

Media Tip Sheet

Selected presentations by topic

Brought to you by the AGU Media Relations Team

Topic	Session Date	Session Start (Pacific Standard Time)	Session Type
Climate	How Does Whole-Ecosystem Warming Alter Plant Fine-Root and Fungal Mycelium Dynamics in a Boreal Peat Bog?		
	7-Dec Monday	4:00:00	Poster
	High-Resolution Detection and Attribution for Extreme Precipitation over the Contiguous United States		
		4:00:00	Poster
	Methane emissions from coal mining are growing		
		5:30:00	eLightning
	Rain-on-snow events can lead to an intensification of late summer hydrological drought in Great Lakes watersheds		
	8-Dec Tuesday	4:00:00	Oral
	More Weather or More Water: What is Driving Increases in Extreme Precipitation?		
		4:00:00	Poster
	Observations and climate models confirm extreme precipitation events are happening more often and the magnitude increases significantly		
		4:00:00	Poster
	Making Climate Action Count: Lessons learnt from engendering communities' resilience across East Africa vulnerable populations and landscapes		
		4:00:00	Poster
	Assessing the Viability of Forecast-Informed Reservoir Operations (FIRO) in Western U.S. Reservoirs Where Atmospheric Rivers Are Key to Both Water Supply and Flooding: Summary, Lessons Learned, and Broader Implications		
		4:00:00	Poster
	Associations among topography, snowmelt, and plant green-up phenology, revealed through a time-lapse camera network		
		4:00:00	Poster
	Survival of the Deepest? Peat Depth as a Control on Peatland Hydraulic Structure and Pore-water Residence Time		
		10:30:00	eLightning
	Climate adaptation: What worked and what did not. A 200-year record from 18th and 19th century British Administrative documents pertaining to semi-arid regions of peninsular India		
		20:30:00	Oral
	Aquatic Ecosystems are the Most Uncertain but Potentially Largest Source of Methane on Earth		
	9-Dec Wednesday	4:00:00	Poster

Topic	Session Date	Session Start (Pacific Standard Time)	Session Type
Climate	Projected potential fish distribution under climate change in a heavily regulated, fragmented river system		
	9-Dec	Wednesday	4:00:00
			Poster
	Hydrate Bodies Big Enough to Look Like Allochthonous Salt in the Mexican Ridges, Gulf of Mexico		
			4:00:00
			Poster
	Indubitable and Dubious Climate Induced Migrations: An examination of the narratives, and key historical determinants		
			5:30:00
			Oral
	Atmospheric rivers in the PETM: Importance for cool season precipitation		
	10-Dec	Thursday	4:00:00
			Poster
	Exploration of Global Spatiotemporal Changes of Fall Foliage Coloration in Deciduous Forests and Shrubs Using VIIRS Phenology Product		
			4:00:00
			Poster
	Fabrication of Reactive Rocks with 3D Printing		
			4:00:00
			Poster
	Changes in Fire Potential and Extreme Downslope Winds in California under Global Warming Projections of 1.5 °C, 2.0 °C, and 3 °C		
			17:30:00
			Oral
	Maximum latewood density records of Great Basin Bristlecone pine (Pinus Longaeva) in the White Mountains, California		
	11-Dec	Friday	4:00:00
			Poster
	Northern Great Barrier Reef coral documents seasonal ocean temperature, salinity, productivity and runoff from the last 250 years		
			4:00:00
			Poster
	Warmer and More Volatile: Summertime Temperature Variance Increases Under Climate Change		
			4:00:00
			Poster
	An inter-comparison of tourism climate indices in the Southern United States: A national park case study		
			4:00:00
			Poster
	Tree Rings Reveal Multi-century Snowpack Dynamics of the Cascade Range, USA		
			4:00:00
			Poster
	Multidecadal trends and interactions in land disturbance regimes across California from time series remote sensing		
			4:00:00
			Poster
	Integrating in situ and satellite-based observations to unravel a mass mortality event of mussel beds in Patagonia, Argentina		
			4:00:00
			Poster

Topic	Session Date	Session Start (Pacific Standard Time)	Session Type
Climate	The return of the Eastern European carbon sink		
	11-Dec Friday	5:30:00	Oral
	Fugitive methane from abandoned oil and gas infrastructure		
		7:00:00	Oral
	Methane and Nitrogen Oxides Emissions from the Offshore Oil and Gas Supply Chain in the U.S. Gulf of Mexico		
		7:00:00	Oral
	Climate Sensitivity Increases Under Higher CO2 Levels Due to Feedback Temperature Dependence		
		10:30:00	Oral
	The role of soil moisture in promoting atmospheric ridges that cause flash droughts in the central U.S. since 1500 and implications for a warming world		
		19:00:00	Oral
	Regional shifts in paleohurricane activity over the past 1500 years reconstructed from blue hole sediment records in the Bahama Archipelago		
		19:00:00	Oral
	Concentration of Global Fishing Effort with Climate Change		
		20:30:00	Oral
	Controlling Factors of Global Heat-Humidity Extremes		
	14-Dec Monday	4:00:00	Oral
	Connections of climate change and variability to the 2019/20 Black Summer megafires in southeast Australia		
		4:00:00	Oral
	Can tidal-stream turbines power the Blue Economy?		
		4:00:00	Poster
	Projected Changes of Wintertime Extra-tropical Storm Activity over North America in the 21st Century		
		4:00:00	Poster
	Future changes in the Frequency of Winter Snowstorms over North America.		
		4:00:00	Poster
	Toward a discrimination between anthropogenic and natural nanoparticles of atmospheric origin entrapped in ancient glacier ice		
		4:00:00	Poster
	The Impacts of Rapid Climate Change on Mass Movements in Denali National Park, Alaska		
		7:00:00	Poster
	Understanding the Impacts of Climate Change on “Billion-dollar Disaster” Precipitation Events in the United States		
		16:00:00	Oral

Topic	Session Date	Session Start (Pacific Standard Time)	Session Type
Climate	Activating green infrastructure design as a planetary green security system: Comparing approaches of landscape care to advance sustainability, resilience, multifunctionality, and ecosystem services		
	15-Dec Tuesday	4:00:00	Poster
	Topographical patterns of tropical forest loss in the early 21st century		
		4:00:00	Poster
	Increased Risk of Cold Damage to Grapevines in spite of Warmer Temperatures: Importance of Considering Winter Season Dynamics.		
		4:00:00	Poster
	Soil moisture-driven increases in hot and dry days in the American West		
		4:00:00	Poster
	Process Oriented Diagnostics for High Frequency Impact Events: Bringing the Weather Scale to Climate		
		5:30:00	Oral
	Developing a forecasting model of droughts' impacts on food security for financial decision-making		
		19:00:00	Oral
	Climate-driven limits to future carbon storage in California's wildland ecosystems		
	16-Dec Wednesday	4:00:00	Poster
	Heat stress will more strongly affect global wheat yields than drought stress under 21st century climate change		
		5:30:00	Oral
	Identification of future Pacific salmon spawning habitat in southern Alaskan watersheds based on climate-induced changes in river discharge and water temperature		
		11:30:00	Oral
	The carbon cycle of southeast Australia during 2019/2020: Drought, fires and subsequent recovery		
		11:30:00	Oral
	Increased risk of the 2019 Alaskan July fires due to anthropogenic activity		
		17:30:00	Oral
	Wildfire smoke over the North Pole during the winter period 2019-2020 and impact on cirrus evolution.		
	17-Dec Thursday	4:00:00	eLightning
	Integrating Solar and Wind Power to Replace Coal in Texas		
COVID-19		7:00:00	eLightning
	Observation of COVID-19's Impact on PM2.5 Concentration as a Result of Independence Day Fireworks		
	7-Dec Monday	4:00:00	Poster
	Investigating Significance of Aerosols in Determining Coronavirus Fatality Rate Among Three European Countries		
		4:00:00	Poster

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
COVID-19	Interaction between COVID-19 and natural disasters: results from an agent-based epidemiology model			
	7-Dec	Monday	4:00:00	Poster
	A SARS-CoV-2-Containing Aerosol Settling Time Model Supports the Significant Role of Indirect Airborne Transmission			
			10:30:00	eLightning
	Measurements of Volatile Organic Compounds in Boulder, Colorado, During the COVID-19 Lockdown			
	8-Dec	Tuesday	4:00:00	Poster
	The Dynamics of Covid-19: Weather, Demographics and Infection Timeline			
			4:00:00	Poster
	Aerosols Reduction during the COVID-19 Pandemic Substantially Increased Diurnal Temperature Range in China			
			4:00:00	Poster
	COVID-19 impacts on snow albedo in the Indus River Basin			
			4:00:00	Poster
	Battling COVID-19 from Space: Cross-Scale Changes in Urban Activity Captured by NASA's Black Marble Product Suite			
			7:00:00	Oral
	Environmental factors and COVID-19: preliminary findings from China			
			19:00:00	Oral
	Decreases in 2020 carbon dioxide growth due to the Coronavirus pandemic observed from space			
	9-Dec	Wednesday	4:00:00	Oral
	Airborne Measurements of Aerosols and Trace Gases over Europe during the COVID-19 Lockdown Phase			
			4:00:00	Oral
	COVID-19 Shutdown Reveals Patterns of Environmental Injustice in Minnesota			
			4:00:00	Poster
	Lockdown due to COVID-19: An opportunity to understand influence of anthropogenic activities			
			4:00:00	Poster
	Disproportionate Impacts of the COVID-19 Economic Slowdown on Air Pollution in the U.S.			
			4:00:00	Poster
	Impact of COVID-19 state-wide stay-at-home phase on the PM2.5 mass concentrations in Los Angeles Basin using the Purple Air low cost sensor network			
			4:00:00	Poster
	Indoor Air Quality Resulting from Increased Usage of Household Cleaning Products during COVID-19			
			4:00:00	Poster

Topic	Session Date	Session Start (Pacific Standard Time)	Session Type
COVID-19	Investigating the Potential Causes of the Significant Decrease in the Lower-Tropospheric Baseline O3 at the U.S. West Coast During COVID-19 Pandemic		
	9-Dec	Wednesday	4:00:00
			Poster
	Impact of COVID19 on Disease Surveillance and Reporting		
		5:30:00	eLightning
	Ozone Changes Over the United States Due to COVID-19		
		19:00:00	Oral
	CO2 Concentrations Reduction Influenced by Traffic in Beijing due to COVID-19		
		20:30:00	Oral
	NOx reductions during COVID-19: Has ozone chemistry in the Los Angeles area become NOx-limited?		
		20:30:00	Oral
	Impact of COVID-19 Global Shutdown on Earth's Radiation Budget		
	10-Dec	Thursday	4:00:00
			Poster
	Impact of Air Traffic Reductions during the COVID-19 Pandemic on Aircraft-induced Clouds and their Radiative Effects		
		4:00:00	Poster
	Impacts of Coronavirus-driven Reduction in Aerosols on Precipitation in the Western United States		
		4:00:00	Poster
	The effect of COVID-19 on sales revenue in Seoul, South Korea: A Spatial Panel Approach		
		4:00:00	Poster
	Effect of COVID-19 state-wide stay-at-home phase on the ambient Volatile Organic Compound concentrations in Southern California communities.		
		4:00:00	Poster
	Minimal Climate Impacts from Short-lived Climate Forcers Following Emission Reductions Related to the COVID-19 Pandemic.		
		7:00:00	Oral
	Assessing COVID-19 environmental impacts through remote sensing		
		10:30:00	Oral
	Lessons from Small Businesses for Natural Disaster Resilience Planning and Recovery During the COVID-19 Pandemic		
	11-Dec	Friday	4:00:00
			Oral
	Air Quality Assessment in São Paulo, Brazil during Covid-19 pandemic: links between isolation rates and pollutants		
		16:00:00	eLightning
	COVID-19 TRANSMISSION BY SMALL DROPLETS		
	14-Dec	Monday	4:00:00
			Poster

Topic	Session Date	Session Start (Pacific Standard Time)	Session Type
COVID-19	Improved in air quality during covid-19 period: a scenario for AOD and Ozone trends over major cities of India.Priyanshu Gupta¹, Sunita Verma¹, R Bhatla², and Swagata Payra³. IESD, BHU Varanasi-221005 Uttar Pradesh, India².Department of Geophysics, BHU.³		
	14-Dec	Monday	4:00:00
			Poster
	Quantifying the Health Impact of “Shelter in Place” Policies from NO2 Emissions: An Empirical Assessments of the West Coast of the United States		
			4:00:00
			Poster
	Substantial decreases in NO2 emissions from reduced transportation volumes in US cities during COVID-19 shutdowns reveal health vulnerabilities of urban populations		
			4:00:00
			Poster
	Exploring the role of particulate matter as a carrier of SARS-CoV-2 in USA cities		
			4:00:00
			Poster
	Reproducibility, Scientific Integrity, and Public Engagement in the Age of Digital Misinformation and COVID-19		
			11:30:00
			Oral
	Concurrent Disasters in a Changing Climate: How Science can Guide Climate-Resilient Investments in the Face of Uncertainty		
			16:00:00
			Oral
	Compound Extreme Heat and COVID-19 Risks in the United States		
	15-Dec	Tuesday	4:00:00
			Poster
	Now we’re cooking: How do activities in the home impact exposure?		
			4:00:00
			Poster
	AgMIP Food Shock Protocols: COVID-19 and Climate Change		
			11:30:00
			Oral
	COVID-19 pandemic impacts on global inland fisheries, fishers, and fish catch		
	16-Dec	Wednesday	8:30:00
			Oral
	Disaster Risk Analysis for the Food Access Issues and its Relevance to Health Effects using Unsupervised Clustering Techniques for Spatial Variability.		
			8:30:00
			Oral
Earth's History, Interior and Life	Exploring the transition from prebiotic chemistry to biology using molecular assembly theory		
	7-Dec	Monday	4:00:00
			Oral
	Sonification and Machine Learning Contribute to a Novel Assay of Bacterial Swimming Dynamics		
			4:00:00
			Oral
	North Carolina's Seneca Guns: the Myth and Observation		
			4:00:00
			Poster

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Earth's History, Interior and Life	Autonomous Vibrational Analysis and Insect Behavioral Manipulation With Pied Piper			
	7-Dec	Monday	4:00:00	Poster
	Did agriculture beget agriculture during the past several millennia?			
			4:00:00	Poster
	Diel Patterns of Bocaccio Rockfish Communication			
			4:00:00	Poster
	Investigating the Possible Role of Chitin Deposition in the Shuram-Wonoka $\delta^{13}\text{C}$ Excursion			
	8-Dec	Tuesday	4:00:00	Poster
	Examining the role of Fe-cycling in microbial mat lithification and stromatolite abundance through Earth history			
			16:00:00	Oral
	A hot early Earth? Assessing Archean and Proterozoic temperature history under different geological constraints.			
	9-Dec	Wednesday	4:00:00	Poster
	Volcano-induced ENSO occurrences: an integrated assessment using targeted paleoclimate data assimilation experiments.			
			4:00:00	Poster
	Holocene Regional Ice History of Southwest Greenland: Driver of Viking Out-Migration?			
			4:00:00	Poster
	Inner Core Rotation Captured by Earthquake Doublets and Twin Stations			
			4:00:00	Poster
	Water-induced Diamond Formation at the Earth's Core-Mantle Boundary			
			4:00:00	Poster
	A Plan For Detecting Evidence of Hadean Life			
			16:00:00	Oral
	Physical Records of Ocean Acidification in the Geological Record			
			19:00:00	Oral
	Rise of the Colorado Plateau and Southern Rocky Mountain Region: A Synthesis of Paleoelevation Constraints and a Path Forward Using Temperature-Based Elevation Proxies			
	10-Dec	Thursday	4:00:00	Oral
	New Discovery of Pliocene Tidal Deposits Near the Crest of the Central Baja California Peninsula: A Key Constraint on Vertical Crustal Motions and Genetic Divergence			
			4:00:00	Oral

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Earth's History, Interior and Life	Can the Cenozoic marine micropaleontological record be used to predict extinction?			
	10-Dec	Thursday	4:00:00	Poster
	A Quantitative Paleoclimatic History of the Southern Great Basin Since the Middle Miocene		4:00:00	Poster
	Magma Storage System and Hidden Hotspot Track of the Emeishan Large Igneous Province and its Impact on the Unusual Timing of the Capitanian Mass Extinction		4:00:00	Poster
	Fire response to changes in hydroclimate and vegetation in Pleistocene East Africa		4:00:00	Poster
	East African Climate Variability Through a Major Faunal Transition at 550 to 250 ka: Preliminary Evidence from Organic Geochemical Proxies		4:00:00	Poster
	A New Insight of the Sahara Formation and Paleoclimate Evidence		4:00:00	Poster
	Animal Occurrence Probability and Power Outage Risk in ISO New England		10:30:00	Oral
	Squids, Snails, and Shellfish: How Oxygen Affected Molluscan Body Size in the Ordovician		16:00:00	Poster
	Assessing The Expansion of Beaver in Northeastern Coastal Watersheds Using High-Resolution Remotely-Sensed Data and the Implications for Biogeochemical Fluxes			
	11-Dec	Friday	4:00:00	Poster
	Abrupt climate change, hurricanes, and the rise and fall of a Taíno village		4:00:00	Poster
	Morphology of a new system of glaciovolcanic caves—Mount St. Helens, Washington, USA		4:00:00	Poster
	Ecoacoustic recordings capture animal population and community changes over time		16:00:00	Oral
	Salty seas and sharks from space: Combining satellite remote sensing and in situ data sets to understand elasmobranch movement ecology in relation to ocean salinity and other sea changes		16:00:00	Oral
	Identification and Characterization of Atlantic Halibut (Hippoglossus hippoglossus) Habitats with Bathymetric Data Supplemented with Seafloor Video Observations			
	14-Dec	Monday	4:00:00	Poster

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Earth's History, Interior and Life	Testing Australian megafaunal avian eggshells for 230Th/U burial dating			
	14-Dec	Monday	8:30:00	Oral
	In-situ identification of giant, needle-shaped magnetofossils in Paleocene-Eocene Thermal Maximum Sediments using high-resolution, low-noise FORC measurements		8:30:00	Oral
	Younger Dryas cooling began with a series of eruptions in Iceland followed by an impact		16:00:00	Oral
	A tectonically active early Earth driven by the tidal recession of the Moon		19:00:00	Oral
	The strength of the Earth's magnetic field from Pre-Pottery Neolithic Jordan			
	15-Dec	Tuesday	4:00:00	Poster
	Wave and current controls on the formation and steady-state maintenance of deep reef flats on atoll rims		4:00:00	Poster
	Archaeointensity of Historically Dated Burnt Structures in the Southern Levant: Anchors for the Evolution of the Levantine Iron Age Anomaly and the Timing of Geomagnetic Spikes		4:00:00	Poster
	Climate as a driver for Hominin Evolution		5:30:00	eLightning
	Dynamic Global Hunter-gatherer Model Reveals Key Role of Seasonality in Population Density via Diet Composition		5:30:00	eLightning
	Late Quaternary Climate Change and Human Presence in the Eastern Sahara: Evidence for Paleoenvironments associated with the Paleolithic, Mesolithic and Neolithic in Southern Egypt		5:30:00	eLightning
	Hunting for Ice Age Refugia: A 10Be-Based Deglacial Chronology from the Northern Alexander Archipelago, Alaska		5:30:00	eLightning
	Human settlements and climatic changes in Remote Oceania over the last millennium: Multi-proxy records from Vanuatu		5:30:00	eLightning
	Sedimentary ancient DNA and molecular evidence for pre-Norse occupation of the Faroe Islands		5:30:00	eLightning
	The Origin of Modern Atolls: Challenging Darwin's Deeply Ingrained Theory		16:00:00	Oral

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Earth's History, Interior and Life	Ocean Bottom Seismometers for Passive Acoustic Monitoring of Baleen Whales			
	15-Dec	Tuesday	19:00:00	Oral
	Catching Fire: Geochemical evidence suggests hominin-controlled fire during the Pleistocene in the Turkana Basin, Kenya			
	16-Dec	Wednesday	4:00:00	Poster
	SAR-based detection of buried ruins: present possibility and uncertainties			
			4:00:00	Poster
	Quantifying post-glacial biotic velocities of tree taxa from fossil pollen records: can the trees keep up?			
			4:00:00	Poster
	Deciphering the “Dissolved”: Ecological Roles of Aquatic Viruses			
			17:30:00	Oral
Environmental Health	Carbon Cycle Recovery After the Cretaceous-Paleogene Mass Extinction: a Terrestrial Perspective			
			20:30:00	Oral
	Assessing the Utility of Historic NASA Imaging Spectroscopy Data to Detect Plant Disease in California Vineyards			
	7-Dec	Monday	4:00:00	Poster
	Air Quality and Climate Impacts of United States Nuclear Power Plant Closures			
			7:00:00	eLightning
	“Godzilla” African Dust Event of June 2020: Impacts of Air Quality in the Greater Caribbean Basin, the Gulf of Mexico and the United States			
			7:00:00	Oral
	Mini Ozone Holes Due to Dust Release of Iodine in the Remote Tropical Free Troposphere			
	8-Dec	Tuesday	4:00:00	Oral
	Combing Remotely Sensed Data and Health Surveys to Investigate Food Insecurity and Women’s Reproductive Health in West Africa			
			4:00:00	Poster
	Understanding and Responding to Global Health Security Risks from Microbial Threats in the Arctic			
			4:00:00	Poster
	The Combined Impact of Heat-Humidity Extremes on Mortality Risks in Major Cities in the Sun Belt of the United States			
	9-Dec	Wednesday	7:00:00	eLightning
	Severe weather-related deaths, stress, and incidence of cardiovascular ailments in U.S. community-based samples after Hurricanes Harvey, Irma, and Michael			
			7:00:00	eLightning

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Environmental Health	Mercury exposure in fish from US national parks			
	10-Dec	Thursday	4:00:00	Poster
	PFAS Distribution in Contaminated Soils and Impact on Rhizosphere and Plant Microbiota		7:00:00	Oral
	Heat and Health: Using physiological evidence to build resilience to a warming planet		7:00:00	Oral
	How Safe are United States Public Water Supply Systems?		20:30:00	Oral
	Another Surprising Turn in the Global Emission of CFC-11			
	11-Dec	Friday	4:00:00	Oral
	Deriving a global infant mortality pollution response curve for developing countries		4:00:00	Poster
	Cardiorespiratory health impacts of wildfire smoke in Alaska		16:00:00	eLightning
	Mortality Burden Of Ambient PM2.5 Exposure In Megacity Delhi: Spatially Disaggregated v/s Aggregated Approach To Exposure Assignment			
	14-Dec	Monday	4:00:00	Poster
	Capping a swine farm wastewater lagoon: preliminary evaluation of water quality impacts in eastern North Carolina		4:00:00	Poster
	INVESTIGATING THE 2018-2020 PINNIPED UNUSUAL MORTALITY EVENT ALONG THE NORTHEAST COAST THROUGH AERIAL SURVEY DATA		4:00:00	Poster
	An 18-Year Retrospective Analysis of West Nile Virus Infection in Culex Mosquitoes of the Midwestern United States		10:00:00	eLightning
	Concentrated animal feeding operation liquid manure application patterns: Insights from remote sensing		20:30:00	Oral
	When smoke comes to town: a long-term health impact assessment of acute and chronic wildfire smoke exposure			
	15-Dec	Tuesday	7:00:00	eLightning
	Excess Asthma Events from Future Wildfires in the Western US: A Health Impact Assessment		7:00:00	eLightning

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Environmental Health	Hand hygiene in a changing water world: ensuring “water and sanitation for all” in the context of a pandemic			
	15-Dec	Tuesday	10:00:00	Oral
	The fidelity of elemental concentrations and mass-dependent ($\delta^{18}\text{O}$, $\delta^{13}\text{C}$, $\delta^{15}\text{N}$, $\delta^2\text{H}$, $\delta^{34}\text{S}$, $\delta^{42/44}\text{Ca}$) and radiogenic isotopic compositions ($^{87}\text{Sr}/^{86}\text{Sr}$, Pb isotopes) in human hair in seawater and fresh water and implications for forensics, anthropology, and e		20:30:00	Oral
Human Impacts and Environmental Justice	The air quality trade-offs of wildfire and prescribed burning			
	17-Dec	Thursday	5:30:00	Oral
	We Will Rock You: Noisy and Quiet Times Around the Michigan Stadium			
	7-Dec	Monday	4:00:00	Poster
	Sources and Spatiotemporal Patterns of Anthropogenic Infrasound in Urban Areas		4:00:00	Poster
	Bushmeat hunting reduces transport of key nutrients in Amazonia		4:00:00	Poster
	Could road constructions be more disastrous than an earthquake in terms of landsliding?		10:30:00	eLightning
	Evidence of Ionospheric Perturbations from a Buried Chemical Explosion Captured Using High-Rate GNSS Measurements		19:00:00	Oral
	Local Adaptation and Unintended Coastal Vulnerability			
	8-Dec	Tuesday	4:00:00	Poster
	Global Land-Use Change, Biomass and Greenhouse Gas Emissions for Producing Plant- and Animal-based Human Food		4:00:00	Poster
	Narratives of Conflict and Resilience: Understanding Structural Violence in an Arctic Community Facing Climate Change		5:30:00	Oral
	The 2020 Edenville and Sanford, MI Dam Failures: Geomorphic Change in Response to Catastrophic Flooding		20:30:00	Oral
	The unequal distribution of natural resources: why geology matters		20:30:00	Oral

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Human Impacts and Environmental Justice				
	Climate Change Increases Trapped Populations: When Migration Cannot Be Used as an Adaptation Solution			
	9-Dec	Wednesday	4:00:00	Oral
	Heavy Metal(Ioid) Contamination of Medicinal Plants: Implications for Public Health of Indigenous People.			
			4:00:00	Poster
	Modeling and Sharing UNSDG Indicator Data for Poverty, Food, Water, and Energy in Relation to Climate Change			
			4:00:00	Poster
	Increasing trend in atmosphere helium from 1975 to 2020			
			4:00:00	Poster
	Mapping landscapes of the displaced: Automating land cover change detection with multi-sensor satellite time series at internally displaced people (IDPs) settlements in Ethiopia			
			5:30:00	Oral
	Disentangling the drivers of regional migration in West Africa: The impact of food (in)security on migration			
			5:30:00	Oral
	Agricultural stability explains the location choices of internally displaced people (IDPs) during the Syrian Civil War			
			5:30:00	Oral
	Indian Pipelines: science-based expertise as tools of liberation and oppression in Native America			
			17:30:00	Oral
	Burnt Dinner: Greenhouse Gas and VOC Emissions from Swine Carcass Open-Pit Burning Disposal Method			
	10-Dec	Thursday	4:00:00	Poster
	Charting Justice for Refugee Relocation Under Extreme Climate Change			
			4:00:00	Poster
	U-turn Needed to Feed 10 Billion People Within Planetary Boundaries: Insights from a Global Model-based Assessment			
			4:00:00	Poster
	Alternative methods for reducing sediment delivery from skid trails used for post-fire logging			
			4:00:00	Poster
	Marine wild-capture fisheries after nuclear war			
			4:00:00	Poster

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Human Impacts and Environmental Justice	Identification of Opportunities for International Cooperation over Proposed Series of Large Freshwater Reservoirs to Capture the Melting Glaciers in the Hindu Kush Himalayan (HKH) mountains			
	11-Dec	Friday	5:30:00	eLightning
	Properties of Change: Politics and Land Ownership in Northern Alaskan Social-Environmental Systems		5:30:00	Oral
	Using long-term satellite image records to map swine concentrated animal feeding operations and estimate their historical impact on nutrient inputs in the NC Coastal Plain		7:00:00	Oral
	Infrasound Generation from the 2017 DPRK Underground Nuclear Explosion			
	14-Dec	Monday	20:30:00	Oral
	Assessing the relationship between urban structure and the urban heat island: Improving local climate zone mapping and estimating zone and site-scale effects on air temperature			
	15-Dec	Tuesday	4:00:00	Poster
	Microplastic Distribution in the Gulf of Mexico		11:30:00	eLightning
	Diverse studies document intricate relationships among volcanoes, honey, salmon, and Indigenous peoples as part of a complex geochemical puzzle in the Pacific Northwest of North America		20:30:00	Oral
	Source-specific Contributions to Racial-Ethnic Disparities in Ambient Fine Particulate Matter Exposure in the United States			
	16-Dec	Wednesday	4:00:00	Poster
	Characteristics of airplane-induced ground motion recorded by three-component(3-C) geophone and distributed acoustic sensing (DAS) in cities		16:00:00	eLightning
	Seismo-acoustic Vector Detection and Tracking of Ground Vehicles		16:00:00	eLightning
	Assessing the Impact of Hurricane Sandy on Mobility Patterns in New York City across Scales		16:00:00	Oral
	Unprotected and Underserved: Environmental justice and inadequacy of federal, state and local air pollution policies in protecting marginalized communities		17:30:00	Oral
	From Baltimore's polluting facilities to industrial poultry farming on the Eastern Shore: Making the case for cumulative impacts analysis in Maryland's environmental permitting and enforcement		17:30:00	Oral

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Human Impacts and Environmental Justice	Forest degradation in the Brazilian arc of deforestation: Land cover classification and biomass estimation using very high-resolution satellite images			
	17-Dec	Thursday	5:30:00	Oral
Natural Hazards	Arctic tsunami as an emerging threat for circumpolar coastal landscapes and communities- insight into Karrat Fjord 2017 tsunami wave impacts on Nuugaatsiaq settlement, western Greenland			
	7-Dec	Monday	4:00:00	Oral
	Post-Disturbance Biomass Recovery in California's Forests		4:00:00	Poster
	Preliminary Crustal GMPE for Puerto Rico after the 2020 SWPR Seismic Sequence		4:00:00	Poster
	The Largest Gravity Changes Ever Recorded: Continuous Gravity Monitoring of the Onset of Kilauea's 2018 Eruption		16:00:00	Oral
	Not All Disasters Are Created Equal: Evaluating Differences in Fire and Hurricane Media Coverage			
	8-Dec	Tuesday	4:00:00	eLightning
	Design and initial testing of instrumented particles for rock-fall dynamics monitoring		4:00:00	Poster
	HAWAIIAN FOUNTAINING: CHANGING SIZE AND SHAPE OF FALLING BOMBS		4:00:00	Poster
	Using Lightning Data in the Quest for Real-time Detection of Wild Fires Using the ABI Instrument Onboard GOES-16		4:00:00	Poster
	Wildfire response to changing daily temperature extremes in California's Sierra Nevada		4:00:00	Poster
	Democratizing Safety During an Earthquake: Multi-Disciplinary Spatial Optimization for Defining Evacuation Centers with Fair Access in L.A. County		4:00:00	Poster
	Effects of drought-intensified tree mortality on wildfire behavior in Sierra Nevada forests		7:00:00	Oral
	Geospatial Analysis of Wildfire Coverage in Newspapers across the USA		7:00:00	Oral
	Lightning Observations of the Taal Eruption		10:30:00	Oral

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Natural Hazards	Australian wildfires caused a major perturbation of the stratosphere and generate a smoke-charged vortex rising up to 35 km as inferred from satellite observations			
	8-Dec	Tuesday	10:30:00	Oral
	How Alaska's Barry Arm Can Help Us Prepare for Climate Change Hazards			
	9-Dec	Wednesday	4:00:00	Poster
	Education and Healthcare Networks Resilience as a Social Stability Index			
			4:00:00	Poster
	Identification of earthquakes and anthropogenic events around the southern Great Lakes			
			4:00:00	Poster
	New records of historical tsunamis obtained from Costa Rican newspapers			
			7:00:00	Oral
	Quantifying succession and ecosystem service recovery in California's altered wildfire regime			
			20:30:00	Oral
	Repeated wildfires in a Sierra Nevada watershed cause limited post-fire erosion			
	10-Dec	Thursday	4:00:00	Oral
	Controls on Post-fire Debris Flow Grain Sizes Across the Intermountain West			
			4:00:00	Poster
	An Experimental Model of Unconfined Bubbly Lava Flows			
			4:00:00	Poster
	A Conceptual Framework for Emergency Food and Water Requirements in a Disaster and Case Study for the HayWired Earthquake Scenario			
			4:00:00	Poster
	Dissecting a Zombie: Shallow Volcanic Structure Revealed by Multiple Geophysical Data Sets at Uturuncu Volcano, Bolivia			
			10:30:00	Oral
	Tsunami hazard in Cascadia from M7--9 earthquakes: Most hazardous segments of the rupture			
			16:00:00	Oral
	Extreme Discharges and Thresholds of Boulder Mobility in Steep Mountainous Streams on Maui, Hawai'i			
	11-Dec	Friday	4:00:00	Poster
	Risky development: increasing exposure to natural hazards in the United States			
			4:00:00	Poster
	Exploring of the conditions leading to volcanic lightning: Results of a field study at Sakurajima volcano, Japan			
			4:00:00	Poster

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Natural Hazards			Spatial Analysis of Volcanic Lightning within Eruption Clouds	
	11-Dec	Friday	4:00:00	Poster
			Spatiotemporal Evolution of Microseismicity and Repeating Earthquakes in Haiti	
			4:00:00	Poster
			Volcanic hazard from Late Pleistocene-Holocene monogenetic volcanism around the capital city of Kamchatka, Russia	
			5:30:00	Oral
			The Silent Sounds of Tornadoes and Their Potential Fluid Mechanism	
			17:30:00	Oral
			Tsunami intrusion into a river	
	14-Dec	Monday	4:00:00	Poster
			Contribution of Atmospheric Circulation Changes and Anthropogenic Warming to the Increase of Warm Season Fire Weather Risk in California	
			4:00:00	Poster
			Contemporaneous lidar and radar observations of a rotating pyrocumulus plume.	
			4:00:00	Poster
			Examining Trends in Fire-Weather Conditions across California	
			4:00:00	Poster
			Extreme fire weather hotspots and vulnerable electric powerlines identified through California climatology analysis	
			4:00:00	Poster
			Simulating Rotating Pyroconvection	
			4:00:00	Poster
			Future wave climate in nearshore California: new insights into the need for nearshore projections in local coastal hazard assessments	
			5:30:00	Oral
			Individual Storm Event Influence on Seasonal Snow Depth Distribution in Complex Mountain Terrain	
			8:30:00	Oral
			Trends in Regional Large Magnitude Snow Avalanche Occurrence and Associated Climate Patterns in the U.S. Northern Rocky Mountains	
			8:30:00	Oral
			Coastal Flooding Today, Tomorrow, and the Next Ten Years in East Coast U.S. Cities	
	15-Dec	Tuesday	4:00:00	Poster
			Severe Drought and Locust Outbreak in China in 1368-1911 using REACHES Data Sets	
			4:00:00	Poster

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Natural Hazards	UK Space Agency's METEOR project: Making the case for Earth Observation (EO) data for insurance in developing countries			
	15-Dec	Tuesday	20:30:00	Oral
	North American Wildfires are Changing the Atmospheric Carbon Monoxide Seasonal Cycle			
	16-Dec	Wednesday	4:00:00	Poster
	Highly variable lead (Pb) air concentrations associated with fire events in California			
			4:00:00	Poster
	Beam Theory Applied to Slab Avalanche Release			
			4:00:00	Poster
	High Resolution Field Observations of Meteotsunamis off the Coast of Louisiana, USA			
			4:00:00	Poster
	The August 2019 eruption of Volcano 0403-091: pumice-raft formation and dispersion eruption			
			19:00:00	Oral
	West Mata Submarine Volcano, NE Lau Basin: Eruption Evolution Using Hydroacoustic and Video Data			
			19:00:00	Oral
	Australian wildfires inject a volcanic-scale smoke plume into the stratosphere			
Polar Science and Glaciers	17-Dec	Thursday	4:00:00	eLightning
	Long-lived smoke clouds from the Australian megafires measured over Lauder, New Zealand			
			4:00:00	eLightning
	Multi-scale Simulations of Massive Stratospheric Smoke Injected by the 2017 British Columbia PyroCbs			
			4:00:00	eLightning
	Nuisance flooding due to groundwater emergence in coastal urban areas			
			5:30:00	Oral
	Distributed Energy Resources for Disaster Resilience to Hurricanes in a Changing Climate			
			7:00:00	eLightning
	Opportunities for Observations in Support of Indigenous Food Systems in the Coastal Alaskan Walrus Ecosystem			
	7-Dec	Monday	4:00:00	Poster
	Exploring Stability of Greenland's Peripheral Marine-Terminating Glaciers through Analysis of Automated Terminus Position Timeseries			
			4:00:00	Poster
	Increasing evaporation losses from global lakes between 1984 and 2018			
			19:00:00	Oral
	Recent temperature change on the Juneau Icefield, Alaska.			
	8-Dec	Tuesday	4:00:00	Poster

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Polar Science and Glaciers	Permafrost region disturbances in space and time: a pan-arctic perspective			
	8-Dec	Tuesday	7:00:00	Oral
	Weather, snow and ice: Hydrological and landscape changes in the Canadian Rockies headwaters		10:30:00	Oral
	Glacier Hazards in the Himalaya-Karakoram			
	9-Dec	Wednesday	4:00:00	Poster
	Assessing Rock Wall Permafrost Changes in Colorado's Front Range and Their Implications for Rock Fall		4:00:00	Poster
	Illusory Stability of Marine-Terminating Glaciers at Bedrock Peaks		4:00:00	Poster
	Basal Conditions Underneath Thwaites Glacier Using Ice Penetrating Radar		4:00:00	Poster
	Ikaagvik Sikukun: Bridging the Scientific and Indigenous Communities to Study Sea Ice Change in Arctic Alaska		16:00:00	Oral
	Ancient DNA in lake sediment reveals High Arctic greening during the Last Interglacial			
	11-Dec	Friday	4:00:00	Oral
	Sea Ice Deformation at MOSAiC		4:00:00	Oral
	Climate and Environmental Changes and its Impact on the Scythian Frozen Toms of the Altai Mountains, South Siberia, Russia.		4:00:00	Poster
	Impact of permafrost factor in ecological disasters due to spills of fuel and lubricants in the cryolithozone (with Norilsk region as an example)		4:00:00	Poster
	Visualizing Change with Landsat at Helheim Glacier, East Greenland, 1972 to 2020			
	14-Dec	Monday	4:00:00	Poster
	Human-environmental interactions in the Arctic inferred from microfossils in Central Greenland ice		4:00:00	Poster
	Large source of mercury from the western margin of the Greenland Ice Sheet		5:30:00	eLightning
	Holocene relative sea-level change in the Pine Island-Thwaites Glacier region of West Antarctica		5:30:00	Oral

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Polar Science and Glaciers	Investigating the Possibility of Cascading Lake Drainage in the Pakitsq Region of Western Greenland using an Analytical Ice-Flow Model			
	14-Dec	Monday	11:30:00	Oral
	Record surface meltwater ponding on the Northern George VI Ice Shelf, Antarctic Peninsula, during the 2019/2020 melt season			
			11:30:00	Oral
	Radiometric calibration and analysis of radar sounding observations of ice-sheet subsurface conditions from archival film records			
			17:30:00	eLightning
	Geometry of the eastern Thwaites ice shelf cavity and implications for continued grounding zone retreat			
			17:30:00	eLightning
	Complex bathymetry beneath Thwaites and Dotson Ice Shelves revealed by active-source seismic surveys			
	15-Dec	Tuesday	4:00:00	Oral
Space, Space Weather and Planetary Science	Glacier Disappearance in the High Alpine of Oregon, U.S.A.			
			4:00:00	Poster
	The Pathways and Heat Transport of Circumpolar Deep Water into the Thwaites and the Pine Island Glaciers, West Antarctica			
			4:00:00	Poster
	Inverting surface-elevation data for basal topography beneath Thwaites Glacier, West Antarctica			
			4:00:00	Poster
	Beavers engineer vast arctic tundra lowlands of Alaska			
			7:00:00	Oral
	Geological Template of the Thwaites Glacier Catchment			
	16-Dec	Wednesday	4:00:00	Poster
	Fire and climate in the eastern Siberia over the past 500 years (1500-2010 CE)			
			4:00:00	Poster
	Montreal Protocol to delay ice-free Arctic by a decade			
			7:00:00	Oral
	The 2020 Siberian Heat Wave			
	17-Dec	Thursday	7:00:00	Oral
	A New Global Topographic Map of Enceladus: Polar Signatures and Large Basin Distributions			
	7-Dec	Monday	4:00:00	Oral

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Space, Space Weather and Planetary Science	On the Taxonomy of Exoplanets using Transmission Color Analysis			
	7-Dec	Monday	4:00:00	Poster
	A New Model for the Origin of Chlorine on Enceladus		4:00:00	Poster
	MISSIONS NEED MAPS: TOWARDS A GLOBAL CRATER DATABASE FOR MARS AND THE MOON AT ULTIMATE RESOLUTION.		4:00:00	Poster
	The association between slot-filling injections and subauroral (STEVE) emissions		5:30:00	Oral
	The Effect of Continental Location on Climate of Synchronously Rotating Exoplanets		17:30:00	Oral
	8-Dec	Tuesday		
	Mapping the Distribution and Global Budget of Impact-Derived Sediment on Venus		4:00:00	Poster
	9-Dec	Wednesday		
	A Glacial Origin for the Extensive, Linear Inverted Features Within Gale Crater		5:30:00	eLightning
	Unexpected enhancement of saltation at Martian-like pressures		7:00:00	Oral
	Tesserae on Venus may preserve evidence of fluvial erosion		7:00:00	Oral
	High-speed video observations of a +CG flash caused by a sequence of bidirectional leaders forming a ground-reaching branch of pre-existing in-cloud channel		17:30:00	eLightning
	High-speed video observations of space stems and leaders in natural negative cloud-to-ground lightning		17:30:00	eLightning
	Collision of downward negative leader branches: Why does this happen?		17:30:00	eLightning
	Thermal Forcing of Near-Surface Temperatures by Martian Water Ice Clouds		4:00:00	Poster
	10-Dec	Thursday		
	Asteroid Thermal Evolution with Fragmentation and Reassembly into a Rubble Pile		4:00:00	Poster
	Listening for a Landing: the seismic detectability of Mars 2020's arrival by the InSight lander		5:30:00	eLightning

Topic	Session Date		Session Start (Pacific Standard Time)	Session Type
Space, Space Weather and Planetary Science	New HiRISE Observations of Gale Crater Rim Surfaces – Evidence for Glacial Processes			
	10-Dec	Thursday	7:00:00	eLightning
	A numerical study of magmatism and mantle convection in Mars: Implications for its crust, surface environment, and magnetic field			
	11-Dec	Friday	4:00:00	Oral
	Chaos Blocks on Europa: An Analysis of Orientation and Size Distributions			
			7:00:00	eLightning
	Multi-wavelength imaging observations of STEVE at Athabasca, Canada			
	14-Dec	Monday	4:00:00	Poster
	Food Supply for the Crew of a Lunar Village			
			4:00:00	Poster
	SMALL COMET VAPOR CLOUDS IMAGED FOR THE FIRST TIME			
			4:00:00	Poster
	Autonomous Exploration of Earth's Largest Subterranean Lake and Implications for Robotic Lunar and Mars Lava Tube Exploration			
			7:00:00	Oral
	CONSTRAINTS ON THE BIOPERSISTENCE OF OLIVINE PARTICULATES FROM EXPERIMENTAL DISSOLUTION IN SIMULATED LUNG AND GASTRIC FLUID			
			8:30:00	eLightning
	Molecular Solids on Titan: New Insights into Hydrogen Cyanide and Butadiene			
	15-Dec	Tuesday	4:00:00	Poster
	New evidence for climate and erosion history in Gale crater, Mars, from Curiosity's ascent onto the Greenheugh pediment			
			5:30:00	Oral
	New Observations Show the Earliest Stages of Titan's Radial Labyrinth Terrain Evolution			
			11:30:00	Oral
	The Green Emissions of STEVE: Optical Evidence of an Energy Cascade			
			11:30:00	Oral
	Investigating the simultaneous occurrence of STEVEs and SAR arcs using all-sky imagers, satellites, and citizen scientist data			
			11:30:00	Oral
	A Nitrogen-Rich Atmosphere on Ancient Mars Indicated by Isotopic Evolution.			
			17:30:00	Oral

Topic	Session Date	Session Start (Pacific Standard Time)	Session Type
Space, Space Weather and Planetary Science	From hot to cold: Assessing the mineralogical diversity of hydrothermal vent plume particles on Earth with an eye towards hydrothermally active icy ocean worlds		
	16-Dec	Wednesday	4:00:00
			Oral
	Frozen Worlds: How High-Pressure Ice Phases can Influence Their Structure.		
			4:00:00
			Poster
	Using a laser-pushed solar sail to deflect the trajectory of an asteroid		
			4:00:00
			Poster
	Ion radiation belts outside of the main rings of Jupiter and Saturn		
			4:00:00
			Poster
	Simulation and Analysis of a Comet's Atmospheric Entry, Impact, and Consequences		
			4:00:00
			Poster
	The Dust Environment in the Inner Heliosphere		
			4:00:00
			Poster
	The Viral Elevator: Modeling Virus and Bacteria Populations in Europa's Icy Ocean		
			5:30:00
			Oral
	Bulk modulus of H2O across the ice VII – ice X transition measured by time-resolved X-ray diffraction in dynamic Diamond Anvil Cell experiments		
			8:30:00
			Oral
	Deformation along Enceladus' Tiger Stripes: Insights from tidally modulated icequakes and stress release at Ross Ice Shelf rifts, Antarctica		
			17:30:00
			Oral