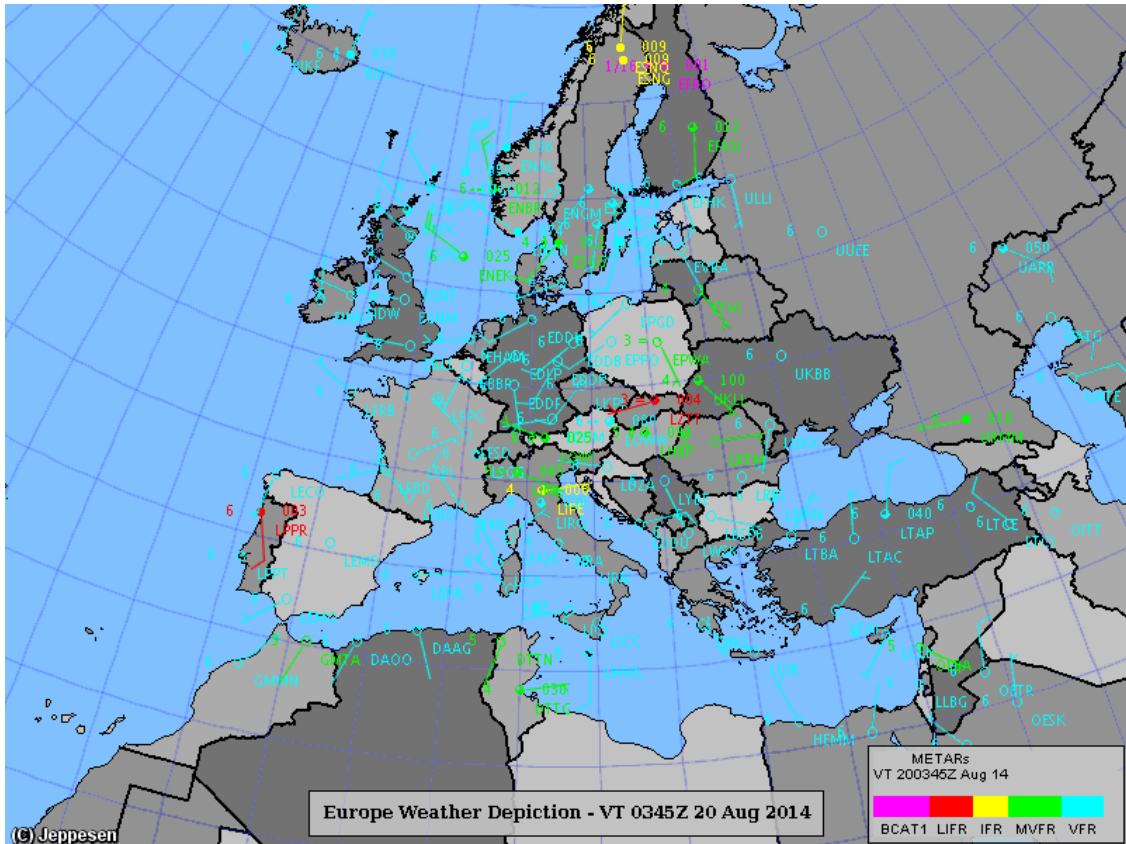


Weather Help - Surface & Low Level Significant Weather Maps

Surface Weather Depiction



Flight Conditions: Color of station as well as labeled directly to the right of station circle.

VFR (white) – visibility greater than 5 miles and ceiling greater than 3000 ft.

MVFR (green) – visibility between 3 and 5 miles and/or ceiling between 1000 and 3000 ft.

IFR (yellow) – visibility less than 3 miles and/or ceiling less than 1000 ft.

LIFR (red) – visibility less than or equal to 1 mile and/or ceiling less than or equal to 500 ft.

BCAT1 (purple) – ceiling less than or equal to 200 ft.

Ceiling: Number directly below station circle in hundreds of feet if a ceiling is present.

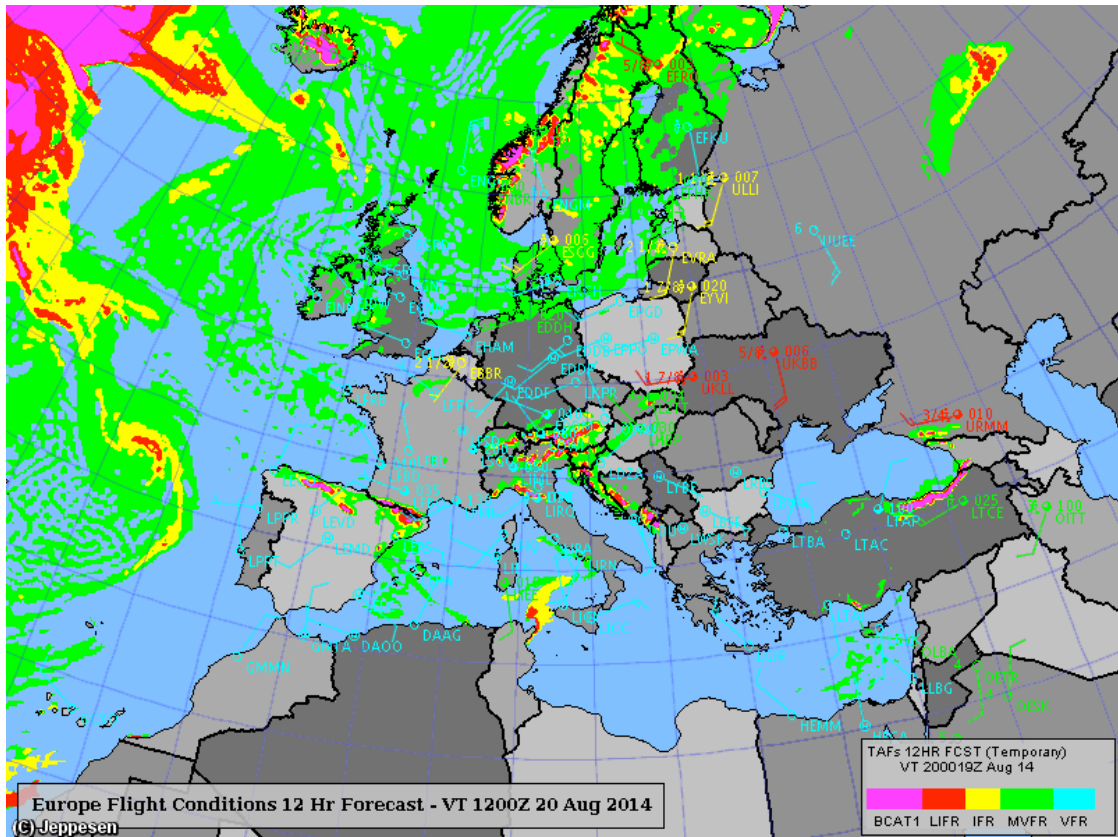
Visibility: Number to the left of station circle. Value is in units normally reported in METAR for that region. North America reports visibility in statute miles, most other international areas report visibility in meters. If visibility is greater than or equal to 6 sm or 10,000 meters, it is omitted from the map.

Present Weather: Weather symbol is directly to the left of station circle if station is reporting weather.

Wind Direction and Speed: Wind flag used to indicate wind direction and speed. Speed value is in same units as reported in METAR. Most observations use knots, some countries (Russia and China) use meters per second.

Maps are updated once per hour, generally available near the top of each hour and contain the most recent observations from the stations on the map. Valid Time on the map represents the earliest observation time used on the map.

Flight Conditions Forecast Map



This map depicts a combination of graphical TAF information which is contained in the station circles, as well as information from numerical weather prediction data that forecasts flight conditions based on forecasts of ceiling height and visibility.

Flight Conditions: Color of station as well as numerical weather prediction model data in color fill.

VFR (white) – visibility greater than 5 miles and ceiling greater than 3000 ft.

MVFR (green) – visibility between 3 and 5 miles and/or ceiling between 1000 and 3000 ft.

IFR (yellow) – visibility less than 3 miles and/or ceiling less than 1000 ft.

LIFR (red) – visibility less than or equal to 1 mile and/or ceiling less than or equal to 500 ft.

BCAT1 (purple) – ceiling less than or equal to 200 ft.

Ceiling: Number directly below station circle in hundreds of feet if a ceiling is present.

Visibility: Number to the left of station circle. Value is in units normally reported in METAR for that region. North America reports visibility in statute miles, most other international areas report visibility in meters. If visibility is greater than or equal to 6 sm or 10,000 meters, it is omitted from the map.

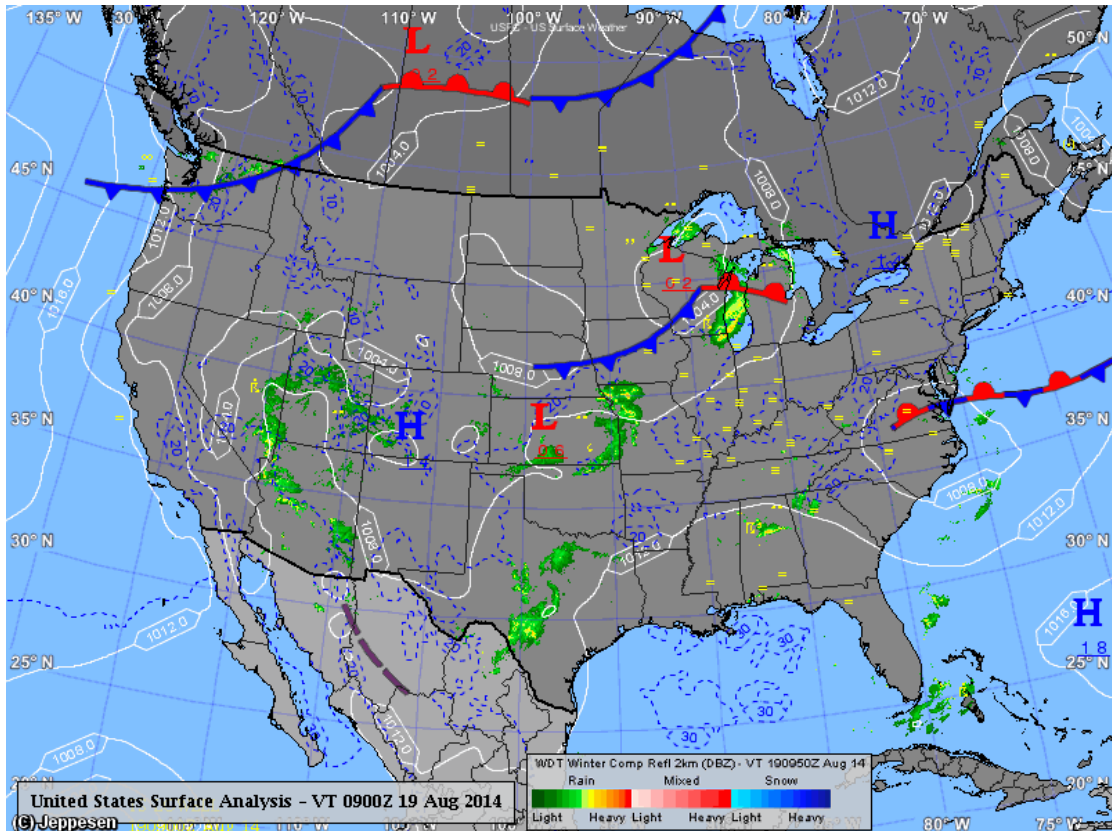
Present Weather: Weather symbol is directly to the left of station circle if station is reporting weather.

Wind Direction and Speed: Wind flag used to indicate wind direction and speed. Speed value is in same units as reported in METAR. Most observations use knots, some countries (Russia and China) use meters per second.

At times, the NWP (Numerical Weather Prediction) and TAF (Terminal Area Forecast) data can be very different. This is the nature of attempting to use numerical model data to forecast flight conditions, which takes ceilings and visibility into account. Historically, numerical models have a lower skill level when predicting ceiling and visibility data, but for many areas, this is the best guess that is available. For example, a flight between Denver and Grand Junction, Colorado goes across the Rocky Mountains. By just using the TAFs at each station, it could appear that there is VFR all the way between the stations. The reality is the mountains may have very different weather in between. The NWP data attempts to resolve these areas that are not covered by TAFs. In areas where TAFs are available, a higher confidence should be entrusted to this data as human forecasters, whom are familiar with the area, are using multiple sources of data to make that forecast.

Maps are updated four times per day at around 0030, 0630, 1230, and 1830 UTC. They contain the most recent TAF from the stations on the map. Valid Times on the maps for the US and regional US are for 03, 06, 12, 18, 24, 36, 48, and 60 hours. Valid Times for maps over Europe are for 06, 12, 18, 24, 36, 48, and 60 hours. Valid Times for the rest of the world are for 06, 12, 18, and 24 hours.

Surface Weather Analysis (U.S. & International Regions)



Surface Fronts: Cold fronts are dark blue, warm fronts are red, occluded fronts are purple, and stationary fronts are alternating red/blue. Surface Troughs are dashed chocolate lines.

Isobars: Solid white lines representing contours of sea-level pressure. Drawn at 4 mb intervals and labeled with the pressure (1008 = 1008 mb and 996 = 996 mb).

Pressure Centers: Blue H denotes center of high sea-level pressure, and red L denotes center of Low sea-level pressure. Value of central pressure is labeled beneath the center with the last two digits (1008 = 1008 mb and 996 = 996 mb).

Tropical Systems: The current position of all tropical systems is depicted on the map using standard symbols. A red "L" denotes a Tropical Depression (wind speed less than 35 kts), a red tropical symbol with a hole in the middle denotes a Tropical Storm (wind speed between 35 and 64 kts), and a solid filled symbol denotes a hurricane/typhoon/tropical cyclone (wind speed greater than 64 kts).

Present Weather: Any station reporting present weather is depicted with the appropriate weather symbol in yellow at the airport location. To identify the type of weather, see the map symbol help page.

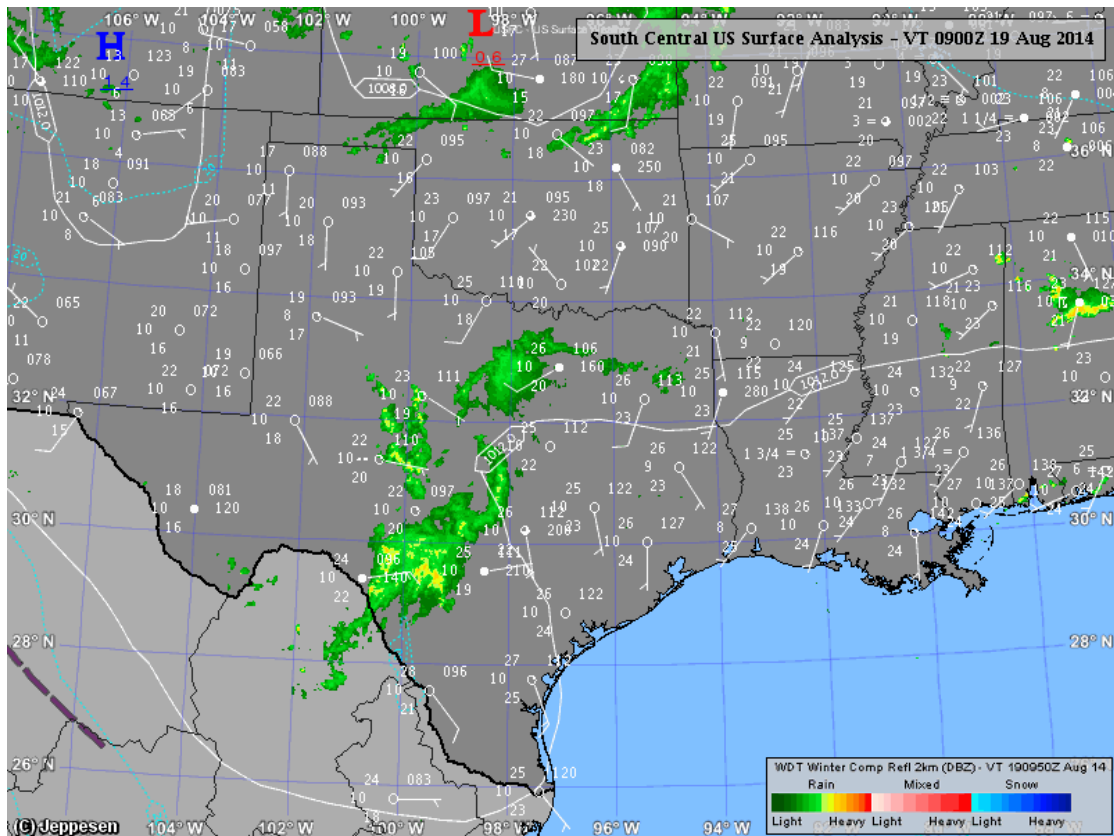
Temperature Contours: Dotted light blue lines represent contours of current temperature as reported by all available stations in the region.

Radar Composite Reflectivity: U.S. maps only. Contains latest NEXRAD composite reflectivity overlay.

Surface Analysis maps are drawn by Jeppesen meteorologists who analyze the latest METAR observations in conjunction with radar and satellite imagery.

Maps are valid at time of the observations, and are prepared for valid times of 0000, 0600, 1200 and 1800 UTC internationally. Additionally, US maps are prepared at 0300, 0900, 1500, and 2100 UTC. Maps are available between 1 and 1 ½ hours after valid time.

Surface Weather Analysis (Regional U.S. Versions)



Surface Fronts: Cold fronts are dark blue, warm fronts are red, occluded fronts are purple, and stationary fronts are alternating red/blue. Surface Troughs are dashed chocolate lines.

Isobars: Solid white lines representing contours of sea-level pressure. Drawn at 4 mb intervals and labeled with the pressure (1008 = 1008 mb and 996 = 996 mb).

Pressure Centers: Blue H denotes center of high sea-level pressure, and red L denotes center of Low sea-level pressure. Value of central pressure is labeled beneath the center with the last two digits (1008 = 1008 mb and 996 = 996 mb).

Tropical Systems: The current position of all tropical systems is depicted on the map using standard symbols. A red "L" denotes a Tropical Depression (wind speed less than 35 kts), a red tropical symbol with a hole in the middle denotes a Tropical Storm (wind speed between 35 and 64 kts), and a solid filled symbol denotes a hurricane/typhoon/tropical cyclone (wind speed greater than 64 kts).

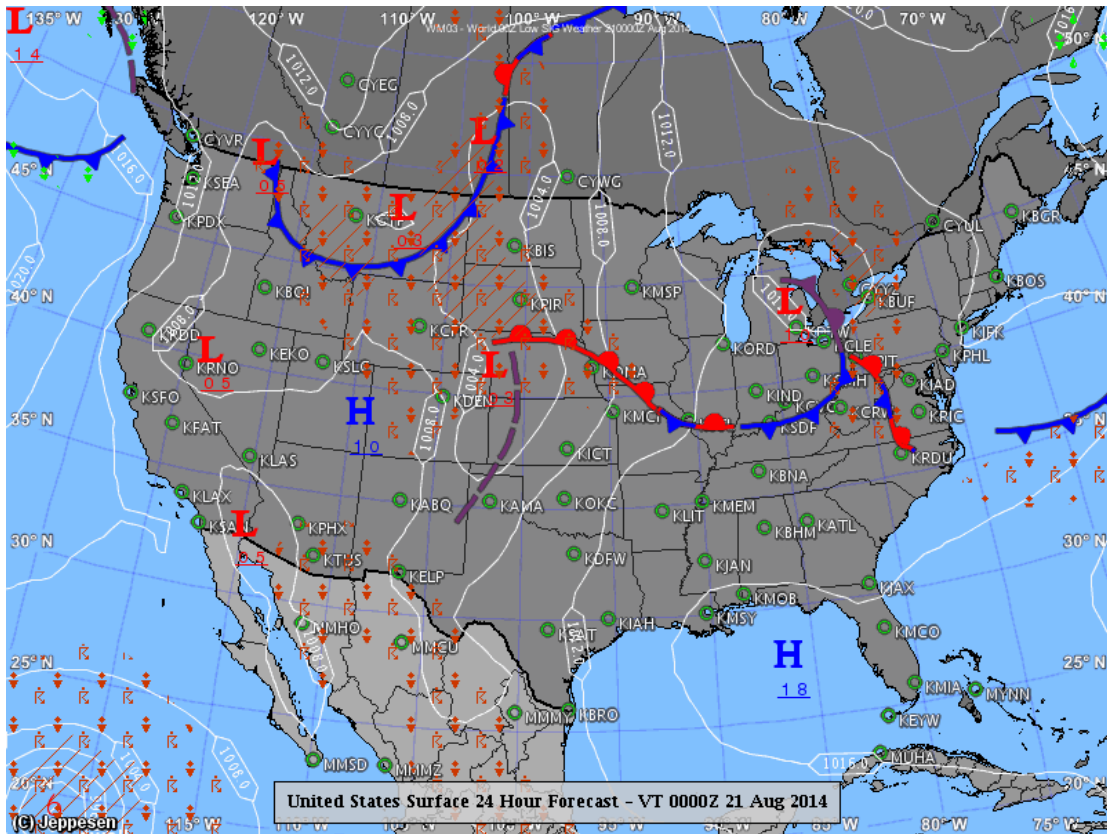
Station Observations: White circles and text represent the actual METAR observation data. Cloud Cover - Shading of option circle. Open = CLR, ¼ shaded = SCT, ¾ shaded = BKN, Solid shaded = OVC. Temperature - upper left of circle in degrees Celsius. Dew Point - lower left of circle in degrees Celsius. Sea-Level Pressure - upper right of circle using 3 digit notation (123 = 1112.3 mb/987 = 998.17 mb) Present Weather - center left of circle using standard weather symbology Wind Direction and Speed - Wind flag denotes direction and speed. Value in METAR units.

Radar Composite Reflectivity: Contains latest NEXRAD composite reflectivity overlay.

Surface Analysis maps are drawn by Jeppesen meteorologists who analyze the latest METAR observations in conjunction with radar and satellite imagery.

Maps are valid at time of the observations, and are prepared for valid times of 0000, 0300, 0600, 0900, 1200, 1500, 1800 and 2100 UTC. Maps are available approximately 1 hour after valid time.

Surface Weather Forecast



Surface Fronts: Cold fronts are dark blue, warm fronts are red, occluded fronts are purple, and stationary fronts are alternating red/blue. Surface Troughs are dashed chocolate lines. Dry Line is similar to warm front except for unfilled pips.

Isobars: Solid white lines representing contours of sea-level pressure. Drawn at 4 mb intervals and labeled with the pressure (1008 = 1008 mb and 996 = 996 mb).

Pressure Centers: Blue H denotes center of high sea-level pressure, and red L denotes center of Low sea-level pressure. Value of central pressure is labeled beneath the center with the last two digits (08 = 1008mb and 96 = 996mb).

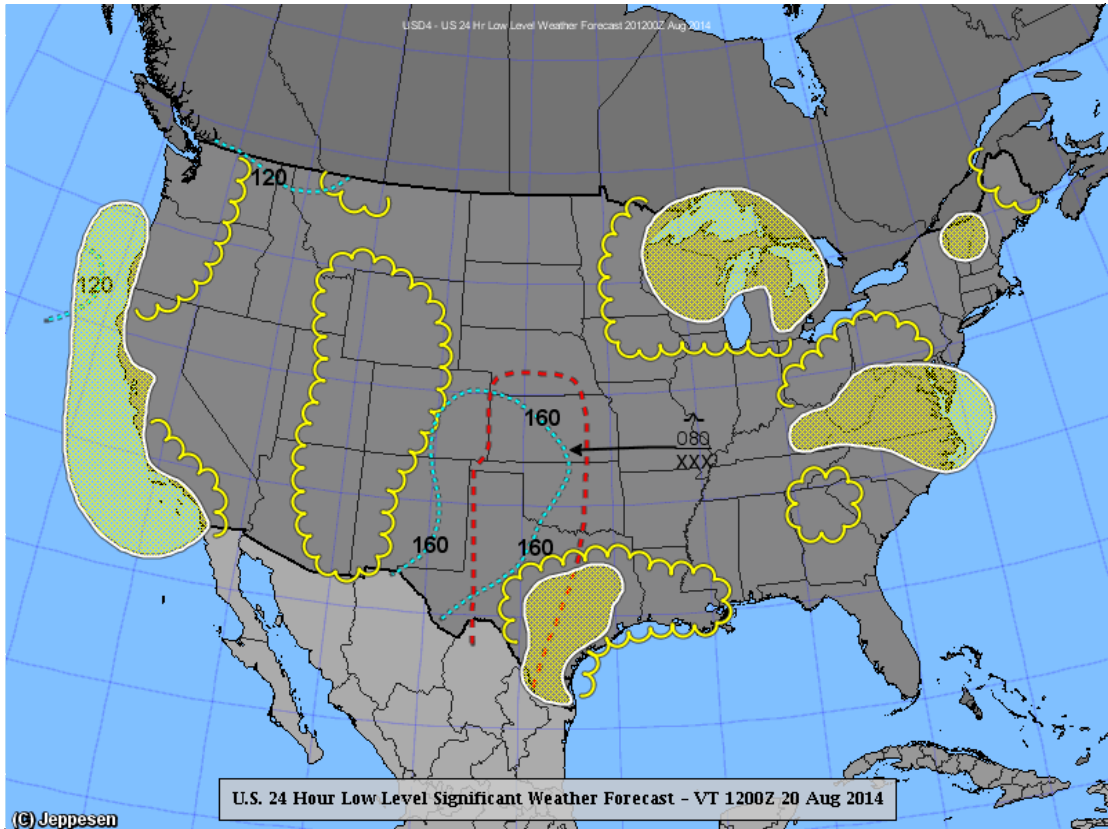
Tropical Systems: The current position of all tropical systems is depicted on the map using standard symbols. A red "L" denotes a Tropical Depression (wind speed less than 35 kts), a red tropical symbol with a hole in the middle denotes a Tropical Storm (wind speed between 35 and 64 kts), and a solid filled symbol denotes a hurricane/typhoon/tropical cyclone (wind speed greater than 64 kts).

Precipitation Areas: Areas expected to experience precipitation at the forecast valid time are depicted with symbol shading. Regions where greater than half the area is expected to experience precipitation is shaded with diagonal lines. Unshaded regions represent areas where less than half the area is expected to experience precipitation.

Surface Weather Forecast maps depict conditions from the surface to FL240 and are created by Jeppesen meteorologists using numerical forecast guidance and current observations. Maps are created for 24 hour forecast periods for various regions.

Valid Times for 24 hour forecast maps are 0000 and 1200 UTC and maps are produced twice daily. U.S. maps are additionally available at 0700 (valid at 1800) and 1900 (valid at 0600) UTC.

Low Level Significant Weather Forecast



Flight Conditions: Regions expected to experience IFR conditions at the valid time of the map are depicted with yellow shading. Regions expected to experience MFVR conditions at the valid time of the map are depicted with yellow scalloped lines.

Turbulence: Areas of turbulence are depicted by red dashed lines. Areas are labeled with the intensity of turbulence expected using the standard red turbulence symbology (moderate or severe) and with the altitude range in white (hundreds of feet). If only one number appears for the range, it is implied that the turbulence exists from the surface up to that flight level.

Freezing Levels: Freezing level contours are depicted with light blue dotted lines at 4000 ft intervals. They are labeled in hundreds of feet. The surface freezing line is a light blue dashed line and is labeled with SFC.

Maps are valid for 12 and 24 hour forecast periods. Both are updated 4 times per day. Maps are valid at 0000, 0600, 1200 or 1800 UTC. Maps are available at 0100, 0700, 1300 and 1900 UTC.