

Evidence of a dense water vein along the Libyan continental margin

Gasparini G.P. , Bonanno A., Zgozi S., Basilone G., Borghini M., Buscaino G., Cuttitta A., Essarbout N., Mazzola S., Patti B., Ramadan A. B., Schroeder K., Bahri T., Massa F.

Abstract

For the first time it was possible to investigate a still poorly known region of the eastern Mediterranean Sea, the Libyan continental margin. The region has been investigated during an oceanographic cruise in summer 2006. The paper presents an important and novel feature of the Mediterranean Sea: a dense vein along the continental margin off Libya. Its cascading into a steep canyon that incises the continental shelf may play a role in ventilating the deep layers of the Ionian Sea. The paper gives a description of the vein evolution and cascading, focusing on the accelerating and retarding effects acting on it, gives some insight on its dynamic and furnishes an estimate of its transport, which resulted to be comparable with the Adriatic Deep Water production rates.

Keywords: Libyan coast, dense vein, cascading, dynamics, circulation

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