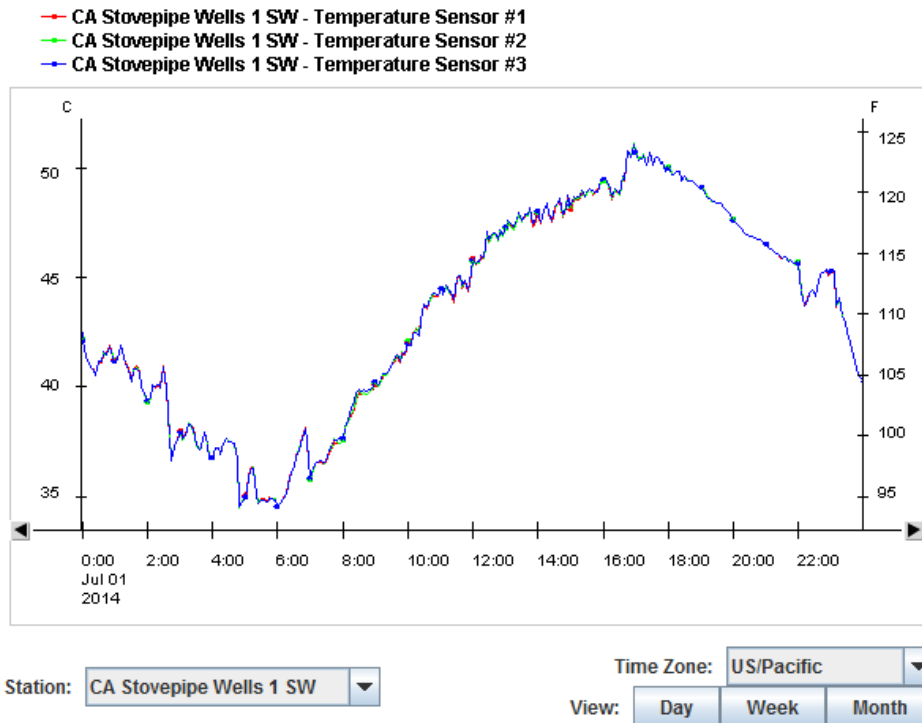


U.S. Climate Reference Network (USCRN) Climate Wrap-Up for 2014

The USCRN continues to perform at a high level as the premier surface climate observing system for the U.S. The data receipt rate for the 114 stations in the lower 48 states is at 99.6% which exceeds the minimally accepted level of 98%; in Alaska, the data receipt rate is at 98.1% which is still quite good given the harsh environment it must operate in during the long winter season. Progress continues on building out the Alaska portion of the USCRN grid of 29 eventual stations. As of the end of 2014, three new stations were installed bringing the total of operating USCRN stations in Alaska up to 16, with a plan to add another three new stations in 2015. The USCRN has three primary variables that it observes – namely air temperature, precipitation, as well as soil moisture and temperature. Some notable highlight events associated with these observed parameters are summarized below.

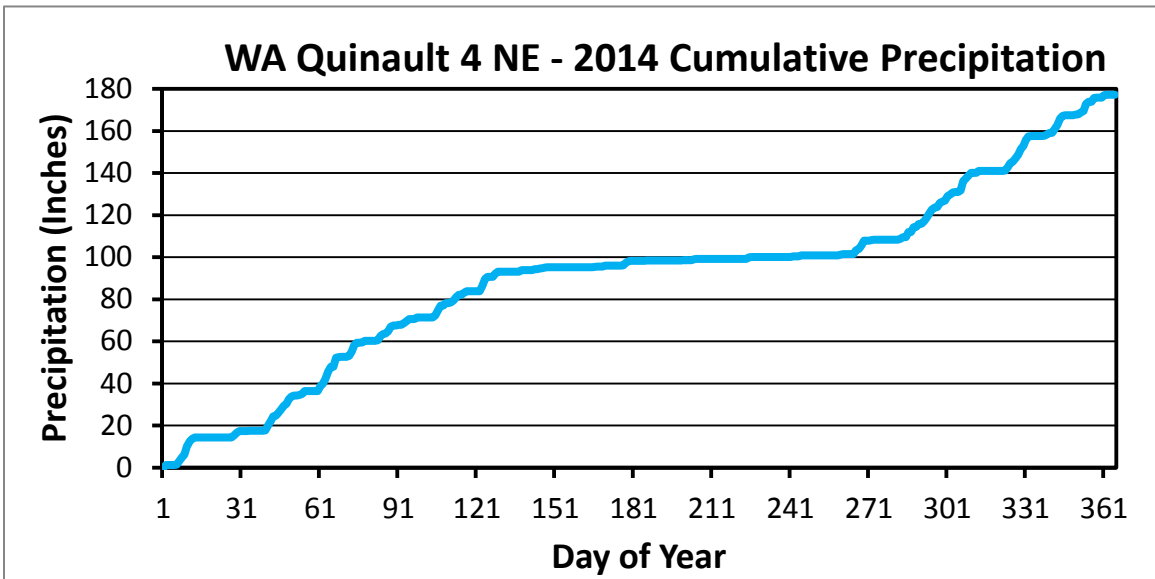
Temperature Highlights. Stovepipe Wells, CA in Death Valley stood again as the warmest station in the network, observing both the highest daily maximum temperature, 124.0°F on July 1 (see figure directly below), and the highest daily minimum temperature, 102.4°F on July 14. The lowest temperatures at individual stations were observed in Alaska, with southeastern interior perennial cold spot at Tok in the Tetlin National Wildlife Refuge, yielding the lowest daily minimum temperature of -46.3°F on both February 11 and 12, and the new station north of the Brooks Range near Ivotuk, AK recorded the lowest daily maximum temperature of -31.7°F on December 10.

CA Stovepipe Wells 1 SW – Highest 2014 Air Temperature



Source: National Climatic Data Center/NESDIS/NOAA

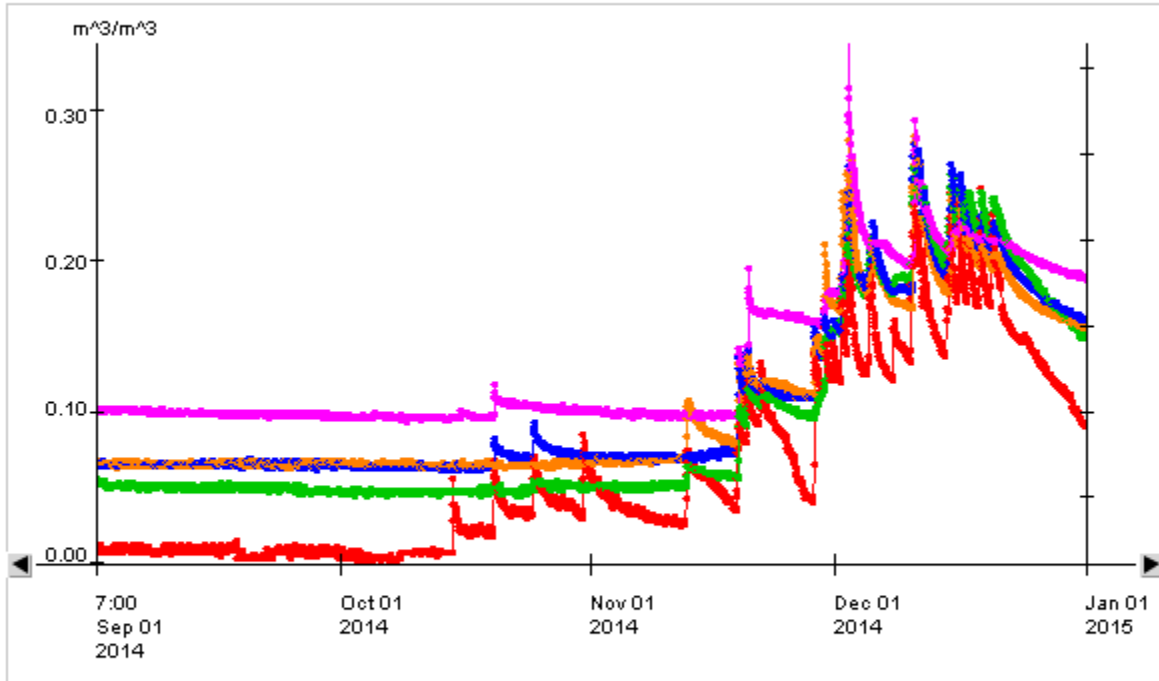
Precipitation Highlights. The USCRN station in the Olympic National Park near Quinault, WA, observed 177.20 inches of precipitation during 2014, setting a new calendar year record for the station and the network (see figure directly below). This is not the record for all 12-month periods, which is still 194.05 inches that fell at the same site from April 16, 2010 to April 15, 2011. Meanwhile, in the midst of the western drought, the USCRN station in Death Valley National Park near Stovepipe Wells recorded only 1.58 inches of precipitation for all of 2014. This may seem like a small amount, but for the 366-day year period from July 7, 2011 to July 6, 2012, Stovepipe Wells only recorded 0.26 inches of precipitation, a station and network 12-month record.



Soil Moisture Highlights. During 2014, soil moisture levels in California continued to remain lower than normal as the regional drought entered its third year. The start to the wet season in Fall 2014 seemed promising, with a number of large Pacific storms recharging moisture to near normal wet season levels at a number of USCRN stations, including at the Bodega, CA site northwest of San Francisco (see figure below). The barrage of storms tapered off toward the end of 2014, and as in the past several years, it appears that the wet season may be shorter than normal. Soil moisture already started to dry less than halfway through the wet season.

CA Bodega 6 WSW – Late 2014 Soil Moisture

- CA Bodega 6 WSW - Soil Moisture - 5cm
- CA Bodega 6 WSW - Soil Moisture - 10cm
- CA Bodega 6 WSW - Soil Moisture - 20cm
- CA Bodega 6 WSW - Soil Moisture - 50cm
- CA Bodega 6 WSW - Soil Moisture - 100cm



Station: CA Bodega 6 WSW

Time Zone: US/Pacific

View: Day Week Month

Source: National Climatic Data Center/NESDIS/NOAA