Fall Meeting 2020 press events

AGU will hold three types of press events at Fall Meeting 2020:

- **Press conferences:** 45-minute panel presentations sharing breaking research news via the Zoom Webinar platform
- **Press briefings:** 45-minute panel presentations providing updates on current topical research or future missions or projects via the Zoom Webinar platform
- Media roundtables: 45-minute Q&A sessions that provide background on topics in the news and upcoming projects in an informal, discussion-style setting with reporters encouraged to ask questions at any time via the Zoom Meeting platform.

Press conferences and briefings will take place through Zoom Webinar, Monday through Friday, 7 to 11 December, at 11:00 am and 1:00 pm U.S. Eastern Time (UTC-5). Press conferences and briefings will be recorded and archived on <u>AGU's YouTube channel</u>. Immediately following the press conference or briefing, AGU will open a "discussion room" for additional questions and discussion via Zoom.

Media roundtables will take place through Zoom Meetings, Monday through Thursday, 14 to 17 December, at 11:00 am and 1:00 pm U.S. Eastern Time (UTC-5).

Slides and other materials for press events are available in the **Fall Meeting Media Center** website. Descriptions of each press event are on the following pages. Links to join each event are on the **Fall Meeting Media Center** and in the online meeting virtual platform.

Note: Press events are subject to change before and during Fall Meeting. Panelists may be added or dropped and event titles or emphases may change.

	Monday, 7 December	Tuesday, 8 December	Wednesday, 9 December	Thursday, 10 December	Friday, 11 December
11:00 am Eastern Time	Briefing: Drought 2021	Press Conference: 2020 Arctic Report Card	Press Conference: Unequal impacts of heat, pollution and climate change	Briefing: Solar Orbiter science begins	Press Conference: Latest NASA Juno Mission science results
1:00 pm Eastern Time	Press Conference: Impacts of covid-19 on people and the environment		Briefing: Listening to a quieter ocean in the pandemic	Briefing: Human Occupied Vehicle Alvin goes to greater extremes	Press Conference: Wildfire-driven thunderstorms and their role in the climate system

Schedule: 7-11 December

Schedule: 14-17 December

	Monday, 14 December	Tuesday, 15 December	Wednesday, 16 December	Thursday, 17 December
11:00 am Eastern Time	Roundtable: The pandemic and implications for the world food supply	Roundtable: MOSAiC Arctic expedition: After the ice	Roundtable: What will we learn from Solar Cycle 25?	Roundtable: Health of mountain water tower systems around the world
1:00 pm Eastern Time	Roundtable: Life in the clouds of Venus? Lessons from studying life in Earth's atmosphere	Roundtable: Year of the asteroids! Missions to the building blocks of our solar system		Roundtable: Powering a renewable future through lithium extraction from unconventional sources

Descriptions

Briefing: Drought 2021 Monday, 7 December, 11:00 am Eastern Time

With 72 million Americans and 47% of the continental United States now affected by moderate (or worse) drought that shows no sign of letting up, this briefing will provide reporters with up-to-date information on drought status and impacts. Panelists will also debut a new drought website, a powerful informational resource that will help reporters enrich their coverage of drought issues.

Panelists

Adam Lang, NOAA's National Integrated Drought Information System, United States Kelsey Satalino, NOAA's National Integrated Drought Information System, United States Mark Svoboda, National Drought Mitigation Center, University of Nebraska Lincoln, United States

Press Conference: Impacts of covid-19 on people and the environment, as seen from space

Monday, 7 December, 1:00 pm Eastern Time

The covid-19 pandemic has impacted human lives in tangible, multifaceted ways. This panel will discuss how remote sensing data is beginning to show some of the less tangible but still important ways the pandemic is affecting both people and the environment. After several months of the pandemic, scientists now have enough remote sensing data to observe

trends emerging due to covid-19 as well as a more nuanced understanding of the pandemic's effects. Each member of the panel will home in on a specific example: deforestation, atmospheric pollution and inequality, urban light and snow albedo.

Panelists

Susan Anenberg, George Washington University, United States Ned Bair, University of California Santa Barbara/Earth Research Institute, United States Timothy Newman, US Geological Survey, United States Nima Pahlevan, NASA Goddard Space Flight Center, United States

Scientific presentations

<u>C011-0002, U003-01, U012-05, U012-06</u>

Press Conference: 2020 Arctic Report Card

Tuesday, 8 December, 11:00 am Eastern Time

Now in its 15th year, the NOAA-led Arctic Report Card has become the authoritative, annual volume of peer-reviewed environmental observations and analysis on the Arctic, a region of the world that is undergoing dramatic and disruptive change, with global consequences. This year the panel authors will present highlights of startling developments observed in the Arctic in 2020, including trends in Bowhead whale populations and wildland fire at high latitudes. A special retrospective on 15 years of Arctic change will be also be presented.

Panelists

Retired Navy Rear Adm. Tim Gallaudet, Assistant Secretary of Commerce for Oceans and Atmosphere, United States

JC Craig, Dept. of Wildlife, Northern Borough, Alaska, United States Jackie Richter-Menge, US Arctic Research Commission, United States Matthew Shupe, NOAA/CIRES Physical Sciences Laboratory, United States Rick Thoman, International Arctic Research Center, United States Alison York, University of Alaska Fairbanks, United States

Scientific presentations

<u>A168-06, C044-0003, SY043-08</u>

Press Conference: Unequal impacts of heat, pollution and climate change

Wednesday, 9 December, 11:00 am Eastern Time

The health consequences of heat, pollution and a changing climate fall harder on some communities than others. This panel discussion includes a few of the voices from the many Fall Meeting presentations on the unequal effects of everything from covid-19 to urban heat.

Panelists Susanne Benz, University of California San Diego, United States Allison Grant, University of Mary Washington, United States Angel Hsu, University of North Carolina at Chapel Hill, United States

Scientific presentations A182-0019, GC056-0011

Briefing: Listening to a quieter ocean in the pandemic to track impacts on marine life

Wednesday, 9 December, 1:00 pm Eastern Time

The covid-19 pandemic has tragically taken the lives of more than a million people and severely weakened economies around the world. This has resulted in far less ship traffic, and this slowdown of maritime commerce in once-busy ports has opened a rare window into how a relatively quiet ocean may affect marine life.

Stitching together a network of existing underwater listening devices, scientists will discuss how reduced shipping, fishing, tourism and ocean development may be affecting marine mammals and other marine life. In this briefing, join scientists from NOAA, the National Park Service and academia to learn about the research and hear audio of mammals conversing in a quieter ocean.

Panelists

Bob Dziak, NOAA Pacific Marine Environmental Laboratory, United States **Christine Gabriele,** Glacier Bay National Park and Preserve, United States **Jason Gedamke,** NOAA Fisheries Ocean Acoustics Program, United States **Leila Hatch,** Stellwagen Bank National Marine Sanctuary, United States **Ana Sirovic,** Texas A&M Galveston, United States

Briefing: Solar Orbiter science begins

Thursday, 10 December, 11:00 am Eastern Time

The Solar Orbiter mission, which will take the closest-ever images of the Sun and observe the Sun's polar regions like never before, has begun to produce results. In this briefing, Solar Orbiter scientists will give a first taste of the data they have collected so far, including a closer look at the discovery of 'campfires' (mini solar flares) and look towards the first of many Venus flybys — on 27 December — which will enable scientists to eventually see the Sun's poles, essential for understanding the Sun's activity cycle.

Panelists

Frédéric Auchère, Institut d'Astrophysique Spatiale, France **Tim Horbury,** Imperial College London, United Kingdom **Daniel Müller,** European Space Agency, The Netherlands **Teresa Nieves-Chinchilla,** NASA Goddard Space Flight Center, United States

Briefing: Overhaul to take Human Occupied Vehicle Alvin to greater extremes

Thursday, 10 December, 1:00 pm Eastern Time

This spring the Alvin sub began the final phase of an overhaul that will allow it to dive to 6,500 meters. Previously rated to dive to 4,500 meters, the increased depth range will give scientists the ability to explore 98 percent of the ocean floor and study the abyssal region—one of the least-understood areas of the deep sea and home to high-temperature hydrothermal vents, submarine volcanoes, subduction trenches, mineral resources and more. In this roundtable, Alvin scientists will discuss the upgrades and what new science questions they hope to answer once Alvin is ready to dive.

Panelists

Chad King, Monterey Bay National Marine Sanctuary, United States **Anna-Louise Reysenbach,** Portland State University, United States **Adam Soule,** Woods Hole Oceanographic Institution, United States **Bruce Strickrott,** Woods Hole Oceanographic Institution, United States

Press Conference: 29 and counting: Latest NASA Juno Mission science results

Friday, 11 December, 11:00 am Eastern Time

NASA's Juno mission has provided the most detailed in-depth scrutiny of our solar system's largest planetary inhabitant in history. By the time of this media briefing, the solar-powered spacecraft will have recently completed an unprecedented 29th close-up science pass of Jupiter. This briefing will include the latest findings on the gas giant's polar cyclones, magnetosphere, Great Red Spot, atmosphere and interior, as well as highlight the scientific – as well as beatific – contributions of the mission's citizen scientists.

Panelists

Heidi Becker, NASA Jet Propulsion Laboratory, United States **Scott Bolton,** Southwest Research Institute, United States **Candice Hansen,** Planetary Science Institute, United States **Steve Levin,** NASA Jet Propulsion Laboratory, United States

Scientific presentations

<u>A076-05, P005-0002, P005-0007, SM014-07</u>

Press Conference: Wildfire-driven thunderstorms and their role in the climate system

Friday, 11 December, 1:00 pm Eastern Time

In this press conference, researchers discuss the fascinating phenomenon of pyrocumulonimbus clouds funneling smoke like a chimney from Earth's wildfires to high altitudes where it remains for extended periods. Results will include the most detailed information to date on the Australian New Year 2020 wildfire-driven thunderstorm activity and provide a unique perspective on how the Australian events compare with other large wildfire and pyrocumulonimbus events observed worldwide.

Panelists

Mike Fromm, U.S. Naval Research Laboratory, United States **David Peterson,** U.S. Naval Research Laboratory, United States **Laura Thapa,** University of California Los Angeles, United States

Scientific presentations

<u>A049-01, A234-09, A251-02, A251-11</u>

Roundtable: The pandemic and implications for the world food supply Monday, 14 December, 11:00 am Eastern Time

As the pandemic drags on, food production, supply chains and consumer income have been disrupted, and hunger is rising in many regions. This roundtable will discuss the effects so far and look into what might happen during this pandemic or future ones, especially if events are compounded by climate-related factors including floods, heat waves or droughts, as well as transport bottlenecks or trade wars. It will also look at ways to mitigate resulting potential famines.

Panelists

Iman Haqiqi, Purdue University, United States Michael Puma, Earth Institute, Columbia University, United States Cynthia Rosenzweig, Earth Institute, Columbia University, United States John Valbo-Jorgenson, United Nations Food and Agriculture Organization, Italy

Scientific presentations

GC108-01, GH023-03, GH023-05, GH023-07

Roundtable: Life in the clouds of Venus? Lessons from studying life in Earth's atmosphere

Monday, 14 December, 1:00 pm Eastern Time

In this roundtable, biologists who study life in the Earth's atmosphere will discuss how airborne microorganisms survive and reproduce in the unique, dynamic conditions of

Earth's troposphere and how their research could apply to Venus. What factors need to be learned about Venus and its past and present environments to help determine whether or not it ever had or has life in its clouds? Approaches such as these can help shape future observations of Venus and provide a way to interpret the data that's retrieved – whether that's an actual sample or a view from a telescope.

Panelists

Kevin Dillon, Rutgers University, United States
Diane Gentry, NASA Ames Research Center, United States
Noam Izenberg, Johns Hopkins University Applied Physics Laboratory, United States
David J. Smith, NASA Ames Research Center, United States

Roundtable: MOSAiC Arctic expedition: After the ice

Tuesday, 15 December, 11:00 am Eastern Time

On 12 October 2020, after 13 months in the central Arctic drifting with the sea ice, the *RV Polarstern* icebreaker returned to its port in Bremerhaven, Germany, marking the end of the most ambitious Arctic research expedition to date. The resulting snow, ice, atmospheric, oceanographic and biological measurements will allow scientists and the public to better understand our changing Arctic climate. At this roundtable, MOSAiC researchers will report on the unprecedented datasets collected during the year-long drift and touch on initial results.

Panelists

Giulia Castellani, Alfred Wegener Institute, Germany Markus Rex, Alfred Wegener Institute, Germany Kirstin Schulz, Alfred Wegener Institute, Germany Matthew Shupe, NOAA/CIRES Physical Sciences Laboratory, United States Melinda Webster, University of Alaska Fairbanks, United States

Roundtable: Year of the asteroids! Missions to the building blocks of the solar system

Tuesday, 15 December, 1:00 pm Eastern Time

2021 is going to be the year of the asteroids! With OSIRIS-REx slated to begin its return to Earth with a sample of the asteroid Bennu, launches of the DART and Lucy missions and Psyche on the horizon for 2022, there will be a lot of discussion about the diverse types of asteroids and what we can learn from their respective chapters as storytellers of the solar system. In this roundtable, panelists will discuss how these asteroids may hold important keys to understanding how they could have seeded Earth with organic compounds and water and how they can help scientists protect our planet from a catastrophic impact.

Panelists

Jim Bell, Arizona State University, United States **Nancy Chabot,** Johns Hopkins Applied Physics Laboratory, United States Paul Chodas, NASA Jet Propulsion Laboratory, United States Jamie Elsila, NASA Goddard Space Flight Center, United States Lindley Johnson, NASA Headquarters, United States Hal Levison, Southwest Research Institute, United States Tom Statler, NASA Headquarters, United States

Roundtable: What will we learn from Solar Cycle 25? Wednesday, 16 December, 11:00 am Eastern Time

Solar Cycle 25 is here, ushering in the next season of space weather from the Sun. As the Sun's activity ramps up — a natural part of its roughly 11-year cycle —scientists are eager to test their predictions. In this roundtable, scientists will discuss outstanding questions in solar cycle science, what opportunities this new cycle provides researchers and how they track progress in predictions.

Panelists Paul Charbonneau, Université de Montréal, Canada Dean Pesnell, NASA Goddard Space Flight Center, United States Lisa Upton, Space Systems Research Corporation, United States

Roundtable: Health of mountain water towers around the world Thursday, 17 December, 11:00 am Eastern Time

In this roundtable, researchers from the most comprehensive scientific expedition to Mt. Everest in history will discuss new findings into the health of the cryosphere in the Himalaya and the significant impacts facing the region as a result of the global climate crisis. Early results from the Everest Expedition will be published in a special issue of One Earth in late November, with additional results debuting at the AGU meeting. The roundtable will provide a clear and comprehensive picture of what's at stake for the iconic and vital mountain regions that provide water resources to nearly 2 billion people around the world.

Panelists

Tenzing Chogyal Sherpa, International Centre for Integrated Mountain Development, Nepal

Lewis Collins, One Earth, United Kingdom Paul Mayewski, Climate Change Institute, University of Maine, United States Imogen Napper, University of Plymouth, United Kingdom Baker Perry, Appalachian State University, United States

Roundtable: Powering a renewable future through lithium extraction from unconventional sources

Thursday, 17 December, 1:00 pm Eastern Time

The demand for lithium, a key ingredient in most batteries, is expected to grow tenfold by 2030 as sectors increasingly go electric. Domestic conventional reserves of lithium and other energy-critical elements are limited, but large unconventional resources, such as sedimentary deposits and brine reservoirs, exist in many western states, such as Nevada and California. In this roundtable, Lawrence Berkeley Lab scientists will discuss how they, along with industry and academic partners, are working to accelerate technological advancements in energy-efficient lithium separations and purification.

Panelists

Hanna Breunig, Lawrence Berkeley National Laboratory, United States
Peter Fiske, Lawrence Berkeley National Laboratory, United States
Will Stringfellow, Lawrence Berkeley National Laboratory/University of California Berkeley, United States

Michael Whittaker, Lawrence Berkeley National Laboratory, United States