

JACIE 2026

PRESENTER BIOGRAPHIES

A.....	3
B.....	5
C.....	7
D.....	10
E.....	10
F.....	11
G.....	11
H.....	12
I.....	14
J.....	14
K.....	15
L.....	16
M.....	18
N.....	19
O.....	19
P.....	20
R.....	21
S.....	22
T.....	25
V.....	26
W.....	26
Y.....	26
Z.....	27

A

Saif Aati, Planet Labs

Dr. Saif Aati is a Geometric Technical Lead at Planet Labs. He holds a PhD in remote sensing and leads the development of algorithms for geometric calibration, band-to-band registration, geolocation, and geometric performance evaluation of high-resolution, multispectral, and hyperspectral satellite constellations. His work spans photogrammetry, 3D reconstruction, and physical sensor modeling. He is the developer of geoCosiCorr3D, an open-source software for rigorous sensor model refinement, orthorectification, sub-pixel image correlation, and 3D surface displacement and time-series analysis.

Mark Abrams, Exquisite Geolocation Systems

Dr. Abrams holds B.A, M.A., & Ph.D. degrees in Physics from the University of California at Berkeley. In addition to authoring 54 papers in refereed journals, Dr. Abrams is an international leader in high resolution spectroscopy, active and passive remote sensing, geolocation and co-authored Fourier Transform Spectrometry. Since 9/11, he has been an embedded scientist, focusing on geolocation with ISR systems and rapid transition into operations. He has deployed with operational teams on four continents, most recently in Africa. He has been married for 36 years and is the father of four adopted sons, each from a different continent.

Dr. Abrams specializes in calibration and independent verification and validation of complex information systems. Examples include establishing absolute spectral calibration systems in the 1980s, measuring atmospheric composition from the Space Shuttle in the 1990s, establishing 3D geodetic networks with DGPS class stability and accuracy in the remote 3D world in the first decade of this century, and demonstrating and certifying global 3D remote sensing systems with sub-meter absolute accuracy.

Matthew Adams, Geoscience Australia

Dr. Matthew L. Adams is a senior leader in spatial and earth observation with more than 35 years of experience advancing geospatial innovation in Australia. He currently serves as Director Global Data Interoperability and Integrity at Geoscience Australia, where he oversees bilateral and multilateral engagement with the international EO community in quality assurance and data interoperability. His leadership has guided teams of up to 40 staff through major transformations, including the migration of earth observation services to cloud platforms and organisational transitions from a functional operating model to a helix-based operating model.

Matthew has played a pivotal role in shaping Western Australia's geospatial capabilities, leading projects such as the Aurora fire simulation tool, recipient of a Western Australia Premier's Award, and negotiating WA's involvement in the Copernicus Australasia Regional Data Hub. His work has consistently improved service reliability, achieving near-perfect uptime for EO emergency applications in Western Australia.

Matthew holds a Ph.D. in Soil, Crop and Atmospheric Sciences from Cornell University and has authored numerous publications in precision agriculture, remote sensing, and emergency management.

Lucas Antonel, Satellogic

Lucas Antonel is an AI Engineer at Satellogic, where he leads artificial intelligence projects applied to satellite imagery. With seven years of experience in data science and machine learning, he specializes in image quality control and the application of AI across multiple stages of the imagery lifecycle. His work encompasses the development of processing pipelines, artifact detection, and the simulation of satellite scenes for high-resolution sensors. His research on image quality assessment for optical products was recently published in arXiv (2024). Lucas holds a Master's degree in Artificial Intelligence and a B.A. in Philosophy, complemented by a technical degree in Electromechanical Engineering.

Akash Ashapure, NASA GSFC / SSAI

Akash Ashapure is a Senior Research Scientist with Science Systems and Applications Inc. (SSAI) in the Freshwater Sensing Program at the Terrestrial Information Systems Laboratory of NASA Goddard Space Flight Center (GSFC). He serves as Principal Investigator and Co-Principal Investigator on multiple NASA-funded projects and is an active member of the Landsat Science Team, the EMIT ROSES Science Team, and the PACE ROSES Science Team through his role in the Freshwater Sensing Program.

Dr. Ashapure earned his Ph.D. in Geomatics from Purdue University in 2021. His expertise lies in remote sensing, geospatial data analytics, and machine learning, with a focus on utilizing high-performance computing (HPC) for large-scale geospatial data processing.

His current research focuses on developing methodologies to mitigate atmospheric effects in multispectral and hyperspectral satellite sensors over inland and nearshore coastal waters. His work involves leveraging HPC and cloud computing to generate extensive datasets through radiative transfer simulations, which are then used to develop and validate sensor-specific machine-learning models for atmospheric correction.

B

Keith Beckett, EarthDaily Analytics

Dr. Keith Beckett is the Senior Technical Manager for Cal/Val at EarthDaily Analytics, leveraging an engineering, research and product management career spanning well over 30 years in remote sensing, working on multiple international projects for a range of customers. He led key roles in the Ground Segment development and mission commissioning for RADARSAT, Rapiddye, GeoEye, DigitalGlobe (now MAXAR), to name just a few.

EarthDaily Analytics will soon have a constellation of satellites capable of observing the earth every day in a wide range of spectral channels, and serving multiple vertical applications with science-grade imagery and analytics. He is leading the development of the cal/val capabilities for EarthDaily Analytics' upcoming constellation, and our EarthPipeline partners.

Shashank Bhushan, NASA Goddard Space Flight Center & University of Maryland

Dr. Shashank Bhushan is an Assistant Research Scientist at the University of Maryland's Earth

System Science Interdisciplinary Center (ESSIC) and NASA Goddard's Biospheric Sciences Laboratory. His research focuses on advancing remote sensing techniques to study the Earth's cryosphere, biosphere, and mountain hazards.

Shashank's journey in remote sensing began with mountain glaciology research during his undergraduate studies. In graduate school, he developed photogrammetry workflows to derive accurate geodetic products using electro-optical commercial satellite data (Planet Labs, Maxar). He leveraged these new observations to understand surface and climatic processes controlling the mass balance of debris-covered glaciers in High-Mountain Asia. During his postdoctoral training, he initiated the development of optical stereo and lidar fusion algorithms to produce high-resolution, decimeter accuracy geodetic measurements as part of the NASA DSI STV team.

At NASA Goddard, Shashank aims to continue leading new research in photogrammetry and glacier change measurement while expanding his expertise in applying satellite observations to study biosphere, ice sheets and other Earth System processes. In addition to research, he is passionate about developing open-source data science tools, creating accessible tutorials, and fostering collaborative academic communities.

Anudeep Bildfell, Wyvern Inc.

Anudeep Bildfell is a Calibration and Validation Scientist at Wyvern Inc. where she applies over a decade of experience in remote sensing industry to ensure the accuracy and scientific integrity of hyperspectral data from Wyvern's Dragonette constellation. Anudeep specializes in on-orbit calibration workflows, data quality assessment and optimizing imaging system performance.

Valentina Boccia, ESA

Paul Bresnahan, USGS

Paul Bresnahan is a Photogrammetric Engineer at KBR with over 30 years of experience in photogrammetry, remote sensing, and engineering, serving the municipal, federal, and geospatial-intelligence communities. He has an Aeronautical/Astronautical Engineering degree from the University of Illinois at Urbana-Champaign and an M.S. degree in Geodetic Science (Photogrammetry) from The Ohio State University. He has led image quality and geolocation accuracy evaluations and simulations for numerous civil and commercial imaging satellites, informing decisions for multiple imagery programs.

Steven Brown, NIST

Steven Brown's interests lie in the development of advanced radiometric artifacts and new approaches to radiometric sensor calibrations to improve the performance of instruments used in a wide variety of military, government agency and commercial applications. He is involved in the development of standards, technologies, and algorithms to improve the state-of-the-art of remote sensing sensors, recently including hyperspectral instruments. He has been a member of the technical staff at NIST for 28 years.

Andreas Brunn, constellr GmbH

Dr. Andreas Brunn leads the data processing and cal/val activities for constellr. After a PhD in remote sensing he has gathered more than 20 years of experience in remote sensing data processing, calibration/validation and data quality from companies like RapidEye, planet, EUMETSAT and finally constellr.

Chad Bryant, Wyvern Inc.

Chad is the Principal Scientist leading Calibration and Validation (Cal/Val) activities at Wyvern. His work focuses on the technical rigor required to ensure the Wyvern Dragonette constellation provides high-quality remote sensing data.

Chad's work centers on optimizing system performance characteristics through precise sensor calibration and continuous validation. He applies mathematical and statistic knowledge of experimental physics strengthened by his Ph.D. in Space Physics from the

University of Calgary. With 4.5 years dedicated to the Dragonette program, Chad's contributions are essential to maintaining the constellation's radiometric stability and data quality.

Emidio Bueno, Satellogic

Emidio Bueno is a Cartographic Engineer with over 11 years of experience in remote sensing and geospatial image processing. Currently working as an Image Processing Engineer at Satellogic, he specializes in developing algorithms for complex tasks such as camera calibration, bundle adjustment, and image geolocation. His recent work includes the development of automated boresight calibration routines and leading the implementation of high-performing pipelines to generate orthorectified data.

C

Petya Campbell, NASA/GSFC and UMBC/GESTARII

Dr. Campbell's research combines forest ecology with plant physiology and remote sensing, using the tools of reflectance and fluorescence spectroscopy at leaf and canopy scales. Her recent focus is on the remote sensing characterization of the diurnal and seasonal responses of grasslands, crops and forests using very high temporal frequency observations of reflectance and chlorophyll fluorescence for ecosystem assessments of photosynthetic function and productivity.

Joshua Chadney, SatVu

Nilima Chaube, Space Applications Centre, Indian Space Research Organisation (ISRO)

Nilima Rani Chaube was born in Lalitpur, Uttar Pradesh, India. She received MSc degree in electronics science from Dayalbagh Educational Institute, Agra, India, and M. Tech. in Microwave Electronics from the University of Delhi South Campus in 1990 and 1992, respectively. She worked as Scientist at the Institute of Plasma Research from March 1993 to January 1999. She developed 8 channel superheterodyne radiometer in 60-90 GHz for measuring electron cyclotron emission temperature in Aditya Tokamak plasma. She joined Space Applications Centre, ISRO in January 1999. She worked extensively in algorithm development for Optical & Microwave data processing and Data products generation. She has simulated SAR raw data and implemented Radar Doppler & Chirp Scaling processor with image quality estimation of satellite data and carried out quality controlled product simulation with respect to sensor platform unstabilities. She also worked in remote sensing applications as a Principal Investigator for crop phenology, Mangrove forest delineation and AGB estimation using optical and microwave data. She is presently Group Head in Data

quality evaluation & Calibration Group, Signal & Image Processing Area, Space Applications Centre, Ahmedabad, looking after post launch quality evaluation and calibration of various Optical & Microwave data products.

Clara Chew, Muon Space

Clara Chew is a terrestrial hydrologist, receiving her PhD in Geology from the University of Colorado Boulder in 2015. She specializes in using surface-reflected global navigation satellite system signals for Earth observation, including soil moisture retrieval and inundation mapping. She is currently working as a Principal Scientist at Muon Space.

Tom Chrien, Matter Intelligence, Inc.

Tom Chrien is the Technical Director of Matter Intelligence. He is a seasoned optics and remote sensing expert with over 40 years of experience. He currently leads the design and development of next-generation optical payloads at Matter Intelligence. At NASA's JPL he developed advanced electro-optical sensors and pioneered techniques for calibrating imaging spectrometers, serving as the chief engineer on the Airborne Visible/Infrared Imaging Spectrometer. He was a member of the HYDICE sensor calibration advisory team and led development and characterization of the WF-1 imaging spectrometer. At Raytheon, Tom was the technical director of the ARTEMIS imaging spectrometer that flew on TacSat-3 and worked advance EO programs. At Aerospace Corp., he helped advanced optical payloads and studied the calibration performance of large format IR detector arrays. Tom served at the lead payload engineer for the ORS-1 multispectral imager. At Millennium

Space Systems, he developed star trackers and space situational awareness cameras. Recently, Tom has taught Applied Optics at Cal Poly Pomona. He has enjoyed working "new space" programs to deliver high quality instruments at a much lower price.

Jeffrey Clauson, U.S. Geological Survey (USGS)

Jeff is the USGS ECCOE Data Quality Lead with the U.S. Geological Survey at the Earth Resources Observation and Science (EROS) Center and is the ECCOE Project Data Quality Lead. Jeff has worked at USGS EROS for nearly 20 years with his first 19 years as a contractor. Jeff has been in several roles over the years, most recently as the ECCOE Project RCA-EO Section Lead. Previously, Jeff has primarily engaged as a PM/SE resource having been involved with the full software/web application lifecycle from initial concept to decommissioning, project planning and management, and all phases of the Systems Engineering "V" from stakeholder engagement and requirements through testing and deployment to operations.

Alan Collison, Planet Labs PBC

Alan is a software engineer with a Masters in Astronomy and PhD in Physics/Astrophysics from the University of Iowa. Studied circumstellar gas and dust shells around late type stars at the Naval Research Lab and University of Illinois. Wrote front end and backend software for several Silicon Valley startups before working at Planet Labs PBC. He has worked at Planet for over 10 years and is currently a staff software engineer on the Cross Sensors team that covers on-orbit radiometric and geometric calibration along with rectification of Planet's various fleets of satellites. The team developed and maintains the current implementation of the atmospherically corrected L2 products.

Lauren Connor, NOAA Northeast fisheries science center

Lauren Connor is a remote sensing analyst and spatial ecologist whose work focuses on applying commercial satellite imagery to marine conservation and ecological research. She supports the development of scalable geospatial workflows that enable the identification and monitoring of marine species from space, with an emphasis on integrating very high-resolution imagery into operational science environments. Lauren's experience spans imagery preprocessing, structured annotation workflows, and evaluating how environmental and sensor factors influence detection outcomes. Her work advances the use of remote sensing as a practical tool for understanding wildlife distribution, informing management decisions, and expanding the role of satellite technology in ecological applications.

Taylor Corbett, Microsoft

Taylor is passionate about leveraging open data to tackle global challenges. Currently, Taylor is the Senior Technical Program Manager for Microsoft's Planetary Computer, an open, cross-domain geospatial platform that empowers researchers and developers to measure, monitor, and model our planet at scale. Before joining Microsoft, Taylor collaborated with global institutions including the United Nations, leading universities, and national governments to develop analytic solutions for challenges ranging from disaster management to polio eradication. Taylor has also taught graduate courses on data visualization as an Adjunct Professor at Georgetown University's McCourt School of Public Policy.

Christopher Crawford, U.S. Geological Survey Earth Resources Observation and Science Center

Dr. Christopher (Chris) J. Crawford is a Research Physical Scientist with the U.S. Geological Survey at the Earth Resources Observation and Science (EROS) Center in the New Missions Branch. His research and development focus on the calibration, acquisition, processing, analysis, validation, and interpretation of multi-source ground,

airborne, and spaceborne Earth remote sensing measurements using an array of scientific instrumentation. Dr. Crawford co-investigates with others on basic and applied research science in the fields of cryosphere, atmosphere, hydrology, and aquatics where remote sensing measurements are a core observable.

Jeff Czapl-Myers, University of Arizona

Jeffrey Czapl-Myers is a Research Professor and the Director of the Remote Sensing Group in the Wyant College of Optical Sciences at the University of Arizona. He obtained the B.S. degree in Optical Engineering from the University of Arizona in 1997, the M.Sc. degree in Earth and Space Science from York University (Toronto, Canada) in 2000, and the Ph.D. degree in Optical Sciences from the University of Arizona in 2006. He is currently a member of the Landsat Calibration Working Group, the MODIS/VIIRS Science Team, and the Radiometric Calibration Network (RadCalNet). His research interests include remote sensing, radiometry, ground-based vicarious calibration of airborne and satellite systems, and the design, development, and laboratory characterization of radiometers.

D

Leo de Laurentiis, ESA

Dir. Ned Mamula

Mamula's career includes prominent positions across government, industry, and academia, focusing on energy and mineral research. He has worked with leading scientific and intelligence agencies, including the USGS, the Department of Energy, and the Central Intelligence Agency. During his previous tenure at the USGS, he contributed to critical research in both the Conservation and Geologic Divisions, enhancing the evaluation of energy and mineral resources, environmental policy, and the management of federal leases.

Mamula most recently served as Chief Geologist at GreenMet, where he spearheaded efforts related to critical mineral policy and resource assessment. Prior to this, he was the Critical Minerals Program Director with LTI at DOE Fossil Energy from 2019 to 2023, playing a key role in establishing the DOE's Mineral Sustainability Division. His extensive experience also includes significant contributions to the energy industry, where he worked with teams of geoscientists on domestic and worldwide oil and gas exploration and production projects.

E

Boryana Efremova, GeoThinkTankLLC (NASA contractor)

Boryana Efremova is a calibration scientist at the NASA GSFC Radiometric Calibration Laboratory (RCL)

F

Michael Falkowski, Earth Fire Alliance

Denis Felikson, NASA Goddard Space Flight Center

Denis Felikson is a Research Scientist at NASA's Goddard Space Flight center, focusing on combining observations and models of Earth's ice sheets to understand the processes that drive their change and to improve projections of sea-level rise. He is Deputy Project Scientist of the Ice, Cloud, and land Elevation Satellite-2 (ICESat-2) mission, Lead of the Integration Working Group on NASA's Sea-Level Change Team (N-SLCT), and Co-Lead of the Greenland Ocean Forcing Focus Group for the Ice Sheet Model Intercomparison Project for CMIP7 (ISMIP7).

Daniel Foley, USGS

Daniel Foley is a geographer with the USGS with a Master of Science (M.S.) in Applied Geospatial Sciences and a graduate certificate in Geographic Information Systems (GIS) Northern Arizona University. His research interests include utilizing geographic science, geospatial technology, and remote sensing to solve problems in Earth and environmental science. His research goals are to help better understand modeling and mapping of global croplands for food and water security in the 21st century. Daniel joined the USGS in Flagstaff, AZ as part of the GFSAD30 team working for WaterSMART as a graduate student contractor on remote sensing of global crop water productivity. Daniel is passionate about Earth science and education and likes to stay current in interdisciplinary research techniques and developments.

G

Aaron Gerace, Rochester Institute of Technology

Aaron Gerace has been actively engaged with the Landsat community for nearly twenty years, primarily from the perspective of leveraging simulation and modeling techniques to support calibration of Landsat thermal instrumentation, validation of their corresponding higher-level products, and to help inform decision makers on the impact of sensor design with respect to image quality characteristics, particularly with Landsat Next sensors. As an active participant with the Landsat Calibration and Validation team, my work in vicarious

calibration has been used by both NASA and USGS to support the calibration of the TIRS thermal sensors onboard Landsat 8/9. In recent years, my work has expanded to the development of operational workflows to enable worldwide surface temperature and (corresponding) uncertainty products for the entire Landsat archive. I am actively engaged in the development of hardware and software solutions to monitor the fidelity of these products and to, in general, improve validation practices.

Jaume Gibert, Satellogic

Dr. Jaume Gibert holds a BSc in Mathematics and PhD in Computer Science. He has been working in computer vision since 2008. Since 2022, he is a Data Scientist at Satellogic where, among others, he implements AI solutions as well as image quality metrics.

Barbara Grant, Grant Drone

Barbara G. Grant is the author of "Getting Started with UAV Imaging Systems: A Radiometric Guide," SPIE Press, 2016 and 2026. She earned her M. S. degree in optical sciences from The University of Arizona, where she performed research on the vicarious calibration of spaceborne imaging sensors. Her professional experience includes work in the commercial and government sectors including Lockheed Martin and NASA contractors. She oversaw the integration and test of the imager and sounder on two GOES weather satellites, receiving NASA awards for her efforts. She is the co-author of "The Art of Radiometry" and author of "Field Guide to Radiometry," both published by SPIE Press. She is a distinguished instructor in the Optical Engineering and Optical Instrument Design certificate program at University of California, Irvine, and a Fellow of SPIE--the international society for optics and photonics.

Garrison Gross, KBR-USGS

Garrison Gross is a contractor with KBR to the USGS Earth Resources, Observation, and Science Center (EROS). He supports the EROS Cal/Val Center of Excellence (ECCOE) project on the Level 2 Validation team. This work includes collaboration with university partners across the country, compiling data to improve the Landsat Level 2 Product. Garrison's involvement in remote sensing started in the South Dakota State University Image Processing Lab as part of the team that provided the cross-calibration gains for Landsat 9 following its launch in 2021. Their work pushed the cross-calibration process from Pseudo Invariant Calibration Sites (PICS) to a global scale, with estimated uncertainties within 1%.

H

Steven Hartung, Vantor

Steven Hartung is a Fellow and a Distinguished Member of the Technical Staff at Vantor. He is currently a technical lead on the instrument calibration team. He holds an Electrical Engineering degree from the University of Michigan, a Masters in Astronomy and Astrophysics, and a PhD in Computational Astronomy from James Cook University in Queensland, Australia. Prior to working at Vantor he did research in petascale image processing at Lawrence Berkeley National Laboratory (LBNL), and before that he spent many years developing real-time embedded software.

Norberto Hernandez, Planet Labs (Berlin)

Norberto is a Computer Vision Engineer working at Planet Labs in the Imaging Operations team, with years-long experience with hyperspectral, multispectral and high resolution payloads.

Simon Hook, NASA/JPL

Dr. Simon J. Hook is a senior research scientist in the Science Division at the Jet Propulsion Laboratory. His research is focused on improving our understanding of geologic, hydrodynamic and ecologic processes on planets. He is currently studying large lakes, wildfires and mineral distributions on Earth. He has also applied his knowledge of terrestrial geologic processes to other planets, in particular Mars.

Simon has served in a variety of Project, Program and Line management positions at JPL. These include the Principal Investigator (PI) for ECOSTRESS, HyTES and MASTER, the ASTER Project Scientist, the Discipline Program Manager for Carbon Cycle and Ecosystems, the Engineering and Science Directorate (ESD) Chief Scientist, the Manager for the Earth Science Section and Manager for the Science Division. He is also the Principal Investigator or co-investigator of several NASA ROSES proposals.

Hayden Howard, CompassData

Hayden Howard is a geospatial professional with over two decades of experience in ground control, accuracy assessment, and spatial data integration across satellite, aerial, and terrestrial systems. He is a co-owner of CompassData, where his work focuses on advancing the use of independent ground control to support geometric accuracy, calibration, and validation of geospatial datasets.

Hayden has led and supported control collection efforts worldwide, working across a range of environments and sensor types to enable reliable positioning, navigation, and timing (PNT) and image alignment. His recent work emphasizes bridging the gap between traditional survey-grade control and modern, increasingly automated geospatial workflows, with a focus on transparency, repeatability, and fitness-for-use.

He regularly collaborates with commercial, academic, and government stakeholders on topics related to geospatial accuracy, ground reference data, and calibration and validation best practices, and has previously presented at JACIE and other industry forums.

Philipp Hummel, CompassData

Philipp Hummel holds a Master's degree in Land Surveying, Geodesy, Remote Sensing, and Photogrammetry, and is professionally licensed in Arizona, Colorado, Idaho, Nebraska, and Utah, as well as being a Certified Federal Surveyor. Philipp's career has progressed from hands-on field surveying across various countries to senior leadership positions in geospatial data acquisition and management. At CompassData, he introduced rigorous surveying practices and implemented standardized workflows, greatly enhancing the accuracy and traceability of geospatial data products. These contributions set new industry standards and have been formally recognized by the FAA for airport mapping projects, with processes that are ISO 9001:2015 certified.

His expertise extends to leading Ground Truthing projects around the world, where he has managed initiatives ranging from small-scale surveys to large, complex projects for the GEOINT, engineering, surveying, and mapping industries. Philipp is known for his commitment to excellence and innovation in geospatial solutions, fostering improved data integrity and reliability for clients globally.

Vincent Hurley, ICEYE US

I

Gretchen Imahori, NOAA

Gretchen Imahori is a staff scientist and the NOAA SatBathy Team lead in the Remote Sensing Division at NOAA's National Geodetic Survey. She has 26 years of experience at NOAA supporting hydrographic and remote sensing operations as well as research and writing technical policies in support of NOAA's charting mission for the Office of Coast Survey and the Remote Sensing Division. She has a BS in Chemistry from SUNY at Buffalo, an MS in Earth Science with a focus in Ocean Mapping from the University of New Hampshire and a Category A certification (FIG-IHO-ICA IBSC).

J

Zorana Jelenak, UCAR/UPC/CPAESS

Dr.Zorana Jelenak is highly accomplished Remote Sensing Scientist specializing in Calibration/Validation (Cal/Val) and the creation of operational products. Her expertise is focused on ensuring the integrity of Earth Observation data and translating raw satellite measurements into actionable, high-impact solutions. She has led comprehensive Cal/Val campaigns for 25 satellite and aircraft instruments, spanning national and international missions, guaranteeing data quality and reliability. Crucially, she has driven the development of over 100 operational environmental products that directly support critical weather monitoring and forecasting systems. Her work accelerates the transition of research into robust operational use (R2O), bridging the gap between scientific observation and real-world application.

Shawana Johnson, Global Marketing Insights, Inc.

Dr.Shawana P. Johnson, GISP is a global commercial remote sensing subject matter expert, and has bridged the worlds of government, defense, and commercial innovation in geospatial intelligence.

Ellie Jones, Wyvern

Ellie Jones has a diverse range of work experience spanning several industries. Their most recent position was as a Product Development Lead at Wyvern, a role they have held since 2022. Before that, they worked at AltaML, where they held multiple roles. As a Senior Machine Learning Developer, Ellie led and contributed to successful ML solutions for clients, with a combined projected ROI of \$10MM+ per year. Ellie was also a Machine Learning Developer, involved in all aspects of the data science lifecycle. Additionally, Ellie gained experience as a Machine Learning Developer Intern as part of the AltaML Applied AI Lab program, where they worked on various use cases with Suncor as the industry partner.

K

Moongyu Kim, SI Imaging Services

Moongyu Kim is the CEO & President of SI Imaging Services (SIIS). SIIS is the worldwide distributor of SpaceEye-T, Satrec Initiative's own satellite, and KOMPSAT imagery. SIIS was established on 1st of April, 2014 as a subsidiary of Satrec Initiative (SI).

Moongyu Kim has about 30 years' experiences in the space industry and has joined Satrec Initiative in 2005. He had been responsible for development of ground stations for KOMPSAT series and Satrec Initiative's own satellites.

Minsu Kim, KBR

Minsu Kim is the chief scientist at KBR. Research interests are Radiative transfer, Lidar, HyperspectralUSGS Landsat 8 OLI atmospheric correction, USGS 3DEP lidar accuracy assessment, satellite cal/val, spatial performance analysis, bathymetric lidar, satellite derived bathymetry. He got his PhD from Cornell University.

Tania Kleynhans, Hydrosat

Tania Kleynhans holds a Ph.D. in Imaging Science from the Rochester Institute of Technology, where she also served as a research scientist specializing in thermal remote sensing. Her work contributed to the radiometric calibration and validation of the Landsat 8 and 9 thermal instruments, as well as the development of the land surface temperature (LST) product used in operational earth observation.

In 2022, Tania joined Hydrosat, a geospatial startup focused on delivering high-resolution thermal data for precision agriculture and climate resilience. At Hydrosat, she works on the development of the data processing pipeline that transforms raw satellite observations into actionable downstream products, including LST and surface reflectance. Her work spans sensor calibration, algorithm development, and validation using ground truth and modeling techniques.

L

Natalie Laudier, NOAA

Natalie Laudier serves as the Chief for the Products and Piloting Branch within NESDIS's Systems Architecture and Engineering Office. She is responsible for managing the NESDIS Commercial Data Program (CDP) and establishing policy and procedures for NESDIS satellite products and services. Prior to joining NOAA in April 2024, Ms. Laudier served in a variety of leadership roles throughout the Department of Defense. She is a retired Naval Meteorology and Oceanography (METOC) Officer who served on both Active duty and Reserves. Throughout her career she led many teams to deliver operational products and new science and technological capabilities. These included prototyping commercial data and services, undersea agile software development projects, and integrating operational products for improved decision making. She earned her Master of Science degree in Meteorology and Oceanography from the Naval Postgraduate School, and a Bachelor of Science in Oceanography from the U.S. Naval Academy.

Dominic LeDuc, Planet Labs

Dominic LeDuc is a Senior Software Engineer at Planet Labs, where he works on the radiometric calibration/validation of the Tanager and Pelican constellations. Previously, he

worked at Lockheed Martin modeling radiometry for the Global Lightning Mapper. He holds a BA in Astrophysics from UC Berkeley.

Guoqing (Gary) Lin, NASA Goddard Space Flight Center

Dr. Lin is leading a Geometric Characterization Support Team at NASA. He supports pre-launch and on-orbit geometric characterization, calibration and validation for the spaceborne Earth observing instruments. The instruments include Moderate Resolution Imaging Spectroradiometer (MODIS) on NASA Terra and Aqua satellites, Visible Infrared Imaging Radiometer Suite (VIIRS) on Suomi National Polar-orbiting Partnership (SNPP) and Joint Polar Satellite System (JPSS-1-2 became NOAA-20&-21 and JPSS-3-4 will become NOAA-22&-23 after launch) satellites, Advanced Baseline Imager (ABI) and Global Lightning Mapper (GLM) on Geostationary Operational Environmental Satellites-R series (GOES-16-19) satellites, and many other optical instruments from which NASA has acquired images. His research interests include sensor spatial response, image co-registration, satellite navigation, instrument pointing and image geolocation, and their impacts on remote sensing data retrievals. Dr. Lin has a bachelor's degree in hydro-electrical engineering, a master's degree in physical oceanography, and a Ph.D. in civil engineering.

Ryan Longhenry, U.S. Geological Survey National Civil Applications Center

Joe Lovick, CATALYST (PCI Geomatics Inc)

Joe Lovick is a Manager, Remote Sensing at CATALYST.

CATALYST (PCI Geomatics Inc) is a geospatial technology company specialising in advanced satellite image processing and analytics. Building on deep expertise in photogrammetry, remote sensing, and AI, CATALYST develops high-performance software and services that transform raw Earth-observation data into accurate, actionable insights. The company supports a wide range of optical and SAR sensors and focuses on scalable, automated solutions for mapping, monitoring, and decision-making across commercial and government sectors.

Wolfgang Lueck, EOIntelligence

Wolfgang Lueck is the Managing Director and CTO of EOIntelligence, a small software company from Victoria Canada, specializing in the development of Earth Observation Satellite Payload Ground Segments, processing raw data from small-sats and cube-sats to products aspiring CEOS ARD conformants.

He leads the development of the IRMI satellite payload ground segment processing raw data from small-sats and cube-sats to CEOS ARD conformant products.

M

Josh Magarick, Orbital Sidekick, Inc.

Josh Magarick is the Director of Government Programs for Orbital Sidekick (OSK) where he generates space-based hyperspectral imagery (HSI) use cases for government customers, performs business development primarily for Defense & Intelligence, and fulfills other contractual duties. Prior to joining OSK, Mr. Magarick previously spent nearly 20 years with the National Geospatial-Intelligence Agency (NGA) in Springfield, VA where he similarly led, managed, and performed HSI processing and automation R&D for the government. During his tenure at NGA, he served with the Source, Analysis, and Research Directorates, supported 5 deployments to Afghanistan, and chaired the Spectroradiometric Working Group (SWG). He was the recipient of two Joint Civilian Service Commendation Medals, a National Intelligence Meritorious Unit Citation, and a challenge coin from General David Petraeus. He holds an MS in Geoinformatics & Geospatial Intelligence from George Mason University and a BA in Geography (with a focus on GIS & Remote Sensing) from the University of Colorado at Boulder.

Melissa Martin, NASA

NASA Commercial Satellite Data Acquisition Program Manager

Chloe Helena Martella

Chloe is an EDAP+ Atmospheric expert and a remote sensing scientist at ESA-ESRIN.

Stephen Maxwell, Muon Space

Stephen Maxwell is a Staff Remote Sensing Data Scientist at Muon Space, leading on-orbit radiometric calibration and validation for the FireSat wildfire detection mission. He joined Muon Space after a nearly 18-year career at NIST, where he specialized in the calibration and validation of optical Earth-observing satellites. His work included supporting prelaunch calibration activities at NASA, NOAA, and other agencies as well as developing novel remote sensing systems to improve the utility of lunar spectral irradiance for on-orbit calibration. Stephen holds a PhD in Atomic Physics from Harvard University.

Ian McGreer, Hydrosat

Ian McGreer received his PhD in Astronomy from Columbia University in 2009. After a postdoctoral appointment at the University of Arizona he joined the faculty as an Astronomer, a position he held until 2018. During his time as an astronomer, he led many publications in the field of high-redshift quasars, developed image processing pipelines, and contributed to multiple large imaging surveys, including the SDSS and DESI. He then joined

BlackSky as part of the image processing team as the Gen-2 constellation was being launched. He led the development of the geolocation processing pipeline, adapting to BlackSky's unique constellation of imaging satellites in mid-inclination orbits typically observing off-nadir. Currently, he works in image operations at Hydrosat, where he continues to work on geolocation processing, now combining thermal and visual imagery from dual-sensor payloads hosted on Hydrosat's first two pathfinder missions.

Jason McKeever, GHGSat

Antoine Ramier joined the science and systems team at GHGSat in 2019, following doctoral work at the Harvard-MIT Division of Health Sciences and Technology on optical sensing and imaging applications. His responsibilities at GHGSat include characterizing the performance of gas-sensing satellites at the component, instrument, and systems level, as well as developing the next generation of instrumentation and processing algorithms.

Matthew Montanaro, NASA Goddard Space Flight Center

Matt has supported the pre-flight and in-flight calibration and operations of several imaging instruments for both Earth and Planetary science at NASA Goddard Space Flight Center. He has been particularly involved with the characterization of the Thermal Infrared Sensor (TIRS) instruments on Landsat 8 and Landsat 9. Currently, he serves as the Deputy Instrument Scientist for the Landsat Next mission where he is involved with assisting the project and instrument vendor in meeting imaging performance requirements.

N

Tim Newman, USGS National Land Imaging

Timothy R Newman is the Program Coordinator for the National Land Imaging Program and the Acting Program Coordinator for the Land Change Science Program.

O

Tina Ochoa, Vantor

Tina is a Senior Staff Aerospace Engineer, Vantor, Inc.

Tina brings a decade of hands-on remote-sensing experience, specializing in instrumentation and field work for Earth-observing sensors. At Vantor she leads a team that delivers absolute radiometric and atmospheric calibration, turning raw imagery into science-ready products that drive climate, environmental, and defense missions. Her Master's thesis in optical physics focused on vicarious, reflectance-based calibration of

VNIR/SWIR satellites, and she continues to develop algorithms and software that keep those instruments precise and reliable.

Beyond the lab, Tina mentors NASA's Colorado Space Grant Consortium participants, sharing her expertise and encouraging the next generation of sensor scientists. In her spare time she rescues ferrets and performs with the Denver Broncos' drumline and brass band, a testament to her collaborative spirit and creativity.

Dan Opstal, USGS

Daniel W. Opstal is the Deputy Program Coordinator for the National Land Imaging Program at the U.S. Geological Survey. He is also the emeritus Executive Secretary of the Civil Applications Committee (CAC) where he worked with the defense/intel community on the collaborative use of geospatial technologies. As Deputy PC, Dan helps coordinate the \$115M National Land Imaging Program, which operates the Landsat satellites and provides the Nation's portal to one of the largest archives of remotely sensed land data in the world. He is responsible for providing program guidance, formulating and executing budgets, interfacing with senior Administration and Congressional staff and building international and industry earth observation partnerships.

Dan's work has involved engagement at multiple levels of government, including the National Security Council and the President's Council of Advisors on Science and Technology. He holds degrees in international affairs (BA, Emory University), business (MBA, Penn State), strategic studies (MS, US Army War College) and strategic intelligence (MS, National Intelligence University) with a focus on commercial satellite imagery innovations. He is a distinguished graduate of the US Army War College and a certified GEOINT professional. Dan is completing his Doctoral work in Leadership and Innovation from Purdue University.

P

Monica Palaseanu-Lovejoy, USGS / Geology, Minerals, Energy and Geophysics (GMEG) Science Center

Monica Palaseanu-Lovejoy is a Research Geologist at GMEG Science Center. Since joining the USGS, Monica has devoted her career to studying coastal environments and using remote sensing for geomorphology and change analysis. Presently her research focuses on erosion and landslides in coastal cliffs and bluffs, structure from motion using historical and satellite imagery, and satellite derived bathymetry.

Gerard Peltzer, NOAA NESDIS Commercial Data Program, Science and Technology Corporation (STC)

The NOAA NESDIS Commercial Data Program (CDP) successfully engages with the private sector to obtain commercial satellite data that helps meet NOAA's observing system objectives. The purpose of NESDIS CDP is to assess and acquire value-added space-based commercial environmental observation data in support of NOAA's operations and research. NESDIS CDP manages Commercial Data Pilot projects to demonstrate the quality and impact of commercial data on environmental applications.

Jeff Pennings, Wolverine Radar

Jeff Pennings is the founder and CEO of Wolverine Radar, a Michigan-based company formed to provide radar processing and mission design support satellite builders. Prior to founding Wolverine, Mr. Pennings served as Chief Technology Officer for Orbital Effect, Inc. where he was responsible for overseeing the design and construction of a next generation tactically responsive satellite and ground system. Mr. Pennings brings over 21 years of experience in radar satellite technology with a particular emphasis on area-rate optimization through a combination of radar collection mode design and advanced signal processing techniques.

R

Nina Raqueno, Rochester Institute of Technology

Daniel Reynolds, United States Space Force

Captain Daniel Reynolds was commissioned into the U.S. Air Force in May 2017 as a distinguished graduate of the U.S. Air Force Academy. For his first assignment, Capt Reynolds attended graduate school at the Massachusetts Institute of Technology, where he served as a research fellow at the Charles Stark Draper Laboratory. While at Draper, Capt Reynolds led engineering efforts in developing and testing flight control strategies for NASA's next-generation lunar space station, the Gateway. In November 2020, he PCS'ed to Peterson SFB to begin a 4-year assignment as a test director, branch chief, and assistant director of operations for the 4th Test and Evaluation Squadron. In this role, he was responsible for the design, planning, and execution of integrated tests for a multi-billion dollar portfolio of space assets. In February 2021, he transferred into the U.S. Space Force as a member of its second tranche of inter-service transfers. He is currently a SECAF-sponsored PhD candidate pursuing a doctorate in aeronautics and astronautics. During his 8-year career, he has accrued over a decade of experience in the non-profit, academic, and defense sectors of space exploration.

Monica Rios, NGA/ QS

Ms. Monica Rios is a Spectral Scientist in the Sensor and innovation office at NGA where she leads the commercial HSI and software development efforts. She is currently working commercial hyperspectral data providers to adopt data standards by providing the support and guidance they need to fully implement it. In her previous role she served as the lead systems engineer for the Data program office, where she built robust data frameworks that support NGA's mission and enhance data accessibility.

Brian J. Roberts, BAE Systems

Ross Rogers, U.S. Geological Survey National Civil Applications Center

Robert Ryan, Innovative Imaging & Research

Robert Ryan is the Chief Technical Officer and co-founder of Innovative Imaging & Research (I2R), where he leads the development of advanced imaging systems, night-imaging technologies, and radiometric calibration methods for spaceborne, airborne, and ground-based remote sensing. His current work expands the scientific utility of nighttime Earth observation through hyperspectral night-light imaging, SI-traceable calibration sources such as the Terra Vega system, and the development of Angstrom, an imaging star photometer designed for nighttime aerosol retrievals. Dr. Ryan contributes to national efforts in radiometric uncertainty quantification, collaborating with USGS and NASA on methods to model per-pixel uncertainty in Landsat Level-1 and Level-2 products. He also leads a team developing cost-effective prelaunch characterization and calibration approaches for high-resolution satellite imaging systems. In addition to his remote sensing work, Dr. Ryan has pioneered high-speed, high-dynamic-range (HDR) imaging techniques for rocket plume diagnostics and combustion studies, and he has designed multiple electro-optical instruments spanning visible, infrared, and hyperspectral modalities. He has authored numerous technical publications and holds eleven U.S. patents in optics and sensor technologies. Dr. Ryan earned his Ph.D. in Physics from the State University of New York at Stony Brook.

S

Aparajithan Sampath, KBR

Aparajithan Sampath (Ajit) is a geospatial data scientist and systems engineer specializing in Lidar analytics, remote-sensing data quality, and decision-theoretic modeling for environmental risk mitigation. With over 15 years of technical leadership experience, he has developed scalable, cloud-native workflows for 3DEP lidar validation, hyperspectral/Earth

Observation cross-calibration, flood-monitoring decision tools, and advanced machine-learning pipelines for point-cloud and imagery analysis. His work integrates open-source geospatial architectures, AI/ML automation, and uncertainty-aware analytics to bridge the gap between remote-sensing science and operational decision-making. Ajit holds a Masters in Engineering and Management from MIT and a PhD in Geomatics from Purdue University, and collaborates widely across academic, federal, and industry partners on next-generation geospatial intelligence and Earth-observation applications.

Stephen Schiller, Self/CalVal Research

Deron Scott, Space Dynamics Laboratory

Mr. Deron Scott has over 30 years of experience leading diverse, multidisciplinary teams in the development, test, and production of technically challenging hardware and software systems. His career spans all phases of mission execution, where he has successfully bridged multiple disciplines and organizations to deliver operationally robust and scientifically credible space-based sensing systems.

Mr. Scott's technical expertise is focused on space sensor systems, radiometric modeling, science data requirements definition, calibration planning, data management and analysis planning, and sensor characterization. He has served in both technical and leadership roles, including calibration engineer and program manager, enabling him to align detailed engineering execution with mission-level objectives.

At Space Dynamics Laboratory (SDL), Mr. Scott led teams of engineers providing end-to-end sensor analysis across subsystem testing, ground calibration, and on-orbit operations. His efforts included defining testing parameters, performing anomaly characterization, and implementing continuous sensor monitoring to ensure measurement quality and mission success.

In addition, Mr. Scott has developed analysis software used to generate scientific results and truth data sets for payload characterization. His work has directly supported the delivery of calibrated, high-quality data products that meet mission requirements and enable reliable scientific interpretation.

Alana Semple, SSAI/NASA

Alana Semple started as an undergraduate InSAR researcher at Cornell university. She got her PhD from Rice university in geodynamics in 2020 and in 2022 after which she returned to satellite work in her position at SSAI/NASA GSFC. Her main work include geometric quality assessment of commercial satellite data purchased by CSDA, analyzing imagery for true image resolution, geolocation accuracy, and band-to-band registration.

Jie Shan, Purdue University

Afreen Siddiqi, Massachusetts Institute of Technology

Dr. Afreen Siddiqi is a Research Scientist in the Engineering Systems Lab, in the Department of Aeronautics and Astronautics, at the Massachusetts Institute of Technology (MIT). Her expertise is in development of systems-theoretic analytical methods and quantitative modeling for technical systems operating in changing environments. Her work centers on systems in space (such as satellite remote sensing for environmental monitoring), and on Earth (such as infrastructure for water, energy, and agriculture). She has industry experience (working as an engineer at National Instruments in Austin, Texas) and also has experience in public policy engagement (through teaching at Harvard Kennedy School and affiliation with the Science, Technology, and Public Policy Program). Her work has led to a co-authored book and over 130 technical and scientific publications. She has received several teaching awards and fellowships including the Amelia Earhart Fellowship, Richard D. DuPont Fellowship, and the Rene H. Miller Prize in Systems Engineering. Dr. Siddiqi received an S.B. in Mechanical Engineering, an S.M. in Aeronautics and Astronautics, and a Ph.D. in Aerospace Systems, all from MIT.

Andrea Spichtinger, OroraTech

OroraTech is a global intelligence-as-a-service company leveraging thermal data for a sustainable Earth. Their product, Wildfire Solution, powered by high-resolution thermal data from our proprietary and public space-based sensor system, is trusted worldwide for revolutionizing wildfire detection. Since 2022, OroraTech has established a comprehensive global monitoring network, delivering real-time situational awareness and prompt risk alerts. The cutting-edge system detects fires of any scale, day or night, ensuring timely action. Founded in 2018, OroraTech is headquartered in Munich, Germany, with operations in Canada and Brazil. With a dedicated team of over 100 experts, OroraTech is committed to delivering innovative solutions for a sustainable future.

David Stolarz, GeoSDO

With over 35 years experience in the geospatial industry, Mr. Stolarz has had a unique career trajectory, from entry level land surveying to academia to public administration to hard-core computing to national publishing to geospatial standards to international diplomacy, all the while finding time to volunteer where a need arises in his line of sight, including a variety of professional associations.

T

Mohammad Tahersima, George Washington University

Dr. Tahersima was a Research Scientist at Science Systems and Applications Inc., working for the NASA/GSFC Sciences and Exploration Directorate, at the time of preparing this talk. He is currently part-time faculty at George Washington University. He holds a PhD in Electronics with a focus in Photonics Integrated Circuits.

Katalin Takats, Satellogic

Dr. Katalin Takats is an imagery scientist at Satellogic working on image processing, image quality assessment, and radiometric calibration and validation. She received a PhD in Astrophysics from the University of Szeged in Hungary, and was a postdoctoral fellow at the Universidad Nacional Andres Bello in Chile.

Bin Tan, GSFC/SSAI

Dr. Bin Tan received his Ph.D. in Remote Sensing from Boston University, where his doctoral research focused on assessing and validating MODIS LAI products and examining the impact of uncertainties on these assessments. During his postdoctoral appointment at Boston University, Dr. Tan also contributed to the maintenance and development of the MODIS land cover and phenology algorithms.

Since 2007, Dr. Tan has supported NASA's Goddard Space Flight Center and currently serves as Chief Scientist at Science Systems and Applications, Inc. His research interests include global land cover and land use change monitoring, image navigation and registration evaluation, and sensor testing and evaluation before and after launch. He has extensive experience in geometric performance evaluation for MODIS, VIIRS, GOES-R ABI, GLM, and commercial satellite sensors such as PlanetScope and BlackSky.

Dir. Mike Tischler, USGS Overview

Dr. Michael Tischler is the Acting Associate Director for Core Science Systems (CSS) Mission Area at the U.S. Geological Survey (USGS).

William Thomas, Hydrosat

William Thomas is an Imaging Systems Engineer at Hydrosat supporting the development of optical payloads.

V

Jim Vrabel, USGS-ITC

W

Michael Wernau, EOMAP

Ryder Whitmire, Vantor

Ryder Whitmire is a Technical Fellow for Guidance, Navigation, and Control (GNC) at Vantor (previously Maxar and DigitalGlobe), where he has worked for over 10 years on the Geometric Calibration team maintaining exquisite geolocation accuracy for a constellation of electro-optical earth observation satellites. He also developed much of the onboard control system flight software for the WorldView Legion Satellite Constellation. Ryder's research interests include stellar image processing for geometric calibration, applied optimal estimation, and techniques for minimizing the smear and jitter of push broom scanning sensors while maximizing vehicle agility. In his current role, Ryder is focused on developing future satellite systems and constellations for Vantor. He holds a BS in Aerospace Engineering and an MS in Astrodynamics from the University of Colorado at Boulder.

Paul Woodford, Umbra Space

Dr. Paul Woodford has worked with synthetic aperture radars for over 25 years. He has provided technical leadership for numerous radar experiments and deployments, developing CONOPS and operational modes, overseeing checkouts and initial operations, and providing on-site and reach-back support to deployed teams and government customers. These experiments and deployments have included multi-static, multi-band, multi-aspect, polarimetric, change detection, and foliage/building/ground penetration systems. His long-standing interest in the unique capabilities of arrays of radar systems led him to join Umbra in 2022, where he supports development of a new generation of low-cost, high-performance radar satellites.

Y

Mehran Yarahmadi, SSAI

I am a scientist at SSAI working at NASA Goddard Space Flight Center (GSFC) as part of the Calibration and Validation team. My work supports Earth-observing missions such as Landsat, Terra, and the Surface Biology and Geology (SBG) mission. I specialize in calibration and validation methodologies, including the application of vicarious calibration techniques

across multiple sensor platforms. My research focuses on developing and advancing calibration strategies for current and future missions, with an emphasis on large-scale data analysis. I earned my Ph.D. in Mechanical Engineering from Virginia Tech.

Z

Ignacio Zuleta, OroraTech GmbH