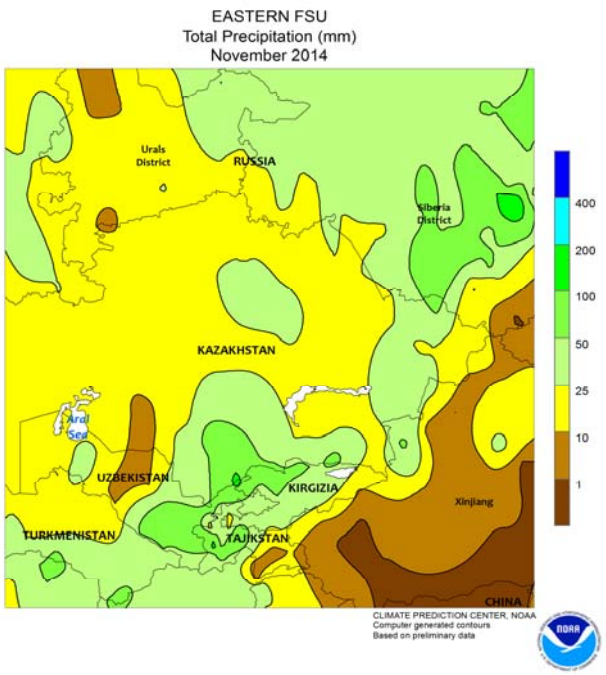


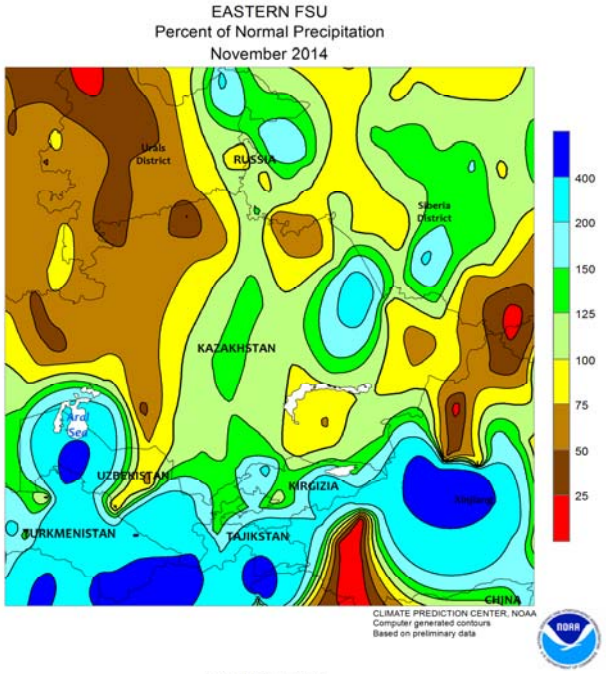


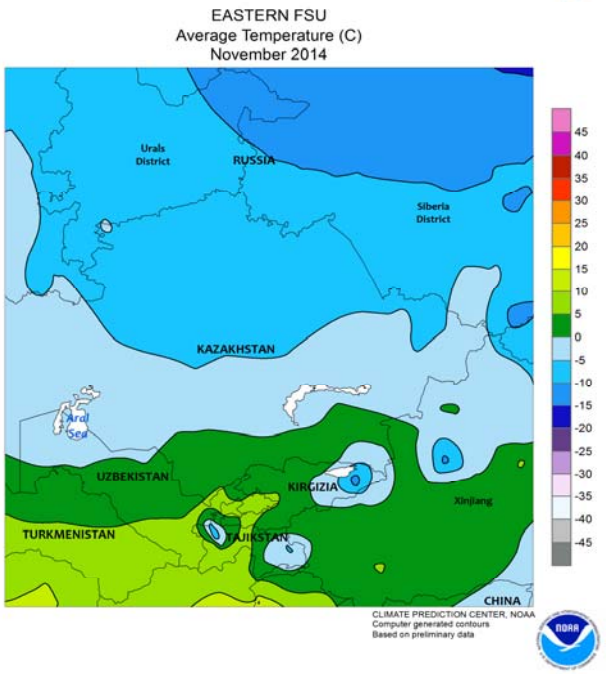


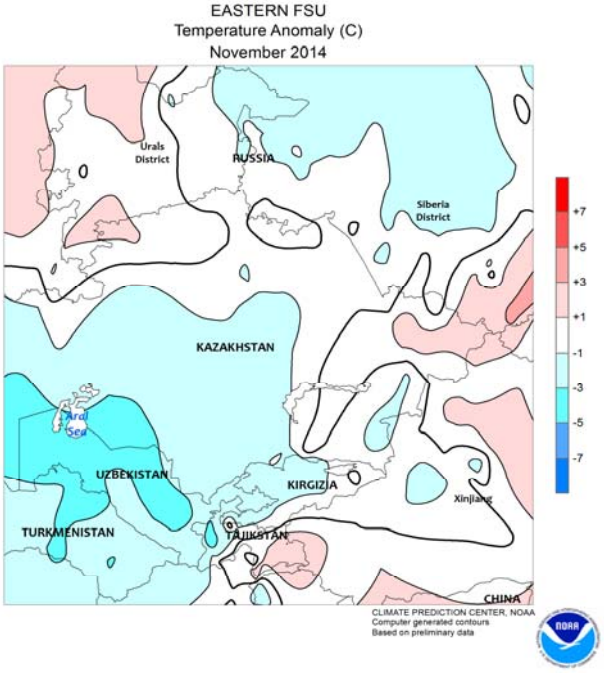
WESTERN FSU

During November, cold conditions further stressed poorly-established winter grains in the north, while winter wheat in key southern growing areas entered dormancy under mostly favorable conditions. Autumn drought continued from Belarus and northern Ukraine into central Russia, with November precipitation totaling less than 50 percent of normal (locally less than 10 percent). The lack of moisture coupled with an early onset of bitter cold (-20°C or lower) resulted in poorly established winter grains in more northerly growing areas. In addition, a lack of snow cover may have resulted in some burnback or winterkill during the coldest weather. In contrast, despite a dry November, winter crops in southern growing areas were properly established due to plentiful autumn rainfall. Therefore, winter wheat from southern Ukraine into southern portions of Russia entered dormancy under mostly favorable conditions and was better able to withstand the late-month bitter cold, despite a relatively shallow snowpack.





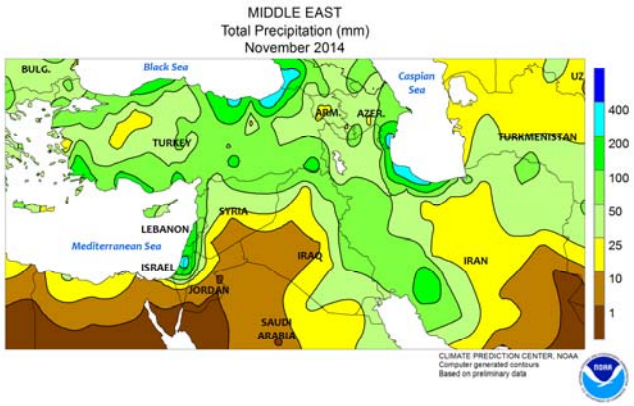


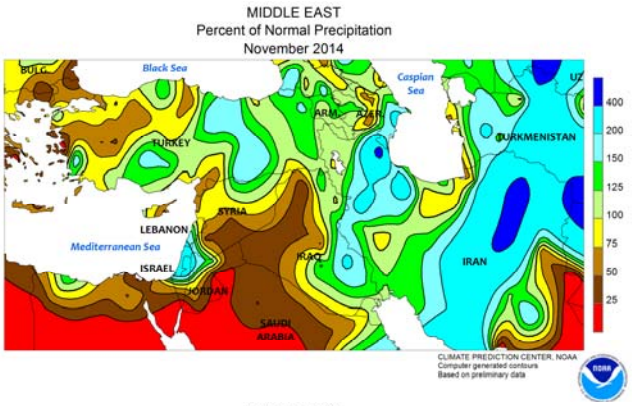


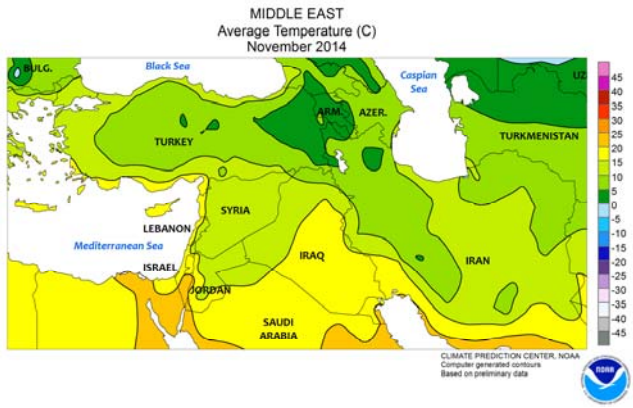
EASTERN FSU

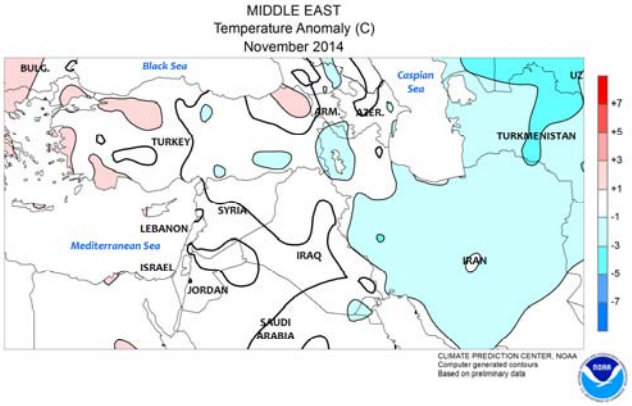
During November, bitterly cold, snowy weather halted late spring wheat harvesting. In particular, unharvested spring wheat in southern portions of Russia's Siberia District remained covered in a moderate to deep snowpack, with a persistent arctic air mass keeping much of the region encased in snow. These areas do not typically grow much winter wheat due to the harsh winters. Snow and cold also halted late autumn fieldwork in the south, though the cotton harvest was reportedly completed before the cold, snowy weather arrived.

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



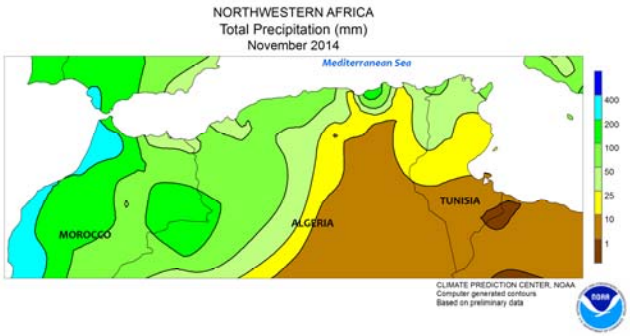


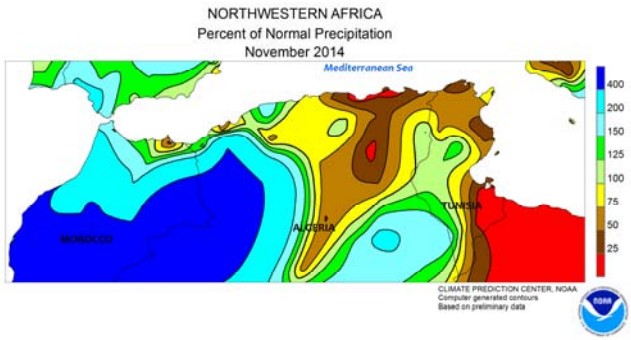


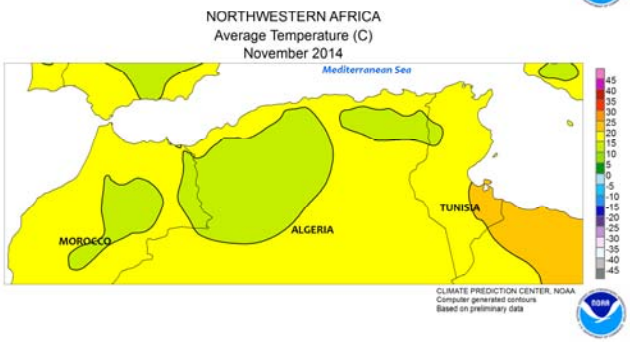


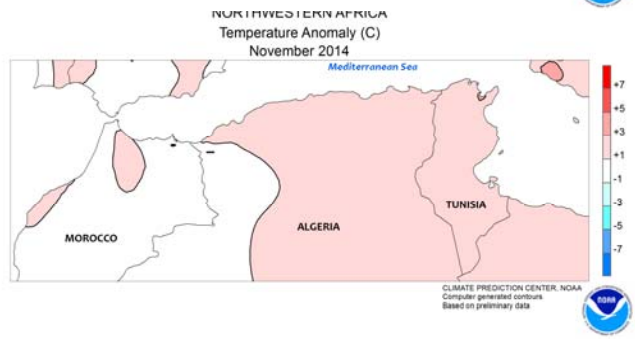
MIDDLE EAST

Near- to above-normal November precipitation maintained favorable prospects for winter grains. In Turkey, consistent, timely rainfall ensured adequate soil moisture for winter wheat establishment, while a lack of early-season bitter cold ensured crops avoided any potential freeze damage. Moderate to heavy rain and mountain snow (25-150 mm, locally more than 150 percent of normal) from northern Iraq into Iran boosted soil moisture for winter grain planting and establishment as well as recharging irrigation reserves. The favorable start to the 2014-15 wet season was most pronounced in northeastern Iran, where last year's drought reduced soil moisture availability and lowered crop yields. Rainfall was also apparent on satellite imagery in Syria, with estimates indicating 25 to 50 mm of rainfall for winter crop establishment.



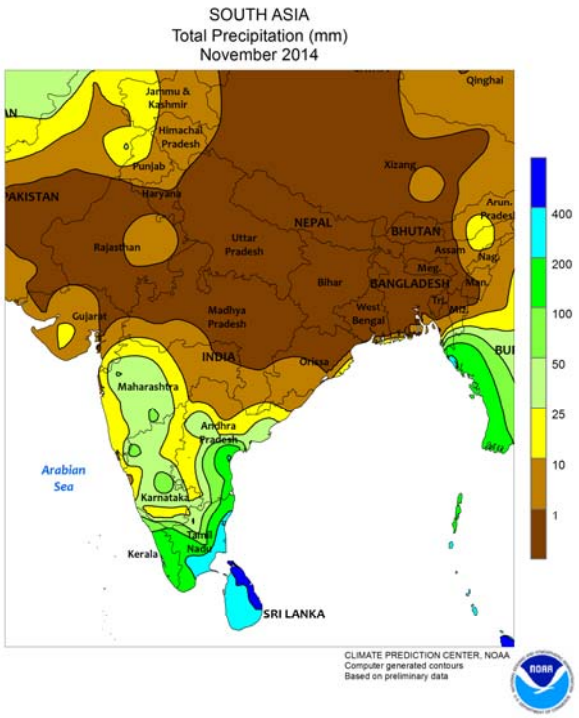


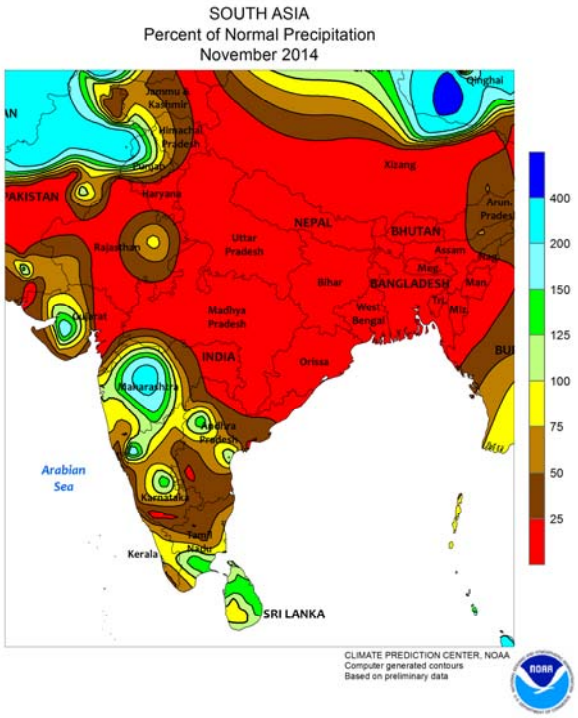


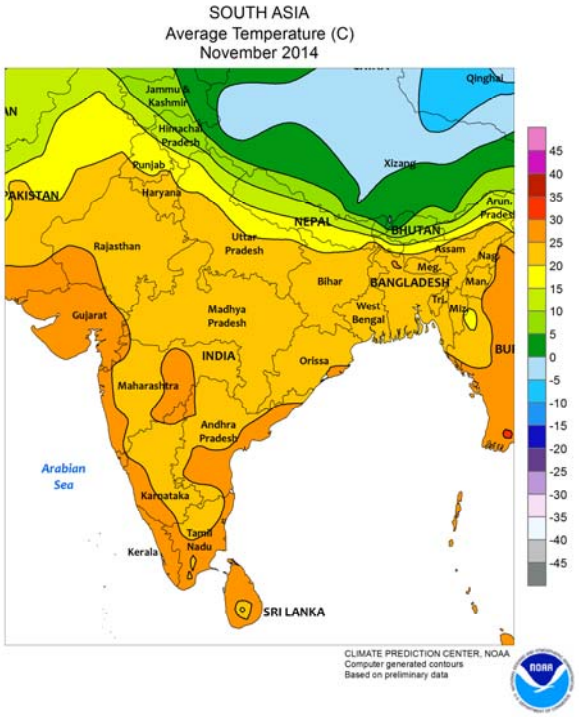


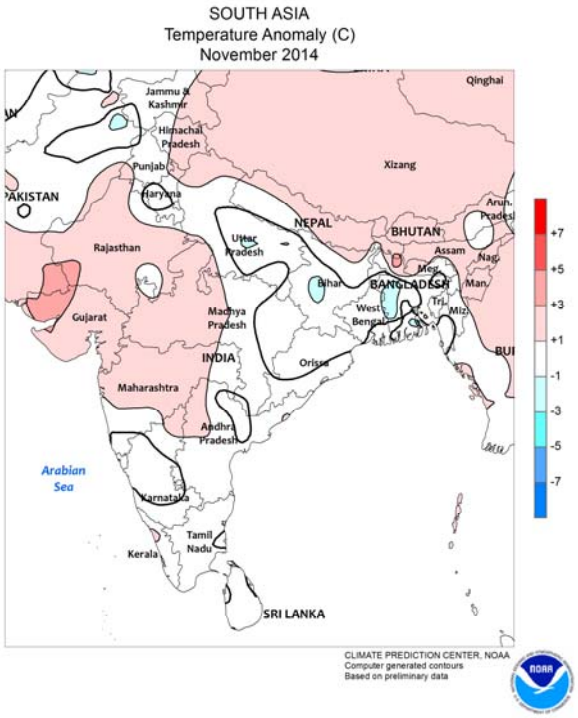
NORTHWESTERN AFRICA

An excessively wet November in the west contrasted with warm, unfavorably dry conditions in the east. A series of Atlantic storms generated heavy to excessive rainfall (100-300 mm, locally more) in Morocco, causing lowland flooding but boosting soil moisture reserves for winter grain planting and establishment. There may have been some need to replant winter crops in southern portions of Morocco, where rain was heaviest. In Algeria, wet weather in western portions of the country contrasted with increasing dryness (less than 50 percent of normal) in eastern growing areas. Similar dryness was noted in northern Tunisia, which coupled with unseasonable warmth (3-4°C above normal) accelerated soil moisture losses but encouraged fieldwork.



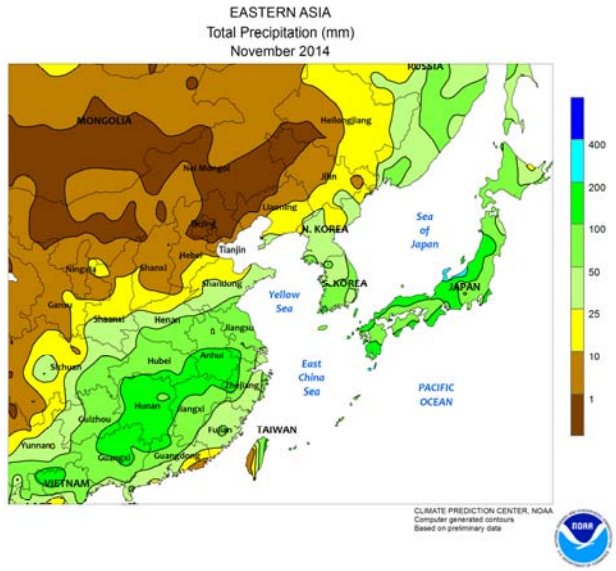


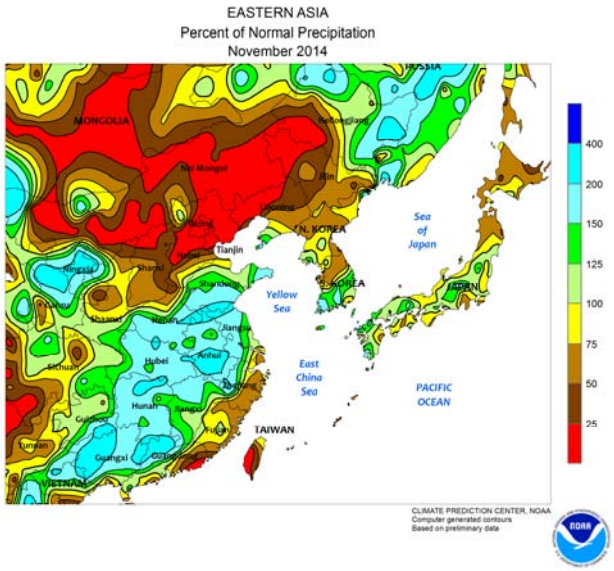


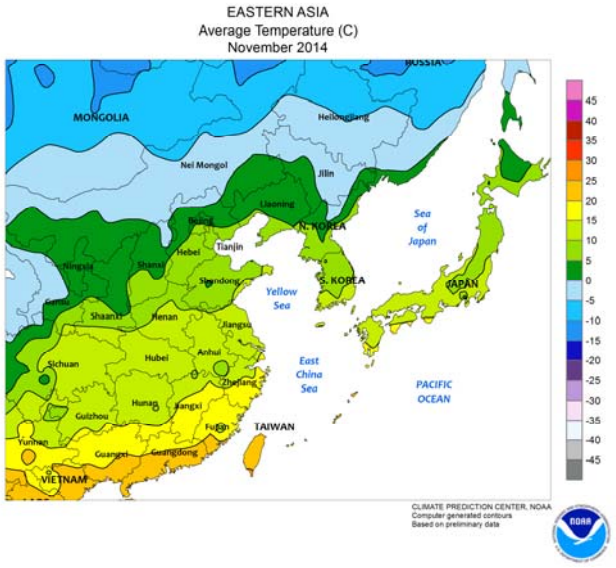


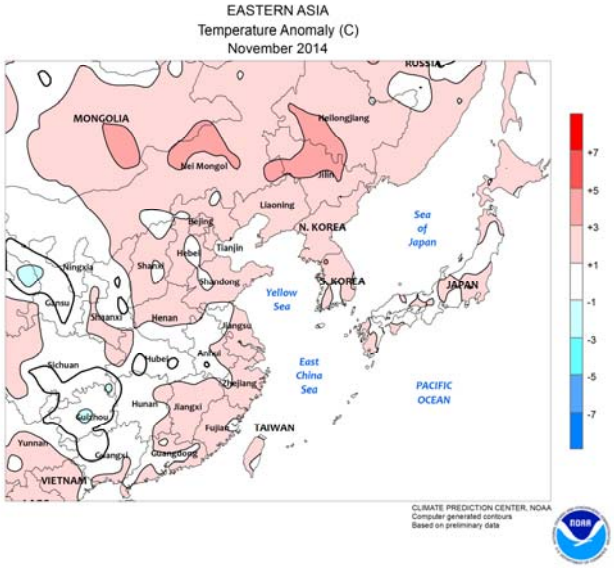
SOUTH ASIA

Rabi (winter) crop planting continued through November and was over halfway complete for most crops. In northern India, wheat benefited from occasional showers and mild weather, while warmer-than-normal weather in rapeseed areas increased irrigation demands. Most shower activity in the region was concentrated in southern India and Sri Lanka as the northeast monsoon produced locally above-normal rainfall for rice and other rabi crops.



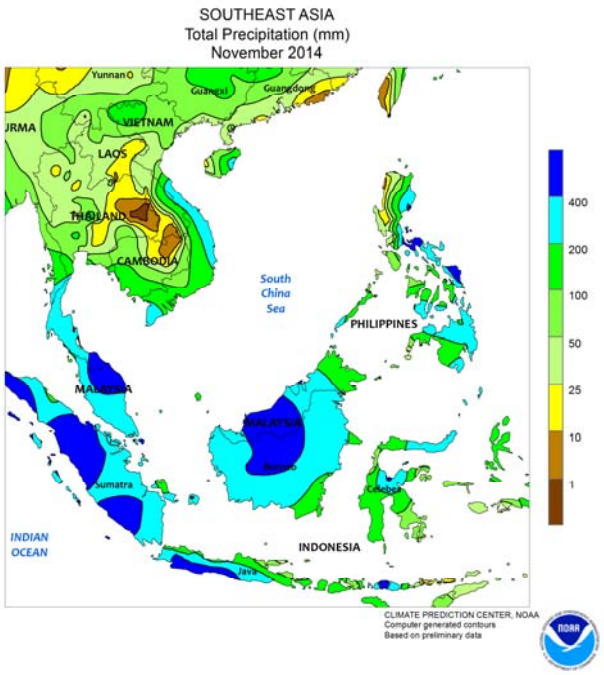


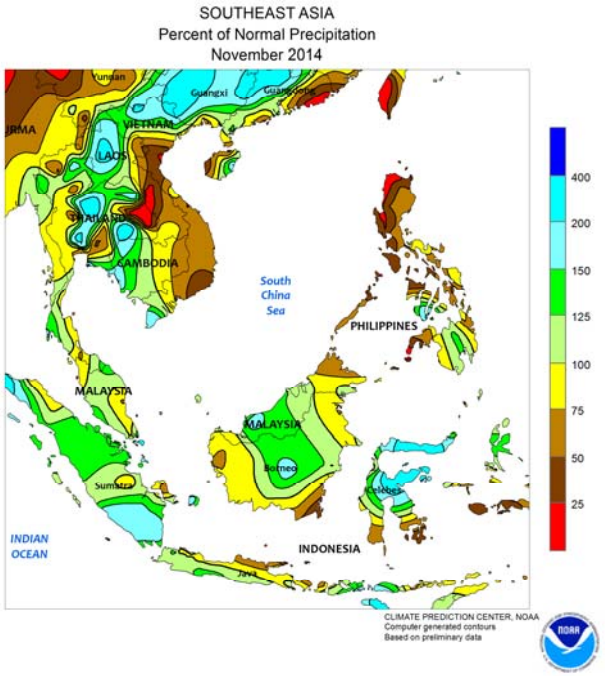


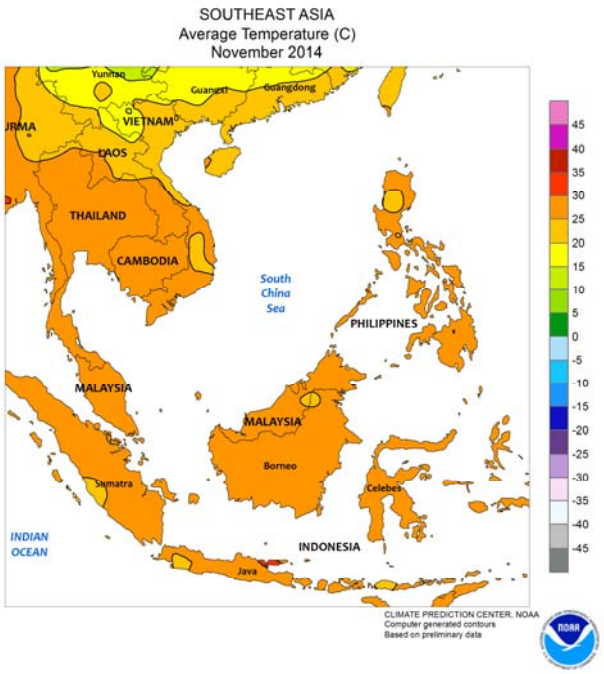


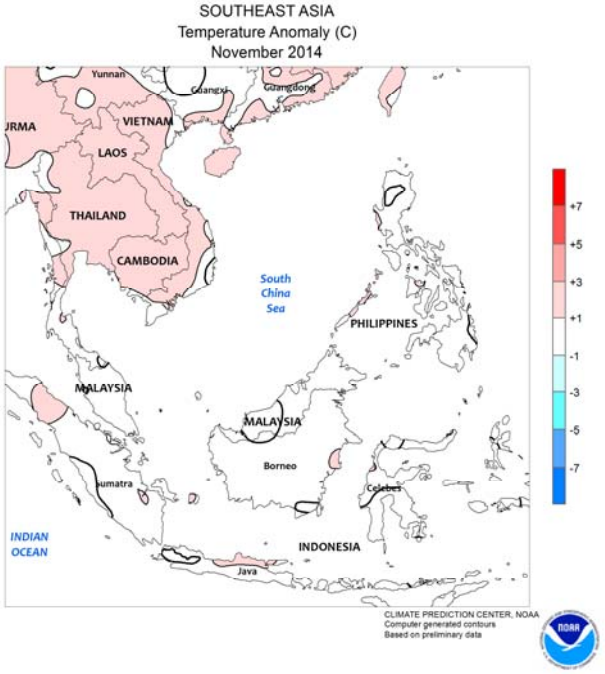
EASTERN ASIA

November rainfall was generally above normal across the North China Plain and above last year's November totals as well. The moisture benefited vegetative winter wheat during what is typically the start of the dry season. Rainfall was well above normal throughout the Yangtze Valley and above last year's monthly rainfall totals in eastern growing areas, boosting moisture reserves for vegetative winter rapeseed. In addition, above-normal temperatures throughout winter crop areas promoted vegetative growth, which better established crops prior to entering dormancy.



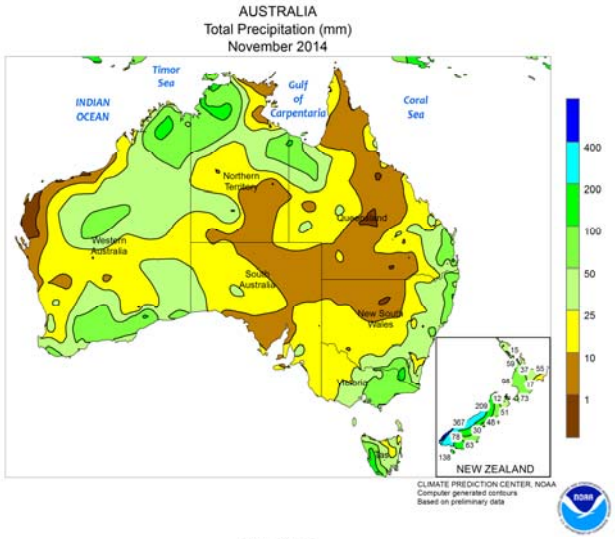


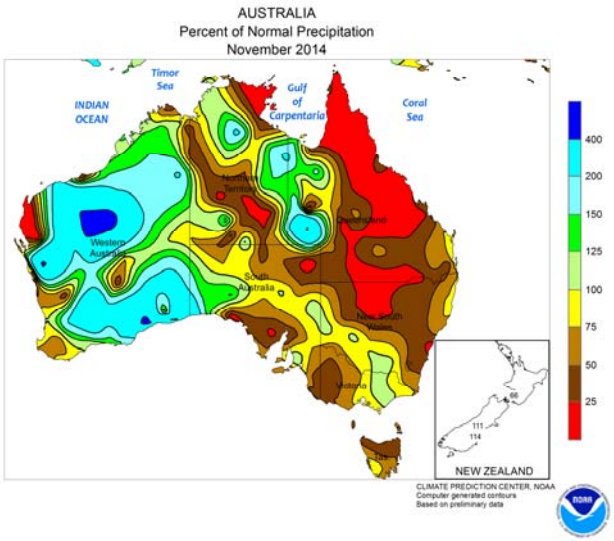


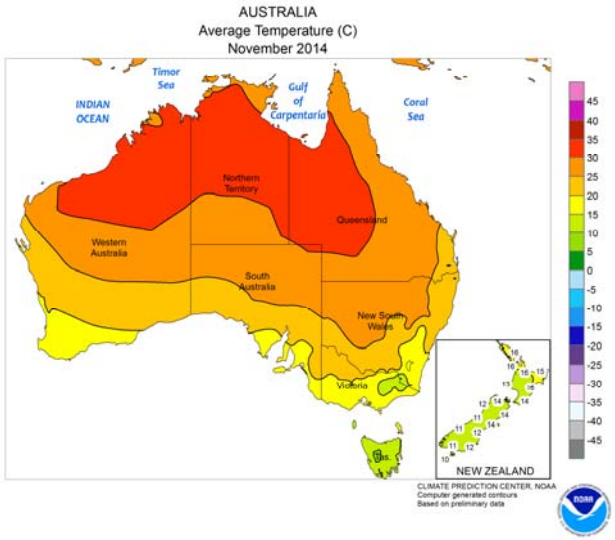


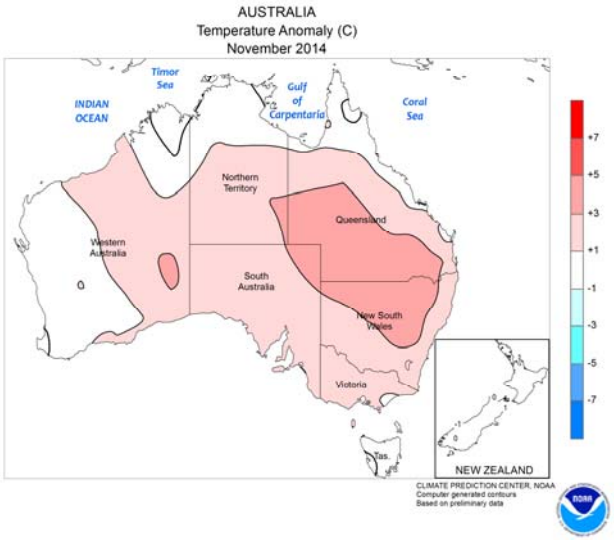
SOUTHEAST ASIA

Throughout much of November, heavy showers from an active northeast monsoon maintained adequate moisture supplies for rice and corn in the Philippines, although rainfall was below normal in parts of Luzon. A late-month tropical cyclone (Sinlaku) crossed the southern Philippines and dissipated in central Vietnam after producing heavy showers in both areas. The rainfall in central Vietnam occurred outside major agricultural areas and had little impact on previously harvested coffee, while the showers in the southern Philippines boosted winter moisture supplies for rice and corn. Elsewhere, after a slow start to the rainy season in Java, Indonesia, showers began to increase during November. In western Java, November rainfall exceeded the long-term average as well as last year's November totals, benefiting main-season rice. Meanwhile in central and eastern Java, seasonal rainfall didn't become established until late in the month leaving rice with below-average rainfall for the month.



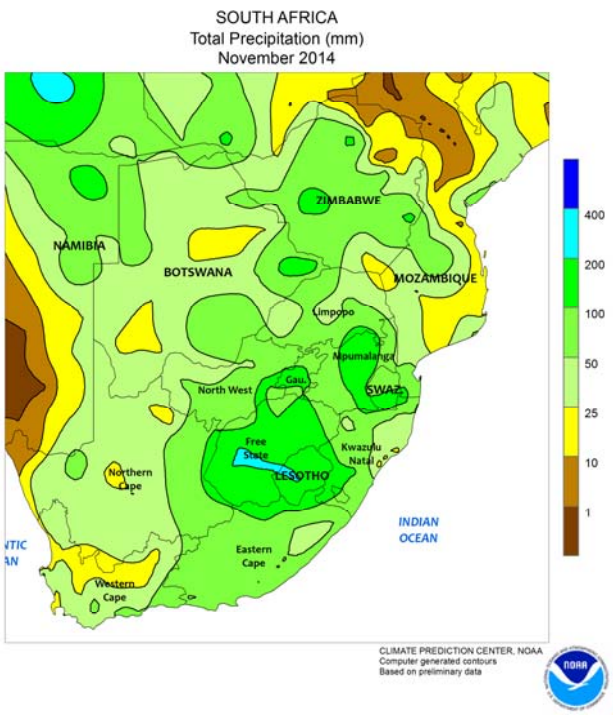


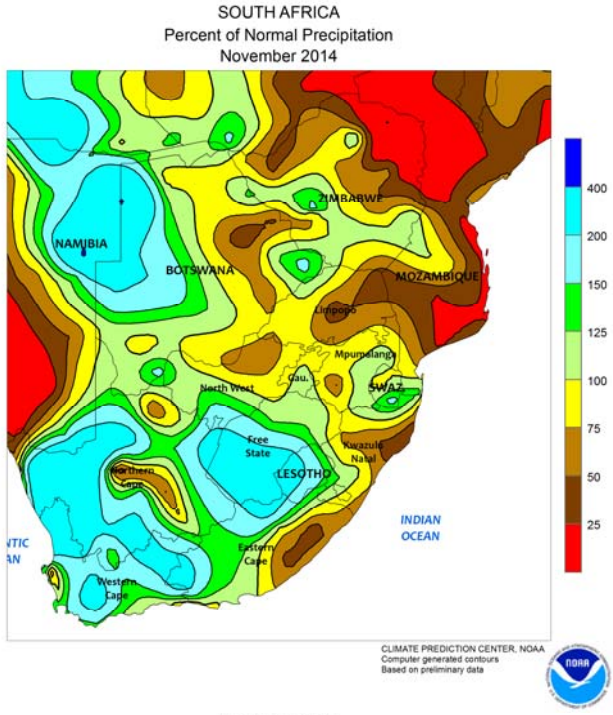


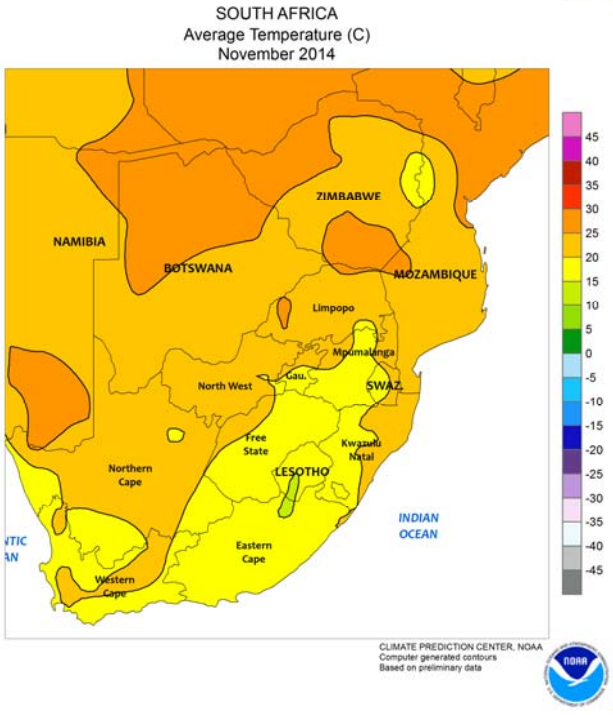


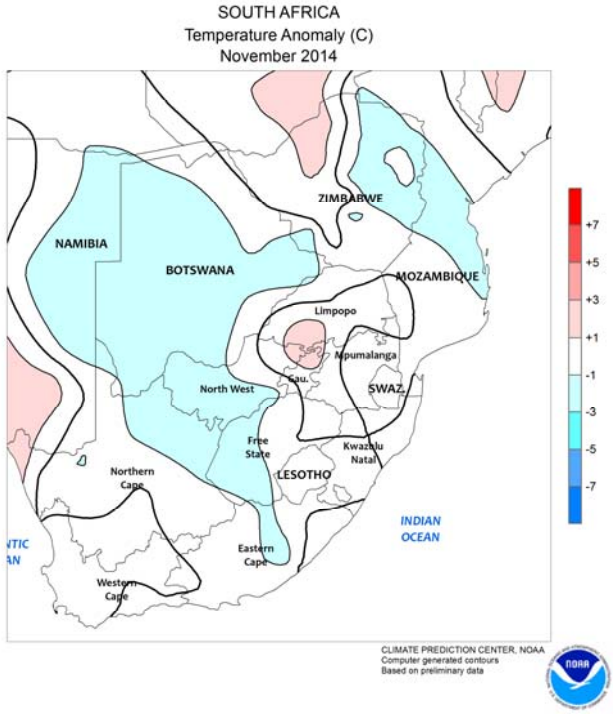
AUSTRALIA

In southern and eastern Australia, unseasonably hot, mostly dry weather during November promoted wheat, barley, and canola maturation and harvesting. The heat and dryness were unfavorable for summer crops, increasing stress on vegetative crops and discouraging additional planting. In Western Australia, near-normal rainfall and temperatures allowed winter grain and oilseed harvesting to proceed at a reasonable pace and helped maintain crop quality.



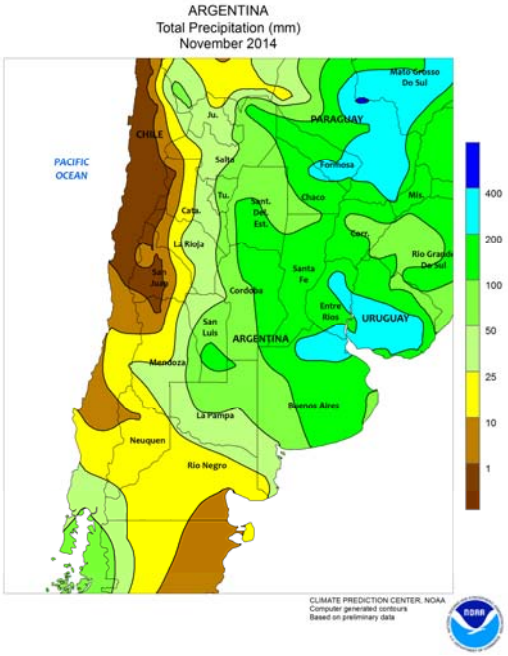


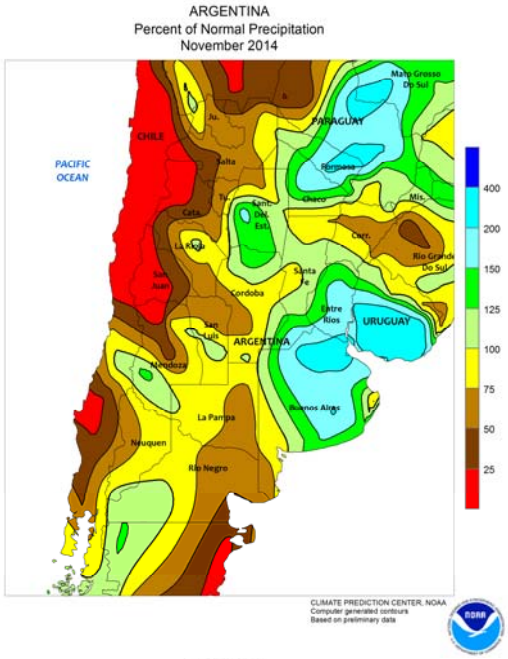


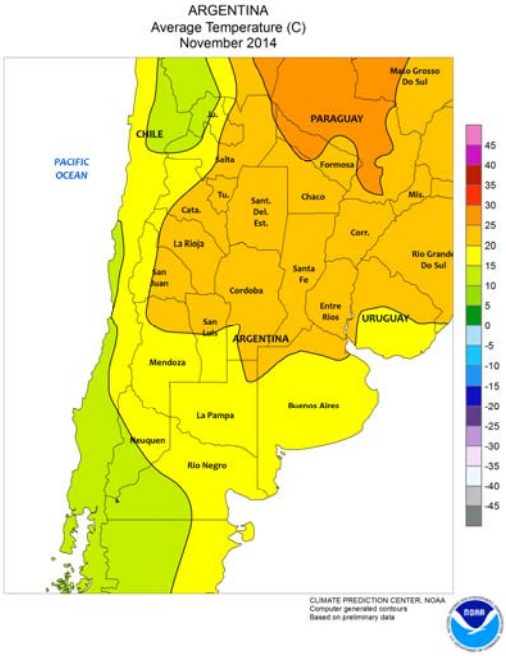


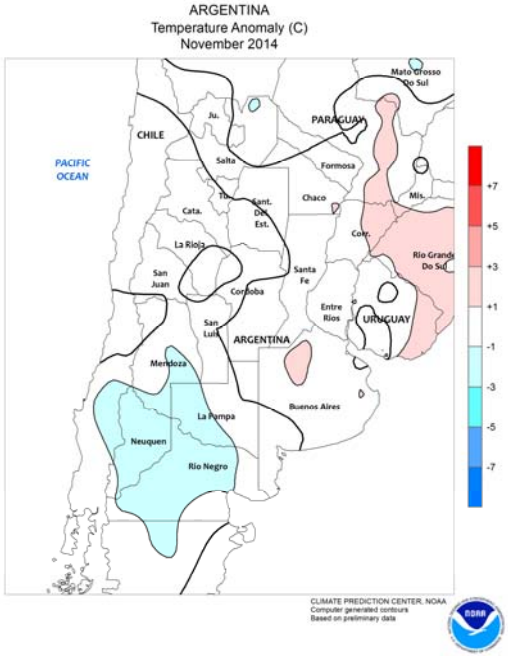
SOUTH AFRICA

During November, frequent, occasionally heavy rain improved prospects for rain-fed summer crops throughout the South African corn belt. While amounts were variable (monthly accumulations between 50 to 175 mm), the timeliness of the rainfall likely allowed planting to progress at a normal pace. In addition, seasonable temperatures lowered the potential for high evaporative losses. Elsewhere, drier-than-normal conditions continued in sugarcane areas of KwaZulu-Natal, though amounts increased to normal levels during the latter half of November. In contrast, periods of unseasonable wetness (monthly totals in excess of 25 mm) were recorded in Western Cape, giving a late-season boost to irrigation resources but disrupting seasonal fieldwork, including the final stages of the wheat harvest. Heavy rain (locally more than 100 mm) fell in upper sections of the Orange River Valley (bordering areas of Free State and Northern and Eastern Cape Provinces) at mid-month, increasing moisture supplies for irrigated summer row crops, including corn and cotton.



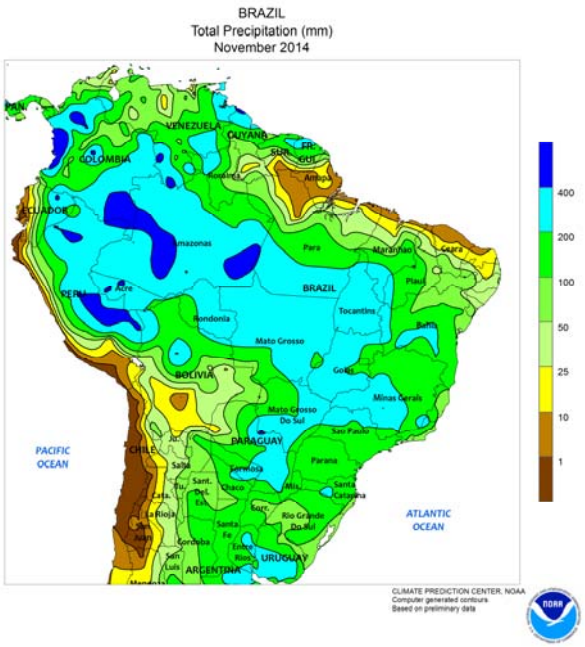


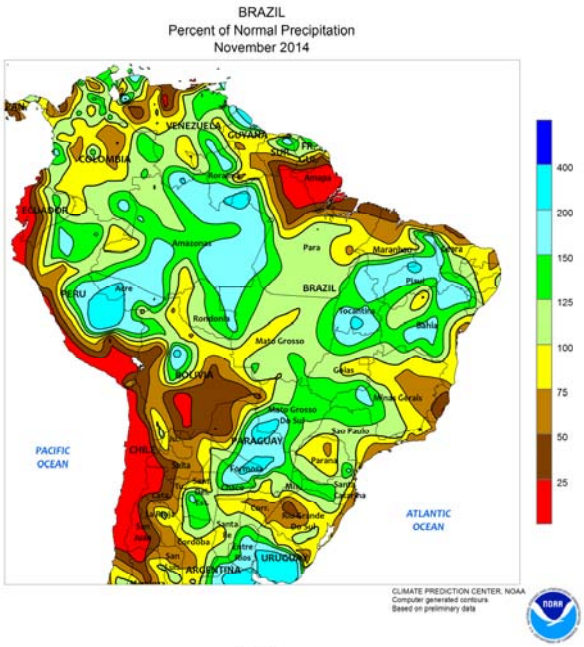


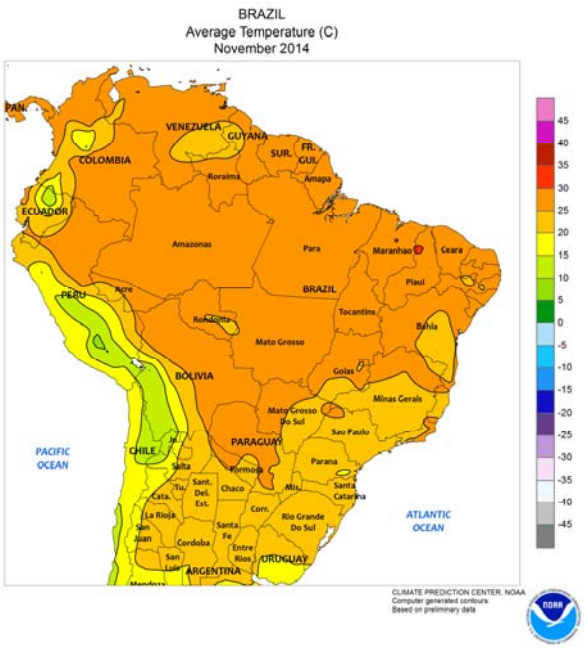


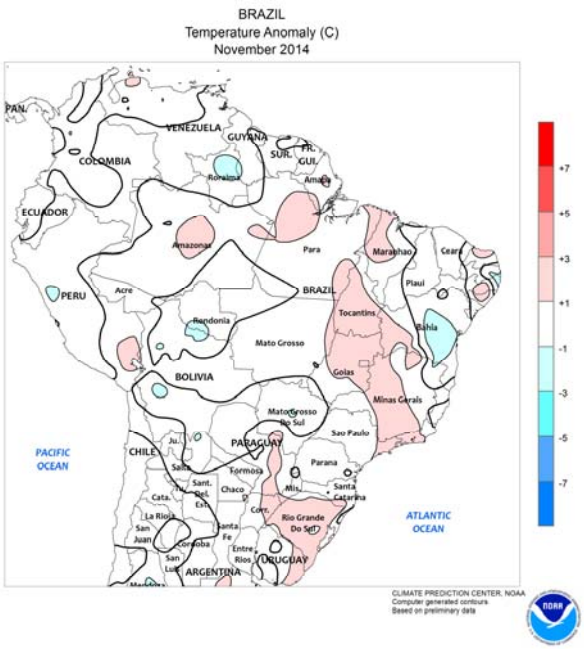
ARGENTINA

During November, near- to above-normal rainfall increased moisture for summer crop establishment, but the intensity of the rain in some areas caused localized flooding and disrupted seasonal fieldwork. The heaviest rainfall (monthly accumulations above 200 mm) occurred in the lower Parana River Valley (in and around northern Buenos Aires) and from northern Cordoba to eastern Formosa. In western areas — notably Cordoba — the rain was timely for corn and soybean planting, following extended periods of dryness. Monthly average temperatures were near to slightly above normal; highs occasionally approached 40°C in parts of the north, sustaining high evaporative losses.



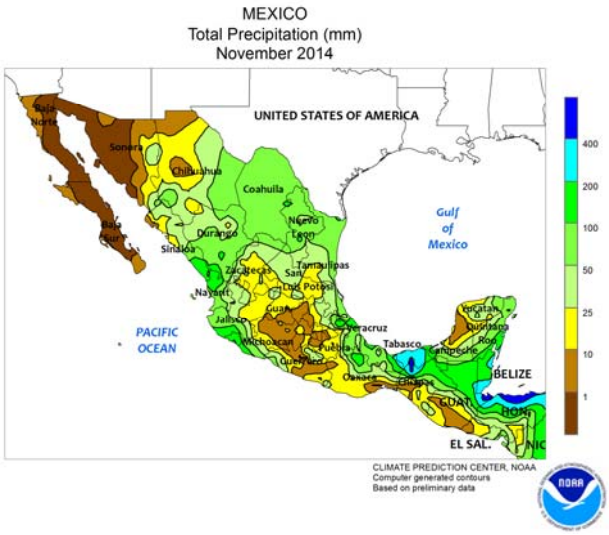


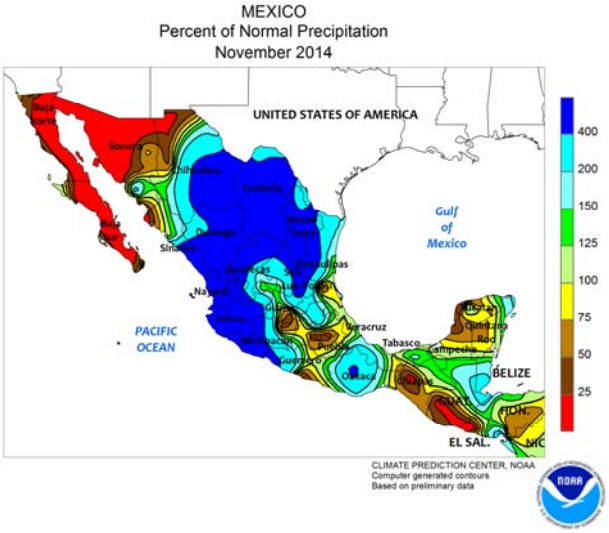


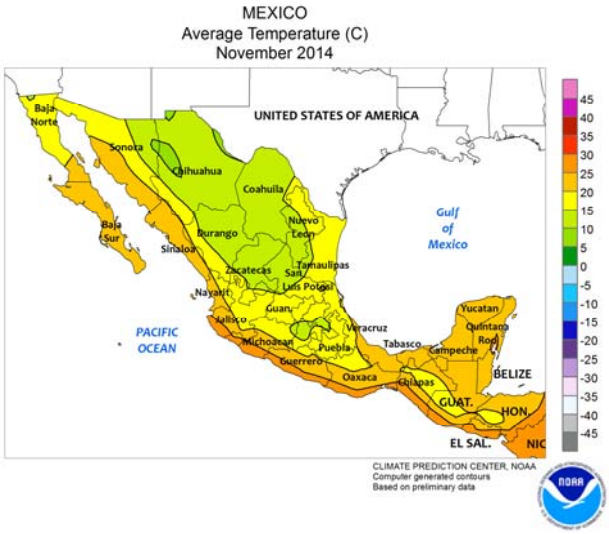


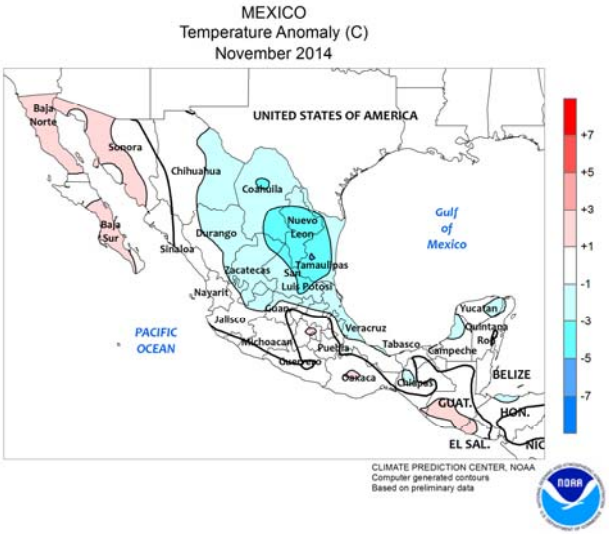
BRAZIL

In November, above-normal rainfall maintained overall favorable conditions for soybeans throughout major production areas of central Brazil. Similar conditions prevailed in soybean and cotton areas of Brazil's northeastern interior, though periods of warmth and dryness raised evaporation rates and dried topsoils as crops were emerging. Rainfall was variable in southern Brazil, with early-month wet conditions slowing the late stages of wheat harvesting in Rio Grande do Sul. In contrast, periods of unseasonable warmth and dryness reduced moisture for sugarcane and coffee in the main production areas of Sao Paulo and Minas Gerais, but a late-month surge in moisture reversed the drying trend. Monthly average temperatures were near to above normal throughout the region, with the warmest conditions (daytime highs occasionally reaching the upper 30s degrees C) in the traditionally warmer locations of Mato Grosso and Tocantins.



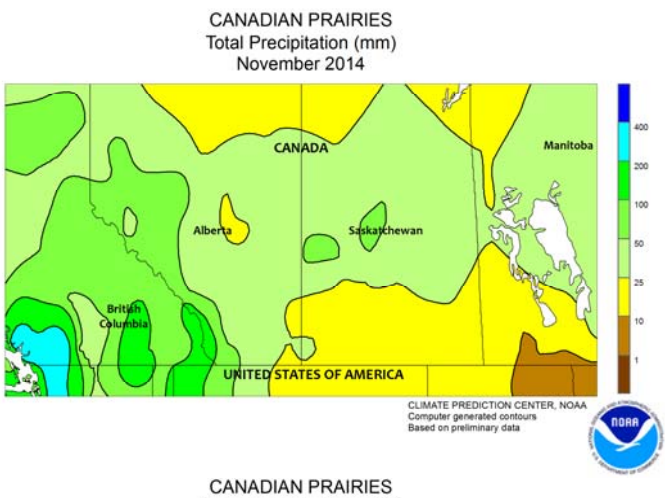


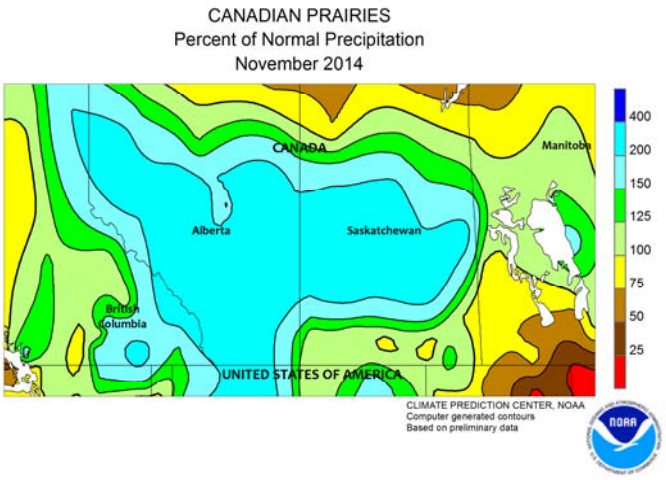


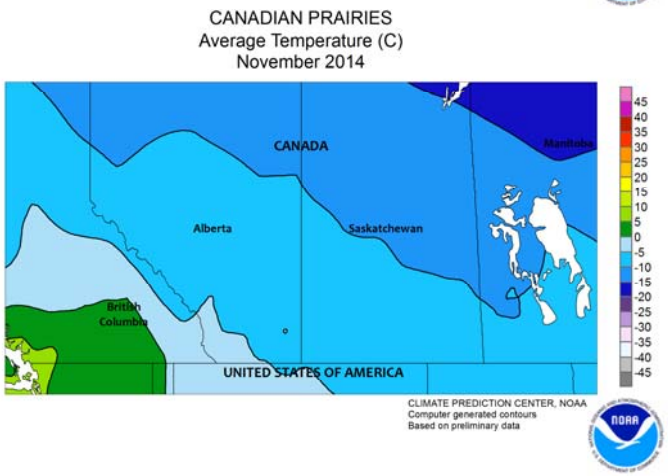


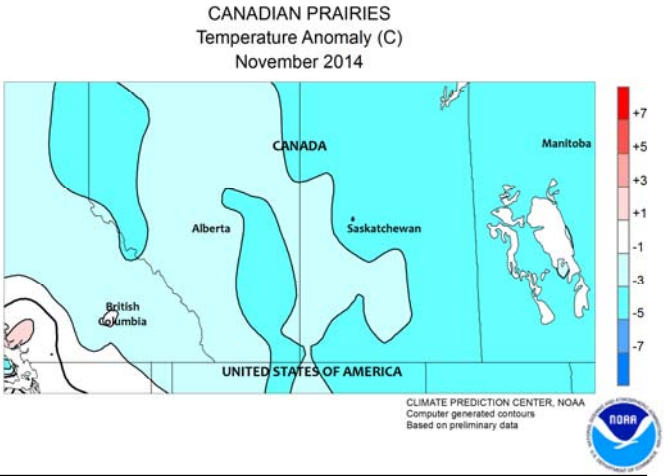
MEXICO

Hurricane Vance and its remnants generated unseasonable rain across portions of central and northern Mexico in early November. Accumulations exceeded 50 mm over a broad area stretching from the west coast vegetable areas (southern Sinaloa and Nayarit) to the Rio Grande Valley. Tropical moisture lingered into the latter half of the month along the Gulf Coast, with amounts exceeding 50 mm throughout Veracruz and more than 200 mm in the vicinity of Tabasco. In contrast, seasonably drier conditions dominated the southern plateau, favoring drydown of corn and other rain-fed summer crops and supporting harvesting. According to the government of Mexico, total National reservoir levels were at 54.5 percent capacity as of November 30, compared with 64.2 last year and 48.4 in 2012.



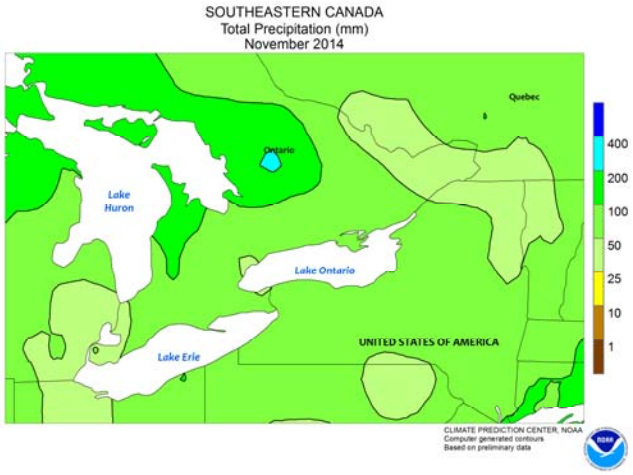


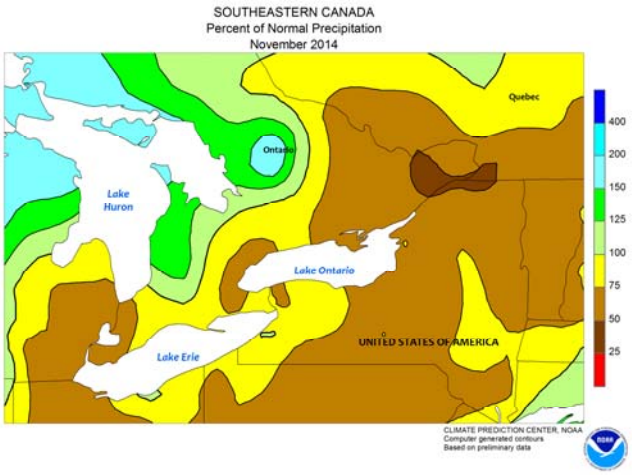


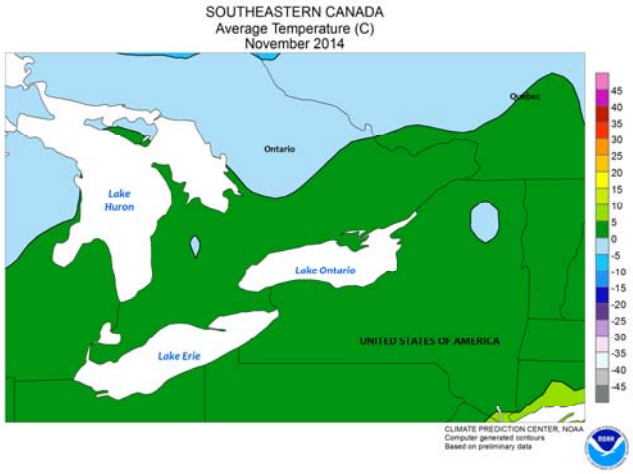


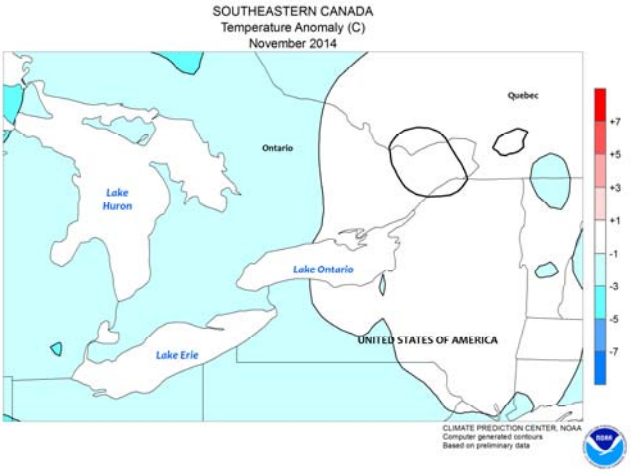
CANADIAN PRAIRIES

Cooler- and wetter-than-normal conditions prevailed across the Prairies during the month of November. Monthly temperatures averaged 2 to 4°C below normal owing to several outbreaks of bitter cold (nighttime lows falling below -20°C) that affected all major agricultural districts. Snow cover was patchy and light during the first event, which occurred at mid-month, raising concern for potential damage to winter grains. Additional snow cover offered more protection for the unseasonable cold during the later stages of November.









SOUTHEASTERN CANADA

In November, seasonal cooling pushed winter crops and pastures into dormancy. An outbreak of unseasonably cold conditions dropped nighttime lows below -15°C on several nights but snow preceding the cool down insulated winter wheat. However, monthly temperatures averaged only slightly below normal as periods of warmer weather at the beginning and end of the month offset the mid-month cold outbreak.

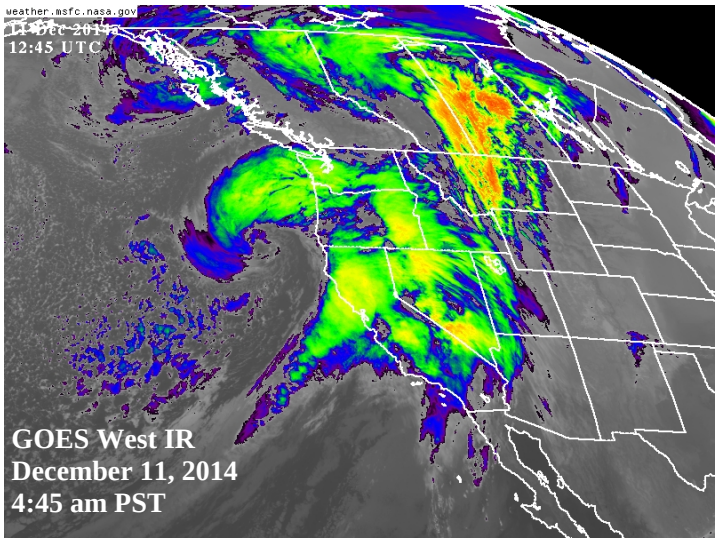
For additional information contact: mbrusberg@oce.usda.gov

U.S. Crop Production Highlights

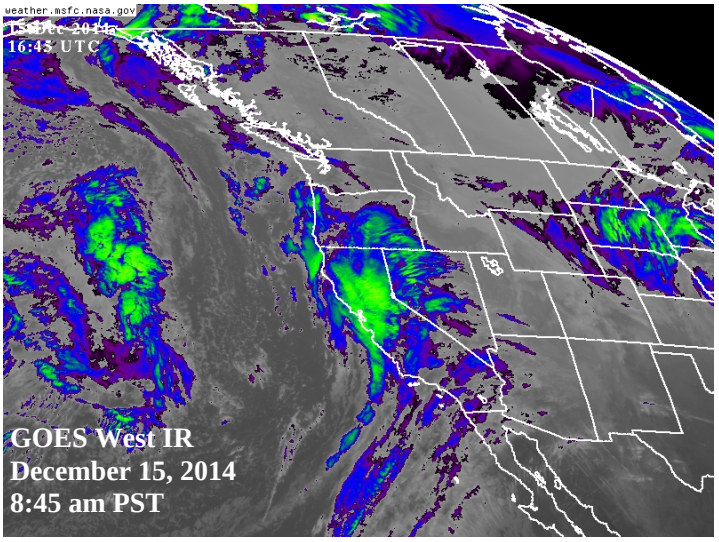
The following information was released by USDA's Agricultural Statistics Board on Dec. 10, 2014. Forecasts refer to Dec. 1.

All cotton production is forecast at 15.9 million 480-pound bales, down 3 percent from last month but up 23 percent from last year. Yield is expected to average 773 pounds per harvested acre, down 48 pounds from last year. Upland cotton production is forecast at 15.3 million 480-pound bales, up 25 percent from 2013. Pima cotton production, forecast at 578,000 bales, was carried forward from last month.

The U.S. **all orange** forecast for the 2014-2015 season is 6.96 million tons, unchanged from the previous forecast but up 3 percent from the 2013-2014 final utilization. The Florida all orange forecast, at 108 million boxes (4.86 million tons), is up 3 percent from last season's final utilization. Early, mid-season, and Navel varieties in Florida are forecast at 52.0 million boxes (2.34 million tons), down 2 percent from last season's final utilization. The Florida Valencia orange forecast, at 56.0 million boxes (2.52 million tons), is up 9 percent from last season's final utilization. In Florida, citrus growing conditions were ideal from the beginning of the citrus bloom to the start of the 2014-2015 season harvest. Arizona, California, and Texas forecasts are carried forward from the previous forecast.



A significant storm arrived in California on December 11.



Additional storms followed, starting on December 15.

The *Weekly Weather and Crop Bulletin* (ISSN 0043-1974) is jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the *Weekly Weather Chronicle*. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53rd Congress, 3rd Session. The contents may be redistributed freely with proper credit.

Correspondence to the meteorologists should be directed to:
***Weekly Weather and Crop Bulletin*, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 4443B, Washington, DC 20250.**
Internet URL: **http://www.usda.gov/oce/weather**
E-mail address: ***brippey@oce.usda.gov***

The *Weekly Weather and Crop Bulletin* and archives are maintained on the following USDA Internet URL:
http://www.usda.gov/oce/weather/pubs/Weekly/Wwcb/index.htm