RECORD HIGH PRECIPITABLE WATER VALUES AT MPX

From: Matt Friedlein < Matt.Friedlein@noaa.gov>

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To: Anthony Zaleski <Anthony.Zaleski@noaa.gov>, Byron Paulson <Byron.Paulson@noaa.gov>, Dan Effertz <Dan.Effertz@noaa.gov>, Daniel Luna <Daniel.Luna@noaa.gov>, James McQuirter <James.Mcquirter@noaa.gov>, James Taggart <James.Taggart@noaa.gov>, Jim Richardson <Jim.Richardson@noaa.gov>, Shawn Devinny <Shawn.DeVinny@noaa.gov>, Matt Friedlein <Matt.Friedlein@noaa.gov>, Michael Griesinger <Michael.Griesinger@noaa.gov>, Philip Poyner <Philip.Poyner@noaa.gov>, Ricky Hiltbrand <Ricky.Hiltbrand@noaa.gov>,

Todd Krause <Todd.Krause@noaa.gov>, Tom Hultquist <Thomas.Hultquist@noaa.gov>, Chris Franks <Chris.Franks@noaa.gov>, Harry Petaisto <Harry.Petaisto@noaa.gov>, Kurt Mayer <Kurt.Mayer@noaa.gov>, Joe Calderone <joseph.calderone@noaa.gov>, Michelle Margraf <Michelle.Margraf@noaa.gov>, Ross Carlyon

<Ross.Carlyon@noaa.gov>, Diane Cooper <Diane.Cooper@noaa.gov>, Lyle Schaller <Lyle.Schaller@noaa.gov>

CC: Matthew Bunkers < Matthew.Bunkers@noaa.gov>

Subject: MPX July Precipitable Waters

Staff,

As we did last summer, we thought it worthwhile to compare our recent high PWATs to climatology. Below is a plot of June and July 2011 PWATs relative to the long-term normals, courtesy of Matt Bunker's (UNR) <u>PWAT page</u>.

A few observations regarding our July 2011 PWATs:

The median of PWATs was 1.42 in., implying one half of the soundings had higher PWATs than that. Note our normal 75th percentile (1.37 in.) is even lower than our 2011 median.

The 75th percentile was basically at +2SD (1.80 in). In other words, one quarter of our observed PWATs were above that. While minute differences in PWAT depending on the database or software occur, a preliminary look provides six soundings at MPX that had two inches or higher PWAT.

We of course had our record PWAT of 2.45 in. on July 18th that Dan E. and Matt Bunkers noted.

When creating the same plot of DVN raobs for the RFC, the differences of July 2011 from their normals was very similar. Would you believe they had 16 soundings at or above 2 inches?

I believe PWAT departure from normal is the most direct indicator as to how busy we are. :-) Matt

