

CLIMATE CHANGE IMPACTS ON SEA SURFACE TEMPERATURE IN THE EASTERN MEDITERRANEAN, LEVANTINE BASIN

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Abstract

Increases in SSTs have been recorded to occur in the Mediterranean at about twice the rate as that of the global oceans. Here we analyze and compare satellite remote sensing SST data with in-situ data from 1996 to 2012 in the Levantine. Further, SST profiles from oceanographic cruises and gliders were processed to study the variability at the surface layer (0-10m). These data were collected during several CYBO research cruises that the Oceanography Centre (OC) has conducted, as well as during missions of the gliders owned and operated by the OC. We show that the Levantine has undergone SST increases, and that satellite and in-situ SST data are correlated. The driving mechanisms of these changes need to be investigated, in order to understand the future trends and impacts of climate change in the region.