# Section 12
# CONVECTIVE OUTLOOK CHART

The convective outlook chart (Figure 12-1) delineates areas forecast to have thunderstorms. This chart is presented in two panels. The left-hand panel is the Day 1 Convective Outlook, and the right-hand panel is the Day 2 Convective Outlook. These guidance products are produced at the Storm Prediction Center (SPC) in Norman, OK.

## DAY 1 CONVECTIVE OUTLOOK

The Day 1 Convective Outlook (Figure 12-1) outlines areas in the continental United States where thunderstorms are forecasted during the Day 1 period. It is issued five times daily. The first issuance is 06Z and is the initial Day 1 Convective Outlook that is valid 12Z that day until 12Z the following day. The other issuances are 1300Z, 1630Z, 2000Z, and 0100Z, and all issuances are valid until 12Z the following day.

The outlook issued qualifies the level of risk (i.e., SLGT, MDT, HIGH) as well as the areas of general thunderstorms.

## DAY 2 CONVECTIVE OUTLOOK

The Day 2 Convective Outlook contains the same information as the Day 1 Convective Outlook. It is issued twice a day. It is initially issued at 0830Z during standard time and 0730Z during daylight time. It is updated at 1730Z. The timeframe covered is from 12Z the following day to 12Z the next day. For example, if today is Monday, the Day 2 Convective Outlook will cover the period 12Z Tuesday to 12Z Wednesday.

The outlook issued qualifies the level of risk (i.e., SLGT, MDT, HIGH) as well as the areas of general thunderstorms.

## LEVELS OF RISK

Risk areas come in three varieties and are based on the expected number of severe thunderstorm reports per geographical unit and forecaster confidence. Table 12-1 indicates the labels that appear on both the Day 1 and Day 2 Convective Outlook charts.

**Table 12-1 Notations of Risk**

| NOTATION | EXPLANATION |
|---|---|
| **SEE TEXT** | **Used for those situations where a SLGT risk was considered but at the time of the forecast, was not warranted.** |
| **SLGT (Slight risk)** | **A high probability of 5 to 29 reports of 1 inch or larger hail, and/or 3-5 tornadoes, and/or 5 to 29 wind events,…or…a low/moderate probability of moderate to high risk being issued later if some conditions come together** |
| **MDT (Moderate risk)** | **A high probability of at least 30 reports of hail 1 inch or larger; or 6-19 tornadoes; or numerous wind events (30).** |
| **HIGH (High risk)** | **A high probability of at least 20 tornadoes with at least two of them rated F3 (or higher), or an extreme derecho causing widespread (50 or more) wind events with numerous higher-end wind (80 mph or higher) and structural damage reports** |

SEE TEXT is used for those situations where a slight risk was considered, but at the time of the forecast, was not warranted. Although there is no severe outlook for the labeled area, users should read the text of the convective outlook (AC) forecast message to learn more about the potential for a threat to develop if some particular conditions do come together.

Slight (SLGT) risk implies well-organized severe thunderstorms are expected but in small numbers and/or low coverage.

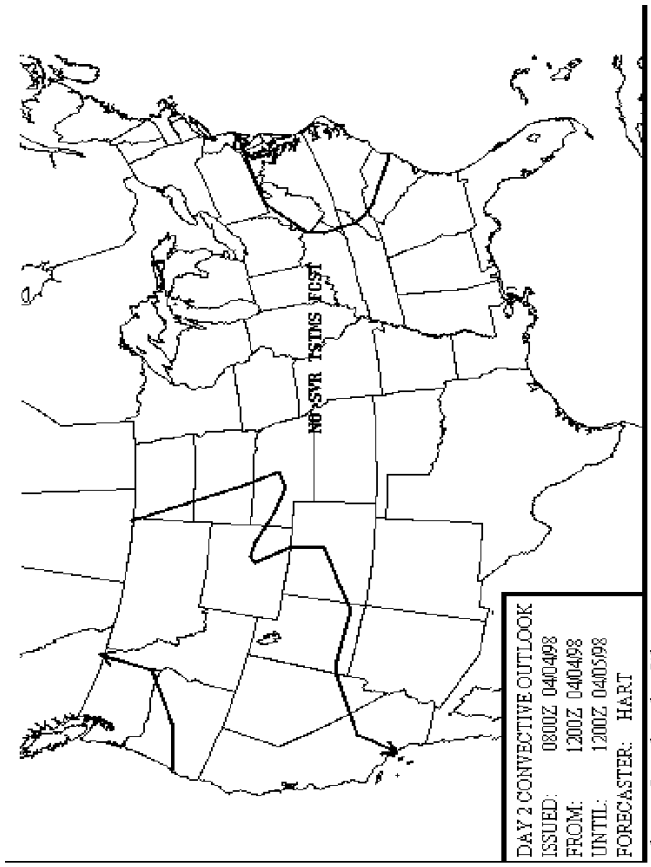
Moderate (MDT) risks imply a greater concentration of severe thunderstorms, and in most situations, greater magnitude of severe weather.

High (HIGH) risk almost always means a major severe weather outbreak is expected, with great coverage of severe weather and enhanced likelihood of extreme severe events (i.e., violent tornadoes or unusually intense damaging wind events). SPC issues a public information statement (PWO) describing a "particularly dangerous situation" when HIGH risk areas are in effect, and it sometimes issues a PWO for MDT risk situations. Some National Weather Service (NWS) offices will include in their public forecasts the phrase "some thunderstorms may be severe" when a MDT or HIGH risk is issued.

In addition to the severe risk areas, general thunderstorms (non-severe) are outlined, but with no label on the graphic map.

## USING THE CHART

The Day 1 and Day 2 Convective Outlooks Charts are flight planning tools used to determine forecast areas of thunderstorms.



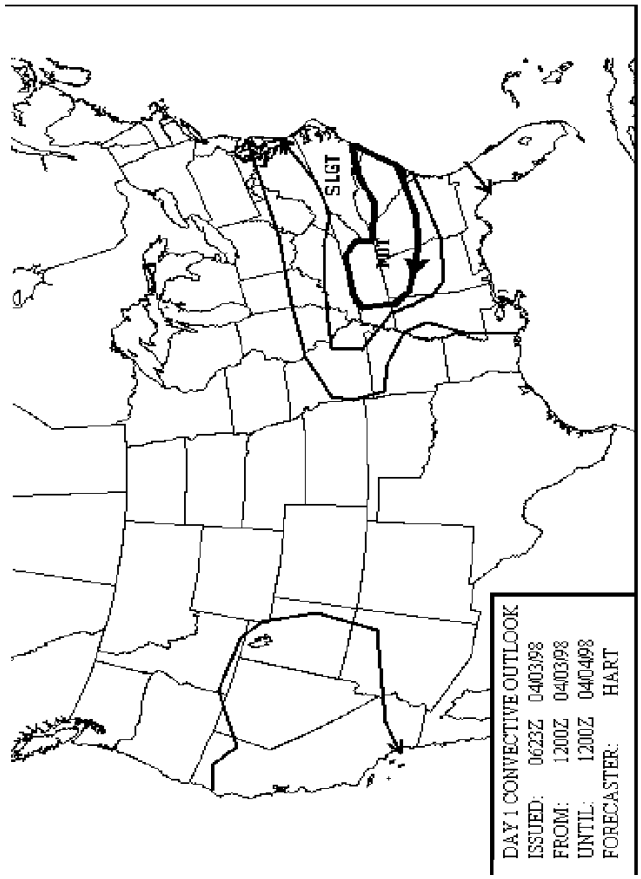




Figure 12-1. Severe Weather Outlook Chart.