

# **A high-resolution depth profile of coccolithophore in oligotrophic waters from the North Atlantic gyre**

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We report abundances and vertical distribution of coccolithophore species from water samples retrieved on 28.1.2015 by the R.V. Meteor during cruise M113/2, station #39 located at c. 31.46°N, 44.44°W in the North Atlantic gyre. Whenever possible, at least 300 specimens at 24 depths, from the surface to 400 m, were evaluated by SEM to determine community composition. This location is representative of oligotrophic regions of oceans with a deep Chl a maximum at 120 m, where we observed abundant coccolithophores. Oligotrophic regions account for 70 percent of the photosynthetic volume of the oceans. We seek to understand the contribution of coccolithophores in this region to biogeochemical cycling of carbon.