



Assimilation of glider observations in the Ionian Sea

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Glider observations of temperature and salinity in the Ionian Sea made in autumn 2004 were assimilated in an operational analyses system together with other in situ and satellite observations. The glider data significantly improved the vertical structure of temperature and salinity fields along the path of the glider and remove biases. The analyses allowed a detailed evaluation of the dynamics, path and intensity of the Atlantic Ionian Stream (AIS). It is found that in the Sicily Strait the AIS is strengthened during autumn by the positive but weak wind stress curl near the southern Sicilian coasts. On the other hand, the change of position of the wind stress curl zero crossing in winter, forces the AIS to bifurcate and shift southward in the Ionian Sea. For the first time the analyses show that a ring-like eddy detaches from the AIS in the Ionian Sea.