



Poster session 2: Paleo Proxies: Development, Calibration and Application

Tuesday 30 August from 13:30-16:30

P-059 -Diatom chemistry as a potential paleo-proxy for sea surface conditions.

Shaun Akse, Lubos Polerecky, Anne Roepert, Jack J. Middelburg

P-060 -New constraints on Southwest Pacific deep water carbonate chemistry from B/Ca of benthic foraminiferal calcite

Katherine Allen, Elisabeth L. Sikes, Bärbel Hönisch, Aurora C. Elmore, Thomas P. Guilderson, Yair Rosenthal, Robert F. Anderson

P-061 -Sea surface dynamics in the Northeast Atlantic Ocean during the last 55 ka

Javier Álvarez Fernández, Carmen Álvarez, Guillermo Francés, Paula Diz, Joan Grimalt

P-062 -Reconstructing Mediterranean sea levels during sapropel events

Jessica Amies, Eelco Rohling, Katharine Grant

P-063 -Mg/Ca ratios of single foraminifera shells of planktonic species *G. ruber* by LA-ICPMS : New insights into past seasonality and inter-annual variability of water column temperatures

SCHMITT Anaïs, Mary Elliot, Carole La, Aurore Mosellan, Stephan Jorry, Jean Borgomano

P-064 -High resolution paleo-climates from the two last interglacial periods (MIS 5e and 7) derived from giant clams (*Tridacnidae*) shells in Sulawesi (Indonesia)

Camilo Arias Ruiz, Elliot M., Bézos A., Pedoja K., Husson L., Michel E.

P-065 -Using clumped isotope and triple oxygen isotope geochemistry to examine paleoenvironment and modern biogeochemistry in the Baltic Sea

Jeanine Ash, Elinor Andrén, Thomas Andrén, Thorsten Bauersachs, Ole Bennike, Naomi E. Levin, Benjamin H. Passey, Nadine Quintana-Krupinski, Edward D. Young

P-066 -Palynology of IODP Site U1307 at the Pliocene to Pleistocene transition: sea-surface conditions in the Labrador Sea and pollen input from the Greenland vegetation

Aurélie M. R. Aubry, Anne de Vernal

P-067 -Resolving orbitally paced phosphogenesis during the middle Miocene Monterey event using high-resolution gamma ray data

Gerald Auer, Christoph A. Hauzenberger, Markus Reuter, Werner E. Piller

P-068 -Coccolithophore potential for transfer-function development: Reconstructing sea surface salinity in the Western Mediterranean

Blanca Ausin, Iván Hernández-Almeida, Jose Abel Flores, Francisco Javier Sierro, Martin Grosjean, Guillermo Francés, Belén Alonso,



P-069 -A record of bottom water temperature and sea water $\delta^{18}O$ for the western Pacific warm pool over the past 60,000 years based on Mg/Ca of benthic foraminifera

M.Yusuf Awaluddin, Mahyar Mohtadi, Gema-Martinez Mendez, Stephan Steinke, Heather J. H. Johnstone, Yair Rosenthal, Dierk Hebbeln

P-070 -Evolving sea surface temperatures and seasonality in the Norwegian Sea through the Pliocene – links to orbital forcing, gateway changes, and changes in the atmospheric CO₂ concentration

Paul E. Bachem, Bjørg Risebrobakken, Erin L. McClymont

P-071 -Variations of bottom current activity in the Ulleung Interplain Gap, East Sea since the Last Glacial Maximum

Jang-Jun Bahk, Jae Hwa Jin

P-072 -Arctica islandica gaping activity: Implications for paleoclimatic reconstructions

Irene Ballesta-Artero, Rob Witbaard, Michael Carrol, Jaap van der Meer

P-073 -Benthic foraminiferal Mg/Ca paleothermometry in the Arctic Ocean

Natalia Barrientos, Caroline Lear, Martin Jakobsson, Christian Stranne, Matthew O'Regan, Thomas Cronin, Aleksander Gukov, Helen Coxall

P-074 -Ocean Circulation and Past Variability in Arabian Sea Oxygen Minimum Zone

Chandranath Basak, Steven L. Goldstein, Robert F. Anderson, Sarah Romahn, Jürgen Pätzold

P-075 -An organic geochemical proxy for Antarctic sea ice, IPSO25: Source, distribution and environmental significance

Simon Belt, Lukas Smik, Thomas A. Brown, Jung-Hyun Kim, Steven J. Rowland, Claire S. Allen, Joung-Ku Gal, Kyung-Hoon Shin, Jae Il Lee, Kyle W.R. Taylor

P-076 -Evaluating planktic foraminiferal Na/Ca as environmental proxy

Jacqueline Bertlich, Dirk Nürnberg, Jelle Bijma, Edmund Hathorne

P-077 -Detecting foraminiferal photosymbionts in the fossil record: a combined micropalaeontological and geochemical approach

Rehemat Bhatia, Bridget Wade, Shari Hilding-Kronforst, John Spratt, Melanie Leng, David Thornalley

P-078 -The distribution of Nd isotopes around the deep subpolar North Atlantic during the last termination

Patrick Blaser, Jörg Lippold, Marcus Gutjahr, Frerk Pöppelmeier, Norbert Frank, Jasmin Link, Martin Frank



P-079 -Changes in the flow rate and vertical distribution of water masses on the North-East Brazil Margin during key periods of the last 40 kyrs

Evelyn Böhm, Claire Waelbroeck, Pierre Burckel, Helge W. Arz, Arnaud Dapoigny, Matthieu Roy-Barman

P-080 -Holocene North Atlantic mid-depth gyre dynamics from Neodymium isotopic composition of cold water corals

Lucile Bonneau, Christophe Colin, Edwige Pons-Branchu, Eric Douville, Nadine Tisnerat-Laborde, Quentin Dubois-Dauphin, Furu Mienis, Norbert Frank

P-081 -Reconstructions of river discharges (Tagus River, Western Iberian Margin) during the last 5700 years: the contribution of benthic foraminifera.

Jerome Bonnin, Pierre-Antoine Dessandier, Jung-Hyun Kim, Clément Lambert, Bruno Malaizé, Lisa Warden, Jaap Sinninghe-Damsté

P-082 -Sea surface temperature proxy comparison for the Pliocene, North-Western Europe

Christine Boschman, Emily D. C.-Flood, Stefan Schouten, Francien Peterse, Jaap S. Sinninghe Damsté

P-083 -A terrestrial Pliocene-Pleistocene temperature record from North-Western Europe

Emily Dearing Crampton Flood, Francien Peterse, Dirk Munsterman, Jaap S. Sinninghe Damsté

P-084 -The calcium isotope evolution of the Lake Lisan, the last glacial Dead Sea

Harold Bradbury, Alexandra V. Turchyn, Kenny Wong, Adi Torfstein

P-085 -Variations in Laurentide meltwater $\delta^{18}O$ during Marine Isotope Stage 3 from individual foraminifera trace element and isotope measurements.

Oscar Branson, Lael Vetter, Jennifer S Fehrenbacher, Howard J Spero

P-086 -Crust vs Ontogenetic calcite: A Culture-Based Mg/Ca Calibration for Foraminifers Neogloboquadrina pachyderma and Neogloboquadrina incompta

Catherine V Davis, Jennifer H. Fehrenbacher, Ann D. Russell, Howard J. Spero, Tessa M. Hill

P-087 -Diurnal light cycle modulates Mg-banding in the non-spinose planktic foraminifer Neogloboquadrina dutertrei

Jennifer Fehrenbacher, Ann D. Russell, Catherine V. Davis, Howard J. Spero, Alexander Gagnon

P-088 -Determining water column stratification from individual Neogloboquadrina pachyderma (sinistral) geochemistry using a combination of analytical approaches.

Caitlin Livsey, Howard Spero, Reinhard Kozdon

P-089 -Refining the Diatom Oxygen Isotope Thermometer for Paleoclimatological Applications

Anthony Menicucci, Howard J. Spero



P-090 -Variation in Ba/Ca of spinose and non-spinose planktic foraminiferal calcite across a Pacific Ocean productivity gradient

Ann Russell, Hayley Cynar, Jennifer Fehrenbacher, Adina Paytan, Howie Spero

P-091 -Multispecies, individual specimen evidence for an Atlantic-Pacific offset in planktonic $\delta^{13}\text{C}_{\text{FORAM}}$ data due to water column differences in CO_3 ion concentration

Howard Spero, Jennifer S. Fehrenbacher

P-092 -Quantitative assessment of the potential for consistent morphological classification of *Globigerinoides ruber* morphotypes

Elizabeth A. Brown, Manuel F. G. Weinkauf, Pamela Hallock, Michal Kucera

P-093 -Towards the chromium isotope system as paleo-redox proxy: Influence of organic matter

Sylvie Bruggmann, Robert Kläebe, Robert Frei

P-094 -Porosity, Surface Area, and Volume of Planktonic Foraminifera as an Integrated Metabolic Index

Janet E. Burke, Pincelli M. Hull, Tess M. Maggio

P-095 -Networks of biochronologies for marine climate reconstruction

Paul Butler, Stella Alexandroff, Irene Ballesta, Fabian Bonitz, Juan Estrella-Martínez, Amy Featherstone, Stefania Milano, Ariadna Purroy, Maria Pyrina, Tamara Trofimova, Liqiang Zhao

P-096 -Implications of geochemical signatures on the origin of the white and red calcarenites in Burgos, Ilocos Norte, northern Philippines

Gretchen Callejo, Allan Gil Fernando

P-097 -Carbonate Clumped Isotope SST reconstructions of the Late Cretaceous Western Interior Seaway

Robin R. Canavan, Hagit P. Affek, Mark Pagani

P-098 -Trace elements in modern and medieval oyster shells from the French Atlantic coast, archival indicators discriminating natural high concentrations and anthropic pollutions.

Elsa Cariou, Christèle Guivel, Yann Le Jeune, Larole La, Laurent Lenta, Mary Elliot

P-099 - $^{87}\text{Sr}/^{86}\text{Sr}$ in pore fluids from the Arabian Sea Monsoon IODP Expedition 355

Samantha C. Carter, Elizabeth M. Griffith, Howie D. Scher

P-100 -Testing the potential of neodymium and hafnium isotopes for paleoceanography investigations in the Estuary and Gulf of St. Lawrence (eastern Canada)

Marie Casse, Jean-Carlos Montero-Serrano, Guillaume St-Onge, André Poirier

P-101 -A comparison of Neogene UK'37 and TEX86 temperature reconstructions

Isla Castaneda, Kira T. Lawrence



P-102 -Holocene rainfall changes in the western Mediterranean Sea as inferred from XRF core scanner ratios

Albert Català i Caparrós, Isabel Cacho, Jaime Frigola, Miquel Canals

P-103 -How can we constrain the Last Glacial Maximum carbonate system and circulation using proxy data?

Thomas Chalk, Benjamin Greenwood, Geoffrey Gebbie

P-104 -Early Holocene sea-level jumps and formation of the East China Sea coastal current

Fengming Chang, Song Zhao, Tiegang Li

P-105 -The Last 90 Ka Varied Intermediate Water Circulation of Northwestern Pacific

Yuan-Pin Chang, Shu-Han Chang, Horng-sheng Mii, Chuan-Chou Shen, Min-Te Chen

P-106 -Migration of the subtropical front south of Africa during the past 150,000 years and its impact on upper ocean stratification

Miros S. J. Charidemou, Ian R. Hall, Martin Ziegler, Markus Kienast, Rainer Zahn

P-107 -Revised marine mollusc shell clumped-isotope temperature calibration using the MIRA isotope ratio mass spectrometer

Leon Clarke, Paul Dennis, Alina Marca, Daniel Petrizzo, Gregory Henkes

P-108 -The palaeobiological response of dinoflagellate cysts to the Toarcian Oceanic Anoxic Event (T-OAE), in the Lusitanian Basin, Portugal

Vânia Fraquito Correia, James B. Riding, Paulo Fernandes, Luís V. Duarte, Zélia Pereira

P-109 -Disentangling the impact of inorganic carbon system parameters on the incorporation of elements in foraminiferal test carbonate

Linda Karoline Dämmer, Lennart de Nooijer, Gert-Jan Reichart

P-110 -Foraminifera B/Ca reconstructions over the last 5 Ma in the South China Sea (ODP 1146)

Haowen Dang, Lili Hu, Zhimin Jian, Peijun Qiao

P-111 -Changes in Atlantic Meridional Overturning Circulation and weathering inputs over the past 13 million years: Radiogenic Nd and Hf isotope evidence from the Agulhas Ridge

Veit Dausmann, Martin Frank, Jörg Rickli, Marcus Gutjahr

P-112 -The Applicability of Proxies for Deep-Time Studies: Insights from Earth Systems Models

Andrew Davies, Benjamin Greselle

P-113 -Reconstruction of LGM tropical SST anomalies from Mg/Ca and UK37' using the SENSETROP database.

Thibault de Garidel-Thoron, David W. Lea, Edouard Bard, Markus Kienast and SENSETROP participants



P-114 -The evolution of deep ocean chemistry in the Eastern Equatorial Pacific over the last deglaciation

Maria de la Fuente, Eva Calvo, Luke Skinner, Carles Pelejero, Wolfgang Müller, David Evans, Patricia Povea, Isabel Cacho

P-115 -New multi-site, high-resolution boron isotope based reconstruction of atmospheric CO₂ during the Pleistocene

Elwyn de la Vega, Gavin L. FOSTER, Paul A. WILSON

P-116 -Paleoclimate-associated dynamics of Formation, Preservation, and Interruption of the most-recent Organic-rich Sapropel S1

Gert J de Lange, R. Hennekam, M.L. Goudeau, A. Filippidi, J.W. Wu

P-117 –

Linda de Roij

P-118 - A multiproxy palaeoceanographic record of the deglacial and Holocene from the Subantarctic island of South Georgia

Rowan DeJardin, Claire Allen, Sev Kender, Melanie Leng, Victoria Peck, George Swann

P-119 - Moderate changes in Mg/Ca of seawater through the last 5 Ma

Petra Dekens, Ana Christina Ravelo, Elizabeth M. Griffith

P-120 - Variations of upper water structure and properties over the last 160 ka in the eastern Timor Sea: paleoceanographic and paleoclimatic controls

Xuan Ding, Xiaolei Pang, Franck Bassinot

P-121 - Application and validation of Na/Ca as a proxy for seawater salinity in the Red Sea and Mediterranean

Jan Pieter Dirksen, Esmee Geerken, Katharine M. Grant, Lennart de Nooijer, Eelco J. Rohling, Gert-Jan Reichert

P-122 - Boron in diatoms: a proxy for pH?

Hannah Donald, Gavin Foster, Alex Poulton, Mark Moore

P-123 - Sediment provenance in the western Arctic Ocean since the last deglaciation: paleoceanographic implications

Deschamps Charles Edouard, Charles-Edouard Deschamps, Jean-Carlos Montero-Serrano, Guillaume St-Onge



P-124 -Comparison of sea surface temperatures in glacial (MIS38) and interglacial (MIS37) periods using alkenone, glycerol dibiphytanyl glycerol tetraether and alkyl diol indices (SW Iberian Margin; IODP Site U1385)

Anuar El Ouahabi El Ghazi, Marta Rodrigo-Gámiz, Joan O. Grimalt, Belen Martrat, Stefan Schouten, Jaap S. Sinninghe Damsté

P-125 -Response of benthic foraminifera to changing bottom-water-oxygen levels at the Peruvian Oxygen Minimum Zone (OMZ) since the Last Glacial Maximum

Zeynep Erdem, Joachim Schönfeld, Anthony E. Rathburn, Maria-Elena Pérez, Jorge Cardich, Nicolaas Glock

P-126 -Deep evaporites of the Mediterranean: Constraining the origin of the Messinian gypsum deposits using water isotopes in gypsum hydration water

Nicholas Evans, Fernando Gázquez, Thomas K. Bauska, Judith A. McKenzie, Hazel J. Chapman, David A. Hodell

P-127 -A 135 kyr record of subsurface pCO₂, ventilation and nutrient levels from the Norwegian Sea

Mohamed Ezat, Tine L. Rasmussen, Bärbel Hönisch, Jesper Olsen, Jeroen Groeneveld, Luke Skinner, Peter DeMenocal, David Thornalley

P-128 -Marine signal of the Medieval Climate Anomaly - Little Ice Age transition in the South East Pacific

Elizabeth J. Farmer, Eirik V. Galaasen, Camille Li, Laura Ciasto, Ulysses Ninnemann

P-129 -Bottom-water ventilation variability during Eastern-Mediterranean sapropel S1 formation as related to Adriatic and Aegean deep-water formation

Amalia Filippidi, M.Triantaphyllou, G.J. De Lange

P-130 -Geochemical composition of Baltic benthic foraminifera collected and cultured over a large salinity gradient

Helena Filipsson, Jeroen Groeneveld, William E.N. Austin, Kate Darling, Nadine B. Quintana Krupinski, Clare Bird, David J. McCarthy, Ed C. Hathorne, Magali Schweizer

P-131 -Bamboo corals as recorders of environmental signals: Insights from laser ablation based elemental and boron isotopic investigations

Sebastian Flöter, Jan Fietzke, Marcus Gutjahr, Jesse Farmer, Bärbel Hönisch, Markus Kienast, Anton Eisenhauer

P-132 -Response of the marine silicon cycle during the PETM

Guillaume Fontorbe, Patrick J. Frings, Christina L. De La Rocha, Katharine R. Hendry, Daniel J. Conley



P-133 -Variability in the Iberian Upwelling System since the late 19th century from the annually-resolved sclerochronology of the bivalve *Glycymeris glycymeris*

Pedro Freitas, Carlos Monteiro, Paul Butler, Christopher Richardson, David Reynolds, Miguel Gaspar, James Scourse

P-134 -Tracing Mediterranean water masses with neodymium isotopes: preliminary results on modern and past conditions

Jaime Frigola, Isabel Cacho, Leopoldo D. Pena, Steven L. Goldstein, Fabrizio Lirer

P-135 -Barium isotopes in the Southern Ocean and the role of barite

Stephen Galer, Wafa Abouchami, Rob Middag

P-136 -Glacial-interglacial productivity changes in the Southern Ocean inferred from barium isotope ratios in marine barites

Ruifang C. Xie, Stephen J.G. Galer, Alfredo Martinez-Garcia, Anja Studer

P-137 -Evaluating the significance of “elevated epifauna” (foraminifera) for the reconstruction of the Mediterranean Outflow in the Gulf of Cadiz

Ángela García-Gallardo, Patrick Grunert, Antje Voelker, Isabel Mendes, Werner E. Piller

P-138 -Astronomical forcing of South Asian Monsoon precipitation over the past ~1 million years

Daniel Gebregiorgis, Ed Hathorne, Dirk Nürnberg, Steven Clemens, Liviu Giosan, Martin Frank

P-139 -Sodium incorporation in *Amphistegina lessonii*; applicability as a palaeo-salinity proxy

Esmee Geerken, Lennart de Nooijer, Inge van Dijk, Gert-Jan Reichart

P-140 -Biomarker proxy calibration along the AMT transect: TEX86, alkenone Uk37' and δD

Jessica Gould, Markus Kienast, Michael Dowd, Gesine Mollenhauer, Enno Shefuß

P-141 -A long term natural exposure experiment on species-specific degradation of dinoflagellate cysts

Daniel Gray, Karin Zonneveld, Gerard Versteegh

P-142 -The effects of temperature and salinity on Mg/Ca in *Globigerinoides ruber* (white): results from a global sediment trap compilation

William Gray, Syee Weldeab, David Lea, Yair Rosenthal, Birgit Gaye

P-143 -Benthic and planktonic boron isotope and B/Ca records over glacial–interglacial Termination 2 at ODP Site 1123.

Mervyn Greaves, Sambuddha Misra, Linda Booth, Caroline Daunt, Harry Elderfield

P-144 -Carbonate compensation in the uppermost Maastrichtian (Cretaceous): the apparent paradox of shallow deep sea carbonate compensation in warm palaeoclimates

Sarah Greene, Andy Ridgwell, Daniela N. Schmidt, Ellen Thomas, Sandra Kirtland Turner



P-145 -Late Miocene evolution of the Black Sea: insights from palynology and strontium isotope ratios

Arjen Grothe, Christiaan van Baak, Iuliana Vasiliev, Francesca Sangiorgi, Gert-Jan Reichart, Marius Stoica, Wout Krijgsman

P-146 -Mg/Ca temperature calibration for the benthic foraminifers *Bulimina inflata* and *Bulimina mexicana*

Patrick Grunert, Yair Rosenthal, Frans Jorissen, Ann Holbourn

P-147 -Biostratigraphy and Paleoenvironmental History of the latest Pliocene-Pleistocene Using Calcareous Nannofossils, IODP 349 Site U1431D, Eastern South China Sea

Jose Dominick Guballa, Alyssa Peleo-Alampay

P-148 -Sensitivity of coccolithophore degree of calcification to changing CO₂

José Tripathi, Heather Stoll, Paul A. Wilson, Steven M. Bohaty, Tom Dunkley Jones, Pratiyga J. Polissar, Sam Phelps

P-149 -Benthic foraminiferal assemblage and bottom water evolution off the Portuguese margin since the Mid-Pleistocene

Qimei Guo, Baohua Li, Jin-Kyoung Kim

P-150 -Sea Surface Temperature (SST) reconstructions for the last 20 KYR in the Southeast Pacific, using a new Southern Hemisphere Core-Tops Database of planktonic foraminifera sensus countings for SST reconstructions.

Naoufel Abdeldjalyl Haddam, Giuseppe Siani, Elisabeth MICHEL

P-151 -Changes in the trajectory of the Amazon Plume during Heinrich Stadial 1

Christoph Hägg, Cristiano M. Chiessi, Stefan Mulitza, Enno Schefuß

P-152 -Annually resolved North Atlantic marine climate over the last Millennium

Ian Hall, David Reynolds, James Scourse, Paul Halloran, Alexander Nederbragt, Alan Wanamaker, Paul Butler, Christopher Richardson

P-153 -The Paradox of the Paleocene Carbon Isotope Maximum (PCIM; 57.8Ma): Abrupt $\delta^{13}C$ Enrichment and Global Warming

Dustin Harper, Ursula Röhl, Thomas Westerhold, James Zachos

P-154 -Reconstructing past ocean-chemistry using foraminiferal Na/Ca: evidence from culture experiments with the benthic foraminifer *Operculina ammonoides*

Hagar Hauzer, Jonathan Erez, David Evans, Wolfgang Müller, Kaixuan Bu and Yair Rosenthal



P-155 -Rapid Subtropical Vegetation Response to Termination II: lipid $\delta^{13}C$ evidence from the South China Sea

Juan He, Guodong JIA, Li LI, Pinxian WANG

P-156 -Intermediate waters of the temperate NE Atlantic during the deglaciation recorded by cold water corals and sediment

Freya Hemsing, Yu-Te Hsieh, Luke Bridgestock, Patrick Blaser, Thomas Krenzel, Marleen Lausecker, Anne-Marie Wefing, Frédérique Eynaud, Dierck Hebbeln, Claudia Wienberg, David Van Rooij, Markus Gutjahr, Christophe Colin, Quentin Dubois-Dauphin, Gideon Henderson, Norbert Frank

P-157 -A radiolarian-based transfer function for paleoenvironmental reconstructions in the South China Sea

Iván Hernández- Almeida, Giuseppe Cortese, Pai-Sen Yu, Min-Te Chen, Michal Kucera

P-158 -Assessing the effects of foraminiferal ecology on geochemical paleothermometers

Sze Ling Ho, Jeroen Groeneveld, Thomas Laepple, Tilla Roy, Anna Nele Meckler

P-159 -Calibration of $\delta^{18}O$, Mg/Ca and clumped isotopes for estimation of temperature and $\delta^{18}O$ seawater in planktonic foraminifera

David Hodell, Sebastian F.M. Breitenbach, Maryline Vautravers, Anna-Lena Grauel, Stefano Bernasconi, James Rolfe, Li Lo, Mervyn Greeves, Henry Elderfield

P-160 -Estimating the boron isotope/pH sensitivity in ancient marine carbonates

Baerbel Hoenisch, Laura L. Haynes

P-161 -The tolerable warmness of the Eocene hyperthermal ocean

Christopher Hollis, Kristina Pascher, Claire Shepherd, Benjamin Hines, Hugh Morgans, Percy Strong, David Naafs, Richard Pancost

P-162 -Western Pacific near surface hydrography reflected in shells of planktic foraminifera

Martina Hollstein, Mahyar Mohtadi, Yair Rosenthal, Paola Moffa Sanchez, Gema Martínez Méndez, Delia Oppo, Stephan Steinke, Dierck Hebbeln

P-163 -Evolution of Deep ocean condition in Pacific during Northern Hemisphere Glaciation

baoyi huang, Ana Christina Ravelo, Jianghui Du

P-164 -Carbon and nitrogen isotopic compositions of chloropigments and porphyrins as a tool for elucidating the biogeochemical cycle of the aquatic system

Yuta Isaji, Hodaka Kawahata, Junichiro Kuroda, Toshihiro Yoshimura, Nanako O. Ogawa, Akiko Makabe, Hisami Suga, Atsushi Suzuki, Takazo Shibuya, Francisco J. Jiménez-Espejo, Stefano Lugli, Andrea Santulli, Vinicio Manzi, Marco Roveri, Naohiko Ohkouchi



P-165 -Environmental changes around the Gulf of Aden over the past 210 kyr: Implications for the dispersal of Homo sapiens

Yuta Isaji, Hodaka Kawahata, Naohiko Ohkouchi, Masafumi Murayama, Kensaku Tamaki

P-166 -Formation of the North Pacific Intermediate Water in the Bering Sea during the late Pleistocene, recorded by authigenic neodymium isotopes

Kwangchul Jang, Youngsook Huh, Yeongcheol Han

P-167 -Foraminiferal carbon and oxygen isotope composition characteristics and their paleoceanographic implications in the north margin of the western Pacific Warm Pool over the past about 700,000 years

Qi Jia, Tiegang Li, Zhifang Xiong, Fengming Chang

P-168 -Single tests of *G. inflata* as recorder of upper water column structure off NW Africa during the last deglaciation

Heather J. H. Johnstone, Tim Haarmann, Ute Merkel, Torsten Bickert, Heiko Paelike

P-169 -Seasonal and depth habitats of planktonic foraminifera vary as a function of climate

Lukas Jonkers, Stefan Mulitza, Michal Kucera

P-170 -Investigating the effects of growth rate and temperature on the B/Ca ratio and delta 11B during inorganic calcite formation

Karina Kaczmarek, Gernot Nehrke, Sambuddha Misra, Jelle Bijma, Henry Elderfield

P-171 -Episodes of El-Nino like conditions in equatorial Pacific Ocean during late Quaternary: evidence from planktic foraminiferal census and stable isotopic records

Tushar Kaushik, Devesh Kumar Sinha, Ashutosh Kumar Singh, Rengaswamy Ramesh

P-172 -Exploring foraminiferal Sr/Ca as a new carbonate system proxy

Nina Keul, Gerald Langer, Silke Thoms, Lennart deNooijer, Gert-Jan Reichart, Jelle Bijma

P-173 -New evidence for sediment focusing based on grain-size distributions from the Eastern Equatorial Pacific

Stephanie Kienast, Diksha Bista, Paul S Hill, Markus Kienast

P-174 -Western Equatorial Pacific nitrogen isotope dynamics during the last 25,000 yrs: A tale of two hemispheres

Markus Kienast, Nadine Lehmann, Julie Granger, Martina Hollstein, Gema Martinez Mendez, Mahyar Mohtadi

P-175 -Assessing the Extent and Causes of Fluctuations in the Seawater Sr/Ca Ratio to Improve Coral Paleothermometry Calibrations

Hali Kilbourne, Agraj Khare, Johan Schijf



P-176 -Benthic foraminiferal Mn/Ca ratios reflect foraminiferal microhabitat preferences

Karoliina Koho, Lennart de Nooijer, Christophe Fontanier, Takashi Toyofuku, Kazumasa Oguri, Hiroshi Kitazato, Gert-Jan Reichart

P-177 -Reconstructing Holocene palaeo-environmental conditions in the Southwestern Baltic (Little Belt, IODP Expedition 347, Site M0059): A multi-proxy comparison

Ulrich Kotthoff, Elinor Andr n, Thomas Andr n, Jeanine L. Ash, Thorsten Bauersachs, Anne-Sophie Fanget, Wojciech Granoszewski, Jeroen Groeneveld, Nadine Quintana Krupinski, Odile Peyron, Caroline P. Slomp, Anna Stepanova, Jonathan Warnock, Niels van Helmond, Expedition 347 Science Party

P-178 -Assessing seasonal biases in paleoceanographic reconstructions from the northern North Atlantic using an ecosystem modeling approach

Kerstin Kretschmer, Michal Kucera, Michael Schulz

P-179 -Quantifying CO₂ outgassing from the mid-depth South Pacific during the last glacial termination: an outlook.

Kevin K ssner, Ralf Tiedemann, Frank Lamy, Michael Sarnthein, Jenny Roberts, Thomas Ronge, Jelle Bijma, Gesine Mollenhauer, Christoph V lker, Jutta Wollenburg, Peter K hler, Martin Butzin

P-180 -Composition of surface sediments across the Drake Passage related to ocean productivity, terrigenous input, currents, and ice proximity

Carina Lange, Lorena Rebolledo, Hartmut Schulz, Juliane M ller, Helge Arz, Frank Lamy

P-181 -Characterising Heinrich Events in High Resolution using observations from the Iberian Margin proxies.

Sophie Lawrence, Luke Skinner

P-182 -Asynchronous patterns of the East Asian monsoon climate proxies since the Last Glacial

Li Li, Yanming Ruan, Juan He, Guodong Jia, Liang Dong, Hui Wang

P-183 -High-resolution upper-column water evolution in the southwestern South China Sea over last glacial-interglacial periods

Baohua Li, Xiaoyan Wang

P-184 -Reconstructing past changes in deep North Atlantic circulation pathway and strength with grainsize-specific Nd isotopes

Yuting Li, Alexander M. Piotrowski, Ioan Lascu, Richard J. Harrison, Simon Crowhurst, Josephine Clegg, Iris Buisman, I. Nicholas McCave

P-185 -Exploring the potential of zinc isotopes in deep-sea corals as a palaeo-proxy

Susan Little, Tina van de Flierdt, David J. Wilson, Peter Spooner, Mark Rehk mper, Jess F. Adkins, Laura F. Robinson



P-186 -Diatom transfer functions show decoupling between oceanic productivity and carbon burial: an example from the NE Pacific

Cristina Lopes, M. Kucera, Alan C. Mix

P-187 -Adjusting marine proxy records to account for palaeogeographic change and plate movements – retrieving the carbon cycle signal

Dan Lunt, Alex Farnsworth, Gavin Foster, Paul Markwick, Charlotte O'Brien, Rich Pancost, Stuart Robinson, Neil Wrobel

P-188 -Diatom and radiolarian $\delta^{30}\text{Si}$ and $\delta^{18}\text{O}$ – A surface sediment calibration study from the Pacific Southern Ocean

Edith Maier, Andrea Abelmann, Rainer Gersonde, Oliver Esper, Andreas Mackensen, Hanno Meyer

P-189 -Greater ENSO activity during the late Little Ice Age inferred from Mg/Ca in individual planktonic foraminifera

Tom Marchitto, Jennifer Fehrenbacher, Howard Spero, Alexander van Geen

P-190 -Regional Paleoceanographic Clues from Calcareous Nannofossils and Sediment Geochemistry: A 2000 year old Record from Northern and Southern Sibuyan Sea, Philippines

Dorothy Joyce Marquez, Alyssa Peleo-Alampay, Zhifei Liu

P-191 -Modalities for the accumulation of organic matter in the distal part of the Quaternary turbidite system of the Ogooué River (Gabon)

Philippe Martinez, Salomé Mignard, Philippe Martinez, Thierry Mulder, Thierry Garlan

P-192 -A new Mg/Ca-Temperature calibration for the benthic foraminifer *Trifarina angulosa* and its future use in Amundsen Sea Embayment water mass reconstructions.

Elaine Mary Mawbey, Katharine Hendry, Claus-Dieter Hillenbrand, James Smith, Mervyn Greaves

P-193 -Evaluation of reconstructed sea surface temperatures based on $\text{Uk}'37$ from surface samples of the subarctic Pacific

Lars Max, Lester Lembke-Jene, Kirsten Fahl, Jianjun Zou, Xuefa Shi, Ralf Tiedemann

P-194 -The Mud Current meter: Field Calibration

Nick McCave

P-195 -Clumped isotope thermometry on foraminifera: Reconstruction of Cenozoic deep-sea cooling

Nele Meckler, Phil Sexton, Stefano Bernasconi, Aradhna Tripathi

P-196 -Reconstructing seasonality from single specimen stable isotope analysis of planktonic foraminifera

Brett Metcalfe, Gerald Ganssen, Frank Peeters



P-197 -A field calibration of salinity controlled Na incorporation in planktonic foraminifera

Eveline Mezger, Lennart Jan de Nooijer, Michael Siccha, Geert-Jan A. Brummer, Michal Kucera, Gert-Jan Reichart

P-198 -The impact of seasonal variability on Neogloboquadrina pachyderma morphology and stable isotope values in sediment traps along the West Antarctic Peninsula

Anna Mikis, Kirsty Edgar, Daniela Schmidt, Frank Peeters, Hugh Ducklow, Victoria Peck, Michael Meredith, Kate Hendry, Melanie Leng, Jennifer Pike

P-199 -Atmospheric CO₂ evolution over Neogene

Sambuddha Misra, Martijn Bokkerink, Maryline Vautravers, Mervyn Greaves, Henry Elderfield

P-200 -Seawater Ca Isotopes Across Cretaceous – Tertiary Boundary

Sambuddha Misra,

P-201 -Insight on Atlantic Meridional Circulation Changes over the last 40 ky using ²³¹Pa/²³⁰Th and benthic δ¹³C from core SU90-08

Lise Missiaen, Evelyn Böhm, Claire Waelbroeck, Arnaud Dapoigny, Sylvain Pichat, Natalia Vázquez-Riveiros, Santiago. Moreira Martinez

P-202 -Paleovegetation changes in Northeast Africa over the past 23000 years based on compound-specific δ¹³C variations of n-alkanes in sediments from the Eastern Mediterranean Sea

Khaled Sayed Sinoussy Mohamed, HIROSHI NARAOKA, YUSUKE OKAZAKI

P-203 -A multiproxy paleotemperature reconstruction in the westernmost Mediterranean Sea over the last 35 kyr

Laura Morcillo Montalbá, Jaap Sinninghe Damsté, Stefan Schouten, Marta Rodrigo-Gámiz, Francisca Martinez-Ruiz, Miguel Ortega-Huertas

P-204 -Understanding environmental controls on Mg/Ca in Neogloboquadrina incompta: A core top study from the subpolar North Atlantic.

Audrey Morley, Tali Babila, Reinhard Kozdon, Yair Rosenthal

P-205 -Southwest monsoon driven changes in paleoproductivity in the NW Arabian Sea during the Neogene: a multi-proxy approach

Prakasam Muthusamy, Anil K. Gupta, Yuvaraja A, Ray S

P-206 -Tracing Antarctic Bottom Water formation in the Adélie and George V Land: A proxy calibration study.

Taryn Noble, Zanna Chase; Helen Bostock, Alexandra Post

P-207 -Laboratory techniques for preparation of large foraminiferal samples for element ratio and isotopic analyses

Sophie Nuber, Stephen Barker, Caroline H. Lear



P-208 -'One cold pole' – Estimating global sea surface temperatures for the late Oligocene

Charlotte O'Brien, Charlotte L. O'Brien, Mark Pagani

P-209 -Seasonality in the shell flux and oxygen isotopic composition of planktonic foraminifera in the southwestern Atlantic

Igor Martins Venancio Padilha de Oliveira, Igor M. Venancio, Andre L. Belem, Thiago P. Santos, Douglas O. Lessa, Ana Luiza S. Albuquerque, Stefan Mulitza, Michael Schulz, Michal Kucera

P-210 -A Coral Sea record of the bipolar see-saw, Heinrich STadial warming of the Great Barrier Reef

Bradley Opdyke, Ryan J. Owens

P-211 -Prolonged suppression of the Atlantic overturning circulation early in the deglaciation

Delia W. Oppo, Kuo-Fang Huang, Geoffrey Gebbie, William B. Curry, Zhengyu Liu, Jiaxu Zhang

P-212 -Controls on B/Ca Ratios in Symbiont-Barren Planktonic Foraminifera and Application to Paleo Carbonate System Reconstructions

Emily Osborne, Robert C. Thunell, Michael Bizimis, Wayne Buckley, Claudia Benitez-Nelson

P-213 -Rare earth element patterns in sedimentary foraminifera coatings: potential water mass tracers?

Anne Osborne, Ed C. Hathorne, Yves Plancherel, Philipp Böning, Dirk Nürnberg, Martin Frank

P-214 -Hydroclimatic shift associated with Indian Summer Monsoon during the last 700 years constrained by sedimentary records in the northern Andaman Sea

Yuki Ota, Hodaka Kawahata, Masafumi Murayama, Mayuri Inoue, Yusuke Yokoyama, Yosuke Miyairi, Thura Aung, H. M. Zakir Hossain, Atsushi Suzuki, Akihisa Kitamura, Kyaw Thu Moe

P-215 -Terrigenous sedimentation and bottom-water dynamics on the Shirshov Ridge during the last glacial Termination

Ekaterina Ovsepyan, Evgenia Dorokhova, Ivar Murdmaa, Dirk Nürnberg

P-216 -Indian summer monsoon variability during the last 6000 years BP recorded in sediments from South Eastern Arabian Sea

Saravanan P., Anil K. Gupta, Mruganka K. Panigrahi, Prakasam, M, Santosh K. Rai

P-217 -Spatial and Temporal Variations of Clay Mineral Records off Southwestern Taiwan since 50 kyr BP based on VNIR Reflectance Derivative Spectroscopy

Hui-Juan PAN, Joseph D. Ortiz, Pai-sen Yu, Min-Te Chen

P-218 -Glacial-interglacial thermocline variability of Indonesian throughflow

Xiaolei Pang, Xuan Ding, Franck Bassinot



P-219 -A core top calibration of sedimentary ϵNd in the Labrador Sea

Genna Patton, Roger Francois, Dominique Weis

P-220 -Down core ϵNd in the equatorial Atlantic: glacial-interglacial changes in a 100 kyr and 41 kyr world

Genna Patton, Roger Francois, Dominique Weis

P-221 -Considerations when using pteropod shells as an indicator of ocean acidification – past, present and future.

Victoria Peck, Rosie Oakes, Elizabeth Harper, Clara Manno, Geraint Tarling

P-222 -Experimental proxy calibration in cold water corals

Carles Pelejero, Robert M. Sherrell, Sara FuertesReinhard Kozdon, Àngel López-Sanz, Alexander C. Gagnon, Vreni Häussermann, Günter Forsterra, Eva Calvo

P-223 -Clumped isotope ($\Delta 47$) of planktonic foraminifera: methodology and calibration

Marion Peral, Mathieu Daëron, Dominique Blamart, Franck Bassinot

P-224 -Climate forcing in the western Mediterranean deep and intermediate water circulation over the last 23 ka

José N. Pérez-Asensio, Isabel Cacho, Jaime Frigola, Leopoldo D. Pena, Alessandra Asioli, Jannis Kuhlmann, Katrin Huhn

P-225 -Mn/Ca intraspecimen variability of benthic foraminifera (*Ammonia tepida* and *Melonis barleeanus*)

Jassin Petersen, Frans Jorissen, Antoine Bézos, Christine Barras, Carole La, Filip Meysman, Karoliina Koho, Lennart de Nooijer

P-226 -Deconstructing the alkenone- pCO_2 “b” parameter: a new calibration and application

Samuel Phelps, Pratigya J. Polissar, Peter B. deMenocal, Heather M. Stoll

P-227 -Constraining the magnitude of CO_2 decline since the mid Miocene inferred from phytoplankton proxies

Heather Stoll, Samuel Phelps, Pratigya Polissar

P-228 -Development of the alkenone-based temperature proxy: insights from Canadian lakes

Julien Planq, Jaime L. Toney

P-229 -Determining changes in the Baltic Sea outflow during the late Holocene based on organic carbon, stable carbon isotopes and benthic foraminifera.

Irina Polovodova Asteman, Anna Binczewska, Eystein, Jansen, Matthias Moros, Bjørg Risebrobakken, Joanna Slawinska



P-230 -A new collection of deep-sea corals from the southwest Indian Ocean covering the past 25,000 years

Naomi Pratt, Tianyu Chen, Tina van de Flierdt, Susan H. Little, Laura F. Robinson, Michelle L. Taylor, Alex D. Rogers, Nadiezhda Santodomingo

P-231 -Characterising water masses in the eastern Indian Ocean with $\Delta^{14}\text{C}$, $\delta^{18}\text{O}$ and $\delta^2\text{H}$

Na Qian, Liping Zhou, Pan Gao, Jingcan Zhang, Ian Lee-Mather, David Hodell

P-232 -Deep water carbonate ion concentration variations in the western equatorial Pacific during the last 250 kyr: A shell weight study of planktic foraminifera

Bingbin Qin, Tiegang Li, Zhifang Xiong, Fengming Chang

P-233 -Environmental constraints on Holocene cold-water coral reef growth off Norway: Insights from a multi-proxy approach

Jacek Raddatz, Volker Liebetrau, Julie Trotter, Andres Rüggeberg, Sascha Flögel, Wolf-Christian Dullo, Anton Eisenhauer, Silke Voigt, Malcolm McCulloch

P-234 -253 Plus - New 10 kV Isotope Ratio Mass Spectrometer: Robust Precision and Accuracy for Low Abundance Isotope Research – Clumped isotope research as an example

Jens Radke, Andreas Behrens, Stefano M. Bernasconi, Alvarro Fernandez, Inigo A. Mueller, Andreas Hilkert, Johannes Schwieters

P-235 -Past atmospheric pCO_2 from foraminiferal boron

Markus Raitzsch, Jelle Bijma, Klaus-Uwe Richter, Albert Benthien

P-236 -Evaluating sedimentary chlorins as a proxy for primary productivity and nutrient utilization

Maria Raja, Antoni Rosell-Melé

P-237 -Sodium at the nano-length scale in foraminifera

Elizabeth Read, Oscar Branson, Simon Redfern

P-238 -Constraints on deep South Atlantic glacial bottom water $\delta^{18}\text{O}$ from ikaites in the Zaire Fan

Ros Rickaby, Babette Hoogakker, Katherine Egan, Alexander Lawrence, Tania Marsset, Laurence Droz, Zunli Lu, M. Hermoso

P-239 -Diagenetic alterations of Pliocene foraminifera in the Nordic Seas

Bjørq Risebrobakken, Carin Andersson, Erin McClymont, Stijn De Schepper

P-240 -Reconstructing Holocene temperature changes in the Skagerrak area

Bjørq Risebrobakken, Irina Polovodova Asteman, Anna Binczewska, Matthias Moros, Joanna Slawinska, Amandine Tisserand, Eystein Jansen

P-241 -Progress toward a Plio-Pleistocene salinity reconstruction in the Bay of Bengal

Marci Robinson, Harry Dowsett, Emiliano Santin, Expedition 353 Scientists



P-242 -Paleoclimate and paleoceanographic variability over the last 20 kyr: insights from the Gulf of Cadiz and the Alboran marine records

Marta Rodriago-Gámiz, Francisca Martinez-Ruiz

P-243 -Cl/Ca ratio of coccoliths as a salinity proxy

Anne Roepert, Lubos Polerecky, Jack Middelburg

P-244 -Advances in developing Antarctic sclerochronological archives from the marine bivalve *Yoldia eightsi*

Alejandro Roman Gonzalez, Ian R. Hall, James D. Scourse, Paul G. Butler, Caroline H. Lear, Lloyd Peck, Martin Ziegler

P-245 -Understanding the effects of dissolution on Mg/Ca ratios in planktic foraminifera: Evidence from a novel individual foraminifera method

Brigitta Rongstad, Thomas M. Marchitto, Juan Carlos Herguera

P-246 -²³²Th/²³⁰Th as a Proxy for Aeolian Dust: A Core-top Study from the Tropical North Atlantic

George Rowland, Hong Chin Ng, Laura F. Robinson, Jerry F. McManus, Kais J. Mohamed, Katharine R. Hendry

P-247 -High resolution paleo-climates from the two last interglacial periods (MIS 5e and 7) derived from giant clams (*Tridacnidae*) shells in Sulawesi (Indonesia)

Hernan Camilo Arias Ruiz, Mary Elliot, Antoine Bézos, Kévin Pédaja, Laurent Husson, Edwige Pons-Branchu, Elisabeth Michel

P-248 -A high-resolution study on modern species specific aerobic degradation of organic-walled dinoflagellate cysts in marine surface sediments off Cape Blanc (NW Africa)

Annegret Rübült, Karin A.F. Zonneveld

P-249 -Understanding the mechanisms behind boron elemental and isotopic fractionation in the benthic foraminifera *Cibicides wuellerstorfi*

Aleksey Sadekov, Joanna Kerr, Gerald Langer, Maria de la Fuente, Luke Skinner, Henry Elderfield

P-250 -Stable carbon isotopes of planktonic foraminifera, a proxy for water column nutrients? The NW Iberian Margin as a case study

Emília Salgueiro, C. G. Castro, D. Zuñiga, M. Rufino, J. Groeneveld, F. de la Granda, N. Villaceros-Robineau, F. Alonso-Pérez, A. Voelker, F. Abrantes

P-251 -Controls on B/Ca incorporation from a network of Pacific corals

Sara Sanchez, Charles Charles, Alan Foreman, Jess Adkins

P-252 -Benthic ¹⁴C ventilation ages record DIC Storage in modern and LGM Abyssal Ocean

Michael Sarnthein, Ayako Abé-Ouchi, Sven Balmer, Megumi Chicamoto, Pieter M. Grootes, Birgit Schneider, Klaus Wallmann



P-253 -Quantification of dispersed volcanic ash: Application of geochemical approaches in marine sediment

Rachel Scudder, Deborah J. Thomas, Richard W. Murray

P-254 -Water masses and circulation in the Denmark Strait during Dansgaard-Oeschger events

Evangeline Sessford, Amandine Aline Tisserand, Eystein Jansen

P-255 -Paleoenvironmental changes across the Cretaceous/Paleogene boundary at the Agost Section (Spain): Ultra-High resolution LA-ICP-MS results

Claudia Sosa-Montes de Oca, Gert de Lange, Francisca Martínez-Ruiz, Francisco Javier Rodríguez-Tovar

P-256 -Modern pollen distribution in the Adriatic Sea reflecting river discharge provenance.

Salvador Ruiz Soto, Karin Zonneveld, Timme Donders, Francesca Sangiorgi

P-257 -Baltic Sea Ostracoda from the IODP Expedition 347

Anna Stepanova, Thomas Andrén

P-258 -The response of upper water structure in Kuroshio Source region to the variation of the Western Pacific Warm Pool since the early Pleistocene

Hanjie Sun, Tiegang Li, Fengming Chang, Zhifang Xiong, Baizheng An

P-259 -Atlantic Sea Surface Temperature from the Miocene Through Pliocene: Regional Gradients and Proxy Coherence

James Super, Mark Pagani

P-260 -Paleoproductivity in the western tropical Indian Ocean over the past 300 kyrs: evidence from coccolithophores off Tanzania, East Africa

Deborah Tangunan, Karl-Heinz Baumann

P-261 -North Pacific proxies and glacial-interglacial climate change

Ben Taylor, James Rae, Rainer Gersonde, Kate Darling, Andrea Burke, Edith Maier

P-262 -Oxygen history off Baja California over the last 80 kyr: A new foraminiferal-based record.

Martin Tetard, Laetitia Licari, Luc Beaufort

P-263 -Productivity changes reconstructed from species-specific benthic foraminiferal stable carbon isotope deviations

Marc Theodor, Gerhard Schmiedl, Andreas Mackensen, Frans Jorissen

P-264 -Paleoproductivity proxies in the eastern equatorial Atlantic.

Els Ufkes, Kay Beets, Maarten Prins, Jan-Berend STUUT



P-265 -Geochemical signature of provenance change in the western slope of the Ulleung Basin, East Sea

In Kwon Um, Man Sik Choi

P-266 -Neodymium in the Oceans: Assessment of a modern tracer and implications for paleoceanography

Tina van de Fliedt, Alexander M. Griffiths, Myriam Lambelet, Susan H. Little, Torben Stichel, David J. Wilson

P-267 -Tracing Late Pliocene Eastern Equatorial Atlantic ocean temperatures and water-column structure using dinoflagellates, and (in)organic geochemical proxies

Carolien van der Weijst, Josse Winkelhorst, Lucas Lourens, Francesca Sangiorgi, Francien Peterse, Appy Sluijs

P-268 -Sulfur in foraminiferal calcite: A new proxy for changes in carbonate ion concentration?

Inge van Dijk, L.J. De Nooijer, W. Boer, G.J. Reichert

P-269 -Thorium-230 and Protactinium-231 in a Global Model: Present and Past Climate

Marco van Hulst, Jean-Claude Dutay, Masa Kageyama, Matthieu Roy-Barman

P-270 -Mg/Ca Thermometry in Planktic Foraminifera: Improving Paleotemperature Estimations for *G. bulloides* and *N. pachyderma* left

Natalia Vazquez Riveiros, Aline GOVIN, Claire WAELBROECK, Andreas MACKENSEN, Elisabeth MICHEL, Santiago MOREIRA, Thomas BOUINOT, Nicolas CAILLON, Ayche ORGUN, Margaux BRANDON

P-271 -Evidence for short-lived hypoxia in coastal regions following the Cretaceous-Paleogene boundary impact

Johan Vellekoop, Lineke Woelders, Niels A.G.M. van Helmond, Simone Galeotti, Jan Smit, Caroline P. Slomp, Henk Brinkhuis, Philippe Claeys, Robert P. Speijer

P-272 -Diagenesis in Madeira Abyssal Plain turbidites. New insights for Inorganic geochemistry, organic geochemistry, palynology and their proxies

Gerard J.M. Versteegh, Daniel Gray, Gerhard Kuhn, Julius Lipp, Karin A.F. Zonneveld, Sabine S Kasten

P-273 -Middle Eocene to Lower Oligocene Bio-Magnetostratigraphy from ODP Site 709 (Madingley Rise, Equatorial Indian Ocean) and Calcareous Nannofossil response to Climate variability

Giuliana Villa, Chiara Fioroni, Fabio Florindo, Katia Carbonara, Lurcock Pontus

P-274 -Identifying early recrystallisation in foraminiferal tests

Janett Voigt, Ed Hathorne, Jan Fietzke, Heiko Pälike

P-275 -Metabolic water trapped in deep sea coral skeletal carbonates

Hubert Vonhof, John Reijmer, Eline Feenstra, Furu Mienis



P-276 -Simulating planktonic foraminifer oxygen isotope time series

Claire Waelbroeck, Didier Roche, Thibaut Caley, Michal Kucera, Lukas Jonkers, Natalia Vazquez

P-277 -Atlantid heteropods as sensitive indicators of environmental changes

Deborah Wall-Palmer, Christopher W. Smart, Richard Kirby, Malcolm B. Hart, Alice K. Burrige, Katja T.C.A. Peijnenburg

P-278 -The deep water carbonate chemistry changes in the South China Sea: implications for marine carbon cycle during the last glacial cycle

Sui Wan, Zhimin JIAN

P-279 -Quantifying the environmental niche stability of planktic foraminifera between the Holocene and Last Glacial Maximum

Amy Waterson, Kirsty M. Edgar, Daniela N. Schmidt, Paul J. Valdes

P-280 -Towards a core-top calibration for the δ Dalkenone paleosalinity proxy – Linking culture studies with the natural environment

Gabriella Weiss, Eva Pfannerstill, Jaap S. Sinninghe Damsté, Stefan Schouten, Marcel T. J. van der Meer

P-281 -El Niño in the Pliocene

Sarah White, Christina Ravelo

P-282 -Stable carbon isotopic fractionation in marine phytoplankton throughout the Phanerozoic and its relationship with $p\text{CO}_2$

Caitlyn R Witkowski, Stefan Schouten, Johan WH Weijers, Jaap S. Sinninghe Damste

P-283 -18 Million years of Surface Temperature variability in the Japan/East Sea

Frederike Wittkopp, Masanobu Yamamoto, Heiko Moossen, Tom Dunkley-Jones, Andrew Henderson, James Bendle

P-284 -Riverine contribution from the Libyan-Tunisian margin in central Mediterranean sediments during the Holocene sapropel: evidence from Sr and Nd isotopes

Jiawang Wu, Philipp Böning, Katharina Pahnke, Kazuyo Tachikawa, Gert J. de Lange

P-285 -A Critical Test of Nd isotopes as a Paleocirculation Proxy in the Southwest Atlantic

Yingzhe Wu, Steven L. Goldstein, Leopoldo D. Pena, Alison E. Hartman, Micha J.A. Rijkenberg, Hein J.W. de Baar

P-286 -A 450-ka sea surface temperature record of Site IODP-U1352 and its implications for the migration of Subtropical Front in the south-west Pacific

Yingying Wu, Xuan Ding



P-287 -On the fidelity of $\delta^{18}O_{sw}$ reconstructions: comparing paired foraminiferal Mg/Ca- $\delta^{18}O$ values from conventional and in situ techniques

Jody Wycech, D. Clay Kelly, Reinhard Kozdon, John Valley

P-288 -Can *Globigerina Bulloides* be used as a winter proxy in the northern South China Sea?

Rong Xiang, Jianguo Liu, Dongxiao Wang, Muhong Chen, Zhong Chen, Wen Yan

P-289 -Seasonal distribution of dissolved neodymium and ϵNd in the Bay of Bengal

Zhaojie Yu, Christophe COLIN, Eric Douville, Franck Bassinot

P-290 -Exploration for a new paired MPS-Mg/Ca analysis of *Ammonia aomoriensis* to estimate bottom water temperature in shallow marginal sea

Zhoufei Yu, Yanli Lei, Tiegang Li, Shuai Zhang

P-291 -Paleoceanographic changes and near sea surface temperatures (SST) in the western-central Fram Strait over the last 47kyr

Kasia Zamelczyk, Kasia Zamelczyk, Tine L. Rasmussen, Jeroen Groeneveld, Markus Raitzsch

P-292 -Dynamics of primary productivity in the northern South China Sea over the past 24, 000 years

Hongrui Zhang, ChuanLian Liu, XiaoBo Jin, JiangNan Shi, ShaoHua Zhao, ZhiMin Jian

P-293 -The Barrier Layer Evolution in the Core Region of the Western Pacific Warm Pool during the Last 360 kyr

Shuai Zhang, Tiegang Li, Fengming Chang, Zhoufei Yu

P-294 -Luminescence sensitivity of quartz grains: a new tool for studying marine sediments

Liping Zhou, Niankai Liu

P-295 -Stable oxygen isotope and clumped isotope data across the MPT in the Sea of Japan

Martin Ziegler, Expedition 346 Scientists

P-296 -A change in coral extension rates and stable isotopes after El Niño-induced coral bleaching and regional stress events

Jens Zinke, S. Hetzinger, M. Pfeiffer, W.-Chr. Dullo, D. Garbe-Schönberg

P-297 -Plio-Pleistocene marine palynology of the North Pacific

coralie zorzi, Anne de Vernal

P-298 -"Romans and climate"

A marine palynological perspective of upper water temperature and Italian precipitation between 200 BC and 500 AD

Karin Zonneveld, Gerard Versteegh