MODIS & VIIRS Calibration & Validation Proposal Overview

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NASA VIIRS-MODIS Joint Science Team Mtg Ocean Breakout Session
May 14, 2008
Proposals & Activities

• “MODIS Aqua & Terra Calibration & Validation Analyses in Support of Ocean Products”
  - C. McClain, PI; G. Feldman, Co-I
  - Activities:
    • Maintain sensor calibrations (including vicarious using MOBY) in collaboration with MCST.
    • Maintain processing S/W including HiRes module for routine processing & SeaDAS.
    • Maintain SeaBASS support.
    • Conduct product quality evaluations.
    • Work with algorithm PIs on implementation & testing.
    • Refine processing algorithms for coastal applications (SWIR-based aerosol correction, AERONET-based aerosol models) using Chesapeake Bay as test site.
    • Evaluate methods for improving MODIS/Terra products
    • Evaluate use of Calipso and Glory data on improving atmospheric corrections.
Proposals & Activities

• “Evaluation of the VIIRS Sensor Performance and Operational NPOESS Ocean Product Algorithms”
  - C. McClain, PI; G. Feldman, Co-I; W. Esaias, Co-I
  - Staff: Z. Ahmad, S. Bailey, R. Barnes, G. Eplee, G. Meister, F. Patt, K. Turpie, J. Werdell
  - Activities:
    • Continue review of operational algorithms (calibration, bio-optical, masks/flags, SST) as implemented by NGST.
    • Collaborate with NICST on prelaunch calibration & characterization analyses for NPP.
    • Conduct product sensitivity analyses based on sensor calibration data.
    • Develop a simulated data set using “best available” calibration, bio-optical, and atmospheric correction algorithms.
    • Support NPP Project Scientist & Deputy PS and NPP Project Office and provide science team interface to Ocean PEATE.
Related Publications, Past Year


