

# Guide to Frontier Weather Graphics and Data Files

This document provides a listing of all weather graphics and data files that are available as of June 2012 along with file location paths on the Frontier Weather website. Most products are included, but the listing is not completely exhaustive of everything available. The following is a listing of what is included.

## GRAPHICS

- Current Weather Maps
  - Temperature, dewpoint, humidity, apparent temperature, wind speed, warnings, drought maps, snow maps, radar and satellite imagery.
  - U.S. and international regions (international not available for all products)
- Historical Weather Maps
  - Yesterday's Max/Min Temperatures, weekly temperature and precipitation, 15 day precipitation totals/anomalies, monthly and seasonal temperature and precipitation anomalies.
  - Some data available for international locations.
- Forecast Weather Maps & Graphs
  - Period, daily and weekly temperature anomalies
  - Daily max/min temperature forecast maps
  - Daily and hourly forecast graphs for U.S. cities
  - Tropical Maps
- Model Forecast Graphics
  - GFS, GFS Ensembles, ECMWF, ECMWF ensembles Canadian Ensembles, NAM
  - Temperatures, temperature anomalies, precipitation, snowfall (availability varies by model)
  - Wind speed and wind generation potential (from NAM model).

## DATA FILES

- Historical Data Files
  - Hourly and Daily data (temperature, humidity, wind speeds, cloud cover, precipitation) for hundreds of U.S./Canadian cities
  - Data files available for various time frames, historical hourly data back to 1998 and daily data back as far as 1948.
- 15 day Frontier Weather temperature, degree days, precipitation forecasts for hundreds of U.S./Canadian cities
- 9 month Frontier Weather temperature and degree day forecasts for hundreds of U.S./Canadian sites
  - Monthly and daily formats available.
- Model data files from the GFS, GFS Ensembles, ECMWF, ECMWF ensembles, NAM, NWS
  - Max/Min temperatures, temperature anomalies, precipitation, snowfall
  - Available for hundreds of U.S. and more than 8,000 international sites (for GFS and GFS ensembles)
- Historical and forecast degree day data files
  - State, Regional, and U.S. Composite
  - Population, Gas, and Oil Weighted data

Notes regarding access to graphics and data files:

- Much of the data is available only through password protected portions of the website. As such, availability of a given graphic or data file will be dependent on your particular subscription.
- Most forecast model graphics and data files are updated 7 days a week after each model run. Data files will generally be available within 30 minutes of the completion of a given model run. For example, the operational GFS models are usually completed around 10:45 AM & PM and 4:45 AM & PM Central Standard Time (an hour later during daylight savings time). Data files related to those models are generally all available within 30-40 minutes of those times, some less.
- GFS operational model temperature anomaly forecast graphics are updated in real-time for each model run.
- The composite and bias corrected GFS ensemble data files are updated a couple hours after the model runs are complete.
- Frontier Weather forecast maps (2-5, 6-10, 11-15, and daily anomalies) are only updated Sunday through Friday.
- Frontier Weather forecast data files (temperatures, degree days, etc) are updated twice per day during Monday through Friday (except holidays) once between 6-7AM CT and again between 1-2PM CDT or 12-1PM CST. Files are updated around midday on Sundays or Monday holidays.
- Custom wind generation forecast files and graphics are also available as requested (extra fees apply).
- All data files and many graphics are available by ftp as well (provided they are already available as part of your subscription. Please contact us for additional information.

If you note any errors in this document, such as file paths that are incorrect, please notify us so that we may correct this document.

## Current Weather Map Locations

Note that image size can be altered as needed. The 640x480 can be changed to 320x240, 1024x768 or any other size. Removing the “\_points” at the end of the string will display a map without numerical values.

### United States

Temperature: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=us\\_temperature\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=us_temperature_i1_points.png)

Dewpoint: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=us\\_dewpoints\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=us_dewpoints_i1_points.png)

Relative Humidity: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=us\\_humidity\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=us_humidity_i1_points.png)

Apparent Temp: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=us\\_apparenttemp\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=us_apparenttemp_i1_points.png)

Wind Speed: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=us\\_windspeed\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=us_windspeed_i1_points.png)

Current Warnings: <http://www.frontierweather.com/weather/warnfetch.php?size=640x480&state=us>

Current Palmer Drought Index: [http://www.frontierweather.com/currentweather/imagefetch.php?size=480x360&type=palmer&img=us\\_palmerindex\\_ip1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=480x360&type=palmer&img=us_palmerindex_ip1_points.png)

Current Soil Moisture Anomalies: [http://www.frontierweather.com/currentweather/imagefetch.php?size=480x360&type=palmer&img=us\\_moistanom\\_ip1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=480x360&type=palmer&img=us_moistanom_ip1_points.png)

Precip Needed to end Drought: [http://www.frontierweather.com/currentweather/imagefetch.php?size=480x360&type=palmer&img=us\\_precipneeded\\_ip1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=480x360&type=palmer&img=us_precipneeded_ip1_points.png)

Current Snow Depth: [http://www.frontierweather.com/currentweather/imagefetch.php?size=480x360&type=snow&img=us\\_snowdepth\\_i1.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=480x360&type=snow&img=us_snowdepth_i1.png)

Current Radar: <http://www.frontierweather.com/weather/radarfetch2.php?size=640x480&type=ptype&loc=us&base=flat&ext=jpg&o=&u=>

Current IR Satellite: [http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus\\_clir](http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus_clir)

Current Vis Satellite: [http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus\\_vis](http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus_vis)

Current WV Satellite: [http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus\\_wv](http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus_wv)

### Canada

Temperature: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=ca\\_temperature\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=ca_temperature_i1_points.png)

Dewpoint: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=ca\\_dewpoints\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=ca_dewpoints_i1_points.png)

Relative Humidity: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=ca\\_humidity\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=ca_humidity_i1_points.png)

Apparent Temp: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=ca\\_apparenttemp\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=ca_apparenttemp_i1_points.png)

Wind Speed: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=ca\\_windspeed\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=ca_windspeed_i1_points.png)

Current IR Satellite: [http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus\\_clir](http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus_clir)

Current Vis Satellite: [http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus\\_vis](http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus_vis)

Current WV Satellite: [http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus\\_wv](http://www.frontierweather.com/weather/satfetch.php?size=640x480&img=conus_wv)

### South America

Temperature: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sam\\_temperature\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sam_temperature_i1_points.png)

Dewpoint: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sam\\_dewpoints\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sam_dewpoints_i1_points.png)

Relative Humidity: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sam\\_humidity\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sam_humidity_i1_points.png)

Apparent Temp: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sam\\_apparenttemp\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sam_apparenttemp_i1_points.png)

Wind Speed: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sam\\_windspeed\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sam_windspeed_i1_points.png)

Current IR Satellite: [http://aviationweather.gov/data/obs/sat/intl/ir\\_ICAO-A\\_bw.jpg](http://aviationweather.gov/data/obs/sat/intl/ir_ICAO-A_bw.jpg)

### Europe

Temperature: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=eur\\_temperature\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=eur_temperature_i1_points.png)

Dewpoint: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=eur\\_dewpoints\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=eur_dewpoints_i1_points.png)

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Wind Speed: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=eur\\_windspeed\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=eur_windspeed_i1_points.png)

Current IR Satellite: [http://aviationweather.gov/data/obs/sat/intl/ir\\_ICAO-C\\_bw.jpg](http://aviationweather.gov/data/obs/sat/intl/ir_ICAO-C_bw.jpg)

### Middle East

Temperature: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=mide\\_temperature\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=mide_temperature_i1_points.png)

Dewpoint: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=mide\\_dewpoints\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=mide_dewpoints_i1_points.png)

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Wind Speed: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=mide\\_windspeed\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=mide_windspeed_i1_points.png)

Current IR Satellite: [http://aviationweather.gov/data/obs/sat/intl/ir\\_ICAO-D\\_bw.jpg](http://aviationweather.gov/data/obs/sat/intl/ir_ICAO-D_bw.jpg)

### Northern Asia

Temperature: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=nas\\_temperature\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=nas_temperature_i1_points.png)

Dewpoint: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=nas\\_dewpoints\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=nas_dewpoints_i1_points.png)

Relative Humidity: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=nas\\_humidity\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=nas_humidity_i1_points.png)

Apparent Temp: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=nas\\_apparenttemp\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=nas_apparenttemp_i1_points.png)

Wind Speed: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=nas\\_windspeed\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=nas_windspeed_i1_points.png)

Current IR Satellite: [http://aviationweather.gov/data/obs/sat/intl/ir\\_ICAO-M\\_bw.jpg](http://aviationweather.gov/data/obs/sat/intl/ir_ICAO-M_bw.jpg)

### Southern Asia

Temperature: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sas\\_temperature\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sas_temperature_i1_points.png)

Dewpoint: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sas\\_dewpoints\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sas_dewpoints_i1_points.png)

Relative Humidity: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sas\\_humidity\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sas_humidity_i1_points.png)

Apparent Temp: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sas\\_apparenttemp\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sas_apparenttemp_i1_points.png)

Wind Speed: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sas\\_windspeed\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=sas_windspeed_i1_points.png)

Current IR Satellite: [http://aviationweather.gov/data/obs/sat/intl/ir\\_ICAO-D\\_bw.jpg](http://aviationweather.gov/data/obs/sat/intl/ir_ICAO-D_bw.jpg)

### Australia

Temperature: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=aus\\_temperature\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=aus_temperature_i1_points.png)

Dewpoint: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=aus\\_dewpoints\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=aus_dewpoints_i1_points.png)

Relative Humidity: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=aus\\_humidity\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=aus_humidity_i1_points.png)

Apparent Temp: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=aus\\_apparenttemp\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=aus_apparenttemp_i1_points.png)

Wind Speed: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=aus\\_windspeed\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=currents&img=aus_windspeed_i1_points.png)

Current IR Satellite: [http://aviationweather.gov/data/obs/sat/intl/ir\\_ICAO-F\\_bw.jpg](http://aviationweather.gov/data/obs/sat/intl/ir_ICAO-F_bw.jpg)

## Historical Weather Map Locations

### United States

Yesterday's Highs: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=yesttemps&img=us\\_yesthighs\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=yesttemps&img=us_yesthighs_i1_points.png)

Yesterday's Lows: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=yesttemps&img=us\\_yestlows\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=yesttemps&img=us_yestlows_i1_points.png)

For weekly and monthly maps, change date strings in file name as needed. Dates are of the pattern: YYYYMM or YYYYMMDD

Weekly Temperature Anomalies: [http://www.frontierweather.com/climatemaps/7DayPeriodAverages/Historical7DayvsClimo/Hist7DayAnom20120531\\_new.png](http://www.frontierweather.com/climatemaps/7DayPeriodAverages/Historical7DayvsClimo/Hist7DayAnom20120531_new.png)

Weekly Precipitation Anomalies: [http://www.frontierweather.com/climatemaps/Precip/20120531\\_7day\\_anom\\_us.png](http://www.frontierweather.com/climatemaps/Precip/20120531_7day_anom_us.png)

Monthly Temperature Anomalies: <http://www.frontierweather.com/climatemaps/temp201204.gif>

Monthly Precipitation Anomalies: <http://www.frontierweather.com/climatemaps/precip201204.gif>

90 Day Precip Totals: [http://www.frontierweather.com/climatemaps/Precip/latest\\_90day\\_accum\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_90day_accum_us.png)

60 Day Precip Totals: [http://www.frontierweather.com/climatemaps/Precip/latest\\_60day\\_accum\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_60day_accum_us.png)

30 Day Precip Totals: [http://www.frontierweather.com/climatemaps/Precip/latest\\_30day\\_accum\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_30day_accum_us.png)

15 Day Precip Totals: [http://www.frontierweather.com/climatemaps/Precip/latest\\_15day\\_accum\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_15day_accum_us.png)

7 Day Precip Totals: [http://www.frontierweather.com/climatemaps/Precip/latest\\_7day\\_accum\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_7day_accum_us.png)

90 Day Precip Anomalies: [http://www.frontierweather.com/climatemaps/Precip/latest\\_90day\\_anom\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_90day_anom_us.png)

60 Day Precip Anomalies: [http://www.frontierweather.com/climatemaps/Precip/latest\\_60day\\_anom\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_60day_anom_us.png)

30 Day Precip Anomalies: [http://www.frontierweather.com/climatemaps/Precip/latest\\_30day\\_anom\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_30day_anom_us.png)

15 Day Precip Anomalies: [http://www.frontierweather.com/climatemaps/Precip/latest\\_15day\\_anom\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_15day_anom_us.png)

7 Day Precip Anomalies: [http://www.frontierweather.com/climatemaps/Precip/latest\\_7day\\_anom\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_7day_anom_us.png)

90 Day Precip %Normal: [http://www.frontierweather.com/climatemaps/Precip/latest\\_90day\\_pnorm\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_90day_pnorm_us.png)

60 Day Precip %Normal: [http://www.frontierweather.com/climatemaps/Precip/latest\\_60day\\_pnorm\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_60day_pnorm_us.png)

30 Day Precip %Normal: [http://www.frontierweather.com/climatemaps/Precip/latest\\_30day\\_pnorm\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_30day_pnorm_us.png)

15 Day Precip %Normal: [http://www.frontierweather.com/climatemaps/Precip/latest\\_15day\\_pnorm\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_15day_pnorm_us.png)

7 Day Precip %Normal: [http://www.frontierweather.com/climatemaps/Precip/latest\\_7day\\_pnorm\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_7day_pnorm_us.png)

90 Day Precip Year on Year Change: [http://www.frontierweather.com/climatemaps/Precip/latest\\_90day\\_yearchange\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_90day_yearchange_us.png)

60 Day Precip Year on Year Change: [http://www.frontierweather.com/climatemaps/Precip/latest\\_60day\\_yearchange\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_60day_yearchange_us.png)

30 Day Precip Year on Year Change: [http://www.frontierweather.com/climatemaps/Precip/latest\\_30day\\_yearchange\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_30day_yearchange_us.png)

15 Day Precip Year on Year Change: [http://www.frontierweather.com/climatemaps/Precip/latest\\_15day\\_yearchange\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_15day_yearchange_us.png)

7 Day Precip Year on Year Change: [http://www.frontierweather.com/climatemaps/Precip/latest\\_7day\\_yearchange\\_us.png](http://www.frontierweather.com/climatemaps/Precip/latest_7day_yearchange_us.png)

Site Specific 6 Month Temperature/Precipitation Graphs/Table: [http://www.frontierweather.com/ForecastDataPlus/ORD\\_90daygraph.html](http://www.frontierweather.com/ForecastDataPlus/ORD_90daygraph.html)

Change ORD (Chicago) to whatever site ID is needed.

## International Areas

Yesterday's Highs: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=yesttemps&img=eur\\_yesthighs\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=yesttemps&img=eur_yesthighs_i1_points.png)

Yesterday's Lows: [http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=yesttemps&img=eur\\_yestlows\\_i1\\_points.png](http://www.frontierweather.com/currentweather/imagefetch.php?size=640x480&type=yesttemps&img=eur_yestlows_i1_points.png)

Replace "eur" in string to view other international areas:

eur=Europe      nam=North America      sam=South America      ca=Canada      mide=Middle East  
nas=Northern Asia      sas=Southern Asia      afr=Africa      aus=Australia      us=United States

90 Day Precip Totals: [http://www.frontierweather.com/climatemaps/Precip/latest\\_90day\\_accum\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_90day_accum_europe.png)

60 Day Precip Totals: [http://www.frontierweather.com/climatemaps/Precip/latest\\_60day\\_accum\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_60day_accum_europe.png)

30 Day Precip Totals: [http://www.frontierweather.com/climatemaps/Precip/latest\\_30day\\_accum\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_30day_accum_europe.png)

15 Day Precip Totals: [http://www.frontierweather.com/climatemaps/Precip/latest\\_15day\\_accum\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_15day_accum_europe.png)

7 Day Precip Totals: [http://www.frontierweather.com/climatemaps/Precip/latest\\_7day\\_accum\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_7day_accum_europe.png)

90 Day Precip Anomalies: [http://www.frontierweather.com/climatemaps/Precip/latest\\_90day\\_anom\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_90day_anom_europe.png)

60 Day Precip Anomalies: [http://www.frontierweather.com/climatemaps/Precip/latest\\_60day\\_anom\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_60day_anom_europe.png)

30 Day Precip Anomalies: [http://www.frontierweather.com/climatemaps/Precip/latest\\_30day\\_anom\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_30day_anom_europe.png)

15 Day Precip Anomalies: [http://www.frontierweather.com/climatemaps/Precip/latest\\_15day\\_anom\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_15day_anom_europe.png)

7 Day Precip Anomalies: [http://www.frontierweather.com/climatemaps/Precip/latest\\_7day\\_anom\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_7day_anom_europe.png)

90 Day Precip %Normal: [http://www.frontierweather.com/climatemaps/Precip/latest\\_90day\\_pnorm\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_90day_pnorm_europe.png)

60 Day Precip %Normal: [http://www.frontierweather.com/climatemaps/Precip/latest\\_60day\\_pnorm\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_60day_pnorm_europe.png)

30 Day Precip %Normal: [http://www.frontierweather.com/climatemaps/Precip/latest\\_30day\\_pnorm\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_30day_pnorm_europe.png)

15 Day Precip %Normal: [http://www.frontierweather.com/climatemaps/Precip/latest\\_15day\\_pnorm\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_15day_pnorm_europe.png)

7 Day Precip %Normal: [http://www.frontierweather.com/climatemaps/Precip/latest\\_7day\\_pnorm\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_7day_pnorm_europe.png)

90 Day Precip Year on Year Change: [http://www.frontierweather.com/climatemaps/Precip/latest\\_90day\\_yearchange\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_90day_yearchange_europe.png)

60 Day Precip Year on Year Change: [http://www.frontierweather.com/climatemaps/Precip/latest\\_60day\\_yearchange\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_60day_yearchange_europe.png)

30 Day Precip Year on Year Change: [http://www.frontierweather.com/climatemaps/Precip/latest\\_30day\\_yearchange\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_30day_yearchange_europe.png)

15 Day Precip Year on Year Change: [http://www.frontierweather.com/climatemaps/Precip/latest\\_15day\\_yearchange\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_15day_yearchange_europe.png)

7 Day Precip Year on Year Change: [http://www.frontierweather.com/climatemaps/Precip/latest\\_7day\\_yearchange\\_europe.png](http://www.frontierweather.com/climatemaps/Precip/latest_7day_yearchange_europe.png)

Replace "europe" in string to view other international areas:

us=United States      europe=Europe      fsu=Eastern Europe      asia=Asia      samerica=South America      australia=Australia

## Forecast Weather Map Locations

### UNITED STATES

2-5 Day Forecast Temperature Anomaly: <http://www.frontierweather.com/forecasts/Days2-5Anom.png>

6-10 Day Forecast Temperature Anomaly: <http://www.frontierweather.com/forecasts/Days6-10Anom.png>

11-15 Day Forecast Temperature Anomaly: <http://www.frontierweather.com/forecasts/Days11-15Anom.png>

Last Week's Temperature Anomalies: <http://www.frontierweather.com/forecasts/LWTemps.png>

This Week's Temperature Anomalies: <http://www.frontierweather.com/forecasts/TWTemps.png>

Next Week's Temperature Anomalies: <http://www.frontierweather.com/forecasts/NWTemps.png>

Any Week Temperature Anomalies: [http://www.frontierweather.com/climatemaps/7DayPeriodAverages/Historical7DayvsClimo/Hist7DayAnomYYYYMMDD\\_new.png](http://www.frontierweather.com/climatemaps/7DayPeriodAverages/Historical7DayvsClimo/Hist7DayAnomYYYYMMDD_new.png)

Any Week Precipitation Anomalies: [http://www.frontierweather.com/climatemaps/Precip/YYYYMMDD\\_7day\\_anom\\_us.png](http://www.frontierweather.com/climatemaps/Precip/YYYYMMDD_7day_anom_us.png)

Where "YYYY" is year, "MM" is month, and "DD" is day. The map displayed will be the seven day temperature or precipitation anomaly ending on that day.

Daily Forecast Temperature Anomalies: <http://www.frontierweather.com/forecasts/DayNAnom.png>

Daily Forecast High Temperatures: <http://www.frontierweather.com/forecasts/DayNhighs.png>

Daily Forecast Low Temperatures: <http://www.frontierweather.com/forecasts/DayNlows.png>

Daily Forecast Degree Days: <http://www.frontierweather.com/forecasts/DayNDDs.png>

Where "N" is the number of the forecast day, between 1 and 15.

For precipitation forecast maps, please consult "Forecast Models" section.

### INTERNATIONAL

2-5 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/comp\\_days25\\_latest\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/comp_days25_latest_REGION.png)

6-10 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/comp\\_days610\\_latest\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/comp_days610_latest_REGION.png)

11-15 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/comp\\_days1115\\_latest\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/comp_days1115_latest_REGION.png)

Day 1 Forecast Temperature Anomalies: [http://www.frontierweather.com/forecasts/modelmaps/new/day1\\_00z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/day1_00z_REGION.png)

Days 2-15 Forecast Temperature Anomalies: [http://www.frontierweather.com/forecasts/modelmaps/new/comp\\_dayN\\_latest\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/comp_dayN_latest_REGION.png)

Where "N" is the number of the forecast day, between 2 and 15.

Replace "REGION" in string to view other international areas:

europe=Europe

fsu=Eastern Europe

asia=Asia

samerica=South America

australia=Australia

For precipitation forecast maps, please consult "Forecast Model" section.

## TROPICAL FORECAST MAPS

Tropical Atlantic Environmental Composite: [http://www.frontierweather.com/tropical/atl\\_composite.png](http://www.frontierweather.com/tropical/atl_composite.png)

Tropical Atlantic Dry Air: [http://www.frontierweather.com/tropical/atl\\_SAL.png](http://www.frontierweather.com/tropical/atl_SAL.png)

Tropical Atlantic Shear: [http://www.frontierweather.com/tropical/atl\\_shear.png](http://www.frontierweather.com/tropical/atl_shear.png)

Tropical Atlantic SSTs: [http://www.frontierweather.com/tropical/atl\\_wide\\_sst\\_large.png](http://www.frontierweather.com/tropical/atl_wide_sst_large.png)

Tropical Atlantic SST Anomalies: [http://www.frontierweather.com/tropical/atl\\_wide\\_sst\\_anom\\_large.png](http://www.frontierweather.com/tropical/atl_wide_sst_anom_large.png)

Forecast Storm Tracks: [http://www.frontierweather.com/tropical/tropicalupdate\\_files/TropicalUpdateMaps\\_image001.png](http://www.frontierweather.com/tropical/tropicalupdate_files/TropicalUpdateMaps_image001.png)

Forecast Model Tracks: [http://www.frontierweather.com/tropical/tropicalupdate\\_files/TropicalUpdateMaps\\_image003.png](http://www.frontierweather.com/tropical/tropicalupdate_files/TropicalUpdateMaps_image003.png)

Historical Track Maps: [http://www.frontierweather.com/tropical/historical/YYYY\\_all\\_tracks.png](http://www.frontierweather.com/tropical/historical/YYYY_all_tracks.png)

Where “YYYY” is the year from 1851 to present.

Daily Gales Maps: [http://www.frontierweather.com/forecasts/waves/GFS\\_REGION\\_gales\\_dayN.png](http://www.frontierweather.com/forecasts/waves/GFS_REGION_gales_dayN.png)

Hourly Gales Maps: [http://www.frontierweather.com/forecasts/waves/GFS\\_REGION\\_gales\\_FNN.png](http://www.frontierweather.com/forecasts/waves/GFS_REGION_gales_FNN.png)

Daily Wave Height Maps: [http://www.frontierweather.com/forecasts/waves/ww3\\_REGION\\_waves\\_dayN.png](http://www.frontierweather.com/forecasts/waves/ww3_REGION_waves_dayN.png)

Hourly Wave Height Maps: [http://www.frontierweather.com/forecasts/waves/ww3\\_REGION\\_waves\\_FNN.png](http://www.frontierweather.com/forecasts/waves/ww3_REGION_waves_FNN.png)

Where “**REGION**” is either: **atl** for Atlantic, **gulf** for Gulf of Mexico, or **epac** for the eastern Pacific.

Where “**N**” is the forecast day, from 1-3

Where “**NN**” is the forecast hour, in three hour intervals, from “**03**” to “**84**”.



## Forecast Model Map Locations

### GFS FORECAST MODEL-ALL REGIONS

For below maps, “HH” is either 00, 06, 12, or 18 to denote the 00Z, 06Z, 12Z, 18Z runs. The 00Z run is available around midnight central time, the 6Z run available around 6AM central time, etc. “Z” denotes Zulu or GMT time and is the time the model run begins. Maps are generally available ~5 hours after model start time.

“REGION” denotes the region. Remove “\_REGION” for U.S. (e.g. 2-5 day map for U.S. for 00Z run is: days25\_00z.png  
cak=Canada Alaska    europe=Europe    australia=Australia    asia=Asia    samerica= South America    fsu=eastern Europe

“N” denotes forecast day between 1-15.

Also, for most maps, an “\_small.png” can be used instead of “.png” for a smaller sized version of the map.

2-5 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/days25\\_HHz\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days25_HHz_REGION.png)

6-10 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/days610\\_HHz\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days610_HHz_REGION.png)

11-15 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/days1115\\_HHz\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days1115_HHz_REGION.png)

Daily Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/dayN\\_HHz\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/dayN_HHz_REGION.png)

(day one is only available on the 00Z run)

The forecast composite temperature anomalies are a weighted average of the last 4 GFS runs.

2-5 Day Forecast Composite Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/comp\\_days25\\_latest\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/comp_days25_latest_REGION.png)

6-10 Day Forecast Composite Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/comp\\_days610\\_latest\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/comp_days610_latest_REGION.png)

11-15 Day Forecast Composite Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/comp\\_days1115\\_latest\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/comp_days1115_latest_REGION.png)

Daily Composite Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/comp\\_dayN\\_latest\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/comp_dayN_latest_REGION.png)

2-5 Day Forecast Precipitation Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/days25\\_HHz\\_precip\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days25_HHz_precip_REGION.png)

6-10 Day Forecast Precipitation Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/days610\\_HHz\\_precip\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days610_HHz_precip_REGION.png)

11-15 Day Forecast Precipitation Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/days1115\\_HHz\\_precip\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days1115_HHz_precip_REGION.png)

Days 1-7 Forecast Precipitation Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/day7total\\_HHz\\_precip\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/day7total_HHz_precip_REGION.png)

Days 1-15 Forecast Precipitation Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/day15total\\_HHz\\_precip\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/day15total_HHz_precip_REGION.png)

Daily Precipitation Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/dayN\\_HHz\\_precip\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/dayN_HHz_precip_REGION.png)

2-5 Day Forecast Precipitation Anomalies: [http://www.frontierweather.com/forecasts/modelmaps/new/days25\\_HHz\\_precip\\_anom\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days25_HHz_precip_anom_REGION.png)

6-10 Day Forecast Precipitation Anomalies: [http://www.frontierweather.com/forecasts/modelmaps/new/days610\\_HHz\\_precip\\_anom\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days610_HHz_precip_anom_REGION.png)

11-15 Day Forecast Precipitation Anomalies: [http://www.frontierweather.com/forecasts/modelmaps/new/days1115\\_HHz\\_precip\\_anom\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days1115_HHz_precip_anom_REGION.png)

Days 1-7 Forecast Precipitation Anomalies: [http://www.frontierweather.com/forecasts/modelmaps/new/day7total\\_HHz\\_precip\\_anom\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/day7total_HHz_precip_anom_REGION.png)

Days 1-15 Forecast Precipitation Anomalies: [http://www.frontierweather.com/forecasts/modelmaps/new/day15total\\_HHz\\_precip\\_anom\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/day15total_HHz_precip_anom_REGION.png)

2-5 Day Forecast Snowfall Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/days25\\_HHz\\_snow\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days25_HHz_snow_REGION.png)

6-10 Day Forecast Snowfall Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/days610\\_HHz\\_snow\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days610_HHz_snow_REGION.png)

11-15 Day Forecast Snowfall Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/days1115\\_HHz\\_snow\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/days1115_HHz_snow_REGION.png)

Days 1-7 Forecast Snowfall Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/day7total\\_HHz\\_snow\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/day7total_HHz_snow_REGION.png)

Days 1-15 Forecast Snowfall Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/day15total\\_HHz\\_snow\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/day15total_HHz_snow_REGION.png)

Daily Snowfall Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/dayN\\_HHz\\_snow\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/dayN_HHz_snow_REGION.png)

### GFS FORECAST MODEL-U.S. ONLY

Daily High Temperature Forecast: [http://www.frontierweather.com/forecasts/modelmaps/new/2mt /GFS\\_HH\\_z\\_dayN\\_tmax\\_small.png](http://www.frontierweather.com/forecasts/modelmaps/new/2mt /GFS_HH_z_dayN_tmax_small.png)

Daily Low Temperature Forecast: [http://www.frontierweather.com/forecasts/modelmaps/new/2mt /GFS\\_HH\\_z\\_dayN\\_tmin\\_small.png](http://www.frontierweather.com/forecasts/modelmaps/new/2mt /GFS_HH_z_dayN_tmin_small.png)

### GFS ENSEMBLE FORECAST MODEL-U.S. ONLY

Daily High Temperature Forecast: [http://www.frontierweather.com/forecasts/modelmaps/new/2mt /ens\\_mean\\_HH\\_z\\_dayN\\_tmax\\_small.png](http://www.frontierweather.com/forecasts/modelmaps/new/2mt /ens_mean_HH_z_dayN_tmax_small.png)

Daily Low Temperature Forecast: [http://www.frontierweather.com/forecasts/modelmaps/new/2mt /ens\\_mean\\_HH\\_z\\_dayN\\_tmin\\_small.png](http://www.frontierweather.com/forecasts/modelmaps/new/2mt /ens_mean_HH_z_dayN_tmin_small.png)

Daily Ensemble Spread: [http://www.frontierweather.com/forecasts/modelmaps/new/ens\\_spread\\_dayN\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ens_spread_dayN_HH_z_REGION.png)

Daily Warmest Pop Weighted Solution: [http://www.frontierweather.com/forecasts/modelmaps/new/ens\\_warmest\\_dayN\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ens_warmest_dayN_HH_z_REGION.png)

Daily Coldest Pop Weighted Solution: [http://www.frontierweather.com/forecasts/modelmaps/new/ens\\_coldest\\_dayN\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ens_coldest_dayN_HH_z_REGION.png)

### GFS ENSEMBLE FORECAST MODEL-ALL REGIONS

2-5 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ens\\_days25\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ens_days25_HH_z_REGION.png)

6-10 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ens\\_days610\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ens_days610_HH_z_REGION.png)

11-15 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ens\\_days1115\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ens_days1115_HH_z_REGION.png)

Daily Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ens\\_dayN\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ens_dayN_HH_z_REGION.png)

Ensemble composite is a weighted average of the last four ensemble runs.

2-5 Day Forecast Ensemble Composite Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ens\\_comp\\_days25\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ens_comp_days25_HH_z_REGION.png)

6-10 Day Forecast Ensemble Composite Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ens\\_comp\\_days610\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ens_comp_days610_HH_z_REGION.png)

11-15 Day Forecast Ensemble Composite Temperature Anomaly:

[http://www.frontierweather.com/forecasts/modelmaps/new/ens\\_comp\\_days1115\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ens_comp_days1115_HH_z_REGION.png)

Daily Temperature Ensemble Composite Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ens\\_comp\\_dayN\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ens_comp_dayN_HH_z_REGION.png)

(day one is only available on the 00Z run)

### ECMWF and ECMWF ENSEMBLE FORECAST MODELS-ALL REGIONS

Note that the ECMWF and ECMWF Ensemble forecasts are only available at 00z and 12z and daily maps are only available from days 1-10.

ECMWF:

2-5 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF\\_days25\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF_days25_HH_z_REGION.png)

6-10 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF\\_days610\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF_days610_HH_z_REGION.png)

11-15 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF\\_days1115\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF_days1115_HH_z_REGION.png)

Daily Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF\\_dayN\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF_dayN_HH_z_REGION.png)

ECMWF ENSEMBLE MEAN:

2-5 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF\\_ens\\_days25\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF_ens_days25_HH_z_REGION.png)

6-10 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF\\_ens\\_days610\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF_ens_days610_HH_z_REGION.png)

11-15 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF\\_ens\\_days1115\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF_ens_days1115_HH_z_REGION.png)

Daily Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF\\_ens\\_dayN\\_HH\\_z\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/ECMWF_ens_dayN_HH_z_REGION.png)

## CANADIAN ENSEMBLE MEAN FORECAST MODEL-ALL REGIONS

Note that the Canadian Ensemble forecasts are only available at 00z and 12z.

2-5 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/canadian\\_ens\\_days25\\_HHz\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/canadian_ens_days25_HHz_REGION.png)

6-10 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/canadian\\_ens\\_days610\\_HHz\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/canadian_ens_days610_HHz_REGION.png)

11-15 Day Forecast Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/canadian\\_ens\\_days1115\\_HHz\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/canadian_ens_days1115_HHz_REGION.png)

Daily Temperature Anomaly: [http://www.frontierweather.com/forecasts/modelmaps/new/canadian\\_ens\\_dayN\\_HHz\\_REGION.png](http://www.frontierweather.com/forecasts/modelmaps/new/canadian_ens_dayN_HHz_REGION.png)

## NAM PRECIPITATION/SNOWFALL FORECAST GRAPHICS (US ONLY)

“**N**” is the forecast day from 1 to 3, “**HH**” is the forecast model run, either 00, 06, 12 or 18.

Daily Forecast Snowfall Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/NAM\\_dayN\\_HHz\\_snow.png](http://www.frontierweather.com/forecasts/modelmaps/new/NAM_dayN_HHz_snow.png)

84 Hour Forecast Total Snowfall: [http://www.frontierweather.com/forecasts/modelmaps/new/NAM\\_84hr\\_HHz\\_snow.png](http://www.frontierweather.com/forecasts/modelmaps/new/NAM_84hr_HHz_snow.png)

High Resolution forecast for days 1-2:

Daily Forecast Snowfall Totals: [http://www.frontierweather.com/forecasts/modelmaps/new/NAM\\_conusnest\\_dayN\\_HHz\\_snow.png](http://www.frontierweather.com/forecasts/modelmaps/new/NAM_conusnest_dayN_HHz_snow.png)

60 Hour Forecast Total Snowfall: [http://www.frontierweather.com/forecasts/modelmaps/new/NAM\\_conusnest\\_60hr\\_HHz\\_snow.png](http://www.frontierweather.com/forecasts/modelmaps/new/NAM_conusnest_60hr_HHz_snow.png)

Forecast Precipitation Type (3 hour intervals from 03 to 84): [http://www.frontierweather.com/forecasts/ptype/NAM\\_ptype\\_FHH.png](http://www.frontierweather.com/forecasts/ptype/NAM_ptype_FHH.png)

Forecast Clouds/Precipitation (hourly from 01 to 36): [http://www.frontierweather.com/forecasts/cloudreflectivity/NAM\\_ref\\_REGION\\_FHH\\_large.png](http://www.frontierweather.com/forecasts/cloudreflectivity/NAM_ref_REGION_FHH_large.png)

Region: us=whole US    ma=Mid-Atlantic    mw=Midwest    nc=North Central    ne=Northeast    sc=South Central    se=Southeast    w=West

## NAM WIND SPEED AND WIND GENERATION POTENTIAL FORECAST GRAPHICS (US ONLY)

“**HH**” is the forecast hour from 03 to 60 at 3 hour intervals.

“**REGION**” is the forecast region can be:

us=lower 48    SP=Southern Plains    NP=Northern Plains    pacnw=Pacific Northwest    midwest=Midwest    gulf=Gulf of Mexico

Forecast 3 hour wind speeds: [http://www.frontierweather.com/free/wind/combined\\_wind\\_REGION\\_F0HH.png](http://www.frontierweather.com/free/wind/combined_wind_REGION_F0HH.png)

Forecast 3 hour wind generation potential: [http://www.frontierweather.com/free/wind/combined\\_genpot\\_REGION\\_F0HH.png](http://www.frontierweather.com/free/wind/combined_genpot_REGION_F0HH.png)

## DAILY AND PERIOD AVERAGE GRAPHS COMPARING U.S. POPULATION WEIGHTED TEMPERATURE ANOMALIES FROM VARIOUS MODELS

Daily comparison graph: [http://www.frontierweather.com/forecasts/USCompositeModelGraph\\_3.png](http://www.frontierweather.com/forecasts/USCompositeModelGraph_3.png)

Period average comparison graph: [http://www.frontierweather.com/forecasts/USCompositeModelGraph\\_6.png](http://www.frontierweather.com/forecasts/USCompositeModelGraph_6.png)

2-5 Day Model Mean Forecast Trend: [http://www.frontierweather.com/forecasts/USCompositeModelGraph\\_7.png](http://www.frontierweather.com/forecasts/USCompositeModelGraph_7.png)

6-10 Day Model Mean Forecast Trend: [http://www.frontierweather.com/forecasts/USCompositeModelGraph\\_8.png](http://www.frontierweather.com/forecasts/USCompositeModelGraph_8.png)

11-15 Day Model Mean Forecast Trend: [http://www.frontierweather.com/forecasts/USCompositeModelGraph\\_10.png](http://www.frontierweather.com/forecasts/USCompositeModelGraph_10.png)

2-5 & 6-10 Day Model Mean Trend for same Calendar Days: [http://www.frontierweather.com/forecasts/USCompositeModelGraph\\_9.png](http://www.frontierweather.com/forecasts/USCompositeModelGraph_9.png)

# Data File Locations

## CITY SPECIFIC GRAPHS/TABLES/DATA FILES

Where "XXX" is the three letter site ID for a site in question. Example: ORD=Chicago, ATL=Atlanta

**SITE ID Lookup table:** <http://www.frontierweather.com/forecastcitysitelist.csv> Note that site specific data files are not available for all sites.

HTML Temperature Forecast Graphs/Data Tables: <http://www.frontierweather.com/ForecastDataPlus/XXX.html>

HTML Hourly Forecast Graphs/Data Tables: <http://www.frontierweather.com/ForecastDataPlus/HourlyGraphs/KXXX.html>

7 Day Hourly Forecast Data File: [http://www.frontierweather.com/HourlyData/KXXX\\_Fcst.csv](http://www.frontierweather.com/HourlyData/KXXX_Fcst.csv)

GFS Hourly Forecast Data: <http://www.frontierweather.com/weather/hw3.php?forecast=gfshourly&icao=KXXX>

Hourly Data for the last 3 days: <http://www.weather.gov/data/obhistory/KXXX.html>

Hourly Data File with 30 days of Observations: <http://www.frontierweather.com/HourlyData/Last30KXXX.txt>

6 Month Temperature/Precipitation Graph: [http://www.frontierweather.com/ForecastDataPlus/XXX\\_90daygraph.html](http://www.frontierweather.com/ForecastDataPlus/XXX_90daygraph.html)

(the link says 90 day graph but they are 6 month graphs now)

1971-Present Trends Graph: [http://www.frontierweather.com/temperaturetrends/XXXTemperatureTrends\\_18482\\_image006.png](http://www.frontierweather.com/temperaturetrends/XXXTemperatureTrends_18482_image006.png)

## HISTORICAL HOURLY DATA FILES (ALL CITIES IN ONE FILE)

Yesterday's data for major cities: <http://www.frontierweather.com/HourlyData/yesterdayshourlydata98sites.txt>

Yesterday's data for hundreds of cities: <http://www.frontierweather.com/HourlyData/yesterdayshourlydata.txt>

Last 3 days for major cities: <http://www.frontierweather.com/HourlyData/lastthreedayshourlydata98sites.txt>

Last 3 days for hundreds of cities: <http://www.frontierweather.com/HourlyData/lastthreedayshourlydata.txt>

Last 7 days for major cities: <http://www.frontierweather.com/HourlyData/lastsevendayshourlydata98sites.txt>

Last 7 days for hundreds of cities: <http://www.frontierweather.com/HourlyData/lastsevendayshourlydata.txt>

Last 30 days for major cities: <http://www.frontierweather.com/HourlyData/Last30DaysSubset.txt>

Daily Hourly Averages for Last 30 days for hundreds of cities:

<http://www.frontierweather.com/HourlyData/30DayDailyHourlyAverages.txt>

## HISTORICAL DAILY DATA FILES (ALL CITIES IN ONE FILE)

Yesterday's max/min data: <http://www.frontierweather.com/historicaltemps/yesterdayall.txt>

Yesterday's max/min/DDs/dewpt/wind/precip:

<http://www.frontierweather.com/historicaltemps/HistoryYesterdaywithextras.txt>

Yesterday's max/min/DDs/precip for Canadian sites: <http://www.frontierweather.com/historicaltemps/YesterdayCanadian.txt>

Last 10 days max/min data: [http://www.frontierweather.com/historicaltemps/All\\_Historical\\_Last10.txt](http://www.frontierweather.com/historicaltemps/All_Historical_Last10.txt)

Last 10 days max/min/DD data: [http://www.frontierweather.com/historicaltemps/All\\_Historical\\_Last10\\_WD.txt](http://www.frontierweather.com/historicaltemps/All_Historical_Last10_WD.txt)

Last 10 days max/min/DD/dewpt/wind/precip data:

<http://www.frontierweather.com/historicaltemps/HistoricalLast10withextras.txt>

Last 10 days max/min/DDs/precip for Canadian sites: <http://www.frontierweather.com/historicaltemps/Last10DaysCanadian.txt>

Last 30 days max/min data: [http://www.frontierweather.com/historicaltemps/All\\_Historical\\_Last30.txt](http://www.frontierweather.com/historicaltemps/All_Historical_Last30.txt)

Last 30 days max/min/DD/dewpt/wind/precip data:

<http://www.frontierweather.com/historicaltemps/HistoricalLast30withextras.txt>

Last 2 years max/min data: [http://www.frontierweather.com/historicaltemps/All\\_Historical\\_2010-present.txt](http://www.frontierweather.com/historicaltemps/All_Historical_2010-present.txt)

Max/min/DD/dewpt/wind/precip data since last year:

<http://www.frontierweather.com/historicaltemps/HistoricalLastYearwithextras.txt>

Last 2 years max/min data for Canada: <http://www.frontierweather.com/historicaltemps/CanadianDataSince2010.txt>

1996-2010 max/min data: [http://www.frontierweather.com/historicaltemps/All\\_Historical\\_1996-2010.txt](http://www.frontierweather.com/historicaltemps/All_Historical_1996-2010.txt)

1996-2010 max/min data (zipped): [http://www.frontierweather.com/historicaltemps/All\\_Historical\\_1996-2010.zip](http://www.frontierweather.com/historicaltemps/All_Historical_1996-2010.zip)

1996-2010 max/min/DD/dewpt/wind/precip data:

<http://www.frontierweather.com/historicaltemps/Historical1996-2010withextras.txt>

1996-2010 max/min/DD/dewpt/wind/precip data (zipped):

<http://www.frontierweather.com/historicaltemps/Historical1996-2010withextras.zip>

1971-2010 max/min data for Canada: <http://www.frontierweather.com/historicaltemps/CanadianData1971-2010.txt>

1971-2010 max/min data for Canada (zipped): <http://www.frontierweather.com/historicaltemps/CanadianData1971-2010.zip>

Monthly averages since last year: <http://www.frontierweather.com/historicaltemps/monthlydatasincelastyearnoextras.txt>

Monthly averages since last year with DDs, precip, etc:

<http://www.frontierweather.com/historicaltemps/monthlydatasincelastyear.txt>

Monthly averages since 1971: <http://www.frontierweather.com/historicaltemps/monthlydatanoextras.txt>

Monthly averages since 1971 with DDs, precip, etc: <http://www.frontierweather.com/historicaltemps/monthlydata.txt>

## HISTORICAL NORMALS (1971-2000 and 1981-2010)

Daily normals based on 1971-2000 averages: [http://www.frontierweather.com/historicaltemps/Normals\\_1971-2000.txt](http://www.frontierweather.com/historicaltemps/Normals_1971-2000.txt)

Monthly normals based on 1971-2000 averages: [http://www.frontierweather.com/historicaltemps/Normals\\_monthly\\_1971-2000.txt](http://www.frontierweather.com/historicaltemps/Normals_monthly_1971-2000.txt)

Daily normals based on 1981-2010 averages: [http://www.frontierweather.com/historicaltemps/Normals\\_1981-2010.txt](http://www.frontierweather.com/historicaltemps/Normals_1981-2010.txt)

Monthly normals based on 1981-2010 averages: [http://www.frontierweather.com/historicaltemps/Normals\\_monthly\\_1981-2010.txt](http://www.frontierweather.com/historicaltemps/Normals_monthly_1981-2010.txt)

## FRONTIER WEATHER 15 DAY FORECAST DATA FILES

15 Day Forecast Max/Min for U.S. cities, long format: [http://www.frontierweather.com/icfs\\_text/TodaysForecastLong15day.txt](http://www.frontierweather.com/icfs_text/TodaysForecastLong15day.txt)

15 Day Forecast Max/Min for U.S. cities, wide format: [http://www.frontierweather.com/icfs\\_text/TodaysForecastWide15day.txt](http://www.frontierweather.com/icfs_text/TodaysForecastWide15day.txt)

15 Day Forecast Max/Min data with forecast day U.S. & Canada: [http://www.frontierweather.com/icfs\\_text/FW\\_fcst\\_temps.csv](http://www.frontierweather.com/icfs_text/FW_fcst_temps.csv)

15 Day Forecast Max/Min/Anom/DDs/RH/Wind/Precip U.S. & Canada: [http://www.frontierweather.com/icfs\\_text/FW\\_fcstplus.csv](http://www.frontierweather.com/icfs_text/FW_fcstplus.csv)

Same as above but with 4 letter site ids for Canadian cities: [http://www.frontierweather.com/icfs\\_text/FW\\_fcstplusv2.csv](http://www.frontierweather.com/icfs_text/FW_fcstplusv2.csv)

## FRONTIER WEATHER SEASONAL FORECAST DATA FILES

### SEASONAL MONTHLY FORECASTS:

9 Month Forecast Anomalies (wide format): [http://www.frontierweather.com/seasonal/monthlyforecasts\\_all.csv](http://www.frontierweather.com/seasonal/monthlyforecasts_all.csv)

9 Month Forecast Anomalies (long format): [http://www.frontierweather.com/seasonal/monthlyforecasts\\_all\\_vertical.csv](http://www.frontierweather.com/seasonal/monthlyforecasts_all_vertical.csv)

9 Month Forecast Avg Temps/Anomalies/DDs/etc: <http://www.frontierweather.com/seasonal/compositemonthlyforecast.csv>

Last 3 Months + 9 Month Forecast Avg Temps/Anomalies/DDs/etc:

<http://www.frontierweather.com/seasonal/SeasonalMonthlyForecasts.txt>

### SEASONAL DAILY FORECASTS:

Last 3 Months + 9 Month Forecast broken down to a daily format (Max/Min/Avg/Anomaly/DDs/etc):

<http://www.frontierweather.com/seasonal/SeasonalDailyForecasts.txt>

Daily Forecast and Average HDDs by City (Excel file): <http://www.frontierweather.com/seasonal/DailyHDDForecasts.xls>

Daily Forecast and Average HDDs by City (comma delimited text file):

<http://www.frontierweather.com/seasonal/DailyHDDForecasts.txt>

Last 3 Months + 9 Month Daily U.S. Population Weighted Degree Days:

<http://www.frontierweather.com/seasonal/LongRangeUSPopWeightedbyYearDDs.txt>

Last 3 Months + 9 Month Daily U.S. Gas Weighted Degree Days:

<http://www.frontierweather.com/seasonal/LongRangeUSGRGasWeightedbyYearDDs.txt>

Last 3 Months + 9 Month Daily U.S. Gas Weighted Degree Days by Gas Region:

<http://www.frontierweather.com/seasonal/LongRangeRegionalUSGRGasWeightedbyYearDDs.txt>

Last 3 Months + 9 Month Daily U.S. Gas Weighted Degree Days by Gas Region (alternate format):

<http://www.frontierweather.com/seasonal/LongRangeRegionalUSGRGasWeightedbyYearDDsCrosstab.txt>

## U.S. OIL WEIGHTED DATA

Oil weighted HDDs for 1970-2010: [http://www.frontierweather.com/degreedays/OilweightedHDDs\\_1970-2010.txt](http://www.frontierweather.com/degreedays/OilweightedHDDs_1970-2010.txt)

Oil weighted HDDs for 7/1/1996 through 15 day forecast: <http://www.frontierweather.com/degreedays/OilweightedHDDs.txt>

Oil weighted HDDs for last 10 days plus 15 day forecast: <http://www.frontierweather.com/degreedays/OWlast10andforecast.txt>

## U.S. POPULATION WEIGHTED DEGREE DAY DATA

Daily 1970-2011 Population Weighted Degree Day Data:

[http://www.frontierweather.com/degreedays/USPopWeightedbyYearDDs\\_1970-2011.txt](http://www.frontierweather.com/degreedays/USPopWeightedbyYearDDs_1970-2011.txt)

Daily 7/1/1996 to present + 15 day forecast of U.S. population weighted degree day data:

<http://www.frontierweather.com/degreedays/USPopWeightedbyYearDDs.txt>

Daily last 15 days + 15 day forecast of U.S. population weighted degree day data:

<http://www.frontierweather.com/degreedays/USPopWeightedbyYearDDsL15N15.txt>

Daily last 3 months + 9 month forecast of U.S. population weighted degree day data:

<http://www.frontierweather.com/degreedays/LongRangeUSPopWeightedbyYearDDs.txt>

## POPULATION WEIGHTED DEGREE DAY DATA BY STATE

Population Data: <http://www.frontierweather.com/degreedays/StateRegionPopulationData.xls>

Daily 1971-2011 population weighted degree day data by state:

[http://www.frontierweather.com/degreedays/StatePopulationWeightedWeatherData\\_1971-2011.zip](http://www.frontierweather.com/degreedays/StatePopulationWeightedWeatherData_1971-2011.zip)

Daily 1/1/2010 through 15 day forecast population weighted degree day data by state:

[http://www.frontierweather.com/degreedays/StatePopulationWeightedWeatherData\\_Since2010.txt](http://www.frontierweather.com/degreedays/StatePopulationWeightedWeatherData_Since2010.txt)

Daily last 15 + next 15 days population weighted degree day data by state:

[http://www.frontierweather.com/degreedays/StatePopulationWeightedWeatherData\\_L15N15.txt](http://www.frontierweather.com/degreedays/StatePopulationWeightedWeatherData_L15N15.txt)

Monthly 1971 to current + 9 month population weighted degree day data by state:

[http://www.frontierweather.com/degreedays/MonthlyStatePopulationWeightedWeatherData\\_since1971.txt](http://www.frontierweather.com/degreedays/MonthlyStatePopulationWeightedWeatherData_since1971.txt)

Monthly 2010 to current + 9 month population weighted degree day data by state:

[http://www.frontierweather.com/degreedays/MonthlyStatePopulationWeightedWeatherData\\_since2010.txt](http://www.frontierweather.com/degreedays/MonthlyStatePopulationWeightedWeatherData_since2010.txt)

## POPULATION WEIGHTED DEGREE DAY DATA BY CENSUS REGION

Daily 1970-2011 population weighted degree day data by census region:

[http://www.frontierweather.com/degreedays/CRPopWeightedbyYearDDs\\_1970-2011.txt](http://www.frontierweather.com/degreedays/CRPopWeightedbyYearDDs_1970-2011.txt)

Daily 7/1/1996 through 15 day forecast of population weighted degree day data by census region:

<http://www.frontierweather.com/degreedays/CRPopWeightedbyYearDDs.txt>

Alternative File Format: <http://www.frontierweather.com/degreedays/CRPopWeightedbyYearDDsCrosstab.txt>

Daily last 15 days through 15 day forecast of population weighted degree day data by census region:

<http://www.frontierweather.com/degreedays/CRPopWeightedbyYearDDsL15N15.txt>

Alternative File Format: <http://www.frontierweather.com/degreedays/CRPopWeightedbyYearDDsL15N15Crosstab.txt>

Daily last 3 months + 9 month forecast of population weighted degree day data by census region:

<http://www.frontierweather.com/degreedays/LongRangeRegionalUSCRGasWeightedbyYearDDs.txt>

Alt. File Format: <http://www.frontierweather.com/degreedays/LongRangeRegionalUSCRGasWeightedbyYearDDsCrosstab.txt>

Monthly 1970-2011 population weighted degree day data by census region:

[http://www.frontierweather.com/degreedays/MonthlyRegionalUSCRGasWeightedbyYearDDs\\_1970-2011.txt](http://www.frontierweather.com/degreedays/MonthlyRegionalUSCRGasWeightedbyYearDDs_1970-2011.txt)

Monthly 1996 to Present + 9 Month Forecast of U.S. Population Weighted Degree Day Data:

<http://www.frontierweather.com/degreedays/MonthlyRegionalUSCRGasWeightedbyYearDDs.txt>

## POPULATION WEIGHTED DEGREE DAY DATA BY POWER REGION

Map of power regions: <http://www.frontierweather.com/picts/PowerRegionMap.jpg>

Daily Year to Date Power Region Population Weighted DD Averages:

<http://www.frontierweather.com/degreedays/YearToDatePowerRegionAverages.txt>

Daily Last 15 days + Next 15 Days Power Region Population Weighted DD Averages:

<http://www.frontierweather.com/degreedays/L15N15PowerRegionAverages.txt>

Daily Last 10 weeks + Next 15 Days Power Region Population Weighted DD Averages:

[http://www.frontierweather.com/degreedays/L15N15PowerRegionAverages\\_10weeks.txt](http://www.frontierweather.com/degreedays/L15N15PowerRegionAverages_10weeks.txt)

Daily Power Region Forecast from 1 Week Ago:

<http://www.frontierweather.com/degreedays/LastWeeksForecastforPowerRegions.txt>

Monthly 1971 through present + 9 Month Forecast of Population Weighted DDs by Power Region:

<http://www.frontierweather.com/degreedays/MonthlyPowerRegionAveragesSince1971.txt>

Monthly Last Year through present + 9 Month Forecast of Population Weighted DDs by Power Region:

<http://www.frontierweather.com/degreedays/MonthlyPowerRegionAveragesSinceLastYear.txt>

## GAS WEIGHTED DEGREE DAY DATA BY GAS REGION

Daily 1970-2011 Gas Weighted Degree Day Data by Gas Region:

[http://www.frontierweather.com/degreedays/USGasWeightedbyYearDDs\\_1970-2011.txt](http://www.frontierweather.com/degreedays/USGasWeightedbyYearDDs_1970-2011.txt)

Daily 7/1/1996 to Present + 15 Day Forecast of Gas Weighted Degree Day Data by Gas Region:

<http://www.frontierweather.com/degreedays/USGasWeightedbyYearDDs.txt>

Daily Last 15 Days + 15 Day Forecast of Gas Weighted Degree Day Data by Gas Region:

<http://www.frontierweather.com/degreedays/USGasWeightedbyYearDDsL15N15.txt>

Daily Last 3 Months + 9 Month Forecast of Gas Weighted Degree Day Data by Gas Region:

<http://www.frontierweather.com/degreedays/LongRangeUSGRGasWeightedbyYearDDs.txt>

Monthly 1970-2011 Gas Weighted Degree Day Data by Gas Region:

[http://www.frontierweather.com/degreedays/MonthlyRegionalUSGRGasWeightedbyYearDDs\\_1970-2011.txt](http://www.frontierweather.com/degreedays/MonthlyRegionalUSGRGasWeightedbyYearDDs_1970-2011.txt)

Monthly 1996 to Present + 9 Month Forecast Gas Weighted Degree Day Data by Gas Region:

<http://www.frontierweather.com/degreedays/MonthlyRegionalUSGRGasWeightedbyYearDDs.txt>

## U.S. GAS WEIGHTED DEGREE DAY DATA

Daily 1970-2011 U.S. Gas Weighted Degree Day Data:

[http://www.frontierweather.com/degreedays/USGasWeightedbyYearDDs\\_1970-2011.txt](http://www.frontierweather.com/degreedays/USGasWeightedbyYearDDs_1970-2011.txt)

Daily 7/1/1996 to Present + 15 Day Forecast of U.S. Gas Weighted Degree Day Data:

<http://www.frontierweather.com/degreedays/USGasWeightedbyYearDDs.txt>

Daily Last 15 Days + 15 Day Forecast of U.S. Gas Weighted Degree Day Data:

<http://www.frontierweather.com/degreedays/USGasWeightedbyYearDDsL15N15.txt>

Daily Last 3 Months + 9 Month Forecast of U.S. Gas Weighted Degree Day Data:

<http://www.frontierweather.com/degreedays/LongRangeUSGRGasWeightedbyYearDDs.txt>

Monthly 1970-2011 U.S. Gas Weighted Degree Day Data:

[http://www.frontierweather.com/degreedays/MonthlyUSGRGasWeightedbyYearDDs\\_1970-2011.txt](http://www.frontierweather.com/degreedays/MonthlyUSGRGasWeightedbyYearDDs_1970-2011.txt)

Monthly 1996 to Present + 9 Month Forecast of U.S. Gas Weighted Degree Day Data:

<http://www.frontierweather.com/degreedays/MonthlyUSGasWeightedbyYearDDs.txt>



# MODEL FORECAST TEMPERATURE DATA FILES

## GFS MODEL DATA

All forecast model max/min/anomaly data is based on 6Z to 6Z, which is approximately midnight to midnight for the U.S. but will vary for global locations. U.S./Canada files contain a few hundred locations, while Global files contain some 8,000 sites and are about 10MB each.

Raw GFS Model Max/Min/Anomaly Temperature Forecasts where "HH" is the model run time (00, 06, 12, or 18).

15 Day U.S./Canada Forecasts: [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_Tmaxmin\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_Tmaxmin_long.csv)

(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_Tmaxmin\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_Tmaxmin_wide.csv)

15 Day Global Forecasts: [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_Tmaxmin\\_global\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_Tmaxmin_global_long.csv)

(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_Tmaxmin\\_global\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_Tmaxmin_global_wide.csv)

These files adjust the temperatures during days 9-15 to account for the decrease in model resolution at that time.

15 Day U.S./Canada Forecasts: [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_Tmaxmin\\_long\\_alt.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_Tmaxmin_long_alt.csv)

(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_Tmaxmin\\_wide\\_alt.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_Tmaxmin_wide_alt.csv)

15 Day Global Forecasts: [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_Tmaxmin\\_global\\_long\\_alt.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_Tmaxmin_global_long_alt.csv)

(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_Tmaxmin\\_global\\_wide\\_alt.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_Tmaxmin_global_wide_alt.csv)

The files below contain just the raw daily temperature anomalies and match the model temperature anomaly maps on the website and are calculated from the 1981-2010 GFS climatology, not actual climatology (to help reduce biases).

15 Day U.S./Canada Forecasts: [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_anom\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_anom_long.csv)

(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_anom\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_anom_wide.csv)

## GFS MOS DATA

This is just a reformatted version of the NWS GFS Model Output Statistics data:

8 Day 00Z Operational GFS Max/Min MOS data: [http://www.frontierweather.com/ForecastDataPlus/GFSMOS\\_OP.csv](http://www.frontierweather.com/ForecastDataPlus/GFSMOS_OP.csv)

8 Day 12Z Operational GFS Max/Min MOS data: [http://www.frontierweather.com/ForecastDataPlus/GFSMOS\\_OP12z.csv](http://www.frontierweather.com/ForecastDataPlus/GFSMOS_OP12z.csv)

## NAM MODEL DATA

This is just a reformatted version of the NWS NAM Model Output Statistics data:

3 Day 00Z NAM Model Max/Min MOS data: <http://www.frontierweather.com/ForecastDataPlus/NAMMOS.csv>

3 Day 12Z NAM Model Max/Min MOS data: <http://www.frontierweather.com/ForecastDataPlus/NAMMOS12z.csv>

## GFS ENSEMBLE MODEL DATA

Raw GFS Model Max/Min/Anomaly Temperature Forecasts where “HH” is the model run time (00, 06, 12, or 18). The GFS ensembles are run at a constant resolution for the entire forecast period, so there is no issue with inconsistencies resulting from model resolution changes after day 8 as with the operational GFS.

15 Day U.S./Canada Forecasts: [http://www.frontierweather.com/ForecastDataPlus/ens\\_mean\\_HHz\\_Tmaxmin\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/ens_mean_HHz_Tmaxmin_long.csv)

(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/ens\\_mean\\_HHz\\_Tmaxmin\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/ens_mean_HHz_Tmaxmin_wide.csv)

15 Day Global Forecasts: [http://www.frontierweather.com/ForecastDataPlus/ens\\_mean\\_HHz\\_Tmaxmin\\_global\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/ens_mean_HHz_Tmaxmin_global_long.csv)

(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/ens\\_mean\\_HHz\\_Tmaxmin\\_global\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/ens_mean_HHz_Tmaxmin_global_wide.csv)

The files below contain just the raw daily temperature anomalies as per the GFS files above.

15 Day U.S./Canada Forecasts: [http://www.frontierweather.com/ForecastDataPlus/ens\\_mean\\_HHz\\_Tmaxmin\\_anom.csv](http://www.frontierweather.com/ForecastDataPlus/ens_mean_HHz_Tmaxmin_anom.csv)

15 Day Global Forecasts: [http://www.frontierweather.com/ForecastDataPlus/ens\\_mean\\_HHz\\_Tmaxmin\\_global\\_anom.csv](http://www.frontierweather.com/ForecastDataPlus/ens_mean_HHz_Tmaxmin_global_anom.csv)

15 Day GFS Ensemble data files below combine the GFS MOS data files with adjusted 15 day raw temperature data. Corrections are applied to the 15 day raw GFS Ensemble data in order to bring it in-line with the 8 day MOS data.

## 00Z GFS COMPOSITE ENSEMBLE DATA

00Z GFS Ensemble Statistics (Mean/Highest/Lowest solutions, etc):

[http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS\\_statistics.csv](http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS_statistics.csv)

Bias Corrected (90 day bias correction) Ensemble Statistics:

[http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS\\_statistics\\_biascorrected.csv](http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS_statistics_biascorrected.csv)

15 Day Forecasts from all GFS Ensemble Members: <http://www.frontierweather.com/ForecastDataPlus/GFSforecastscombined.csv>

(Alt. file format): <http://www.frontierweather.com/ForecastDataPlus/combinedextendedGFSMOS.csv>

Bias corrected version: [http://www.frontierweather.com/ForecastDataPlus/GFSforecastscombined\\_biascorrected.csv](http://www.frontierweather.com/ForecastDataPlus/GFSforecastscombined_biascorrected.csv)

(Alt. file format): [http://www.frontierweather.com/ForecastDataPlus/combinedextendedGFSMOS\\_biascorrected.csv](http://www.frontierweather.com/ForecastDataPlus/combinedextendedGFSMOS_biascorrected.csv)

15 Day Forecasts of raw 2 meter Max/Min data from all ensembles:

<http://www.frontierweather.com/ForecastDataPlus/combinedextendedGFSRAW.csv>

## 12Z GFS COMPOSITE ENSEMBLE DATA

00Z GFS Ensemble Statistics (Mean/Highest/Lowest solutions, etc):

[http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS\\_statistics\\_12z.csv](http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS_statistics_12z.csv)

Bias Corrected (90 day bias correction) Ensemble Statistics:

[http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS\\_statistics\\_biascorrected12z.csv](http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS_statistics_biascorrected12z.csv)

15 Day Forecasts from all Ensemble Members: [http://www.frontierweather.com/ForecastDataPlus/GFSforecastscombined\\_12z.csv](http://www.frontierweather.com/ForecastDataPlus/GFSforecastscombined_12z.csv)

(Alt. file format): [http://www.frontierweather.com/ForecastDataPlus/combinedextendedGFSMOS\\_12z.csv](http://www.frontierweather.com/ForecastDataPlus/combinedextendedGFSMOS_12z.csv)

Bias corrected version: [http://www.frontierweather.com/ForecastDataPlus/GFSforecastscombined\\_biascorrected12z.csv](http://www.frontierweather.com/ForecastDataPlus/GFSforecastscombined_biascorrected12z.csv)

(Alt. file format): [http://www.frontierweather.com/ForecastDataPlus/combinedextendedGFSMOS\\_biascorrected12z.csv](http://www.frontierweather.com/ForecastDataPlus/combinedextendedGFSMOS_biascorrected12z.csv)

15 Day Forecasts of raw 2 meter Max/Min data from all ensembles:

[http://www.frontierweather.com/ForecastDataPlus/combinedextendedGFSRAW\\_12z.csv](http://www.frontierweather.com/ForecastDataPlus/combinedextendedGFSRAW_12z.csv)

## INDIVIDUAL ENSEMBLE MEMBER DATA

Change “.csv” to “\_12z.csv” in the file name to view the data for the 12Z runs. Data is not available for the 6Z and 18Z runs at this time.

8 Day MOS Max/Min Data for Control run: [http://www.frontierweather.com/ForecastDataPlus/GFSMOS\\_C00.csv](http://www.frontierweather.com/ForecastDataPlus/GFSMOS_C00.csv)

15 Day Ensemble Control Run Max/Min Data: [http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS\\_C00.csv](http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS_C00.csv)

Individual Ensemble Member Max/Min data where “XX” ranges from “00” to “20”:

8 Day MOS Data for Ensemble member: [http://www.frontierweather.com/ForecastDataPlus/GFSMOS\\_PXX.csv](http://www.frontierweather.com/ForecastDataPlus/GFSMOS_PXX.csv)

15 Day Max/Min data for Ensemble member: [http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS\\_PXX.csv](http://www.frontierweather.com/ForecastDataPlus/extendedGFSMOS_PXX.csv)

## ECMWF & ECMWF ENSEMBLE MODEL DATA

These files are of 850 mb (~5000 ft for areas near sea level) temperature anomalies in degrees Fahrenheit. These anomalies may differ somewhat from those at the surface, particularly along the coasts and over complex terrain. Daily anomalies are for the 6Z to 6Z time period each day. Data is for U.S./Canada locations only.

Note that ECMWF data is only available at the HH=00 and HH=12 model times.

10 Day ECMWF Model Forecasts: [http://www.frontierweather.com/ForecastDataPlus/ECMWF\\_HHz\\_anom\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/ECMWF_HHz_anom_long.csv)

(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/ECMWF\\_HHz\\_anom\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/ECMWF_HHz_anom_wide.csv)

10 Day ECMWF Ensemble Mean Forecasts: [http://www.frontierweather.com/ForecastDataPlus/ECMWF\\_ens\\_mean\\_HHz\\_anom\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/ECMWF_ens_mean_HHz_anom_long.csv)

(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/ECMWF\\_ens\\_mean\\_HHz\\_anom\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/ECMWF_ens_mean_HHz_anom_wide.csv)

## NWS NDFD DATA

This is just a reformatted version of the National Weather Service National Digital Forecast Database 7 Day Max/Min temperature forecasts.

7 Day NWS Forecasts for U.S. Locations: <http://www.frontierweather.com/ForecastDataPlus/NWSNDFD.csv>

# MODEL FORECAST PRECIPITATION DATA FILES

## GFS MODEL PRECIPITATION DATA

All forecast precipitation data is based on 6Z to 6Z, which is approximately midnight to midnight for the U.S. but will vary for global locations. U.S./Canada files contain a few hundred locations, while Global files contain some 8,000 sites and are about 10MB each. Precipitation is rainfall and the liquid equivalent of frozen precipitation. Both precipitation and snowfall data is in inches.

Raw GFS Model Precipitation/Snowfall Forecasts where “**HH**” is the model run time (00, 06, 12, or 18).

15 Day U.S./Canada Precipitation Forecasts: [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_precip\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_precip_long.csv)  
(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_precip\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_precip_wide.csv)

15 Day Global Precipitation Forecasts: [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_precip\\_global\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_precip_global_long.csv)  
(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_precip\\_global\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_precip_global_wide.csv)

15 Day U.S./Canada Snowfall Forecasts: [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_snow\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_snow_long.csv)  
(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_snow\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_snow_wide.csv)

15 Day Global Snowfall Forecasts: [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_snow\\_global\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_snow_global_long.csv)  
(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/GFS\\_HHz\\_snow\\_global\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/GFS_HHz_snow_global_wide.csv)

## NAM MODEL SNOWFALL DATA

All forecast snowfall data is based on 6Z to 6Z, which is approximately midnight to midnight for the U.S. but will vary for global locations. The NAM model is only run over North America and so only the U.S./Canada locations are available.

Raw NAM Snowfall Forecasts where “**HH**” is the model run time (00, 06, 12, or 18).

3 Day U.S./Canada Snowfall Forecasts: [http://www.frontierweather.com/ForecastDataPlus/NAM\\_HHz\\_snow\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/NAM_HHz_snow_long.csv)  
(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/NAM\\_HHz\\_snow\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/NAM_HHz_snow_wide.csv)

Raw High Resolution NAM Snowfall forecasts:

2 Day U.S./Canada Snowfall Forecasts: [http://www.frontierweather.com/ForecastDataPlus/NAM\\_conusnest\\_HHz\\_snow\\_long.csv](http://www.frontierweather.com/ForecastDataPlus/NAM_conusnest_HHz_snow_long.csv)  
(alt. file format): [http://www.frontierweather.com/ForecastDataPlus/NAM\\_conusnest\\_HHz\\_snow\\_wide.csv](http://www.frontierweather.com/ForecastDataPlus/NAM_conusnest_HHz_snow_wide.csv)