

Proving Ground Demonstration Proposal

- (1) Project Title:** GOES-R Proving Ground Aviation Weather Testbed
- (2) Organization:**
 - a. Aviation Weather Center, Kansas City, MO
- (3) Products to be demonstrated (list the GOES-R Products you would like to demonstrate as a GOES-R Proving Ground activity):**
 - a. Volcanic Ash Detection and Height (Pavolonis)
 - b. SO₂ (Pavolonis)
 - c. UW Convective Initiation (Feltz)
 - d. Low Cloud and Fog (Pavolonis)
 - e. Aircraft Icing Threat (Smith Jr.)
 - f. Nowcasting (Peterson)
 - g. WRF Lightning (McCaul)
- (4) Demonstration Project Summary:**
 - a. To improve forecaster skills resulting in more accurate and timely forecasts and warnings.
 - b. To educate developers in Aviation-related operations and constraints
 - c. To educate forecasters in latest aviation research
 - d. To support the production of aviation weather products using IC4D, AWIPS, and AWIPS II.
- (5) Participants (Centers) involved:**
 - a. Providers
 - i. NOAA/NESDIS
 - ii. CIMSS
 - iii. CIRA
 - iv. SPoRT
 - v. USRA Huntsville
 - b. Consumers
 - i. Aviation Weather Center
- (6) Project schedule/duration (timeline):**
 - a. Begin: June 2010 (planning)
 - b. First products into testbed: August 2010
 - c. Midterm Report: November 2010
 - d. Final Evaluation Report: February 2010

Proving Ground Product	Acquisition into Testbed due date	Evaluation Campaign dates
Convective Initiation and Nearcasting	12/01/10	12/15/10-01/30/12
Volcanic Ash: Detection and Height; SO ₂ Detection	10/03/11	10/10/11-01/30/12
Aircraft Icing Threat	10/03/11	10/10/11-01/30/12
Low Cloud and Fog	05/02/11	05/09/11-01/30/12
WRF Lightning Threat*	10/31/11	11/07/11-01/30/12

*Note, WRF Lightning Threat is of interest to AWC and will be integrated well after the GOES-R Aviation-related products.

(7) Project decision points and deliverables

- a. Proving Ground Operations Plan
- b. Proving Ground Final Report

(8) Responsibilities and Coordination

- a. Bruce Entwistle, NOAA/NCEP/AWC – AWC PG Lead
- b. Ken Pryor & Wayne Feltz, UW-CIMSS – Aviation Application Team co-leads
- c. Bonnie Reed, NOAA/NWS/OST – NWS PG Lead
- d. Dick Reynolds, GOES-R Program Office

(9) Budget and resource estimate