

# First Half Blahs, Second Half Ahhs?

# Cold Start to February Brings One More Light Freeze at Mid-Month to RGV

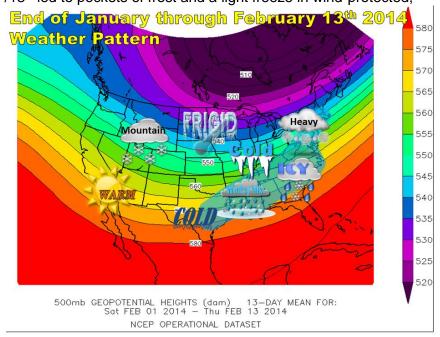
## Winter's Final Act?

The first half of February 2014 (February 1-13) was one of the coldest in recent memory. While the average temperatures (below) were far from the recent benchmark for the <u>same period in 2011</u>, the Rio Grande Valley departure of a little over 9°F below the 1981-2010 comparative period was a notable continuation of the rather persistent cold that dominated the Valley's weather from <u>November 22, 2013 through the end of January, 2014</u>. The end of the cold period occurred between February 11<sup>th</sup> and 13<sup>th</sup>, when the last in a series of cold fronts drove shallow, Canadian air into the region. Low clouds, drizzle, and gusty north winds brought upper 20s to lower 30s "feels like" temperatures to the region for the eighth calendar day (preliminarily) of the winter (others were December 6; January 6, 24, 28(late), 29; February 6 and 7).

Following a surprising <u>early morning thunderclap</u> in Brownsville on the 12<sup>th</sup>, skies cleared across portions of the Valley. Temperatures dropped a few degrees from their overnight values in the upper 30s to near 40 and slipped to or below freezing across the Upper Valley and Brush Country Ranchlands (above, left) on the 12<sup>th</sup>. Clear, calm conditions overnight on the 12<sup>th</sup>/13<sup>th</sup> led to pockets of frost and a light freeze in wind-protected,

rural areas of the Rio Grande Valley and most of the ranchlands early on the 13<sup>th</sup>.

While the Valley was cold, with plenty of clouds, periods of drizzle, and a coating of glace from Zapata through Falfurrias and Sarita on February 6 and 7, a stripe from the northern Gulf Coast through the Mid Atlantic and New England states experienced winter's full wrath. Multiple mixed precipitation storms (right) cut power to millions and may have cost billions of dollars in infrastructure/tree loss as well as lost economic activity from Georgia to North Carolina; 1 to 2 feet of snow fell on February 12-13 across the Appalachians and mid-Atlantic Piedmont. the largest single snow event in this entire region since February 2010.



### A "Six Pack" of Changes

Sharp Temperature <u>Drops</u> (35 degrees or more) from one day to the next this winter (November 2013-February 12, 2014)

Harlingen/Valley International Airport

November 22: 88 November 23 (2 PM): 49 Change: 39 degrees colder December 5: 83 December 6 (2 PM): 46 Change: 37 degrees colder January 5: 76 January 6 (2 PM): 40 Change: 36 degrees colder January 23: 78 January 24 (2 PM): 37 Change: 41 degrees colder January 28 (2 PM): 42 Change: 38 degrees colder January 27: 80 February 10: 82 February 11 (2 PM): 41 Change: 41 degrees colder

**Previous Nine Seasons:** 

2012/2013: No Cases 2011/2012: No Cases

2010/2011: 1 case (February 1 to 2, 2 PM: 36 degrees colder)

2009/2010: No Cases

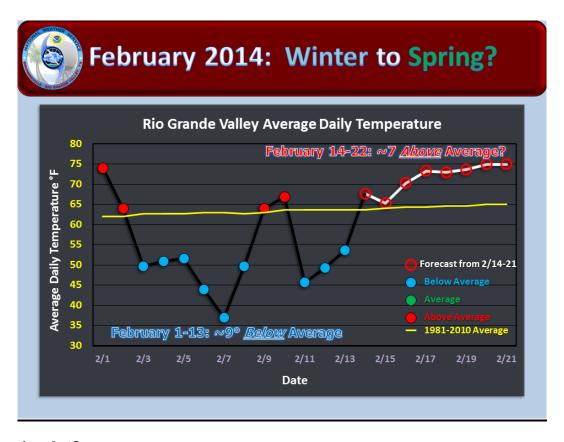
2008/2009: No Cases

2007/2008: 1 case (November 21 to 22, 2PM: 35 degrees colder) 2006/2007: 1 case (January 15 to 16, 2 PM: 36 degrees colder) 2005/2006: 2 cases (December 7 to 8, 2 PM: 38 degrees colder;

February 17 to 18, 2 PM: 35 degrees colder)

2004/2005: 1 case (December 22 to 23, 2 PM: 35 degrees colder)

Winter 2013/2014 across the Valley may be remembered most for its *contrasts*. Between November 22<sup>nd</sup> and February 6<sup>th</sup>, there were six occasions where the 2 PM temperature at Harlingen/Valley International Airport (a proxy for the Valley) was at least 35 degrees colder than the prior day's maximum temperature. The data (left) show just how rare this has been during the past decade; whether the six cases is a seasonal record has not yet been determined.



#### Spring's Opening Act?

The return of a flat upper level ridge and westerly (vs. northwesterly) flow well above the surface was forecast to bring a sunny weekend with warm days and comfortable nights and mornings from February 15 through 17. Thereafter, the pattern shifts nationwide for several more days, and was expected to bring an upper level trough of low pressure to the Rocky Mountain region, with a broad ridge extending from the western Gulf into the southeast U.S. This pattern will bring increasing southerly surface winds and more humidity, along with low cloud cover – typical of the early spring "Valley Wind Machine". The pattern will bring rather muggy overnights and still warm days between the 18<sup>th</sup> and 21<sup>st</sup>, with overall temperatures up to 10 degrees above average. The question remains: Will the warming last long enough – through month's end – to overcome the 9 degree below average start to February? The first week (February 14-21) will put a good dent into the

negative departures, for sure. Little to no rainfall is expected until the 22<sup>nd</sup> or 23<sup>rd</sup> when a cold front is expected to pass the region; the front may trigger showers and thunderstorms, but will be followed by mild, not damp and chilly, conditions. Winter as the Rio Grande Valley has known it *might just be over* as of this writing (February 14, 2014).

