

Winter 2015-16 Quarterly Climate Digest

This display shows the CIMSS climate digest for the Northern Hemisphere Winter, featuring highlights from the U.S. and global analysis products issued by NOAA.

The climate digest conveys a visual interpretation of weather and climate conditions for each season.

The December 2015 through February 2016 seasonal global temperature was 2.03 degrees Fahrenheit, or 1.13 degrees Celsius above the 20th century average of 53.8 degrees Fahrenheit. This was the warmest Northern Hemisphere winter ever recorded. Much of Central America and northern South America, southern Africa, southern Europe, north-central Siberia, and parts of south and southeastern Asia were record warm. Conversely, some regions in central Africa were cooler than average. However, no land areas observed record cold temperatures for the December to February period.

This real-time dataset shows sea surface temperature anomalies for December through February measured by NOAA satellites. Blue colors indicate cooler than normal ocean temperatures, and red indicates warmer than normal ocean temperatures. Across the world's oceans, the December through February average sea surface temperature was the highest on record. This record warmth is consistent with a strong El Niño which peaked in December 2015. According to NOAA's Climate Prediction Center, strong El Niño conditions persisted into February 2016 across the central and eastern equatorial Pacific Ocean but a transition to neutral conditions is likely during late spring or early summer.

The contiguous United States observed its warmest December through February since records began. Specifically, December 2015 was the warmest month ever, January was cooler but still ranked as the 34th warmest, and February was the 7th warmest since records began.

The winter precipitation total for the contiguous U.S. was 8.05 inches, 1.26 inches above the 20th century average. This was the 12th wettest December through February period on record for the Lower 48. According to the U.S. Drought Monitor, 14.3 percent of the contiguous U.S. was in drought at the end of winter.

Of note, a crippling blizzard dumped heavy snow across the Mid-Atlantic and New England states from January 22nd to the 24th. The snowstorm covered 434 thousand square miles and impacted 102.8 million people. Of those, about 1.5 million people had over 30 inches of snowfall; almost 24 million had over 20 inches.

The outlook for spring 2016 calls for above normal temperatures across China, Northern South America and much of Africa with cooler than normal temperatures expected over the Southern United States and Northwestern Asia. Drier than normal conditions are forecasted across Northeastern Brazil and Cambodia, increasing the regions potential for continued drought. Above normal precipitation is expected for the Southwestern United States which could bring some needed relief from the regions 5 years of drought.

And that is your winter 2015-2016 Climate Digest!