The North Atlantic is the primary deep ventilator of the oceans playing a key role in the thermohaline circulation through the Atlantic Meridional Overturning Circulation whose strength can be affected by regional or global climatic changes. During abrupt climate change events, e.g. Heinrich Events, the southward migration of the Polar Front, induced by the discharges of icebergs and melt-water pulses, led to abrupt decreases in sea surface temperatures and salinity thereby affecting primary productivity. Paleo-productivity signals in the North Atlantic are controversial and not straightforward (Villanueva et al., 2001). Coccolithophores are primary producers and the most important calcifying organisms in the ocean, playing a key role not only in the ecosystem but also in the global carbon cycle. The coccolith Sr/Ca ratio is linked to productivity with a higher ratio indicating higher growth rates and thus coccolith productivity. This study infers paleo-productivity variability based on coccolith Sr/Ca ratios at IODP Site U1313 (41°N, 33°W) between 676 and 355 ka ago. MIS 12 is considered the most extreme glacial of the last 500 ka and experienced Heinrich-type ice-rafting events while MIS 14 was a relative mild glacial. For the MIS 12-10 interval, for which data corrections and interpretation have already been completed, the Sr/ Ca data clearly shows that coccolithophore productivity was substantially higher during glacial than interglacial or interstadial periods. Heinrich events, conversely, greatly diminished paleo-productivity.

**Palavras chave:** circulação termohalina, coccolitóforos, productividade, Sr/Ca, evento Heinrich-type.

**Keywords:** thermohaline circulation, coccolithophores, productivity, Sr/Ca, Heinrich-type event.

**Proxy calibration: What are coccolithophores of Galician waters and surface sediments telling us?**

Calibração de proxy: O que nos dizem os coccolitóforos e cocolitos encontrados nas águas da Galiza e sedimentos superficiais?

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**A Preliminary Environmental Sensitivity Index (ESI) Map to assist oil spill management in the Aveiro coastal and estuarine region**

Mapa Preliminar de Índices de Sensibilidade Ambiental (ESI) para apoio à gestão de derrames petrolíferos na região costeira e estuarina de Aveiro

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