

**Marine biodiversity in rocky shores and sediments: the impact of the Port of Sines (SW Portugal). 38<sup>th</sup> European Marine Biology Symposium. Aveiro.**

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Spatial and temporal patterns of number of *taxa* were studied in two marine environments: rocky shores and sediments. Spatial variability was studied in different areas located outside and inside the Port of Sines. Areas inside the Port of Sines were chosen accordingly to location in relation to potential impacts (fishing port, oil and coal terminals) and exposure to wave action and water flow. Variability in a smaller scale (site, nested in area) was also tested. Temporal variability was studied in different dates in winter and summer. In rocky shores two vertical levels were considered. Sediments were sampled at approximately 20 m deep. Macrobenthic *taxa* were identified to species in rocky shores and to families in sediments. Data were analysed by analysis of variance. In rocky shores, the following general patterns of biodiversity were found: number of *taxa* was higher in areas outside the Port of Sines and lowest in one area inside the Port of Sines located close to the fishing port; no significant differences were found between sites and among dates. In sediments, the following general patterns of biodiversity were found: number of *taxa* was highest in one area located inside the Port of Sines and close to a sewage outfall; no consistent differences between areas outside and inside the Port of Sines were detected; no significant differences were found between sites; number of *taxa* was highest in summer.