

'Product' discussion group 2

- Glenn Campbell
- Thomas Heege
- Vagelis Spyrakos
- Bunkei Matsushita
- Ils Reusen
- Miroslaw Darecki
- Daniel Odermatt
- Hartwig Kremer
- Steve Greb
- Erin Hestir

State of the art

- Several project specific round robins were done, but do not enable a conclusive selection
- Activities like the global agriculture experiment enable more comprehensive validation for other fields of application
- Globolakes is establishing an online validation framework for remote sensing products
- It is relatively clear that Chl-a, turbidity, possibly temperature are the most commonly used parameters for large scale applications
- Water extent and water level are provided for by other groups

User needs & requirements

- Relevance of feasible parameters is relatively clear (CHL, turbidity/TSM, LSWT)
- In order to build sustainable systems, we need sustainable user relations
- Focus on SDG, UNEP monitoring guidelines and publicly available requirement statements
- Legislative use of products has specific requirements, remote sensing products are challenged to meet consistency in space and time
- Publication of methods is not sufficient, standardization must go one step further
- DIN/ISO norms exist for Chlorophyll in-situ measurements, what can we do in that direction?

Gaps, problems and issues

- We need common standards, although product accuracy may vary for the variety of products we provide
- Get an overview of available products that are relevant for building the GEOSS
- Involvement of non EO-users must be strengthened for recommendations to be made
- The goal of GEO activities is unclear

Solutions and resource allocations

- Standardization through the establishment of common validation benchmark datasets
- Rather than accuracy dependent standards, multi-level validation protocols, independent reference measurements and quality labels
- Opportunities may arise from Future Earth endeavour
- Coupling water quality with problem specific applications (development, waste water)
- Enable presence of the GEO WQ group at WFD delegate meetings and similar events

Strategic implementation plan

- The purpose of the GEO water quality group needs to be clarified, in particular for external communication
- The model for standardization plans must be defined
- A community effort should be planned to enable validation protocols if not product standardization
- Enable interaction between GEO and UNEP Live