Proving Ground Demonstration Plan Proposal
Last Updated March 23, 2010

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

(1) **Project Title:**
   a. NHC 2010 Hurricane Season PG Experiment

(2) Organization:
   a. National Hurricane Center

(3) Products to be demonstrated (list the GOES-R Products you would like to demonstrate as a GOES-R Proving Ground activity):
   a. Hurricane Intensity Estimate (HIE)
   b. Red-Blue-Green (RGB) air mass product
   c. RGB aerosol/dust Product
   d. Saharan air layer product
   e. Super rapid scan imagery
   f. Rapid intensity index

(4) Demonstration Project Summary:
   a. Purpose/Scope: Demonstrate identified GOES-R surrogate products real-time at the National Hurricane Center. Image products will be demonstrated on a dedicated website and through Google Earth. Quantitative products (HIE and rapid intensity index will be provided via ftp and websites). Additionally, NHC forecaster feedback will be captured and provided to the GOES-R algorithm developers.

(5) Participants (Centers) involved:
   a. Providers
      i. AWG
         1. Coordination on HIE algorithm
      ii. CIRA
         1. RGB air mass product
         2. RGB aerosol/dust Product
         3. Rapid intensity index
      iii. CIMSS
         1. Hurricane Intensity Estimate
         2. Saharan air layer product
      iv. NHC
         1. Super rapid scan imagery
   b. Consumers
      i. NHC

(6) Project schedule/duration (timeline):

a. Product testing and raining: 1 JUN – 31 JUL 2010
b. Experiment: 1 AUG – 30 NOV 2010

(7) Project decision points and deliverables

a. Proving Ground Operations Plan (following template)
b. Proving Ground Demonstration and Final Report (following template)

(8) Responsibilities and Coordination

a. Jack Beven – Primary NHC focal point
    i. Coordinate with other hurricane specialists as well as forecasters from the NHC Tropical Analysis and forecast Branch.
b. Michael Brennan – 2nd focal point at NHC
    i. Assist Jack in planning, preparation, and execution
c. Jiann-Gwo Jiing, NHC Technical Support Branch (TSB) Chief
    i. Coordinate all technical development
d. Mark DeMaria (NOAA/NESDIS/STAR/RAMMB)
    i. Overall NHC PG project management
    ii. Lightning-based rapid intensity index
e. John Knaff (NOAA/NESDIS/STAR/RAMMB)
    i. MSG product generation
    ii. POC for Super Rapid Scan Imagery
f. Kevin Micke (CIRA/CSU)
    i. Google earth development
g. Jason Dunion (NOAA/Hurricane Research Division)
    i. Coordinate with CIRA on demonstrating RGB aerosol/dust product
h. Chris Velden (U. Wisconsin, CIMSS)
    i. POC for HIE product
    ii. Liaison to NASA/NSF field programs for Super Rapid Scan Imagery collection
i. Training
    i. CIMSS products – CIMSS responsible for training
    ii. CIRA products – CIRA responsible for training
    iii. COMET – CIRA/CIMSS training will reference existing COMET modules on RGB applications

(9) Budget and resource estimate

a. CIRA and CIMSS contributions will be covered by their PG project funds
b. NESDIS personnel contributions (Knaff, DeMaria) will be covered by NESDIS/STAR base funds
c. NHC personnel contributions (Beven, Brennan, Jiing, other TSB staff) will be covered by NHC base funds
d. Real time GSD360 lightning data feed will be provided free of charge from Vaisala through an MOU with CIRA