



## 1. Overview

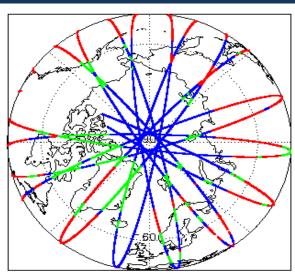
Report Production:	06-Feb-2018
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data

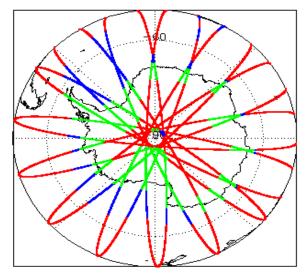
<u></u>		
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary Correction Error Check	Nominal	Nominal
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
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

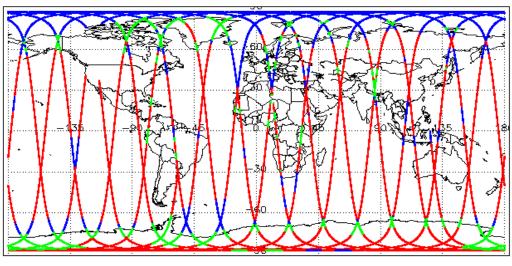
Mission / Instrument News		
03-Feb-2018	None	
04 Ech 2018	None	

05-Feb-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:

Product		Description
CS_OFFL_SIR_IOPM1B_20180204T025425_20180204T032851_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

### 4.6 L1B Waveform Group Data Check

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPN1B_20180204T024713_20180204T025201_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180204T073413_20180204T073540_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180204T091648_20180204T092050_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180204T123345_20180204T123554_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180204T192051_20180204T192116_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180204T042213_20180204T042740_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180204T122742_20180204T123002_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:

### 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:

### 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20180204T025425_20180204T032851_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

## 5.6 L2 Range Measurement Check

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

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

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

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

Number of products with errors: 7-

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20180203T235718_20180204T000856_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T001444_20180204T001707_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T002343_20180204T003841_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T004021_20180204T005116_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T011715_20180204T012425_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

	1	The Ocean Pages Averaging Status Eleg has been get for one or more
CS_OFFL_SIR_IOPM_2_20180204T012548_20180204T013036_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T013319_20180204T014946_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T015231_20180204T020111_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T020326_20180204T022558_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T025425_20180204T032851_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T033435_20180204T033905_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T034151_20180204T040935_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T043823_20180204T045054_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T045631_20180204T050716_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T051352_20180204T051943_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T052119_20180204T054225_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T055843_20180204T055935_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T061211_20180204T064703_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T065258_20180204T065814_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T070454_20180204T070720_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T073540_20180204T073809_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T075219_20180204T080102_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T080348_20180204T082551_C001	Ocean Range Averaging Status	records.  The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T083139_20180204T083259_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T083306_20180204T083713_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T083920_20180204T085218_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T085406_20180204T090118_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T093218_20180204T100459_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T100640_20180204T101157_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180204T102257 20180204T105305 C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T111354_20180204T112619_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T112823_20180204T114408_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T114554_20180204T115055_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T115134_20180204T115257_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T120014_20180204T121033_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180204T121652 20180204T122742 C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T130400_20180204T130643_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180204T130822 20180204T132254 C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T132506_20180204T133005_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T133636_20180204T141024_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180204T143820 20180204T150255 C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T150551_20180204T150922_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T150944_20180204T151312_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T151536_20180204T154428_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T161631_20180204T164154_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T164334_20180204T164836_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T164843_20180204T165210_C001	Ice Range Averaging Status	records.  The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T165601_20180204T170643_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T171219_20180204T172950_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180204T181522 20180204T182128 C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T182332_20180204T182907_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T183509_20180204T190819_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T194139_20180204T200048_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T104T03_20180204T200802_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_201802041201336_201802041204807_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180204T2211240_20180204T2211701_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
	J	records.

CS_OFFL_SIR_IOPM_2_20180204T211757_20180204T213534_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T215409_20180204T221312_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T221604_20180204T222316_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T224307_20180204T230106_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T230222_20180204T231611_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T232725_20180204T233116_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T233300_20180204T234833_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180204T042156_20180204T042213_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180204T151312_20180204T151456_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180204T183109_20180204T183225_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180204T214221_20180204T214504_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180204T032909_20180204T033024_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180204T050716_20180204T050957_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180204T060043_20180204T060055_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180204T060122_20180204T060915_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180204T070255_20180204T070454_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180204T074908_20180204T074953_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180204T123142_20180204T123256_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

## 5.7 L2 SWH and Backscatter Measurement Check

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

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

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

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20180203T235718_20180204T000856_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_20180204T001444_20180204T001707_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T002343_20180204T003841_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_20180204T004021_20180204T005116_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_20180204T011715_20180204T012425_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_20180204T012548_20180204T013036_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_20180204T013319_20180204T014946_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_20180204T015231_20180204T020111_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T020326_20180204T022558_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_20180204T025425_20180204T032851_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_20180204T033435_20180204T033905_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T034151_20180204T040935_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_20180204T043823_20180204T045054_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_20180204T045631_20180204T050716_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_20180204T051352_20180204T051943_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T052119_20180204T054225_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_20180204T055843_20180204T055935_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_20180204T061211_20180204T064703_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_20180204T065258_20180204T065814_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T070454_20180204T070720_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_20180204T073540_20180204T073809_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_20180204T075219_20180204T080102_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_20180204T080348_20180204T082551_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_20180204T083139_20180204T083259_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180204T083306_20180204T083713_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\_20180204T083920\_20180204T085218\_C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPM 2 20180204T085406 20180204T090118 C001 Backscatter Averaging Status more records. SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T093218\_20180204T100459\_C001 Backscatter Averaging Status more records. The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_IOPM\_2\_20180204T100640\_20180204T101157\_C001 Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T102257\_20180204T105305\_C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T111354\_20180204T112619\_C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPM 2 20180204T112823 20180204T114408 C001 Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR IOPM 2 20180204T114554 20180204T115055 C001 Ice Backscatter Averaging Status records. The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_IOPM\_2\_20180204T115134\_20180204T115257\_C001 Ice Backscatter Averaging Status records The SWH and Ocean Averaging Status Flags have been set for one or SWH Averaging Status, Ocean CS\_OFFL\_SIR\_IOPM\_2\_20180204T120014\_20180204T121033\_C001 Backscatter Averaging Status SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPM 2 20180204T121652 20180204T122742 C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T130400\_20180204T130643\_C001 Backscatter Averaging Status more records. SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPM 2 20180204T130822 20180204T132254 C001 Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_IOPM\_2\_20180204T132506\_20180204T133005\_C001 Ice Backscatter Averaging Status records. SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T133636\_20180204T141024\_C001 Backscatter Averaging Status more records. SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPM 2 20180204T143820 20180204T150255 C001 Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_IOPM\_2\_20180204T150551\_20180204T150922\_C001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_IOPM\_2\_20180204T150944\_20180204T151312\_C001 Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPM 2 20180204T151536 20180204T154428 C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T161631\_20180204T164154\_C001 Backscatter Averaging Status more records. The Ice Backscatter Averaging Status Flag has been set for one or more Ice Backscatter Averaging Status CS\_OFFL\_SIR\_IOPM\_2\_20180204T164334\_20180204T164836\_C001 records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR IOPM 2 20180204T164843 20180204T165210 C001 Ice Backscatter Averaging Status records. SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T165601\_20180204T170643\_C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPM 2 20180204T171219 20180204T172950 C001 Backscatter Averaging Status SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPM 2 20180204T175544 20180204T180228 C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T181522\_20180204T182128\_C001 **Backscatter Averaging Status** more records. The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_IOPM\_2\_20180204T182332\_20180204T182907\_C001 Ice Backscatter Averaging Status SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T183509\_20180204T190819\_C001 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 CS\_OFFL\_SIR\_IOPM\_2\_20180204T194139\_20180204T200048\_C001 more records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR IOPM 2 20180204T200254 20180204T200802 C001 Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T201336\_20180204T204807\_C001 Backscatter Averaging Status more records. SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T211240\_20180204T211701\_C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPM 2 20180204T211757 20180204T213534 C001 Backscatter Averaging Status more records. SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T215409\_20180204T221312\_C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T221604\_20180204T222316\_C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T224307\_20180204T230106\_C001 more records Backscatter Averaging Status SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPM\_2\_20180204T230222\_20180204T231611\_C001 Backscatter Averaging Status more records. The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR IOPM 2 20180204T232725 20180204T233116 C001 Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPM 2 20180204T233300 20180204T234833 C001 Backscatter Averaging Status more records. SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPN\_2\_20180204T042156\_20180204T042213\_C001 Backscatter Averaging Status more records The SWH and Ocean Averaging Status Flags have been set for one or SWH Averaging Status, Ocean CS\_OFFL\_SIR\_IOPN\_2\_20180204T151312\_20180204T151456\_C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPN 2 20180204T183109 20180204T183225 C001 **Backscatter Averaging Status** more records. The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_IOPN\_2\_20180204T214221\_20180204T214504\_C001 Ice Backscatter Averaging Status records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPR 2 20180204T032909 20180204T033024 C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPR\_2\_20180204T050716\_20180204T050957\_C001 Backscatter Averaging Status more records. The SWH and Ocean Averaging Status Flags have been set for one or SWH Averaging Status, Ocean CS\_OFFL\_SIR\_IOPR\_2\_20180204T060043\_20180204T060055\_C001 Backscatter Averaging Status more records. SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPR 2 20180204T060122 20180204T060915 C001 Backscatter Averaging Status more records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPR\_2\_20180204T070255\_20180204T070454\_C001 Backscatter Averaging Status more records. SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS\_OFFL\_SIR\_IOPR\_2\_20180204T074908\_20180204T074953\_C001 Backscatter Averaging Status SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPR 2 20180204T123142 20180204T123256 C001 Backscatter Averaging Status 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:

59

## 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:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220180204T024530_20180204T033507_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

#### 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.

Number of products with errors: 29		
Product	Test Failed	Description
CS_OFFL_SIR_IOP_220180203T232703_20180204T001640_C003	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180204T001640_20180204T010617_C002	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_220180204T010617_20180204T015554_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_220180204T015554_20180204T024530_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_220180204T024530_20180204T033507_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_220180204T033507_20180204T042444_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_220180204T042444_20180204T051421_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20180204T051421_20180204T060358_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_220180204T060358_20180204T065335_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180204T065335_20180204T074311_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_220180204T074311_20180204T083248_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_220180204T083248_20180204T092225_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_220180204T092225_20180204T101202_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180204T101202_20180204T110138_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_220180204T110138_20180204T115115_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_220180204T115115_20180204T124052_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_220180204T124052_20180204T133029_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_220180204T133029_20180204T142005_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180204T142005_20180204T150942_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_220180204T150942_20180204T155919_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180204T155919_20180204T164856_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_220180204T164856_20180204T173833_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_220180204T173833_20180204T182810_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_220180204T182810_20180204T191746_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20180204T191746_20180204T200723_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_2_20180204T200723_20180204T205700_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20180204T205700_20180204T214637_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180204T214637_20180204T223613_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180204T223613_20180204T232550_C001	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

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. 29

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_2_20180203T232703_20180204T001640_C003	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_220180204T001640_20180204T010617_C002	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_220180204T010617_20180204T015554_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_220180204T015554_20180204T024530_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_220180204T024530_20180204T033507_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_220180204T033507_20180204T042444_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_220180204T042444_20180204T051421_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_220180204T051421_20180204T060358_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_220180204T060358_20180204T065335_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_220180204T065335_20180204T074311_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_220180204T074311_20180204T083248_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_220180204T083248_20180204T092225_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_220180204T092225_20180204T101202_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_220180204T101202_20180204T110138_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_220180204T110138_20180204T115115_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_220180204T115115_20180204T124052_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_220180204T124052_20180204T133029_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_220180204T133029_20180204T142005_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_220180204T142005_20180204T150942_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_220180204T150942_20180204T155919_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_220180204T155919_20180204T164856_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_220180204T164856_20180204T173833_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_220180204T173833_20180204T182810_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_220180204T182810_20180204T191746_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_220180204T191746_20180204T200723_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_220180204T200723_20180204T205700_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.

	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
	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_220180204T223613_20180204T232550_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.

### 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.

28

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:

Ocean Retracking Quality Flag CS OFFL SIR IOP 2 20180203T232703 20180204T001640 C003 The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T001640\_20180204T010617\_C002 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS OFFL SIR IOP 2 20180204T010617 20180204T015554 C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T015554\_20180204T024530\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T024530\_20180204T033507\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS OFFL SIR IOP 2 20180204T033507 20180204T042444 C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T042444\_20180204T051421\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T051421\_20180204T060358\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS OFFL SIR IOP 2 20180204T060358 20180204T065335 C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS OFFL SIR IOP 2 20180204T065335 20180204T074311 C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T074311\_20180204T083248\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS OFFL SIR IOP 2 20180204T083248 20180204T092225 C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T092225\_20180204T101202\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS OFFL SIR IOP 2 20180204T101202 20180204T110138 C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS OFFL SIR IOP 2 20180204T110138 20180204T115115 C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T115115\_20180204T124052\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T124052\_20180204T133029\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T133029\_20180204T142005\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T142005\_20180204T150942\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T150942\_20180204T155919\_C001 The Ocean Retracking Quality Flag has been set for one or more records. Ocean Retracking Quality Flag CS\_OFFL\_SIR\_IOP\_2\_\_20180204T155919\_20180204T164856\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T173833\_20180204T182810\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS OFFL SIR IOP 2 20180204T182810 20180204T191746 C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T191746\_20180204T200723\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T200723\_20180204T205700\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T205700\_20180204T214637\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS\_OFFL\_SIR\_IOP\_2\_\_20180204T214637\_20180204T223613\_C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. CS OFFL SIR IOP 2 20180204T223613 20180204T232550 C001 Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records.