

# QA4EO Daily Report for OFFLINE data:

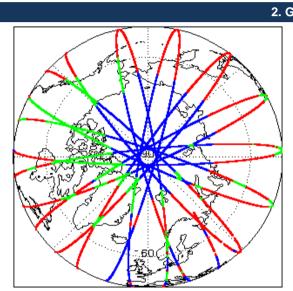
29/09/2021

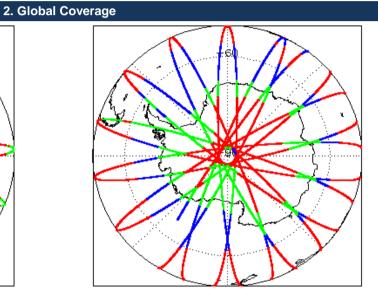
| Report Production Date: | 29-Oct-2021             | Check                                      | Status                       |
|-------------------------|-------------------------|--|------------------------------|
| Report Froduction Date. | 23 000 2021             | Server check: science-pds.cryosat.esa.int  | Nominal                      |
| Processor Used:         | CryoSat Ice Processor   | Server check: calval-pds.cryosat.esa.int   | Nominal                      |
| Flocessor Used.         | CryoSarice riocessor    | Product Software Check                     | Nominal                      |
| Data Used:              | L1B and L2 OFFLINE Data | Product Format Check                       | Nominal                      |
| Data Useu.              | LTD and L2 OFFLINE Data | Product Header Analysis                    | Nominal                      |
|                         |                         | Star Tracker Usage Check                   | Nominal                      |
|                         |                         | L1B Tracking Flag Check                    | See Section 4.4              |
|                         |                         | 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 4.8 and 5.5      |
|                         |                         | QCC Errors/ Warnings                       | See Section 6.1, 6.2 and 6.3 |

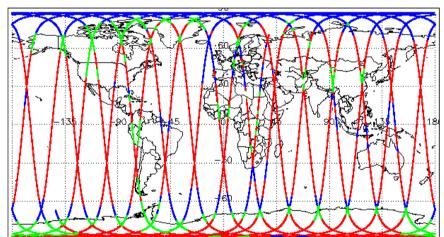
1. Overview

#### Mission / Instrument News 28-Sep-2021 None 29-Sep-2021 None

30-Sep-2021 Nothing planned

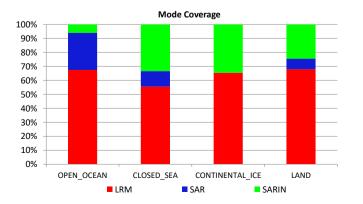


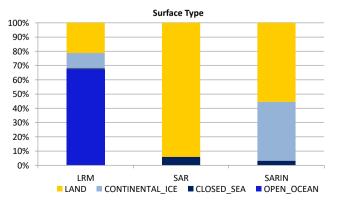






| LRM   | 67.1 |
|-------|------|
| SAR   | 19.6 |
| SARIn | 13.2 |





## 3. Instrument Configuration

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

SIRAL - A

0

0

100

SIRAL instrument(s) in use:

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 Tracking Flags Check

#### CryoSat L1B data includes a tracking flag for each measurement record. The bit value of this flag indicates any problems when set.

Loss of Echo Flag: This flag is currently set for some products over land, but this is to be expected.

#### Number of products with errors:

| Product   | Test Failed  | Description  |
|---|--------------|--|
| CS_OFFL_SIR_LRM_1B_20210928T235658_20210929T000128_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T000202_20210929T000424_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T000727_20210929T000838_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T001232_20210929T001601_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T001623_20210929T001756_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T001901_20210929T002009_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T002100_20210929T002802_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T011521_20210929T012642_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T014103_20210929T014132_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T014343_20210929T014411_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T014755_20210929T015404_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T021828_20210929T022332_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T023031_20210929T030619_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T041032_20210929T042130_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T042221_20210929T042446_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T042450_20210929T042456_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T042500_20210929T042521_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T042524_20210929T042526_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T042529_20210929T042659_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T043140_20210929T044554_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T051754_20210929T053212_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T054931_20210929T060106_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T060217_20210929T060405_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T060606_20210929T060628_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T060631_20210929T060634_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T060637_20210929T061527_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T061726_20210929T062551_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T063839_20210929T065312_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T065314_20210929T065455_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T070014_20210929T071304_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T071738_20210929T072555_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T075133_20210929T075241_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T075628_20210929T075708_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T075750_20210929T075753_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T075759_20210929T075953_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T075955_20210929T080538_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T081733_20210929T082557_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T082650_20210929T083026_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T083029_20210929T085247_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T085913_20210929T090424_E001 | Loss of echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_LRM_1B_20210929T093449_20210929T093512_E001 | Loss of echo | The tracking echo is missing for one or more records |

CS OFFL SIR LRM 1B 20210929T093528 20210929T094138 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T094138\_20210929T094506\_E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T094537\_20210929T094600\_E001 CS OFFL SIR LRM 1B 20210929T100358 20210929T100409 E001 CS OFFL SIR LRM 1B 20210929T100413 20210929T100416 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T100418\_20210929T100421\_E001 CS OFFL SIR LRM 1B 20210929T100423 20210929T103126 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T104805\_20210929T111510\_E001 CS OFFL SIR LRM 1B 20210929T111550 20210929T111822 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T111855\_20210929T112550\_E001 CS OFFL SIR LRM 1B 20210929T123358 20210929T123727 E001 CS OFFL SIR LRM 1B 20210929T123849 20210929T124336 E001 CS OFFL SIR LRM 1B 20210929T124354 20210929T124854 E001 CS OFFL SIR LRM 1B 20210929T125510 20210929T125525 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T125527\_20210929T125622\_E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T125633\_20210929T125700\_E001 CS OFFL SIR LRM 1B 20210929T125700 20210929T125758 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T130028\_20210929T130044\_E001 CS OFFL SIR LRM 1B 20210929T142709 20210929T143109 E001 CS OFFL SIR LRM 1B 20210929T143112 20210929T143144 E001 CS OFFL SIR LRM 1B 20210929T143247 20210929T143419 E001 CS OFFL SIR LRM 1B 20210929T145338 20210929T152843 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T153712\_20210929T154048\_E001 CS OFFL SIR LRM 1B 20210929T163208 20210929T163238 E001 CS OFFL SIR LRM 1B 20210929T163240 20210929T164631 E001 CS OFFL SIR LRM 1B 20210929T165113 20210929T170800 E001 CS OFFL SIR LRM 1B 20210929T172601 20210929T173858 E001 CS OFFL SIR LRM 1B 20210929T173901 20210929T173933 E001 CS\_OFEL\_SIR\_LRM\_1B\_20210929T174146\_20210929T174211\_E001 CS OFFL SIR LRM 1B 20210929T174329 20210929T175844 E001 CS OFFL SIR LRM 1B 20210929T181101 20210929T181825 E001 CS\_OFEL\_SIR\_LRM\_1B\_20210929T182111\_20210929T183008\_E001 CS OFFL SIR LRM 1B 20210929T183011 20210929T183133 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T190851\_20210929T191622\_E001 CS OFFL SIR LRM 1B 20210929T192037 20210929T192525 E001 CS OFFL SIR LRM 1B 20210929T192809 20210929T193356 E001 CS OFFL SIR LRM 1B 20210929T194947 20210929T195221 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T195223 20210929T195337 E001 CS OFFL SIR LRM 1B 20210929T195340 20210929T195544 E001 CS OFFL SIR LRM 1B 20210929T195546 20210929T195608 E001 CS OFFL SIR LRM 1B 20210929T195610 20210929T195714 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T195717\_20210929T195724\_E001 CS OFFL SIR LRM 1B 20210929T195728 20210929T195731 E001 CS OFFL SIR LRM 1B 20210929T195741 20210929T195758 E001 CS OFFL SIR LRM 1B 20210929T195800 20210929T195832 E001 CS OFFL SIR LRM 1B 20210929T200232 20210929T200311 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T204152\_20210929T210920\_E001 CS\_OFEL\_SIR\_LRM\_1B\_20210929T211131\_20210929T211144\_E001 CS OFFL SIR LRM 1B 20210929T211146 20210929T211152 E001 CS OFFL SIR LRM 1B 20210929T211154 20210929T211518 E001 CS OFFL SIR LRM 1B 20210929T213226 20210929T213710 E001 CS OFFL SIR LRM 1B 20210929T213838 20210929T213850 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T221342\_20210929T221709\_E001 CS OFFL SIR LRM 1B 20210929T230828 20210929T231349 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T231422\_20210929T231630\_E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T231632\_20210929T231720\_E001 CS OFFL SIR LRM 1B 20210929T231723 20210929T232640 E001 CS OFFL SIR LRM 1B 20210929T232645 20210929T233611 E001 CS\_OFFL\_SIR\_LRM\_1B\_20210929T234818\_20210929T235614\_E001

Loss of echo oss of echo Loss of echo oss of echo Loss of echo Loss of echo Loss of echo Loss of echo

Loss of echo

Loss of echo

The tracking echo is missing for one or more records The tracking echo is missing for one or more records. The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records. The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records

#### 4.5 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:
0

| 4.6 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 valid  | ity of Auxiliary Data Files is correct.  |
| Number of products with errors: 0  |  |  |
| 4.7 L1B Auxiliary Correction Error Check   |  |  |
| CryoSat L1B data includes a correction error flag (field 54) for each measureme  | nt record. The bit value of this flag indicates any  | problems when set.   |
| Number of products with errors: 0  |  |  |
| 4.8 L1B Measurement Confidence Data Check  |  |  |
| CryoSat L1B data includes a measurement confidence flag (field 18) for each m  | easurement record. The bit value of this flag inc  | licates any problems when set.   |
| Currently, there are several common error flags raised in the Level 1B pro-  | ducts 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.<br>Block Degraded Flag: This flag is currently set for a number of individual recorr | ds generally at the start or end of products (all r  | nodes) but this is to be expected  |
|  |  |  |
| Phase Perturbation Flag: This flag is currently set for all L1B SARIn products, i<br>Number of products with errors: 1   | ndicating that the ADC correction application is   | deactivated, but this is in line with the current configuration.   |
|  |  |  |
| Product CS OFFL SIR LRM 1B 20210929T081733 20210929T082557 E001  | Test Failed<br>Echo error, TRK echo error  | Description<br>The tracking echo has returned an error and the Rx1 Echo Error flag is set,   |
| 00_0112_01(10_10_10021001100_2021002010020   |  | 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 er   | sure it consists of both an XML header file (.HE   | 0R) and a product file (.DBL).   |
| Number of products with errors: 0  |  |  |
| 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   | d/or errors raised by the ground-segment processing chain.   |
| Number of products with errors: 0  |  |  |
| 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 valid  | ity of Auvilian/ Data Files is correct   |
| Number of products with errors: 0  |  |  |
| 5.4 L2 Auxiliary Correction Error Check  |  |  |
| -  |  |  |
| CryoSat L2 data includes a correction error flag (field 30) for each measurement Number of products with errors: 0   | record. The bit value of this hag indicates any  | problems when set.   |
|  |  |  |
| 5.5 L2 Measurement Quality Flag Check  |  |  |
| CryoSat L2 data includes a quality flag (field 50) for each 20-Hz measurement re   | • • • •  |  |
| Currently, there are several common error flags raised in the Level 2 produ-<br>below, followed by a table of any additional issues arising from this test.      | acts which are expected due to operational r   | noue of surface type. All common hags are summarised in the list   |
| Freeboard error: This flag is correctly set in all L2 SAR products that are not dis  |  |  |
| Height and Backscatter errors: These flags are currently set for products over<br>this is to be expected.  | land, but this is to be expected. Retracker 1 He   | ight and Backscatter error flags are also set for products over sea-ice, but   |
| Peakiness error: This flag is currently set for products over sea-ice, but this is t   | •  |  |
| SARIn X-Track Angle Error: This flag is set when the difference between the cut this flag is set for L2 SARIn products in all other locations as expected.       | omputed surface elevation and the DEM is >50   | m. The DEM is only available over Greenland and Antarctica and as a result   |
| SSHA interpolation error: This flag is currently set for a number of SAR produced  | cts occurring at surface type boundaries, but thi  | s is to be expected.   |
| Number of products with errors: 204  |  |  |
| Product  | Test Failed  | Description  |
| CS_OFFL_SIR_LRM_220210928T235658_20210929T000128_E001  | 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<br>for Retracker 3 for one or more records  |
| CS_OFFL_SIR_LRM_220210929T005158_20210929T011519_E001  | 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_220210929T011521_20210929T012642_E001  | Height Error (Retracker 2), Height Error<br>(Retracker 3), Backscatter Error<br>(Retracker 2), Surface model unavailable | There is a height and backscatter error for Retracker 2 , a height error for Retracker 3 and no DEM or Slope Model was used for the location of one o more records |
| CS_OFFL_SIR_LRM_220210929T013701_20210929T013911_E001  | 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_220210929T013924_20210929T013937_E001  | 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_220210929T015641_20210929T021259_E001  | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)   | There is a height and backscatter error for Retracker 2 for one or more<br>records   |

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\_2\_\_20210929T023031\_20210929T030619\_E001

| CS_OFFL_SIR_LRM_220210929T032812_20210929T035108_E001 | 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_220210929T041032_20210929T042130_E001 | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)   | There is a height and backscatter error for Retracker 2 for one or more<br>records  |
| CS_OFFL_SIR_LRM_220210929T042221_20210929T042446_E001 | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)   | There is a height and backscatter error for Retracker 2 for one or more<br>records  |
| CS_OFFL_SIR_LRM_220210929T042529_20210929T042659_E001 | 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<br>for Retracker 3 for one or more records   |
| CS_OFFL_SIR_LRM_220210929T043140_20210929T044554_E001 | 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<br>for Retracker 3 for one or more records   |
| CS_OFFL_SIR_LRM_220210929T045838_20210929T051549_E001 | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)   | There is a height and backscatter error for Retracker 2 for one or more<br>records  |
| CS_OFFL_SIR_LRM_220210929T051754_20210929T053212_E001 | 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_220210929T054931_20210929T060106_E001 | 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_220210929T060217_20210929T060405_E001 | 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_220210929T060606_20210929T060628_E001 | 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_220210929T060637_20210929T061527_E001 | 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<br>for Retracker 3 for one or more records   |
| CS_OFFL_SIR_LRM_220210929T063527_20210929T063710_E001 | 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_220210929T063839_20210929T065312_E001 | Height Error (Retracker 2), Height Error<br>(Retracker 3), Backscatter Error<br>(Retracker 2), Surface model unavailable | There is a height and backscatter error for Retracker 2 , a height error for<br>Retracker 3 and no DEM or Slope Model was used for the location of one or<br>more records |
| CS_OFFL_SIR_LRM_220210929T070014_20210929T071304_E001 | 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<br>for Retracker 3 for one or more records   |
| CS_OFFL_SIR_LRM_220210929T074724_20210929T074935_E001 | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)   | There is a height and backscatter error for Retracker 2 for one or more<br>records  |
| CS_OFFL_SIR_LRM_220210929T075759_20210929T075953_E001 | Surface Model Unavailable  | No DEM or Slope Model was used for the location of one or more records  |
| CS_OFFL_SIR_LRM_220210929T081701_20210929T081709_E001 | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)   | There is a height and backscatter error for Retracker 2 for one or more<br>records  |
| CS_OFFL_SIR_LRM_220210929T081733_20210929T082557_E001 | 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_220210929T082650_20210929T083026_E001 | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)   | There is a height and backscatter error for Retracker 2 for one or more<br>records  |
| CS_OFFL_SIR_LRM_220210929T083029_20210929T085247_E001 | 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_220210929T090929_20210929T093227_E001 | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)   | There is a height and backscatter error for Retracker 2 for one or more<br>records  |
| CS_OFFL_SIR_LRM_220210929T094138_20210929T094506_E001 | 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_220210929T094537_20210929T094600_E001 | Surface Model Unavailable  | No DEM or Slope Model was used for the location of one or more records  |
| CS_OFFL_SIR_LRM_220210929T100423_20210929T103126_E001 | 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<br>for Retracker 3 for one or more records   |
| CS_OFFL_SIR_LRM_220210929T104805_20210929T111510_E001 | 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<br>for Retracker 3 for one or more records   |
| CS_OFFL_SIR_LRM_220210929T111855_20210929T112550_E001 | 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<br>for Retracker 3 for one or more records   |
| CS_OFFL_SIR_LRM_220210929T113747_20210929T120949_E001 | 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<br>for Retracker 3 for one or more records   |
| CS_OFFL_SIR_LRM_220210929T122724_20210929T123107_E001 | 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_220210929T125510_20210929T125525_E001 | 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<br>for Retracker 3 for one or more records  |
|---|--|--|
| CS_OFFL_SIR_LRM_220210929T130133_20210929T130504_E001 | 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_220210929T131644_20210929T132551_E001 | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2)   | There is a height and backscatter error for Retracker 2 for one or more<br>records   |
| CS_OFFL_SIR_LRM_220210929T132835_20210929T134958_E001 | 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_220210929T140735_20210929T142343_E001 | 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_220210929T145338_20210929T152843_E001 | 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<br>for Retracker 3 for one or more records  |
| CS_OFFL_SIR_LRM_220210929T154753_20210929T161935_E001 | 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_220210929T163240_20210929T164631_E001 | Height Error (Retracker 2), Height Error<br>(Retracker 3), Backscatter Error<br>(Retracker 2), Surface model unavailable | There is a height and backscatter error for Retracker 2, a height error for<br>Retracker 3 and no DEM or Slope Model was used for the location of one or<br>more records |
| CS_OFFL_SIR_LRM_220210929T165113_20210929T170800_E001 | 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_220210929T172601_20210929T173858_E001 | 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_220210929T174329_20210929T175844_E001 | 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<br>for Retracker 3 for one or more records  |
| CS_OFFL_SIR_LRM_220210929T175935_20210929T180120_E001 | 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_220210929T181101_20210929T181825_E001 | Surface Model Unavailable  | No DEM or Slope Model was used for the location of one or more records   |
| CS_OFFL_SIR_LRM_220210929T182111_20210929T183008_E001 | 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_220210929T183011_20210929T183133_E001 | 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_220210929T183313_20210929T184647_E001 | 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_220210929T190851_20210929T191622_E001 | 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_220210929T192037_20210929T192525_E001 | 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<br>for Retracker 3 for one or more records  |
| CS_OFFL_SIR_LRM_220210929T192809_20210929T193356_E001 | 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_220210929T193518_20210929T193728_E001 | 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_220210929T195741_20210929T195758_E001 | Surface Model Unavailable  | No DEM or Slope Model was used for the location of one or more records   |
| CS_OFFL_SIR_LRM_220210929T200412_20210929T202510_E001 | 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_220210929T204152_20210929T210920_E001 | 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<br>for Retracker 3 for one or more records  |
| CS_OFFL_SIR_LRM_220210929T212836_20210929T213103_E001 | 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_220210929T214108_20210929T220444_E001 | Height Error (Retracker 2), Backscatter<br>Error (Retracker 2), Surface model<br>unavailable                             | There is a height and backscatter error for Retracker 2 and no DEM or<br>Slope Model was used for the location of one or more records                                    |
| CS_OFFL_SIR_LRM_220210929T222101_20210929T225338_E001 | 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_220210929T230650_20210929T230819_E001 | 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_220210929T230828_20210929T231349_E001 | 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_220210929T231723_20210929T232640_E001 | 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_220210929T232645_20210929T233611_E001 | 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<br>for Retracker 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T000540_20210929T000726_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T000839_20210929T001123_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T002802_20210929T003053_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T003215_20210929T003744_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T004749_20210929T005158_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T011519_20210929T011521_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T012642_20210929T013425_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T013425_20210929T013548_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T014150_20210929T014343_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T014554_20210929T014755_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T021259_20210929T021714_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T022650_20210929T023031_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T030621_20210929T031324_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T031324_20210929T031645_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T031755_20210929T032812_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T035108_20210929T035807_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T040904_20210929T041032_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T042130_20210929T042221_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T042659_20210929T043140_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T044554_20210929T045215_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T045215_20210929T045323_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T051549_20210929T051754_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T053212_20210929T053316_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T053449_20210929T053608_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T054828_20210929T054931_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T060107_20210929T060217_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T060405_20210929T060606_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T062552_20210929T062748_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)                           | There is a backscatter error for Retracker 2 and 3 for one or more records  |

| CS_OFFL_SIR_SAR_220210929T062804_20210929T062908_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
|--|---|--|
| CS_OFFL_SIR_SAR_220210929T062908_20210929T063236_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T063524_20210929T063527_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_2_20210929T071304_20210929T071540_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T072743_20210929T072916_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T074433_20210929T074724_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T074935_20210929T075106_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T080538_20210929T080614_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T080614_20210929T081150_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T085247_20210929T085513_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T090706_20210929T090929_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T094600_20210929T094646_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T094706_20210929T095210_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T103127_20210929T103435_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T104612_20210929T104805_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T111517_20210929T111549_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T112551_20210929T113412_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T120949_20210929T121424_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T122433_20210929T122724_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T123108_20210929T123358_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T125131_20210929T125510_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T125758_20210929T130028_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_2_20210929T130504_20210929T131309_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T132551_20210929T132835_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_2_20210929T134958_20210929T135327_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_2_20210929T140330_20210929T140735_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_2_20210929T143144_20210929T143247_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_220210929T143419_20210929T143751_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_2_20210929T143751_20210929T144146_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_2_20210929T144227_20210929T144304_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_2_20210929T144542_20210929T145338_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_2_20210929T152844_20210929T153010_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_2_20210929T154214_20210929T154753_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |
| CS_OFFL_SIR_SAR_2_20210929T162445_20210929T163208_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3) | There is a backscatter error for Retracker 2 and 3 for one or more records |

| CS_OFFL_SIR_SAR_220210929T164631_20210929T165113_E001  | Backscatter Error (Retracker 2),   | There is a backscatter error for Retracker 2 and 3 for one or more records  |
|--|--|---|
| CS_OFFL_SIR_SAR_220210929T170800_20210929T170859_E001  | Backscatter Error (Retracker 3)<br>Backscatter Error (Retracker 2),  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
|  | Backscatter Error (Retracker 3)<br>Backscatter Error (Retracker 2),  |   |
| CS_OFFL_SIR_SAR_220210929T172005_20210929T172601_E001  | Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T174211_20210929T174329_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T180120_20210929T180144_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T180400_20210929T181101_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T183134_20210929T183313_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T184647_20210929T184814_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T192648_20210929T192809_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T194233_20210929T194755_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T194811_20210929T194947_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T200311_20210929T200412_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T202510_20210929T202720_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T203941_20210929T204152_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T212056_20210929T212836_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T220445_20210929T220647_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T221832_20210929T222101_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T225754_20210929T230535_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T230611_20210929T230650_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T233611_20210929T234008_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T234405_20210929T234653_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SAR_220210929T235727_20210930T000202_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SIN_220210929T003745_20210929T003906_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records  |
| CS_OFFL_SIR_SIN_220210929T004434_20210929T004749_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records  |
| CS_OFFL_SIR_SIN_220210929T013548_20210929T013701_E001  | Backscatter Error (Ketracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error, Surface model<br>unavailable | There is a backscatter error for Retracker 2 and 3, an ambiguous angle was<br>detected for SARIn mode, and no DEM or Slope Model was used for the<br>location for one or more records |
| CS_OFFL_SIR_SIN_2_20210929T013911_20210929T013924_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SIN_220210929T013937_20210929T014103_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SIN_2_20210929T014141_20210929T014149_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SIN_2_20210929T015405_20210929T015641_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)  | There is a backscatter error for Retracker 2 and 3 for one or more records  |
| CS_OFFL_SIR_SIN_220210929T021714_20210929T021828_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records  |
| CS_OFFL_SIR_SIN_220210929T022332_20210929T022650_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records  |
| CS_OFFL_SIR_SIN_2_20210929T035807_20210929T040044_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records  |
| CS_OFFL_SIR_SIN_2_20210929T040238_20210929T040904_E001 | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records  |
| CS_OFFL_SIR_SIN_220210929T045323_20210929T045443_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records  |

| CALOPEL_BEL_BEL_BEL_BEL_BEL_BEL_BEL_BEL_BEL_B  | CS_OFFL_SIR_SIN_220210929T045722_20210929T045838_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records |
|--|--|--|--|
| CB: 011: 918 92 ar 201090100000 201000100000 201000100000 20100000000  | CS_OFFL_SIR_SIN_220210929T053316_20210929T053449_E001  |  | There is a backscatter error for Retracker 2 and 3 for one or more records   |
| C. OFFL BR. D.Y. 2. JOINDUPTINGUE JOINDUPTINGUE FOIL     Relationship for plantage 2, and the subscrept end of helitogene and used.       C. OFFL BR. D.Y. 2. JOINDUPTINGUE JOINDUPTINGUE FOIL     Relationship for plantage 2, and the subscrept end of helitogene and used.       C. OFFL BR. D.Y. 2. JOINDUPTINGUE JOINDUPTINGUE FOIL     Relationship for plantage 2, and the subscrept end of helitogene and used.       C. OFFL BR. D.Y. 2. JOINDUPTINGUE JOINDUPTINGUE FOIL     Relationship for plantage 2, and the subscrept end of helitogene and used.       C. OFFL BR. D.Y. 2. JOINDUPTINGUE JOINDUPTINGUE FOIL     Relationship for plantage 2, and the subscrept end of helitogene and used.       C. OFFL BR. D.Y. 2. JOINDUPTINGUE JOINDUPTINGUE FOIL     Relationship for plantage 2, and the subscrept end of helitogene and used.       C. OFFL BR. D.Y. 2. JOINDUPTINGUE JOINDUPTINGUE JOINDUPTINGUE JOINDUPTINGUE JOINT AND THE SUBSCREPT AND THE SUBSCRE  | CS_OFFL_SIR_SIN_220210929T053608_20210929T053942_E001  | Backscatter Error (Retracker 3), SARIn X-  |  |
| CH, DH, DH, DH, LEU HERNEY, SAULENT LEV (Marsaler A), SAMM. An analysis of the second and second an   | CS_OFFL_SIR_SIN_220210929T054150_20210929T054241_E001  | SARIn X-track Angle Error  | An ambiguous angle was detected for SARIn mode for one or more records   |
| Dist Dist Dist Dist Dist Dist Dist Dist  | CS_OFFL_SIR_SIN_220210929T054652_20210929T054828_E001  | Backscatter Error (Retracker 3), SARIn X-  |  |
| Los des eigen eig  | CS_OFFL_SIR_SIN_220210929T061528_20210929T061726_E001  |  |  |
| Cite, Diff, Sint, Sint, Z., 20100221700041, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 2010021700703, 201002170703, 201002170703, 201002170703, 201002170703, 201002170703, 201002170703, 201002170703, 201002170703, 201002170703, 2010021707703, 2010021700003, 2010021700003, 2010021700003, 2010021700003, 2010021700003,  | CS_OFFL_SIR_SIN_220210929T062748_20210929T062804_E001  |  | There is a backscatter error for Retracker 2 and 3 for one or more records   |
| GB 0FFL BR SR 2     2010/02/01/BLND 701100/01/BLND 701     Bancadar Smith  | CS_OFFL_SIR_SIN_220210929T063237_20210929T063342_E001  | Backscatter Error (Retracker 3), SARIn X-  |  |
| 05. DFL_SR_SR_2_2021002100210.0210_021002100210_0210_  | CS_OFFL_SIR_SIN_220210929T063430_20210929T063523_E001  | Backscatter Error (Retracker 3), SARIn X-  |  |
| OPE_DFL_SHSHZ_D210021100010_ED01         produl anxability         Model values of or ext more started           CBOFFL_SHSH_ZD210021101540_20210021071742_ED01         Delta Starter From (Restacts)         ARM / No           CBOFFL_SHSH_ZD210021071754_ED01         Delta Starter From (Restacts)         ARM / No           CBOFFL_SHSH_ZD210021071754_ED01         Delta Starter From (Restacts)         ARM / No           CBOFFL_SHSH_ZD210021071754_ED01         Delta Starter From (Restacts)         Arm values and/e was delta for ext more starter and for Starter and more starter and more starter and for Starter and more and more and more starter and more and more and more starter and more and mor  | CS_OFFL_SIR_SIN_220210929T063710_20210929T063839_E001  | Backscatter Error (Retracker 3), SARIn X-  |  |
| CS 0FFL SIR SN 2       20100201107160       202100201107160  | CS_OFFL_SIR_SIN_220210929T065455_20210929T070014_E001  |  |  |
| CS_OFFL_SR_SN_2_0210020107556_00100201072742_E001     Backscolar Error (Netroder 3), SARK: Longe Error, Sundon Marked Error, Netroder 2), SARK: Longe Error, Netroder 2), SARK: Lo   | CS_OFFL_SIR_SIN_220210929T071540_20210929T071738_E001  | Backscatter Error (Retracker 3), SARIn X-  |  |
| No. 5PT. SR. SR. 2. 2019020105700_020210020105700_0001     model unsuitable     Model visuality       CS, OFFL, SR, SN. 2. 20210920105700_020210020105700_0001     SARis Xasck Angle Enry     An antiguous angle was detected for SARis mode and no DEM or SARis       CS, OFFL, SR, SN. 2. 202109201081700_0202109201081703_E001     Backcoafer Enry (Perceder 3), SARis Xasck Angle Enry     There is a backcarter enry (Perceder 2), SARis Xasck Angle Enry       CS, OFFL, SR, SN. 2. 202109201081700_0202109201081703_E001     Backcoafer Enry (Perceder 2), SARis Xasck Angle Enry     There is a backcarter enry for Retracker 2 and 3 for one or more records       CS, OFFL, SR, SN. 2. 202109201085713_202109201085713_E001     SARis Xasck Angle Enry     An antiguous angle was detected for SARis mode for one or more records       CS, OFFL, SR, SN. 2. 202109201085713_E001     SARis Xasck Angle Enry     An antiguous angle was detected for SARis mode for one or more records       CS, OFFL, SR, SN. 2. 20210920108571085913_E001     SARis Xasck Angle Enry     An antiguous angle was detected for SARis mode for one or more records       CS, OFFL, SR, SN. 2. 2021092010950704506_20210920109577_E001     Backcarter Enry (Percease 2), Backcarter Enry (Percease 2), Backcarter Enry (Percease 2), SARis Xasck Angle Enry     An antiguous angle was detected for SARis mode for one or more records       CS, OFFL, SR, SN. 2. 202109201094506_2021020109201904505_E001     Backcarter Enry (Percease 2), SARis Xasck Angle Enry     An antiguous angle was detected for SARis mode for one or more records       CS, OFFL, SR, SN. 2. 202109201103545_E001     Backcarter Enry (Percease 2), SA   | CS_OFFL_SIR_SIN_220210929T072555_20210929T072742_E001  | Backscatter Error (Retracker 3), SARIn X-  |  |
| Model was used for one or more records  Model was used for one or more records  Model was used for one or more records  G.S., OFFL_SR_SNL2_202109207061700_20210927081733_E001  Backscatter Free (Fertacker 2), Backscatter F  | CS_OFFL_SIR_SIN_220210929T075241_20210929T075628_E001  |  |  |
| GS_OFFL_SR_SNL2_a02102010151_2021020101701_E001       Bedecater Fror (Retack of 2), SARIN X, Ange Tror, SARIN X, SARI   | CS_OFFL_SIR_SIN_2_20210929T075709_20210929T075750_E001 | model unavailable  |  |
| GS_OFFL_SIR_SN_2_20210929708513_20210929708531_E001       Backscatter From (Retacker 2),<br>Backscatter From (Retacker 2),<br>SARIN X       There is a backscatter error for Retacker 2 and 3 and an ambguous angle<br>backscatter Error (Retacker 2),<br>Backscatter Error (Retacker 2),                                    | CS_OFFL_SIR_SIN_2_20210929T081151_20210929T081701_E001 | Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error, Surface model                      | detected for SARIn mode, and no DEM or Slope Model was used for the  |
| C5_OFFL_SIR_SIN_2_20210929T085613_20010929T085613_E001       Backscatter Error (Retacker 3), SARh N, Inste For or more records         C5_OFFL_SIR_SIN_2_20210929T085833_20210929T085913_E001       SARh X-track Angle Error       An ambiguous angle was detected for SARh mode for one or more records         C5_OFFL_SIR_SIN_2_20210929T084533_20210929T08453_20210929T08457_2001       Backscatter Error (Retacker 3), SARh N, track Angle Error       An ambiguous angle was detected for SARh mode for one or more records         C5_OFFL_SIR_SIN_2_20210929T08456_20210929T09457_E001       Backscatter Error (Retacker 3), SARh N, track Angle Error       There is a backscatter error for Retracker 2 and 3, an ambiguous angle was detected for SARh mode, in no one records         C5_OFFL_SIR_SIN_2_20210929T08466_20210929T094585       E001       Backscatter Error (Retracker 3), SARh N, track Angle Error         C6_OFFL_SIR_SIN_2_20210929T08466_20210929T09458       E001       Backscatter Error (Retracker 2), SARh N, track Angle Error         C6_OFFL_SIR_SIN_2_20210929T085210_20210929T10358_E001       Backscatter Error (Retacker 2), SARh N, track Angle Error         C6_OFFL_SIR_SIN_2_20210929T103458_20210929T10358_E001       SARh X-track Angle Error       An ambiguous angle was detected for SARh mode, in one or more records         C6_OFFL_SIR_SIN_2_20210929T103458_20210929T10358_E001       SARh X-track Angle Error       An ambiguous angle was detected for SARh mode for one or more records         C6_OFFL_SIR_SIN_2_20210929T103458_20210929T10358_E001       SARh X-track Angle Error       An ambiguous angle was detect  | CS_OFFL_SIR_SIN_220210929T081709_20210929T081733_E001  | Backscatter Error (Retracker 2),   | There is a backscatter error for Retracker 2 and 3 for one or more records   |
| Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 2),<br>Backscatte | CS_OFFL_SIR_SIN_220210929T085513_20210929T085631_E001  | Backscatter Error (Retracker 3), SARIn X-  |  |
| CS_OFFL_SIR_SIN_2_202109297090425_002109297090457_E001       Backscatter From (Retracker 3), SARIN, Yangb Error, Kentacker 2), Backscatter From (Retracker 2), SARIN, Yangb Error, Kentacker 2), Backscatter From (Retracker 2), Backscatter From (Ret   | CS_OFFL_SIR_SIN_220210929T085833_20210929T085913_E001  | SARIn X-track Angle Error  | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS, OFFL_SIR_SIN_2_20210920T094606_20210920T094507_E001       Backscatter Frort (Retracker 3), SARIN X, how the subscatter error for Retracker 2 and 3, an ambiguous angle was detected for SARIn mode, and no DEM or Stopa Model was used for the backscatter form (Retracker 3), SARIN X, tack Angle Error, Surface model unavailable.       Image and to Zakter mode, and no DEM or Stopa Model was used for the backscatter error (Retracker 3), SARIN X, tack Angle Error, Surface model unavailable.         CS, OFFL_SIR_SIN_2_20210920T094646_20210929T100356_E001       Backscatter Error (Retracker 3), SARIN X, tack Angle Error, Surface model unavailable.       Image and to Zakter mode, and no DEM or Stopa Model was used for the backscatter error for Retracker 2 and 3, an ambiguous angle was detected for SARIn mode, and no DEM or Stopa Model was used for the backscatter error for Retracker 2.         GS, OFFL_SIR_SIN_2_20210929T103435_20210929T103556_E001       Backscatter Error (Retracker 2), backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS, OFFL_SIR_SIN_2_20210929T103435_20210929T103639_E001       SARIN X-track Angle Error       An ambiguous angle was detected for SARIn mode for one or more records         CS, OFFL_SIR_SIN_2_20210929T104413_20210929T104612_E001       Backscatter Error (Retracker 2), SARIN X, track Angle Error       An ambiguous angle was detected for SARIn mode for one or more records         CS, OFFL_SIR_SIN_2_20210929T1121425_20210929T113474_E001       Backscatter Error (Retracker 2), SARIN X, track Angle Error       An ambiguous angle was detected for SARIn mode for one or more records         CS, OFFL_SIR_SIN_2_20210929T1121425_20210929T113414_E001   | CS_OFFL_SIR_SIN_220210929T090425_20210929T090706_E001  | Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                                     |  |
| CS_OFFL_SIR_SIN_2_20210929T094646_20210929T094706_E001       Backscatter Error (Retracker 2), Skrin x-<br>track Angle Error, Surface model<br>U3W8JBM Error (Retracker 2), Backscatter Error (Retracker 2), Skrin X-<br>track Angle Error         CS_OFFL_SIR_SIN_2_20210929T103644_20210929T104612_E001       Backscatter Error (Retracker 2), Skrin X-<br>track Angle Error       An ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T104443_20210929T104612_E001       Backscatter Error (Retracker 2), SARIn X-<br>track Angle Error       An ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T124425_20210929T12445_E001       Backscatter Error (Retracker 2), SARIn X-<br>track Angle Error       An ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T124245_20210929T12445_E001       Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error       There is a backscatter error   | CS_OFFL_SIR_SIN_220210929T094506_20210929T094537_E001  | Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error, Surface model                      | detected for SARIn mode, and no DEM or Slope Model was used for the  |
| CS_OFFL_SIR_SIN_2_20210929T103455_02102929T10358_E001       Backscatter Error (Retracker 3), SARIN ×<br>track Angle Error       Satescatter Error (Retracker 3), SARIN ×<br>Backscatter Error (Retracker 3), SARIN ×<br>track Angle Error         CS_OFFL_SIR_SIN_2_20210929T103455_02010929T10355_E001       SARIN × track Angle Error       An ambiguous angle was detected for SARIn mode, and no DEM or Slope Model was used for the<br>unavailable<br>Backscatter Error (Retracker 3), SARIN ×<br>track Angle Error         CS_OFFL_SIR_SIN_2_20210929T103644_20210929T103839_E001       SARIN × track Angle Error       An ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T104413_20210929T104612_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIN ×<br>track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T122315_20210929T130133_E001       Backscatter Error (Retracker 3), SARIN ×<br>track Angle Error       There is a backscatter error for Retracker 2 and 3 for one or more records<  | CS_OFFL_SIR_SIN_220210929T094646_20210929T094706_E001  | Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error, Surface model                      | detected for SARIn mode, and no DEM or Slope Model was used for the  |
| CS_OFFL_SIR_SIN_2_20210929T103435_20210929T103555_E001       Backscatter Error (Retracker 3), SARIn X, Track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T103644_20210929T104612_E001       Backscatter Error (Retracker 2), SARIn X, Track Angle Error       An ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T104443_20210929T104612_E001       Backscatter Error (Retracker 2), SARIn X, Track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T113412_20210929T113747_E001       Backscatter Error (Retracker 2), SARIn X, Track Angle Error, Surface model unavailable for the track Angle Error Surface model unavailable for one or more records         CS_OFFL_SIR_SIN_2_20210929T121425_20210929T121749_E001       Backscatter Error (Retracker 2), SARIn X, Track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T122435_20210929T122433_E001       Backscatter Error (Retracker 2), Backscatter Error   | CS_OFFL_SIR_SIN_2_20210929T095210_20210929T100358_E001 | Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error, Surface model                      | detected for SARIn mode, and no DEM or Slope Model was used for the  |
| CS_OFFL_SIR_SIN_2_20210929T104443_20210929T104612_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIN X,<br>track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode, for one or more records         CS_OFFL_SIR_SIN_2_20210929T113412_20210929T113747_E001       Backscatter Error (Retracker 3),<br>Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)       There is a backscatter error for Retracker 2 and 3 for one or more records         CS_OFFL_SIR_SIN_2_20210929T131309_20210929T131644_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)       There is a backscatter error for Retracker 2 and 3 for one or more records         CS_OFFL_SIR_SIN_2_20210929T135327_20210929T135648_E001       Backscatter Error (Retracker 3),<br>Backscatter Error (Retracker 3),<br>Backscatter Error (Retracker 3),<br>Backscatter Error (Retracker 3),<br>Backscatter Error (Retracker 3),  | CS_OFFL_SIR_SIN_220210929T103435_20210929T103555_E001  | Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-                      |  |
| CS_OFFL_SIR_SIN_2_20210929T104443_20210929T104612_E001       Backscatter Error (Retracker 3), SARIN X, tack Angle Error       Inter is a backscatter error for error one or more records         CS_OFFL_SIR_SIN_2_20210929T113412_20210929T113747_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIN X         CS_OFFL_SIR_SIN_2_20210929T130044_20210929T130133_E001       Backscatter Error (Retracker 2), Backscatter Error for Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIN X       There is a backscatter error for Retracker 2 and 3 for one or more records         CS_OFFL_SIR_SIN_2_20210929T130044_20210929T136648_E001       Backscatter Error (Retracker 2), Backs  | CS_OFFL_SIR_SIN_2_20210929T103644_20210929T103839_E001 | SARIn X-track Angle Error  | An ambiguous angle was detected for SARIn mode for one or more records   |
| CS_OFFL_SIR_SIN_2_20210929T113412_20210929T113747_E001       Backscatter Error (Retracker 3), SARIn X, track Angle Error, Surface model unavailable Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIn X, track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T122315_20210929T122433_E001       Backscatter Error (Retracker 3), SARIn X, track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T122315_20210929T122433_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIn X, track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T130044_20210929T130133_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3)       There is a backscatter error for Retracker 2 and 3 for one or more records         CS_OFFL_SIR_SIN_2_20210929T131309_20210929T131644_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 3)       There is a backscatter error for Retracker 2 and 3 for one or more records         CS_OFFL_SIR_SIN_2_20210929T140207_20210929T135648_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIn X, track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_2021092  | CS_OFFL_SIR_SIN_220210929T104443_20210929T104612_E001  | Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                                     |  |
| CS_OFFL_SIR_SIN_2_20210929T121425_20210929T121749_E001       Backscatter Error (Retracker 3), SARIn X, track Angle Error         CS_OFFL_SIR_SIN_2_20210929T122315_20210929T122433_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIn X, track Angle Error         CS_OFFL_SIR_SIN_2_20210929T122315_20210929T122433_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIn X, track Angle Error         CS_OFFL_SIR_SIN_2_20210929T130044_20210929T130133_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 3)         CS_OFFL_SIR_SIN_2_20210929T131309_20210929T131644_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 3)         CS_OFFL_SIR_SIN_2_20210929T135327_20210929T135648_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIn X, track Angle Error         CS_OFFL_SIR_SIN_2_20210929T135327_20210929T135648_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIn X, track Angle Error         CS_OFFL_SIR_SIN_2_20210929T140207_20210929T140330_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIn X, track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T140207_20210929T140330_E001 <td>CS_OFFL_SIR_SIN_220210929T113412_20210929T113747_E001</td> <td>Backscatter Error (Retracker 3), SARIn X-<br/>track Angle Error, Surface model</td> <td>detected for SARIn mode, and no DEM or Slope Model was used for the</td>  | CS_OFFL_SIR_SIN_220210929T113412_20210929T113747_E001  | Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error, Surface model                      | detected for SARIn mode, and no DEM or Slope Model was used for the  |
| CS_OFFL_SIR_SIN_220210929T122315_20210929T122433_E001       Backscatter Error (Retracker 3), SARIn X, track Angle Error       Intere is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T130044_20210929T130133_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 3)       There is a backscatter error for Retracker 2 and 3 for one or more records         CS_OFFL_SIR_SIN_2_20210929T13109_20210929T131644_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 3)       There is a backscatter error for Retracker 2 and 3 for one or more records         CS_OFFL_SIR_SIN_2_20210929T135327_20210929T135648_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIn X, track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T140207_20210929T135648_E001       Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), SARIn X, track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T140207_20210929T14030_E001       Backscatter Error (Retracker 2), SARIn X, track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T142343_20210929T142709_E011       Backscatt   | CS_OFFL_SIR_SIN_220210929T121425_20210929T121749_E001  | Backscatter Error (Retracker 3), SARIn X-  |  |
| CS_OFFL_SIR_SIN_2_20210929113004_202109291130133_E001       Backscatter Error (Retracker 3)       Intere is a backscatter error for Retracker 2 and 3 for one or more records         CS_OFFL_SIR_SIN_2_20210929T131309_20210929T131644_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3)       There is a backscatter error for Retracker 2 and 3 for one or more records         CS_OFFL_SIR_SIN_2_20210929T135327_20210929T135648_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X,<br>track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T140207_20210929T140330_E001       Backscatter Error (Retracker 3), SARIn X,<br>track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T140207_20210929T140330_E001       Backscatter Error (Retracker 3), SARIn X,<br>track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T140207_20210929T140207_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 2),       There is a backscatter error for Retracker 2 and 3 for one or more records  | CS_OFFL_SIR_SIN_2_20210929T122315_20210929T122433_E001 | Backscatter Error (Retracker 3), SARIn X-  |  |
| CS_OFFL_SIR_SIN_2_202109291131309_202109291131044_E001       Backscatter Error (Retracker 3)       Intere is a backscatter error for Retracker 2 and 3 ior one or more records         CS_OFFL_SIR_SIN_2_20210929T135327_20210929T135648_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T140207_20210929T14030_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T140207_20210929T14030_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 2),<br>Track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T140207_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 2),<br>There is a backscatter error for Retracker 2 and 3 for one or more records   | CS_OFFL_SIR_SIN_220210929T130044_20210929T130133_E001  |  | There is a backscatter error for Retracker 2 and 3 for one or more records   |
| CS_OFFL_SIR_SIN_2_20210929T135327_20210929T135648_E001       Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error       Immere is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T140207_20210929T140330_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records         CS_OFFL_SIR_SIN_2_20210929T142343_20210929T142709_E001       Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 2),<br>track Angle Error       There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records   | CS_OFFL_SIR_SIN_220210929T131309_20210929T131644_E001  |  | There is a backscatter error for Retracker 2 and 3 for one or more records   |
| CS_OFFL_SIR_SIN_2_20210929T140207_20210929T140330_E001 Backscatter Error (Retracker 3), SARIN X-<br>track Angle Error Backscatter Error (Retracker 2), There is a backscatter error for Retracker 2 and 3 for one or more records CS_OFFL_SIR_SIN_2_20210929T142343_20210929T142709_E001 Backscatter Error (Retracker 2), There is a backscatter error for Retracker 2 and 3 for one or more records CS_OFFL_SIR_SIN_2_20210929T142343_20210929T142709_E001 Backscatter Error (Retracker 2), There is a backscatter error for Retracker 2 and 3 for one or more records CS_OFFL_SIR_SIN_2_20210929T142343_20210929T142709_E001 Backscatter Error (Retracker 2), There is a backscatter error for Retracker 2 and 3 for one or more records   | CS_OFFL_SIR_SIN_220210929T135327_20210929T135648_E001  | Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                                     |  |
|  | CS_OFFL_SIR_SIN_220210929T140207_20210929T140330_E001  | Backscatter Error (Retracker 3), SARIn X-  |  |
|  | CS_OFFL_SIR_SIN_220210929T142343_20210929T142709_E001  |  | There is a backscatter error for Retracker 2 and 3 for one or more records   |

| Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records   |
|--|--|
| Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records   |
| Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records   |
| Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records   |
| Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records  |
| Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records   |
| Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle was detected for SARIn mode for one or more records  |
| Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error                               | There is a backscatter error for Retracker 2 and 3 and an ambiguous angle<br>was detected for SARIn mode for one or more records   |
| Backscatter Error (Ketracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error, Surface model<br>unavailable | There is a backscatter error for Retracker 2 and 3, an ambiguous angle was<br>detected for SARIn mode, and no DEM or Slope Model was used for the<br>location for one or more records  |
|  | Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error<br>Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error<br>Backscatter Error (Retracker 2),<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error<br>Backscatter Error (Retracker 3), SARIn X-<br>track Angle Error |

# 6. QCC Report Analysis

The Quality Control for CryoSat (QCC) facility performs a primary survey of data products immediately after production by the PDS and LTA processing facilities. A list of the tests which raised errors or warnings is provided below.

| Product type | No. Products | No. QCC Reports | No. Valid | No. Warnings | No. Errors |
|--------------|--------------|-----------------|-----------|--------------|------------|
| SIR_LRM_1B   | 161          | 0               | 0         | 0            | 0          |
| SIR_SAR_1B   | 98           | 0               | 0         | 0            | 0          |
| SIR_SIN_1B   | 101          | 0               | 0         | 0            | 0          |
| SIR_LRM_2    | 161          | 0               | 0         | 0            | 0          |
| SIR_SAR_2    | 101          | 0               | 0         | 0            | 0          |
| SIR_SIN_2    | 98           | 0               | 0         | 0            | 0          |
| SIR_GDR_2    | 14           | 0               | 0         | 0            | 0          |

| 6.1 QCC Errors                      |   |  |  |
|-------------------------------------|---|--|--|
| Number of products with QCC errors: | 0 |  |  |
| 6.2 QCC Warnings                    |   |  |  |
| Number of QCC reports with warnings | 0 |  |  |
| 6.2 Missing QCC Reports             |   |  |  |

Number of products with missing QCC reports:

0