

San Diego Convention Center San Diego, California, United States 19 - 23 August 2018

# Earth Observing Systems XXIII Tuesday - Thursday 21 - 23 August 2018

Conference Sessions At A Glance SHOW   HIDE	Important Dates show   HIDE
1: Prelaunch Calibration 2: New Instruments and Technologies	Abstract Due: 7 February 2018
3: GOES-16   4: GOES-16	Author Notification: 16 April 2018
5: New Missions 6: AIRS	Manuscript Due Date: 25 July 2018
7: CERES Remote Sensing Plenary Session 8: On-Orbit, Vicarious, and Inter-Instrument Calibration 9: MODIS	
Poster Session 10: Data Analysis and Algorithms 11: VIIRS I	
Conference Committee	SHOW   HIDE
Conference Chairs James J. Butler, NASA Goddard Space Flight Ctr. (United States) Xiaoxiong (Jack) Xiong, NASA Goddard Space Flight Ctr. (United States) Xingfa Gu, Institute of Remote Sensing Applications (China)	Program Committee continued <u>Bertrand Fougnie</u> , EUMETSAT (Germany) <u>Dennis L. Helder</u> , South Dakota State Univ. (United States) <u>Joel McCorkel</u> , NASA Goddard Space Flight Ctr. (United States) <u>Viav Murgai</u> , Raytheon Space and Airborne Systems (United States)
Program Committee Philip E. Ardanuy, Innovim, LLC (United States) Jeffrey S. Czapla-Myers, College of Optical Sciences, The Univ. of Arizona (United States)	<u>Thomas S. Pagano</u> , Jet Propulsion Lab. (United States) <u>Jeffery J. Puschell</u> , Raytheon Space & Airborne Systems (United States) <u>Mark A. Schwarz</u> , SAIC (United States)
<u>Armin Doerry</u> , Sandia National Labs. (United States) <u>Christopher N. Durell</u> , Labsphere, Inc. (United States)	
TUESDAY 21 AUGUST	Show All Abstracts
Session 1: Prelaunch Calibration	
Tuesday 21 August 2018 8:00 AM - 10:00 AM Location: Conv. Ctr. Room 30E	
Session Chair: <u>Christopher N. Durell</u> , Labsphere, Inc. (United States)	
Prelaunch characterization and performance of JPSS-2 VIIRS reflective Paper 10764-1 Time: 8:00 AM - 8:20 AM Author(s): Amit Angal, Science Systems and Applications, Inc. (United States); Xia Hassan Oudrari, Science Systems and Applications, Inc. (United States); Xia Add To My Schedule	es); David Moyer, The Aerospace Corp. (United States); Qiang Ji, Jeffrey McIntire, aoxiong Xiong, NASA Goddard Space Flight Ctr. (United States)
JPSS-1 VIIRS solar diffuser witness sample BRF calibration using a tal Paper 10764-2	-
Time: 8:20 AM - 8:40 AM Author(s): Jinan Zeng, James J. Butler, Xiaoxiong Xiong, Nathan Kelley, NAS Add To My Schedule	where the second s
Spectral testing of the Landsat-9 OLI-2 instrument using the Goddard L Paper 10764-3	aser Absolute Measurement of Radiance (GLAMR)
Time: 8:40 AM - 9:00 AM Author(s): Julia A. Barsi, Science Systems and Applications, Inc. (United Sta	ates), NASA Goddard Space Flight Ctr. (United States); Joel McCorkel, Brendan

McAndrew, NASA Goddard Space Flight Ctr. (United States); Barbara J. Zukowski, Ball Aerospace (United States), NASA Goddard Space Flight Ctr. (United
States); Timothy M. Shuman, Fibertek, Inc. (United States); Shaida Johnston, The Aerospace Corp. (United States); Brian L. Markham, NASA Goddard
Space Flight Ctr. (United States)

Add To My Schedule	+	

Landsat 9 Thermal Infrared Sensor 2 pre-launch characterization: initial imaging and spectral performance results Paper 10764-4 Time: 9:00 AM - 9:20 AM
Author(s): Aaron J. Pearlman, GeoThinkTank, LLC (United States); Joel McCorkel, NASA Goddard Space Flight Ctr. (United States); Matthew Montanaro, Rochester Institute of Technology (United States); Boryana Efremova, GeoThinkTank, LLC (United States); Brian Wenny, Science Systems and Applications, Inc. (United States); Allen Lunsford, The Catholic Univ. of America (United States); Amy Simon, Jason Hair, Dennis Reuter, NASA Goddard Space Flight Ctr. (United States)
Add To My Schedule
Characterizations of a KHz pulsed laser detection system Paper 10764-5 Time: 9:20 AM - 9:40 AM Author(s): Leibo Ding, Science and Systems Applications, Inc. (United States); James J. Butler, NASA Goddard Space Flight Ctr. (United States); Jinan
Zeng, Fibertek, Inc. (United States); Elaine N. Lalanne, Fibertek, Inc. (United States); John W. Cooper, Science and Systems Applications, Inc. (United States) States)
Add To My Schedule
ECOSTRESS end-to-end radiometric pre-flight calibration and validation (Conference Presentation) Paper 10764-6 Time: 9:40 AM - 10:00 AM
Author(s): William R. Johnson, Jet Propulsion Lab. (United States) <u>Add To My Schedule</u>
Coffee Break 10:00 AM - 10:30 AM
Session 2:
New Instruments and Technologies
Tuesday 21 August 2018 10:30 AM - 11:50 AM Location: Conv. Ctr. Room 30E
Session Chair: Bertrand Fougnie, EUMETSAT (Germany)
Electro-optical sensors for Earth observation missions Paper 10764-7 Time: 10:30 AM - 10:50 AM Author(s): Ian Swindells, David Morris, Teledyne e2v UK Ltd. (United Kingdom) Add To My Schedule
Hawkeye radiometric calibration methodology Paper 10764-11 Time: 10:50 AM - 11:10 AM Author(s): Shihyan Lee, SAIC (United States); Alan Holmes, Cloudland Instruments, Inc (United States); Gerhard Meister, NASA Goddard Space Flight Center, Code 616 (United States); Frederick S. Patt, Science Systems and Applications, Inc. (United States), NASA Goddard Space Flight Ctr. (United States); Gene Feldman, NASA Goddard Space Flight Center (United States) <u>Add To My Schedule</u>
UAV-based remote sensing for NaTech accidents management Paper 10764-9 Time: 11:10 AM - 11:30 AM Author(s): Alessandra Marino, Mariano M. Ciucci, Linda Barbieri Vita, INAIL (Italy); Chiara Piccirilli, Ordine degli Ingegneri della Provincia di Roma (Italy) <u>Add To My Schedule</u>
Prism spectrometer analysis for field use Paper 10764-10 Time: 11:30 AM - 11:50 AM Author(s): Adam Abdelatif, Nikolaus Anderson, Oscar Hernandez, Jeffrey S. Czapla-Myers, College of Optical Sciences, The Univ. of Arizona (United States) <u>Add To My Schedule</u>
Lunch/Exhibition Break 11:50 AM - 1:40 PM
Session 3: GOES-16 I

Tuesday 21 August 2018 1:40 PM - 3:00 PM Location: Conv. Ctr. Room 30E

Characterization of GOES-16 ABI detector-level uniformity from post-launch north south scan collections of several earth targets Paper 10764-12
Time: 1:40 PM - 2:00 PM Author(s): Jason T. Casey, Francis P. Padula, GeoThinkTank, LLC (United States); Monica Cook, GeoThinkTank LLC (United States); Brent D. Bartlett, Aaron J. Pearlman, GeoThinkTank, LLC (United States); David R. Pogorzala, Integrity Applications, Inc. (United States); Changyong Cao, National Environmental Satellite, Data, and Information Service (United States)
Add To My Schedule
In-orbit response versus scan-angle (RVS) validation for the GOES-16 ABI solar reflective bands Paper 10764-13
Time: 2:00 PM - 2:20 PM Author(s): Fangfang Yu, Xi Shao, ERT, Inc. (United States); Xiangqian Wu, National Oceanic and Atmospheric Administration (United States); Haifeng Qian,
ERT, Inc. (United States)
Validation of GOES-16 ABI infrared spatial response uniformity
Paper 10764-14 Time: 2:20 PM - 2:40 PM
Author(s): Fangfang Yu, ERT, Inc. (United States); Xiangqian Wu, National Oceanic and Atmospheric Administration (United States); Haifeng Qian, ERT, Inc. (United States); John Van Naarden, Michael Ramirez, Harris Corp. (United States); Dan Lindsey, National Oceanic and Atmospheric Administration (United States); Chad Gravelle, National Oceanie and Atmospheric Administration (United States); Mathew Gunshor, Univ. of Wisconsin-Madison (United States); Tim Schmit, National Oceanic and Atmospheric Administration (United States); Xi Shao, Zhipeng Wang, Hyelim Yoo, Robert Iacovazzi, Vladimir Kondratovich, ERT, Inc. (United States)
Add To My Schedule
GOES-16 ABI navigation assessment Paper 10764-15
Time: 2:40 PM - 3:00 PM Author(s): Bin Tan, NASA Goddard Space Flight Ctr. (United States), Science Systems and Applications, Inc. (United States); John Dellomo, NASA Goddard Space Flight Ctr. (United States), Global Science & Technology, Inc (United States); Robert E. Wolfe, NASA Goddard Space Flight Ctr. (United States); Alan D. Reth, NASA Goddard Space Flight Ctr. (United States), Chesapeake Aerospace, LLC (United States) <u>Add To My Schedule</u>
Coffee Break 3:00 PM - 3:30 PM
Session 4: GOES-16 II
Tuesday 21 August 2018 3:30 PM - 4:30 PM Location: Conv. Ctr. Room 30E
Independent validation of the advanced baseline imager (ABI) on NOAA's GOES-16: post-launch ABI airborne science field campaign results
Paper 10764-16 Time: 3:30 PM - 3:50 PM
Author(s): Brent D. Bartlett, Jason T. Casey, Francis P. Padula, Aaron J. Pearlman, GeoThinkTank, LLC (United States); David R. Pogorzala, Integrity Applications, Inc. (United States); Changyong Cao, National Environmental Satellite, Data, and Information Service (United States)  Add To My Schedule
Validation of GOES-16 ABI reflective solar band calibration through reanalysis and comparison with field campaign data
Paper 10764-17 Time: 3:50 PM - 4:10 PM Author(s): X Shao, ERT, Inc. (United States); Xanggian Wu, National Oceanic and Atmospheric Administration (United States); Changyong Cao, National
Environmental Satellite, Data, and Information Service (United States); Sirish Uprety, Univ. of Maryland, College Park (United States); Fangfang Yu, Haifeng Qian, ERT, Inc. (United States); Francis P. Padula, Aaron J. Pearlman, GeoThinkTank, LLC (United States); Taeyoung J. Choi, ERT, Inc. (United States); Brent D. Bartlett, Jason T. Casey, GeoThinkTank, LLC (United States)
Add To My Schedule
On-orbit validation of the geolocation accuracy of GOES-16 Geostationary Lightning Mapper (GLM) flashes using ground-based laser beacons Paper 10764-18 Time: 4:10 PM - 4:30 PM
Author(s): Dennis Buechler, The Univ. of Alabama in Huntsville (United States); Tom Varghese, Cybioms Corp. (United States); Peter Armstrong, MIT Lincoln Lab. (United States); James Bremer, ASRC Federal Holding Co. (United States); Rivers Lamb, NASA Goddard Space Flight Ctr. (United States); Jon Fulbright, Arctic Slope Tech Services (United States); Steven Goodman, Thunderbolt Global Analytics (United States) Add To My Schedule
3

Tuesday 21 August 2018 4:30 PM - 5:30 PM Location: Conv. Ctr. Room 30E

Session Chair: Xiaoxiong Xiong, NASA Goddard Space Flight Ctr. (United States)

An update on EUMETSAT programmes and plans Paper 10764-20 Time: 4:30 PM - 4:50 PM Author(s): K. Dieter Klaes, EUMETSAT (Germany) Add To My Schedule The 3MI mission on-board EPS-SG: a multi-spectral multi-polarization multi-directional imager for operational characterization of aerosol and cloud Paper 10764-21 Time: 4:50 PM - 5:10 PM Author(s): Bertrand Fougnie, Thierry Marbach, Antoine Lacan, Peter Schlüssel, Ruediger Lang, Gabriele Poli, Rosemary Munro, EUMETSAT (Germany) Add To My Schedule A new approach of remote sensing satellite programs in Taiwan Paper 10764-22 Time: 5:10 PM - 5:30 PM Author(s): Chia-Ray Chen, National Space Organization (Taiwan) Add To My Schedule WEDNESDAY 22 AUGUST Show All Abstracts Session 6: AIRS Wednesday 22 August 2018 8:00 AM - 9:00 AM Location: Conv. Ctr. Room 30E Session Chair: Armin W. Doerry, Sandia National Labs. (United States) Reducing uncertainty in the AIRS radiometric calibration Paper 10764-23 Time: 8:00 AM - 8:20 AM Author(s): Thomas S. Pagano, Evan M. Manning, Steve Broberg, Hartmut H. Aumann, Margaret Weiler, Jet Propulsion Lab. (United States); Larrabee Strow, University of Maryland Baltimore County (United States) Add To My Schedule Radiometric stability in 16 years of AIRS hyperspectral infrared data Paper 10764-24 Time: 8:20 AM - 8:40 AM Author(s): Hartmut H. Aumann, Evan M. Manning, Steve Broberg, Jet Propulsion Lab. (United States) Add To My Schedule Stratified radiometric means for the evaluation of AIRS and CrIS Paper 10764-25 Time: 8:40 AM - 9:00 AM Author(s): Evan M. Manning, Hartmut H. Aumann, Brian H. Kahn, Jet Propulsion Lab. (United States) Add To My Schedule Session 7: CERES Wednesday 22 August 2018 9:00 AM - 10:20 AM Location: Conv. Ctr. Room 30E Session Chair: James J. Butler, NASA Goddard Space Flight Ctr. (United States) Ensuring continuity of earth radiation budget observations initial results of CERES FM-6 on NOAA-20 (Conference Presentation) Paper 10764-26 Time: 9:00 AM - 9:20 AM Author(s): Kory J. Priestley, NASA Langley Research Ctr. (United States); Susan Thomas, Nathaniel P. Smith, Janet Daniels, Robert Wilson, Dale Walikainen, Science Systems and Applications, Inc. (United States); Anum Ashraf, NASA Langley Research Ctr. (United States)

Add To My Schedule

Early trends on the Clouds and the Earth's Radiant Energy System (CERES) Flight Model 6 (FM6) instrument's performance Paper 10764-27 Time: 9:20 AM - 9:40 AM Author(s): Nathaniel P. Smith, Science Systems and Applications, Inc. (United States); Robert S. Wilson, Z. Peter Szewczyk, Susan Thomas, Science Systems and Applications (United States); Kory J. Priestley, NASA Langley Research Center (United States)

Add To My Schedule

Numerical modeling for Earth radiation budget instruments (Conference Presentation) Paper 10764-28 Time: 9:40 AM - 10:00 AM Author(s): Anum Ashraf, Kory J. Priestley, NASA Langley Research Ctr. (United States); James R. Mahan, Virginia Polytechnic Institute and State Univ. (United States)

Add To My Schedule

#### Radiometric calibration discrepancy and root cause analysis for radiation budget instrument

Paper 10764-29 Time: 10:00 AM - 10:20 AM

Author(s): Yana Z. Williams, Mohan Shankar, NASA Langley Research Ctr. (United States); Loren Woody, Richard Hertel, Joseph P. Predina, Logistikos Engineering LLC (United States); Hyung Lee, Georgi Georgiev, Cindy L. Young, Christopher R. Randall, Kory J. Priestley, NASA Langley Research Ctr. (United States)

Add To My Schedule

Coffee Break 10:20 AM - 11:00 AM

# Session Plen: Remote Sensing Plenary Session

Wednesday 22 August 2018 11:00 AM - 11:50 AM Location: Conv. Ctr. Ballroom 20A

Session Chair: James J. Butler, NASA Goddard Space Flight Ctr. (United States)

Remote sensing of weather, climate, and environment (Conference Presentation) (Plenary Presentation)

Paper 10764-401 Time: 11:00 AM - 11:50 AM Author(s): K. Dieter Klaes, EUMETSAT (Germany)

Add To My Schedule

Lunch/Exhibition Break 11:50 AM - 1:10 PM

## Session 8: On-Orbit, Vicarious, and Inter-Instrument Calibration

Wednesday 22 August 2018 1:10 PM - 3:30 PM Location: Conv. Ctr. Room 30E

Session Chair: James J. Butler, NASA Goddard Space Flight Ctr. (United States)

## NOAA-20 VIIRS on-orbit calibration and characterization using the Moon Paper 10764-30 Time: 1:10 PM - 1:30 PM Author(s): Junqiang Sun, Global Science & Technology, Inc. (United States); Menghua Wang, Ctr. for Satellite Applications and Research (United States) Add To My Schedule MODIS and VIIRS on-orbit calibration and characterization using observations from spacecraft pitch maneuvers Paper 10764-31 Time: 1:30 PM - 1:50 PM Author(s): Xiaoxiong Xiong, NASA Goddard Space Flight Ctr. (United States); Aisheng Wu, Amit Angal, Vincent Chiang, Science Systems and Applications, Inc. (United States); James J. Butler, NASA Goddard Space Flight Ctr. (United States) Add To My Schedule Evaluation of early NOAA-20 VIIRS RSB radiometric performance using intercomparison with Aqua MODIS Paper 10764-32 Time: 1:50 PM - 2:10 PM Author(s): I-Wen Mike Chu, Colorado State Univ. (United States); Junqiang Sun, Global Science & Technology, Inc. (United States), Ctr. for Satellite Applications and Research (United States); Menghua Wang, Ctr. for Satellite Applications and Research (United States) Add To My Schedule Suomi NPP VIIRS DNB and RSB M bands detector-to-detector and HAM side calibration differences assessment using a homogenous ground target Paper 10764-63 Time: 2:10 PM - 2:30 PM Author(s): Xuexia Chen, Ning Lei, Science Systems and Applications, Inc. (United States); Xiaoxiong Xiong, NASA Goddard Space Flight Ctr. (United States)

SBAF for cross-calibration of Landsat-8 OLI and SentineI-2 MSI over North African PICS	
Paper 10764-34	
Time: 2:30 PM - 2:50 PM	
Author(s): Cibele Teixeira Pinto, Mahesh Shrestha, Nahid Hasan, Larry Leigh, Dennis Helder, South Dakota State Univ. (United States)	

Add To My Schedule

## Directional reflectance studies in support of the Radiometric Calibration Test Site (RadCaTS) at Railroad Valley

Paper 10764-35 Time: 2:50 PM - 3:10 PM

Author(s): Jeffrey S. Czapla-Myers, College of Optical Sciences, The Univ. of Arizona (United States); Craig Cobum, Dept of Geography, University of Lethbridge (Canada); Kurtis Thome, NASA Goddard Space Flight Ctr. (United States); Brian Wenny, Science Systems and Applications, Inc. (United States); Nikolaus Anderson, College of Optical Sciences, The Univ. of Arizona (United States) <u>Add To My Schedule</u>

### Coffee Break 3:30 PM - 4:00 PM

# Session 9: MODIS

Wednesday 22 August 2018 4:00 PM - 5:20 PM Location: Conv. Ctr. Room 30E

Session Chair: Jeffrey S. Czapla-Myers, College of Optical Sciences, The Univ. of Arizona (United States)

## MODIS cross-talk effects and areas of potential performance differences for Terra from Aqua characteristics

Paper 10764-37 Time: 4:00 PM - 4:20 PM

Author(s): Bruce Guenther, Stellar Solutions Inc. (United States); Junqiang Sun, Global Science & Technology, Inc. (United States); Christopher Moeller, Cooperative Institute for Meteorological Satellite Studies, University of Wisconsin (United States)

Add To My Schedule
--------------------

#### Assessment of the on-orbit MODIS SRCA spectral uncertainty Paper 10764-38

Time: 4:20 PM - 4:40 PM Author(s): Emily J. Aldoretta, Daniel Link, Kevin A. Twedt, Science Systems and Applications, Inc. (United States); Xiaoxiong Xiong, NASA Goddard Space Flight Ctr. (United States)

Add To My Schedule	+

Effects of time-varying relative spectral response on the calibration of MODIS reflective solar bands

#### Paper 10764-39 Time: 4:40 PM - 5:00 PM

Author(s): Kevin A. Twedt, Amit Angal, Science Systems and Applications, Inc. (United States); Xaoxiong Xiong, NASA Goddard Space Flight Ctr. (United States)

Add To N	ly Schedule	+



Session PWed: Poster Session

Wednesday 22 August 2018 5:30 PM - 7:30 PM Location: Conv. Ctr. Room 20C

Conference attendees are invited to view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines at <u>http://spie.org/OPPosterGuidelines</u>.

Cross comparison of the SNPP VIIRS, NOAA-20 VIIRS, and AQUA MODIS using simultaneous Nadir overpass images

Paper 10764-33 Time: 5:30 PM - 7:30 PM

Author(s): Xuexia Chen, Science Systems and Applications, Inc. (United States); Xiaoxiong Xiong, NASA Goddard Space Flight Ctr. (United States); Ning Lei, Science Systems and Applications, Inc. (United States)

Add To My Schedule

Ring laser in angle measurements Paper 10764-56
Time: 5:30 PM - 7:30 PM Author(s): Nkpoikanke A. Eno, Petr A. Pavlov, Yurii Filatov, Saint Petersburg Electrotechnical Univ. "LETI" (Russian Federation)
Add To My Schedule
Identification of seismic signals at the output of large ring laser gyroscopes Paper 10764-57
Time: 5:30 PM - 7:30 PM Author(s): John Tari Bagshaw, Nkpoikanke A. Eno, Saint Petersburg Electrotechnical Univ. "LETI" (Russian Federation) <u>Add To My Schedule</u>
—
Detection and characterization of striping in GOES-16 ABI VNIR/IR bands Paper 10764-58 Time: 5:30 PM - 7:30 PM
Author(s): Haifeng Qian, Xiangqian Wu, Fangfang Yu, Xi Shao, Robert lacovazzi, Zhipeng Wang, Hyelim Hyelim, National Oceanic and Atmospheric Administration (United States)
Add To My Schedule
On-orbit performance of the Terra and Aqua MODIS solar diffuser stability monitor
Paper 10764-59
Time: 5:30 PM - 7:30 PM Author(s): Emily J. Aldoretta, Kevin A. Twedt, Amit Angal, Hongda Chen, Science Systems and Applications, Inc. (United States); Xiaoxiong Xiong, NASA Goddard Space Flight Ctr. (United States)
Add To My Schedule
Methods of Earth-view-based calibration of the response versus scan angle of the MODIS reflective solar bands Paper 10764-60
Time: 5:30 PM - 7:30 PM Author(s): Kevin A. Twedt, Hongda Chen, Science Systems and Applications, Inc. (United States); Xaoxiong Xiong, NASA Goddard Space Flight Ctr. (United
States); Amit Angal, Xu Geng, Aisheng Wu, Science Systems and Applications, Inc. (United States) Add To My Schedule
NOAA-20 VIIRS radiometric band saturation evaluation and comparison with Suomi NPP VIIRS using global probability distribution function
method Paper 10764-61
Time: 5:30 PM - 7:30 PM
Author(s): Bin Zhang, ERT, Inc. (United States); Changyong Cao, National Oceanic and Atmospheric Administration (United States); Sirish Uprety, Xi Shao, Univ. of Maryland, College Park (United States)
Add To My Schedule
Six-year inters-RSB comparison of Aqua MODIS with SNPP VIIRS
Paper 10764-62
Time: 5:30 PM - 7:30 PM Author(s): I-Wen Mike Chu, Ctr. for Satellite Applications and Research (United States); Junqiang Sun, Global Science & Technology, Inc. (United States),
Ctr. for Satellite Applications and Research (United States); Menghua Wang, Ctr. for Satellite Applications and Research (United States)
Radiometric quality assessment of GOES-16 ABI L1b images
Paper 10764-65 Time: 5:30 PM - 7:30 PM
Author(s): Zhipeng Wang, Science Systems and Applications, Inc. (United States); Xangqian Wu, National Oceanic and Atmospheric Administration (United States); Haifeng Qian, Fangfang Yu, Robert Iacovazzi, Xi Shao, Vladimir Kondratovich, Hyelim Yoo, ERT, Inc. (United States) <u>Add To My Schedule</u>
Orbital variations and impacts on observations from SNPP, NOAA 18-20, and AQUA sun-synchronous satellites Paper 10764-66
Time: 5:30 PM - 7:30 PM Author(s): Xi Shao, Univ. of Maryland, College Park (United States); Changyong Cao, National Environmental Satellite, Data, and Information Service (United
States); Xaoxiong Xiong, NASA Goddard Space Flight Ctr. (United States); Tung-Chang Liu, Bin Zhang, Sirish Uprety, Univ. of Maryland, College Park (United States)
Add To My Schedule
Comparison of the MODIS and VIIRS on-board SD and SDSM performance Paper 10764-67
Time: 5:30 PM - 7:30 PM Author(s): Amit Angal, Science Systems and Applications, Inc. (United States); Xiaoxiong Xiong, NASA Goddard Space Flight Ctr. (United States); Ning Lei,
Kevin A. Twedt, Science Systems and Applications, Inc. (United States) Add To My Schedule
Object detection in multispectral and panchromatic image using superpixel segmentation and multisource feature Paper 10764-68
Time: 5:30 PM - 7:30 PM
Author(s): Di Wu, Ye Zhang, Qingle Guo, Harbin Institute of Technology (China)

Saliency and density enhanced region-of-interest extraction for large-scale high-resolution remote sensing images Paper 10764-69
Time: 5:30 PM - 7:30 PM Author(s): Tong Li, Harbin Institute of Technology (China), Columbia Univ. (United States); Junping Zhang, Qingle Guo, Bin Zou, Harbin Institute of Technology
(China) Add To My Schedule
A land-cover classification method of high-resolution remote sensing imagery based on convolution neural network Paper 10764-71
Time: 5:30 PM - 7:30 PM Author(s): Yuhan Wang, Lingjia Gu, Ruizhi Ren, Zheng Xu, Xintong Fan, Jilin Univ. (China) <u>Add To My Schedule</u>
A building edge extraction method based on dual-scale classification with decision fusion for satellite image Paper 10764-72 Time: 5:30 PM - 7:30 PM
Author(s): Lechuan Hao, Ye Zhang, Harbin Institute of Technology (China); Zhimin Cao, Northeast Petroleum Univ. (China); Qingle Guo, Harbin Institute of Technology (China)
Add To My Schedule
Optical multi-spectral strip filter by lithography and ion beam assisted deposition for multi-spectral remote sensing instrument Paper 10764-73 Time: 5:30 PM - 7:30 PM Author(s): Chien-Fu Huang, Morrison Opto-Electronics Ltd. (Taiwan); Po-Hsuan Huang, National Space Organization (Taiwan)
Add To My Schedule
THURSDAY 23 AUGUST Show All Abstracts
Session 10:
Data Analysis and Algorithms
Thursday 23 August 2018 8:15 AM - 9:55 AM Location: Conv. Ctr. Room 30E
Session Chair: <u>Philip E. Ardanuy</u> , Innovim, LLC (United States)
On the effectiveness of remote monitoring systems Paper 10764-41
Time: 8:15 AM - 8:35 AM Author(s): Ferdenant A. Mkrtchyan, Kotel'nikov Institute of Radio Engineering and Electronics (Russian Federation) Add To My Schedule
Change detection for high resolution image based on pyramid mean shift smoothness and morphology Paper 10764-42 Time: 8:35 AM - 8:55 AM
Author(s): Qingle Guo, Junping Zhang, Ye Zhang, Harbin Institute of Technology (China) <u>Add To My Schedule</u>
Hyperspectral image denoising using improved low-rank and sparsity constraints Paper 10764-43 Time: 8:55 AM - 9:15 AM
Author(s): Chongxiao Zhong, Junping Zhang, Qingle Guo, Harbin Institute of Technology (China) Add To My Schedule
Enhancements to the open access spectral band adjustment factor online calculation tool for visible channels Paper 10764-44 Time: 9:15 AM - 9:35 AM
Author(s): Benjamin R. Scarino, Science Systems and Applications, Inc. (United States); David R. Doelling, NASA Langley Research Ctr. (United States); Arun Gopalan, Thad Chee, Rajendra Bhatt, Conor Haney, Science Systems and Applications, Inc. (United States) Add To My Schedule
Generating Ab initio molecular spectra dataset for atmospheric and planetary studies (Conference Presentation) Paper 10764-74 Time: 9:35 AM - 9:55 AM
Author(s): Piotr Wcisło, Nicolaus Copernicus Univ. (Poland); Franck Thibault, Univ. de Rennes 1 (France); Nikodem Stolarczyk, Hubert Jóźwiak, Michał Słowiński, Magdalena Konefał, Nicolaus Copernicus Univ. (Poland); Samir Kassi, Aiain Campargue, Univ. Grenoble Alpes (France); Yan Tan, Jin Wang, Anwen Liu, Shui-Ming Hu, Univ. of Science and Technology of China (China); Konrad Patkowski, Auburn Univ. (United States); Roman V. Kochanov, Iouli E. Gordon, Harvard-Smithsonian Ctr. for Astrophysics (United States) <u>Add To My Schedule</u>

Session 11: VIIRS I
Thursday 23 August 2018 10:25 AM - 12:05 PM Location: Conv. Ctr. Room 30E
Session Chair: <u>Thomas S. Pagano</u> , Jet Propulsion Lab. (United States)
SNPP VIIRS reflective solar bands on-orbit calibration six-year update: extension and improvements Paper 10764-45 Time: 10:25 AM - 10:45 AM Author(s): Junqiang Sun, Global Science & Technology, Inc. (United States); Menghua Wang, Ctr. for Satellite Applications and Research (United States) <u>Add To My Schedule</u>
Initial on-orbit radiometric calibration of the NOAA-20 VIIRS Reflective Solar Bands Paper 10764-46 Time: 10:45 AM - 11:05 AM
Author(s): Taeyoung J. Choi, Slawomir Blonski, Changyong Cao, National Environmental Satellite, Data, and Information Service (United States) <u>Add To My Schedule</u>
NOAA-20 VIIRS reflective solar bands on-orbit calibration using solar diffuser and solar diffuser stability monitor Paper 10764-47 Time: 11:05 AM - 11:25 AM Author(s): Junqiang Sun, Global Science & Technology, Inc. (United States); Menghua Wang, Ctr. for Satellite Applications and Research (United States) <u>Add To My Schedule</u>
On-orbit RSB calibration of SNPP VIIRS using the full illumination profile of solar diffuser Paper 10764-48 Time: 11:25 AM - 11:45 AM Author(s): Junqiang Sun, Global Science & Technology, Inc. (United States); I-Wen Mike Chu, Colorado State Univ. (United States); Menghua Wang, Ctr. for Satellite Applications and Research (United States) <u>Add To My Schedule</u>
Lunch/Exhibition Break 12:05 PM - 1:30 PM
Session 12: VIIRS II
Thursday 23 August 2018 1:30 PM - 3:10 PM Location: Conv. Ctr. Room 30E
Session Chair: Joel McCorkel, NASA Goddard Space Flight Ctr. (United States)
Analysis of S-NPP VIIRS RSB bands detector saturation status and its change with time Paper 10764-50 Time: 1:30 PM - 1:50 PM Author(s): Chengbo Sun, Global Science & Technology, Inc. (United States); Xuexia Chen, Ning Lei, Science Systems and Applications, Inc. (United States) Kwofu Chiang, Science Systems and Applications (United States); Xaoxiong Xong, NASA Goddard Space Flight Ctr. (United States) Add To My Schedule
Polarization effect in NOAA-20 reflective solar bands and its mitigation in Earth view imagery and radiometry (Conference Presentation) Paper 10764-51 Time: 1:50 PM - 2:10 PM
Author(s): Jungiang Sun, Global Science & Technology, Inc. (United States); Menghua Wang, Ctr. for Satellite Applications and Research (United States)

## JPSS-1/NOAA-20 VIIRS early on-orbit geometric performance

Paper 10764-52 Time: 2:10 PM - 2:30 PM

Author(s): Guoqing Lin, Science Systems and Applications, Inc. (United States), NASA Goddard Space Flight Ctr. (United States); Robert E. Wolfe, James C. Tilton, NASA Goddard Space Flight Ctr. (United States); Ping Zhang, Science Systems and Applications, Inc. (United States); John Dellomo, Global Science & Technology, Inc. (United States); Bin Tan, Science Systems and Applications, Inc. (United States) Add To My Schedule

## A light contamination ranking index-based method for automating VIIRS day/night band stray light correction

Paper 10764-53 Time: 2:30 PM - 2:50 PM

Author(s): X Shao, Tung-Chang Liu, Univ. of Maryland, College Park (United States); Sirish Uprety, Univ. of Maryland (United States); Wenhui Wang, ERT, Inc. (United States); Bin Zhang, Univ. of Maryland, College Park (United States); Changyong Cao, National Environmental Satellite, Data, and Information Service (United States)

An improved algorithm for VIIRS Day/Night Band (DNB) high gain stage (HGS) dark offset determination Paper 10764-54 Time: 2:50 PM - 3:10 PM Author(s): Yalong Gu, ERT, Inc. (United States); Sirish Uprety, Univ. of Maryland, College Park (United States); Slawormir Blonski, Bin Zhang, ERT, Inc. (United States); Changyong Cao, National Environmental Satellite, Data, and Information Service (United States)

Add To My Schedule