Proving Ground Operations Plan Proposal
Please fill out and return to the GOES-R Program Office (richard.reynolds@noaa.gov and bonnie.reed@noaa.gov).

(1) Project Title:

a. Quantitative Precipitation Forecasting with GOES-R Products.

(2) Organization:

a. NWS/NCEP Hydrometeorological Prediction Center (HPC)
b. NESDIS/Satellite Analysis Branch (SAB)

(3) Products to be demonstrated (list the GOES-R Products you would like to demonstrate as a GOES-R Proving Ground activity):

a. Cloud/Moisture Imagery
b. Derived Motion Winds
c. RGB Air Mass
d. Rainfall Rate/QPE

(4) Demonstration Project Summary:

a. Purpose: Demonstrate the utility of identified GOES-R surrogate products to improve HPC forecasts in real-time in an operational environment. Specifically, Quantitative Precipitation Forecasts (QPFs), winter weather forecasts, and assessments of model performance will be impacted by the GOES-R products. Products will be demonstrated within the N-AWIPS/AWIPS system and used in the preparation of operational QPFs. Forecaster feedback will be captured and provided to the GOES-R algorithm developers.
b. Scope: The products will be evaluated for use in short range forecasting, with an emphasis on precipitation forecasting.

(5) Participants (Centers) involved:

a. Providers

i. CIRA & SPoRT (joint)
    1. RGB Air Mass (John Knaff, Gary Jedlovec)
ii. NOAA/NESDIS/STAR
    1. Derived Motion Winds (Jamie Daniels)
    2. Rainfall Rate/QPE (Bob Kuligowski)
iii. CIMSS & CIRA (joint)
    1. Cloud and Moisture Imagery (Tim Schmit & Dan Lindsay)

b. Consumers

i. Forecasters at the HPC
ii. Forecasters at the SAB

(6) Project schedule/duration (timeline):

a. Begin: July 1, 2011

b. End: January 1, 2012

Note: Products would follow AWC model of phasing in 1/month from July – October 2012.

(7) Project decision points and deliverables

a. Proving Ground Operations Plan
b. Proving Ground Mid-term Report
c. Proving Ground Final Report which includes recommendations for future improvements, additional products, or combinations of products.

(8) Responsibilities and Coordination

a. The contractor ("Research Associate for HPC, OPC, and SAB), working within the Hydrometeorological Testbed at HPC (NOAA HMT-HPC) will take the lead in the evaluation of new GOES-R products. Products will be initially tested within the HMT, both by HMT staff and HPC forecasters, then, if appropriate, evaluated by forecasters preparing operational HPC forecasts.
b. Overall management will be provided by the HPC Development and Training Branch Chief with the HMT staff providing the day to day guidance to the contractor. The HPC Science Operations Officer (SOO) will provide guidance on scientific issues. HPC will work with NCEP Central Operations to set up data flow, provide system administration support, and ensure data is available to HPC meteorologists on the N-AWIPS/AWIPS workstations. Final evaluation will be provided by a group consisting of the HPC Development and Training Branch Chief, the HMT staff, and the HPC SOO with input from participating forecasters.
c. Products will also be demonstrated and evaluated within NESDIS Satellite Analysis Branch with Jamie Kibler as the Lead.

(9) Budget and resource estimate

a. REMOVED in this version.