




Weather or Not



**Avoiding Hype And Panic When
Planning Events**

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What causes bad weather and how do I know it's coming?

- Differing air masses colliding with each other causes lifting (producing precipitation) or winds.
- Concept developed during WWI, thus term “fronts” is used.
- Weather Maps show the location, type and strength of these air masses.
- Computer models predict how they will move.
- These models involve massive mathematical calculations of thermodynamics and fluid dynamics.

Who does all the heavy lifting in weather forecasting?

- All weather forecasts in the US, no matter what the source, are based on NWS data and computer models.
- Commercial weather enterprises just put pretty pictures on it and dumb it down.
- While nowadays slicker than Tex Antoine's cartoons or the local weather babe in a tight sweater, you're still just getting an NWS forecast with a commercial "spin" on it.
- The spin is designed to make it more exciting, not more accurate!



Commercial forecast biases

- The primary purpose of a commercial broadcast outlet is to make a profit for its owners.
- The biggest local revenue source is often the local news.
- Fear of bad weather increases news viewership and thus advertising revenues.
- Thus any weather event anywhere within the entire range of the station gets hyped as the news teaser.
- So if Philly is to get an inch of rain but Wilkes-Barre might get six inches of snow, the nine o'clock teaser will often say “Six inches of snow possible in the area, details at eleven”



You can avoid this bias

- Understand the forecast cycle
- Know where to get unbiased locality specific forecasts
- Know where to get time specific forecasts
- Understand the uncertainty of the forecast



The Weather Forecast Cycle

- Hourly Surface Observations
- Surface Synoptic Plotting
- Upper Air Observations at 00Z and 12Z
- Upper Air Synoptic Plotting
- Forecast Model Runs Complete by 02Z and 14Z
- Local interpretation of Forecast Model results
- Local Forecast Issued at 03Z and 15Z
- Local Forecast Updates at 09Z and 21Z



Forecast realities

- NWS naturally errs on the side of caution; weather is more often better than forecast and rarely worse.
- Snow versus rain line is hard to predict
- Snow fall depth is incredibly hard to predict
- An advisory or watch is NOT a warning, just a “heads up” to pay attention.

A vertical strip on the left side of the slide shows a topographic map of a coastline. The map features contour lines, a yellow road, and a blue body of water. The background of the slide is a dark teal color with light teal contour lines.

Internet Tools

- The basic starting point:
- <http://www.erh.noaa.gov/er/phi/>
- Click on your locale
- Look at the forecast
- Read the forecast
- Look at the hourly forecast graph for your location



How good is THIS particular forecast?

- Read the forecast discussion
 - NWS forecasters will indicate their logic and degree of certainty behind it.
 - If the various computer forecast models agree with each other, then the forecast is very solid
 - If the models differ, then it's more subject to doubt.
- The closer the time to the event, the more accurate the forecast.



Additional Tools

- The Weather Channel's color versions of the NWS's Synoptic and Prognostic charts
 - http://www.weather.com/maps/maptype/currentweatherusnational/index_large.html?from=wxcenter_map

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TWC Prognostic charts

- http://www.weather.com/maps/maptype/forecastsusnational/usmorningforecast_large.html?clip=undefined®ion=undefined&collection=localwxforecast&presname=undefined
- http://www.weather.com/maps/maptype/forecastsusnational/usmiddayforecast_large.html?clip=undefined®ion=undefined&collection=localwxforecast&presname=undefined
- http://www.weather.com/maps/maptype/forecastsusnational/useveningforecast_large.html?clip=undefined®ion=undefined&collection=localwxforecast&presname=undefined

Other Government sources

- Aviation Weather Center (Really good for Prog charts)
 - <http://aviationweather.gov/>
- Ocean Prediction Center
 - <http://www.opc.ncep.noaa.gov/>
- Storm Prediction Center
 - <http://www.spc.noaa.gov/products/md/>
- National Hurricane Center
 - <http://www.nhc.noaa.gov/>
- World Meteorological Organization
 - <http://www.worldweather.org/>

Other Commercial Sources

- WSI Intellicast

- <http://www.intellicast.com/National/ForecastToday.aspx>

- Weather Underground

- <http://www.wunderground.com/>

- AccuWeather

- <http://www.accuweather.com/>

- Emergency E-mail network

- <http://www.emergencyemail.org/>



Three hints to avoid bugging Gary

- If I'm planning an event, assume I'm watching the REAL weather forecasts and making a reasonable decision.
- Remember most of us are not the Wicked Witch of the West and don't melt if we get rained on.
- Follow the old Norwegian folk saying:
 - *"There's no such thing as bad weather, only bad clothing"*



Questions?