Interglacial Climatic Variability in Southern Europe During the Last 425,000 Years From NW Iberian Marine Pollen Records


Your query was:
naughton

HR: 0800h
AN: PP41B-1624 Poster
Ti: Interglacial Climatic Variability in Southern Europe During the Last 425,000 Years From NW Iberian Marine Pollen Records
AU: *Desprat, S
EM: sdesprat@gmail.com
AF: EPHE - University Bordeaux 1 - EPOC, Talence, France
AU: Sanchez Goni, M
EM: mf.sanchezgoni@epoc.u-bordeaux1.fr
AF: EPHE - University Bordeaux 1 - EPOC, Talence, France
AU: Malaize, B
EM: b.malaize@epoc.u-bordeaux1.fr
AF: University Bordeaux 1 - EPOC, Talence, France
AU: Naughton, F
EM: filipa.naughton@gmail.com
AF: Marine Geology Unit, LNEG, Amadora, Portugal
AB: A synthesis of the multiproxy studies achieved on three twin deep-sea cores from the NW Iberian margin and providing a record spanning several climatic cycles up to 425 kyrs will be presented. They include records of pollen and marine tracers (assemblages of planktic foraminifera providing sea surface temperature estimates, planktic and benthic δ18O measurements) enabling a direct comparison between the vegetation and climate changes on land and the marine environment variations of the North Atlantic mid-latitudes and adjacent landmasses. This compilation gives information on the variability of duration and degree of warming of past interglacial periods which occurred under different combinations of baseline climate states related to astronomical forcing, ice volume and greenhouse gas concentrations. For example, forested stage of MIS 11 (centered on 400 ka, and known as the closest analogue of our interglacial due to Earth’s orbital configuration) appears to be the longest of the last 425 kyrs, twice as long as the Eemian in NW Iberia. The Iberian margin records also provide additional evidence of pervasive millennial-scale climatic variability in the North Atlantic borderlands throughout past climatic cycles of the Late Pleistocene, regardless of glacial states. A focus on MIS 9 showed however that ice volume might have an indirect influence on the amplitude of the millennial climatic changes in Southern Europe.
DE: [1632] GLOBAL CHANGE / Land cover change
DE: [3305] ATMOSPHERIC PROCESSES / Climate change and variability
DE: [4936] PALEOCEANOGRAPHY / Interglacial
DE: [4954] PALEOCEANOGRAPHY / Sea surface temperature
SC: Paleoceanography and Paleoclimatology (PP)
MN: 2010 Fall Meeting

New Search

AGU Home