



Project of Strategic Interest NEXTDATA

Scientific Report
for the reference period 01 - 01 - 2014 / 31 - 12 - 2014

WP 2.2 Archive of marine observation networks and climate reconstructions

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1. Scheduled activities, expected results and Milestones

During the third year of the Project, WP2.2 activities focused on the completion of the NextData-INGV Geoportal that allows to inspect and display the Reconstruction-Reanalyses (hereafter RR) data for the Mediterranean Sea covering the period between 1955 and 2012. The WebPortal was implemented and tested in each of its three components (see D2.2.4).

2. Deliverables expected for the reference period

D2.2.4: Design and implementation of the alpha and beta versions of the reanalysis archive with comprehensive viewing and cataloguing services.

3. Activities which have been actually conducted during the reference period

3.1 Research activities

Following the user requirements, the INGV-NextData Geoportal was implemented and fully tested in each of its three components. The web application is reachable at the following link <http://medsearr.bo.ingv.it/> and it allows to discover, visualize and download the reanalysis products of the Mediterranean Sea, open and free of charge.

3.2 Applications; technological and computational aspects

The specific activities developed during the third year of the Project were:

- implementation of alpha version Data Layer;
- implementation of alpha version Presentation Layer;
- implementation of alpha version Application Layer;
- test of the three components (beta version);
- Final release of the Web Portal.

3.3 Formation

A dedicated side event on “The Mediterranean Sea Reanalysis” was organized in Lisbon during the *7th EuroGOOS Conference*. The side event provided a valuable opportunity to train on the methodology to generate a reanalysis and illustrate different applications stemming out of the reanalysis products. The event is also described in details in the WP1.3 activity report.

3.4 Dissemination

The INGV-Nextdata Portal can be found at the following web address: <http://medsearr.bo.ingv.it/>

3.5 Participation in conferences, workshops, meetings

During the third year, the results of WP2.2, in collaboration with WP1.3, were presented during the *SGI-SIMP 2014 Congress* in Session 5: Climate change and the Earth System: understanding the past, analyzing the present and predicting future scenarios.

4. Results obtained during the reference period

4.1 Specific results (Data libraries, Measurements, Numerical simulations, etc)

Development of INGV-Nextdata Portal dedicated to Mediterranean Sea reanalysis products.

4.2 Publications

FRATIANNI C., PINARDI N., LALLI F., SIMONCELLI S., COPPINI G., PESARINO V., BRUSCHI A., CASSESE M.L. and DRUDI M., (submitted): Operational oceanography for the Marine Strategy Framework Directive; the case of the mixing indicator. *Journal of Operational Oceanography*.

4.3 Availability of data and model outputs (format, type of library, etc)

All the reanalysis products can be accessed at www.medsearr.bo.ingv.it following an open and free data policy.

4.4 Completed Deliverables

D2.2.4: Design and implementation of the alpha and beta versions of the reanalysis archive with comprehensive viewing and cataloguing services.

5. Comment on differences between expected activities/results/Deliverables and those which have been actually performed.

All the main activities planned for the third year of the Project were completed. The INGV-NextData portal is fully operational at INGV web server.

6. Expected activities for the following reference period

During the next year of the Project, WP2.2 will improve the INGV-NextData Geoportal, introducing the option to download only part of a data product, selecting the area and the period of interest.