

## **S. Mulitza - Peer-reviewed publications (1996-2012)**

### **2012**

Govin, A, Holzwarth, U, Heslop, D, Ford Keeling, L, Zabel, M, Mulitza, S, Collins, J, Chiessi, CM (2011) Distribution of major elements in Atlantic surface sediments (36°N-49°S): imprint of terrigenous input and continental weathering. **Geochem. Geophys. Geosyst.** 13, doi:10.1029/2011GC003785

Hendry, KR, Robinson, LF, Meredith, MP, Mulitza, S, Chiessi, CM, Arz, H (2012) Abrupt changes in high-latitude nutrient supply to the Atlantic during the last glacial cycle. **Geology** 40, 123-126, doi:10.1130/G32779.1

### **2011**

Kuhnert, H, Mulitza, S. (2011) Multidecadal variability and late medieval cooling of near-coastal sea surface temperatures in the eastern tropical North Atlantic. **Paleoceanography** 26, PA4224, doi:10.1029/2011PA002130

Morley, A, Schulz, M, Rosenthal, Y, Mulitza, S, Paul, A, Rühlemann, C (2011) Solar modulation of North Atlantic central Water formation at multidecadal timescales during the late Holocene. **Earth and Planetary Science Letters** 308, 161-171

Zarriess, M, Johnstone, H, Prange, M, Steph, S, Groeneveld, J, Mulitza, S, Mackensen, S (2011) Bipolar seesaw in the northeastern tropical Atlantic during Heinrich stadials. **Geophysical Research Letters** 38, L04706, doi:10.1029/2010GL046070

Collins, JA, Schefuß, E, Heslop, D, Mulitza, S, Prange, M, Zabel, M, Tjallingii, R, Dokken, TM, Huang, E, Mackensen, A, Schulz, M, Tian, J, Zarriess, M & Wefer, G (2011) Interhemispheric symmetry of the tropical African rainbelt over the past 23,000 years. **Nature Geoscience** 4, 42-4

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Lopes dos Santos, R, Prange, M, Castañeda, IS, Schefuß, E, Mulitza, S, Schulz, M, Niedermeyer, EM, Sinninghe Damsté, JS, Schouten, S (2010) Glacial-interglacial variability in Atlantic Meridional Overturning Circulation and thermocline adjustments in the tropical North Atlantic. **Earth and Planetary Science Letters** 300, 407-414

Narayan, N, Paul, A, Mulitza, S, Schulz M (2010) Trends in coastal upwelling intensity during the late 20th century. **Ocean Science** 6, 815-823

Bamberg, A, Rosenthal, Y, Paul, A, Heslop, D, Mulitza, S, Rühlemann, C, Schulz, M (2010) Reduced North Atlantic Central Water formation in response to early Holocene ice sheet melting. **Geophysical Research Letters** 37, L17705, doi:10.1029/2010GL043878

Niedermeyer, EM, Schefuß, E, Sessions, AL, Mulitza, S, Mollenhauer, G, Schulz, M, Wefer, G (2010) Orbital- and millennial-scale changes in the hydrologic cycle and vegetation in the western African Sahel: insights from individual plant wax  $\delta D$  and  $\delta^{13}C$ . **Quaternary Science Reviews** 29, 2996-3005

Chiessi, CM, Mulitza, S, Pätzold, J, Wefer, G (2010) How different proxies record precipitation variability over southeastern South America. **IOP Conference Series: Earth and Environmental Science** 9, doi: 10.1088/1755-1315/9/1/012007

Mulitza, S, Heslop, D, Pittauerova, D, Fischer, HW, Meyer, I, Stuut, JB, Zabel, M, Mollenhauer, G, Collins, JA, Kuhnert, H, Schulz, M (2010) Increase in African dust flux at the onset of commercial agriculture in the Sahel region. **Nature** 466, 226-228

## 2009

Bouimetarhan, I, Dupont, L, Schefuß, E., Mollenhauer, G, Mulitza, S, Zonneveld, K (2009) Palynological evidence for climatic and oceanic variability off NW Africa during the late Holocene. **Quaternary Research** 72, 188-197

Castañeda, IS, Mulitza, S, Schefuß, E, Lopes dos Santos, RA, Sinninghe Damsté, JS, Schouten, S (2009) Wet phases in the Sahara/Sahel region and human migration patterns in North Africa. **Proceedings of the National Academy of Sciences**, doi:10.1073/pnas.0905771106 (open access)

Chiessi, CM, Mulitza, S, Pätzold, J, Wefer, G, Marengo JA (2009) Impact of the Atlantic Multidecadal Oscillation on the South American summer monsoon. **Geophysical Research Letters** 36, doi:10.1029/2009GL039914

Fraile, I, Mulitza, S, Schulz, M (2009) Modeling planktonic foraminiferal seasonality: Implications for sea-surface temperature reconstructions. **Marine Micropaleontology** 72, 1-9

Fraile, I, Schulz, M, Mulitza S, Merkel U, Prange M, Paul, A (2009) Modeling the seasonal distribution of planktonic foraminifera during the Last Glacial Maximum, **Paleoceanography** 24, PA2216, doi:10.1029/2008PA001686

Itambi, A, von Dobeneck, T, Mulitza, S, Torsten Bickert, Heslop, D (2009) Millennial-scale North West African droughts relates to H Events and D O Cycles: Evidence in marine sediments from off-shore Senegal. **Paleoceanography**, doi:10.1029/2007PA001570

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Steph, S, Regenber, M, Tiedemann, R, Mulitza, S, Nürnberg, D (2009) Stable isotopes of planktonic foraminifera from tropical Atlantic/Caribbean core-tops: Implications for reconstructing upper ocean stratification. **Marine Micropaleontology** 71, 1-19

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M, Morey AE, Mulitza S, Pflaumann U, Pisias NG, Radi T, Rochon A, Rohling EJ, Scaffi L, Schäfer-Neth C, Solignac S, Spero H, Tachikawa K, Turon JL (2009) Constraints on the magnitude and patterns of ocean cooling at the Last Glacial Maximum. **Nature Geoscience**, DOI: 10.1038/NGEO411

## 2008

Chiessi, CM, Mulitza, S, Paul, A, Pätzold, J, Groeneveld, J, Wefer, G (2008) South Atlantic interocean exchange as the trigger for the Bølling warm event. **Geology** 36, 919–922

Fraile, I, Schulz, M, Mulitza, S, Kucera, M (2008) Predicting the global distribution of planktonic foraminifera using a dynamic ecosystem model. **Biogeosciences** 5, 891-911

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## 2007

Chiessi, CM, Ulrich, S, Mulitza, S, Pätzold, J, Wefer, G (2007) Signature of the Brazil-Malvinas Confluence (Argentine Basin) in the isotopic composition of planktonic foraminifera from surface sediments, **Marine Micropaleontology** 64, 52-66

Lynch-Stieglitz, J, Adkins, JF, Curry, WB, Dokken, T, Hall, IR, Herguera, JC, Hirschi, JJ-M, Ivanova, EV, Kissel, C, Marchal, O, Marchitto, TM, McCave, IN, McManus, JF, Mulitza, S, Ninnemann, U, Peeters, F, Yu, E-F, Zahn, R (2007) Atlantic Meridional Overturning Circulation during the Last Glacial Maximum. **Science** 316, 66-69

McGregor, H, Dima, M, Fischer, HW, Mulitza, S (2007) Rapid 20th-century increase in coastal upwelling off Northwest Africa. **Science** 315, 637-639

## 2006

Mulitza, S, Paul, A., Wefer, G. (2006) Late Pleistocene paleoceanographic records of the South Atlantic Ocean. In: **Encyclopedia of Quaternary Science**. S. A. Elias (ed) Elsevier, pp. 1816-1831

Zaric, S, Schulz, M, Mulitza, S (2006) Global prediction of planktic foraminiferal fluxes from hydrographic and productivity data. **Biogeosciences** 3, 187–207

## 2005

Schäfer-Neth, C, Mulitza, S, Paul, A (2005) Perspectives on mapping the MARGO reconstructions by variogram analysis/kriging and objective analysis. **Quaternary Science Reviews** 24, 1083-1093

Waelbroeck, C, Mulitza, S, Spero, H, Dokken, T, Kiefer, T (2005) Harmonized global planktonic  $\delta^{18}O$  data set: relation to surface water temperature and  $\delta^{18}O$ . **Quaternary Science Reviews** 24, 853-868

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data, **Marine Micropaleontology** 55, 75-105

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Mulitza, S, Donner, B, Fischer, G, Paul, A, Pätzold, J, Rühlemann, C, Segl, M (2004) The South Atlantic oxygen isotope record of planktic foraminifera. In: **The South Atlantic in the Late Quaternary: Reconstruction of Material Budgets and Current Systems**. G. Wefer, S. Mulitza and V. Ratmeyer (eds) Springer-Verlag, pp. 121-142

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Rühlemann, C, Mulitza, S, Lohmann, G, Paul, A, Prange, M, Wefer, G (2004) Abrupt warming of the intermediate-depth tropical Atlantic caused by thermohaline circulation weakening: evidence from paleoclimate data and model simulations. **Paleoceanography** 19, doi:10.1029/2003PA000948

## 2003

Kim, J-H, Schneider, RR, Mulitza, S, Müller, PJ (2003) Reconstruction of SE trade-wind intensity based on sea-surface temperature gradients in the Southeast Atlantic over the last 25 kyr. **Geophysical Research Letters** 30, doi:10.1029/2003GL017557

Mulitza, S, Boltovskoy, D, Donner, B, Meggers, H, Paul, A, Wefer, G (2003) Temperature: 18O relationships of planktic foraminifera collected from surface waters. **Palaeogeography, Palaeoclimatology, Palaeoecology** 202, 143-152

Niebler, H-S, Arz, H, Donner, B, Mulitza, S, Pätzold, J, Wefer, G (2003) Sea-Surface Temperatures in the Equatorial and South Atlantic Ocean during the Last Glacial Maximum (23-19 ka), **Paleoceanography** 18, doi:10.1029/2003PA000902

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## 2000

Mulitza, S, Rühlemann, C (2000) African monsoonal precipitation modulated by interhemispheric temperature gradients. **Quaternary Research** 53, 270-274

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Mulitza, S, Rühlemann, C, Bickert, T, Hale, W, Pätzold, J, Wefer, G (1998) Late Quaternary <sup>13</sup>C gradients and carbonate accumulation in the western equatorial Atlantic. **Earth and Planetary Science Letters** 155, 237-249

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## **1997**

Mulitza, S, Dürkoop, A, Hale, W, Wefer, G, Niebler, H-S (1997) Planktonic foraminifera as recorders of past surface-water stratification. **Geology**, 25, 335-338

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Rühlemann, C, Frank, M, Hale, W, Mangini, A, Mulitza, S, Müller, PJ, Wefer, G (1996) Late Quaternary productivity changes in the western equatorial Atlantic: Evidence from <sup>230</sup>Th-normalized carbonate and organic carbon accumulation rates. **Marine Geology** 135, 127-152