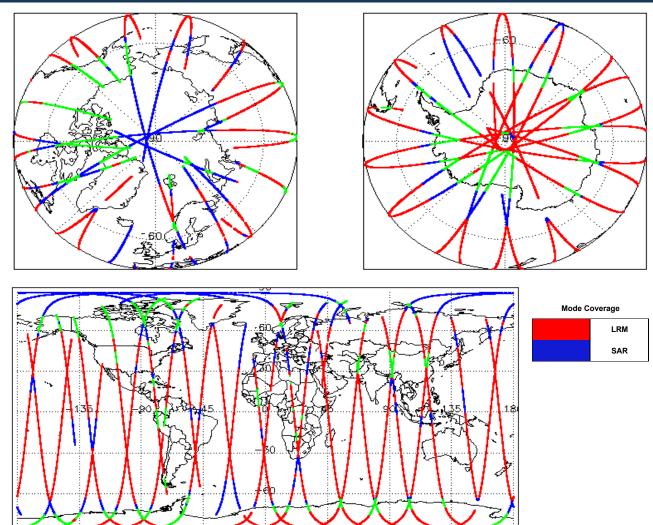


# IDEAS+ Daily Report for NOP data:

# 24/01/2019



| Report Production:     | 25-Jan-2019  | Check                                      | L1 & L2              |  |  |  |
|------------------------|--|--|----------------------|--|--|--|
|                        |  | Server check: science-pds.cryosat.esa.int  | Nominal              |  |  |  |
| Processor Used:        | CryoSat Ocean Processor                                      | Server check: calval-pds.cryosat.esa.int   | Nominal              |  |  |  |
|                        |  | Product Software Check                     | Nominal              |  |  |  |
| Data Used:             | Near Real Time Ocean Products (NOP)<br>L1B & L2 Science Data | Product Format Check                       | Nominal              |  |  |  |
|                        |  | Product Header Analysis                    | See Section 5.2      |  |  |  |
|                        |  | Auxiliary Data File Usage Check            | Nominal              |  |  |  |
|                        |  | Auxiliary Correction Error Check           | Nominal              |  |  |  |
|                        |  | Measurement Confidence Data Check          | See Section 4.5, 4.6 |  |  |  |
|                        |  | Range, SWH & Backscatter Measurement Check | See Section 5.6, 5.7 |  |  |  |
|                        |  | Ocean Retracking Quality Check             | See Section 5.8      |  |  |  |
|                        |  |  |                      |  |  |  |
| lission / Instrument N | ews  |  |                      |  |  |  |
| 23-Jan-2019 None       |  |  |                      |  |  |  |
| 24-Jan-2019 SIRAL      | unavailability on 24-Jan-2019 from 11:57:43 to 12:           | 16:02 due to planned on-board maintanance. |                      |  |  |  |
| 25-Jan-2019 Nothing    | planned  |  |                      |  |  |  |



## 3. Instrument Configuration

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

SIRAL instrument(s) in use:

t(s) in use: SIRAL - A

0

4. NOP 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 binary product file (.DBL).

Number of products with errors:

#### 4.2 L1B Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.
Number of products with errors:
0

| Each product is checked for missing Data Set Descriptors with respect to a pre                                  | e-determined baseline and also to      | check the validity of Auxiliary Data Files is correct.                   |  |  |  |
|---|--|--|--|--|--|
| Number of products with errors: 0   |  |  |  |  |  |
| 4.4 L1B Auxiliary Correction Error Check  |  |  |  |  |  |
| CryoSat L1B data includes a correction error flag for each measurement record                                   | d. The bit value of this flag indicat  | es any problems when set.  |  |  |  |
| Number of products with errors: 0   |  |  |  |  |  |
| 4.5 L1B Measurement Confidence Data Check   |  |  |  |  |  |
| CryoSat L1B data includes a measurement confidence flag for each measuren                                       | nent record. The bit value of this f   | lag indicates any problems when set.                                     |  |  |  |
| Attitude Correction Missing: This flag is currently set in error for NOPR prod                                  |  | • •  |  |  |  |
| Number of products with errors: 0   | Ŭ                                      |  |  |  |  |
|   |  |  |  |  |  |
| 4.6 L1B Waveform Group Data Check   |  |  |  |  |  |
| CryoSat L1B data includes a waveform data flag for each measurement record                                      | I. The bit value of this flag indicate | es any problems when set.  |  |  |  |
| Loss of Echo Flag: This flag is currently set for products over land, but this is                               | to be expected.                        |  |  |  |  |
| Number of products with errors: 14  |  |  |  |  |  |
| Product   | Test Failed                            | Description  |  |  |  |
| CS_OFFL_SIR_NOPM1B_20190124T064324_20190124T065246_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPN1B_20190124T012155_20190124T012508_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPN1B_20190124T061039_20190124T061217_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPN1B_20190124T084912_20190124T085416_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPN1B_20190124T102219_20190124T102251_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPN1B_20190124T112156_20190124T112326_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPN1B_20190124T183537_20190124T183657_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPN1B_20190124T194213_20190124T194348_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPN1B_20190124T215141_20190124T215804_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPN1B_20190124T233100_20190124T233507_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPN1B_20190124T234245_20190124T234320_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPR1B_20190124T003725_20190124T003932_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPR1B_20190124T022326_20190124T022518_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| CS_OFFL_SIR_NOPR1B_20190124T035653_20190124T040536_C001   | Loss of Echo                           | The tracking echo is missing for one or more records                     |  |  |  |
| 5. N  | OP Level 2 Data Qu                     | ality Check  |  |  |  |
| 5.1 L2 Product Format Check   |  | •  |  |  |  |
|   | manual it consists of both on XMI      | header file ( LIDD) and a binary ready of file ( DDI )                   |  |  |  |
| Each product, retrieved and unpacked from the science server, is checked to e Number of products with errors: 0 | ensure it consists of doth an XML      | neader file (.HDR) and a binary product file (.DBL).                     |  |  |  |
|   |  |  |  |  |  |
| 5.2 L2 Product Header Analysis  |  |  |  |  |  |
| For all products, a series of pre-defined checks are performed on the MPH and                                   | d SPH in order to identify any inco    | nsistencies and/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                                  | e-determined baseline and also to      | check the validity of Auxiliary Data Files is correct.                   |  |  |  |
| Number of products with errors: 0   |  |  |  |  |  |
| 5.4 L2 Auxiliary Correction Error Check   |  |  |  |  |  |
| For all products, the auxiliary corrections within the Geophysical Group are che                                | ecked for the default error value (    | 32767).  |  |  |  |
| Number of products with errors: 0   |  |  |  |  |  |
|   |  |  |  |  |  |
| 5.5 L2 Measurement Confidence Data Check  |  |  |  |  |  |

Number of products with errors:

#### 5.6 L2 Range Measurement Check

CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Currently, there are two common status flags raised in the Level 2 products which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.

Ocean Range Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

Ice Range Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 76

0

## Number of products with errors:

| Product   | Test Failed                  | Description   |
|---|------------------------------|---|
| CS_OFFL_SIR_NOPM_2_20190124T000503_20190124T002304_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190124T003554_20190124T003725_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190124T010815_20190124T010938_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |

CS\_OFFL\_SIR\_NOPM\_2\_20190124T011138\_20190124T011428\_C001 CS OFFL SIR NOPM 2 20190124T011628 20190124T012154 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T012748\_20190124T015000\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T015246\_20190124T020140\_C001 CS OFFL SIR NOPM 2 20190124T021445 20190124T021721 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T023357\_20190124T025345\_C001 CS OFFL SIR NOPM 2 20190124T025552 20190124T030052 C001 CS OFFL SIR NOPM 2 20190124T030656 20190124T033951 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T040536\_20190124T042829\_C001 CS OFFL SIR NOPM 2 20190124T043804 20190124T043956 C001 CS OFFL SIR NOPM 2 20190124T044639 20190124T050419 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T050902\_20190124T051739\_C001 CS OFFL SIR NOPM 2 20190124T053205 20190124T053451 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T053638\_20190124T055301\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T055515\_20190124T060951\_C001 CS OFFL SIR NOPM 2 20190124T061659 20190124T061908 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T061956\_20190124T062411\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T062555\_20190124T064123\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T064324\_20190124T065246\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T072103\_20190124T073047\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T073723\_20190124T075156\_C001 CS OFFL SIR NOPM 2 20190124T075452 20190124T080312 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T080528\_20190124T082218\_C001 CS OFFL SIR NOPM 2 20190124T082442 20190124T082654 C001 CS OFFL SIR NOPM 2 20190124T090412 20190124T093119 C001 CS OFFL SIR NOPM 2 20190124T093348 20190124T093548 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T093632\_20190124T094135\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T094427\_20190124T100958\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T104148\_20190124T105256\_C001 CS OFFL SIR NOPM 2 20190124T105834 20190124T110907 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T111313\_20190124T111354\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T111555\_20190124T112156\_C001 CS OFFL SIR NOPM\_2\_20190124T112327\_20190124T115223\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T121602\_20190124T124846\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T125503\_20190124T130026\_C001 CS OFFL SIR NOPM 2 20190124T130227 20190124T130821 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T133838\_20190124T134209\_C001 CS OFFL SIR NOPM 2 20190124T135442 20190124T140306 C001 CS OFFL SIR NOPM 2 20190124T140551 20190124T142806 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T143358\_20190124T143506\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T143511\_20190124T143918\_C001 CS OFFL SIR NOPM 2 20190124T144125 20190124T145424 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T145612\_20190124T150055\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T153322\_20190124T160647\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T160908\_20190124T161403\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T161424\_20190124T161749\_C001 CS OFFL SIR NOPM 2 20190124T162504 20190124T165631 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T180304\_20190124T181644\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T181858\_20190124T183043\_C001 CS OFFL SIR NOPM 2 20190124T185827 20190124T190845 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T191025\_20190124T192454\_C001

Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status The Ocean Range Averaging Status Flag has been set for one or more record The Ice Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records. 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The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more record The Ice Range Averaging Status Flag has been set for one or more The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records.

| CS_OFFL_SIR_NOPM_2_20190124T192712_20190124T193212_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more<br>records.   |
|---|------------------------------|--|
| CS_OFFL_SIR_NOPM_2_20190124T193251_20190124T193353_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more<br>records.   |
| CS_OFFL_SIR_NOPM_2_20190124T194048_20190124T194212_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_NOPM_2_20190124T194509_20190124T195411_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_NOPM_2_20190124T195749_20190124T200236_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_NOPM_2_20190124T204124_20190124T210422_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_NOPM_2_20190124T210745_20190124T211129_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more<br>records.   |
| CS_OFFL_SIR_NOPM_2_20190124T211136_20190124T211144_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more<br>records.   |
| CS_OFFL_SIR_NOPM_2_20190124T211744_20190124T214548_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_NOPM_2_20190124T221809_20190124T224349_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_NOPM_2_20190124T224527_20190124T225042_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more<br>records.   |
| CS_OFFL_SIR_NOPM_2_20190124T225049_20190124T225416_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more<br>records.   |
| CS_OFFL_SIR_NOPM_2_20190124T225751_20190124T230846_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_NOPM_2_20190124T231425_20190124T233059_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPN_2_20190124T003356_20190124T003400_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPN_2_20190124T093229_20190124T093348_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.      |
| CS_OFFL_SIR_NOPN_2_20190124T111152_20190124T111312_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more<br>records.   |
| CS_OFFL_SIR_NOPN_2_20190124T211444_20190124T211650_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPR_2_20190124T030412_20190124T030656_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPR_2_20190124T050420_20190124T050901_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPR_2_20190124T075157_20190124T075256_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_NOPR_2_20190124T224350_20190124T224352_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.    |

#### 5.7 L2 SWH and Backscatter Measurement Check

CryoSat L2 data includes a SWH Averaging Status flag and an Ocean and Ice Backscatter Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Currently, there are three common status flags raised in the Level 2 products which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.

Tree Francis

SWH Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

Ocean Backscatter Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

Ice Backscatter Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 73

Number of products with errors:

| Product   | Test Failed   | Description  |
|---|---|--|
| CS_OFFL_SIR_NOPM_2_20190124T000503_20190124T002304_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T003554_20190124T003725_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T011138_20190124T011428_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T011628_20190124T012154_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_NOPM_2_20190124T012748_20190124T015000_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T015246_20190124T020140_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T021445_20190124T021721_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T023357_20190124T025345_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T025552_20190124T030052_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPM_2_20190124T030656_20190124T033951_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T040536_20190124T042829_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T043804_20190124T043956_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPM_2_20190124T044639_20190124T050419_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T050902_20190124T051739_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T053205_20190124T053451_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPM_2_20190124T053638_20190124T055301_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T055515_20190124T060951_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T061659_20190124T061908_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_NOPM_2_20190124T061956_20190124T062411_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPM_2_20190124T062555_20190124T064123_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
| CS_OFFL_SIR_NOPM_2_20190124T064324_20190124T065246_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or<br>more records. |
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CS\_OFFL\_SIR\_NOPM\_2\_20190124T072103\_20190124T073047\_C001 CS OFFL SIR NOPM 2 20190124T073723 20190124T075156 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T075452\_20190124T080312\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T080528\_20190124T082218\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T082442\_20190124T082654\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T090412\_20190124T093119\_C001 CS OFFL SIR NOPM 2 20190124T093632 20190124T094135 C001 CS OFFL SIR NOPM 2 20190124T094427 20190124T100958 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T104148\_20190124T105256\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T105834\_20190124T110907\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T111313\_20190124T111354\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T111555\_20190124T112156\_C001 CS OFFL SIR NOPM 2 20190124T112327 20190124T115223 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T121602\_20190124T124846\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T125503\_20190124T130026\_C001 CS OFFL SIR NOPM 2 20190124T130227 20190124T130821 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T133838\_20190124T134209\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T135442\_20190124T140306\_C001 CS OFFL SIR NOPM 2 20190124T140551 20190124T142806 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T143358\_20190124T143506\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T143511\_20190124T143918\_C001 CS OFFL SIR NOPM 2 20190124T144125 20190124T145424 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T145612\_20190124T150055\_C001 CS OFFL SIR NOPM 2 20190124T153322 20190124T160647 C001 CS OFFL SIR NOPM 2 20190124T160908 20190124T161403 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T161424\_20190124T161749\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T162504\_20190124T165631\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T180304\_20190124T181644\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T181858\_20190124T183043\_C001 CS OFFL SIR NOPM 2 20190124T185827 20190124T190845 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T191025\_20190124T192454\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T192712\_20190124T193212\_C001 CS OFFL SIR NOPM 2 20190124T194048 20190124T194212 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T194509\_20190124T195411\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T195749\_20190124T200236\_C001 CS OFFL SIR NOPM 2 20190124T204124 20190124T210422 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T210745\_20190124T211129\_C001 CS OFFL SIR NOPM 2 20190124T211136 20190124T211144 C001 CS OFFL SIR NOPM 2 20190124T211744 20190124T214548 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T221809\_20190124T224349\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T224527\_20190124T225042\_C001 CS OFFL SIR NOPM 2 20190124T225049 20190124T225416 C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T225751\_20190124T230846\_C001 CS\_OFFL\_SIR\_NOPM\_2\_20190124T231425\_20190124T233059\_C001 CS\_OFFL\_SIR\_NOPN\_2\_20190124T003356\_20190124T003400\_C001 CS\_OFFL\_SIR\_NOPN\_2\_20190124T093229\_20190124T093348\_C001 CS OFFL SIR NOPN 2 20190124T111152 20190124T111312 C001 CS\_OFFL\_SIR\_NOPN\_2\_20190124T211444\_20190124T211650\_C001 CS\_OFFL\_SIR\_NOPR\_2\_20190124T030412\_20190124T030656\_C001 CS OFFL SIR NOPR 2 20190124T050420 20190124T050901 C001

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Ice Backscatter Averaging Status

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The SWH and Ocean Averaging Status Flags have been set for one or more records.

### 5.8 L2 Ocean Retracking Quality Check

CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

48

Ocean Retracking Quality Flag: This flag is currently set for products over land and sea ice, but this is to be expected. The number of products with this error flag set is given below.

Number of products with errors: