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# Holocene paleoenvironments in the Western Mediterranean Sea along a NorthSouth Transect

Vincent Coussin<sup>\*1</sup>, Aurélie Penaud<sup>1</sup>, Nathalie Combourieu-Nebout<sup>2</sup>, Yannick Miras<sup>2</sup>, Sandra Picard Casal<sup>2</sup>, Odile Peyron<sup>3</sup>, Nadine Tisnérat - Laborde<sup>4</sup>, Nathalie Babonneau<sup>1</sup>, Antonio Cattaneo<sup>5</sup>, and Jacques Deverchère<sup>1</sup>

<sup>1</sup>Laboratoire Géosciences Océan – Université de Brest – Laboratoire Géosciences Océan - UMR 6538 - Institut Universitaire Européen de la Mer, rue Dumont d'Úrville, 29280 PLOUZANÉ, France

<sup>2</sup>Histoire naturelle de l'Homme préhistorique – Centre National de la Recherche Scientifique : UMR7194 – Institut de Paléontologie Humaine 1, rue René Panhard 75013 Paris, France

<sup>3</sup>Institut des Sciences de l'Évolution de Montpellier – Centre National de la Recherche Scientifique - CNRS : UMR5554 – Université de Montpellier, 34095 MONTPELLIER, France

<sup>4</sup>Laboratoire de mesure du carbone 14 – Commissariat à l'énergie atomique et aux énergies alternatives : DSM/LSCE, Centre National de la Recherche Scientifique : UMS2572 – Bâtiment 450 - Porte 4E CEA Saclay 91191 GIF SUR YVETTE CEDEX, France

<sup>5</sup>Laboratoire Environnements Sédimentaires (LES) – Institut Français de Recherche pour l'Exploitation de la Mer (IFREMER) – Pointe du Diable, 29280 Plouzané, France

## Résumé

Marine sediment cores have already highlighted the response of Holocene Mediterranean paleoenvironments face to the successive rapid climate changes with palynological proxies (e.g. Fletcher et Sanchez Goñi, 2008; Combourieu-Nebout et al., 2009; Fletcher et al., 2010, 2013; Chabaud et al., 2014). Here, this study is focused on two sequences from the Western Mediterranean Sea, retrieved 12 km and 20 km from the coast along a South (Algerian coast) – North (Gulf of Lion margin) transect. Inedit core MD04-2801 (36°30.99' N, 0°30.03' W, 2067 m water depth, Algerian coast) covers the last 14 ky on a 9 m-long sediment section. Core KSGC 31 (66.55°N, 17.7°W; 470 m water depth, Gulf of Lion; Bassetti et al., 2016) covers the Holocene on a 7 m-long sediment section. Both cores allows a pluridecadal resolution.

Thanks to the identification of continental (pollen, spores, and other continental non-pollen palynomorphs) and marine (dinoflagellates, other marine micro-algae) palynological tracers, we respectively discuss past continental climate and hydrological conditions. We will especially focus on the 4.2 ka event that has been a key-period for the establishment of the Mediterranean climate regime. The comparison between both cores will allow to understand the different patterns in the hydrological and climatic conditions across the South-North gradient.

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