

**Product/Service Description Document**  
**Experimental Polygon Special Weather Statement**  
**WFO Blacksburg and WFO State College**

**Part I - Mission Connection**

- a. Product/Service Description - The National Weather Service's (NWS) mission is to provide weather forecasts and warnings for the protection of life and property and to provide weather information for the Nation's economic well-being. There is a continuing need to improve the specificity and accuracy of our forecasts. NWS currently issues and disseminates Special Weather Statements (SPS) for sub warning criteria using geopolitical (e.g., county) boundaries.
- b. Product Type - Experimental
- c. Purpose - Threat-based polygon warnings, or storm-based (SB) warnings were implemented nationally in 2008 and essential to effectively warn for severe weather and flash floods. SB warnings show the specific meteorological threat area and are not restricted to geopolitical boundaries. By focusing on the true threat area, polygons help improve NWS warning accuracy and quality. To follow that lead, Blacksburg and State College will begin to issue Storm Based Special Weather Statements (SBS) on an experimental basis to promote increased accuracy of alerting the public to significant weather events. The SBS methodology allows the forecaster the opportunity to be spatially specific, eliminating large areas needlessly alerted when compared to issuing a county based SBS.
- d. Audience - The target audience for this experimental product is the general public, television media community, emergency managers, state and local officials.
- e. Presentation Format - The Blacksburg and State College Weather Forecast Offices will issue SBS for select storms when they are in accordance with NWS Eastern Region Supplement 02-2007. Latitude / Longitude information will be located at the bottom of the product in the exact same format as Severe Thunderstorm, Tornado, and Flash Flood Warnings.
- f. Feedback Method - Blacksburg and State College will seek user comments during the course of their routine outreach program and through a technical evaluation survey. The comment period will run from May 1 through Dec 31, 2009.

Any comments regarding the polygon Special Weather Statements may be addressed to:

National Weather Service  
Eastern Region Headquarters  
ATTN: Fred McMullen  
630 Johnson Avenue      Bohemia, NY 11716      (631) 244-0125  
E-mail comments can be sent to [Fred.McMullen@noaa.gov](mailto:Fred.McMullen@noaa.gov)

Example:

Sample Special Weather Statement for Blair County Pennsylvania.

SPECIAL WEATHER STATEMENT NATIONAL WEATHER SERVICE STATE COLLEGE 222 PM EST  
TUE DEC 9 2008 PA000-092045- BLAIR- 222 PM EST TUE DEC 9 2008 ...A STRONG  
THUNDERSTORM WILL AFFECT PARTS OF BLAIR COUNTY... THE NATIONAL WEATHER

SERVICE IN STATE COLLEGE HAS ISSUED A SPECIAL WEATHER STATEMENT...EFFECTIVE UNTIL 245 PM EST...FOR THE FOLLOWING COUNTY... IN CENTRAL PENNSYLVANIA... BLAIR... INCLUDING THE FOLLOWING LOCATIONS... ALTOONA... AT 219 PM EST...NATIONAL WEATHER SERVICE DOPPLER RADAR WAS TRACKING A STRONG THUNDERSTORM 13 MILES EAST OF ALTOONA...MOVING NORTHEAST AT 35 MPH. SMALL HAIL...WINDS AROUND 50 MPH...AND VERY HEAVY RAIN IS EXPECTED WITH THIS STORM. IF THIS STORM INTENSIFIES FURTHER...A SEVERE THUNDERSTORM WARNING MAY BE REQUIRED. LAT...LON 3216 9231 3215 9236 3215 9263 3216 9264 3249 9241 3248 9241 3241 9241 3232 9230 \$\$ EXPERIMENTAL NNNN

## **Part II - Technical Description**

- a. Format and Science Basis - Using the above format, SBS will illustrate the specific meteorological threat area and not be restricted to geopolitical boundaries. By focusing on the true threat area, polygons will help improve NWS awareness and quality. SBS will promote improved graphical displays, and in partnership with the private sector, support a wider warning distribution through cell phone alerts, pagers, web-enabled Personal Data Assistants (PDA), etc.
- b. Availability - The product will be issued as needed during events when storms reach criteria as defined in NWS Eastern Region Supplement 02-2007.