icdp **news:** winter **2021**

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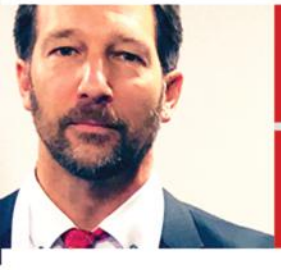
INTERNATIONAL CONTINENTAL SCIENTIFIC DRILLING PROGRAM



to all our icdp friends

from **Marco Bohnhoff, icdp Executive Director**

Although the Corona pandemic is still around and certainly will be around for longer, we are very happy that many ICDP-funded projects either have already kicked off or will do so soon. Over the last months, three ICDP projects have drilled in Switzerland/Germany, Italy, and the Czech Republic, respectively, and achieved significant milestones. Furthermore, ICDP drilling is now underway in South Africa.

Three ICDP-funded workshops were held in 2021 discussing potential future drilling targets in the Pliocene Lakes in western North America (PlioWest), the USA Margin PETM Paleocene-Eocene Thermal Maximum, and the Danakil Depression in Ethiopia (ADD-ON) in an active rift setting

Congratulations to all PIs and participating scientists for their engagement and the great achievements so far!

Given the current travel restrictions, we will hold our annual Town Hall during the AGU fall meeting online again and we are looking forward to catching up with you at least virtually. For those not being able to attend the Town Hall: please accept my slightly early best wishes for a peaceful and healthy holiday season and a smooth transition and a motivated start into 2022!

All the best, Marco Bohnhoff

icdp **DOVE:** Drilling Overdeepened **Alpine Valleys**

Drilling Overdeepened Alpine Valleys (DOVE) investigates formerly-glaciated

areas now filled by Quaternary deposits. The buried troughs and valleys were formed by glacial overdeepening, likely caused by pressurized subglacial meltwater below warm-based glaciers. The overall goal of DOVE is to determine the age and extent of past glaciations including the rate of glacial erosion and its effects on mountain ranges and their foreland. Scientific drilling took place in northern Switzerland (Basadingen) and southern Germany (Winterstettenstadt). Core drilling at the Basadingen site reached the bottom of the overdeepened basin at a depth of 143 meters. Drilling near Winterstettenstadt included three approx. 160 m deep boreholes, two of which were designed especially for geophysical investigations with no core recovery. All three holes reached the base of the basin. Core recovery was excellent at both sites.

icdp STAR: A Strainmeter Array Along the Alto Tiberina Fault

STAR (a STrainmeter ARray along the Alto Tiberina Fault System in central Italy) aims at drilling six monitoring boreholes in the Gubbio/Apennines (central Italy) region. The location is famous for the Iridium anomaly that marks the Cretaceous-Paleogene boundary and was identified and described here for the first time. Current ICDP drilling at Gubbio addresses another big unknown: the low-angle normal fault paradoxon. Gubbio sits on top of the Alto Tiberina Fault (ATF), where rock layers are only slightly inclined on top of each other. Thus, scientists preferentially expected creeping behavior and low earthquake activity of the ATF. Nevertheless, the opposite is observed at times. Within the framework of the STAR project three out of six shallow boreholes (80-160 m) were drilled this Fall and were instrumented with borehole strainmeters, seismometers and fiber-optic cables to monitor slow (aseismic) and seismic deformation on the ATF. Drilling three more boreholes for the same purpose will continue in early 2022.

icdp EGER: Drilling the Eger Rift

At the Bazina Liba site in the Czech Republic (well S4), the target depth of 400 m was reached after only 10 days of wireline coring operations. Core recovery and quality was very good. This additional borehole drilled within Drilling the Eger Rift is another important step in establishing a modern, comprehensive multi-well laboratory at depth for the study of earthquake swarms, crustal fluid flow, mantle-derived CO2 and He degassing, and processes of the deep biosphere.

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icdp BASE: Barberton Archean Surface Environments

The BASE (Barberton Archean Surface Environments, Moodies Group) project is currently drilling precambrian sedimentary strata in the Barberton Greenstone Belt, South Africa. With an age of about 3.22 Ga, the Moodies Group sediments are among the oldest well-preserved shallow water layers in the world. Moodies sediments show that microbial life was already well established in the early oceans including extensive biomats along the shore-lines. Eight drill holes will produce up to 500 m core from each hole. An on-site visitor center provides the local population with information and guided tours.

Upcoming ICDP activities:

AGU Fall Meeting 2021 and EGU General Assembly 2022

Albeit ICDP won`t be physically present at the upcoming AGU 2021 Fall Meeting (13-17 December in New Orleans), we will be available via Zoom each day from Tuesday on between 9:15-9:45 am CST (**Meeting ID: 846 7459 9441, Passcode: 602726**). The joint ICDP-CSD Facility Town Hall meeting will be held on Monday, December 13, at 9:00 am CST (4 pm CET) using the same Zoom passcodes. The Town Hall Meeting will be a great opportunity to meet representatives and scientists from ICDP and the CSD Facility for program updates, future developments and to discuss continental scientific drilling.

The EGU 2022 General Assembly (3-8 April in Vienna) calls for abstracts before 12 January 2022, 13:00 CET. The ICDP and IODP conveners of the EGU session " Achievements and perspectives in scientific ocean and continental drilling " kindly invite you to submit abstracts related to research drilling.

ANNUAL CALL FOR PROPOSALS:

And, last but not least, a reminder to ICDPs annual deadline for the submission of ICDP proposals, which, as always, is on January 15. ICDP is looking forward to receiving exciting pre- workshop-, and full proposals.

Stay safe, stay healthy, **keep calm & drill**

your **icdp team from potsdam**