

**Product/Service Description Document**  
**Experimental Probabilistic Snowfall Internet Graphical Products**  
**NWS Weather Forecast Office Baltimore/Washington**

**Part I - Mission Connection**

- a. Product/Service Description - Experimental probabilistic internet-based snowfall graphics and tables that indicate the probability of snowfall  $\geq$  0.1", 1", 2", 4", 8", 12", 18"; and minimum and maximum snowfall scenarios.
- b. Product Type - Experimental
- c. Purpose - The purpose of these experimental probabilistic internet-based snowfall graphics is to provide NWS Weather Forecast Office Baltimore/Washington (LWX) customers and partners a range of snowfall possibilities, better communicate forecast uncertainties, and enhance Decision Support Services (DSS) during winter weather events. The probabilistic snowfall graphics will complement existing NWS deterministic snowfall graphics, indicating areas of low and/or high uncertainty. LWX will also produce 10% and 90% exceedance percentile graphics represented as the "Best Case" and "Worst Case" scenarios. LWX winter weather coordination calls with partners and customers frequently involve requests regarding forecast uncertainty, forecaster confidence, and worst/best case scenarios. These experimental probabilistic snowfall graphics will convey this critical information and enhance DSS. These graphics provide an opportunity to better leverage available winter weather probabilistic guidance that can't be expressed in text-based products. These probabilistic graphics were initially introduced to the LWX emergency management community during the winter of 2012/2013 and their feedback was overwhelmingly favorable.
- d. Audience - The target audiences for this experimental product are LWX customers and partners with a mission focused on decision support for public safety, including but not limited to emergency managers, state and local officials, transportation safety officials, media, private sector weather providers who need to tailor their services to a particular client, and other high-end users in the general public.
- e. Presentation Format - The probabilistic snowfall graphics are displayed with color curve ranges from zero to 100 percent; Best Case/Worst Case graphics show snowfall amounts in whole inches. Please see examples in Part II.
- f. Feedback Method - Feedback will be gathered from representatives from federal, state, county, and local government agencies and broadcast media during scheduled customer review meetings. Comments/feedback will be collected from November 15, 2013, until April 30, 2014. Users can access the following on-line survey to provide feedback:

<http://weather.gov/survey/nws-survey.php?code=PSNOWFCSTS>

Technical comments for the Probabilistic Snowfall Internet Graphical Products developer may be addressed to:

National Weather Service  
Weather Forecast Office Baltimore/Washington  
ATTN: Chris Strong  
43858 Weather Service Road  
Sterling, VA 20166-2001  
703-996-2200

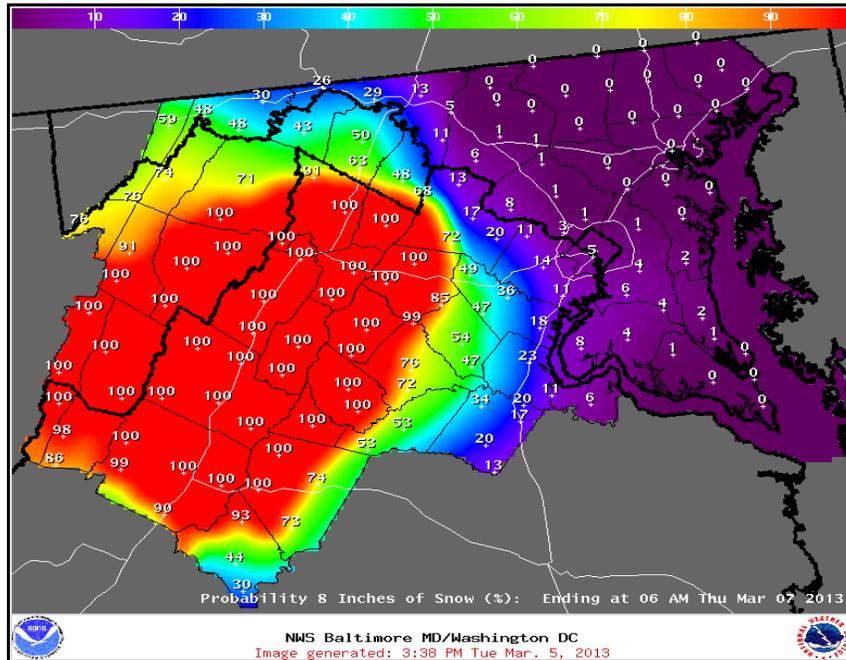
E-mail comments can be sent to [Christopher.Strong@noaa.gov](mailto:Christopher.Strong@noaa.gov)

**Part II - Technical Description**

- a. Format and Science Basis - The format will be graphical with a color curve ranging from zero to 100 percent; Best Case/Worst Case graphics show snowfall amounts in whole inches. The Short Range Ensemble Forecast (SREF) will serve as a basis or starting point for populating probabilistic snowfall accumulation forecast grids.
- b. Availability - These products will be available any time the probability of precipitation is "likely" (60 percent) or greater and snowfall accumulation of at least a trace is expected.

**Probabilistic Snowfall Graphics examples:**

- 1. The image below depicts the probabilities of snowfall  $\geq 8"$  ending at 6:00 am, Thursday, March 07, 2013.



- 2. The images below depict the worst case and best case for snowfall totals in the LWX county warning area at 3:30 pm, Tuesday, March 06, 2013.

