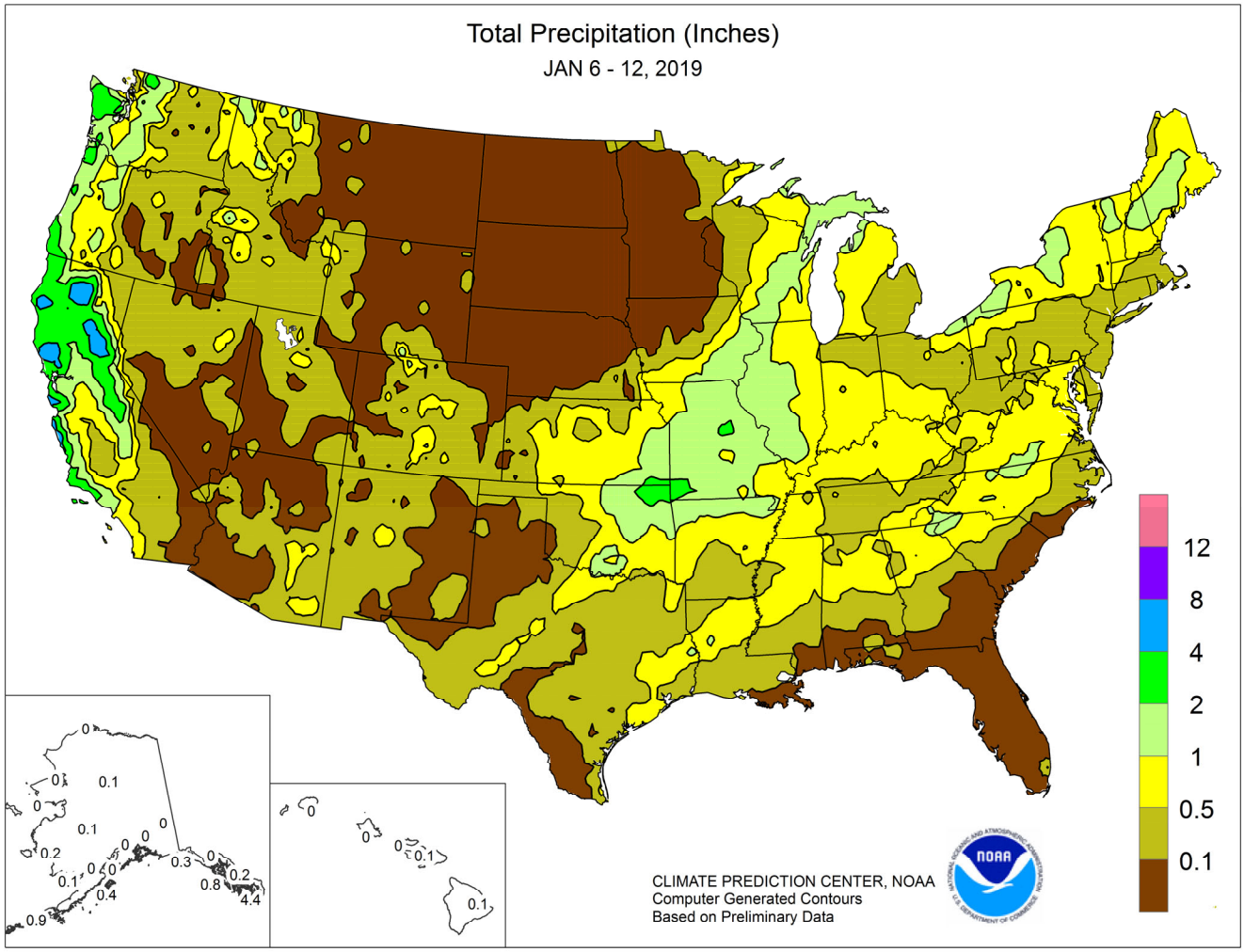
Volume 106, No. 3 http://www.usda.gov/oce/weather January 30, 2019

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
January 6 – 12, 2019

Highlights provided by USDA/WAOB

Benign weather prevailed for several days, followed by a late-week storm system that delivered a swath of heavy snow from the **central Plains into the Mid-Atlantic States**. The storm, which struck from January 11-13, also signaled the end of a spell of unusually mild weather that had persisted since mid-December in the **central and eastern U.S.** Despite the late-week cooling trend, temperatures averaged at least 5 to 10ºF across a large part of the **nation's mid-section**. In fact, near- or above-normal temperatures covered the entire country. Only 28

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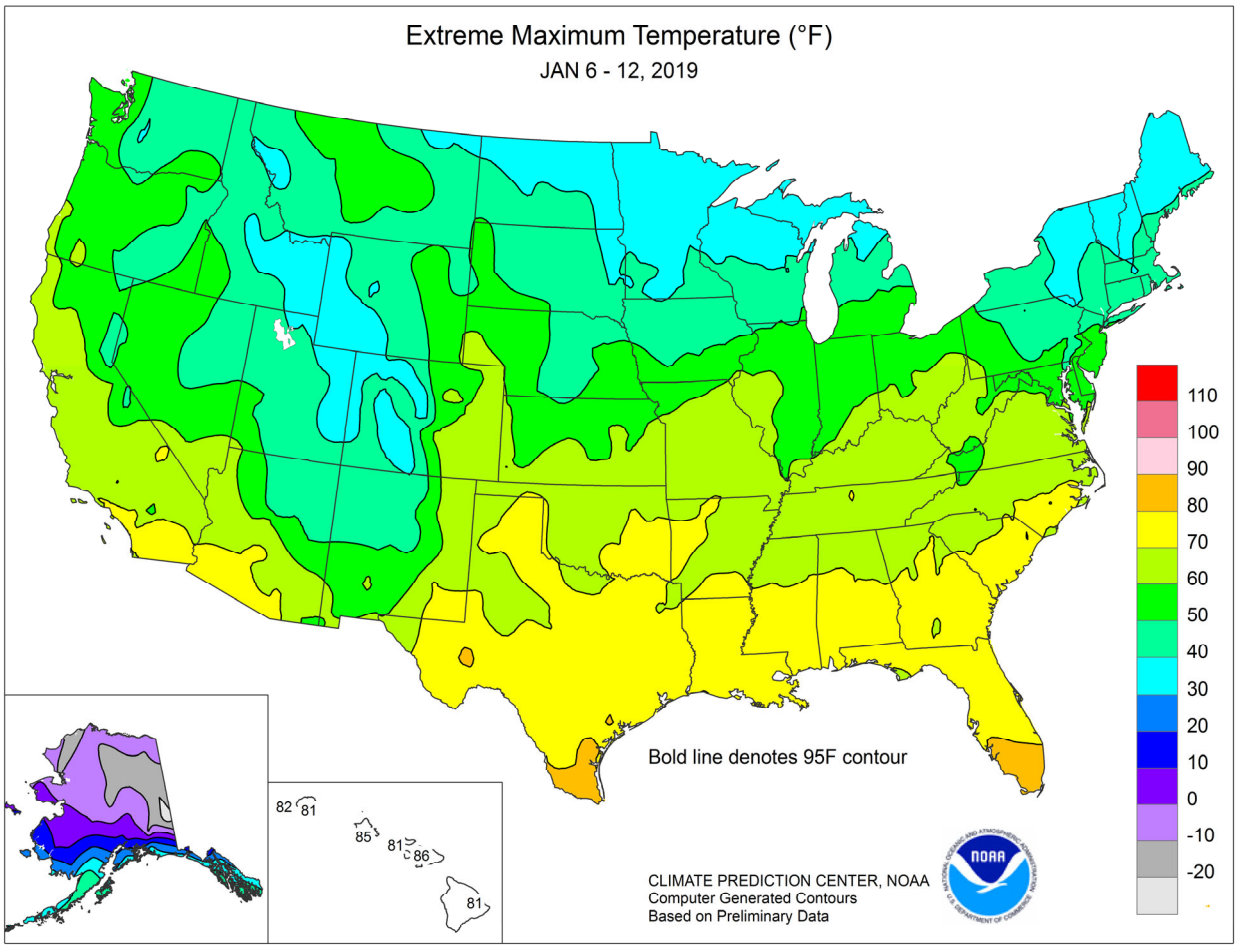
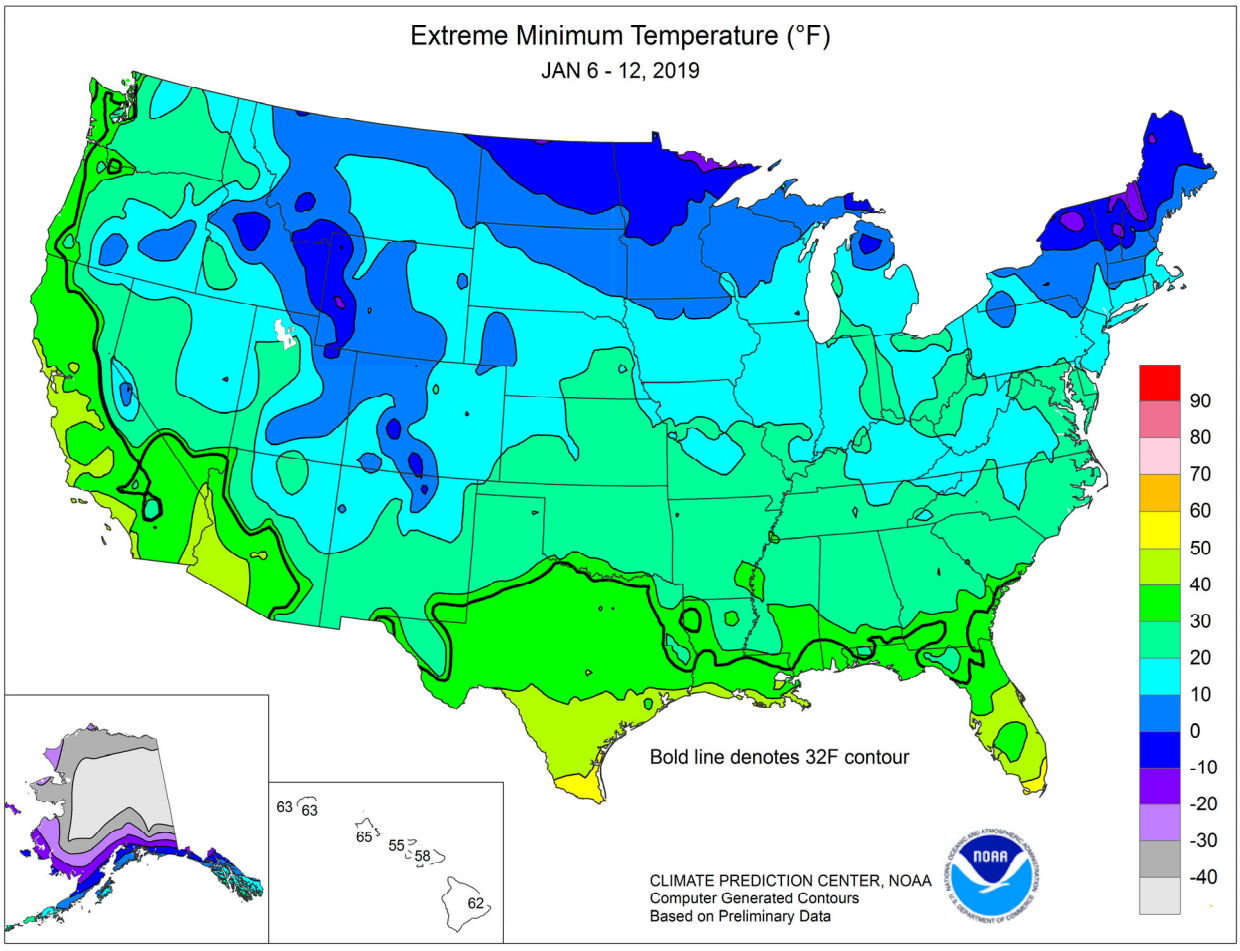
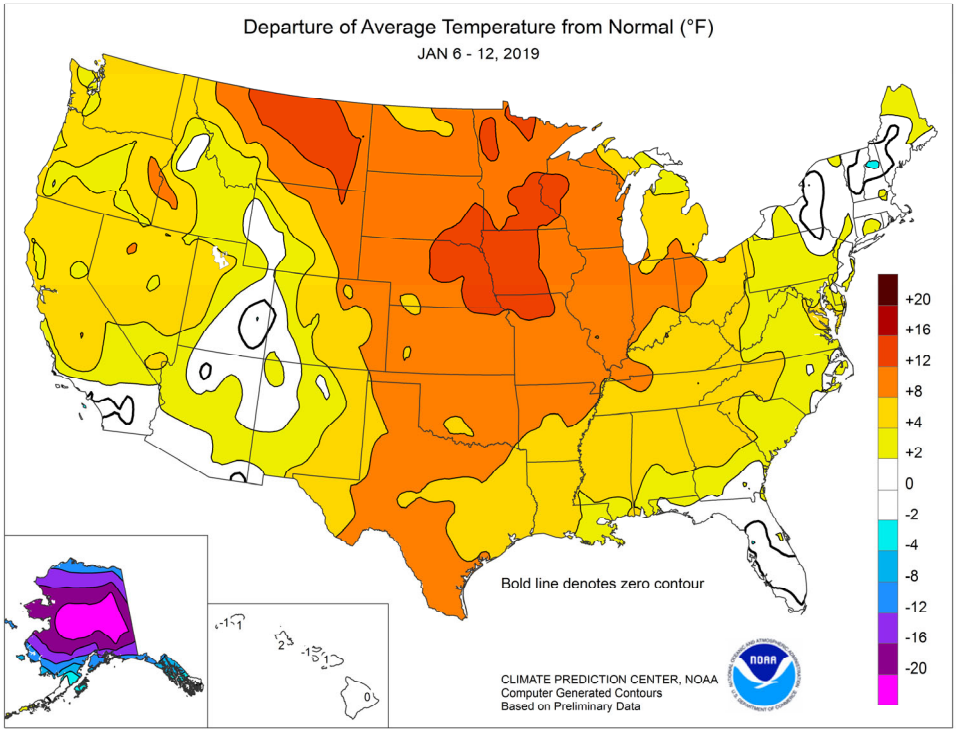

Extreme Maximum Temperature (°F)
JAN 6 - 12, 2019
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
82
81
85
81
86
81
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
JAN 6 - 12, 2019
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
63
63
65
55
58
62
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)

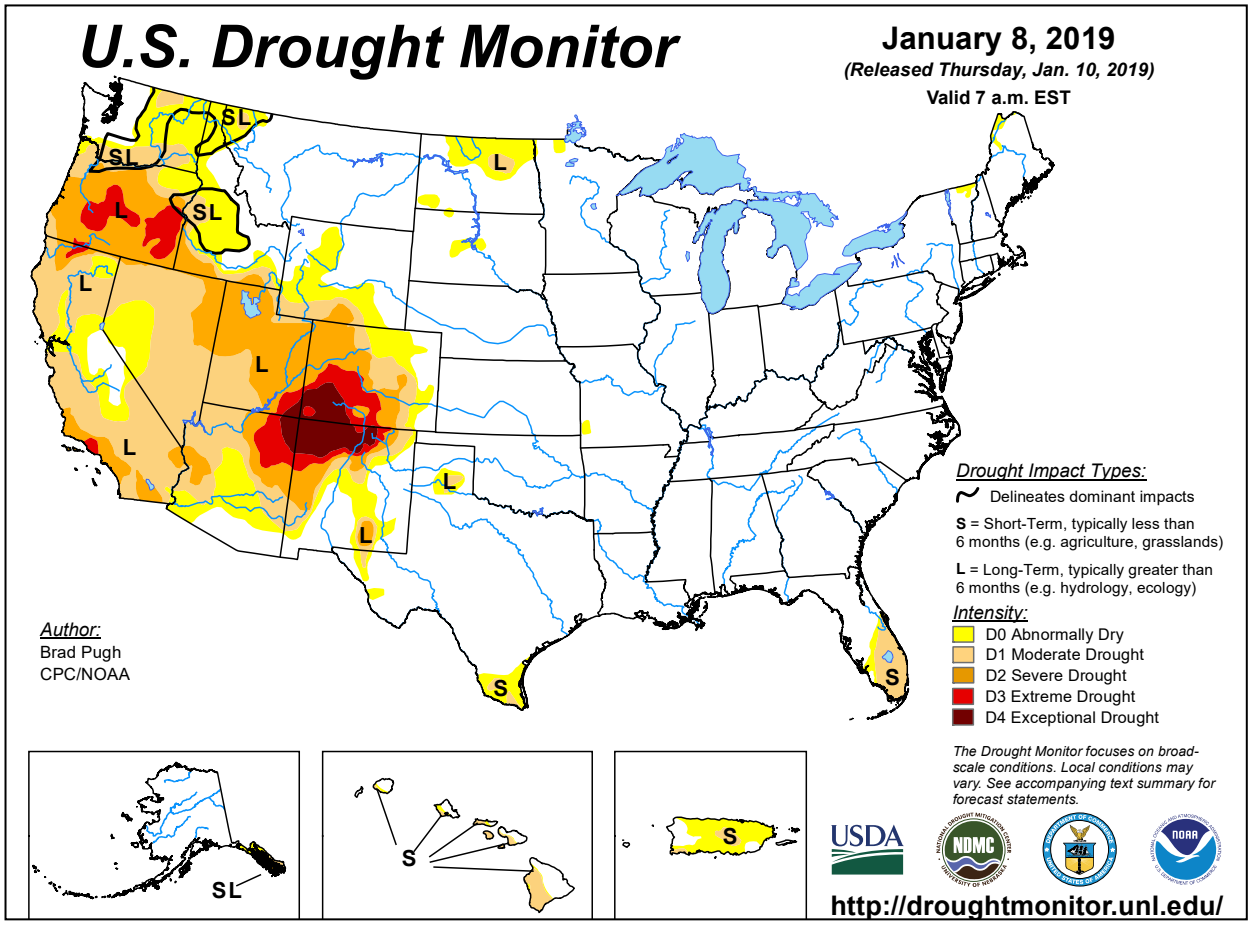
percent of the **contiguous U.S.** was covered by snow on the morning of January 11, but coverage increased to 45 percent by January 14. The **northern High Plains** remained nearly devoid of snow, despite significant late-week accumulations farther south—including **Kansas** and portions of neighboring states—that provided winter wheat with moisture and insulation. Meanwhile, periods of precipitation fell in the **West**, particularly in the **Pacific Coast States**. According to preliminary data provided by the California Department of Water Resources, the average water content of the high-elevation **Sierra Nevada** snowpack increased to 11 inches (84 percent of normal) by mid-January, up from 7 inches (71 percent) on New Year's Day. Precipitation also fell at many inland locations, particularly across the **Intermountain West**. Elsewhere, locally heavy precipitation—mostly rain—fell early in the week across the **Midwest** and **East**. However, portions of the **upper Great Lakes region** received heavy snow. Still, much of the **Midwest** had no snow cover until the arrival of the late-week storm, which dumped heavy snow across the **southern Corn Belt**.

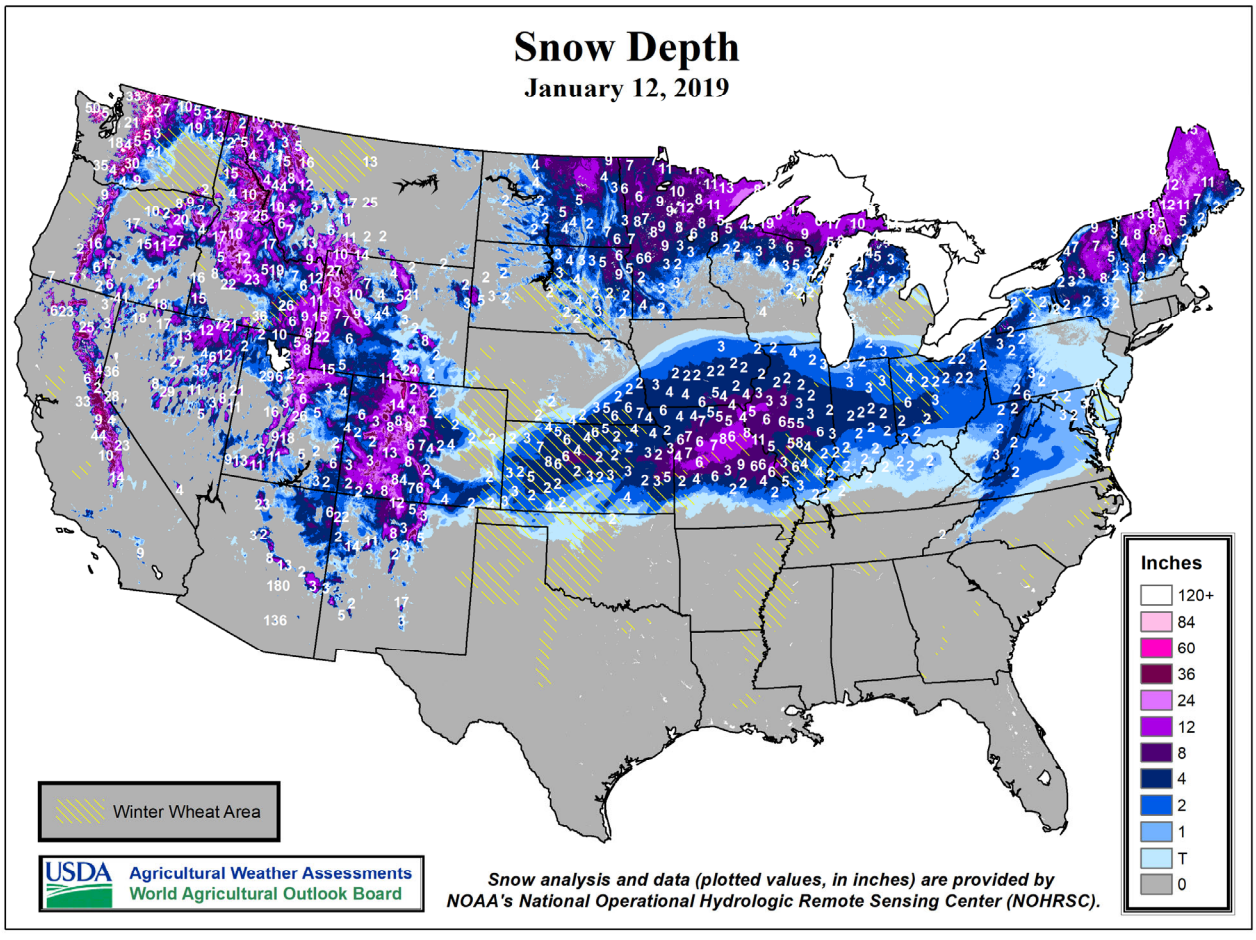


Early-week rain fell at lower elevations in the **Pacific Coast States**, while snowfall blanketed many mountain sites, including portions of the **Intermountain West**. On January 6, downtown **Sacramento, CA**, netted a daily-record rainfall of 1.26 inches. Farther inland, **Utah's Kodachrome Basin State Park** received a 24-hour snowfall total of 7.8 inches on January 5-6. Later, heavy precipitation spread across parts of the **Midwest**. Record-setting precipitation totals for January 7 included 1.34 inches in **Sault Sainte Marie, MI**; 0.95 inch in **Dubuque, IA**; and 0.91 inch in **Green Bay, WI**. **Sault Sainte Marie** also reported a daily-record snowfall of 12.3 inches. Then, following a few days of mostly tranquil weather, heavy snow developed across the **nation's mid-section**. On January 11, **Alamosa, CO**, collected daily-record totals for precipitation and snowfall (0.60 and 7.6 inches, respectively). On the same date in **Missouri**, snowfall totaled 10.4 inches in **Columbia** and 7.8 inches in **St. Louis**. Storm-total (January 11-12) snowfall in those locations reached 16.9 and 11.4 inches, respectively. Heavy snow fell as far north as **central Iowa**, where **Des Moines** received 5.5 inches on January 11-12. With 3 inches on the ground on the morning of the 12th, **Des Moines** also noted its latest-ever occurrence of the season's first snow depth of an inch or greater (previously, January 5, 1980). Meanwhile in **Illinois**, January 11-13 snowfall totaled 11.7 inches in **Lincoln**, 11.5 inches in **Springfield**, and 11.2 inches in **Peoria**. Farther east, record-setting snowfall totals for January 12 included 6.9 inches in **Indianapolis, IN**, and 6.1 inches in **Dayton, OH**. Snow also began on that date in the **Mid-Atlantic region**, where January 12-13 snowfall topped the 10-inch mark at **Virginia's Dulles Airport** (10.6 inches) and **Washington, DC** (10.2 inches).

Southern warmth developed in advance of the late-week storm system. By January 8, daily-record highs climbed to 80ºF in **Beaumont-Port Arthur, TX**, and 77ºF in **Meridian, MS**. Farther north, however, January 9 was the last of 28 consecutive days with an above-normal daily average temperature in **Washington, DC**—a streak that had begun on December 13. **Albany, NY**, reported peak wind gusts to 49 mph on January 9 and 10. Meanwhile, warmth arrived in the **Pacific Northwest**, where **Salem, OR**, posted a daily-record high of 60ºF on January 10. In **Washington**, **Seattle** collected consecutive daily-record highs (61 and 59ºF, respectively) on January 11-12. Elsewhere on the 12th, **Medford, OR**, logged a daily-record high of 65ºF. It was **Medford's** highest temperature since November 18.

Bitterly cold weather held weekly temperatures more than 20ºF below normal across portions of the **Alaskan mainland**, while heavy snow blanketed southeastern sections of the state. In **Fairbanks**, where the temperature plunged to -44ºF on January 12, it was the lowest reading in nearly 2 years. **Fairbanks** had last been colder on January 19, 2017, when the low was -48ºF. Meanwhile, **Nome** notched a daily-record low of -32ºF on January 11. More impressively, it was Nome's lowest reading since February 3, 2012. Similarly, **McGrath** endured a low of -53ºF on January 11—the lowest temperature in that spot since January 28, 2012, when it was -54ºF. In **southeastern Alaska**, **Ketchikan** received precipitation totaling 6.44 inches from January 8-12. **Juneau** measured a weekly snowfall of 17.1 inches, aided by a daily-record sum of 9.7 on January 10. Farther south, minimal precipitation fell in **Hawaii**, even in windward locations. At the state's major airport observation sites, January 1-12 rainfall ranged from 0.01 inch (1 percent of normal) in **Honolulu, Oahu**, to 0.51 inch (15 percent) at **Hilo**, on the **Big Island**.


U.S. Drought Monitor
January 8, 2019
(Released Thursday, Jan. 10, 2019)
Valid 7 a.m. EST
Author:
Brad Pugh
CPC/NOAA
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.
USDA
NDMC
NOAA
http://droughtmonitor.unl.edu/


Snow Depth
January 12, 2019
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 January 12, 2019

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE ˚F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. ˚F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE 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	60	38	70	25	49	7	0.49	-0.73	0.48	13.24	214	1.90	110	85	34	0	2	2	0
	HUNTSVILLE	56	36	68	25	46	6	0.45	-0.82	0.45	12.14	164	2.14	118	82	49	0	2	1	0
	MOBILE	66	42	75	34	54	4	0.13	-1.10	0.13	11.61	182	2.16	126	84	50	0	0	1	0
	MONTGOMERY	64	37	74	28	51	5	0.24	-0.82	0.24	12.11	187	2.12	139	86	38	0	1	1	0
AK	ANCHORAGE	13	-1	18	-7	6	-10	0.00	-0.15	0.00	2.48	192	0.05	21	77	67	0	7	0	0
	BARROW	-17	-26	-9	-28	-21	-8	0.00	0.00	0.00	0.38	292	0.01	100	80	68	0	7	0	0
	FAIRBANKS	-18	-35	-3	-43	-27	-17	0.00	-0.14	0.00	0.42	44	0.00	0	***	***	0	7	0	0
	JUNEAU	26	17	34	7	21	-5	1.44	0.30	0.66	9.05	128	3.42	207	91	78	0	7	5	2
	KODIAK	35	20	41	13	27	-3	0.39	-1.51	0.33	8.99	87	0.94	35	87	75	0	7	3	0
	NOME	-4	-23	7	-32	-14	-20	0.00	-0.19	0.00	0.99	76	0.08	28	78	69	0	7	0	0
AZ	FLAGSTAFF	42	20	51	14	31	2	0.14	-0.30	0.12	1.09	44	0.14	22	94	56	0	7	2	0
	PHOENIX	67	47	73	43	57	4	0.56	0.37	0.54	0.76	62	0.57	190	94	61	0	0	2	1
	PRESCOTT	54	28	60	25	41	5	0.22	-0.10	0.22	0.43	25	0.26	57	93	40	0	7	1	0
	TUCSON	65	41	72	36	53	2	0.81	0.57	0.79	2.60	188	1.10	314	86	66	0	0	2	1
AR	FORT SMITH	56	36	74	25	46	9	0.86	0.34	0.53	8.24	198	2.73	355	81	44	0	2	3	1
	LITTLE ROCK	54	39	68	28	47	7	0.52	-0.29	0.44	11.79	200	1.47	125	89	49	0	1	2	0
CA	BAKERSFIELD	65	49	70	43	57	10	0.18	-0.06	0.11	0.90	81	0.28	80	79	62	0	0	4	0
	FRESNO	61	48	65	42	54	9	0.71	0.27	0.45	1.57	80	1.01	163	91	79	0	0	3	0
	LOS ANGELES	63	50	71	48	57	0	1.14	0.56	0.93	3.15	121	1.70	207	90	74	0	0	2	1
	REDDING	54	45	59	38	49	4	2.48	1.09	1.18	7.91	119	3.59	183	93	89	0	0	4	2
	SACRAMENTO	57	46	63	42	52	7	1.43	0.67	1.00	4.01	114	1.65	154	99	76	0	0	4	1
	SAN DIEGO	64	52	70	49	58	1	1.33	0.86	0.90	4.35	221	1.33	202	82	66	0	0	2	1
	SAN FRANCISCO	62	52	66	47	57	8	0.29	-0.61	0.16	2.14	52	0.49	39	84	70	0	0	3	0
	STOCKTON	59	48	63	40	53	8	0.98	0.43	0.85	3.47	134	1.13	147	93	85	0	0	3	1
CO	ALAMOSA	34	3	38	-7	18	4	0.60	0.54	0.60	1.29	307	0.97	1078	92	77	0	7	1	1
	CO SPRINGS	50	27	60	17	38	10	0.19	0.12	0.18	0.29	54	0.20	167	69	31	0	6	2	0
	DENVER INTL	50	25	61	16	37	9	0.48	0.41	0.44	0.51	121	0.48	436	73	34	0	7	2	0
	GRAND JUNCTION	34	16	40	11	25	0	0.14	0.00	0.11	1.08	148	0.14	67	93	86	0	7	3	0
	PUEBLO	52	26	64	14	39	10	0.34	0.26	0.32	0.46	88	0.37	285	70	40	0	5	2	0
CT	BRIDGEPORT	39	26	49	17	32	2	0.24	-0.61	0.16	7.41	158	1.08	89	67	49	0	5	2	0
	HARTFORD	34	20	46	12	27	1	0.33	-0.53	0.17	6.45	134	1.49	121	74	51	0	7	2	0
DC	WASHINGTON	47	33	60	29	40	5	0.39	-0.35	0.24	6.29	153	0.47	44	69	39	0	4	2	0
DE	WILMINGTON	42	28	53	18	35	3	0.37	-0.43	0.29	7.64	168	0.79	69	78	43	0	5	2	0
FL	DAYTONA BEACH	70	48	78	39	59	0	0.00	-0.69	0.00	5.31	144	0.43	44	98	53	0	0	0	0
	JACKSONVILLE	68	41	76	35	55	2	0.00	-0.77	0.00	5.51	148	0.55	50	95	43	0	0	0	0
	KEY WEST	76	66	82	59	71	1	0.00	-0.52	0.00	1.96	68	0.06	8	80	62	0	0	0	0
	MIAMI	77	58	82	53	68	0	0.06	-0.33	0.06	1.65	60	0.07	12	91	50	0	0	1	0
	ORLANDO	74	50	79	44	62	1	0.00	-0.52	0.00	6.93	226	0.13	17	89	51	0	0	0	0
	PENSACOLA	66	44	75	38	55	3	0.04	-1.11	0.04	17.59	315	1.05	65	81	46	0	0	1	0
	TALLAHASSEE	67	38	73	29	53	1	0.00	-1.20	0.00	17.08	295	1.31	78	95	46	0	1	0	0
	TAMPA	74	52	78	46	63	2	0.02	-0.45	0.02	9.54	320	0.86	126	85	42	0	0	1	0
	WEST PALM BEACH	76	55	80	48	65	-1	0.00	-0.77	0.00	1.45	34	0.01	1	88	54	0	0	0	0
GA	ATHENS	58	36	70	26	47	5	0.43	-0.57	0.43	13.46	262	2.57	181	72	42	0	2	1	0
	ATLANTA	57	39	69	30	48	6	0.52	-0.52	0.52	14.58	276	2.75	187	66	41	0	2	1	1
	AUGUSTA	62	36	73	26	49	5	0.00	-0.96	0.00	7.43	165	1.49	109	82	38	0	3	0	0
	COLUMBUS	62	40	72	29	51	5	0.16	-0.90	0.16	10.74	182	2.81	186	83	36	0	1	1	0
	MACON	62	37	73	26	49	4	0.02	-1.05	0.02	9.29	170	3.03	199	88	37	0	2	1	0
	SAVANNAH	64	39	72	31	52	3	0.00	-0.87	0.00	8.61	213	0.47	38	87	52	0	1	0	0
HI	HILO	80	64	81	62	72	1	0.11	-1.97	0.08	10.53	78	0.56	19	87	74	0	0	3	0
	HONOLULU	83	67	85	65	75	2	0.01	-0.62	0.01	0.61	16	0.01	1	80	66	0	0	1	0
	KAHULUI	84	62	86	58	73	1	0.08	-0.77	0.08	0.63	15	0.09	7	89	78	0	0	1	0
	LIHUE	80	65	81	63	72	0	0.01	-1.07	0.01	4.16	66	0.12	8	87	78	0	0	1	0
ID	BOISE	47	30	52	24	38	9	0.03	-0.27	0.02	1.43	79	0.03	7	76	62	0	4	2	0
	LEWISTON	48	33	50	27	40	7	0.07	-0.17	0.06	0.87	62	0.07	20	82	62	0	4	2	0
	POCATELLO	34	20	39	5	27	3	0.28	0.03	0.23	1.06	72	0.28	76	88	79	0	7	3	0
IL	CHICAGO/O'HARE	36	24	53	14	30	8	0.56	0.17	0.44	3.90	130	0.58	100	86	71	0	6	2	0
	MOLINE	38	24	57	17	31	10	1.01	0.64	0.53	3.96	144	1.01	184	82	69	0	6	3	1
	PEORIA	40	27	61	16	33	10	1.10	0.76	0.80	5.29	182	1.10	216	87	62	0	6	3	1
	ROCKFORD	35	23	51	14	29	10	0.81	0.50	0.53	3.77	150	0.81	176	86	70	0	6	2	1
	SPRINGFIELD	42	27	63	16	34	9	1.19	0.80	0.90	6.10	195	1.19	202	87	59	0	5	3	1
IN	EVANSVILLE	46	31	60	20	39	8	0.71	0.08	0.37	7.61	171	1.46	159	90	63	0	5	3	0
	FORT WAYNE	40	28	55	21	34	10	0.37	-0.10	0.28	3.32	96	0.38	54	89	71	0	5	2	0
	INDIANAPOLIS	42	29	56	18	35	8	0.65	0.10	0.64	4.46	116	0.67	83	85	66	0	4	2	1
	SOUTH BEND	36	26	54	19	31	7	0.35	-0.17	0.27	3.10	80	0.35	45	86	76	0	6	4	0
IA	BURLINGTON	40	27	61	17	34	11	0.69	0.39	0.33	3.07	120	0.69	150	84	59	0	5	3	0
	CEDAR RAPIDS	35	21	49	12	28	10	0.68	0.46	0.48	2.77	153	0.68	206	94	70	0	7	3	0
	DES MOINES	39	27	50	16	33	13	0.68	0.46	0.41	3.58	216	0.68	206	86	67	0	5	4	0
	DUBUQUE	33	22	48	12	27	10	1.20	0.92	0.95	3.27	156	1.20	293	84	72	0	6	3	1
	SIOUX CITY	37	25	48	15	31	13	0.00	-0.14	0.00	1.89	217	0.00	0	83	69	0	6	0	0
	WATERLOO	35	20	48	11	27	11	0.36	0.19	0.17	2.96	218	0.36	144	86	69	0	7	3	0
KS	CONCORDIA	46	29	58	24	37	11	0.61	0.44	0.41	3.24	292	0.61	244	84	55	0	5	2	0
	DODGE CITY	50	30	64	25	40	10	0.70	0.55	0.56	1.90	188	0.70	292	76	46	0	6	2	1
	GOODLAND	50	22	63	12	36	9	0.17	0.06	0.17	0.59	104	0.17	100	84	52	0	7	1	0
	TOPEKA	47	29	60	22	38	11	0.83	0.61	0.63	3.89	222	0.83	252	81	52	0	5	2	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending January 12, 2019

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	33	62	23	41	11	0.62	0.40	0.60	2.42	143	0.62	182	76	52	0	4	2	1
KY	JACKSON	47	30	67	18	39	5	0.65	-0.15	0.65	8.70	160	1.23	105	81	47	0	4	1	1
	LEXINGTON	48	31	66	18	39	7	0.50	-0.29	0.48	7.75	150	1.69	147	77	58	0	4	2	0
	LOUISVILLE	49	33	67	23	41	8	0.38	-0.36	0.31	6.96	146	1.06	99	79	49	0	4	2	0
	PADUCAH	50	34	64	22	42	9	0.62	-0.10	0.47	7.22	133	1.63	154	79	54	0	3	3	0
LA	BATON ROUGE	67	42	76	33	55	5	0.16	-1.16	0.16	12.33	173	2.69	143	93	42	0	0	1	0
	LAKE CHARLES	69	47	76	40	58	7	0.31	-0.93	0.31	11.23	177	4.19	238	92	55	0	0	1	0
	NEW ORLEANS	68	49	76	43	58	6	0.10	-1.07	0.10	7.12	106	1.79	108	81	59	0	0	1	0
	SHREVEPORT	63	44	72	35	53	7	0.28	-0.72	0.28	13.38	224	2.11	148	85	46	0	0	1	0
ME	CARIBOU	23	8	33	-3	16	6	0.96	0.26	0.68	5.55	132	1.78	175	81	65	0	7	4	1
	PORTLAND	31	16	40	5	24	2	0.96	0.02	0.49	5.67	101	2.02	150	81	58	0	6	2	0
MD	BALTIMORE	43	29	54	23	36	4	0.33	-0.47	0.17	6.94	154	0.40	35	70	48	0	5	2	0
MA	BOSTON	38	23	47	15	31	1	0.15	-0.71	0.13	3.98	80	0.96	77	66	37	0	6	2	0
	WORCESTER	30	16	38	8	23	-1	0.33	-0.60	0.15	5.81	113	1.16	87	80	48	0	7	4	0
MI	ALPENA	28	15	40	1	22	3	0.18	-0.23	0.10	2.95	121	0.28	47	85	62	0	7	4	0
	GRAND RAPIDS	35	25	51	20	30	7	0.33	-0.11	0.29	2.36	70	0.37	57	80	61	0	7	2	0
	HOUGHTON LAKE	29	17	39	4	23	4	0.48	0.12	0.39	2.71	119	0.55	106	82	70	0	7	3	0
	LANSING	36	24	51	16	30	8	0.23	-0.10	0.21	2.62	98	0.29	58	81	63	0	7	3	0
	MUSKEGON	35	25	47	20	30	6	0.60	0.10	0.57	3.69	109	0.80	108	75	66	0	7	3	1
	TRAVERSE CITY	32	22	43	15	27	5	0.35	-0.31	0.33	3.17	88	0.38	40	86	62	0	7	2	0
MN	DULUTH	26	15	36	2	21	13	0.34	0.13	0.29	2.32	187	0.35	117	80	72	0	7	2	0
	INT'L FALLS	22	9	34	-13	16	14	0.28	0.12	0.23	1.13	122	0.30	130	91	76	0	7	2	0
	MINNEAPOLIS	32	18	42	6	25	12	0.00	-0.22	0.00	1.73	131	0.00	0	80	69	0	6	0	0
	ROCHESTER	30	18	41	6	24	12	0.04	-0.15	0.02	2.13	164	0.04	14	90	77	0	7	3	0
	ST. CLOUD	28	12	36	1	20	11	0.00	-0.15	0.00	1.33	146	0.00	0	86	65	0	7	0	0
MS	JACKSON	63	39	77	31	51	6	0.44	-0.82	0.44	12.11	169	4.08	225	85	40	0	1	1	0
	MERIDIAN	64	38	77	31	51	5	0.51	-0.79	0.51	12.94	181	2.68	146	82	44	0	2	1	1
	TUPELO	58	37	70	27	47	7	0.75	-0.48	0.74	10.30	130	2.75	154	79	51	0	2	2	1
MO	COLUMBIA	46	32	66	20	39	11	2.66	2.30	1.47	6.96	232	2.66	502	83	54	0	4	3	2
	KANSAS CITY	46	30	61	19	38	11	0.90	0.64	0.61	3.94	194	0.90	231	80	52	0	4	3	1
	SAINT LOUIS	46	31	68	20	38	8	1.22	0.75	0.65	5.20	146	1.22	177	75	59	0	5	3	1
	SPRINGFIELD	49	33	66	21	41	9	1.50	1.06	0.93	6.08	159	1.85	285	74	58	0	3	3	2
MT	BILLINGS	43	25	48	16	34	10	0.01	-0.17	0.01	0.70	75	0.01	4	77	45	0	7	1	0
	BUTTE	32	8	43	-6	20	3	0.02	-0.09	0.01	0.34	49	0.02	12	82	53	0	7	2	0
	CUT BANK	44	18	55	5	31	12	0.00	-0.08	0.00	0.23	50	0.00	0	79	37	0	7	0	0
	GLASGOW	34	17	42	11	26	16	0.00	-0.08	0.00	0.70	140	0.00	0	80	65	0	7	0	0
	GREAT FALLS	45	23	54	8	34	12	0.02	-0.15	0.02	0.35	38	0.02	8	79	37	0	7	1	0
	HAVRE	42	15	54	7	29	15	0.00	-0.11	0.00	0.18	26	0.00	0	84	66	0	7	0	0
	MISSOULA	33	20	37	12	26	3	0.13	-0.12	0.07	0.98	64	0.13	35	86	76	0	7	3	0
NE	GRAND ISLAND	41	27	50	20	34	12	0.00	-0.11	0.00	3.44	414	0.00	0	82	63	0	5	0	0
	LINCOLN	44	28	56	20	36	14	0.43	0.26	0.24	3.75	338	0.43	172	80	59	0	6	2	0
	NORFOLK	39	26	50	19	32	12	0.01	-0.10	0.01	2.90	354	0.01	6	88	66	0	5	1	0
	NORTH PLATTE	43	22	51	14	33	10	0.00	-0.08	0.00	1.40	264	0.00	0	85	54	0	7	0	0
	OMAHA	43	28	56	19	35	14	0.44	0.27	0.35	3.39	292	0.44	183	78	57	0	5	3	0
	SCOTTSBLUFF	50	21	62	14	36	12	0.04	-0.07	0.04	0.37	51	0.05	29	85	58	0	7	1	0
	VALENTINE	42	24	53	13	33	12	0.02	-0.04	0.01	0.91	217	0.02	22	86	61	0	6	2	0
NV	ELY	42	21	49	8	32	7	0.08	-0.07	0.06	0.50	69	0.11	50	88	78	0	6	2	0
	LAS VEGAS	59	43	63	40	51	5	0.09	-0.02	0.09	0.49	86	0.32	188	75	50	0	0	1	0
	RENO	49	31	55	28	40	7	0.84	0.63	0.53	1.94	164	0.85	283	86	66	0	4	3	1
	WINNEMUCCA	46	29	54	25	38	9	0.32	0.13	0.24	2.34	213	0.32	110	81	69	0	6	2	0
NH	CONCORD	29	15	41	2	22	1	0.78	0.12	0.43	4.40	113	1.14	120	79	58	0	7	2	0
NJ	NEWARK	40	27	51	20	34	2	0.19	-0.71	0.19	7.93	164	0.84	66	64	43	0	5	1	0
NM	ALBUQUERQUE	46	29	49	25	38	3	0.33	0.22	0.21	1.18	179	0.39	229	89	50	0	6	3	0
NY	ALBANY	34	20	44	12	27	4	0.48	-0.07	0.40	4.36	126	0.93	116	74	47	0	7	3	0
	BINGHAMTON	28	14	39	6	21	-1	0.72	0.17	0.43	3.64	95	0.93	116	86	71	0	7	6	0
	BUFFALO	33	21	48	11	27	2	0.80	0.07	0.47	4.27	88	0.91	86	83	60	0	6	6	0
	ROCHESTER	34	20	46	10	27	2	0.51	-0.01	0.34	3.21	92	0.61	80	81	67	0	6	5	0
	SYRACUSE	31	16	43	8	24	1	1.22	0.64	0.47	4.60	116	1.33	158	89	60	0	7	5	0
NC	ASHEVILLE	51	32	64	22	42	6	0.72	-0.14	0.72	13.24	287	2.37	194	77	46	0	4	1	1
	CHARLOTTE	55	37	69	25	46	5	0.22	-0.66	0.22	8.66	195	1.68	134	75	38	0	2	1	0
	GREENSBORO	51	33	66	19	42	4	0.29	-0.48	0.29	8.31	200	1.32	120	76	36	0	3	1	0
	HATTERAS	55	44	68	35	50	4	0.21	-1.13	0.11	11.37	176	0.45	24	78	54	0	0	2	0
	RALEIGH	52	34	67	21	43	3	0.08	-0.79	0.08	7.10	166	0.87	71	68	42	0	3	1	0
	WILMINGTON	58	37	74	26	47	1	0.00	-1.00	0.00	7.69	148	0.61	43	81	37	0	3	0	0
ND	BISMARCK	27	13	45	4	20	10	0.00	-0.08	0.00	0.69	121	0.02	15	84	69	0	7	0	0
	DICKINSON	33	13	48	4	23	9	0.00	-0.06	0.00	0.63	147	0.00	0	88	60	0	7	0	0
	FARGO	25	11	38	0	18	11	0.01	-0.16	0.01	1.16	143	0.03	13	87	73	0	7	1	0
	GRAND FORKS	21	6	37	-5	14	9	0.03	-0.11	0.02	0.89	117	0.06	29	92	76	0	7	2	0
	JAMESTOWN	25	11	42	-1	18	9	0.00	-0.12	0.00	0.35	56	0.00	0	93	69	0	7	0	0
	WILLISTON	29	11	40	1	20	12	0.00	-0.11	0.00	0.76	103	0.01	6	80	64	0	7	0	0
OH	AKRON-CANTON	40	26	59	19	33	7	0.44	-0.12	0.19	3.83	101	0.45	55	77	56	0	6	6	0
	CINCINNATI	45	30	63	21	38	8	0.39	-0.27	0.39	6.30	148	0.74	76	78	61	0	5	1	0
	CLEVELAND	41	29	57	24	35	9	0.96	0.41	0.61	4.05	103	1.00	125	78	56	0	4	5	1
	COLUMBUS	43	29	62	19	36	7	0.41	-0.14	0.38	4.52	121	0.65	80	76	61	0	5	3	0
	DAYTON	42	30	61	21	36	9	0.69	0.10	0.69	6.02	153	1.39	162	81	62	0	4	1	1
	MANSFIELD	38	26	57	19	32	7	0.42	-0.18	0.29	4.18	101	0.42	48	90	61	0	6	4	0

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

Weather Data for the Week Ending January 12, 2019

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	40	27	55	21	34	10	0.35	-0.08	0.23	3.19	97	0.37	58	73	56	0	5	4	0
	YOUNGSTOWN	40	25	58	18	32	7	0.64	0.12	0.33	4.43	119	0.70	91	79	65	0	6	6	0
OK	OKLAHOMA CITY	54	35	65	28	45	9	0.50	0.17	0.47	5.97	251	1.81	369	86	48	0	3	3	0
	TULSA	53	36	69	26	44	8	1.73	1.36	1.25	6.92	233	3.34	619	84	51	0	2	3	1
OR	ASTORIA	52	41	58	33	47	5	1.66	-0.49	0.72	12.10	90	2.27	74	90	75	0	0	5	1
	BURNS	38	17	45	1	28	4	0.05	-0.22	0.05	1.09	64	0.05	13	86	76	0	7	1	0
	EUGENE	51	36	60	30	44	5	0.86	-0.83	0.51	6.62	62	0.93	38	92	86	0	2	5	1
	MEDFORD	56	37	65	33	47	9	0.24	-0.31	0.23	3.46	94	0.25	31	88	51	0	0	2	0
	PENDLETON	43	31	56	27	37	4	0.08	-0.22	0.07	1.78	93	0.12	27	90	77	0	6	2	0
	PORTLAND	50	38	54	32	44	5	0.64	-0.49	0.25	5.86	80	0.78	48	87	69	0	1	4	0
	SALEM	52	38	60	31	45	5	0.74	-0.54	0.26	6.98	84	0.94	51	89	80	0	1	5	0
PA	ALLENTOWN	40	26	51	17	33	5	0.20	-0.58	0.18	7.23	160	0.99	88	63	43	0	7	2	0
	ERIE	38	26	54	17	32	4	1.00	0.40	0.76	4.00	87	1.07	120	75	61	0	6	4	1
	MIDDLETOWN	40	27	50	19	33	4	0.33	-0.28	0.13	6.18	150	0.48	55	78	46	0	6	3	0
	PHILADELPHIA	41	29	52	22	35	2	0.33	-0.47	0.24	7.32	164	0.94	82	65	44	0	5	4	0
	PITTSBURGH	39	25	59	19	32	4	0.25	-0.35	0.16	6.15	165	0.61	71	86	58	0	6	3	0
	WILKES-BARRE	33	20	42	11	27	0	0.28	-0.24	0.23	4.02	122	0.83	111	83	51	0	7	3	0
	WILLIAMSPORT	38	25	47	16	31	5	0.22	-0.37	0.13	7.22	191	1.03	121	69	47	0	7	3	0
RI	PROVIDENCE	37	23	46	14	30	1	0.13	-0.85	0.09	6.82	123	1.55	111	71	53	0	6	2	0
SC	CHARLESTON	62	38	73	30	50	2	0.00	-0.92	0.00	10.24	226	0.49	38	88	40	0	2	0	0
	COLUMBIA	59	34	72	25	47	3	0.00	-1.02	0.00	7.95	165	0.70	49	83	41	0	3	0	0
	FLORENCE	59	37	73	26	48	3	0.00	-0.96	0.00	7.68	158	0.77	55	81	35	0	3	0	0
	GREENVILLE	56	36	70	25	46	5	0.67	-0.31	0.67	14.56	276	3.10	220	72	37	0	3	1	1
SD	ABERDEEN	29	13	41	2	21	10	0.00	-0.11	0.00	1.31	238	0.00	0	86	72	0	7	0	0
	HURON	31	18	42	6	24	10	0.00	-0.09	0.00	1.17	221	0.00	0	87	69	0	7	0	0
	RAPID CITY	42	22	51	13	32	10	0.00	-0.08	0.00	1.24	234	0.00	0	86	60	0	7	0	0
	SIOUX FALLS	35	21	45	11	28	14	0.00	-0.11	0.00	1.23	184	0.00	0	83	69	0	6	0	0
TN	BRISTOL	51	31	65	16	41	7	0.32	-0.45	0.32	7.27	162	1.42	129	87	39	0	4	1	0
	CHATTANOOGA	56	36	69	28	46	7	0.66	-0.52	0.66	11.25	174	2.25	135	69	42	0	2	1	1
	KNOXVILLE	53	34	70	23	44	7	0.47	-0.57	0.47	9.09	152	1.59	107	84	41	0	3	1	0
	MEMPHIS	55	39	68	31	47	7	0.66	-0.29	0.57	10.35	146	1.51	109	83	46	0	2	3	1
	NASHVILLE	54	34	71	24	44	7	0.38	-0.53	0.30	6.99	119	1.18	90	76	38	0	3	2	0
TX	ABILENE	60	44	70	35	52	9	0.52	0.29	0.52	4.43	273	0.79	226	71	50	0	0	1	1
	AMARILLO	58	31	72	22	44	9	0.04	-0.11	0.04	0.63	74	0.05	21	71	37	0	3	1	0
	AUSTIN	68	43	78	33	56	6	0.33	-0.13	0.33	9.08	291	2.71	399	80	58	0	0	1	0
	BEAUMONT	71	47	80	39	59	7	0.41	-0.92	0.41	13.37	187	4.41	232	83	53	0	0	1	0
	BROWNSVILLE	79	62	83	57	71	12	0.19	-0.05	0.19	1.04	71	0.39	111	96	62	0	0	1	0
	CORPUS CHRISTI	75	54	82	48	64	8	0.19	-0.16	0.19	1.15	51	0.34	65	90	63	0	0	1	0
	DEL RIO	68	50	75	43	59	8	0.06	-0.03	0.04	1.35	150	0.09	60	85	63	0	0	2	0
	EL PASO	58	41	61	35	49	5	0.10	-0.01	0.09	0.53	56	0.10	59	74	36	0	0	2	0
	FORT WORTH	61	44	74	40	53	9	0.42	-0.05	0.40	6.10	186	1.55	218	77	42	0	0	2	0
	GALVESTON	67	54	72	48	60	4	0.99	0.09	0.99	8.07	168	3.36	263	96	62	0	0	1	1
	HOUSTON	70	48	79	40	59	7	0.61	-0.22	0.61	9.88	202	2.26	190	93	57	0	0	1	1
	LUBBOCK	59	36	69	30	48	11	0.00	-0.09	0.00	1.44	176	0.00	0	68	43	0	2	0	0
	MIDLAND	62	41	71	36	52	9	0.10	-0.01	0.10	1.12	137	0.10	59	72	49	0	0	1	0
	SAN ANGELO	63	41	73	32	52	8	0.31	0.14	0.23	2.79	234	0.32	128	81	54	0	1	2	0
	SAN ANTONIO	69	49	78	42	59	9	0.34	-0.03	0.34	3.39	135	1.05	191	85	51	0	0	1	0
	VICTORIA	72	48	81	42	60	7	0.48	-0.07	0.48	5.77	176	0.83	104	92	59	0	0	1	0
	WACO	63	42	75	36	52	6	0.25	-0.19	0.25	8.35	244	3.62	548	85	56	0	0	1	0
	WICHITA FALLS	58	39	67	32	48	8	0.55	0.29	0.55	5.37	257	1.42	346	81	52	0	1	1	1
UT	SALT LAKE CITY	37	29	40	27	33	4	0.32	0.02	0.25	1.60	96	0.32	74	94	75	0	7	2	0
VT	BURLINGTON	28	11	37	-6	19	0	0.75	0.27	0.39	3.85	132	0.92	133	83	58	0	7	4	0
VA	LYNCHBURG	48	29	65	18	38	4	0.27	-0.51	0.26	7.83	180	0.69	62	68	45	0	4	2	0
	NORFOLK	51	37	64	30	44	4	0.11	-0.75	0.10	4.65	109	0.56	46	75	47	0	2	2	0
	RICHMOND	50	33	64	24	41	5	0.12	-0.70	0.12	3.90	91	0.45	38	69	43	0	3	1	0
	ROANOKE	47	30	66	19	39	3	0.31	-0.37	0.31	7.00	182	0.76	78	69	41	0	4	1	0
	WASH/DULLES	44	28	59	23	36	4	0.31	-0.38	0.20	6.21	153	0.45	45	79	48	0	6	3	0
WA	OLYMPIA	49	34	54	30	42	4	0.91	-0.75	0.28	9.73	95	2.23	94	97	92	0	3	5	0
	QUILLAYUTE	51	39	55	30	45	5	2.21	-0.82	0.78	32.81	174	9.89	228	84	75	0	1	6	3
	SEATTLE-TACOMA	53	40	61	36	47	7	1.03	-0.10	0.42	8.03	111	1.95	120	78	62	0	0	4	0
	SPOKANE	38	29	45	23	34	8	0.66	0.25	0.30	3.32	116	0.70	117	93	75	0	6	3	0
	YAKIMA	42	27	48	22	34	6	0.29	0.01	0.26	0.98	55	0.30	73	91	81	0	7	2	0
WV	BECKLEY	40	27	60	16	34	3	0.31	-0.41	0.25	6.22	151	0.98	95	78	62	0	4	2	0
	CHARLESTON	45	31	63	22	38	5	0.29	-0.41	0.17	6.52	151	0.59	58	80	54	0	4	2	0
	ELKINS	39	23	59	17	31	2	0.34	-0.42	0.22	4.67	103	0.65	60	78	60	0	6	5	0
	HUNTINGTON	47	32	68	22	39	6	0.08	-0.64	0.08	6.47	147	0.37	36	75	49	0	4	1	0
WI	EAU CLAIRE	30	17	40	8	24	12	0.08	-0.13	0.02	2.13	160	0.08	27	86	61	0	7	2	0
	GREEN BAY	32	22	42	16	27	11	0.86	0.61	0.83	2.92	164	0.90	243	84	63	0	6	2	1
	LA CROSSE	33	21	46	11	27	11	0.28	0.05	0.20	3.19	204	0.28	85	83	60	0	6	3	0
	MADISON	33	21	48	12	27	10	1.10	0.85	1.10	3.52	173	1.13	305	84	69	0	6	1	1
	MILWAUKEE	36	25	51	15	31	10	0.69	0.30	0.69	3.11	112	0.70	125	76	65	0	6	1	1
WY	CASPER	41	20	49	12	30	8	0.07	-0.04	0.07	0.47	59	0.07	41	79	55	0	7	1	0
	CHEYENNE	45	25	56	17	35	9	0.05	-0.03	0.05	0.43	73	0.05	38	65	44	0	6	1	0
	LANDER	33	11	43	1	22	2	0.14	0.03	0.12	0.92	118	0.14	82	80	51	0	7	2	0
	SHERIDAN	42	18	48	9	30	9	0.00	-0.17	0.00	0.73	78	0.01	4	77	58	0	7	0	0

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

January 10 ENSO Diagnostic Discussion

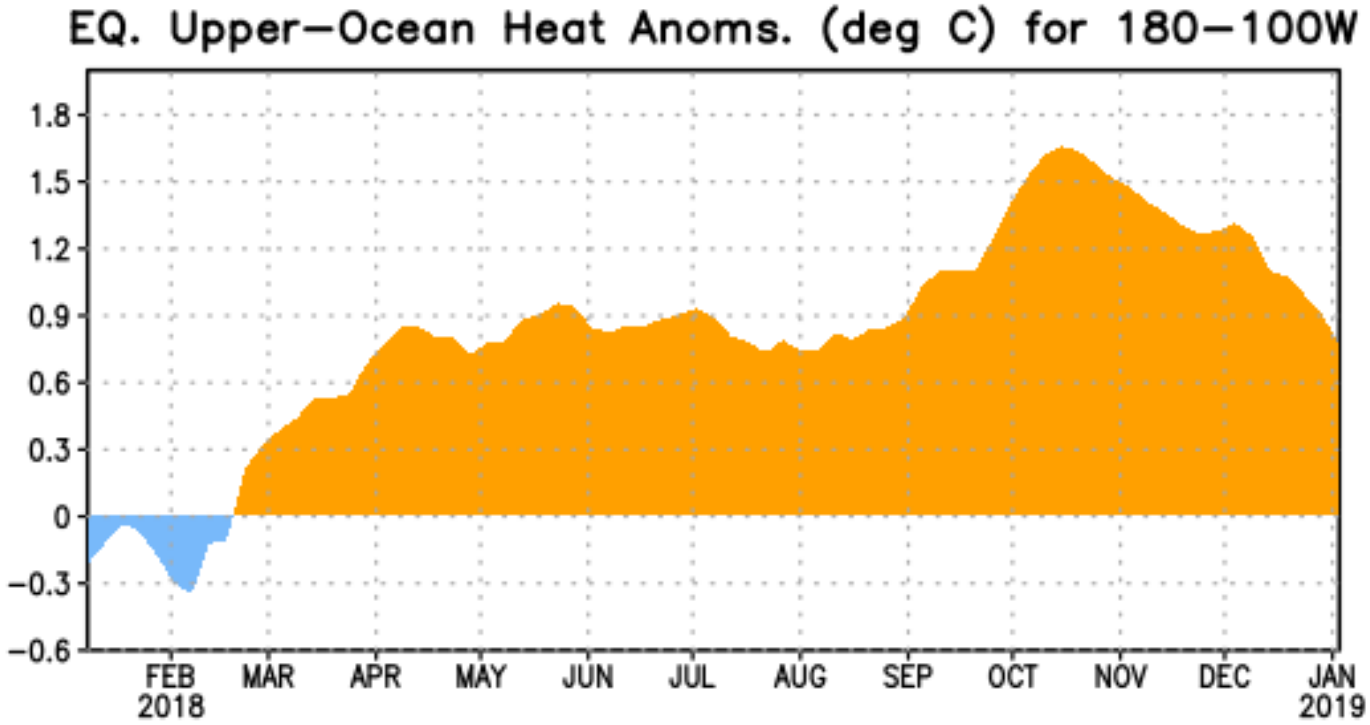


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

ENSO Alert System Status: El Niño Watch

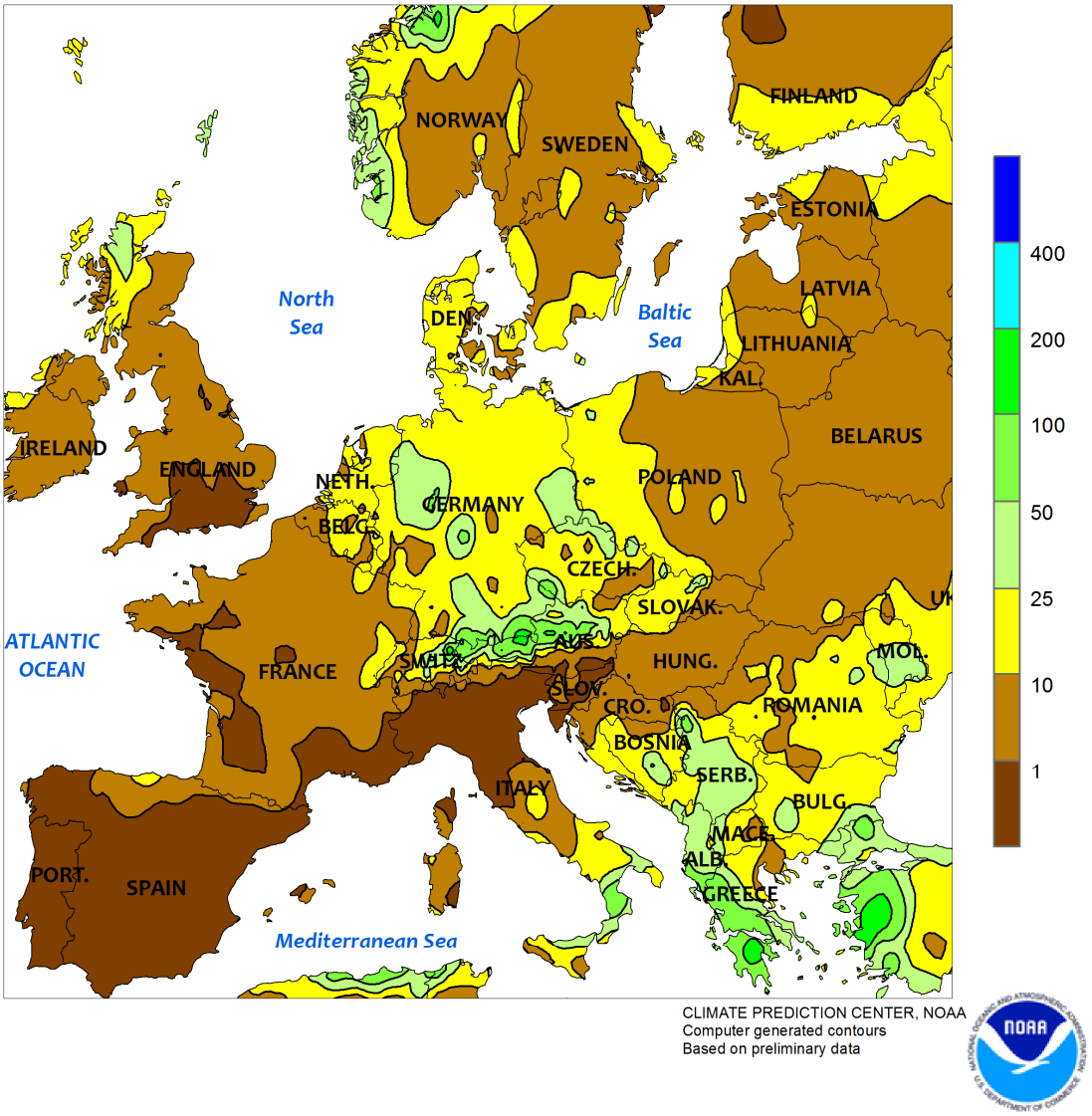
Synopsis: El Niño is expected to form and continue through the Northern Hemisphere spring 2019 (~65% chance).

ENSO-neutral continued during December 2018, despite widespread above-average sea surface temperatures (SSTs) across the equatorial Pacific Ocean. In the last couple of weeks, all four Niño indices decreased, with the latest weekly values at +0.2°C in the Niño-1+2 region and near +0.7°C in the other regions. Positive subsurface temperature anomalies (averaged across 180°-100°W) also weakened (Fig. 1), but above-average temperatures continued at depth across most of the equatorial Pacific Ocean. The atmospheric anomalies largely reflected intra-seasonal variability related to the Madden-Julian Oscillation, and have not yet shown a clear coupling to the above-average ocean temperatures. Equatorial convection was generally enhanced west of the Date Line and suppressed east of the Date Line, while anomalies were weak or near average over Indonesia. Low-level winds were near average, while upper-level wind anomalies were westerly over the eastern Pacific. The traditional Southern Oscillation index was positive, while the equatorial Southern Oscillation index was slightly negative. Despite the above-average ocean temperatures across the equatorial Pacific Ocean, the overall coupled ocean-atmosphere system continued to reflect ENSO-neutral.

The majority of models in the IRI/CPC plume predict a Niño3.4 index of +0.5°C or greater to continue through at least the Northern Hemisphere spring 2019. Regardless of the above-average SSTs, the atmospheric circulation over the tropical Pacific has not yet shown clear evidence of coupling to the ocean. The late winter and early spring tend to be the most favorable months for coupling, so forecasters still believe weak El Niño conditions will emerge shortly. However, given the timing and that a weak event is favored, significant global impacts are not anticipated during the remainder of winter, even if conditions were to form. In summary, El Niño is expected to form and continue through the Northern Hemisphere spring 2019 (~65% chance; click CPC/IRI consensus forecast for the chance of each outcome for each 3-month period).

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site (El Niño/La Niña Current Conditions and Expert Discussions). Forecasts are also updated monthly in the Forecast Forum of CPC's Climate Diagnostics Bulletin. Additional perspectives and analysis are also available in an ENSO blog. The next ENSO Diagnostics Discussion is scheduled for **14 February 2019**. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.enso-update@noaa.gov.

EUROPE
Total Precipitation (mm)
JAN 6 - 12, 2019



EUROPE

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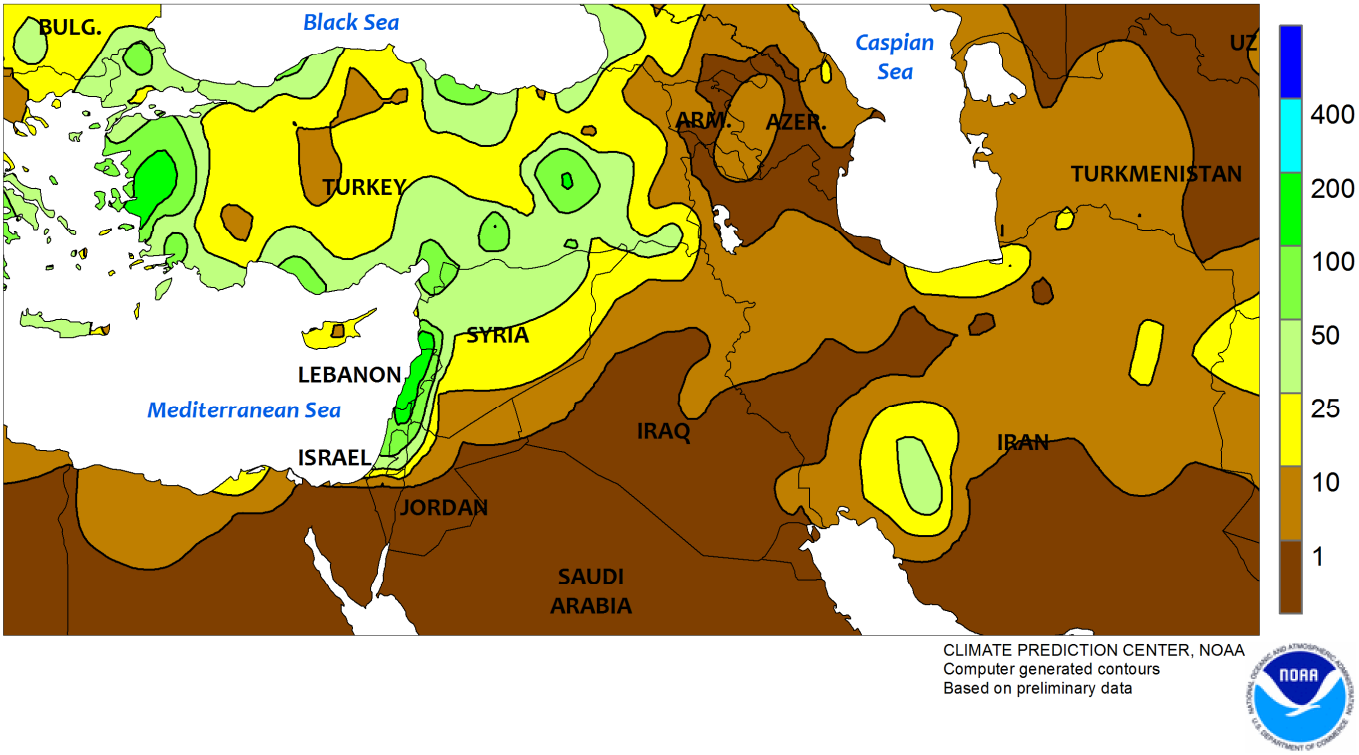
For additional information contact: mbrusberg@oce.usda.gov

MIDDLE EAST
Total Precipitation (mm)
JAN 6 - 12, 2019



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

MIDDLE EAST

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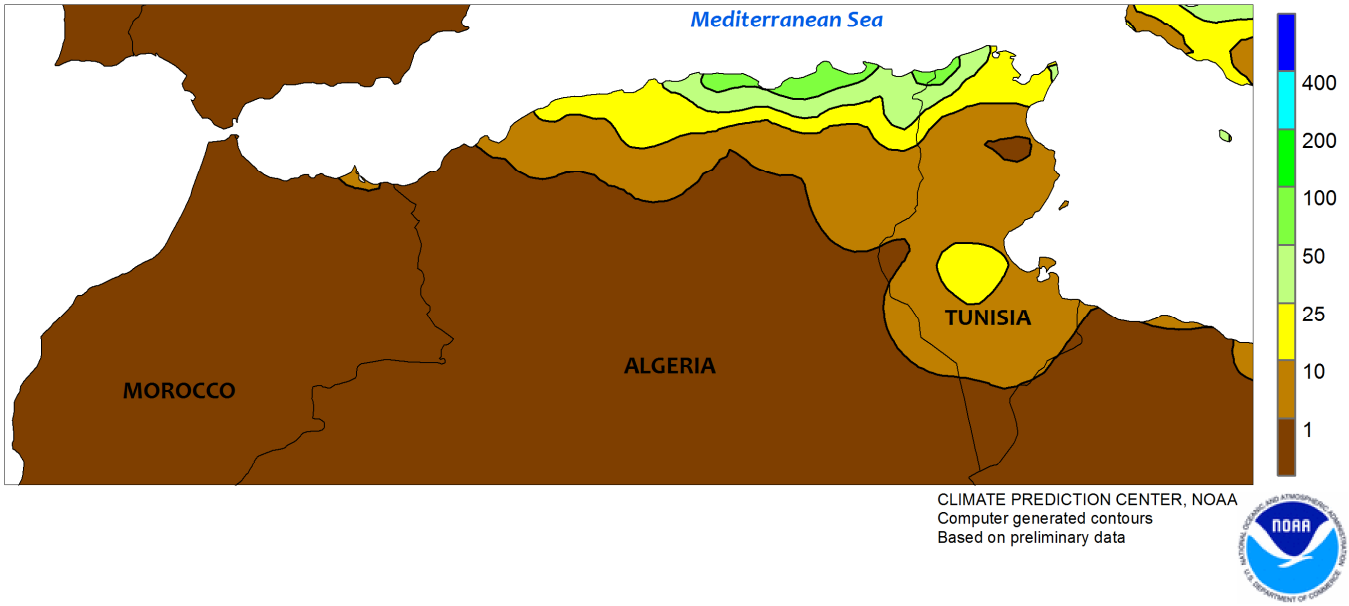
NORTHWESTERN AFRICA
Total Precipitation (mm)
JAN 6 - 12, 2019



NORTHWESTERN AFRICA

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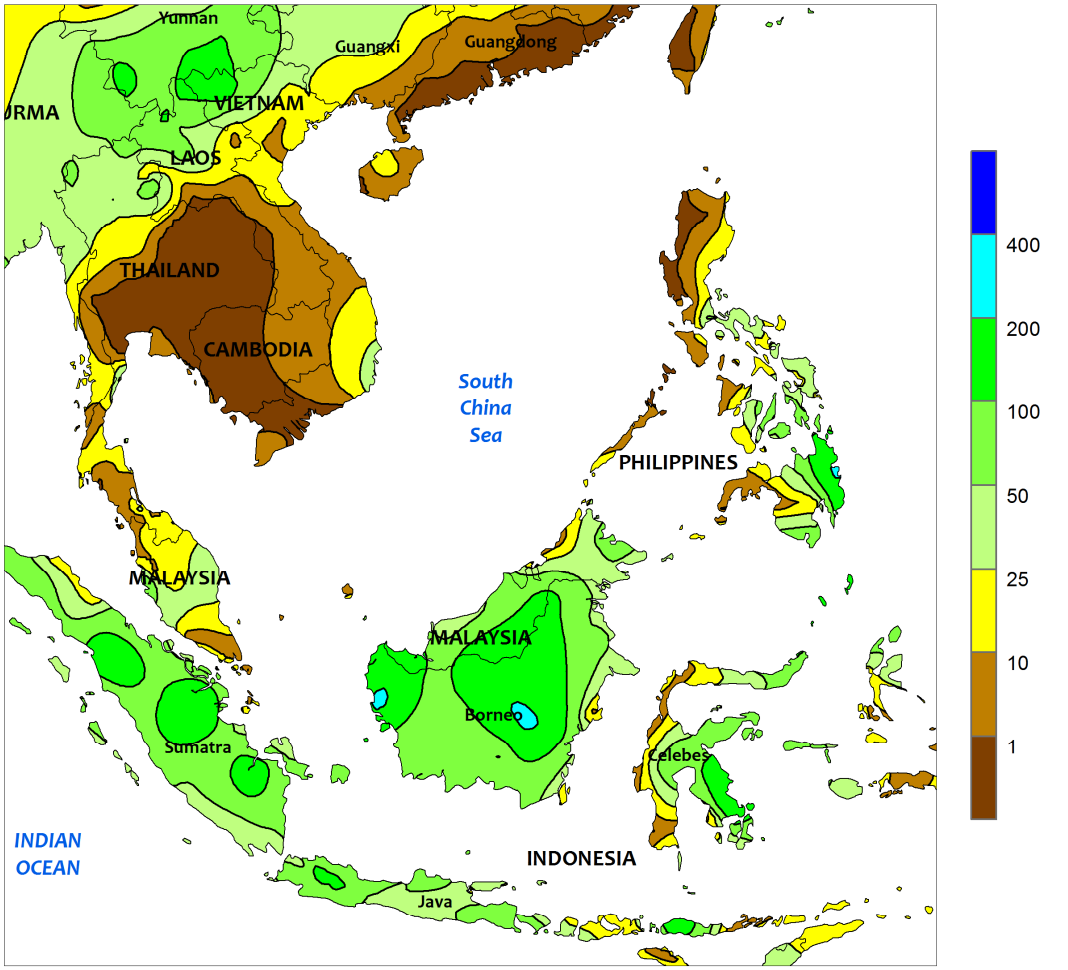
SOUTHEAST ASIA
Total Precipitation (mm)
JAN 6 - 12, 2019



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

SOUTHEAST ASIA

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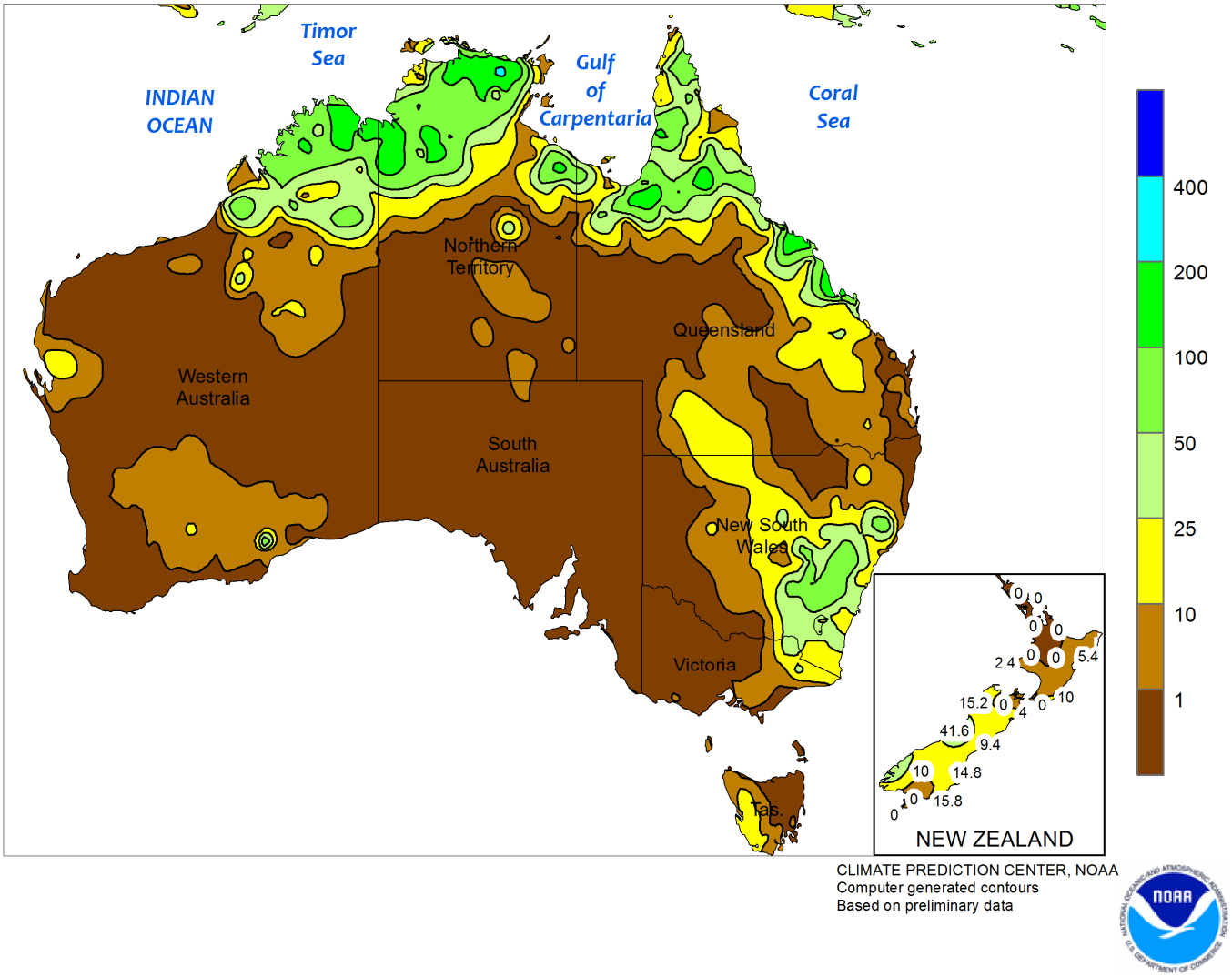
AUSTRALIA
Total Precipitation (mm)
JAN 6 - 12, 2019



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

AUSTRALIA

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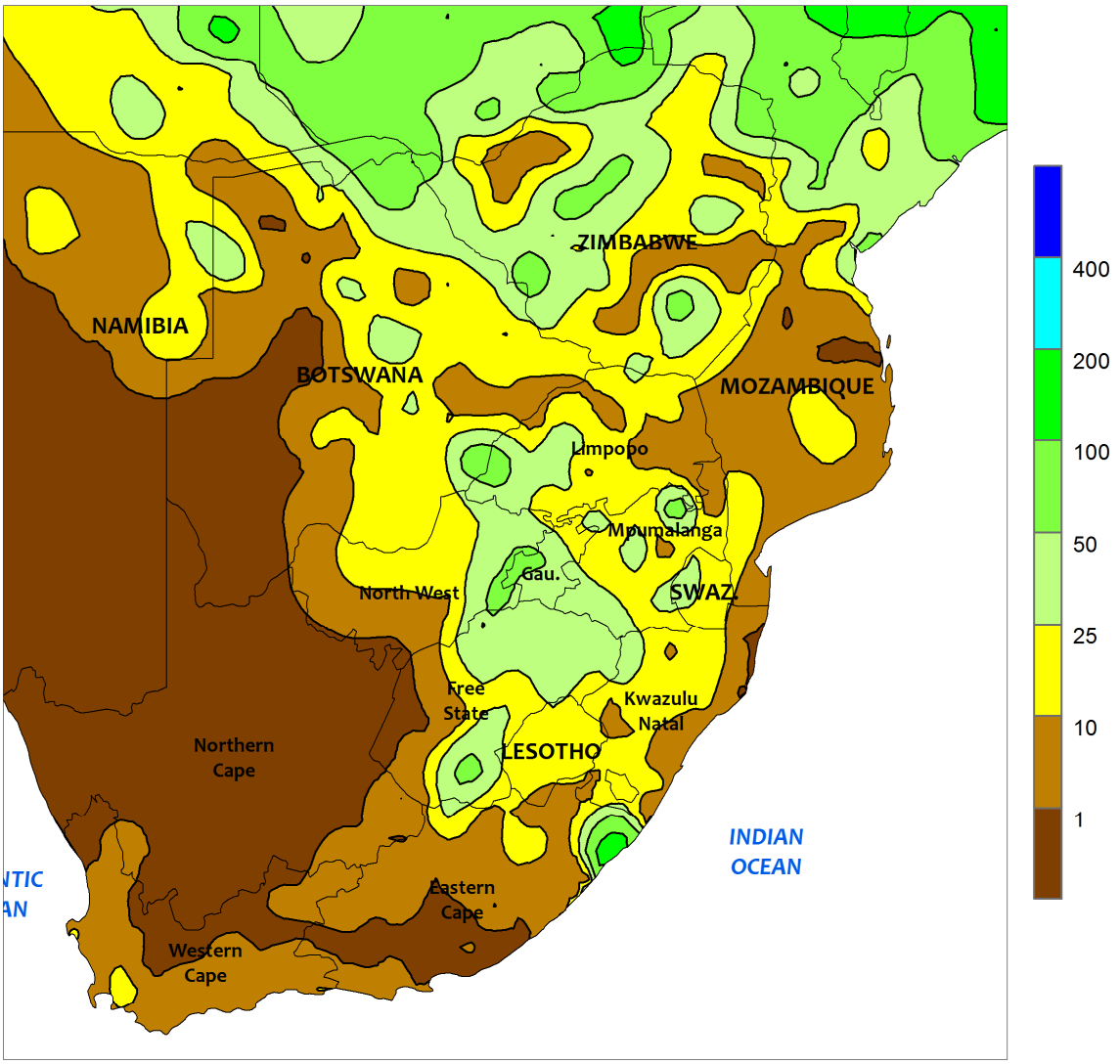
SOUTH AFRICA
Total Precipitation (mm)
JAN 6 - 12, 2019



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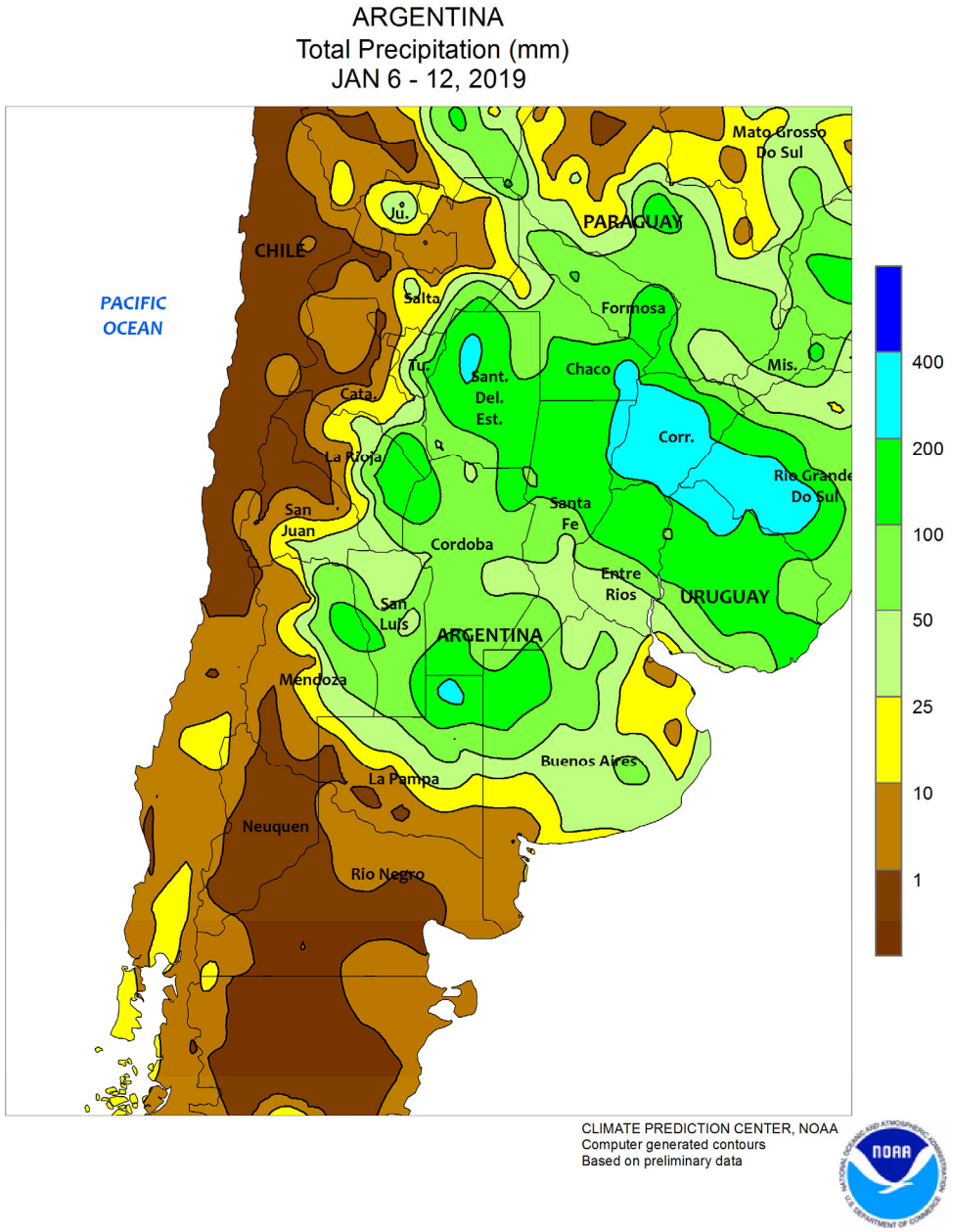

ARGENTINA

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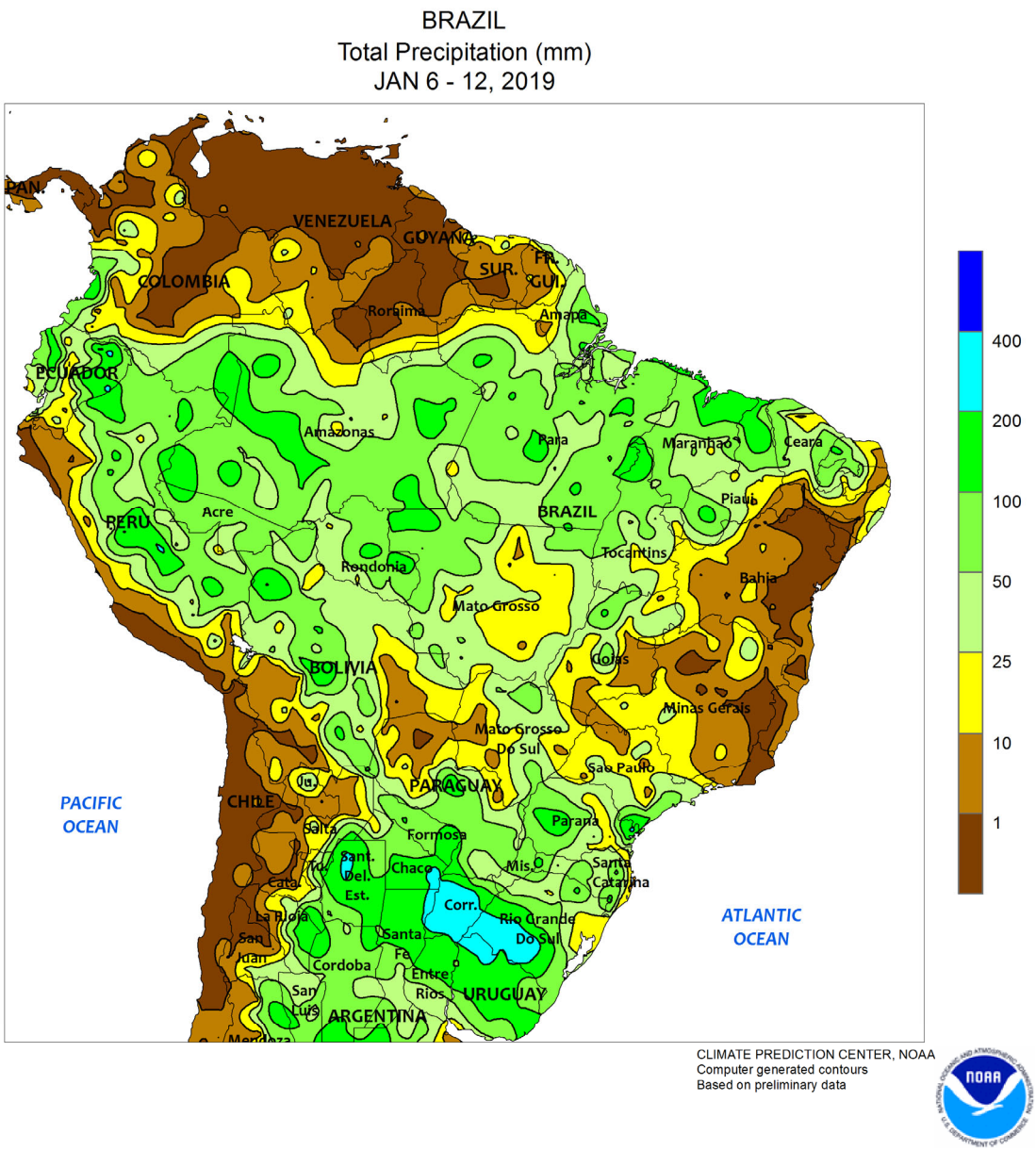

BRAZIL

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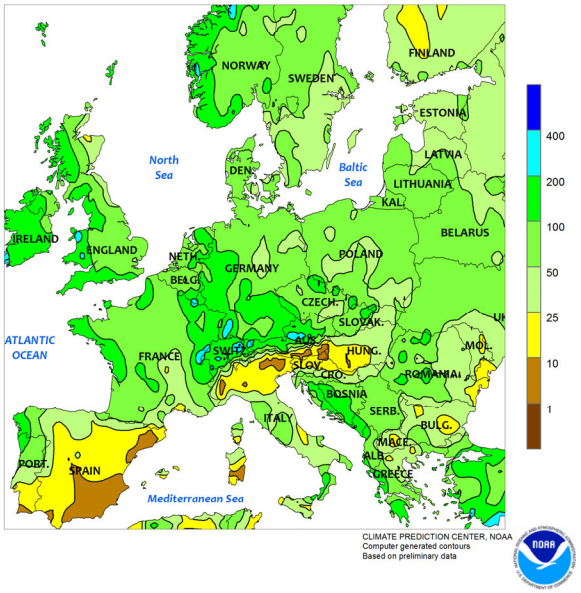
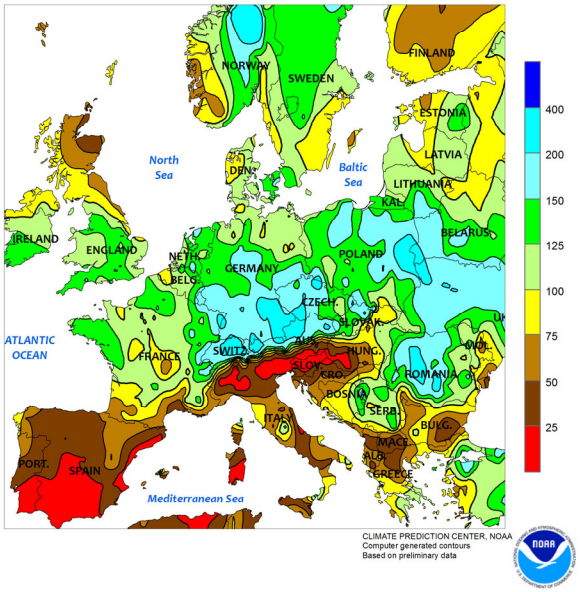
December International Temperature and Precipitation Maps

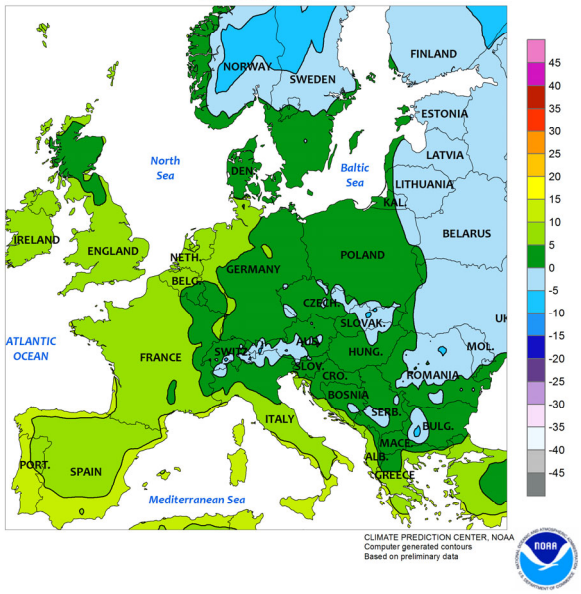
EUROPE
Total Precipitation (mm)
December 2018



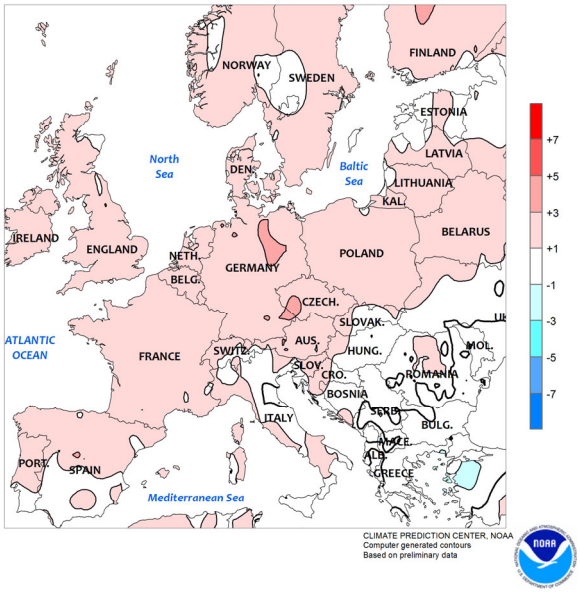
EUROPE
Percent of Normal Precipitation
December 2018



EUROPE
Average Temperature (C)
December 2018



EUROPE
Temperature Anomaly (C)
December 2018



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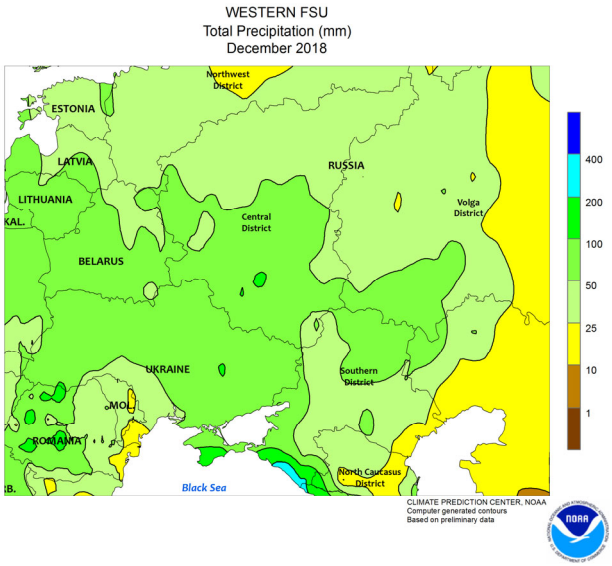

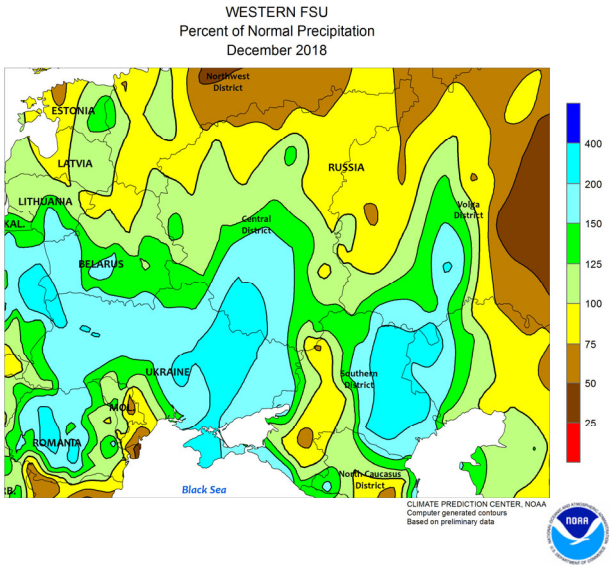

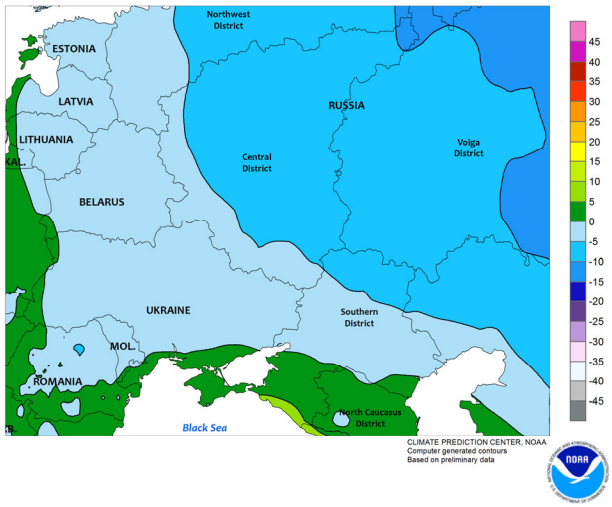

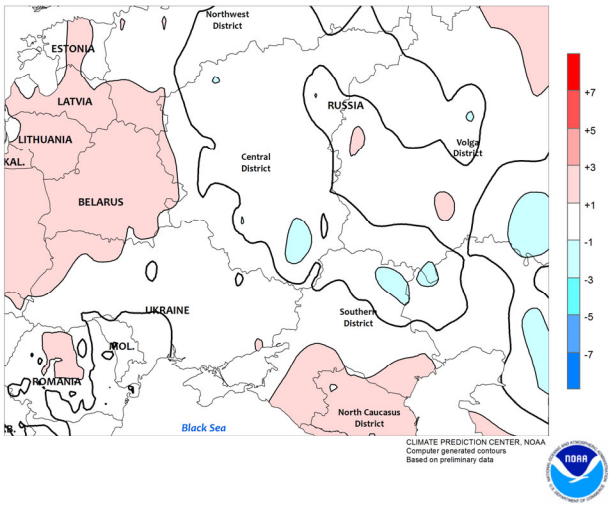

WESTERN FSU

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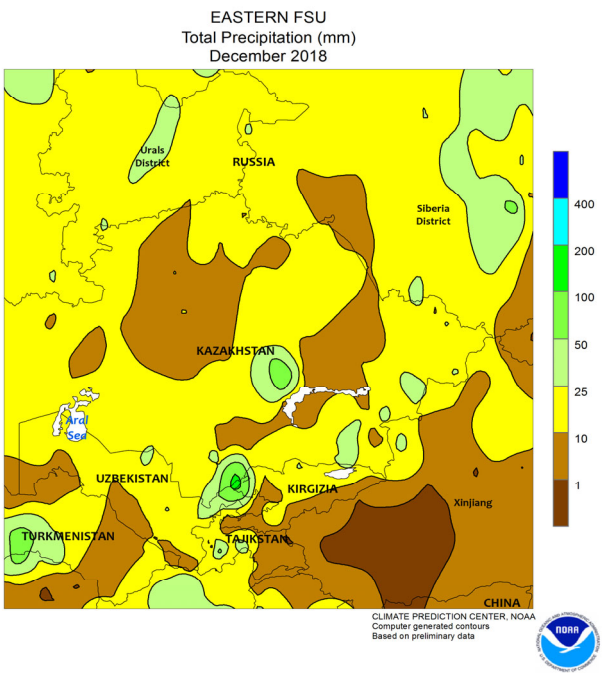

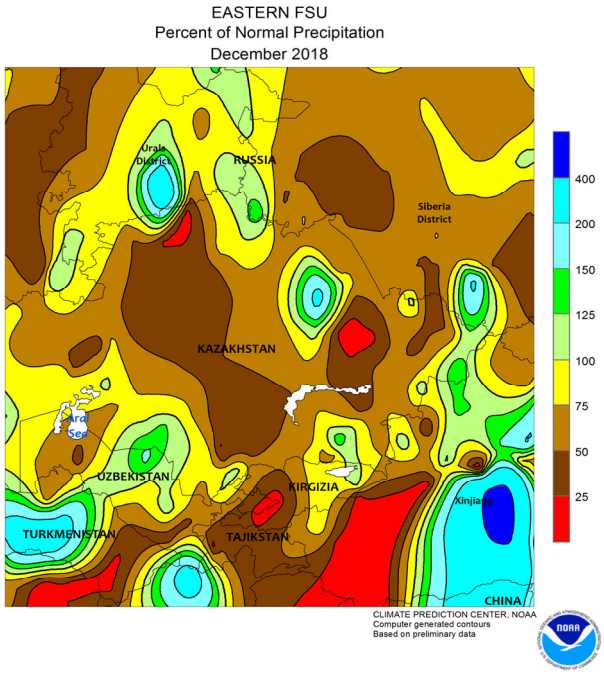

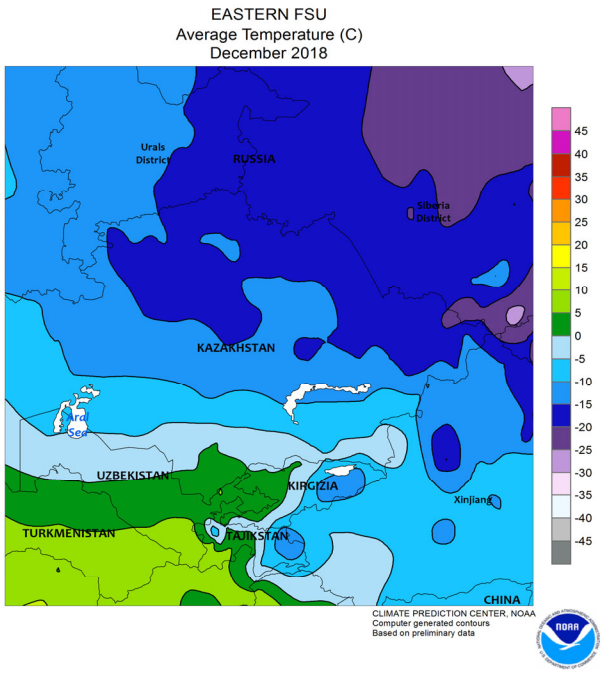

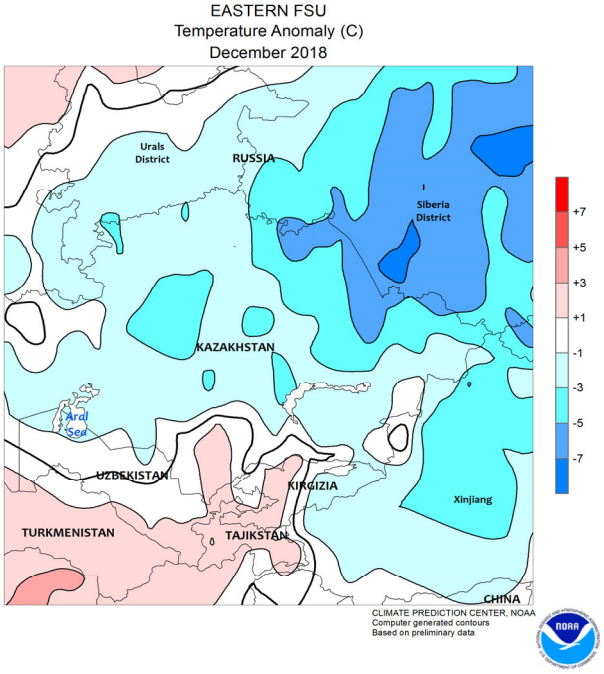

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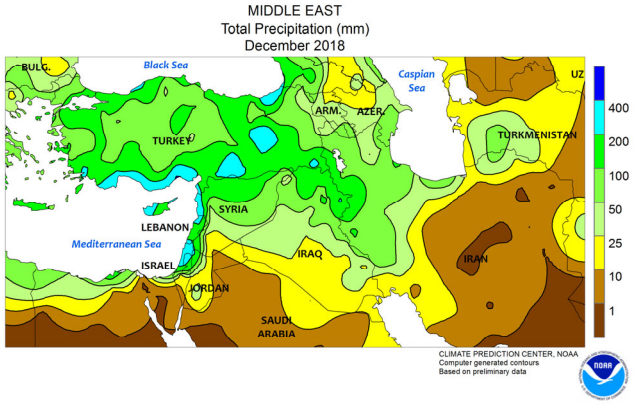

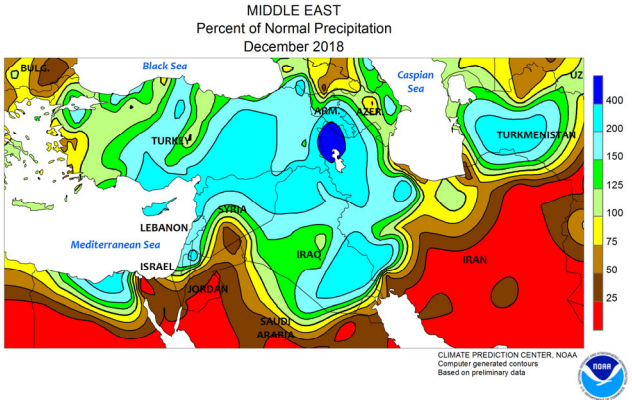

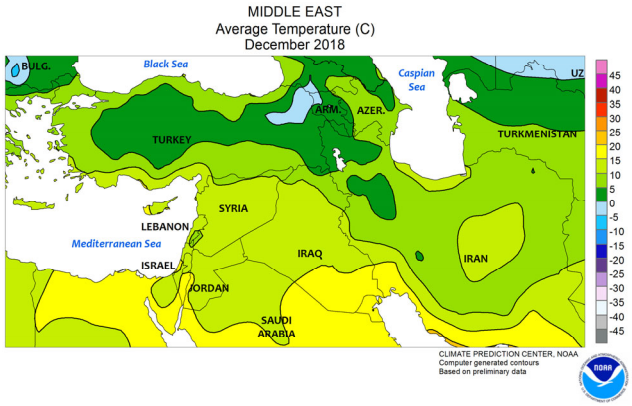

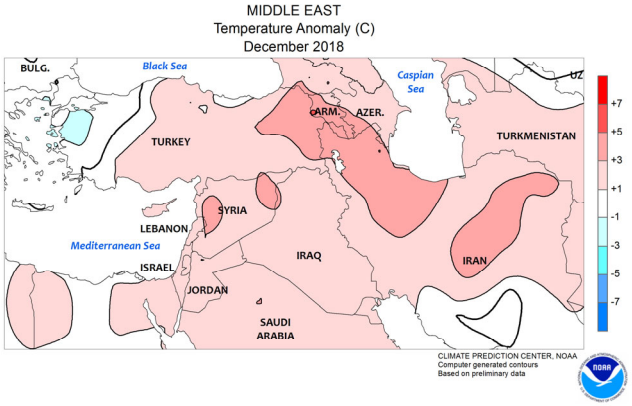

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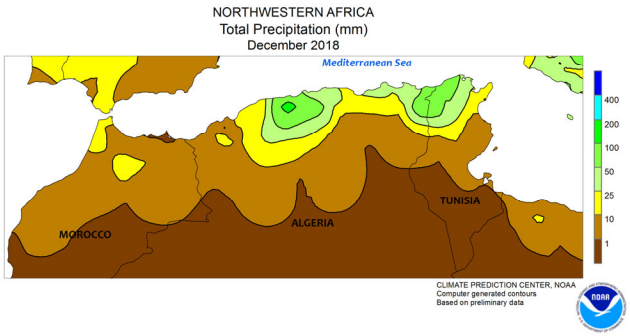

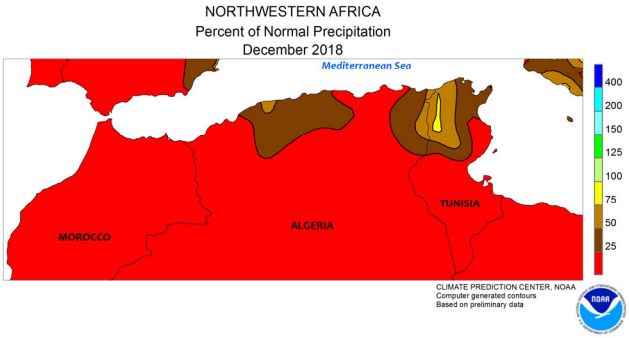

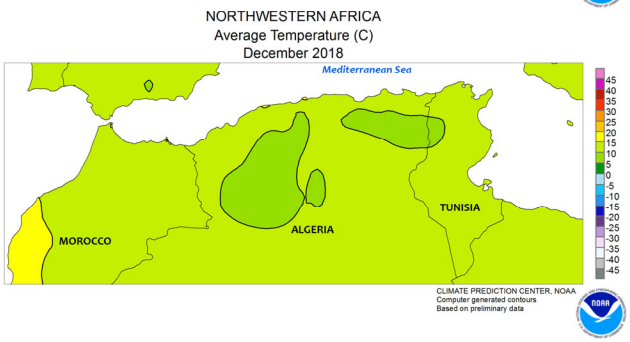

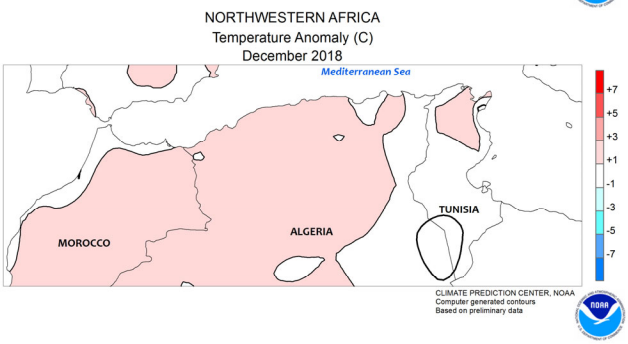

NORTHWESTERN AFRICA

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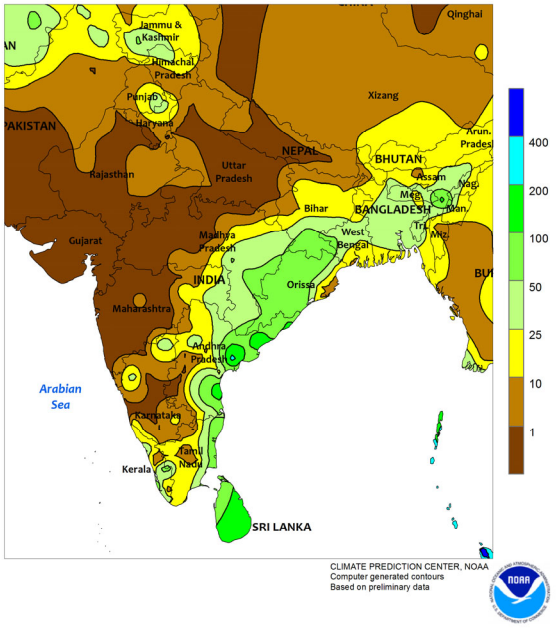
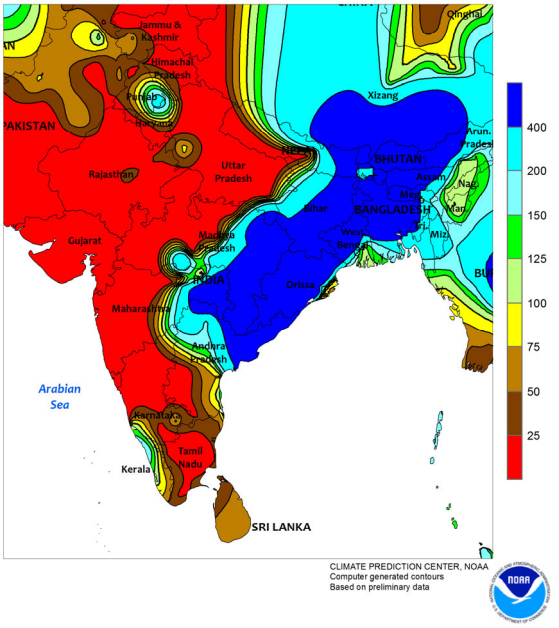
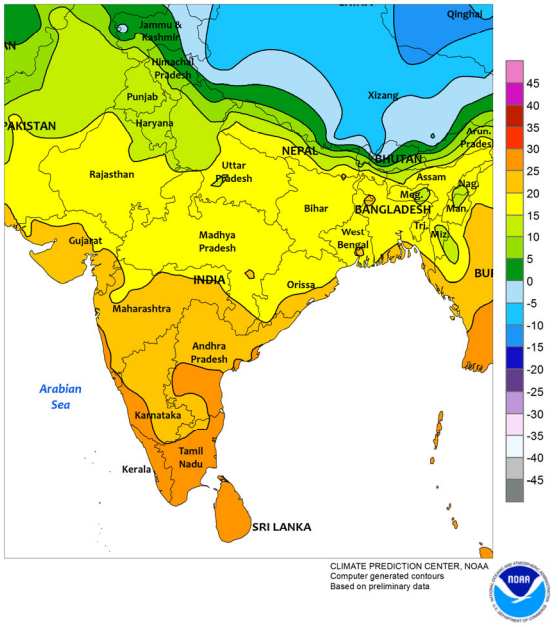
SOUTH ASIA
Total Precipitation (mm)
December 2018



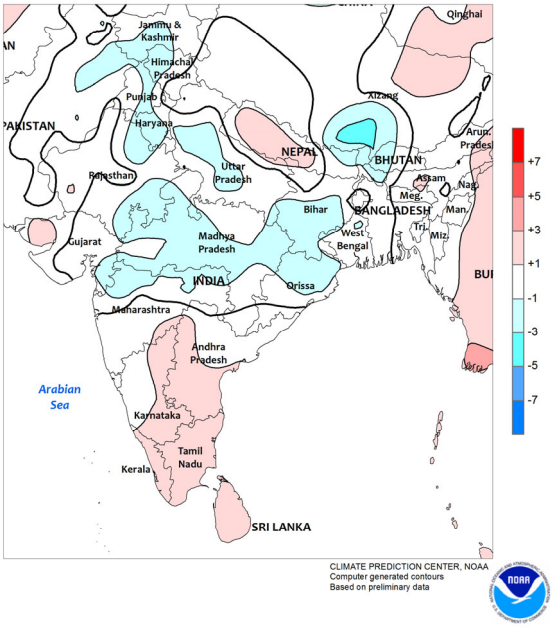
SOUTH ASIA
Percent of Normal Precipitation
December 2018



SOUTH ASIA
Average Temperature (C)
December 2018



SOUTH ASIA
Temperature Anomaly (C)
December 2018



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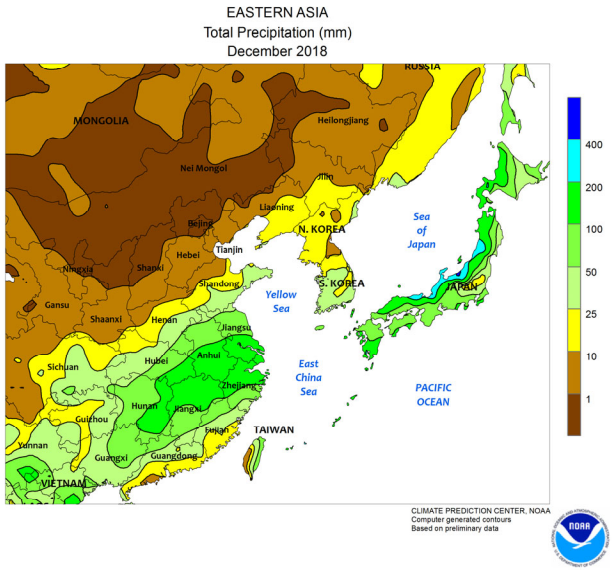

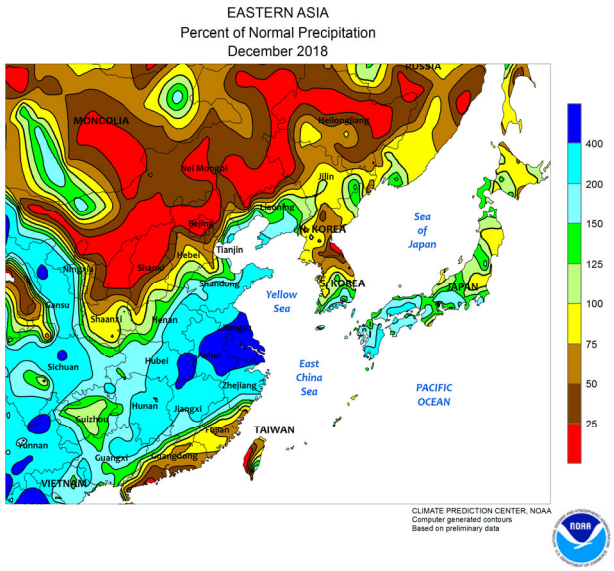

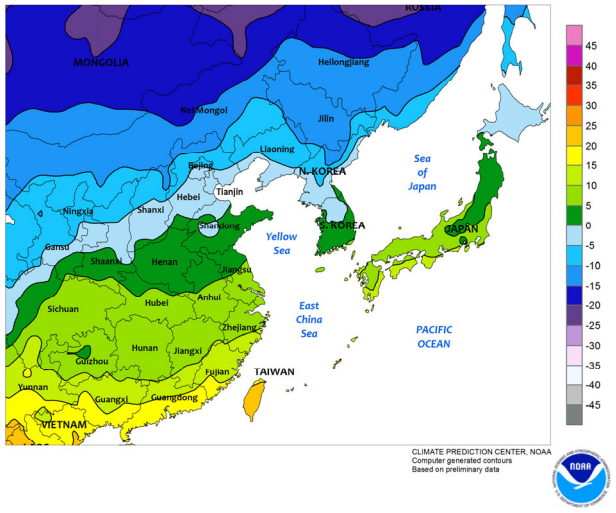

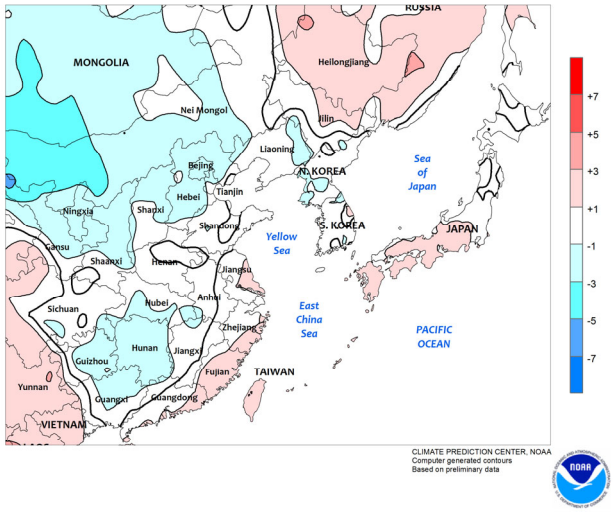

EASTERN ASIA

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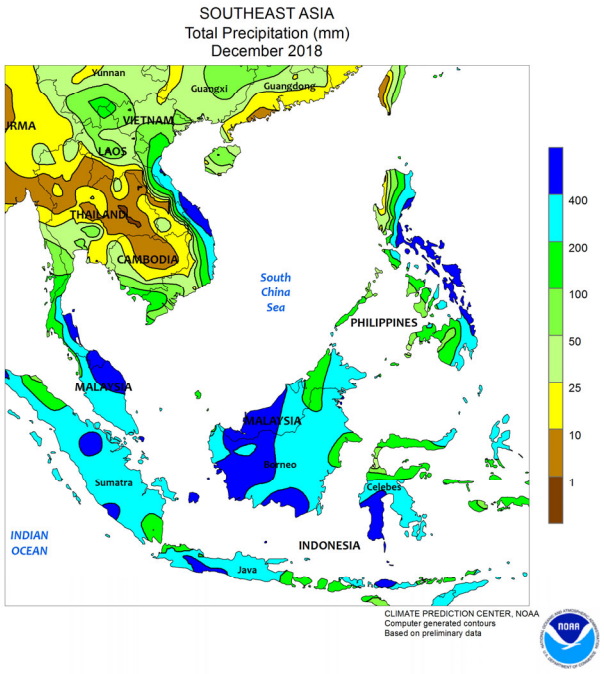

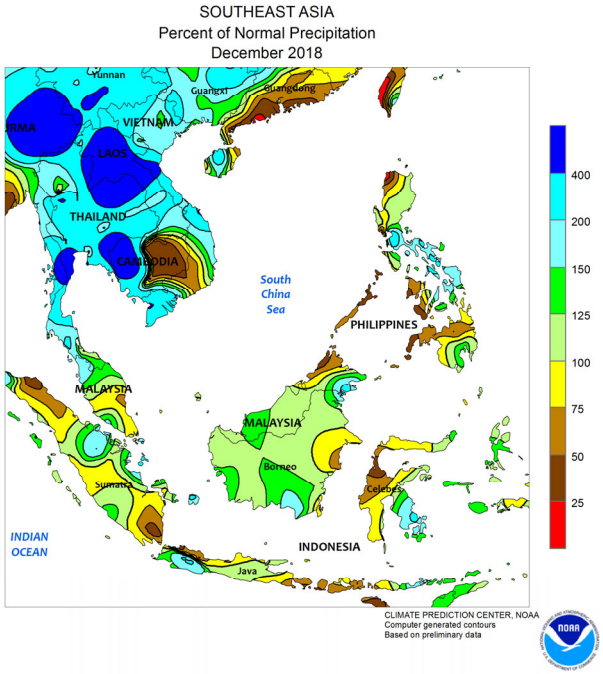

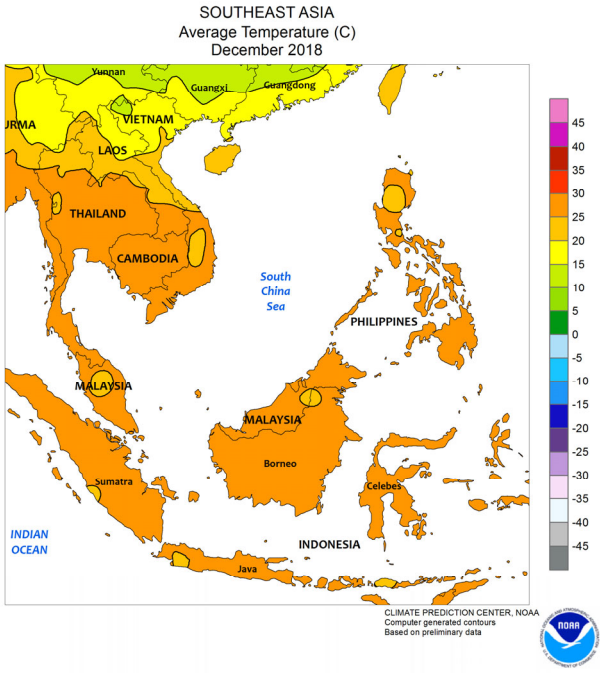

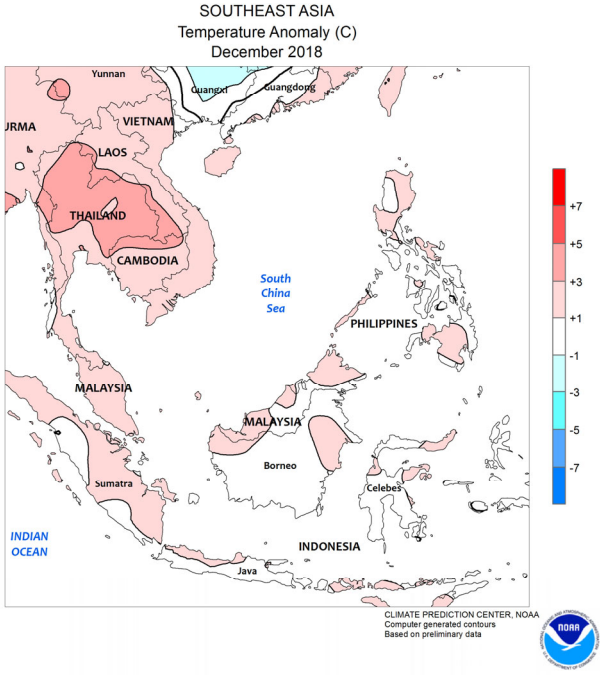

SOUTHEAST ASIA

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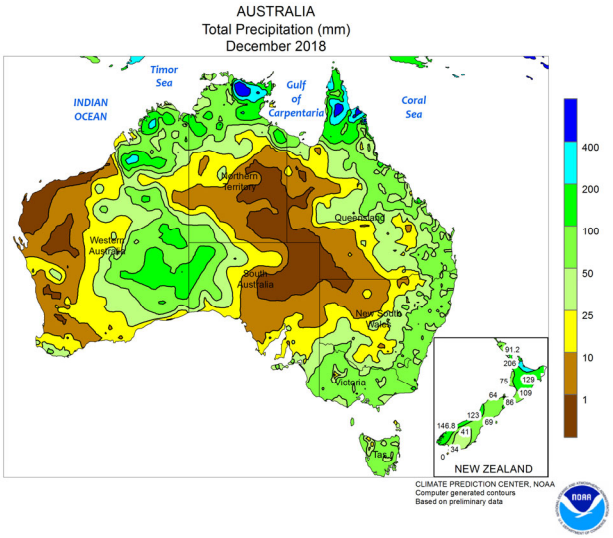

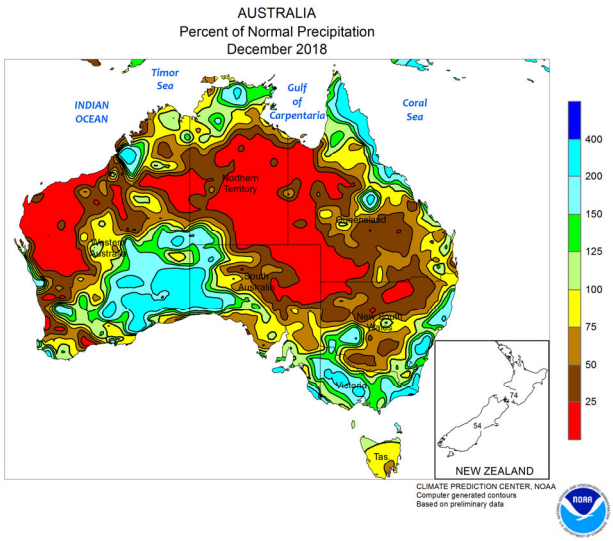

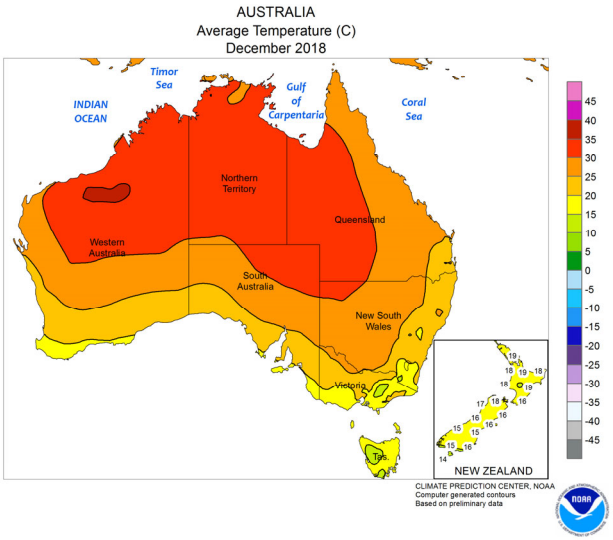

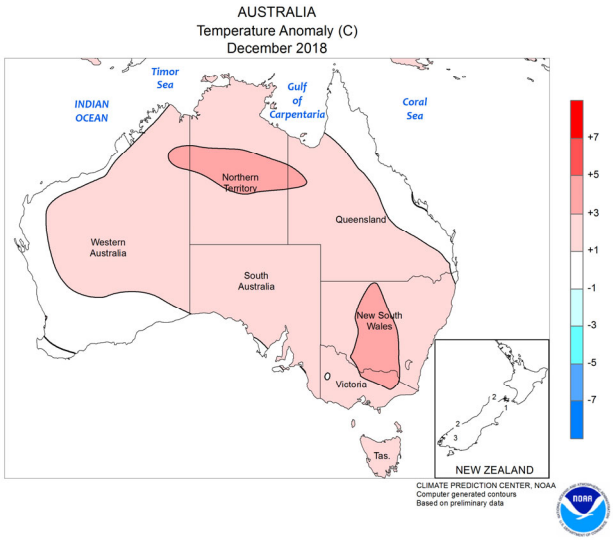

AUSTRALIA

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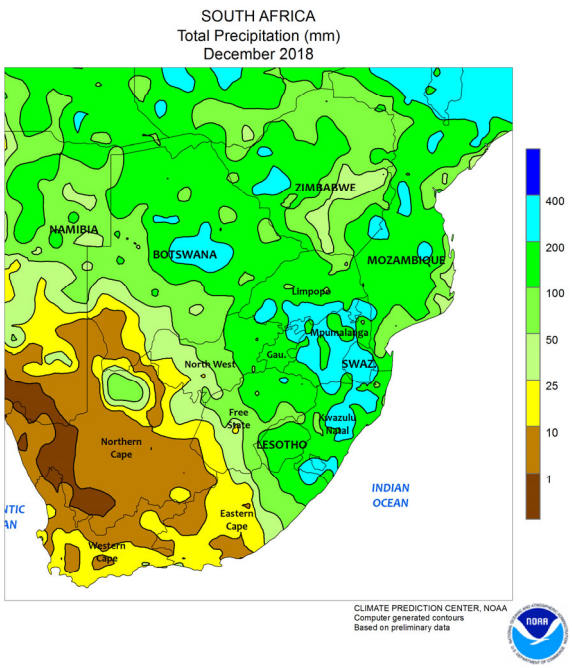

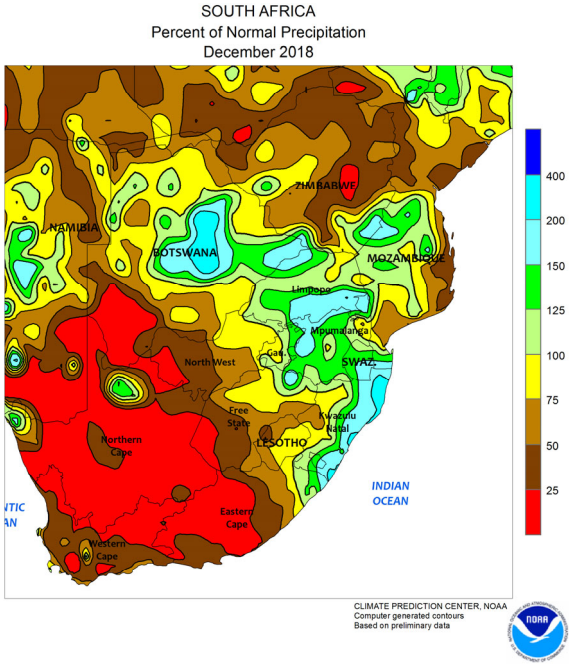

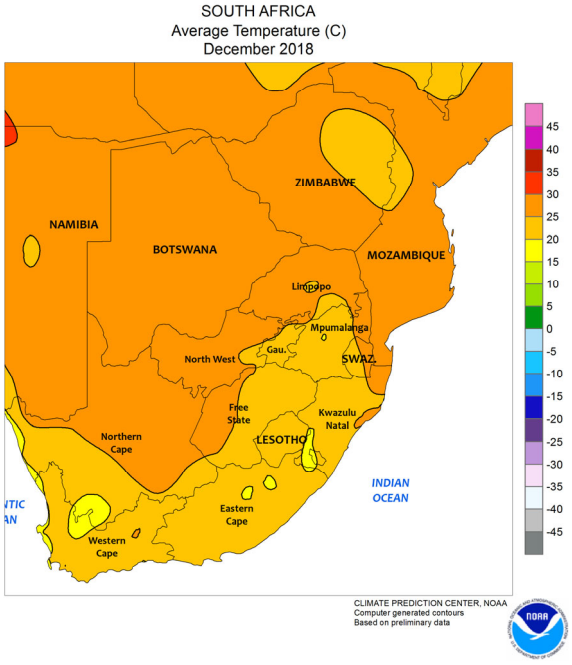

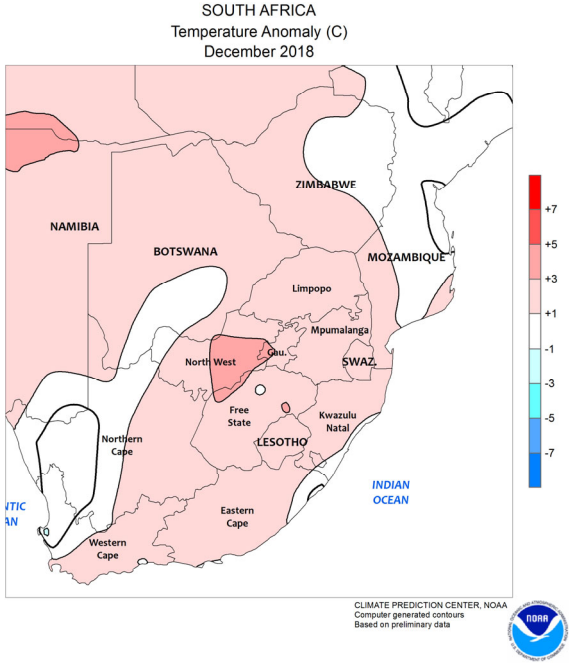

SOUTH AFRICA

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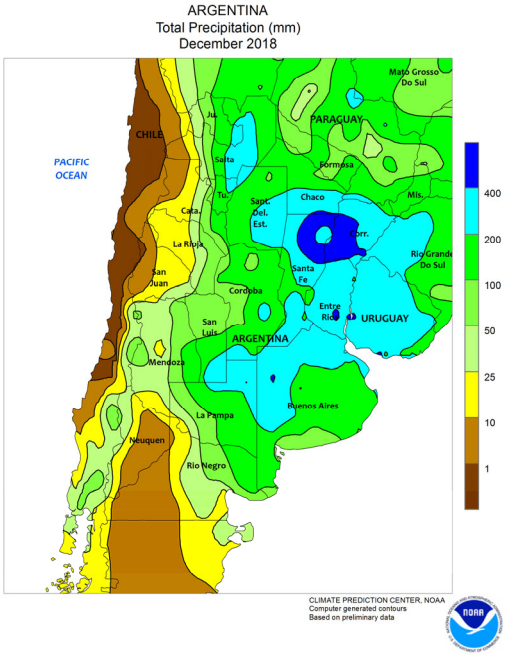

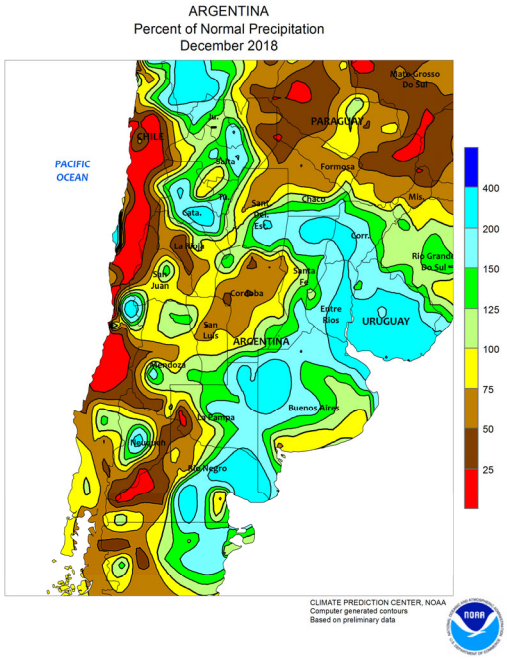

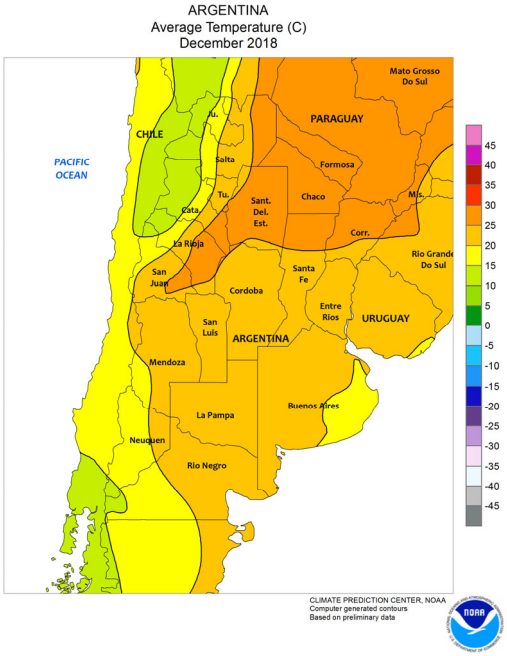

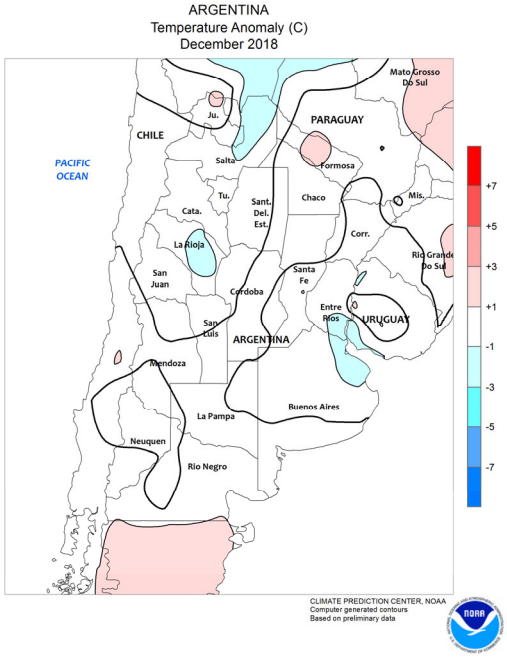

ARGENTINA

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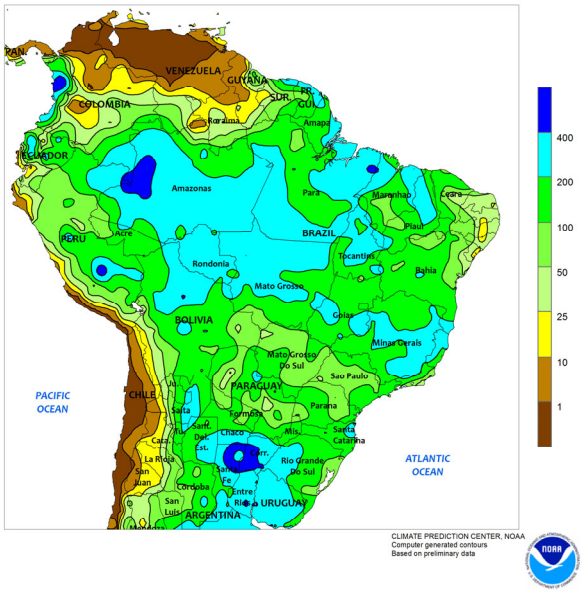
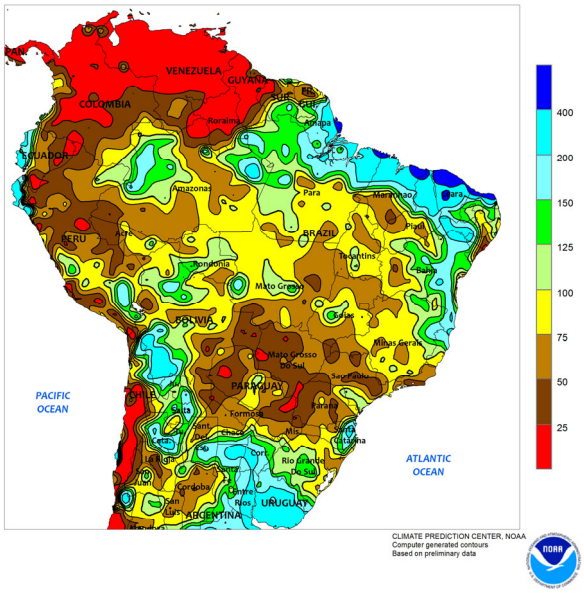
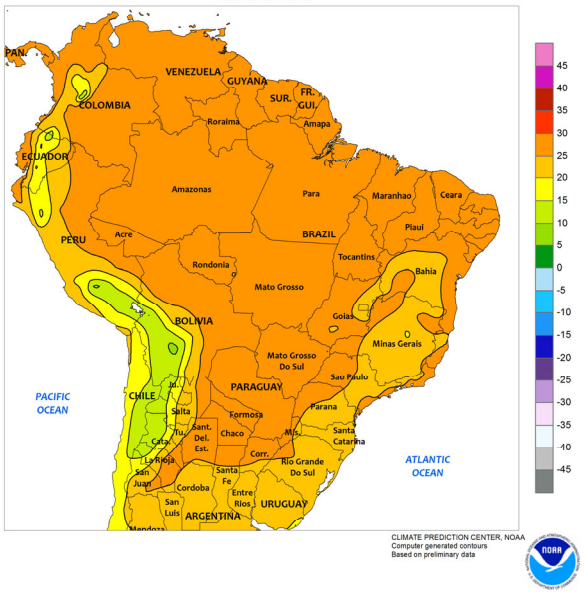
BRAZIL
Total Precipitation (mm)
December 2018



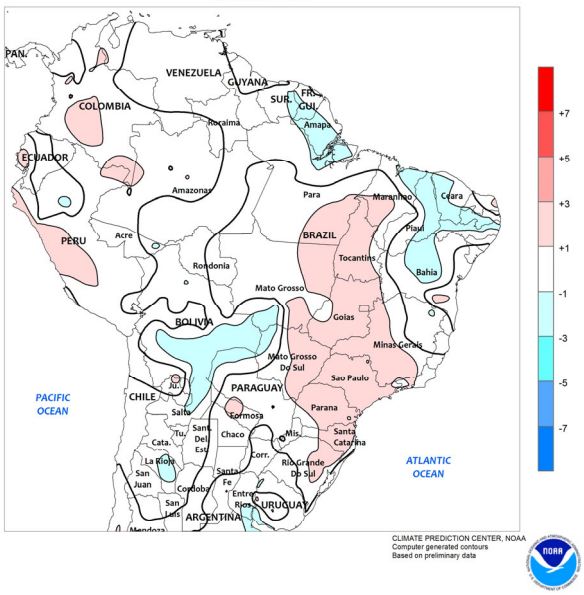
BRAZIL
Percent of Normal Precipitation
December 2018



BRAZIL
Average Temperature (C)
December 2018



BRAZIL
Temperature Anomaly (C)
December 2018



BRAZIL

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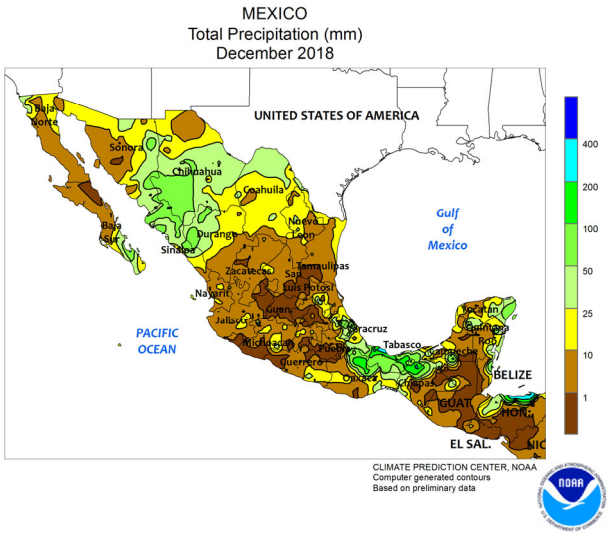

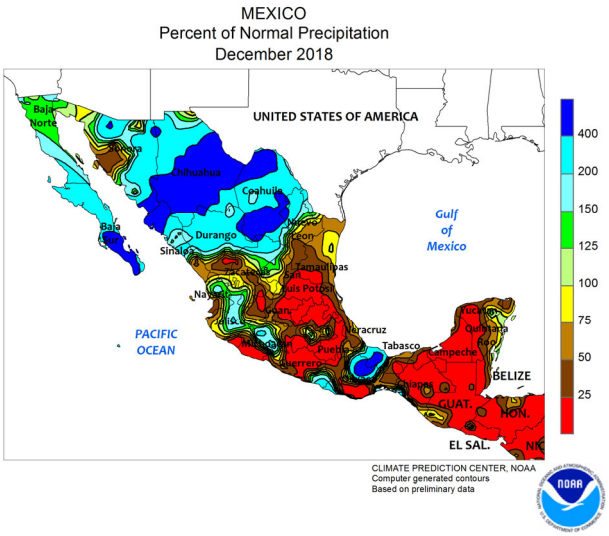

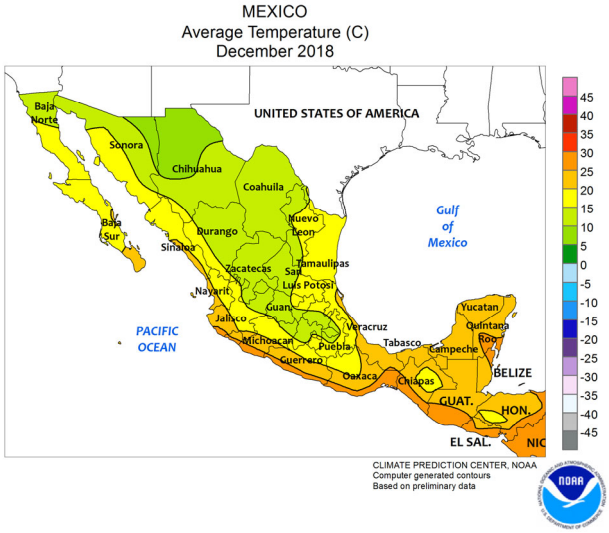

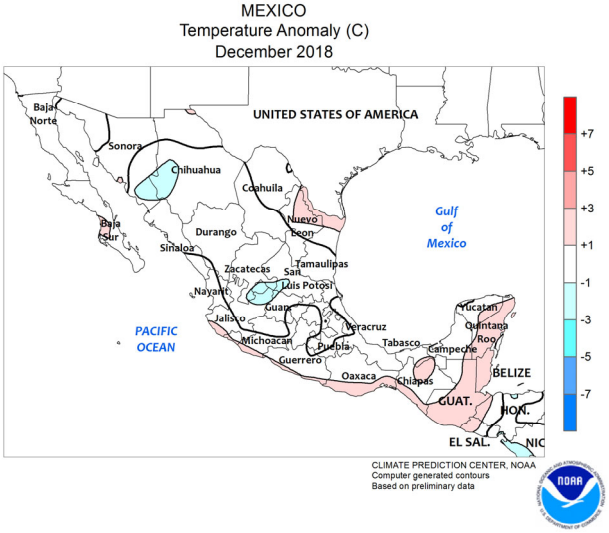

MEXICO

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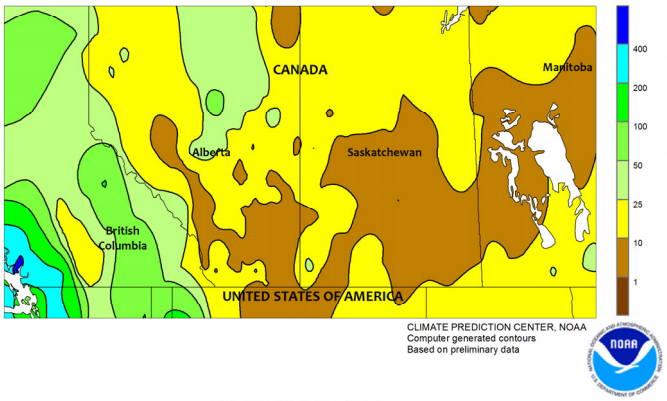
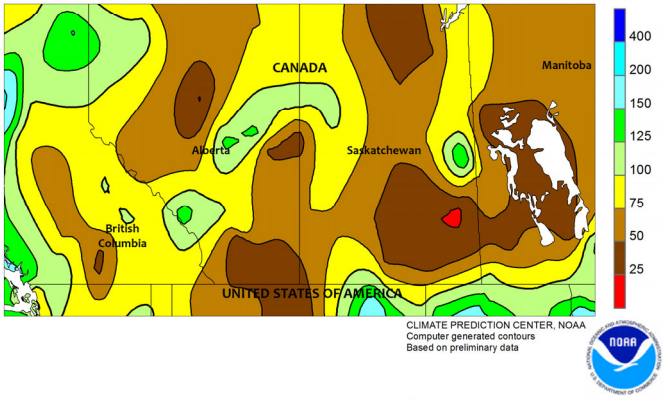
CANADIAN PRAIRIES
Total Precipitation (mm)
December 2018



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

CANADIAN PRAIRIES
Percent of Normal Precipitation
December 2018

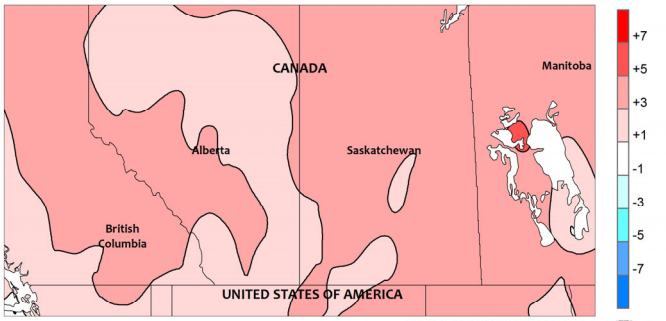


CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

CANADIAN PRAIRIES
Average Temperature (C)
December 2018

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

CANADIAN PRAIRIES
Temperature Anomaly (C)
December 2018



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

CANADIAN PRAIRIES

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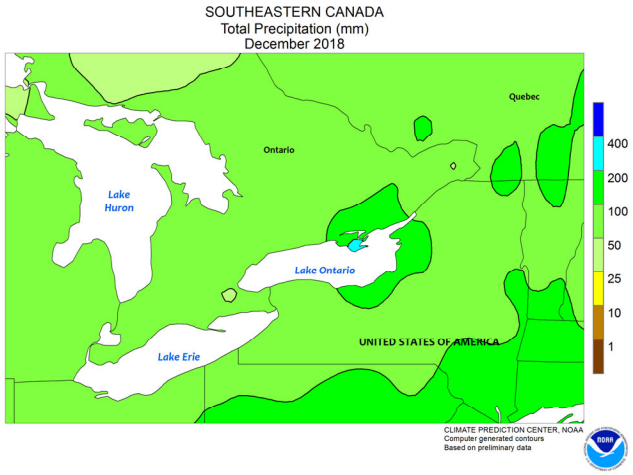

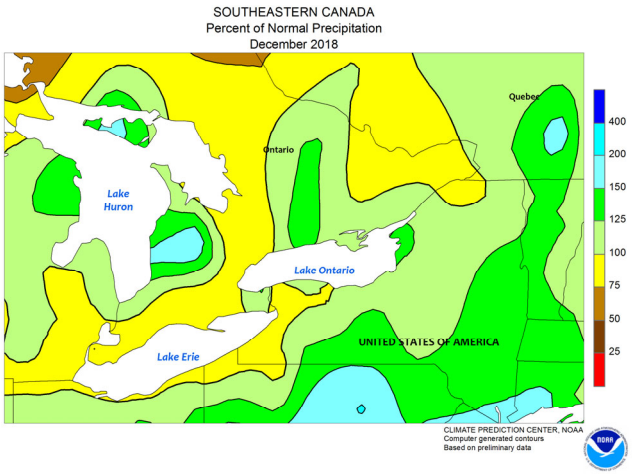

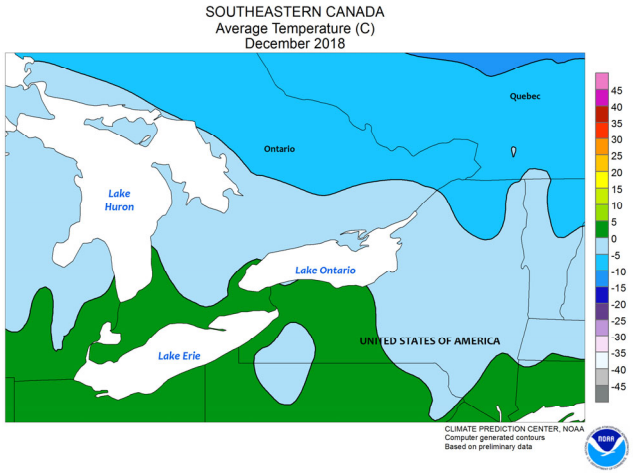

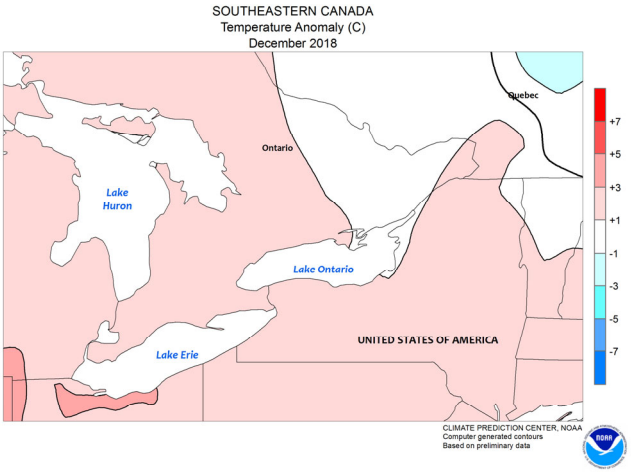

SOUTHEASTERN CANADA

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Selected U.S. Annual Precipitation Records

This information was compiled by USDA's World Agricultural Outlook Board, based on data provided by NOAA's National Weather Service. Totals are listed in inches. Normal amounts and previous records are also provided in inches.

Location	Annual Total	Annual Normal	Previous Record	Record Broken on…
Wilmington, NC	102.40	57.61	83.65 in 1877	September 16
Reading, PA	68.08	43.27	61.21 in 1996	November 2
Mason City, IA	50.01	35.20	47.75 in 2016	November 5
Baltimore, MD	71.82	41.88	62.66 in 2003	November 15
Charleston, WV	67.05	44.03	61.01 in 2003	November 24
Lexington, KY	71.98	45.17	66.35 in 2011	December 1
Lakeland, FL	78.15	54.79	70.24 in 1959	December 4
Danville, VA	67.43	44.41	62.78 in 2003	December 9
Lynchburg, VA	65.70	41.57	59.71 in 1972	December 9
Frankfort, KY	68.94	45.62	65.58 in 2011	December 15
N. Myrtle Beach, SC	68.50	52.01	64.83 in 2015	December 15
Elizabeth City, NC	63.95	46.58	62.13 in 1979	December 15
Washington, DC	66.28	39.74	61.33 in 1889	December 15
Jackson, KY	67.98	48.34	63.29 in 1989	December 15
Roanoke, VA	62.45	41.25	58.81 in 1948	December 15
Atlantic City, NJ	68.57	41.75	65.80 in 1948	December 21
Greensboro, NC	64.11	42.20	62.32 in 2003	December 21
Scranton, PA	61.08	38.26	60.00 in 2011	December 21
Sioux Falls, SD	39.17	26.38	38.26 in 2010	December 26
Waterloo, IA	54.05	34.60	53.07 in 1993	December 27
Green Bay, WI	39.21	29.52	38.36 in 1985	December 27
Asheville, NC	79.48	45.57	75.22 in 2013	December 28
Dulles Airport, VA	66.74	41.54	65.67 in 2003	December 28
Raleigh-Durham, NC	60.29	43.34	59.14 in 1996	December 28
Crossville, TN	74.88	55.09	74.36 in 1973	December 31
Louisville, KY	68.83	44.91	68.02 in 2011	December 31
Wilmington, DE	61.37	43.08	61.05 in 1945	December 31
Pittsburgh, PA	57.83	38.19	57.41 in 2004	December 31
Columbus, OH	55.18	39.31	54.96 in 2011	December 31

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