



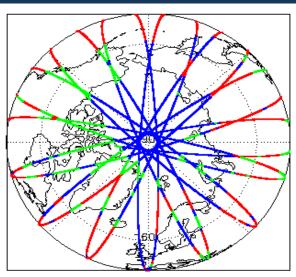
### 1. Overview

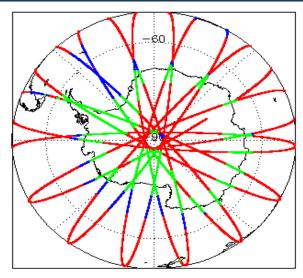
| Report Production: | 03-Apr-2018   |
|--------------------|---|
| Processor Used:    | CryoSat Ocean Processor   |
| Data Used:         | Intermediate Ocean Products (IOP)<br>L1B, L2 & P2P Science Data |

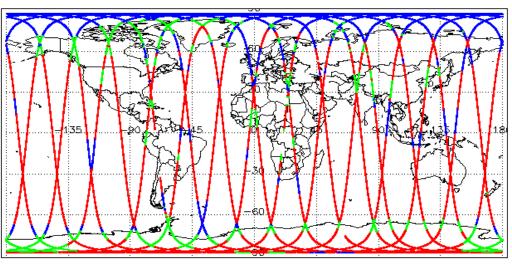
| Check                                      | L1 & L2              | P2P                  |
|--|----------------------|----------------------|
| Server check: science-pds.cryosat.esa.int  | Nominal              | Nominal              |
| Server check: calval-pds.cryosat.esa.int   | Nominal              | Nominal              |
| Product Software Check                     | Nominal              | Nominal              |
| Product Format Check                       | Nominal              | Nominal              |
| Product Header Analysis                    | Nominal              | Nominal              |
| Auxiliary Data File Usage Check            | Nominal              | Nominal              |
| Auxiliary Correction Error Check           | Nominal              | Nominal              |
| Measurement Confidence Data Check          | See Section 4.6      | Nominal              |
| Range, SWH & Backscatter Measurement Check | See Section 5.6, 5.7 | See Section 6.6, 6.7 |
| Ocean Retracking Quality Check             | See Section 5.8      | See Section 6.8      |

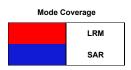
| Mission / Instrument News |                 |  |
|---------------------------|-----------------|--|
| 30-Mar-2018               | None            |  |
| 31-Mar-2018               | None            |  |
| 01-Apr-2018               | Nothing planned |  |
|                           |                 |  |

# 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. IOP 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.

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 IOPR products due to a configuration issue. This is being investigated and will be updated in the next SW update.

Number of products with errors:

Λ

#### 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:

18

| Product   | Test Failed  | Description  |
|---|--------------|--|
| CS_OFFL_SIR_IOPM1B_20180331T010615_20180331T011448_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPM1B_20180331T041623_20180331T045042_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPM1B_20180331T092010_20180331T092941_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPM1B_20180331T182319_20180331T184927_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPN1B_20180331T023308_20180331T023748_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPN1B_20180331T035235_20180331T035339_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPN1B_20180331T072245_20180331T072357_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPN1B_20180331T090019_20180331T090311_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPN1B_20180331T103737_20180331T104154_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPN1B_20180331T204626_20180331T204742_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPR1B_20180331T022304_20180331T023308_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPR1B_20180331T035105_20180331T035154_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPR1B_20180331T035200_20180331T035235_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPR1B_20180331T053450_20180331T053625_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPR1B_20180331T053625_20180331T054056_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPR1B_20180331T100417_20180331T100702_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPR1B_20180331T103427_20180331T103644_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_IOPR1B_20180331T140753_20180331T140925_C001 | Loss of Echo | The tracking echo is missing for one or more records |

#### 5. IOP 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:

0

### 5.3 L2 Auxiliary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the 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).

Number of products with errors:

0

### 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:

0

### 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.

| ScipFill_SIR_LOPM_2_20180331700624_20180331700356_C001 Coan Rarge Averaging Status The Ocean Rarge Averaging Status Flag has been set for one or more records. ScipFill_SIR_LOPM_2_20180331701616_0018031701486_C001 Coan Rarge Averaging Status The Ocean Rarge Averaging Status Flag has been set for one or more records. ScipFill_SIR_LOPM_2_20180331701201486_C001 Coan Rarge Averaging Status The Ocean Rarge Averaging Status Flag has been set for one or more records. The Ocean Rarge Averaging Status Flag has been set for one or more records. The Ocean Rarge Averaging Status Flag has been set for one or more records. The Ocean Rarge Averaging Status Flag has been set for one or more records. The Ocean Rarge Averaging Status Flag has been set for one or more records. The Ocean Rarge Averaging Status Flag has been set for one or more records. The Ocean Rarge Averaging Status The Ocean Rarg |
|--|
| CS_OFFL_SIR_LOPM_2_20180331T00185_2018033T0171454_2010  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  CS_OFFL_SIR_LOPM_2_2018033T0174504_2018033T0171452_20100  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Range Averaging Slatus Filig has been set for one or more records.  Ocean Ra |
| CS_OFFL_SIR_IOPM_2_20180331T01204_20180331T01408_C001  CS_OFFL_SIR_IOPM_2_20180331T01204_20180331T01428_C001  CS_OFFL_SIR_IOPM_2_20180331T012250_C0010  CS_OFFL_SIR_IOPM_2_20180331T012250_20180331T012230_C001  CS_OFFL_SIR_IOPM_2_20180331T012250_20180331T012230_C001  CS_OFFL_SIR_IOPM_2_20180331T012250_20180331T012230_C001  CS_OFFL_SIR_IOPM_2_20180331T012250_2018031T012230_C001  CS_OFFL_SIR_IOPM_2_20180331T0120230_20180031T012230_C001  CS_OFFL_SIR_IOPM_2_20180331T0120230_C001  CS_OFFL_SIR_IOPM_2_20180331T012031_C00331T012020_C001  CS_OFFL_SIR_IOPM_2_20180331T00203_20180331T00200_C001  CS_OFFL_SIR_IOPM_2_20180331T00203_20180331T00200_C001  CS_OFFL_SIR_IOPM_2_20180331T00203_20180331T00200_C001  CS_OFFL_SIR_IOPM_2_20180331T00204_20180331T00203_0001  CS_OFFL_SIR_IOPM_2_20180331T00204_20180331T00203_0001  CS_OFFL_SIR_IOPM_2_20180331T00203_20180331T00203_0001  CS |
| CS_OFFL_SIR_IOPM_2_20180331T012024_20180331T021428_C001  CS_OFFL_SIR_IOPM_2_20180331T012025_20180331T02204_C001  CS_OFFL_SIR_IOPM_2_20180331T02255_20180331T02204_C001  CS_OFFL_SIR_IOPM_2_20180331T022749_20180331T032304_C001  CS_OFFL_SIR_IOPM_2_20180331T012749_20180331T032304_C001  CS_OFFL_SIR_IOPM_2_20180331T012749_20180331T032304_C001  CS_OFFL_SIR_IOPM_2_20180331T012749_20180331T032302_C001  CS_OFFL_SIR_IOPM_2_20180331T012527_C001  CS_OFFL_SIR_IOPM_2_20180331T012527_C001  CS_OFFL_SIR_IOPM_2_20180331T012527_C001  CS_OFFL_SIR_IOPM_2_20180331T012527_C001  CS_OFFL_SIR_IOPM_2_20180331T012020_C001  CS_OFFL_SIR_IOPM_2_20180331T012020_C001  CS_OFFL_SIR_IOPM_2_20180331T012020_C001  CS_OFFL_SIR_IOPM_2_20180331T012020_C001  CS_OFFL_SIR_IOPM_2_20180331T012020_C001  CS_OFFL_SIR_IOPM_2_20180331T012020_C001  CS_OFFL_SIR_IOPM_2_20180331T012020_C001  CS_OFFL_SIR_IOPM_2_20180331T012020_C001  CS_OFFL_SIR_IOPM_2_20180331T012020_C001  CS_OFFL_SIR_IOPM_2_20180331T012223_C001  CS_OFFL_SIR_IOPM_2_20180331T012223_C001  CS_OFFL_SIR_IOPM_2_20180331T012223_C001  CS_OFFL_SIR_IOPM_2_20180331T012220_C001  CS_OFFL_SIR_IOPM_2_20180331T012223_C001  CS_OFFL_SIR_IOPM_2_20180331T012233_C001  CS_OFFL_SIR_IOPM_2_20180331T01223_C001  CS_OFFL_SIR_IOPM_2_20180331T01223_C001  CS_OFFL_SIR_IOPM_2_20180331T01223_C001  CS_OFFL_SIR_IOPM_2_20180331T01223_C001  CS_OFFL_SIR_IOPM_2_20180331T01223_C001  CS_OFFL_SIR_IOPM_2_20180331T01223_C001  CS_OFFL_SIR_IOPM_2_20180331T01220_C001  CS_OFFL_SIR_IOPM_2_20180331T01220_C001  CS_OFFL_SIR_IOPM_2_20180331T01220_C001  CS_OFFL_SIR_IOPM_2_20180331T01220_C001  CS_OFFL_SIR_IOPM_2_2 |
| CS_OFFL_SIR_IOPM_2_20180331T04504_20180331T02342_CO10  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Fla |
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| CS_OFFL_SIR_JOPM_2_20180331T09202_20180331T09224_C001  CS_OFFL_SIR_JOPM_2_20180331T092382_20180331T09202_C001  CS_OFFL_SIR_JOPM_2_20180331T09202_20180331T09201_C001  CS_OFFL_SIR_JOPM_2_20180331T09201_20180331T09201_C001  CS_OFFL_SIR_JOPM_2_20180331T09201_20180331T09201_C001  CS_OFFL_SIR_JOPM_2_20180331T09201_20180331T09201_C001  CS_OFFL_SIR_JOPM_2_20180331T09201_20180331T09201_C001  CS_OFFL_SIR_JOPM_2_20180331T09201_20180331T09201_C001  CS_OFFL_SIR_JOPM_2_20180331T09201_20180331T09201_C001  CS_OFFL_SIR_JOPM_2_20180331T09201_20180331T085052_C001  CS_OFFL_SIR_JOPM_2_20180331T09201_20180331T09201_C001  CS_OFFL_SIR_JOPM_2_20180331T09201_C0180331T09201_C001  CS_OFFL_SIR_JOPM_2_20180331T09201_C0180331T09201_C001  CS_OFFL_SIR_JOPM_2_20180331T09201_C0180331T09201_C001  CS_OFFL_S |
| CS_OFFL_SIR_IOPM_2_20180331T082368_20180331T085012_C001  CS_OFFL_SIR_IOPM_2_20180331T045042_C001  CS_OFFL_SIR_IOPM_2_20180331T045042_C001  CS_OFFL_SIR_IOPM_2_20180331T045042_0180331T052302_C001  CS_OFFL_SIR_IOPM_2_20180331T05001_20180331T052302_C001  CS_OFFL_SIR_IOPM_2_20180331T05001_20180331T052302_C001  CS_OFFL_SIR_IOPM_2_20180331T055047_20180331T062825_C001  CS_OFFL_SIR_IOPM_2_20180331T063001_20180331T06301_C001  CS_OFFL_SIR_IOPM_2_20180331T063001_20180331T06301_C001  CS_OFFL_SIR_IOPM_2_20180331T063001_20180331T06301_C001  CS_OFFL_SIR_IOPM_2_20180331T063001_20180331T063001_C001  CS_OFFL_SIR_IOPM_2_20180331T063001_20180331T063001_C001  CS_OFFL_SIR_IOPM_2_20180331T073742_20180331T073742_C0180331T063001_C001  CS_OFFL_SIR_IOPM_2_20180331T073742_C0180331T065001_C001  CS_OFFL_SIR_IOPM_2_20180331T073742_C0180331T065052_C001  CS_OFFL_SIR_IOPM_2_20180331T063001_C001  CS_OFFL_SIR_IOPM_2_20180 |
| CS_OFFL_SIR_IOPM_2_20180331T045042_C001  CS_OFFL_SIR_IOPM_2_20180331T045042_C001  CS_OFFL_SIR_IOPM_2_20180331T045042_0180331T050116_C001  CS_OFFL_SIR_IOPM_2_20180331T045042_0180331T0500116_C001  CS_OFFL_SIR_IOPM_2_20180331T0503011_20180331T05202_C001  CS_OFFL_SIR_IOPM_2_20180331T055447_20180331T052467_C001  CS_OFFL_SIR_IOPM_2_20180331T055447_20180331T063067_C001  CS_OFFL_SIR_IOPM_2_20180331T063069_20180331T063067_C001  CS_OFFL_SIR_IOPM_2_20180331T063069_20180331T063067_C001  CS_OFFL_SIR_IOPM_2_20180331T063069_20180331T064020_C001  CS_OFFL_SIR_IOPM_2_20180331T064223_20180331T071110_C001  CS_OFFL_SIR_IOPM_2_20180331T071127_20180331T071110_C001  CS_OFFL_SIR_IOPM_2_20180331T071127_20180331T07112001  CS_OFFL_SIR_IOPM_2_20180331T0712041_20180331T0712040_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T0712040_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T0712040_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T0712040_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T074508_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T074508_C001  CS_OFFL_SIR_IOPM_2_20180331T073742_20180331T074508_C001  CS_OFFL_SIR_IOPM_2_20180331T076507_20180331T086502_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081502_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081502_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T085505_C001  CS_OFFL_SIR_IOPM_2_20180331T085505_C001  CS_OFFL_SIR_IOPM_2_20180331T085505_C001  CS_OFFL_SIR_IOPM_2_20180331T085505_C001  CC_OCAR Range Averaging Status  The Ocan Range Averaging Status Flag has been set for one or more records.  The Ocan Range Averaging Status Flag has been set for one or more records.  The Ocan Range Averaging Status Flag has been set for one or more records.  The Ocan Range Averaging Status Flag has been set for one or more records.  The Ocan Range Averaging Status Flag has been set for one or more records.  The Ocan Range Averaging Status Flag has been set for one or |
| CS_OFFL_SIR_IOPM_2_20180331T045604_20180331T065202_C001  CS_OFFL_SIR_IOPM_2_20180331T065030_20180331T065002  CS_OFFL_SIR_IOPM_2_20180331T065030_20180331T065002  CS_OFFL_SIR_IOPM_2_20180331T06306_20180331T064002_C001  CS_OFFL_SIR_IOPM_2_20180331T06306_20180331T064002_C001  CS_OFFL_SIR_IOPM_2_20180331T06306_20180331T064002_C001  CS_OFFL_SIR_IOPM_2_20180331T06306_20180331T064002_C001  CS_OFFL_SIR_IOPM_2_20180331T064223_20180331T071110_C001  CS_OFFL_SIR_IOPM_2_20180331T071127_20180331T0712041_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T072041_C001  CS_OFFL_SIR_IOPM_2_20180331T073742_20180331T074538_C001  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T080803_C001  CS_OFFL_SIR_IOPM_2_20180331T080842_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080842_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080842_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080842_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080842_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080842_20180331T08555_C001  CS_OFFL_SIR_IOPM_2_20180331T080842_20180331T08555_C001  CS_OFFL_SIR_IOPM_2_20180331T084063_20180331T08555_C001  CS_OFFL_SIR_IOPM_2_20180331T084063_20180331T08555_C001  COean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  The Loe Range Averaging Status Flag has been set for one or more records.  The Coean Range Averaging Status Flag has been set for one or more records.  The Coean Range Averaging Status Flag has been set for one or more records.  The Coean Range Averaging Status Flag has been set for one or more records.  The Coean Range Averaging Status Flag has been set for one or more records.  The Coean Range Averaging Status Flag ha |
| CS_OFFL_SIR_IOPM_2_20180331T095091_20180331T095302_C001  CS_OFFL_SIR_IOPM_2_20180331T095301_20180331T095202_C001  CS_OFFL_SIR_IOPM_2_20180331T095301_20180331T095202_C001  CS_OFFL_SIR_IOPM_2_20180331T095301_20180331T09501_C001  CS_OFFL_SIR_IOPM_2_20180331T095301_20180331T094020_C001  CS_OFFL_SIR_IOPM_2_20180331T095301_20180331T094020_C001  CS_OFFL_SIR_IOPM_2_20180331T094223_20180331T094020_C001  CS_OFFL_SIR_IOPM_2_20180331T094223_20180331T094020_C001  CS_OFFL_SIR_IOPM_2_20180331T071127_20180331T094020_C001  CS_OFFL_SIR_IOPM_2_20180331T071127_20180331T071140_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T07140538_C001  CS_OFFL_SIR_IOPM_2_20180331T073742_20180331T075207_C0180331T075207_C0180331T075207_C0180331T075207_C0180331T075207_C0180331T075207_C0180331T075207_C0180331T085083_C001  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T086083_C001  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T085052_C010  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T085055_C001  CS_OFFL_SIR_IOPM_2_20180331T085052_20180331T085055_C001  CS_OFFL_SIR_IOPM_2_20180331T085052_20180331T085055_C001  CS_OFFL_SIR_IOPM_2_20180331T085052_20180331T085052_C001  CS_OFFL_SIR_IOPM_2_20180331T085052_20180331T085052_C001  CS_OFFL_SIR_IOPM_2_20180331T085052_20180331T085052_C001  CS_OFFL_SIR_IOPM_2_20180331T085052_20180331T085055_C001  CS_OFFL_SIR_IOPM_2_20180331T085052_20180331T085055_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085055_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085055_C |
| CS_OFFL_SIR_IOPM_2_20180331T08309_20180331T063617_CO01  CS_OFFL_SIR_IOPM_2_20180331T063617_CO01  CS_OFFL_SIR_IOPM_2_20180331T063617_CO01  CS_OFFL_SIR_IOPM_2_20180331T063619_20180331T063617_CO01  CS_OFFL_SIR_IOPM_2_20180331T063619_20180331T064020_CO01  CS_OFFL_SIR_IOPM_2_20180331T063619_20180331T064020_CO01  CS_OFFL_SIR_IOPM_2_20180331T064023_20180331T071110_CO01  CS_OFFL_SIR_IOPM_2_20180331T064023_20180331T071110_CO01  CS_OFFL_SIR_IOPM_2_20180331T071110_CO01  CS_OFFL_SIR_IOPM_2_20180331T071110_CO01  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T071840_CO01  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T072244_CO01  CS_OFFL_SIR_IOPM_2_20180331T073742_20180331T074538_CO01  CS_OFFL_SIR_IOPM_2_20180331T073742_20180331T074538_CO01  CS_OFFL_SIR_IOPM_2_20180331T080402_20180331T080803_CO01  CS_OFFL_SIR_IOPM_2_20180331T080402_20180331T080803_CO01  CS_OFFL_SIR_IOPM_2_20180331T080402_20180331T080803_CO01  CS_OFFL_SIR_IOPM_2_20180331T080403_20180331T081501_CO01  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T081723_CO01  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085255_CO01  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085255_CO01  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085555_CO01  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085555_CO01  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085555_CO01  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085555_CO01  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085555_CO01  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085555_CO01  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T092941_CO01  CCEAR Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averagi |
| CS_OFFL_SIR_IOPM_2_20180331T063609_20180331T064020_C001  Lee Range Averaging Status  The Lee Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T064022_20180331T071110_C001  CS_OFFL_SIR_IOPM_2_20180331T071127_20180331T071140_C001  CS_OFFL_SIR_IOPM_2_20180331T071127_20180331T071840_C001  CS_OFFL_SIR_IOPM_2_20180331T07127_20180331T071840_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T07244_C001  Lee Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T074538_C001  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T08339_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T08339_C001  CS_OFFL_SIR_IOPM_2_20180331T0809455_20180331T08339_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T08555_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T08555_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T08555_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085051_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085055_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085055_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085055_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085055_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20 |
| CS_OFFL_SIR_IOPM_2_20180331T06402_20180331T06402_C001  |
| CS_OFFL_SIR_IOPM_2_20180331T064223_20180331T071110_C001  CS_OFFL_SIR_IOPM_2_20180331T064223_20180331T071140_C001  CS_OFFL_SIR_IOPM_2_20180331T071127_20180331T071840_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T072244_C001  Loe Range Averaging Status  CS_OFFL_SIR_IOPM_2_20180331T073742_20180331T075286_C001  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T080803_C001  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T080803_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T085001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T08505_20180331T083839_C001  CS_OFFL_SIR_IOPM_2_20180331T08505_20180331T083839_C001  CS_OFFL_SIR_IOPM_2_20180331T08505_20180331T085255_C001  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085555_C001  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085555_C001  CS_OFFL_SIR_IOPM_2_20180331T085247_20180331T085555_C001  CS_OFFL_SIR_IOPM_2_20180331T085247_20180331T0852941_C001  CS_OFFL_SIR_IOPM_2_20180331T092010_20180331T0852941_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095452_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095452_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095452_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095552_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095552_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095552_C001  CS_OFFL_SIR_IOPM_2_20180331T0 |
| CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T071840_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T072244_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T072244_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T074538_C001  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T080803_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T080803_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T082605_20180331T08339_C001  CS_OFFL_SIR_IOPM_2_20180331T082605_20180331T083939_C001  CS_OFFL_SIR_IOPM_2_20180331T082605_20180331T083555_C001  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085655_C001  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085655_C001  CS_OFFL_SIR_IOPM_2_20180331T082501_20180331T085655_C001  CS_OFFL_SIR_IOPM_2_20180331T09201_20180331T095415_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T095415_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T095415_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T095415_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T095415_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T095415_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095410_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095410_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095410_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095410_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095410_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095410_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095400_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095400_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095400_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095520_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095520_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095520_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095400_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095400_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095520_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095520_C0 |
| CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T072244_C001  CS_OFFL_SIR_IOPM_2_20180331T072041_20180331T074538_C001  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T080803_C001  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T080803_C001  CS_OFFL_SIR_IOPM_2_20180331T0808042_20180331T080803_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T0808042_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T081502_20180331T081723_C001  CS_OFFL_SIR_IOPM_2_20180331T082605_20180331T083839_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085255_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085655_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085655_C001  CS_OFFL_SIR_IOPM_2_20180331T082010_20180331T085655_C001  CS_OFFL_SIR_IOPM_2_20180331T082010_20180331T082941_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T092941_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T094718_C001  CS_OFFL_SIR_IOPM_2_20180331T094097_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T094097_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T094097_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T0944097_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T0944097_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T0944097_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T0944097_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T0944097_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T |
| CS_OFFL_SIR_IOPM_2_20180331T07242_20180331T074538_C001  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T080803_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T080803_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T081520_20180331T081723_C001  CS_OFFL_SIR_IOPM_2_20180331T082605_20180331T083839_C001  CS_OFFL_SIR_IOPM_2_20180331T082605_20180331T085255_C001  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085255_C001  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085255_C001  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085655_C001  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T094718_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T094718_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T094907_20180331T095410_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095520_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095520_C |
| CS_OFFL_SIR_IOPM_2_20180331T073742_20180331T074538_C001  CS_OFFL_SIR_IOPM_2_20180331T075207_20180331T080803_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T081520_20180331T081501_C001  CS_OFFL_SIR_IOPM_2_20180331T081520_20180331T081723_C001  CS_OFFL_SIR_IOPM_2_20180331T082605_20180331T083839_C001  CS_OFFL_SIR_IOPM_2_20180331T084503_20180331T083839_C001  CS_OFFL_SIR_IOPM_2_20180331T084503_20180331T085555_C001  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085655_C001  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085655_C001  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085655_C001  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085655_C001  CS_OFFL_SIR_IOPM_2_20180331T092010_20180331T092041_C001  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T094907_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095552_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_ |
| CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T08093_C001  CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  Ice Range Averaging Status  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T082605_20180331T083839_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085255_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for on |
| CS_OFFL_SIR_IOPM_2_20180331T080942_20180331T081501_C001  Ice Range Averaging Status  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been s |
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| CS_OFFL_SIR_IOPM_2_20180331T082605_20180331T083839_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085655_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T092010_20180331T092941_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T092941_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T094718_C001  CS_OFFL_SIR_IOPM_2_20180331T094907_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  Ice Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085255_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T092010_20180331T092941_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T094718_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.   |
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| CS_OFFL_SIR_IOPM_2_20180331T092010_20180331T092941_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T094718_C001  Ice Range Averaging Status  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T094718_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  CS_OFFL_SIR_IOPM_2_20180331T094907_20180331T095412_C001  Ice Range Averaging Status  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.  The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T095412_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095436_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095436_20180331T095552_C001  CS_OFFL_SIR_IOPM_2_20180331T095436_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095436_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095436_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095436_2018031T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095436_2018031T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095436_2018031T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T0 |
| CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001  CS_OFFL_SIR_IOPM_2_20180331T095436_20180331T095552_C001  Ice Range Averaging Status  Ice Range Averaging Status  The Ice Range Averaging Status Flag has been set for one or more  Ice Range Averaging Status  The Ice Range Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_IOPM_2_201803311095419_201803311095430_C001  |
|  |
| The Ocean Range Averaging Status Flag has been get for one or more   |
| CS_OFFL_SIR_IOPM_2_20180331T100244_20180331T100350_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T102214_20180331T102430_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T102553_20180331T102942_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T110920_20180331T112623_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T112900_20180331T113328_C001  |
| CS_OFFL_SIR_IOPM_2_20180331T113350_20180331T113526_C001 Ice Range Averaging Status  The Ice Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_IOPM_2_20180331T113920_20180331T120346_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T123946_20180331T130603_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T130722_20180331T131229_C001  |
| CS_OFFL_SIR_IOPM_2_20180331T131249_20180331T131614_C001  |
| CS_OFFI_SIR_IOPM_2_20180331T131832_20180331T133044_C001 Ocean Range Averaging Status Flag has been set for one or more   |
| CS_OFFL_SIR_IOPM_2_20180331T133620_20180331T135125_C001 Ocean Range Averaging Status  CS_OFFL_SIR_IOPM_2_20180331T133620_20180331T135125_C001 Ocean Range Averaging Status  CS_OFFL_SIR_IOPM_2_20180331T133620_20180331T135125_C001  |
| CS_OFFL_SIR_IOPM_2_20180331T141505_20180331T144537_C001  |
| CS_OFFL_SIR_IOPM_2_20180331T144707_20180331T145143_C001   Ice Range Averaging Status   The Ice Range Averaging Status Flag has been set for one or more  |
| The Ice Range Averaging Status Flag has been set for one or more   |
| CS_OFFL_SIR_IOFM_2_201605311145146_201605311145519_C001 IICE Rainge Averaging Status records.  The Ocean Range Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_IOFM_2_201803311145734_201803311153256_C001  Ocean Rainge Averaging Status  records.  The Ocean Rainge 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_IOFM_2_201803311101048_201803311102503_C001  Ocean Range Averaging Status  records.  The Ocean Range Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_IOPM_2_20180331T163723_20180331T170020_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.  The Ocean Range Averaging Status Flag has been set for one or more records.  |
| CS_OFFL_SIR_IOPM_2_20180331T170306_20180331T171219_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T172436_20180331T172838_C001  Ocean Range Averaging Status  The Ocean Range Averaging Status Flag has been set for one or more records.   |

| CS_OFFL_SIR_IOPM_2_20180331T174424_20180331T174910_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
|---|------------------------------|---|
| CS_OFFL_SIR_IOPM_2_20180331T175058_20180331T180407_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T181630_20180331T182309_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T182319_20180331T184927_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T190729_20180331T193845_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T194820_20180331T195014_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T195306_20180331T195449_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T195651_20180331T201328_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T201918_20180331T202616_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T204215_20180331T204626_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T204748_20180331T205035_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T205122_20180331T210317_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T210937_20180331T212115_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T213602_20180331T215106_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T215246_20180331T220812_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T222936_20180331T223645_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T223807_20180331T224255_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T224547_20180331T230227_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T230452_20180331T231332_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T231537_20180331T233826_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPN_2_20180331T040040_20180331T040136_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPN_2_20180331T103305_20180331T103427_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPN_2_20180331T113329_20180331T113334_C001 | Ice Range Averaging Status   | The Ice Range Averaging Status Flag has been set for one or more records.   |
| CS_OFFL_SIR_IOPN_2_20180331T222349_20180331T222617_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20180331T085255_20180331T085524_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20180331T112623_20180331T112628_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20180331T170020_20180331T170306_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20180331T185436_20180331T185601_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.

| Product   | Test Failed   | Description   |
|---|---|---|
| CS_OFFL_SIR_IOPM_2_20180330T235808_20180331T000357_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T000624_20180331T003208_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_IOPM_2_20180331T010615_20180331T011448_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_IOPM_2_20180331T012024_20180331T013215_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_IOPM_2_20180331T014504_20180331T021428_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_IOPM_2_20180331T022253_20180331T022304_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_IOPM_2_20180331T023749_20180331T031119_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_IOPM_2_20180331T031700_20180331T032237_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T032358_20180331T033022_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_IOPM_2_20180331T041623_20180331T045042_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_IOPM_2_20180331T045604_20180331T050116_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T050301_20180331T052302_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_IOPM_2_20180331T055447_20180331T062825_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_IOPM_2_20180331T063609_20180331T063617_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T063619_20180331T064020_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |

|   | SWH Averaging Status, Ocean                                  | The SWH and Ocean Averaging Status Flags have been set for one or                     |
|---|--|---|
| CS_OFFL_SIR_IOPM_2_20180331T064223_20180331T071110_C001 | Backscatter Averaging Status                                 | more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T071127_20180331T071840_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_IOPM_2_20180331T072041_20180331T072244_C001 | Ice Backscatter Averaging Status                             | The Ice Backscatter Averaging Status Flag has been set for one or more records.       |
| CS_OFFL_SIR_IOPM_2_20180331T073742_20180331T074538_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_IOPM_2_20180331T075207_20180331T080803_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_IOPM_2_20180331T080942_20180331T081501_C001 | Ice Backscatter Averaging Status                             | The Ice Backscatter Averaging Status Flag has been set for one or more records.       |
| CS OFFL SIR IOPM 2 20180331T081520 20180331T081723 C001 | Ice Backscatter Averaging Status                             | The Ice Backscatter Averaging Status Flag has been set for one or more                |
| CS_OFFL_SIR_IOPM_2_20180331T082605_20180331T083839_C001 | SWH Averaging Status, Ocean                                  | records.  The SWH and Ocean Averaging Status Flags have been set for one or           |
| CS_OFFL_SIR_IOPM_2_20180331T084053_20180331T085255_C001 | Backscatter Averaging Status SWH Averaging Status, Ocean     | more records.  The SWH and Ocean Averaging Status Flags have been set for one or      |
| CS_OFFL_SIR_IOPM_2_20180331T085524_20180331T085655_C001 | Backscatter Averaging Status<br>SWH Averaging Status, Ocean  | more records.  The SWH and Ocean Averaging Status Flags have been set for one or      |
| CS_OFFL_SIR_IOPM_2_20180331T092010_20180331T092941_C001 | Backscatter Averaging Status SWH Averaging Status, Ocean     | more records.  The SWH and Ocean Averaging Status Flags have been set for one or      |
|   | Backscatter Averaging Status SWH Averaging Status, Ocean     | more records. The SWH and Ocean Averaging Status Flags have been set for one or       |
| CS_OFFL_SIR_IOPM_2_20180331T093217_20180331T094718_C001 | Backscatter Averaging Status                                 | more records. The Ice Backscatter Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_IOPM_2_20180331T094907_20180331T095412_C001 | Ice Backscatter Averaging Status                             | records.  The Ice Backscatter Averaging Status Flag has been set for one or more      |
| CS_OFFL_SIR_IOPM_2_20180331T095419_20180331T095430_C001 | Ice Backscatter Averaging Status                             | records.  |
| CS_OFFL_SIR_IOPM_2_20180331T095436_20180331T095552_C001 | Ice Backscatter Averaging Status                             | The Ice Backscatter Averaging Status Flag has been set for one or more records.       |
| CS_OFFL_SIR_IOPM_2_20180331T100244_20180331T100350_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_IOPM_2_20180331T102214_20180331T102430_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_IOPM_2_20180331T110920_20180331T112623_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_IOPM_2_20180331T112900_20180331T113328_C001 | Ice Backscatter Averaging Status                             | The Ice Backscatter Averaging Status Flag has been set for one or more                |
| CS_OFFL_SIR_IOPM_2_20180331T113350_20180331T113526_C001 | Ice Backscatter Averaging Status                             | records. The Ice Backscatter Averaging Status Flag has been set for one or more       |
|   | SWH Averaging Status, Ocean                                  | records. The SWH and Ocean Averaging Status Flags have been set for one or            |
| CS_OFFL_SIR_IOPM_2_20180331T113920_20180331T120346_C001 | Backscatter Averaging Status SWH Averaging Status, Ocean     | more records. The SWH and Ocean Averaging Status Flags have been set for one or       |
| CS_OFFL_SIR_IOPM_2_20180331T123946_20180331T130603_C001 | Backscatter Averaging Status                                 | more records.  The Ice Backscatter Averaging Status Flag has been set for one or more |
| CS_OFFL_SIR_IOPM_2_20180331T130722_20180331T131229_C001 | Ice Backscatter Averaging Status                             | records.  |
| CS_OFFL_SIR_IOPM_2_20180331T131249_20180331T131614_C001 | Ice Backscatter Averaging Status                             | The Ice Backscatter Averaging Status Flag has been set for one or more records.       |
| CS_OFFL_SIR_IOPM_2_20180331T131832_20180331T133044_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_IOPM_2_20180331T133620_20180331T135125_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_IOPM_2_20180331T141505_20180331T144537_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_IOPM_2_20180331T144707_20180331T145143_C001 | Ice Backscatter Averaging Status                             | The Ice Backscatter Averaging Status Flag has been set for one or more records.       |
| CS_OFFL_SIR_IOPM_2_20180331T145146_20180331T145519_C001 | Ice Backscatter Averaging Status                             | The Ice Backscatter Averaging Status Flag has been set for one or more records.       |
| CS_OFFL_SIR_IOPM_2_20180331T145754_20180331T153258_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_IOPM_2_20180331T154558_20180331T154753_C001 | SWH Averaging Status, Ocean                                  | The SWH and Ocean Averaging Status Flags have been set for one or                     |
| CS_OFFL_SIR_IOPM_2_20180331T161425_20180331T161529_C001 | Backscatter Averaging Status<br>SWH Averaging Status, Ocean  | more records.  The SWH and Ocean Averaging Status Flags have been set for one or      |
| CS_OFFL_SIR_IOPM_2_20180331T161648_20180331T162503_C001 | Backscatter Averaging Status<br>SWH Averaging Status, Ocean  | more records.  The SWH and Ocean Averaging Status Flags have been set for one or      |
|   | Backscatter Averaging Status                                 | more records.  The Ice Backscatter Averaging Status Flag has been set for one or more |
| CS_OFFL_SIR_IOPM_2_20180331T162648_20180331T163209_C001 | Ice Backscatter Averaging Status SWH Averaging Status, Ocean | records. The SWH and Ocean Averaging Status Flags have been set for one or            |
| CS_OFFL_SIR_IOPM_2_20180331T163723_20180331T170020_C001 | Backscatter Averaging Status SWH Averaging Status, Ocean     | more records. The SWH and Ocean Averaging Status Flags have been set for one or       |
| CS_OFFL_SIR_IOPM_2_20180331T170306_20180331T171219_C001 | Backscatter Averaging Status                                 | more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T172436_20180331T172838_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_IOPM_2_20180331T174424_20180331T174910_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_IOPM_2_20180331T175058_20180331T180407_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_IOPM_2_20180331T181630_20180331T182309_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_IOPM_2_20180331T182319_20180331T184927_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_IOPM_2_20180331T190729_20180331T193845_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_IOPM_2_20180331T194820_20180331T195014_C001 | Ice Backscatter Averaging Status                             | The Ice Backscatter Averaging Status Flag has been set for one or more                |
| CS_OFFL_SIR_IOPM_2_20180331T195651_20180331T201328_C001 | SWH Averaging Status, Ocean                                  | records. The SWH and Ocean Averaging Status Flags have been set for one or            |
| CS_OFFL_SIR_IOPM_2_20180331T201918_20180331T202616_C001 | Backscatter Averaging Status SWH Averaging Status, Ocean     | more records.  The SWH and Ocean Averaging Status Flags have been set for one or      |
|   | Backscatter Averaging Status                                 | more records. The Ice Backscatter Averaging Status Flag has been set for one or more  |
| CS_OFFL_SIR_IOPM_2_20180331T204215_20180331T204626_C001 | Ice Backscatter Averaging Status SWH Averaging Status, Ocean | records. The SWH and Ocean Averaging Status Flags have been set for one or            |
| CS_OFFL_SIR_IOPM_2_20180331T204748_20180331T205035_C001 | Backscatter Averaging Status SWH Averaging Status, Ocean     | more records.  The SWH and Ocean Averaging Status Flags have been set for one or      |
| CS_OFFL_SIR_IOPM_2_20180331T205122_20180331T210317_C001 | Backscatter Averaging Status                                 | more records.   |
| CS_OFFL_SIR_IOPM_2_20180331T210937_20180331T212115_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_IOPM_2_20180331T212706_20180331T212928_C001 | Ice Backscatter Averaging Status                             | The Ice Backscatter Averaging Status Flag has been set for one or more records.       |
| CS_OFFL_SIR_IOPM_2_20180331T213000_20180331T213423_C001 | Ice Backscatter Averaging Status                             | The Ice Backscatter Averaging Status Flag has been set for one or more records.       |
|   |  |   |

| CS_OFFL_SIR_IOPM_2_20180331T213602_20180331T215106_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_IOPM_2_20180331T215246_20180331T220812_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_IOPM_2_20180331T222936_20180331T223645_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_IOPM_2_20180331T223807_20180331T224255_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_IOPM_2_20180331T224547_20180331T230227_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_IOPM_2_20180331T230452_20180331T231332_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20180331T231537_20180331T233826_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_IOPN_2_20180331T040040_20180331T040136_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_IOPN_2_20180331T103305_20180331T103427_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_IOPN_2_20180331T113329_20180331T113334_C001 | Ice Backscatter Averaging Status                            | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPN_2_20180331T222349_20180331T222617_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_IOPR_2_20180331T085255_20180331T085524_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_IOPR_2_20180331T112623_20180331T112628_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_IOPR_2_20180331T170020_20180331T170306_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_IOPR_2_20180331T185436_20180331T185601_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:

### 6. IOP L2 Pole-to-Pole Data Quality Check

#### 6.1 P2P 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 NetCDF product file (.nc).

Number of products with errors:

#### 6.2 P2P 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.

umber of products with errors:

#### 6.3 P2P 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.

lumber of products with errors:

### 6.4 P2P Auxiliary Correction Error Check

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

60

Number of products with errors:

## 6.5 P2P Measurement Confidence Data Check

CryoSat P2P 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:

### 6.6 P2P Range Measurement Check

CryoSat P2P 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 P2P 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.

| Product  | Test Failed   | Description   |
|--|---|---|
| CS_OFFL_SIR_IOP_220180330T235907_20180331T004844_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T004844_20180331T013821_C001  | Ocean Range Averaging Status                                | The Ocean Range Averaging Status Flag has been set for one or more records.           |
| CS_OFFL_SIR_IOP_2_20180331T013821_20180331T022757_C001 | Ocean Range Averaging Status                                | The Ocean Range Averaging Status Flag has been set for one or more records.           |
| CS_OFFL_SIR_IOP_2_20180331T022757_20180331T031734_C001 | Ocean Range Averaging Status                                | The Ocean Range Averaging Status Flag has been set for one or more records.           |
| CS_OFFL_SIR_IOP_2_20180331T031734_20180331T040711_C001 | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_2_20180331T040711_20180331T045648_C001 | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T045648_20180331T054624_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T054624_20180331T063601_C001  | Ocean Range Averaging Status                                | The Ocean Range Averaging Status Flag has been set for one or more records.           |
| CS_OFFL_SIR_IOP_2_20180331T063601_20180331T072538_C001 | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T072538_20180331T081515_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
|  |   |   |

| CS_OFFL_SIR_IOP_2_20180331T081515_20180331T090451_C001 | Ocean Range Averaging Status                                | The Ocean Range Averaging Status Flag has been set for one or more records.           |
|--|---|---|
| CS_OFFL_SIR_IOP_220180331T090451_20180331T095428_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_2_20180331T095428_20180331T104405_C001 | Ocean Range Averaging Status                                | The Ocean Range Averaging Status Flag has been set for one or more records.           |
| CS_OFFL_SIR_IOP_220180331T104405_20180331T113342_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_2_20180331T113342_20180331T122319_C001 | Ocean Range Averaging Status                                | The Ocean Range Averaging Status Flag has been set for one or more records.           |
| CS_OFFL_SIR_IOP_220180331T122319_20180331T131256_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_2_20180331T131256_20180331T140232_C001 | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T140232_20180331T145209_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T145209_20180331T154146_C001  | Ocean Range Averaging Status                                | The Ocean Range Averaging Status Flag has been set for one or more records.           |
| CS_OFFL_SIR_IOP_220180331T154146_20180331T163123_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T163123_20180331T172059_C001  | Ocean Range Averaging Status                                | The Ocean Range Averaging Status Flag has been set for one or more records.           |
| CS_OFFL_SIR_IOP_220180331T172059_20180331T181036_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T181036_20180331T190013_C001  | Ocean Range Averaging Status                                | The Ocean Range Averaging Status Flag has been set for one or more records.           |
| CS_OFFL_SIR_IOP_220180331T190013_20180331T194950_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T194950_20180331T203926_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T203926_20180331T212903_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T212903_20180331T221840_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T221840_20180331T230817_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T230817_20180331T235754_C001  | Ocean Range Averaging Status, Ice<br>Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |

#### 6.7 P2P SWH and Backscatter Measurement Check

CryoSat P2P 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 P2P 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.

| Product   | Test Failed  | Description  |
|---|--|--|
| CS_OFFL_SIR_IOP_220180330T235907_20180331T004844_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T004844_20180331T013821_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T013821_20180331T022757_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_IOP_220180331T022757_20180331T031734_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_IOP_220180331T031734_20180331T040711_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_IOP_220180331T040711_20180331T045648_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_IOP_220180331T045648_20180331T054624_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T054624_20180331T063601_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_IOP_220180331T063601_20180331T072538_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T072538_20180331T081515_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T081515_20180331T090451_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_IOP_220180331T090451_20180331T095428_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T095428_20180331T104405_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_IOP_220180331T104405_20180331T113342_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T113342_20180331T122319_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_IOP_220180331T122319_20180331T131256_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T131256_20180331T140232_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |

| CS_OFFL_SIR_IOP_220180331T140232_20180331T145209_C001  | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
|--|--|--|
| CS_OFFL_SIR_IOP_2_20180331T145209_20180331T154146_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_IOP_2_20180331T154146_20180331T163123_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_2_20180331T163123_20180331T172059_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_IOP_2_20180331T172059_20180331T181036_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T181036_20180331T190013_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_IOP_2_20180331T190013_20180331T194950_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_2_20180331T194950_20180331T203926_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T203926_20180331T212903_C001  | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T212903_20180331T221840_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_IOP_2_20180331T221840_20180331T230817_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_IOP_2_20180331T230817_20180331T235754_C001 | SWH Averaging Status, Ocean<br>Backscatter Averaging Status, Ice<br>Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |

# 6.8 P2P Ocean Retracking Quality Check

Cryosat P2P data includes an ocean retracking quality flag (field 19) 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.

| Product   | Test Failed                   | Description   |
|---|-------------------------------|---|
| CS_OFFL_SIR_IOP_220180330T235907_20180331T004844_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T004844_20180331T013821_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T013821_20180331T022757_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T022757_20180331T031734_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T031734_20180331T040711_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T040711_20180331T045648_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T045648_20180331T054624_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T054624_20180331T063601_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T063601_20180331T072538_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T072538_20180331T081515_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T081515_20180331T090451_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T090451_20180331T095428_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T095428_20180331T104405_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T104405_20180331T113342_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T113342_20180331T122319_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T122319_20180331T131256_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T140232_20180331T145209_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T145209_20180331T154146_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T154146_20180331T163123_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T163123_20180331T172059_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T172059_20180331T181036_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T181036_20180331T190013_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T190013_20180331T194950_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T194950_20180331T203926_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T203926_20180331T212903_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T212903_20180331T221840_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T221840_20180331T230817_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T230817_20180331T235754_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220180331T235754_20180401T004731_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
|   |                               |   |