

CoastColour and SeaSWIR User Consultation Meeting

09th – 10th May, 2013

EUMETSAT premises, Darmstadt

Objective: The recent results of the CoastColour and SeaSWIR projects will be communicated to the scientific and broader coastal user community. Feedback from coastal scientists, managers and other stakeholder will be gathered, and future possibilities with the upcoming Sentinels will be discussed. Recommendations for further scientific work, requirements for new sensors and for exploitation of Earth Observation data for coastal zones will be formulated. These will be addressed to the Space Agencies and research funding organisations.

Programme

[Status: 07th May, 2013]

Thursday, 09th May, 2013 - Morning

09:00 Registration & welcome coffee

Opening session: Status of CoastColour & SeaSWIR projects

09:30 SeaSWIR project: overview of field campaigns and first results

- ❖ Project overview & field campaigns
(Els KNAEPS, Flemish Institute for Technological Research (VITO) [25']
- ❖ SWIR water reflectance (Els KNAEPS, VITO) [15']
- ❖ SWIR theoretical model (Kevin RUDDICK, MUMM) [5']
- ❖ CIMEL/Seaprism data processing (Kevin RUDDICK, MUMM) [10']
- ❖ MODIS processing (Bouchra NECHAD, MUMM) [10']
- ❖ Discussions [25']

11:00 Coffee break [30']

11:30 CoastColour project: overview and first results

- ❖ CoastColour products (L1P, L2R, L2W) and algorithms
(Carsten BROCKMANN and Roland DOERFFER, Brockmann Consult GmbH) [60']
- ❖ CoastColour and OC-CCI
(Shubba SATHYENDRANATH, Plymouth Marine Laboratory, PML) [15']

13:00 Lunch break [60']



14:00 **Current status of quality of coastal products**

- ❖ CoastColour Round Robin: MERIS, MODIS and SeaWiFS Chlorophyll-a and Total Suspended Matter algorithms performance
(Bouchra NECHAD, Royal Belgian Institute for Natural Sciences, RBINS) [20']
- ❖ Validation of ocean colour products in Portuguese Coast and Tagus Estuary
(Vanda BROTAS, Centro de Oceanografia, Universidade de Lisboa) [20']
- ❖ Preliminary Evaluation of MERIS Coast Colour Products in Coastal Waters of South Eastern Arabian Sea
(Aneesh A. LOTLIKER, Indian National Centre for Ocean Information Services, INCOIS) [20']
- ❖ New developments in optical classification of water types
(Tim MOORE, Ocean Process Analysis Laboratory, University of New Hampshire) [20']

15:30 Coffee break [30']

16:00 **Highly Turbid Waters - challenges for atmospheric correction and in-water retrievals**

- ❖ An improved correction method for field measurements of particulate light backscattering in turbid waters
(David DOXARAN, Laboratoire d'Océanographie de Villefranche, LOV) [20']
- ❖ Performance of Turbidity and Total Suspended Matter concentration algorithms in three highly turbid regions: Scheldt, Gironde and La Plata rivers
(Ana DOGLIOTTI, Instituto de Astronomía y Física del Espacio, IAFE) [20']
- ❖ Remote sensing of highly turbid waters and applications in aquaculture management
(Laurent BARILLÉ, Université de Nantes, Institut Universitaire Mer et Littoral - IUML) [20']

17:00 **CoastColour discussion / SeaSWIR internal evaluation and discussion**

17:30 **End of the day**

19:30 **Conference Dinner** *Restaurant "Sitte"*



09:00 **Continuation of the Highly Turbid Water session**

- ❖ Reconsideration for satellite retrieval of suspended sediment concentration over two orders of magnitude within an oceanic scene
(Fang SHEN, State Key Laboratory of Estuarine and Coastal Research, East China Normal University) [20']
- ❖ Management relevant remote sensing applications for the Great Barrier Reef Marine Park
(Thomas SCHROEDER, CSIRO Land & Water) [20']
- ❖ Light absorption properties of highly turbid waters
(Rüdiger RÖTTGERS, Institute for Coastal Research, Helmholtz-Zentrum Geesthacht) [20']
- ❖ PML Coastal Ocean Colour activities
(Steve GROOM, Plymouth Marine Laboratory, PML) [20']

10:30 Coffee break [30']

11:00 **Preparation of exploitation of Sentinels for coastal waters and recommendations for future directions**

- ❖ ESA Sentinels
(Simon PINNOCK, ESA) [20']
- ❖ OLCI Standard Case 2 Water Products and algorithms
(Roland DOERFFER, Brockmann Consult) [20']
- ❖ Lessons from MERIS global MCI observations, 2002 to 2012, in preparation for Sentinel 3
(Jim GOWER, Institute of Ocean Sciences) [20']
- ❖ MVT and S3 validation activities
(Jean-Paul HUOT, ESA) [20']
- ❖ Experiences with current high resolution sensors (Landsat-7/8/RE etc.) and preparation of operational water quality services for Sentinel 2 and 3
(Knut HARTMANN, EOMAP) [20']
- ❖ Coastal Remote Sensing Using HICO - Results, Challenges, and Potential for Operational Biophysical Parameter Estimation
(Wes MOSES, Naval Research Laboratory) [20']
- ❖ Spectral, spatial and temporal high resolution data exploitation
(Kevin RUDDICK, MUMM) [10']

13:10 **Concluding discussion**

13:30 Lunch

