

Bill McGlynn Weather Class 11/23/2020

Notes from my Wx Class on Nov 23.

The video of the presentation is at:

www.t-craft.org/Reference/Bill_McGlynn_WX.11.23.20.mp4

I have a routine I follow when looking at wx, (usually every morning).

I start with the **GFS North Pacific** view at 500mb vort ht. You'll find it here on the NOAA landing page: <https://mag.ncep.noaa.gov>

- choose Model Guidance
- GFS & North-Pac
- 500 vort_ht
- the latest complete model run in upper left of page and then hit Loop All

This will give you big picture insight to wx systems coming from the Pacific. Green shading is indicating vortices churning in the atmosphere possibly acting as a "trigger" for precip.

Next - the **GFS at 850mb (5000ft)** depicting Highs/Lows and precip. Same landing page as above: <https://mag.ncep.noaa.gov>

- choose Model Guidance
- GFS & Namer (North America)
- 850 temp_mslp_precip
- the latest complete model run in upper left of page and then hit Loop All

This will give you a view of wx systems at 5000ft. Blue temp contour lines are depicting freezing temps at 5000ft, red is above freezing, and purple is the demarcation - 0°C. Precip appears as shades of green. Precip in the blue contour areas falls as snow at 5000ft, (maybe turning to rain below if temps are warmer lower), precip in the red contours falls as rain.

Next, I take a closer look using the **College of DuPage tools**. Go to the following webpage and choose GFS: <https://weather.cod.edu/forecast/>

- Once you've chosen GFS, select the region on the map, and check the model run in the upper left to insure you have the latest run.
- Choose "Precipitation Products" and "SLP and Precipitation" below that.
- Use the slider at the top of the page to scroll across the 16 day timeframe in 3 hour windows.

Note the legend for precip. The lightest shade of blue indicates "shower" activity that may be scattered or isolated.

The contour lines depict pressure gradients. Tight groupings of parallel contour lines indicate high pressure gradients and thus strong winds from high to low pressure areas, (often seen along mountain ranges).

- choose "Precipitation type" to discern if precip is falling as snow or rain over a given geography
- you can also select "Surface Products" to view temps and dew points at the surface

Next, I look at Windy.com primarily to view the ECMWF (aka - the EC) model which isn't available on other platforms. EC projects out 9 days in 3 hour increments, (if you pay a subscription fee to Windy, you have access to one hour forecast intervals).

- part of the beauty of Windy is how intuitive it is to use. Just go down the right column to choose views and then use the slider at the bottom of the page to view changes with time.

Last, I like to view the NWS Forecast

Discussions <https://www.wrh.noaa.gov/zoa/cwa.php>

- these are the notes from the local forecasters sharing their views on model output. These are very helpful local knowledge discussions that will help you decipher the models and better understand them over time.

Keep in mind...once a system has passed through the airspace, the atmosphere will be moist for a day or sometimes longer. These post-system event days are called "remnant days" because there will likely be remnants from the system that went through the airspace. This is even more pronounced in the mountains where you should expect to see low clouds or fog on a remnant day.

A good satellite viewing platform is located here: The GeoColor selection is especially helpful since the basemap includes city lights for determining location. Light blue shading depicts low clouds or fog.

https://www.star.nesdis.noaa.gov/GOES/sector_band.php?sat=G17§or=pnw&band=GEOCOLOR&length=24

Finally, not sure if any of you follow Juan Brown, but I especially appreciate his accident investigation analyses and conclusions. This one is particularly instructive regarding a fatal icing accident of a C-210:

<https://www.youtube.com/watch?v=5t4kzdM5xkY&t=62s>

If you have specific questions - feel free to email me at wmpmcglynn@yahoo.com.

Blue skies and tailwinds...

Bill