# Internet Weather Sites for NTSB Investigators Updated June 2012

## **Archived Weather Data**

## **Synoptic Conditions**

NWS Surface Analysis - Official NWS Hydrometeorological Prediction Center (HPC) Surface Analysis Charts identifying major pressure systems, fronts, boundaries, and station models for North America, issued every 3 hours: http://www.hpc.ncep.noaa.gov/html/sfc\_archive.shtml

Official archive of NWS charts from the National Climatic Data Center (NCDC). Provides archive Surface Analysis, Weather Depiction, Radar Summary, Freezing level, Constant Pressures, Ocean analysis and other upper level wind charts, available at: http://nomads.ncdc.noaa.gov/ncep/NCEP

University of Wyoming – 30 day archive of main synoptic conditions with radar coded data: http://weather.uwyo.edu/surface/front.html

NW Storm Prediction Center (SPC) – unanalyzed surface and upper air charts archived back to 1998: http://www.spc.noaa.gov/obswx/maps/

#### **Weather Observations**

The following links provides basic information of what observations sites exist in each region, their location, identifier, type of system, and elevation. Other sites provide observation data for the available sites in the telecommunications gateway for transmission.

**NWS Station listing** – displays reporting sites in a state or country broadcasted the through the telecommunications gateway. http://www.nws.noaa.gov/tg/siteloc.shtml

FAA station listing - source for observations by state, which provides 72 hour history of METARs for reporting locations: <a href="http://www.faa.gov/air\_traffic/weather/asos/?state=CO">http://www.faa.gov/air\_traffic/weather/asos/?state=CO</a>

ASOS/AWOS Site Map - provides map of ASOS/AWOS sites and access to past 3 day weather reports in tabular format: <a href="http://www.faa.gov/air\_traffic/weather/asos/">http://www.faa.gov/air\_traffic/weather/asos/</a>

NCDC NOAA Port Text Data – obtain all official NWS text products such as METARs, TAFs, Area Forecasts, In-flight Advisories (SIGMETs/AIRMETs), PIREPs, winds and temperature aloft forecasts, etc. Data available from 2001: http://hurricane.ncdc.noaa.gov/pls/plhas/has.dsselect

http://www.ncdc.noaa.gov

http://www.ncdc.noaa.gov/data-access

http://www.ncdc.noaa.gov/data-access/land-based-station-data

http://www.ncdc.noaa.gov/data-access/land-based-station-data/land-based-datasets

http://www.ncdc.noaa.gov/data-access/land-based-station-data/land-based-datasets/automated-surfaceobserving-system-asos (Select User Interface Page and Simplified; drill down by Country, State, Identifier) **OGIMET** – International source for METARs/TAFs. Data available from 2005: http://www.ogimet.com/metars.phtml.en

**NWS Hourly Observations** - quality controlled local climatological data (LCD), provides observation in table form of all meteorological elements: http://cdo.ncdc.noaa.gov/qclcd/QCLCD

**Plymouth State Weather** –METARs, Meteogram, decoded weather observations since 1998: <a href="http://vortex.plymouth.edu/statlog-u.html">http://vortex.plymouth.edu/statlog-u.html</a>

**University of Wyoming** – METARs for the last 29 days: http://weather.uwvo.edu/surface/meteogram

**NCAR-RAP** – Surface weather provides graphic plot of observations and raw METARs for the past 60 hours: <a href="http://weather.rap.ucar.edu/surface/">http://weather.rap.ucar.edu/surface/</a>

**MesoWest** – plot of NWS and Remote Automated Weather Stations (RAWS) used by the U.S. Forestry Service for fire weather support: <a href="http://mesowest.utah.edu/index.html">http://mesowest.utah.edu/index.html</a>

**RAWS** archive site: http://www.raws.dri.edu/

## **Upper Air Data**

The following upper air sites provide observed and/or model sounding data to plot temperature, moisture, and wind structure of the atmosphere:

**University of Wyoming** – sounding, wind profiler, and limited upper air charts: <a href="http://weather.uwyo.edu/upperair">http://weather.uwyo.edu/upperair</a>

**NWS Air Resources laboratory (ARL)** – model sounding data: <a href="http://www.arl.noaa.gov/ready/amet.html">http://www.arl.noaa.gov/ready/amet.html</a>

#### **Satellite Imagery**

The following links provide archive Geostationary Operational Environmental Satellite (GOES) imagery for North America.

NOAA GOES 90-day archive under GOES East (West) Archive: http://www.goes.noaa.gov

**Naval Research Laboratory (NRL)** – NexSat archive satellite imagery for CONUS and international satellite sectors for approximately the last 30 days: http://www.nrlmry.navy.mil/NEXSAT.html

### Radar Data

Several sites that provide limited weather radar data.

**NCAR-RAL** – NEXRAD images from WSR-88D radars and regional reflectivity images for the past 5 days: <a href="http://www.rap.ucar.edu/weather/radar/">http://www.rap.ucar.edu/weather/radar/</a>

NHDC - Radar mosaic images: <a href="http://www.ncdc.noaa.gov/oa/radar/radardata.ntml">http://www.ncdc.noaa.gov/oa/radar/radardata.ntml</a>

**Plymouth State Weather** – archive Radar Coded Message (RCM) Maps. Provides a composite radar image based from RAREP (SD) data similar to a radar summary image: <a href="http://vortex.plymouth.edu/rcm-u.html">http://vortex.plymouth.edu/rcm-u.html</a>

## **Lightning Data**

**Lightning data from NASA** – satellite lightning detection: <a href="http://thunder.nsstc.nasa.gov/data/lisbrowse.html">http://thunder.nsstc.nasa.gov/data/lisbrowse.html</a>

# **Marine Weather Data**

NOAA National Data Buoy Center – Buoy reports: <a href="http://www.ndbc.noaa.gov/index.shtml">http://www.ndbc.noaa.gov/index.shtml</a>

NOAA Tides & Current - website: http://tidesandcurrents.noaa.gov/index.shtml

Worldwide Tide and Current Predictor - http://tbone.biol.sc.edu/tide/index.html

**Unisys Sea Surface Temperatures** – image and archive maps of SST: http://weather.unisys.com/archive/index.html

#### **Astronomical Data**

U.S. Naval Observatory (USNO) - Sunrise/Sunset data from: <a href="http://aa.usno.navy.mil">http://aa.usno.navy.mil</a>

#### **Airport & Flight Track Data**

**AirNav** – Airport data, location, elevation, magnetic variation, weather, runways, available approaches, etc. for U.S. Airports, also provides navigation aids and airspace fixes. <a href="http://www.airnav.com/">http://www.airnav.com/</a>

Flight Aware – basic flight track data: http://flightaware.com/live/

#### **Reference material**

**META/TAF Decode** page from NWS:

http://www.nws.noaa.gov/oso/oso1/oso12/document/guide.shtml

 $\label{lem:avaluation} \textbf{Aviation Weather Services AC-00-45G} - \textbf{Basic reference manual for NWS/FAA weather data:} \\ \underline{\textbf{http://rgl.faa.gov/Regulatory and Guidance Library/rgAdvisoryCircular.nsf/0/D6A522C25E53CB} \\ \underline{\textbf{F58625776F0050495C?OpenDocument}} \\ \\ \underline{\textbf{Aviation Weather Services AC-00-45G}} - \underline{\textbf{Basic reference manual for NWS/FAA weather data:}} \\ \underline{\textbf{Aviation Weather Services AC-00-45G}} - \underline{\textbf{Basic reference manual for NWS/FAA weather data:}} \\ \underline{\textbf{Aviation Weather Services AC-00-45G}} - \underline{\textbf{Basic reference manual for NWS/FAA weather data:}} \\ \underline{\textbf{Aviation Weather Services AC-00-45G}} - \underline{\textbf{Basic reference manual for NWS/FAA weather data:}} \\ \underline{\textbf{Aviation Weather Services AC-00-45G}} - \underline{\textbf{Basic reference manual for NWS/FAA weather data:}} \\ \underline{\textbf{Aviation Weather Services AC-00-45G}} - \underline{\textbf{Aviation Weather Model of Services Model of Services AC-00-45G}} \\ \underline{\textbf{Aviation Weather Services AC-00-45G}} - \underline{\textbf{Aviation Weather Model of Services Model of Services Model of Services AC-00-45G}} \\ \underline{\textbf{Aviation Weather Model of Services Mode$ 

**Weather Glossary:** http://www.srh.noaa.gov/oun/?n=spotterglossary

## **Converters and Calculators**

Units – temperature, moisture, pressure and wind speed conversions includes density altitude calculations. <a href="http://www.srh.noaa.gov/epz/?n=wxcalc">http://www.srh.noaa.gov/epz/?n=wxcalc</a>

Conversion charts and calculator from NCDC:

http://www.ncdc.noaa.gov/oa/climate/conversion/mppconversion.html