Media Tip Sheet

Selected presentations by date

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Session Sta	rt (Pacific Standard Time)	Topic	Session Type
Monday, Dece	mber 7, 2020		
	<u>High-Resolution Detection a</u>	nd Attribution for Extreme Precipitation over the Cont	<u>riguous United</u>
4:00:00		Climate	Poster
	How Does Whole-Ecosysten Boreal Peat Bog?	n Warming Alter Plant Fine-Root and Fungal Mycelium	Dynamics in a
		Climate	Poster
	Investigating Significance of European Countries	Aerosols in Determining Coronavirus Fatality Rate An	nong Three
		COVID-19	Poster
	Observation of COVID-19's I	mpact on PM2.5 Concentration as a Result of Indepen	dence Day Fireworks
		COVID-19	Poster
	Interaction between COVID-	19 and natural disasters: results from an agent-based COVID-19	epidemiology model Poster
	Sonification and Machine Le	arning Contribute to a Novel Assay of Bacterial Swimr	ning Dynamics
		Earth's History, Interior and Life	Oral
	Exploring the transition from	n prebiotic chemistry to biology using molecular assem	bly theory
		Earth's History, Interior and Life	Oral
	Diel Patterns of Bocaccio Ro	ockfish Communication	
		Earth's History, Interior and Life	Poster
	Did agriculture beget agricul	ture during the past several millennia?	
		Earth's History, Interior and Life	Poster
	North Carolina's Seneca Gur	ns: the Myth and Observation	
		Earth's History, Interior and Life	Poster
	Autonomous Vibrational Ana	alysis and Insect Behavioral Manipulation With Pied Pi	<u>per</u>
		Earth's History, Interior and Life	Poster
	Assessing the Utility of Histo Vineyards	oric NASA Imaging Spectroscopy Data to Detect Plant	Disease in California
		Environmental Health	Poster
	Sources and Spatiotempora	l Patterns of Anthropogenic Infrasound in Urban Areas	2
		Human Impacts and Environmental Justice	Poster
	We Will Rock You: Noisy and	I Quiet Times Around the Michigan Stadium	
		Human Impacts and Environmental Justice	Poster

Bushmeat hunting reduces transport of key nutrients in Amazonia

4:00:00 Human Impacts and Environmental Justice Poster

Arctic tsunami as an emerging threat for circumpolar coastal landscapes and communities- insight into Karrat Fjord 2017 tsunami wave impacts on Nuugaatsiag settlement, western Greenland

Natural Hazards Oral

Preliminary Crustal GMPE for Puerto Rico after the 2020 SWPR Seismic Sequence

Natural Hazards Poster

Post-Disturbance Biomass Recovery in California's Forests

Natural Hazards Poster

Opportunities for Observations in Support of Indigenous Food Systems in the Coastal Alaskan Walrus Ecosystem

Polar Science and Glaciers Poster

Exploring Stability of Greenland's Peripheral Marine-Terminating Glaciers through Analysis of Automated Terminus Position Timeseries

Polar Science and Glaciers Poster

A New Global Topographic Map of Enceladus: Polar Signatures and Large Basin Distributions

Space, Space Weather and Planetary Science Oral

On the Taxonomy of Exoplanets using Transmission Color Analysis

Space, Space Weather and Planetary Science Poster

A New Model for the Origin of Chlorine on Enceladus

Space, Space Weather and Planetary Science Poster

MISSIONS NEED MAPS: TOWARDS A GLOBAL CRATER DATABASE FOR MARS AND THE MOON AT

ULTIMATE RESOLUTION.

Space, Space Weather and Planetary Science Poster

Methane emissions from coal mining are growing

5:30:00 Climate eLightning

The association between slot-filling injections and subauroral (STEVE) emissions

Space, Space Weather and Planetary Science Oral

Air Quality and Climate Impacts of United States Nuclear Power Plant Closures

7:00:00 Environmental Health 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

Environmental Health Oral

A SARS-CoV-2-Containing Aerosol Settling Time Model Supports the Significant Role of Indirect

Airborne Transmission

10:30:00 COVID-19 eLightning

Monday, December 7, 2020

Could road constructions be more disastrous than an earthquake in terms of landsliding?

10:30:00 Human Impacts and Environmental Justice eLightning

The Largest Gravity Changes Ever Recorded: Continuous Gravity Monitoring of the Onset of Kīlauea's

2018 Eruption

16:00:00 Natural Hazards Oral

Evidence of Ionospheric Perturbations from a Buried Chemical Explosion Captured Using High-Rate

GNSS Measurements

19:00:00 Human Impacts and Environmental Justice Oral

Increasing evaporation losses from global lakes between 1984 and 2018

Polar Science and Glaciers Oral

Tuesday, December 8, 2020

Rain-on-snow events can lead to an intensification of late summer hydrological drought in Great Lakes

watersheds

4:00:00 Climate Oral

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

Climate Poster

More Weather or More Water: What is Driving Increases in Extreme Precipitation?

Climate Poster

Observations and climate models confirm extreme precipitation events are happening more often and

the magnitude increases significantly

Climate Poster

Making Climate Action Count: Lessons learnt from engendering communities' resilience across East

Africa vulnerable populations and landscapes

Climate Poster

Associations among topography, snowmelt, and plant green-up phenology, revealed through a time-

<u>lapse camera network</u>

Climate Poster

Measurements of Volatile Organic Compounds in Boulder, Colorado, During the COVID-19 Lockdown

COVID-19 Poster

COVID-19 impacts on snow albedo in the Indus River Basin

COVID-19 Poster

Aerosols Reduction during the COVID-19 Pandemic Substantially Increased Diurnal Temperature

Range in China

COVID-19 Poster

Natural Hazards Poster

Using Lightning Data in the Quest for Real-time Detection of Wild Fires Using the ABI Instrument **Onboard GOES-16**

Democratizing Safety During an Earthquake: Multi-Disciplinary Spatial Optimization for Defining Evacuation Centers with Fair Access in L.A. County

Natural Hazards Poster

Wildfire response to changing daily temperature extremes in California's Sierra Nevada Poster Natural Hazards

HAWAIIAN FOUNTAINING: CHANGING SIZE AND SHAPE OF FALLING BOMBS Natural Hazards Poster

Recent temperature change on the Juneau Icefield, Alaska.

Natural Hazards

Polar Science and Glaciers Poster

Narratives of Conflict and Resilience: Understanding Structural Violence in an Arctic Community **Facing Climate Change**

5:30:00 Human Impacts and Environmental Justice Oral

Poster

Session Sta	rt (Pacific Standard Time)	Topic	Session Type
Tuesday, Dece	ember 8, 2020		
	_	ce: Cross-Scale Changes in Urban Activity Captured b	y NASA's Black
	Marble Product Suite	20117	
7:00:00		COVID-19	Oral
	Effects of drought-intensifie	ed tree mortality on wildfire behavior in Sierra Nevada	<u>forests</u>
		Natural Hazards	Oral
	Geospatial Analysis of Wildf	ire Coverage in Newspapers across the USA	
		Natural Hazards	Oral
	Permafrost region disturbar	nces in space and time: a pan-arctic perspective	
		Polar Science and Glaciers	Oral
	Survival of the Deepest? Pea Residence Time	at Depth as a Control on Peatland Hydraulic Structure	and Pore-water
10:30:00		Climate	eLightning
	Lightning Observations of th	ne Taal Eruption	
		Natural Hazards	Oral
		a major perturbation of the stratosphere and generate inferred from satellite observations	a smoke-charged
		Natural Hazards	Oral
	Weather, snow and ice: Hydi	rological and landscape changes in the Canadian Rock	<u>kies headwaters</u>
		Polar Science and Glaciers	Oral
	Examining the role of Fe-cyc	cling in microbial mat lithification and stromatolite abu	indance through
16:00:00		Earth's History, Interior and Life	Oral
	The Effect of Continental Lo	ocation on Climate of Synchronously Rotating Exoplar	<u>iets</u>
17:30:00		Space, Space Weather and Planetary Science	Oral
	Environmental factors and C	COVID-19: preliminary findings from China	
19:00:00		COVID-19	Oral
	·	orked and what did not. A 200-year record from 18th ments pertaining to semi-arid regions of peninsular Inc	
20:30:00		Climate	Oral
	The 2020 Edenville and San Flooding	ford, MI Dam Failures: Geomorphic Change in Respon	se to Catastrophic

Human Impacts and Environmental Justice

Human Impacts and Environmental Justice

The unequal distribution of natural resources: why geology matters

Wednesday, December 9, 2020

Oral

Oral

Water-induced Diamond Formation at the Earth's Core-Mantle Boundary

Earth's History, Interior and Life

Poster

Wednesday,	December	9.	2020
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<u>Holocene Regional Ice History of Southwest Greenland: Driver of Viking Out-Migration?</u>

4:00:00 Earth's History, Interior and Life Poster

Climate Change Increases Trapped Populations: When Migration Cannot Be Used as an Adaptation

Solution

Human Impacts and Environmental Justice Oral

Increasing trend in atmosphere helium from 1975 to 2020

Human Impacts and Environmental Justice Poster

<u>Modeling and Sharing UNSDG Indicator Data for Poverty, Food, Water, and Energy in Relation to</u>

Climate Change

Human Impacts and Environmental Justice Poster

Heavy Metal(loid) Contamination of Medicinal Plants: Implications for Public Health of Indigenous

People.

Human Impacts and Environmental Justice Poster

<u>Identification of earthquakes and anthropogenic events around the southern Great Lakes</u>

Natural Hazards Poster

Education and Healthcare Networks Resilience as a Social Stability Index

Natural Hazards Poster

How Alaska's Barry Arm Can Help Us Prepare for Climate Change Hazards

Natural Hazards Poster

Glacier Hazards in the Himalaya-Karakoram

Polar Science and Glaciers Poster

Assessing Rock Wall Permafrost Changes in Colorado's Front Range and Their Implications for Rock

<u>Fall</u>

Polar Science and Glaciers Poster

Illusory Stability of Marine-Terminating Glaciers at Bedrock Peaks

Polar Science and Glaciers Poster

Basal Conditions Underneath Thwaites Glacier Using Ice Penetrating Radar

Polar Science and Glaciers Poster

Mapping the Distribution and Global Budget of Impact-Derived Sediment on Venus

Space, Space Weather and Planetary Science Poster

Indubitable and Dubious Climate Induced Migrations: An examination of the narratives, and key

historical determinants

5:30:00 Climate Oral

Impact of COVID19 on Disease Surveillance and Reporting

COVID-19 eLightning

Agricultural stability explains the location choices of internally displaced people (IDPs) during the Svrian Civil War

5:30:00 Human Impacts and Environmental Justice Oral

Mapping landscapes of the displaced: Automating land cover change detection with multi-sensor satellite time series at internally displaced people (IDPs) settlements in Ethiopia

Human Impacts and Environmental Justice Oral

Disentangling the drivers of regional migration in West Africa: The impact of food (in)security on migration

Human Impacts and Environmental Justice Oral

A Glacial Origin for the Extensive, Linear Inverted Features Within Gale Crater

Space, Space Weather and Planetary Science eLightning

The Combined Impact of Heat-Humidity Extremes on Mortality Risks in Major Cities in the Sun Belt of the United States

7:00:00 Environmental Health eLightning

<u>Severe weather-related deaths, stress, and incidence of cardiovascular ailments in U.S. community-based samples after Hurricanes Harvey, Irma, and Michael</u>

Environmental Health eLightning

New records of historical tsunamis obtained from Costa Rican newspapers

Natural Hazards Oral

Unexpected enhancement of saltation at Martian-like pressures

Space, Space Weather and Planetary Science Oral

Tesserae on Venus may preserve evidence of fluvial erosion

Space, Space Weather and Planetary Science Oral

A Plan For Detecting Evidence of Hadean Life

16:00:00 Earth's History, Interior and Life Oral

Ikaaġvik Sikukun: Bridging the Scientific and Indigenous Communities to Study Sea Ice Change in

Arctic Alaska

Polar Science and Glaciers Oral

Indian Pipelines: science-based expertise as tools of liberation and oppression in Native America

17:30:00 Human Impacts and Environmental Justice Oral

<u>High-speed video observations of space stems and leaders in natural negative cloud-to-ground</u>

lightning

Space, Space Weather and Planetary Science eLightning

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

Space, Space Weather and Planetary Science eLightning

Wednesday, December 9, 2020

Collision of downward negative leader branches: Why does this happen?

17:30:00 Space, Space Weather and Planetary Science eLightning

Ozone Changes Over the United States Due to COVID-19

COVID-19 19:00:00 Oral

Physical Records of Ocean Acidification in the Geological Record

Earth's History, Interior and Life Oral

CO2 Concentrations Reduction Influenced by Traffic in Beijing due to COVID-19

COVID-19 20:30:00 Oral

NOx reductions during COVID-19: Has ozone chemistry in the Los Angeles area become NOx-limited?

COVID-19

Quantifying succession and ecosystem service recovery in California's altered wildfire regime

Natural Hazards Oral

Thursday, December 10, 2020

Exploration of Global Spatiotemporal Changes of Fall Foliage Coloration in Deciduous Forests and

Shrubs Using VIIRS Phenology Product

4:00:00 Climate Poster

Fabrication of Reactive Rocks with 3D Printing

Climate Poster

Atmospheric rivers in the PETM: Importance for cool season precipitation

Climate Poster

Effect of COVID-19 state-wide stay-at-home phase on the ambient Volatile Organic Compound

concentrations in Southern California communities.

COVID-19 Poster

Impacts of Coronavirus-driven Reduction in Aerosols on Precipitation in the Western United States

COVID-19 Poster

Impact of Air Traffic Reductions during the COVID-19 Pandemic on Aircraft-induced Clouds and their

Radiative Effects

COVID-19 Poster

The effect of COVID-19 on sales revenue in Seoul, South Korea: A Spatial Panel Approach

COVID-19 Poster

Impact of COVID-19 Global Shutdown on Earth's Radiation Budget

COVID-19 Poster

Rise of the Colorado Plateau and Southern Rocky Mountain Region: A Synthesis of Paleoelevation

Constraints and a Path Forward Using Temperature-Based Elevation Proxies

Earth's History, Interior and Life Oral

Thursday, December 10, 2020			
	New Discovery of Pliocene Tidal Deposits Near the Crest of the Central Baja California Key Constraint on Vertical Crustal Motions and Genetic Divergence	ornia Peninsula: A	
4:00:00	Earth's History, Interior and Life	Oral	
	Magma Storage System and Hidden Hotspot Track of the Emeishan Large Igneous Impact on the Unusual Timing of the Capitanian Mass Extinction	s Province and its	
	Earth's History, Interior and Life	Poster	
	Can the Cenozoic marine micropaleontological record be used to predict extinction	on?	
	Earth's History, Interior and Life	Poster	
	A Quantitative Paleoclimatic History of the Southern Great Basin Since the Middle	<u>e Miocene</u>	
	Earth's History, Interior and Life	Poster	
	Fire response to changes in hydroclimate and vegetation in Pleistocene East Afric	<u>ca</u>	
	Earth's History, Interior and Life	Poster	
	East African Climate Variability Through a Major Faunal Transition at 550 to 250 l Evidence from Organic Geochemical Proxies	ka: Preliminary	
	Earth's History, Interior and Life	Poster	
	A New Insight of the Sahara Formation and Paleoclimate Evidence		
	Earth's History, Interior and Life	Poster	
	Mercury exposure in fish from US national parks		
	Environmental Health	Poster	
	Marine wild-capture fisheries after nuclear war		
	Human Impacts and Environmental Justice	Poster	
	<u>U-turn Needed to Feed 10 Billion People Within Planetary Boundaries: Insights from based Assessment</u>	om a Global Model-	
	Human Impacts and Environmental Justice	Poster	
	Charting Justice for Refugee Relocation Under Extreme Climate Change		
	Human Impacts and Environmental Justice	Poster	
	Burnt Dinner: Greenhouse Gas and VOC Emissions from Swine Carcass Open-Pit Method	Burning Disposal	
	Human Impacts and Environmental Justice	Poster	
	Alternative methods for reducing sediment delivery from skid trails used for post-	-fire logging	
	Human Impacts and Environmental Justice	Poster	
	Repeated wildfires in a Sierra Nevada watershed cause limited post-fire erosion		
	Natural Hazards	Oral	
	Controls on Post-fire Debris Flow Grain Sizes Across the Intermountain West		
	Natural Hazards	Poster	
	Natural Hazards	Poster	

A Conceptual Framework for Emergency Food and Water Requirements in a Disaster and Case Study for the HavWired Earthquake Scenario

4:00:00 Natural Hazards Poster

An Experimental Model of Unconfined Bubbly Lava Flows

Natural Hazards Poster

Thermal Forcing of Near-Surface Temperatures by Martian Water Ice Clouds

Space, Space Weather and Planetary Science Poster

Asteroid Thermal Evolution with Fragmentation and Reassembly into a Rubble Pile

Space, Space Weather and Planetary Science Poster

Listening for a Landing: the seismic detectability of Mars 2020's arrival by the InSight lander

5:30:00 Space, Space Weather and Planetary Science eLightning

Minimal Climate Impacts from Short-lived Climate Forcers Following Emission Reductions Related to

the COVID-19 Pandemic.

7:00:00 COVID-19 Oral

PFAS Distribution in Contaminated Soils and Impact on Rhizosphere and Plant Microbiota

Environmental Health Oral

Heat and Health: Using physiological evidence to build resilience to a warming planet

Environmental Health Oral

New HiRISE Observations of Gale Crater Rim Surfaces – Evidence for Glacial Processes

Space, Space Weather and Planetary Science eLightning

Assessing COVID-19 environmental impacts through remote sensing

10:30:00 COVID-19 Oral

Animal Occurrence Probability and Power Outage Risk in ISO New England

Earth's History, Interior and Life Oral

Dissecting a Zombie: Shallow Volcanic Structure Revealed by Multiple Geophysical Data Sets at

Uturuncu Volcano, Bolivia

Natural Hazards Oral

Squids, Snails, and Shellfish: How Oxygen Affected Molluscan Body Size in the Ordovician

16:00:00 Earth's History, Interior and Life Poster

Tsunami hazard in Cascadia from M7--9 earthquakes: Most hazardous segments of the rupture

Natural Hazards Oral

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 Climate Oral

Thursday, December 10, 2020

How Safe are United States Public Water Supply Systems?

20:30:00 Environmental Health Oral

Friday, December 11, 2020

Integrating in situ and satellite-based observations to unravel a mass mortality event of mussel beds in Patagonia, Argentina

4:00:00 Climate Poster

Northern Great Barrier Reef coral documents seasonal ocean temperature, salinity, productivity and runoff from the last 250 years

Climate Poster

<u>Multidecadal trends and interactions in land disturbance regimes across California from time series</u> remote sensing

Climate Poster

Maximum latewood density records of Great Basin Bristlecone pine (Pinus Longaeva) in the White Mountains, California

Climate Poster

Tree Rings Reveal Multi-century Snowpack Dynamics of the Cascade Range, USA

Climate Poster

An inter-comparison of tourism climate indices in the Southern United States: A national park case study

Climate Poster

Warmer and More Volatile: Summertime Temperature Variance Increases Under Climate Change

Climate Poster

<u>Lessons from Small Businesses for Natural Disaster Resilience Planning and Recovery During the COVID-19 Pandemic</u>

COVID-19 Oral

Assessing The Expansion of Beaver in Northeastern Coastal Watersheds Using High-Resolution Remotely-Sensed Data and the Implications for Biogeochemical Fluxes

Earth's History, Interior and Life Poster

Morphology of a new system of glaciovolcanic caves—Mount St. Helens, Washington, USA

Earth's History, Interior and Life Poster

Abrupt climate change, hurricanes, and the rise and fall of a Taíno village

Earth's History, Interior and Life Poster

Another Surprising Turn in the Global Emission of CFC-11

Environmental Health Oral

Deriving a global infant mortality pollution response curve for developing countries

Environmental Health Poster

Kamchatka, Russia

Friday, December 11, 2020 Risky development: increasing exposure to natural hazards in the United States 4:00:00 Natural Hazards Poster Extreme Discharges and Thresholds of Boulder Mobility in Steep Mountainous Streams on Maui, Hawai'i Natural Hazards Poster
4:00:00 Natural Hazards Poster Extreme Discharges and Thresholds of Boulder Mobility in Steep Mountainous Streams on Maui, Hawai'i
Extreme Discharges and Thresholds of Boulder Mobility in Steep Mountainous Streams on Maui, Hawai'i
<u>Hawai'i</u>
Natural Hazards Poster
Spatial Analysis of Volcanic Lightning within Eruption Clouds
Natural Hazards Poster
Spatiotemporal Evolution of Microseismicity and Repeating Earthquakes in Haiti
Natural Hazards Poster
Exploring of the conditions leading to volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning: Results of a field study at Sakurajima volcanic lightning ligh
Natural Hazards Poster
Sea Ice Deformation at MOSAiC
Polar Science and Glaciers Oral
Ancient DNA in lake sediment reveals High Arctic greening during the Last Interglacial
Polar Science and Glaciers Oral
Climate and Environmental Changes and its Impact on the Scythian Frozen Toms of the Altai Mountains, South Siberia, Russia.
Polar Science and Glaciers Poster
Impact of permafrost factor in ecological disasters due to spills of fuel and lubricants in the cryolithozone (with Norilsk region as an example)
Polar Science and Glaciers Poster
A numerical study of magmatism and mantle convection in Mars: Implications for its crust, surface environment, and magnetic field
Space, Space Weather and Planetary Science Oral
The return of the Eastern European carbon sink
5:30:00 Climate Oral
Identification of Opportunities for International Cooperation over Proposed Series of Large Freshwater Reservoirs to Capture the Melting Glaciers in the Hindu Kush Himalayan (HKH) maount
Human Impacts and Environmental Justice eLightning
Properties of Change: Politics and Land Ownership in Northern Alaskan Social-Environmental Syst
Human Impacts and Environmental Justice Oral
Volcanic hazard from Late Pleistocene-Holocene monogenetic volcanism around the capital city of

Natural Hazards

Oral

Session Sta	rt (Pacific Standard Time)	Topic	Session Type
Friday, Decem	nber 11, 2020		
	Fugitive methane from aban	doned oil and gas infrastructure	
7:00:00		Climate	Oral
	Methane and Nitrogen Oxide Mexico	es Emissions from the Offshore Oil and Gas Supply Ch	nain in the U.S. Gulf o
		Climate	Oral
		age records to map swine concentrated animal feedin	g operations and
	estimate their historical imp	act on nutrient inputs in the NC Coastal Plain	
		Human Impacts and Environmental Justice	Oral
	Chaos Blocks on Europa: An	Analysis of Orientation and Size Distributions	
		Space, Space Weather and Planetary Science	eLightning
	Climate Sensitivity Increase	s Under Higher CO2 Levels Due to Feedback Tempera	ature Dependence
10:30:00		Climate	Oral
	Air Quality Assessment in Sa and pollutants	ão Paulo, Brazil during Covid-19 pandemic: links betwe	en isolation rates
16:00:00		COVID-19	eLightning
	Ecoacoustic recordings cap	ture animal population and community changes over t	<u>:ime</u>
		Earth's History, Interior and Life	Oral
		space: Combining satellite remote sensing and in situ on ovement ecology in relation to ocean salinity and other	
		Earth's History, Interior and Life	Oral
	Cardiorespiratory health imp	pacts of wildfire smoke in Alaska	
		Environmental Health	eLightning
	The Silent Sounds of Tornac	loes and Their Potential Fluid Mechanism	
17:30:00		Natural Hazards	Oral

17:30:00 Natural Hazards 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 Climate Oral

Regional shifts in paleohurricane activity over the past 1500 years reconstructed from blue hole

sediment records in the Bahama Archipelago

Climate Oral

Concentration of Global Fishing Effort with Climate Change

20:30:00 Climate Oral

Monday, December 14, 2020

Connections of climate change and variability to the 2019/20 Black Summer megafires in southeast

<u>Australia</u>

4:00:00 Climate Oral

Capping a swine farm wastewater lagoon: preliminary evaluation of water quality impacts in eastern

Environmental Health

North Carolina

Poster

Polar Science and Glaciers

Climate

7:00:00

The Impacts of Rapid Climate Change on Mass Movements in Denali National Park, Alaska

Oral

Poster

Monday, December 14, 2020

Autonomous Exploration of Earth's Largest Subterranean Lake and Implications for Robotic Lunar and

Mars Lava Tube Exploration

7:00:00 Space, Space Weather and Planetary Science 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 Earth's History, Interior and Life Oral

Testing Australian megafaunal avian eggshells for 230Th/U burial dating

Earth's History, Interior and Life Oral

Individual Storm Event Influence on Seasonal Snow Depth Distribution in Complex Mountain Terrain

Natural Hazards Oral

<u>Trends in Regional Large Magnitude Snow Avalanche Occurrence and Associated Climate Patterns in</u> the U.S. Northern Rocky Mountains

Natural Hazards Oral

CONSTRAINTS ON THE BIOPERSISTENCE OF OLIVINE PARTICULATES FROM EXPERIMENTAL DISSOLUTION IN SIMULATED LUNG AND GASTRIC FLUID

Space, Space Weather and Planetary Science eLightning

An 18-Year Retrospective Analysis of West Nile Virus Infection in Culex Mosquitoes of the Midwestern United States

10:00:00 Environmental Health eLightning

Reproducibility, Scientific Integrity, and Public Engagement in the Age of Digital Misinformation and

COVID-19

11:30:00 COVID-19 Oral

Investigating the Possibility of Cascading Lake Drainage in the Pakitsoq Region of Western Greenland using an Analytical Ice-Flow Model

Polar Science and Glaciers Oral

Record surface meltwater ponding on the Northern George VI Ice Shelf, Antarctic Peninsula, during the

2019/2020 melt season

Polar Science and Glaciers Oral

<u>Understanding the Impacts of Climate Change on "Billion-dollar Disaster" Precipitation Events in the</u>

United States

16:00:00 Climate Oral

Concurrent Disasters in a Changing Climate: How Science can Guide Climate-Resilient Investments in

the Face of Uncertainty

COVID-19 Oral

Younger Dryas cooling began with a series of eruptions in Iceland followed by an impact

Earth's History, Interior and Life Oral

Monday, December 14, 2020

Geometry of the eastern Thwaites ice shelf cavity and implications for continued grounding zone

<u>retreat</u>

17:30:00 Polar Science and Glaciers eLightning

Radiometric calibration and analysis of radar sounding observations of ice-sheet subsurface

conditions from archival film records

Polar Science and Glaciers eLightning

A tectonically active early Earth driven by the tidal recession of the Moon

19:00:00 Earth's History, Interior and Life Oral

Concentrated animal feeding operation liquid manure application patterns: Insights from remote

sensing

20:30:00 Environmental Health Oral

Infrasound Generation from the 2017 DPRK Underground Nuclear Explosion

Human Impacts and Environmental Justice Oral

Tuesday, December 15, 2020

Topographical patterns of tropical forest loss in the early 21st century

4:00:00 Climate Poster

Soil moisture-driven increases in hot and dry days in the American West

Climate Poster

Activating green infrastructure design as a planetary green security system: Comparing approaches of landscape care to advance sustainability, resilience, multifunctionality, and ecosystem services

Climate Poster

Increased Risk of Cold Damage to Grapevines in spite of Warmer Temperatures: Importance of Considering Winter Season Dynamics.

Climate Poster

Now we're cooking: How do activities in the home impact exposure?

COVID-19 Poster

Compound Extreme Heat and COVID-19 Risks in the United States

COVID-19 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

Earth's History, Interior and Life Poster

Wave and current controls on the formation and steady-state maintenance of deep reef flats on atoll

rims

Earth's History, Interior and Life Poster

The strength of the Earth's magnetic field from Pre-Pottery Neolithic Jordan

Earth's History, Interior and Life Poster

Tuesday.	December	15.	2020
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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

4:00:00

Human Impacts and Environmental Justice

Poster

Coastal Flooding Today, Tomorrow, and the Next Ten Years in East Coast U.S. Cities

Natural Hazards

Poster

Severe Drought and Locust Outbreak in China in 1368-1911 using REACHES Data Sets

Natural Hazards

Poster

Complex bathymetry beneath Thwaites and Dotson Ice Shelves revealed by active-source seismic surveys

Polar Science and Glaciers

Oral

The Pathways and Heat Transport of Circumpolar Deep Water into the Thwaites and the Pine Island Glaciers. West Antarctica

Polar Science and Glaciers

Poster

Inverting surface-elevation data for basal topography beneath Thwaites Glacier, West Antarctica

Polar Science and Glaciers

Poster

Glacier Disappearance in the High Alpine of Oregon, U.S.A.

Polar Science and Glaciers

Poster

Molecular Solids on Titan: New Insights into Hydrogen Cyanide and Butadiene

Space, Space Weather and Planetary Science

Poster

<u>Process Oriented Diagnostics for High Frequency Impact Events: Bringing the Weather Scale to Climate</u>

5:30:00

Climate

Oral

Late Quaternary Climate Change and Human Presence in the Eastern Sahara: Evidence for Paleoenvironments associated with the Paleolithic, Mesolithic and Neolithic in Southern Egypt

Earth's History. Interior and Life

eLightning

Hunting for Ice Age Refugia: A 10Be-Based Deglacial Chronology from the Northern Alexander Archipelago, Alaska

Earth's History, Interior and Life

eLightning

<u>Dynamic Global Hunter-gatherer Model Reveals Key Role of Seasonality in Population Density via Diet Composition</u>

Earth's History, Interior and Life

eLightning

Climate as a driver for Hominin Evolution

Earth's History, Interior and Life

eLightning

Sedimentary ancient DNA and molecular evidence for pre-Norse occupation of the Faroe Islands

Earth's History, Interior and Life

eLightning

Tuesday, Dece	ember 15, 2020	
	Human settlements and climatic changes in Remote Oceania over the last mille	nnium: Multi-proxy
	records from Vanuatu	
5:30:00	Earth's History, Interior and Life	eLightning
	New evidence for climate and erosion history in Gale crater, Mars, from Curiosit Greenheugh pediment	y's ascent onto the
	Space, Space Weather and Planetary Science	Oral
7:00:00	Excess Asthma Events from Future Wildfires in the Western US: A Health Impac Environmental Health	ct Assessment eLightning
7.100.00	When smoke comes to town: a long-term health impact assessment of acute ar	
	smoke exposure	id chronic whathe
	Environmental Health	eLightning
	Beavers engineer vast arctic tundra lowlands of Alaska	
	Polar Science and Glaciers	Oral
	Hand hygiene in a changing water world: ensuring "water and sanitation for all" in pandemic	n the context of a
10:00:00	Environmental Health	Oral
	AgMIP Food Shock Protocols: COVID-19 and Climate Change	
11:30:00	COVID-19	Oral
	Microplastic Distribution in the Gulf of Mexico	
	Human Impacts and Environmental Justice	eLightning
	Investigating the simultaneous occurrence of STEVEs and SAR arcs using all-sk and citizen scientist data	xy imagers, satellites,
	Space, Space Weather and Planetary Science	Oral
	The Green Emissions of STEVE: Optical Evidence of an Energy Cascade	
	Space, Space Weather and Planetary Science	Oral
	New Observations Show the Earliest Stages of Titan's Radial Labyrinth Terrain	<u>Evolution</u>
	Space, Space Weather and Planetary Science	Oral
	The Origin of Modern Atolls: Challenging Darwin's Deeply Ingrained Theory	
16:00:00	Earth's History, Interior and Life	Oral
	A Nitrogen-Rich Atmosphere on Ancient Mars Indicated by Isotopic Evolution.	
17:30:00	Space, Space Weather and Planetary Science	Oral
	Developing a forecasting model of droughts' impacts on food security for finance	cial decision-making
19:00:00	Climate	Oral
	Ocean Bottom Seismometers for Passive Acoustic Monitoring of Baleen Whale	<u>es</u>
	Earth's History, Interior and Life	Oral

Tuesday, December 15, 2020

The fidelity of elemental concentrations and mass-dependent (δ 180, δ 13C, δ 15N, δ 2H, δ 34S, δ 42/44Ca) and radiogenic isotopic compositions (87Sr/86Sr, Pb isotopes) in human hair in seawater and fresh water and implications for forensics, anthropology, and e

20:30:00 Environmental Health Oral

<u>Diverse studies document intricate relationships among volcanoes, honey, salmon, and Indigenous</u> peoples as part of a complex geochemical puzzle in the Pacific Northwest of North America

Human Impacts and Environmental Justice Oral

<u>UK Space Agency's METEOR project: Making the case for Earth Observation (EO) data for insurance in developing countries</u>

Natural Hazards Oral

Wednesday, December 16, 2020

Climate-driven limits to future carbon storage in California's wildland ecosystems

4:00:00 Climate Poster

Catching Fire: Geochemical evidence suggests hominin-controlled fire during the Pleistocene in the Turkana Basin, Kenya

Earth's History, Interior and Life Poster

SAR-based detection of buried ruins: present possibility and uncertainties

Earth's History, Interior and Life Poster

Quantifying post-glacial biotic velocities of tree taxa from fossil pollen records: can the trees keep up?

Earth's History, Interior and Life Poster

Source-specific Contributions to Racial-Ethnic Disparities in Ambient Fine Particulate Matter Exposure in the United States

Human Impacts and Environmental Justice Poster

Highly variable lead (Pb) air concentrations associated with fire events in California

Natural Hazards Poster

High Resolution Field Observations of Meteotsunamis off the Coast of Louisiana, USA

Natural Hazards Poster

North American Wildfires are Changing the Atmospheric Carbon Monoxide Seasonal Cycle

Natural Hazards Poster

Beam Theory Applied to Slab Avalanche Release

Natural Hazards Poster

Fire and climate in the eastern Siberia over the past 500 years (1500-2010 CE)

Polar Science and Glaciers Poster

Geological Template of the Thwaites Glacier Catchment

Polar Science and Glaciers Poster

16:00:00

Human Impacts and Environmental Justice

eLightning

4:00:00 Climate eLightning

Long-lived smoke clouds from the Australian megafires measured over Lauder, New Zealand

Natural Hazards eLightning

Multi-scale Simulations of Massive Stratospheric Smoke Injected by the 2017 British Columbia

PyroCbs

Natural Hazards

eLightning

Australian wildfires inject a volcanic-scale smoke plume into the stratosphere

Natural Hazards eLightning

Thursday, December 17, 2020

The air quality trade-offs of wildfire and prescribed burning

5:30:00 Environmental Health Oral

Forest degradation in the Brazilian arc of deforestation: Land cover classification and biomass estimation using very high-resolution satellite images

Human Impacts and Environmental Justice Oral

Nuisance flooding due to groundwater emergence in coastal urban areas

Natural Hazards Oral

Integrating Solar and Wind Power to Replace Coal in Texas

7:00:00 Climate eLightning

<u>Distributed Energy Resources for Disaster Resilience to Hurricanes in a Changing Climate</u>

Natural Hazards eLightning

The 2020 Siberian Heat Wave

Polar Science and Glaciers Oral