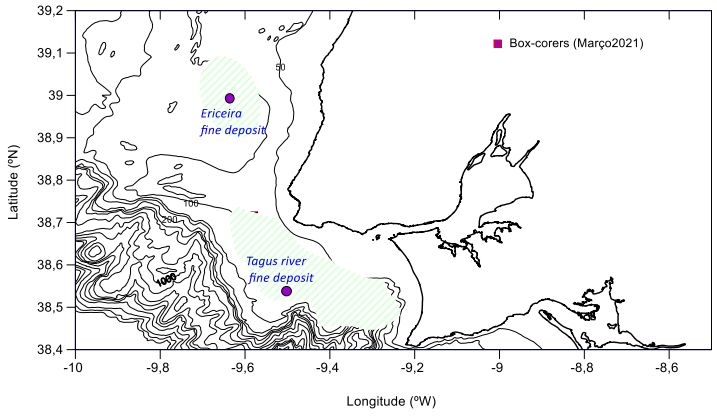


MESTRADO CIÊNCIAS DO MAR
Ano letivo 2023/2024

TÍTULO	Recent sedimentation in the Tagus adjacent shelf and dinoflagellate cyst records: looking back into the history of Harmful Algae Blooms and climate change
 <p>Figure: box-core location</p>	
RESUMO (até c. de 2000 caracteres)	<p>Objective: Study the accumulation of cysts in two main sedimentary environments with different hydrodynamic characteristics using sedimentary record (2 dated box –corers, one collected off Ericeira and another in the Tagus muddy deposits).</p> <p>Expected results:</p> <ol style="list-style-type: none"> 1. Document the historical record (XIX-XXI century) of harmful dinoflagellate blooms in Western Iberia. 2. Document environmental change in Western Iberia in the last century, in particular climate change, using dinoflagellate cysts as environmental proxies. 3. Predict future scenarios for harmful dinoflagellate blooms in Iberia contributing to a sustainable management of marine resources affected by these nuisance events. <p>Methods: Sediment corers will be analysed for grain-size, water content, organic carbon, and sedimentation rates. For dinoflagellate cyst characterization, samples will be prepared according to standard palynological methods for comparison with the sub-fossil record from other areas and using non-destructive methods for investigation of viable cysts along the corer, isolation, and establishment of cultures (resurrection biology). Note: The sediment samples have already been collected and dated and will be available from the beginning of the Master project. It is a multidisciplinary project in marine ecology with a strong link between geology, oceanography and biology.</p>
ORIENTADOR(ES) (máx. 2, um com vínculo à FCUL)	Ana Amorim (FCUL) and Anabela Oliveira (IH)
LOCAL DE ACOLHIMENTO	The work will be developed in the marine geology laboratory of Instituto Hidrográfico and the marine botany laboratory at FCUL-MARE

(principal e secundário, se for o caso)	
DATA DE INÍCIO (a partir de Setembro de 2022)	<i>1 setembro 2023</i>
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