## Heavy Rains at Del Rio and Val Verde County May 24-25, 2010

In April and May of $\mathbf{2 0 1 0}$ most of the rain over South Central Texas has come in several events, notably from April 12th to 17th; the late afternoon of April 23rd to the morning of April 24th; the night of April 30th to the early morning of May 1st; May 14th to May 16th; the evening of May 17th to early morning of May 18th; the late afternoon and evening of May 24th to the early morning hours of May 25th; and on the afternoon to early evening of May 25th.

In late May of 2010 very heavy rains came to parts of Edwards and Val Verde Counties. On the evening of May 24th to the early morning of May 25th, a disturbance approached from the west, and linked with larger scale disturbances from the eastern Rockies to the Great Plains. This process began the weekend of May 22nd and 23rd, as gradually more unstable conditions evolved from the west, and moderate to strong south to southeast winds brought tropical moisture across South Texas. The instability increased on Monday May 24th, as a south to north larger scale disturbance formed, from West Texas to the Eastern Rockies. This environment allowed scattered showers and thunderstorms to form easily in the afternoon of May 24th over the Hill Country to the Rio Grande south and west of Del Rio. One area of showers and thunderstorms was over the western Hill Country, while another developed over Val Verde County. The storm growth was explosive on the evening of May 24th. Showers and thunderstorms merged over Val Verde County, forming a Mesoscale Convective Complex of storms over Val Verde County. As the storms moved slowly southeast they brought severe thunderstorm wind gusts and periods of flash flood producing rains to the southeast part of Val Verde County and Del Rio. The storms then moved southeast across Maverick, Zavala, Dimmit, Kinney, and Frio Counties from just after Midnight to 7 am.

Over the southeast part of Val Verde County, rainfall amounts of near 5 to $\mathbf{1 0 . 5}$ inches were observed. The west to north part of Val Verde County had less rain, where 0.38 inches was observed 29.7 miles northwest of Comstock. The heaviest rain was $\mathbf{1 0 . 5}$ inches near Lake Amistad Reservoir and 9.61 inches 9.3 miles north of Del Rio. At Del Rio International Airport 7.59 inches of rain fell from 11 pm May 24th to 2 am May 25th. On May 24th, 7.12 inches of rain fell at Del Rio from 11 pm to 1 am ( 10 pm to Midnight Standard Time, the time used for daily climate records). The 7.12 inches of rain at Del Rio for May 24th broke the daily May 24th record and the all-time daily record at Del Rio for the month of May. An additional 0.47 inches of rain fell early the 25th, plus 0.02 inches of rain on the afternoon of May 25th at Del Rio. This brought the monthly total at Del Rio to 10.45 inches of rain for May, making May 2010 the wettest May of record at Del Rio. Another area that received heavy rain was over the northern part of Edwards County, where rainfall amounts varied from near a quarter of an inch to 8.05 inches at 5.4 miles northwest of Rocksprings. Rocksprings had 3.4 inches of rain, while $\mathbf{1 2 . 2}$ miles north, northwest of Rocksprings had 5.9 inches and 8 miles west, southwest of Rocksprings had 2.76 inches of rain.

Some key statistics on the May 24 to 25, 2010 rainfall event at Del Rio are listed below.
A record rainfall of 7.12 inches was set at Del Rio on Monday, May 24, 2010. This broke the old record of 1.86 inches set May 24, 1908. This also breaks the record amount of rainfall for a day in the month of May at Del Rio of 6.53 inches set on May 27, 2003.

The 10.45 inches of rain at Del Rio in May 2010 makes May of 2010 the wettest May of record at Del Rio. The old record for the wettest May at Del Rio since December 1905 was 10.23 inches in May of 1957.

The wettest Mays at Del Rio since December 1905 are listed below.

1. May 201010.45 inches
2. May 195710.23 inches
3. May 19148.91 inches
4. May $1925 \quad 7.99$ inches
5. May $2007 \quad 7.93$ inches

May 24, 2010 was also the 5th wettest day of record at Del Rio since December 1905.
The wettest days since December 1905 at Del Rio are listed below.

1. August 23, $1998 \quad 17.03$ inches
2. June 13, $1935 \quad 8.79$ inches
3. October 4, $1969 \quad 7.60$ inches
4. October 13, $2005 \quad 7.59$ inches
5. May 24, $2010 \quad 7.12$ inches

Rainfall for the first 5 months at Del Rio this year will end up as the wettest January to May of record for Del Rio. The list below shows the wettest January to May periods at Del Rio since December 1905.

1. January to May 2010
2. January to May 1957
3. January to May 1949
21.70 inches
19.47 inches
15.24 inches
