## Experimental New Space Weather Forecast Product Product Description Document (PDD) November 20, 2012

## Part 1 - Mission Connection

a. <u>Product Description</u> - A new 3-Day Space Weather Forecast product to relay forecast information about anticipated space weather activity in formats consistent with existing NOAA Scale thresholds.

b. <u>Purpose</u> - Existing forecast products have decades of legacy of providing scientific data that has been targeted towards small groups of sophisticated users and members of the scientific community. With an increase in attention on space weather activity and potential effects on technology and infrastructure, a more intuitive delivery of space weather forecast information is needed. Additionally, comments gathered from key partners in the emergency management, other government decision makers, and the media all indicate that existing forecast products are difficult to understand and do not fully meet their needs. The new experimental forecast product provides space weather conditions and forecasts in a more intuitive and less confusing manner.

c. <u>Audience</u> - The general public, emergency managers, electronic media, NOAA, NWS, NASA, FEMA and other federal, state, and local government agencies.

d. <u>Presentation Format</u> - The experimental forecast product will be accessible by subscribing to the Space Weather Prediction Center (SWPC) Product Subscription Service (PSS) at <u>https://pss.swpc.noaa.gov/Login</u>, on NWS Weather Wire, and also via the SWPC website <u>http://www.swpc.noaa.gov/index.html</u>.

e. <u>Feedback Method</u> - Comments will be accepted from 12 January 2013 through 12 February 2013. Comments can be made via the web form at: <u>http://www.nws.noaa.gov/survey/nws-</u> <u>survey.php?code=3DSWF</u>

Technical and policy questions regarding this experimental forecast product may be addressed to:

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## **Part II – Technical Description**

**a.** <u>Format and Science Basis</u> -This experimental forecast product was developed to provide an improved delivery of space weather information in a more intuitive format, delineating information by phenomenon type, while taking advantage of the capabilities of existing NWS and SWPC dissemination methods. This experimental forecast product addresses numerous comments and suggestions about the existing products from the public and key partners.

The new 3-day forecast product summarizes expected space weather conditions under each of the three categories of activity; Geomagnetic Storms, Solar Radiation Storms, and Radio Blackouts. Unlike existing forecast products, the new product will be issued twice a day, and reference the level of activity expected consistent with the commonly understood and widely disseminate NOAA Scale thresholds. A short description of why expected conditions are forecast will also be included for each activity category.

**b.** <u>Availability</u> - The experimental forecast product will be accessible by subscribing to the Space Weather Prediction Center (SWPC) Product Subscription Service (PSS) at <u>https://pss.swpc.noaa.gov/Login</u> as well as NWS Weather Wire, and also via the SWPC website <u>http://www.swpc.noaa.gov/index.html</u>.