

PML Level 2 EO database

The level 2 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 2); European Space Agency Medium Resolution Imaging Spectrometer (MERIS) carried on Envisat satellite (2002 – 2012) and the Sea-viewing Wide Field of View Sensor (SeaWiFS) carried on Orbview-2 (1997-2010); and the thermal infra-red Advanced Very High Resolution Radiometer (AVHRR) sensor carried on the NOAA series of satellites. In addition PML has an archive of full resolution L2 MERIS data from ~2009-2012. Level 2 data comprise geophysical quantities such as water reflectance or water-leaving radiance or the sea-surface brightness temperature as well as a number of geophysical quantities such as sea-surface temperature (from MODIS and AVHRR), diffuse attenuation coefficient or biological quantities such as chlorophyll-a concentration, suspended particulate matter concentration or inherent optical properties (for example, <http://oceancolor.gsfc.nasa.gov/cgi/algorithms.cgi>). The level 2 data are stored as individual sensor overpasses and also as mapped images covering a standard area covering the ISECA 2seas region. These mapped products can be inter-compared, for example, to see how SST and chlorophyll-a are inter-related. Figure 3 shows the image in Figures 1 and 2 mapped at 500m resolution covering the ISECA region.

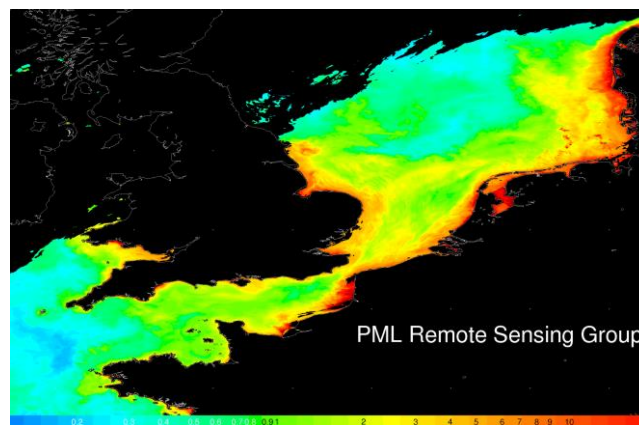


Figure 3. Level 2 MODIS 500m mapped chlorophyll-a image from 24 Jul 2012 12:45 UT.