Title:

Video of a plankton community enclosed in a “Kiel Off-Shore Mesocosm for future Ocean Simulations” (KOSMOS) during the long-term study in Gullmar Fjord (Sweden) 2013

Authors:

M. Sswat[1], T. Boxhammer[1], F. Jutfelt[2], L. T. Bach[1], M. Nicolai[1], and U. Riebesell[1]

Affiliations:

[1] GEOMAR Helmholtz Centre for Ocean Research Kiel

[2] University of Gothenburg

DOI: 10/3289/KOSMOS\_PLANKTON\_SWEDEN\_2013

Abstract:

From January to July 2013 we deployed ten 19 m long KOSMOS units in a Swedish fjord (Gullmar Fjord, 58° 16’008 N, 11° 28’680E) close to the city of Lysekil, in order to study the influence of ocean acidification on a natural winter-to-summer succession of a plankton community under in-situ conditions. Towards the end of the study (21st of May), we mounted an underwater camera on a diving torch and slowly lowered this setup to a depth of approximately 18.5 m. A variety of different organisms (copepods, fish larvae, jelly fish) and detrital aggregates can be seen during the descent of the camera into the deep. The conical mesocosm sediment trap and particles collected in the funnel can be seen at the end of the video in 19 m water depth. The video shows that we enclosed and studied a lively plankton community within the KOSMOS system.

Funding:

This study was funded by the Federal Ministry of Education and Research (BMBF) in the framework of the “Biological impacts of ocean acidification II” (BIOACID II) project.

Information:

The video can be downloaded but it also available on the streaming platform YouTube.