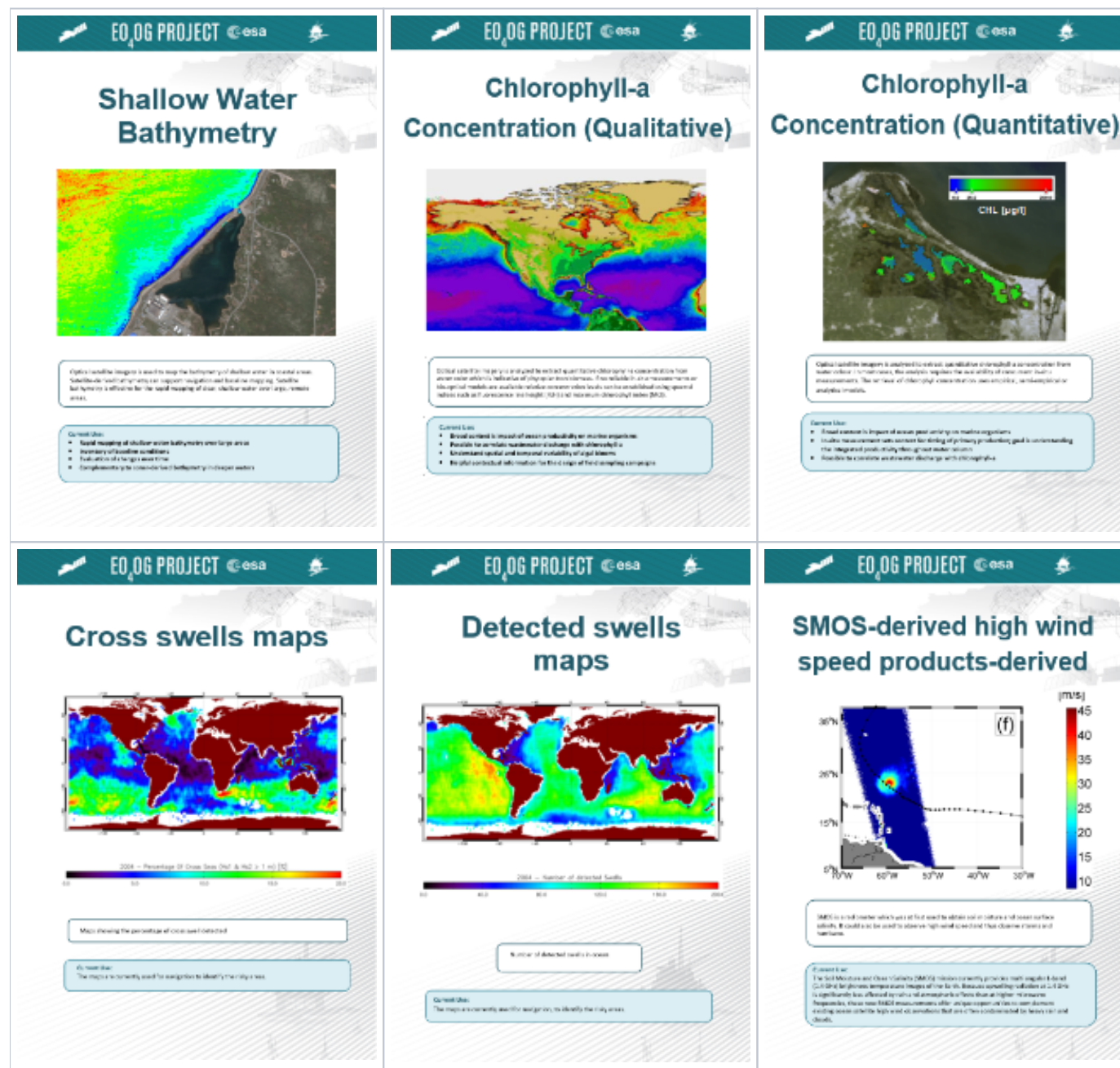


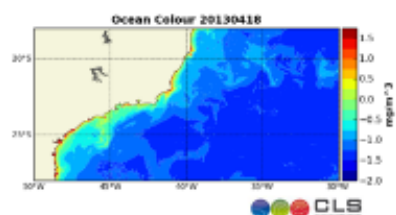
EO4OG Products Off-Shore

EO4OG Product Sheets Off-Shore





Ocean Color Composite

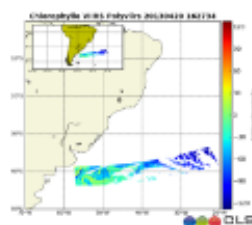


Ocean Color is an ocean domain that is particularly well suited to observing higher trophic features of the ocean surface. It can be provided as physical or as ocean color, but both of the assembled products. The historical data ranges back to 1987 and new data are expected to be provided in the near future.

Current Use: The Ocean Color product is used for the detection of ocean color in the upper layer of the ocean. It is also used as a status indicator of the ocean currents.



Ocean Color Swath

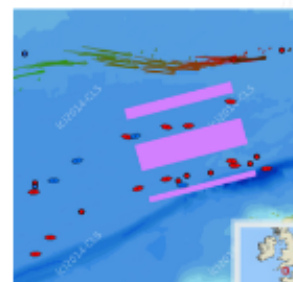


Ocean Color Swath is a high resolution satellite ocean color product that is well suited to observing oceanic features. It can be provided as physical or as ocean color, but both of the assembled products. The historical data ranges back to 1987 and new data are expected to be provided in the near future.

Current Use: The Ocean Color Swath product is used for the detection of ocean color in the upper layer of the ocean. It is also used as a status indicator of the ocean currents.



Early warning system for oil spill

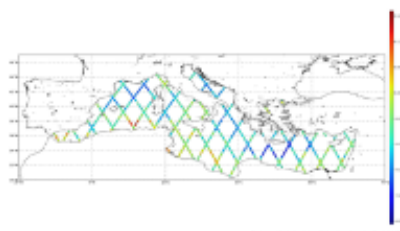


This product is used to detect oil spills in the ocean. It is also used as a status indicator of the ocean currents.

Current Use: It is used by environmental agencies to provide early warning of oil spills.



Near-Real-Time Global Along-track Absolute Dynamic

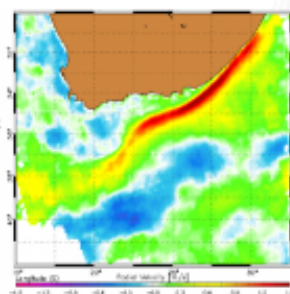


Mean motion, absolute dynamic, near-real-time, along-track absolute dynamic. It can be provided as physical or as ocean color, but both of the assembled products. The historical data ranges back to 1987 and new data are expected to be provided in the near future.

Current Use: The along-track Absolute Dynamic is used for the study of ocean general circulation.



Radial Surface current

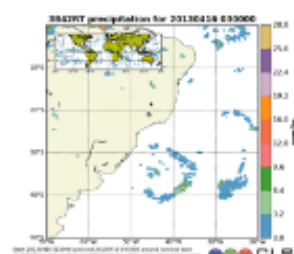


This product gives information on the surface current in the range of the ocean. It can be provided as physical or as ocean color, but both of the assembled products. The historical data ranges back to 1987 and new data are expected to be provided in the near future.

Current Use: This product has many uses in oceanography.



Rainfall



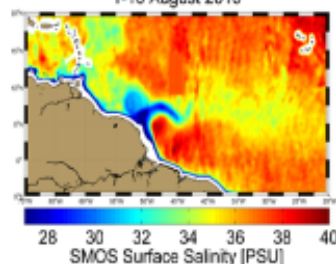
Rainfall data is available from the 1987 to the present. The 1987 to the present is expected to be provided in the near future.

Current Use: Rainfall data can be used to study the ocean circulation in a given region or as input to climate models. Rainfall data can also be used to track the movement of oil spill and to provide early warning of oil spills.



Sea Surface Salinity Composite

1-10 August 2010



SSMOS SeaWiFS satellite is a medium resolution daily dataset with worldwide coverage. It is built by using all data available, from either the SMOS or the Aquarius sensors. As a result, it has no gaps due to clouds.

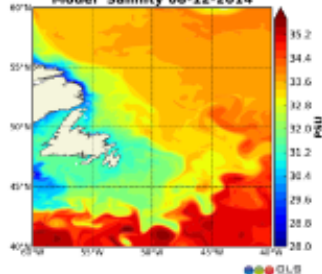
Current Use:

The SSMOS provides information on the ocean dynamics. It is often used together with other products like sea level anomaly to better identify the position of eddies and frontal areas.



Sea Surface Salinity Model

Model Salinity 08-12-2014



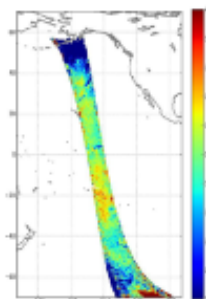
SSM model is a high resolution dataset that has global coverage. It is an output of ocean general circulation models that incorporate SST for air-sea fluxes and SST as a boundary condition.

Current Use:

The SSM provides information on the ocean dynamics. It is often used together with other products like sea level anomaly to better identify the position of eddies and frontal areas.



Sea Surface Salinity Swath



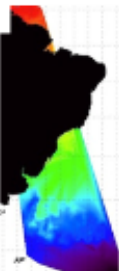
SSW Swath is a medium resolution daily dataset with worldwide coverage. It is built by using SSW data from either the SMOS or the Aquarius sensors.

Current Use:

The SSW provides information on the ocean dynamics. It is often used together with other products like sea level anomaly to better identify the position of eddies and frontal areas.



Sea Surface Temperature Swath Microwave



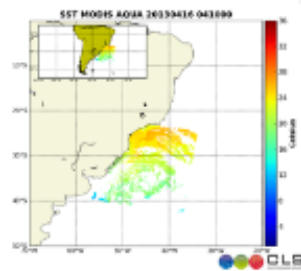
SST Swath microwave is a medium resolution daily dataset with worldwide coverage. It is provided as a 10-day average to avoid cloud contamination.

Current Use:

- Providing information on ocean dynamics. It is often used together with other products like sea level anomaly to better identify the position of eddies and frontal areas.
- Monitoring of SST and changes in SST in relation to its effect on marine biology.
- Monitoring long-term changes in SST which can affect ocean circulation, sea level rise and sea level anomaly.
- Impact on weather patterns and climate models.
- Used as input for climate change models.



Sea Surface Temperature Swath Radiometer



SST Swath radiometer is a high resolution daily dataset with worldwide coverage. It is provided as a 10-day average to avoid cloud contamination.

Current Use:

- Providing information on ocean dynamics. It is often used together with other products like sea level anomaly to better identify the position of eddies and frontal areas.
- Monitoring of SST and changes in SST in relation to its effect on marine biology.
- Monitoring long-term changes in SST which can affect ocean circulation, sea level rise and sea level anomaly.
- Impact on weather patterns and climate models.
- Used as input for climate change models.



Sediment Concentration (Qualitative)



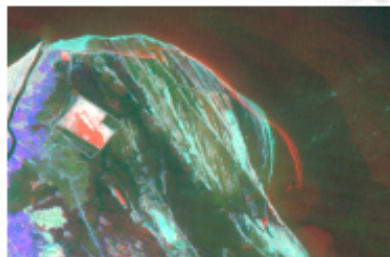
Sediment concentration is a qualitative dataset with worldwide coverage. It is provided as a 10-day average to avoid cloud contamination.

Current Use:

- Providing information on ocean dynamics. It is often used together with other products like sea level anomaly to better identify the position of eddies and frontal areas.
- Monitoring of sediment concentration and its effect on marine biology.
- Monitoring long-term changes in sediment concentration which can affect ocean circulation, sea level rise and sea level anomaly.
- Impact on weather patterns and climate models.
- Used as input for climate change models.



Shoreline Change



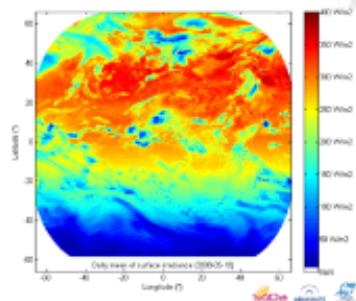
Shoreline changes can be detected through a variety of satellite techniques. Using optical or SAR imagery, it is possible to extract shoreline data for coastal cities, ecosystems, or other events that may disturb the shoreline's original morphology. Representing this information can be employed for mapping of coastal area changes or for policy purposes.

Current Uses

- Assess impacts of changing sea level and erosion (e.g. due to climate change)
- Produce maps of coastal change over time for coastal erosion, preservation or restoration
- Assessing impacts and/or reduction caused by anthropogenic activity



Solar Radiation



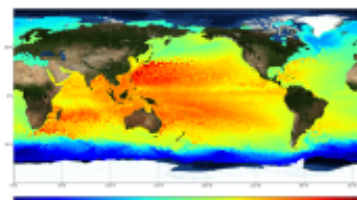
The Surface Solar Irradiance is a measure of solar radiation. It has nearly global coverage with high temporal resolution.

Current Uses

- Solar irradiance is an essential climate variable for the Global Climate Observing System meaning that it is a parameter of key importance for understanding and monitoring the global climate system. In addition to such it is an energy application, it is used for instance to determine the solar energy potential, and therefore, agriculture, and so on.



Delayed-Time Global Gridded Absolute Dynamic Topography



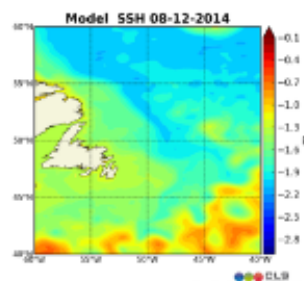
Multi-sensor altimetry data derived to the gridded Absolute Dynamic Topography (ADT) is a high level processed product combining data from several altimetry missions (satellites, cross calibration, filtering, a global time position on a grid and a Mean Dynamic Topography (MDT)).

Current Uses

- The gridded Absolute Dynamic Topography (ADT) is used to study the ocean dynamics (waves circulation).



Sea Surface Height Model



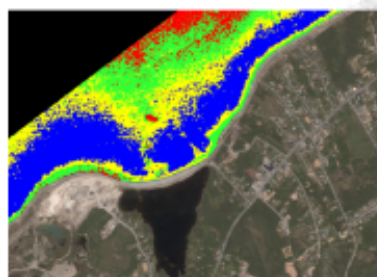
SSH model is a high resolution data set that has global coverage. It is an output of ocean general circulation models that incorporate the flow (velocity and $\rho\sigma$) as well as the waves.

Current Uses

- The SSH product provides information on the ocean dynamics. It is often used together with other products for sea surface study to better describe the position of waves and coastal areas.



Subtidal Habitat



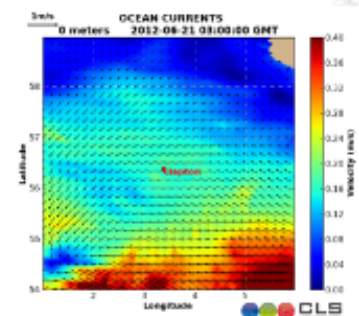
Coastal bathymetry is employed to extract bottom type in the flow model. This method is applicable to bathymetry data sets, which are used to model the flow of water in the ocean. In some cases, the bathymetry of the bottom of the sea is derived from a 100 m resolution map.

Current Uses

- Coastal bathymetry is used for modeling of coastal environment and
- Mapping and inventory of subtidal habitat
- Input for oceanographic modeling
- Evaluation of a large area for the use of subtidal habitat in coastal management



Surface Current Model

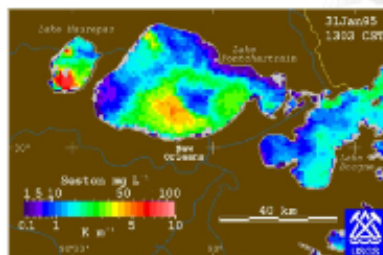


Surface Current Model is a high resolution data set that has global coverage. It is an output of ocean general circulation models that incorporate the flow (velocity and $\rho\sigma$) as well as the waves.

Current Uses

- The Surface Current product provides information on the ocean dynamics. It allows the identification of eddies, current vorticity and other dynamic features.

**Turbidity
(Quantitative)**

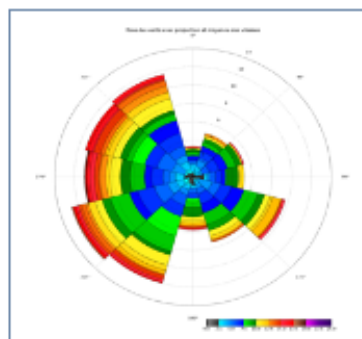


Optical satellite imagery is analyzed to extract quantitative turbidity levels from water color. The analysis requires the availability of concurrent results that permit us to establish an empirical relationship with a turbidity sensor.

Further study

- Based on monitoring of water quality
- Toxicity may be caused by phytoplankton or a suspended sediment
- D-D based monitoring provides information related to environmental conditions and possible control, effects of effluent use development and its treatments associated with a suspended materials

Wind roses

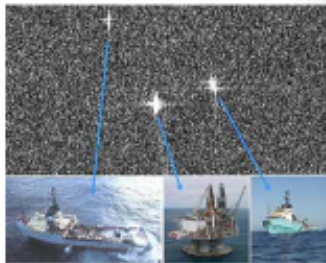


some mass is associated with a large wave pressure response. It gives a number close to four, or at least indicates that the wave pressure is distributed at a particular location.

Edward L. Lee

These statistical variables are often used to help managers make strategic field-level and resource allocation and in the case of a proposal an offer are used later.

Vessel Monitoring

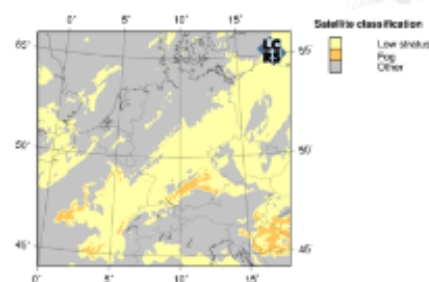


Soil and ground water sampling is analyzed to detect and classify the results. Temporarily stored test sample and ground truth data is required to build a reliable classification system. High-resolution data is also necessary in order to extract small details.

Current Users

- Most services in monitoring of vessel activity and stability for marine resources.
- The majority of existing services are related to oil spill detection and monitoring, and marine traffic surveillance in the fisheries and transportation sectors.

Visibility

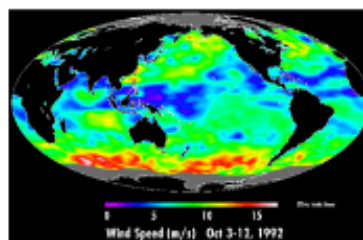


Different labels and directions of satellite imagery are employed to detect fog from different sensors. When used alone, this technology is less useful for night-time observations.

C. arvensis L. var.

Derives the probability of fog conditions, at sea and inland, in the measurements are not existing

Wind speed distribution



the joint space distribution is estimated from a large trial residual distribution

Q. multi (2)

These identical products are often used in the same building, making energy efficiency and wind resistance important in the design and layout of the structure.