

HLS v1.2 - Release Note

- Improvement of the Landsat-8 atmospheric correction:
 - Per-pixel view angle correction
 - All bands used for aerosol retrieval
- Improvement of the Sentinel-2 atmospheric correction:
 - Fix of pixel index problem in V1.1 Sentinel-2 atmospheric correction that had caused misalignment between 10m, 20m and 60m bands.
- Registration of all Landsat-8 data and Sentinel-2 data with processing baseline prior to v02.04 to a single reference Sentinel-2 L1C image for each tile selected among processing baseline v02.04 (the reference image is reported in the metadata). The co-registration is performed using AROP.
- New test sites: Germany, Tanzania, South-East Australia...
- Correction of a bug in Fmask
- S10 and S30 partial granule pair on a tile due to data strip transition are consolidated as one. As a result, the granule identifier “A” and “B” used in V1.1 filenames are not needed in V1.2.
- Sentinel-2 L1C metadata related to the product quality control are reported in the S10/S30 metadata. It includes the following fields: Sensor image quality, Geometric image quality, general image quality and radiometric image quality.

Known issues

- Sentinel-2 atmospheric correction, although improved, has not yet implemented the operational Landsat-8 aerosol interpolation scheme. As a result, some blockiness and “pinholes” may occur in SR images.
- Fmask for Sentinel-2 can generate erroneous results, particularly for hazy conditions, thin clouds, cloud edges, and bright urban areas. Distinction between snow and cloud pixels can be inaccurate due to the lack of thermal data.