



## 1. Overview

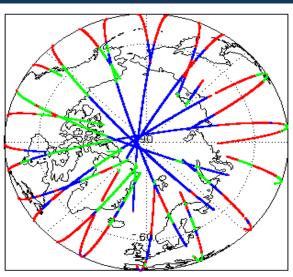
| Report Production: | 07-May-2019                         |  |
|--------------------|-------------------------------------|--|
| Processor Used:    | CryoSat Ocean Processor             |  |
| Data Used:         | Near Real Time Ocean Products (NOP) |  |

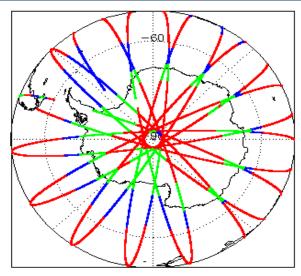
| Check                                      | L1 & L2                      |
|--------------------------------------------|------------------------------|
| Server check: science-pds.cryosat.esa.int  | Nominal                      |
| Server check: calval-pds.cryosat.esa.int   | Nominal                      |
| Product Software Check                     | Nominal                      |
| Product Format Check                       | Nominal                      |
| Product Header Analysis                    | Nominal                      |
| Auxiliary Data File Usage Check            | Nominal                      |
| Auxiliary Correction Error Check           | Nominal                      |
| Measurement Confidence Data Check          | See Section 4.5, 4.6 and 5.5 |
| Range, SWH & Backscatter Measurement Check | See Section 5.6, 5.7         |
| Ocean Retracking Quality Check             | See Section 5.8              |

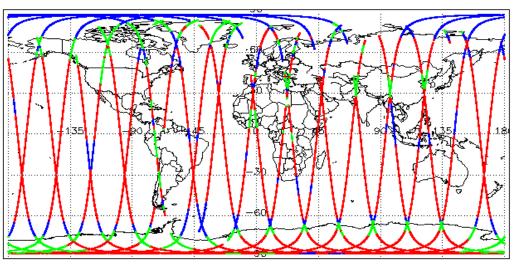
| Mission / Instrument News |      |  |
|---------------------------|------|--|
| 05-May-2019               |      |  |
| 06-May-2019               | None |  |

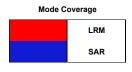
07-May-2019 Nothing planned

# 2. Global Coverage









# 3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

# 4. 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:

0

## 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.

#### 4.3 L1B Auxilary Data File Usage Check

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

Dynamic Atmospheric Correction: The DAC is missing in all products because the auxiliary files required are not available in time for processing. This known and expected behaviour.

Number of products with errors:

# 4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

### 4.5 L1B Measurement Confidence Data Check

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

Attitude Correction Missing: This flag is currently set in error for NOPR products due to a configuration issue. This is being investigated and will be updated in the next SW update.

Number of products with errors:

| Product                                                 | Test Failed         | Description                                                                  |
|---------------------------------------------------------|---------------------|------------------------------------------------------------------------------|
| CS_OFFL_SIR_NOPM1B_20190506T164649_20190506T165125_C001 | Power scaling error | There is an error in the scaling of the L1B waveform for one or more records |

### 4.6 L1B Waveform Group Data Check

CryoSat L1B data includes a waveform data 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 products over land, but this is to be expected.

Number of products with errors:

| Product                                                 | Test Failed  | Description                                          |
|---------------------------------------------------------|--------------|------------------------------------------------------|
| CS_OFFL_SIR_NOPM1B_20190506T133532_20190506T133808_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPM1B_20190506T142654_20190506T142953_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20190506T014707_20190506T014816_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20190506T014925_20190506T015057_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20190506T081545_20190506T081646_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20190506T123235_20190506T123428_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20190506T131612_20190506T131829_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20190506T145157_20190506T145708_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20190506T180709_20190506T180904_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20190506T063829_20190506T064832_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20190506T081227_20190506T081539_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20190506T094631_20190506T094703_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20190506T095628_20190506T095844_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20190506T113915_20190506T114630_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20190506T131315_20190506T131612_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20190506T144945_20190506T145156_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20190506T182026_20190506T182144_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20190506T232006_20190506T232051_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20190506T235402_20190507T000102_C001 | Loss of Echo | The tracking echo is missing for one or more records |

## 5. NOP Level 2 Data Quality Check

### 5.1 L2 Product Format Check

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

Number of products with errors:

#### 5.2 L2 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:

## 5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

## 5.4 L2 Auxiliary Correction Error Check

For all products, the auxiliary corrections within the Geophysical Group are checked for the default error value (32767). 0

Number of products with errors:

## 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

| Product                                                 | Test Failed         | Description                                                                 |
|---------------------------------------------------------|---------------------|-----------------------------------------------------------------------------|
| CS_OFFL_SIR_NOPM_2_20190506T164649_20190506T165125_C001 | Power scaling error | There is an error in the scaling of the L2 waveform for one or more records |

## 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.

Number of products with errors:

73

| Product  CS OFFL SIR NOPM 2 20190506T001320 20190506T003103 C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more           |
|------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------|
| CS_OFFL_SIR_NOPM_2_20190506T003227_20190506T004622_C001          | Ocean Range Averaging Status | records. The Ocean Range Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_NOPM_2_20190506T005419_20190506T005619_C001          | Ice Range Averaging Status   | records. The Ice Range Averaging Status Flag has been set for one or more    |
| CS OFFL SIR NOPM 2 20190506T010319 20190506T011840 C001          | Ocean Range Averaging Status | records. The Ocean Range Averaging Status Flag has been set for one or more  |
| CS OFFL SIR NOPM 2 20190506T012042 20190506T013006 C001          | Ocean Range Averaging Status | records. The Ocean Range Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_NOPM_2_20190506T015303_20190506T015344_C001          | Ocean Range Averaging Status | records. The Ocean Range Averaging Status Flag has been set for one or more  |
| CS OFFL SIR NOPM 2 20190506T015641 20190506T020906 C001          | Ocean Range Averaging Status | records. The Ocean Range Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_NOPM_2_20190506T022509_20190506T022831_C001          | Ocean Range Averaging Status | records. The Ocean Range Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_NOPM_2_20190506T023224_20190506T024023_C001          | Ice Range Averaging Status   | 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  |
| CS_OFFL_SIR_NOPM_2_20190506T024259_20190506T025747_C001          | Ocean Range Averaging Status | records. The Ocean Range Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_NOPM_2_20190506T033442_20190506T040754_C001          | Ocean Range Averaging Status | records.  The Ice Range Averaging Status Flag has been set for one or more   |
| CS_OFFL_SIR_NOPM_2_20190506T041333_20190506T041909_C001          | Ice Range Averaging Status   | records. The Ocean Range Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_NOPM_2_20190506T042241_20190506T044657_C001          | Ocean Range Averaging Status | records. The Ocean Range Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_NOPM_2_20190506T051857_20190506T053007_C001          | Ocean Range Averaging Status | records.  The Ocean Range Averaging Status Flag has been set for one or more |
| CS_OFFL_SIR_NOPM_2_20190506T053544_20190506T054639_C001          | Ocean Range Averaging Status | records.  The loc Range Averaging Status Flag has been set for one or more   |
| CS_OFFL_SIR_NOPM_2_20190506T055307_20190506T055744_C001          | Ice Range Averaging Status   | records.                                                                     |
| CS_OFFL_SIR_NOPM_2_20190506T060105_20190506T062907_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T065250_20190506T072531_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T073216_20190506T073749_C001          | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPM_2_20190506T074009_20190506T074536_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T081646_20190506T081837_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T083150_20190506T090508_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T091119_20190506T091632_C001          | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPM_2_20190506T091933_20190506T093816_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T100958_20190506T104328_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T105136_20190506T105533_C001          | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPM_2_20190506T105949_20190506T112636_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T112654_20190506T113356_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T113524_20190506T113805_C001          | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPM_2_20190506T115013_20190506T120057_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T120702_20190506T122303_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T122459_20190506T123017_C001          | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPM_2_20190506T123036_20190506T123235_C001          | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.    |
| CS_OFFL_SIR_NOPM_2_20190506T124101_20190506T125356_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T125610_20190506T130905_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T131051_20190506T131253_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T133532_20190506T133808_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_NOPM_2_20190506T133811_20190506T134557_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more           |
| CS_OFFL_SIR_NOPM_2_20190506T134737_20190506T140148_C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more           |
| CS_OFFL_SIR_NOPM_2_20190506T140424_20190506T140928_C001          | Ice Range Averaging Status   | records. The Ice Range Averaging Status Flag has been set for one or more    |
| CS OFFL SIR NOPM 2 20190506T142654 20190506T142953 C001          | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more           |
| CS_OFFL_SIR_NOPM_2_20190506T143737_20190506T143948_C001          | Ocean Range Averaging Status | records. The Ocean Range Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_NOPM_2_20190506T144111_20190506T144812_C001          | Ocean Range Averaging Status | records. The Ocean Range Averaging Status Flag has been set for one or more  |
| CS OFFL SIR NOPM 2 20190506T151819 20190506T152210 C001          | Ocean Range Averaging Status | 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  |
| CS_OFFL_SIR_NOPM_2_20190506T152326_20190506T154031_C001          | Ocean Range Averaging Status | records.                                                                     |

| CS_OFFL_SIR_NOPM_2_20190506T154433_20190506T154844_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
|---------------------------------------------------------|------------------------------|-----------------------------------------------------------------------------|
| CS_OFFL_SIR_NOPM_2_20190506T154851_20190506T154859_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_NOPM_2_20190506T154906_20190506T155054_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_NOPM_2_20190506T155522_20190506T162101_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T165536_20190506T172030_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T172234_20190506T172758_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_NOPM_2_20190506T172804_20190506T173129_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_NOPM_2_20190506T173500_20190506T174559_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T175137_20190506T180708_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T183845_20190506T185241_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T185419_20190506T190004_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T190229_20190506T191037_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_NOPM_2_20190506T191415_20190506T194803_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T202128_20190506T203047_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T203124_20190506T203858_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T204207_20190506T204724_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_NOPM_2_20190506T205404_20190506T211537_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T211823_20190506T212739_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T213935_20190506T214358_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T215947_20190506T220429_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T220617_20190506T221725_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T222324_20190506T222624_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_NOPM_2_20190506T223322_20190506T230626_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T232245_20190506T232938_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T232952_20190506T235402_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPN_2_20190506T213901_20190506T213916_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPR_2_20190506T000043_20190506T000207_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPR_2_20190506T232101_20190506T232141_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.

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.

Number of products with errors: 73

| Product                                                 | Test Failed                                                 | Description                                                                     |
|---------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------|
| CS_OFFL_SIR_NOPM_2_20190506T001320_20190506T003103_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T003227_20190506T004622_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T005419_20190506T005619_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T005726_20190506T010121_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T010319_20190506T011840_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T012042_20190506T013006_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T015303_20190506T015344_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T015641_20190506T020906_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T022509_20190506T022831_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T023224_20190506T024023_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T024259_20190506T025747_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T033442_20190506T040754_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T041333_20190506T041909_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T042241_20190506T044657_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T051857_20190506T053007_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
|                                                         |                                                             |                                                                                 |

| CS_OFFL_SIR_NOPM_2_20190506T053544_20190506T054639_C001             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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|                                                                     | er Averaging Status more records.  The Ice Backscatter Averaging Status Flag has been set for one or more                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| SWH Ave                                                             | activer Averaging Status records.  The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| CS_OFFL_SIR_NOPM_Z_201905061060105_201905061062907_C001  Backscattt | er Averaging Status more records.  The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| CS OFFE SIR NOPM 2 201905061065250 201905061072531 C001             | er Averaging Status more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                     | The Ice Backscatter Averaging Status Flag has been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CS_OFFL_SIR_NOPM_2_201905061074009_201905061074536_C001  Backscatte | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CS OFFE SIR NOPM 2 201905061081646 201905061081837 C001             | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                     | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                     | The Ice Backscatter Averaging Status Flag has been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                     | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CS_OFFL_SIR_NOPM_2_20190506T100958_20190506T104328_C001             | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                     | er Averaging Status more records.  The loe Backscatter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Fl |
|                                                                     | records.  The loe Backscatter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more s |
| CS_OFFL_SIR_NOPM_2_20100506T105040_20100506T112636_C001SWH Avei     | aging Status, Ocean  The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| SWH Ave                                                             | er Averaging Status more records.  aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                     | ar Averaging Status more records.  The Ice Backscatter Averaging Status Flag has been set for one or more                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| SWH Ave                                                             | action Averaging Status records.  The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CS_OFFL_SIR_NOPM_2_201905061115013_20190506112005/_C001 Backscatt   | er Averaging Status more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                     | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CS_OFFL_SIR_NOPM_2_20190506T122459_20190506T123017_C001 lce Backs   | The Ice Backscatter Averaging Status Flag has been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CS_OFFL_SIR_NOPM_2_20190506T123036_20190506T123235_C001             | The Ice Backscatter Averaging Status Flag has been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                     | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                     | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CS_OFFL_SIR_NOPM_2_20190506T131051_20190506T131253_C001             | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CS_OFFL_SIR_NOPM_2_20190506T133532_20190506T133808_C001             | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CS_OFFI_SIR_NOPM_2_20190506T133811_20190506T134557_C001SWH Ave      | er Averaging Status more records.  aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| CS_OFFL_SIR_NOPM_2_20190506T134737_20190506T140148_C001             | er Averaging Status more records.  aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Dackscalu                                                           | er Averaging Status more records.  The loe Backscatter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more statter Averaging Status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Flag has been set for one or more status Fl |
| SWH Ave                                                             | records.  aging Status, Ocean  The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| C5_OFFL_SIR_NOPM_Z_201905001142654_201905001142955_C001  Backscatt  | er Averaging Status more records.  aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| CS_OFFL_SIR_NOPM_Z_201905061143737_201905061143948_C001 Backscatt   | er Averaging Status more records.  aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| CS_OFFL_SIR_NOPM_2_201905061144111_201905061144812_C001  Backscatte | er Averaging Status more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| CS_OFFL_SIR_NOPM_2_201905061151819_201905061152210_C001  Backscatte | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                     | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CS_OFFL_SIR_NOPM_2_20190506T154433_20190506T154844_C001             | The Ice Backscatter Averaging Status Flag has been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CS_OFFL_SIR_NOPM_2_20190506T154906_20190506T155054_C001             | The Ice Backscatter Averaging Status Flag has been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CS OFFE SIR NOPM 2 201905061155522 201905061162101 C001             | aging Status, Ocean  The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| CS OFFI SID NORM 2 20100506T165526 20100506T172030 C001             | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or ex Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                     | The Ice Backscatter Averaging Status Flag has been set for one or more                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                     | The Ice Backscatter Averaging Status Flag has been set for one or more                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CS OFFI SIR NOPM 2 20190506T173500 20190506T174559 C001             | aging Status, Ocean  The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| SWH Ave                                                             | er Averaging Status more records.  aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| CS_OFFL_SIR_NOPM_2_201905001175137_201905001160706_C001 Backscatt   | er Averaging Status more records.  The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| CS_OFFL_SIR_NOPM_Z_201905061183845_201905061185241_C001  Backscatte | more records.  The Ice Backscatter Averaging Status Flag has been set for one or more                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                     | records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| CS_OFFL_SIR_NOPM_2_201905061191415_201905061194803_C001 Backscatt   | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CS_OFFL_SIR_NOPIM_2_201905061202126_201905061203047_C001 Backscatt  | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                     | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CS_OFFL_SIR_NOPM_2_20190506T204207_20190506T204724_C001             | The Ice Backscatter Averaging Status Flag has been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                     | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CS_OFFI_SIR_NOPM_2_20190506T211823_20190506T212739_C001SWH_Ave      | arrive leads.  The SWH and Ocean Averaging Status Flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set for one or experience of the status flags have been set flags have b |
| CS OFFI SID NORM 2 20100506T213035 20100506T214358 C004 SWH Avei    | aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CS OFFI SIR NORM 2 20100506T215047 20100506T220420 C001 SWH Avei    | er Averaging Status more records.  aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| CS_OFFL_SIR_NOPM_2_20190506T220617_20190506T221725_C001             | er Averaging Status more records.  aging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Backscatt                                                           | er Averaging Status more records.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| CS_OFFL_SIR_NOPM_2_20190506T222324_20190506T222624_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
|---------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------|
| CS_OFFL_SIR_NOPM_2_20190506T223322_20190506T230626_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T232245_20190506T232938_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20190506T232952_20190506T235402_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPN_2_20190506T213901_20190506T213916_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPR_2_20190506T000043_20190506T000207_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPR_2_20190506T232101_20190506T232141_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status | 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.

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:

51