

NWS Product Definition Document (PDD) for:
Addition of supplemental Day 4-8 Severe Weather Outlook Guidance

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

"Concerning the experimental Day 4-8 Probabilistic Outlooks -- I am a degreed meteorologist forecasting operationally for one of the nations larger energy companies. Would it be possible for me to have access to these products?"

Jacob Klee - meteorologist for Dominion Power

I saw the link to the outlooks 4-8 on the website but they are forbidden to the general public. I am writing to ask if and maybe when the public can see them? ...

M. Maxwell - USA Weather

The SPC proposes to make the probabilistic hazard information open to all customers for comment through its web site *beginning on October 3, 2005 and ending on 28 July2006* at which time a decision to proceed with testing, revise the test or to continue on the path to operational production will be made. Since the product would be in the public domain, this outlook can be repackaged and re-transmitted in accordance with standard NWS product use policies.

Comments:

During the internet test the format for the information will be unchanged from its current NOAA-restricted form unless internal or external feedback results in product revision. An

example can be found (by NOAA users) in the convective outlook section of the SPC website each day (for example see <http://www.spc.noaa.gov/products/exper/day4-8/>). Given continued success, the SPC plans to eventually embed this information in human and machine readable form within one or more of its operationally disseminated AWIPS products. A NWS Public Information Statement (PNS) Service Change Notification (SCN) will be issued prior to AWIPS product modification.

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.

For the remainder of FY05 the Day 4-8 severe weather outlook would be available via internet (www.spc.noaa.gov), however, given a successful internet test the information would become an AWIPS transmitted product. 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.

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Approval:

_____ Director, Storm Prediction Center

_____ OCWWS Severe Weather Program Leader

_____ Director, National Centers for Environmental Prediction