

IODP/ICDP Kolloquium 2022



**Helmholtz-Zentrum Potsdam - Deutsches
GeoForschungsZentrum GFZ**

1. – 3. November 2022

Tagungsprogramm – *Agenda*

Alle Präsentationen finden im Haus H statt.

IODP/ICDP Kolloquium 2022 - GFZ Potsdam - 1.-3. November 2022

Programm (Stand 20.10.2022)

Dienstag, 1. November 2022		
13:00	14:00	Registrierung - <i>Registration</i>
Beginn Kolloquium - <i>Beginning of the Conference</i>		
14:00	14:15	Begrüßung - <i>Welcome</i>
14:15	14:35	<i>Bornemann, A.</i> Aktuelle Entwicklung in IODP
14:35	15:00	<i>Bohnhoff, M. and Krastel, S.</i> Aktuelle Entwicklung in ICDP
Wissenschaftliche Beiträge zu IODP und ICDP - <i>Scientific talks related to IODP and ICDP</i>		
15:00	15:30	<i>Schäbitz, F.</i> Pleistocene climate variability in eastern Africa influenced hominin evolution and dispersal: results from the Chew Bahir record (Keynote)
15:30	16:30	Posterpräsentation und Kaffeepause - <i>Presentation of posters and coffee break</i>
16:30	16:50	<i>Petrick, B.</i> New Late Miocene climate records raise questions about the traditional narratives of Coral loss and development in the Coral Sea
16:50	17:10	<i>Struve, T.</i> The role of South Pacific dust provenance changes in Pliocene-Pleistocene climate variability (IODP Expedition 383)
17:10	17:30	<i>Vuillemin, A.</i> Isotope signatures of diagenetic siderites from Lake Towuti's 1Ma ferruginous archive
17:30	17:50	<i>Schubert, F.</i> Rapid metabolism fosters microbial survival in the deep, hot, seafloor biosphere
Im Anschluss: Posterpräsentation und Icebreaker - <i>Presentation of posters and Icebreaker</i>		

Mittwoch, 2. November 2022		
IODP Expeditionsberichte - IODP Expedition Reports		
09:00	09:20	<i>Homrighausen, S. (für Hoernle, K.)</i> New Insights into Tristan-Gough-Walvis Ridge Hotspot Volcanism from International Ocean Discovery Program Expeditions 391 and 397T
09:20	09:40	<i>Uenzelmann-Neben, G.</i> Initial results of IODP Expedition 392: Agulhas Plateau Cretaceous Climate
09:40	10:00	<i>Longman, J.</i> Report - IODP Expedition 396 "Mid-Norwegian Margin Magmatism and Paleoclimate Implications"
Wissenschaftliche Beiträge zu IODP und ICDP - <i>Scientific talks related to IODP and ICDP</i>		
10:00	10:20	<i>Lehnert, O.</i> Drilling the Unknown: Proterozoic igneous and Lower Palaeozoic sedimentary rocks below the Caledonian nappe pile – COSC-2 models vs. reality
10:20	10:40	<i>Tanner, D.</i> ICDP project "Drilling Overdeepened Alpine Valleys" (DOVE) – status report of boreholes drilled in 2021
10:40	11:40	Posterpräsentation und Kaffeepause - <i>Presentation of posters and coffee break</i>
Wissenschaftliche Beiträge zu IODP und ICDP - <i>Scientific talks related to IODP and ICDP</i>		
11:40	12:00	<i>Kulhanek, D.</i> Pliocene–Pleistocene Antarctic Slope Current modulation of Antarctic Ice Sheet dynamics along the Ross Sea continental shelf break, IODP Site U1523
12:00	12:20	<i>Lamy, F.</i> Dynamics of the Pacific Antarctic Circumpolar Current over the past five million years (IODP Expedition 383 - DYNAPACC)
12:20	12:40	<i>Dallanave, E.</i> Middle Eocene to the early Miocene absolute paleolatitude of northern Zealandia determined from the sedimentary record of IODP Exp. 371 (Tasman Sea)
12:40	13:00	<i>De Vleeschouwer, D.</i> Multiproxy paleoceanography from Broken Ridge pinpoints the onset of Tasman Leakage at 6.6 Ma
13:00	14:30	Mittagspause und Posterpräsentation - <i>Lunch break and Presentation of posters</i>

Wissenschaftliche Beiträge zu IODP und ICDP - <i>Scientific talks related to IODP and ICDP</i>		
14:30	14:50	<i>Heubeck, C.</i> First results from BASE drilling in the world's oldest well-preserved sedimentary rocks, the Archean Moodies Group (~3.22 Ga), Barberton Greenstone Belt, South Africa
14:50	15:10	<i>Rammelmair, D.</i> Mesoscale investigation on drill cores. The key to keep track of macro to micro relationships.
15:10	15:30	<i>Nikonow, W.</i> Combined μEDXRF and LIBS analysis providing information on mineralogical and geochemical variation within magnetite layers in the Upper Zone of the Bushveld Complex
15:30	15:50	<i>Merseburger, S.</i> ICDP Oman Drilling Project: Drilling through the crust mantle transition zone - the formation of massive dunites.
15:50	16:40	Posterpräsentation und Kaffeepause - <i>Presentation of posters and coffee break</i>
Wissenschaftliche Beiträge zu IODP und ICDP - <i>Scientific talks related to IODP and ICDP</i>		
16:40	17:00	<i>Cook, A.</i> IODP APL 691: Linking sediment deposition during glacial cycles and methane hydrate occurrence
17:00	17:20	<i>Dummann, W.</i> The opening of the Equatorial Atlantic Gateway and its impact on the mid-Cretaceous climate
17:20	17:40	<i>Jurikova, H.</i> A geochemical perspective on the evolution of Dead Sea brines and its link to Eastern Mediterranean hydroclimate (project PRO-HYDRO)
17:40	18:00	<i>Müller, D.</i> Phases of stability during major hydroclimate change ending the Last Glacial in the Levant
ab 19:00		<i>Gemeinsames Abendessen im Restaurant El Puerto (Lange Brücke 6, 14467 Potsdam)</i>

Donnerstag, 3. November 2022		
Wissenschaftliche Beiträge zu IODP und ICDP - <i>Scientific talks related to IODP and ICDP</i>		
09:00	09:20	<i>Henehan, M.</i> Carbon Cycling at the Dawn of the Cenozoic
09:20	09:40	<i>Wiese, F.</i> The response of terminal Maastrichtian deep-sea echinoids to the Latest Maastrichtian Warming Event (LMWE) and the K/Pg Boundary Event
New developments in scientific ocean drilling post-2024		
09:40	10:30	<i>Camoin, G., Lüniger, G. & Bornemann, A.</i> New developments in scientific ocean drilling post-2024
10:30	11:10	Posterpräsentation und Kaffeepause - <i>Presentation of posters and coffee break</i>
11:10	11:30	<i>Lipus, D.</i> Analysis of CO₂ driven microbial behaviour and metabolic responses in the geologically active Eger Rift subsurface
11:30	11:50	<i>Ohrnberger, M.</i> ICDP-EGER pilot seismological 3D-array test site S1: installation, operational status and first observations
11:50	12:10	<i>Chen, X.</i> Estimating Earthquake Source Parameters in the Sea of Marmara
12:10		Posterprämierung und Schlussworte - <i>Poster Awards and Concluding Remarks</i>
13:00		GESEP School on Scientific Drilling: GFZ Potsdam (GFZ Haus H, Seminarräume 1-3)
Ende: Freitag, 4. November 2022, 16 Uhr		

Tagungsprogramm Poster – *Posters*

Alle Poster sind während der gesamten Zeit im Haus H zu finden.

<u>Name</u>	<u>Postertitel</u>
<u>Name</u>	<u>Poster title</u>
E. Anagnostou	Late Eocene to Oligocene carbon cycle stories: Expedition 378
T. Bauersachs	Microbial life in an ultra-deep sulfate-methane transition zone on the Antarctic continental margin
J. Belo	Marine tephra layers in the Indian Ocean and their volcanological implications: a story of not just Toba
S. Beraus	Seismic crosshole investigations at the Tannwald drillsite (ICDP DOVE project)
C. Blanchet	The 8.2 ka event in the Dead Sea: tracking a high-latitude disturbance in the Mediterranean
L. Braeunig	Seismic site characterization around the COSC-2 drillhole (Järpen, Sweden)
T. Burschil	Improving the characterization of overdeepened Alpine valleys by combining seismic reflection imaging and waveform inversion
F. Cáceres	Oxide nanolites formation and subsequent viscosity changes in Krafla magma
D. De Vleeschouwer	Decrypting tidal- and Milankovitch-driven sedimentary rhythms in nearshore strata of the Archean Moodies Group, South Africa
S. Donner	NonDC-BoVo Non-Double-Couple moment tensor components and their relation to fluid flow in the West-Bohemia/Vogtland region
O. Esper	Micropaleontological reconstruction of Miocene Ross Sea (Southern Ocean) paleoenvironmental conditions
N. Fernandez	Initial results of the project “DEformation Mechanisms along the Main MArmara Fault (DEMMAF)”: 3D lithospheric structure below the Marmara Sea from gravity modelling, seismic tomography and thermal and rheological modelling
A. Fischer	Are hyperthermal events a persistent feature of greenhouse climates?
P. L. F. Ferreira	Pliocene to Pleistocene reconstruction of regional versus global ocean oxygenation from eastern Pacific anoxic sediments
T. Frederichs	Chronostratigraphic framework for IODP Expedition 379 (Amundsen Sea West Antarctic Ice Sheet History)
T. Freudenthal	Estimation of regional heat flux based on borehole temperatures acquired during logging while tripping with the sea floor drill rig MARUM-MeBo200
O. Friedrich	Short-term waxing and waning of Antarctic ice sheets during the late Oligocene – evidence from benthic foraminiferal geochemistry and detrital Nd isotopes
C. Gebhardt	Preliminary results from sediment cores from the glacially overprinted Labrador Shelf
J. Geldmacher	The origin of the Agulhas Plateau at the African-Southern Ocean gateway: Planned research on igneous rocks from IODP Exp. 392
J. Gille-Petzoldt	Pliocene West Antarctic Ice Sheet Dynamics -Tying IODP Expedition 379 Drill Records to Seismic Data
J. Grützner	The opening of the Fram Strait and its influence on sediment transport, climate and ocean circulation between the Arctic Ocean and the North Atlantic
M. Gutjahr	Climatically controlled sedimentation dynamics and export productivity at IODP Site U1537 in the Scotia Sea (Southern Ocean) over the past four glacial cycles
E. Hathorne	Pliocene Silicate weathering in the South Asian Monsoon domain
K. Heß	Pacific “ENSO-Modoki” on the rise under global warming conditions? A view from the Pleistocene and the Early Pliocene
S. Homrighausen	The temporal geochemical evolution of the Tristan-Gough seamount chain
M. Ikari	Frictional Slip Behavior of IODP Expedition 375 Drilling Samples from the Papaku Fault, Hikurangi Subduction Zone, New Zealand
Z. Jia	Microbial activity in a terrestrial subsurface ecosystem shaped by active CO ₂ degassing
E. Jovanovska	Adaptive radiations of diatoms and their determinants
S. Kaynar	Methodological Strategies for Extracting Sedimentary Ancient DNA from Tropical Lake Regions
R. Kearney	The TephroMed project: Using tephra to precisely synchronise two key palaeoclimatic ICDP records of the eastern Mediterranean region
O. Knebel	Last deglacial environmental change in the tropical South Pacific (Tahiti) from IODP Expedition 310 corals
M. Knoke	Petroleum formation in subsurface hydrothermal sediments is a potential source of recalcitrant dissolved organic matter to the deep Pacific Ocean
L. Kolb	Ecosystem change in SE Africa during critical periods of early hominin evolution between 4 and 1.8 Ma
U. Kotthoff	Palynomorph records from IODP-Sites M0059, M0061, M0062 and M0063 – marine and terrestrial ecosystem change and agricultural activity
S. Krastel	Seismic data acquisition on Lake Managua (Nicaragua) for the ICDP proposal ‘Paleoclimate, Paleoenvironment, and Paleoecology of Neogene Central America: Bridging Continents and Oceans (NICA-BRIDGE)’
S. Lauterbach	Hydroclimatic changes in subtropical Southeast Africa across the Last Interglacial revealed by plant leaf wax stable isotopes in Zambezi Fan sediments (IODP Site U1477)
L. Lembke-Jene	Variations in Subantarctic Pacific Surface to Intermediate Water stratification and ventilation during the Pleistocene
K.-F. Lenz	Evolution of the Laurentide Ice Sheet on the Labrador Shelf reconstructed by geomorphological analysis

<u>Name</u> <i>Name</i>	<u>Postertitel</u> <i>Poster title</i>
K. Leu	Cyclostratigraphy of the Early Jurassic Sinemurian stage deduced from downhole logging data of the Prees-2 core (England) as part of the ICDP JET project
J. Lippold	The AMOC strength of the last glacial cycle
R. Martinez-Abarca	Abrupt millennial-scale oscillations during MIS3-2 registered in the sediments of tropical Lake Petén Itzá
C. März	Geochemical and magnetic indicators for tracing Quaternary glacial-interglacial water mass changes in the Gulf of Corinth (IODP Expedition 381)
T. Nagakura	Biological sulfate reduction in deep seafloor sediment of Guaymas Basin
B. Najjarifarizhendi	Active versus arrested silica diagenetic front: Implications on the palaeoceanographic evolution across the Falkland/Malvinas Plateau
I. Neugebauer	Results of the TEPH-ME project: Cryptotephra in the Lateglacial ICDP Dead Sea sediment record and their implications for chronology
C. Ohlendorf	Preliminary syn and postglacial chronological information from a shelf-to-inland sediment core transect at the Eastern margin of the Laurentide Ice Sheet
K. Pank	Tephrochronostratigraphy in marine sediments of New Zealand: Benchmark for Miocene to Quaternary explosive volcanism
S. Pierdominici	Cyclostratigraphic studies of Lake Junín (Peru) sediments from downhole logging and core data to investigate paleoclimatic implications
A. Platz	3D imaging of the subsurface electrical resistivity structure in West Bohemia/Upper Palatinate covering mofettes and Quaternary volcanic structures by using Magnetotellurics
J. Preine	Unraveling interplay of magmatism, tectonics, and mass-wasting at the Christiana-Santorini-Kolumbo volcanic field: outlook on core-log seismic integration on the upcoming IODP Expedition 398
L. Pérez	Species diversity, sex ratio and body size of ostracodes in response to climate change in the northern Neotropics: the record from ancient Lake Petén Itzá, Guatemala
V. Rigalleau	800 000 years of millennial-scale variability in the Southeast Pacific
J. Raddatz	CODO – Coupling of deep-sea pH, ocean circulation and climate during the Cretaceous/Paleogene transition
N. Rein	Local noise sources retrieved from seismic double cross-correlations: A feasibility study in the region of Landwüst (Germany)
N. Rohlfs	An open access platform to document and retrieve composite records from ocean drilling sites - the Ocean Drilling Composite Tracker (ODCT)
Ruchi	A new perspective on the MECO 'Carbon Cycle Conundrum': $\delta^{30}\text{Si}$ records from the South Pacific
F. Ruiz Blas	Selective metabolic traits of the subsurface biosphere in the 1Ma ferruginous archive of Lake Towuti
E. M. Rückert	Water mass provenance in the Atlantic Sector of the Southern Ocean during the past 500 ka revealed by neodymium isotopes
H. Sadatzki	Sea surface temperature and productivity records from the Pacific Southern Ocean spanning the last 5 million years
M. Sardar Abadi	Detecting tephra layers across the lacustrine deposits of Lake Chalco, using high-resolution gamma ray spectrometry
T. Schwenk	Quantification of Himalayan erosional fluxes based on core-seismic integrated data from the Bengal Fan (IODP Exp. 354)
R. Sheward	Linking phytoplankton community changes to biogeochemical responses in the cool Oligocene ocean
V. Sinnen	Pleistocene evolution of eastern Pacific Southern Ocean surface water conditions
O. Soaga	Pleistocene variations in Antarctic Intermediate Water
V. Spiess	Tectonic Deformation and Lake Depositional Processes within Lake Issyk Kul – Kyrgyzstan - Insights from new High-Resolution Seismic and Acoustic Data –
V. Toy	Multi-scale calibrations of rock masses electrical properties around the DIVE drillsite
A. Ulfers	Cyclostratigraphic investigations with special emphasis on half-precession signals using XRF-data from ODP Site 663 (Eastern Equatorial Atlantic)
A. Urban	Past temperatures of the Dead Sea during the last Deglaciation- Insights from Clumped Isotope Thermometry
M. van der Does	A 5,3-Myr Record of Dust Deposition in the South Pacific Ocean from IODP expedition 383
M. Vinneband	High-resolution downhole gamma ray data from Lake Bosumtwi (Ghana) – Towards an astronomical age model and implications for environmental reconstructions
C. Virgil	Three-component borehole magnetism in the COSC-2 drill hole
C. Waelkens	Constraining the magmatic plumbing system of the Snake River Plain volcanic province, USA: contributions from crystal mush fragments
B. Wawerzinek	Project SEIZE - SEismic imaging of the Ivrea Zone
A. Wegwerth	Subantarctic surface ocean temperatures in the Eastern South Pacific since the Late Miocene (IODP Expedition 383)
T. Westerhold	Cycles, cycles, cycles – a new Maastrichtian to Late Campanian composite record from equatorial Pacific Shatsky Rise ODP Leg 198
B. Zoheir	Disseminated sulfides in the crust-mantle transition zone in Oman ophiolite (OmanDP Holes CM1A and CM2B): Implications for mantle to crust metal flux