

Designação do Projeto	Quando o Arquipélago dos Açores foi realmente colonizado? Uma abordagem paleolimnológica de alta resolução
Código do Projeto	PTDC/CTA-AMB/28511/2017
Objetivo Principal	«Objectivos_Científicos»
Região de Intervenção	Lisboa
Entidade Beneficiária	FCiências.ID – Associação para a Investigação e Desenvolvimento de Ciências
Data de Aprovação	23-08-2018
Data de Início	01-10-2018
Data de Conclusão	30-09-2021
Custo Total Elegível	239.472,54
Apoio Financeiro da União Europeia	FEDER - «FEDER»
Apoio Financeiro Público Nacional/ Regional	OE - «OE»

## Objetivos

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The main objective of DiscoverAZORES is to time the first human settlements of the Azores archipelago, and reveal their contemporary climate in order to understand the first colonizers distribution patterns.

## Atividades

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- 1) identifying the first signals of change related to human occupation (past land use changes) using both paleolimnological (chironomids, diatoms, inorganic and organic composition of sediments) and paleoecological (pollen analysis) classical approaches as well as
- 2) using cutting-edge approaches (faecal related organic compounds and human DNA presence) as unequivocal tracers of human activity preserved in sedimentary record
- 3) using climate and environmental activity reconstructions and to unravel the role of the anthropogenic, climate and volcanic forcings on the vegetation evolution
- 4) to characterize climatic and environmental conditions at the time of early human settlements on the Azores archipelago



## Resultados Esperados / Atingidos

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The successful fulfilment of the proposed work packages will give us the opportunity to produce high quality outputs: i) a comprehensive detection of the first signals of human arrival in the Azores archipelago (T4-5); ii) a confirmation with unequivocal tracers of human activity preserved in sedimentary record (T6-7); iii) a robust reconstruction of past climate (T8); iv) understanding favourable past climate windows to a successful distribution of humans on remote oceanic islands (T9-10). The reconstruction of the dynamics of past landscape (T4-5) will give the opportunity to relate it to eventual modifications by climatic shifts and human activities such as fire, agriculture or cattle raising and decline, potentially yielding publications in journals like Quaternary Science Reviews or Frontiers in Plant Science. The confirmation with unequivocal tracers of human activity (bio and molecular markers approach) preserved in sedimentary record (T6-T7) will yield an independent publication in journals like Frontiers in Ecology and Evolution or Geochimica et Cosmochimica Acta. The reconstruction of the past climate of the Azores (T8) will provide one of the most innovative contributions paleoclimate research in the North Atlantic and is expected to yield a publication in Climate of the Past, The Holocene or similar journals. Understanding favourable past climate windows to a successful distribution of humans on remote oceanic islands will provide the most innovative outcome and it is expected to yield a publication in high impact journals (T9-10). Project results will be published in MSc theses and international meetings. Also, dissemination of results will include a variety of routes, such as: articles in local newspapers, direct links and communications with different stakeholders and policymakers. Short news will be released at participants' institutions WebPages, and local/national and international media.

