

# USGS CARD4L self-assessment of Surface Reflectance (Collection 2) SR PFS v5

Summary Table: WGCV CARD4L Review Panel evaluation (SR PFS v5)

|                                                   | Threshold    | Target       |
|---------------------------------------------------|--------------|--------------|
| <b>1. General Metadata</b>                        |              |              |
| 1.1 Traceability                                  | Not required | Not assessed |
| 1.2 Metadata Machine Readability                  | Verified     | Not assessed |
| 1.3 Data Collection Time                          | Verified     | Verified     |
| 1.4 Geographical Area                             | Verified     | Verified     |
| 1.5 Coordinate Reference System                   | Verified     | Verified     |
| 1.6 Map Projection                                | Verified     | Verified     |
| 1.7 Geometric Correction Methods                  | Not required | Verified     |
| 1.8 Geometric Accuracy of the Data                | Not required | Verified     |
| 1.9 Instrument                                    | Verified     | Verified     |
| 1.10 Spectral Bands                               | Verified     | Verified     |
| 1.11 Sensor Calibration                           | Not required | Verified     |
| 1.12 Radiometric Accuracy                         | Not required | Verified     |
| 1.13 Algorithms                                   | Verified     | Verified     |
| 1.14 Ancillary Data                               | Verified     | Verified     |
| 1.15 Processing Chain Provenance                  | Not required | Verified     |
| 1.16 Data Access                                  | Verified     | Verified     |
| 1.17 Overall Data Quality                         | Not required | Verified     |
|                                                   |              |              |
| <b>2. Per-Pixel Metadata</b>                      |              |              |
| 2.1 Metadata Machine Readability                  | Verified     | Verified     |
| 2.2 No Data                                       | Verified     | Verified     |
| 2.3 Incomplete Testing                            | Verified     | Verified     |
| 2.4 Saturation                                    | Verified     | Verified     |
| 2.5 Cloud                                         | Verified     | Verified     |
| 2.6 Cloud Shadow                                  | Verified     | Verified     |
| 2.7 Land/Water Mask                               | Not required | Verified     |
| 2.8 Snow/Ice Mask                                 | Not required | Verified     |
| 2.9 Terrain Shadow Mask                           | Not required | Not assessed |
| 2.10 Terrain Occlusion                            | Not required | Verified     |
| 2.11 Solar and Viewing Geometry                   | Verified     | Not assessed |
| 2.12 Terrain Illumination Correction              | Not required | Not assessed |
| 2.13 Aerosol Optical Depth Parameters             | Not required | Verified     |
|                                                   |              |              |
| <b>3. Radiometric and Atmospheric Corrections</b> |              |              |
| 3.1 Measurement                                   | Verified     | Not assessed |
| 3.2 Measurement Uncertainty                       | Not required | Not assessed |
| 3.3 Measurement Normalisation                     | Not required | Verified     |
| 3.4 Directional Atmospheric Scattering            | Verified     | Verified     |
| 3.5 Water Vapour Corrections                      | Verified     | Verified     |
| 3.6 Ozone Corrections                             | Not required | Verified     |
|                                                   |              |              |
| <b>4. Geometric Corrections</b>                   |              |              |
| 4.1 Geometric Correction                          | Verified     | Verified     |

**Feedback for consideration: (to be read in conjunction with feedback provided in the previous review)**

**CARD4L review outcome: (SR PFS v5)**

|                         |                                                                                                                               |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Threshold level:</b> | <b>Compliance verified for all applicable items</b>                                                                           |
| <b>Target level:</b>    | <b>Compliance for seven items yet to meet requirements, was not assessed; compliance for the remaining items was verified</b> |

|                                          |                                                                                                        |
|------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>WGCV CARD4L Review Panel Members:</b> | <b>Valentina Boccia<br/>Nigel Fox<br/>Darren Ghent<br/>Jeffrey Czapla-Myers<br/>Medhavy Thankappan</b> |
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