

Day 4-8 Severe Weather Outlook Guidance Product Description Document (PDD)

Part 1 - Mission Connection

The Storm Prediction Center (SPC) is the National Weather Service's center of expertise for forecasting convection, especially for economically-disruptive weather events such as tornadoes, large hail, and damaging winds. The current SPC severe thunderstorm forecast product suite includes Convective Outlooks for today (Day 1), tomorrow (Day 2) and the day following (Day 3). However, during the past couple of years, local National Weather Service Offices have been issuing hazard weather outlooks that sometimes mention the likelihood of severe storms out to seven days in advance for their county warning area. In addition, the emergency management community has expressed an interest in longer range outlooks to facilitate planning.

This Product Description Document concerns SPC issuance of Day 4-8 severe weather outlooks to provide national guidance on a critical public safety issue for media, emergency managers, local National Weather Service Forecast Offices and ultimately the United States Public. This product will help its customers to adequately prepare several days in advance of an expected severe weather episode. This product enhancement is aligned with the NOAA Strategic Objective for FY2005 -2010 to "Improve predictability of the onset, duration and impact of hazardous severe weather and water events."

This product is currently available to only NOAA internet addresses, to collect feedback on the content and value from NWS field forecasters. We are now satisfied that the product is ready for a wider audience. During its period of NOAA-only viewing, we have heard from several external customers who would like us to expedite broader availability of this enhanced severe weather service. Select feedback include

Part II - Technical Description

The Day 4-8 Severe Weather Outlook product will consist of one graphic with an area (s) where severe weather is anticipated during the period. The severe weather threat areas will be depicted with a closed line and a label indicating the dates of the expected threat. A short 2-4 sentence paragraph will accompany the graphic to briefly describe the area depicted and occasionally describe the key reasons for the forecast. The forecast decision will be based on a variety of guidance information including the GFS, UKMET and ECMWF deterministic models, Medium Range (MREF) ensemble guidance and other statistical techniques.

These extended range severe weather outlooks will provide SPC customers and partners with information that will help them provide better public safety for the United States public.