

INTERREG IVA 2 Mers Seas Zeeën Cross-border Cooperation

Programme 2007 – 2013

## **ISECA**

### **Deliverable D2.3 "A description of the EO DB at L1 to be on the WAS."**

Contract: 07-027-FR-ISECA

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## 1. SUMMARY A description of the EO DB at L1 to be on the WAS.

The aim of this deliverable is to have provided a description of the raw L1 data to be on the WAS and the WIS. In fact no L1 data were provided on the WAS since L1 data are of little use for end users being unprocessed. However, a description of L1 data in the ISECA database is available on the WIS at

<http://www.iseca.eu/images/dels/PML%20L2UK.pdf>

The text is given below

### **PML Level 1 EO database**

The level 1 Earth Observation data held at Plymouth Marine Laboratory (PML) comprise data from a number of ocean colour sensors including the NASA Moderate Resolution Imaging Spectroradiometer (MODIS) carried on the Aqua satellite (2002- to date: e.g. Figure 1); European Space Agency Medium Resolution Imaging Spectrometer (MERIS) at reduced resolution carried on Envisat satellite (2002 – 2012) and the Sea-viewing Wide Field of View Sensor (SeaWiFS) carried on Orbview-2 (1997-2010). In addition, PML has an archive of full resolution L1 MERIS data from 2002-2012. Level 1 data comprise the top of atmosphere calibrated radiance measurements at a number of wavelengths as measured by the space borne sensors. In order to retrieve geophysical quantities such as the water reflectance or water-leaving radiance it is necessary to perform an atmospheric correction and apply various bio optical algorithms to retrieve biological quantities such as chlorophyll-a concentration. L2 data from MODIS are available on the WAS (e.g. see Deliverables D2.4a and D3.1)

The PML database also includes data from the NOAA series of Advanced Very High Resolution Radiometer (AVHRR) sensors but these are stored as level 0 as supplied by the Dundee Satellite receiving station and available from (1979 to date). SST products are available on the WAS



Figure 1. Level 1 MODIS image from 24 Jul 2012 12:45 UT.

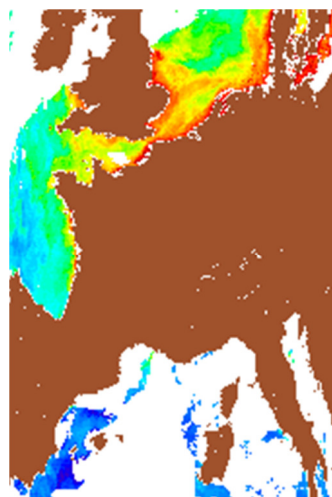


Figure 2. Level 2 MODIS image from 24 Jul 2012 12:45 UT for same area as Fig 1 showing chlorophyll-a product.