COPERNICUS CLIMATE CHANGE SERVICE

Copernicus Workshop on Climate Observation Requirements

29 June - 2 July 2015

Seed questions for the Working Groups as at 19 Jun 2015

Topic A: Collection and processing for *in situ* data: atmosphere, ocean, land, cryo- & bio-spheres

A1. What activities are needed to support data rescue and collection?

A2. What are the requirements for homogenized and harmonized *in situ* data records?

A3. How can access to national holdings of *in situ* climate data be improved?

- Scientific, technical, policy considerations

Topic B: Collection and reprocessing for (Level-1) satellite data records

B1. What are the priorities to support satellite data rescue?

B2. What are the requirements for timely reprocessed product streams?

- Interim CDRs?

B3. How should C3S link to international co-ordinating activities in this area?

- Intercalibration, e.g.GSICS
- SCOPE-CM
- CEOS/CGMS WG-CLIMATE
- What else is needed to achieve a comprehensive inventory of reprocessing activities?

B4. Are there any access issues for satellite datasets?

Topic C: Observational ECV and gridded products

C1. What datasets are currently available and how could they be used for climate services?

C2. What kind of input data, tools and activities are needed to support further development and production of these datasets?

C3. What could be the role of Copernicus (and C3S in particular) in facilitating this development?

Topic D: General issues

D1. What quality/maturity criteria should be applied to candidate datasets for the Climate Data Store?

D2. What is needed to achieve open access?

D3. What are the requirements for metadata (relevant to WIGOS)?

D4. What are the observation requirements for validating climate model simulations, past, present and future?

For context - tentative list of ECVs/indicators to be covered by the C3S

Surface air temperature	*Ocean colour*	Snow cover
Surface precipitation	*Sea ice*	*Glaciers & ice caps*
Water vapour	*Sea level*	Albedo
Surface radiation budget	*Sea surface temperature*	FAPAR
Earth radiation budget	Global ocean heat content	*Fire*
Carbon dioxide & methane		*Ice sheets*
Ozone & aerosols		Lakes
Cloud properties	CO_2 partial pressure	Permafrost
Wind speed & direction	Ocean acidity	*Land cover*
Upper air temperature	Sea surface salinity	Leaf area index
Other long-lived greenhouse gases	Current salinity	*Soil moisture*