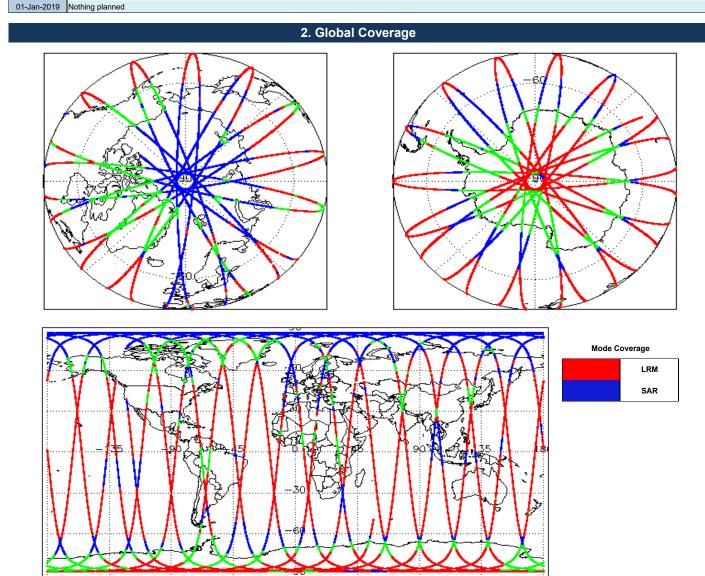


IDEAS+ Daily Report for IOP data:

<u>31/12/2018</u>

| 1. Overview | | | | |
|--------------------|--|--|----------------------|----------------------|
| | | | | |
| Report Production: | 03-Jan-2019 | Check | L1 & L2 | P2P |
| Report Froduction. | 03-341-2019 | Server check: science-pds.cryosat.esa.int | Nominal | Nominal |
| Processor Used: | CryoSat Ocean Processor | Server check: calval-pds.cryosat.esa.int | Nominal | Nominal |
| Processor useu. | CryoSal Ocean Processor | Product Software Check | Nominal | Nominal |
| Dete Heed | ta Used: Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data | Product Format Check | Nominal | Nominal |
| Data Used: | | Product Header Analysis | Nominal | Nominal |
| | | Auxiliary Data File Usage Check | Nominal | Nominal |
| | | Auxiliary Correction Error Check | Nominal | Nominal |
| | | Measurement Confidence Data Check | See Section 4.5, 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-Dec-2018 | None | | |
| 31-Dec-2018 | None | | |
| | | | |



3. Instrument Configuration

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

SIRAL - A

0

SIRAL instrument(s) in use:

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:

4.2 L1B Product Header Analysis

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

| 4.3 L1B Auxilary Data File Usage Check | | | | |
|--|-------------------------------------|---|--|--|
| Each product is checked for missing Data Set Descriptors with respect to a provide the products with errors: 0 | e-determined baseline and also | to check the validity of Auxiliary Data Files is correct. | | |
| 4.4 L1B Auxiliary Correction Error Check | | | | |
| CryoSat L1B data includes a correction error flag for each measurement recor | d. The bit value of this flag indi | cates any problems when set. | | |
| Number of products with errors: 0 | | | | |
| 4.5 L1B Measurement Confidence Data Check | | | | |
| CryoSat L1B data includes a measurement confidence flag for each 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: 0 | | | | |
| 4.6 L1B Waveform Group Data Check | | | | |
| CryoSat L1B data includes a waveform data flag for each measurement record | d. The bit value of this flag indic | ates 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: 17 | | | | |
| Product | Test Failed | Description | | |
| CS_OFFL_SIR_IOPM1B_20181231T074808_20181231T080135_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPN1B_20181231T060019_20181231T060430_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPN1B_20181231T081857_20181231T082454_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPN1B_20181231T091833_20181231T092054_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |

Loss of Echo

5. IOP Level 2 Data Quality Check

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

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The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

CS_OFFL_SIR_IOPN1B_20181231T140825_20181231T140913_C001

CS_OFFL_SIR_IOPN1B_20181231T141053_20181231T141151_C001

CS_OFFL_SIR_IOPN1B_20181231T190445_20181231T190845_C001

CS_OFFL_SIR_IOPN1B_20181231T190908_20181231T191035_C001

CS_OFFL_SIR_IOPN1B_20181231T204507_20181231T204926_C001

CS_OFFL_SIR_IOPR1B_20181231T122817_20181231T123032_C001

CS_OFFL_SIR_IOPR1B_20181231T131711_20181231T132037_C001

CS_OFFL_SIR_IOPR1B_20181231T135816_20181231T135913_C001

CS_OFFL_SIR_IOPR1B_20181231T154227_20181231T154329_C001

CS_OFFL_SIR_IOPR1B_20181231T154329_20181231T154819_C001

CS_OFFL_SIR_IOPR1B_20181231T173124_20181231T173851_C001

CS_OFFL_SIR_IOPR1B_20181231T200559_20181231T200614_C001

CS_OFFL_SIR_IOPR1B_20181231T204150_20181231T204411_C001

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: 0 | | | |
| 5.2 L2 Product Header Analysis | | | |
| 5.2 LZ FTOUUCI HEAUEI Allaysis | | | |
| 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: 0 | | | |
| 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. | | | |
| Number of products with errors: 75 | | | |

 Product
 Test Failed
 Description

 CS_OFFL_SIR_IOPM_2_20181230T233900_20181231T000313_C001
 Ocean Range Averaging Status
 The Ocean Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOPM_2_20181231T000539_20181231T001051_C001 CS OFFL SIR IOPM 2 20181231T001832 20181231T002853 C001 CS_OFFL_SIR_IOPM_2_20181231T003432_20181231T005122_C001 CS_OFFL_SIR_IOPM_2_20181231T011419_20181231T012617_C001 CS_OFFL_SIR_IOPM_2_20181231T012623_20181231T013211_C001 CS_OFFL_SIR_IOPM_2_20181231T013729_20181231T014204_C001 CS OFFL SIR IOPM 2 20181231T014538 20181231T015124 C001 CS OFFL SIR IOPM 2 20181231T015758 20181231T023042 C001 CS_OFFL_SIR_IOPM_2_20181231T024413_20181231T024510_C001 CS_OFFL_SIR_IOPM_2_20181231T030232_20181231T032020_C001 CS_OFFL_SIR_IOPM_2_20181231T032506_20181231T033017_C001 CS_OFFL_SIR_IOPM_2_20181231T033642_20181231T035830_C001 CS_OFFL_SIR_IOPM_2_20181231T040005_20181231T041048_C001 CS_OFFL_SIR_IOPM_2_20181231T044022_20181231T045945_C001 CS_OFFL_SIR_IOPM_2_20181231T051621_20181231T054859_C001 CS OFFL SIR IOPM 2 20181231T060513 20181231T062406 C001 CS_OFFL_SIR_IOPM_2_20181231T062434_20181231T063733_C001 CS_OFFL_SIR_IOPM_2_20181231T064630_20181231T064827_C001 CS_OFFL_SIR_IOPM_2_20181231T065530_20181231T071050_C001 CS_OFFL_SIR_IOPM_2_20181231T071253_20181231T072215_C001 CS_OFFL_SIR_IOPM_2_20181231T074442_20181231T074741_C001 CS OFFL SIR IOPM 2 20181231T074808 20181231T080135 C001 CS_OFFL_SIR_IOPM_2_20181231T082454_20181231T082750_C001 CS_OFFL_SIR_IOPM_2_20181231T082759_20181231T083230_C001 CS OFFL SIR IOPM 2 20181231T083504 20181231T084919 C001 CS OFFL SIR IOPM 2 20181231T093625 20181231T100000 C001 CS_OFFL_SIR_IOPM_2_20181231T100301_20181231T101130_C001 CS_OFFL_SIR_IOPM_2_20181231T101417_20181231T103934_C001 CS_OFFL_SIR_IOPM_2_20181231T111057_20181231T112214_C001 CS OFFL SIR IOPM 2 20181231T112746 20181231T113819 C001 CS_OFFL_SIR_IOPM_2_20181231T114513_20181231T114930_C001 CS_OFFL_SIR_IOPM_2_20181231T115325_20181231T122025_C001 CS OFFL SIR IOPM 2 20181231T123032 20181231T123110 C001 CS_OFFL_SIR_IOPM_2_20181231T124550_20181231T130128_C001 CS_OFFL_SIR_IOPM_2_20181231T130658_20181231T131711_C001 CS OFFL SIR IOPM 2 20181231T132425 20181231T133010 C001 CS_OFFL_SIR_IOPM_2_20181231T133305_20181231T133750_C001 CS OFFL SIR IOPM 2 20181231T140913 20181231T141006 C001 CS OFFL SIR IOPM 2 20181231T142322 20181231T145656 C001 CS_OFFL_SIR_IOPM_2_20181231T150329_20181231T150841_C001 CS_OFFL_SIR_IOPM_2_20181231T151318_20181231T153002_C001 CS OFFL SIR IOPM 2 20181231T160157 20181231T163038 C001 CS_OFFL_SIR_IOPM_2_20181231T163048_20181231T163550_C001 CS_OFFL_SIR_IOPM_2_20181231T164132_20181231T164329_C001 CS_OFFL_SIR_IOPM_2_20181231T164335_20181231T164749_C001 CS_OFFL_SIR_IOPM_2_20181231T165229_20181231T172542_C001 CS OFFL SIR IOPM 2 20181231T174335 20181231T175453 C001 CS_OFFL_SIR_IOPM_2_20181231T175746_20181231T180017_C001 CS_OFFL_SIR_IOPM_2_20181231T180022_20181231T181507_C001 CS OFFL SIR IOPM 2 20181231T181706 20181231T182227 C001 CS_OFFL_SIR_IOPM_2_20181231T182246_20181231T182457_C001

Ice Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status

The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records 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 record 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 ecords The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords 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 Ice Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The 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 ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The 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 Ice Range Averaging Status Flag has been set for one or more record The Ocean Range Averaging Status Flag has been set for one or more The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more record 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 ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The 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_20181231T183337_20181231T184601_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
|---|------------------------------|--|
| CS_OFFL_SIR_IOPM_2_20181231T184737_20181231T190445_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T192650_20181231T193704_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T193907_20181231T195402_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T195632_20181231T200126_C001 | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T200131_20181231T200138_C001 | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T200935_20181231T201340_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T202729_20181231T204027_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T211753_20181231T213324_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T213610_20181231T214054_C001 | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T214727_20181231T221404_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T224711_20181231T231233_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T231559_20181231T231954_C001 | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T232701_20181231T233809_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T234342_20181231T235337_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPN_2_20181231T140825_20181231T140913_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPN_2_20181231T200320_20181231T200559_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPN_2_20181231T204411_20181231T204448_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPN_2_20181231T204507_20181231T204926_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20181231T023420_20181231T024111_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20181231T105234_20181231T105330_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20181231T154329_20181231T154819_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20181231T232454_20181231T232700_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. 78

Number of products with errors:

| Product | Test Failed | Description |
|---|---|--|
| CS_OFFL_SIR_IOPM_2_20181230T233900_20181231T000313_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T000539_20181231T001051_C001 | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T001832_20181231T002853_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T003432_20181231T005122_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T011419_20181231T012617_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T012623_20181231T013211_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T013729_20181231T014204_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T014538_20181231T015124_C001 | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T015758_20181231T023042_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T024413_20181231T024510_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T030232_20181231T032020_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T032506_20181231T033017_C001 | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T033642_20181231T035830_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T040005_20181231T041048_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T044022_20181231T045945_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T050700_20181231T050919_C001 | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T051621_20181231T054859_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T060513_20181231T062406_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T062434_20181231T063733_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPM_2_20181231T064630_20181231T064827_C001 | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |

CS_OFFL_SIR_IOPM_2_20181231T065003_20181231T065329_C001 CS OFFL SIR IOPM 2 20181231T065530 20181231T071050 C001 CS_OFFL_SIR_IOPM_2_20181231T071253_20181231T072215_C001 CS_OFFL_SIR_IOPM_2_20181231T074442_20181231T074741_C001 CS OFFL SIR IOPM 2 20181231T074808 20181231T080135 C001 CS OFFL SIR IOPM 2 20181231T082454 20181231T082750 C001 CS OFFL SIR IOPM 2 20181231T082759 20181231T083230 C001 CS OFFL SIR IOPM 2 20181231T083504 20181231T084919 C001 CS_OFFL_SIR_IOPM_2_20181231T093625_20181231T100000_C001 CS_OFFL_SIR_IOPM_2_20181231T100301_20181231T101130_C001 CS_OFFL_SIR_IOPM_2_20181231T101417_20181231T103934_C001 CS_OFFL_SIR_IOPM_2_20181231T111057_20181231T112214_C001 CS OFFL SIR IOPM 2 20181231T112746 20181231T113819 C001 CS_OFFL_SIR_IOPM_2_20181231T114513_20181231T114930_C001 CS_OFFL_SIR_IOPM_2_20181231T115325_20181231T122025_C001 CS OFFL SIR IOPM 2 20181231T123032 20181231T123110 C001 CS_OFFL_SIR_IOPM_2_20181231T124550_20181231T130128_C001 CS_OFFL_SIR_IOPM_2_20181231T130658_20181231T131711_C001 CS_OFFL_SIR_IOPM_2_20181231T132425_20181231T133010_C001 CS_OFFL_SIR_IOPM_2_20181231T133305_20181231T133750_C001 CS_OFFL_SIR_IOPM_2_20181231T140913_20181231T141006_C001 CS OFFL SIR IOPM 2 20181231T142322 20181231T145656 C001 CS_OFFL_SIR_IOPM_2_20181231T150329_20181231T150841_C001 CS OFFL SIR IOPM 2 20181231T151318 20181231T153002 C001 CS OFFL SIR IOPM 2 20181231T160157 20181231T163038 C001 CS OFFL SIR IOPM 2 20181231T163048 20181231T163550 C001 CS_OFFL_SIR_IOPM_2_20181231T164132_20181231T164329_C001 CS_OFFL_SIR_IOPM_2_20181231T164335_20181231T164749_C001 CS_OFFL_SIR_IOPM_2_20181231T165229_20181231T172542_C001 CS OFFL SIR IOPM 2 20181231T174335 20181231T175453 C001 CS_OFFL_SIR_IOPM_2_20181231T175746_20181231T180017_C001 CS_OFFL_SIR_IOPM_2_20181231T180022_20181231T181507_C001 CS OFFL SIR IOPM 2 20181231T181706 20181231T182227 C001 CS_OFFL_SIR_IOPM_2_20181231T182246_20181231T182457_C001 CS_OFFL_SIR_IOPM_2_20181231T183337_20181231T184601_C001 CS OFFL SIR IOPM 2 20181231T184737 20181231T190445 C001 CS_OFFL_SIR_IOPM_2_20181231T192650_20181231T193704_C001 CS_OFFL_SIR_IOPM_2_20181231T193907_20181231T195402_C001 CS OFFL SIR IOPM 2 20181231T195632 20181231T200126 C001 CS OFFL SIR IOPM 2 20181231T200131 20181231T200138 C001 CS_OFFL_SIR_IOPM_2_20181231T200202_20181231T200320_C001 CS_OFFL_SIR_IOPM_2_20181231T200935_20181231T201340_C001 CS_OFFL_SIR_IOPM_2_20181231T202729_20181231T204027_C001 CS OFFL SIR IOPM 2 20181231T211753 20181231T213324 C001 CS_OFFL_SIR_IOPM_2_20181231T213610_20181231T214054_C001 CS_OFFL_SIR_IOPM_2_20181231T214727_20181231T221404_C001 CS OFFL SIR IOPM 2 20181231T224711 20181231T231233 C001 CS_OFFL_SIR_IOPM_2_20181231T231559_20181231T231954_C001 CS_OFFL_SIR_IOPM_2_20181231T232701_20181231T233809_C001 CS OFFL SIR IOPM 2 20181231T234342 20181231T235337 C001 CS_OFFL_SIR_IOPN_2_20181231T140825_20181231T140913_C001

The Ice Backscatter Averaging Status Flag has been set for one or more Ice Backscatter Averaging Status record SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean 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 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean 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 Ice Backscatter Averaging Status ecords SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records. SWH Averaging Status, Ocean 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 Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records The SWH and Ocean Averaging Status Flags have been set for one or SWH Averaging Status, Ocean Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean 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 Ice Backscatter Averaging Status records The SWH and Ocean Averaging Status Flags have been set for one or SWH Averaging Status, Ocean Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean 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 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status nore records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records. SWH Averaging Status, Ocean Backscatter Averaging Status The SWH and Ocean Averaging Status Flags have been set for one or more records The Ice Backscatter Averaging Status Flag has been set for one or more Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records. SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records The SWH and Ocean Averaging Status Flags have been set for one or SWH Averaging Status, Ocean Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more Ice Backscatter Averaging Status records. The Ice Backscatter Averaging Status Flag has been set for one or more Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records. SWH Averaging Status, Ocean 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 Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status more records. SWH Averaging Status, Ocean 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 Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or Backscatter Averaging Status

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

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

SWH Averaging Status, Ocean

SWH Averaging Status, Ocean

Backscatter Averaging Status

Backscatter Averaging Status

| CS_OFFL_SIR_IOPN_2_20181231T200320_20181231T200559_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
|---|---|--|
| CS_OFFL_SIR_IOPN_2_20181231T204411_20181231T204448_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPN_2_20181231T204507_20181231T204926_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20181231T023420_20181231T024111_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20181231T105234_20181231T105330_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20181231T154329_20181231T154819_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOPR_2_20181231T232454_20181231T232700_C001 | SWH Averaging Status, Ocean 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. 59

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. Number 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.

Number 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). 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. 30

Number of products with errors:

| Product | Test Failed | Description |
|---|---|--|
| CS_OFFL_SIR_IOP_220181230T232131_20181231T001106_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T001106_20181231T010045_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T010045_20181231T015020_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T015020_20181231T023958_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T023958_20181231T032933_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T032933_20181231T041912_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T041912_20181231T050847_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T050847_20181231T055825_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T055825_20181231T064800_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T064800_20181231T073739_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T073739_20181231T082714_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T082714_20181231T091653_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T091653_20181231T100628_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T100628_20181231T105606_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T105606_20181231T114541_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T114541_20181231T123520_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T123520_20181231T132455_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T132455_20181231T141433_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |

Range Averaging Status

or more records

| CS_OFFL_SIR_IOP_220181231T141433_20181231T150408_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
|---|---|--|
| CS_OFFL_SIR_IOP_220181231T150408_20181231T155347_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T155347_20181231T164322_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T164322_20181231T173300_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T173300_20181231T182235_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T182235_20181231T191214_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T191214_20181231T200149_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T200149_20181231T205128_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T205128_20181231T214102_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T214102_20181231T223041_C001 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T223041_20181231T232016_C001 | Ocean Range Averaging Status, Ice Range Averaging Status | The Ocean and Ice Range Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T232016_20190101T000955_C002 | Ocean Range Averaging Status | The Ocean Range Averaging Status Flag has 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. 30

Number of products with errors:

| Product | Test Failed | Description |
|--|--|---|
| CS_OFFL_SIR_IOP_220181230T232131_20181231T001106_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T001106_20181231T010045_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T010045_20181231T015020_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T015020_20181231T023958_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T023958_20181231T032933_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T032933_20181231T041912_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T041912_20181231T050847_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_2_20181231T050847_20181231T055825_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T055825_20181231T064800_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_2_20181231T064800_20181231T073739_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T073739_20181231T082714_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T082714_20181231T091653_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T091653_20181231T100628_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T100628_20181231T105606_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T105606_20181231T114541_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T114541_20181231T123520_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T123520_20181231T132455_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_2_20181231T132455_20181231T141433_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_2_20181231T141433_20181231T150408_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T150408_20181231T155347_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T155347_20181231T164322_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |

| CS_OFFL_SIR_IOP_220181231T164322_20181231T173300_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
|--|--|---|
| CS_OFFL_SIR_IOP_220181231T173300_20181231T182235_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T182235_20181231T191214_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T191214_20181231T200149_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T200149_20181231T205128_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T205128_20181231T214102_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T214102_20181231T223041_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T223041_20181231T232016_C001 | SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status | The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. |
| CS_OFFL_SIR_IOP_2_20181231T232016_20190101T000955_C002 | SWH Averaging Status, Ocean Backscatter Averaging Status | The SWH and Ocean 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. Number of products with errors: 27

| Product | Test Failed | Description |
|---|-------------------------------|---|
| CS_OFFL_SIR_IOP_220181231T001106_20181231T010045_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T010045_20181231T015020_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T015020_20181231T023958_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T023958_20181231T032933_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T032933_20181231T041912_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T050847_20181231T055825_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T055825_20181231T064800_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T064800_20181231T073739_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T073739_20181231T082714_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T082714_20181231T091653_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T091653_20181231T100628_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T100628_20181231T105606_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T105606_20181231T114541_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T114541_20181231T123520_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T132455_20181231T141433_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T141433_20181231T150408_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T150408_20181231T155347_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T155347_20181231T164322_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T164322_20181231T173300_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T173300_20181231T182235_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T182235_20181231T191214_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T191214_20181231T200149_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T200149_20181231T205128_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T205128_20181231T214102_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T214102_20181231T223041_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T223041_20181231T232016_C001 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| CS_OFFL_SIR_IOP_220181231T232016_20190101T000955_C002 | Ocean Retracking Quality Flag | The Ocean Retracking Quality Flag has been set for one or more records. |
| | | |