



BLENDED PRODUCTS WORKSHOP – INTRODUCTION AND LOGISTICS

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OBJECTIVES AND OUTCOMES

- **Workshop Objectives:**
 - Determine the current status of various schemes used to blend operational products at various time and space scales
 - Determine emerging, new techniques being tested through new products from the JPSS PGRR program
 - Identify common tools and their potential use in NESDIS enterprise systems

- **Expected Outcomes:**
 - A white paper on the current status of JPSS blended products and future development strategy
 - Identify synergies with ongoing NESDIS Enterprise products

Monday Tuesday Wednesday Thursday

Auditorium: Blended Products Workshop

Time	Presentations / Topics	Speaker	Affiliation
0845 - 0920	Session 1 - Introduction	CHAIR - Ralph Ferraro, Lihang Zhou	NESDIS/STAR
845 - 855	<i>Introduction and Logistics</i>	Ralph Ferraro	STAR
855 - 905	<i>Objectives and Goals</i>	Mitch Goldberg	JPSS
905 - 920	<i>Current Operational NESDIS Blended Products and emerging PGRR Products</i>	Limin Zhao	OSPO
0920 - 1000	Session 2 - Blending Tools	CHAIR - Ingrid Guch, Tom Smith	Aerospace; NESDIS/STAR
920 - 940	<i>Commonly used Blending Techniques</i>	Tom Smith/STAR	STAR
940 - 1000	<i>Gap filling methods - DIN EOF</i>	Xiaoming Liu	STAR
1000	Break		
1015 - 1115	Session 3 - Composite Products	CHAIR - Huan Meng, John Forsythe	NESDIS/STAR; CIRA
1015 - 1035	<i>Blended Ozone</i>	Flynn/Kapoor	STAR/OSPO
1035 - 1055	<i>Blended Biomass Burning</i>	Kondragunta/Ding	STAR/OSPO
1055 - 1115	<i>Multi-Platform TC surface winds</i>	Knaff/Ma	STAR/OSPO
1115 - 1215	Session 4 - PDF matching and OI Products	CHAIR - Nai-Yu Wang, Sean Helfrich	
1115 - 1135	<i>Soil Moisture</i>	Zhan/Zhao	STAR/OSPO
1135 - 1155	<i>IMS</i>	Helfrich/Romanov/Woods	STAR/CUNY/OSPO
1155 - 1215	<i>Blended SST</i>	Maturi/Sapper	STAR/OSPO
1215 - 1330	LUNCH - Possible brown bag seminar?		
1330 - 1510	Session 5 - Other/Advanced Techniques	CHAIR - Limin Zhao, Tony Wimmers	OSPO/CIMSS
1330 - 1350	<i>Multisensor Sea Ice Motion and Concentration</i>	Jeff Key, Aaron Letterly	STAR, CIMSS
1350 - 1410	<i>MIMIC</i>	Tony Wimmers	CIMSS
1410 - 1430	<i>CMORPH</i>	Pingping Xie	NWS/NCEP/CPC
1430 - 1450	<i>Multisatellite Water Vapor and Rain Rates</i>	John Forsythe	CIRA
1450 - 1510	<i>Flooding from VIIRS and ABI</i>	Sanmei Li	GMU
1510 - 1530	Break		
1530 - 1700	Session 6 - Topical Discussions/Common Threads	CHAIR - Lihang Zhou, Ralph Ferraro	STAR
1530 - 1645	<i>Discussions</i>		
1645	<i>Action Items, next steps, etc.</i>		
1700	<i>Workshop Ends</i>		

RJD, 2018R 12:55 pm

We chose a wide array of products, but we could not include them all...

- We have coffee
- Vending
- Restrooms
- Wireless – umd network; Username: jpssws; password: rtubbacoponp (all lower case)
- Lunch on your own/Lunch Talk
- Stay for the discussion session!

Discussion Topics

- Any common methods/tools that could be used for:
 - Baseline products
 - Emerging/PGRR products
 - Ripe for the Enterprise Product System?
- What is best path forward to compare impact of various blending schemes – a testbed of sorts?
- What is the ‘low hanging fruit’?
- Possible future improvements for end-users’ needs
 - Data Formats
 - NetCDF, GeoTiff, etc.
 - Latency
 - Resolution
- Next steps; what would be a good platform to keep the dialogue continuing?



BACKUP

Some Attributes of Blended Products

- Considered as “L3”; use L2 products as input
 - Quality of L3 dependent on quality of L2!
- Highly desirable by NESDIS operations and end users
 - Optimizes computer resources for producer and user
 - Puts quality burden on producer and not user
- There is a “normalization” process
 - Each L2 could have different attributes
 - Native spatial resolution; Latency; Errors
 - Observation frequency of various sensors used
 - Scan geometry/biases
 - Generally, each L2 is “adjusted” to a reference
 - Highest quality L2, independent data, human eye (IMS), etc.
 - For some products, weights assigned to each L2 that factor in error attributes
 - End usage also dictates how the normalization is done
 - AWIPS/image products
 - Input to NWP or Hydrological Models
 - Global vs. Regional