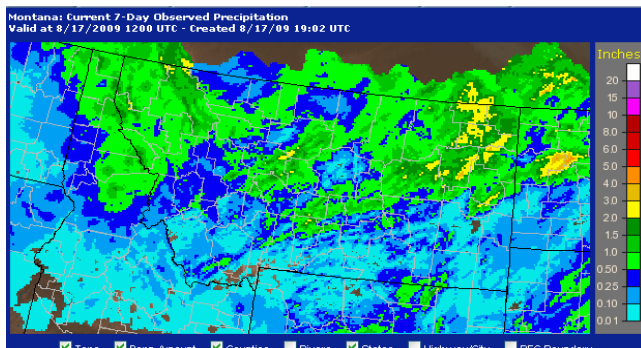




Under the Big Sky e-Letter August 17, 2009

Is that snow in the above photo? Nope, it's hail in a photo taken by the Broadus Volunteer Fire Department near Broadus on Aug 7th. Thankfully things were mostly quiet while I was on vacation this year. That makes it easier to catch up when coming back to the office. We did have an event that produced from 4 to 6" of rain and some flash flooding in the Little Rockies on August 6th.



Past 7 days precipitation across Montana.

The past ten days have brought quite a bit of precipitation to the area. In the last seven days, the precipitation has amounted to several inches in some areas. To keep up with the latest precipitation estimates at a quick glance, go to:

<http://water.weather.gov/>

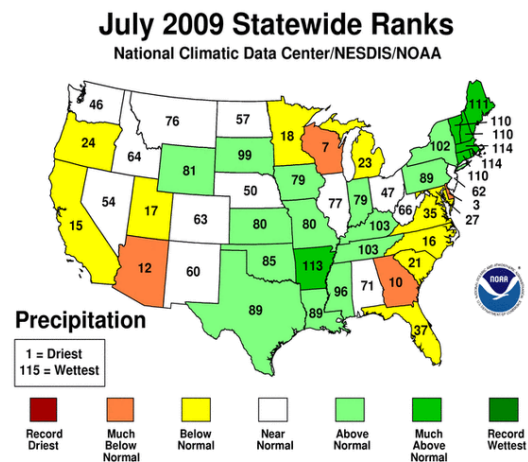
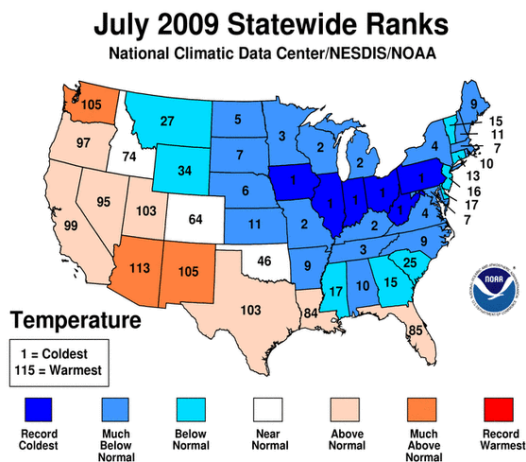
Click on MT, and then you can play with the options below the map.

CoCoRaHS Canada? There are quite a few Canadians who have shown some interest in the CoCoRaHS program, especially at the Plentywood Farm and Ranch Expo each spring. It is now possible for them to be a part of the program. They just need to sign up at: <http://www.cocorahs.org> They will need to report in inches for now though. Please feel free to pass this on to your Canadian friends and family! For questions, they can contact me at: tanja.fransen@noaa.gov or 406-228-2850.



July Climate Data: The planet's ocean surface temperature in July was the warmest on record, breaking the previous high temperature from 1998. If you combine oceanic and land temperatures, it was the 5th warmest on record (going back to 1880).

For the US though, July was below normal temperature-wise. Six states even had their lowest temperature statewide for the month of July, while Arizona had their third warmest on record! And, Arkansas and some of the New England states had some of their wettest July's on record as well. (see graphics below)



July Ocean Temperature Stats:

http://www.noaanews.noaa.gov/stories2009/20090814_julyglobalstats.html

July United States Climate information:

http://www.noaanews.noaa.gov/stories2009/20090810_julystats.html

Discovery Channel's Raging Planet: Tom Warner, a Rapid City, SD resident and PhD student at the South Dakota School of Mines was recently interviewed in the Raging Planet: Lightning episode on the Discovery Channel. While I missed it on TV, I was able to find it online, along with many other episodes covering fires, tornadoes, and flooding: <http://dsc.discovery.com/videos/raging-planet-lightning/>

Tom has been doing research on lightning for the past few years, and has a high end digital camera that can take 7200 images per second. His research is showing how lightning forms and allowing other researchers to see lightning as it's never been seen before with the naked eye. Videos of his lightning photography can be seen at: <http://www.ztresearch.com/index.html>

World Map of Natural Hazards: The Munich Re. reinsurance company has a pretty neat publication showing worldwide natural hazard areas. It has earthquakes, tropical storms, and many other items overlaid on the map. There are also individual maps for Hailstorm frequency, tornadoes, lightning etc. You can download it here: http://www.munichre.com/publications/302-05972_en.pdf

Montana Crop Weather Report: You can get the latest crop weather report from the Montana Ag Statistics Service by signing up at: http://www.nass.usda.gov/Statistics_by_State/Montana/Subscribe_to_MT_Reports/index.asp

NWS Glasgow News:

Northeast Montana Fair: We had a total of ten employees participate for a few hours each to work the NWS booth at the fair this year. We got to see many of our weather spotters, some of the cooperative weather observers, and were impressed with how weather savvy the younger kids are that visited our booth.



Administrative Assistant (ASA) Retiring: If you've ever come into the NWS Glasgow office, you were likely greeted by the smiling face of Diana Koenig. Diana was our original ASA when the office spun up into a forecast office in 1995/1996. She has been with the federal government for 21 years, formerly at DOE/WAPA and the USDA. Diana's last day is August 28th. We'll miss her greatly, but wish her the best of luck in her retirement years.

NOAA News:

NOAA and other agencies from US and Canada survey the Arctic Ice Shelf:

There is a multi-agency effort to collect data showing the full extent of the Arctic Ice Shelf. Under law, every coastal nation is allowed 200 nautical miles of ocean beyond the shoreline, and this gives those nations rights over the natural resources. With the shifting of the ice (melting in the spring and regrowing in the winter) this boundary has a lot of political implications if not properly mapped.

http://www.noaanews.noaa.gov/stories2009/20090810_arcticshelf.html

Hurricane Seasonal Outlook lowered: The NWS has lowered its Atlantic Hurricane Season outlook, mostly due to the emerging El Nino in the equatorial Pacific. This past weekend actually had three named storms to keep an eye on, Tropical Storm Ana (now a tropical depression), Hurricane Bill, and Tropical Storm Claudette (now a tropical depression).

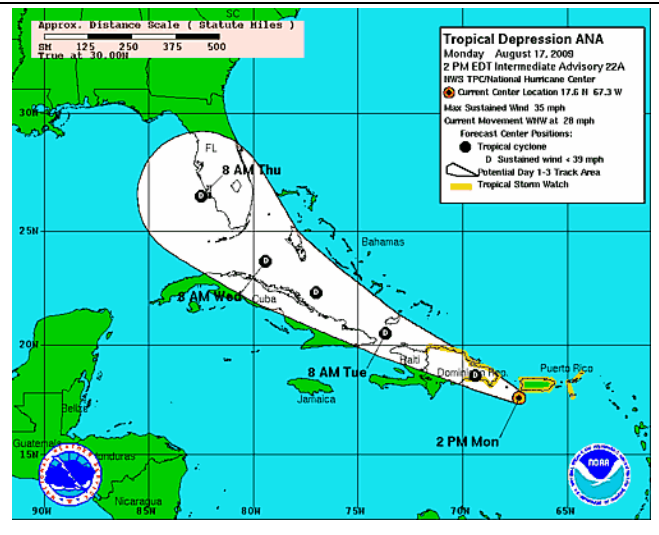
http://www.noaaneews.noaa.gov/stories2009/20090806_hurricaneupdate.html

For the latest hurricane information, go to: <http://www.nhc.noaa.gov/>

Did you know?

"When a portion of the United States is in a three day forecast hurricane path, the sales of Strawberry Pop-Tarts increases 700%?"

-Presented at the Weather and Society: Integrated Studies Workshop in Boulder in August 2009, from a Wal-Mart sales report



Weather in the News:

Thunderwear for Dogs: I had to chuckle when I saw this originally, but I do know many pet owners who say they have dogs terrified of storms, and perhaps this is a solution. We used to have "Jock the Weather Dog" who visited our office anytime the weather turned bad. His owner worked here, but even if they were out of town, Jock would find his way here during bad weather.

http://www.msnbc.msn.com/id/32375721/ns/today-today_pets/

Typhoon Morakot Impacts: Typhoon Morakot recently struck a large portion of eastern Asia, with some areas measuring over 80 inches of rainfall!!! Significant mudslides and flooding occurred in China and Taiwan, and the death toll is in the triple digits. Below is one article that may be of interest and it has some spectacular photographs:

http://www.boston.com/bigpicture/2009/08/typhoon_morakot.html

Here's a video showing a hotel falling into the river in Taiwan:

<http://www.youtube.com/watch?v=7Dn7OpD8TQU>

And lastly, here's the radar loop of part of the event:

http://einstein.atmos.colostate.edu/~mcnoldy/tropics/morakot09/Morakot_07Aug09.gif