

LSI-VC-15 Actions & Decisions v1.0

Actions

LSI-VC-15-01	Steve to share an update on RCMAP / multi-modal analyses for the next CEOS-ARD newsletter.	May 2024
LSI-VC-15-02	Dave and Ake to work with Danilo and the CONAE team to explore implementation of the processes used for SAOCOM CEOS-ARD in the CEOS Analytics Lab as an example.	June 2024
LSI-VC-15-03	Matt to add SAOCOM to the CEOS-ARD website 'under development' table, along with NISAR and Sentinel-1 (OPERA products; both RTC and GSLC) and Radarsat Constellation Mission (RCM) products.	May 2024
LSI-VC-15-04	Ake to report back to the LSI-VC Secretariat regarding minor updates to the combined SAR PFS to address azimuth spacing requirements. <u>Context:</u> NASA have proposed a minor change to the specification, adjusting the threshold requirement to be the azimuth spacing (in metres) or the PRI (in seconds) of the source data product (as well as the other attributes). A target requirement that supersedes the baseline requirement would be a pixel-for-pixel image layer providing the number of looks.	May 2024
LSI-VC-15-05	LSi-VC Leads to reflect on the recommendations from Bruce Chapman (his last slide) regarding changes to the CEOS-ARD Specifications, including around being more prescriptive on formats and ensure this is reflected via either: revision of the Goal requirements, through Technical Advisory Notes, or via the CEOS Interoperability Framework with WGISS, as appropriate.	June 2024
LSI-VC-15-06	Matt to ensure that the ISRO CEOS-ARD roadmap is completely reflected on ceos.org/ard	May 2024

LSI-VC-15-07	Matt to add COAST to the test cases / pilots chapter (5) of the CEOS-ARD Strategy 2024 and seek to ensure that teams ongoing awareness of CEOS-ARD and representation in the CEOS-ARD Oversight Group.	May 2024
LSI-VC-15-08	Matt to consider how to add a thread in the CEOS-ARD Strategy 2024 about capturing the benefits of CEOS-ARD.	July 2024
LSI-VC-15-09	Matt to share the CEOS-ARD Strategy 2024 draft with the NASA team working atmospheric ARD and seek to make a connection to CEOS-ARD and the activity of the CEOS-ARD Oversight Group and AC-VC. Copy Dave Borges for AC-VC follow up.	May 2024
LSI-VC-15-10	Matt to reflect on the membership of the CEOS-ARD Oversight Group and ensure the latest rotations of WG and VC Chairs haven't left gaps in representation.	May 2024
LSI-VC-15-11	Matt to add the data formats discussion to section 2 of the CEOS-ARD Strategy 2024.	May 2024
LSI-VC-15-12	LSI-VC Secretariat and USGS team to discuss getting a CEOS-ARD tag onto their AWS datasets as a first implementation example for others to follow. Capture the specifics in the section of the CEOS-ARD Strategy related to cloud discoverability/visibility. Also follow up with other CEOS-ARD hosts (JAXA EORC website, CDSE, Tellus, etc.)	May 2024
LSI-VC-15-13	Consider the potential of using the CEOS-ARD Github to serve as a repository for sample CEOS-ARD datasets.	LSI-VC-16
LSI-VC-15-14	LSI-VC Leads to connect, via Ferran Gascon, with the CHIME team to agree potential changes to the Surface Reflectance PFS that would add specific caveats for hyperspectral missions.	May 2024

LSI-VC-15-15	LSI-VC Leads to consider a similar caveat approach (ref: LSI-VC-15-14) for high resolution missions, as a means for addressing the issues raised by KARI around sub-pixel accuracy.	May 2024
LSI-VC-15-16	Matt to initiate the process to change the 2.13 Goal requirement to 'As Threshold' for the SR and NLSR PFS. And to check the AR PFS handling of this parameter. Note: This is not an urgent change, so consideration will need to be given to the cycle in which the change is made.	May 2024
LSI-VC-15-17	Hari Priya (ISRO) to connect with Zheng-Shu Zhou (CSIRO) to coordinate the two agencies' NovaSAR-1 CEOS-ARD products.	May 2024
LSI-VC-15-18	To support the Surface Reflectance Quality, Consistency and Equivalence activity , LSI-VC to discuss a definition of a homogenised Surface Reflectance product in the context of CEOS-ARD. Ensure this is input to the Interoperability Framework activities in WGISS.	LSI-VC-16
LSI-VC-15-19	LSI-VC Secretariat to capture more information about exactly what is included in each of the CEOS-ARD SR datasets (i.e., whether they include BRDF, terrain illumination, etc.) on the ceos.org/ard tables of CEOS-ARD products. <i>Note: For that we need disambiguation. Revising processing levels along the lines that Peter proposed would be helpful in doing so in a transparent way. The alternative will be many more 'L2xy' levels, which to harmonise would be a challenge of its own.</i>	July 2024
LSI-VC-15-20	Matthias to change field names from 'ceos_ard' to 'ceosard' in the CEOS-ARD STAC Extension.	COMPLETE
LSI-VC-15-21	Steve and Matt to consider how the CEOS-ARD Governance Framework can be input to the CEOS Interoperability Handbook v2.0 of WGISS.	June 2024

LSI-VC-15-22	Wenyng to share the latest ECV Inventory Gap Analysis Report with LSI-VC for review. LSI-VC input to prioritise the gaps would be helpful.	May 2024
LSI-VC-15-23	Wenyng to share WGClimate's draft responses to the GCOS Implementation Plan that relate to LSI-VC for review by the team.	May 2024
LSI-VC-15-24	LSI-VC to consider adding a long-term stability parameter to future iterations of the Surface Temperature/Combined Optical PFS.	LSI-VC-16
LSI-VC-15-25	LSI-VC Leads to consider a joint initiative with WGClimate to increase communication of observation gaps (starting with the LST CDR case) to CEOS Principals, including via discussion at SIT / other CEOS leadership meetings. These types of issues are underrepresented at CEOS leadership level meetings. These findings, achieved in the frame of CEOS, need more opportunities to impact agency mission planning processes.	June 2024
LSI-VC-15-26	Matt to ask agencies to report on uptake of CEOS-ARD products at LSI-VC-16. The goal is to try to understand the impact of CEOS-ARD. Looking at download metrics, trends following release of a CEOS-ARD product, or user survey could be some approaches. Qualifying direct impact will be challenging and should be considered aspirational.	LSI-VC-16
LSI-VC-15-27	CEOS Communications Team to include a CEOS-ARD example in the work to demonstrate the impact of CEOS. Quotes from users will need to be provided.	July 2024
LSI-VC-15-28	Ake to work with Marc Paganini (ESA) to write a short report on how EO and CEOS can support the Ramsar Convention. This could include suggestions for wording to be included in the future Ramsar Work Plan revision. These inputs will be presented at LSI-VC-16. An LSI-VC Wetlands Subgroup might be a possible construct to formalise support. Matt to ensure there are wetlands sessions on future LSI-VC agendas.	LSI-VC-16

LSI-VC-15-29	<p>LSI-VC and GEOGLAM Subgroup co-leads to follow up with Zolti Szantoi (ESA) for his perspective on how to build the membership of the LSI-VC GEOGLAM Subgroup. Identifying a few CEOS Agency champions is critical to enabling a CEOS response to the Essential Agriculture Variables. Zolti would be a great candidate to serve for ESA.</p> <p>A CEOS response to the EAVs should be done with a view to ensuring efficiencies in the CEOS responses to multiple thematic requirements (EAVs, EBVs, ECVs).</p>	LSI-VC-16
LSI-VC-15-30	<p>GEOGLAM team to engage CONAE in the LSI-VC GEOGLAM Subgroup, via Danilo Dadamia.</p>	LSI-VC-16
LSI-VC-15-31	<p>Libby to ensure the LSI-VC team has an opportunity to review the WGISS Collections Management Practices White Paper. Libby will also share the related presentations from WGISS-57. LSI-VC Secretariat to consider inviting Mirko Albani to present on this topic at LSI-VC-16. LSI-VC is interested to see how this might guide CEOS-ARD collection management practices.</p>	LSI-VC-16
LSI-VC-15-32	<p>Matt to submit a support ticket through CDSE to see whether the CEOS-ARD logo (or a CEOS-ARD 'tag') could be added to pages / entries related to CEOS-ARD compliant datasets.</p>	June 2024
LSI-VC-15-33	<p>LSI-VC Leads and Ake to refine input for SIT-39 on the POLINSAR workshop recommendations and consider a targeted follow-up to ESA, JAXA, NASA, ASI, DLR, ISRO and CONAE. The aim is to get some names and licence to follow up based on Principal agreement to the quad-pol/multi-frequency supersites concept.</p> <p>Need to remain aware of the potential connections to the ICGS-SAR and the WGCV SAR Subgroup.</p>	July 2024
LSI-VC-15-34	<p>Matt to ensure a standing agenda item at future LSI-VC meetings for follow-up on the PolInSAR Workshop recommendations and QP/multi-frequency supersite activity.</p>	LSI-VC-16

LSI-VC-15-35	Matt to poll the LSI-VC team regarding preferences for the week before or after the 2024 SIT Technical Workshop for LSI-VC-16 in Canberra, Australia.	May 2024
LSI-VC-15-36	Matt to email Ignacio Zuleta regarding the possibility of a CEOS-ARD session at ARD24.	May 2024

Decisions

Decision 01	LSI-VC encourages working towards a presentation of the CEOS-ARD Strategy 2024 at the SIT Technical Workshop, towards endorsement at CEOS Plenary 2024.
Decision 02	Change the 2.13 Goal requirement to 'As Threshold' for the SR and NLSR PFS.
Decision 03	Agreed that we need to ensure consistency between the 'No Data' fields of the PFS (incl. SAR) and that some stratification is necessary to describe the different cases (sensor dependent, measurand dependent). This will be dealt with in the process to develop a combined optical PFS. Definitions will need to be agreed for the cases of 'NoData', 'Invalid', 'Falsified' (TBC), and 'Valid'. This could be handled in the same way as on the SAR side, with a mask layer to indicate each case at the Threshold level. Goal level requiring a per-pixel approach. LSI-VC will consider different masks and ways to capture the specifics of why a pixel is registered as 'No Data'.
Decision 04	Agreed to adjust the SR, ST, NLSR PFS to include at a minimum FWHM information at Threshold, and a full spectral response function at the Goal level. This will be addressed in the process of developing a combined optical PFS.

Decision 05	Agreed to make 1.6 of the ST PFS consistent with that of the SR PFS v5.0.1. It was agreed that the changes to 1.6 in the SR PFS which have raised issues related to hyperspectral sensors will not adversely affect the ST side. This will be dealt with in the process to combine the optical PFSs. The caveats for hyperspectral sensors on the SR side will not be applicable to the ST side.
Decision 06	Agreed in principle to try a 'fitness for purpose' approach to accuracy requirements for the combined optical PFS. This is the approach used on the SAR side, that is, not mandating a value, but ensuring information is provided for users to decide whether it is fit for their use case. This will resolve the issue with the 0.5 sub-pixel rRMSE accuracy requirement for high resolution datasets and the principle will be broadly applicable to other quality / accuracy aspects of the PFS. This principle will be adopted in the definition of the combined optical PFS.
Decision 07	Agreed in principle to attempt a combined PFS (including joint optical and SAR in time). We will start by looking at the common parameters of the optical PFS and seeing where the requirements match exactly. Discussion will then focus on those parameters where the requirements differ. It was agreed that it could make sense to seek to combine the SAR and optical PFS from the outset, rather than doing the harmonisation in two steps.
Decision 08	Will wait until progress is made on the Combined Optical PFS before publishing the new CEOS-ARD STAC Extension.
Decision 09	General agreement that it makes sense for LSI-VC to be the home for land related 'beyond level 2' thematic product discussions – specifically in the LSI-VC Subgroups, of which there could be more established. However this all hinges on staffing and having a couple of CEOS Agency champions for each theme.