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| [Mission/Instrument] Quality Assessment Summary | | |
|  | Author(s): | ***[Author Name]***  *Task [X] Mission Expert* |
|  | Approval: | ***[Approver Name]***  *Task [X] Lead* |
|  | Accepted: | ***Clement Albinet***  *EOP-GMQ EDAP Technical Officer* |
| *EDAP.TMP.001* | *Issue: 1.2* | *12/07/19* |

AMENDMENT RECORD SHEET

The Amendment Record Sheet below records the history and issue status of this document.

| **ISSUE** | **DATE** | **REASON** |
| --- | --- | --- |
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TABLE OF CONTENTS

1. Executive Summary 3

1.1 Cal/Val Maturity Matrices 4

1.1.1 Summary Cal/Val Maturity Matrix 4

1.1.2 *Validation Cal/Val Maturity Matrix* 5

2. Data Provider Documentation Review 6

2.1 Product Information 6

2.2 Metrology 8

2.3 Product Generation 10

3. Detailed Validation – Measurement 12

3.1 Measurement Validation Activity #1 12

3.1.1 Method 12

3.1.2 Results Compliance 12

4. Detailed Validation – Geometric 13

4.1 Geometric Validation Activity #1 13

4.1.1 Method 13

4.1.2 Results Compliance 13

# Executive Summary

Text

## Cal/Val Maturity Matrices

### Summary Cal/Val Maturity Matrix

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Data Provider Documentation Review** | | |  | **Validation Summary** |
| **Product**  **Information** | **Metrology** | **Product**  **Generation** |  |
| Lock  Product Details | Lock  Sensor  Calibration & Characterisation | Lock  Calibration Algorithm |  | Lock  Measurement Validation Method |
| Lock  Availability & Accessibility | Lock  Geometric Calibration & Characterisation | Lock  Geometric  Processing |  | Lock  Measurement  Validation Results  Compliance |
| Lock  Product Format, Flags & Metadata | Lock  Metrological Traceability Documentation | Lock  Retrieval  Algorithm |  | Lock  Geometric  Validation Method |
| Lock  User Documentation | Lock  Uncertainty Characterisation | Lock  Mission-Specific Processing |  | Lock  Geometric  Validation Results  Compliance |
|  | Lock  Ancillary Data |

|  |  |
| --- | --- |
| **Key** | |
| Not Assessed | |
| Not Assessable | |
| Basic | |
| Good | |
| Excellent | |
| Ideal | |
| Lock | Not Public |

Figure 1 - Summary Matrix Cal/Val Maturity Matrix

### *Validation Cal/Val Maturity Matrix*

|  |  |  |  |
| --- | --- | --- | --- |
| **<Entity> Detailed Validation** | | | |
| **Measurement** | | **Geometric** | |
| Lock  Measurement Validation Activity #1 Method | Lock  Measurement Validation Activity #1 Results Compliance | Lock  Geometric Validation Activity #1 Method | Lock  Geometric Validation Activity #1 Results Compliance |
| … | … | … | … |

|  |  |
| --- | --- |
| **Key** | |
| Not Assessed | |
| Not Assessable | |
| Basic | |
| Good | |
| Excellent | |
| Ideal | |
| Lock | Not Public |

Figure 2 – Validation Cal/Val Maturity Matrix

# Data Provider Documentation Review

## Product Information

|  |  |
| --- | --- |
| **Product Details** | |
| Grade: Basic/Good/Excellent/Ideal | |
| Justification |  |
| Product Name | *e.g. Sentinel-3 OLCI Level 1b Full Resolution* |
| Sensor Name | *e.g. OLCI* |
| Sensor Type | *e.g. Optical – Multichannel spectrometer* |
| Mission Type | *e.g. Constellation – 2 satellites* |
| Mission Orbit | *e.g. Sun Synchronous* |
| Product Version Number | *e.g. v1* |
| Product ID | *e.g.*  *OL\_1\_EFR* |
| Processing level of product | *e.g. Level 1* |
| Measured Quantity Name | *e.g. Radiance* |
| Measured Quantity Units | *e.g. mW sr-1 m-2 nm-1* |
| Stated Measurement Quality | *e.g. stated 2% radiometric accuracy* |
| Spatial Resolution |  |
| Spatial Coverage |  |
| Temporal Resolution |  |
| Temporal Coverage |  |
| Point of Contact |  |
| Product locator (DOI/URL) |  |
| Conditions for access and use |  |
| Limitations on public access |  |
| Product Abstract |  |

|  |  |
| --- | --- |
| **Availability & Accessibility** | |
| Grade: Basic/Good/Excellent/Ideal | |
| Justification |  |
| Compliant with FAIR principles | *e.g.*  *Yes/No* |
| Data Management Plan |  |
| Availability Status |  |

|  |  |
| --- | --- |
| **Product Format** | |
| Grade: Basic/Good/Excellent/Ideal | |
| Justification |  |
| Product File Format | *e.g. netCDF4* |
| Metadata Conventions | *e.g. v1* |
| Analysis Ready Data? | *e.g.*  *Yes/No* |

|  |  |  |
| --- | --- | --- |
| **User Documentation** | | |
| Grade: Basic/Good/Excellent/Ideal | | |
| Justification |  | |
| *Document* | *Reference* | *QA4ECV Compliant* |
| Product User Guide |  |  |
| ATBD |  |  |

## Metrology

|  |  |
| --- | --- |
| **Sensor Calibration & Characterisation** | |
| Grade: Basic/Good/Excellent/Ideal | |
| Justification |  |
| References | * Reference 1 * Reference 2 * Reference 3 |

|  |  |
| --- | --- |
| **Geometric Calibration & Characterisation** | |
| Grade: Basic/Good/Excellent/Ideal | |
| Justification |  |
| References | * Reference 1 * Reference 2 * Reference 3 |

|  |  |
| --- | --- |
| **Metrological Traceability Documentation** | |
| Grade: Basic/Good/Excellent/Ideal | |
| Justification |  |
| References | * Reference 1 * Reference 2 * Reference 3 |

|  |  |
| --- | --- |
| **Uncertainty Characterisation** | |
| Grade: Basic/Good/Excellent/Ideal | |
| Justification |  |
| References | * Reference 1 * Reference 2 * Reference 3 |

|  |  |
| --- | --- |
| **Uncertainty Characterisation** | |
| Grade: Basic/Good/Excellent/Ideal | |
| Justification |  |
| References | * Reference 1 * Reference 2 * Reference 3 |

## Product Generation

|  |  |
| --- | --- |
| **Geometric Processing** | |
| Grade: Basic/Good/Excellent/Ideal | |
| Justification |  |
| References | * Reference 1 * Reference 2 * Reference 3 |

|  |  |
| --- | --- |
| **Calibration Algorithm** | |
| Grade: Basic/Good/Excellent/Ideal | |
| Justification |  |
| References | * Reference 1 * Reference 2 * Reference 3 |

|  |  |
| --- | --- |
| **Retrieval Algorithm** | |
| Grade: Basic/Good/Excellent/Ideal | |
| Justification |  |
| References | * Reference 1 * Reference 2 * Reference 3 |

|  |  |
| --- | --- |
| **Mission-Specific Processing** | |
| Grade: Basic/Good/Excellent/Ideal | |
| *Additional Processing 1* | |
| Justification |  |
| Reference |  |
| Additional Processing 2 | |
| Justification |  |
| Reference |  |

# Detailed Validation – Measurement

## Measurement Validation Activity #1

### Method

Description of method, including justification of grade

### Results Compliance

Summary of validation results and their compliance, including justification of grade

# Detailed Validation – Geometric

## Geometric Validation Activity #1

### Method

Description of method, including justification of grade

### Results Compliance

Summary of validation results and their compliance, including justification of grade