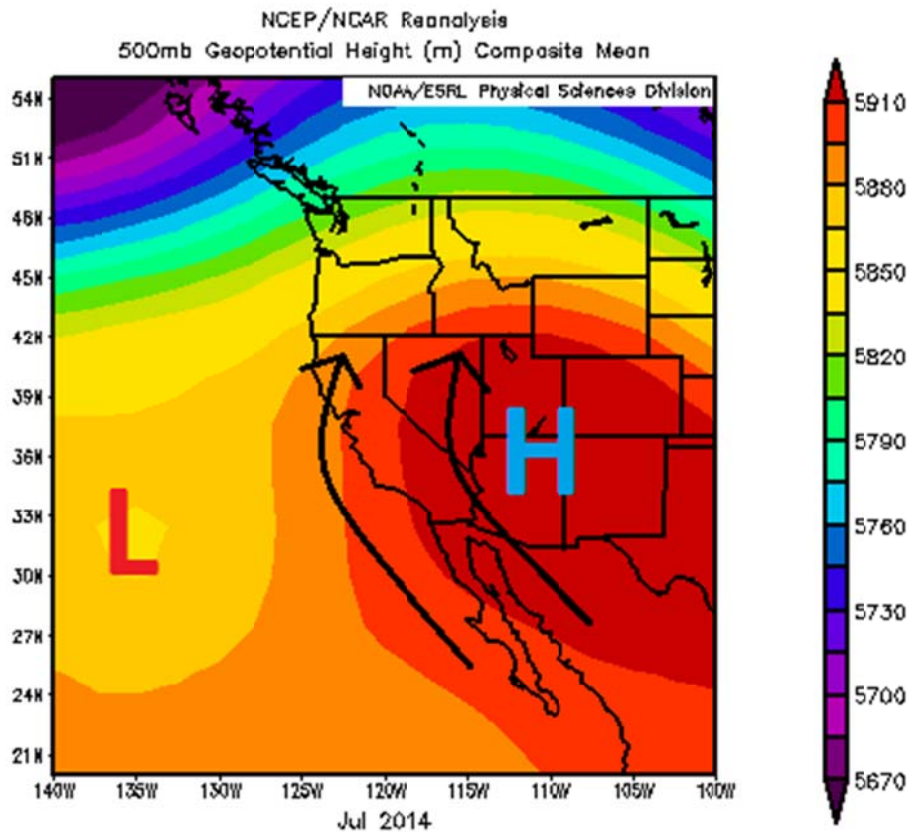


July 2014 Climate Summary



Average location of July ridge as depicted by 500 mb heights. Courtesy: NOAA/ESRL

Monsoon season arrived on the NNSS in early July bringing the most significant rainfall since February to many locations. The persistent area of high pressure that was located off the coast for much of the spring and early summer was replaced by low pressure. High pressure moved northward from Mexico and was located over the West. The center of the high varied from near the Four Corners to northern Nevada during the month which allowed for periods of southeast winds to transport moisture into the region.

The month started off dry until the first influx of moisture reached the area on the 5th. Scattered showers and thunderstorms developed with all locations picking up measureable precipitation by the 7th. Strong downburst winds were initially associated with these thunderstorms until the lower levels of the atmosphere moistened up. For example, Desert Rock airport recorded a wind gust of 58 mph on the evening of the 6th.

High pressure relocated to northern Nevada by the 15th. As it made this northwestward transition, the NNSS observed the hottest temperatures of the month. The center of the high was overhead on the 13th when the highest values were recorded. Temperatures exceeded 100° at all but the highest elevations with Desert Rock Airport and Meda 50* in area 25 tying for the hottest at 111°. Easterly flow to the south of the high provided another modest push of moisture from the 15th thru 20th. Thunderstorms mainly developed over the higher terrain during this time but several storms did affect the eastern boundary on the afternoon of the 15th.

The 21st thru 25th were hot and dry as low pressure off the coast strengthened and pushed the high well to the east resulting in a dry southwest flow aloft. The last significant influx of moisture overspread the NNSS on the 26th when the offshore trough weakened allowing the high to relocate to favorable position near the Four Corners. Scattered showers and thunderstorms developed with most locations recording precipitation through the 30th. Drier southwest flow returned to the NNSS on the 31st reducing the coverage of thunderstorms to locations mainly north and east of the area.

Meda 14 in Area 14 recorded the most precipitation for the month with 1.28 inches while Meda 5 in Area 5 recorded the least with 0.17 inches. The greatest 24 hour precipitation total was recorded at Meda 48 in Area 15 with 0.82 inches.

* Meda 50 in Area 25 went online on June 26, 2014.

Below is data for some select locations.

<u>Station</u>	<u>Highest (°F)</u>	<u>Date</u>	<u>Lowest (°F)</u>	<u>Date</u>	<u>Precipitation (in.)</u>
Meda 23 (Mercury)	106	13	71	29	0.20
Desert Rock Airport	111	13	66	22	0.20
Meda 05 (W5B)	109	13	57	12	0.17
Meda 40 (Rainier Mesa)	90	13	53	29	0.99
Meda 43 (Yucca Dry Lake)	106	13	57	22	0.21

Hazardous Weather Notifications:

- A Lightning Alert was issued for July 7th from 1400 to 2200 PDT.
- A Lightning Alert was issued for July 9th from 1400 to 2000 PDT.
- A Lightning Alert was issued for July 15th from 1145 to 1900 PDT.
- A Lightning Alert was issued for July 16th from 1315 to 1800 PDT.
- A Lightning Alert was issued for July 17th from 1200 to 1800 PDT.
- A Lightning Alert was issued for July 27th from 1045 to 2000 PDT.
- A Lightning Alert was issued for July 28th from 1130 to 2200 PDT.
- A Lightning Alert was issued for July 30th from 1430 to 1900 PDT.
- A Lightning Alert was issued for July 31st from 1400 to 2100 PDT.

James Wood