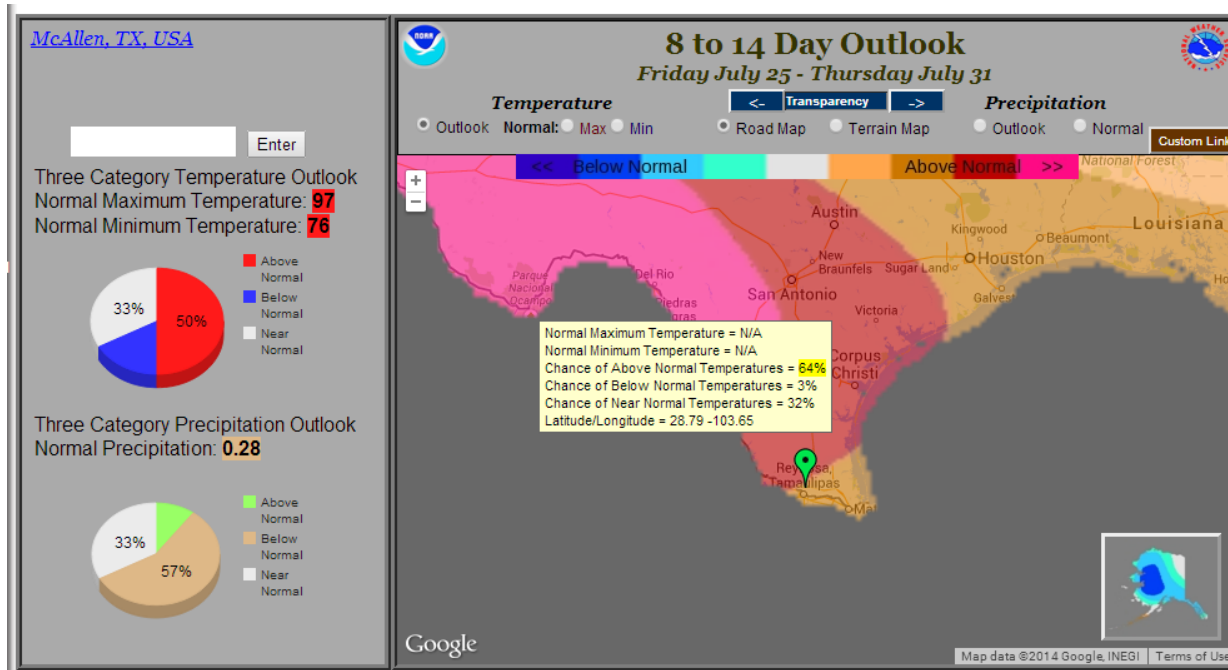


Above: Left – Weather Pattern and General Conditions Expected for July 19-25. Right: Weather Pattern and General Conditions Expected for July 24-30.

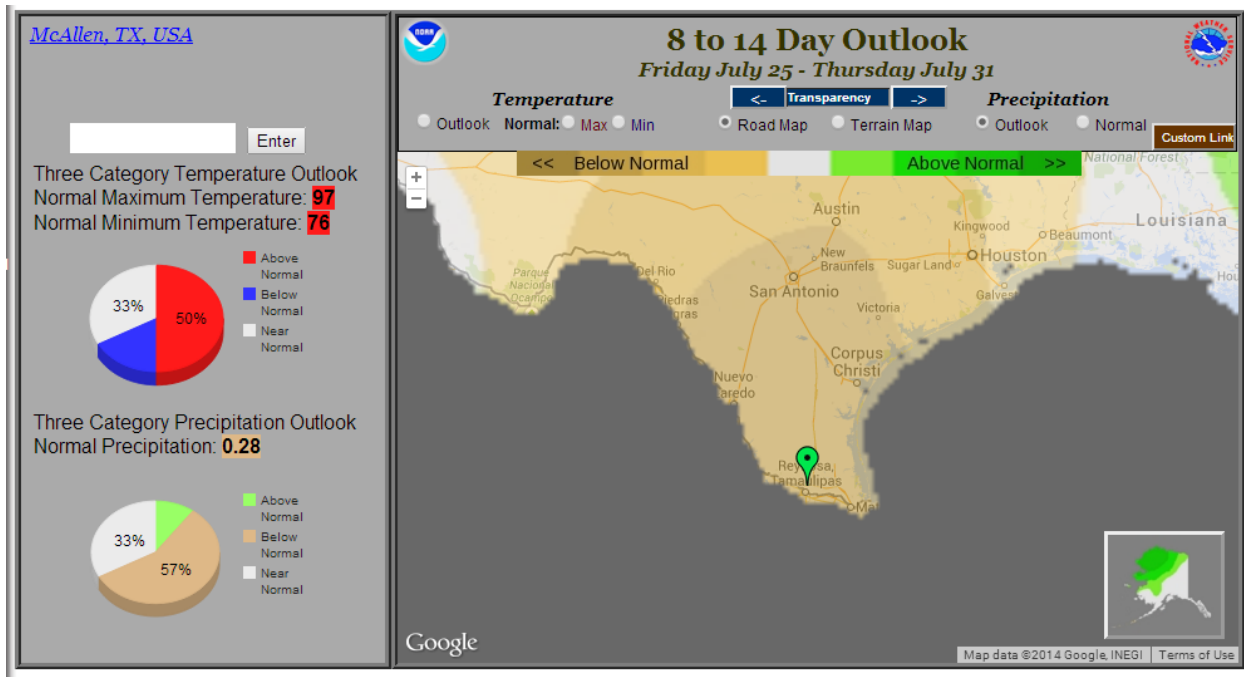
“La Canícula” Has Arrived

“Dog Days” of 2014 Are Here; Sweltering Heat, Little Rain, Worsening Drought

It took awhile, but the persistently hot and rain-free weather we expected to dominate most of the summer (June-August) arrived during the second full week of July, 2014. By July 17th, 100°F afternoon temperatures had become routine in the mid/upper Rio Grande Valley (McAllen/Pharr/Edinburg and points west), and late evening heat index values holding near 90°F up until midnight just about everywhere in the Valley were dominant. The extended forecast to close out July (above, right) suggested more of the same, with a gradual increase and eastward spread of century-mark afternoon temperatures as soil/plant moisture dries up and most of the sun’s energy goes straight into heating, rather than [evapotranspiration](#).



Above: 8-14 day outlook for temperature at McAllen for the period July 25-31, 2014. Pie charts on left show both temperature and precipitation probabilities for above, normal, and below normal levels for the same period. To select your city, surf to <http://www.cpc.ncep.noaa.gov/products/predictions/814day/interactive/index.php> and type in above the pie chart area.

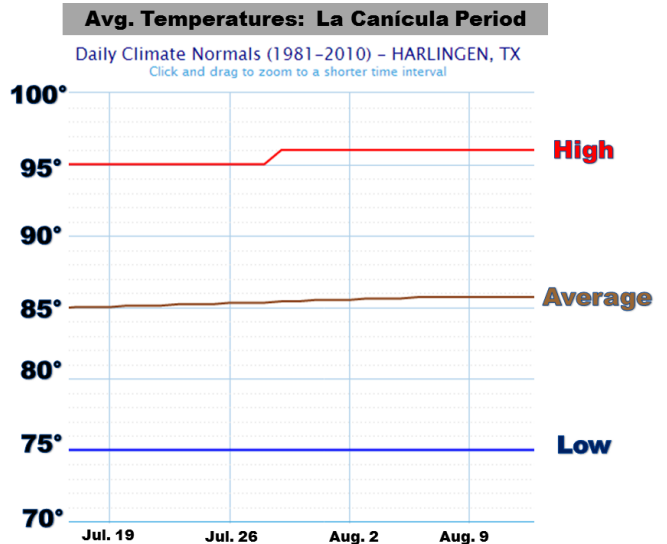
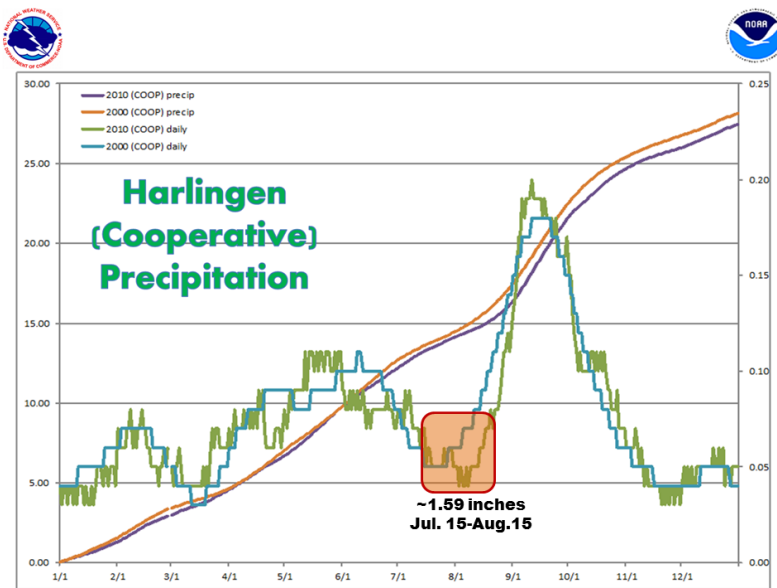


Above: Same as for temperature, except for precipitation, at McAllen.

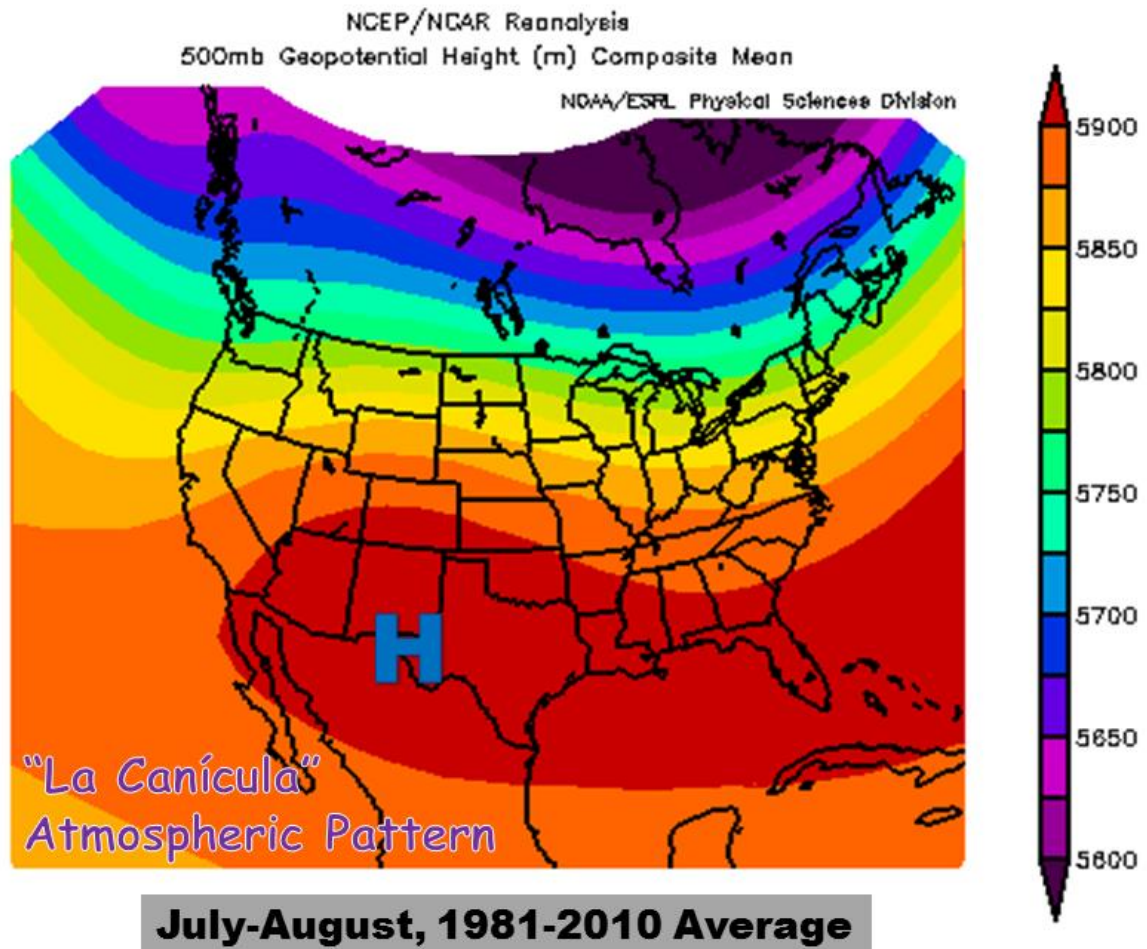
La Canícula, Explained

We've often used this term to describe the atmospheric conditions that lead to a 30 day (or longer, depending on the situation) period from mid July through mid August that favors hot and rain free weather for the Rio Grande Valley. Translated, "La Canícula" means "The Heatwave", but the "Heatwave" term was based on the timing of the rising of the constellation Sirius (dog star) with the sun, known as the Canicular Days. While many across the central and eastern United States adopted the English translation ("Dog Days"), residents of northern Mexico and southern Texas used the Spanish vernacular, "Canícula". By definition, the period of Canicular is July 3 through August 11; for purposes of combining the generally used "heatwave" concept with the Sirius/sunrise conjunction, we've typically used mid July to mid August to frame the phenomena. Read here for more on [Sirius and summer sunrise](#).

Climatologically in the Rio Grande Valley, there is a defined dip in daily precipitation (left, for Harlingen; note orange shaded area). Near the end of the Canicular Days, daily rainfall dips to 0.04 inches, similar or lower to values we see in "drier" times of the year (March and November in particular). Temperatures reach their hottest of the year on average during the last of the Canicular (right, Harlingen), and continue through mid to late August.



La Canícula has had a clear signal during the most recent period of comparative climate record (1981-2010). Note the position of the high pressure ridge (US Southwest/Northern Mexico) for July and August, which was likely a contributor to raising the daily and seasonal averages by a degree or more between the 1971-2000 and 1981-2010 benchmarks.



The Bottom Line

Residents and visitors to the Rio Grande Valley should be prepared for even hotter weather than usual, even during these "Dog Days". Combined with periods of relatively high surface humidity, there will be periods where it will feel like 105° to 110°F, which is several degrees higher than what most folks are used to. The following heat safety tips are urged for those planning to spend time outdoors:

- Drink plenty of water before, during, and after activity
- Seek shady spots often, and take frequent breaks if doing any physical activity
- Wear lightweight, light colored, and loose fitting clothing, or special clothing that can wick away heat and keep the body cool
- Reserve strenuous exercise for the pre-sunrise hours, when it will "feel" the coolest. "Feels like" temperatures, even a few hours after sunset, could be dangerous
- Most of all, be sure to check the backseat of your vehicle before leaving it! Never leave children or pets in a hot car; injury and death can arrive in minutes.

If headed to the beach to cool down, remember to

- Wear plenty of sunscreen and apply frequently
- Drink mainly water, and do so often! Refrain from alcoholic beverages when in the sun
- Be aware of rip or longshore currents when entering the water. Poor swimmers and children should wear life vests.