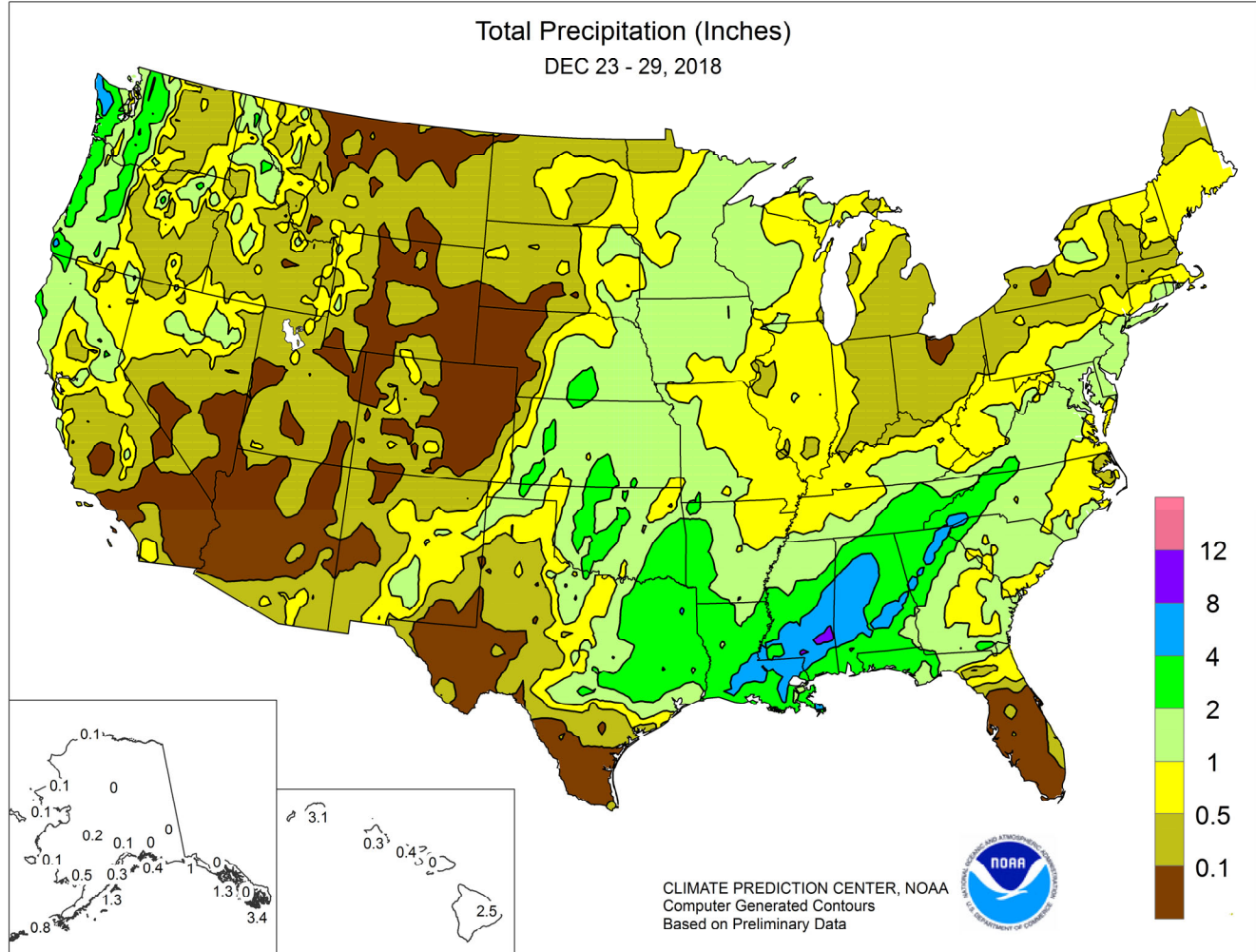


WEEKLY WEATHER AND CROP BULLETIN

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 23 – 29, 2018

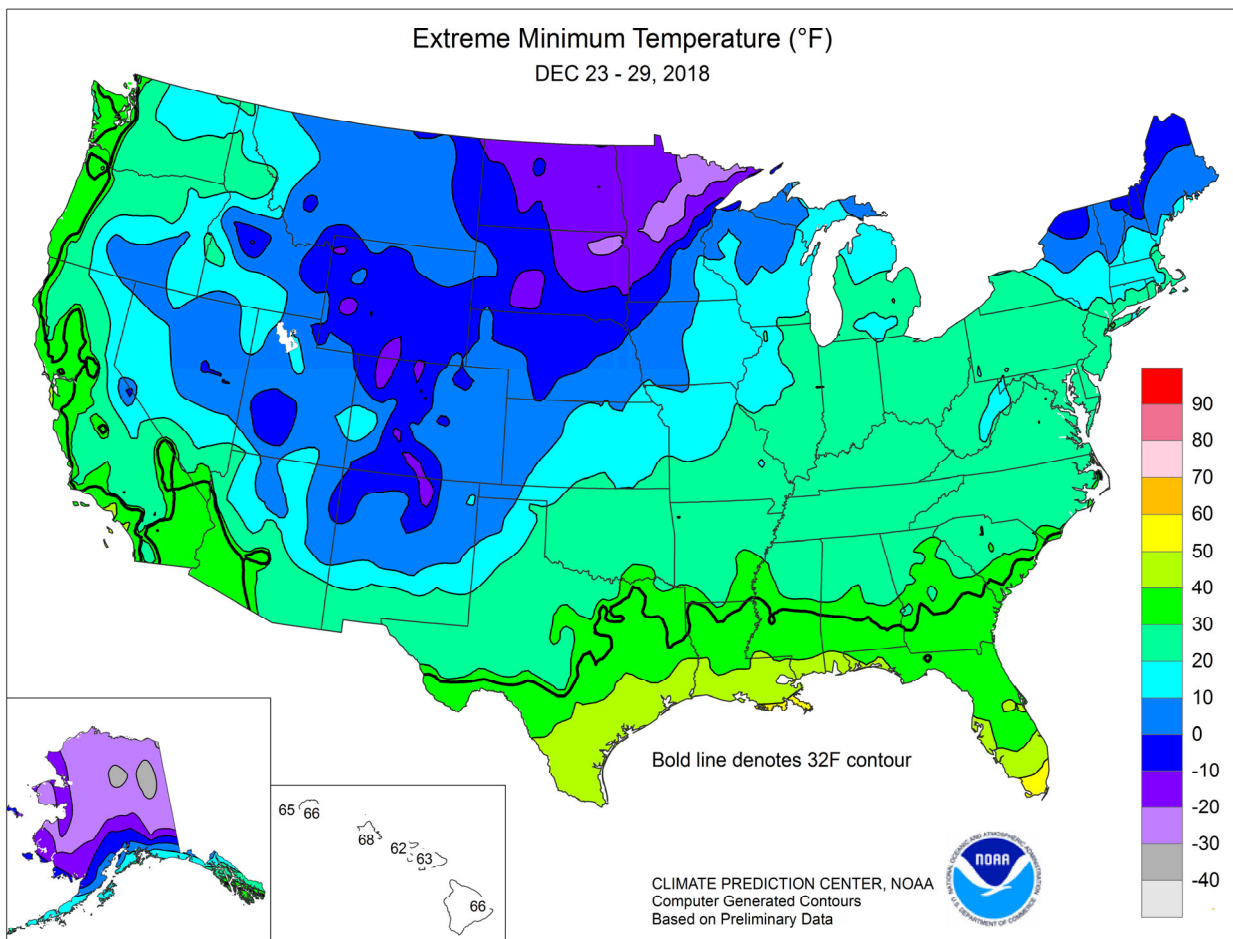
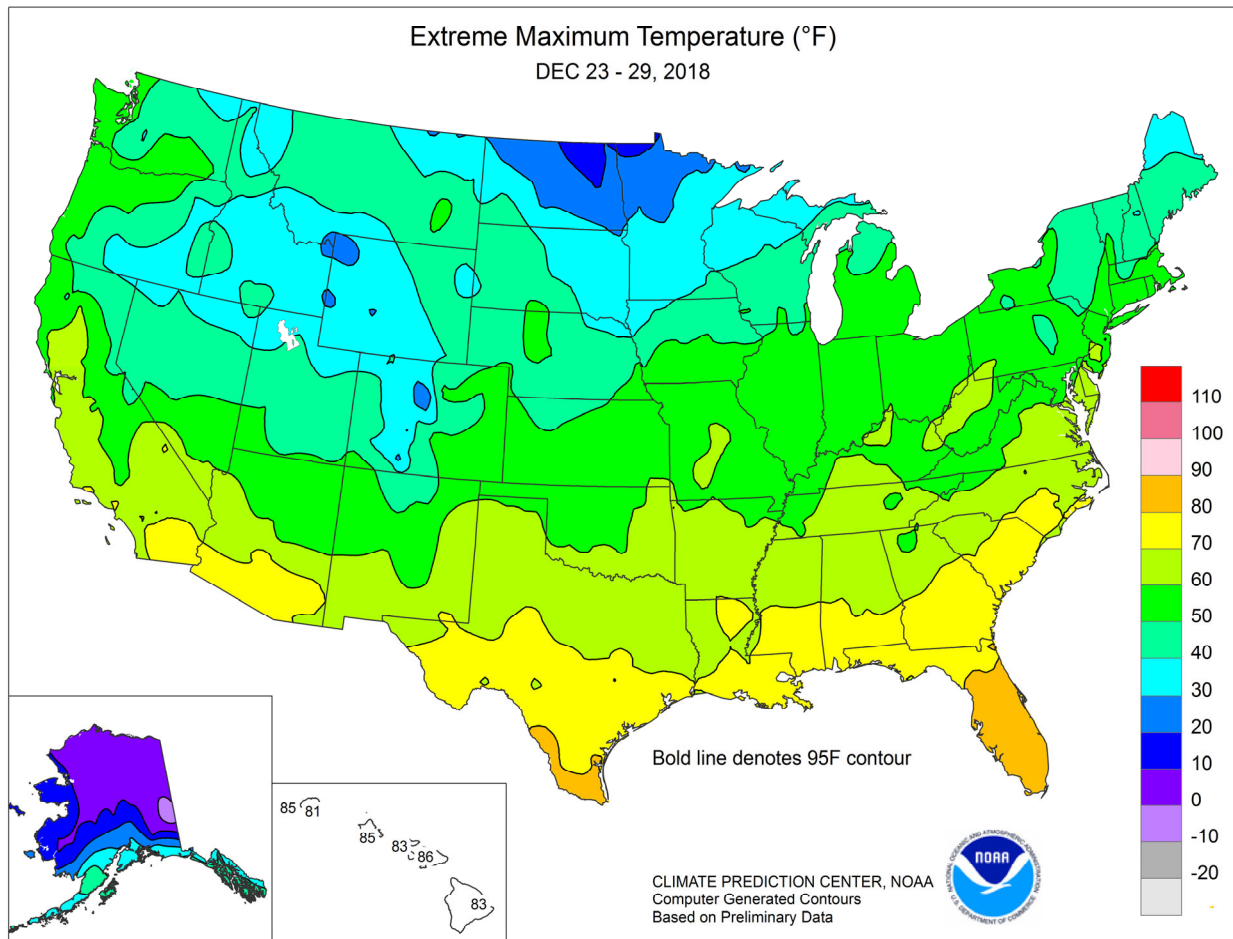
Highlights provided by USDA/WAOB

A post-Christmas storm delivered snow from the **southern High Plains into the upper Great Lakes region**, stressing livestock and snarling holiday travel plans. In addition, colder air covered the **western half of the country**, although weekly temperatures were still close to normal. In contrast, unusual warmth continued in much of the **eastern half of U.S.**, with temperatures averaging at least 5°F above normal across a broad area stretching from the **Midwest southward through the Mississippi Valley**. In the **Southeast**, locally heavy rain accompanied the

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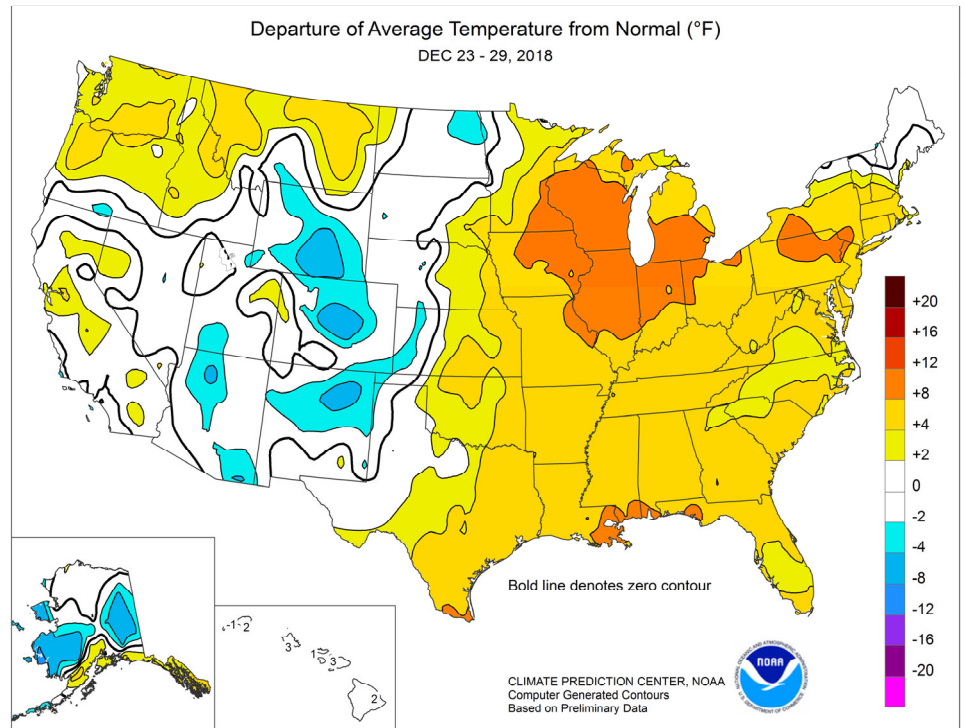
(Continued on page 3)



(Continued from front cover)

warm weather, slowing or halting off-season fieldwork and triggering pockets of flash flooding and river flooding. Weekly rainfall totaled 2 to 4 inches or more in many areas from **eastern Texas to the southern Appalachians**, with some of the highest amounts reported from **southeastern Louisiana into northern and western Alabama**. Significant precipitation also fell in the **Northwest**, particularly from the **Cascades westward**. Meanwhile, only light precipitation fell in several regions, including the **northern High Plains**, **eastern Corn Belt**, and the **Southwest**. Late in the week, markedly colder air began to overspread the **West**, lowering snow levels and contributing to a boost in high-elevation snowpack in areas where precipitation fell.

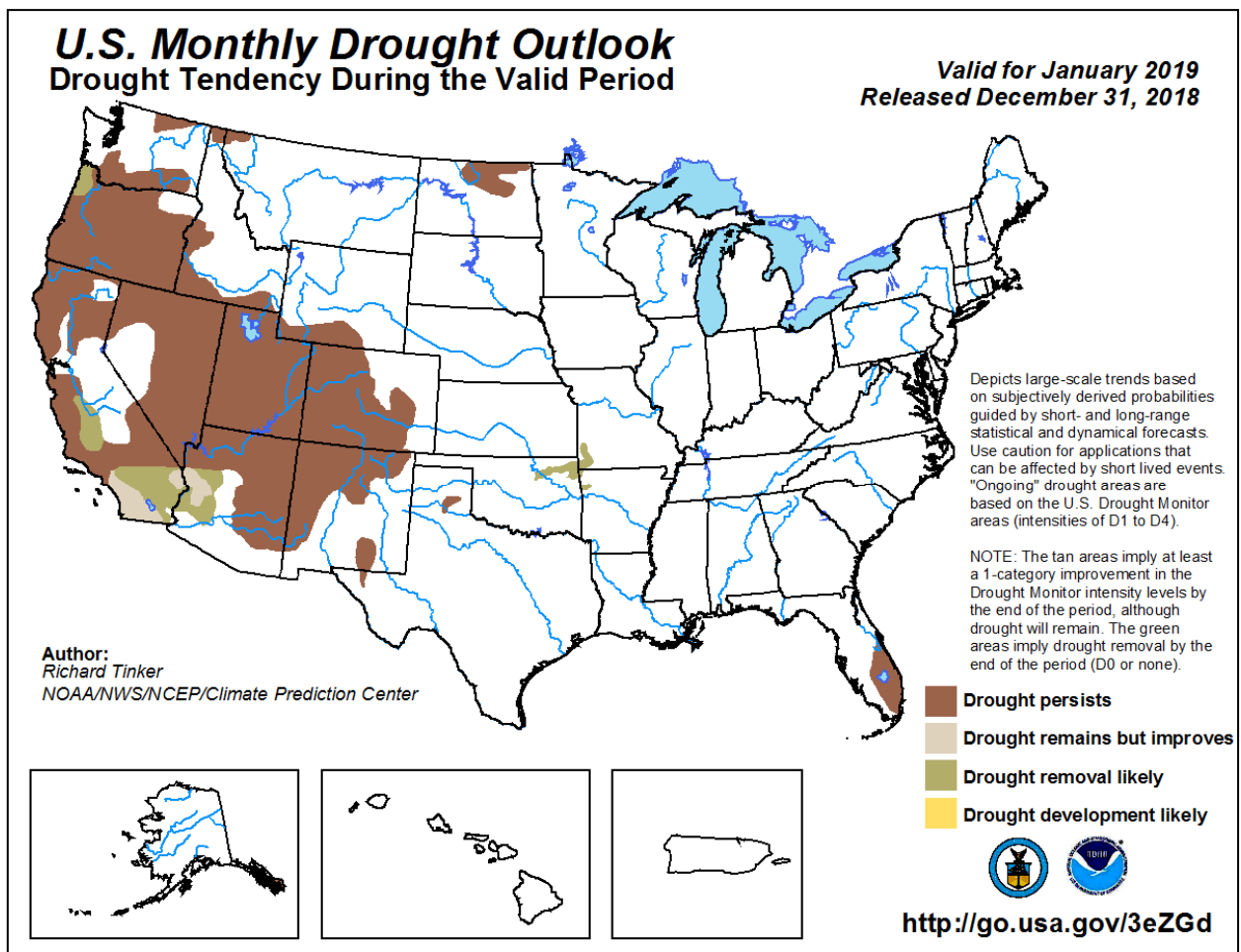
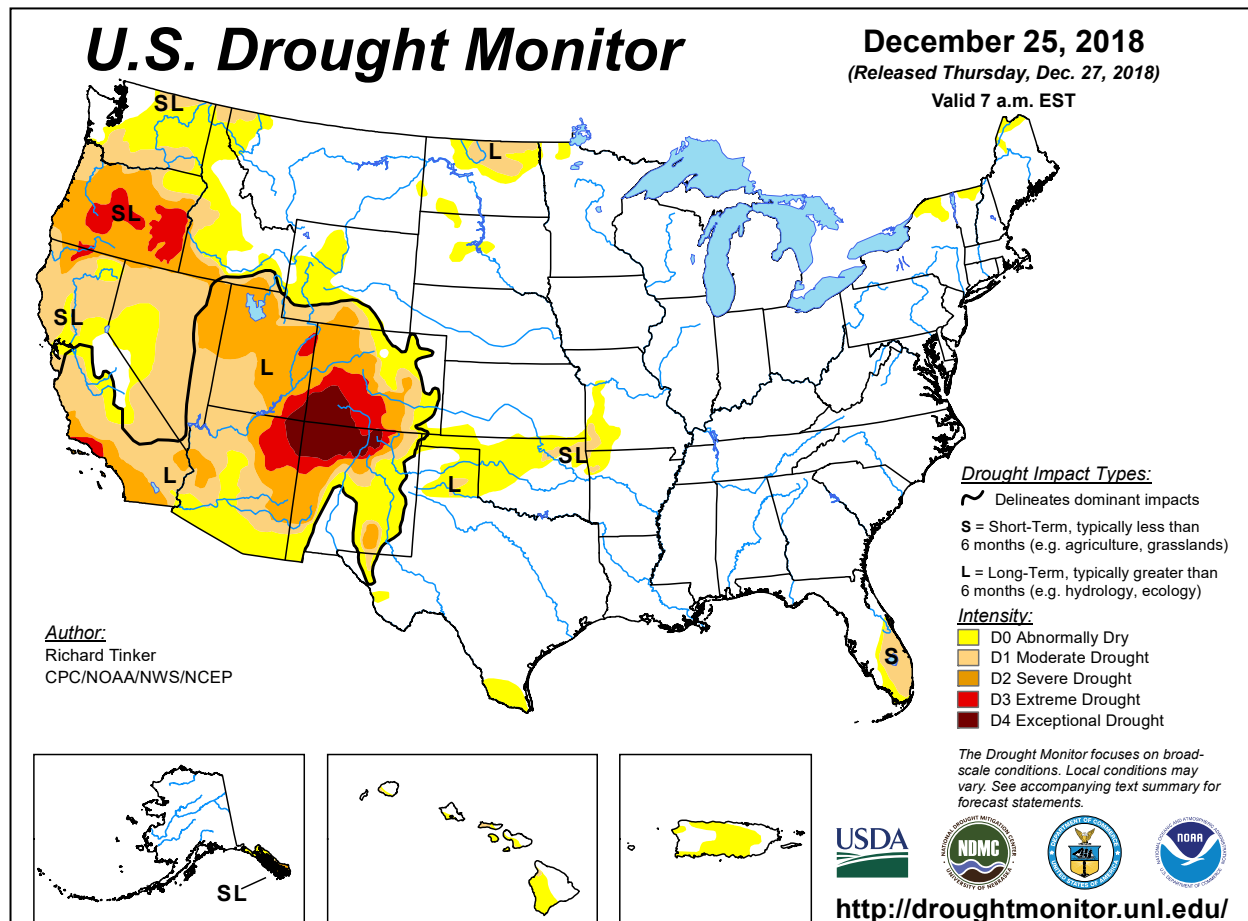
On December 24, a storm system moving into the **West** delivered daily-record precipitation totals in locations such as **Reno, NV** (0.73 inch), and **Klamath Falls, OR** (0.67 inch). All of **Reno's** Christmas Eve precipitation fell as rain. Elsewhere in **Nevada**, however, **Elko** received 8.2 inches of snow from December 23-26. By December 26, heavy precipitation erupted across the **nation's mid-section**, where daily-record totals in **Oklahoma** reached 3.97 inches in **Lawton** and 2.72 inches in **Oklahoma City**. On the same date, daily-record amounts topped an inch in locations such as **Dallas-Fort Worth, TX** (2.45 inches); **Wichita, KS** (1.72 inches); and **Grand Island, NE** (1.42 inches). In **northern Texas**, a pair of tornadoes were spotted on the 26th—one apiece in **Dickens** and **Donley Counties**—followed by 2.3 inches of snow in **Borger** from December 27-29. On December 26-27, **Guymon, OK**, received 2.31 inches of precipitation and clocked a peak wind gust to 45 mph, along with reports of as much as 10 inches of snow. Farther north, December 26-28 snowfall totals in **South Dakota** included 11.4 inches in **Mitchell**; 10.0 inches in **Watertown**; and 8.3 inches in **Aberdeen**, accompanied by northerly wind gusts that peaked at 50 to 55 mph on the 27th. **Duluth, MN**, netted a daily-record snowfall of 12.2 inches on December 27. Coverage of snow across the **Lower 48 States**, which had fallen to just under 25 percent by December 25, increased to 40 percent by the morning of the 29th. Meanwhile, torrential rain fell across parts of the **South**. Record-setting rainfall totals for the 27th reached 5.82 inches in **Hattiesburg, MS**; 3.04 inches in **College Station, TX**; and 2.70 inches in **Lafayette, LA**. For **Hattiesburg**, it was the wettest December day on record (previously, 5.33 inches on December 23, 1941) and the wettest day since January 30, 1999, when 9.85 inches fell. The rain swept into the **East** on December 28, resulting in another batch of broken annual precipitation records. By year's end, precipitation rose to 79.48 inches in **Asheville, NC** (previously, 75.22 inches in 2013), and 66.74 inches at **Virginia's Dulles Airport** (previously, 65.67 inches in 2003). Late-month rainfall was particularly impressive in **Asheville**, where 5.19 inches fell on December 27-28. **Asheville** also set record for its wettest December day (4.17 inches on the 28th; previously, 2.90 inches on December 29, 1901) and wettest



December (10.87 inches; previously, 9.16 inches in 2009). In **Florida**, **Tallahassee** (15.77 inches) and **Apalachicola** (12.08 inches) also reported record-high December precipitation. As cold air swept across the **Great Lakes**, **Marquette, MI**, collected a daily-record snowfall (8.2 inches) on December 28.

Mild weather in advance of the post-Christmas storm resulted in several daily-record highs. For example, **Madison, WI**, notched a record-tying high (50°F) for December 27. In **Florida**, daily-record highs for December 28 included 85°F in **Sarasota-Bradenton** and 84°F in **Vero Beach**. **Florida's** warmth lingered through the 29th, when daily-record highs surged to 85°F in **Vero Beach** and **Fort Pierce**. In contrast, cold air settled across much of the **West**. In **California**, daily-record lows dipped to 25°F (on December 29) in **Ramona** and 32°F (on December 28) in **Eureka**. Mild conditions quickly returned, however, across **Montana's High Plains**, due to downslope (chinook) winds. On December 29, **Cut Bank, MT**, reported an average wind speed of 30.9 mph and clocked a peak gust to 60 mph.

Mild weather returned to **Alaska**, except westernmost areas, in late December, following a brief cold spell. **King Salmon** posted a daily record-tying high of 43°F on Christmas Day, followed by consecutive daily-record highs of 49°F on December 27-28. In a few areas, significant precipitation accompanied **Alaska's** mostly above-normal temperatures. In **Anchorage**, 6.1 inches of snow fell from December 27-29. Meanwhile in **Ketchikan**, weekly rainfall totaled 4.06 inches. Farther south, warm weather prevailed in **Hawaii**, accompanied by locally heavy windward showers. Weekly rainfall in **Lihue, Kauai**, totaled 3.16 inches, nearly half (1.44 inches) of which fell on Christmas Day. December 25 was **Lihue's** wettest day since October 30, when 3.27 inches fell. **Lihue's** wet spell boosted its December rainfall to 4.04 inches (78 percent of normal). Elsewhere, **Honolulu, Oahu**, closed the week with a daily record-tying high of 85°F on December 29.



National Weather Data for Selected Cities

Weather Data for the Week Ending December 29, 2018

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
		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	TEMP. °F		PRECIP.		
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
AL	BIRMINGHAM	60	40	64	29	50	6	5.25	4.25	2.32	10.26	251	62.02	116	90	55	0	2	3	3	
	HUNTSVILLE	57	40	65	29	48	7	3.09	1.87	2.12	9.30	179	59.21	104	85	68	0	2	4	2	
	MOBILE	68	51	73	43	60	9	1.96	0.97	1.71	9.00	207	63.88	97	95	73	0	0	3	1	
AK	MONTGOMERY	67	42	71	32	54	7	4.04	3.00	2.05	9.57	205	55.07	101	94	60	0	1	3	2	
	ANCHORAGE	27	16	30	10	22	5	0.35	0.13	0.20	3.28	349	19.35	121	85	78	0	7	2	0	
	BARROW	-6	-16	1	-25	-11	1	0.05	0.05	0.03	0.33	3300	9.68	240	83	74	0	7	2	0	
	FAIRBANKS	-2	-16	8	-22	-9	-2	0.00	-0.17	0.00	0.00	0	13.33	130	75	71	0	7	0	0	
	JUNEAU	36	28	40	24	32	4	0.60	-0.63	0.35	4.69	94	54.84	95	95	87	0	7	4	0	
	KODIAK	38	26	41	19	32	2	1.35	-0.46	0.68	6.37	92	73.43	98	91	80	0	6	5	1	
AZ	NOME	6	-9	13	-26	-2	-9	0.07	-0.12	0.06	0.58	64	15.38	93	86	80	0	7	2	0	
	FLAGSTAFF	38	14	56	1	26	-3	0.12	-0.29	0.10	0.74	45	21.35	94	86	47	0	7	3	0	
	PHOENIX	64	42	73	34	53	0	0.00	-0.21	0.00	0.05	6	9.15	112	68	42	0	0	0	0	
	PRESCOTT	48	23	61	13	36	-1	0.00	-0.28	0.00	0.02	2	13.00	68	80	34	0	7	0	0	
	TUCSON	62	39	75	26	50	-1	0.64	0.39	0.35	1.36	155	13.30	111	72	42	0	1	3	0	
	FORT SMITH	54	37	63	27	45	6	2.78	2.16	1.62	4.67	142	53.32	122	82	54	0	3	2	2	
CA	LITTLE ROCK	55	38	67	28	47	6	1.04	0.12	0.93	9.04	200	70.13	138	88	53	0	2	2	1	
	BAKERSFIELD	56	41	61	31	48	2	0.10	-0.08	0.10	0.62	98	5.18	82	84	71	0	1	1	0	
	FRESNO	55	42	58	34	48	4	0.06	-0.27	0.06	0.56	49	8.65	78	91	80	0	0	1	0	
	LOS ANGELES	64	50	67	40	57	0	0.00	-0.44	0.00	1.45	94	7.79	60	66	56	0	0	0	0	
	REDDING	57	39	63	33	48	3	1.34	0.21	1.17	4.32	104	25.39	77	82	56	0	0	3	1	
	SACRAMENTO	57	39	61	33	48	3	0.49	-0.08	0.27	2.37	109	18.42	104	93	50	0	0	2	0	
CO	SAN DIEGO	64	50	66	41	57	0	0.18	-0.15	0.18	2.85	261	7.48	71	73	59	0	0	1	0	
	SAN FRANCISCO	59	46	60	41	53	4	0.44	-0.25	0.40	1.68	66	15.72	80	73	63	0	0	3	0	
	STOCKTON	59	40	61	31	49	5	0.88	0.46	0.56	2.35	147	14.14	104	84	66	0	1	2	1	
	ALAMOSA	33	2	45	-13	17	2	0.12	0.06	0.08	0.17	68	5.61	78	81	53	0	7	2	0	
	CO SPRINGS	37	15	46	2	26	-2	0.05	-0.04	0.03	0.09	29	15.41	89	85	39	0	7	2	0	
	DENVER INTL	39	14	52	5	27	-2	0.00	-0.06	0.00	0.00	0	8.80	65	78	35	0	7	0	0	
CT	GRAND JUNCTION	37	22	50	12	29	2	0.53	0.42	0.34	0.73	178	7.99	90	79	64	0	7	3	0	
	PUEBLO	42	16	52	4	29	0	0.00	-0.08	0.00	0.03	10	7.65	62	75	52	0	7	0	0	
	BRIDGEPORT	46	32	54	24	39	6	0.98	0.20	0.91	4.83	152	60.24	137	80	53	0	4	2	1	
DC	HARTFORD	43	26	54	20	35	7	0.45	-0.34	0.44	4.24	128	62.43	136	80	54	0	7	2	0	
	WASHINGTON	51	37	58	31	44	7	1.05	0.36	1.02	5.34	192	65.77	168	85	51	0	2	3	1	
	DE	WILMINGTON	49	32	60	26	41	7	1.73	0.97	1.66	6.16	197	61.33	144	93	56	0	3	3	1
FL	DAYTONA BEACH	74	55	83	40	65	5	0.00	-0.61	0.00	4.88	199	63.53	130	99	64	0	0	0	0	
	JACKSONVILLE	70	48	80	34	59	5	1.04	0.43	0.95	4.85	206	59.72	115	97	59	0	0	2	1	
	KEY WEST	79	71	83	62	75	4	0.00	-0.49	0.00	1.90	99	37.48	97	82	68	0	0	0	0	
	MIAMI	78	67	83	55	73	4	0.02	-0.42	0.01	1.58	77	61.45	105	87	67	0	0	2	0	
	ORLANDO	76	56	82	42	66	4	0.00	-0.50	0.00	6.82	320	51.86	108	93	56	0	0	0	0	
	PENSACOLA	68	53	72	45	60	7	3.38	2.47	3.12	16.12	448	90.58	142	90	68	0	0	3	1	
GA	TALLAHASSEE	70	46	74	31	58	6	1.87	0.89	1.75	15.81	432	79.89	127	96	68	0	1	2	1	
	TAMPA	76	58	82	46	67	5	0.00	-0.49	0.00	8.71	413	62.90	141	89	57	0	0	0	0	
	WEST PALM BEACH	77	63	82	46	70	3	0.33	-0.26	0.25	1.44	48	53.96	88	93	64	0	0	2	0	
	ATHENS	59	38	64	29	48	5	1.68	0.83	1.13	10.27	306	68.64	145	88	61	0	2	3	1	
	ATLANTA	59	42	63	34	50	6	4.31	3.47	3.11	11.28	321	69.47	139	81	62	0	0	3	2	
	AUGUSTA	65	41	73	29	53	8	0.55	-0.24	0.49	5.71	208	56.59	128	92	57	0	3	3	0	
	COLUMBUS	66	45	70	32	55	7	1.88	0.91	1.46	7.66	189	66.46	138	92	53	0	1	3	1	
	MACON	65	41	72	28	53	7	0.72	-0.20	0.63	6.20	175	50.48	113	98	55	0	3	3	1	
	SAVANNAH	67	45	77	34	56	6	0.79	0.08	0.70	7.94	325	47.40	96	96	59	0	0	3	1	
HI	HILO	80	68	83	66	74	2	2.53	0.55	0.80	9.17	89	172.14	137	93	88	0	0	6	3	
	HONOLULU	83	71	85	68	77	3	0.31	-0.35	0.17	0.69	27	17.01	94	84	73	0	0	5	0	
	KAHULUI	84	67	86	63	76	3	0.03	-0.72	0.01	0.59	22	21.74	118	90	80	0	0	3	0	
	LIHUE	80	69	81	66	75	2	3.10	2.03	1.73	4.00	91	51.35	131	89	79	0	0	7	2	
	BOISE	39	28	44	22	34	5	0.20	-0.08	0.12	1.24	100	10.51	87	82	75	0	6	4	0	
	LEWISTON	41	33	50	30	37	4	0.42	0.20	0.26	0.76	81	12.86	102	88	75	0	3	4	0	
ID	POCATELLO	29	17	37	8	23	-1	0.57	0.34	0.27	0.78	81	9.06	73	91	81	0	7	5	0	
	CHICAGO/O'HARE	43	28	53	22	35	10	0.80	0.33	0.67	2.33	101	48.80	135	89	70	0	6	3	1	
	MOLINE	43	25	54	18	34	10	0.82	0.38	0.69	2.05	99	45.84	121	88	68	0	6	3	1	
	PEORIA	44	27	53	19	35	10	0.88	0.44	0.83	2.33	101	45.00	125	89	62	0	6	3	1	
	ROCKFORD	42	26	51	20	34	12	0.87	0.48	0.82	2.06	105	55.00	151	86	71	0	6	3	1	
	SPRINGFIELD	46	27	54	19	37	9	0.79	0.29	0.79	2.81	117	45.39	128	91	60	0	6	1	1	
IN	EVANSVILLE	48	32	58	27	40	7	0.41	-0.28	0.41	4.84	142	59.14	134	91	73	0	5	1	0	
	FORT WAYNE	44	30	56	25	37	11	0.33	-0.23	0.33	1.68	64	43.01	118	91	71	0	5	1	0	
	INDIANAPOLIS	45	30	56	23	38	9	0.54	-0.06	0.44	2.64	92	46.61	114	91	63	0	6	3	0	
	SOUTH BEND	42	27	54	21	35	9	0.36	-0.27	0.33	1.51	52	51.54	130	89	70	0	6	2	0	
	BURLINGTON	42	26	54	18	34	9	0.56	0.17	0.52	1.35	67	42.40	112	86	62	0	6	2	1	
	CEDAR RAP																				

Weather Data for the Week Ending December 29, 2018

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
		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	PRECIP		
																			.01 INCH OR MORE	.50 INCH OR MORE	
KY	WICHITA	47	28	57	20	38	6	1.77	1.49	1.72	1.80	145	32.30	107	91	70	0	6	2	1	
	JACKSON	49	34	60	28	42	6	0.91	0.02	0.49	6.09	151	67.68	138	94	62	0	4	3	0	
	LEXINGTON	48	32	59	28	40	6	0.76	-0.11	0.48	4.70	126	76.68	168	80	68	0	5	2	0	
	LOUISVILLE	51	34	61	29	43	8	0.49	-0.28	0.42	4.42	128	71.10	160	82	57	0	3	2	0	
LA	PADUCAH	51	33	59	27	42	7	0.86	0.00	0.76	4.79	114	62.05	126	81	67	0	5	4	1	
	BATON ROUGE	67	52	74	41	59	8	4.72	3.53	4.26	9.25	192	66.59	106	97	65	0	0	4	1	
	LAKE CHARLES	67	53	73	46	60	8	1.70	0.66	1.20	5.42	129	59.91	106	98	72	0	0	3	1	
	NEW ORLEANS	70	57	75	49	63	9	2.42	1.37	1.76	5.20	109	63.76	100	96	79	0	0	4	1	
ME	SHREVEPORT	61	44	69	32	53	6	2.58	1.59	1.98	10.00	237	65.79	129	89	56	0	1	2	2	
	CARIBOU	23	3	35	-1	13	0	0.54	-0.18	0.46	3.78	129	42.01	113	82	57	0	7	2	0	
MD	PORTLAND	38	20	50	14	29	4	0.78	-0.14	0.78	3.45	88	52.60	116	81	42	0	7	1	1	
	BALTIMORE	49	30	54	23	40	5	1.09	0.33	1.07	5.79	189	72.83	175	93	55	0	4	3	1	
MA	BOSTON	44	31	57	26	38	6	0.33	-0.50	0.33	2.31	67	54.29	128	75	41	0	5	1	0	
	WORCESTER	39	24	54	19	32	5	0.53	-0.32	0.52	4.04	116	62.11	127	84	55	0	7	2	1	
MI	ALPENA	34	22	50	10	28	6	0.31	-0.08	0.16	1.53	93	32.94	117	90	71	0	7	5	0	
	GRAND RAPIDS	40	29	53	23	34	9	0.28	-0.23	0.21	1.35	52	47.29	128	87	71	0	6	5	0	
	HOUGHTON LAKE	33	22	48	16	28	7	0.21	-0.15	0.07	1.27	79	32.20	114	90	78	0	7	3	0	
	LANSING	40	28	53	21	34	9	0.21	-0.20	0.15	1.56	75	40.89	130	90	74	0	6	3	0	
MN	MUSKEGON	40	29	52	25	35	8	0.57	0.04	0.35	1.61	65	45.66	140	79	71	0	6	5	0	
	TRAVERSE CITY	37	24	51	17	31	7	0.31	-0.29	0.20	1.19	49	38.00	114	90	70	0	7	5	0	
	DULUTH	26	10	34	-9	18	7	1.32	1.18	1.19	1.52	173	31.85	103	82	75	0	7	2	1	
	INT'L FALLS	19	-2	28	-23	9	4	0.61	0.50	0.50	0.82	130	25.57	107	91	77	0	7	4	1	
MS	MINNEAPOLIS	29	18	37	9	24	8	1.26	1.07	0.95	1.48	159	35.18	120	85	76	0	6	2	1	
	ROCHESTER	30	19	40	9	25	11	1.05	0.88	0.83	2.11	220	43.70	139	95	86	0	6	3	1	
	ST. CLOUD	27	10	34	-9	18	7	0.65	0.51	0.40	0.73	116	30.51	113	91	72	0	7	3	0	
	JACKSON	64	44	71	34	54	8	3.87	2.68	3.03	7.57	153	77.54	140	90	57	0	0	4	2	
MO	MERIDIAN	65	43	72	33	54	7	5.25	4.08	3.63	9.96	203	71.18	122	90	65	0	0	3	2	
	TUPELO	57	38	63	27	47	5	1.33	-0.02	1.19	6.19	109	72.94	132	86	66	0	2	4	1	
	COLUMBIA	46	29	61	19	38	8	0.89	0.45	0.67	2.21	92	38.30	95	85	57	0	4	2	1	
	KANSAS CITY	43	26	56	15	35	6	1.21	0.91	0.91	2.26	145	42.38	112	86	59	0	5	3	1	
MT	SAINT LOUIS	49	32	59	26	40	8	0.63	0.10	0.61	2.88	105	44.20	114	80	60	0	5	2	1	
	SPRINGFIELD	47	31	61	24	39	5	0.00	-0.54	0.00	0.84	27	41.86	93	80	62	0	4	0	0	
	BILLINGS	31	18	43	10	25	0	0.37	0.22	0.17	0.39	71	23.47	160	86	66	0	7	3	0	
	BUTTE	28	8	39	-7	18	1	0.18	0.07	0.15	0.28	61	14.54	114	83	63	0	7	3	0	
NE	CUT BANK	31	15	43	8	23	3	0.00	-0.06	0.00	0.06	26	12.07	97	86	59	0	7	0	0	
	GLASGOW	28	17	37	10	22	9	0.04	-0.04	0.03	0.71	254	13.78	124	84	79	0	7	2	0	
	GREAT FALLS	33	18	44	10	26	3	0.05	-0.11	0.02	0.24	44	17.14	116	96	60	0	7	4	0	
	HAVRE	33	18	45	8	25	8	0.00	-0.11	0.00	0.14	33	14.77	130	86	74	0	7	0	0	
NV	MISSOULA	32	23	43	19	28	6	0.39	0.14	0.17	0.75	74	16.36	120	89	82	0	7	6	0	
	GRAND ISLAND	36	17	46	2	27	3	1.67	1.56	1.41	3.22	519	34.72	134	91	73	0	7	2	1	
	LINCOLN	39	18	47	4	28	4	1.45	1.31	0.89	2.79	358	40.98	145	87	75	0	7	3	2	
	NORFOLK	34	15	42	-3	25	3	1.38	1.28	0.95	2.66	443	36.86	139	93	81	0	7	2	1	
OH	NORTH PLATTE	38	12	50	-4	25	1	0.57	0.49	0.42	1.19	340	28.09	143	88	56	0	7	2	0	
	OMAHA	40	21	51	8	30	7	1.73	1.59	0.94	2.86	329	39.33	130	79	67	0	7	3	2	
	SCOTTSBLUFF	38	14	50	0	26	1	0.00	-0.11	0.00	0.22	44	23.98	147	86	60	0	7	0	0	
	VALENTINE	36	10	53	-9	23	1	0.14	0.08	0.08	0.86	297	34.80	179	84	62	0	7	3	0	
NJ	ELY	34	15	46	-1	25	0	0.07	-0.04	0.04	0.17	44	7.61	77	81	61	0	7	3	0	
	LAS VEGAS	55	41	61	35	48	2	0.07	-0.01	0.07	0.17	55	3.39	77	45	32	0	0	1	0	
	RENO	44	28	50	21	36	3	0.75	0.56	0.73	1.08	135	9.24	125	73	62	0	6	2	1	
	WINNEMUCCA	36	20	41	9	28	-1	1.51	1.34	1.09	1.88	272	9.65	118	91	79	0	6	4	1	
NY	CONCORD	36	20	47	14	28	5	0.48	-0.15	0.48	2.51	92	52.84	141	82	48	0	7	1	0	
	NEWARK	48	35	59	29	41	7	1.30	0.52	1.21	5.80	176	62.08	135	81	53	0	2	3	1	
	ALBUQUERQUE	44	25	57	11	34	-1	0.41	0.30	0.26	0.49	126	9.62	103	70	43	0	6	3	0	
	ALBANY	40	27	50	19	33	7	0.12	-0.43	0.09	2.53	102	45.05	119	75	56	0	6	2	0	
NC	BINGHAMTON	36	26	49	19	31	6	0.42	-0.19	0.29	2.09	73	57.43	149	89	79	0	6	4	0	
	BUFFALO	39	29	54	23	34	6	0.38	-0.41	0.11	2.71	76	40.98	102	90	71	0	6	6	0	
	ROCHESTER	41	30	56	23	35	8	0.24	-0.32	0.12	2.04	80	34.79	103	84	74	0	6	3	0	
	SYRACUSE	39	24	52	14	31	5	0.63	0.02	0.42	2.82	95	43.35	109	91	73	0	6	3	0	
ND	ASHEVILLE	51	32	60	26	42	5	5.21	4.47	3.98	10.57	340	79.18	169	85	60	0	4	4	2	
	CHARLOTTE	56	34	66	24	45	2	0.93	0.19	0.61	6.73	235	58.87	136	96	52	0	4	2	1	
	GREENSBORO	52	32	63	26	42	3	1.52	0.83	1.44	7.60	273	64.71	151	93	52	0	5	3	1	
	HATTERAS	60	46	70	38	53	5	0.67	-0.43	0.65	10.82	265	92.96	162	88	61	0	0	2	1	
OH	RALEIGH	57	33	68	26	45	4	1.64	0.93	1.61	6.09	223	60.15	141	94	52	0	5	3	1	
	WILMINGTON	62	40	70	29	51	4	0.99	0.13	0.81	6.94	202	102.85	181	94	52	0	2	2	1	
	BISMARCK	21	6	29	-14	14	1	0.63	0.55	0.62	0.66	183	21.65	129	85	76	0	7	2	1	
	DICKINSON	25	8	42	-2	16	0	0.00	-0.06	0.00	0.11	39	20.47	126	88	67	0	7	0	0	
OH	FARGO	19	1	25	-10	10	0	0.58	0.45	0.35	0.90	188	27.73	131	89	76	0	7	3	0	
	GRAND FORKS	13	-3	21	-17	5	-3	0.40	0.2												

Weather Data for the Week Ending December 29, 2018

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
		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	TEMP. °F		PRECIP	
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
OK	TOLEDO	44	30	57	23	37	10	0.43	-0.09	0.43	2.02	81	37.80	114	79	63	0	5	1	0
	YOUNGSTOWN	42	30	56	27	36	8	0.24	-0.35	0.18	2.33	83	55.47	146	85	67	0	6	2	0
	OKLAHOMA CITY	48	32	58	24	40	2	2.72	2.31	2.72	3.79	222	45.48	128	91	61	0	5	1	1
OR	TULSA	51	32	60	21	41	3	0.69	0.25	0.60	2.75	118	33.54	79	84	66	0	5	2	1
	ASTORIA	50	39	52	32	45	3	3.03	0.83	1.41	9.92	101	64.42	97	100	94	0	1	5	3
	BURNS	34	18	39	7	26	2	0.23	-0.05	0.09	1.11	97	7.17	69	90	82	0	7	4	0
PA	EUGENE	50	40	52	35	45	6	1.38	-0.35	0.74	5.78	73	27.95	55	90	84	0	0	4	1
	MEDFORD	42	33	49	28	37	0	1.04	0.45	0.93	3.22	118	12.07	66	97	87	0	4	5	1
	PENDLETON	42	32	54	28	37	4	1.03	0.73	0.31	1.65	122	10.52	83	92	80	0	4	7	0
	PORTLAND	49	39	53	32	44	5	1.55	0.35	0.45	5.07	94	27.28	74	92	84	0	1	6	0
	SALEM	49	40	53	34	45	5	1.37	0.02	0.72	6.18	101	31.15	79	88	81	0	0	5	1
	ALLENTOWN	46	32	52	27	39	9	1.20	0.47	1.06	5.20	166	68.66	153	81	57	0	4	3	1
	ERIE	42	32	58	30	37	7	0.33	-0.42	0.14	2.37	67	48.67	114	84	69	0	5	4	0
	MIDDLETOWN	45	32	48	25	39	8	1.27	0.62	1.15	4.81	157	66.44	165	91	57	0	3	4	1
	PHILADELPHIA	48	34	60	29	41	6	1.69	0.96	1.66	5.70	188	64.23	154	86	55	0	3	3	1
	PITTSBURGH	44	29	58	21	36	6	0.36	-0.23	0.30	4.22	158	62.30	165	94	64	0	6	3	0
RI	WILKES-BARRE	43	32	52	30	38	9	0.39	-0.11	0.28	2.65	110	61.53	165	88	62	0	4	2	0
	WILLIAMSPORT	43	33	49	27	38	9	0.47	-0.11	0.41	5.35	192	70.69	171	84	64	0	4	5	0
	PROVIDENCE	44	29	56	22	37	5	0.98	0.07	0.96	4.30	112	65.02	141	79	52	0	6	2	1
SC	CHARLESTON	65	44	74	34	55	6	0.54	-0.24	0.47	9.75	339	60.58	118	94	57	0	0	3	0
	COLUMBIA	62	38	73	27	50	5	1.37	0.54	1.25	6.97	234	49.74	104	94	59	0	4	2	1
	FLORENCE	63	40	76	29	51	5	0.67	-0.20	0.66	6.28	205	61.06	138	97	49	0	3	2	1
SD	GREENVILLE	55	35	66	29	45	3	1.11	0.22	0.60	10.86	310	67.35	135	92	54	0	4	3	1
	ABERDEEN	24	2	37	-21	13	0	0.61	0.53	0.48	0.70	250	19.36	96	86	72	0	7	3	0
	HURON	28	7	38	-17	18	2	0.77	0.70	0.52	0.97	313	23.53	113	90	70	0	7	3	1
TN	RAPID CITY	31	11	49	-3	21	-2	0.28	0.20	0.21	0.82	273	26.62	161	83	60	0	7	2	0
	SIOUX FALLS	31	13	38	-7	22	6	0.84	0.76	0.49	1.01	220	44.07	179	87	77	0	7	2	0
	BRISTOL	51	31	59	22	41	6	1.65	0.91	1.25	6.00	190	54.99	134	99	63	0	4	3	1
TX	CHATTANOOGA	54	36	63	30	45	4	2.86	1.82	1.64	8.66	194	65.57	121	87	63	0	3	4	2
	KNOXVILLE	53	35	65	27	44	5	2.65	1.66	1.41	7.02	169	61.39	128	97	69	0	4	3	2
	MEMPHIS	56	39	62	29	47	6	1.19	0.06	1.09	5.57	102	62.88	116	92	59	0	2	3	1
	NASHVILLE	53	35	63	27	44	5	0.82	-0.13	0.59	3.23	76	59.02	123	87	58	0	2	3	1
	ABILENE	54	38	68	30	46	2	0.93	0.63	0.93	3.36	297	33.64	142	81	65	0	2	1	1
	AMARILLO	47	26	65	11	36	0	0.55	0.40	0.45	0.58	121	13.60	69	90	57	0	6	4	0
	AUSTIN	65	45	77	32	55	4	1.91	1.37	1.24	6.10	272	35.64	107	77	59	0	1	2	2
	BEAUMONT	68	54	73	48	61	8	2.52	1.31	2.17	7.66	160	90.65	153	88	65	0	0	3	1
	BROWNSVILLE	78	60	84	48	69	9	0.30	0.08	0.28	0.63	62	23.02	84	95	69	0	0	2	0
	CORPUS CHRISTI	72	55	79	45	63	6	0.01	-0.38	0.01	0.78	50	40.50	126	86	66	0	0	1	0
UT	DEL RIO	66	43	77	36	54	3	0.01	-0.13	0.01	1.25	192	26.18	144	86	59	0	0	1	0
	EL PASO	55	37	67	28	46	2	0.20	0.04	0.08	0.43	65	8.37	90	69	38	0	2	3	0
	FORT WORTH	56	42	66	33	49	4	2.25	1.67	1.97	3.65	156	55.27	160	82	57	0	0	2	1
	GALVESTON	65	55	70	48	60	3	0.60	-0.18	0.49	2.75	85	59.22	136	100	72	0	0	3	0
	HOUSTON	66	51	73	44	59	7	1.71	0.91	1.30	7.32	215	58.72	123	94	67	0	0	2	1
	LUBBOCK	50	31	67	25	40	2	0.32	0.19	0.32	0.94	168	14.77	80	84	60	0	5	1	0
	MIDLAND	55	35	68	28	45	1	0.14	0.00	0.14	1.06	189	17.73	121	85	63	0	3	1	0
	SAN ANGELO	58	36	75	28	47	2	0.29	0.10	0.29	2.13	257	33.72	162	83	59	0	2	1	0
	SAN ANTONIO	65	48	75	41	56	5	0.55	0.14	0.31	2.20	122	41.04	125	82	52	0	0	2	0
	VICTORIA	69	50	76	43	59	5	0.32	-0.23	0.18	4.85	213	38.04	95	88	60	0	0	2	0
VA	WACO	60	41	69	30	51	4	1.88	1.30	1.63	4.23	165	34.48	104	82	63	0	1	2	1
	WICHITA FALLS	51	34	62	26	43	2	1.31	0.94	1.31	3.32	216	37.97	132	92	72	0	4	1	1
	SALT LAKE CITY	36	23	46	14	29	0	0.71	0.45	0.40	1.19	110	13.10	80	91	65	0	7	4	0
WV	BURLINGTON	33	15	49	7	24	2	0.53	0.09	0.38	2.58	125	39.23	109	86	63	0	7	4	0
	LYNCHBURG	50	29	61	23	39	3	1.78	1.06	1.74	7.00	238	68.12	158	89	51	0	5	2	1
	NORFOLK	56	38	70	30	47	5	0.68	-0.04	0.68	3.85	143	56.65	125	94	59	0	3	1	1
WI	RICHMOND	54	32	65	26	43	5	1.19	0.46	1.14	3.27	117	64.95	149	87	54	0	5	2	1
	ROANOKE	50	32	60	25	41	4	1.55	0.94	1.43	5.32	202	62.72	148	81	52	0	4	2	1
	WASH/DULLES	48	30	54	22	39	5	1.11	0.45	1.07	5.24	186	66.63	160	93	56	0	4	3	1
WY	OLYMPIA	46	38	50	32	42	5	2.42	0.75	0.92	7.07	95	44.05	87	98	91	0	1	5	2
	QUILLAYUTE	47	35	51	29	41	1	4.79	1.67	1.41	19.51	142	102.03	101	99	96	0	3	5	4
	SEATTLE-TACOMA	47	40	51	36	44	4	1.89	0.72	0.73	6.01	113	35.66	97	88	80	0	0	7	2
WV	SPOKANE	34	27	43	21	30	4	0.58	0.13	0.23	2.57	122	15.90	96	95	80	0	7	5	0
	YAKIMA	40	27	57	22	33	5	0.10	-0.20	0.04	0.68	55	5.06	62	91	83	0	7	4	0
	BECKLEY	45	29	56	22	37	4	0.62	-0.07	0.26	4.05	143	60.38	146	88	64	0	4	3	0
WI	CHARLESTON	50	31	62	24	40	4	0.76	0.07	0.38	5.04	162	67.13	153	98	60	0	5	3	0
	ELKINS	45	25	59	17	35	4	1.01	0.27	0.53	3.80	119	69.52	152	86	67	0	6	4	1
	HUNTINGTON	49	31	61	25	40	5	0.91	0.17	0.56	4.82	154	64.26	153	88	58	0	6	2	1
WY	EAU CLAIRE	29	19	37	11	24	9	0.74	0.55	0.67	0.80	83	39.36	123	94	71	0	7	3	1
	GREEN BAY	36	23	47	13	30	11	0.53												

International Weather and Crop Summary

A summary of weather events occurring since December 16, 2018, will be published in *Weekly Weather and Crop Bulletin* Volume 106, No 6.

December 2018

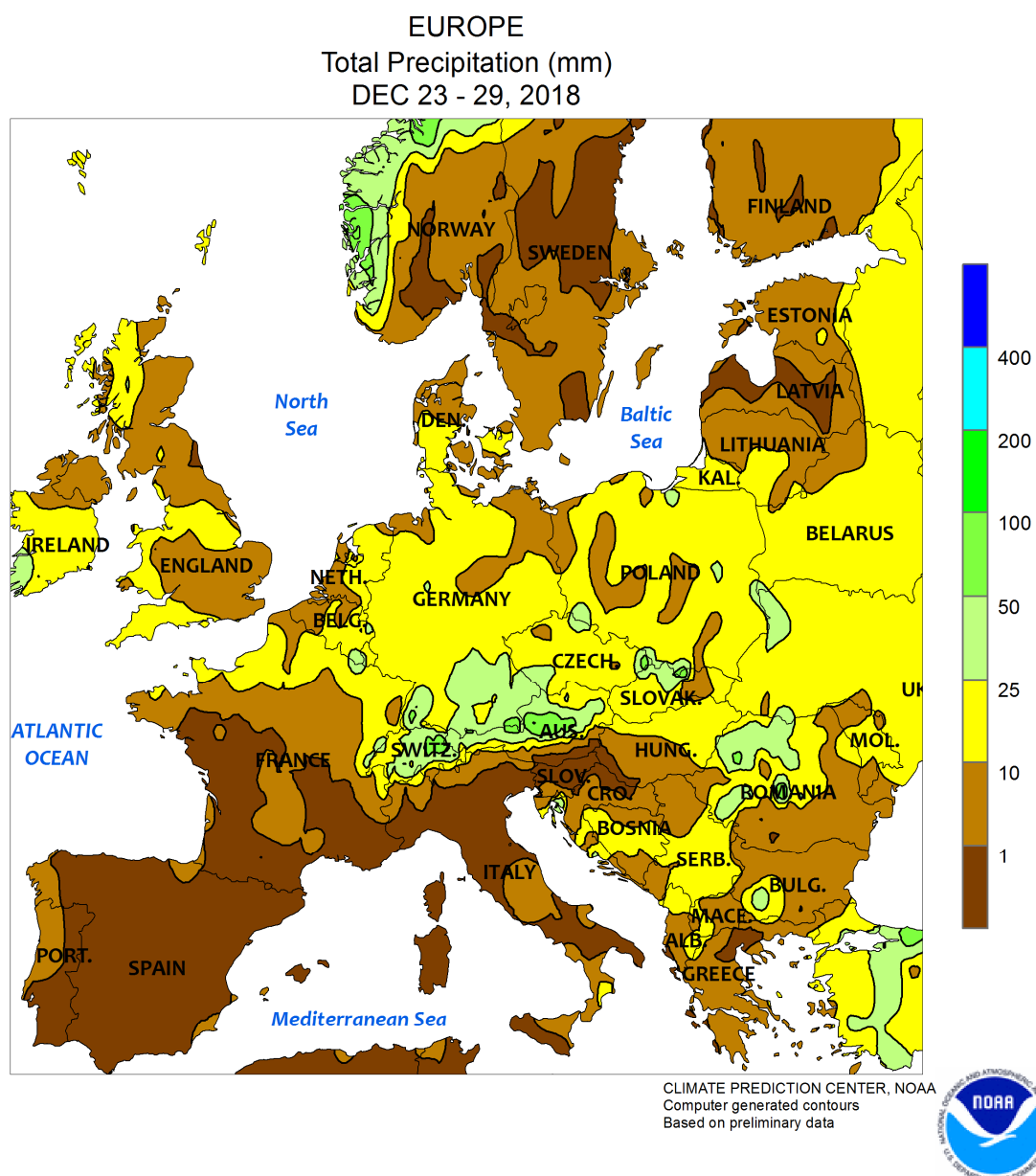
COUNTRY	CITY	TEMPERATURE (C)					PRECIP. (MM)		
		AVG MAX	AVG MIN	HI MAX	LO MIN	DEP AVG	DEP NRM	TOT	DEP NRM
ALGERI	ALGER	20	6	25	2	13	1.3	31	-59
	BATNA	16	0	22	-6	8	1	5	-26
ARGENT	IGUAZU	33	20	38	13	26	0.8	45	-141
	FORMOSA	33	22	39	14	27	0.6	91	-67
	CERES	31	19	40	11	25	0.8	108	-42
	CORDOBA	30	16	37	10	23	-0.3	124	-39
	RIO CUARTO	29	16	36	11	22	0.1	84	-72
	ROSARIO	28	17	34	9	23	-0.7	172	63
	BUENOS AIRES	27	16	33	6	22	-0.5	229	143
	SANTA ROSA	30	15	37	6	23	0.2	129	27
	TRES ARROYOS	28	14	37	4	21	1.1	10	-82
AUSTRA	DARWIN	33	27	35	23	30	1.3	40	-236
	BRISBANE	28	22	33	18	25	0.4	63	-54
	PERTH	30	15	41	9	23	0.6	1	-6
	CEDUNA	27	16	43	9	22	0.7	0	-18
	ADELAIDE	27	17	38	11	22	1.9	9	-15
	MELBOURNE	26	15	39	8	20	2.5	101	54
	WAGGA	32	18	41	10	25	3.3	57	7
	CANBERRA	29	14	37	8	22	2.8	106	60
AUSTRI	VIENNA	5	1	13	-4	3	1.7	88	48
	INNSBRUCK	5	-2	11	-10	2	1.8	109	54
BAHAMA	NASSAU	28	21	31	15	24	1.9	35	-22
BARBAD	BRIDGETOWN	29	24	30	22	27	0.4	68	-36
BELARU	MINSK	-1	-3	3	-12	-2	1.2	56	5
BERMUD	ST GEORGES	21	18	25	13	20	0	78	-31
BOLIVI	LA PAZ	17	3	21	-3	10	0.4	117	-34
BRAZIL	FORTALEZA	30	25	32	23	28	-0.6	188	152
	RECIFE	30	26	30	23	28	-1.3	24	-17
	CAMPO GRANDE	32	22	35	16	27	1	79	-131
	FRANCA	28	19	32	14	24	1.3	217	-28
	RIO DE JANEIRO	31	24	37	17	27	1.3	54	-83
	LONDRINA	32	21	35	13	27	3.4	52	-194
	SANTA MARIA	30	19	38	10	24	0.1	174	57
	TORRES	28	20	33	11	24	-0.8	45	-47
BULGAR	SOFIA	3	-2	12	-11	1	-0.3	25	-16
BURKIN	OUAGADOUGOU	33	18	35	16	26	0.6	0	-1
CANADA	LETHBRIDGE	3	-8	12	-23	-3	*****	3	*****
	REGINA	-4	-14	4	-30	-9	*****	5	*****
	WINNIPEG	-6	-13	5	-29	-10	*****	12	*****
	TORONTO	3	-3	12	-9	0	2.5	52	-8
	MONTREAL	-1	-9	6	-18	-5	0.8	98	20
	PRINCE ALBERT	-7	-17	7	-37	-12	3.7	10	-8
	CALGARY	2	-8	9	-19	-3	4.3	13	1
	VANCOUVER	8	2	13	-6	5	1.3	255	80
CANARY	LAS PALMAS	23	17	25	14	20	0.9	1	-29
CHILE	SANTIAGO	30	13	33	9	21	1.5	1	-2
CHINA	HARBIN	-8	-17	8	-25	-13	1.5	5	-1
	HAMI	-5	-17	3	-22	-11	-4.1	3	2
	BEIJING	3	-7	10	-14	-2	-1.4	0	-3
	TIENTSIN	3	-6	10	-12	-1	-0.7	2	-2
	LHASA	7	-8	13	-13	0	0.1	12	*****
	KUNMING	18	5	20	0	11	2.7	40	26
	CHENGCHOW	6	-1	18	-9	3	0.8	14	4
	YEHCHANG	8	4	18	-4	6	-1.8	30	12
	HANKOW	8	3	18	-9	6	-1.1	91	66
	CHUNGKING	11	8	18	3	10	0.4	46	23
	CHIHKIANG	8	4	18	-4	6	-1.5	38	9
	WU HU	8	4	18	-5	6	0.4	152	116
	SHANGHAI	11	6	22	-3	9	0.7	163	125
	NANCHANG	10	6	22	-2	8	-0.3	122	81
	TAIPEI	22	18	30	13	20	2	52	-18
	CANTON	20	13	29	5	17	0.9	23	-9
	NANNING	17	12	28	3	15	-1	31	7
COLOMB	BOGOTA	21	6	23	3	13	0.4	23	-23
COTE D	ABIDJAN	32	26	33	23	29	1.4	39	-37
CUBA	CAMAGUEY	29	20	32	16	25	1.3	25	10
CYPRUS	LARNACA	20	11	22	5	15	2	135	63
CZECHR	PRAGUE	4	1	12	-5	3	2.4	44	18
DENMAR	COPENHAGEN	6	3	11	-2	4	2.4	75	29
EGYPT	CAIRO	20	14	23	11	17	1.6	10	5

Based on Preliminary Reports

December 2018

COUNTRY	CITY	TEMPERATURE (C)					PRECIP. (MM)			COUNTRY	CITY	TEMPERATURE (C)					PRECIP. (MM)		
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	TOT	DEP NRM			AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	TOT	DEP NRM
ESTONI	TALLINN	-1	-3	5	-10	-2	0.3	38	-23	MOZAMB	MAPUTO	33	23	40	17	28	2.2	35	-57
ETHIOP	ADDIS ABABA	24	10	26	7	17	1.2	0	-18	N KORE	PYONGYANG	1	-7	10	-14	-3	-0.8	14	-3
F GUIA	CAYENNE	30	24	30	21	27	0.8	392	58	NEW CA	NOUMEA	29	23	33	20	26	0.7	28	-51
FIJI	NAUSORI	30	23	32	19	27	1.3	488	228	NIGER	NIAMEY	32	19	34	16	25	0.4	0	0
FINLAN	HELSINKI	-1	-3	5	-13	-2	1.2	44	-12	NORWAY	OSLO	-2	-5	5	-15	-4	0.8	49	-14
FRANCE	PARIS/ORLY	9	5	15	-3	7	1.6	64	6	NZEALA	AUCKLAND	22	16	25	11	19	*****	208	*****
	STRASBOURG	7	3	16	-3	5	2.7	37	-9		WELLINGTON	20	15	23	10	17	*****	87	*****
	BOURGES	9	4	15	-6	7	2.2	63	-1	P RICO	SAN JUAN	30	23	31	22	26	0.8	57	-59
	BORDEAUX	12	7	17	-1	10	2.7	95	-11	PAKIST	KARACHI	28	13	32	9	21	0.5	0	-4
	TOULOUSE	12	6	18	0	9	2.5	52	2	PERU	LIMA	26	19	27	17	23	1.4	0	0
	MARSEILLE	13	4	18	0	9	1.0	30	-21	PHILIP	MANILA	30	25	33	22	28	0.7	122	59
GABON	LIBREVILLE	30	25	31	23	28	1.2	213	-122	PNEWGU	PORT MORESBY	33	26	36	24	30	2.4	117	-5
GERMAN	HAMBURG	7	4	12	-2	5	2.8	106	28	POLAND	WARSAW	3	0	8	-12	2	1.8	49	14
	BERLIN	6	3	14	-2	5	2.7	45	-10		LODZ	3	0	8	-11	2	1.9	63	18
	DUSSELDORF	8	4	14	-2	6	1.9	93	17		KATOWICE	3	0	8	-10	2	1.7	73	26
	LEIPZIG	6	3	14	-3	5	2.9	55	14	PORTUG	LISBON	16	9	20	6	13	0.8	25	-74
	DRESDEN	5	2	14	-3	4	2.0	78	35	ROMANI	BUCHAREST	3	-3	10	-13	0	-0.4	60	21
	STUTTGART	6	2	14	-5	4	2.4	65	10	RUSSIA	ST.PETERSBURG	-2	-4	3	-12	-3	0.6	39	-9
	NURNBERG	6	2	13	-6	4	2.6	127	74		KAZAN	-7	-10	-2	-16	-8	-0.1	53	16
	AUGSBURG	5	1	13	-6	3	2.2	77	24		MOSCOW	-4	-7	2	-16	-6	-0.3	56	7
GREECE	THESSALONIKA	10	3	15	-1	7	-0.2	34	-14		YEKATERINBURG	-9	-13	-1	-25	-11	-0.4	13	-12
	LARISSA	11	1	15	-4	6	-0.7	22	-26		OMSK	-14	-21	-6	-37	-18	-4.1	14	-16
	ATHENS	14	8	19	3	11	-0.7	72	14		BARNAUL	-15	-23	-4	-36	-19	-6.2	22	-6
GUADEL	RAIZET	29	21	30	19	25	0.1	62	-75		KHABAROVSK	-12	-18	5	-25	-15	2.3	3	-14
HONGKO	HONG KONG INT	22	17	29	9	20	1.2	18	-8		VLADIVOSTOK	-5	-10	7	-18	-8	1.3	16	2
HUNGAR	BUDAPEST	4	-1	11	-11	2	0.7	30	-8		VOLGOGRAD	-3	-6	2	-18	-5	0.3	76	38
ICELAN	REYKJAVIK	4	2	10	-5	3	2.9	66	-16		ASTRAKHAN	1	-3	6	-9	-1	1.2	26	12
INDIA	AMRITSAR	21	5	25	0	13	-0.2	1	-11		ORENBURG	-9	-14	-1	-29	-12	-2.7	21	-13
	NEW DELHI	23	7	28	3	15	-0.8	1	-7	S AFRI	JOHANNESBURG	28	16	34	11	22	3.0	123	8
	AHMEDABAD	28	13	31	8	21	-0.8	0	-2		DURBAN	28	20	33	16	24	0.7	150	35
	INDORE	25	11	29	7	18	-0.6	0	-5		CAPE TOWN	26	16	30	11	21	1.1	14	-7
	CALCUTTA	25	15	29	9	20	-0.4	10	-2	S KORE	SEOUL	4	-4	14	-14	0	-0.7	17	-6
	VERAVAL	30	17	33	14	24	0.2	0	*****	SAMOA	PAGO PAGO	31	26	33	23	29	0.9	543	203
	BOMBAY	32	18	35	12	25	-0.1	0	*****	SENEGA	DAKAR	29	21	36	19	25	2.1	0	-5
	POONA	29	12	33	6	21	0.6	0	-7	SPAIN	VALLADOLID	10	3	16	-2	7	1.7	23	-30
	BEGAMPET	28	17	32	10	23	1.2	48	44		MADRID	12	3	17	-1	7	0.8	9	-38
	VISHAKHAPATNAM	28	22	31	16	25	0.6	120	113		SEVILLE	19	8	23	5	13	1.0	10	-90
	MADRAS	30	23	31	21	26	1.3	97	-86	SWITZE	ZURICH	5	2	13	-5	3	1.9	163	83
	MANGALORE	33	23	35	19	28	0.6	19	4		GENEVA	7	3	14	-4	5	2.4	115	29
INDONE	SERANG	32	24	35	23	28	0.9	201	5	SYRIA	DAMASCUS	15	6	19	0	10	3.0	13	-32
IRELAN	DUBLIN	10	6	13	2	8	1.8	83	7	TAHITI	PAPEETE	32	25	33	24	28	1.6	128	-210
ITALY	MILAN	8	0	18	-4	4	1.1	17	-37	TANZAN	DAR ES SALAAM	33	25	35	24	29	1.6	86	-17
	VENICE	8	1	13	-3	4	0.4	14	-34	THAILA	PHITSANULOK	32	22	36	17	27	2.8	12	6
	GENOA	14	8	20	2	11	1.2	62	-21		BANGKOK	34	25	37	23	30	3.4	49	44
	ROME	15	6	19	-1	10	0.7	33	-51	TOGO	TABLIGBO	35	23	37	19	29	1.6	0	-21
	NAPLES	15	6	19	0	10	0.4	49	-60	TRINID	PORT OF SPAIN	30	22	31	20	26	0.4	60	-75
JAMAIC	KINGSTON	31	24	33	22	27	0.8	30	-6	TUNISI	TUNIS	18	11	21	6	15	1.7	18	-44
JAPAN	SAPPORO	1	-3	13	-9	-1	-0.2	91	-14	TURKEY	ISTANBUL	10	6	17	0	8	-0.2	95	4
	NAGOYA	12	5	20	-1	9	1.9	63	26		ANKARA	6	-2	11	-18	2	0.8	54	8
	TOKYO	12	5	23	-1	9	0.2	46	6	TURKME	ASHKHABAD	10	4	23	0	7	2.0	41	19
	YOKOHAMA	12	6	23	1	9	0.8	75	27	UKINGD	ABERDEEN	7	2	13	-6	5	0.5	28	-49
	KYOTO	12	6	23	0	9	1.3	64	17		LONDON	10	5	16	-1	8	1.9	67	12
	OSAKA	13	7	25	2	10	1.5	75	37	UKRAIN	KIEV	-1	-3	3	-13	-2	-0.4	80	40
KAZAKH	KUSTANAY	-11	-18	-4	-31	-15	-2.8	11	-13		LVOV	1	-2	9	-14	0	1.1	82	32
	TSELINOGRAD	-11	-17	-4	-33	-14	-1.8	13	-8		KIROVOGRAD	-1	-4	2	-14	-2	0.2	74	41
	KARAGANDA	-10	-18	-2	-30	-14	-2.9	16	-7		ODESSA	3	-1	8	-9	1	-0.4	36	-2
KENYA	NAIROBI	25	16	27	15	20	0.9	208	136		KHARKOV	-2	-4	2	-14	-3	-0.1	77	39
LIBYA	BENGHAZI	17	***	19	***	***	*****	75	3	UZBEKI	TASHKENT	9	2	17	-7	6	1.9	54	2
LITHUA	KAUNAS	0	-2	5	-13	-1	0.7	82	34	YUGOSL	BELGRADE	6	1	14	-7	4	0.9	67	15
LUXEMB	LUXEMBOURG	6	2	12	-5	4	2.0	172	86	ZAMBIA	LUSAKA	27	21	34	18	24	1.2	79	-71
MALAYS	KUALA LUMPUR	33	25	35	24	29	2.3	220	-26	ZIMBAB	KADOMA	***	***	33	15	***	*****	*****	*****
MALI	BAMAKO	33	17	35	11	25	-0.1	0	-1										
MARSHA	MAJURO	30	27	31	25	28	1.1	266	-17										
MARTIN	LAMENTIN	29	23	30	20	26	0.9	114	-56										
MAURIT	NOUAKCHOTT	***	***	28	11	***	*****	*****	*****										
MEXICO	GUADALAJARA	22	9	26	2	15	-0.2	3	-14										
	TLAXCALA	21	7	25	2	14	0.9	3	-3										
	ORIZABA	22	14	30	5	18	1.8	39	-4										
MOROCC	CASABLANCA	19	10	23	5	15	1.0	4	-74										
	MARRAKECH	24	7	28	4	15	2.6	3	-19										

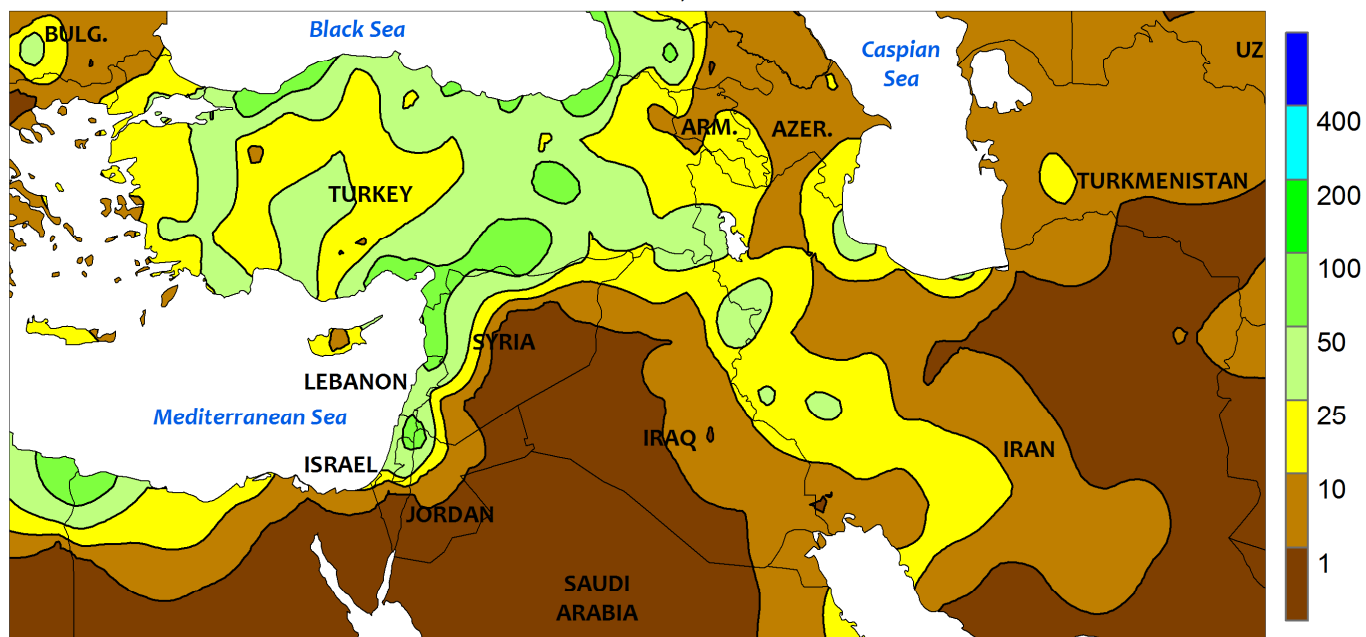
Based on Preliminary Reports



EUROPE

A summary of weather events occurring since December 16, 2018, will be published in *Weekly Weather and Crop Bulletin* Volume 106, No 6.

MIDDLE EAST
Total Precipitation (mm)
DEC 23 - 29, 2018



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



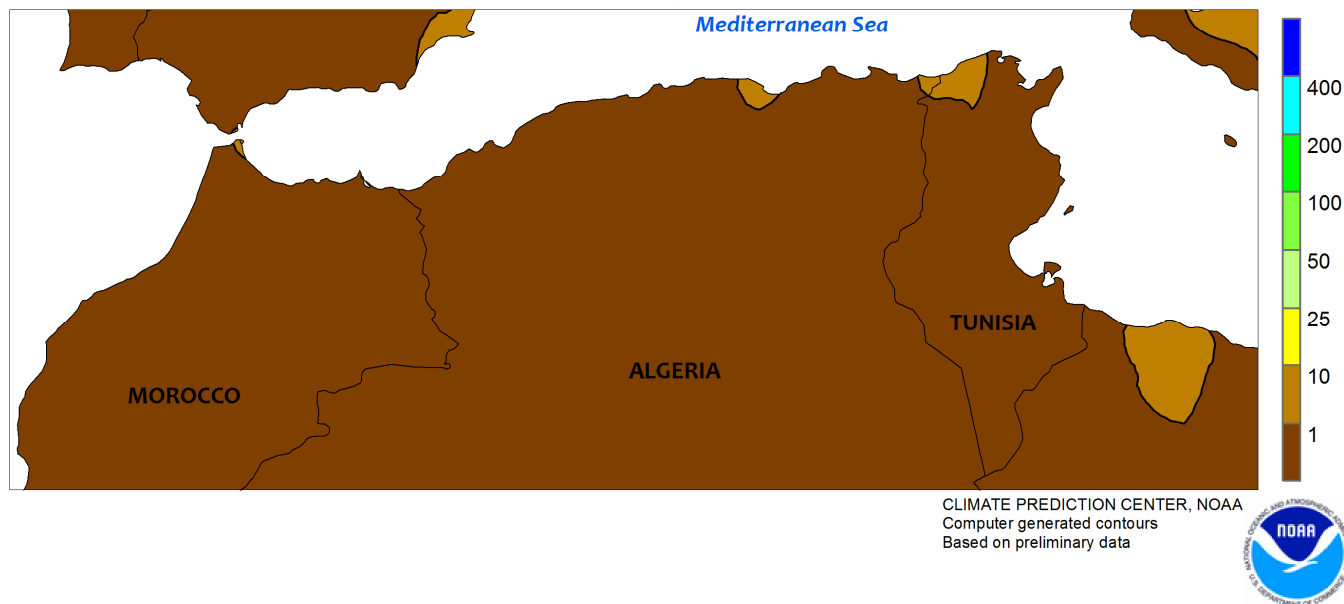
MIDDLE EAST

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NORTHWESTERN AFRICA

Total Precipitation (mm)

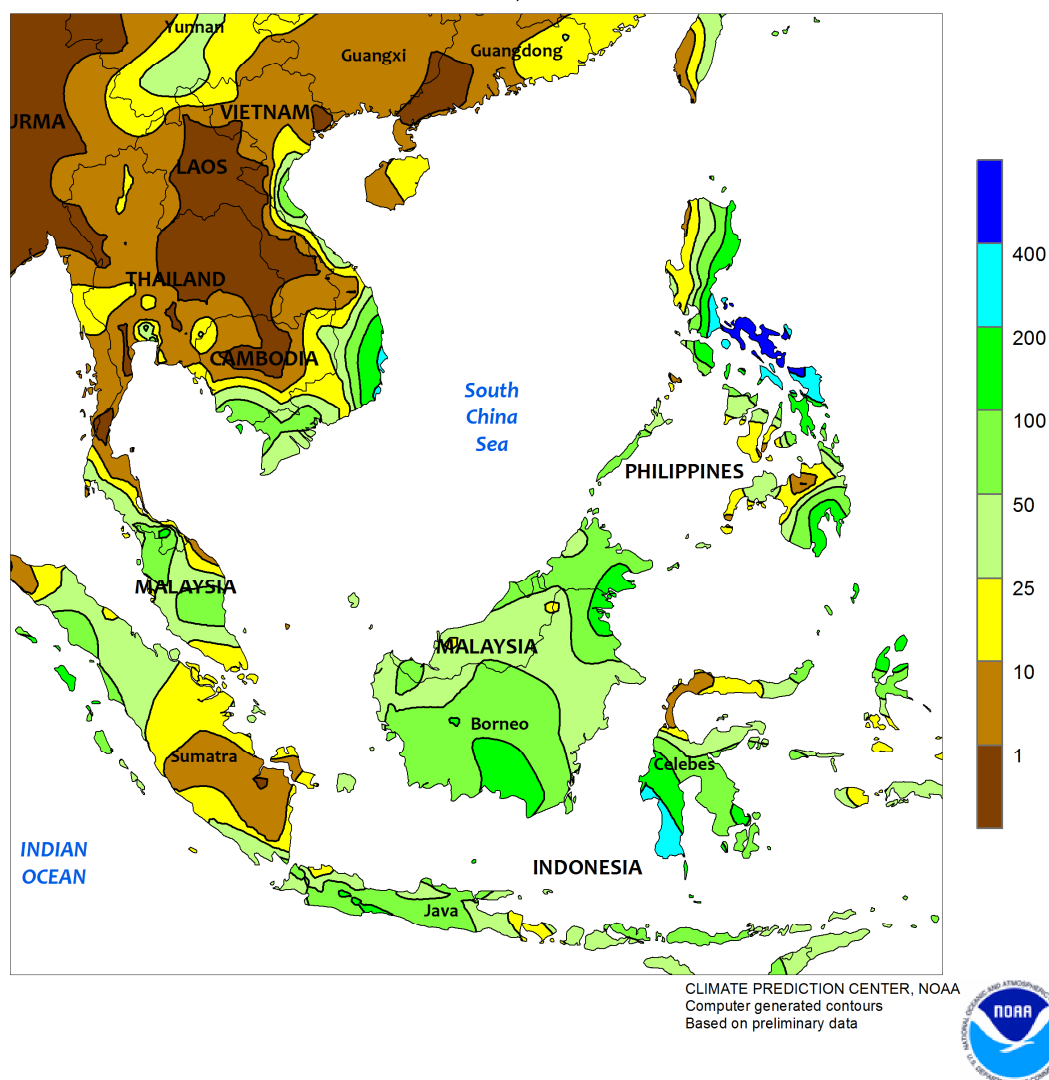
DEC 23 - 29, 2018



NORTHWESTERN AFRICA

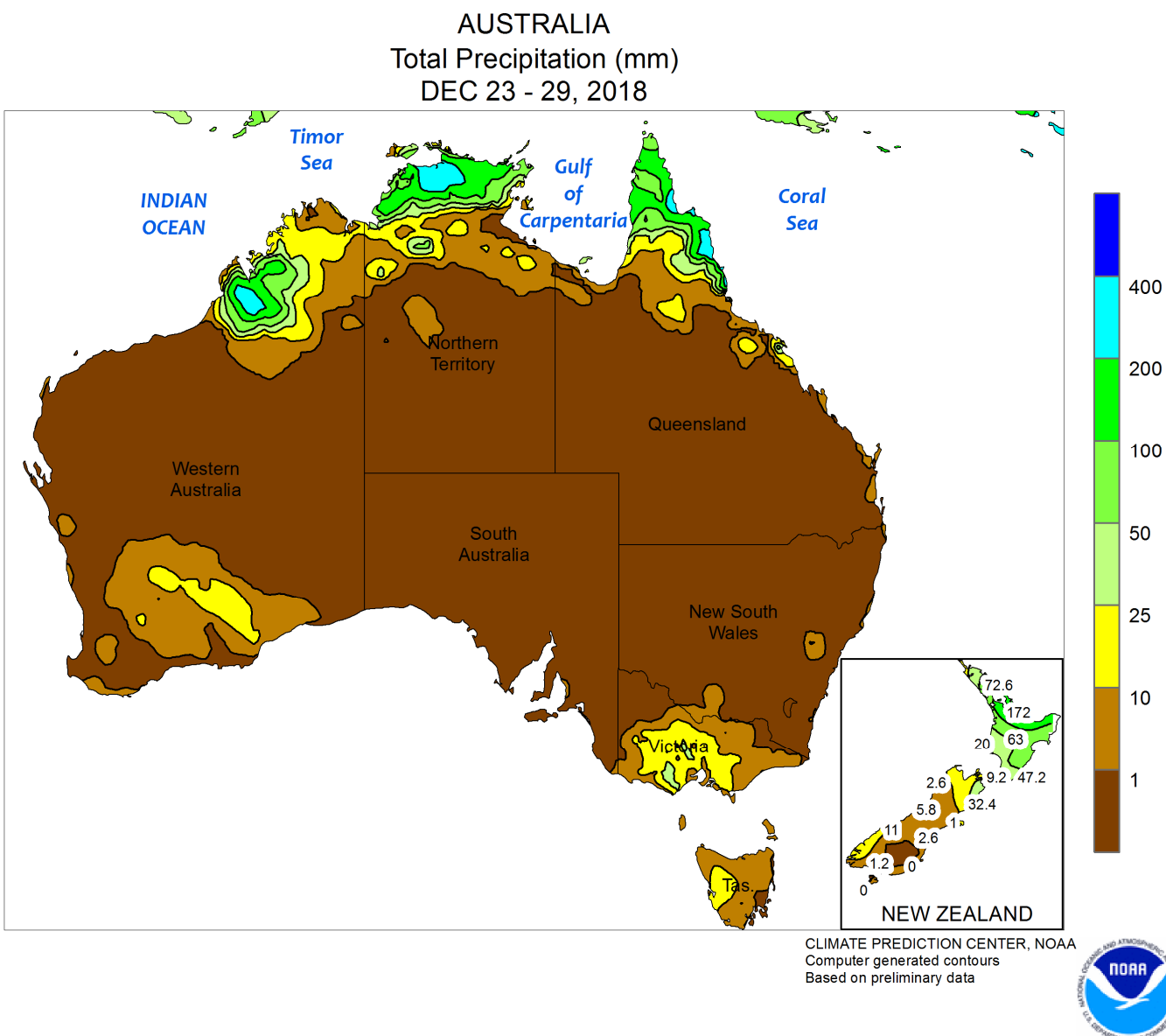
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SOUTHEAST ASIA
Total Precipitation (mm)
DEC 23 - 29, 2018



SOUTHEAST ASIA

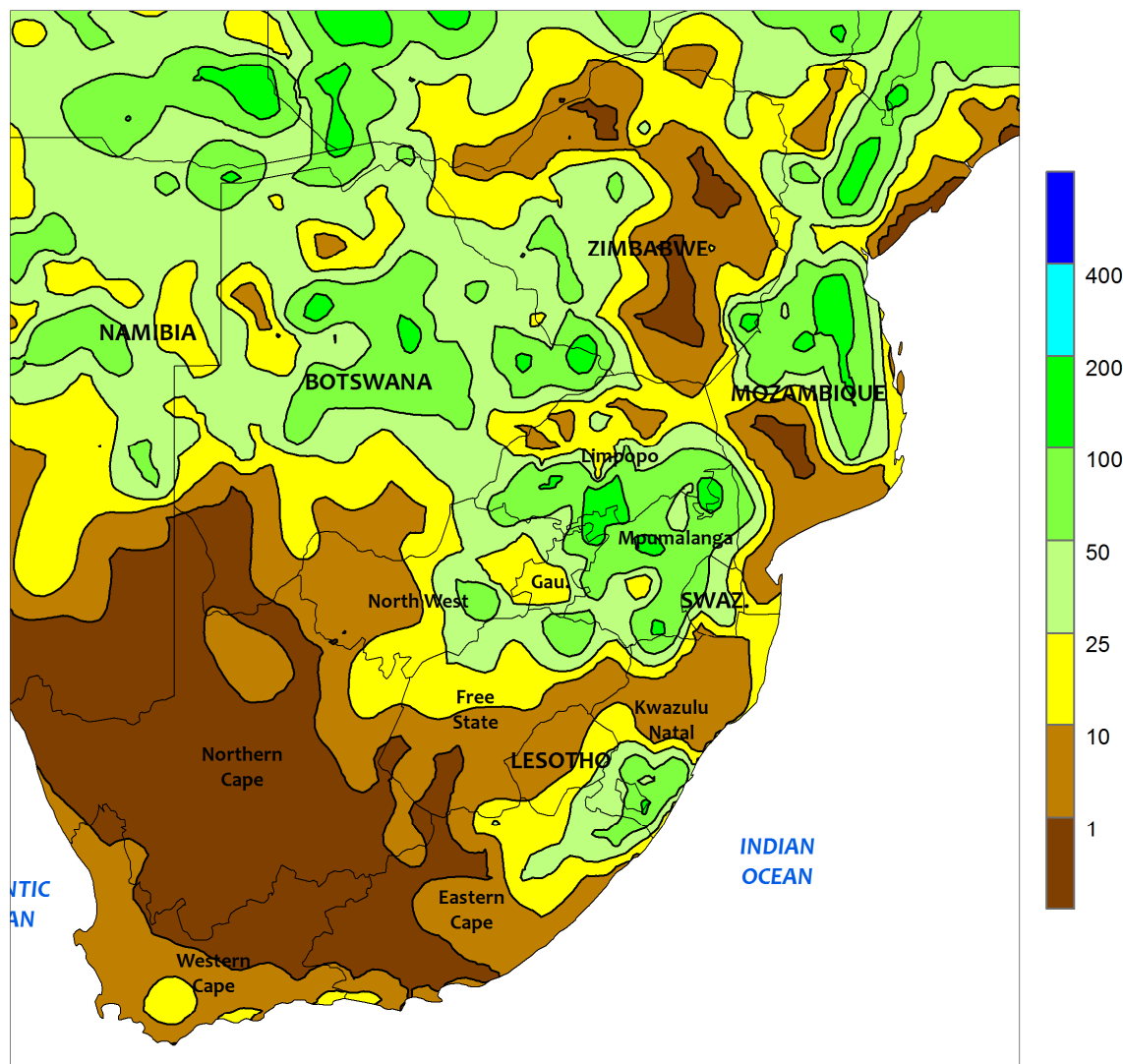
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AUSTRALIA

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SOUTH AFRICA
Total Precipitation (mm)
DEC 23 - 29, 2018



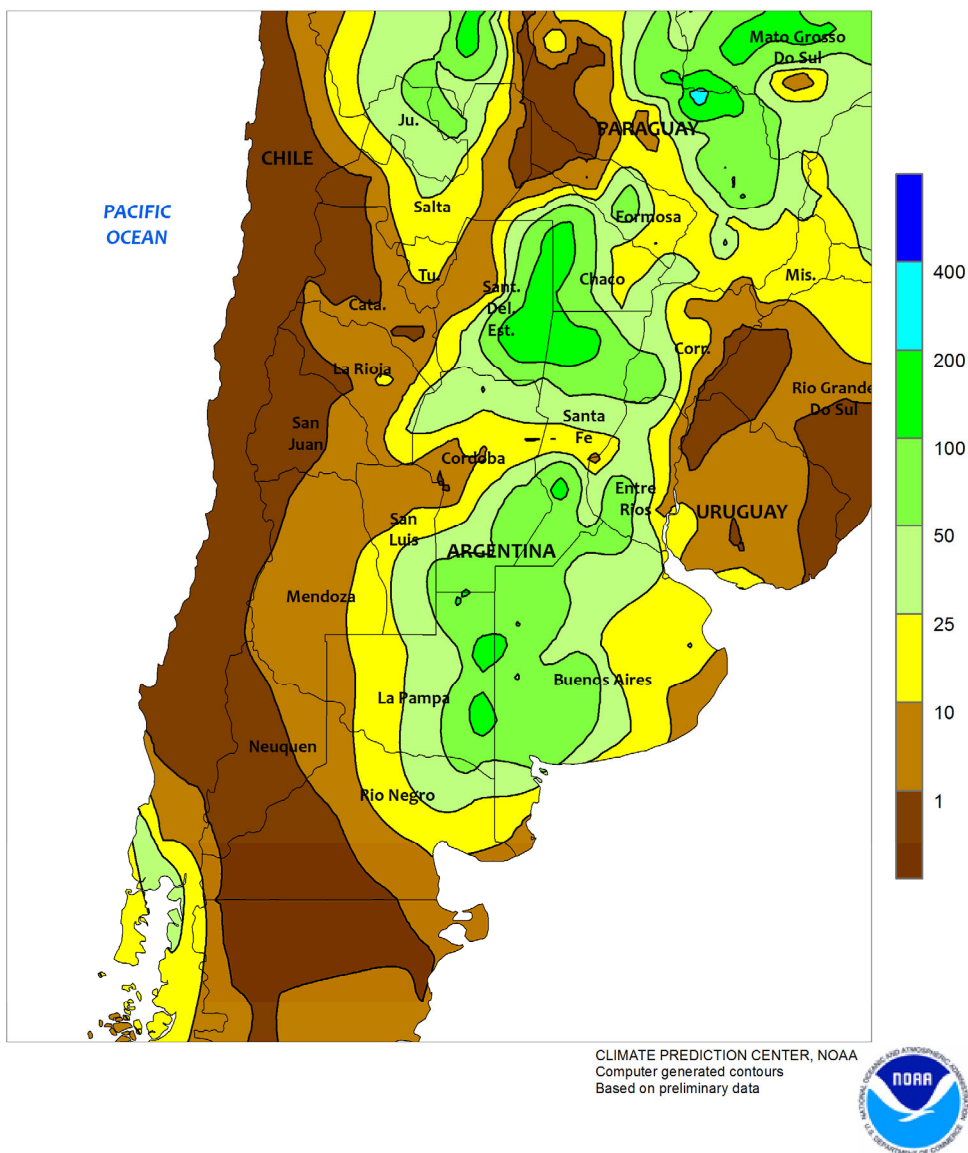
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



SOUTH AFRICA

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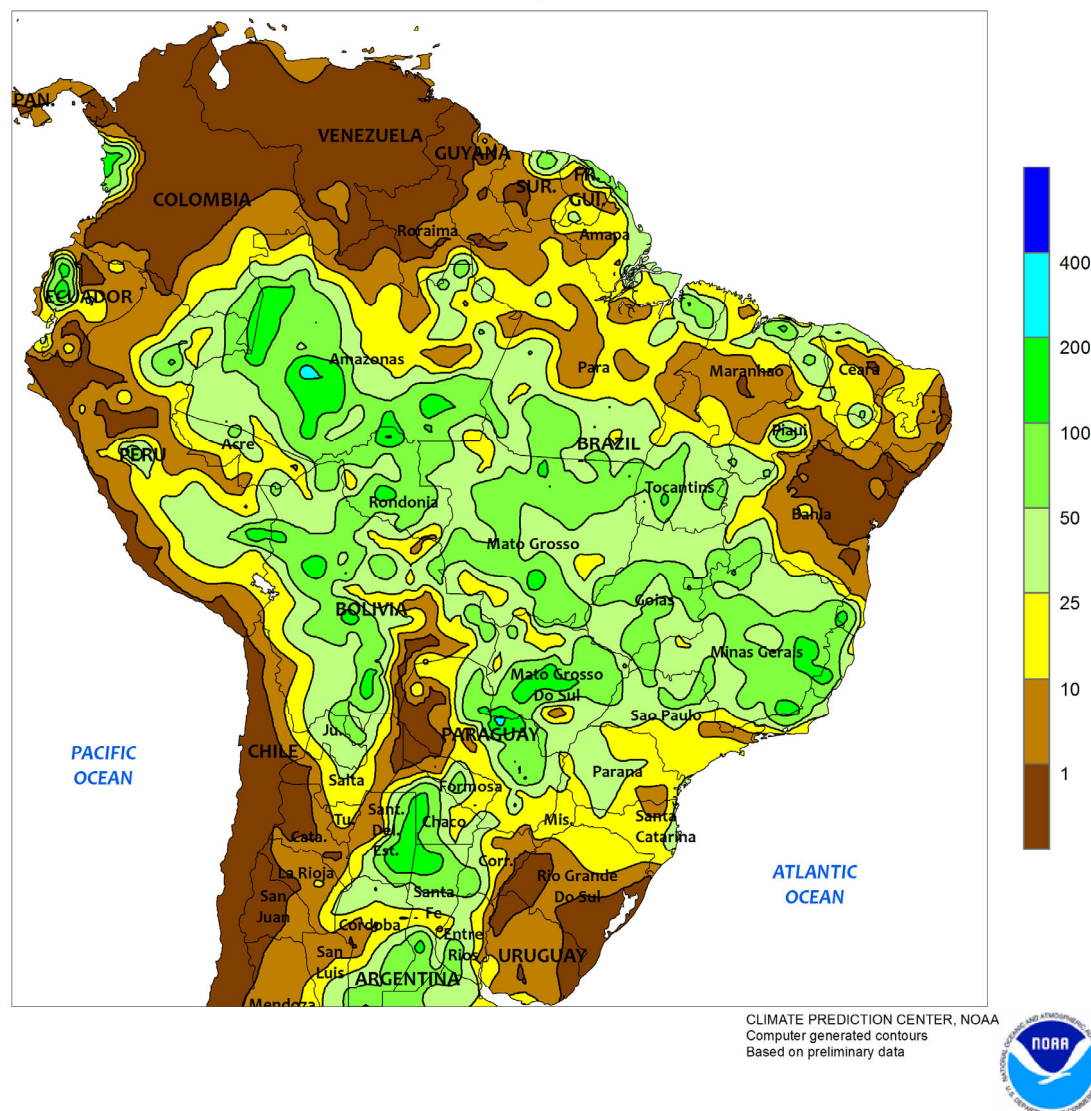
ARGENTINA
Total Precipitation (mm)
DEC 23 - 29, 2018



ARGENTINA

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BRAZIL
Total Precipitation (mm)
DEC 23 - 29, 2018

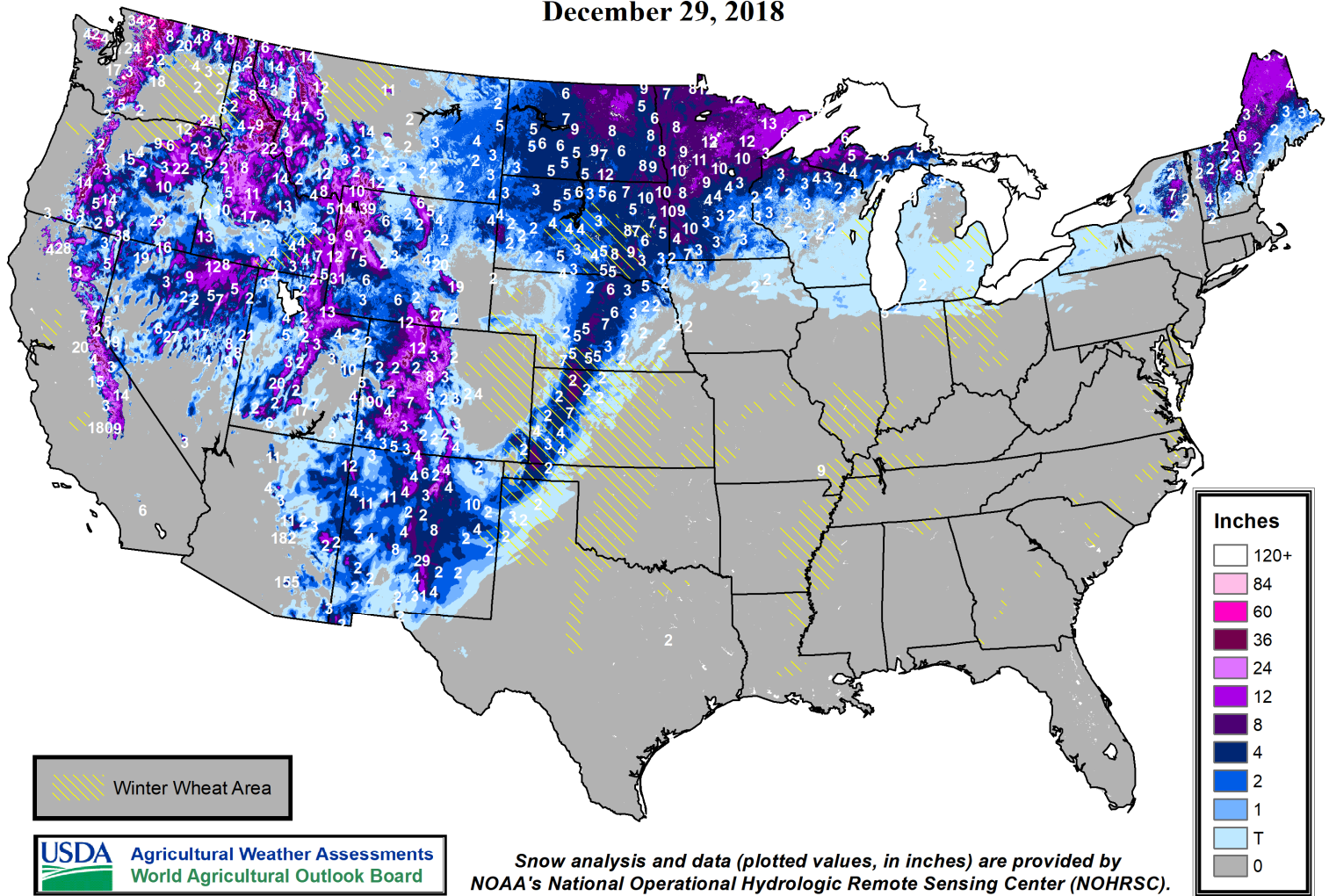


BRAZIL

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Snow Depth

December 29, 2018



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

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