



Experiences of ocean literacy with different users of operational oceanography services and with high school students

Paola Agostini (1), Giovanni Coppini (1), Sara Martinelli (1), Roberto Bonarelli (1), Rita Lecci (1), Nadia Pinardi (1,3), Sergio Creti (1), Giuseppe Turrisi (1), Stefania Angela Ciliberti (1), Ivan Federico (1), Gianandrea Mannarini (1), Giorgia Verri (1), Eric Jansen (1), Letizia Lusito (1), Francesca Macchia (1), Fabio Montagna (1), Mauro Buonocore (1), Palmalisa Marra (2), Luca Tedesco (2), and Arturo Cavallo (2)

(1) Foundation Euro-Mediterranean Centre on Climate Change (CMCC), Via Augusto Imperatore 16, 73100 Lecce, Italy (paola.agostini@cmcc.it), (2) Links S.p.a., Links Management and Technology, via R. Scotellaro, 73100 Lecce, (3) Università di Bologna, viale Berti-Pichat, 40126 Bologna, Italy

According to a common definition, ocean literacy is an understanding of the ocean's influence on people and people influence on the ocean. An ocean-literate person is able to make informed and responsible decisions regarding the ocean and its resources.

To this aim, this paper presents operational oceanographic tools developed to meet the needs of different users, and activities performed in collaboration with high school students to support new developments of the same tools. Operational oceanography allows to deal with societal challenges such as maritime safety, coastal and marine environment management, climate change assessment and marine resources management. Oceanographic products from the European Copernicus Marine Monitoring Service - CMEMS are transformed and communicated to public and stakeholders through adding-value chains (downstreaming), which consider advanced visualization, usage of multi-channels technological platforms and specific models and algorithms. Sea Situational Awareness is strategically important for management and safety purposes of any marine domain and, in particular, the Mediterranean Sea and its coastal areas. Examples of applications for sea situational awareness and maritime safety are here presented, through user-friendly products available both by web and mobile channels (that already reach more than 100.000 users in the Mediterranean area).

Further examples of ocean literacy are web bulletins used to communicate the technical contents and information related to oceanographic forecasts to a wide public. They are the result of a collaboration with high school students, with whom also other activities on improving products visualization and online communication have been performed.