



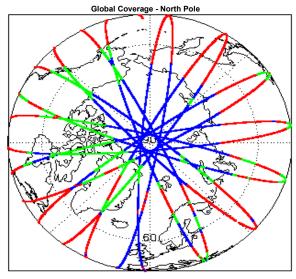
# 1. Overview

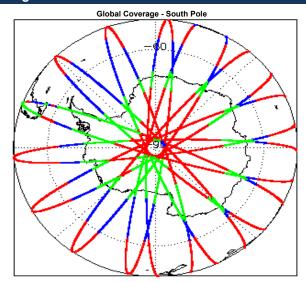
| Report Production Date: | 18-Aug-2016             |
|-------------------------|-------------------------|
| Processor Used:         | CryoSat Ice Processor   |
| Data Used:              | L1B and L2 OFFLINE Data |

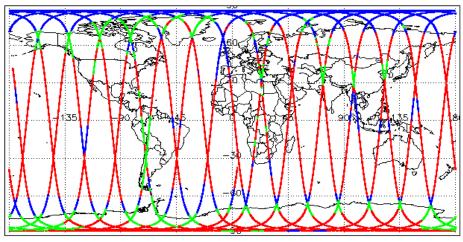
| Check                                      | Status                  |
|--|-------------------------|
| Server check: science-pds.cryosat.esa.int  | Nominal                 |
| Server check: calval-pds.cryosat.esa.int   | Nominal                 |
| Product Software Check                     | Nominal                 |
| Product Format Check                       | Nominal                 |
| Product Header Analysis                    | Nominal                 |
| Star Tracker Usage Check                   | Nominal                 |
| L1B Calibration Usage Check                | Nominal                 |
| L1B & L2 Auxiliary Data File Usage Check   | Nominal                 |
| L1B & L2 Auxiliary Correction Error Check  | Nominal                 |
| L1B & L2 Measurement Confidence Data Check | See Section 4.7 and 5.5 |

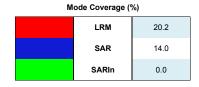
| Mission / Instru | ment News       |
|------------------|-----------------|
| 17-Jul-2016      | None            |
| 18-Jul-2016      | None            |
| 19-Jul-2016      | Nothing planned |

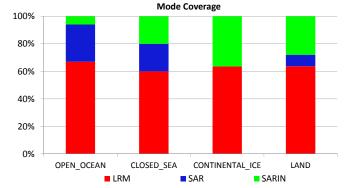
# 2. Global Coverage

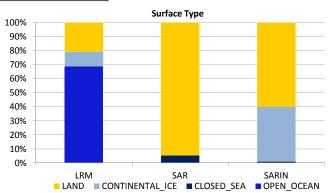












# 3. Instrument Configuration

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

| SIRAL instrument(s) in use: | SIRAL - A |
|-----------------------------|-----------|
| ` '                         |           |

# 4. Level 1B Data Quality Check

#### 4.1 L1B 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 product file (.DBL)

Number of products with errors:

#### 4.2 L1B 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:

#### 4.3 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:

## 4.4 L1B Calibration Usage Check

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

Number of products with errors:

### 4.5 L1B Auxilary 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

#### 4.6 L1B 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:

#### 4.7 L1B 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

Currently, there are several common error flags raised in the Level 1B products which are expected due to operational mode or surface type. All common flags are summarised in the list below, followed by a table of any additional issues arising from this test.

Block Degraded Flag: This flag is currently set for a number of individual records generally at the start or end of products (all modes), but this is to be expected.

Phase Perturbation Flag: This flag is currently set for all L1B SARIn products, indicating that the ADC correction application is deactivated, but this is in line with the current configuration.

umber of products with errors:

| Product   | Test Failed | Description  |
|---|-------------|--|
| CS_OFFL_SIR_LRM_1B_20160718T142248_20160718T143720_C001 |             | The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo |
| CS_OFFL_SIR_LRM_1B_20160718T183229_20160718T190605_C001 |             | The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo |

# 5. Level 2 Data Quality Check

#### 5.1 L2 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 product file (.DBL).

Number of products with errors:

# 5.2 L2 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:

### 5.3 L2 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:

# 5.4 L2 Auxiliary Correction Error Check

CryoSat L2 data includes a correction error flag (field 30) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

## 5.5 L2 Measurement Quality Flag Check

CryoSat L2 data includes a quality flag (field 50) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common error flags raised in the Level 2 products which are expected due to operational mode or surface type. All common flags are summarised in the list below, followed by a table of any additional issues arising from this test.

Freeboard error: This flag is correctly set in all L2 SAR products that are not discriminated as sea-ice, and for which freeboard cannot be calculated.

Height and Backscatter errors: These flags are currently set for products over land, but this is to be expected. Retracker 1 Height and Backscatter error flags are also set for products over sea-ice, but this is to be expected.

**Peakiness error:** This flag is currently set for products over sea-ice, but this is to be expected.

SARIn X-Track Angle Error: This flag is set when the difference between the computed surface elevation and the DEM is >50 m. The DEM is only available over Greenland and Antarctica and as a result this flag is set for L2 SARIn products in all other locations as expected.

SSHA interpolation error: This flag is currently set for a number of SAR products occurring at surface type boundaries, but this is to be expected.

Number of products with errors:

| Test Failed  Surface Model Unavailable  Height Error (Retracker 2), Backscatter Error (Retracker 3) for one or more records  There is a height and backscatter error for Retracker 2 and a height effort (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), | rror     |
|--|----------|
| Height Error (Retracker 2), Backscatter Error (Retracker 2) and a height error (Retracker 2) theight Error (Retracker 3) theight Error (Retrac | rror     |
| CS_OFFL_SIR_LRM_2_20160718T010705_20160718T010751_CO01  CS_OFFL_SIR_LRM_2_20160718T010757_20160718T010852_CO01  CS_OFFL_SIR_LRM_2_20160718T011908_20160718T010852_CO01  CS_OFFL_SIR_LRM_2_20160718T011908_20160718T014203_CO01  CS_OFFL_SIR_LRM_2_20160718T015134_20160718T015337_CO01  CS_OFFL_SIR_LRM_2_20160718T015134_20160718T015337_CO01  CS_OFFL_SIR_LRM_2_20160718T020111_20160718T02005_CO01  CS_OFFL_SIR_LRM_2_20160718T022016_CO01  CS_OFFL_SIR_LRM_2_20160718T022236_20160718T023705_CO01  CS_OFFL_SIR_LRM_2_20160718T024923_20160718T030736_CO01  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T032239_CO01  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T032239_CO01  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T032239_CO01  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T035506_CO01  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T035506_CO01  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T035506_CO01  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T046629_CO01  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_CO01  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T040629_CO01  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T040629_CO01  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T040629_CO01  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T040629_CO01  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T040629_CO01  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T040629_CO01  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T040629_CO01  | 9        |
| CS_OFFL_SIR_LRM_2_20160718T010757_20160718T010852_C001  CS_OFFL_SIR_LRM_2_20160718T011908_20160718T014203_C001  CS_OFFL_SIR_LRM_2_20160718T011908_20160718T014203_C001  CS_OFFL_SIR_LRM_2_20160718T015134_20160718T014203_C001  CS_OFFL_SIR_LRM_2_20160718T015134_20160718T015337_C001  CS_OFFL_SIR_LRM_2_20160718T020111_20160718T022005_C001  CS_OFFL_SIR_LRM_2_20160718T02236_20160718T02205_C001  CS_OFFL_SIR_LRM_2_20160718T02236_20160718T023705_C001  CS_OFFL_SIR_LRM_2_20160718T024923_20160718T033736_C001  CS_OFFL_SIR_LRM_2_20160718T024923_20160718T032390_C001  CS_OFFL_SIR_LRM_2_20160718T031101_20160718T032239_C001  CS_OFFL_SIR_LRM_2_20160718T0310407_20160718T032390_C001  CS_OFFL_SIR_LRM_2_20160718T033046_20160718T033246_C001  CS_OFFL_SIR_LRM_2_20160718T033046_20160718T035506_C001  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T035506_C001  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T035506_C001  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T03600000000000000000000000000000000000  |          |
| Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3 for one or more records  CS_OFFL_SIR_LRM_2_20160718T011908_20160718T015337_C001  CS_OFFL_SIR_LRM_2_20160718T020111_20160718T022005_C001  CS_OFFL_SIR_LRM_2_20160718T020111_20160718T022005_C001  CS_OFFL_SIR_LRM_2_20160718T020111_20160718T022005_C001  CS_OFFL_SIR_LRM_2_20160718T020111_20160718T023705_C001  CS_OFFL_SIR_LRM_2_20160718T022336_20160718T033705_C001  CS_OFFL_SIR_LRM_2_20160718T024923_20160718T033705_C001  CS_OFFL_SIR_LRM_2_20160718T024923_20160718T030736_C001  CS_OFFL_SIR_LRM_2_20160718T031101_20160718T032239_C001  CS_OFFL_SIR_LRM_2_20160718T031101_20160718T032239_C001  CS_OFFL_SIR_LRM_2_20160718T031006_20160718T033246_C001  CS_OFFL_SIR_LRM_2_20160718T033046_20160718T033246_C001  CS_OFFL_SIR_LRM_2_20160718T033046_20160718T035506_C001  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T035506_C001  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T044550_C001  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T044550_C001  |          |
| CS_OFFL_SIR_LRM_2_20160718T011908_20160718T014203_C001  CS_OFFL_SIR_LRM_2_20160718T015134_20160718T015337_C001  Surface Model Unavailable  Height Error (Retracker 2), Height Error (Retracker 2), Backscatter Error (Retracker 3) for one or more records  CS_OFFL_SIR_LRM_2_20160718T022236_20160718T022005_C001  CS_OFFL_SIR_LRM_2_20160718T022236_20160718T023705_C001  CS_OFFL_SIR_LRM_2_20160718T022236_20160718T033736_C001  CS_OFFL_SIR_LRM_2_20160718T024923_20160718T030736_C001  CS_OFFL_SIR_LRM_2_20160718T031101_20160718T032239_C001  CS_OFFL_SIR_LRM_2_20160718T033046_20160718T033246_C001  CS_OFFL_SIR_LRM_2_20160718T033046_20160718T033246_C001  CS_OFFL_SIR_LRM_2_20160718T033046_20160718T033506_C001  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T035506_C001  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T035506_C001  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T0344849_20160718T044850_C001  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T044850_C001  C |          |
| Height Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Err | rror     |
| CS_OFFL_SIR_LRM_2_20160718T022015_C001  (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter | ırds     |
| CS_OFFL_SIR_LRM_2_20160718T0324923_20160718T030736_C001  Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retra |          |
| CS_OFFL_SIR_LRM_2_20160718T03101_20160718T032239_C001  CS_OFFL_SIR_LRM_2_20160718T033046_20160718T032239_C001  CS_OFFL_SIR_LRM_2_20160718T033046_20160718T033246_C001  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T035506_C001  CS_OFFL_SIR_LRM_2_20160718T034007_20160718T035506_C001  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T044550_C001  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T044550_C001  |          |
| CS_OFFL_SIR_LRM_2_20160718T033046_20160718T033246_C001  Error (Retracker 2)  Surface Model Unavailable  Height Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 3 for one or more records  There is a height and backscatter error for Retracker 2 and a height error (Retracker 3), Backscatter Error (Retracker  |          |
| Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3) for one or more records  CS_OFFL_SIR_LRM_2_20160718T035707_20160718T040629_C001  CS_OFFL_SIR_LRM_2_20160718T042849_20160718T044550_C001  Height Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3) for one or more records  There is a height and backscatter error for Retracker 2 and a height error (Retracker 3) for one or more records  There is a height and backscatter error for Retracker 2 and a height error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker  | ,        |
| CS_OFFL_SIR_LRM_2_20160718T034007_20160718T035506_C001  (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3) | ords     |
| CS_OFFL_SIR_LRM_2_20160718T042849_20160718T044550_C001  (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backs | rror     |
| CS_OFFL_SIR_LRM_2_20160718T042849_20160718T044550_C001 (Retracker 3), Backscatter Error for Retracker 3 for one or more records  | rror     |
| (Retracker 2)  | rror     |
| CS_OFFL_SIR_LRM_2_20160718T050142_20160718T050347_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) and backscatter error for Retracker 2 for one or more records   | ;        |
| CS_OFFL_SIR_LRM_2_20160718T050854_20160718T051650_C001 Surface Model Unavailable No DEM or Slope Model was used for the location of one or more reco   |          |
| CS_OFFL_SIR_LRM_2_20160718T051947_20160718T053412_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   |          |
| CS_OFFL_SIR_LRM_2_20160718T061123_20160718T064352_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   | ,        |
| CS_OFFL_SIR_LRM_2_20160718T064724_20160718T064935_C001 Surface Model Unavailable No DEM or Slope Model was used for the location of one or more reco   | ords     |
| CS_OFFL_SIR_LRM_2_20160718T064957_20160718T065538_C001 Surface Model Unavailable No DEM or Slope Model was used for the location of one or more reco   |          |
| CS_OFFL_SIR_LRM_2_20160718T065947_20160718T072334_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   |          |
| CS_OFFL_SIR_LRM_2_20160718T075556_20160718T080631_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   |          |
| CS_OFFL_SIR_LRM_2_20160718T081208_20160718T082234_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   | ;        |
| CS_OFFL_SIR_LRM_2_20160718T083838_20160718T090456_C001  Height Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3) for one or more records   | rror     |
| CS_OFFL_SIR_LRM_2_20160718T090945_20160718T091547_C001  Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3) for one or more records  (Retracker 2)  There is a height and backscatter error for Retracker 2 and a height error (Retracker 3) for one or more records   |          |
| CS_OFFL_SIR_LRM_2_20160718T092920_20160718T100048_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   |          |
| CS_OFFL_SIR_LRM_2_20160718T105312_20160718T105535_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   | ,        |
| CS_OFFL_SIR_LRM_2_20160718T110800_20160718T114052_C001  Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3) and a height error (Retracker 3) for Retracker 3 for one or more records   | rror     |
| CS_OFFL_SIR_LRM_2_20160718T115810_20160718T122253_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   |          |
| CS_OFFL_SIR_LRM_2_20160718T122326_20160718T122506_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   | ,        |
| CS_OFFL_SIR_LRM_2_20160718T123237_20160718T123301_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   | į        |
| CS_OFFL_SIR_LRM_2_20160718T124415_20160718T131936_C001  Height Error (Retracker 2), Height Error (Retracker 2) and a height error (Retracker 3), Backscatter Error (Retracker 3) for Retracker 3 for one or more records   | rror     |
| CS_OFFL_SIR_LRM_2_20160718T132803_20160718T133202_C001 Surface Model Unavailable No DEM or Slope Model was used for the location of one or more reco   | ords     |
| CS_OFFL_SIR_LRM_2_20160718T133648_20160718T140302_C001  Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3) and a height error (Retracker 3) and a height error (Retracker 2) and a height error (Retracker 3) and a height error (Retracker 3) are in the properties of | rror     |
| CS_OFFL_SIR_LRM_2_20160718T140317_20160718T141035_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   | ,        |
| CS_OFFL_SIR_LRM_2_20160718T142248_20160718T143720_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   | 3        |
| CS_OFFL_SIR_LRM_2_20160718T144202_20160718T145903_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   | ,        |
| CS_OFFL_SIR_LRM_2_20160718T151737_20160718T153021_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   |          |
| CS_OFFL_SIR_LRM_2_20160718T153234_20160718T154948_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   | )        |
| CS_OFFL_SIR_LRM_2_20160718T161153_20160718T162125_C001  Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3) for one or more records  There is a height and backscatter error for Retracker 2 and a height error (Retracker 3) for one or more records  | rror     |
| Height Error (Retracker 2), Height Error (Retracker 2) and a height error (Retracker 3) and a heigh | rror     |
| CS_OFFL_SIR_LRM_2_20160718T170426_20160718T170607_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) as height and backscatter error for Retracker 2 for one or more records   | ;        |
| CS_OFFL_SIR_LRM_2_20160718T171148_20160718T171611_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   |          |
| CS_OFFL_SIR_LRM_2_20160718T171734_20160718T172425_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) as height and backscatter error for Retracker 2 for one or more records   |          |
| CS_OFFL_SIR_LRM_2_20160718T175707_20160718T175833_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 for one or more records   | <u> </u> |

|   | Height Error (Retracker 2), Backscatter   | There is a height and backscatter error for Retracker 2 for one or more  |
|---|---|--|
| CS_OFFL_SIR_LRM_220160718T180042_20160718T181649_C001   | Error (Retracker 2)   | records  |
| CS_OFFL_SIR_LRM_220160718T183229_20160718T190605_C001   | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)                                | There is a height and backscatter error for Retracker 2 for one or more records                                    |
| CS_OFFL_SIR_LRM_2_20160718T193147_20160718T195556_C001  | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)                                | There is a height and backscatter error for Retracker 2 for one or more records                                    |
| CS_OFFL_SIR_LRM_2_20160718T200432_20160718T200757_C001  | Surface Model Unavailable   | No DEM or Slope Model was used for the location of one or more records   |
| CS_OFFL_SIR_LRM_220160718T201138_20160718T202225_C001   | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)                                | There is a height and backscatter error for Retracker 2 for one or more records                                    |
| CS_OFFL_SIR_LRM_220160718T202801_20160718T204318_C001   | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)                                | There is a height and backscatter error for Retracker 2 for one or more records                                    |
| CS_OFFL_SIR_LRM_220160718T205933_20160718T210558_C001   | Height Error (Retracker 2), Height Error<br>(Retracker 3), Backscatter Error<br>(Retracker 2) | There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records |
| CS_OFFL_SIR_LRM_220160718T210853_20160718T211609_C001   | Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)       | There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records |
| CS_OFFL_SIR_LRM_220160718T211612_20160718T213530_C001   | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)                                | There is a height and backscatter error for Retracker 2 for one or more records                                    |
| CS_OFFL_SIR_LRM_220160718T213854_20160718T214703_C001   | Surface Model Unavailable   | No DEM or Slope Model was used for the location of one or more records   |
| CS_OFFL_SIR_LRM_220160718T215153_20160718T222432_C001   | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)                                | There is a height and backscatter error for Retracker 2 for one or more records                                    |
| CS_OFFL_SIR_LRM_220160718T223711_20160718T223841_C001   | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)                                | There is a height and backscatter error for Retracker 2 for one or more records                                    |
| CS_OFFL_SIR_LRM_220160718T223853_20160718T223945_C001   | Height Error (Retracker 2), Height Error<br>(Retracker 3), Backscatter Error<br>(Retracker 2) | There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records |
| CS_OFFL_SIR_LRM_220160718T224925_20160718T225049_C001   | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)                                | There is a height and backscatter error for Retracker 2 for one or more records                                    |
| CS_OFFL_SIR_LRM_220160718T230608_20160718T230712_C001   | Height Error (Retracker 2), Backscatter Error (Retracker 2)                                   | There is a height and backscatter error for Retracker 2 for one or more records                                    |
| CS_OFFL_SIR_LRM_220160718T233052_20160718T235201_C001   | Height Error (Retracker 2), Backscatter Error (Retracker 2)                                   | There is a height and backscatter error for Retracker 2 for one or more records                                    |
| CS_OFFL_SIR_LRM_220160718T235447_20160719T000625_C001   | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)                                | There is a height and backscatter error for Retracker 2 for one or more records                                    |
| CS_OFFL_SIR_SIN_220160718T000803_20160718T000924_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T001434_20160718T001743_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T014851_20160718T015134_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T015337_20160718T015906_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T024426_20160718T024857_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T033246_20160718T033357_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T033748_20160718T033928_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T042328_20160718T042409_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T042413_20160718T042438_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T042553_20160718T042739_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T050533_20160718T050854_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T051650_20160718T051838_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T060246_20160718T060749_C001   | SARIn X-track Angle Error, Surface<br>Model Unavailable                                       | An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records          |
| CS_OFFL_SIR_SIN_220160718T064535_20160718T064724_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T064935_20160718T064957_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_220160718T065539_20160718T065801_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_2_20160718T073621_20160718T073638_C001  | SARIn X-track Angle Error, Surface  | An ambiguous angle was detected for SARIn mode and no DEM or Slope   |
| CS OFFL SIR SIN 2 20160718T073735 20160718T073808 C001  | Model Unavailable SARIn X-track Angle Error, Surface  | Model was used for one or more records  An ambiguous angle was detected for SARIn mode and no DEM or Slope         |
| CS_OFFL_SIR_SIN_220160718T082505_20160718T082646_C001   | Model Unavailable SARIn X-track Angle Error   | Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more              |
| CS_OFFL_SIR_SIN_220160718T082757_20160718T082933_C001   | SARIn X-track Angle Error   | records An ambiguous angle was detected for SARIn mode for one or more   |
| CS_OFFL_SIR_SIN_220160718T083405_20160718T083649_C001   | SARIn X-track Angle Error   | records An ambiguous angle was detected for SARIn mode for one or more   |
| CS_OFFL_SIR_SIN_220160718T100508_20160718T100843_C001   | SARIn X-track Angle Error   | records An ambiguous angle was detected for SARIn mode for one or more   |
| CS_OFFL_SIR_SIN_2_20160718T101419_20160718T101534_C001  | SARIn X-track Angle Error   | records An ambiguous angle was detected for SARIn mode for one or more records                                     |
| CS_OFFL_SIR_SIN_220160718T114427_20160718T114746_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more   |
| CS_OFFL_SIR_SIN_220160718T115259_20160718T115424_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more   |
| CS_OFFL_SIR_SIN_220160718T132138_20160718T132448_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more   |
| CS_OFFL_SIR_SIN_220160718T133202 _20160718T133310_C001  | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more   |
| CS OFFL SIR SIN 2 20160718T141055 20160718T141202 C001  | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more   |
| CS_OFFL_SIR_SIN_220160718T141426_20160718T141533_C001   | SARIn X-track Angle Error   | An ambiguous angle was detected for SARIn mode for one or more   |
| CS_OFFL_SIR_SIN_220160718T145944_20160718T150125_C001   | SARIn X-track Angle Error   | records  An ambiguous angle was detected for SARIn mode for one or more  |
| CS_OFFL_SIR_SIN_220160718T150904_20160718T151055_C001   | SARIn X-track Angle Error   | records An ambiguous angle was detected for SARIn mode for one or more   |
| CS_OFFL_SIR_SIN_2201607181130304_201607181131633_C001   | SARIn X-track Angle Error, Surface  | records  An ambiguous angle was detected for SARIn mode and no DEM or Slope  |
| CS_OFFL_SIR_SIN_2201607181193221_201607181193491_C001  CS_OFFL_SIR_SIN_2_201607181163904_201607181164050_C001 | Model Unavailable SARIn X-track Angle Error   | Model was used for one or more records  An ambiguous angle was detected for SARIn mode for one or more             |
| 25_5.1 2_0.10.12201001101103304_201007101104030_0001  | STATE A GOOD PHYSIC EITO  | records  |

| CS_OFFL_SIR_SIN_2_20160718T164613_20160718T164619_C001 | SARIn X-track Angle Error                            | An ambiguous angle was detected for SARIn mode for one or more records                                    |
|--|--|---|
| CS_OFFL_SIR_SIN_220160718T164735_20160718T165426_C001  | SARIn X-track Angle Error                            | An ambiguous angle was detected for SARIn mode for one or more records                                    |
| CS_OFFL_SIR_SIN_220160718T172905_20160718T173332_C001  | SARIn X-track Angle Error, Surface Model Unavailable | An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records |
| CS_OFFL_SIR_SIN_220160718T181806_20160718T182052_C001  | SARIn X-track Angle Error                            | An ambiguous angle was detected for SARIn mode for one or more records                                    |
| CS_OFFL_SIR_SIN_220160718T182512_20160718T182518_C001  | SARIn X-track Angle Error                            | An ambiguous angle was detected for SARIn mode for one or more records                                    |
| CS_OFFL_SIR_SIN_220160718T182715_20160718T183022_C001  | SARIn X-track Angle Error                            | An ambiguous angle was detected for SARIn mode for one or more records                                    |
| CS_OFFL_SIR_SIN_220160718T195748_20160718T195902_C001  | SARIn X-track Angle Error                            | An ambiguous angle was detected for SARIn mode for one or more records                                    |
| CS_OFFL_SIR_SIN_220160718T200757_20160718T200915_C001  | SARIn X-track Angle Error                            | An ambiguous angle was detected for SARIn mode for one or more records                                    |
| CS_OFFL_SIR_SIN_220160718T205800_20160718T205853_C001  | SARIn X-track Angle Error, Surface Model Unavailable | An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records |
| CS_OFFL_SIR_SIN_220160718T213730_20160718T213854_C001  | SARIn X-track Angle Error                            | An ambiguous angle was detected for SARIn mode for one or more records                                    |
| CS_OFFL_SIR_SIN_220160718T214704_20160718T214817_C001  | SARIn X-track Angle Error                            | An ambiguous angle was detected for SARIn mode for one or more records                                    |
| CS_OFFL_SIR_SIN_220160718T231707_20160718T231832_C001  | SARIn X-track Angle Error                            | An ambiguous angle was detected for SARIn mode for one or more records                                    |
| CS_OFFL_SIR_SIN_220160718T232352_20160718T232659_C001  | SARIn X-track Angle Error                            | An ambiguous angle was detected for SARIn mode for one or more records                                    |