

Minutes and Action Items LPV subgroup meeting

30-31 January 2014, ESA/ESRIN Frascati, Italy

Participants

Gabriela Schaepman-Strub (Chair)
Miguel Roman (Vice-Chair)
Tao Che (Snow cover)
Xavier Ceamanos (Albedo)
Crystal Schaaf (Albedo)
Martin Herold (Land cover)
Nadine Gobron (FAPAR)
Stephen Plummer (LAI)
Luigi Boschetti (Fire)
Jose Sobrino (LST)
Tom Jackson (Soil moisture)
Jadu Dash (Phenology)

Guests

Albrecht von Bargaen (CEOS WGCV)
Bojan Bojkov (CEOS WGCV/ACSG and ESA)
Ferran Gascon (ESA – hosting agency)
Alessandro Burrini (ESA- CEOS CAL/VAL portal)

1. Introduction meeting goals and LPV updates (Gabriela)

- Welcome to new focus area leads Xavier Ceamanos and Oliver Sonnentag (Oliver not present, but will replace Richard Fernandes from now on for LAI). For snow cover we are in contact with Thomas Nagler who would be a perfect match for LPV, he gets back to us as soon as SnowPex is confirmed. **Richard: Thanks so much for all your contributions to CEOS LPV, especially also for leading and much of the writing of the LAI good practices!!!!**

2. Presentations by focus area co-leads on validation status

- All focus area leads presented state of the art and validation stage – very much appreciated and helpful!!
- Information will be compiled into an overview paper (based on table to be sent around by Gabriela, 1 page per focus area), tentatively to be submitted to RSE.

3. Introduction to validation methods (Miguel) and presentations on variable-specific validation methods

- Miguel presents 4 types of validation methods. Tom Jackson suggests model prediction as additional intercomparison/validation source.
- Some of this content might go into the paper, in the synthesis and outlook section

4. Introduction to WGCV (Albrecht von Bargaen, current WGCV vice-chair)

- Albrecht kindly visited the LPV sub-group meeting to present CEOS WGCV and its structure and links.

5. Status of good practice protocols

- Good practice protocols are needed by user communities. LPV should publish state of the art docs on methods on the website, even if they do not include all parts of intercomparison and validation. For each product we will create a new page with current best practice (dedicated protocol (eg. as for LAI) or peer-reviewed papers)
- All final protocols will undergo peer-review to involve community. Comments and answers are posted along with protocols.
- After review and revisions, all protocols will get a doi and a reference assigned to make them citable. New versions get new dois. Gabriela will clarify with Albrecht (WGCV) if CEOS can assign dois (also needed for LPV endorsed validation datasets).
- All protocols should be kept by chairs in original (eg Word) format, for updates in the future.
- Status (31/01/2014) of protocols in below table. Different focus areas are at different stages. We will poste corresponding documents for each product with LPV website update.

Snow cover (T5)*, Ice	Starting
Surface radiation (Reflectance, BRDF, Albedo (T8)*)	First draft planned for end of 2014, spatial representativeness papers (Roman, Cescatti) to website
Land cover (T9)*	Strahler 2006, Olofsson in revision -> to website
FAPAR (T10)*	Review current methods
Leaf area index (T11)*	Releasing phase, citation and doi assignment -> to website
Fire (T13)* (Active Fire, Burned Area)	Version 2009 (first section ok) -> to website, sampling missing; active fire pending, sensor-specific, list references on website
Land surface temperature*	AATSR protocol (ESA CCI) presented by Darren Ghent to be extended by field measurements, Jose will take lead in contacting active people doing field measurements. In the meantime evaluate Darren's document. When accepted within focus area to website and invitation for external review.
Soil moisture*	SMAP cal/val plan might be starting point to be posted to website for external review.
Land surface phenology	Review methods

6. OLIVE discussion

- Concept of OLIVE is important for LPV activities, specifically for LAI, FAPAR, albedo and phenology
- Implementation needs improvement.
- Space agencies responsible for subsetting satellite data and interfacing for automatic upload of satellite data to future OLIVE.

- LPV has expertise to compile reference dataset (processing and quality check of available in situ data and creation of 'golden standard')
- LPV will send a statement to ESA with needs and role of LPV for the continuation and improvement of operability of OLIVE.

7. Future expansion of LPV with new focus areas

In the framework of the Carbon Task Force (and potential implementation thereof in the future), as well as other initiatives we might be asked or tasked to extend the number of focus areas. With currently 9 focus areas we are a large sub-group within WGCV and have to carefully evaluate such requests. LPV however is open to evaluate new groups under following conditions:

- Product is operational and ready for validation activities.
- Strong support from scientific community for leading the focus area.

LPV is observing developments of biomass products and will reevaluate the establishment of a corresponding focus area once the products are ready for validation. In the meantime, Martin Herold is observing developments in the framework of GOFC-GOLD and acts as biomass contact for LPV.

8. Global Supersite Selection for CEOS

- CEOS is asking for a list of high-priority reference sites for validation (long pending issue...).
- LPV will compile a list based on the suggestions by the focus areas and come up with an acronym.
- Sites should fulfill number of criteria (eg continuity of ground measurements (back- and forwards), spatial representativeness, various ecosystems, suitable for several variables).
- Potential candidates are EOS land validation sites (active ones), NEON, Fluxnet, BSRN, ARM, ICOS, other European sites (examples: Barrow, Harvard Forest, Zotino/Yakutsk, USDA BARC, Läger, Tharandt, Donana, Barrax)
- Plan is to get intensive sampling on these sites, full characterization of canopy structure for a 3D reconstruction for combined measurement-radiative transfer modelling activities (eg testing sampling methods, product algorithms, forward, inverse modelling, modelling complexities).

9. Website

- Based on presentations Miguel and Jaime will update website (towards end of March).
Thanks so much for this offer, Miguel and Jaime!

10. Future LPV subgroup meetings

- General agreement that a physical meeting for LPV is needed (approx. every 1.5 yrs).
- Next meeting could again be attached to LPVE meeting (ESA plans follow-up in 1.5yrs) or ev. MODIS science team meeting (springtime each year).
- For all focus areas both co-leads should be present if possible (but at least 1 per focus area as was the case in the current meeting).

11. Terms of chair, vice-chair, co-leads

Generally agreed that it should be a 3-yrs term (chair, vice-chair, co-leads), plus max. 1 extension for focus area co-leads only (total of 6 yrs). It however remains important to keep a good balance of people with experience and incoming co-leads, so optimally not both co-leads start at same time. For people that are on for longer we start counting the 3yrs 2nd term with the LPV sub-group meeting.

	Incoming	End of term (outgoing after 2 nd term)
Gabriela Schaepman-Strub (Chair)	March 2013	February 2016 (outgoing)
Miguel Roman (Vice-Chair)	March 2013	February 2016 (transition to chair)
Tao Che (Snow cover)	March 2013	February 2016 (1 st term)
Tentatively Thomas Nagler (Snow cover)	January 2014	December 2016 (1 st term)
Xavier Ceamanos (Albedo)	January 2014	December 2016 (1 st term)
Crystal Schaaf (Albedo)	January 2014	December 2016 (2 nd term)
Martin Herold (Land cover)	January 2014	December 2016 (2 nd term)
Nadine Gobron (FAPAR)	June 2011	April 2014 (1 st term)
Arturo Sanchez (FAPAR)	July 2012	June 2015 (1 st term)
Stephen Plummer (LAI)	January 2014	December 2016 (2 nd term)
Oliver Sonnentag (LAI)	March 2014	February 2017 (1 st term)
Luigi Boschetti (Fire)	January 2014	December 2016 (2 nd term)
Kevin Tansey (Fire)	January 2014	December 2016 (2 nd term)
Tom Jackson (Soil moisture)	January 2014	December 2016 (2 nd term)
Wolfgang Wagner (Soil moisture)	January 2014	December 2016 (2 nd term)
Jose Sobrino (LST)	January 2014	December 2016 (2 nd term)
Simon Hook (LST)	January 2014	December 2016 (2 nd term)
Jadu Dash (Phenology)	March 2012	February 2015 (1 st term)
Matt Jones (Phenology)	March 2012	February 2015 (1 st term)

12. Action items

1	Fill table for each focus area	End March	All
2	Update LPV website	End March	Miguel, Jaime
3	First draft paper	End April	Gabriela
4	Evaluation and update of GCOS fire target units	ongoing	Luigi, Kevin
5	LST protocol Darren Ghent evaluation		Gabriela, Jose, Simon
6	Publication of protocol (doi/reference)	February	Gabriela, Jaime, LAI focus area leads
7	Super site nomination by focus area		All, to Gabriela, Miguel
8	NEON, Fluxnet note		Crystal, Miguel, Gabriela
9	OLIVE response to ESA		Gabriela, Miguel
10	DOI assignment for CEOS documents and val datasets		Gabriela with Albrecht