

MEETING PROGRAM

SUNDAY, 10 FEBRUARY

18:00-19:30 Ice breaker at the Zaiyo-Zuiyo lawns, International Centre Goa

MONDAY, 11 FEBRUARY

09:00-09:30 **Welcome**

09:30-10:00 **Keynote Talk - Alan Mix: "Paleoscience - review and preview"**

10:00-11:00 **Oral Session**

YSM06 Proxy Development, Calibration and Validation

Chair: Denis-Didier Rousseau

Reconstructing Plio-Pleistocene Intermediate Water Temperatures Using Mg/Ca of Infaunal Foraminifera (Uvigerina peregrina)

Aurora Elmore, Erin McClymont, Harry Elderfield, Sev Kender, Benjamin Petrick

Holocene Climate in Western Mongolia from an Altai Ice Core

Pierre-Alain Herren, Anja Eichler, Horst Machguth, Leonhard Tobler, Alexander Zapf, Margit Schwikowski, Tatyana Papina

Reconstructing the past millennium of hydrologic variability in the Western Tropical Pacific using the hydrogen isotopes of lipid biomarkers

Julie Richey, Julian Sachs

Climatic signal in tree-ring width chronologies of European Russia: spatial change and perspectives for paleoclimatic reconstructions

Vladimir Matskovsky

11:00-11:30 **Morning Break**

11:30-12:30 **Poster Sessions**

YSM06 Proxy Development, Calibration and Validation

Chair: Denis-Didier Rousseau

YSM06-01 *A multiproxy examination of the toarcian oceanic anoxic event, Arroyo Lapa, (North and South) Neuquen Basin, Argentina*

Aisha Al Suwaidi, François Baudin, Susana Damborenea, Stephen Hesselbo, Hugh Jenkyns, Miguel Manceñido, Richard Pancost, Alberto Riccardi, Chris Siebert

YSM06-02 *Abrupt changes in the strength of the Indian Summer Monsoon during late glacial to Holocene evidenced by episodic increases in Ayeyarwady outflow to the Andaman Sea*

Sijinkumar A.V., B.N. Nath

YSM06-03 *Developing a chrysophyte-based cold-season temperature transfer function and a calibration-in-time model to reconstruct environmental variables in Polish lakes*

Iván Hernández-Almeida, Christian Kamenik, Wojciech Tylmann, Martin Grosjean

YSM06-04 *Developing and validating diatom-based water chemistry models for Ugandan crater lakes: assessing the advantages and disadvantages of regional vs. pan-African calibration datasets*

Keely Mills, David B. Ryves

YSM06-05 *Development and application of Australian lacustrine ostracod-based transfer functions*

Chris Gouramanis, Stuart Halse, Patrick De Deckker, Daniel Wilkins

YSM06-06 *End-member modelling – a way to better understand grain size proxies in marine and terrestrial sediment archives*

Elisabeth Dietze, Boris Biskaborn, Andreas Borchers, Michael Dietze, Stephan Opitz, Janneke IJmker

YSM06-07 *Paleorainfall variations in Southern India during the past 3154 years: Evidence from Pookot Lake record*

Sandeep K, Shankar R, Warriar A K, Weijian Z, Xuefeng Lu

YSM06-08 *Recent accumulation rate and impurity seasonality derived from NEEM firn cores*

Gideon Gfeller, Matthias Bigler, Daiana Leuenberger, Olivia Mini, Hubertus Fischer

YSM06-09 *Robust grain size end-members inferred from Quaternary lacustrine sediments across the Tibetan Plateau*

Elisabeth Dietze, Bernhard Diekmann, Torsten Haberzettl, Karoline Henkel, Christian Herb, Thomas Kasper, Weilin Zhang

YSM06-10 *Spectral biases in climate proxies and reconstructions of the last millennium*

Jörg Franke, David Frank, Christoph Raible, Jan Esper, Stefan Brönnimann

YSM06-11 *Testing the tree-ring parameter Blue Intensity, a new inexpensive path towards robust low-frequency reconstructions of late Holocene summer temperatures?*

Jesper Björklund, Hans Linderholm

YSM06-12 *The missing ocean - Generation of high resolution records of sea surface temperature for the Common Era*

Jeff Salacup, Timothy Herbert, Warren Prell

YSM06-13 *Triple water vapor isotopic ($H_2^{18}O$, $HD^{18}O$, $H_2^{17}O$) measurements above the Greenland Ice Sheet and importance for interpretation of ice cores*

Hans Christian Steen-Larsen, Renato Winkler, Frédéric Prié, Amaelle Landais, Valérie Masson-Delmotte, Camille Risi, Barbara Stenni

YSM06-14 *You are what you eat: Differences in the chemical composition of organic-walled dinoflagellate resting cysts and its implications for preservation*

Kara Bogus, Kenneth Neil Mertens, Johan Lauwaert, Ian C. Harding, Henk Vrielinck, Karin Zonneveld, Gerard J.M.Versteegh

YSM07 Modeling

Chair: Pascale Braconnot

YSM07-01 *Evaluation of historical climate simulation with High-resolution global atmospheric model*

Sumin Woo, Jai-Ho Oh, Kyoung-Min Lee

YSM07-02 *Influence of the tropical hydrologic cycle on Atlantic meridional overturning at the end of the last interglacial*

Benjamin Blazey, Matthias Prange, André Paul, Aline Govin

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YSM07-03 *Meeting the challenge of global high resolution paleoclimate modelling*

Paul Spence

YSM07-04 *On the role of sea ice at the onset of the Little Ice Age*

Flavio Lehner, Andreas Born, Christoph C. Raible, Thomas F. Stocker

YSM07-05 *Modelling the influence of evolving vegetation on past greenhouse climates*

Claire Loptson, Dan Lunt

YSM07-06 *Projected 21st Century Decline Snow Cover Overlying the Arctic Sea Ice and Implications for the Sea Ice and Arctic Climate in CESM/CCSM*

Benjamin Blazey

YSM07-07 *The Tropical Pacific climate response to the changing forcing over the last glacial cycle*

William Roberts, Paul Valdes

YSM07-08 *What is the influence of Tibetan Plateau on the Asian summer monsoon? Barrier versus heating effect*

Guangshan Chen, Zhengyu Liu, John Kutzbach

12:30-13:30 Oral Session

YSM02 Regional Climate Dynamics

Chair: Olga Solomina

Sub-centennial Holocene fluctuations of Atlantic water inflow and sea ice distribution in the western Barents Sea, European Arctic

Sarah Berben, Katrine Husum, Patricia Cabedo Sanz, Simon Belt

Sahel megadrought during Heinrich Stadial 1: Evidence for a three-phase evolution of the low- and mid-level West African wind system

Ihham Bouimetarhan, Matthias Prange, Enno Schefuß, Lydie Dupont, Jörg Lippold, Stefan Mulitza, Karin Zonneveld

Precession forcing of fire activity in subtropical southern Africa over the past 170,000 years

Anne-Laure Daniau, Maria Fernanda Sánchez Goñi, Philippe Martinez, Dunia H. Urrego, Viviane Bout-Roumazielles, Stéphanie Desprat, Jennifer Marlon

Regional monsoon dynamics from small but complex paleoclimate networks

Kira Rehfeld, Bedartha Goswami, Nora Molkenhain, Franziska Lechleitner, Sebastian F.M. Breitenbach, OlaKwiecien, Norbert Marwan, Jürgen Kurths

13:30-15:00 Lunch

15:00-16:00 Oral Sessions

YSM02 Regional Climate Dynamics (continued)

Chair: Ines Hessler

Fluctuations in the Indonesian-Australian Monsoon: New insights from the Flores stalagmite record

Nick Scropton, Linda Ayliffe, Mike Gagan, John Hellstrom, Wahyoe Hantoro, Hamdi Rifai, Bambang Suwargardi

History of terrestrial precipitation in the Amazon basin (South America) during the last 240 ka

Aline Govin, Janis Ahrens, David Heslop, Matthias Zabel, Stefan Mulitza, Cristiano M. Chiessi

YSM07 Modeling

Chair: Pascale Braconnot

Unraveling groundwater and surface water interaction in Central Kenya Rift lakes: Implications for Paleohydrology

Lydia A. Olaka, Andreas Musolff, Ulrich Kniess

Integrated climate-proxy modeling using the isotope-enabled SPEEDY-IER with a focus on tropical climate

Sylvia Dee, David Noone, Julien Emile-Geay, Nikolaus Buenning

16:00-16:30 Afternoon Break

16:30-17:15 The Art of Reviewing

Alicia Newton, Denis-Didier Rousseau and Chris Turney. Moderation: Alberto Reyes

17:15-17:45 The Art of Sharing Data

David Anderson

17:45-18:45 Breakout Groups

19:00-21:00 Boat Dinner

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TUESDAY, 12 FEBRUARY

09:00-10:00 Reporting from Breakout Groups

10:00-11:00 Oral Sessions

YSM01 Climate Forcings

Chair: Michael Schulz

*Diatom based sea-ice reconstruction over the past 95,000 years in the Indian Ocean sector of Southern Ocean***Abhilash Nair**, Rahul Mohan, M.C Manoj, Meloth Thamban*Mid- to Late Holocene temperature and salinity changes in the Southwestern Atlantic***Renata H. Nagai**, Cristiano M. Chiessi, Silvia H.M. Sousa, Henning Kuhnert, Stefan Mulitza, Michel M. Mahiques

YSM04 Human-Climate-Ecosystem Interactions

Chair: Janet Wilmshurst

*Regional integration of lake sediment and archaeological archives: Holocene climate variability and socio-evolutionary pathways in Cappadocia, central Anatolia***Samantha Allcock**, Neil Roberts*The impact of environmental change on past human societies in the Central Peloponnese (Greece)***Ingmar Unkel**, Helmut Brückner, Walter Dörfler, Christian Heymann, Oliver Nelle, Arndt Schimmelmänn, HelenZagana

11:00-11:30 Morning Break

11:30-12:30 Poster Session

YSM02 Regional Climate Dynamics

Chair: Ines Hessler

*YSM02-01 A 12,000-Year-Long, Annually-Resolved Varve Record Spanning the Last Interglacial from Lake Bosumtwi, Southern Ghana***Nicholas McKay**, Jonathan Overpeck, Timothy Shanahan, John Peck, Clifford Heil, John King, Chris Scholz*YSM02-02 A 65 ka Stalagmite Paleoclimate Record from Northern Venezuela: A Record of Caribbean Climate Change***Julie B. Retrum**, Luis A. González, R. Lawrence Edwards, Stacy M. Tinchner, Hai Chang, F. Urbani*YSM02-03 A pseudoproxy evaluation of four climate field reconstruction methods using improved emulations of real-world conditions***Jianghao Wang**, Julien Emile-Geay, Dominique Guillot, Jason E. Smerdon*YSM02-04 Antarctic linkages to the deep water flow variability during the past 95000 years in the Indian sector of the Southern Ocean***M C Manoj**, Meloth Thamban, Rahul Mohan*YSM02-05 Contrasting paleoceanographic conditions off western Sahel during Heinrich Stadial 1: A new concept for productivity development revealed by dinoflagellate cysts***Ilham Bouimetarhan**, Jeroen Groeneveld, Matthias Zabel, Lydie Dupont, Karin Zonneveld*YSM02-06 Data and model perspectives on the Indian Ocean Zonal Mode over the past millennium***Bronwen Konecky**, James Russell, Mathias Vuille, Yongsong Huang*YSM02-07 Deglaciation in the tropical Indian Ocean driven by interplay between the regional monsoon and global teleconnections***Rajeev Saraswat**, David Lea, Rajiv Nigam, Andreas Mackensen, Dinesh Naik*YSM02-08 Does upstream Agulhas Current variability reflect inferred changes in Agulhas Leakage?***Margit H. Simon**, Ian R. Hall, Kristina L. Arthur, Ben Loveday, Frank J. C. Peeters, Stephen Barker, Martin Ziegler*YSM02-09 Eastern Andean Patagonia (40°-51°S) vegetation and climate variability during the Holocene related to southern westerlies fluctuations***Gonzalo Sottile**, M. Alejandra Marcos, Florencia Bamonte, Marcos Echeverría, M. Eugenia de Porras, Marcela Tonello, M. Virginia Mancini, M. Martha Bianchi*YSM02-10 Genetic differentiation in the Patagonian-fuegian rodents *Abrothrix olivaceus* and *A. longipilis* (Rodentia: Cricetidae) associated to the major Pleistocene-Holocene climatic changes: Using molecular data to the global changing assessment***Matias Mora***YSM02-11 Hydrological and Climatological Changes in the Trondheimsfjord/Norway during the late Holocene inferred from Benthic Stable Isotopes and Dinocyst Assemblages***G. Milzer**, J. Giraudeau, S. Schmidt, J. Faust, J. Knies, F. Eynaud, C. Rühlemann*YSM02-12 Incidence of the most important climatic perturbations of the late Pleistocene and early Holocene on the phylogeography and population genetics of the Talas's tuco-tuco (*Ctenomys talarum*) from the Argentinean Pampas***Matias Mora***YSM02-13 Late Holocene variations from Lake Rutundu, mount Kenya***Christine Omuombo**, Daniel Olago, Stephen Rucina, David Williamson*YSM02-14 Late Holocene vegetation vis á vis climate dynamics from Hasila wetland, western Assam, Northeast India: Pollen and diatom record***Swati Dixit**, Samir Kumar Bera*YSM02-15 Late Quaternary paleoceanography of the southwestern Indian Ocean***Dinesh K. Naik**, R. Saraswat, N. Khare, A.C. Pandey, A. Mackensen, R. Nigam*YSM02-16 Late-Holocene climate variability in southern New Zealand: A multi-proxy study of laminated lake sediments from Lake Ohau to reconstruct regional climate***Heidi Roop**, Marcus Vandergoes, Richard Levy, Gavin Dunbar, Sean Fitzsimons, Jamie Howarth, Bob Ditchburn, Gary Wilson, Jennifer Purdie*YSM02-17 Mangrove and coastal environment changes during the Holocene in the Mahanadi Delta, India***Shilpa Singh***YSM02-18 Marine and terrestrial response of the Black Sea/Northern Anatolia region to rapid climatic variability during the marine isotope stage 3***Lyudmila S. Shumilovskikh**, Helge W. Arz, Hermann Behling

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YSM02-19 *New evidence of Holocene climate and atmospheric circulation variability, inferred from lacustrine stable isotope records from Gotland, southern Sweden*
Francesco Muschitiello, Dan Hammarlund, Barbara Wohlfarth

YSM02-20 *New Insights on Last Glacial Ice-sheet Dynamics and Retreat Deduced from Southeastern Weddell Sea Sediment*
Daniela Sprenk, Michael E. Weber, Gerhard Kuhn

YSM02-21 *Novel precipitation isotope records address a long-standing debate about East Asian cave oxygen isotope records*
Elizabeth Thomas, Steve Clemens, Tim Herbert, Yongsong Huang, Warren Prell, Jaap Sinninghe-Damsté, Youbin Sun

YSM02-22 *Permafrost and climate development in the northern Yukon since the LGM – East Beringia vs. Laurentide Ice*
Michael Fritz, Ulrike Herzschuh, Wayne Pollard, Hugues Lantuit

YSM02-23 *Reconstruction of late Quaternary climate changes as derived from a pollen record from Lahaul Himalaya, Himachal Pradesh, India*
Suman Rawat, A. K. Gupta, S. J. Sangode, N. R. Phadtare, H. C. Nainwal

YSM02-24 *Southern Westerlies postglacial dynamics at Central Chilean Patagonia (Rio Cisnes valley, 44°S)*
María Eugenia de Porras, Antonio Maldonado, Flavia Quintana, César Méndez, Omar Reyes

YSM02-25 *The late Pleistocene-Holocene climatic transition record in the alluvial sequences of central Argentina (33-38°S)*
Mehl Adriana, Zárate Marcelo

12:30-13:30 Oral Sessions

YSM05 Chronology

Chair: Alberto Reyes

U-Pb age model for an Early Pleistocene stalagmite from Corchia Cave (Italy)

Petra Bajo, Russell Drysdale, Jon Woodhead, John Hellstrom, Giovanni Zanchetta

YSM03 Global Earth-System Dynamics

Chair: Immaculate Ssemmanda

How did the late-glacial no-analog plant communities in eastern North America arise? Testing competing hypotheses through model-data comparison

Yao Liu, Simon Brewer, Stephen T. Jackson

The past relationship between temperature and sea level from proxy records and transient ice sheet modelling

Edward Gasson, Mark Siddall, Dan Lunt, David Pollard

Climate variability in West Antarctica over the last 60 thousand years and linkages to the tropics

Bradley Markle, Eric Steig, Spruce Schoenemann, Tyler J. Fudge, WAIS Divide Community Members, Ed Brook, Ken Taylor, Todd Sowers, Andrew Schauer, Qinghua Ding, Cecilia Bitz, Emily Newsom

13:30-15:00 Lunch

15:00-16:00 Poster Sessions

YSM01 Climate Forcings

Chair: Michael Schulz

YSM01-01 *Concerted climatic and oceanic variability in tropical southeastern Africa (off Tanzania) over the past 19,000 years related to the latitudinal migration of the ITCZ: Evidence from palynology*

Ilham Bouimetarhan, Lydie Dupont, Karin Zonneveld

YSM01-02 *Detailed reconstructions of fluctuations of seven glaciers during the “Little Ice Age” in the Northern Caucasus Russian Federation*

Irina Bushueva

YSM01-03 *High resolution characterization of the Indian monsoon over the last glacial period from Bitoo Cave, northern India*

Gayatri Kathayat, Hai Cheng, Ashish Sinha, R. L. Edwards

YSM01-04 *High-resolution multi-proxy climatic reconstruction off Myanmar suggestive of climatic modulations due to solar forcing during the past ~489 years*

Ranchang, Rajiv Nigam

YSM01-05 *Holocene carbon fluxes in the tropical peatlands of Southeast Asia: The contrasting roles of changing sea-level and climate*

René Dommain, Hans Joosten, Paul H. Glaser

YSM01-06 *Tracking carbon dynamics and climate forcing through Holocene peatland development by combining palaeoecological information and modern carbon flux measurements*

Paul Mathijssen, Minna Väiliranta, Eerika Niemelä, Annalea Lohila, Juha-Pekka Tuovinen

YSM03 Global Earth-System Dynamics

Chair: Immaculate Ssemmanda

YSM03-01 *Analysis of the South American monsoon for the mid-Holocene considering the results of seven different PMIP3-model outputs*

Luciana Prado, Ilana Wainer, Cristiano Chiessi

YSM03-02 *Glacier expansion during the Late Quaternary in the monsoon dominated Goriganga valley, Central Himalaya, India*

Sheikh Nawaz Ali, Rabiul Biswas, Anil Shukla, Navin Juyal

YSM03-03 *Holocene Atlantic bottom water inflow at the western Barents Sea margin, European Arctic*

Diane Groot, Steffen Aagaard-Sørensen, Katrine Husum

YSM03-04 *Increase proportion of Antarctic Intermediate Water off northern Chile (7°S) in glacial periods over the past million years*

Gema Martínez-Méndez, Dierk Hebbeln, Mahyar Mohtadi, Mieke Thierens, Frank Lamy, Tim Freudenthal

YSM03-05 *Mid-Holocene variability of the East Asian monsoon based on bulk organic $\delta^{13}\text{C}$ and C/N records from the Pearl River estuary, southern China*

Fengling Yu, Yongqiang Zong, Jeremy M. Lloyd, Melanie J. Leng, Adam D. Switzer, Wyss W.-S. Yim, Guangqing Huang

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YSM03-06 *Norwegian Research School in Climate Dynamics (ResClim)*

Sarah Berben, Tore Furevik

YSM03-07 *Understanding the range of climates that can be simulated by perturbing uncertain climate parameters within their range of uncertainty for the early Eocene warm paleoclimate*

Navjit Sagoo, Paul Valdes, Rachel Flecker

YSM04 Human-Climate-Ecosystem Interactions

Chair: Janet Wilmshurst

YSM04-01 *Holocene vegetation, climate, and disturbance history from the subalpine ecozone of the Colorado Plateau, USA*

Jesse Morris, Andrea Brunelle, Mitchell Power

YSM04-02 *Lake Geneva sediments as archive for past environmental changes and human activity since the last 3000 years*

Katrina Kremer, Juan Pablo Corella, Stéphanie Girardclos

YSM04-03 *Late Holocene Hypolimnetic Anoxia in Lake Victoria at Napoleon Gulf as inferred from Geochemical Proxies*

Morgan Andama, Julius B. Lejju, Casim Umba Tolo, Grace Kagoro-Rugunda, Immaculate Ssemmanda, Janet Ayebare

YSM04-04 *Late Pleistocene to Holocene climate and seasonality in North Africa from $\delta^{18}O$, $\delta^{13}C$ and Mg/Ca analysis of marine and terrestrial mollusc shells (Haua Fteah, Libya)*

Amy Prendergast, Rhiannon Stevens, Tamsin O'Connell, Chris Hunt, Graeme Barker

YSM04-05 *Recent climate change in West Africa and adaptation strategies proposed by rural population*

Timothee Ourbak, Benoit Sarr

YSM04-06 *The Indian Monsoon anomaly at 4k; dynamical analogs and cultural implications*

Max Berkelhammer, Ashish Sinha

YSM05 Chronology

Chair: Alberto Reyes

YSM05-01 *Chronology of deposition of coastal Red dunes (Teri sands) in South India and its palaeoenvironmental implications*

Linto Alappat, P. Morthekai, A.Vidyasagar, S. Srinivasalu, D. V. Reddy, A.K. Singhvi

YSM05-02 *Dendrochronological studies in Nepal: Current status and future prospects*

Narayan Prasad Gaire, Dinesh Raj Bhuj

YSM05-03 *Intercontinental Ash: The correlation of the Alaskan White River Ash to the European AD 860B tephra*

Britta Jensen, Sean Pyne-O'Donnell, Gill Plunkett, Duane Froese, Paul Hughes, Jonathan Pilcher, Valerie Hall

16:00-16:30 Afternoon Break

16:30-17:15 The Art of Communicating Science

Gavin Schmidt

17:15-17:45 Peer Feedback, Awards, and Closing

18:00-19:30 OSM Welcome Reception