Task Highlights & Progress Summary:

This is the 1st quarterly progress (June 1 – July 15, 2010) report for the 2010 ASAP initiative at the University of Wisconsin-Madison CIMSS/SSEC in collaboration with the University of Alabama-Huntsville, MIT, and NCAR. Described are tasks as listed on the NASA LaRC/SSAI CIMSS Statement of Work for ASAP 2010.

Wayne Feltz leads the University of Wisconsin-Madison CIMSS/SSEC effort. The contact information is (608) 265-6283, or wayne.feltz@ssec.wisc.edu. The CIMSS ASAP-project staff also includes: Justin Sieglaff, Tony Wimmers, Mike Pavolonis, Ralph Petersen, Jason Brunner, and Chris Velden. Coordination between John Mecikalski at the University of Alabama-Huntsville, Robert Sharman NCAR, and Marilyn Wolfson/Haig Iskenderian MIT is ongoing.

Coordination, Presentations and Conferences:

Internal ASAP coordination meeting was held on July 15th, 2010. A telcon was conducted with Dr. Haig Iskenderian with regard to satellite-based convective interest field and wind processing development on June 30th 2010. Other areas of common interests were discussed including turbulence.

Research Progress:

1) Support for JPDO NextGen Involvement (In collaboration with UAH and NASA LaRC)

Wayne Feltz participated in JPDO Environmental Information team on regularly scheduled telcons. Provided GOES-R Aviation satellite-based algorithm overview to Darien Davis/Steve Abelman and NextGen Aviation science roadmap. Among other connections (networking) that has been accomplished:

- Member of NextGen Environmental Information team
- Tom Carty and Mike Richards - FAA Tech center visited UW-Madison CIMSS in February to talk about aviation-related satellite applications to populate 4-D cube prototype
- Attended two NextGen planning meetings in DC
- Tri-agency NASA/NOAA/FAA Aviation Program review and NextGen discussion in March 2010
- Provided overview of GOES-R Aviation algorithm linkages with NextGen activities related to turbulence, convection, icing, and volcanic ash at GOES-R Proving Ground and Algorithm Working Group annual meetings
2) Continue CoSPA validation ASAP research (In collaboration with UAH, MIT, and NCAR)

UW-CIMSS continues to collaborate with MIT/Lincoln Lab and UAH on transition of SATCAST into CoSPA algorithm. Highlights below:

- Implemented MIT improved nearest neighbor wind interpolation routine
- UW-CIMSS has integrated box-average cloud top cooling rate methodology into SATCAST algorithm (ver 1.3) and provided to UAH and MIT
- WINDCO code has been made more efficient (64-bit) and MIT has significantly increased processing speed

2010 ASAP related Peer-reviewed Papers:


Conferences

GOES-R OCONUS Proving Ground Testbed Workshop, Honolulu, HI, 28-30 July 2010 – Preparing for geostationary testbed to support Pacific region, Focus was on making sure GOES-R Aviation products are connected to NextGen activities

2010 EUMETSAT meeting, Cordoba, Spain, 20 – 24 September 2010, Presentation of satellite turbulence application originally developed within ASAP activities.