

Changing habitats of planktonic foraminifera in the Greenhouse World

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The objectives of our research project are to document historical changes in the assemblage composition and habitat depth of planktonic foraminifera in relation to changes in the physical and chemical parameters and stratification of the surface ocean due to recent global warming. Changes in the abundance, size, chemical, and isotopic composition of the tests are assessed.

Irish Sea:

Immigration of the subtropical *Globorotalia hirsuta* since 1993

Cape Verdes:

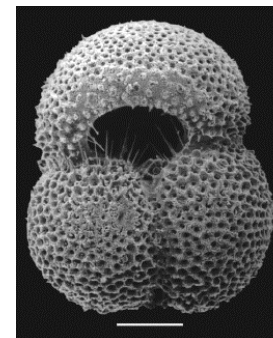
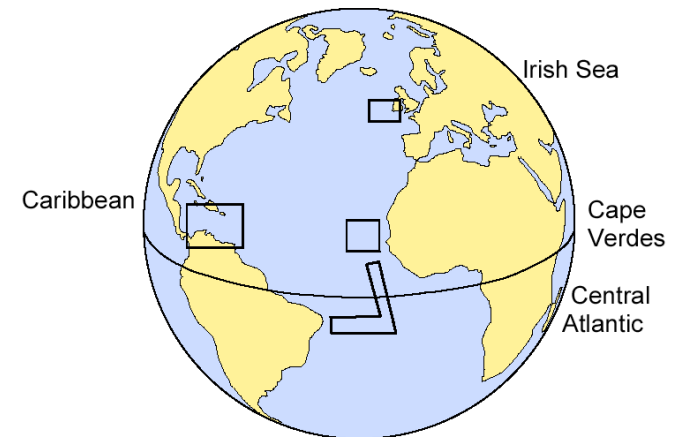
Abundance increase of *Globorotalia menardii* since 1927

Central Atlantic:

Abundance decrease of *Globigerinoides ruber*, white, since 1964 and *Globigerinoides sacculifer* since 1927

Caribbean:

Abundance decrease of *Globigerinoides ruber*, white, since 1996



Globigerinoides ruber (l.) and *Globorotalia menardii* (r.) from the tropical Atlantik. Scale bar: 100 μm (images: A. Harbers, 2011).

Publications: Harbers, A. et al. 2010, *Micropaleontology*, 56: 259-274.
Harbers, A. 2011, Diss. Univ. Kiel (<http://eldiss.uni-kiel.de>)
Jentzen et al., 2018. *J. Foram. Res.*, 48, 251-272.
Jentzen et al., 2019. *J. Micropalaeontology*, 38, 231-247.