



Committee on Earth Observation Satellites

Working Group Calibration & Validation

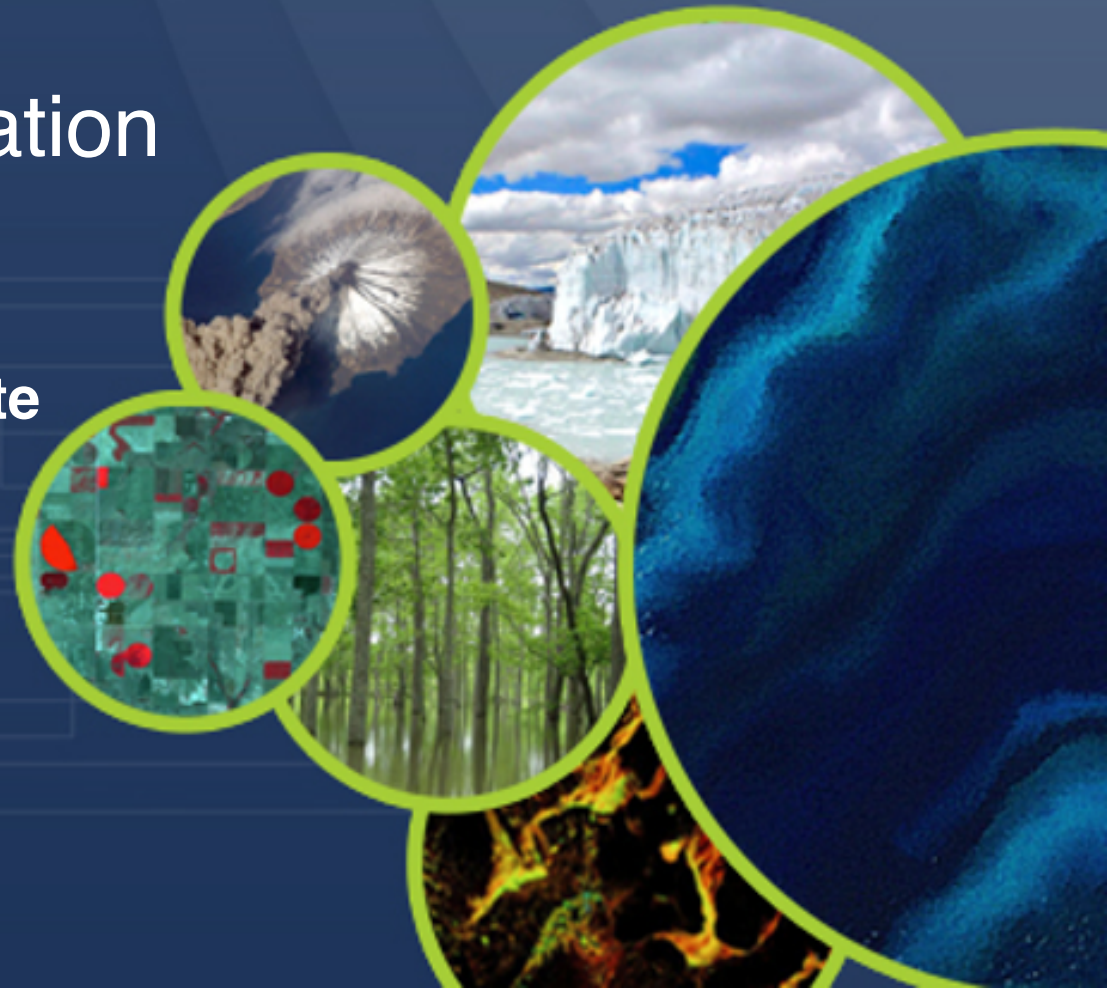
Terrain Mapping SubGroup and DEMIX Update

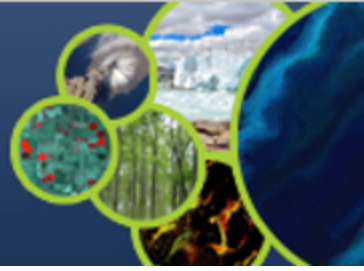
Peter Strobl, EC-JRC, WGCV

CEOS WGCV #47, Virtual Meeting Session

Hosted by Webex

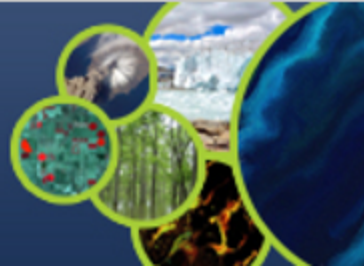
16 July 2020





- Revival of the Terrain Mapping SubGroup (TMSG)
 - Proposed at WGCV45 in July 2019
 - Decided by SIT in September 2019
 - Invitation email sent to last available participant list in January 2020
 - as of July 16th 2020:
 - 50(38) subscriptions
 - 13(12) countries
 - ~50% with CEOS background
 - ~30% Geomorphometry.org
 - 30(28) expressed interest in the intercomparison exercise DEMIX

Subscription page: https://ec.europa.eu/eusurvey/runner/WGCV-TMSG_membership

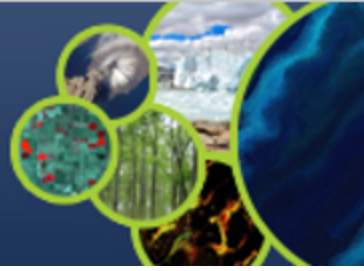


Development:

- DEMIX call for participation issued 5 May 2020
- 28 participants registered (CAS, DLR, EC, ESA, JAXA, NASA, USGS) + domain experts & industry
- Kick-off meeting held with 26 participants on 26&30 June 2020

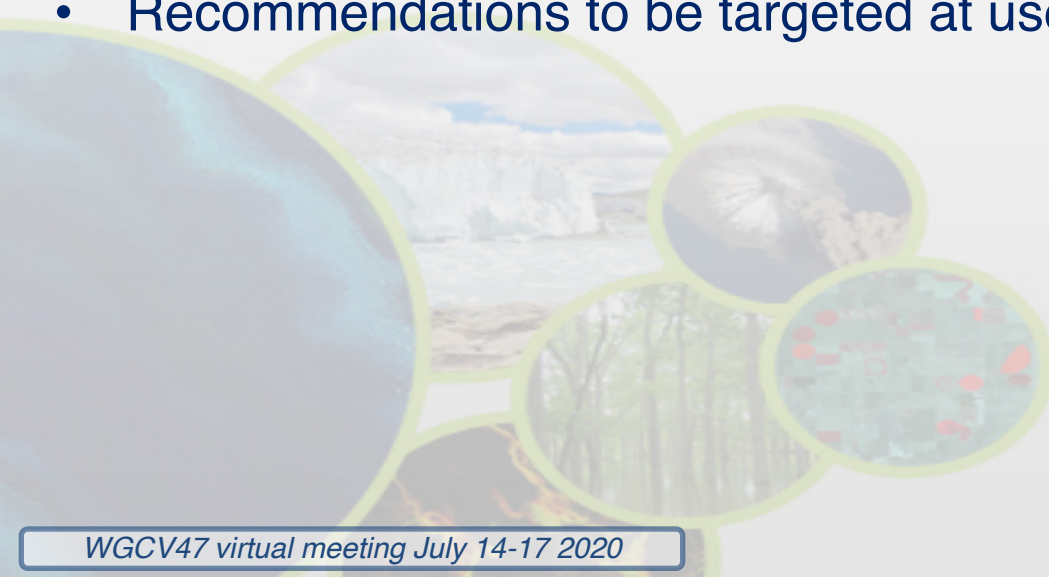
Intermediate results:

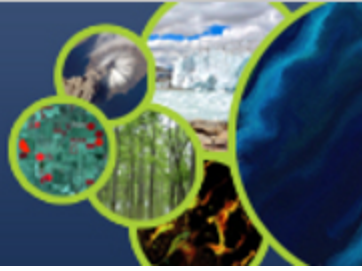
- Three sub-groups are set-up:
 - 1) terminology and analytical basis
 - 2) algorithms and software – open source tool box
 - 3) platforms and processing
- Each group received at least 7 contributors, lead is more difficult...



Concerns:

- Further elaborate and detail scope and objectives
- Agree on collaboration tool(s) (Teams/Slack/Github)
- Enhance visibility
- Find platform (MAAP?)
- Typology of DEM uses (Orthorectification, atm. Correction, Hydrology, Pedology, ...)
 - Do such typologies already exist somewhere?
- Recommendations to be targeted at use typology?

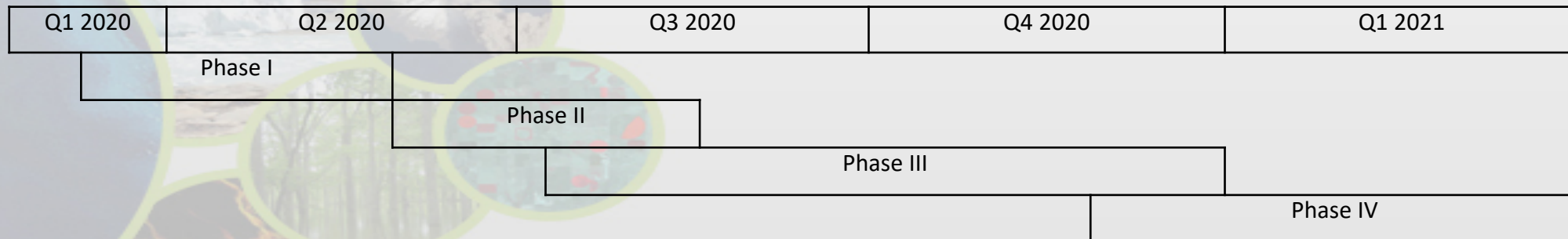




- DEMIX to be performed in 4 phases

- I. General agreement among main contributors (data owners) on approach & scope; Call for expression of interest to further partners (commercial tbd); circulation of JRC Workshop report (in preparation) & selection of base (Δx , Δy , Δz) & extended (slope, aspect, morphology) testing methods and algorithms; Identification of suitable test areas (at least 1 per continent);
- II. Cross-comparison of all participating data sets on test areas and, if feasible, identification of a reference dataset (at DGED L1). If available and where applicable cross-comparison to suitable orthorectified (reference?) imagery (Sentinel-2?); Workshop to exchange experiences from the test areas and agree on details of an eventual global roll-out;
- III. Feasibility testing & potential global roll out of at least base tests & determination of suitable aggregation scale for reporting;
- IV. Calculation of agreed comparison metrics for all candidates and publication of results.

- Timeline



Thank you for your attention!
Any questions?

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