EO L1 lessons learned - objectives

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The importance of L1 is self-evident:
How does the evolution work?

**Satellite Data from Calibrated Sensors**

**Mission Feedback**
- Science community input
- Comparison with independent products
- Evolution of protocols (QA4EO)

**Improved Products and Algorithms**
- Reprocessing resulting from improved calibration and algorithms
- Interface to collaborative algorithms

**Tools**
- Cal/Val tools
- Diagnostic data-sets (DDS)
- Algorithm breadboards
- Radiative Transfer Models

**Calibration Strategy**
- Pre-launch (Phase A-D)
- Satellite Commissioning (Phase E1)
- Operations (Phase E2)
- Post-Operations (Phase F)

**In-Situ Data**
- Collection of data against well-defined requirements
- Inter-calibration of in-situ systems
- Data collection following community accepted protocols (QA4EO)
- Maintenance of Cal/Val information and data portals

**Product and Algorithm Validation**
- Algorithm development and Validation
- Operational QC on products
- Match-up, long-loop evaluation, Satellite-Satellite

**SPPA (with ESLs and QWGs)**

**European Space Agency**
From ESA’s point of view:

Integrate the latest findings on level-1 into the upcoming reprocessings of ERS1/ERS-2/Envisat

Support:

• Scientific Research
• The EO Applications and Exploitation community
  ESA programmes, in particular CCI, SEOM and LTDP

Prepare for the Sentinels operations phase (and lessons learned for the future missions)
ESA objectives for this meeting

Have an exchange of ideas between the different ESA EO instrument teams – *introduction to the approaches used by different communities* (keynotes by N. Fox and P. Henry)

L1 recommendations for the upcoming ERS/Envisat instrument reprocessings

Formulation of lessons learned for calibration and in-flight characterisation – *recommendation for future activities* (for example QA constellation, S5p/S5 calibration, Sentinel B-units)

*Way forward... is there a need for a cross-cutting L1 QWG?*