



# **CoastColour User Consultation Meeting**

Simon Pinnock, ESA/ESRIN, Frascati, Italy 16/11/2010

European Space Agency



# **Background and Objectives**



CoastColour is a project under ESA's Data User Element Programme:

"...to encourage the establishment of a long-term relationship between user communities and Earth Observation..."

- Strengthen user communities for EO data
- Develop and demonstrate new EO based services responding to user needs
- Transfer research into EO applications

GlobColour & Marcoast projects clearly indicated a strong user need for further development and demonstration of the advanced capabilities of MERIS in Case 2 water **globally** 





## **User Consultation Meeting**

Cork, Ireland - March 2009

=> 60 Participants

34 "Champion Users" provided

- Statements of User Requirements
- Project Commitment Letters





National Maritime College of Ireland Colorists National Mora na Aliteann









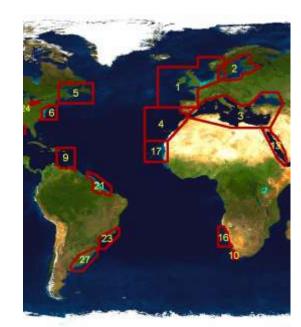
### User Requirements -> Project Objectives

1. To develop, validate and demonstrate best-practice regional optimisations of MERIS Case 2 retrieval algorithms over globally distributed test sites.

2. To investigate the relative merits of MERIS Case 2 ocean-colour algorithms compared to other sources of coastal ocean-colour information.

3. To assist the scientific community to fully exploit the MERIS for in coastal waters.









## **CoastColour Project**

- ESA "Invitation To Tender" issued in July, closed Sept 2009
- Project KO: 4 Jan 2010, 2 year duration
- Budget: 1.5 Meuro

#### **Consortium:**

- Brockmann Consult (D)
- Plymouth Marine Laboratory (UK)
- GKSS (D)
- MUMM (B)
- University of Lisbon (P)
- University of Littoral (F)
- + supported by international team of consultants: KORI, DFO, JRC, CSIR, Mississippi, CSIRO, NASA

# **GMES Sentinel-3**



Ocean and Land Colour Instrument (OLCI) – an improved MERIS
 Sea and Land Surface Temperature Radiometer (SLSTR) – an improved ATSR
 Sea & Ice Topography Payload (SRAL, MWR, GNSS, DORIS, LRR)

### **OPERATIONAL MISSION**

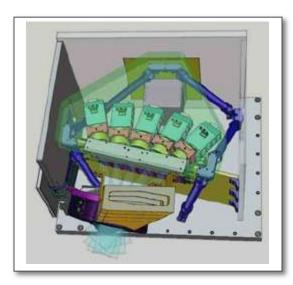
- Launch: 2013, ...
- Revisit at equator = 2 days (or daily with 2 satellites)
  - 7 year lifetime (max. 12 yrs)

# Sentinel-3: Ocean and Land Colour Instrument (OLCI)



#### Pushbroom Imaging Spectrometer (VIS-NIR)

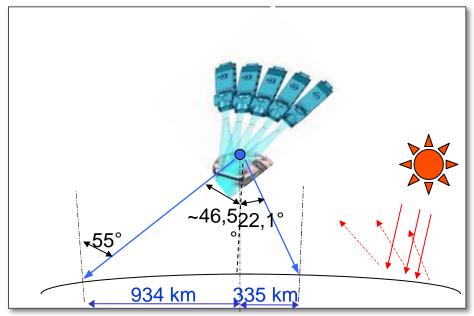
- ENVISAT MERIS heritage
- 5 fan-shaped cameras, 21 programmable spectral bands (incl. bands for MERIS & VGT legacy products)
- Abs. radiometric accuracy < 2%
- Relative accuracy 0.1%
- Minimisation of sun-glint by design



#### **Objective**

Allow Sea & Land Colour observation with high accuracy

Data continuity of the SPOT-Vegetation



- Spatial Resolution: 300m (at nadir)
  - 1200m open Ocean, after L1 processing
  - 300m over Land & Coastal Ocean





#### **Objectives of This Meeting**

- To raise awareness about the CoastColour project
- To present the work done in the 1<sup>st</sup> year, and the plans for the 2<sup>nd</sup> year
- To obtain YOUR feedback on all aspects of the project
- To encourage YOUR participation in the Round-Robin exercise





## **Meeting Information & Announcements**

- See Carmen or Maura on reception for any questions (toilets, taxis, ...etc...)
- Lunch available at 12.30-14.00 in the canteen downstairs (cash only)
- "Welcome cocktail" at Villa Grazioli 18.00 tonight

   bus will go there anyway, so you can't escape ha ha ha ha!!!!
- Please fill-in and return to us:
  - CoastColour Feedback Form
  - Round Robin Registration Form
- Please load presentations beforehand in the coffee breaks