

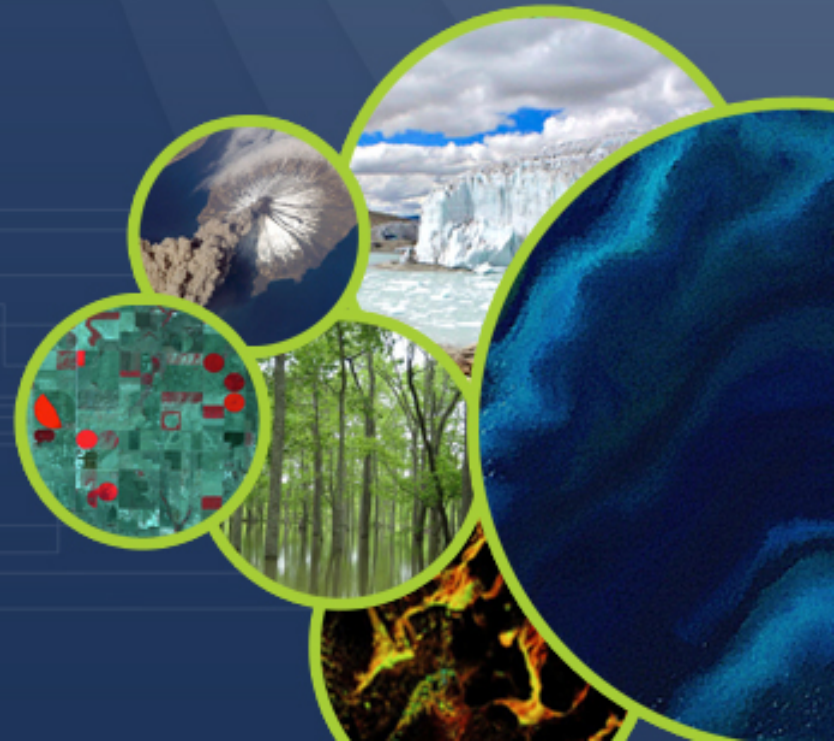


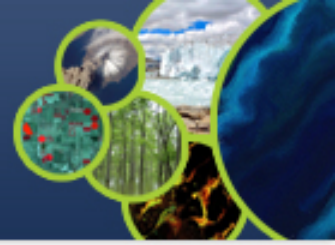
ARD – LSI-VC – Commercial sector

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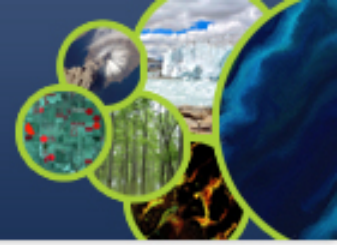
WGCV 47

Working Group on Calibration and Validation

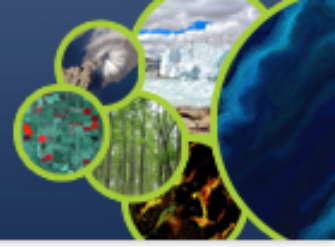




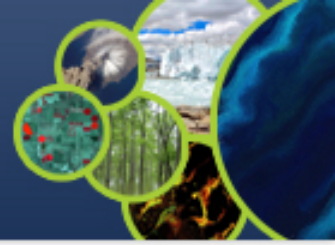
- **ARD – has many definitions and aims – need to specify ARD for what?**
- **CEOS CARD4L has momentum, ambition and a process with criteria**
 - sort of standard/certification of compliance
 - Two levels Target and Threshold
 - For optical sensors was drafted with moderate spatial resolutions in mind e.g. Sentinel 2, Landsat ..
 - Self-assessment with CEOS WGCV review
- **Commercial sector: Planet, Maxar etc also provide ARD particularly for high resolution sensors and associated applications**
 - Have well attended workshops
 - Attended and had discussions at ESA VH-RODA meeting in Nov 19
 - Expressed desire for 'standard' and alignment/partnership with CEOS to establish/evolve CARD4L
 - as optical sensors and existing participation of commercial sector IVOS offered to facilitate discussions subject to LSI-VC being happy
- **Subsequently to date around 4 telecons to initiate actions**
- **Participation in LSI-VC discussions relating to CARD4L and Potential formal standards etc**



- Consider too early to look for formalising CARD4L with a standards body
- Encouraging of IVOS to explore engagement with commercial optical sensor sector
 - - potential to evolve specs/add a category to facilitate higher resolution
 - image focused RGB applications
- Also note the need for more clarity & flexibility in some of the specification
- Criteria
 - - step between threshold and target can be very demanding
 - e.g. no radiometric traceability/uncertainty (threshold) to full evidenced
 - SI traceability (Target)
 - - encourage WGCV (IVOS) to help with proposals for intermediate steps
 - and guidance on requirements



- Keen for some form of 'standard' to facilitate transparency to customers
- Happy to work with CEOS and evolve/adapt CARD4L
- Recognise that there could be many ARD's for different applications but need to keep simple and minimise number and complexity
- Want to do with urgency and not long timescales
- Want to be party to the process and have time and effort to commit
- Needs to be easy to go through assessment process but also 'fit for purpose' and understandable/interpretable by their customers



- Small Team in IVOS to develop a strawman of evolved CARD4L via virtual meets
 - USGS, ESA, NASA, GA, NPL + Planet, Maxar, Labsphere +
 - when agreed socialise with IVOS/WGCV, Commercial, LSI-VC
- Consider one or two potential additional classifications for set of applications
 - e.g. high resolution RGB applications and intermediate to threshold/target
 - review and propose adaptations to CARD4L spec to address
- Consider potential naming convention and groupings of applications each specification suitable for
- Consider viability/benefit of a maturity matrix like assessment/presentational structure