Session ID	Date	Time	Session Title	Abstract Title:	Abstract Lead Author Name:	Abstract Lead Author Affiliation:
TS 1-1	Tuesday 10/25/22	10:30-Noon	From Three to Many Shades of Water Color: The Legacy of Landsat and Its Prospects	Calculated risk: Leveraging multimission compositing and machine learning for managing cyanoHABs	Kate Fickas	USGS, UC Santa Barbara
				Introduction the Landsat 8/9 Collection 2 Provisional Aquatic Reflectance Science Product	Benjamin Page	Earth Space Technology Services, Contractor to the U.S. Geological Survey Earth Resources Observation and Science (EROS) Center, Sioux Falls, South Dakota, USA
				Long-term monitoring of Water Clarity in Amazon Basin using Landsat data	Daniel Maciel	National Institute of Space Research
				Macroscale Ecological Insights from Remotely Sensed Water Color	Simon Topp	U.S. Geological Survey
				Assessing the Maximum Chlorophyll Index for Sentinel-2 at a broad scale	Wilson Salls	U.S. Environmental Protection Agency, Office of Research and Development
				Assessment of Artificial Light at Night and Consequent Predation Risk for Juvenile Salmon in the Lake Washington Basin	Jennifer Schulien	U.S. Geological Survey - Western Fisheries Research Center
TS 1-2	Tuesday 10/25/22	10:30-Noon	Analysis Ready Data (ARD): New Providers, New Opportunities	Leveraging Analysis Ready Data with Digital Earth Africa	Adam Lewis	Digital Earth Africa / Group on Earth Observations
				Beyond Analysis Ready Data - Embracing 'sensor agnostic' Data Science will be key to Delivering Sustained Value from EO Constellations	Adam Lewis	Digital Earth Africa / Group on Earth Observations
				Sentinel Hub - on-demand Sentinel-1 CARD4L generation - Digital Earth Africa use-case	Grega Milcinski	Sinergise/Sentinel Hub
				CEOS Strategy for Analysis Ready Data	Andreia Siqueira	Geoscience Australia
				CEOS Analysis-Ready Data Specifications for Synthetic Aperture Radar	Brian D. Killough	NASA Langley Research Center
				Planet Fusion: Applications of a next generation analysis ready surface reflectance product	Rasmus Houborg	Planet Labs PBC
				Quantitative Metrics for Interoperability	Cody Anderson	USGS
TS 1-3	Tuesday 10/25/22	10:30-Noon	Advancing Radiometric Calibration, Part 1/2	Operational Land Imager 2: Development and Characterization Lessons Learned	Edward Knight, Ph.D.	Ball Aerospace
				Landsat 9 Operational Land Imager-2 (OLI-2) Radiometric Calibration and Characterization	Kurtis Thome	NASA Goddard Space Flight Center
				Landsat 8/9 Underfly Radiometric Cross Calibration and Validation	Garrison Gross	South Dakota State University
				Landsat 9 Calibration Overview – Commissioning and Move to Operations	Cody Anderson	USGS
				Calibrating the 50-Year Landsat Archive	Esad Micijevic	USGS EROS
				Landsat-8 Per-Pixel Radiometric Uncertainty Algorithm	Mary Pagnutti	Innovative Imaging and Research, Corp., Stennis Space Center, MS 39529
				Interoperability and calibration for a heterogeneous constellation of satellites	Arin Jumpasut	Planet Labs PBC
TS 1-4	Tuesday 10/25/22	10:30-Noon	Sustainable Development Goals (SDG) and Coastal Ecosystems	Applications of LandSat data in support of SDG15 in Benin and Ghana	Abigail Barenblitt	Massachusetts Institute of Technology
				Integration of Earth observation data into tracking Belize' s SDG commitments	Christine Evans	University of Alabama in Huntsville (UAH)
				Modeling forest phenology and habitat for species of conservation concern for use in forest land use plans in Argentina in support of the UN Sustainable Development Goals	Martinuzzi, Sebastian	University of Wisconsin-Madison
				Monitoring Mangroves and Associated Ecosystems Using Earth Observations	Lola Fatoyinbo	NASA Goddard Space Flight Center
				Earth Observations for SDGs: Lessons Learned	Cindy Schmidt	Bay Area Environmental Research Institute/NASA
TS 1-5	Tuesday 10/25/22	10:30-Noon	National Land Cover Database (NLCD): Next Generation Products and Research	NLCD: Integrating new methodologies and partner data into future products	Jon Dewitz	USGS
				NLCD Change Detection Using CCDC Synthetic and Composite Imagery	Suming Jin	USGS EROS Center
				Improving Classification Accuracy using Deep Learning Artificial Intelligence (AI) for the National Land Cover Database	Patrick Danielson	KBR, Contractor to the U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center
				Rangeland Condition Monitoring Assessment and Projection (RCMAP): Tracking ground cover patterns over a 1985-2021 time-series	Matthew Rigge	USGS EROS
				The USFS NLCD Tree Canopy Cover Project : Perspective from a strategic national dataset, recent R-2-O work, and delivery of new time series products	Karen Schleeweis	USDA USFS Forest Inventory and Analysis Program
				2016 NLCD TCC Validation and Comparison with GEDI Canopy Cover	Jill Derwin	Virginia Tech
TS 1-6	Tuesday 10/25/22	10:30-Noon	Land Elevation and Surface Processes	Historical Change Detection in the USGS Seamless 1/3 Arc-Second DEM	Barry Miller	U.S. Geological Survey
				Iterative Orthophoto Refinement of Digital Elevation Model from MAXAR Imagery	Grzegorz Miecznik	MAXAR
				The Story of East Timbalier Island	Gary B. Fisher	U.S. Geological Survey
				Accuracy analysis of Copernicus DEM and comparison to the current USGS DEM used in Landsat processing.	Shannon Franks	KBR
				Digital Earth Australia Coastlines: A novel Landsat approach to monitoring coastal change with proven potential for global uptake	Bishop-Taylor, Robbi	
				Landslide Monitoring Using Uncrewed Aerial Systems and Multiscale Model-to-Model Cloud Comparison Along Railway Corridors	Donna Delparte	Idaho State University
TS 2-1	Tuesday 10/25/22	1:30-3:00	Power, Promise, and Challenges in Remote Sensing of Water Quality	Tracking Chlorophyll Trends in Intermountain West Lakes Using Remote Sensing	Samuel J. Sillen	University of Wyoming
				Using Landsat-8 observations to determine surface water temperature and ice cover for 1.4 million global lakes	Maartje C. Korver	Geography, McGill University, Canada
				Earth observation monitoring of algal blooms in Oklahoma and Texas reservoirs	Victoria Stengel	USGS
				Assessing trends and drivers of lake trophic status change at continental scales	Michael F Meyer	U.S. Geological Survey
				Mapping and characterizing Arctic beaded streams through high-resolution satellite imagery	Merritt E. Harlan	University of Massachusetts Amherst
				Spatially Distributed Bias Correction of Provisional Landsat 8 Collection 2 Surface Temperature Products in Rivers, Streams, Lakes, and Reservoirs	Robert J. Welk	USGS

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TS 2-2	Tuesday 10/25/22	1:30-3:00	Conservation and Sustainability, Part 1	Dynamical Systems Analysis across time series of land degradation metrics of a Commercial Ranch in Sagebrush Steppe from 1972 - 1998	Robert A. Washington-Allen	Director NevadaView, Dept of Agriculture, Veterinary, & Rangeland Sciences, University of Nevada, Reno
				INTEGRATION OF LANDSAT IMAGERY IN PROTECTED AREA ASSESSMENT AND ECOSYSTEM SERVICES MAPPING IN THE TROPICS	Ellen Delgado Florian	Center for Geospatial Research of the University of Georgia
				Digital Earth Africa, Empowering a Billion People with Earth Observations	Adam Lewis	Digital Earth Africa / Group on Earth Observations
				Building on the Sustainable Development Goal Indicator 11.3.1 for identification of urbanization hotspots in Africa	Orion Cardenas-Ritzert	Colorado State University
				Spatial Optimization of Residential Green Spaces for Water Conservation and Heat Mitigation: A Case of Phoenix Metropolitan Area, Arizona	Chuyuan Carter Wang	Towson University
TS 2-3	Tuesday 10/25/22	1:30-3:00	Advancing Radiometric Calibration, Part 2 / Advancing Geometric Calibration	Quality Assessment of the Harmonized Landsat/Sentinel-2 Data	Junchang Ju	University of Maryland, College Park
				Radiometric calibration and stability monitoring of optical satellite sensors using Global Extended Pseudo Invariant Calibration Sites.	Juliana Fajardo Rueda	South Dakota State University
				Providing a Satellite Cross-calibration Capability across the Global Earth Observation Systems of System	Brian Sauer	USGS
				AI based cloud clearing for geolocation validation with Landsat chips and VIIRS imagery	Zhang, Bin	ESSIC/CISESS, University of Maryland, College Park
				Co-registration accuracy between Collection-2 Landsat-8 and geometrically refined Sentinel-2 orthorectified products	Rajagopalan Rengarajan	KBR contractor to USGS EROS
				An overview on Landsat 9 operational geometric characterization and calibration processes and results	Mike Choate	USGS
				Comparing the geometric performance of Landsat 8 and Landsat 9 satellites and their data products	Rajagopalan Rengarajan	KBR contractor to USGS EROS
TS 2-4	Tuesday 10/25/22	1:30-3:00	Addressing Local Decision-Making Needs through the Application of NASA Earth Observations	NASA DEVELOP's Approach to Building Capacity in Individuals and Organizations to Use Earth Observations for Informed Decision Making	Lauren Childs-Gleason	NASA Langley
				Understanding the Impact of Forest Management on the Cameron Peak and CalWood Fires	Chris Choi	NASA DEVELOP - SSAI
				Using MODIS to monitor spatiotemporal trends in fog and low cloud cover along the California and southern Oregon coast	Zack Werner	NASA DEVELOP - SSAI
				Leveraging NASA Earth Observations to Analyze and Display Crop Phenology Data and Weather Conditions to Support Expansion of Small Grain Crops in the Midwest	Cameron Levine	NASA DEVELOP - SSAI
				Evaluating Potential Sites for Coral Reef Restoration in the Golfo Dulce, Costa Rica Based on Turbidity and Sea Surface Temperature	Samuel Furey	NASA DEVELOP - SSAI
				Leveraging NASA Earth Observations to Support Modeling Urban Cooling Interventions and Urban Heat Vulnerability in Yonkers, New York	Tamara Barbakova	NASA DEVELOP - SSAI
				Leveraging Earth Observations and Health Data to Map Outbreak Risk and Inform Public Health Interventions for Zoonotic Disease Prevention	Ellen Delgado Florian	University of Georgia / NASA DEVELOP
TS 2-5	Tuesday 10/25/22	1:30-3:00	Monitoring, Assessing, and Projecting Land Change Impacts with LCMAP Science Products	Sending Mixed Signals: Predicting Landsat Reflectance Patterns with Climate Data	Kate Fickas	USGS, UC Santa Barbara
				Historical landscape reconstruction and scenario-based modeling in LCMAP	Sohl, Terry	US Geological Survey
				Coastal land-aquatic system biogeochemical cycle modelling with LCMAP Science Products and the Land Use and Carbon Scenario Simulator (LUCAS)	Jinxun Liu	USGS Western Geographic Science Center
				Bringing it all together: integrating Landsat change detection with high-res remote sensing	Jarlath O'Neil-Dunne	University of Vermont
TS 2-6	Tuesday 10/25/22	1:30-3:00	Land Cover and Land Use Change and Impacts on Decision Making Processes Affecting Food Security and Environment	Comprehensive monitoring of environmental change: new opportunities for capacity building	Pontus Olofsson	Earth & Environment, Boston University
				Mapping land-cover change and building capacity across Amazonia and beyond.	Stephanie Spera	University of Richmond
				Leveraging time-series satellite imagery to improve land cover monitoring in the Lower Mekong Basin	Robert E Kennedy	College of Earth, Ocean, and Atmospheric Sciences / Oregon State University / Corvallis OR
				Advancing Cropland and Crop-type Mapping with Deep Learning for Agricultural Monitoring in Data Scarce Regions	Catherine Nakalembe	University of Maryland
				Conflict and changing agricultural profiles in Mali, West Africa	Niall P. Hanan	New Mexico State University (NMSU)
				Satellite-based assessment of changes in forage conditions in East African Rangelands	Julius Y. Anchang	New Mexico State University
TS 3-1	Tuesday 10/25/22	3:30-5:00	Remote Sensing of Open Water Surface Dynamics and Quality	Modelling Total Suspended Sediments in the Belize Coastal Lagoon using Meta-Learning and Multi-Sensor Remote Sensing	Chintan B. Maniyar	Department of Geography, University of Georgia, Athens, GA USA
				The Applications Program of the Surface Water and Ocean Topography (SWOT) Mission	Margaret Srinivasan	Jet Propulsion Laboratory California Institute of Technology
				Validation of Landsat-8/OLI virtual orange band for the Brazilian inland waters	Daniel Andrade Maciel	Instrumentation Lab for Aquatic Systems (LabISA)
				Multiscale remote sensing of the Upper Chattahoochee Watershed to monitor land cover changes and water surface area dynamics.	Ali Mehran	University of North Georgia
				Using Satellite Derived Water Quality Data from an Automated High Performance Computing Environment for Spatial/Temporal Trend Analysis of 10,000+ Minnesota Lakes	Leif Olmanson	
TS 3-2	Tuesday 10/25/22	3:30-5:00	Conservation and Sustainability, Part 2	Rangeland Brush Estimation Tool (RaBET): A Landsat-informed aid for conservation planning	Chandra Holifield Collins	USDA-ARS Southwest Watershed Research Center
				Impact of coal mining, thermal plants, anthropogenic activities on wildlife corridors for national parks and wildlife sanctuaries in the regions of India and Kenya	Abhinav Galodha	School of Interdisciplinary Research (SIRe), Indian Institute of Technology, IIT Delhi
				Spectral diversity as a proxy of forest biodiversity	Catherine Chan	School of Natural Resources, University of Nebraska-Lincoln
TS 3-3	Tuesday 10/25/22	3:30-5:00	Advancing Vicarious Calibration	Impact of 50 years of Landsat on vicarious calibration methods and accuracies	Kurtis Thome	NASA Goddard Space Flight Center

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				ECCOE Landsat 8/9 Under-Fly Surface Reflectance Validation	Emily Maddox	KBR, Contractor to USGS EROS
				Assessing the Potential of the Arable Sensors to Provide Surface Reflectance Data	Cibele Teixeira Pinto	South Dakota State University Image Processing Laboratory
				Collecting Spectra on a Budget: Comparing Reflectance Measurements from a Modified Laboratory Spectroradiometer to a Field Spectroradiometer for Fieldwork and UAS Mapping Applications	Victoria Scholl	U.S. Geological Survey, Geosciences and Environmental Change Science Center
				A Low-Cost Radiometer Designed To Enhance Landsat Thermal Validation	Aaron Gerace	Rochester Institute of Technology
				Leveraging NOAA Buoys and Forward Modeling to Support Calibration of Landsat's Thermal Archive	Nina Raqueno	
TS 3-4	Tuesday 10/25/22	3:30-5:00	Monitoring Trends in Surface Albedo, Soil Moisture, Land Cover and Other Essential Climate Variables (ECV)	Landsat, Sentinel-2A/B, and HLS Albedos of Northern High Latitudes	Crystal Schaaf	School for the Environment, University of Massachusetts Boston
				Cross-Comparison of Carbon Emission Estimates based on variable Land Use Land Cover Changes within SERVIR Focus Regions	Christine Evans	Earth System Science Center, The University of Alabama Huntsville, SERVIR Science Coordination Office
TS 3-5	Tuesday 10/25/22	3:30-5:00	Full Speed Ahead: Increasing Frequency and Reducing Latency of National-Scale Maps	NLCD: Balancing accuracy and methodology innovation with increasing production frequency	Jon Dewitz	USGS
				Mapping Disturbance for the Conterminous United States in Less than Six Months: Exploring Improvements in Processing Power, Image Compositing, and Improved Change Detection Algorithms	Brian Tolk	KBR contractor to USGS EROS Center, Sioux Falls, SD 57198, USA.
				A Random Forest-Based Commission Error Filter for LANDFIRE Disturbance Mapping	Sanath Sathyachandran Kumar	ASRC Federal Data Solutions, contractor to the United States Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center, Sioux Falls, SD 57198, USA.
				The LANDFIRE image-based annual prototype: Detailed annual updates to vegetation maps for the United States using machine learning.	Daryn Dockter	LANDFIRE Vegetation Specialist, KBR Contractor to USGS EROS
				Painting the landscape by number: The use of image segmentation to improve geospatial vegetation classification	Joshua J. Picotte	ASRC Federal Data Solutions, contractor to the United States Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center
				Annual Monitoring of Land Cover Change: The Benefits and Challenges of Lowering Latency	Jesslyn Brown	USGS
TS 3-6	Tuesday 10/25/22	3:30-5:00	Agricultural Programs Using Remote Sensing to Estimate Planted Commodities and Forecast Production	A New Dissemination Portal for the Cropland Data Layer Program: CroplandCROS	Rick Mueller	USDA/NASS
				Two Decades of Mapping US Corn Yields using MODIS	David M. Johnson	USDA National Agricultural Statistics Service
				Remote sensing-based agro-geoinformatic tools for supporting agricultural monitoring and decision making in South Asia	Di, Liping	Center for Spatial Information Science and Systems, George Mason University
				Reviewing the application of remote sensing towards improved field crop yields in Sub-Saharan Africa	Adeline Ngie	Unit for Env. Sc. and Management, School of Geo-and Spatial Sciences, Faculty of Natural and Agricultural Sciences, Vaal Triangle Campus, North-West University, P.O. Box 1174 Hendrick Van Eck Boulevard, Vanderbijlpark, 1900, South Africa
TS 4-1	Wednesday 10/26/22	10:30-Noon	50 Years of Landsat Terrestrial Monitoring – Past, Present and Future	Perspectives on USGS Landsat processing and future needs	David Roy and Chris Crawford	MSU, USGS
				Perspectives on the explosion of use of Landsat data	Curtis Woodcock	Boston University
				The global 2000-2020 land cover and land use change dataset derived from the Landsat archive	Peter Potopov	University of Maryland
				Progress and remaining challenges for large area mapping with Landsat	Matthew Hansen	University of Maryland
				An Undate on NASA's global harmonized Landsat-Sentinel-2 Products	Brian Freitag	NASA MSFC
				NLI Programatic Outlook	Tim Newman	USGS
TS 4-2	Wednesday 10/26/22	10:30-Noon	Remote Sensing of Shallow-Water Bathymetry: Methods for a New Era	Satellite Derived Bathymetry (SDB) using physics-based algorithm	Minsu Kim	KBR, contractor to USGS EROS
				Satellite Derived Bathymetry: Open-source module for NASA Ames Stereo Pipeline	Monica Palaseanu-Lovejoy	US Geological Survey, GMEG SC
				ICESat-2 Operational Global Inland Surface Water Products for Hydrology and Water Resources	Michael F. Jasinski	NASA Goddard Space Flight Center
				Assessment of Satellite-Based Observations of Bathymetric Change	Christopher E. Parrish	Oregon State University
				Utilizing Deep Learning ICESat-2 Bathymetry Extraction and Multi-Modal Depth Retrieval Model to Derive Satellite Derived Bathymetry	Felicia Nurindrawati	TCarta Marine
TS 4-3	Wednesday 10/26/22	10:30-Noon	Agricultural Monitoring with Landsat Data	Mapping crop types globally using Landsat and Sentinel-2 imagery with transfer learning from the US Cropland Data Layer	David M. Johnson	USDA National Agricultural Statistics Service
				Advancing cropland monitoring using multi-source optical time-series data	Matthew Hansen	University of Maryland
				Landsat for Agriculture: the Way Forward	Chris Justice	UMD
				The Symbiotic Relationship Between Landsat and Agricultural Applications	Darrel L. Williams	Chief Scientist, Global Science & Technology, Inc.
				Extracting fields from space – a novel lens on the changing global landscape	Lin Yan	MSU
				NASA Harvest: Satellite Monitoring of Agricultural Productivity, Land Use, and Sustainability	Alyssa Whitcraft	NASA Harvest
TS 4-4	Wednesday 10/26/22	10:30-Noon	Community Science Through Remote Sensing of the Environment	Building community through the Trees Around the GLOBE student research campaign	Peder Nelson	Oregon State University
				Integrating ecocultural knowledge and remote sensing in Barbuda, West Indies, through participatory science and story telling	Rebecca Boger	Brooklyn College, CUNY
				Nebraska Indian Community College's Remote Sensing Research Applications "Community Science Through Remote Sensing"	Hank Miller	Nebraska Indian Community College
				Communicating the meaning of place: Landsat images, art, and discovery.	Carole A.S. Mandryk	Osher Lifelong Learning Institute at University of Hawaii at Manoa
				Understanding Gender Barriers Today to Inform Equitable Capacity Building Efforts in the Future	Crista Straub	USGS

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				If Satellites Could Talk	Justin Braaten	Google
TS 4-5	Wednesday 10/26/22	10:30-Noon	Advancing Geospatial Data Science Through Data Access and Computing, Part 1	Moderate Spatial Resolution Mapping of Global Land Cover and Land Cover Change Across Multiple Decades from Landsat	Mark A. Friedl	Boston University
				Modeling snowmelt runoff using Landsat fractional snow-covered area	Chase Mueller	KBR, Inc., Under contract to USGS
				Building a federal water data science capability at the U. S. Geological Survey	Simon Topp	USGS
				Landsat Data and Information in the Cloud Era	Bobbi Lenczowski	Maxar
				Is GeoAI the Crystal Ball to the future of Earth Observation?	Vasit Sagan	Geospatial Institute, Saint Louis University, St. Louis, MO 63108, USA
				Planet Data Access for Researchers via the NASA Commercial SmallSat Data Acquisition (CSDA) Program	Tanya N. Harrison	Planet Labs, PBC
TS 4-6	Wednesday 10/26/22	10:30-Noon	Rigorous Assessment and Application of Land Surface Phenology: A Track in Honor of Bradley C. Reed, Part 1	Phenometric Lapse Rates Improve Understanding of Land Surface Phenologies in Montane Pastures	Geoffrey M. Henebry	Michigan State University
				Thirty years of satellite seasonality: progress and challenges	Josh Gray	North Carolina State University
				Observing and Modeling Land Surface Phenology at Local, Regional, and Global Scales Using Remote Sensing	Mark A. Friedl	Boston University
				Near-real-time crop phenology mapping using harmonized Landsat and Sentinel-2	Feng Gao	
				The development and application of remotely sensed exotic annual grass phenology metrics in western U.S. rangelands	Stephen P. Boyte	US Geological Survey - EROS Center
TS 4-7	Wednesday 10/26/22	10:30-Noon	Education & Outreach - Preparing the Next Generation of Remote Sensing Scientists	Crossing Paths: Integrating Landsat Imagery with Weather Satellite Imagery in RealEarth	Sam Batzli	WisconsinView - SSEC/CIMSS - University of Wisconsin - Madison
				Turning Digital Data Layers into Analog Atlas and Outreaching to Communities in Georgia	Jeong Seong	University of West Georgia
				Imagination & Innovation: Turning ideas into reality within the Landsat education and public outreach realm	Ginger Butcher	NASA/Science Systems and Applications Inc
				The Impact and Implications of Cloud GeoTechnology on Education and Society	Canserina Kurnia	Esri Inc
TS 5-1	Wednesday 10/26/22	3:30-5:00	Intercomparison and Synergies between Multispectral and Imaging Spectroscopy Earth Observation Data in Preparation for the Future	An Assessment of Earth Observation Imaging Spectroscopy User Needs	Nathan Roberts	KBR
				Does higher spatial resolution improve snow estimates?	Edward (Ned) Bair	UCSB
				Studying and monitoring freshwater ecosystems: Towards synergistic use of multispectral and hyperspectral observations	Nima Pahlevan	Science Systems and Applications Inc. / NASA Goddard Space Flight Center
				Preparing for surface mineral mapping across the Earth by assembling large area airborne imaging spectrometer coverage and analyzing existing soil spectral libraries	Raymond F Kokaly	USGS, Geology, Geophysics, and Geochemistry Science Center (GGGSC), Denver CO
				Keeping PACE with the NASA Plankton, Aerosol, Cloud, ocean Ecosystem mission	Jeremy Werdell	NASA
				Improving the historical remotely sensed snow albedo record and preparing for satellite imaging spectroscopy via multi-sensor fusion	Karl Rittger	INSTAAR - University of Colorado, Boulder
TS 5-2	Wednesday 10/26/22	3:30-5:00	Integrated Analysis of Land Imaging Satellite Performance and Benefits	User-driven Earth Observation Pathways	Greg Snyder	U.S. Geological Survey
				Land Imaging Architecture Analytical Tools and Applications	Ellen Wengert	USGS (KBR Contractor)
				The Visualization, Exploration, and Data Analysis (VEDA) project: A unified cyberinfrastructure supporting NASA missions, science, and applications	Brian Freitag	NASA MSFC
				New Drivers of Remote Sensing	Jon Christopherson	KBR, Contractor to US Geological Survey, EROS Data Center
				ASPRS 10 Year Remote Sensing Forecast 2022-2032	Greg Stensas	ASPRS Primary Data Acquisition Division Director; USGS
				GHG Monitoring from Space – A Systematic Mapping of Public, Private and Hybrid Missions	Aaron Davitt	WattTime and Climate TRACE
				Climate TRACE - Tracking Real time Atmospheric Carbon Emissions: How remote sensing, cloud computing, machine learning and artificial intelligence are changing how we approach the climate crisis.	Aaron Davitt	WattTime and Climate TRACE
TS 5-3	Wednesday 10/26/22	3:30-5:00	Performance of Hyperspectral and Advanced Multispectral Data in the Study of Leading Agricultural Crops of the World	Measuring, modeling, mapping, and monitoring crop water productivity (“crop per drop”) of leading world crops based on a study in California utilizing advanced multispectral remote sensing on the Google Earth Engine (GEE) cloud	Daniel Foley	United States Geological Survey
				Study of some of the leading world agricultural crops using spaceborne new generation (DESIS, PRISMA) and old generation (Hyperion) hyperspectral data	Itiya Aneece	Western Geographic Science Center, U. S. Geological Survey
				Concept and characteristics of global hyperspectral imaging spectral libraries of agricultural crops (GHISA)	Prasad S. Thenkabail	United States Geological Survey (USGS)
				Performance of new and old generation spaceborne hyperspectral data relative to advanced multispectral data in the study of leading agricultural crops of the world	Prasad S. Thenkabail	United States Geological Survey (USGS)
TS 5-4	Wednesday 10/26/22	3:30-5:00	Opening the Aperture: Citizen Science Ground Photos as Reference for Earth Observations	Understanding 50 years of land cover changes with citizen scientists using the GLOBE Observer Land Cover mobile application	Peder Nelson	Oregon State University
				Assessing Global Landsat and Sentinel-2 Derived Land Cover Datasets Using GLOBE Observer Land Cover Photo Classification Protocols	Di Yang	University of Wyoming
				Labeling Citizen Science Land Cover Photos to Enable Machine Learning Classifiers and Searchable Databases within the GLOBE Observer Community	Peder Nelson	Oregon State University
				How citizen science can fill the gaps in Landsat Earth Observations	Peder Nelson	Oregon State University
				Adopt-a-Pixel 3km: Fostering collaborative student research via citizen science and cloud-based data analysis tools	Russanne Low	Institute for Global Environmental Strategies

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TS 5-5	Wednesday 10/26/22	3:30-5:00	Advancing Geospatial Data Science Through Data Access and Computing, Part 2	Landsat Data Access Updates	Jacob Savoy	C2G (Contractor to USGS EROS)
				Introduction to Using Landsat Data in the Cloud	Holly Wilson	KBR (Contractor to USGS EROS)
				The Open Data Cube Sandbox: A State-of-the-Art Tool for using Landsat Data	Brian Killough	NASA
				Exploring Data Interoperability with STAC and the Microsoft Planetary Computer	Peter Gadomski	Element 84
				50 Years of Landsat: How the Current Landsat Data Ecosystem Creates Value for Decision-Makers and Society	Sarah F. Schenkein	U.S. Geological Survey, National Land Imaging Program and Social and Economic Analysis Branch, Fort Collins Science Center
				Developing Analysis Ready Data for the 3D Elevation Program	Jason Stoker	USGS
TS 5-6	Wednesday 10/26/22	3:30-5:00	Rigorous Assessment and Application of Land Surface Phenology: A Track in Honor of Bradley C. Reed, Part 2	Improved Land Surface Phenology Detections from Time Series fused Landsat and Sentinel-2 with Geostationary Satellites	Xiaoyang Zhang	South Dakota State University
				False winter peaks in the NDVI phenology of western coniferous forests	Jessica Walker	US Geological Survey
				Progress in estimating vegetation phenology from the Copernicus Sentinel 2 and 3 satellites	Lars Eklundh	Lund University
TS 6-1	Thursday 10/27/22	10:30-Noon	Surface Temperature and Evapotranspiration (ET)	Improving Temporal Sampling of ET Timeseries Retrievals using Multi-Sensor Thermal Imaging Sources	Martha C. Anderson	USDA-ARS
				Improving evapotranspiration estimation and mapping for global field-scale applications	Gabriel Senay	U.S. Geological Survey (USGS), Earth Resources Observation and Science (EROS) Center, North Central Climate Adaptation Science Center
				OpenET: Operational Evapotranspiration Data for Water Management in the Western United States	Forrest Melton	NASA Ames Research Center, Cooperative for Research in Earth Science and Technology
				An Introduction to NASA's Western Water Applications Office	Forrest Melton	NASA Ames Research Center, Cooperative for Research in Earth Science and Technology
				Landsat 9 Thermal Infrared Sensor 2 (TIRS-2) Radiometric Calibration and Characterization	Matthew Montanaro	NASA Goddard Space Flight Center
				Operationalizing the generalized split window algorithm for the TIRS-class sensors	Tania Kleynhans	Rochester Institute of Technology
TS 6-2	Thursday 10/27/22	10:30-Noon	High-Latitude Aquatic Remote Sensing	Discrimination of river runoff over ice from melt ponds by k-mean clustering of Landsat 8 and MODIS derived remote sensing reflectance spectra	Luka Catipovic	MIT
				The Bio-Optical Properties of Arctic-Boreal Lakes	Kelly Luis	
				Development of SAR and EO derived wetland products for waterfowl abundance models in the Arctic-Boreal Zone	Michael Battaglia	Michigan Technological University
TS 6-3	Thursday 10/27/22	10:30-Noon	Commodity-Driven Tropical Deforestation	Delayed palm oil conversion after forest loss: improving burned areas or land speculation?	Diana Parker	Department of Geographical Sciences, University of Maryland
				Massive soybean expansion in South America since 2000 and implications for conservation	Xiao-Peng Song	Department of Geosciences, Texas Tech University, Lubbock, TX, USA
				Land use expansion in South America, 1985 to 2018	Viviana Zalles	University of Maryland
				Tropical forest loss area and driver assessment using multi-source data	Alexandra Tyukavina	University of Maryland
TS 6-4	Thursday 10/27/22	10:30-Noon	Current and Future Earth Observation Innovations Across Mobile, Aerial and Satellite Remote Sensing Platforms	The Case For An Earth Archive	Christopher Fisher	The Earth Archive/Colorado State University
				Automating Infrastructure Risk with Satellite Data, Artificial Intelligence and Machine Learning.	Anthony D. Palizzi	LiveEO
				Introducing the Computational Reconfigurable Imaging Spectrometer (CRISP)	Milstein, Adam B.	MIT Lincoln Laboratory
				Evaluating SAR Radiometric Terrain Correction Solutions: Optimal products for applied user	Africa Flores-Anderson	NASA SERVIR
TS 6-5	Thursday 10/27/22	10:30-Noon	AmericaView Demonstrates the Power of Landsat Imagery	Making the past relevant through the Landsat Time-Series and LandTrendr	Peder Nelson	Oregon State University
				ORIGIN: Water Quality Monitoring Across Multiple States using Remotely Sensed Data	Anita Simic Milas	Bowling Green State University
				Mapping Forest Height over Cloud Persistent Mountainous Areas with Landsat, Google Earth Engine, Airborne Lidar, and Machine Learning	Qi Chen	University of Hawaii at Manoa
				Review of undergraduate remote sensing research activities in the no-cost Landsat data era	Ramesh Sivanpillai	University of Wyoming
				Missing pixel reconstruction using Source-Augmented Partial Convolution: application in Landsat 8 land surface temperature image patches	Maosi Chen	Colorado State University
				Using Landsat Imagery to Monitor Forest Change in New Hampshire: 1996-2018	Russell G. Congalton	University of New Hampshire
				KansasView Online Remote Sensing Tools for Data Exploration and Visualization	Dana Peterson	University of Kansas, Kansas Biological Survey
TS 6-6	Thursday 10/27/22	10:30-Noon	Forest Inventory and Condition Mapping	Probabilistic Forest Type Predictions Using FIA Field Data, Landsat-Derived GLAD Phenological Metrics, and Digital Terrain Variables	Aaron E. Maxwell	West Virginia University
				Assessing the utility of NAIP digital aerial photogrammetric point clouds for estimating pine canopy height in the southeastern United States	Alison Ritz	Virginia Polytechnic Institute and State University, Forest Resources and Environmental Conservation
				A comparison of methods for wall-to-wall biomass mapping in Mexico using Landsat	Nadine Drigo	Boston University
				Integrating imagery, point clouds, and surface models in an object-based approach for mapping forest canopy extent and structure	Keith C. Pelletier	University of Minnesota
				Diameter Estimation of Eucalyptus Plantations in Southern Brazil using GEDI data and Support Vector Regression	Benjamin Mill	Virginia Tech
				Developing remote sensing method for mapping community tree canopy in Nebraska	Hugh Ellerman	University of Nebraska - Lincoln
TS 7-1	Thursday 10/27/22	1:30-3:00	New Applications Using Declassified Defense and Intelligence Community Remote Sensing Data and Technology	Global Fiducials Library (GFL)	Steve Smith	USGS

Session ID	Date	Time	Session Title	Abstract Title:	Abstract Lead Author Name:	Abstract Lead Author Affiliation:
				Historic Imagery Availability Working Group (HIAWG)	Jon Griffith	USGS
				Environmental Security Working Group (ESWG)	Jordan Beauregard	USGS
				Tasking/International Charter Update	Dan Opstal	USGS
				Satisfying U.S. Government Hi-Resolution Imagery Needs	Peter Rinkleff	USGS
				The Global Fiducials Library	Steve Smith	USGS
				Providing Research-Ready Declassified Historical Imagery	Jon Griffith	DOI / USGS / NCAC
TS 7-2	Thursday 10/27/22	1:30-3:00	Fire Detection, Monitoring, and Remediation	Leveraging Consumer Drones For Wildland Fire Monitoring: Validating The Positional And Thematic Accuracy of Georeferenced Small UAS Motion Imagery	Loren Russell	Pennsylvania State University
				Contemporary (1984-2020) fire history metrics for the conterminous United States	Melanie Vanderhoof	GECSC, U.S. Geological Survey
				Impact of wildfire on vegetation water use using Evapotranspiration data from OpenET	Yun Yang	University of Maryland College Park
				Burn Severity Portal	Seth Bogle	USDA Forest Service, Geospatial Technology and Applications Center (GTAC)
				Effect of burn severity on vegetation succession: a case study of 1983 Rosie Creek Fire, interior Alaska.	Anushree Badola	Geophysical Institute, University of Alaska Fairbanks, Fairbanks, AK 99775, USA
				Synthesizing wildfire monitoring objectives and information needs using a whole-system conceptual framework	Morgan A. Crowley	McGill University
				Spaceborne mapping of fire retardant drops using machine learning techniques	Troy Saltiel	Pacific Northwest National Lab
TS 7-3	Thursday 10/27/22	1:30-3:00	Monitoring Spatial Patterns and Causes of Deforestation and Degradation	Multi-scalar Time Series of Earth Observations for Assessing Human-Environment Impacts of Mining in Ghana	Amanda D. Aragon	University of Georgia - Center for Geospatial Research
				Mapping causal agents of forest disturbance in high latitudes	Yingtong Zhang	Boston University
				Monitoring and analyzing shifting cultivation in Laos	Shijuan Chen	Earth and Environment, Boston University, USA
				Spatial and Temporal Availability of Cloud-free Optical Observations in the Tropics to Monitor Deforestation	Africa Ixmucane Flores-Anderson	McGill University / NASA-SERVIR
				Temporal transferability of remote sensing models for large area monitoring of tree cover	Steven Filippelli	Colorado State University
TS 7-4	Thursday 10/27/22	1:30-3:00	Detecting and Monitoring Land Cover and Land Use Change, Part 1	Widespread Changes in 21st Century Vegetation Cover in Argentina, Paraguay, and Uruguay	Radost Stanimirova	Department of Earth and Environment, Boston University, Boston, MA 02215
				A Multifaceted View of Conterminous US Land Change	Zhe Zhu	University of Connecticut
				Classifying Small-Town Built Environments using Object-Based Image Analysis (GEOBIA) in the Beqaa Valley, Lebanon	Lynn Abdouni	Clemson University
				A High Resolution National Land Cover Census	Kyle Barnes	NOAA Office for Coastal Management
TS 7-5	Thursday 10/27/22	1:30-3:00	AmericaView and StateView Educational Outreach Empowers Earth Observation Education		Rebecca L Dodge	
					Amy Logan	
					Tom Mueller	
					Karen Babyak	
					Amy Logan	
					Tracy DeLiberty	
					Mary Schorse	
					John McGee	
					Brad Shellito	
TS 7-6	Thursday 10/27/22	1:30-3:00	Forest Growth and Ecosystem Productivity Estimation	Remotely quantified forest functional traits and diversity as predictors of gross primary productivity in forested ecosystems	Paige Tatum Williams	Virginia Tech
				Discrimination of Forest Regrowth from Conversion to Other Land Uses Using Remotely Sensed Products from Landsat and NAIP	Randy Wynne	Virginia Tech
				Remote sensing estimation of foliar traits: Effect of leaf traits expression and scaling approach on model performance and prediction accuracy	Tawanda W Gara	School of Forest Resources, University of Maine
				Green University: Using Google Earth on Mobile for Tree Survey	Yaowaret Jantakat	Rajamangala University of Technology ISAN
TS 7-7	Thursday 10/27/22	1:30-3:00	Advancing Nighttime Imaging Technology	Nighttime Light Surface Radiance Analysis Ready Data	Brian Killough	NASA
				The Day/Night Band: Lighting a Pathway to Nocturnal Discovery	Steven Miller	CSU
				Angstrom: An Imaging Star Photometer	Mary Pagnutti	I2R
				An SI Traceable Night Light Source	Robert Ryan	I2R
				NASA's Black Marble Nighttime Light Product Suite	Zhuosen Wang	UMD
TS 8-1	Thursday 10/27/22	3:30-5:00	Landsat-Derived Global Rainfed and Irrigated-Cropland Product at 30m (LGRIP30) for World's Food and Water Security in the twenty-first Century	Landsat-derived Global Rainfed and Irrigated-Cropland Product at 30m (LGRIP30) for World's Food and Water Security in the twenty-first Century	Prasad S. Thenkabail	United States Geological Survey (USGS)
				Landsat-derived Global Rainfed and Irrigated-Cropland Product at 30m for the Conterminous United States (CONUS): Study of irrigated and rainfed areas at the country, state, and county level	Pardhasaradhi Teluguntla	Bay Area Environmental Research Institute (BAERI)@USGS
				Automated cropland fallow algorithm (ACFA) for the Great Plains of United States for 2010-2021 using decision-tree algorithms on the Google Earth Engine (GEE) cloud	Adam J. Oliphant	Western Geographic Science Center, USGS, Flagstaff AZ
				Global Cropland Products from 1-km to 30-m in support of world's food and water security in the twenty-first century: An overview of multiple data products, access, impact, and future plans	Prasad S. Thenkabail	United States Geological Survey (USGS)
TS 8-2	Thursday 10/27/22	3:30-5:00	Floods, Weather Events and Other Hazards	Analysis of Brine Spill Impacted Lands of Western North Dakota Using Landsat 7 ETM+ and Landsat 8 OLI Imagery	Gregory Vandeberg	Department of Geography & GISc., University of North Dakota and North DakotaView
				Dissemination of Global Flood Severity and Surface Water Mapping using Remote Sensing Data to Global Stakeholders	Margaret T. Glasscoe	University of Alabama in Huntsville

Session ID	Date	Time	Session Title	Abstract Title:	Abstract Lead Author Name:	Abstract Lead Author Affiliation:
				Automated Pipeline for Satellite Imagery from Tidal Alert Monitoring	Erik Friesen	Planet
				Tagging flood data	Jeffrey Ganuza	USGS
				Near-real-time Agricultural Flood Monitoring and Crop Damage Assessment under Google Earth Engine	Zhe Li	United States Department of Agriculture, National Agricultural Statistics Service
				Examining spatial and temporal surface water inundation patterns in California, USA croplands using satellite imagery.	Britt Smith	U.S. Geological Survey
TS 8-3	Thursday 10/27/22	3:30-5:00	Forest Health and Invasive Species Monitoring	Integration of multi-sensor satellite data to map spruce budworm vulnerability in Maine, USA	Rajeev Bhattarai	The University of Maine
				Mapping dry forest in two regions of Colombia using Landsat time series	Paulo Arévalo	Boston University. Department of Earth and Environment.
				Understanding the climate drivers of forest health and productivity in Alaska using Time-series analysis (2000-2021)	Sumana Sahoo	University of Alaska, Fairbanks
				Predicting Forest Decline in Rhode Island with Remote Sensing and GIS	Jason Parent	University of Rhode Island
				The Sentinel GreenReport using Google Earth Engine	Chen Liang	University of Kansas
				Detecting Eastern Redcedar encroachment in Kansas using Sentinel-2 imagery and a machine learning model	Chen Liang	University of Kansas
TS 8-4	Thursday 10/27/22	3:30-5:00	Detecting and Monitoring Land Cover and Land Use Change, Part 2	Continuous change-detection of wetlands dynamics using two decades of Landsat legacy data	Lindi J. Quackenbush	Professor and Chair at SUNY-ESF
				Landsat-based mapping of bi-national wetlands and land cover changes for the Great Lakes Basin	Nancy HF French	Michigan Technological University
				A Global Training Dataset of Land Cover from 1985 to 2019 for the Global Land Cover Estimation (GLanCE) Project	Radost Stanimirova	Department of Earth and Environment, Boston University, Boston, MA 02215
				Improving the temporal consistency of global land cover and land cover change maps across multiple decades using Landsat time series	Paulo Arévalo	Boston University. Department of Earth and Environment.
				Thematic Accuracy Assessment in the Time of Landsat MSS	Russell G. Congalton	University of New Hampshire
				Evaluation of Landsat Image Compositing Algorithms	Shi Qiu	University of Connecticut
TS 8-5	Thursday 10/27/22	3:30-5:00	“Rising Waters”- A Summer Workshop Providing an Inside Look into the World of Imagery for High School Students			
				Recruiting Geoscience Majors through Combined Service Learning and Undergraduate Student Research Projects	Brent Yantis	
				Exposing High School Students to Geoscience Concepts through Local Environmental Challenges	Rebecca L. Dodge	
				Assessing the Results of the First GEO SERVICE Workshops	Heather Stone	
				Undergraduate Mentors' Perspectives on Connecting with Potential Geoscience Majors	Courtney A. Poirier	
TS 8-6	Thursday 10/27/22	3:30-5:00	Using Earth Observations for Marine and Freshwater Applications Research	Fore-C: A new coral disease forecasting product	Megan J Donahue	Hawaii Institute of Marine Biology
				Remote sensing, population viability analysis, and the next generation of native trout conservation	Daniel Dauwalter	Trout Unlimited
				Dynamic, satellite-derived seascapes: a global framework for observing and understanding biodiversity patterns in ocean ecosystems	Maria T. Kavanaugh	College of Earth, Ocean, and Atmospheric Sciences, Oregon State University, Corvallis OR, 97331
				DEtection and Characterization of cOastal tiDal wEtland Change (DECODE) – An Operational Model for Monitoring Change and Targeting Coastal Wetland Management Actions	Xiucheng Yang	University of Connecticut
				Hot spots in the ice: using satellites to reveal relationships between marine ecosystems and sea ice in coastal Antarctica	Alice Duvivier	National Center for Atmospheric Research
				Multiscale Spectroscopy of Intertidal Biofilm: Modeling Quantity, Quality and Composition	Kristin Byrd	USGS Western Geographic Science Center
				Predicting the Long-Distance Dispersal of Ichthyoplankton in the Intra-Americas Sea: A Data-Assimilative Decision Support Tool for Effective Living Marine Resource Management	Ruoying He	North Carolina State University / Fathom Science
TS 8-7	Thursday 10/27/22	3:30-5:00	Developing Capacity to Apply Earth Observations for Global Societal Benefit	Monitoring Container Ship Backlog at the Los Angeles Port in Light of Supply-Chain Challenges using VIIRS, Landsat, and Sentinel 2 images	Yan Bai	University of Maryland, CISESS
				Air quality dynamics estimation during COVID-19 travel restrictions using Goggle Earth Engine: A case of Johannesburg, South Africa	Emmanuel Fundisi	Department of Geography, Environmental Management and Energy Studies, University of Johannesburg, South Africa
				Application of Earth observation data for improved environmental and disaster monitoring in Central America	Lauren Carey	University of Alabama in Huntsville (UAH)