



1. Overview

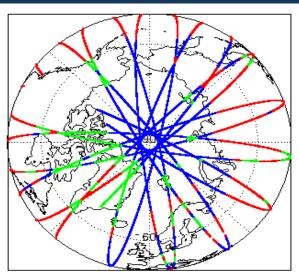
Report Production:	29-Jan-2018
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data

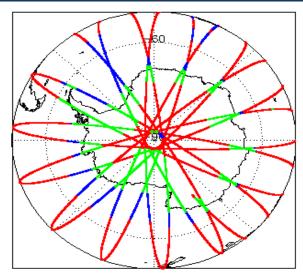
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	See Section 5.2	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
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

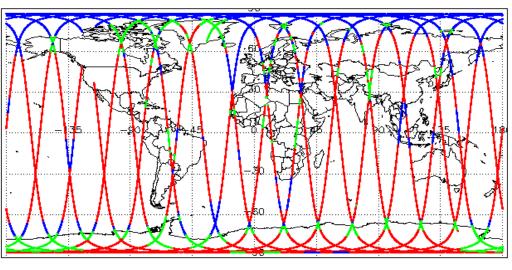
Mission / Instrument News		
11-Jan-2018	None	
12-Jan-2018	None	

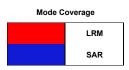
13-Jan-2018 Nothing planned

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:

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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.

Number of products with errors:

73

Para danse	Total Falled	December 1 - 1
Product CS_OFFL_SIR_IOPM1B_20180112T105029_20180112T112243_C001	Test Failed Power scaling error	There is an error in the scaling of the L1B waveform for one or more
CS_OFFL_SIR_IOPR1B_20180112T003939_20180112T004451_C001	Attitude correction missing	records The attitude has not been corrected
CS OFFL SIR IOPR1B 20180112T004451 20180112T004609 C001	Attitude correction missing	The attitude has not been corrected
CS OFFL SIR IOPR1B 20180112T010837 20180112T011050 C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T015623_20180112T015802_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T020256_20180112T020510_C001	Attitude correction missing	The attitude has not been corrected
CS OFFL SIR IOPR1B 20180112T021313 20180112T021341 C001	Attitude correction missing	The attitude has not been corrected
CS OFFL SIR IOPR1B 20180112T022208 20180112T022543 C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T030728_20180112T030826_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T032056_20180112T032106_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T035713_20180112T035733_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T035733_20180112T040455_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T044607_20180112T044802_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T045911_20180112T045932_C001	Attitude correction missing	The attitude has not been corrected
CS OFFL SIR IOPR1B 20180112T053531 20180112T054526 C001	Attitude correction missing	The attitude has not been corrected
	ů.	
CS_OFFL_SIR_IOPR1B_20180112T060832_20180112T061407_C001	Attitude correction missing Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T063846_20180112T063859_C001	Attitude correction missing Attitude correction missing	The attitude has not been corrected The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T070517_20180112T070655_C001		The attitude has not been corrected The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T070806_20180112T070943_C001 CS_OFFL_SIR_IOPR1B_20180112T071255_20180112T071318_C001	Attitude correction missing Attitude correction missing	The attitude has not been corrected The attitude has not been corrected
	Attitude correction missing	
CS_OFFL_SIR_IOPR1B_20180112T071442_20180112T071519_C001 CS_OFFL_SIR_IOPR1B_20180112T071900_20180112T072649_C001	ů.	The attitude has not been corrected The attitude has not been corrected
	Attitude correction missing	
CS_OFFL_SIR_IOPR1B_20180112T080450_20180112T080724_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR4B_20180112T082608_20180112T082702_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR4B_20180112T085024_20180112T085304_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR4B_20180112T085539_20180112T090942_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR4B_20180112T091840_20180112T092126_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR4B_20180112T094326_20180112T094449_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T095615_20180112T095700_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T101000_20180112T101147_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T102406_20180112T103108_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T104554_20180112T104614_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T104714_20180112T105029_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T112937_20180112T112942_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T113417_20180112T114038_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T121732_20180112T122302_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T122753_20180112T122804_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T122808_20180112T122828_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T122831_20180112T122909_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T131259_20180112T131602_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T131658_20180112T131741_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T134545_20180112T134609_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T134919_20180112T135049_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T135344_20180112T135425_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T135636_20180112T140329_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T141712_20180112T142527_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T144033_20180112T144039_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T144746_20180112T144751_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T145401_20180112T145409_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T152821_20180112T152924_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T153459_20180112T154011_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T162035_20180112T162056_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T171243_20180112T172031_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T175935_20180112T175947_C001	Attitude correction missing	The attitude has not been corrected

CS_OFFL_SIR_IOPR1B_20180112T181128_20180112T181345_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T182426_20180112T183001_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T184916_20180112T184918_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T185059_20180112T185829_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T185854_20180112T190018_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T190112_20180112T190356_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T190742_20180112T190938_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T193005_20180112T193303_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T195004_20180112T195244_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T203846_20180112T203944_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T204746_20180112T204958_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T220816_20180112T221530_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T225315_20180112T230014_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T231022_20180112T231136_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T234039_20180112T234235_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T234252_20180112T234253_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T234815_20180112T234941_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T234954_20180112T235421_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20180112T235422_20180112T235531_C001	Attitude correction missing	The attitude has not been corrected

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:

Paradicat	Took Failed	Pesseintier
Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20180112T014133_20180112T015622_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20180112T071625_20180112T071712_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20180112T072955_20180112T080450_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180112T040456_20180112T040941_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180112T071802_20180112T071859_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180112T103418_20180112T103828_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180112T121631_20180112T121731_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180112T135425_20180112T135636_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180112T053531_20180112T054526_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180112T070517_20180112T070655_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180112T071900_20180112T072649_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180112T113417_20180112T114038_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180112T134919_20180112T135049_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180112T202605_20180112T203632_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:

Product	Test Failed
CS_OFFL_SIR_IOPR_2_20180112T072825_20180112T072836_C001	Percentage of processing errors detected greater than minimum acceptable threshold.

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.

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20180112T105029_20180112T112243_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:

77

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20180112T000202_20180112T001847_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T001905_20180112T003113_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T005251_20180112T010837_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T011731_20180112T012621_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T013514_20180112T013939_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T014133_20180112T015622_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T015802_20180112T020256_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T023452_20180112T024202_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T024325_20180112T030727_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T032106_20180112T034451_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T041201_20180112T044607_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180112T044930 20180112T045111 C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T045217_20180112T045643_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T045933_20180112T052520_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T059393_20180112T060832_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
		records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T061408_20180112T062500_C001	Ocean Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T063132_20180112T063721_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T063859_20180112T065420_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T072955_20180112T080450_C001	Ocean Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T081038_20180112T081552_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T081749_20180112T082036_C001	Ocean Range Averaging Status	records.
CS_OFFL_SIR_IOPM_2_20180112T082236_20180112T082608_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T082702_20180112T083418_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T085305_20180112T085539_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T090943_20180112T091840_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T092126_20180112T094325_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T094911_20180112T095038_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T095045_20180112T095454_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T095701_20180112T101000_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T101148_20180112T101904_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T102000_20180112T102405_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T103109_20180112T103149_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T103149_20180112T103243_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T105029_20180112T112243_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T112408_20180112T112936_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T114039_20180112T115307_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T115333_20180112T121053_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T123220_20180112T124400_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T124603_20180112T130144_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T130336_20180112T130833_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T130841_20180112T130848_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T130913_20180112T131034_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T131741_20180112T132545_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180112T133433 20180112T134545 C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T142527_20180112T144033_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
00_011 E_0111_101 WI_E_201001121 142321_201001121 144033_0001	Joean Range Averaging Status	records.

CS_OFFL_SIR_IOPM_2_20180112T144256_20180112T144746_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T145409_20180112T152820_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T155549_20180112T161703_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T161711_20180112T162035_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T162329_20180112T162701_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T162724_20180112T163050_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T163316_20180112T170228_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T173137_20180112T175935_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T180117_20180112T180615_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T181346_20180112T182426_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T183001_20180112T184747_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T193625_20180112T193912_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T194115_20180112T194646_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T195244_20180112T202605_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T203945_20180112T204101_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T205907_20180112T211828_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T212034_20180112T212542_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T213129_20180112T220520_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T223018_20180112T223456_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T223535_20180112T225315_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T231136_20180112T232904_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T233345_20180112T234039_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180112T022543_20180112T022752_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180112T113229_20180112T113416_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180112T121345_20180112T121435_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180112T135425_20180112T135636_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180112T021941_20180112T022048_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180112T103341_20180112T103418_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180112T124400_20180112T124603_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180112T131658_20180112T131741_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180112T162035_20180112T162056_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180112T211828_20180112T211917_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

5.7 L2 SWH and Backscatter Measurement Check

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

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

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20180112T000202_20180112T001847_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_20180112T001905_20180112T003113_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_20180112T005251_20180112T010837_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_20180112T011731_20180112T012621_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_20180112T013219_20180112T013449_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T013514_20180112T013939_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T014133_20180112T015622_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_20180112T015802_20180112T020256_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_20180112T023452_20180112T024202_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_20180112T024325_20180112T030727_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_20180112T032106_20180112T034451_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_20180112T041201_20180112T044607_C001	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
CS OFFL SIR IOPM 2 20180112T044930 20180112T045111 C001	Backscatter Averaging Status Ice Backscatter Averaging Status	more records. The Ice Backscatter Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T045217_20180112T045643_C001	Ice Backscatter Averaging Status	records. The Ice Backscatter Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T045933_20180112T052520_C001	SWH Averaging Status, Ocean	records. The SWH and Ocean Averaging Status Flags have been set for one or
	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T055350_20180112T060832_C001	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T061408_20180112T062500_C001	Backscatter Averaging Status	more records. The Ice Backscatter Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T063132_20180112T063721_C001	Ice Backscatter Averaging Status SWH Averaging Status, Ocean	records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T063859_20180112T065420_C001	Backscatter Averaging Status	more records.
CS_OFFL_SIR_IOPM_2_20180112T072955_20180112T080450_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_20180112T081038_20180112T081552_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T081749_20180112T082036_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_20180112T082236_20180112T082608_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_20180112T085305_20180112T085539_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_20180112T090943_20180112T091840_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_20180112T092126_20180112T094325_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_20180112T094911_20180112T095038_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T095045_20180112T095454_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T095701_20180112T101000_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_20180112T101148_20180112T101904_C001	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T102000_20180112T102405_C001	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T103109_20180112T103149_C001	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T103149_20180112T103243_C001	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T105029_20180112T112243_C001	Backscatter Averaging Status	more records. The Ice Backscatter Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T112408_20180112T112936_C001	Ice Backscatter Averaging Status SWH Averaging Status, Ocean	records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T114039_20180112T115307_C001	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T115333_20180112T121053_C001	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T123220_20180112T124400_C001	Backscatter Averaging Status	more records.
CS_OFFL_SIR_IOPM_2_20180112T124603_20180112T130144_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_20180112T130336_20180112T130833_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T130841_20180112T130848_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T131741_20180112T132545_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_20180112T133433_20180112T134545_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_20180112T142527_20180112T144033_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_20180112T144256_20180112T144746_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180112T145409_20180112T152820_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_20180112T155549_20180112T161703_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_20180112T161711_20180112T162035_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_20180112T162329_20180112T162701_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T162724_20180112T163050_C001	Ice Backscatter Averaging Status	records. The Ice Backscatter Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T163316_20180112T170228_C001	SWH Averaging Status, Ocean	records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T173137_20180112T175935_C001	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOFM_2_201801121173137_201801121173933_C001 CS_OFFL_SIR_IOPM_2_201801127180117_201801127180615_C001	Backscatter Averaging Status Ice Backscatter Averaging Status	more records. The Ice Backscatter Averaging Status Flag has been set for one or more
	SWH Averaging Status, Ocean	records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T181346_20180112T182426_C001	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T183001_20180112T184747_C001	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T190019_20180112T190112_C001	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20180112T193625_20180112T193912_C001	Backscatter Averaging Status	more records. The Ice Backscatter Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180112T194115_20180112T194646_C001	Ice Backscatter Averaging Status	records.
CS_OFFL_SIR_IOPM_2_20180112T195244_20180112T202605_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_20180112T203945_20180112T204101_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_20180112T205907_20180112T211828_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_20180112T212034_20180112T212542_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOPM_2_20180112T213129_20180112T220520_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_20180112T223018_20180112T223456_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_20180112T223535_20180112T225315_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_20180112T231136_20180112T232904_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_20180112T233345_20180112T234039_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180112T022543_20180112T022752_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180112T113229_20180112T113416_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180112T121345_20180112T121435_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180112T135425_20180112T135636_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180112T021941_20180112T022048_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180112T103341_20180112T103418_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180112T124400_20180112T124603_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180112T131658_20180112T131741_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.

5.8 L2 Ocean Retracking Quality Check

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

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

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: 0

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). 0

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_220180112T104003_20180112T112942_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.

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220180111T235507_20180112T004441_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_220180112T004441_20180112T013421_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_220180112T013421_20180112T022355_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_220180112T022355_20180112T031334_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_220180112T031334_20180112T040308_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_220180112T040308_20180112T045248_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T045248_20180112T054222_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T054222_20180112T063202_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_220180112T063202_20180112T072136_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_220180112T072136_20180112T081115_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOP_220180112T081115_20180112T090049_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_220180112T090049_20180112T095029_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_220180112T095029_20180112T104003_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_220180112T104003_20180112T112942_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_220180112T112942_20180112T121916_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_220180112T121916_20180112T130856_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T130856_20180112T135830_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T135830_20180112T144809_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_220180112T153743_20180112T162723_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_220180112T162723_20180112T171657_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_220180112T171657_20180112T180637_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_220180112T180637_20180112T185611_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T185611_20180112T194550_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_220180112T194550_20180112T203524_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T203524_20180112T212504_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_220180112T212504_20180112T221438_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T221438_20180112T230417_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T230417_20180112T235351_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.

6.7 P2P SWH and Backscatter Measurement Check

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

Currently, there are three common status flags raised in the P2P products which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220180111T235507_20180112T004441_C002	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_220180112T004441_20180112T013421_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_220180112T013421_20180112T022355_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_220180112T022355_20180112T031334_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_220180112T031334_20180112T040308_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_220180112T040308_20180112T045248_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_220180112T045248_20180112T054222_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_220180112T054222_20180112T063202_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_220180112T063202_20180112T072136_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_220180112T072136_20180112T081115_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_220180112T081115_20180112T090049_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_220180112T090049_20180112T095029_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_220180112T095029_20180112T104003_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_220180112T104003_20180112T112942_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_220180112T112942_20180112T121916_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_220180112T121916_20180112T130856_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_220180112T130856_20180112T135830_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.

CS_OFFL_SIR_IOP_2_20180112T135830_20180112T144809_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_220180112T153743_20180112T162723_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_220180112T162723_20180112T171657_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_220180112T171657_20180112T180637_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_220180112T180637_20180112T185611_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_220180112T185611_20180112T194550_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_220180112T194550_20180112T203524_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_220180112T203524_20180112T212504_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_220180112T212504_20180112T221438_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_220180112T221438_20180112T230417_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_220180112T230417_20180112T235351_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.

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220180111T235507_20180112T004441_C002	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T004441_20180112T013421_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T013421_20180112T022355_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T022355_20180112T031334_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T031334_20180112T040308_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T040308_20180112T045248_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T045248_20180112T054222_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T063202_20180112T072136_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T072136_20180112T081115_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T081115_20180112T090049_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T090049_20180112T095029_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T095029_20180112T104003_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T104003_20180112T112942_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T112942_20180112T121916_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T121916_20180112T130856_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T130856_20180112T135830_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T135830_20180112T144809_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T153743_20180112T162723_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T162723_20180112T171657_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T171657_20180112T180637_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T185611_20180112T194550_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T194550_20180112T203524_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T203524_20180112T212504_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T212504_20180112T221438_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T221438_20180112T230417_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T230417_20180112T235351_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180112T235351_20180113T004331_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.