



Goal: Develop the next generation coastal water products and services from satellite ocean colour data for applications such as Environmental Impact Assessment and water quality monitoring.

Project Acronym: HIGHROC

Funded by EU/FP7 Space (“Stimulating development of downstream services”)

EU financial contribution: 2.5M€

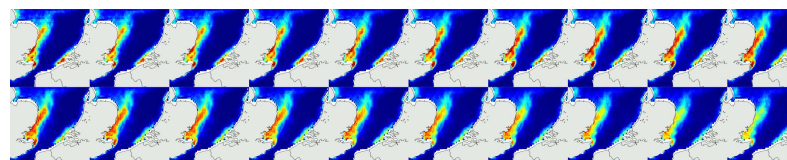
Start date: 1 January 2014 **Finish date:** 31st December 2017

Project Coordinator: RBINS, Belgium (Kevin Ruddick)

Project Partners: UPMC/LOV, France (David Doxaran), NIVA, Norway (Kai Sorensen), BC, Germany (Carsten Brockmann), VITO, Belgium (Els Knaeps), CEFAS, UK (Veronique Créach)

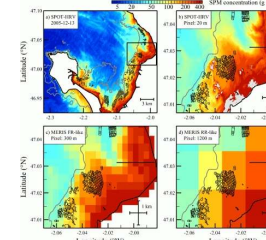
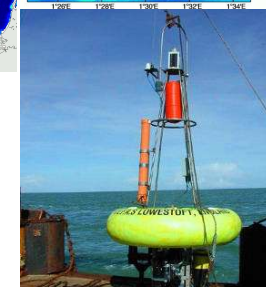
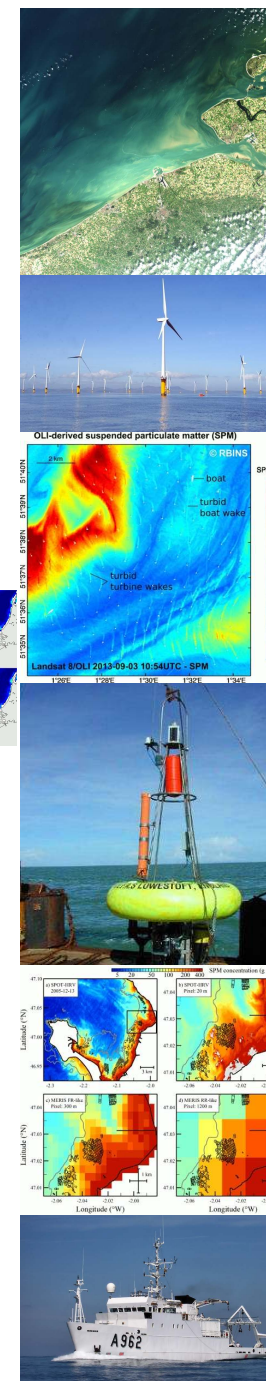
HIGHROC is a European Union 7th Framework Programme (FP7) Collaborative Research Project carried out by a consortium of six partners with experience in remote sensing and its applications in the management of coastal and estuarine waters.

The overall objective of HIGHROC is to develop new products and services to cater for the requirements of end-users involved in coastal water quality management and/or related activities such as **dredging operations** and offshore constructions and their **environmental impacts**. Mature services now exist to support the monitoring and reporting of water quality. Despite improved coverage with respect to in situ monitoring, satellite data is still limited in spatial and temporal resolution compared to user requirements. **HIGHROC will derive coastal water quality parameters from Sentinel-2 (S2) at 10-20m resolution and SEVIRI at 15 minute resolution, thus dramatically improving the spatial and temporal resolution.**



The HIGHROC activities include:

- **Clarification of User Requirements** and definition and evaluation of the associated HIGHROC services
- **Algorithm development**, particularly for the new satellite data sources, S2 and SEVIRI
- **In situ measurements** to provide calibration data for algorithms and validation data for HIGHROC algorithms and products
- **Image processing** of S2 and SEVIRI data and medium resolution data such as S3/OLCI
- **Product validation** to provide users with an assessment of product quality
- **User Service Trials:** a one year period during which the HIGHROC core users receive the HIGHROC service and provide feedback on its utility and recommendations for improvements
- **Dissemination of results and products** to the scientific community and to end-users
- **Business development and sustainability planning** for services developed by HIGHROC



Project Partners

- Royal Belgian Institute for Natural Sciences (RBINS)
- Laboratoire d'Océanographie de Villefranche (LOV)/
Université Pierre et Marie Curie - Paris 6 (UPMC)
- Norwegian Institute for Water Research (NIVA)
- Brockmann Consult (BC)
- Flemish Institute for Technological Research (VITO)
- Centre for Environment, Fisheries & Aquaculture Science (CEFAS)

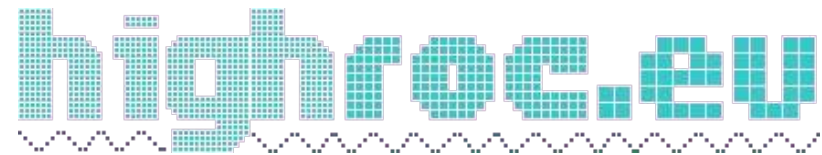
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The logo for highroc.eu features the text 'highroc.eu' in a light blue, pixelated font. Below the text is a decorative horizontal line composed of small, repeating 'v' or 'w' shaped patterns.

High spatial and temporal resolution ocean colour
coastal water products and services

<http://www.highroc.eu>

