







### Sea Level SpaceWatch Workshop - NOC, Southampton, Tuesday 22<sup>nd</sup> March

### **Agenda**

Welcome - Introduction to the Sea Level SpaceWatch Project (09:30)

Session 1 – The need for monitoring sea level rise in a changing climate (09:35-11:00)

- 1. What we know about sea level variability around the UK. (09:35 10:15)
  - UK Sea Level Variability from Tide Gauge Data (Angela Hibbert, NOC)
  - Spatial footprint and temporal clustering of storm surges around the UK (Ivan Haigh, University of Southampton)
- 2. User Needs: (10:15 11:00)

The Environment Agency, Natural Resources Wales, The Climate Change Committee, Scottish Environment Protection Agency (10 minutes each)

Break (11:00 - 11:30)

# Session 2 - Sea Level SpaceWatch: Variability in UK Coastal Sea Level from Satellite Altimetry and Tide Gauges 11:30-13:00

- Constructing model projections of century-scale change in extreme sea level for UKCP09 and UKCP18. (Tom Howard, Met Office) (11:30 – 11:50)
- 2. Sea Level Data from satellites and tide gauges (11:50 12:20)
  - Tide Gauge Data Processing for Sea Level SpaceWatch (Angela HIbbert, NOC)
  - Processing of coastal altimetry data for Sea Level SpaceWatch (Paolo Cipollini, NOC)
- 3. Analysis: Variability (in time and space) and errors / confidence levels (12:20 12:50)
  - Analysis of seasonal to interannual sea level variability from altimetry and tide gauge data (Francisco Calafat, NOC)
  - Stochastic modelling of the tide gauge, altimeter and GPS time series for realistic uncertainties in derived parameters (Simon Williams, NOC)
- 4. Example of a possible Site Specific Analysis Discussion

Lunch (13:00 - 14:00)

# Session 3 – Sea Level SpaceWatch Implementation – Business Plan 14:00-16:00

- The Sea Level SpaceWatch Service Offering and Business Plan David Cotton, SatOC (14:00 – 14:30)
- 2. User response and Discussion (14:30 15:30)
  - a. Identification and discussion of options
  - b. Further developments necessary before implementation
- 3. Possible Future Developments: Extensions outside UK (15:30 15:40)
  - a. Within Europe
  - b. Internationally identification of vulnerable regions
- 4. Round up and next steps (15:40 16:00)

Close 16:00









### Questions to support discussion on proposed Operational Service

- 1. Are further developments needed to the service for it to be useful, and to be something your organization would be prepared to fund?
  - Scientific issues to do with data processing and analysis
  - Technical issues to do with data / information presentation
- Is the way the service is structured suitable? (i.e. public access to general web
  pages and data, more detailed analysis at a specified number of locations
  available to paying users, with scope for additional analyses paid for on
  demand).
- 3. Is the funding basis appropriate? (Initial set up cost, plus annual fee, become member of user board, meets annually to review service,....)
- 4. Are the projected costing levels at the right level?