

## LSI-VC-18 Actions & Decisions v1.0

### Actions

<b>LSI-VC-18-01</b>	Dave Borges to share the CEOS Organisational GitHub Framework for feedback from the LSI-VC team and for awareness to help shape the complementary rules specifically for the CEOS-ARD repository.	<b>October 2025</b>
<b>LSI-VC-18-02</b>	<p>LSI-VC Leads to coordinate an update of the CEOS-ARD Governance Framework to cover CEOS-ARD GitHub Governance, including the following aspects:</p> <ul style="list-style-type: none"> <li>● Section on the PFS semantic versioning convention, major release procedure and cadence, and changelog publishing.</li> <li>● Process and roles/permissions for endorsing pull requests and maintaining the main branch as the authoritative version of the PFS / building blocks.</li> <li>● Protocol for what becomes an issue and how to open issues within the building block framework (e.g., covering input from external contributors, permissions to make direct pull requests versus opening issues, using issues as a means to facilitate discussion, etc.).</li> </ul>	<b>October 2025</b>
<b>LSI-VC-18-03</b>	Matthias Mohr to follow up with the KCEO/EOGlossary team ( <a href="#">Dominik Weckmueller</a> ; <a href="#">Peter Strobl</a> ) on the addition of a JSON output format for the dictionary.	<b>October 2025</b>
<b>LSI-VC-18-04</b>	Ake Rosenqvist and Matthias Mohr to generate the various combinations of SAR PFS using the building block process and manually confirm there are no major issues with the ordering of requirements.	<b>October 2025</b>
<b>LSI-VC-18-05</b>	Ake Rosenqvist to connect with the KARI team (via <a href="#">Taeheon Kim</a> ) regarding KARI participation in the development of the CEOS-ARD PFS for very high resolution SAR.	<b>September 2025</b>
<b>LSI-VC-18-06</b>	SEO team to establish and populate a new CEOS mailing list for the purpose of allowing CEOS Agencies to announce commercial data buy opportunities and news.	<b>October 2025</b>

<b>LSI-VC-18-07</b>	LSI-VC Leads and Secretariat to review feedback from Leonardo De Laurentiis, Dana Ostrenga and Melissa Yang Martin on the ESA-NASA Joint Quality Assessment Framework and potential CEOS-ARD connections (LSI-VC-18 item 4.3) and prepare a thorough response to each and reflect feedback, where relevant, in the Future of CEOS-ARD Concept Note.	<b>October 2025</b>
<b>LSI-VC-18-08</b>	LSI-VC Leads and Secretariat to review feedback from Neil Sims on Land Degradation Neutrality (LSI-VC-18 item 5.1) and prepare a thorough response to each input and reflect feedback, where relevant, in the Future of CEOS-ARD Concept Note. Notes will also be added to LSI-VC's input to the 2025 CEOS SIT Technical Workshop regarding observation gaps, etc.	<b>October 2025</b>
<b>LSI-VC-18-09</b>	Siri Jodha Khalsa and Peter Strobl to propose definitions of 'Land Surface Temperature' and 'Surface Brightness Temperature' for the CEOS EO Glossary so they can be referenced in future development of the updated CEOS-ARD Surface Temperature PFS.	<b>November 2025</b>
<b>LSI-VC-18-10</b>	LSI-VC Secretariat to ensure PFS and requirements feedback from presentations to LSI-VC-18 are transferred to the GitHub issue tracker.	<b>September 2025</b>
<b>LSI-VC-18-11</b>	LSI-VC Secretariat to review input from commercial providers that presented to LSI-VC-18 and ensure their perspectives are included in the 'Increasing Commercial Relevance' section of the Future of CEOS-ARD Concept Note.	<b>September 2025</b>
<b>LSI-VC-18-12</b>	<p>LSI-VC Secretariat to convene a working group to explore updates to the thermal specifications of CEOS-ARD (i.e., the existing Surface Temperature PFS and potential new Surface Brightness Temperature and Sea Surface Temperature specifications). The following nominations / expressions of interest have already been received:</p> <ul style="list-style-type: none"> <li>● ESA: Silvia Scifoni</li> <li>● USGS: Name TBD</li> <li>● SatVu: Jamie McMillan</li> <li>● Constellr: Andreas Brunn</li> <li>● OroraTech: Josephine Wong, Anastasia Sarelli</li> <li>● EarthDaily: Name TBD</li> <li>● Siri Jodha Khalsa</li> </ul>	<b>September 2025</b>

	<ul style="list-style-type: none"> <li>● Darren Ghent</li> </ul> <p>LSI-VC Secretariat will initiate a few initial meetings but a solution is needed for sustainment. The LSI-VC Secretariat will follow up with other relevant companies (e.g., Aistech Space, Albedo, <a href="#">IHI Corporation?</a>) and CEOS agencies such as CSA and ECCC (WildfireSat), and CNES and ISRO (TRISHNA). SST-VC and COAST-VC should also be asked to nominate representatives.</p>	
<b>LSI-VC-18-13</b>	<p>LSI-VC Secretariat and SEO team to coordinate the CEOS-ARD presence at VH-RODA 2025. Medhavy Thankappan (GA), Paolo Castracane (ESA), Cody Anderson (USGS), and Peter Strobl (EC) are planning to attend.</p>	<b>September 2025</b>
<b>LSI-VC-18-14</b>	<p>LSI-VC Secretariat and Leads to explore the possibility of a dedicated CEOS-ARD session at JACIE with Cody Anderson/USGS. Specifically targeting Friday, April 17, which is the day after SIT-41 and the week before LSI-VC-19.</p>	<b>October 2025</b>
<b>LSI-VC-18-15</b>	<p>LSI-VC Secretariat to organise a dedicated CEOS-ARD Oversight Group day during the joint WGCV/LSI-VC meeting week in April 2026 at USGS EROS. The purpose will be to focus on development of CEOS-ARD Strategy 2026, following planned SIT-41 confirmation of the strategic direction that will enable subsequent technical decisions to be taken. The meeting will also be an opportunity to connect with the commercial sector and consider outcomes from JACIE.</p>	<b>March 2026</b>
<b>LSI-VC-18-16</b>	<p>LSI-VC Secretariat to investigate the following aspects of the CEOS-ARD survey:</p> <ul style="list-style-type: none"> <li>● Confirm if 'unclear benefits or added value' was a question posed to data users.</li> <li>● Determine who noted that they are planning/undertaking CEOS-ARD self assessments and seek to add these to the ceos.org/ard datasets table.</li> <li>● Summarise the additional CEOS-ARD datasets that respondents requested of CEOS Agencies and ensure this feedback is presented to the 2025 SIT Technical Workshop and CEOS Plenary.</li> <li>● Further segment the survey multiple choice results by 'data provider' and 'data user'.</li> </ul>	<b>2025 CEOS Plenary</b>
<b>LSI-VC-18-17</b>	<p>LSI-VC Secretariat to reflect discussion from items 8.2 and 8.3 of LSI-VC-18 into the Future of CEOS-ARD Concept Note. This should include reinforcing wording around the purposes of CEOS-ARD, noted below.</p>	<b>2025 CEOS Plenary</b>

	<i>Note: "CEOS-ARD is not intended to be the solution to every problem. If we make it too generic and encompassing, it becomes meaningless. This is about reinforcing why we started CEOS-ARD. Democratisation is a key piece. We're trying to support users in their attempts to analyse data without the need for additional processing and to integrate data from multiple sensors. Most products today are highly tailored to one sensor. One starting point for CEOS-ARD was to broaden communities' use of multiple sources of satellite data. Many different applications for users. Broadening the community to more non-experts is important to highlight."</i>	
<b>LSI-VC-18-18</b>	LSI-VC team to review the Future of CEOS-ARD Concept Note and confirm that the high level categories and sub-issues/risks/opportunities/dependencies (to be added as dot points) are complete and correct.	<b>2025 CEOS Plenary</b>
<b>LSI-VC-18-19</b>	Ferran Gascon to share Cloud Masking Inter-comparison eXercise (CMIX) contact details with <a href="#">Chris Rampersad</a> and <a href="#">Miriam Cabero</a> (EarthDaily)	<b>September 2025</b>
<b>LSI-VC-18-20</b>	LSI-VC team to respond to <a href="#">EarthDaily's questions</a> resulting from their Surface Reflectance Goal-level self-assessment, particularly items 1.11 and 1.14, which likely need to be revised in future iterations of the PFS.	<b>September 2025</b>
<b>LSI-VC-18-21</b>	Ake Rosenqvist to create an issue in the CEOS-ARD GitHub regarding cloud-optimised formats becoming a Threshold requirement in future iterations of the CEOS-ARD PFS, and to reflect the same in the Future of CEOS-ARD Concept Note.  <i>Note: This is not regarding prescribing a particular format, but rather the overall concept of requiring cloud-optimised formats. Note also the relation to the WGISS Interoperability Handbook v2.0 recommendations.</i>	<b>September 2025</b>
<b>LSI-VC-18-22</b>	Dave Borges and Peter Strobl will share the newly adopted CEOS-ARD typology and product level conventions at the next Earth Science Information Partners (ESIP) meeting – for strategic awareness of this community that was discussing product level definitions recently.	<b>Next ESIP Meeting</b>
<b>LSI-VC-18-23</b>	Peter Strobl and LSI-VC Secretariat to propose an update to the CEOS-ARD Governance Framework to adopt the typology and product level conventions proposed by Peter at LSI-VC-18. Note the connection to LSI-VC-18-02.	<b>October 2025</b>
<b>LSI-VC-18-24</b>	Dave Borges to prepare for the ARD SWG meeting at the OGC 133 <sup>rd</sup> Member Meeting a statement regarding CEOS's non-concurrence with the OGC ARD Maturity Report and a motion to convert the Joint ISO/OGC ARD SWG to a new OGC ARD DWG.	<b>OGC 133rd Member Meeting (October 28 to 31, 2025)</b>

<b>LSI-VC-18-25</b>	Dave Borges to schedule a meeting with Scott Simmons of OGC to discuss the specifics of transitioning the OGC ARD SWG to a Community Standard approach built on CEOS-ARD, including new versioning scheme details.	<b>Before OGC's 133<sup>rd</sup> Member Meeting (October 28 to 31, 2025)</b>
<b>LSI-VC-18-26</b>	LSI-VC team to consider nominations for Co-Chair of the OGC ARD SWG / DWG (if transitioned).	<b>Before OGC's 133<sup>rd</sup> Member Meeting (October 28 to 31, 2025)</b>
<b>LSI-VC-18-27</b>	Dave Borges and LSI-VC Secretariat to compile a list of voting members in frame of OGC and ISO ( TC211 WG6 ARD Project). <i>Note: Additional votes and national standards bodies connections are needed. Andreas Brunn (Constellr) should be consulted regarding German national standards bodies contacts.</i>	<b>Before OGC's 133<sup>rd</sup> Member Meeting (October 28 to 31, 2025)</b>
<b>LSI-VC-18-28</b>	Peter Strobl to share GCPIX connections with Gopika Suresh of Marble Imaging.	<b>September 2025</b>
<b>LSI-VC-18-29</b>	Chris Barnes and LSI-VC Secretariat to propose updates to the optical CEOS-ARD PFS to address sub-pixel accuracy and Algorithm Theoretical Basis Document (ATBD) availability issues.	<b>November 2025</b>

## Decisions

<b>LSI-VC-18 Decision 01</b>	Agreed the decisions captured in Appendix A of the <a href="#">Notes: CEOS-ARD Oversight Group Telecon - 2 September 2025</a>
<b>LSI-VC-18 Decision 02</b>	It was decided that retaining the 'Threshold' and 'Goal' terminology is the best course of action, both for stability of the CEOS-ARD PFS and due to the lack of consensus on alternative definitions, which are also varied across relevant standards.

<b>LSI-VC-18 Decision 03</b>	<p>The update of the CEOS-ARD surface temperature specifications should not be limited to land but also include sea surface temperature. The CEOS SST-VC will be consulted and invited to participate.</p>
<b>LSI-VC-18 Decision 04</b>	<p>LSI-VC Secretariat will convene a working group to explore updates of the thermal CEOS-ARD specifications, including for Land Surface Temperature (LST), Surface Brightness Temperature (SBT), and Sea Surface Temperature (SST). The updates will be implemented using the CEOS-ARD building block framework as a trial implementation. The LSI-VC Secretariat will initiate a few initial meetings but a solution is needed for sustainment of the activity.</p>
<b>LSI-VC-18 Decision 05</b>	<p>A CEOS-ARD workshop in California after SIT-41 will not be pursued in favour of organising a CEOS-ARD session on the Friday of JACIE week (April 13-17, 2026, in Reston, Virginia).</p>
<b>LSI-VC-18 Decision 06</b>	<p>Organise a dedicated CEOS-ARD Oversight Group day during the joint WGCV/LSI-VC meeting week in April 2026 at USGS EROS.</p>
<b>LSI-VC-18 Decision 07</b>	<p>For SIT-41, identify policy questions to put to CEOS Principals that will provide guidance for the 2026 CEOS-ARD Strategy development sessions that will follow the week after at the joint WGCV/LSI-VC meeting. That is, seek to have SIT-41 confirm the strategic direction to enable subsequent technical decisions to take place at the joint WGCV and LSI-VC meeting the week after and make writing of the CEOS-ARD Strategy more certain.</p>
<b>LSI-VC-18 Decision 08</b>	<p>Agreed LSI-VC-19 will take place during the week of April 20 at USGS EROS, seeking to use the full five days for a LSI-VC specific sessions, sessions joint with WGCV, and broader CEOS-ARD Oversight Group topics where we can engage other WGs and VCs. The exact structure will be refined by the LSI-VC Secretariat and Chris Barnes as primary LSI-VC Co-Lead.</p>
<b>LSI-VC-18 Decision 09</b>	<p>Agreed that adopting the typology and product level conventions proposed by Peter Strobl (item 9.2) in the CEOS-ARD Framework would be beneficial.</p>

<b>LSI-VC-18 Decision 10</b>	<p>CEOS will not support the OGC ARD Maturity Report and will move/second at the 133<sup>rd</sup> OGC Member Meeting that OGC should not endorse the report unless it goes through a review and revision in the OGC ARD SWG/DWG.</p>
<b>LSI-VC-18 Decision 11</b>	<p>CEOS supports, and joint CEOS/OGC members will vote accordingly when required, to convert the Joint ISO/OGC ARD SWG to a new OGC ARD DWG.</p>
<b>LSI-VC-18 Decision 12</b>	<p>CEOS agrees that given the ISO/OGC ARD SWG has been inactive for more than one year, and in light of the (proposed) conversion to a DWG, new DWG leadership is warranted and a formal vote should be requested. CEOS will consider nominations for these co-chair positions (ideally one CEOS Agency and one industry person).</p>
<b>LSI-VC-18 Decision 13</b>	<p>CEOS will initiate the OGC Community Standards process to make CEOS-ARD an OGC Community Standard, socializing and incorporating feedback into this process through the new OGC ARD DWG. The Community Standard would be a multi-part approach, with just Part 1 (Process / Governance) now to start with, documenting the high level CEOS-ARD process, rather than individual PFS (which would be subsequent parts).</p>
<b>LSI-VC-18 Decision 14</b>	<p>ISO 19176-1 WG 6 Imagery ARD Project (Stage 0 Preliminary Work Item) should remain a Stage 0 PWI until CEOS-ARD has officially become an OGC Community Standard, after which, a Stage 1 vote should occur to allow ISO ARD Project development based upon the OGC CEOS-ARD Community Standard.</p>
<b>LSI-VC-18 Decision 15</b>	<p>CEOS-ARD will (in due time) pursue OGC Community Standard certification with expectation that the process will take approximately 12 months.</p>
<b>LSI-VC-18 Decision 16</b>	<p>LSI-VC is supportive of developing an official CEOS/LSI-VC recommendation regarding Discrete Global Grid System (DGGS).</p>
<b>LSI-VC-18 Decision 17</b>	<p>Agree with the proposal for a new Biodiversity Virtual Constellation in CEOS, provided there are sufficient interfaces for reporting observational requirements and requirements for EBVs, CEOS-ARD, etc. to the LSI-VC.</p>

**LSI-VC-18**  
**Decision 18**

Updates to the optical CEOS-ARD PFS to address sub-pixel accuracy and Algorithm Theoretical Basis Document (ATBD) availability issues should be undertaken as soon as possible, as this is limiting uptake by a number of data providers.