

## Press Briefing – AAAS 2019

### Climate Change: Scientists Tap Nature, Space and Society

*Climate Change: Understanding Feedback from Nature, Culture and Society*  
Saturday, February 16, 2019; 3:30 PM - 5:00 PM; Marriott Wardman Park, Delaware Suite



*Image credit: Crowther Lab / ETH Zurich, Switzerland*

**Three scientists share their research from the natural, physical, and social sciences on novel responses to climate change.**

**Thomas Crowther** will identify long-disappeared forests available for restoration across the world. He will describe how there is room for an additional 1.2 trillion new trees around the world that could absorb more carbon than human emissions each year. Crowther will also describe data that reveals the world's Arctic and sub-Arctic regions store most of the world's carbon. But the warming of these ecosystems is causing the release of this soil carbon, a process that could accelerate climate change by 17%. Restoring vegetation and soil carbon is by far our best weapon in the fight against climate change.

**Laura Duncanson** will point to two recent NASA laser missions – the ICESat-2 satellite and the Global Ecosystem Dynamics Investigation (GEDI) – and their contributions to mapping global forest biomass, to guide forest management programs and inform climate mitigation plans. Duncanson will show how data from forests located both in boreal, tropical and temperate areas can improve carbon measurements.

**Matto Mildenerger** will explain how perceived experiences with climate change in the United States can be linked to political shifts in Congress, culture and society. He will demonstrate how partisan opinions about the prevalence and dangers of climate change in each of the 50 states and 435 congressional districts in the United States can change policymaking by Congress.

## Press Briefing

**Thomas Crowther**, Assistant Professor Environmental Systems Science, ETH Zurich, Zurich, ZH Switzerland

*Understanding Carbon Cycle Feedbacks to Predict Climate Change*

<https://aaas.confex.com/aaas/2019/meetingapp.cgi/Paper/23744>

**Laura Duncanson**, Assistant Professor, University of Maryland, College Park; NASA Goddard Space Flight Center, Greenbelt, MD, USA

*Spaceborne Data: Mapping and Monitoring the Carbon Content of Earth's Forests*

<https://aaas.confex.com/aaas/2019/meetingapp.cgi/Paper/23740>

**Matto Mildenberger**, Assistant Professor Comparative Politics, Environmental Politics, Public Opinion and Methodology, University of California, Santa Barbara, CA, USA

*Political and Policy Feedbacks in the Climate System*

<https://aaas.confex.com/aaas/2019/meetingapp.cgi/Paper/23746>

### Media Materials

Press information is available on the AAAS / EurekAlert! platform and are under embargo until 16 February 2019 at 3:30 PM EST. Additional media materials are available at:

<http://bit.ly/AAAS2019>

### Contacts

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### ETH Zurich Profile

<https://www.ethz.ch/en/the-eth-zurich/portrait.html>