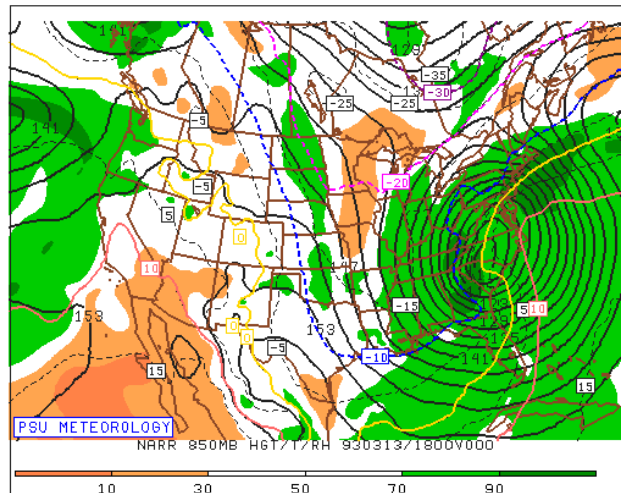
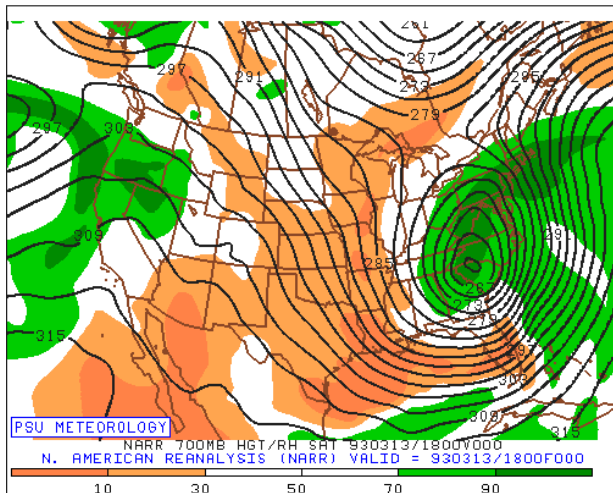
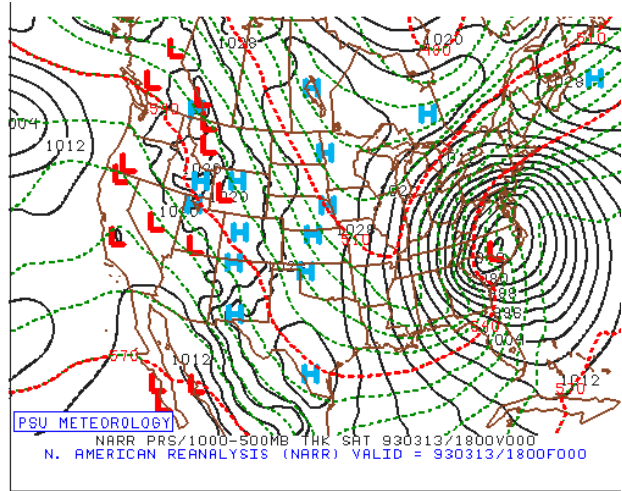
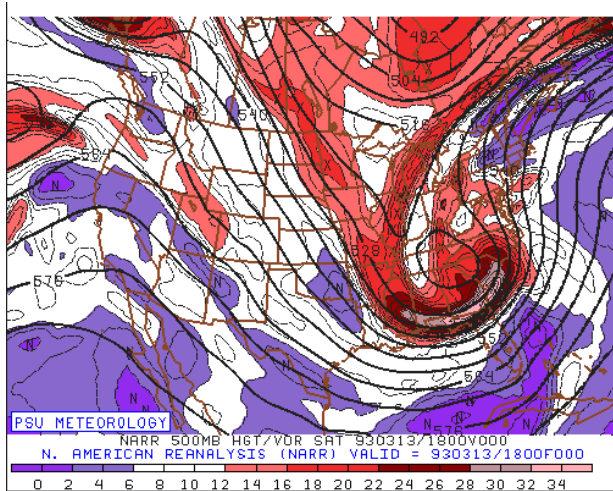


A Comprehensive List of Weather Forecasting Websites



Originally created by Zach Hiris (Oswego '18), Jimmy Barham (KU '17), and Jim Sullivan (OU '16) in September 2015

Last Updated: 9/6/2023

Is a site you love missing? Contact Scott.Steiger@oswego.edu for updates!

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Current Conditions

- [Storm Prediction Center](#)
 - [Mesoanalysis Page](#)
 - [Sounding Analysis](#)
 - [Sounding Archive Explorer](#)
 - [Objective Upper Air Maps](#)
- College of Dupage
 - [Satellite/Radar Page](#)
 - [Analysis](#)
- [University of Wyoming Sounding Page](#)
- METARs & Mesonet
 - [NY Mesonet \(Main\)](#)
 - [NY Mesonet \(Advanced\)](#)
 - [NWS Obs Page](#)
 - [Mesowest Obs Page](#)
 - [UCAR Real Time Weather Data](#) (more than just obs!)
- [NWS GIS Viewer](#)

Aviation

- [AviationWeather.gov](#)
 - [Beta Site](#)
 - [METAR/TAF Reference Guides](#)
- ACARS/Airplane Obs

Is a site you love missing? Contact Scott.Steiger@oswego.edu for updates!

- [ADMAR](#)
- [WxSter ACARS](#)
- [FAA WeatherCams](#)
- [Wind Roses \(Select Site → Custom Wind Roses\)](#)

Models & Forecast Data

- “One-Stop Pages”
 - [NCEP Model Analyses and Guidance](#)
 - *A classic site, but in desperate need of a modern design. If you like acronyms and abbreviations, this is the place for you*
 - [WeatherBell](#)
 - *User/password required*
 - [College of Dupage Forecasts](#)
 - *A staple of basic model plots for many years, old but reliable*
 - [PivotalWeather](#)
 - *Relatively new site (late 2010s), lots of good plotting options, including some of the best model comparison and $d(\text{model})/dt$ plots*
 - [Tropical Tidbits](#)
 - *A staple for a while, this site continues to make improvements*
 - [Polar Wx](#)
 - *A newer site from an OU PhD, a lot of great/customizable data, with good weather-in-context options as well*
 - [Alicia Bentley's Real-time GFS](#)
 - *A MAPlist favorite, a lot of great charts*
 - [WeatherNerds](#)
 - *A site with just about anything you can ask for. Fully customizable, but there are some things that feel clunky*
 - [ECMWF Charts](#) | [Meteogram Options](#)
 - *Lots of good ECMWF Deterministic and Ensemble Plots*
 - [Utah Model Center](#)
 - *Some good Western-US centric products*
 - [InstantWeatherMaps](#)
 - *Mostly nostalgia, in the early 2010s this was the fastest page by far*
 - [Earl Barker's Model Page](#)
 - *A... difficult site to use, but there's some valuable stuff buried in between lots of dead links. Good luck!*
 - Meteocentre - [Models](#) & [Cyclone Tracks](#)

- *Do you like French?*
 - [Penn State E-Wall](#)
 - *Another nostalgia pick, but a TON of good data still exists*
- Specialized Sites
 - [HREF \(SPC\)](#)
 - [HREF \(EMC\)](#)
 - [NSSL CAMS](#)
 - *Regular CAMs not showing what you want? Try these ones out instead!*
 - [SREF Page](#)
 - [SREF Plumes](#)
 - [HRRR Smoke](#) | [RAP Smoke](#) | [Interactive Page](#)
 - [Plymouth State University - Make Your Own Maps](#)
 - *Endless possibilities*
 - [University of Wyoming - Create Your Own](#)
 - *Like PSU's, but not as many options*
 - [CSU Machine Learning Convective & Heavy Rain Outlooks](#)
- Ensemble Focused
 - [WPC Cluster Page](#) | [QPF Cluster Page](#)
 - [GEFS Plumes \(EMC\)](#)
 - [ECMWF Ensemble Meteogram \(Oswego\)](#)
 - [WPC Winter Weather SREF Derived Products](#)
- Weather - in - Context Pages

In other words, how “different” is the model from climatology?

 - [NAEFS Ensemble Situational Awareness Table](#)
 - [NBM Forecast Records](#)
 - [Alicia Bentley's GFS Standardized Anomaly Maps](#)
 - [CIPS Guidance](#)
 - [CIPS Severe Probabilities](#)

Tropical Weather

- [National Hurricane Center](#)
- [Tropical Tidbits](#)
- [CIMSS Tropical Cyclones](#)
 - Comprehensive site
- [RAMMB - CIRA Tropical Cyclone Page](#)
 - Good one stop for satellite/environment info, w/ some model data

- [UCAR Tropical Cyclone Page](#)
 - Summary page for models/recon/satellite/etc.
- [Recon Data](#) (via Tropical Tidbits)
- [GOES Floater Imagery](#)
 - Storm specific conventional (visible, IR, water vapor) satellite images
- [Navy/NRL Tropical Cyclone Page](#)
 - Storm specific satellite images (including microwave imagery)
- [Joint Typhoon Warning Center](#)
 - Issues tropical cyclone forecasts for systems outside of the Atlantic or East Pacific
- [Central Pacific Hurricane Center](#)
 - Issues tropical cyclone forecasts for systems between 140W and the Dateline in the North Pacific
- [Penn State Tropical E-Wall](#)
 - Includes shear, steering currents, satellite data, and many other helpful tools
- [Tropical Cyclone Phase](#)
 - Useful for tracking subtropical vs. tropical storms, also shows tracks of the storms. Shows how deep of a warm core a system has
- [Probabilities of Landfall](#)
 - Uses historical data to determine the probability of a Tropical Cyclone making landfall over particular areas
- [GEFS Tropical Weather Forecasts](#)
 - From Florida State University
- [Model TC Genesis](#)
 - From Florida State University. Even more links from FSU available through Hart's page [here](#)
- [Tropical Cyclone Genesis](#)
 - From Florida State, predicts the chances of Tropical Cyclone genesis

Subseasonal Guidance

- [CFS Plots - HopWRF](#)
- [CFS Plots \(Anomalies\)](#)
- [CFS - Severe Weather Guidance Dashboard](#)
- [NIU Severe Weather Analogs \(Weeks 2-3\)](#)
- [NIU GEFS SCP Plots \(Weeks 1-2\)](#)
- [Multi-Model 3-4 Week Guidance](#)

Past Weather/Climate Indices/Seasonal Information

- Daily US Surface/Upper Air Observations
 - [SPC Mesonalysis Archive \(2005-Present\)](#)
 - Hourly Mesoanalysis from SPC
 - [NARR \(Penn State Reanalysis\)](#)
 - Daily, 4x6hr charts thru 2014. Includes 500mb vorticity, 850/700mb temps/humidity/heights, and sfc maps. Goes back to the late 70s/80s.
 - [WPC Daily Forecast Maps](#)
 - Daily WPC produced graphics from 2002-Present
 - [UCAR Case Study Site](#)
 - Great source of archived data, can be used for case study/research projects
- National Datasets
 - [ESRL- US Temp/Precip Analysis](#)
 - [ESRL- NH 20th Century Reanalysis](#)
 - Includes extensive upper air data, including 500mb height anomalies, upper level temperature data, etc. Able to specify regions
 - [ESRL- Daily Composite Reanalysis](#)
 - Similar to the 20th Century Reanalysis, but for specific days. Time range covers Jan. 1948-Present
 - [ESRL Daily Composites \(Old\)](#)
 - Same as above link, but for data starting in the mid 1800s-2012
 - [NARR - 3 Hourly Composites](#)
 - [NARR - 6 Hourly Composites](#)
- United States Climate Data
 - Each NWS office has their own climate records. For example, NWS Buffalo has their archive online [here](#).
 - [scAcis](#)
 - Thredded climate data
 - [Midwest Regional Climate Center](#)
 - Data available for entire US, not just Midwest
 - [Northeast Regional Climate Center](#)
 - Daily/Weekly/Monthly temperature and precipitation data for the Northeast US

- [Utah State Climate Center- Archived Data](#)
 - Includes Co-op, official NWS observations, and other stations for various years across the U.S. Most data is available on a daily basis, rather than summarized monthly statistics.
- Climate Indices
 - Daily NAO/PNA/EPO, etc.
 - [CPC Daily Forecast](#)
 - Monthly AO/NAO/PNA/Etc.
 - [Master List](#)
 - [Arctic Oscillation](#), [NAO](#), [PNA](#), [EPO](#), [PDO](#) + [PDO \(alternate\)](#), [QBO](#)
 - Seasonal Forecasting
 - [Linear Correlations in Atmospheric Seasonal/Monthly Averages](#)

El Nino Southern Oscillation (ENSO) & ENSO Related Links

- Current ENSO Conditions
 - [Monthly MEI Values](#)
 - Monthly values from 1979-Present (MEI v1 data [here](#) 1950-2018)
 - [CPC ENSO Home](#)
 - Home for CPC, includes several other current conditions
 - [ESRL SST Page](#)
 - Current SSTs, SSTa, etc.
- SSTanom Model Forecasts
 - [CFS Seasonal Forecasts](#)
 - [Korean Met. Agency ENSO Forecasts](#)
 - [ECMWF ENSO Plumes](#)
 - [IRI Enso Page](#) | [Gridded](#) | [Plumes](#)
 - Seasonal ENSO forecasts from both statistical and dynamic models
- Historical ENSO Conditions
 - [KNMI Climate Explorer](#)
 - Monthly time series, percentiles for each individual ENSO region. Also includes additional information on other climate indices
 - [CPC Historical Information](#)

Madden Julian Oscillation

- General Information
 - [CPC Factsheet](#)

- [MJO Wiki Link](#)
- Forecast Information
 - [CPC Homepage](#)
 - [MJO - Temperature Correlations](#)
 - Every MJO Phase Temp Correlation in the United States, on 3-month cycles (DJF, JFM, etc.)
 - [MJO - Precip Correlation](#)
 - Same as above, but precip. Note that both Temperature and precip aren't always strongly correlated to MJO phases

Quasi-Biennial Oscillation (QBO) + Stratosphere Links

- General Information + Forecasts
 - [Monthly QBO Values](#)
 - 1950 - Present
 - [CPC Stratosphere Monitoring](#)
 - Temperature, U-wind times series. Both raw and anomalies available for use in QBO diagnostics, SSWEs.
 - [Stratospheric Diagnostics](#)
 - ECMWF Forecasts D1-D10 from 150mb-1mb. Isentropic maps also available. Useful for SSWE events