

Planning of the 2nd Year

(and beyond)





# Overview 2011

### Round Robin

- Today: Release Round Robin Data Package
- January & April 2011: Users to send back products
- September 2011: Round Robin Report
- December 2011: Case2 Algorithm Protocol

### Algorithm Development

- March 2011: Completion of water processors implementation
- April 2011: Validation and decision on final design

### Product and Software Releases

- January/February 2011: Level 1P on ftp
- June 2011: Level 2
- July 2011 December 2011: NRT service

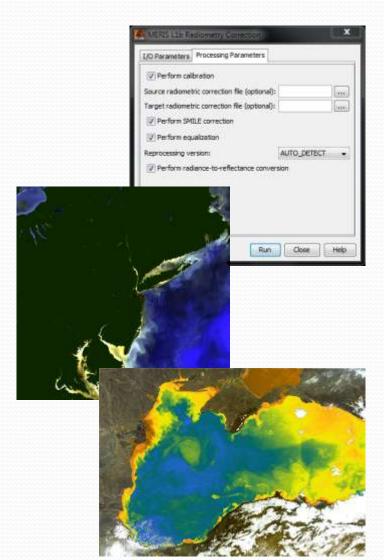
### User Interactions

- December 2010, Spring and Summer 2011 Newsletters
- March 2011: Webportal 2.0 with download of data
- 19. 21. October 2011: User Consultation Meeting in Lisbon



## **Product and Software Releases**

- MERIS Radiometric Correction Tool
  - Release with BEAM 4.9
  - December 2010
  - Funtions:
    - 2<sup>nd</sup> to 3<sup>rd</sup> reprocessing recalibration
    - smile correction
    - coherent noise reduction
    - radiance to reflectance (TOA) conversion
- CoastColour L1P Products
  - Release January / February 2011
  - data from 2005 2009 over 27 sites
  - Geometrically precise
  - Radiometrically corrected
  - Pixel classification flags
- Standard Processing L1 and L2 Products
  - March 2011 (depending on ODESA)
- CoastColour L2 Products
  - Release June 2011
- NRT Service
  - June 2011 December 2011









#### News

#### November 2010 Program of UCM available

November 2010 Report available

July 2010 Newsletter 1 available

#### 17./18. February 2010 COASTCOLOUR presentation at SAFARI Remote Sensing and

presentation at SAFARI Remote Sensing and Fisheries International Workshop in Kochi, India

# User Consultation Meeting ESRIN.





Software and Production More than

35TB of MERIS FRS products from coastal zone will be processed using BEAM Technology. The software will be under the GNU Public License.

#### The COASTCOLOUR Project

The Europe the MERIS i derived from COASTCOL algorithms of discussion of

# Please send us your user profile office@coastcolour.org



Kratzer, Stockholm University, Sweden Dr Susanne Kratzer is

Associate Professor at Stockholm University and coordinator of the Nordic Network in Aquatic Remote Sensing. Her current research focus is on water quality studies of the Baltic Sea, using remote sensing and bio-optical methods, and supporting the development of an operational remote sensing system.



🎫 🔤 Coastal Water Challenges

The task of retrieving water optical properties and concentrations from reflections

spectra in coastal waters is a complex matter. In contrast to case 1 water, where by definition, only 1 component determines the variability of the water leaving radiance reflectance, ...



COASTCOLOUR products
Coastcolour will process all

available MERIS Full Resolution (300m) of the champion user test sites (and possibly more). The coastcolour products will include a set of basic quantities which will be generated over all sites (TOA radiances, water leaving reflectances, IOPs and concentrations)

#### ine test sites.

In the description below it should be recognised that a given site is likely to have a wide range of oceanographic and hence optical characteristics and the user interest may be focussed on one small part.

Site 1: North Sea, English Channel, Bay of Biscay, Cel

Site 2: Baltic
Site 3: Complete Mediterranean & Black Sea
Site 4: Morocco (Atlantic and Mediterranean coasts of
Site 5: Acadia
Site 6: Chesapeake Bay
Site 7: Oregon and Washington

Site 8: Plumes & Blooms Site 9: Puerto Rico Site 10: Benguela

Site 11: China, Korea, Japan Site 12: Great Barrier Reef

Site 13: Red Sea Site 14: Indonesian Waters

Site 15: Beibu Bay Site 16: Namibian Waters Site 17: Cape Verde



Coastcolour UCM1 \* Frascati \* 16.-17.11.2010

Coordinated by Dr. Carsten Brockmann • Brockmann Consult • Email: carsten dot brockmann at brockmann-consult dot de



### Site 1: NorthSea English Channel etc.

North Sea, English Channel, Bay of Biscay, Celtic Sea, Irish Sea, Southern Brittany

Site 1 in Google Earth

Download the sample products: subset: L1(500MB) C2R(2265MB)

L1(22MB) C2R(215MB)

#### Standard products

- Surface reflectances
- Inherent optical properties
- Water constituent concentrations
- Water transparency/turbidity information
- · Chlorophyll Indices

#### Experimental products

- Turbidity in Formazine units
- Primary Productivity or Potential Primary Productivity
- · Phytoplankton Biomass estimates in gC m<sup>-3</sup> or aC m<sup>-2</sup> units
- · Concentrations of some taxonomic of functional groups such as Coccolithophorides, Cyanobacteria etc.

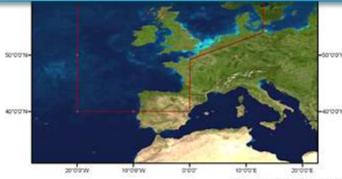
#### Responsible partner

PLYMOUTH MARINE



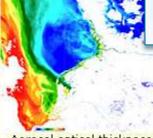
The North Sea is a large sea with a diverse set of optical properties and

## Please send us updated site descriptions! office@coastcolour.org



Belgian coasts there are high chlorophyll blooms which may cause coastal scum and in the east there have been massive blooms of harmful algae such as Chattonella spp. that can threaten fish farms in Norway, Along the coast of Norway the surface outflow from the Baltic containing higher CDOM concentrations can give erroneous chl-a estimates in relatively deep waters. Hence, waters range from case 1 to case 2 with the latter dominated by SPM and/or CDOM. For the North Sea (and English Channel) the best in situ data set is

the EG Regional validation of MERIS chiprophyll products in north sea coastal waters ectres by IVM and including MUMM, CB and PML as partners.



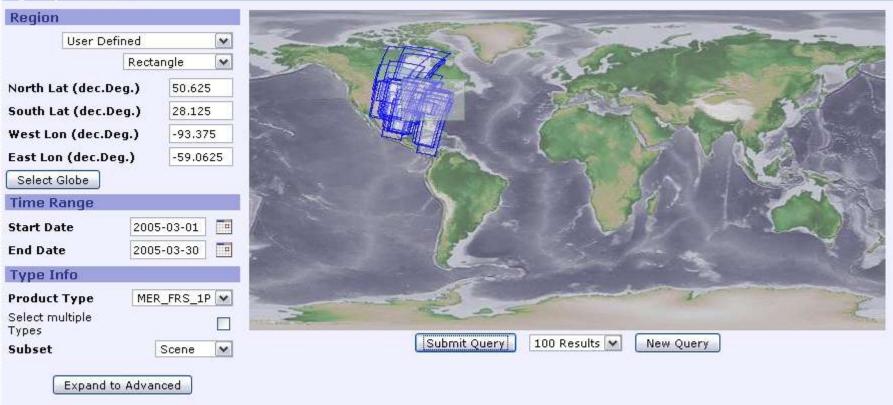
North Sea

Aerosol optical thickness at 550nm (tau\_550)



| Home | Query Products | Query Sites | Product Manager | System Check | Access Statistic | User Manager | Site Manager | Change Password | Logout | Help | Administration Help

### **Query Products**



Results 1 - 59 of 59 matching products. (0.258 seconds)

| select | # | Preview | Product Name  |
|--------|---|---------|---|
|        | 1 |         | MER_FRS_1PNUPA20050313_152555_0000000252035_00283_15868_0746.N1 |
|        |   |         |   |



# Long Term Perspective

- GMES Sentinel 3 Mission
  - Operational ocean colour and altimetry mission
  - MERIS and AATSR follow on instruments
    - improved instruments
    - heritage algorithms and products
  - 2 satellites in orbit
  - OLCI tilted towards west to limit sun glint
  - First launch 2013; mission planned until 2020
- ESA Climate Change Initiative (CCI)
  - Provide Climate Change Data Records
  - Ocean Colour CCI kicked-off August 2010
  - Intentionally excluding the coastal zone because of CoastColour



# CoastColour Perspective

- Short Term
  - Express your need for
    - Sites
    - Products
    - Service
  - CoastColour Team would be prepared to extend the activities
- Long Term
  - Sentinel offers the potential to continue CoastColour products
  - Include coastal zone in CCI, but objectives are significantly different from CoastColour!



# User Consultation Meeting 2 19.-21. October 2011 Lisbon

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