

### 1. Overview

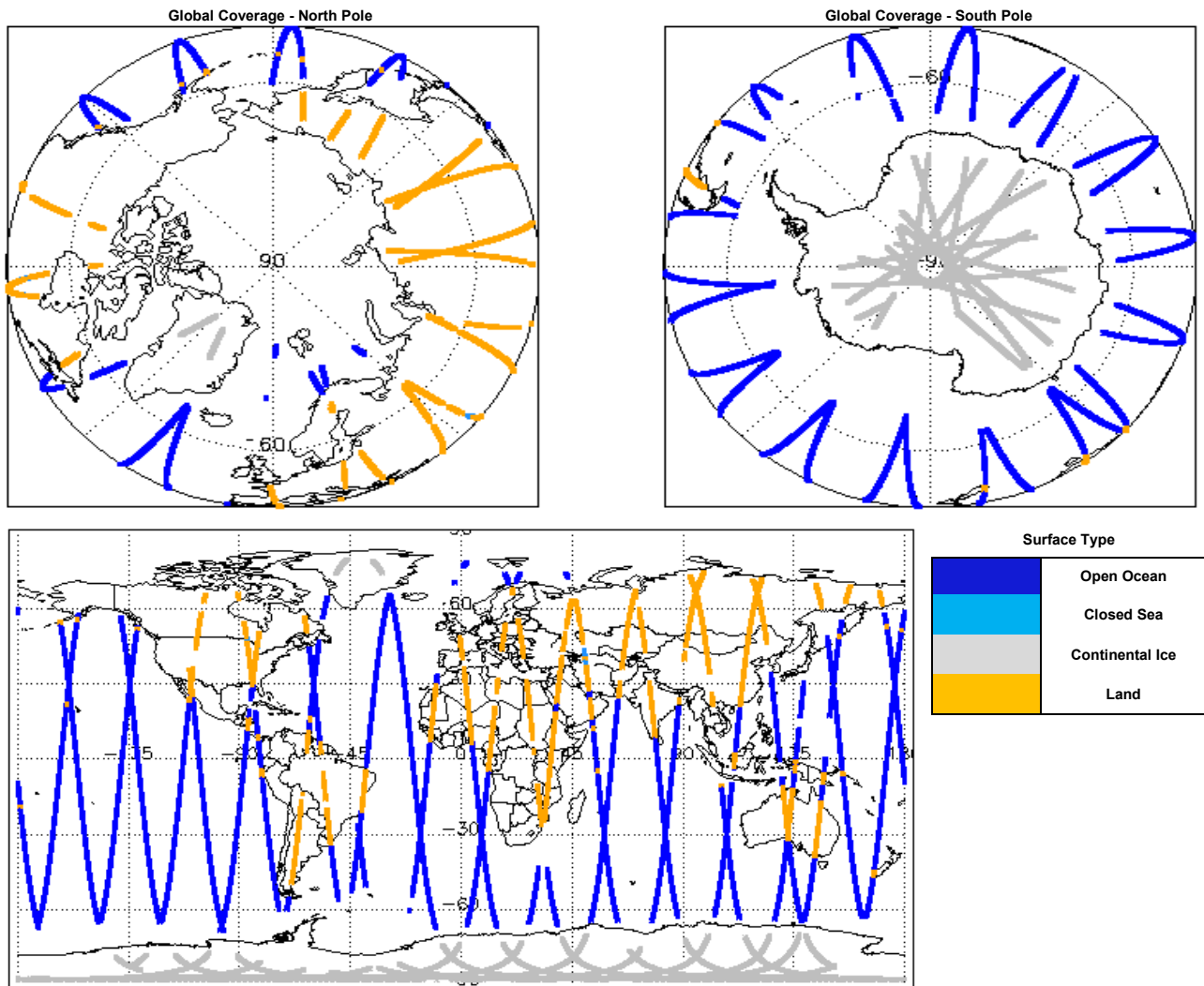
|                         |   |
|-------------------------|---|
| Report Production Date: | 25-Jan-2016   |
| Processor Used:         | CryoSat Ice Processor                                 |
| Data Used:              | L1 and L2 Fast Delivery Marine (FDM) Mode and L0 Data |

| Check                                     | Status                            |
|---|-----------------------------------|
| Server check: science-pds.cryosat.esa.int | Nominal                           |
| Server check: calval-pds.cryosat.esa.int  | Nominal                           |
| Product Software Check                    | Nominal                           |
| Product Format Check                      | Nominal                           |
| Product Header Analysis                   | See Section 4.2                   |
| Star Tracker Usage Check                  | See Section 5.3                   |
| Calibration Usage Check                   | Nominal                           |
| Auxiliary Data File Usage Check           | Nominal                           |
| Auxiliary Correction Error Check          | See Section 6.4                   |
| Measurement Confidence Data Check         | See Section 5.7, 6.6, 6.7 and 6.8 |

#### Mission / Instrument News

|             |                 |
|-------------|-----------------|
| 21-Jan-2016 | None            |
| 22-Jan-2016 | None            |
| 23-Jan-2016 | Nothing planned |

### 2. Global Coverage



### 3. Instrument Configuration

The SIRAL instrument configuration for the day of acquisition is provided below.

|                             |                |
|-----------------------------|----------------|
| SIRAL instrument(s) in use: | SIRAL - A      |
| Star Tracker(s) in use:     | Star Tracker 1 |

### 4. Level 0 Data Quality Check

#### 4.1 L0 Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL).

Number of products with errors: 0

## 4.2 L0 Product Header Analysis

For all products, a series of pre-defined checks are carried out on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the processing chain.

Number of products with errors: 5

| Product   | Test Failed   |
|---|---|
| CS_OPER_SIR1SAR_0__20160122T025140_20160122T025427_0001.HDR | Percentage of processing errors detected greater than minimum acceptable threshold. |
| CS_OPER_SIR1SAR_0__20160122T110616_20160122T110924_0001.HDR | Percentage of processing errors detected greater than minimum acceptable threshold. |
| CS_OPER_SIR1SIN_0__20160122T021317_20160122T022011_0001.HDR | Percentage of processing errors detected greater than minimum acceptable threshold. |
| CS_OPER_SIR1SIN_0__20160122T234408_20160122T234514_0001.HDR | Percentage of processing errors detected greater than minimum acceptable threshold. |
| CS_OPER_SIR2SIN_0__20160122T102322_20160122T102619_0001.HDR | Percentage of processing errors detected greater than minimum acceptable threshold. |

## 5. Level 1B FDM Data Quality Check

### 5.1 L1B FDM Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL).

Number of products with errors: 0

### 5.2 L1B FDM Product Header Analysis

For all products, a series of pre-defined checks are carried out on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.

Number of products with errors: 0

### 5.3 L1B FDM Star Tracker Usage Check

Each product is checked in order to ensure a valid star tracker file has been used in processing.

Number of products with errors: 13

| Product   | Test Failed   |
|---|---|
| CS_OFFL_SIR_FDM_1B_20160122T062717_20160122T063018_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T063052_20160122T063247_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T063335_20160122T064021_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T064024_20160122T064114_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T064139_20160122T065134_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T065645_20160122T070248_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T070454_20160122T071037_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T071108_20160122T071239_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T071631_20160122T074934_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T160824_20160122T160832_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T174436_20160122T174446_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T192110_20160122T192243_C001 | No Star Tracker file used in the processing of this product |
| CS_OFFL_SIR_FDM_1B_20160122T21027_20160122T224507_C001  | No Star Tracker file used in the processing of this product |

### 5.4 L1B FDM Calibration Usage Check

Each product is checked in order to ensure the necessary calibration files have been used in processing.

Number of products with errors: 0

### 5.5 L1B FDM Auxiliary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.

Number of products with errors: 0

### 5.6 L1B FDM Auxiliary Correction Error Check

CryoSat L1B data includes a correction error flag (field 54) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors: 0

### 5.7 L1B FDM Measurement Confidence Data Check

CryoSat L1B data includes a measurement confidence flag (field 18) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors: 13

| Product   | Test Failed                 | Description                         |
|---|-----------------------------|-------------------------------------|
| CS_OFFL_SIR_FDM_1B_20160122T062717_20160122T063018_C001 | Attitude correction missing | The attitude has not been corrected |
| CS_OFFL_SIR_FDM_1B_20160122T063052_20160122T063247_C001 | Attitude correction missing | The attitude has not been corrected |
| CS_OFFL_SIR_FDM_1B_20160122T063335_20160122T064021_C001 | Attitude correction missing | The attitude has not been corrected |
| CS_OFFL_SIR_FDM_1B_20160122T064024_20160122T064114_C001 | Attitude correction missing | The attitude has not been corrected |
| CS_OFFL_SIR_FDM_1B_20160122T064139_20160122T065134_C001 | Attitude correction missing | The attitude has not been corrected |
| CS_OFFL_SIR_FDM_1B_20160122T065645_20160122T070248_C001 | Attitude correction missing | The attitude has not been corrected |
| CS_OFFL_SIR_FDM_1B_20160122T070454_20160122T071037_C001 | Attitude correction missing | The attitude has not been corrected |
| CS_OFFL_SIR_FDM_1B_20160122T071108_20160122T071239_C001 | Attitude correction missing | The attitude has not been corrected |
| CS_OFFL_SIR_FDM_1B_20160122T071631_20160122T074934_C001 | Attitude correction missing | The attitude has not been corrected |
| CS_OFFL_SIR_FDM_1B_20160122T160824_20160122T160832_C001 | Attitude correction missing | The attitude has not been corrected |

|   |                             |                                     |
|---|-----------------------------|-------------------------------------|
| CS_OFFL_SIR_FDM_1B_20160122T174436_20160122T174446_C001 | Attitude correction missing | The attitude has not been corrected |
| CS_OFFL_SIR_FDM_1B_20160122T192110_20160122T192243_C001 | Attitude correction missing | The attitude has not been corrected |
| CS_OFFL_SIR_FDM_1B_20160122T221027_20160122T224507_C001 | Attitude correction missing | The attitude has not been corrected |

## 6. Level 2 FDM Data Quality Check

### 6.1 L2 FDM Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL).

Number of products with errors: 0

### 6.2 L2 FDM Product Header Analysis

For all products, a series of pre-defined checks are carried out on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.

Number of products with errors: 0

### 6.3 L2 FDM Auxiliary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.

Number of products with errors: 0

### 6.4 L2 FDM Auxiliary Correction Error Check

Each product is checked to detect auxiliary corrections flagged by the ground-station processing chain as missing or containing errors.

Number of products with errors: 33

| Product  | Test Failed                                      | Description  |
|--|--|--|
| CS_OFFL_SIR_FDM_2_20160122T000435_20160122T002529_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T005818_20160122T010940_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T013552_20160122T014809_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T014949_20160122T020420_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T022011_20160122T022246_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T022319_20160122T024155_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T032039_20160122T034405_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T035704_20160122T042349_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T045705_20160122T052317_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T053721_20160122T061045_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T063335_20160122T064021_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T071631_20160122T074934_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T085509_20160122T092932_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T095406_20160122T101814_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T103533_20160122T110616_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T112425_20160122T114308_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T114348_20160122T115701_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T121422_20160122T123003_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T123205_20160122T124126_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T130357_20160122T130609_C001 | Sea State Bias Correction                        | There is an error with the Sea State Bias Correction for one or more records                           |
| CS_OFFL_SIR_FDM_2_20160122T130850_20160122T132048_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T135357_20160122T140832_C001 | Sea State Bias Correction                        | There is an error with the Sea State Bias Correction for one or more records                           |
| CS_OFFL_SIR_FDM_2_20160122T153312_20160122T155245_C001 | Sea State Bias Correction                        | There is an error with the Sea State Bias Correction for one or more records                           |
| CS_OFFL_SIR_FDM_2_20160122T163122_20160122T165757_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T171202_20160122T173944_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T174943_20160122T175017_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T180450_20160122T183712_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T190153_20160122T190613_C001 | Sea State Bias Correction                        | There is an error with the Sea State Bias Correction for one or more records                           |
| CS_OFFL_SIR_FDM_2_20160122T212118_20160122T215511_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T221027_20160122T224507_C001 | Sea State Bias Correction                        | There is an error with the Sea State Bias Correction for one or more records                           |
| CS_OFFL_SIR_FDM_2_20160122T230154_20160122T231219_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T231659_20160122T231914_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |
| CS_OFFL_SIR_FDM_2_20160122T231922_20160122T233443_C001 | Sea State Bias Correction, Altimetric Wind Speed | There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records |

### 6.5 L2 FDM Measurement Confidence Data Check

CryoSat L2 data includes a measurement confidence flag (field 8) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors: 0





|   |                               |  |
|---|-------------------------------|--|
| CS_OFFL_SIR_FDM_2__20160122T190153_20160122T190613_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. |
| CS_OFFL_SIR_FDM_2__20160122T192820_20160122T192923_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. |
| CS_OFFL_SIR_FDM_2__20160122T194243_20160122T201702_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. |
| CS_OFFL_SIR_FDM_2__20160122T202951_20160122T205809_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. |
| CS_OFFL_SIR_FDM_2__20160122T212118_20160122T215511_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. |
| CS_OFFL_SIR_FDM_2__20160122T220855_20160122T220959_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. |
| CS_OFFL_SIR_FDM_2__20160122T231659_20160122T231914_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. |
| CS_OFFL_SIR_FDM_2__20160122T231922_20160122T233443_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. |

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