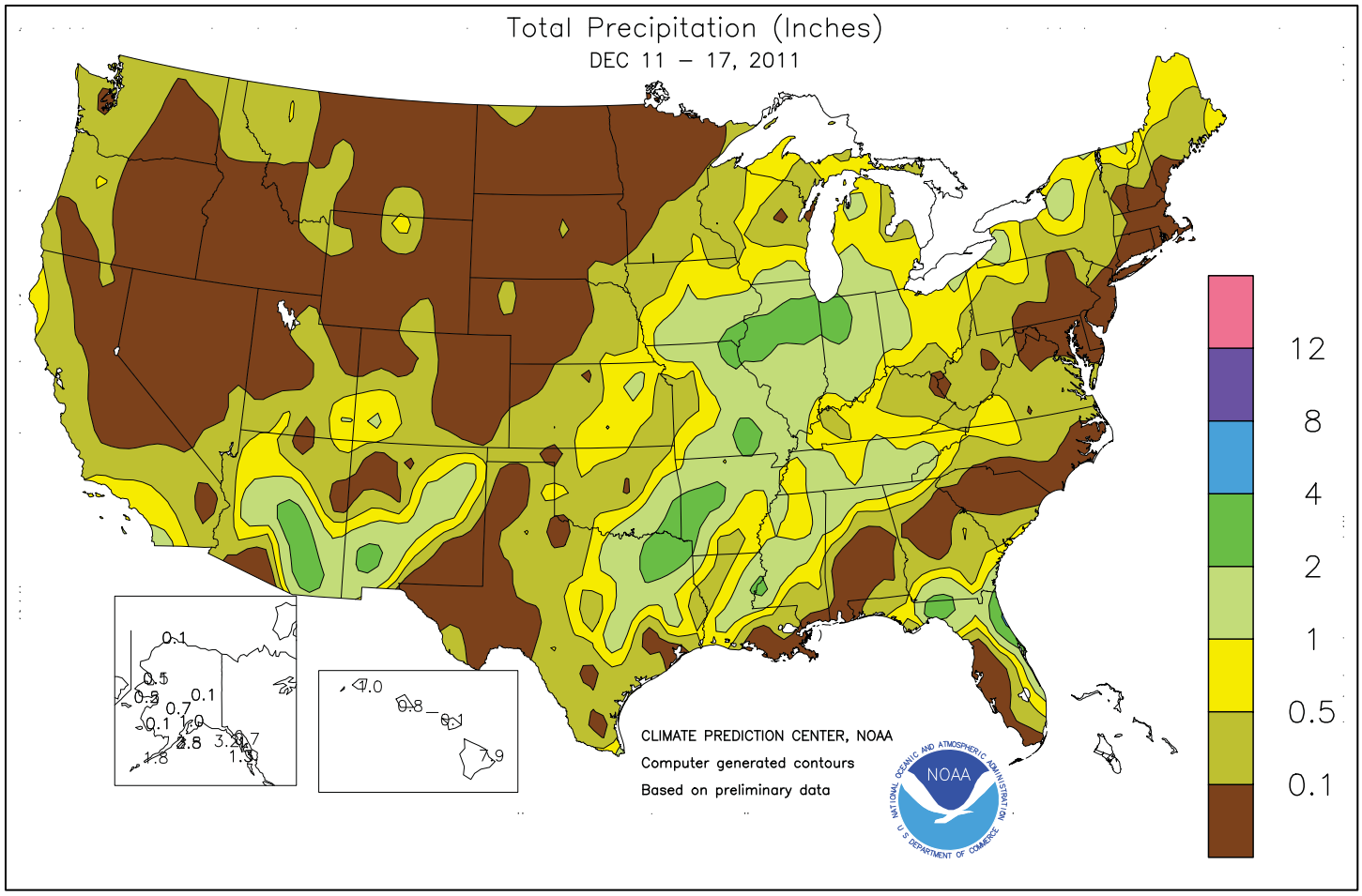
Volume 98, No. 51 http://www.usda.gov/oce/weather December 20, 2011

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 11 - 17, 2011

Highlights provided by USDA/WAOB

Generally wet weather persisted from the **southeastern Plains into the Midwest**. On the **southern Plains**, rain continued to chip away at long-term precipitation deficits, benefiting winter grains and drought-ravaged rangeland and pastures. Farther north and east, however, soggy conditions plagued the **Mid-South** and the **eastern Corn Belt**. In the latter region, producers were waiting for fields to freeze before proceeding with the corn harvest. In contrast, little or no precipitation accompanied mild weather along the **Atlantic Seaboard** and across the

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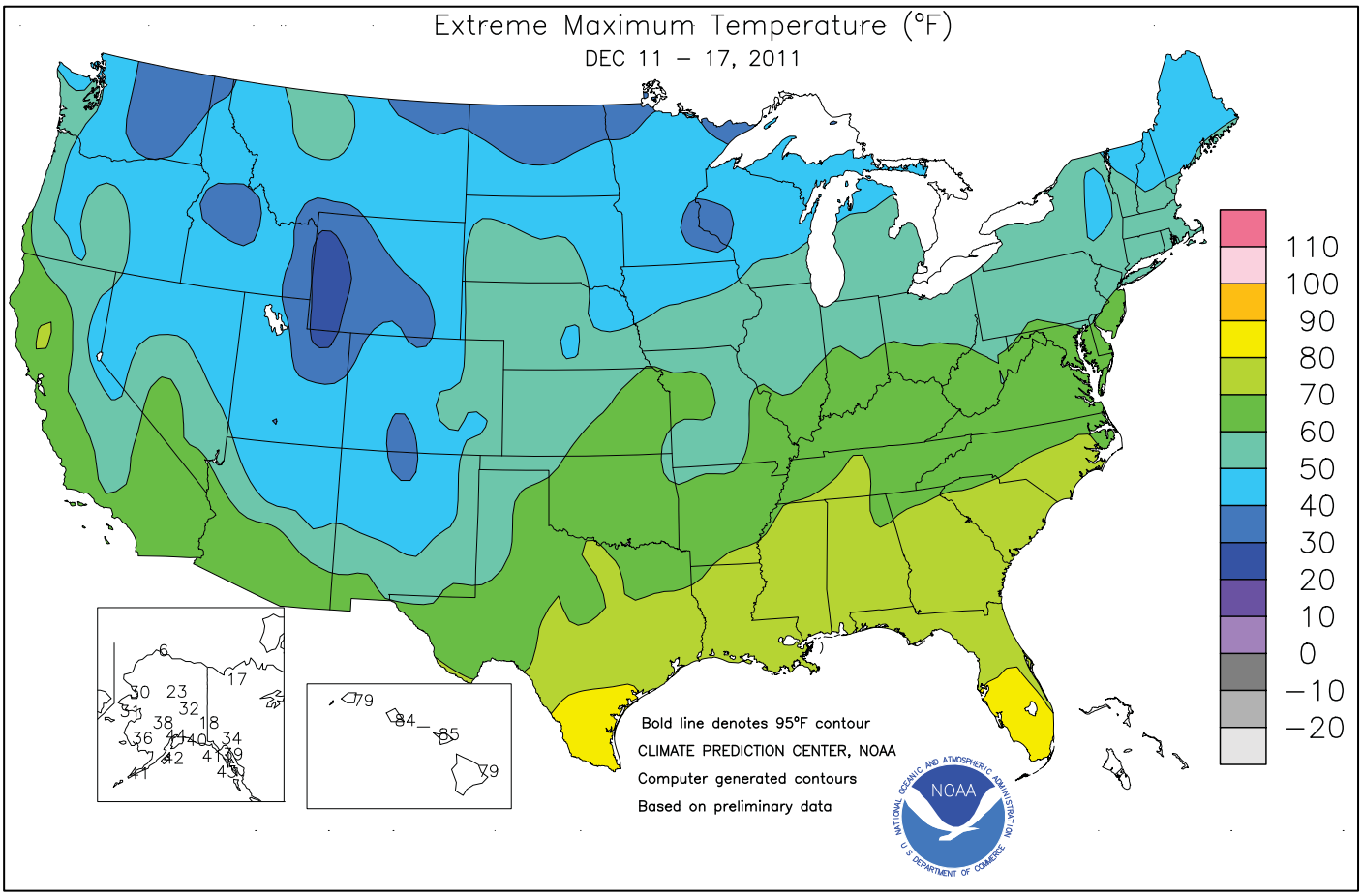
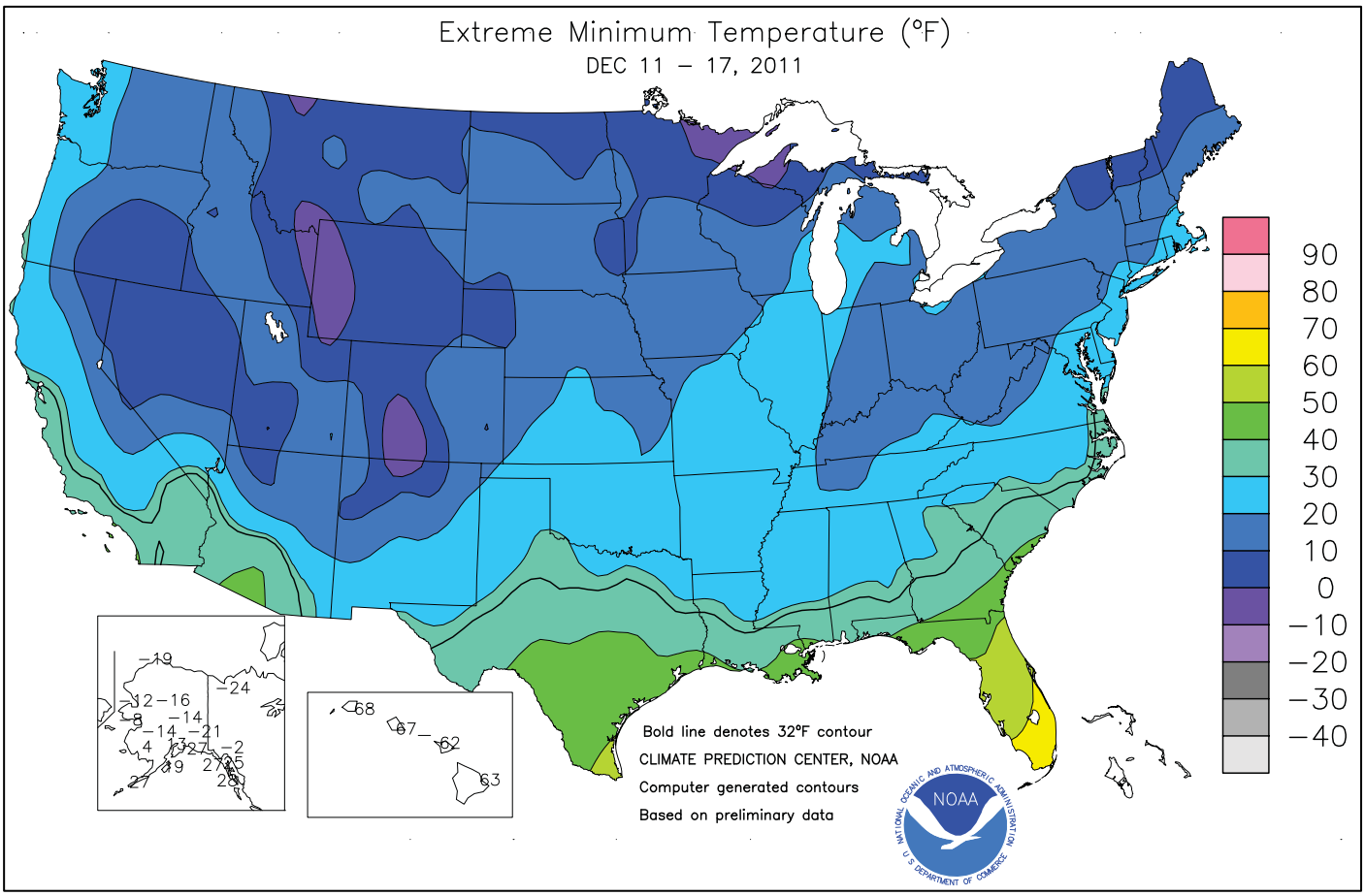
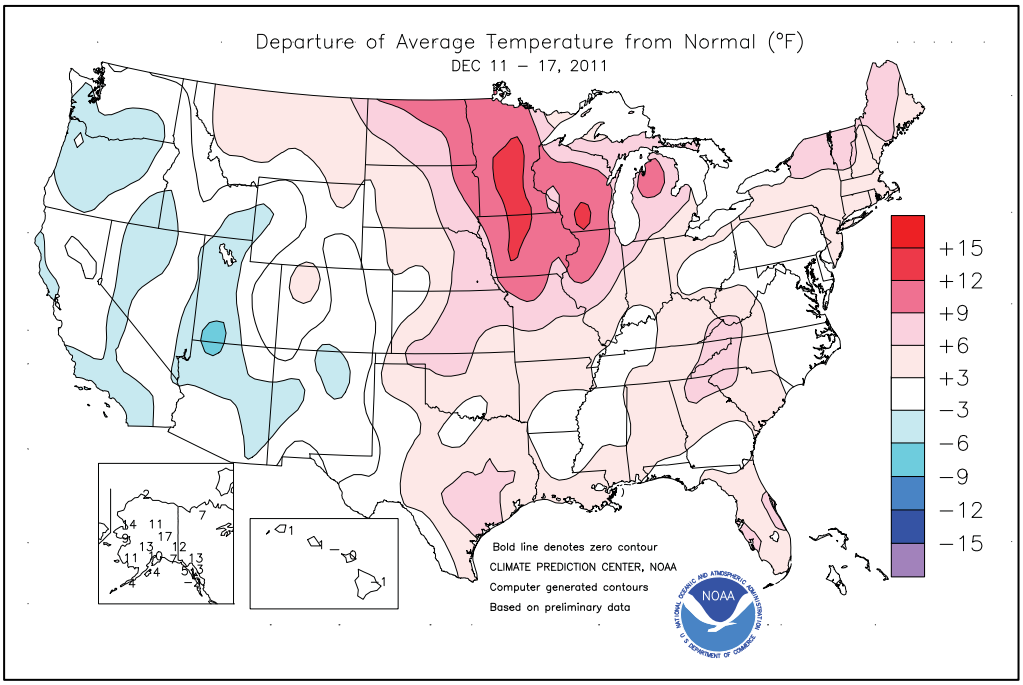

Extreme Maximum Temperature (°F)
DEC 11 – 17, 2011
110
100
90
80
70
60
50
40
30
20
10
0
−10
−20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
NOAA


Extreme Minimum Temperature (°F)
DEC 11 – 17, 2011
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

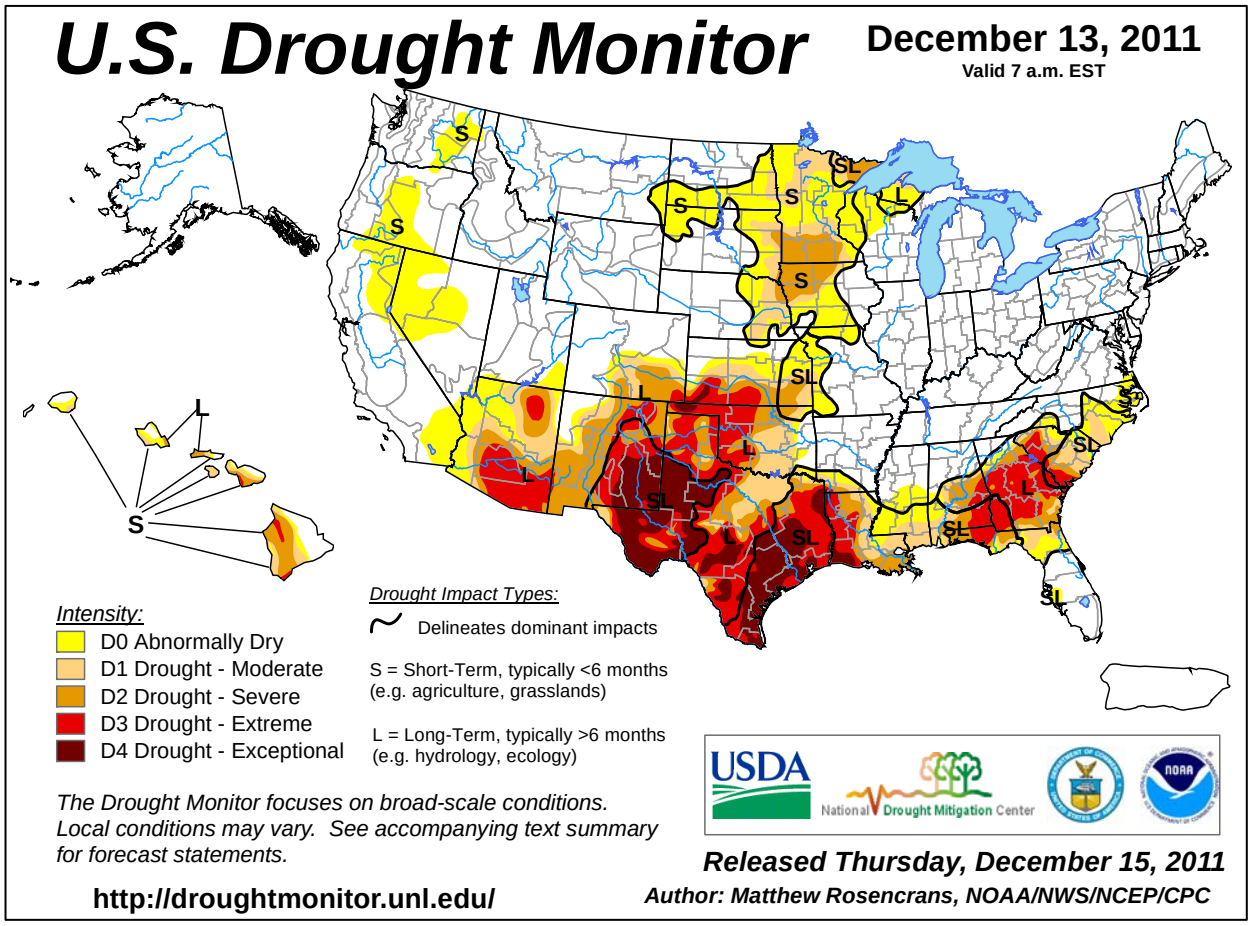
(Continued from front cover)
northern Plains and **upper Midwest**. Soybean harvesting and other late-autumn fieldwork neared completion in the **Southeast**, while winter wheat's protective snow cover largely melted on the **Plains**. In the **West**, cool, mostly dry weather prevailed, except in the **Four Corners States**. A slow start to the wet season in **California** was not yet a hydrological concern, due to above-average reservoir storage. In valley locations, however, cold, dry weather has stunted the growth of cool-season pastures. Farther south, drought-affected sections of **Arizona** and **New Mexico** continued to benefit from widespread rain and snow.

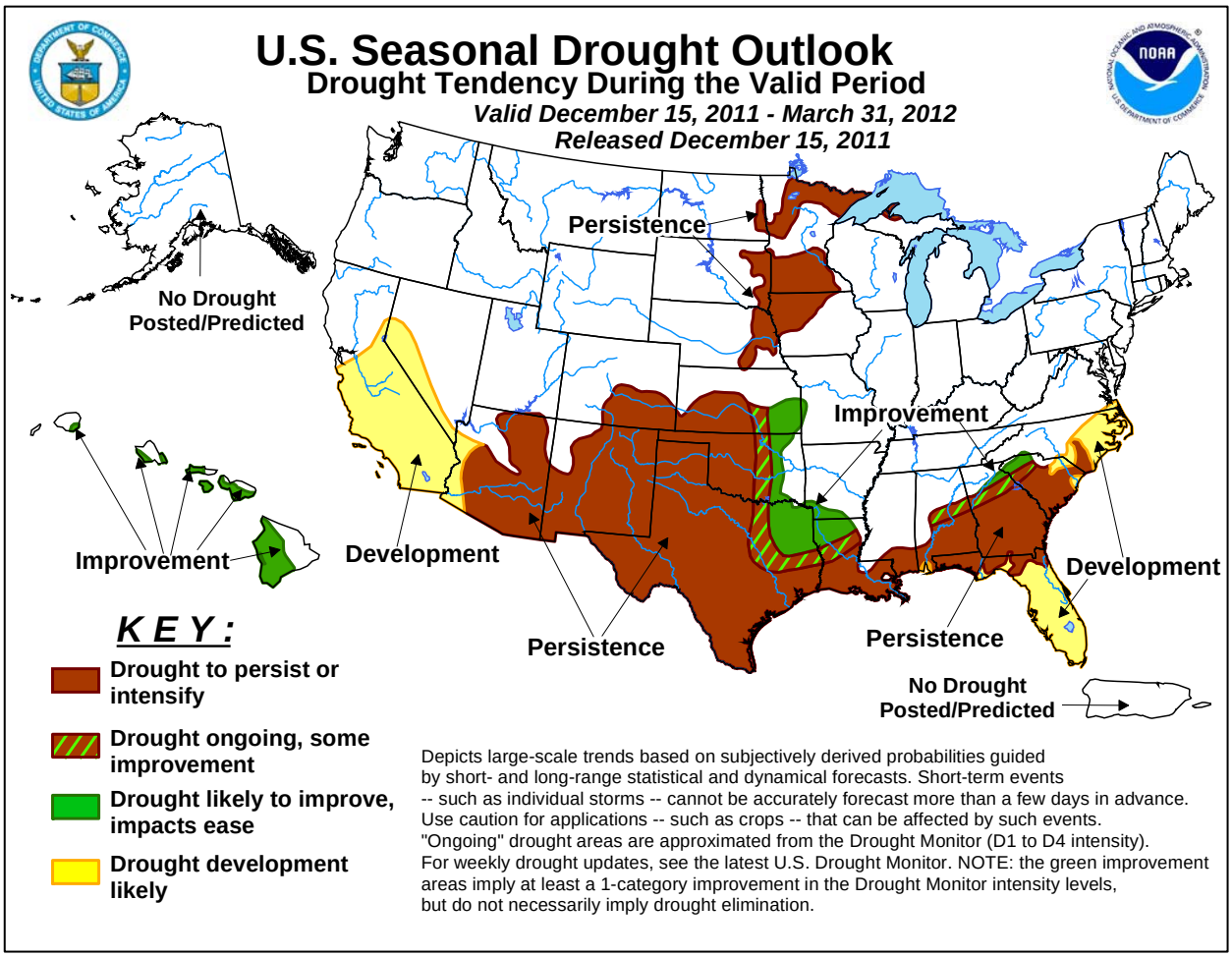


Early in the week, drought-easing rains ended across **southern Texas**. **McAllen, TX**, received 1.94 inches from December 10-12, accounting for 19 percent of its year-to-date rainfall of 10.26 inches (47 percent of normal). Farther east, some early-week showers peppered the **southern Atlantic Coast**. In **Florida**, **Daytona Beach** a daily-record total of 2.36 inches on December 12. Meanwhile, another round of significant precipitation spread into the **Southwest**. In **Arizona**, daily-record amounts for December 13 included 1.14 inches in **Tucson** and 1.12 inches in **Yuma**. **Tucson** also noted its seventh-wettest December day on record and was ensured of an above-normal annual precipitation total for the first time since 2000. Elsewhere in **Arizona**, **Flagstaff** received 17.6 inches of snow from December 12-14. By mid-week, rain returned to the **Midwest**, where record-setting amounts for December 14 reached 1.46 inches in **Peoria, IL**, and 1.30 inches in **South Bend, IN. Chicago, IL**, with 1.43 inches on the 14th, experienced its first December day with at least an inch of precipitation since December 27, 2008. In **Arkansas**, **Little Rock's** December 1-17 precipitation of 5.97 inches accounted for nearly half (49 percent) of its normal winter (December-February) total. In contrast, dry conditions persisted across the **upper Midwest**. From August 1 - December 15, the 4.94-inch total in **Rochester, MN**, was just 45 percent of normal and marked the driest such period since 2003 (4.46 inches). Short-term dryness continued to intensify along the **Pacific Coast**, where **Eureka, CA**, set a record with no measurable precipitation during the first 13 days of December. **Eureka's** streak ended with a 0.47-inch total on December 14-15. Similarly, **Seattle, WA**, noted record-low precipitation during the first 2 weeks of December (0.03 inch; previously, 0.07 inch in 1919).

Daily-record lows were scattered across the **West** for much of the week. In **California**, records were set in locations such as **Montague** (8°F on December 14); **Ramona** (24°F on December 11); and **Palm Springs** (37°F on December 15). Meanwhile, warmth was most prevalent across the **Midwest**, where **Huron, SD** (60°F on December 17), and **Moline, IL** (57°F on December 15), were among several stations reporting daily-record highs. Warm weather also made an appearance across the **South**, where **Monroe, LA** (81°F), notched a record-setting high for December 15. At week's end, warmth began to intensify across the **northern Plains** and the **Northwest**. By Sunday, December 18, highs of 72°F in **Redding, CA**, and 55°F in **Fargo, ND**, were records for the date.

Mild, stormy weather covered much of **Alaska**, where weekly temperatures averaged more than 10°F above normal at many interior locations. With an average temperature of 14.1°F (17.9°F above normal), **Fairbanks** experienced its warmest first half of December since 1934. In **Valdez**, daily-record snowfalls of 20.3 and 20.0 inches on December 11 and 17, respectively, contributed to a weekly total of 59.9 inches. Through December 17, the month-to-date snowfall in **Valdez** reached 95.9 inches. The snowiest December on record in **Valdez** occurred in 1991, when 137.1 inches fell. Heavy snow was also observed in **King Salmon**, where a daily-record total of 10.0 inches fell on December 11. Farther south, an upper-level disturbance in the vicinity of **Hawaii** helped to trigger locally heavy precipitation, especially on **Oahu**, where weekly rainfall reached 11.46 inches at the **Manoa Lyon Arboretum**. More than half (5.89 inches) of the arboretum's rain fell in a 12-hour period on December 12-13. Meanwhile on the **Big Island**, **Hilo's** month-to-date rainfall climbed to 10.25 inches (151 percent of normal).


U.S. Drought Monitor
December 13, 2011
Valid 7 a.m. EST
Intensity:
D0 Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
L = Long-Term, typically >6 months (e.g. hydrology, ecology)
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
http://droughtmonitor.unl.edu/
USDA
National Drought Mitigation Center
Released Thursday, December 15, 2011
Author: Matthew Rosencrans, NOAA/NWS/NCEP/CPC


U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid December 15, 2011 - March 31, 2012
Released December 15, 2011
No Drought Posted/Predicted
Persistence
Improvement
Development
Persistence
Development
Persistence
Improvement
No Drought Posted/Predicted
KEY:
Drought to persist or intensify
Drought ongoing, some improvement
Drought likely to improve, impacts ease
Drought development likely
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 green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

National Weather Data for Selected Cities

Weather Data for the Week Ending December 17, 2011

Data Provided by Climate Prediction Center (301-763-8000, Ext. 7503)

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 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	62	42	73	26	52	6	0.19	-0.76	0.15	2.60	108	55.67	107	95	54	0	1	2	0
	HUNTSVILLE	59	39	71	23	49	5	1.10	-0.15	0.93	3.24	104	56.48	103	87	61	0	2	2	1
	MOBILE	65	48	77	36	56	3	0.01	-1.00	0.01	0.22	8	48.75	76	90	75	0	0	1	0
	MONTGOMERY	66	42	76	32	54	5	0.03	-1.10	0.02	0.32	11	45.65	87	91	49	0	1	2	0
AK	ANCHORAGE	34	20	44	13	27	9	0.96	0.71	0.50	1.60	281	15.96	102	88	74	0	7	3	1
	BARROW	-3	-12	6	-19	-8	2	0.06	0.06	0.04	0.54	5400	6.55	163	86	76	0	7	3	0
	FAIRBANKS	22	1	32	-14	11	16	0.09	-0.08	0.04	0.41	114	9.00	90	88	81	0	7	3	0
	JUNEAU	36	29	39	25	33	3	0.69	-0.52	0.51	4.40	152	63.18	113	96	87	0	6	7	1
	KODIAK	40	30	42	19	35	4	2.84	1.17	1.16	4.46	114	69.07	96	87	70	0	4	6	2
	NOME	25	10	31	-8	18	9	0.21	-0.01	0.07	2.05	360	18.41	114	88	82	0	7	5	0
AZ	FLAGSTAFF	34	16	40	1	25	-6	1.77	1.38	1.09	2.59	270	21.10	96	92	67	0	7	3	2
	PHOENIX	63	47	70	41	55	0	0.79	0.60	0.39	0.96	218	4.52	58	71	52	0	0	2	0
	PRESCOTT	47	27	53	21	37	-1	0.73	0.45	0.39	1.26	188	11.24	60	90	51	0	6	3	0
	TUCSON	60	43	70	33	51	-1	1.60	1.39	0.91	2.34	509	12.54	108	80	55	0	0	2	1
AR	FORT SMITH	56	38	67	28	47	5	1.04	0.24	0.91	2.80	128	45.92	108	87	56	0	2	4	1
	LITTLE ROCK	56	36	66	25	46	2	0.81	-0.29	0.54	5.94	206	58.40	119	94	57	0	4	3	1
CA	BAKERSFIELD	56	35	58	31	45	-2	0.00	-0.14	0.00	0.00	0	4.39	73	85	66	0	2	0	0
	FRESNO	56	34	58	30	45	0	0.00	-0.26	0.00	0.00	0	10.93	104	87	70	0	3	0	0
	LOS ANGELES	61	47	66	42	54	-4	0.67	0.31	0.65	0.67	82	9.86	81	79	59	0	0	2	1
	REDDING	59	34	71	24	47	2	0.09	-0.87	0.09	0.09	4	26.23	84	72	49	0	4	1	0
	SACRAMENTO	57	32	65	28	45	-1	0.27	-0.23	0.27	0.27	22	16.95	101	95	49	0	5	1	0
	SAN DIEGO	60	48	63	46	54	-4	0.84	0.60	0.47	0.84	150	9.05	90	81	64	0	0	3	0
	SAN FRANCISCO	55	41	62	38	48	-2	0.13	-0.46	0.07	0.13	9	16.58	89	86	72	0	0	2	0
	STOCKTON	55	33	57	29	44	-1	0.16	-0.20	0.15	0.16	18	10.14	78	93	78	0	5	2	0
CO	ALAMOSA	28	1	40	-7	15	-3	0.10	0.04	0.09	0.21	131	4.54	64	80	71	0	7	2	0
	CO SPRINGS	47	18	52	16	32	3	0.00	-0.08	0.00	0.02	13	15.80	92	76	29	0	7	0	0
	DENVER INTL	39	18	47	13	29	-1	0.00	-0.06	0.00	0.29	193	16.82	125	75	45	0	7	0	0
	GRAND JUNCTION	41	23	43	15	32	3	0.23	0.15	0.15	0.23	105	9.62	111	85	62	0	7	2	0
	PUEBLO	46	13	52	11	30	-1	0.00	-0.06	0.00	0.12	71	8.49	70	84	52	0	7	0	0
CT	BRIDGEPORT	48	31	56	23	40	4	0.00	-0.74	0.00	2.34	127	56.52	133	66	42	0	5	0	0
	HARTFORD	47	26	53	19	37	5	0.06	-0.72	0.05	2.81	143	67.30	151	76	50	0	6	2	0
DC	WASHINGTON	51	35	63	29	43	3	0.02	-0.64	0.01	3.36	209	45.35	120	73	43	0	3	2	0
DE	WILMINGTON	50	30	61	20	40	3	0.03	-0.71	0.03	2.19	120	54.33	132	94	46	0	5	1	0
FL	DAYTONA BEACH	75	59	78	56	67	6	3.03	2.45	1.55	3.03	213	48.62	101	98	62	0	0	3	2
	JACKSONVILLE	69	49	75	46	59	4	1.52	0.97	1.50	1.56	116	47.67	93	97	63	0	0	2	1
	KEY WEST	79	71	80	70	75	3	0.13	-0.32	0.13	0.26	24	42.56	112	89	67	0	0	1	0
	MIAMI	80	70	82	66	75	5	0.76	0.26	0.50	1.13	88	63.85	111	80	57	0	0	4	1
	ORLANDO	77	60	81	56	68	5	0.61	0.10	0.39	0.62	48	56.68	120	96	67	0	0	3	0
	PENSACOLA	66	49	75	38	58	3	0.08	-0.75	0.04	0.46	22	41.43	66	91	66	0	0	4	0
	TALLAHASSEE	70	45	76	40	58	4	3.57	2.73	2.18	3.69	181	34.07	56	98	64	0	0	2	2
	TAMPA	78	62	79	60	70	6	0.00	-0.52	0.00	0.04	3	53.08	121	90	53	0	0	0	0
	WEST PALM BEACH	79	70	80	64	74	5	0.33	-0.37	0.26	0.61	30	47.60	79	85	68	0	0	3	0
GA	ATHENS	63	40	75	31	51	6	0.00	-0.78	0.00	0.47	24	33.57	73	83	50	0	1	0	0
	ATLANTA	62	42	72	32	52	6	0.01	-0.80	0.01	0.80	38	35.60	73	76	46	0	1	1	0
	AUGUSTA	65	38	76	29	52	5	0.07	-0.56	0.07	0.12	8	28.29	66	91	64	0	1	1	0
	COLUMBUS	64	44	74	36	54	4	0.60	-0.36	0.59	1.15	48	35.87	77	89	48	0	0	2	1
	MACON	65	39	75	27	52	4	0.09	-0.74	0.08	0.32	16	30.43	71	95	48	0	1	2	0
	SAVANNAH	67	44	76	41	55	3	0.64	0.08	0.64	0.69	53	34.15	71	87	66	0	0	1	1
HI	HILO	77	67	79	63	72	0	7.87	5.43	4.10	10.20	151	87.61	71	90	86	0	0	7	4
	HONOLULU	82	70	84	67	76	1	0.75	0.12	0.41	0.99	68	16.15	96	89	78	0	0	5	0
	KAHULUI	81	66	85	62	74	0	0.06	-0.58	0.00	0.06	4	10.71	62	81	74	0	0	1	0
	LIHUE	78	71	79	68	75	2	0.96	-0.09	0.33	1.31	51	42.76	115	86	81	0	0	5	0
ID	BOISE	40	19	43	17	30	-1	0.00	-0.30	0.00	0.00	0	10.19	88	79	65	0	7	0	0
	LEWISTON	35	26	51	17	31	-3	0.03	-0.19	0.03	0.03	5	12.88	105	93	81	0	7	1	0
	POCATELLO	36	9	40	5	22	-4	0.00	-0.22	0.00	0.01	2	12.18	101	90	77	0	7	0	0
IL	CHICAGO/O'HARE	45	31	57	23	38	9	1.60	1.03	1.44	2.10	144	49.28	140	82	68	0	4	4	1
	MOLINE	46	30	58	22	38	10	1.37	0.86	1.03	2.40	186	34.57	93	86	71	0	5	2	1
	PEORIA	46	30	57	21	38	9	1.97	1.40	1.46	2.29	152	39.27	112	87	63	0	5	3	2
	ROCKFORD	44	28	56	20	36	10	0.85	0.37	0.65	1.71	135	38.69	108	87	73	0	5	4	1
	SPRINGFIELD	48	31	59	25	40	8	0.71	0.12	0.34	0.86	57	28.86	84	89	61	0	5	3	0
IN	EVANSVILLE	50	30	65	20	40	3	0.91	0.08	0.65	4.31	198	68.30	159	88	68	0	4	3	1
	FORT WAYNE	43	26	58	14	35	5	1.62	0.97	1.23	2.73	169	48.50	137	87	68	0	5	4	1
	INDIANAPOLIS	46	29	62	19	38	5	1.62	0.92	1.18	2.98	165	47.50	120	88	63	0	4	3	1
	SOUTH BEND	43	29	57	19	36	6	1.47	0.75	1.28	1.91	105	45.78	119	83	68	0	5	4	1
IA	BURLINGTON	44	30	57	22	37	8	2.09	1.59	1.54	2.82	217	35.31	95	93	68	0	5	3	2
	CEDAR RAPIDS	42	27	55	16	34	9	0.93	0.58	0.68	2.53	269	30.00	91	92	67	0	4	2	1
	DES MOINES	45	30	56	19	38	12	0.77	0.47	0.56	2.25	278	36.93	108	85	66	0	4	2	1
	DUBUQUE	42	27	52	19	35	11	0.89	0.50	0.78	2.26	215	45.87	132	93	76	0	5	4	1
	SIOUX CITY	40	22	48	11	31	8	0.25	0.12	0.22	0.59	151	23.94	93	90	76	0	7	3	0
	WATERLOO	41	27	51	15	34	11	0.65	0.40	0.47	1.95	271	30.09	92	92	74	0	4	3	0
KS	CONCORDIA	47	30	56	19	38	7	0.37	0.19	0.19	0.55	112	29.76	106	89	70	0	4	2	0
	DODGE CITY	47	30	55	25	39	5	0.14	-0.03	0.13	0.75	188	8.94	41	89	64	0	4	2	0
	GOODLAND	42	20	51	14	31	1	0.00	-0.06	0.00	0.37	195	19.30	99	90	69	0	7	0	0
	TOPEKA	50	33	63	20	41	9	0.76	0.43	0.45	2.01	226	31.48	90	91	69	0	4	2	0

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

Weather Data for the Week Ending December 17, 2011

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	50	32	63	23	41	7	0.98	0.68	0.71	1.72	223	24.08	81	92	71	0	4	3	1
KY	JACKSON	52	36	67	21	44	5	0.35	-0.64	0.24	1.87	76	57.69	121	84	55	0	4	2	0
	LEXINGTON	49	33	64	17	41	4	0.37	-0.54	0.37	2.52	114	64.44	146	81	65	0	3	1	0
	LOUISVILLE	52	33	66	20	42	3	0.39	-0.45	0.39	3.29	156	66.09	154	84	52	0	4	1	0
	PADUCAH	52	31	64	20	42	4	0.76	-0.28	0.42	5.82	218	73.42	154	93	58	0	4	2	0
LA	BATON ROUGE	69	47	80	35	58	5	0.04	-1.12	0.02	0.28	10	46.89	77	98	60	0	0	2	0
	LAKE CHARLES	68	49	76	38	59	5	0.47	-0.51	0.24	0.72	29	34.66	63	92	57	0	0	2	0
	NEW ORLEANS	68	53	79	45	60	5	0.30	-0.85	0.24	0.69	24	54.01	87	86	66	0	0	2	0
	SHREVEPORT	61	43	70	31	52	3	0.48	-0.54	0.24	3.59	142	28.77	58	90	60	0	1	2	0
ME	CARIBOU	32	15	42	1	24	6	0.81	0.12	0.78	1.87	110	53.90	150	90	67	0	7	2	1
	PORTLAND	44	26	50	18	35	6	0.19	-0.75	0.17	2.26	96	50.52	115	82	48	0	5	2	0
MD	BALTIMORE	51	30	63	22	41	3	0.01	-0.71	0.01	2.64	149	54.66	135	79	49	0	5	1	0
MA	BOSTON	47	33	54	27	40	4	0.11	-0.72	0.06	2.70	132	51.12	125	70	45	0	4	5	0
	WORCESTER	43	29	51	21	36	6	0.12	-0.71	0.12	2.49	121	64.23	136	79	49	0	4	1	0
MI	ALPENA	42	24	51	14	33	8	0.36	-0.03	0.23	0.58	59	35.78	130	90	65	0	7	4	0
	GRAND RAPIDS	44	30	57	22	37	8	1.22	0.59	0.80	1.95	115	44.45	123	83	61	0	5	3	1
	HOUGHTON LAKE	41	27	50	20	34	9	0.40	0.01	0.19	0.66	67	30.47	110	87	72	0	7	4	0
	LANSING	42	28	55	19	35	7	0.73	0.22	0.66	1.26	93	37.91	123	80	64	0	5	3	1
	MUSKEGON	44	33	52	27	38	8	0.89	0.29	0.74	1.54	99	41.11	129	81	72	0	3	3	1
	TRAVERSE CITY	44	30	52	21	37	10	0.64	0.06	0.49	1.31	93	29.36	91	90	61	0	6	4	0
MN	DULUTH	32	19	41	4	26	11	0.16	-0.04	0.16	0.22	35	25.73	84	86	75	0	7	1	0
	INT'L FALLS	30	13	43	1	21	11	0.08	-0.07	0.03	0.08	19	19.30	82	91	70	0	6	3	0
	MINNEAPOLIS	36	26	40	17	31	11	0.40	0.19	0.37	0.64	108	26.55	92	86	76	0	4	4	0
	ROCHESTER	36	27	41	15	31	12	0.53	0.31	0.44	0.92	139	27.47	88	93	83	0	4	3	0
	ST. CLOUD	36	23	43	12	30	14	0.10	-0.04	0.09	0.10	26	27.85	104	92	64	0	4	2	0
MS	JACKSON	63	43	75	27	53	5	1.72	0.53	1.55	2.34	80	45.12	84	95	63	0	2	2	1
	MERIDIAN	61	42	72	26	52	2	0.18	-0.99	0.13	0.94	32	47.39	84	94	76	0	2	2	0
	TUPELO	59	37	73	22	48	4	0.79	-0.61	0.71	1.35	40	47.25	89	90	65	0	3	2	1
MO	COLUMBIA	49	30	58	22	40	7	1.26	0.67	0.46	2.44	154	38.41	98	92	66	0	5	7	0
	KANSAS CITY	49	31	60	18	40	8	0.48	0.10	0.24	1.61	158	35.50	95	92	62	0	4	2	0
	SAINT LOUIS	51	33	62	27	42	7	0.74	0.07	0.38	1.10	61	45.13	120	79	61	0	4	2	0
	SPRINGFIELD	50	31	58	22	41	4	1.05	0.28	0.60	1.54	72	39.32	90	86	67	0	4	3	1
MT	BILLINGS	37	22	44	18	30	3	0.01	-0.12	0.01	0.08	27	19.42	135	80	53	0	7	1	0
	BUTTE	32	6	45	-6	19	1	0.00	-0.11	0.00	0.05	19	11.59	93	88	58	0	7	0	0
	CUT BANK	35	13	49	-9	24	2	0.00	-0.06	0.00	0.01	7	5.95	48	87	59	0	6	0	0
	GLASGOW	28	15	36	6	21	4	0.02	-0.04	0.02	0.16	114	22.75	207	92	84	0	7	1	0
	GREAT FALLS	39	22	54	14	31	6	0.18	0.05	0.09	0.31	107	16.51	114	81	44	0	6	2	0
	HAVRE	36	16	55	7	26	6	0.01	-0.10	0.01	0.02	9	11.94	107	88	75	0	7	1	0
	MISSOULA	35	22	44	12	28	4	0.00	-0.25	0.00	0.15	25	14.40	109	84	78	0	7	0	0
NE	GRAND ISLAND	41	25	51	20	33	7	0.16	0.02	0.10	1.07	249	27.12	106	87	72	0	7	2	0
	LINCOLN	43	25	51	14	34	7	0.68	0.50	0.48	1.56	294	29.16	104	93	75	0	6	2	0
	NORFOLK	40	22	50	13	31	6	0.21	0.07	0.16	0.72	167	20.96	79	87	74	0	7	2	0
	NORTH PLATTE	43	17	54	13	30	4	0.02	-0.06	0.02	0.20	95	23.59	121	93	59	0	7	1	0
	OMAHA	43	27	51	20	35	8	0.75	0.55	0.47	1.60	262	28.59	96	92	73	0	4	2	0
	SCOTTSBLUFF	44	12	51	8	28	2	0.00	-0.11	0.00	0.12	39	18.84	117	85	57	0	7	0	0
	VALENTINE	41	19	57	16	30	6	0.00	-0.06	0.00	0.11	58	21.90	113	88	56	0	7	0	0
NV	ELY	40	11	45	3	25	-1	0.05	-0.03	0.03	0.22	110	12.00	124	85	65	0	7	2	0
	LAS VEGAS	54	37	61	34	45	-2	0.09	0.01	0.09	0.16	94	2.36	55	62	44	0	0	1	0
	RENO	46	22	49	15	34	0	0.00	-0.19	0.00	0.00	0	4.92	70	64	49	0	7	0	0
	WINNEMUCCA	43	7	46	0	25	-5	0.02	-0.15	0.01	0.06	15	9.25	117	84	58	0	7	2	0
NH	CONCORD	44	21	51	14	32	5	0.06	-0.59	0.04	2.42	146	53.13	146	91	47	0	7	2	0
NJ	NEWARK	50	33	60	25	42	5	0.00	-0.78	0.00	2.25	114	67.65	151	66	39	0	4	0	0
NM	ALBUQUERQUE	44	27	48	20	36	0	0.47	0.39	0.24	0.60	300	4.12	45	84	55	0	5	3	0
NY	ALBANY	44	26	50	16	35	5	0.16	-0.43	0.16	1.95	128	51.83	140	84	55	0	4	1	0
	BINGHAMTON	40	25	49	14	32	4	0.15	-0.55	0.11	1.16	65	66.10	177	81	58	0	6	2	0
	BUFFALO	43	28	57	18	36	5	1.04	0.17	0.91	2.47	113	48.41	124	81	55	0	4	2	1
	ROCHESTER	44	27	56	19	36	5	0.48	-0.14	0.43	1.30	83	39.28	120	80	49	0	5	4	0
	SYRACUSE	47	28	57	13	37	7	0.54	-0.18	0.37	1.04	55	46.60	120	77	48	0	5	4	0
NC	ASHEVILLE	56	36	66	21	46	6	0.35	-0.38	0.35	2.17	117	43.09	95	86	63	0	3	1	0
	CHARLOTTE	60	38	68	28	49	4	0.36	-0.30	0.36	0.92	57	42.03	100	85	55	0	2	1	0
	GREENSBORO	56	36	66	28	46	4	0.59	-0.07	0.59	1.26	78	41.78	100	80	48	0	4	1	1
	HATTERAS	58	48	67	43	53	2	0.00	-0.93	0.00	0.83	37	60.76	110	91	63	0	0	0	0
	RALEIGH	57	36	68	30	46	2	0.62	-0.01	0.61	1.16	75	42.81	103	79	56	0	4	2	1
	WILMINGTON	64	40	76	35	52	2	0.00	-0.80	0.00	0.02	1	43.38	78	91	47	0	0	0	0
ND	BISMARCK	31	16	41	11	24	7	0.05	-0.03	0.05	0.18	82	22.92	138	90	73	0	7	1	0
	DICKINSON	29	19	43	14	24	5	0.00	-0.06	0.00	0.01	6	18.54	115	90	72	0	7	0	0
	FARGO	34	17	45	12	26	12	0.02	-0.09	0.01	0.03	11	23.62	113	79	58	0	7	2	0
	GRAND FORKS	31	15	41	10	23	10	0.02	-0.09	0.02	0.02	7	19.08	99	90	64	0	7	1	0
	JAMESTOWN	31	14	44	9	23	8	0.00	-0.08	0.00	0.00	0	21.99	120	91	69	0	7	0	0
	WILLISTON	29	17	37	8	23	9	0.07	-0.04	0.07	0.12	41	19.16	138	92	80	0	7	1	0
OH	AKRON-CANTON	43	27	58	17	35	3	0.94	0.26	0.73	2.56	149	56.19	151	80	61	0	5	3	1
	CINCINNATI	48	30	63	16	39	3	0.59	-0.15	0.53	3.79	207	70.55	171	81	64	0	5	2	1
	CLEVELAND	45	28	62	20	36	4	0.94	0.20	0.42	3.04	161	63.38	169	82	55	0	5	3	0
	COLUMBUS	45	29	60	19	37	3	0.69	0.02	0.35	2.85	166	52.38	140	88	63	0	5	3	0
	DAYTON	44	28	60	17	36	3	0.82	0.12	0.49	3.29	187	54.67	143	86	62	0	6	2	0
	MANSFIELD	43	27	59	16	35	4	0.74	-0.01	0.40	2.93	151	54.52	130	92	59	0	5	4	0

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

Weather Data for the Week Ending December 17, 2011

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	43	26	57	17	35	5	0.97	0.35	0.48	2.35	151	47.93	149	84	65	0	5	3	0
	YOUNGSTOWN	43	25	56	15	34	2	0.88	0.19	0.48	2.11	119	51.72	140	83	58	0	5	3	0
OK	OKLAHOMA CITY	53	35	68	25	44	4	0.19	-0.22	0.09	1.24	123	29.73	85	86	56	0	3	4	0
	TULSA	54	36	64	27	45	5	0.18	-0.39	0.11	0.89	58	31.43	76	81	62	0	3	3	0
OR	ASTORIA	46	31	55	25	38	-5	0.54	-1.85	0.33	0.55	9	64.60	103	97	87	0	4	4	0
	BURNS	38	10	44	2	24	-1	0.01	-0.27	0.01	0.02	3	10.13	102	89	78	0	7	1	0
	EUGENE	43	29	50	20	36	-4	0.10	-1.81	0.09	0.10	2	29.14	61	92	89	0	3	2	0
	MEDFORD	46	23	57	19	35	-3	0.00	-0.67	0.00	0.01	1	15.47	90	93	63	0	7	0	0
	PENDLETON	31	23	46	20	27	-7	0.01	-0.32	0.01	0.01	1	11.61	96	98	95	0	7	1	0
	PORTLAND	44	31	50	24	37	-3	0.05	-1.26	0.03	0.07	2	34.68	100	92	82	0	3	2	0
	SALEM	44	31	49	23	38	-2	0.11	-1.39	0.08	0.11	3	32.68	88	90	85	0	3	2	0
PA	ALLENTOWN	43	26	56	18	35	2	0.01	-0.74	0.01	0.71	38	68.25	156	75	57	0	5	1	0
	ERIE	44	30	58	21	37	3	0.78	-0.10	0.48	2.57	116	54.44	132	72	57	0	4	2	0
	MIDDLETOWN	47	28	58	19	37	2	0.01	-0.73	0.01	1.50	79	71.96	184	84	46	0	6	1	0
	PHILADELPHIA	49	33	59	27	41	3	0.01	-0.71	0.01	2.31	130	62.27	154	68	43	0	4	1	0
	PITTSBURGH	44	27	58	16	36	3	0.20	-0.45	0.14	0.50	30	42.25	115	81	49	0	5	3	0
	WILKES-BARRE	42	25	51	18	34	2	0.06	-0.52	0.06	1.75	115	58.64	161	82	51	0	6	1	0
	WILLIAMSPORT	43	26	51	18	35	3	0.17	-0.50	0.08	1.98	112	68.55	170	76	51	0	5	5	0
RI	PROVIDENCE	48	30	55	23	39	4	0.12	-0.79	0.12	2.67	118	55.44	124	73	46	0	5	1	0
SC	BEAUFORT	65	43	76	41	54	3	0.29	-0.34	0.27	0.57	39	33.35	69	91	51	0	0	3	0
	CHARLESTON	66	43	76	40	55	4	0.02	-0.65	0.02	0.05	3	36.41	73	90	50	0	0	1	0
	COLUMBIA	66	40	77	34	53	6	0.00	-0.69	0.00	0.07	4	35.58	77	83	55	0	0	0	0
	GREENVILLE	60	41	69	31	51	7	0.15	-0.68	0.09	1.22	61	43.21	89	88	51	0	1	2	0
SD	ABERDEEN	34	19	44	11	27	10	0.00	-0.06	0.00	0.04	29	23.00	115	85	67	0	7	0	0
	HURON	36	19	47	11	27	7	0.00	-0.06	0.00	0.03	16	22.48	109	96	69	0	7	0	0
	RAPID CITY	40	18	54	15	29	4	0.00	-0.07	0.00	0.11	73	19.25	118	86	55	0	7	0	0
	SIOUX FALLS	38	20	44	9	29	10	0.21	0.11	0.19	0.23	72	23.89	98	89	72	0	7	2	0
TN	BRISTOL	56	34	66	18	45	7	0.48	-0.27	0.46	2.72	145	46.30	116	91	53	0	3	2	0
	CHATTANOOGA	58	40	68	31	49	6	1.11	0.05	0.82	3.75	139	62.01	118	90	67	0	1	2	1
	KNOXVILLE	56	37	68	25	47	5	0.86	-0.13	0.62	2.90	119	54.62	118	93	58	0	3	2	1
	MEMPHIS	58	38	70	27	48	4	0.66	-0.69	0.46	6.34	184	56.13	107	87	57	0	3	2	0
	NASHVILLE	53	34	71	19	44	3	0.47	-0.57	0.39	2.23	85	50.12	109	89	60	0	3	2	0
TX	ABILENE	57	41	71	31	49	3	0.73	0.45	0.43	1.45	238	16.36	71	93	70	0	1	5	0
	AMARILLO	50	32	58	25	41	4	0.07	-0.04	0.06	0.42	183	5.87	30	91	60	0	4	2	0
	AUSTIN	64	51	76	45	58	5	0.95	0.40	0.75	3.04	234	15.05	46	80	68	0	0	4	1
	BEAUMONT	69	53	82	44	61	6	0.27	-0.86	0.20	0.67	24	27.69	48	89	52	0	0	5	0
	BROWNSVILLE	73	60	84	54	67	6	0.43	0.19	0.27	1.14	178	17.54	65	95	79	0	0	4	0
	CORPUS CHRISTI	71	59	82	48	65	6	0.37	-0.02	0.23	1.04	116	11.92	38	90	76	0	0	3	0
	DEL RIO	61	52	73	42	56	3	0.16	-0.01	0.09	0.66	165	9.59	54	83	73	0	0	4	0
	EL PASO	55	37	60	32	46	0	0.04	-0.13	0.00	0.45	118	4.98	55	77	50	0	1	1	0
	FORT WORTH	59	44	69	33	51	4	0.82	0.25	0.44	3.79	285	25.32	76	83	52	0	0	5	0
	GALVESTON	65	56	72	47	60	1	0.08	-0.68	0.04	1.30	67	19.83	47	94	71	0	0	3	0
	HOUSTON	68	53	77	40	60	6	0.13	-0.68	0.12	1.43	70	21.71	47	84	66	0	0	2	0
	LUBBOCK	50	34	58	28	42	2	0.16	0.02	0.11	0.71	215	5.05	28	93	72	0	3	2	0
	MIDLAND	53	38	63	32	46	1	0.10	-0.04	0.09	0.76	238	4.63	32	88	65	0	2	2	0
	SAN ANGELO	58	45	69	39	51	4	0.01	-0.20	0.01	0.84	171	9.08	44	82	66	0	0	1	0
	SAN ANTONIO	64	53	75	46	59	6	0.22	-0.22	0.12	1.71	160	16.45	51	87	66	0	0	5	0
	VICTORIA	69	55	82	46	62	6	0.31	-0.24	0.17	0.39	29	12.12	31	87	70	0	0	3	0
	WACO	61	46	69	35	54	5	1.48	0.85	1.19	4.06	265	26.73	83	83	64	0	0	3	1
	WICHITA FALLS	55	38	71	29	47	3	0.25	-0.14	0.15	1.21	136	12.73	45	92	67	0	3	3	0
UT	SALT LAKE CITY	35	21	44	18	28	-3	0.02	-0.23	0.02	0.02	3	19.12	120	91	71	0	7	1	0
VT	BURLINGTON	40	25	50	11	33	7	0.28	-0.21	0.23	0.93	71	49.70	141	82	57	0	6	4	0
VA	LYNCHBURG	53	31	64	23	42	3	0.34	-0.35	0.34	3.09	180	37.44	90	84	47	0	4	1	0
	NORFOLK	55	43	69	39	49	4	0.31	-0.32	0.27	0.58	39	50.12	113	83	52	0	0	2	0
	RICHMOND	54	34	67	27	44	3	0.36	-0.30	0.36	1.14	72	46.63	110	81	44	0	4	1	0
	ROANOKE	53	32	65	21	43	3	0.35	-0.27	0.34	2.64	166	43.48	105	75	49	0	3	2	0
	WASH/DULLES	50	29	62	19	39	2	0.00	-0.68	0.00	2.35	139	44.09	109	79	52	0	5	0	0
WA	OLYMPIA	43	27	51	19	35	-3	0.10	-1.70	0.07	0.10	2	46.10	97	96	91	0	6	3	0
	QUILLAYUTE	46	33	52	24	39	-2	0.39	-2.93	0.25	0.56	7	99.99	105	95	88	0	3	3	0
	SEATTLE-TACOMA	43	34	50	26	38	-3	0.06	-1.23	0.04	0.07	2	34.22	99	94	79	0	2	2	0
	SPOKANE	30	23	40	18	27	0	0.04	-0.47	0.02	0.04	3	14.42	92	94	87	0	7	3	0
	YAKIMA	31	17	40	7	24	-5	0.01	-0.29	0.01	0.01	1	7.01	92	88	82	0	7	1	0
WV	BECKLEY	50	33	63	17	42	6	0.21	-0.48	0.12	2.45	147	40.59	101	78	58	0	4	3	0
	CHARLESTON	53	33	64	19	43	5	0.03	-0.72	0.02	1.78	92	49.14	115	86	49	0	3	2	0
	ELKINS	48	23	63	11	36	2	0.14	-0.63	0.09	2.13	110	50.38	113	90	52	0	6	2	0
	HUNTINGTON	51	33	63	17	42	4	0.12	-0.63	0.07	1.55	84	60.80	149	83	51	0	3	3	0
WI	EAU CLAIRE	35	23	40	12	29	10	0.66	0.44	0.65	1.06	166	31.78	100	96	73	0	4	2	1
	GREEN BAY	38	28	43	20	33	10	0.39	0.08	0.37	1.24	139	37.70	131	87	70	0	6	3	0
	LA CROSSE	37	26	42	16	32	9	0.44	0.16	0.28	1.17	148	34.86	109	95	72	0	4	5	0
	MADISON	43	27	52	19	35	11	0.81	0.42	0.69	1.84	179	30.15	93	85	70	0	5	3	1
	MILWAUKEE	44	29	54	24	37	9	0.80	0.29	0.76	1.52	114	31.88	94	80	68	0	5	2	1
WY	CASPER	36	16	39	8	26	2	0.00	-0.13	0.00	0.16	48	12.74	100	74	55	0	7	0	0
	CHEYENNE	40	14	46	11	27	-1	0.00	-0.09	0.00	0.17	68	19.09	125	73	47	0	7	0	0
	LANDER	26	7	32	3	17	-5	0.00	-0.13	0.00	0.30	86	14.74	112	86	62	0	7	0	0
	SHERIDAN	36	12	46	7	24	1	0.00	-0.14	0.00	0.25	76	18.43	128	82	66	0	7	0	0

Based on 1971-2000 normals

***** Not Available**

Autumn Weather Review

Review provided by USDA/WAOB

Highlights: Autumn 2011 featured a wide variety of weather conditions, from Tropical Storm Lee-induced flooding (in early September) in the Mid-Atlantic States to drought relief on the southern Plains. In general, relatively dry conditions prevailed from the Pacific Northwest to the upper Midwest, while wet conditions plagued areas from the Mid-South into the Northeast. However, significant autumn fieldwork delays were mostly confined to a small part of the eastern Corn Belt. Meanwhile, autumn warmth across the North and West contrasted with cooler-than-normal conditions in portions of the Southeast. Despite the overall Midwestern warmth, Minnesota and North Dakota experienced an earlier-than-normal first freeze in mid-September. In addition to the early upper Midwestern freeze, autumn climate oddities included a freak, late-October snow storm in the Northeast and October downpours in southern Florida.

According to preliminary information provided by the National Climatic Data Center, the nation experienced its 16th-warmest, 57th-wettest autumn on record. The nation's average temperature of 55.5°F was 1.3°F above the 1901-2000 mean. State rankings ranged from the 20th-coolest autumn in Mississippi to the warmest September-November period on record in Massachusetts, Rhode Island, and Vermont (figure 1). In addition, it was among the ten warmest autumns in Delaware, New Jersey, New York, North Dakota, Pennsylvania, and the remainder of New England. Meanwhile, U.S. autumn precipitation averaged 6.80 inches, 101 percent (%) of the long-term mean. State rankings ranged from the third-driest autumn in Minnesota to the wettest September-November period in Ohio and Pennsylvania (figure 2). Top-ten rankings for autumn wetness were also noted in Indiana, Kentucky, Maryland, Massachusetts, New York, Tennessee, and West Virginia.

Figure 1

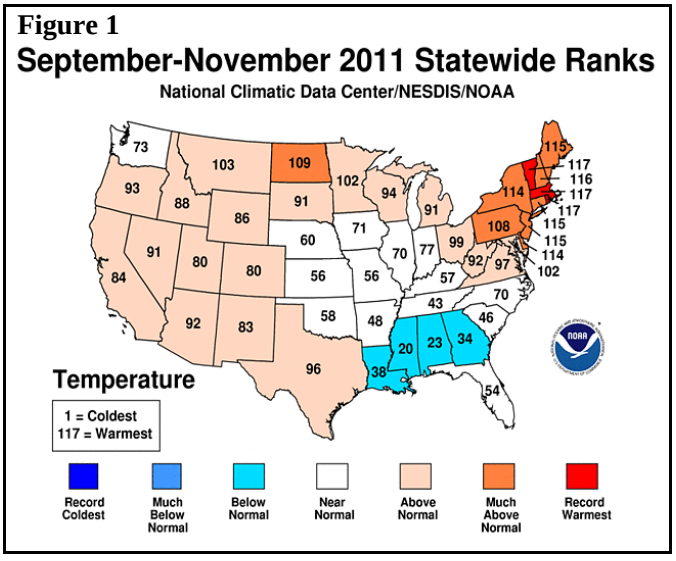
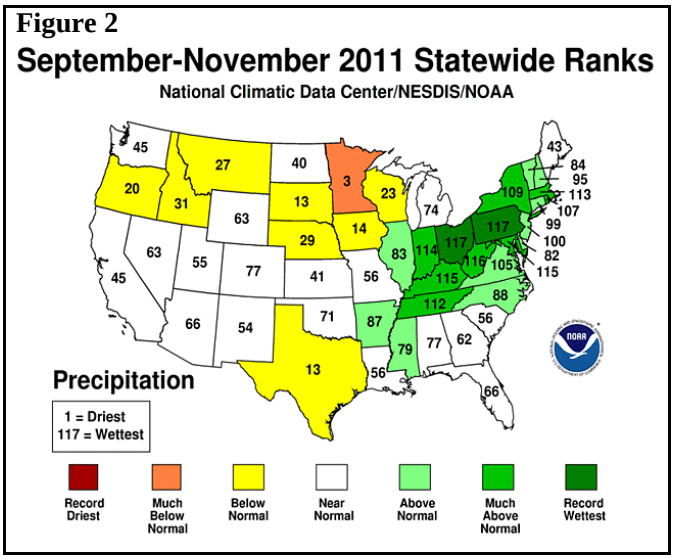


Figure 2



September: Mostly dry weather dominated the Plains, upper Midwest, and Northwest, promoting summer crop maturation and harvesting. Winter wheat planting also quickly advanced, except on the drought-stricken southern Plains, where many producers opted to postpone seeding operations while awaiting rain.

In addition to the dry weather, parts of the upper Midwest—including North Dakota and Minnesota—experienced a growing season-ending freeze on September 15. Only a small percentage of the corn and soybeans in the freeze-affected area was fully mature when the freeze struck, possibly reducing yield potential.

Meanwhile, wet weather prevailed along and east of a line from Louisiana to Indiana. Some of the heavy rain, especially early in the month, was due to the remnants of Tropical Storm Lee, interacting with a cold front. Lee made landfall along the Louisiana coast on September 4.

Across the eastern Corn Belt, where September wetness hampered early-season harvest efforts, crops were already late in maturing due to spring planting delays. Farther east, back-to-back tropical deluges (from Irene in late August and Lee in early September) led to record flooding in parts of the Mid-Atlantic States. Elsewhere, scattered showers accompanied late-season Southwestern warmth.

October: Mostly dry weather in the Mississippi Valley, including the western Corn Belt, allowed autumn fieldwork to near completion. In stark contrast, winter wheat planting and corn and soybean harvest activities trailed the normal pace in the eastern Corn Belt, due to late maturation of summer crops and autumn wetness.

Wet conditions also extended into the Northeast, where a late-October snow storm highlighted the continuation of a soggy weather regime. The October 29-30 snow caused widespread power outages when it weighed down and snapped trees still carrying their leaves.

Farther south, tropical showers soaked Florida's peninsula, while drier-than-normal weather favored October fieldwork across the remainder of the lower Southeast.

Meanwhile on the Plains, beneficial showers provided moisture for winter wheat emergence and establishment. Precipitation was particularly important on the southern Plains, where little subsoil moisture was available due to the record-setting drought that began in October 2010.

Elsewhere, hit-or-miss showers accompanied mild weather in the West. The Western precipitation, beneficial from the standpoint of providing moisture for winter grains and establishing high-elevation snow packs, did not cause significant fieldwork disruptions.

November: Mild weather covered the eastern half of the U.S., promoting some late-season winter wheat development as far north as the central Plains and the Midwest. In contrast, near- to below-normal temperatures affected the northern High Plains and much of the West. As a result, at least one-tenth of the winter wheat had not emerged by November 27 in Oregon (12%) and Montana (10%). Elsewhere, lingering drought hampered wheat growth in Texas, with 26% not yet emerged, while planting delays and excessive wetness in Ohio kept 10% of the crop from emerging by November 27.

Midwestern precipitation was highly variable, with wet conditions in the southern and eastern Corn Belt contrasting with mostly dry weather in the upper Mississippi Valley. Fieldwork neared completion in the latter region, but nearly one-quarter (24%) of Ohio's corn crop had not yet been harvested by November 27.

Weather variability was also noted on the Plains, where much-needed, drought-easing precipitation fell across Oklahoma, southern Kansas, and southeastern Colorado. Parts of northern Texas also received beneficial moisture, but large sections of western and southern Texas remained mired in historic drought.

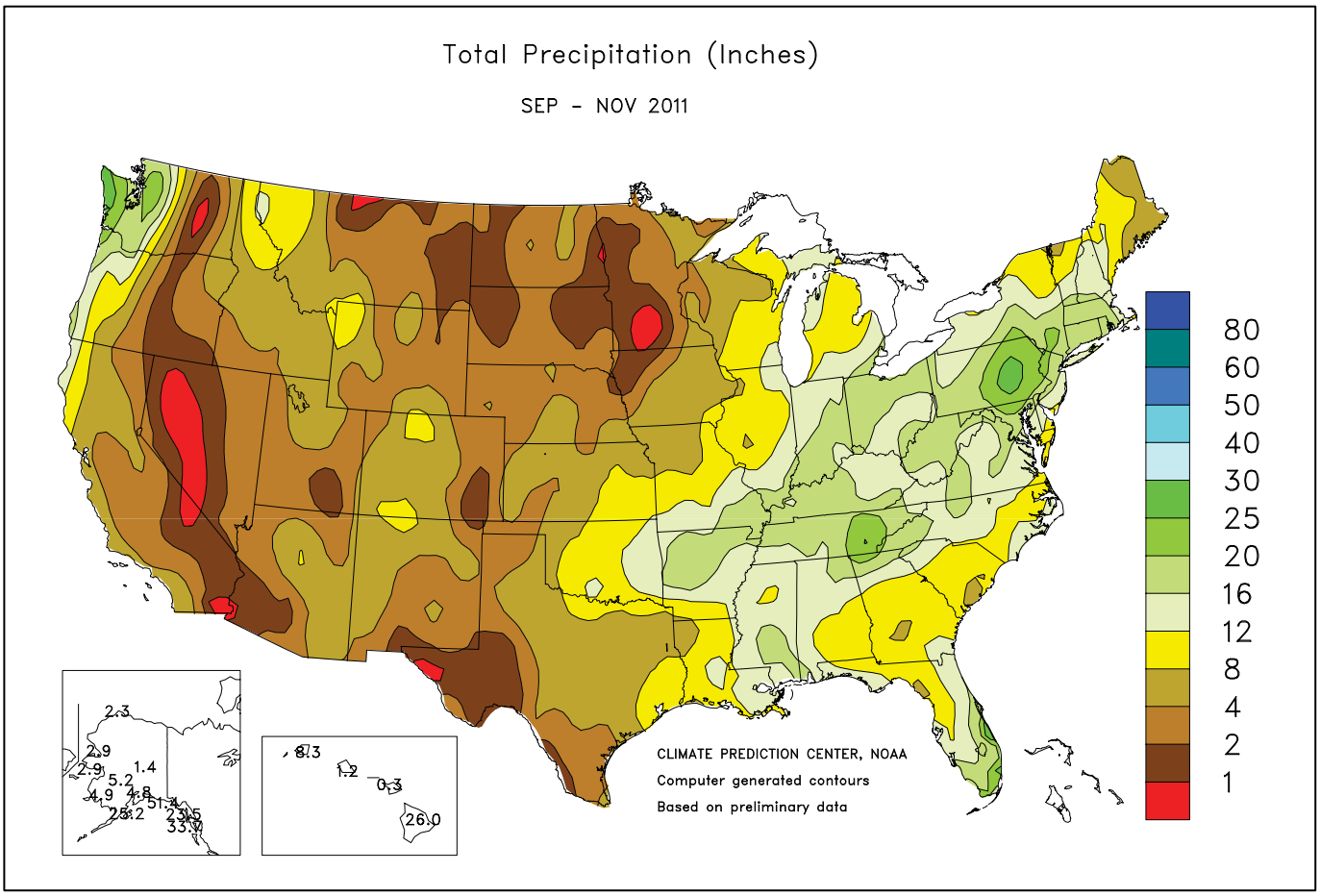
Drier-than-normal conditions also prevailed during November across much of the nation's southern tier. In the Southeast, long stretches of warm, dry weather allowed autumn fieldwork—including winter wheat planting and cotton and soybean harvesting—to advance quickly. Louisiana's sugarcane harvest was nearly three-quarters (72%) complete by November 27, well ahead of the average pace.

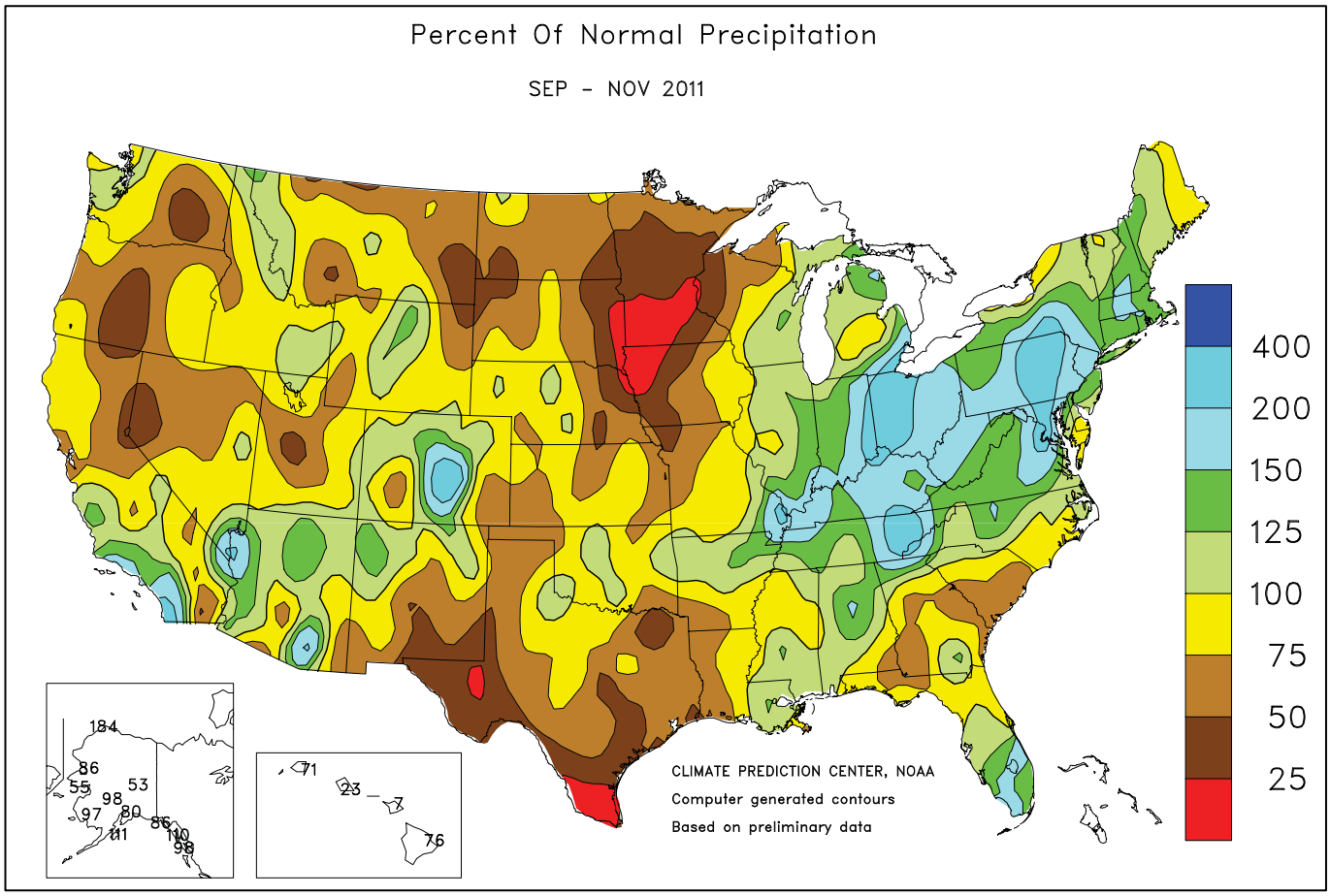
Farther west, an early-season chill engulfed the Pacific Coast States. However, generally below-normal precipitation accompanied the cool spell, allowing fieldwork to proceed with few delays. More significant storminess affected the Four Corners States and the Rockies, helping to establish high-elevation snow packs.

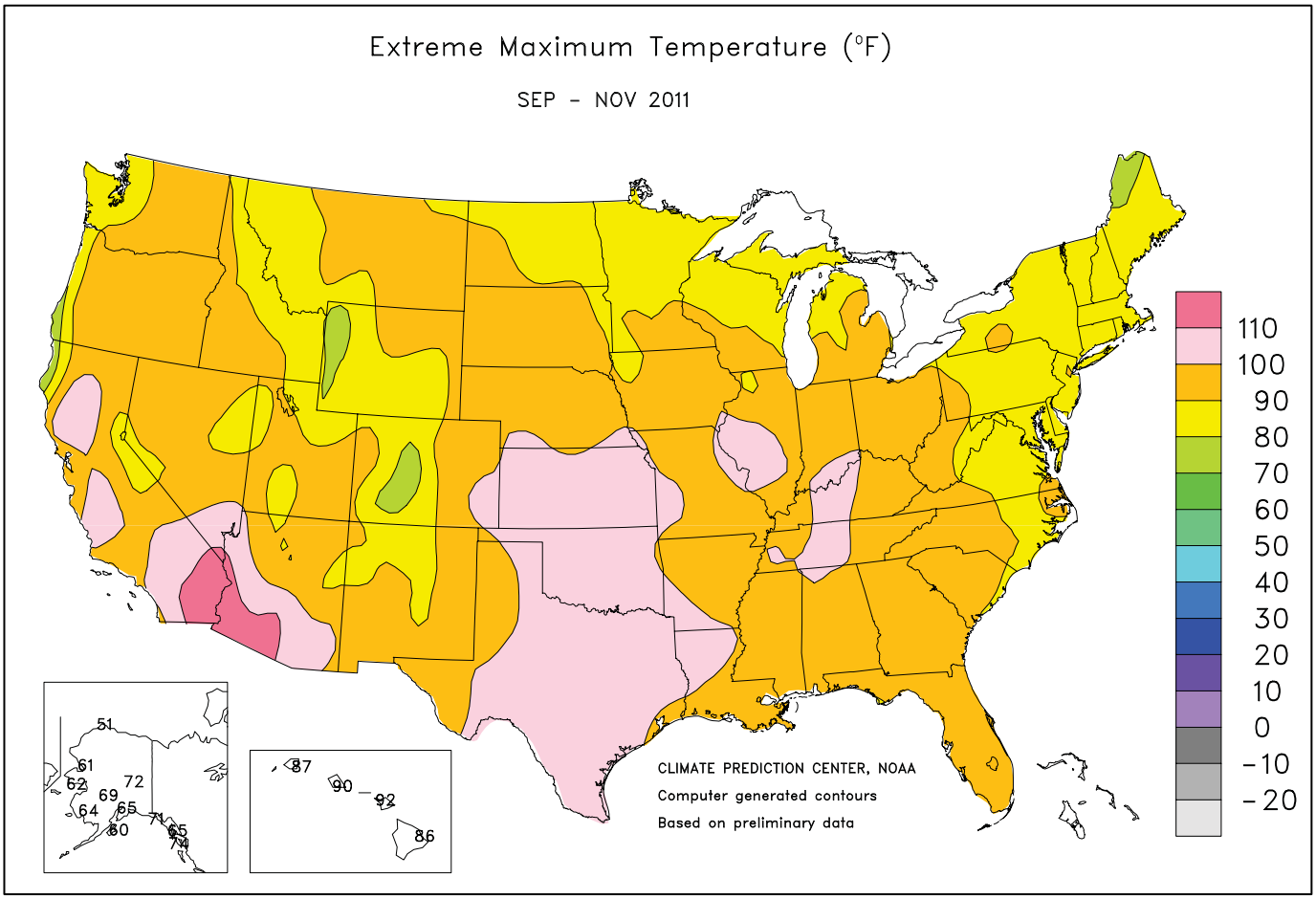
Wettest Year on Record, Selected Locations

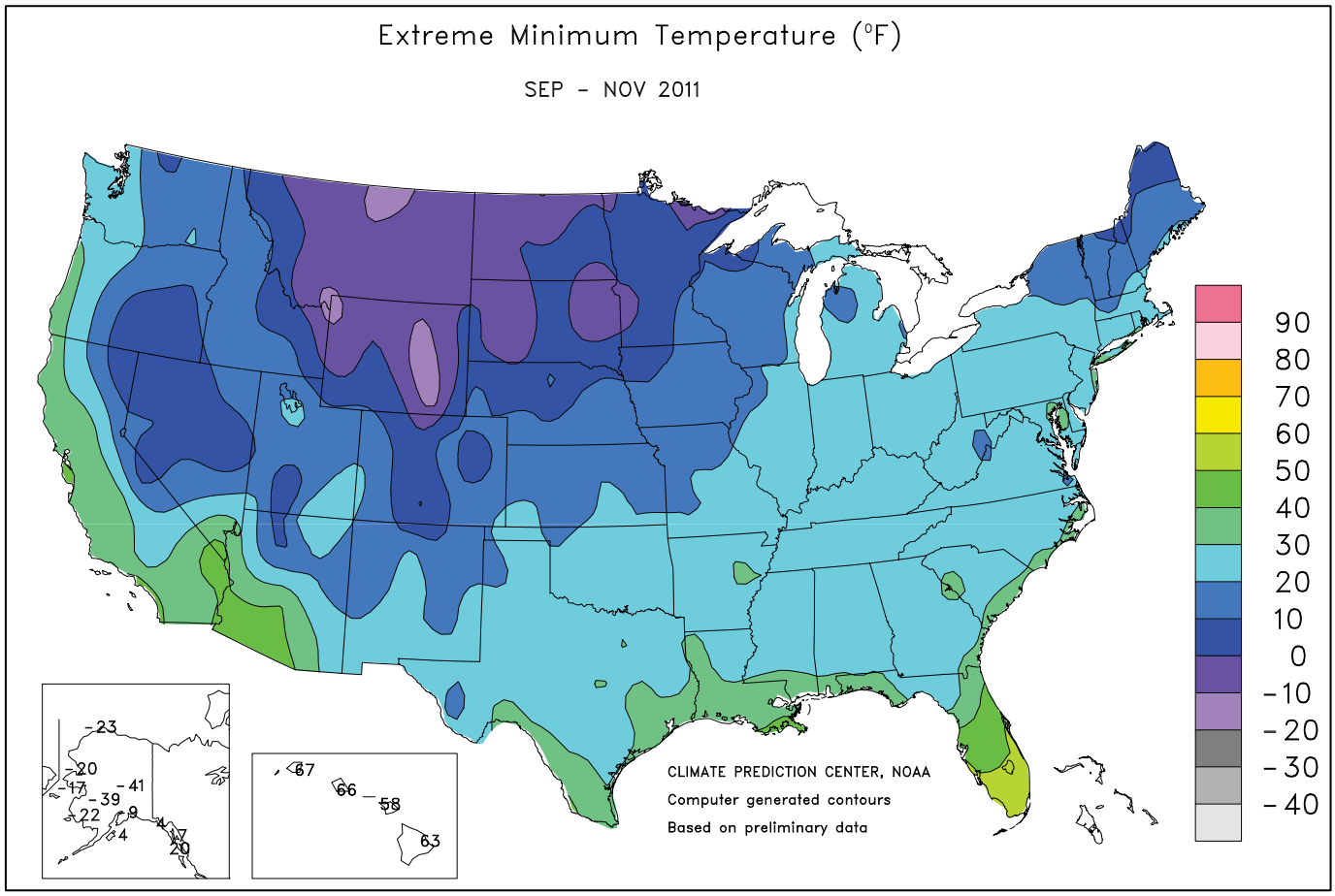
Updated Through December 19

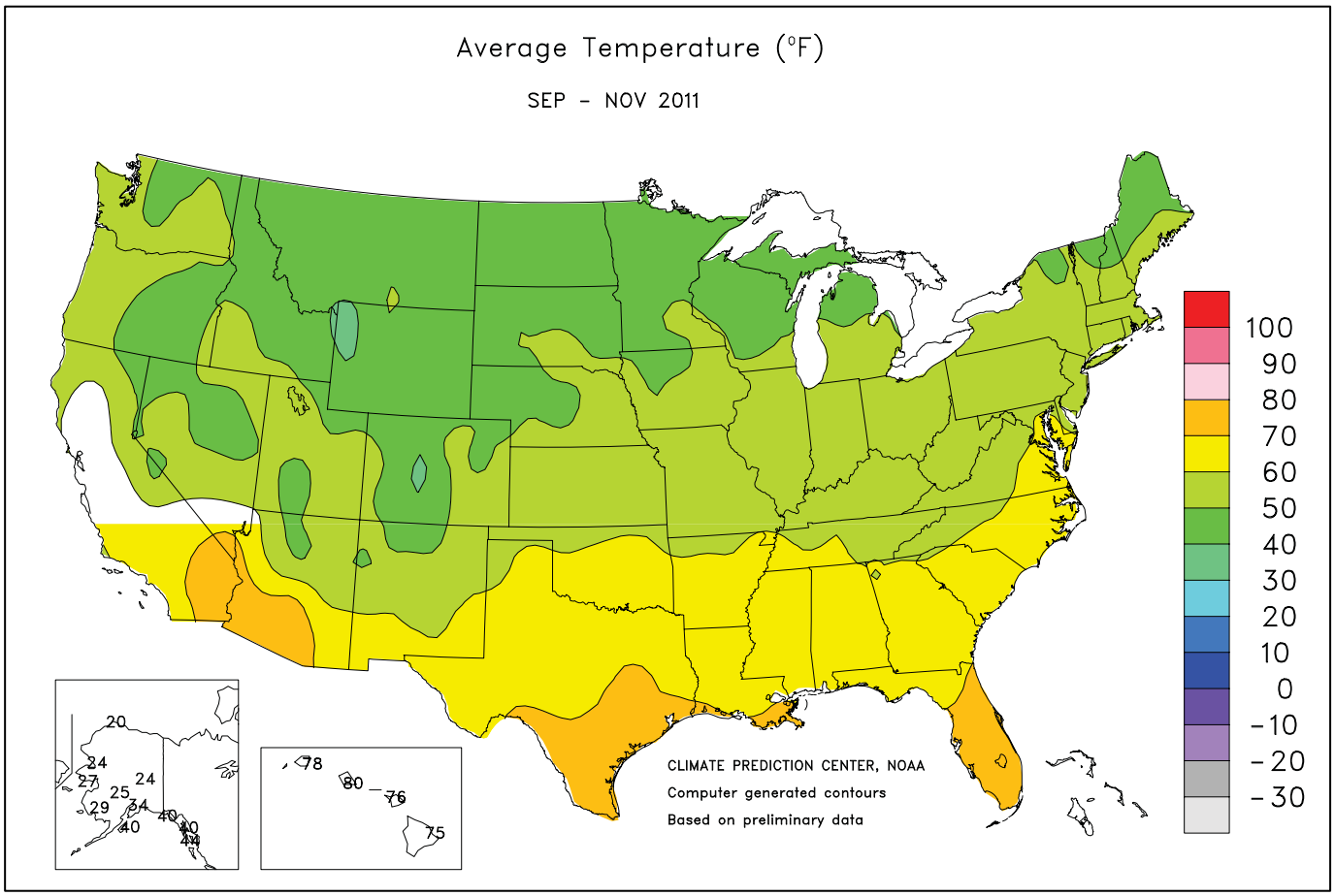
Location	Precipitation (Inches)	Previous Record / Year
Paducah, KY	73.37	70.58 in 1950
Cincinnati, OH	70.83	57.58 in 1990
Allentown, PA	69.71	67.69 in 1952
Evansville, IN	68.30	66.18 in 2006
Newark, NJ	67.65	65.50 in 1983
Louisville, KY	66.11	64.60 in 1990
Binghamton, NY	66.09	49.78 in 2006
Frankfort, KY	63.69	60.66 in 1935
Cleveland, OH	63.42	53.83 in 1990
LaGuardia Apt., NY	63.26	60.84 in 1983
Philadelphia, PA	62.27	56.45 in 1996
Youngstown, OH	51.71	50.81 in 1911

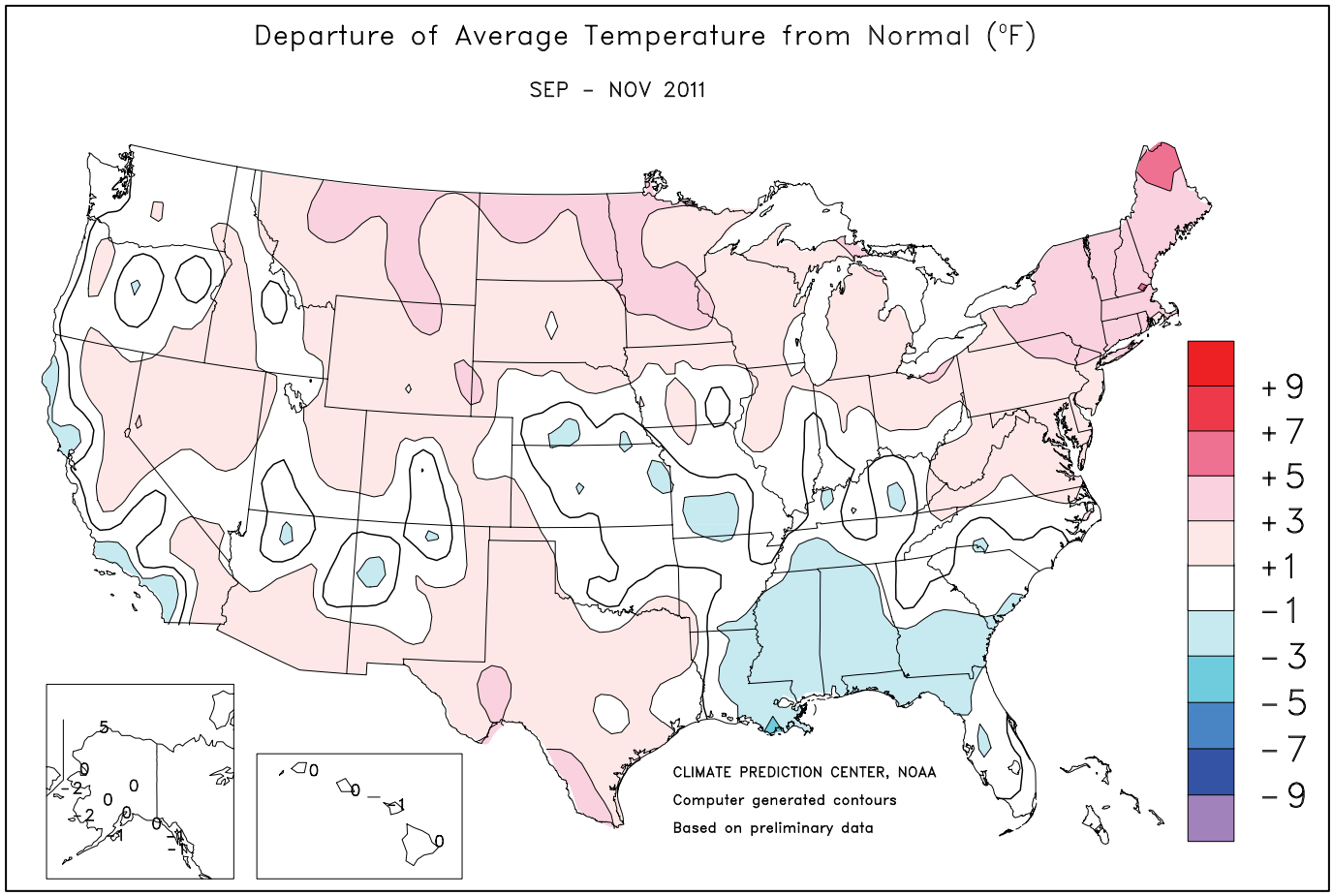

Total Precipitation (Inches)
SEP - NOV 2011
80
60
50
40
30
25
20
16
12
8
4
2
1
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Percent Of Normal Precipitation
SEP - NOV 2011
400
200
150
125
100
75
50
25
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Extreme Maximum Temperature (°F)
SEP - NOV 2011
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
51
61
62
72
69
64
65
80
87
90
92
86
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Extreme Minimum Temperature (°F)
SEP - NOV 2011
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
-23
-20
-41
-39
-22
9
4
67
66
58
63
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Average Temperature (°F)
SEP - NOV 2011
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data


Departure of Average Temperature from Normal (°F)
SEP - NOV 2011
+9
+7
+5
+3
+1
-1
-3
-5
-7
-9
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

National Weather Data for Selected Cities

Autumn 2011

Data Provided by Climate Prediction Center (301-763-8000, Ext. 7503)

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	63	0	18.87	6.96	LEXINGTON	56	-1	18.06	8.81	COLUMBUS	56	1	15.00	6.58
HUNTSVILLE	61	-1	12.45	-0.60	LONDON-CORBIN	56	-1	15.35	5.28	DAYTON	55	1	19.65	10.98
MOBILE	67	-1	18.78	4.11	LOUISVILLE	59	0	15.74	6.10	MANSFIELD	54	3	14.29	4.41
MONTGOMERY	65	-1	13.63	2.30	PADUCAH	59	1	17.38	5.84	TOLEDO	53	1	16.82	8.85
AK ANCHORAGE	34	-1	4.80	-1.24	LA BATON ROUGE	67	-1	17.82	4.41	YOUNGSTOWN	53	2	14.43	5.01
BARROW	20	5	2.28	1.04	LAKE CHARLES	69	0	8.42	-6.08	OK OKLAHOMA CITY	62	1	9.79	0.06
COLD BAY	40	-1	9.83	-4.01	NEW ORLEANS	71	1	16.67	2.98	TULSA	62	0	9.82	-2.46
FAIRBANKS	24	1	1.43	-1.29	SHREVEPORT	68	1	6.85	-5.49	OR ASTORIA	53	0	17.38	-1.34
JUNEAU	40	-2	23.46	2.19	ME BANGOR	51	3	10.14	-0.42	BURNS	46	2	1.87	-0.46
KING SALMON	34	-1	8.22	1.78	CARIBOU	48	6	9.14	-0.24	EUGENE	55	2	7.27	-6.06
KODIAK	40	-1	25.23	2.40	PORTLAND	53	5	12.80	0.31	MEDFORD	58	3	2.65	-2.37
NOME	27	-2	2.94	-2.43	MD BALTIMORE	59	3	19.08	8.82	PENDLETON	53	1	1.71	-1.54
AZ FLAGSTAFF	47	0	7.17	1.26	MA BOSTON	58	3	15.38	4.14	PORTLAND	56	1	9.34	-0.80
PHOENIX	78	4	0.94	-1.33	WORCESTER	54	4	17.64	4.36	SALEM	55	2	8.46	-2.39
TUCSON	72	2	6.63	3.30	MI ALPENA	48	2	10.83	3.62	PA ALLENTOWN	56	4	22.39	10.99
AR FORT SMITH	64	2	12.38	0.03	DETROIT	55	3	14.42	6.26	ERIE	55	2	16.01	3.40
LITTLE ROCK	64	1	18.00	4.31	FLINT	52	3	7.42	-1.33	MIDDLETOWN	56	1	27.08	17.12
CA BAKERSFIELD	67	1	1.31	0.27	GRAND RAPIDS	53	3	7.86	-2.57	PHILADELPHIA	60	2	17.85	8.06
EUREKA	52	-2	8.44	-0.56	HOUGHTON LAKE	48	2	8.57	1.06	PITTSBURGH	55	2	11.88	3.40
FRESNO	67	3	1.57	-0.44	LANSING	51	2	8.40	-0.03	WILKES-BARRE	54	2	18.19	8.19
LOS ANGELES	64	-2	2.33	0.58	MUSKEGON	53	3	10.38	0.83	WILLIAMSPORT	55	3	24.67	13.88
REDDING	64	1	5.80	-0.89	TRAVERSE CITY	51	2	9.12	-0.07	PR SAN JUAN	82	1	16.86	0.03
SACRAMENTO	64	1	2.08	-1.36	MN DULUTH	46	4	3.21	-5.50	RI PROVIDENCE	57	3	17.86	6.07
SAN DIEGO	65	-2	3.71	1.99	INT'L FALLS	43	3	3.64	-2.73	SC CHARLESTON	67	0	6.91	-4.82
SAN FRANCISCO	61	1	2.73	-1.00	MINNEAPOLIS	53	6	1.36	-5.38	COLUMBIA	64	0	7.05	-2.66
STOCKTON	63	-1	1.50	-1.42	ROCHESTER	50	4	3.14	-4.19	FLORENCE	64	-1	5.69	-3.51
CO ALAMOSA	43	1	2.14	0.10	ST. CLOUD	48	4	2.40	-4.31	GREENVILLE	62	1	13.25	1.62
CO SPRINGS	51	3	6.97	4.36	MS JACKSON	64	-1	17.16	5.47	MYRTLE BEACH	65	0	8.74	-3.04
DENVER	52	3	3.15	0.64	MERIDIAN	63	-3	9.47	-2.40	SD ABERDEEN	47	2	1.47	-2.72
GRAND JUNCTION	54	2	2.75	0.13	TUPELO	62	0	14.41	2.67	HURON	49	2	2.31	-1.97
PUEBLO	54	2	2.01	-0.05	MO COLUMBIA	56	1	7.98	-2.09	RAPID CITY	49	2	2.84	-0.24
CT BRIDGEPORT	59	4	13.11	2.34	JOPLIN	59	0	10.22	-3.00	SIOUX FALLS	50	3	0.87	-5.00
HARTFORD	56	4	19.97	7.84	KANSAS CITY	56	0	6.25	-4.02	TN BRISTOL	57	1	10.58	2.12
DC WASHINGTON	60	1	14.69	4.65	SPRINGFIELD	57	-1	10.62	-2.14	CHATTANOOGA	61	0	21.69	9.24
DE WILMINGTON	58	2	13.11	2.83	ST JOSEPH	55	-1	3.99	-5.36	JACKSON	60	-1	12.79	0.64
FL DAYTONA BEACH	73	-1	12.17	-1.95	ST LOUIS	60	2	9.51	0.08	KNOXVILLE	59	-1	20.58	10.91
FT LAUDERDALE	79	1	22.26	2.99	MT BILLINGS	51	4	2.24	-1.11	MEMPHIS	64	0	11.55	-0.83
FT MYERS	77	0	20.90	8.74	BUTTE	41	1	1.37	-1.11	NASHVILLE	60	0	13.28	2.37
JACKSONVILLE	69	-1	12.15	-1.95	GLASGOW	47	4	1.60	-0.48	TX ABILENE	67	2	4.51	-2.60
KEY WEST	80	0	24.61	12.18	GREAT FALLS	48	4	2.79	0.04	AMARILLO	59	1	2.77	-1.29
MELBOURNE	75	0	13.21	-1.87	HELENA	47	3	1.36	-0.83	AUSTIN	70	0	4.01	-5.55
MIAMI	79	0	22.30	4.30	KALISPELL	44	2	2.75	-0.86	BEAUMONT	71	1	6.16	-9.36
ORLANDO	74	-1	14.85	4.04	MILES CITY	49	2	1.15	-1.69	BROWNSVILLE	77	2	3.94	-6.90
PENSACOLA	68	-2	10.16	-4.18	MISSOULA	46	2	3.52	0.65	COLLEGE STATION	72	2	5.62	-5.69
ST PETERSBURG	75	-1	10.69	-1.58	NE GRAND ISLAND	52	1	3.24	-2.11	CORPUS CHRISTI	75	2	3.08	-7.63
TALLAHASSEE	68	-1	6.63	-5.49	HASTINGS	52	0	2.44	-3.43	DALLAS/FT WORTH	69	2	4.64	-4.46
TAMPA	75	-1	10.50	0.05	LINCOLN	52	-1	3.92	-2.52	DEL RIO	72	2	2.28	-2.74
WEST PALM BEACH	78	0	19.44	0.33	MCCOOK	52	0	2.03	-1.71	EL PASO	67	3	0.67	-2.17
GA ATHENS	62	0	8.98	-1.73	NORFOLK	51	1	1.81	-3.60	GALVESTON	75	1	8.65	-4.24
ATLANTA	64	1	6.49	-4.81	NORTH PLATTE	50	1	3.28	-0.04	HOUSTON	72	2	9.33	-3.69
AUGUSTA	64	0	4.66	-4.81	OMAHA/EPPLEY	54	2	2.69	-4.51	LUBBOCK	62	2	2.85	-2.13
COLUMBUS	66	0	7.61	-1.76	SCOTTSBLUFF	51	4	2.08	-0.95	MIDLAND	66	2	3.26	-1.47
MACON	64	0	8.31	-0.54	VALENTINE	49	1	3.24	-0.31	SAN ANGELO	68	3	3.66	-2.96
SAVANNAH	67	0	7.38	-3.22	NV ELKO	49	2	1.35	-1.09	SAN ANTONIO	72	2	8.02	-1.42
HI HILO	75	0	26.00	-8.36	ELY	47	2	2.85	0.28	VICTORIA	73	1	3.68	-8.22
HONOLULU	80	0	1.20	-3.98	LAS VEGAS	70	2	1.10	0.24	WACO	69	1	11.56	2.40
KAHULUI	76	-2	0.27	-3.34	RENO	56	4	0.33	-1.34	WICHITA FALLS	65	1	7.59	-0.39
LIHUE	78	0	8.25	-3.39	WINNEMUCCA	49	0	1.31	-0.68	UT SALT LAKE CITY	55	3	3.33	-0.97
ID BOISE	55	3	2.21	-0.69	NH CONCORD	52	4	17.74	7.55	VT BURLINGTON	52	4	10.98	0.97
LEWISTON	54	2	2.07	-0.90	NJ ATLANTIC CITY	60	4	10.47	1.21	VA LYNCHBURG	57	0	10.70	0.25
POCATELLO	48	1	3.40	0.41	NEWARK	60	3	17.46	6.40	NORFOLK	64	2	11.23	0.72
IL CHICAGO/O'HARE	54	2	8.87	-0.12	NM ALBUQUERQUE	58	1	2.01	-0.68	RICHMOND	62	3	15.91	5.27
MOLINE	53	1	7.77	-0.92	NY ALBANY	54	4	12.02	2.22	ROANOKE	58	1	15.75	5.54
PEORIA	54	1	8.98	0.11	BINGHAMTON	52	4	23.75	13.82	WASH/DULLES	58	2	16.38	5.88
ROCKFORD	52	2	10.94	2.27	BUFFALO	54	3	12.38	1.43	WA OLYMPIA	51	1	14.66	0.31
SPRINGFIELD	56	1	6.17	-2.15	ROCHESTER	54	4	11.43	2.54	QUILLAYUTE	50	0	32.61	3.83
IN EVANSVILLE	58	1	19.01	9.06	SYRACUSE	55	5	12.92	1.80	SEATTLE-TACOMA	53	0	9.90	-0.82
FORT WAYNE	54	2	14.66	6.24	NC ASHEVILLE	57	1	11.45	0.74	SPOKANE	49	2	2.60	-1.46
INDIANAPOLIS	56	1	13.06	3.81	CHARLOTTE	61	-1	11.93	1.08	YAKIMA	51	2	1.45	-0.52
SOUTH BEND	53	1	11.68	1.23	GREENSBORO	60	1	18.31	7.79	WV BECKLEY	55	2	12.10	3.35
IA BURLINGTON	54	0	7.16	-2.07	HATTERAS	67	1	27.23	11.31	CHARLESTON	58	2	15.19	5.41
CEDAR RAPIDS	51	0	6.43	-1.29	RALEIGH	62	1	12.37	1.96	ELKINS	53	2	13.87	3.77
DES MOINES	54	2	4.72	-3.15	WILMINGTON	65	0	12.36	-0.90	HUNTINGTON	57	1	15.43	6.58
DUBUQUE	50	1	7.61	-0.94	ND BISMARCK	46	2	2.37	-1.22	WI EAU CLAIRE	49	3	3.23	-4.67
SIOUX CITY	51	1	0.59	-5.22	DICKINSON	46	2	1.03	-2.52	GREEN BAY	49	2	9.62	2.07
WATERLOO	50	1	6.25	-1.29	FARGO	49	6	1.43	-3.78	LA CROSSE	51	1	5.58	-2.08
KS CONCORDIA	55	0	2.54	-3.25	GRAND FORKS	47	5	3.31	-1.34	MADISON	50	2	8.01	0.44
DODGE CITY	56	0	3.57	-0.59	JAMESTOWN	46	3	2.15	-1.70	MILWAUKEE	53	2	7.07	-1.42
GOODLAND	52	1	2.85	-0.14	MINOT	47	4	3.23	-0.69	WAUSAU	48	2	7.55	-1.36
HILL CITY	54	0	3.54	-0.71	WILLISTON	46	4	2.10	-0.77	WY CASPER	47	2	2.78	-0.16
TOPEKA	56	0	6.83	-2.18	OH AKRON-CANTON	54	2	14.26	5.26	CHEYENNE	47	2	2.99	0.17
WICHITA	58	0	6.13	-1.10	CINCINNATI	56	0	19.86	10.62	LANDER	48	3	3.55	0.05
KY JACKSON	58	0	12.93	1.78	CLEVELAND	56	4	18.68	8.80	SHERIDAN	47	3	4.98	1.39

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

December 12 – 18, 2011

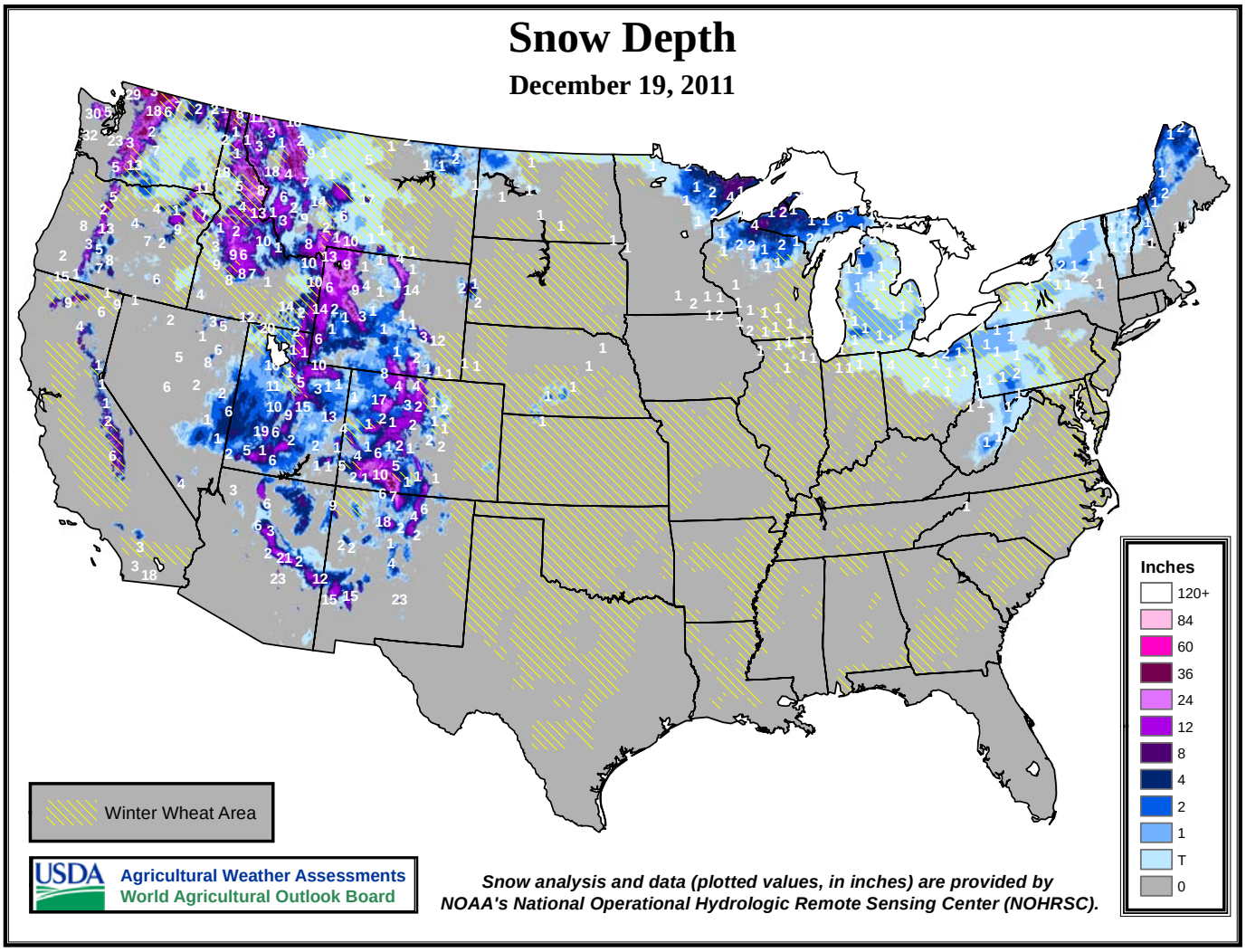
Weekly National Agricultural Summary provided by USDA/NASS

Near- to below-normal temperatures prevailed during the week west of the Rocky Mountains, while readings averaged as much as 15°F above normal in portions of the Great Lakes region. Strong winter storms delivered rain and snow in excess of 200 percent of normal to portions of the Southwest and Midwest. Rainfall in parts of the Southeast boosted soil moisture levels, while warm, dry weather favored soybean harvesting and other late-season fieldwork in southern Atlantic Coast States.

In Florida, temperatures were above average during the week. Rainfall was abundant in the northern part of the state, while just traces of precipitation fell in the south. Producers near Lake Okeechobee continued to harvest sugarcane, while late-maturing cotton was picked in Escambia and Santa Rosa Counties. Vegetable producers continued to harvest a variety of crops to meet holiday demand. Early and mid-season orange harvest remained strong.

With temperatures in the northern part of the state cold enough to freeze saturated soils, producers in portions of Ohio wrapped up their corn harvest for the 2011 season during the week. However, 10 percent of the state's crop remained in the field, as producers waited for soil conditions to improve before harvesting. Cool, wet weather caused winter wheat conditions to deteriorate slightly from last week's ratings.

Temperatures in Arizona were near normal, while much of the state received precipitation totaling at least twice the weekly normal. Cotton harvest advanced 10 percentage points during the week to 85 percent complete by December 18, behind both last year and the 5-year average. Producers continued to seed small grains and harvest alfalfa hay. Vegetable growers shipped a wide variety of crops from both central and western areas of the state.



International Weather and Crop Summary

December 11-17, 2011

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

HIGHLIGHTS

EUROPE: For the second consecutive week, much-needed rain improved soil moisture reserves for winter crops over central and northern Europe.

WESTERN FSU: Mild, wet weather boosted soil moisture reserves but kept central and western crop districts devoid of snow cover.

MIDDLE EAST: Rain and snow returned to western and northern portions of the region, boosting moisture reserves for winter wheat and barley.

NORTHWESTERN AFRICA: Showers returned, maintaining excellent soil moisture for winter grains.

SOUTH ASIA: Sunny weather favored cotton harvesting in southern India and winter crop development to the north.

EAST ASIA: Seasonably cold, dry air settled in across China as most crops were dormant and well cold hardened.

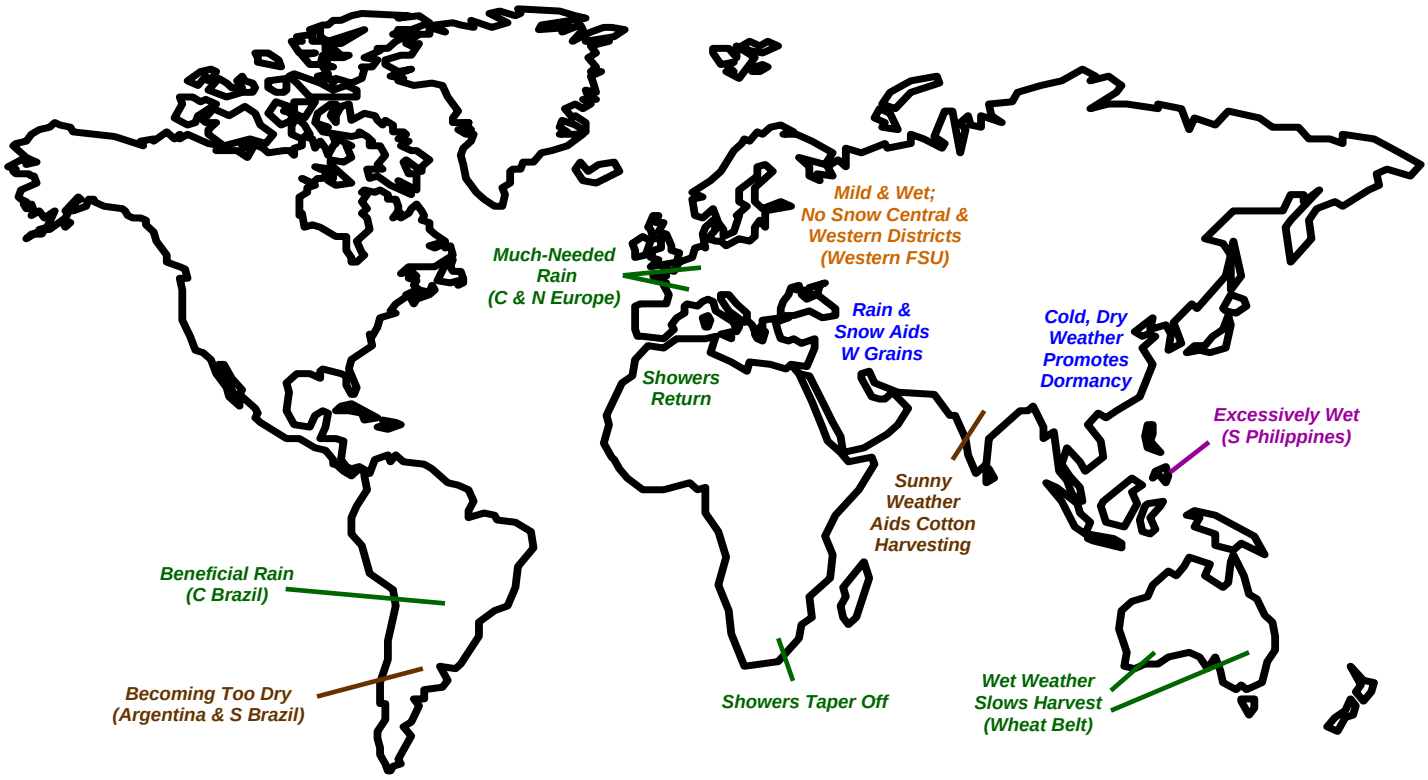
SOUTHEAST ASIA: A late-year tropical cyclone brought heavy showers to the southern Philippines, exacerbating already wet conditions for corn.

AUSTRALIA: Wet weather slowed winter crop harvesting across most of the wheat belt but maintained abundant moisture supplies for dry land and irrigated summer crops.

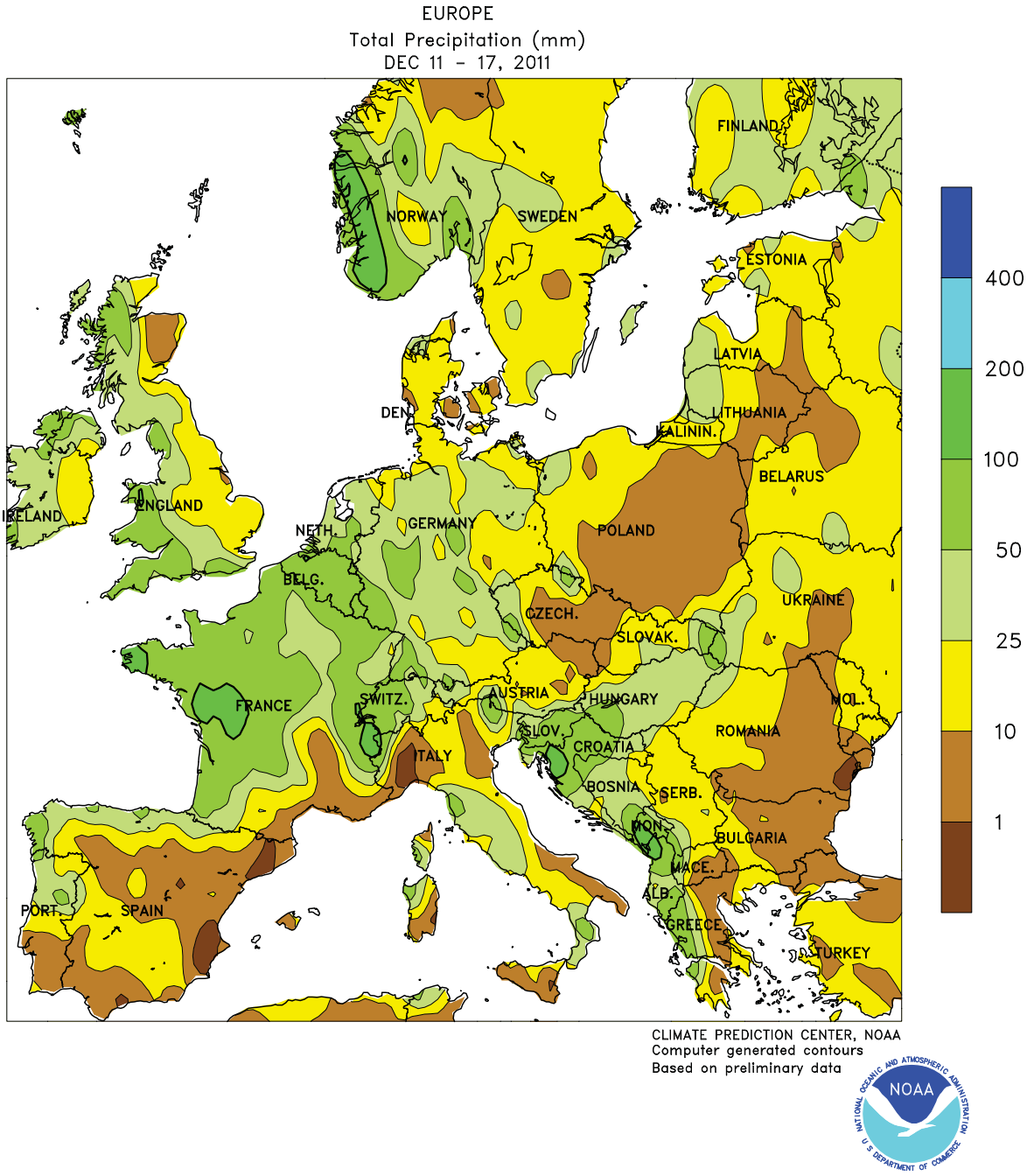
SOUTH AFRICA: Showers tapered off across the main corn and sugarcane production areas.

ARGENTINA: Dry weather promoted winter grain harvesting but moisture became limited for summer crops.

BRAZIL: Dryness intensified across the south but favorably wet conditions continued in Brazil's northern cotton and soybean areas.



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



EUROPE

Unseasonably warm, wet weather persisted over most major growing areas for a second consecutive week. A parade of Atlantic storms triggered moderate to heavy rain (10-100 mm) from England, France, and northern Spain into western portions of Poland and the Balkans. The rainfall boosted soil moisture for vegetative winter grains and oilseeds in England and France and dormant winter crops in Germany, Poland, and the Balkans. Showers (10-20 mm) also returned to northern Italy, easing irrigation demands for recently planted winter crops. In addition, temperatures averaged 2 to 4°C above normal in northern Europe and up to 8°C above normal in the Balkans. The mild weather reduced winter crop cold hardiness and encouraged additional, late-season vegetative growth in western portions of the continent.

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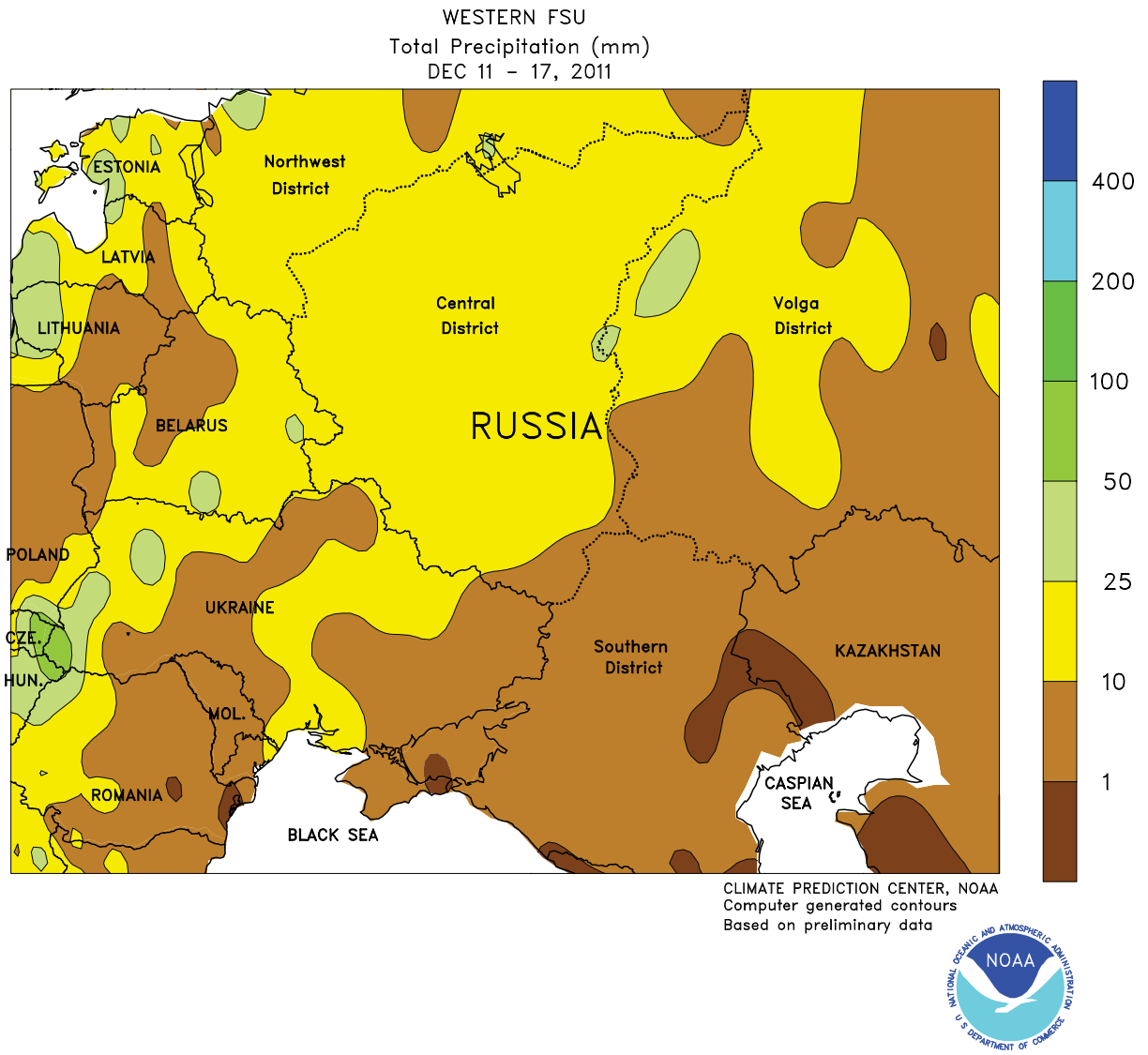

WESTERN FSU

Mild, wet weather persisted, providing much-needed moisture in the west but keeping the region devoid of protective snow cover. A strong storm system generated rain and wet snow from Belarus and Ukraine (5-30 mm liquid equivalent) into central and northern Russia (2-15 mm), boosting moisture reserves for dormant winter crops. However, temperatures averaging up to 6°C above normal across the western half of the region reduced winter crop cold hardiness and left primary growing areas devoid of protective snow cover. Cooler-than-normal conditions were confined to central and eastern portions of the Volga District, where a shallow to moderate snowpack (2-25 cm) persisted.

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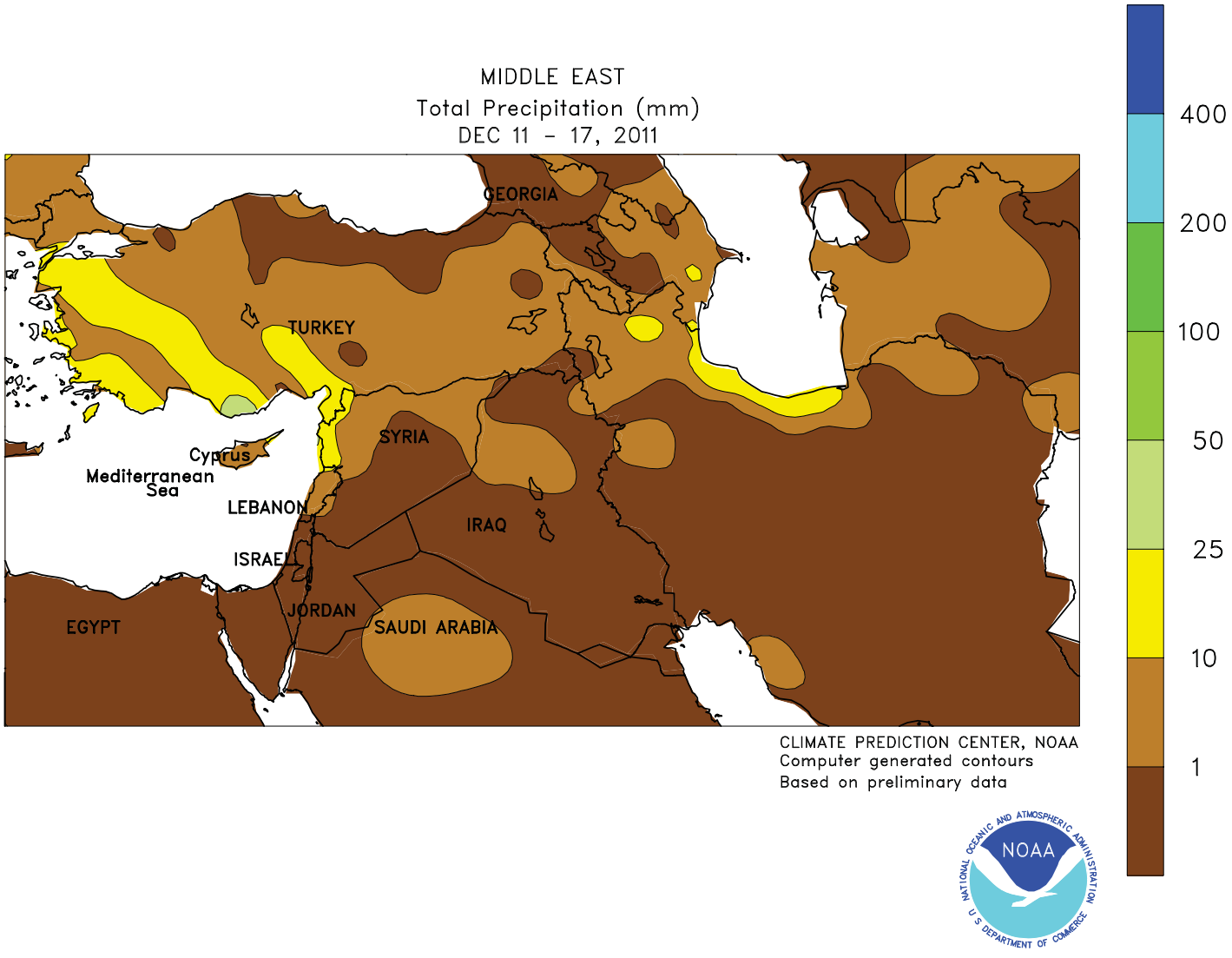

MIDDLE EAST

Rain and snow lingered in western and northern crop districts, while drier weather settled over central and eastern growing areas. An upper-air disturbance triggered rain and high-elevation snow (2-25 mm liquid equivalent) from western and southern Turkey into northern Iran, maintaining favorable soil moisture for wheat and barley establishment. Winter grains remained dormant from Turkey's Anatolia Plateau into northern Iran as weekly average temperatures remained below 5°C. In contrast, mostly sunny skies promoted crop development from the eastern Mediterranean coast into central and southern Iran. Winter crop prospects over most of the Middle East remain excellent due to the favorably wet start to the fall-winter growing season.

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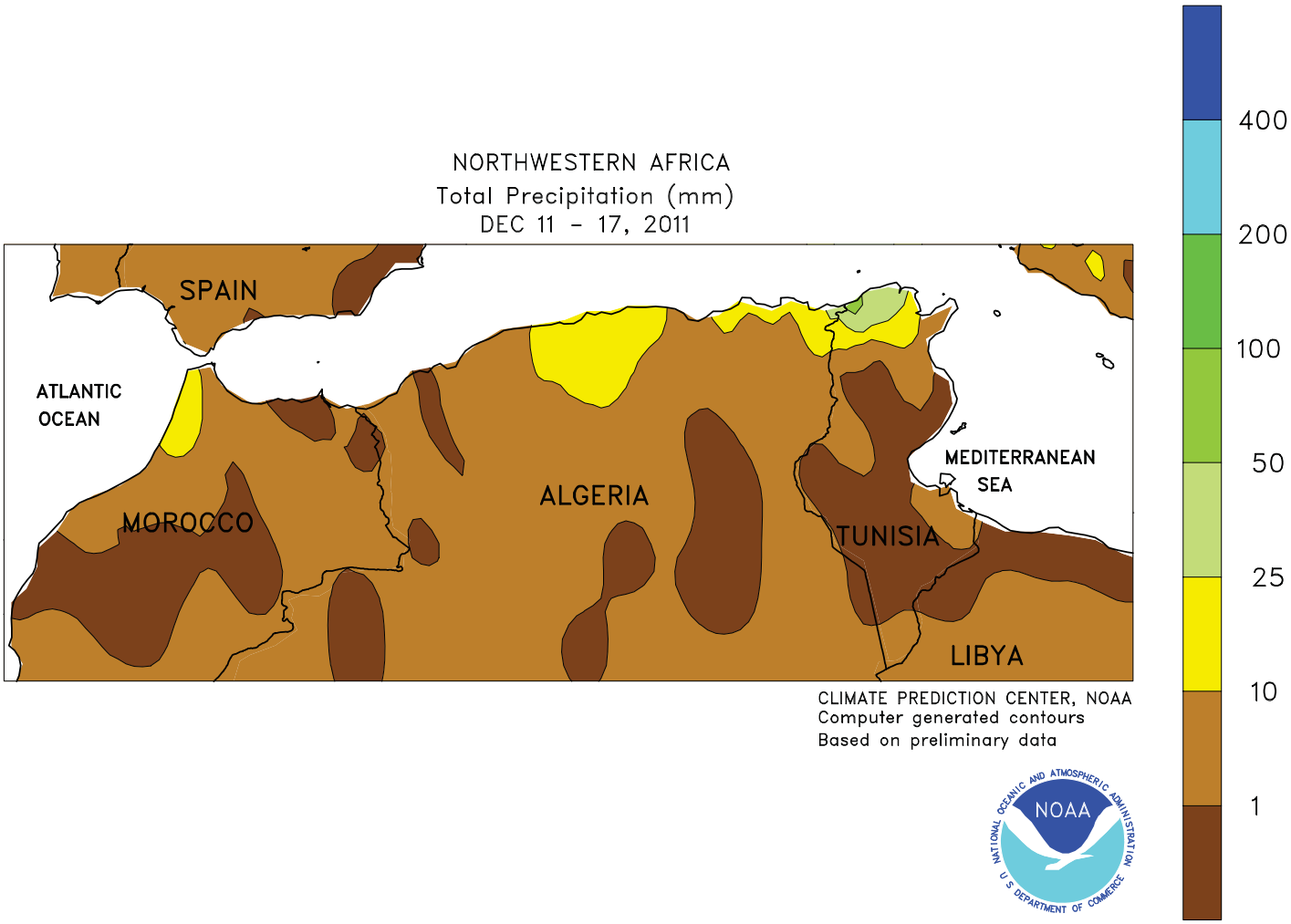

NORTHWESTERN AFRICA

Showers returned, maintaining excellent prospects for vegetative winter grains. A weak cold front produced showers (2-25 mm) across north-central portions of Morocco and Algeria, with somewhat heavier rain (up to 50 mm) falling in northern Tunisia. Topsoil and subsoil moisture remained in good supply for wheat and barley establishment, as producers continued to enjoy a favorable start to the 2011-12 growing season. Temperatures averaged near to slightly above normal, promoting crop growth.

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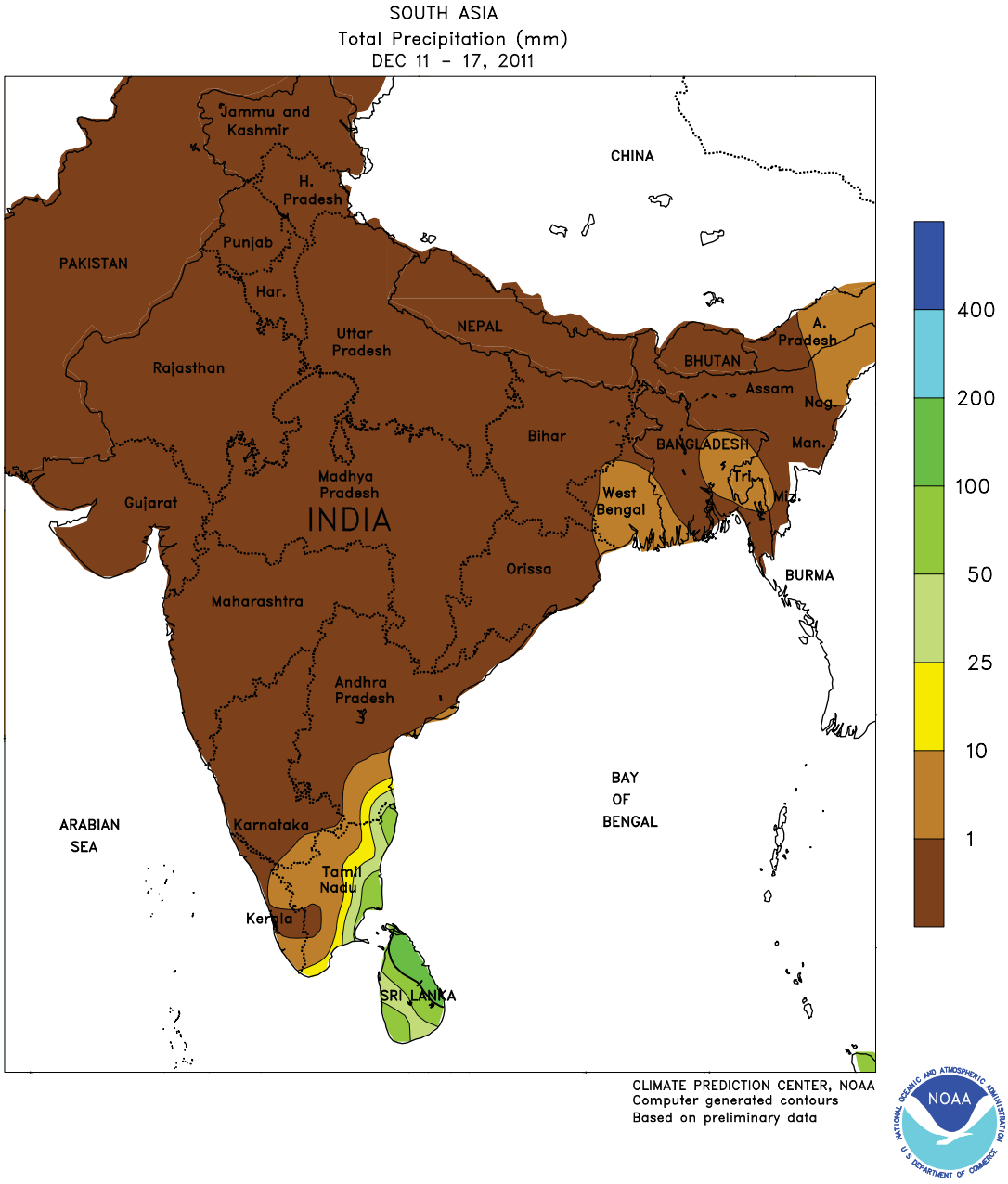

SOUTH ASIA

Sunny, warm conditions favored cotton harvesting throughout the southern half of India, where weekly temperatures averaged in the middle 20s (degrees C). Farther north, sunny, cooler weather prevailed. Weekly average temperatures between 15 and 20°C benefited development of winter wheat approaching the boot stage of development in northern India and into Pakistan. The weather also favored winter rapeseed progressing through the late rosette stages of development.

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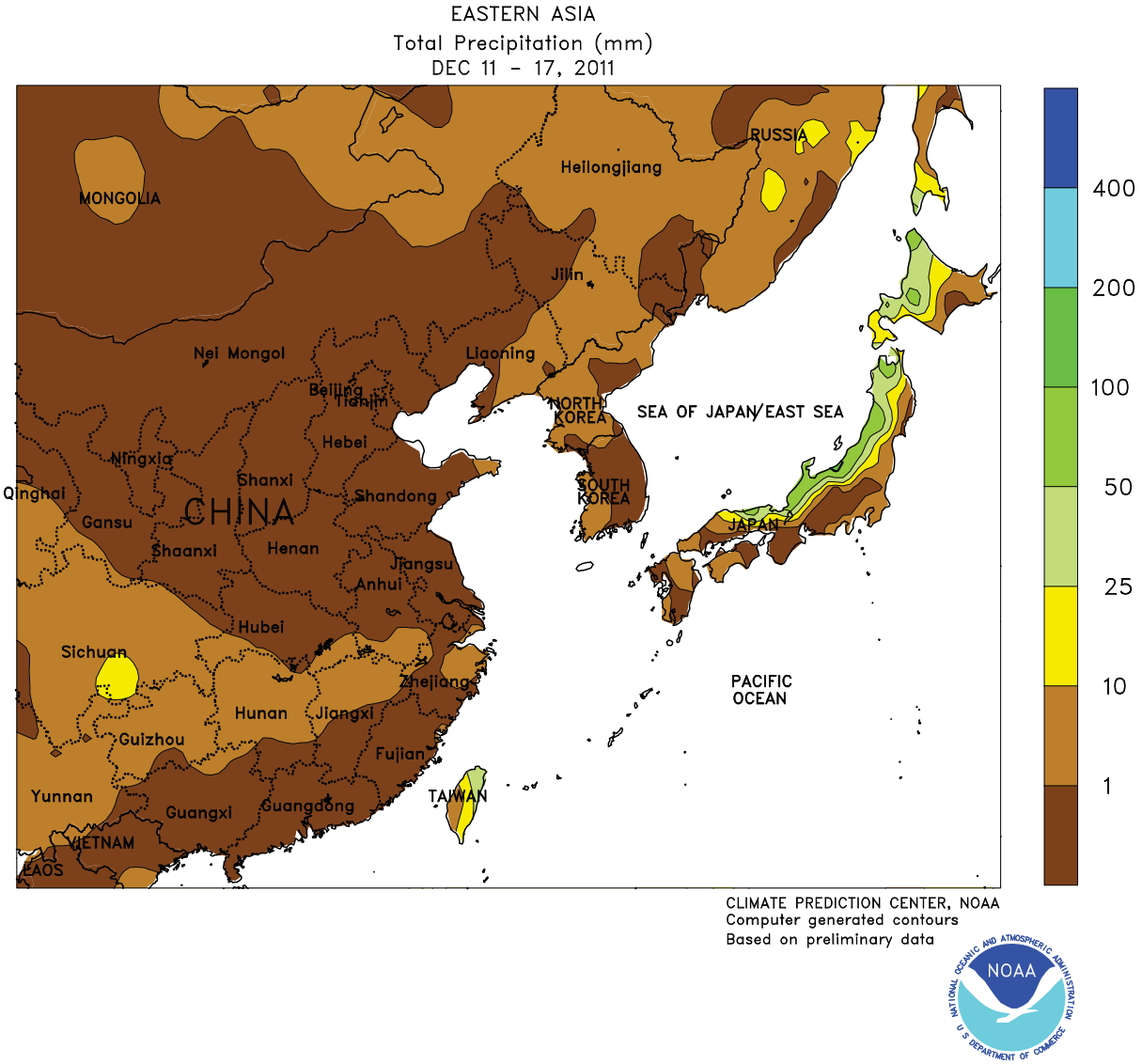

EASTERN ASIA

Seasonably cold, dry air settled in across eastern China. Weekly minimum temperatures dipped below -5°C on the North China Plain, where winter wheat was dormant and near its peak cold tolerance (-17°C). Freezing temperatures were apparent as far south as the Xi River Basin, necessitating protective measures for winter-grown vegetables in the south. Meanwhile, winter rapeseed was dormant in most of the Yangtze Valley but still maintained vegetative growth in the Sichuan Basin. In eastern growing areas, rapeseed was likely cold tolerant to about -10°C, while weekly minimum temperatures remained above that threshold.

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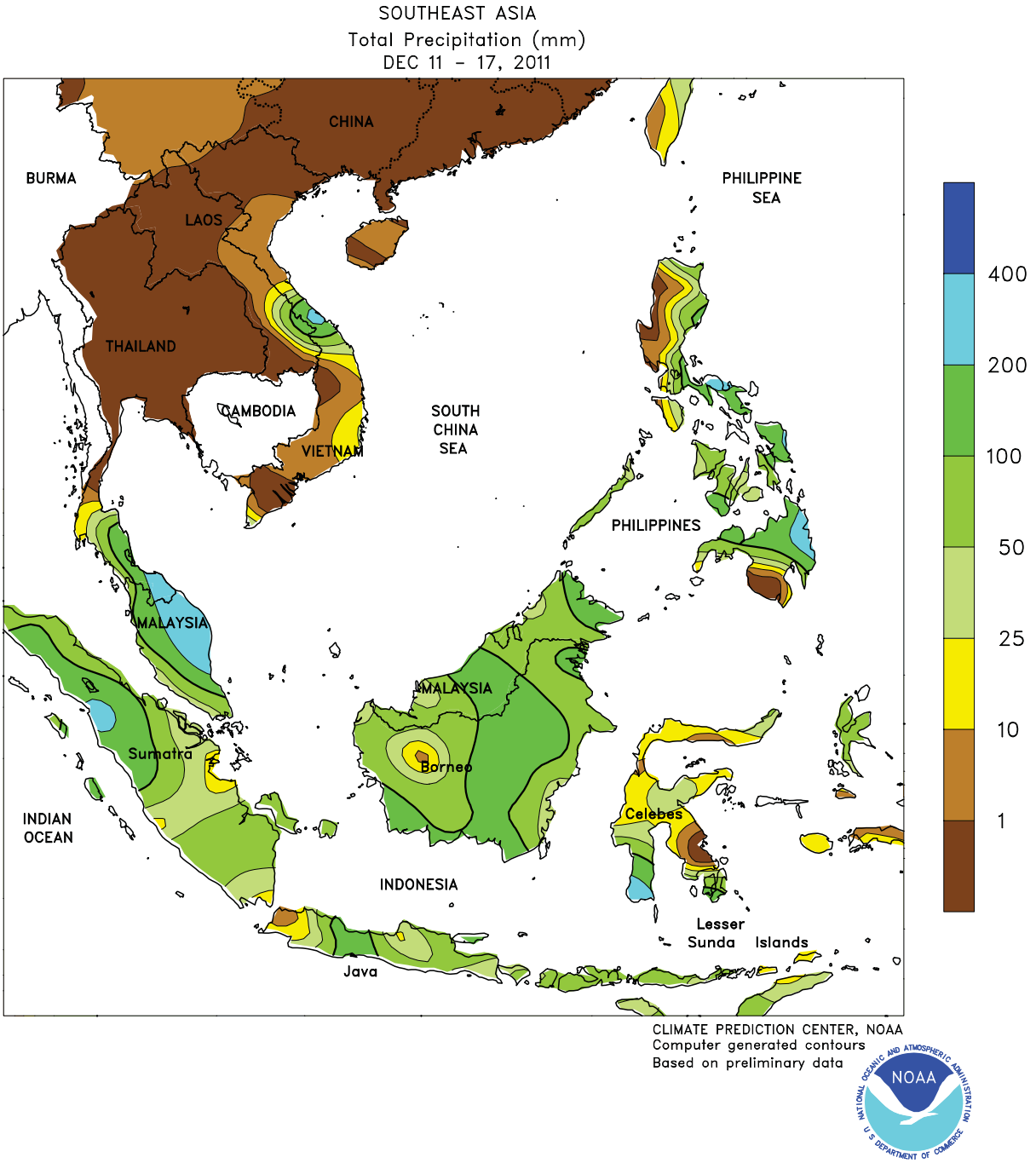

SOUTHEAST ASIA

An unusual late-year tropical cyclone passed across the southern Philippines, bringing heavy showers (100 mm or more) to winter corn. Much of the rest of the eastern Philippines continued to receive above normal rainfall, maintaining excessive moisture conditions for corn and to a lesser extent rice. The northeastern Philippines, however, experienced lesser amounts of rainfall (25-50 mm), with sunnier conditions benefiting rice in the Cagayan Valley. Mostly sunny weather in Vietnam favored winter-spring rice development as well as the final stages of coffee harvesting. Meanwhile, heavy rainfall (over 100 mm) on the eastern Malay Peninsula caused oil palm harvest delays, while also causing delays in parts of Indonesia. In Java, Indonesia, rainfall (10-100 mm) was generally scattered with the highest amounts occurring in mountainous areas. Moisture conditions remained favorable for vegetative rice across Java from consistent above-normal rainfall.

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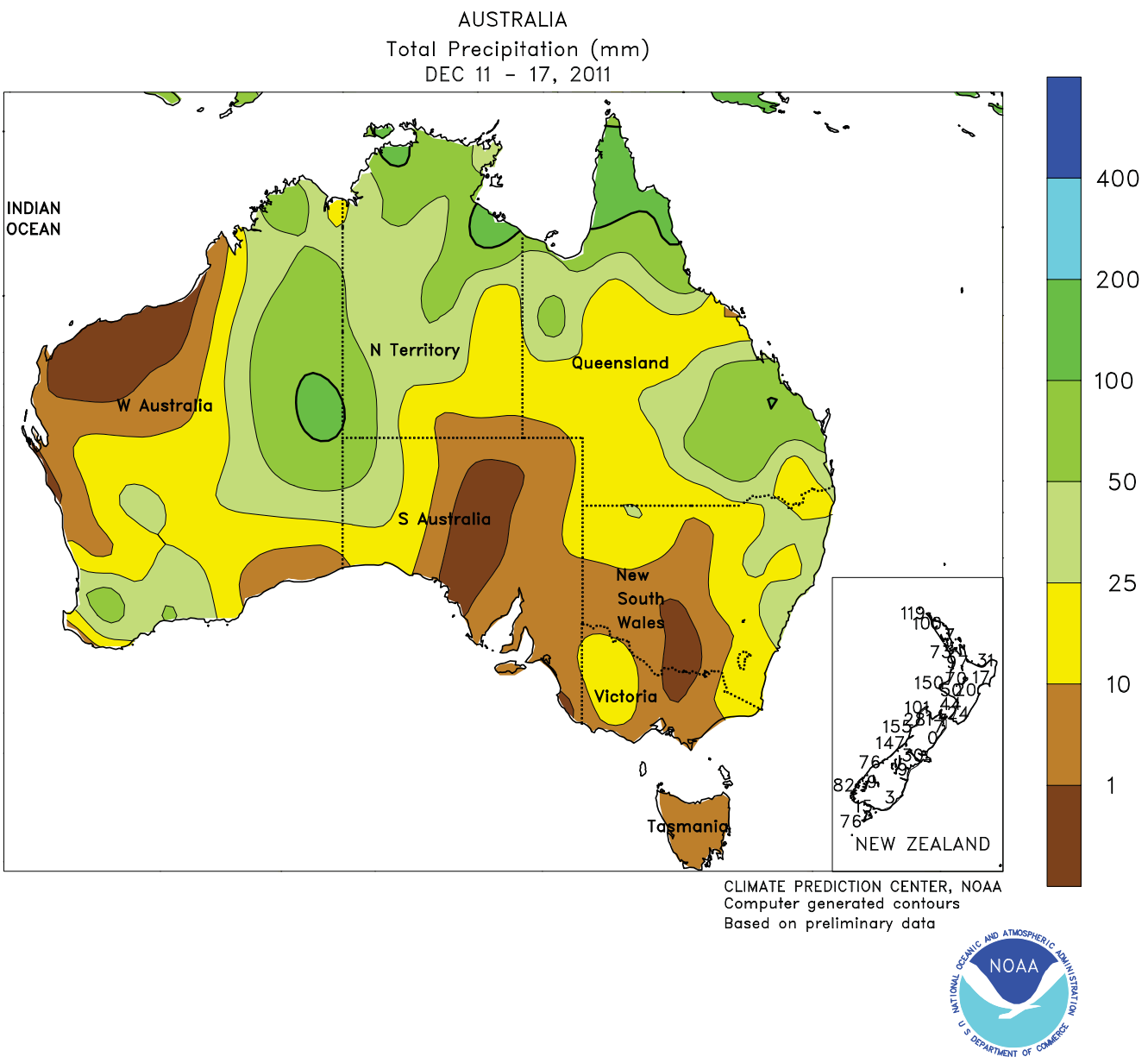

AUSTRALIA

For the second consecutive week, periods of rain (25-75 mm or more) slowed winter crop harvesting throughout the Western Australia wheat belt. Farther east, passing showers (20-60 mm or more) temporarily interrupted wheat, barley, and canola harvesting across portions of South Australia and Victoria, while relatively dry weather in southern New South Wales helped winter grain dry down and harvesting. Wet weather (15-70 mm) continued to plague northern New South Wales and Queensland, further delaying winter wheat harvesting and reducing the quality of unharvested crops. The rain continued to benefit dryland and irrigated summer crops, maintaining abundant moisture supplies for cotton and sorghum development. Temperatures averaged about 2 to 4°C below normal in northern New South Wales, Queensland, and Western Australia. Elsewhere, temperatures averaged near normal.

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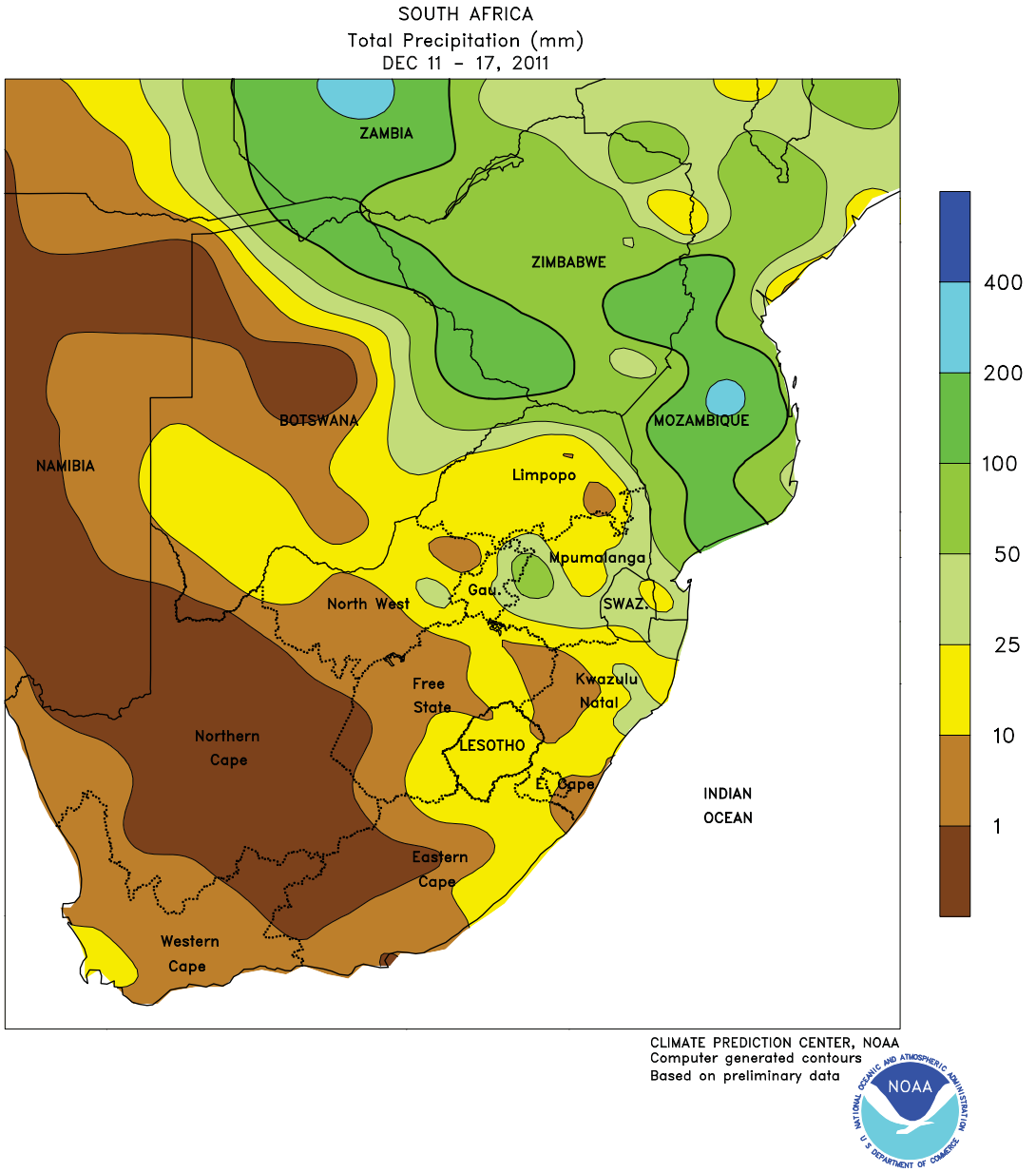

SOUTH AFRICA

Following last week's beneficial rain, a generally drier weather pattern dominated the corn belt. Though pockets of heavy rain (greater than 25 mm) spanned major northern production areas (North West to western Mpumalanga), amounts were overall lower in most other areas, in many cases below 5 mm. Weekly average temperatures were 1 to 3°C above normal in eastern sections of the corn belt and near to below normal in the west, with highs ranging from the upper 20s to lower 30s (degrees C). Given the recent increase in topsoil moisture, the drier weather and increased sunshine favored vegetative development of corn and other rain-fed summer crops in eastern sections of the corn belt while promoting planting farther west. Warmer, drier conditions also prevailed in rain-fed sugarcane areas of southern KwaZulu-Natal, although frequent light showers led to accumulations of 5 to 25 mm or more of rain. Elsewhere, showers were scattered and light in most agricultural districts in the Cape Provinces, with midweek accumulations greater than 10 mm in a few localized areas. Temperatures averaged near to below normal throughout the region but daytime highs rose into the middle and upper 30s at week's end upon the return of seasonably drier weather.

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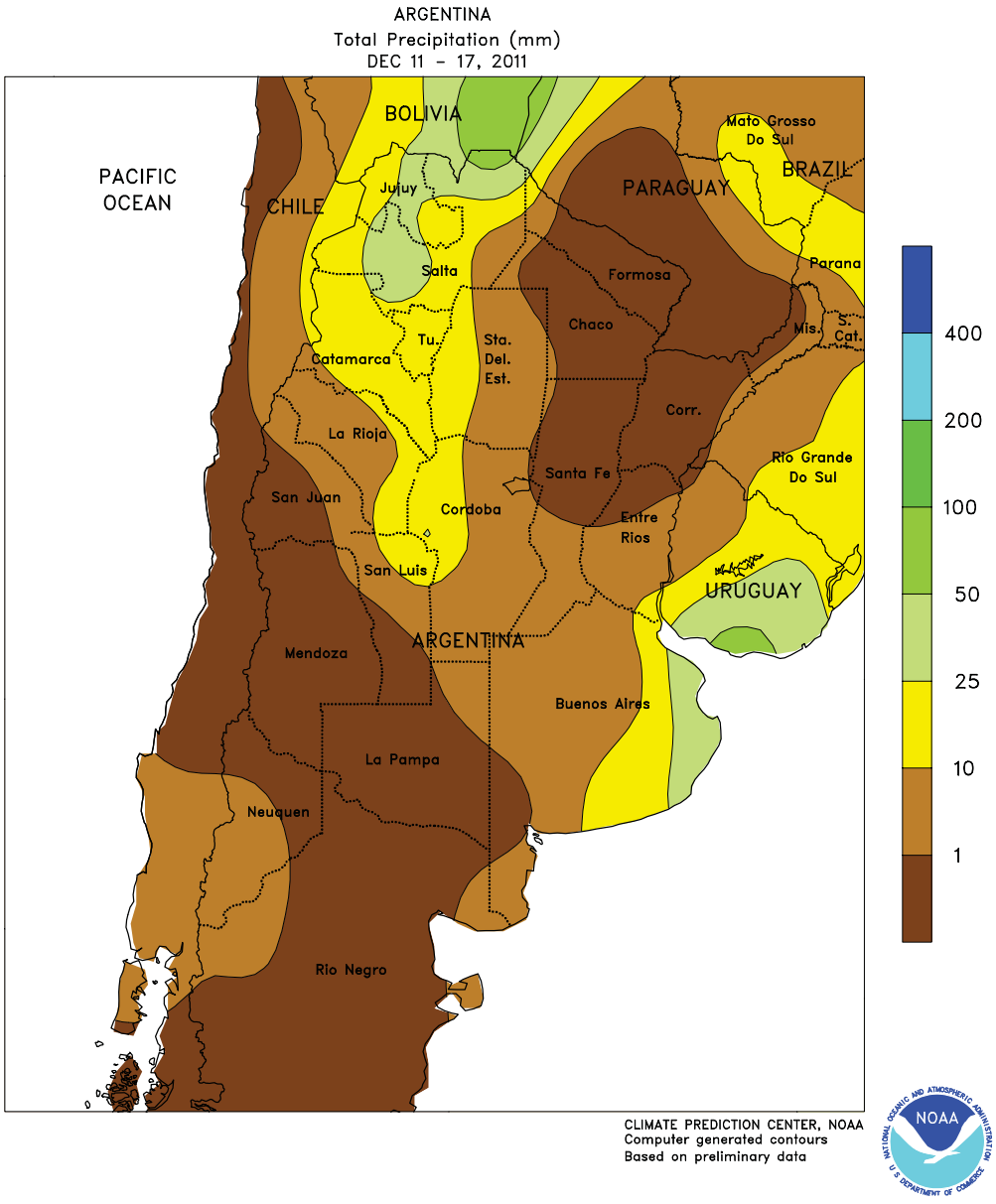

ARGENTINA

Dry weather dominated major agricultural areas of central and northern Argentina, aiding winter grain harvesting but leading to reductions in moisture available for development of summer grains, oilseeds, and cotton. Most major producers of summer row crops recorded well-below normal rainfall (below 10 mm) even though fringe agricultural areas, notably eastern sections of Buenos Aires and the northwest (northern Cordoba to Salta and Jujuy), continued to receive more seasonable amounts (10-25 mm or more). Weekly temperatures averaging 1 to 2°C below normal helped to mitigate the impact of dryness, although warmer conditions (highs reaching the middle 30s degrees C in western farming areas) were developing at the end of the week. A return to a more seasonable pattern of showers and summer warmth is needed to prevent losses in yield potential, particularly in high-yielding farming areas of the lower Parana River Valley, which recorded a third week of unfavorable dryness as early planted corn advanced through reproduction. According to Argentina's Ministry of Agriculture, soybeans and corn were 77 and 83 percent planted, respectively, as of December 15. Sunflower planting was virtually complete. In addition, winter wheat was 52 percent harvested, slightly ahead of last year's pace.

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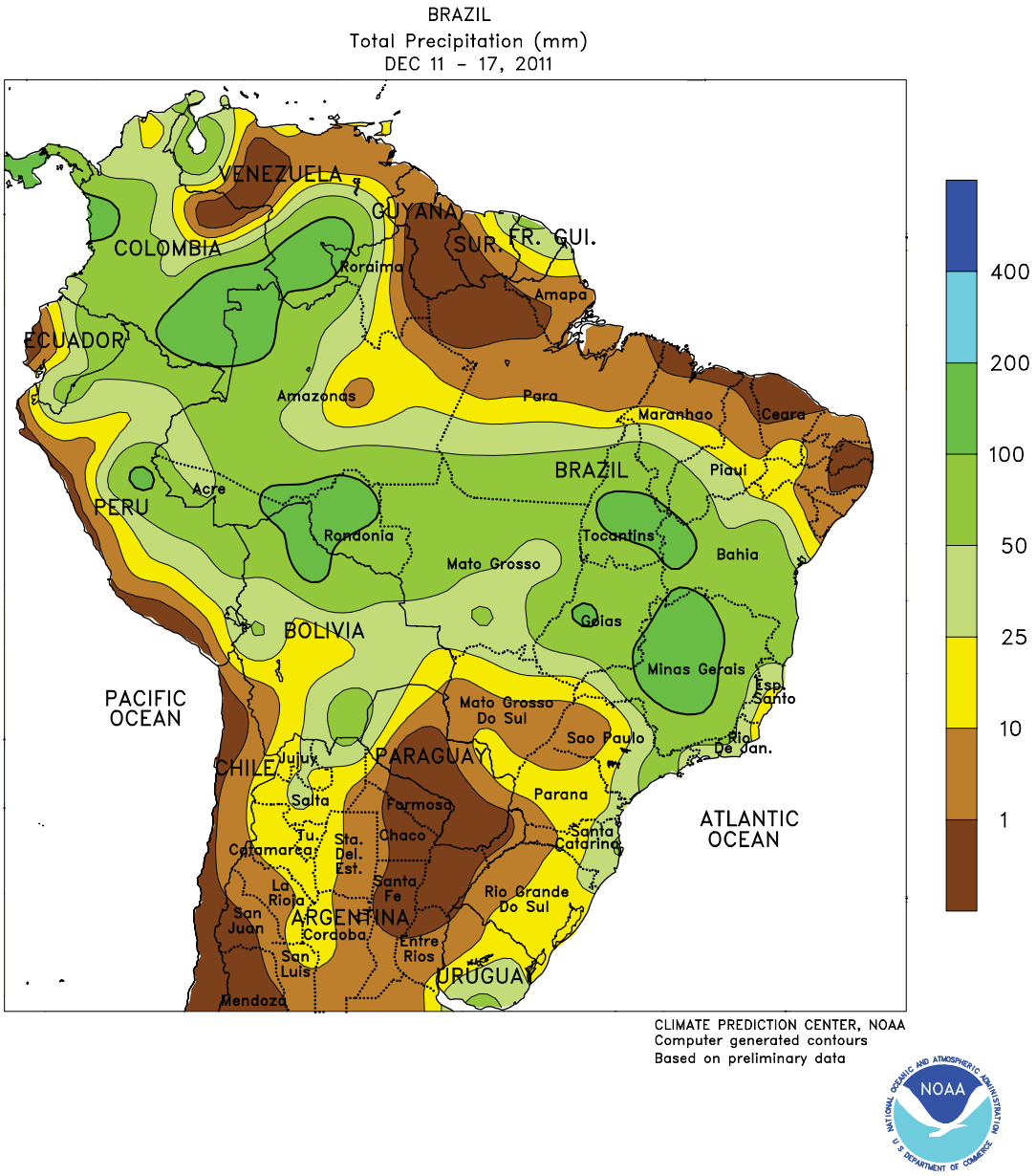
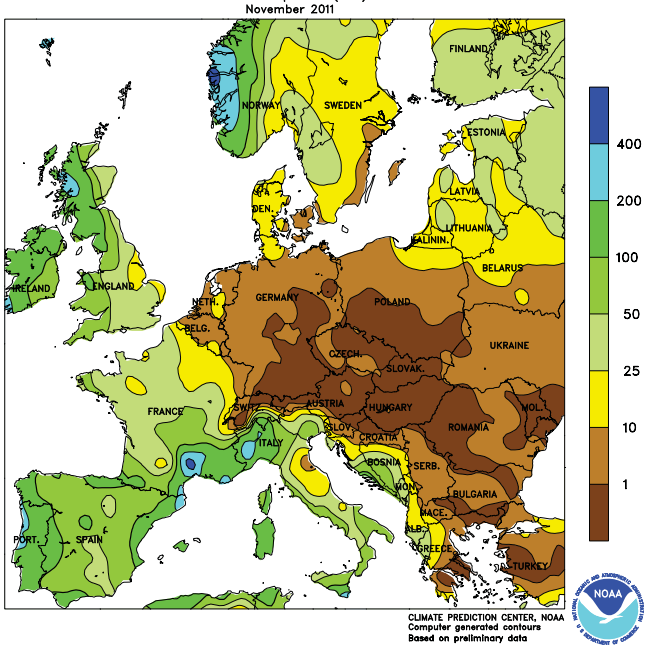


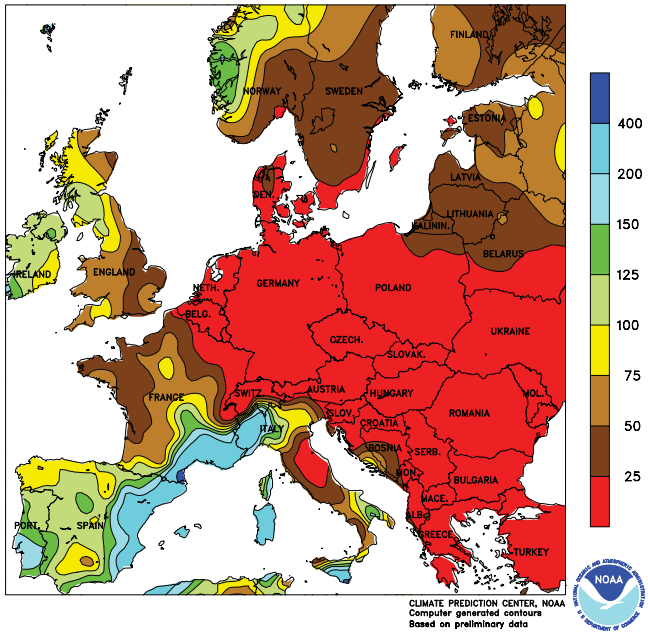
BRAZIL

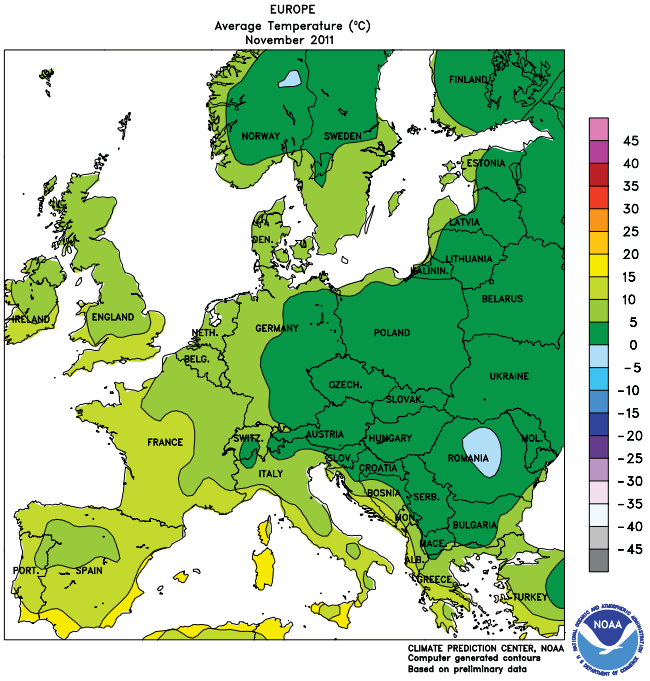
Drier-than-normal weather dominated a large portion of the south, reducing moisture for corn, soybeans, and sugarcane. Rainfall totaled 3 to 25 mm from Rio Grande do Sul northward through Mato Grosso do Sul and western Sao Paulo; near- to above-normal temperatures (highs reaching the lower and middle 30s degrees C) exacerbated the impact of the dryness on summer row crops, particularly main-season corn in or approaching reproduction. This region has been experiencing periodic dryness during the early part of the growing season, and a return to seasonably heavy rain is needed soon to prevent losses in yield potential. This is particularly true from Rio Grande do Sul to southern Parana, where farmers have experienced three consecutive weeks of below-normal rainfall. Farther north, moderate to heavy rain (25-100 mm or more) continued from Mato Grosso eastward through Bahia and Minas Gerais, increasing moisture for soybeans, cotton, and coffee. Weekly average temperatures were generally within 1°C of normal, with highs in the lower 30s. Meanwhile, seasonable warmth and dryness in Brazil's northeastern tip favored sugarcane harvesting.

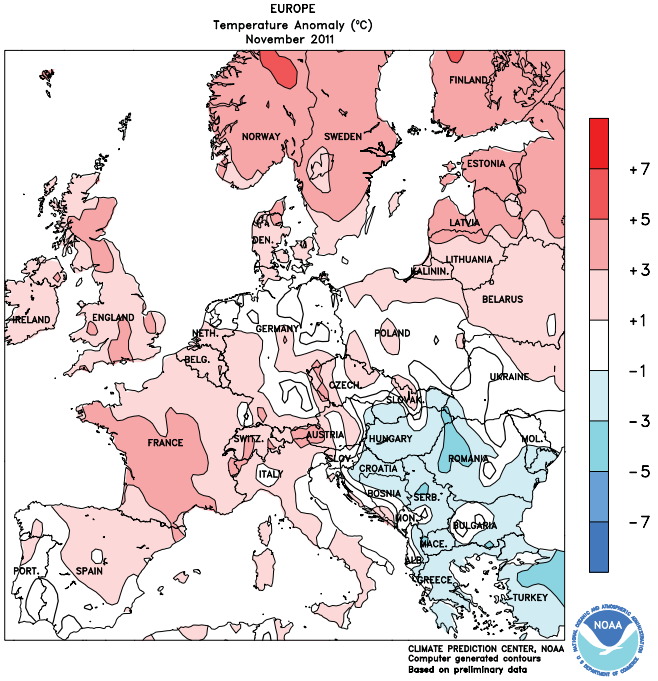
For additional information contact: mbrusberg@oce.usda.gov

November International Temperature and Precipitation Maps









EUROPE

In November, favorably wet conditions in the west contrasted with unseasonable dryness in the east. In particular, winter wheat and rapeseed were locally poorly established in Poland and the Balkans following a month with little – if any – precipitation. Dry conditions in Germany likewise reduced soil moisture, although October rain aided winter crop establishment. In contrast, favorable rainfall aided winter wheat planting and establishment in Italy and Spain and encouraged additional winter crop growth in France and England. At month's end, winter crops were dormant in eastern Europe.

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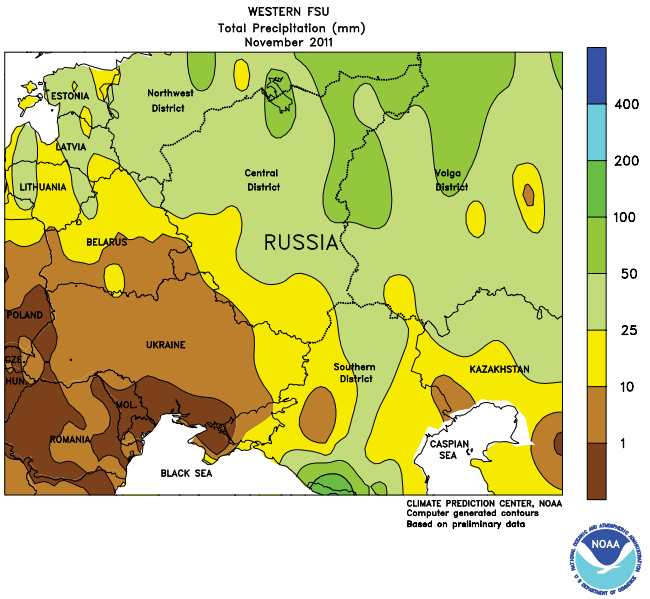
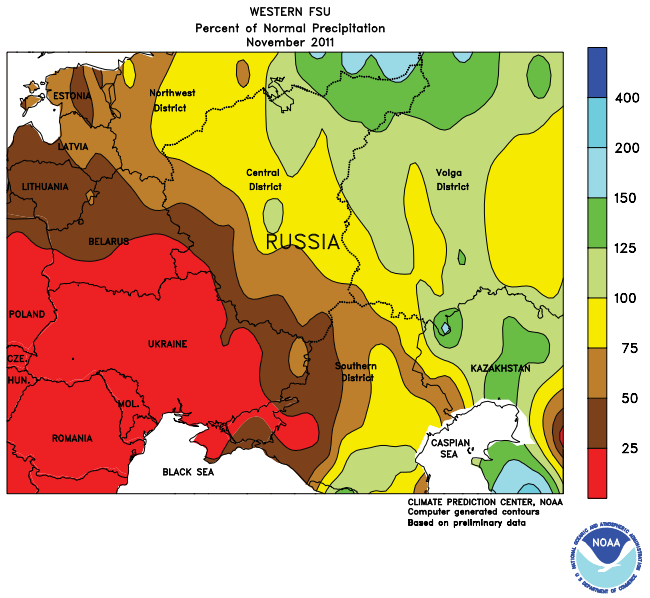
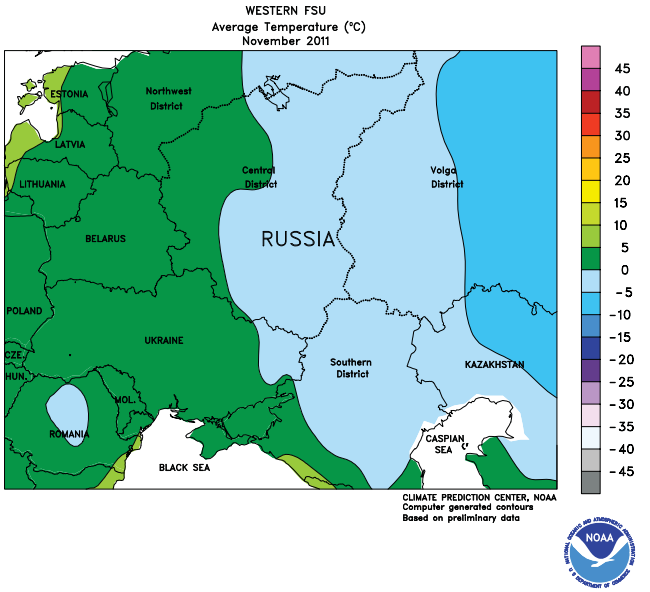
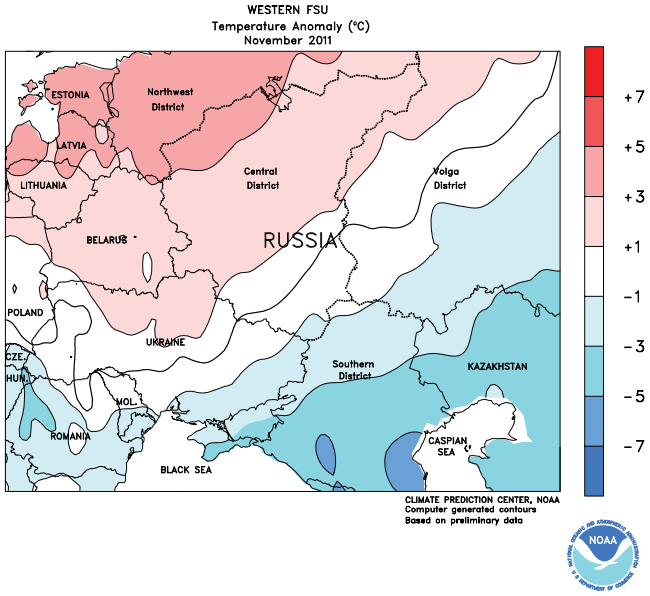


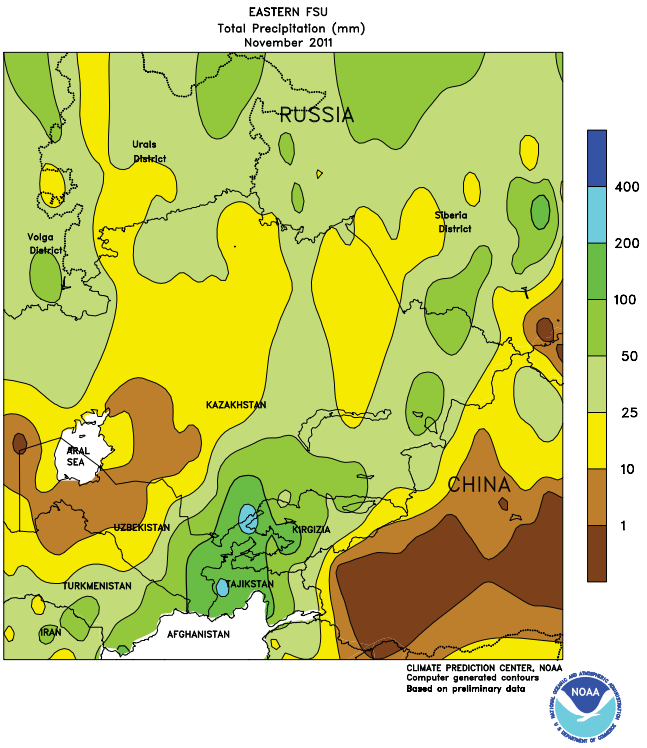


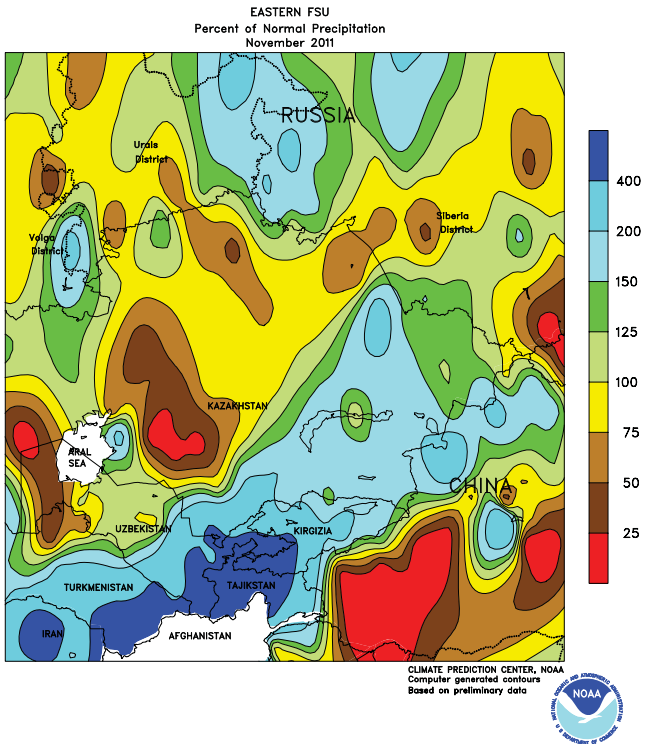


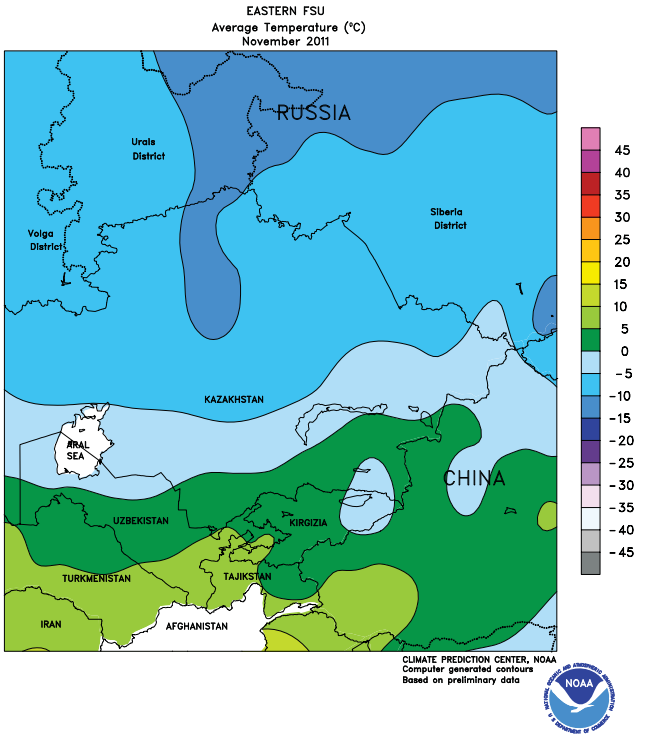


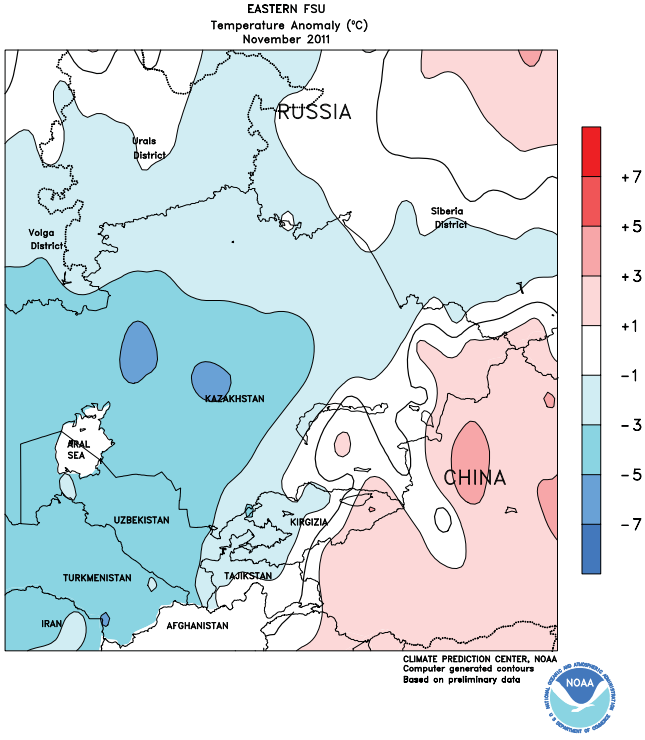
WESTERN FSU

In November, an early season cold snap threatened newly emerged, exposed winter grains in Russia's Southern District. Temperatures plunged below -15°C (locally below -20°C) in the Southern District, where some winter grains may have suffered some burnback. In contrast, plentiful snowfall insulated winter crops from potential winterkill across the remainder of Russia. In Ukraine, exceptionally dry weather followed October's locally beneficial showers, resulting in poorly established stands of winter wheat. By month's end, winter crops were dormant across the entire region, although milder weather reduced cold hardiness in western portions of the region. As of early December, winter grains in central Russia were adequately protected by snow, while crops elsewhere were devoid of a protective snow cover.





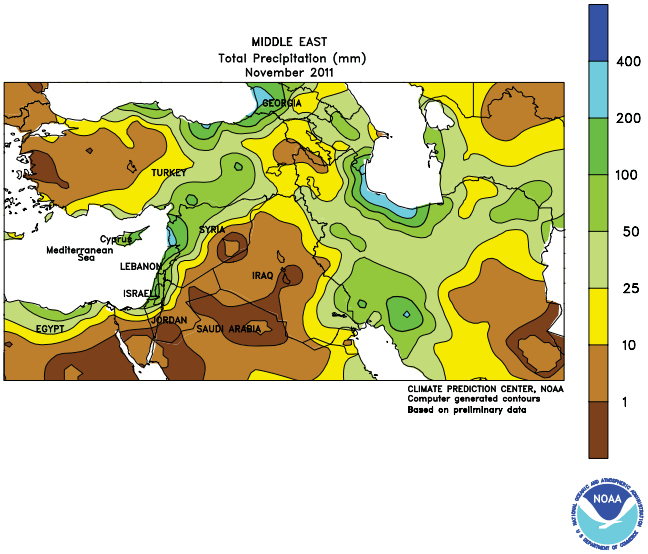


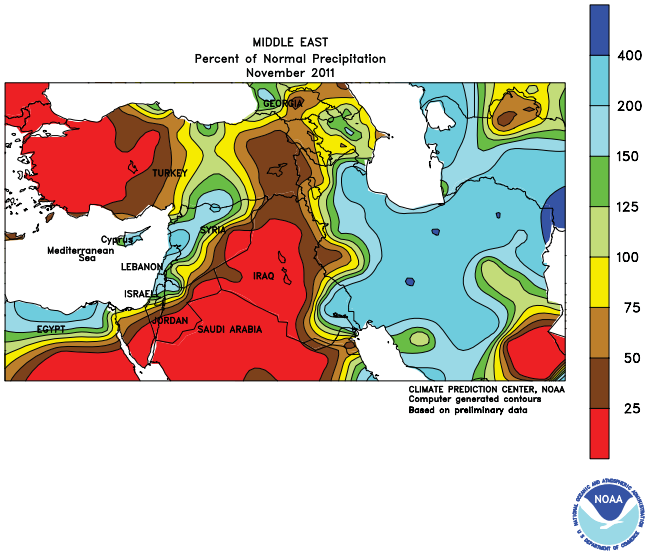


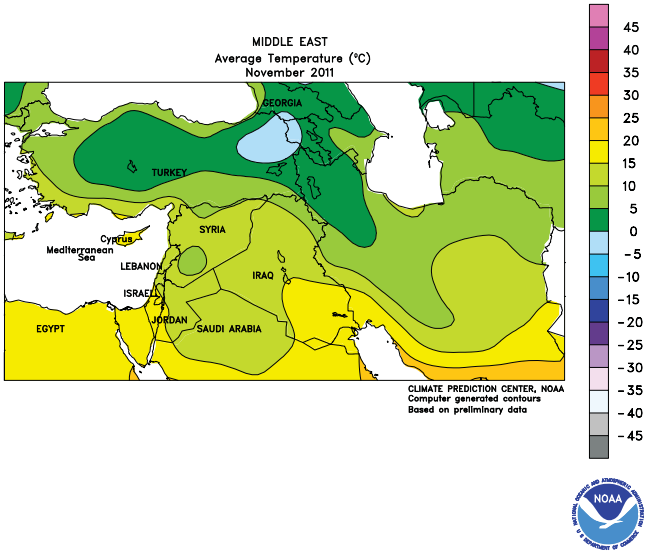
EASTERN FSU

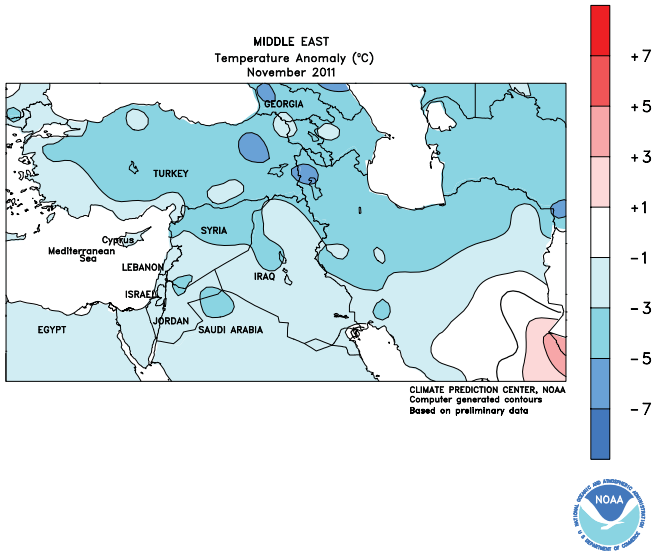
In November, seasonably cold, snowy weather settled over Kazakhstan and Russia's Siberia District. This region is not a primary winter crop area, although any planted winter grains were protected from the cold by a deep snowpack. Meanwhile, heavy rain and mountain snow (50-320 mm liquid equivalent) boosted irrigation reserves and mountain snowpacks. However, overall impacts on primary agriculture were minimal, as the cotton harvest was mostly completed by the time the rain arrived.

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



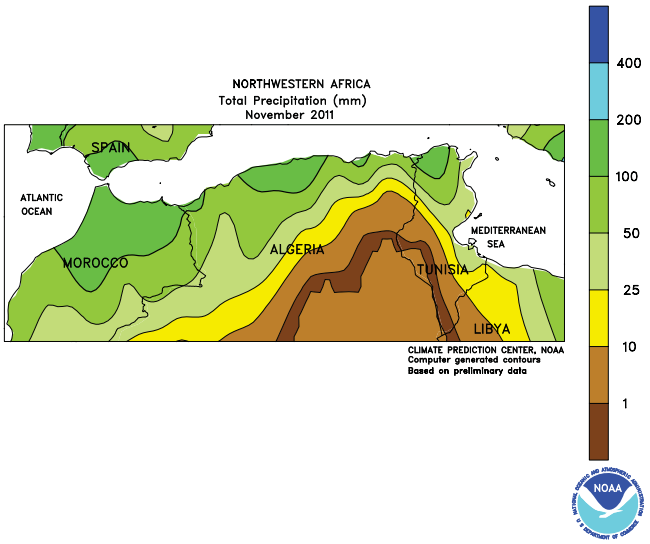


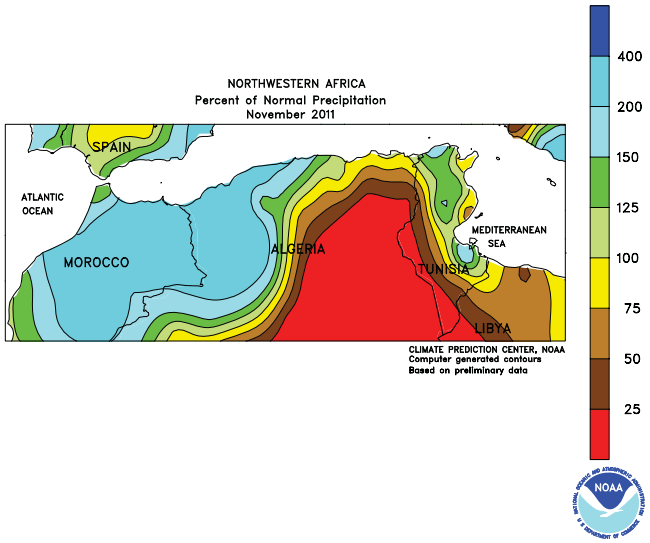


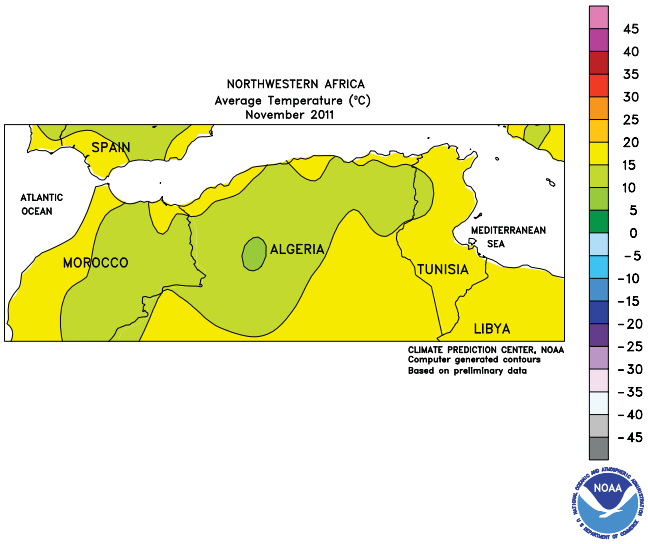


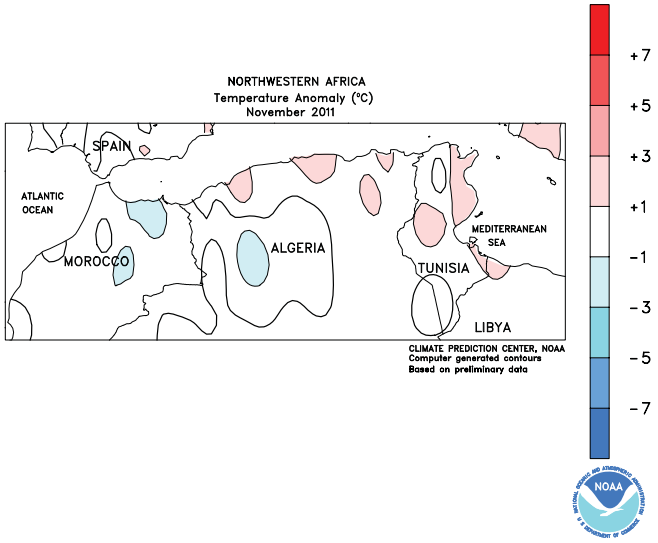
MIDDLE EAST

During November, rain and snow boosted soil moisture for winter crop establishment from southeastern Turkey into Iran. However, locally heavy rain (60-100 mm) delayed late cotton harvesting in southeastern Turkey. Precipitation tallied 100 to more than 500 percent of normal for the month over much of Iran, maintaining excellent moisture reserves for winter crop establishment. In contrast, drier-than-normal conditions (10 mm or less) in central and western Turkey reduced soil moisture for winter crops. Temperatures averaged up to 5°C below normal in the region's primary winter grain belt, likely ushering northern-grown winter crops into dormancy several weeks early.



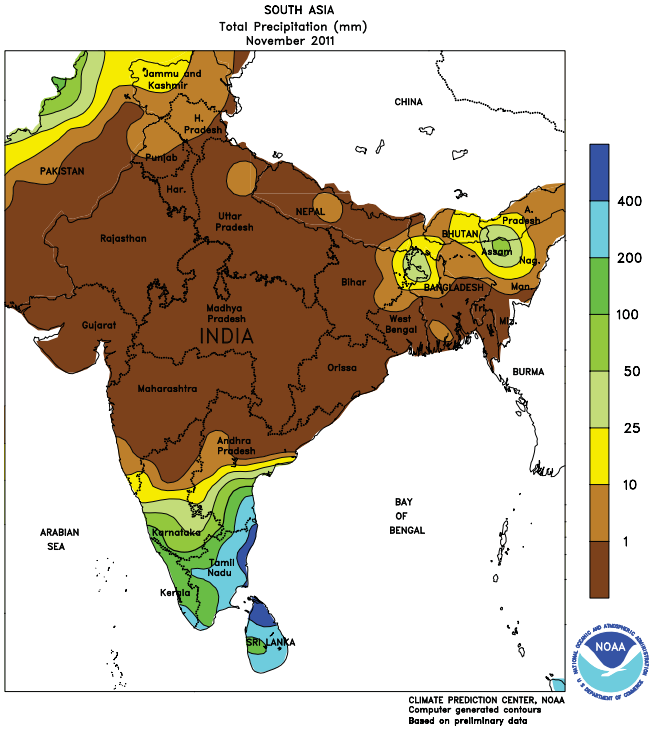


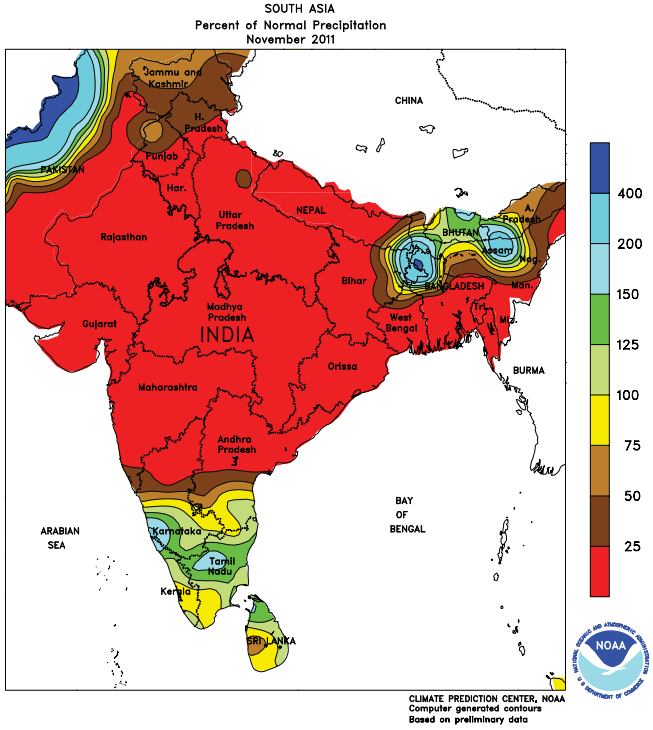


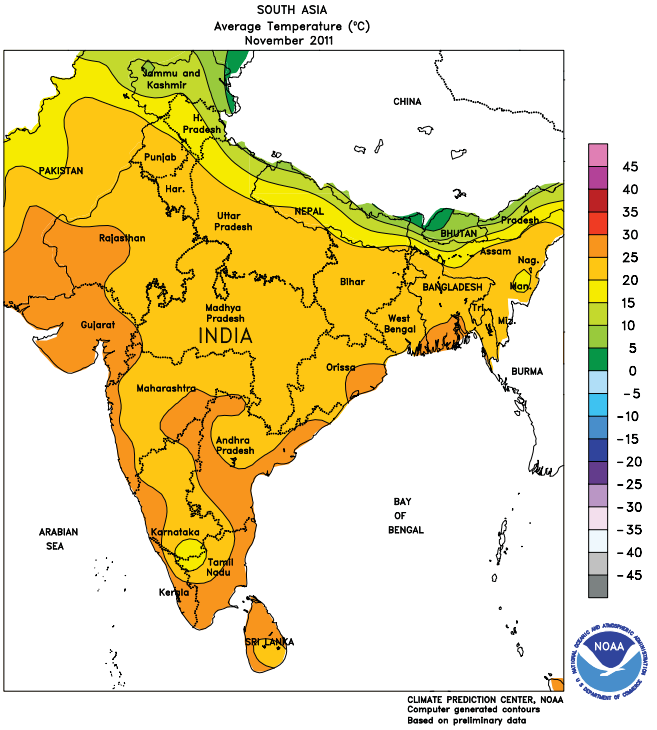


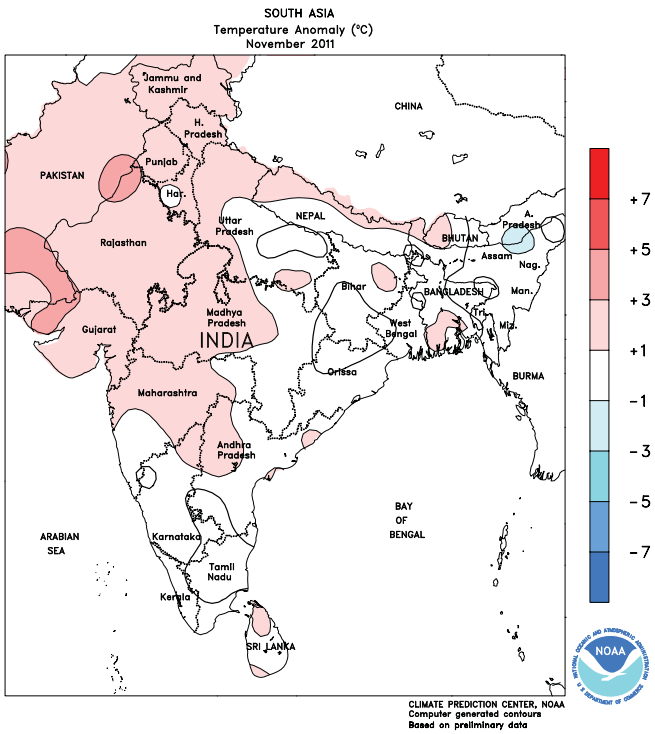
NORTHWESTERN AFRICA

Above-normal November rainfall from Morocco into northern Tunisia boosted topsoil moisture for winter grain planting and establishment. Rain totals exceeding 150 mm were common in northern Morocco and north-central Algeria, with amounts above 100 mm reported in northern Tunisia. With the exception of eastern Algeria, the entire region reported 150 to 350 percent of normal precipitation for the month. Consequently, soil moisture remained in abundant supply for winter crops, although some planting delays were likely. Overall, early winter crop prospects in northwestern Africa were excellent.



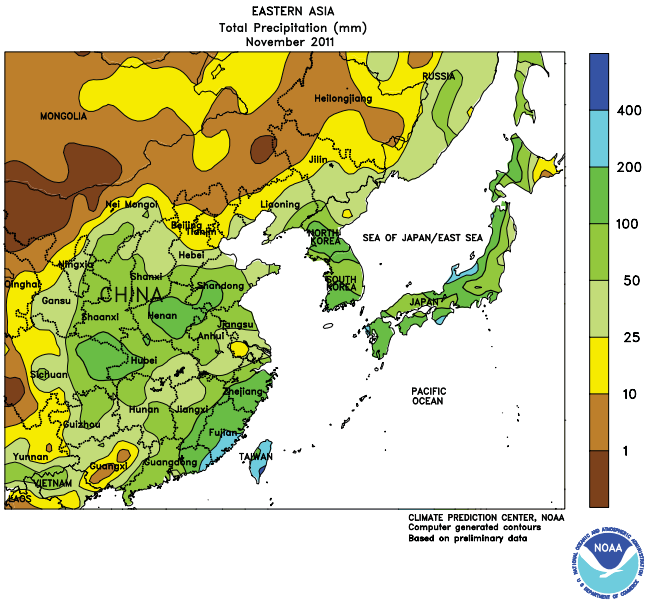


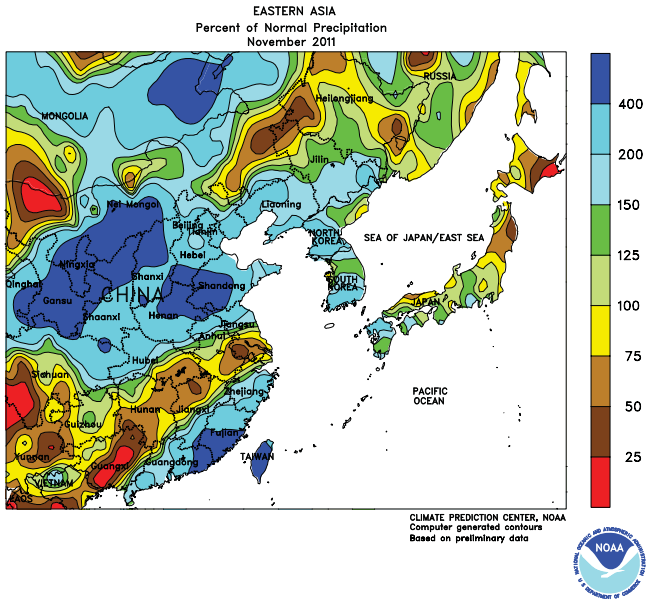


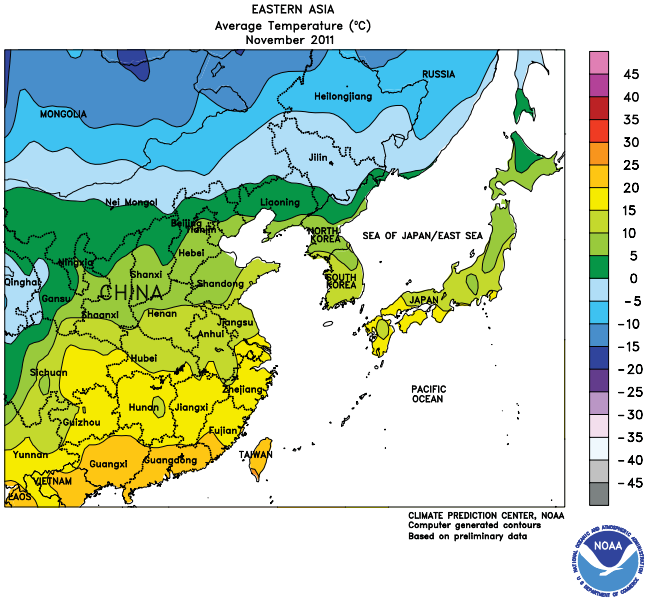


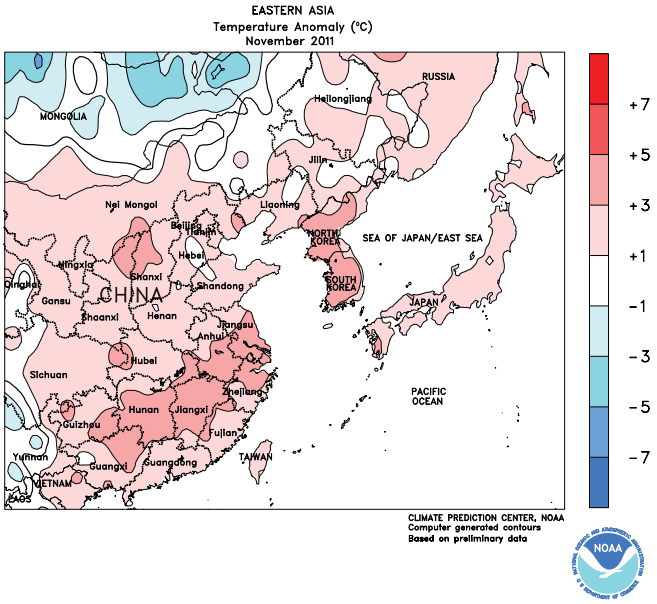
SOUTH ASIA

During November, sunny, warm weather promoted winter wheat and rapeseed development in northern and western India. Similar conditions also favored winter wheat in Pakistan. Beneficially dry conditions aided cotton across central and southern India as bolls began to open. Rainfall was confined to far southern Indian states, particularly Tamil Nadu, where a rare late-season tropical cyclone brought heavy showers.



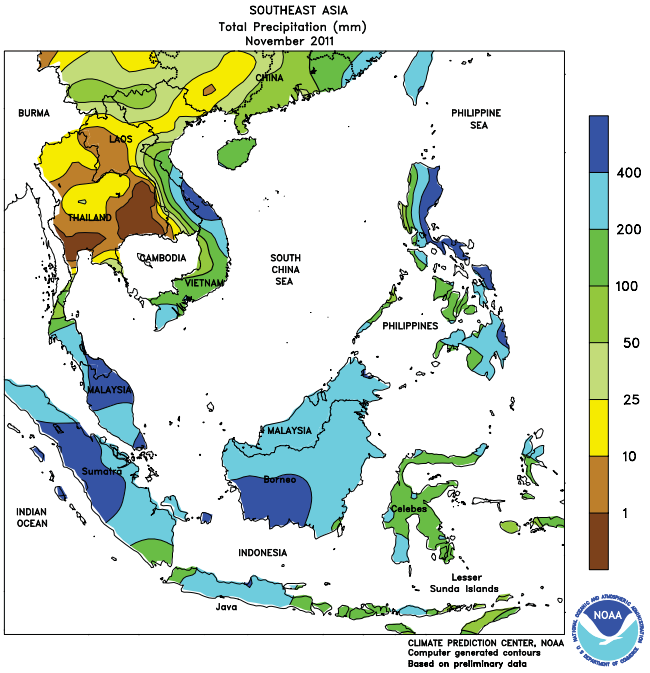


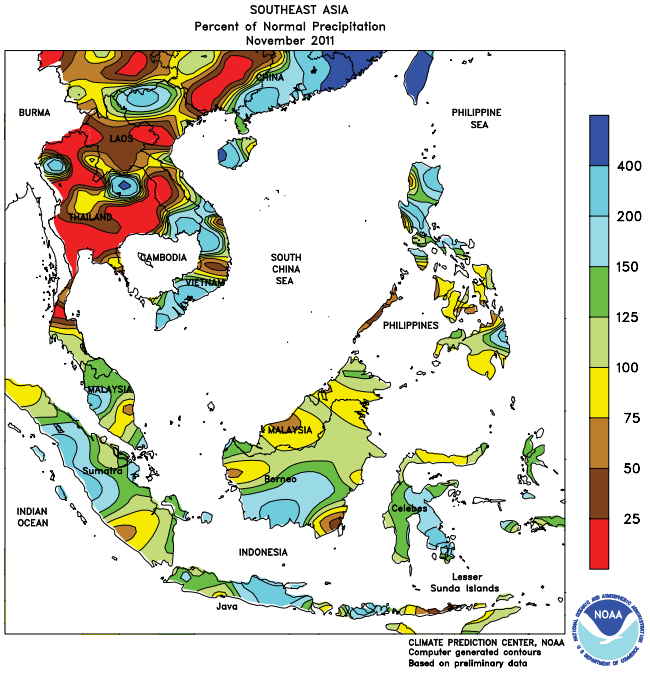


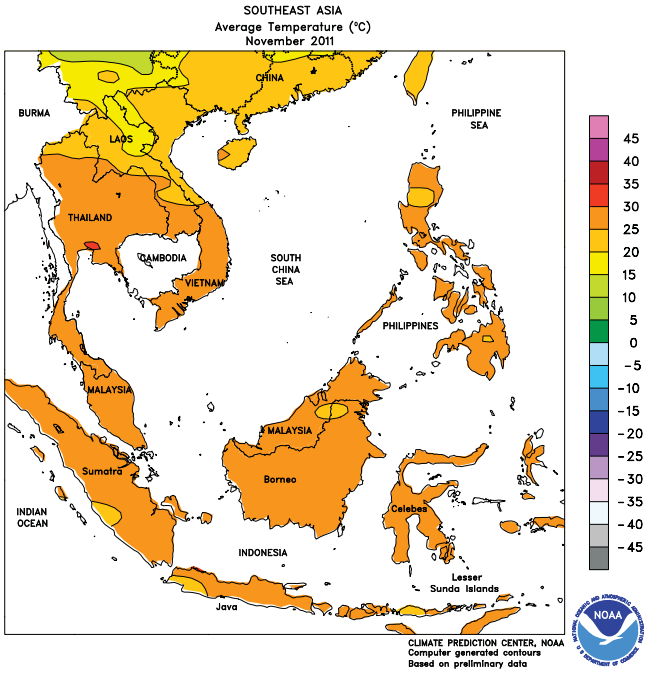


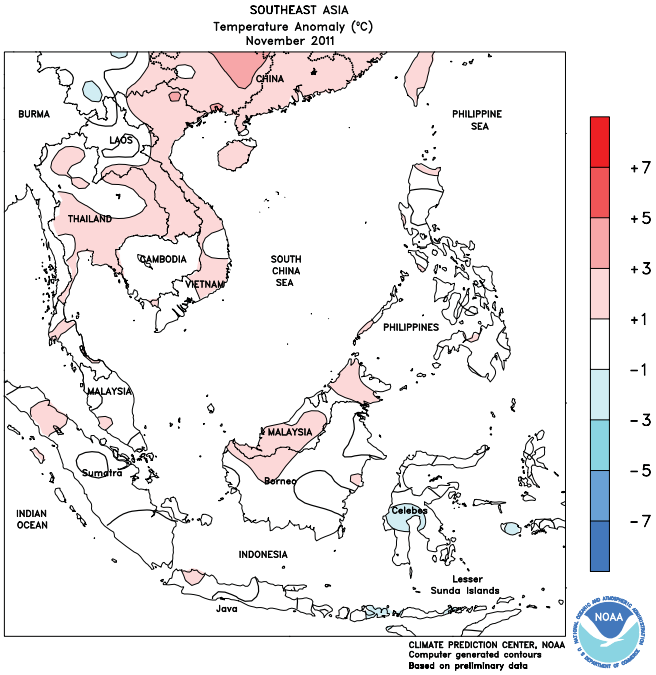
EASTERN ASIA

In November, above-normal rainfall from the Sichuan Basin through the North China Plain boosted moisture reserves and aided newly emerged winter wheat and rapeseed establishment. Furthermore, mild weather increased vegetative growth prior to the onset of colder weather in early December.





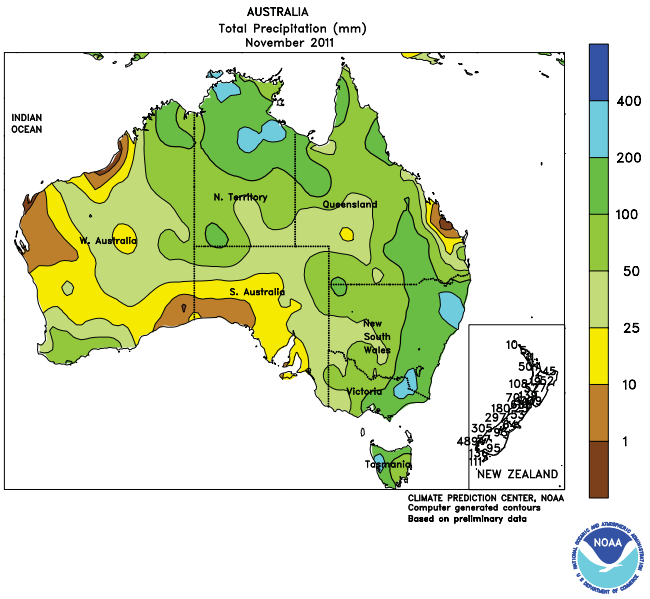


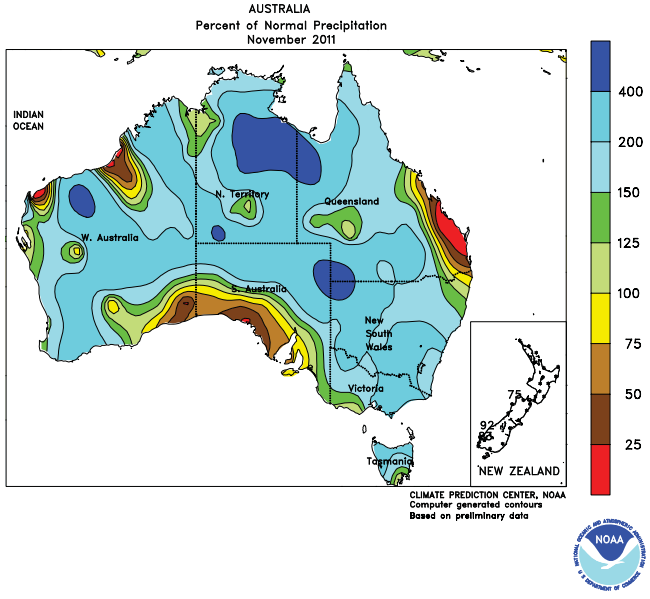


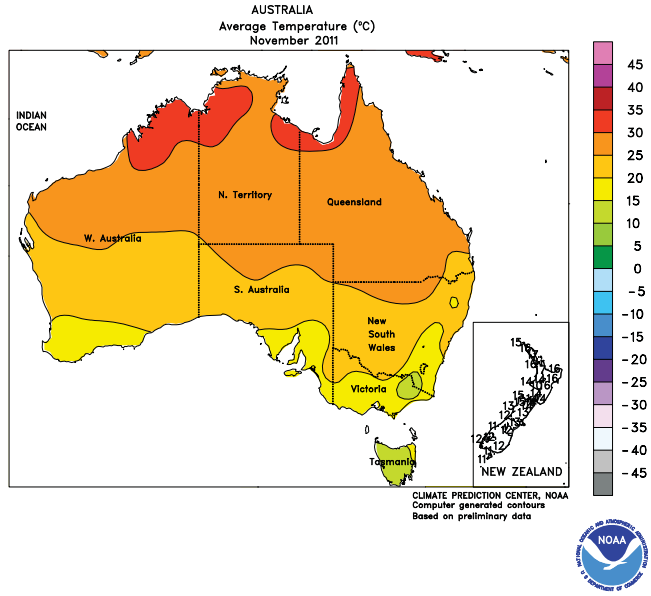
SOUTHEAST ASIA

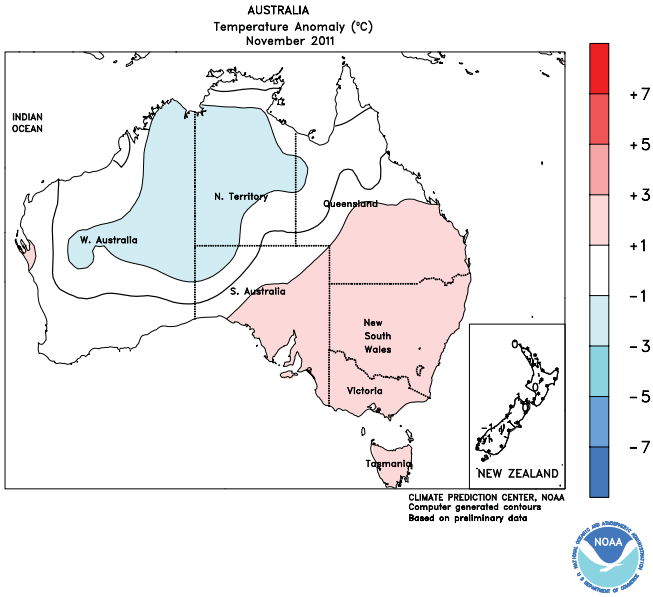
Flooding rainfall persisted through much of November in the eastern Philippines, necessitating rice and corn replanting. Drier conditions returned in early December. In Vietnam, beneficial rainfall promoted the establishment of winter-spring rice in the south and caused only minor delays in coffee harvesting in the Central Highlands. Meanwhile, an increase in rainfall across Indonesia caused flooding in oil palm areas and delayed harvesting, while more seasonable amounts maintained favorable soil moisture for rice establishment in Java.

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



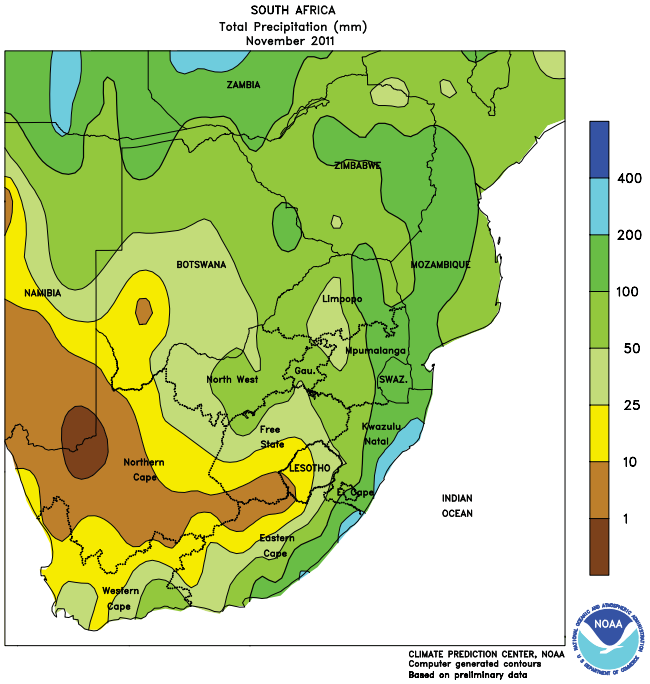


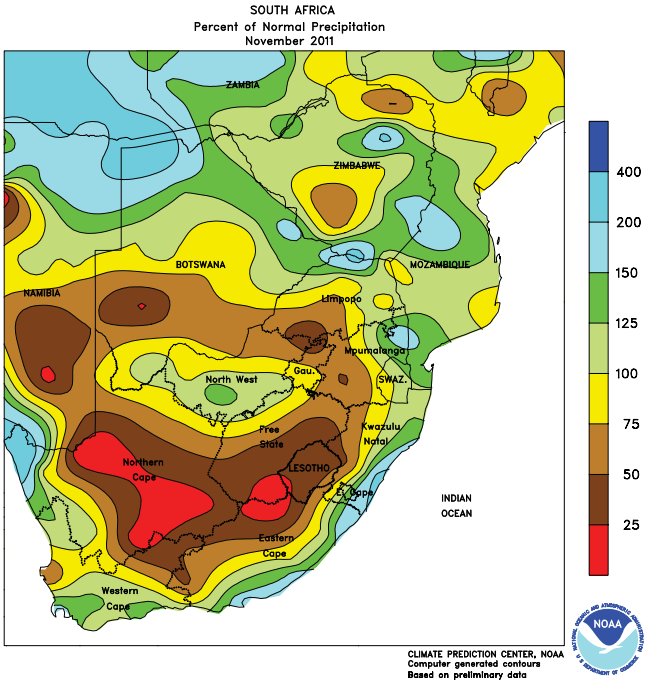


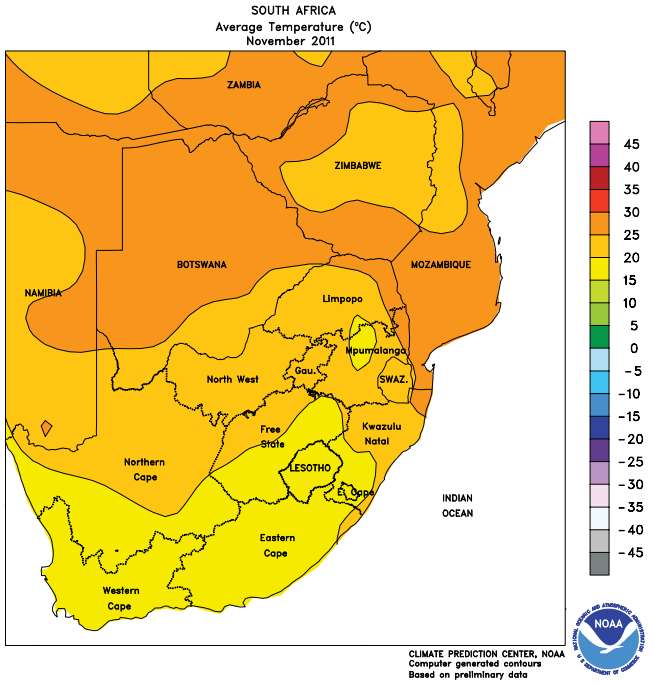


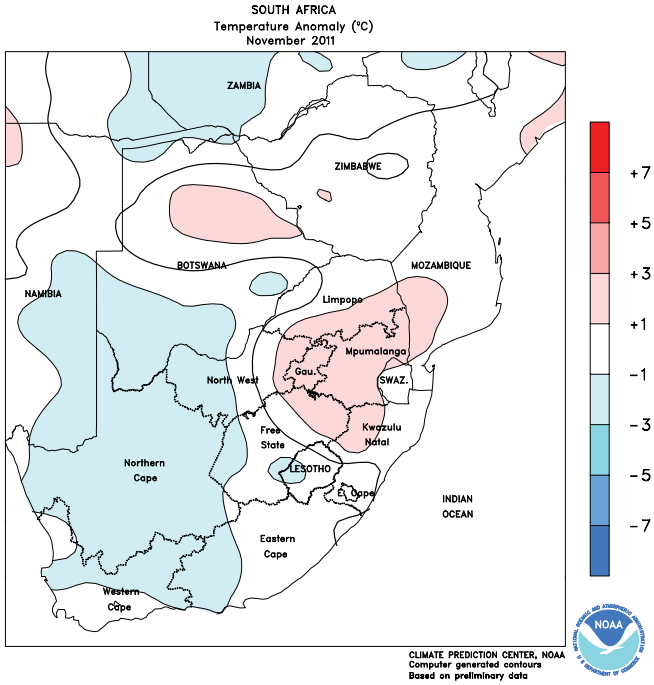
AUSTRALIA

Mostly dry weather overspread Western Australia in November, helping winter crop harvesting gain momentum, following a wet start to the month. In contrast, occasional showers and periods of sun in southern and eastern Australia favored wheat, barley, and canola maturation and harvesting in early November. However, frequent, sometimes heavy rain toward month's end halted fieldwork and caused local flooding. The wet weather benefited vegetative summer crops but reduced the quality of some mature winter grains and oilseeds.









SOUTH AFRICA

During November, warmer- and drier-than-normal weather reduced moisture for emerging summer crops in eastern sections of the corn belt and likely delayed early fieldwork farther west. Monthly rainfall was well below normal throughout much of the region, and most of the rain that did fall came over a period of just a few days during the middle to latter part of the month. Monthly temperatures averaged from near normal to more than 2°C above, with daytime highs reaching the middle 30s (degrees C) several times prior to the arrival of the briefly wetter conditions. Elsewhere, locally heavy rain fell along the coasts of Western and Eastern Cape Provinces and KwaZulu-Natal. As in the corn belt, most of the rain came during the latter half of the month, although both frequency and amount were higher. The moisture was especially timely in southern KwaZulu-Natal, where rain-fed sugarcane had previously been developing with limited moisture. Monthly average temperatures were near to slightly below normal in these wetter areas. In Western Cape, highs occasionally reached the middle and upper 30s, hastening development of the region's irrigated tree and vine crops.

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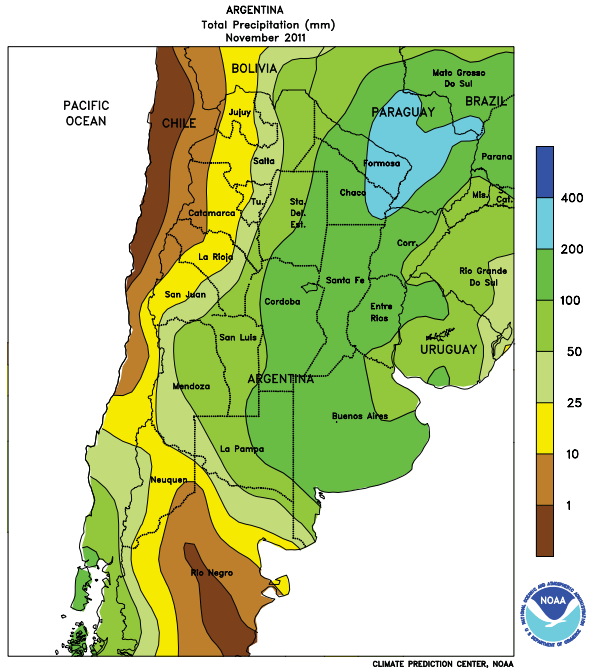
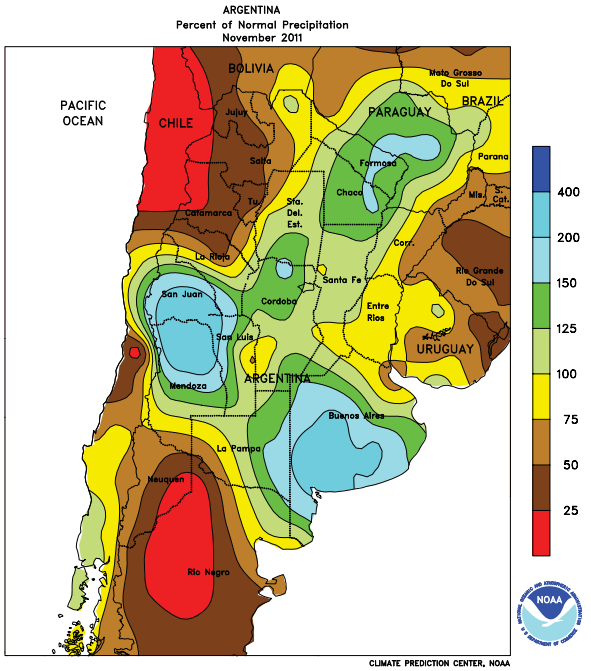
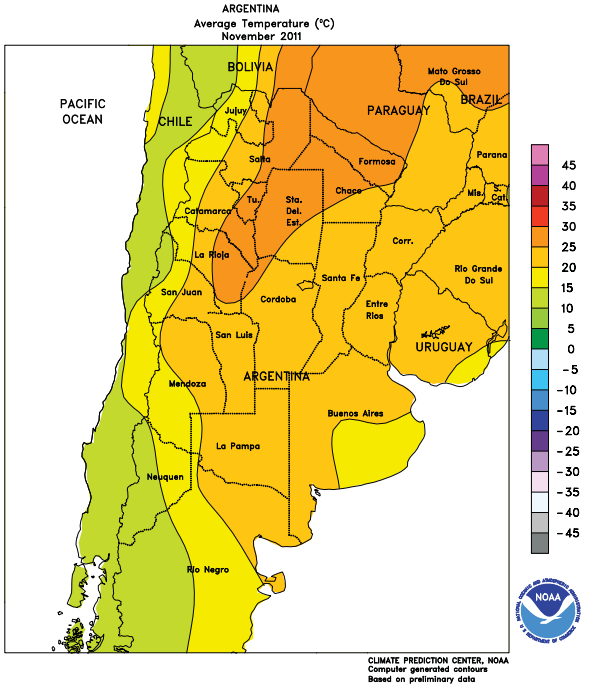
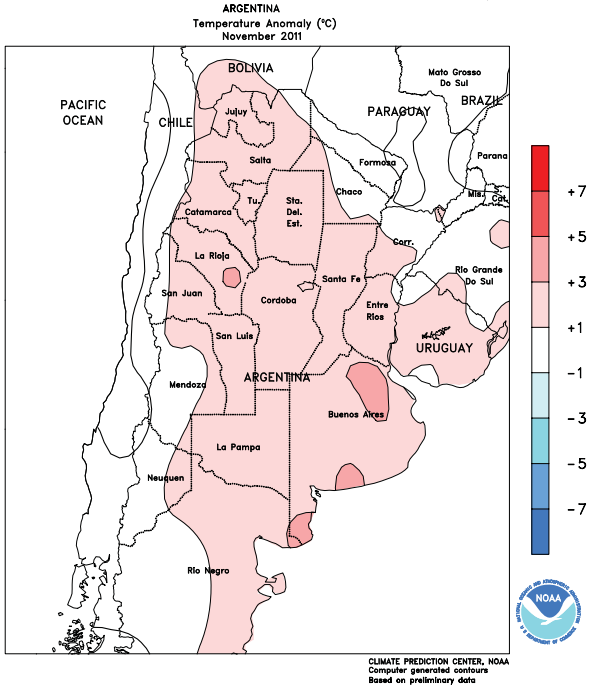


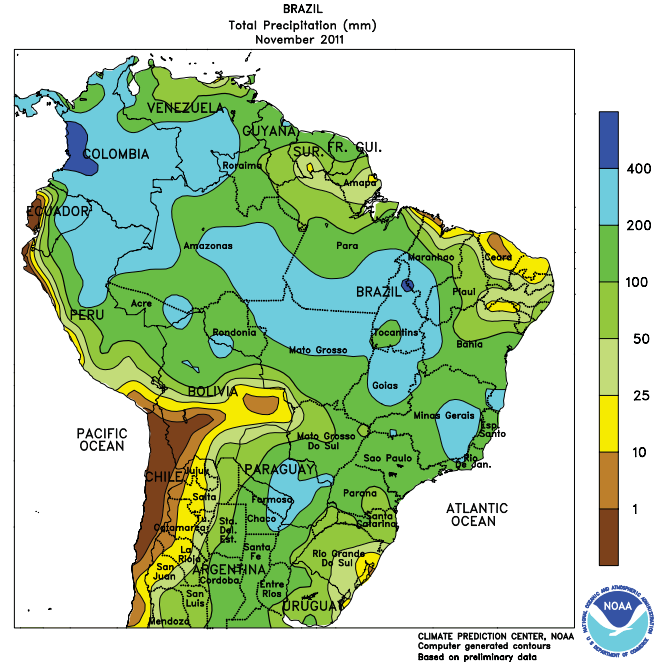


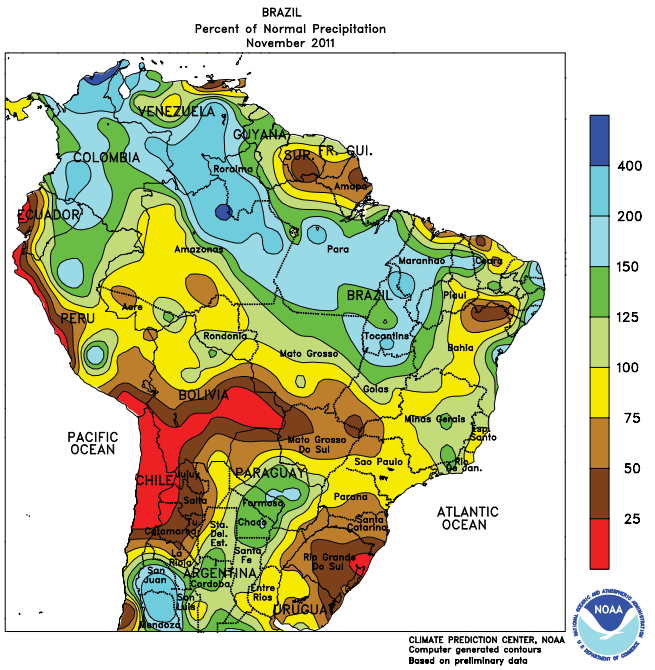


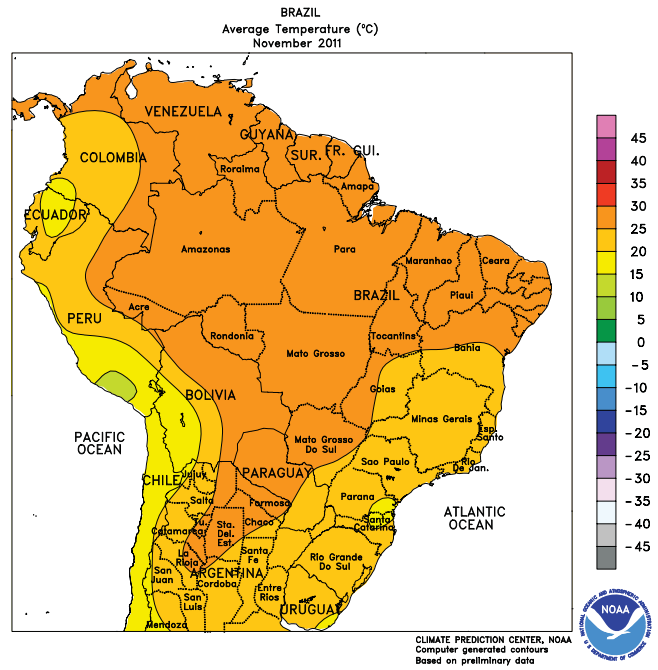


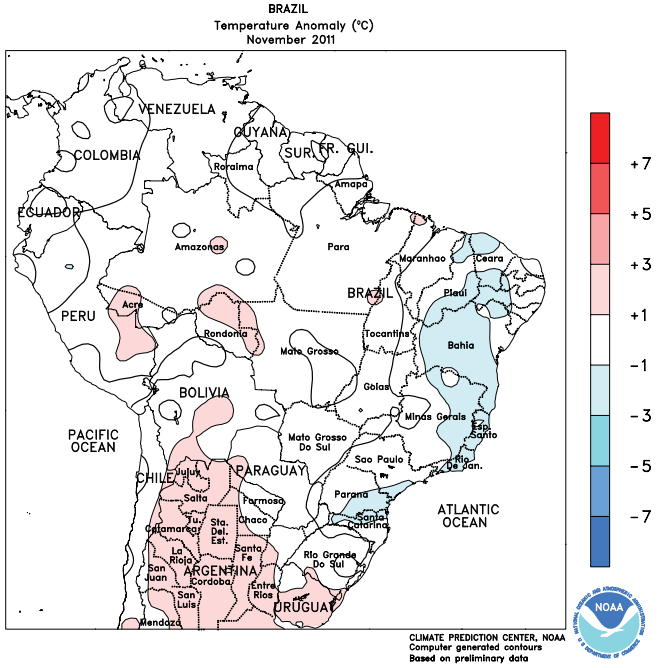
ARGENTINA

In November, warm, showery weather further improved conditions for reproductive to filling winter grains and emerging to vegetative summer grains, oilseeds, and cotton. Monthly rainfall was near to above normal in nearly all agricultural areas, the exception being the northwest (in and around Salta), which saw a continuation of this season's trend toward unfavorable dryness. In contrast, rainfall increased in both intensity and frequency in southern Buenos Aires, bringing needed relief from dryness to winter grains advancing through reproduction. Temperatures averaged 1 to 2°C above normal throughout much of the region, hastening development of winter grains and emerging summer grains, oilseeds, and cotton. Highs occasionally reached the middle 30s (degrees C) in central Argentina but the heat helped to push winter grains toward maturity, and most summer grains were not far enough along to sustain significant stress. In the driest parts of the northwest (western Santiago del Estero northward to western Paraguay), highs frequently ranged in the middle and upper 30s and reached 40°C at some locations.



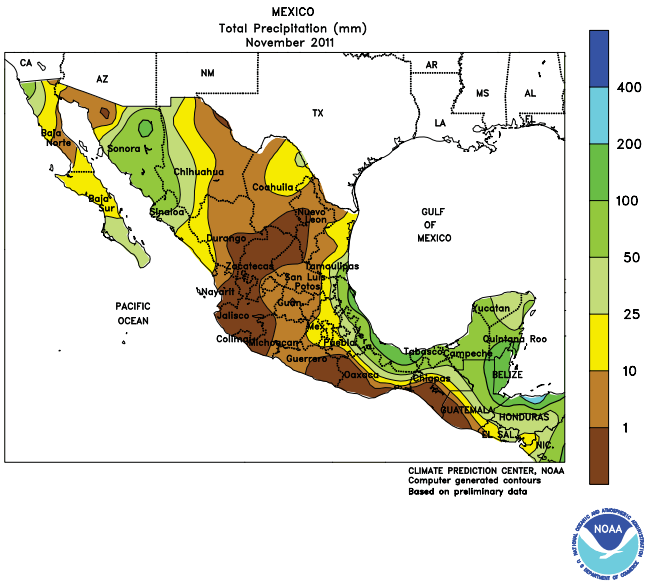


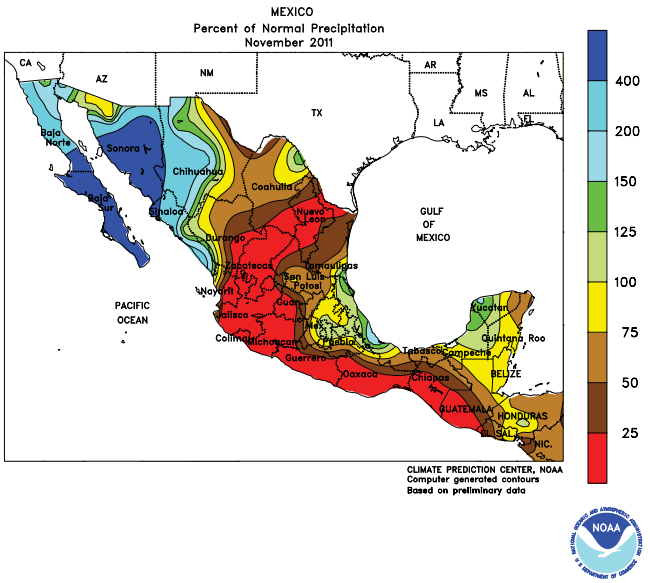


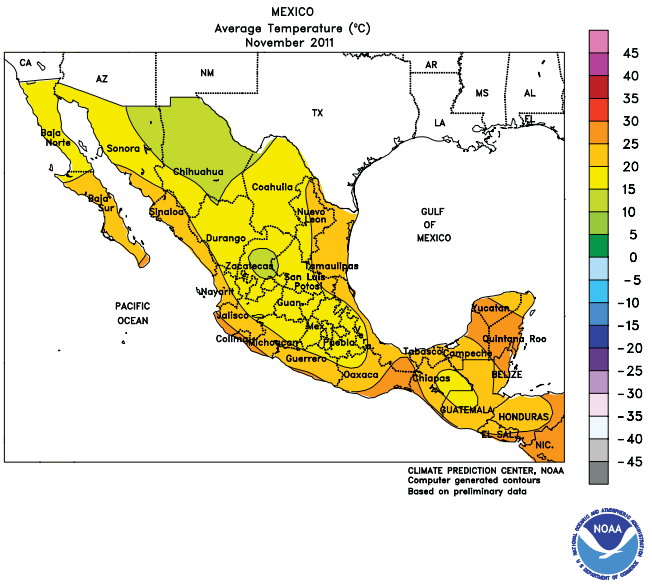


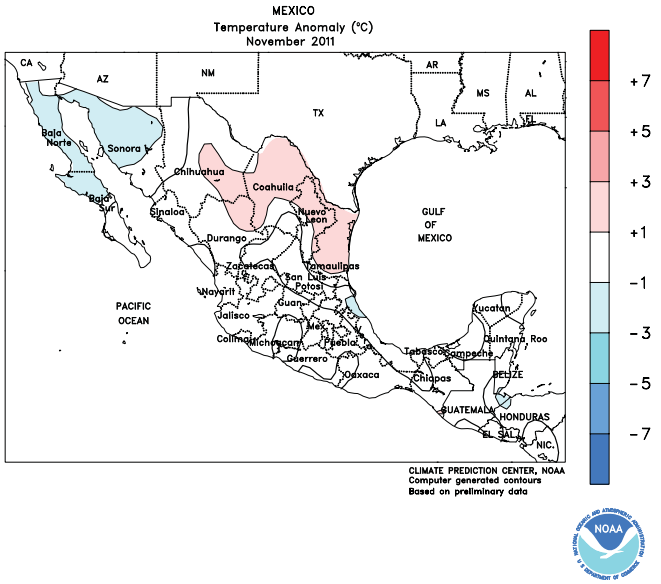
BRAZIL

November rainfall was below normal over a large part of south-central Brazil, although timely showers benefited emerging soybeans and corn and brought relief from dryness to sugarcane and coffee. Monthly rainfall totals were below 100 mm in Rio Grande do Sul, Santa Catarina, and southern Parana; most of the remainder of the affected area saw 100 to 200 mm. In conjunction with the periods of dryness, near- to above-normal temperatures in the aforementioned areas maintained both high evaporative losses and moisture demands of emerging to vegetative corn and soybeans. However, moisture conditions were still overall favorable throughout the month due to the recharge from October's wetness. Meanwhile, conditions were overall favorable in Brazil's more northerly soybean and cotton areas, with frequent, near- to above-normal rainfall occurring from northern Mato Grosso to western Bahia. Monthly average temperatures were generally within 1°C of normal in these areas, with highs often reaching the lower and middle 30s (degrees C).





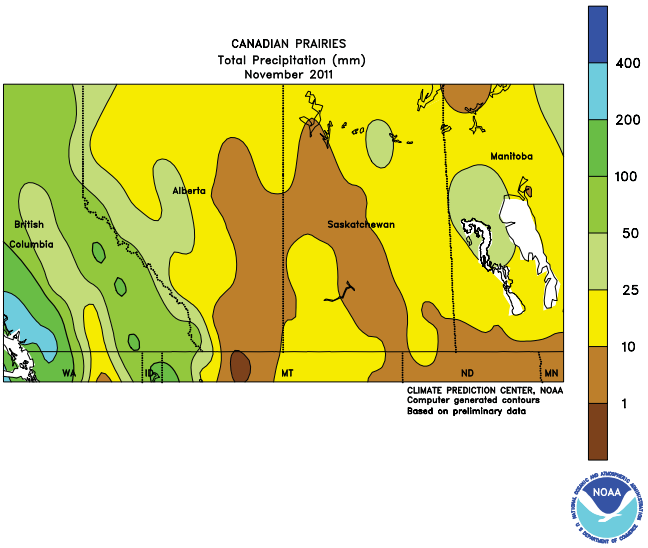


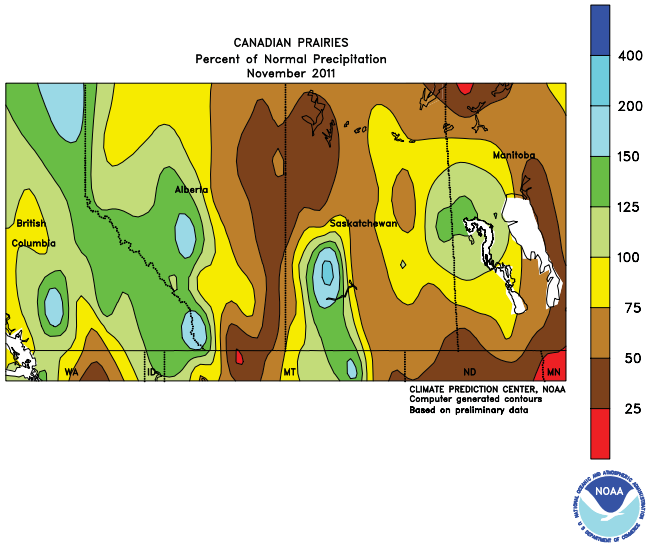


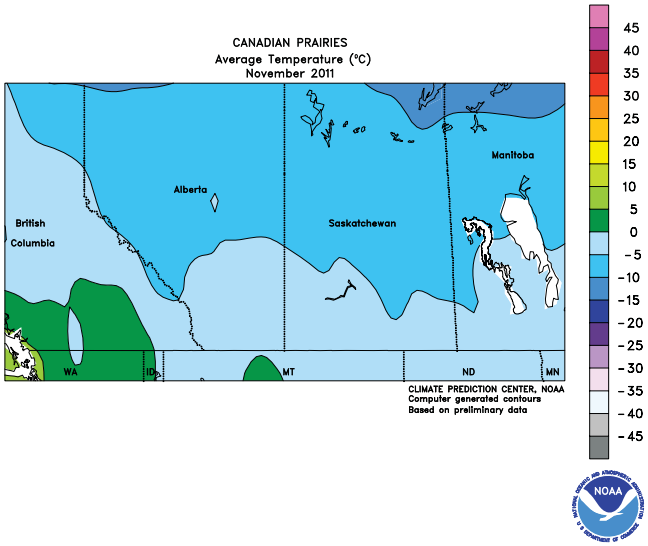
MEXICO

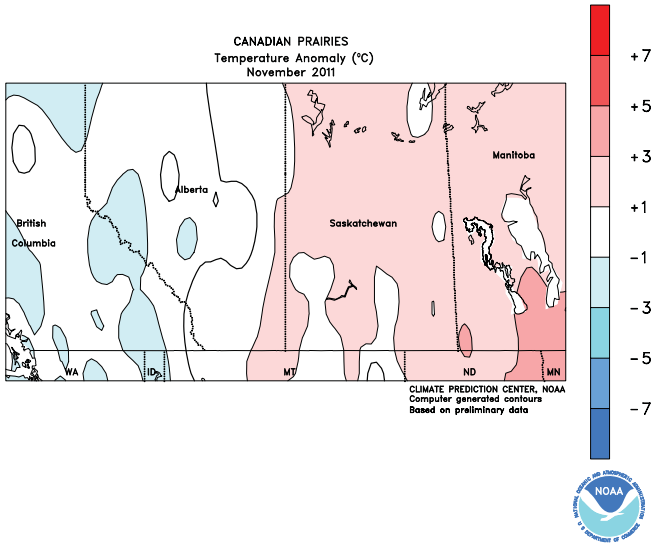
A seasonably drier weather pattern dominated much of the region during November, although some areas experienced periods of beneficial rain. In the northwest, several outbreaks of unseasonably heavy rain (totaling 10-50 mm or more) brought unexpected moisture to Sonora, Chihuahua, and Sinaloa. The rainfall benefited winter wheat and pastures but was insufficient to significantly increase that region's unusually low irrigation levels. Lighter showers were observed in the northeast, mostly in the Rio Grande Valley. Warm, dry weather promoted maturation and harvesting of corn and other summer crops in western sections of the southern plateau and along the southern Pacific Coast; light showers were recorded in eastern sections of the corn belt. In contrast, seasonable rainfall continued along the Gulf Coast in and around Veracruz, maintaining irrigation supplies for winter farming. According to the government of Mexico, total national reservoir capacity was at 55.5 percent as of November 30, compared with 85.1 percent last year, and 79.1 percent in 2009.

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



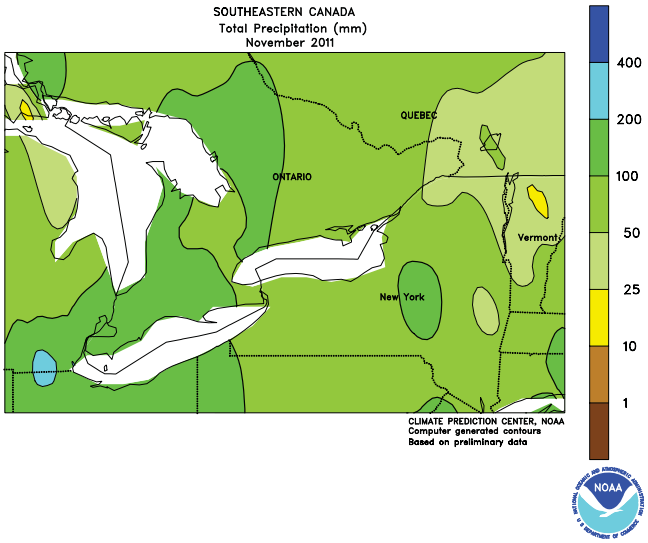


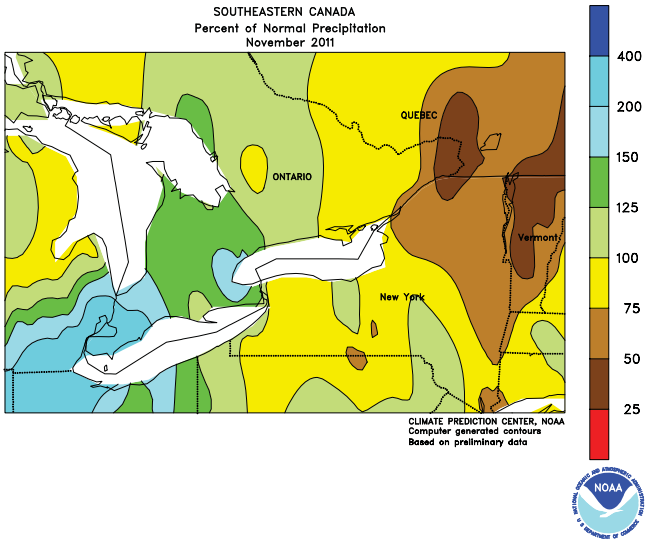


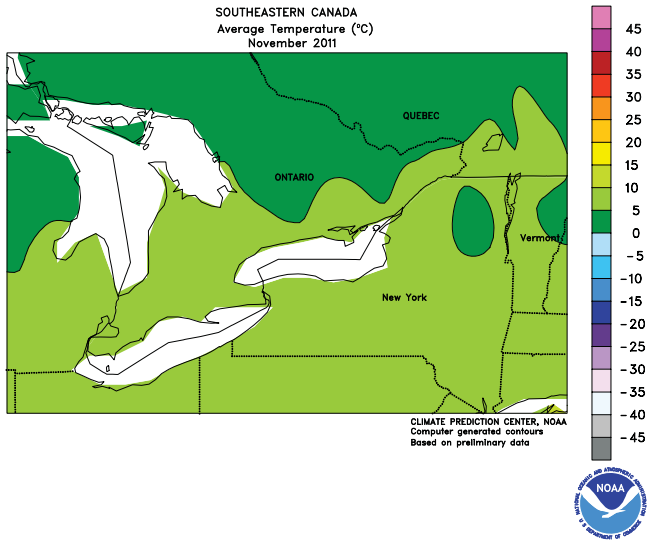


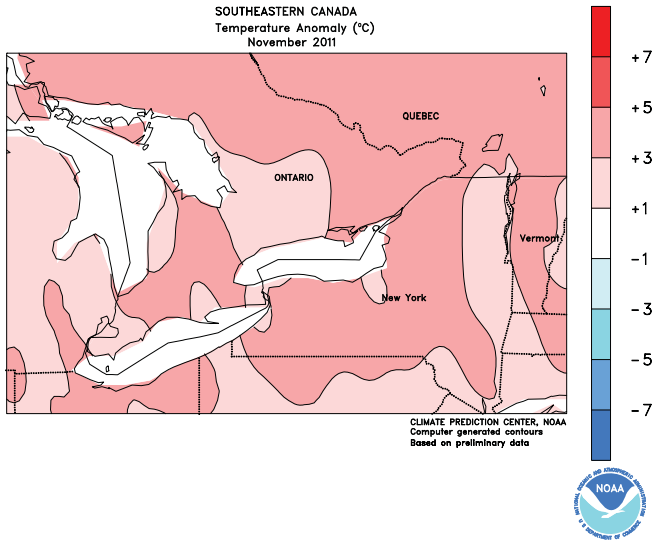
CANADIAN PRAIRIES

A general pattern of unseasonable warmth and dryness dominated the Prairies during November, although an outbreak of cold, snowy weather occurred during the middle part of the month. Monthly average temperatures were near normal in Alberta and 1 to 3°C above normal in Saskatchewan and Manitoba, despite an outbreak of bitter cold (low temperatures falling below -20°C) affecting many areas between November 15 and 21. Light precipitation in the form of snow fell during the onset of the cold, offering some protection to overwintering grains and pastures. In total, November precipitation ranged from 5 to 25 mm throughout the region.







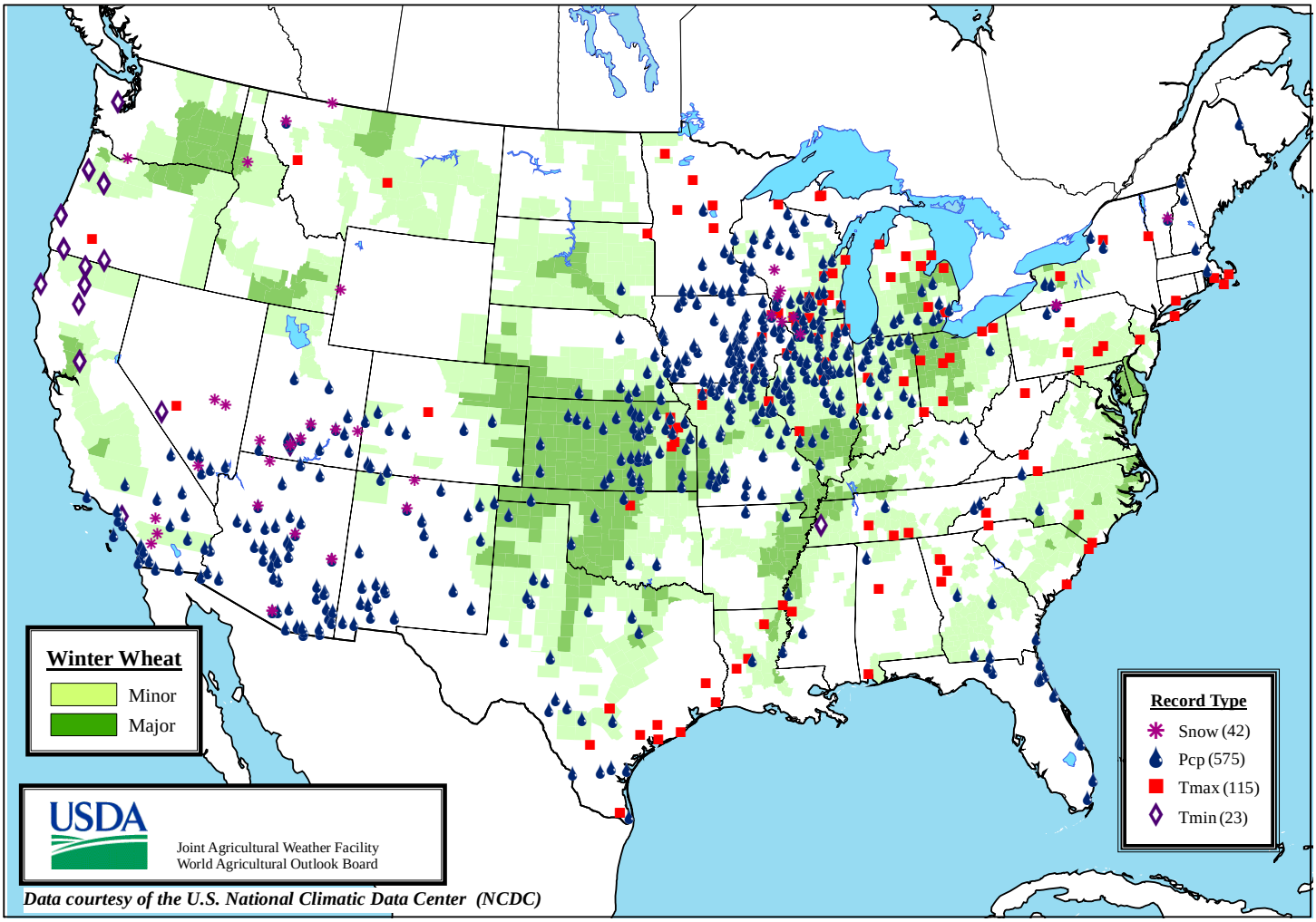


SOUTHEASTERN CANADA

During November, mild, showery weather prevailed across Ontario. Near- to above-normal precipitation, mostly in the form of rain, maintained abundant moisture levels for overwintering grains and pastures. However, much of the rainfall came at the end of the month, and earlier periods of dryness allowed some harvesting of corn and soybeans. Monthly average temperatures were up to 4°C above normal and, although seasonal cooling occurred, daily average temperatures were commonly above the 5°C threshold for winter crop dormancy during the latter part of November. A similar pattern of unseasonable warmth dominated farming areas of southern Quebec, although precipitation was below normal, engendering more favorable conditions for summer crop harvesting and other seasonal fieldwork.

Daily Weather Records (ASOS & COOP)

December 11-17, 2011



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