

## **Press Release**

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Low oxygen eddies open up new views on the Atlantic Ocean Kiel Marine Sciences show previously unknown biological processes in the Atlantic

11 January 2016/Kiel. After the discovery of low-oxygen eddies in the tropical and subtropical Atlantic Ocean, some assumptions regarding biogeochemical cycles in this region now have to be rethought. Marine scientists from Kiel and Plön (Germany) have found processes within these short-lived eddies that previously were not



Fiedler from GEOMAR. But when the newly formed eddy was discovered on satellite data off the coast of Mauritania, everything fit together. In collaboration with another project, two autonomous oceanographic gliders were launched from the Cape Verdean island of São Vicente and sent to the eddy. In March 2014, the eddy had already approached the archipelago, they used the research vessel ISLÂNDIA of the Instituto Nacional de Desenvolvimento das Pescas (INDP) for direct sampling. In the same month, a long planned scientific cruise of the German research vessel METEOR, started in the Cape Verdean port city of Mindelo. Sampling of the low-oxygen eddy was added to the programme of the cruise. "So we were able to obtain, for the first time, detailed insight into the biogeochemistry of such eddies," says Dr Fiedler. The study is only the first in a series of papers with results from the investigations in 2014.

Prof Dr Arne Körtzinger from GEOMAR, another co-author of the study, adds: "This project has shown again how important it is to have a well-equipped base in such an important region as the tropical Atlantic. Our long-lasting and reliable cooperation with Cape Verde and the construction of permanent research infrastructures there has paid off scientifically."

## Originalarbeit:

Löscher, C. R., M. A. Fischer, S. C. Neulinger, B. Fiedler, M. Philippi, F. Schütte, A. Singh, H. Hauss, J. Karstensen, A. Körtzinger, S. Künzel and R. A. Sch5 -1.16l 37484 Künz i[(i)3(m)-6(por)-6(t)of