

JPSS/GOES-R Proving Ground / Risk Reduction Summit

24-28 February 2020



NOAA Center for Weather and Climate Prediction
Conference Center • 5830 University Research Court • College Park, MD 20740

Monday

Tuesday

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Friday

Posters

Auditorium: Keynotes & Program Overviews - Severe Weather - NWP/Data Assimilation

Time	Presentations / Topics	Speaker	Affiliation
0815 - 0930	<i>Keynotes and Program Overviews I</i> <i>Moderators: Mitch Goldberg and Dan Lindsey</i>		
0815 - 0830	<i>Welcome and Logistics</i>	Mitch Goldberg and Dan Lindsey	
0830 - 0900	<i>Keynote Presentation</i>	Louis Uccellini	
0900 - 0915	<i>Keynote Presentation</i>	Ellen Meccray	
0915 - 0930	<i>Keynote Presentation</i>	Chris Lauer	
0930 - 0945	Coffee		
0945 - 1115	<i>Severe Weather</i> <i>Moderator: Bill Line</i>		
0945 - 1015	<i>Severe Weather Users</i>	Michael Bowlan, Chauncy Schultz, Chad Gravelle	CIMMS, NWS Bismarck, NWS SRH
1015 - 1045	<i>Severe Weather Developers</i>	Kris Bedka, Rebekah Esmaili, Scott Rudlosky	NASA, STC, STAR
1045 - 1115	<i>Severe Weather Open Discussion</i>		
1115 - 1215	<i>Keynotes and Program Overviews II</i> <i>Moderators: Mitch Goldberg and Dan Lindsey</i>		
1115 - 1125	<i>STAR Intro</i>	Harry Cikanek	STAR
1125 - 1135	<i>JPSS Intro</i>	Greg Mandt	JPSS
1135 - 1145	<i>GOES-R Intro</i>	Pam Sullivan	GOES-R
1145 - 1205	<i>Keynote presentation</i>	Steve Volz	NESDIS
1205 - 1215	<i>Questions/Discussion</i>		
1215 - 1315	Lunch		
1315 - 1445	<i>NWP/Data Assimilation I: Radiances</i> <i>Moderator: Jim Yoe</i>		
1315 - 1345	<i>NWP/Data Assimilation Users</i>	Ben Ruston, Vijay Tallapragada, Will McCarty	NRL, EMC, NASA/GMAO
1345 - 1415	<i>NWP/Data Assimilation Developers</i>	Andrew Collard, Kevin Garrett, Steve Weygandt	EMC, STAR, ESRL
1415 - 1445	<i>NWP/Data Assimilation Open Discussion</i>		
1445 - 1500	Coffee		
1500 - 1630	<i>NWP/Data Assimilation II: Geophysical Parameters</i> <i>Moderator: Nazmi Chowdhury</i>		
1500 - 1530	<i>NWP/Data Assimilation Users</i>	Amanda Back, Jim Yoe, Ed Hyer	CIRA/ESRL, JCSDA, NRL
1530 - 1600	<i>NWP/Data Assimilation Developers</i>	Kyle Hilburn, Xuguang Wang, Haixia Liu	CIRA, OU, EMC
1600 - 1630	<i>NWP/Data Assimilation Open Discussion</i>		

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Posters

Auditorium: Land Products - Imagery - Smoke and Fire - Ocean and Coastal - Poster Session 1 (Conference Center)

Time	Presentations / Topics	Speaker	Affiliation
0845 - 1015	Land Moderator: Kevin Gallo		
0845 - 0915	<i>Land Product Users</i>	Helin Wei/Mike Ek, Harlan Shannon, Christa Peters-Lidard	NCEP/UCAR, USDA, NASA
0915 - 0945	<i>Land Product Developers</i>	Bob Yu, Jerry Zhan, Mark Brusberg	STAR, STAR, USDA
0945 - 1015	<i>Land Product Open Discussion</i>		
1015 - 1030	Coffee		
1030 - 1200	Imagery Moderator: Dan Lindsey		
1030 - 1100	<i>Imagery Users</i>	Melissa Kreller, Steve Zubrick, Bill Ward	NWS Fairbanks, NWS Sterling, NWS Pacific Region
1100 - 1130	<i>Imagery Developers</i>	Steve Miller, Tim Schmit, Don Hillger	CIRA, STAR, STAR
1130 - 1200	<i>Imagery Open Discussion</i>		
1200 - 1315	Lunch		
1315 - 1445	Smoke and Fire Moderator: Bill Sjoberg		
1315 - 1345	<i>Smoke and Fire Users</i>	Chad Gravelle, Robyn Heffeman, Mike Stavish	NWS, NWS, NWS
1345 - 1415	<i>Smoke and Fire Developers</i>	Ravan Ahmadov, Ivan Csiszar, Davida Street	NASA, STAR, OSPO
1415 - 1445	<i>Smoke and Fire Open Discussion</i>		
1445 - 1500	Coffee		
1500 - 1630	Ocean and Coastal Moderator: Veronica Lance		
1500 - 1530	<i>Ocean and Coastal Users</i>	Joe Sienkiewicz, Mike Ford, Shelly Tomlinson	OPC, NMFS, NCCOS
1530 - 1600	<i>Ocean and Coastal Developers</i>	Veronica Lance, Sasha Ignatov, Menghua Wang	STAR/Coastwatch, STAR, STAR
1600 - 1630	<i>Ocean and Coastal Open Discussion</i>		
1630 - 1645	Coffee		
1645 - 1800	<i>Poster Session (in Conference Rooms A/B/C)</i>		

2-21-2020 2:59 pm

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Posters

Auditorium: Tropical Weather - Clouds and Winds - Aviation Products - Air Quality/Aerosols - Poster Session 2 (Conference Center)

Time	Presentations / Topics	Speaker	Affiliation
0845 - 1015	Tropical Weather Moderator: Monica Bozeman		
0845 - 0915	<i>Tropical Weather Product Users</i>	Monica Bozeman, Stephanie Stevenson, Michael Folmer	NHC, NHC, OPC
0915 - 0945	<i>Tropical Weather Product Developers</i>	Tony Wimmers, John Knaff, Josh Cossuth	CIMSS, STAR, NRL
0945 - 1015	<i>Tropical Weather Product Open Discussion</i>		
1015 - 1030	Coffee		
1030 - 1200	Clouds and Winds Moderator: Jaime Daniels		
1030 - 1100	<i>Clouds and Winds Users</i>	Steve Weygandt, Andrew Collard, Michael Folmer	ESRL/GSD, NCEP, OPC
1100 - 1130	<i>Clouds and Winds Developers</i>	Y. J. Noh, Jaime Daniels, Andy Heidinger	CIRA, STAR, STAR
1130 - 1200	<i>Clouds and Winds Open Discussion</i>		
1200 - 1315	Lunch		
1315 - 1445	Aviation Weather Moderator: Jeff Weinrich		
1315 - 1345	<i>Aviation Weather Users</i>	Randy Bass, Ty Higginbotham, David Bieger	FAA, AWC, FAA
1345 - 1415	<i>Aviation Weather Developers</i>	Mike Pavolonis, Carl Dierking, Jeff Weinrich	STAR, GINA, JPSS
1415 - 1445	<i>Aviation Weather Open Discussion</i>		
1445 - 1500	Coffee		
1500 - 1630	Air Quality/Aerosols Moderator: Shobha Kondragunta		
1500 - 1530	<i>Air Quality/Aerosols Users</i>	Ivanka Stajner, Brad Pierce, Ed Hyer	EMC, UW, NRL
1530 - 1600	<i>Air Quality/Aerosols Developers</i>	Istvan Laszlo, Rob Levy, Ralph Kahn	STAR, NASA/GSFC, NASA/GSFC
1600 - 1630	<i>Air Quality/Aerosols Open Discussion</i>		
1630 - 1645	Coffee		
1645 - 1800	<i>Poster Session (in Conference Rooms A/B/C)</i>		

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Posters

Auditorium: Arctic/Cryosphere - River Ice and Flooding - Hydrology - Atmospheric Composition - Poster Session 3 (Conference Center)

Time	Presentations / Topics	Speaker	Affiliation
0845 - 1015	Arctic/Cryosphere Moderator: Bonnie Reed		
0845 - 0915	<i>Arctic/Cryosphere Product Users</i>	Kevin Berberich, Mike Lawson, Carl Dierking	NIC, ASIP, GINA
0915 - 0945	<i>Arctic/Cryosphere Product Developers</i>	Sean Helfrich, Peter Romanov, Jeff Key	STAR, STAR, STAR
0945 - 1015	<i>Arctic/Cryosphere Product Open Discussion</i>		
1015 - 1030	Coffee		
1030 - 1200	River Ice and Flooding Moderator: Bill Sjoberg		
1030 - 1100	<i>River Ice and Flooding Users</i>	Adam Barker, Eric Holloway, Shawn Carter	FEMA, NWS/AK, NWC
1100 - 1130	<i>River Ice and Flooding Developers</i>	Sanmei Li, Angelica Gutierrez, Naira Chaouch	GMU, NWS/OH, CCNY
1130 - 1200	<i>River Ice and Flooding Open Discussion</i>		
1200 - 1315	Lunch		
1315 - 1445	Hydrology Moderator: Ralph Ferraro		
1315 - 1345	<i>Hydrology Users</i>	Andrew Orrison, Pingping Xie, Aaron Jacobs	WPC, CPC, NWS
1345 - 1415	<i>Hydrology Developers</i>	Bob Kuligowski, Ralph Ferraro, John Forsythe	STAR, STAR, CIRA
1415 - 1445	<i>Hydrology Open Discussion</i>		
1445 - 1500	Coffee		
1500 - 1630	Atmospheric Composition Moderator: Monika Kopacz		
1500 - 1530	<i>Atmospheric Composition Users</i>	Lori Bruhwiler, Matt Alvarado, Irina Petropavlovskikh	ESRL, AER, ESRL
1530 - 1600	<i>Atmospheric Composition Developers</i>	Chris Barnet, Juying Warner, Larry Flynn	STC, UMD, STAR
1600 - 1630	<i>Atmospheric Composition Open Discussion</i>		
1630 - 1645	Coffee		
1645 - 1800	<i>Poster Session (in Conference Rooms A/B/C)</i>		

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Posters

Auditorium: Special Topics and Innovation - Session Summaries - Closing Remarks and Discussion

Time	Presentations / Topics	Speaker	Affiliation
0845 - 1015	Special Topics/Innovation Moderator: Lihang Zhou		
0845 - 0900	<i>NUCAPS and ABI - Stronger together using AI</i>	Jun Li	CIMSS
0900 - 0915	<i>Applications of JPSS and GOES-R for long-term monitoring</i>	Andy Heidinger/Cheng Zhi Zou	STAR
0915 - 0930	<i>Lesson learned from VOLCAT and ProbSevere</i>	Mike Pavolonis	STAR
0930 - 0945	<i>Cloud Computing</i>	Kathryn Shontz	OSAAP
0945 - 1000	<i>NESDIS -wide User Engagement</i>	Renata Lana	HQ
1000 - 1015	<i>Space Weather</i>	Elsayed Talaat	OPPA
1015 - 1030	Coffee		
1030 - 1200	Closing Session Moderator: Dan Lindsey and Mitch Goldberg		
1030 - 1145	<i>5 minute session summary</i>	Moderators	
1145 - 1200	<i>Closing Remarks and discussions</i>		

2-21-2020 3:35 pm

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Posters

List of Posters and Presenters

Poster Number	Presenter	Title
	Tuesday Poster Session	
1	Danielle Carpenter	NAVOCEANO's Use of JPSS Data
2	Xi Shao	Update on SNPP and NOAA-20 VIIRS Day/Night Band Stray Light Correction
3	Mingshi Chen	Multiple Temporal-Spatial Resolution Vegetation Products Derived From JPSS VIIRS Data For Environmental Modeling and Monitoring
4	Yalong Gu	Improvement of VIIRS Day/Night Band Image Quality
5	Yuling Liu	Quality Assessment and Comparisons of NOAA 20 and SNPP VIIRS LST Product
6	Corinne Carter	NVPS Vegetation Index products
7	Jingjing Peng	Blended shortwave daily mean albedo from SNPP and NOAA-20 VIIRS observations
8	Zhangyan Jiang	Validation of NOAA-20 Green Vegetation Fraction Product
9	Jifu Yin	Near Real Time 1 km SMAP Soil Moisture Data Product for Potential Use in National Water Model
10	Peng Yu	The Status of the GOES-R Land Surface Temperature Product
11	Wenze Yang	A novel re-compositing approach to create continuous and consistent cross-sensor/cross-production global NDVI datasets
12	Chengquan Huang	Global Surface Type Products from VIIRS
13	Li Fang	An Evapotranspiration Product at 2-km resolution from NOAA GOES-16
14	Eileen Maturi	GEO-POLAR Blended SST Analysis
15	Korak Saha	TBD
16	Yongsheng Zhang	TBD
17	Seunghyun Son	Water Quality and Bio-optical Properties Measured from the Geostationary and Polar-Orbiting Ocean Color Sensors in the Northwestern Pacific Region
18	Jianwei Wei	Retrieval of water depth and bottom albedo over shallow waters from multiband satellite ocean color sensors
19	David Moyer	Preliminary JPSS-3 VIIRS polarization sensitivity and comparison with S-NPP, NOAA-20 and JPSS-2
20	Evan Ellicott	VIIRS Fire Activity Associated with Land Grabs
21	Tianfeng Chai	Wildfire smoke forecasts using HYSPLIT-based emission inverse modeling system and GOES observations
22	Kristopher White	Towards the Development of Real-Time Normalized Burn Ratio Imagery for AWIPS from GOES and JPSS
23	Chris Schmidt	Current Status of ABI Fire Detection
24	Michael Garay	Evaluating Performance of GOES during FIREX-AQ
25	William Smith	Severe Weather Forecasting Using Combined Polar Hyperspectral and Geomultispectral Soundings
26	John Forsythe	Blended Multisensor Water Vapor Products for Forecasters

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List of Posters and Presenters

Poster Number	Presenter	Title
Wednesday Poster Session		
1	Christopher Schultz	Using GLM Sub Flash Properties to Diagnose Convective State
2	Steven Goodman	NWS Complementary Use of the Geostationary Lightning Mapper (GLM) and Lightning Imaging Sensor (LIS)
3	Xin Jin	Integrating Additional Modules into CrIS ICVS to Support CalVal Tasks
4	Hu Yang	Resolution Enhancements for ATMS Low Frequency Channels and Their Potential Applications
5	Warren Porter	Reassessing Geolocation Performance of CrIS aboard Suomi-NPP with ICVS
6	Isaac Moradi	Performance of Radiative Transfer Models in Microwave Region
7	Cheng-Zhi Zou	JPSS/SNPP SDR Reprocessing
8	Scott Mindock	CSPP SDR
9	Jingfeng Huang	ICVS Monitoring on the Cross-Calibration of S-NPP and NOAA-20 VIIRS Sensor Data Records
10	Changyong Cao	Vectorized CRTM supporting JPSS applications
11	Sirish Uprety	Assessing the radiometric consistency between NOAA-20 and S-NPP VIIRS
12	Bigyani Das	Testing JPSS ATMS and OMPS SDRs in Cloud in ADL Block 2.1 MX8
13	Bin Zhang	Recent VIIRS solar vector anomaly root cause analysis and lessons learned
14	Steve Weygandt	Use of satellite cloud product data for HRRR and RTMA cloud analysis
15	Haidao Lin	Assimilation of GOES-16 ABI, N20 CrIS-FSR/ATMS (including Direct Broadcast) in RAP Version 5
16	Amanda Back	Assimilation of GOES-16 convective indicators into the High Resolution Rapid Refresh for improved storm spin-up
17	Kristin Calhoun	GOES Proving Ground Activities & Feedback in the Hazardous Weather Testbed
18	Banghua Yan	NRT Monitoring of Hurricane Warm Core Animations via ICVS
19	Kenneth Pryor	Polar satellite microwave observations of severe convective storms
20	Alice Crawford	Volcanic Ash Forecasting for Aviation
21	Tony Wimmers	Turbulence nowcasting from the ABI and AHI
23	Jason Apke	Dense Optical Flow Applications for Operational Users
24	Eric Wendoloski	The Aerospace Cloud Mask (ArCM) Utility
25	James Carr	LEO-GEO Stereo Winds: a Demonstration using MODIS and ABI
26	Andrew Bailey	Use of Deep-Dive Analysis Tools to Validate GOES-16/17 Atmospheric Motion Vectors
27	Houria Madani	GEO-GEO Stereo 3D Winds with a Path into NOAA Operations
28	Barry Gross	Diurnal Assessment of GOES-ABI Aerosol AOD
29	Patrick Duran	Using GLM Flash Density, Flash Area, and Flash Energy to Diagnose Tropical Cyclone Structure and Intensification
30	Bill Ward	Next Generation Satellite within the Pacific Region
31	Christopher Grassotti	Preliminary Development and Assessment of the NOAA Microwave Integrated Retrieval System for Tropical Cyclones (MIRS-TC)
32	Liqun Ma	Operational Tropical Cyclone Satellite Products
33	Galina Chirokova	How JPSS Data Can Improve Operational TC Analysis and Forecasting
34	Edward Hyer	Improved Fire Activity Time Series by Accounting for Variation in Viewing Geometry
35	Mi Zhou	Validating and Improving GOES-16/-17 Operational Aerosol Optical Depth Product

List of Posters and Presenters

Poster Number	Presenter	Title
Thursday Poster Session		
1	Richard Dworak	Blended VIIRS and AMSR2 Sea Ice Concentration
2	Aaron Letterly	Enterprise Snow Cover Algorithm Migration
3	Jeff Key	Adaptation of MODIS Sea Ice Leads Detection Algorithm to VIIRS
4	Yinghui Liu	Changes in Sea Ice Extent Will Outweigh Changes in Snow Cover in Future Arctic Climate Change
5	Yinghui Liu	2nd poster 'Ice Products from NOAA Operational LEO and GEO Satellites'
6	Dale Allen	A TROPOMI- and GLM-based Estimate of NOx Production by Lightning over the U.S.
7	Kenneth Pickering	NOx Production by Lightning as Inferred Using NO2 Slant Columns from GCAS during the GOES-R Validation Campaign
8	Pierre Kirstetter	Probabilistic precipitation rate estimates from GOES-R for hydrologic applications
9	Bob Kuligowski	Operational Transition to the Enterprise GOES-R Rainfall Rate Algorithm
10	Huan Meng	Enhancement to the JPSS Snowfall Rate Product
11	Sheldon Kusselson	The CIRA Advection Layered Precipitable Water (ALPW) Product and Applications to Help Forecast Hazardous Precipitation Events
12	Pingping Xie	CMORPH2 Integrated Satellite Precipitation Estimates
13	Shruti Upadhyaya	Investigating the potential of multi-spectral data from the GOES-R satellite for precipitation retrieval
14	Marouane Temimi	Exploiting NOAA-20 and S-NPP VIIRS sensors for Sea Ice Mapping in Antarctica
15	Leonid Yurganov	Arctic Ocean as a significant source of atmospheric methane: year-round satellite data
16	Lawrence Flynn	Ozone Climate Data Records
17	Jianguo Niu	NOAA Volcanic SO2 cloud measurement from SNPP and NOAA-20 using LFSO2 algorithm
18	Irina Petropavlovskikh	Is stratospheric ozone recovering as we expect? Results of the SPARC/WMO LOTUS analyses
19	Zhihua Zhang	V8TOz and V8PRO Products at NOAA
20	Monika Kopacz	AC4 Program collaboration with NESDIS on atmospheric composition
21	Benjamin Gaubert	TBD
22	Caroline Nowlan	Global Formaldehyde Products from the OMPS Nadir Mappers on Suomi NPP and NOAA-20
23	Jeannette Wild	Ozone recovery as detected in NOAA Ground-Based and Satellite Ozone Measurements
24	Zhihua Zhang	V8TOz and V8PRO Ozone Products at NOAA
25	Kyle Hilburn	Using Machine Learning to Assimilate Precipitating Pixel Information from GOES ABI and GLM
26	Yan Zhou	Development of a Machine Learning-Based Radiometric Bias Correction for NOAA's Microwave Integrated Retrieval System (MIRS)
27	Jun Li	Improving NUCAPS soundings using collocated sub-FOR ABI IR radiances
28	Arunas Kuciauskas	NUCAPS research in the Atlantic and Pacific basins
29	Joe Taylor	Airborne Demonstration of Next-Gen Imaging Infrared Sounder Capabilities and Algorithms
30	Anthony Reale	NUCAPS Soundings Support Forecasters
31	Rebekah Esmaili	Adapting Satellite Soundings for Operational Forecasting within the Hazardous Weather Testbed
32	Erin Lynch	Radio Occultation Data for Numerical Weather Prediction
33	Adrian Flores	Howard University Beltsville Campus (HUBC): Involvement, Contribution, and Impact in Atmospheric Sciences Research