**Last Discussion – Wrap up – Led by Miguel**

Validation framework - includes OLIVE component

Site reference information – manually added

By the time it’s in OLIVE, it has been quality screened

Produces intercomparison and validation reports associated with each product.

Support for OLIVE came from ESA-ESRIN

How do we extend this beyond LAI/Fpar?

Would like to reuse for other products, this was part of our proposal to HQ as part of our current funding.

How do we move forward, what is the status of OLIVE?

Can incorporate USGS and NASA, to perform processing and data flow, subsetting.

Have various teams and network components providing the in situ data.

Subsets are already generated for MODIS/VIIRS and are pushed to data centers, such as LPDAAC/LPCS/OLIVE? USGS (LPDAAC is the EOS archive, also created LPCS)

Standards for combining resolutions, projections, resampling (USGS tool).

USGS tool currently has crude statistical estimation. LPCS, funded by USGS and NOAA. Intercomparisons only.

Do we have them do this, expand on what they have, or do it within OLIVE ?

LPCS tool doesn’t allow for reference data, so currently can only be used for intercomparison.

Best to have experts estimating the metrics, and following the protocol, doing the estimation. Who will take this on?

How do we engage the networks? This will be a role for Zhosen (GSFC). There is a network within the US, with live pyranometer downloads available. We can consider a scoping study on this. We’d like to get some operational data flow into the validation framework.

What is the program level status of OLIVE? Cal/Val portal? CVP is not just LPV, it’s also IVOS, RadCalNet, ASIX. It is expected that this infrastructure will be retained. Integration of data, and provide the analysis, that’s what it was designed to do. If OLIVE is not there what are our options?

FG: Programmatic status of OLIVE – not currently funded. Users were not there.

Expected change?? If we need an objective - for whom, which products/sensors? It may be possible to reactivate. Goal has to be the validation framework, that is useful for S2, S3, MODIS, Landsat, VIIRS… Armed with concrete needs, missions/products, he can go back to his management and try to get resources.

Best products are those with community feedback and use. If we want to get to the point where the community is contributing, and we leverage all who are willing to so this research, we will save resources. We need to enable the infrastructure for this to happen.

FG: This should be a secondary objective. The primary objective should be a tool that is useful for the interests of Copernicus Services.

SP: History. The online tool OLIVE was funded under a contract to develop a tool, with no thought to what users wanted, it was made to work, and a paper was published with the results. The reference dataset, the SM project (ISMN, I assume), was another project. We have a tool, but no linkage, and no support for development. We have no mechanism to ingest data, tool not serving our purposes. Is is this tool that we invest our time in, one that provides a mechanism for providing a validation and intercomparison for which focus areas, and what are the priorities?

* How do we get the in situ data
* How do we get the interface active so you can interact with it

MR: Challenge is partly programmatic, ESA and NASA are research agencies. But NOAA has a requirement for operational assessment of land products. They have to build this tool, if ESA does not resurrect. We can certainly provide the specifications and need.

SP: There are other tools… Perhaps Nadine’s tool w/in Copernicus. Is there justification for investing in OLIVE now in light of these types of developments?

Perhaps we need families of tools, rather than trying to push it all within OLIVE.

MR: What is the solution? We are happy to work w Nadine. The US **will** come up with a capability, within USGS/NASA/NOAA, to get this done for US operational products.

ESA is more than welcome to help to cover the suite of Sentinel products. Currently w/in our agreements for S2/S3 anyway. We want to avoid duplicating efforts or reinventing the wheel.

FG: Noted that w/in RadCalNet they built a tool, shared resources and each interested agency built a part of it. There was a clear set of user requirements and a core user community.

MR: Is the option to share the OLIVE code a possibility?

FG says yes. He thinks he can convince his management to invest in resurrecting OLIVE if there is a clear interest for S2/S3 or FLEX/Biomass. Has to be a clear interest for ESA to invest in it.

SP: Will try to sell this to mgmt with the promise of S2/S3 benefits. We need to identify what are the processes we want to do, need to make it a manageable size. Because if its too big, we wont be able to sell it.

Oversight of in situ reference data. That is a role someone has to take on. It’s part of OLIVE, but how is this gatekeeping done?

This is understood: Example is fluxnet – live feeds are possible, but these are not QA’ed, the cleaned, checked, gap-filled data take time to produce (1-2 yrs). This would exist for ref data brought in to OLIVE too, and needs to be considered. I seem to recall the original thought with OLIVE was that LPV would do this… but specifically who that was was never clear. Perhaps by FA.

Do we do that or do the data centers do this? We need to know what Copernicus is doing, need to coordinate. Can even have multiple tools in parallel, but ref data has to be coordinated and consistent.

We are moving forward on this.

Actions

* FG/SP report back on OLIVE.
* Miguel will meet w LPCS group, get some of the preliminary accuracy assessments, with the advice of the LPV group

Our common ground between the agencies is the integration of moderate resolution products and their assessment.

FG: Wants a common action at next meeting for user needs for OLIVE. Which missions/products. Will take on an action to provide a table that the FA can fill out.

Request that Nadine provide overview of her/Copernicus efforts.

**Roles for FA Leads - Jaime**

Specified on wiki

Main thing lacking is communication with their respective communities

* maintaining list of contacts
* communities are not being engaged in the activities going on w/in the FA, kept abreast
* if we send out a letter every six months or stagger so that every six months the membership either hears from LPV chair/gen or from the FA leads
* listserv - used for protocols
* maintain/review product lists annually

Jaime action to remind FA leads

**Turnover for WG**

Sometimes leads come to stalemate due to differing opinions

Many have terms coming up at end of 2016.

Crystal, Jose, Stephen, Luigi, Kevin…

Also need to maintain continuity, losing too much expertise at one time. It is okay if the incoming contacts have service and contacts established within the validation community.

Need to lead by example, with geographical and gender representation