Isotopic stratigraphy and biostratigraphy of a modern carbonate system: The northern Bahamas slope over the late Quaternary

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The high resolution stratigraphic framework was performed on a marine core located on the northern side of the Little Bahama Bank slope. The stratigraphical methods include faunal and floral analyses (planktonic foraminifera and coccoliths), radiometric dating, XRF analyses and isotopic stratigraphy. Low production and exportation of sediment from the bank during glacial periods and sea level lowstands result in reduced deposits, whereas deposits during interglacial periods are well developed. Any gravity flows disturbed the sedimentation, mostly during sea level rises.

Keywords: Planktonic foraminifera, Biostratigraphy, Isotopic stratigraphy, Bahamas, Late Quaternary.

High resolution biostratigraphy of Holocene on cores from the Bahamian slopes

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The leeward slopes of Bahamas are characterized by very high sedimentation rates over the Holocene and biostratigraphy based on planktonic foraminifera is a powerful tool to compare and date cores and facies. Based on four cores collected during the CARAMBAR cruise (2010) on the upper slope of the Great Bahama Bank, eleven radiocarbon dates, ^{210}Pb excess and planktonic foraminifer assemblage analyses, this work shows and discusses the main features used as detailed biostratigraphical points in this area over the mid and late Holocene.

Keywords: biostratigraphy, planktonic foraminifera, Holocene, Bahamas slopes.

Biostratigraphy of the Holocene and of the main cold events of the late Quaternary in the Gulf of Cadiz

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The Gulf of Cadiz, west of the Strait of Gibraltar, is the privileged site of water exchanges between the Atlantic Ocean and the Mediterranean where many palaeoceanographical studies have taken place over the last decades. Based on 21 cores from three cruises, oxygen isotope curves, 139 radiocarbon dates and microfaunal analyses, this work shows and discusses the main bio-events used as detailed biostratigraphical points in this area over the Late Quaternary. Those bio-events, such as well-known cold events (Younger Dryas, Heinrich events) or bio-events occurring during the Holocene, are essentially based on planktonic foraminifer species and/or coiling ratio and point occurrences of pteropod species. The large and spread data set allows to discuss ages and spatial validity of such bio-events.

Keywords: biostratigraphy, planktonic foraminifera, pteropods, Gulf of Cadiz, Late Quaternary.