

M. Vargas-Yáñez, M.C. García-Martínez, F. Moya, E. Tel, G. Parrilla, F. Plaza, A. Lavín, M. J. García, J. Salat, J.L. López-Jurado, J. Pascual, J. García Lafuente, D. Gomis, E. Álvarez, M. García, C. González-Pola, F. Polvorinos, E. Fraile, M. L. Fernández, P. Zunino (2010).

Abstract: The first edition of the report “Climate Change in the Spanish Mediterranean” acknowledged the necessity of monitoring environmental conditions within the Mediterranean Sea and it stated that initiatives aimed at preserving and achieving a sustainable development of its resources should be based on a rigorous and scientific knowledge. The first edition of this report attempted to establish the basis for future works and detected and quantified the sea level rise of waters surrounding the Mediterranean Spanish coasts, the temperature and salinity increase of deep waters, and the warming of the air and sea surface waters. The study of these and other man-made threats on the marine environment is an open question and requires a continuous monitoring effort. Thanks to the collaboration with other Spanish institutions such as ICM (CSIC), Puertos del Estado (PE), IMEDEA (CSIC), UMA, UIB and AEMET, as well as the own monitoring programs from the Instituto Español de Oceanografía (RADMED program), this second edition continues the previous report, analyzing time series extended to July 2008 and evidencing the persistence of the above mentioned warming trends in the Spanish Mediterranean. This and future updated reports, the activities of the IEO Mediterranean Group on Climate Change, and the collaboration with the already mentioned institutions intend to be a tool for the continuous surveillance of the Mediterranean Spanish waters and the assessment for its sustainable exploitation

Keywords: Western Mediterranean, Climate change, Monitoring systems, Time series, Trend detection