

Using microComputedTomography to study the impact of environmental stressors on benthic foraminifera: initial results

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We performed microComputedTomography (microCT) scans of benthic foraminifera, in order to better understand how multiple environmental stressors are affecting biomineralization as well as preservation of benthic foraminifera. Both live (Cell Tracker Green labeled) and dead foraminiferal specimens from the Skagerrak and Kattegat, NE Atlantic were scanned. The samples originate from 330m and 130m of water depth, where salinity ranged between 35.2 (Skagerrak) and 34.7 (Kattegat) and dissolved oxygen content varied from full oxygenated in the Skagerrak to hypoxic conditions ($<2\text{mlO}_2/\text{L}$) at the Kattegat station. Substantial differences were noted in test (shell) preservation and morphology between fossil and modern samples, where pre-industrial samples were less affected by dissolution processes.

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