



## **Shallow traces of the Mediterranean outflow in the Eastern Gulf of Cádiz**

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From 1998 onwards during the bi-annual bottom trawl surveys in the eastern Gulf of Cádiz standard CTD observations are being taken on a regular grid. These observations are being complemented from November 2008 with direct velocity measurements along transects perpendicular to the shelf with a 75 kHz VM-ADCP. From July 2009 quarterly hydrographic observations (CTDO2-LADCP and water samples) are also conducted along three standard sections under the frame of STOCA project (Series temporales de datos oceanográficos en el golfo de Cádiz, IEO). The study of these data sets together with the reanalysis of a historical database allows resolving the 3D mass and velocity fields, with emphasis in the Mediterranean outflow and its early transformations in the eastern Gulf of Cádiz. These observations have permitted us to detect and characterize a previously unreported shallow pathway of the Mediterranean outflow along the upper slope from the Straits of Gibraltar to Cape St. Vincent. This structure is discussed in the context of the regional oceanography with a special look at the shelf and surface circulation.