



1. Overview

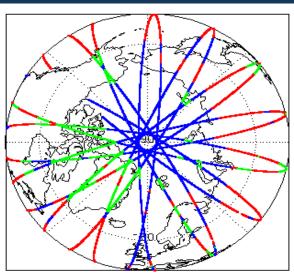
Report Production:	28-Feb-2019
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data

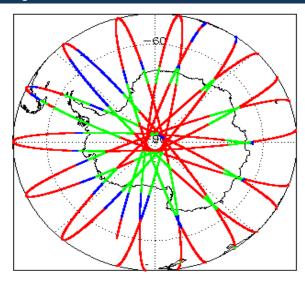
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary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

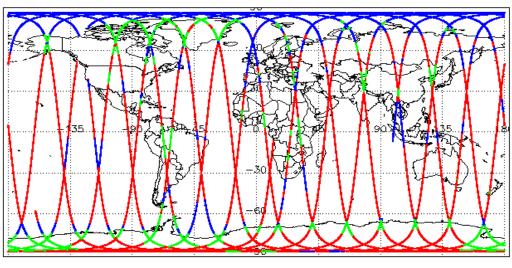
Mission / Instrument News		
24-Feb-2019	None	
25-Feb-2019	None	

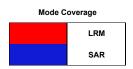
25-Feb-2019 None 26-Feb-2019 Nothing planned

2. Global Coverage









3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

4. IOP Level 1B Data Quality Check

4.1 L1B Product Format Check

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

Number of products with errors:

0

4.2 L1B Product Header Analysis

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

4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

Λ

4.6 L1B Waveform Group Data Check

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

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

Number of products with errors:

12

Product	Test Failed	Description
CS_OFFL_SIR_IOPN1B_20190225T022147_20190225T022704_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190225T031244_20190225T031652_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190225T040558_20190225T040729_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190225T080440_20190225T080459_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190225T112321_20190225T112416_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190225T113405_20190225T113542_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190225T130335_20190225T130418_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190225T171939_20190225T172204_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190225T175728_20190225T180151_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190225T060147_20190225T060448_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190225T130419_20190225T131448_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190225T221635_20190225T221753_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:

0

5.2 L2 Product Header Analysis

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

Number of products with errors:

0

5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

5.4 L2 Auxiliary Correction Error Check

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

Number of products with errors:

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:

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.

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20190225T001852_20190225T003607_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T003734_20190225T004245_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T004805_20190225T011058_C001	Cocan Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T011322_20190225T012308_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T015334_20190225T021512_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

		The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T021927_20190225T022147_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T022825_20190225T025900_C001	Ocean Range Averaging Status	records.
CS_OFFL_SIR_IOPM_2_20190225T031734_20190225T033634_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T033658_20190225T034956_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T040234_20190225T040558_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T040729_20190225T042319_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T042522_20190225T043442_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T050203_20190225T051359_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T053724_20190225T054017_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T054028_20190225T054459_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T054657_20190225T060147_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T064849_20190225T071305_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T071529_20190225T072400_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T072608_20190225T075157_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T082417_20190225T083504_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T084011_20190225T085156_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T085742_20190225T090159_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T090451_20190225T093245_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T095817_20190225T101353_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T101924_20190225T103102_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T103653_20190225T104239_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T104357_20190225T105020_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T113543_20190225T121034_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T121558_20190225T122110_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
		records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T122251_20190225T124228_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T131448_20190225T134301_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T134312_20190225T134857_C001	Ocean Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T135402_20190225T135557_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T135604_20190225T140018_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T140218_20190225T143809_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T143809_20190225T143840_C001	Ocean Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T144134_20190225T144230_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T145612_20190225T150812_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T151010_20190225T151248_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190225T151250_20190225T152804_C001	Ocean Range Averaging Status	records.
CS_OFFL_SIR_IOPM_2_20190225T152934_20190225T153456_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T153515_20190225T153727_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T154605_20190225T155830_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T160002_20190225T161226_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T161357_20190225T161657_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T163902_20190225T164928_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T165131_20190225T170703_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T170900_20190225T171355_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T171431_20190225T171549_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T172205_20190225T172626_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T174017_20190225T175253_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T184837_20190225T185323_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T185905_20190225T192627_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T195939_20190225T202601_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T202828_20190225T203222_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T203829_20190225T205039_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
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CS_OFFL_SIR_IOPM_2_20190225T205611_20190225T210604_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T212851_20190225T220523_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T220650_20190225T221136_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T221753_20190225T222957_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T223001_20190225T225304_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T233751_20190225T233948_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T234148_20190225T234456_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T234640_20190225T235204_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T235738_20190226T002009_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190225T111842_20190225T112004_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190225T112321_20190225T112416_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190225T140018_20190225T140126_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190225T162135_20190225T162300_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190225T175728_20190225T180151_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190225T203237_20190225T203243_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190225T221512_20190225T221635_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190225T013517_20190225T013640_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190225T063318_20190225T063353_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190225T122232_20190225T122251_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190225T153912_20190225T154227_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190225T175714_20190225T175728_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190225T231327_20190225T231347_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

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. 74

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20190225T001852_20190225T003607_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_20190225T003734_20190225T004245_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T004805_20190225T011058_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_20190225T011322_20190225T012308_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_20190225T015334_20190225T021512_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_20190225T021927_20190225T022147_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T022825_20190225T025900_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_20190225T031734_20190225T033634_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_20190225T033658_20190225T034956_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_20190225T040234_20190225T040558_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T040729_20190225T042319_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_20190225T042522_20190225T043442_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_20190225T050203_20190225T051359_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_20190225T053724_20190225T054017_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T054028_20190225T054459_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T054657_20190225T060147_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_20190225T064849_20190225T071305_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_20190225T071529_20190225T072400_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190225T072608_20190225T075157_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_20190225T082417_20190225T083504_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_20190225T084011_20190225T085156_C001	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 CS_OFFL_SIR_IOPM_2_20190225T085742_20190225T090159_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 20190225T090451 20190225T093245 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_20190225T095817_20190225T101353_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_20190225T101924_20190225T103102_C001 Backscatter Averaging Status more records. The Ice Backscatter Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOPM_2_20190225T103653_20190225T104239_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_20190225T104357_20190225T105020_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 IOPM 2 20190225T113543 20190225T121034 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 20190225T122251 20190225T124228 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_20190225T131448_20190225T134301_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_20190225T134312_20190225T134857_C001 Backscatter Averaging Status The Ice Backscatter Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOPM_2_20190225T135402_20190225T135557_C001 Ice Backscatter Averaging Status records. The Ice Backscatter Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOPM_2_20190225T135604_20190225T140018_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_20190225T140218_20190225T143809_C001 Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOPM_2_20190225T144134_20190225T144230_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_20190225T145612_20190225T150812_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 20190225T151010 20190225T151248 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_20190225T151250_20190225T152804_C001 Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOPM_2_20190225T152934_20190225T153456_C001 Ice Backscatter Averaging Status The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR IOPM 2 20190225T153515 20190225T153727 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_20190225T154605_20190225T155830_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_20190225T160002_20190225T161226_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 20190225T161357 20190225T161657 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_20190225T163902_20190225T164928_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 20190225T165131 20190225T170703 C001 Backscatter Averaging Status The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR IOPM 2 20190225T170900 20190225T171355 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 20190225T172205 20190225T172626 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_20190225T174017_20190225T175253_C001 Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOPM_2_20190225T184837_20190225T185323_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_20190225T185905_20190225T192627_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 20190225T195939 20190225T202601 C001 Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOPM_2_20190225T202828_20190225T203222_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_20190225T203829_20190225T205039_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 20190225T205611 20190225T210604 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_20190225T212851_20190225T220523_C001 Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOPM_2_20190225T220650_20190225T221136_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_20190225T221753_20190225T222957_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_20190225T223001_20190225T225304_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 IOPM 2 20190225T233751 20190225T233948 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 20190225T234148 20190225T234456 C001 Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOPM_2_20190225T234640_20190225T235204_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_IOPN_2_20190225T111842_20190225T112004_C001 Backscatter Averaging Status nore records SWH Averaging Status, Ocean The SWH and Ocean Averaging Status Flags have been set for one or CS OFFL SIR IOPN 2 20190225T112321 20190225T112416 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_20190225T140018_20190225T140126_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_20190225T162135_20190225T162300_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_20190225T175728_20190225T180151_C001 Backscatter Averaging Status more records The Ice Backscatter Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOPN_2_20190225T203237_20190225T203243_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 IOPN 2 20190225T221512 20190225T221635 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_20190225T013517_20190225T013640_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_20190225T063318_20190225T063353_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 20190225T122232 20190225T122251 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_20190225T153912_20190225T154227_C001 Backscatter Averaging Status more records.

SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean

Backscatter Averaging Status

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

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

CS_OFFL_SIR_IOPR_2_20190225T231327_20190225T231347_C001

5.8 L2 Ocean Retracking Quality Check

CS_OFFL_SIR_IOPR_2_20190225T175714_20190225T175728_C001

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

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

Number of products with errors:

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

6.1 P2P Product Format Check

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

Number of products with errors:

6.2 P2P Product Header Analysis

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

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.

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220190224T235221_20190225T004200_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_220190225T004200_20190225T013134_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190225T013134_20190225T022113_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_220190225T022113_20190225T031048_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190225T031048_20190225T040027_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_220190225T040027_20190225T045002_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_220190225T045002_20190225T053940_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T053940_20190225T062915_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_220190225T062915_20190225T071854_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_220190225T071854_20190225T080829_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_220190225T080829_20190225T085808_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_220190225T085808_20190225T094742_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_220190225T094742_20190225T103721_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T103721_20190225T112656_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_20190225T112656_20190225T121635_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_220190225T121635_20190225T130610_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_20190225T130610_20190225T135548_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_220190225T135548_20190225T144523_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_20190225T144523_20190225T153502_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_220190225T153502_20190225T162437_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_220190225T162437_20190225T171416_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_220190225T171416_20190225T180350_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_220190225T180350_20190225T185329_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOP_220190225T185329_20190225T194304_C001		The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190225T194304_20190225T203243_C001	0 0 0	The Ocean and Ice Range Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_2_20190225T203243_20190225T212217_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190225T212217_20190225T221157_C001		The Ocean and Ice Range Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220190225T221157_20190225T230131_C001	Cicean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T230131_20190225T235110_C001		The Ocean and Ice Range Averaging Status Flags have been set for one or more records.

6.7 P2P SWH and Backscatter Measurement Check

CryoSat P2P data includes a SWH Averaging Status flag and an Ocean and Ice Backscatter Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when

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

SOUTH SRIP (OP 2 291902251104500 291902251104500 OD) SWIM Announce State of the American State of the Committee S	Product	Test Failed	Description
Backsoater Averaging Status — The SWM and Ocean Averaging Status Flags have been set for one or more records. SWM Averaging Status. Covern backsoater Averaging Status. Cover		SWH Averaging Status, Ocean Backscatter Averaging Status, Ice	The SWH, Ocean and Ice Averaging Status Flags have been set for one
Subscript Averaging Status CS_OFFL_SIR_OP_2_20190225T02113_20190225T031048_0001 SVM Averaging Status, Corean Subscript Averaging Status Core	CS_OFFL_SIR_IOP_2_20190225T004200_20190225T013134_C001		
Section 1. Proc. 2. 2019022511030104, 2019022511040027, C001 Section 1. Secti	CS_OFFL_SIR_IOP_220190225T013134_20190225T022113_C001		
Se_OFFL_SIR_IOP_2_20190225T000272_20190225T000042_20190225T00004000000000000000000000000000000	CS_OFFL_SIR_IOP_2_20190225T022113_20190225T031048_C001		
CS_OFFL_SIR_IOP_2_20190225T045024_20100225T053940_C001 SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been set for one or more records. SWH Averaging Status, Cean Scacciater Averaging Status Plags have been	CS_OFFL_SIR_IOP_220190225T031048_20190225T040027_C001	Backscatter Averaging Status, Ice Backscatter Averaging Status	
Backscatter Averaging Status Legs SWH Averaging Status Legs SWH Averaging Status Legs Backscatter Averaging Status Legs Backscatter Averaging Status Legs Backscatter Averaging Status Legs Backscatter Averaging Status Backscatter Averaging Status Legs Backscatter Averaging Status Backscatter Averag	CS_OFFL_SIR_IOP_220190225T040027_20190225T045002_C001	Backscatter Averaging Status, Ice	
CS_OFFL_SIR_IOP_2_20190225T08949_20190225T08508_CO01 SBackscatter Averaging Status. Ice Backscatter Averagi	CS_OFFL_SIR_IOP_220190225T045002_20190225T053940_C001		
Security of the security of th	CS_OFFL_SIR_IOP_220190225T053940_20190225T062915_C001	Backscatter Averaging Status, Ice	
CS_OFFL_SIR_IOP_2_20190225T080829_20190225T08508_C001 Backscatter Averaging Status, Loe Backscatter Averaging Status, Coean Backscatter Averaging Status, Coean Backscatter Averaging Status, Loe Backscatter Averaging Status, Coean Backscatter Averaging Status, Loe Backscatter A	CS_OFFL_SIR_IOP_220190225T062915_20190225T071854_C001	Backscatter Averaging Status, Ice Backscatter Averaging Status	
ackscatter Averaging Status. Loe Backscatter Averaging Status. Loe Backscatter Averaging Status. Coean	CS_OFFL_SIR_IOP_220190225T071854_20190225T080829_C001	Backscatter Averaging Status, Ice Backscatter Averaging Status	
Backscatter Averaging Status SWH Averaging	CS_OFFL_SIR_IOP_220190225T080829_20190225T085808_C001	Backscatter Averaging Status, Ice	
Backscatter Averaging Status Cos OFFL_SIR_IOP_2_20190225T12056_20190225T121635_C001 SWH Averaging Status Cos OFFL_SIR_IOP_2_20190225T121635_C001 SWH Averaging Status Cos OFFL_SIR_IOP_2_20190225T121635_C001 SWH Averaging Status Cos OFFL_SIR_IOP_2_20190225T121635_C0190225T121635_C001 SWH Averaging Status Cos OFFL_SIR_IOP_2_20190225T121635_C0190225T121635_C0190225T121635_C0190225T121635_C0190225T121635_C0190225T121635_C0190225T130610_C001 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T130610_20190225T135548_C001 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T130548_C001 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T135548_C001 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T135548_C001 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T144523_C001 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T144523_C019 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T144523_C019 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T162437_C019 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T162437_C019 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T162437_C019 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T17416_C019 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T17416_C019 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T17416_20190225T180350_C001 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T17416_20190225T180350_C001 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T180350_C019 Swh Averaging Status Cos OFFL_SIR_IOP_2_20190225T180329_C0190225T180329_C0190225T180329_C0190225T180329_C01902	CS_OFFL_SIR_IOP_220190225T085808_20190225T094742_C001		
CS_OFFL_SIR_IOP_2_20190225T112656_20190225T12635_C001 CS_OFFL_SIR_IOP_2_20190225T112656_20190225T12635_C001 CS_OFFL_SIR_IOP_2_20190225T12655_20190225T130610_C001 CS_OFFL_SIR_IOP_2_20190225T130610_20190225T135548_C001 CS_OFFL_SIR_IOP_2_20190225T130610_20190225T135548_C001 CS_OFFL_SIR_IOP_2_20190225T135548_20190225T135548_C001 CS_OFFL_SIR_IOP_2_20190225T135548_20190225T135502_C001 CS_OFFL_SIR_IOP_2_20190225T144523_20190225T155002_C001 CS_OFFL_SIR_IOP_2_20190225T163502_20190225T162437_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T17416_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T17416_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T185392_C001 CS_OFFL_SIR_IOP_2_20190225T1853050_20190225T1853050_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T162437_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T162437_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T1646_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T1646_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T1646_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T1853050_C001 CS_OFFL_SIR_IOP_2_20190225T163050_20190225T185309_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T185309_C001 CS_OFFL_SIR_IOP_2_20190225T163050_20190225T185309_C001 CS_OFFL_SIR_IOP_2_20190225T163050_20190225T185309_C001 CS_OFFL_SIR_IOP_2_20190225T185309_20190225T194304_C001 CS_OFFL_SIR_IOP_2_20190225T184304_2019	CS_OFFL_SIR_IOP_2_20190225T094742_20190225T103721_C001	Backscatter Averaging Status	
SOFFL_SIR_IOP_2_20190225T121635_20190225T130610_C001 Sackscatter Averaging Status, Ice Backscatter Averaging Status Status, Ice Backscatter Averaging Status, Ice Backscatter Averaging Status Status, Ice Backscatter Averaging Status Status, Ice Backscatter Averaging Status, Ice Backscatter Averaging Status Status, Ice Backscatter Averaging Status, Ice Backscatter Averaging Stat	CS_OFFL_SIR_IOP_2_20190225T103721_20190225T112656_C001	Backscatter Averaging Status, Ice Backscatter Averaging Status	
SOFFL_SIR_IOP_2_20190225T130610_20190225T135548_C001 Backscatter Averaging Status, Dean Backscatter Averaging Status (CS_OFFL_SIR_IOP_2_20190225T135548_20190225T144523_C001) CS_OFFL_SIR_IOP_2_20190225T135548_20190225T144523_C001 CS_OFFL_SIR_IOP_2_20190225T135548_20190225T144523_C001 CS_OFFL_SIR_IOP_2_20190225T135502_20190225T155502_C001 CS_OFFL_SIR_IOP_2_20190225T155502_20190225T162437_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T162437_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T17416_C001 CS_OFFL_SIR_IOP_2_20190225T162437_20190225T17416_C001 CS_OFFL_SIR_IOP_2_20190225T17416_20190225T185392_C001 CS_OFFL_SIR_IOP_2_20190225T17416_20190225T185392_C001 CS_OFFL_SIR_IOP_2_20190225T17416_20190225T185392_C001 CS_OFFL_SIR_IOP_2_20190225T185392_20190225T185392_C001 CS_OFFL_SIR_IOP_2_20190225T185392_20190225T194304_C001 CS_OFFL_SIR_IOP_2_20190225T194304_20190225T194304_C001 CS_OFFL_SIR_IOP_2_20190225T194304_20190225T194304_C001 CS_OFFL_SIR_IOP_2_20190225T194304_20190225T104304_C001 CS_OFFL_SIR_IOP_2_20190225T	CS_OFFL_SIR_IOP_2_20190225T112656_20190225T121635_C001	Backscatter Averaging Status, Ice Backscatter Averaging Status	
CS_OFFL_SIR_IOP_2_20190225T135548_20190225T144523_C001 SWH Averaging Status, loe Backscatter Averaging Stat	CS_OFFL_SIR_IOP_2_20190225T121635_20190225T130610_C001	Backscatter Averaging Status, Ice Backscatter Averaging Status	
CS_OFFL_SIR_IOP_2_20190225T135548_20190225T144523_C001 Backscatter Averaging Status, Ice Backscatter Averaging Status or more records. SWH Averaging Status or more records. SWH Averaging Status or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH Averaging Status Flags have been set for one or more records. The SWH 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 Backscatter Averaging Status, Ice Ba	CS_OFFL_SIR_IOP_2_20190225T130610_20190225T135548_C001	Backscatter Averaging Status, Ice Backscatter Averaging Status	
CS_OFFL_SIR_IOP_2_20190225T144523_20190225T153502_C001 Backscatter Averaging Status SWH Aver	CS_OFFL_SIR_IOP_220190225T135548_20190225T144523_C001	Backscatter Averaging Status, Ice Backscatter Averaging Status	
CS_OFFL_SIR_IOP_2_20190225T153502_20190225T162437_C001 Backscatter Averaging Status, Ice Backscatter Averaging Status CS_OFFL_SIR_IOP_2_20190225T171416_20190225T180350_C001 CS_OFFL_SIR_IOP_2_20190225T180350_20190225T185329_C001 CS_OFFL_SIR_IOP_2_20190225T180350_20190225T185329_C001 CS_OFFL_SIR_IOP_2_20190225T185329_20190225T194304_C001 SWH Averaging Status Ice Backscatter Averaging Status Ice Backscatter Averaging Status The Ice Backscatter 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. 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. The SWH, Ocean and Ice 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. The SWH, Ocean and Ice 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. 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.	CS_OFFL_SIR_IOP_2_20190225T144523_20190225T153502_C001	Backscatter Averaging Status, Ice	
CS_OFFL_SIR_IOP_2_20190225T162437_20190225T171416_C001 Backscatter Averaging Status, Ice Backscatter Averaging Status CS_OFFL_SIR_IOP_2_20190225T180350_20190225T185329_C001 Ice Backscatter Averaging Status In ESWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The Ice Backscatter Averaging Status Flag has been set for one or more records. SWH Averaging Status, Ocean Backscatter Averaging Status CS_OFFL_SIR_IOP_2_20190225T185329_20190225T194304_C001 SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ice Backscatter 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. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Statu	CS_OFFL_SIR_IOP_2_20190225T153502_20190225T162437_C001	Backscatter Averaging Status, Ice Backscatter Averaging Status	
CS_OFFL_SIR_IOP_2_20190225T171416_20190225T180350_C001 Backscatter Averaging Status, Ice Backscatter Averaging Status CS_OFFL_SIR_IOP_2_20190225T180350_20190225T185329_C001 Ice Backscatter Averaging Status The Ice Backscatter Averaging Status Flag has 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 CS_OFFL_SIR_IOP_2_20190225T185329_20190225T194304_C001 SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status SWH Averaging Status, Ice Backscatter Averaging Status Flags have been set for one or more records. SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status Flags have been set for one or more records. SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status Flags have been set for one or more records. SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status Flags have been set for one or more records. SWH Averaging Status, Ocean Backscatter Averaging Status Flags have been set for one or more records.	CS_OFFL_SIR_IOP_2_20190225T162437_20190225T171416_C001	Backscatter Averaging Status, Ice Backscatter Averaging Status	
CS_OFFL_SIR_IOP_2_20190225T180350_20190225T194304_C001 SWH Averaging Status, Ocean Backscatter Averaging Status CS_OFFL_SIR_IOP_2_20190225T194304_20190225T203243_C001 SWH Averaging Status, Ocean Backscatter Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status, Ice Backscatter Averaging Status Status CS_OFFL_SIR_IOP_2_20190225T194304_20190225T203243_C001 SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status S	CS_OFFL_SIR_IOP_2_20190225T171416_20190225T180350_C001	Backscatter Averaging Status, Ice	
Backscatter Averaging Status more records. SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status were records. SWH Averaging Status, Ice Backscatter Averaging Status were records. The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records. SWH Averaging Status The SWH, Ocean Averaging Status Flags have been set for one or more records.	CS_OFFL_SIR_IOP_220190225T180350_20190225T185329_C001	Ice Backscatter Averaging Status	
CS_OFFL_SIR_IOP_2_20190225T194304_20190225T203243_C001 Backscatter Averaging Status, Ice Backscatter Averaging Status SWH Averaging Status, Ocean SWH Averaging Status, Ocean The SWH, Ocean and the Averaging Status Flags have been set for one or	CS_OFFL_SIR_IOP_220190225T185329_20190225T194304_C001		
	CS_OFFL_SIR_IOP_220190225T194304_20190225T203243_C001	Backscatter Averaging Status, Ice	
	CS_OFFL_SIR_IOP_220190225T203243_20190225T212217_C001		

CS_OFFL_SIR_IOP_2_20190225T212217_20190225T221157_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_20190225T221157_20190225T230131_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_220190225T230131_20190225T235110_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_20190225T235110_20190226T004045_C001	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_220190225T004200_20190225T013134_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T013134_20190225T022113_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T022113_20190225T031048_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T031048_20190225T040027_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T040027_20190225T045002_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T045002_20190225T053940_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T062915_20190225T071854_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T071854_20190225T080829_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T080829_20190225T085808_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T085808_20190225T094742_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T094742_20190225T103721_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T103721_20190225T112656_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T112656_20190225T121635_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T121635_20190225T130610_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T130610_20190225T135548_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T135548_20190225T144523_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T144523_20190225T153502_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T153502_20190225T162437_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T162437_20190225T171416_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T171416_20190225T180350_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T185329_20190225T194304_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T194304_20190225T203243_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T203243_20190225T212217_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T212217_20190225T221157_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T221157_20190225T230131_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T230131_20190225T235110_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190225T235110_20190226T004045_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.