

JPSS Proving Ground and Risk Reduction Update 14 Jan 2013



Current Initiatives

- PGRR Project Updates
- JPSS Science Seminars
- Presentations at 2013 AMS Annual Conference
- JPSS PGRR January Telecon
- Maintaining Communications



PGRR Project Updates

- Projects provided their quarterly reports for 4CY2012
- Summary created of project accomplishments, concerns, and future plans
- Special emphasis requested for:
 - Interaction with your operational partner(s).
 - Conference/workshop participation
 - Funding concerns.
 - Outside project publicity



Project Accomplishments

Project Lead	Description	Accomplishments
Mark DeMaria	Application of JPSS Imagers and Sounders to Tropical Cyclone Track and Intensity Forecasting	Considerable progress has been made on the center fixing routine
Kent Hughes	Global VIIRS Ocean Color Pre-operational User Expansion	NOS, NMFS and NWS user engagement meetings
Jeff Hawkins	NRL-MRY VIIRS Data and Calibration/Validation Project	Using Arctic domain on NRLVIIRS cal/val web page to routinely view multiple DNB overpasses per day (no sunlight conditions) with scenes including snow covered land, the rapidly expanding sea ice, open water polynyas, clouds, and aurora.
Gary Jedlovec	Improve situational awareness and short-term forecasts at WFO operations	Used VIIRS data and products to help support forecasting and relief efforts associated with Hurricane Sandy
Ivan Csiszar	A rapid delivery system of enhanced VIIRS active fire data for fire management and fire weather applications	Two fire weather telecons were held (October 23 rd and November 27 th) in order to engage the end-users targeted as part of our Proving Ground project
Elizabeth Weisz	Atmospheric Soundings from Suomi NPP/Aqua and Metop-A/Metop-B Sounding Pairs.	Modification of the retrieval algorithm, resulted in improvements, in particular, for cloud top pressure Released software package to the public to covert AIRS, IASI and CrIS radiances to retrieval products.
Nancy Baker	ATMS, CrIS, and VIIRS Data Assimilation	ATMS data stream ingested and overall quality assessed.
Fuzhong Weng	Improve Hurricane Structure Monitoring and Intensity Forecast Using NPP ATMS and GCOM-W AMSR2	Applied the regression method to ATMS data to depict the hurricane warm core for Hurricane Sandy 2012. Investigated and evaluated the impact of initial conditions on hurricane Debby forecast.
Huan Meng	Development of a Snowfall Detection Algorithm using ATMS Measurements	Completed compilation of a rich training and validation dataset consisting of AMSU-A and MHS (N18, N19 and METOP-A) observations and surface meteorological measurements over US (including Alaska).



JPSS Science Seminars

Date	Presenters	Topic
November 19, 2012	Ivan Csiszar (STAR)	Suomi NPP (SNPP) Visible Infrared Imager Radiometer Suite (VIIRS) Active Fire Data for Fire Management and Fire Weather Applications
December 17, 2012	Liam Gumley and Kathy Strabala (CIMSS)	Status of the Community Satellite Processing Package (CSPP)
January 29, 2013	NWS and GINA	Use of SNPP Data to Support Alaska Missions
February 2013	SPoRT (invited)	Support to NWS WFOs and Alaska
March 2013	Fuzhong Weng (invited)	SNPP Data Assimilation into TC Models
April 2013	NCEP	ATMS/CrIS Data Assimilation into Models
May 2013	Mike Folmer	SNPP Data use in NCEP HPC, OPC, and NHC



AMS Presentations

- 9th Annual Satellite Symposium
 - Fifteen oral sessions with a total of 80 presentations
 - Two poster sessions with a total of 99 posters
 - Nine of the oral sessions were joint with other conferences and committees
- SNPP Data highlighted in other conferences and symposia...examples
 - Third Conference on Transition of Research to Operations
 - 27th Conference on Hydorlogy
 - 17th Conference on IOAS-AOLS
 - Special Symposium on the JCSDA
 - Special Symposium on Advancing Weather and Climate Forecasts: Innovative Techniques and Applications
 - Impacts: Weather 2012



JPSS PGRR Telecon

- Scheduled for Fri 15 Jan from 1-3pm
- Summary of status of all PGRR Projects
- Presentations from selected PGRR Projects
- Discussion on effectivness of current PGRR procedures
- Provide details of Satellite Science Week agenda



Maintaining Communications

- Use of BOX website for
 - Quarterly reports
 - Science Seminar abstracts and presentations
 - Conference presentations
 - Journal articles
 - Other program documents