Hydro-meteorological extremes, such as floods, droughts, and rainfall driven landslides, are intensifying due to climate change; posing serious threats to communities around the world. News items report record-breaking hydro-meteorological extremes such as floods and droughts with increasing frequency. While we expect extremes to become more frequent due to climate change, we know less about where, when, and how strong the change will be. The socio-economic context in which these events take place varies dramatically around the world. Some societies will be rather resilient to these changing extremes, while others will experience devastating societal and even geopolitical consequences. How can science support society in a world of uncertain and changing hydro-meteorological extremes?

The Young Academy Distinguished Lecture Series brings cutting-edge scholarship to the public, presented by distinguished experts and members of the Young Academy. This twin set of lectures will discuss: How are hydro-meteorological risks evolving? How do these changes and their potential implications vary across geographic regions? What role do societal wealth and individual actions play in shaping risks and possible solutions?

The event will be held in English.

ORGANISER

Young Academy of the Austrian Academy of Sciences

CONTACT

Christina Bierbaumer, junge.akademie@oeaw.ac.at

Please note that photos and video recordings (image and sound) may be taken during the lecture.

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Austrian Academy of Sciences

Young Academy Distinguished Lecture Series

Floods, Droughts, and Landslides in a Changing World

Extremes of the Century or a Century of Extremes?

Thorsten Wagener University of Potsdam
Uğur Öztürk University of Vienna & Member of the Young Academy, OeAW

Friday
13 Nov 2026
Start: 5:00 p.m.

Austrian Academy of Sciences
Campus Akademie
Seminarraum 1
Bäckerstraße 13
1010 Vienna

Thorsten Wagener is an internationally recognized professor of hydrology at the University of Potsdam. He has pioneered approaches that improved the reliability and quality of flood and drought models from local to global scales. Since 2021, he has held an *Alexander von Humboldt Professorship* at the University of Potsdam, which is Germany's most highly endowed research prize. Wagener was named a Fellow of the American Geophysical Union (AGU) in the same year and received the John Dalton Medal of the European Geosciences Union (EGU) in 2026. He serves as an Associate Editor of *Water Resources Research (WRR)*, AGU's flagship water sciences journal.

Uğur Öztürk is a Tenure Track Assistant Professor for Geohazards in Human–Environment System at the University of Vienna. He received the *Postdoctoral Award in Natural Sciences and Engineering* in 2023 from the State of Brandenburg. In 2024, Öztürk was awarded the ERC Starting Grant for the project *"UrbanSlide – Getting Ahead of Landslides: Understanding Social and Environmental Interactions to Anticipate Future Urban Landslide Risk"*. He is an editor of *Natural Hazards and Earth System Sciences (NHESS)*, a journal of the European Geosciences Union (EGU). Öztürk was elected to the Young Academy of the Austrian Academy of Sciences in 2025.

Please register via the QR Code or the following link:
oeaw.ac.at/veranstaltungen/anmeldung/young-academy-distinguished-lecture-series

Programme

5:00 P.M.

Welcome Address

5:05 P.M.

Distinguished Lectures

Thorsten Wagener
Extremes of the Century or a Century of Extremes?
Hydro-meteorological systems evolve globally, but with stark differences across geographic regions. Prof. Wagener will put emphasis on how changes in the hydro-meteorological system reflect on the water extremes such as droughts and floods. One key challenge is to understand whether the current hydrological models can predict those extremes despite model uncertainties and incomplete observations.

Uğur Öztürk
What is Our Role in Shaping Disaster Risk?
Changes in hydro-meteorological systems reflect on the disasters from certain hazards, such as landslides and floods. Unfortunately, disasters caused by these so-called "natural" hazards are largely controlled by human actions. Prof. Öztürk will discuss how a well-thought-out risk assessment can at least partially offset disaster risk. To achieve this, however, it may be necessary to expand the current risk management framework.

6:00 P.M.

Panel Discussion, followed by Q&A

The discussion will be moderated by Alexandra Rodler, ERC Starting Grant 2022 awardee, Group Leader at the Austrian Archaeological Institute (OeAI) and member of the Young Academy.

6:20 P.M.

Reception