

Presentation of MAR-ECO Students

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Working title of project: Bioluminescent fauna of the Mid-Atlantic Ridge

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Summary of Project:

Bioluminescence is the only visually relevant source of light at depths greater than 1000m. Various studies conducted in the Atlantic Ocean, using an ISIT (Intensified Silicon Intensifier Target) Camera, have shown high levels of pelagic bioluminescence in a region of coastal upwelling and elevated levels of benthic bioluminescence corresponding to the presence of ostracods interacting with deep-water eels.

During a series of three voyages to the Mid-Atlantic ridge, observations are planned at different depths and latitudes to determine the prevalence, intensity, source and function of bioluminescent displays in relation to new hypotheses on the causes of zonation of fauna in the deep sea. New techniques for measuring pelagic and benthic bioluminescence will also be developed. The research will be conducted within the framework of the NERC consortium and contributes to the Consensus of Marine Life MAR-ECO programme.