

IDEAS+ Daily Report for GOP data:

<u>09/12/2017</u>



		1. Overview			
port Production:	08-Jan-2018	Check		L1 & L2	P2P
		Server check: science-pds.		Nominal	Nominal
rocessor Used:	CryoSat Ocean Processor	Server check: calval-pds.c		Nominal	Nominal
		Product Software C		Nominal	Nominal
Data Used:	Geophysical Ocean Products (GOP)	Product Format Cl		Nominal	Nominal
	L1B, L2 & P2P Science Data	Product Header An		Nominal	Nominal
		Auxiliary Data File Usa		Nominal	Nominal
		Auxiliary Correction Err		Nominal	Nominal
		Measurement Confidence		See Section 4.5, 4.6 and 5.5	See Section 6.5
		Range, SWH & Backscatter Me	asurement Check	See Section 5.6, 5.7	See Section 6.6, 6
		Ocean Retracking Qua	ity Check	See Section 5.8	See Section 6.8
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-Dec-2017 None	645				
-Dec-2017 None					
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# 3. Instrument Configuration

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

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SIRAL instrument(s) in use:

4. GOP Level 1B Data Quality Check

## 4.1 L1B Product Format Check

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

Number of products with errors:

## 4.2 L1B Product Header Analysis

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

## 4.3 L1B Auxilary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a 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.

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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.

		<b>-</b>
Product CS_OFFL_SIR_GOPM1B_20171209T031544_20171209T032916_C001	Test Failed Power scaling error	Description There is an error in the scaling of the L1B waveform for one or more
CS_OFFL_SIR_GOPR1B_20171209T004229_20171209T004413_C001	Attitude correction missing	records The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T011432_20171209T011812_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T012226_20171209T01012_0001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T012646_20171209T012755_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T013222_20171209T013301_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T015106_20171209T015216_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_2017120910120600_201712091013210_0001	Attitude correction missing	The attitude has not been corrected
CS OFFL SIR GOPR1B 20171209T022253 20171209T022310 C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T030212_20171209T030655_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_201712091030212_201712091030003_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T031424_20171209T031544_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_201712091031424_201712091031944_0001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_201712091040202_201712091040205_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T052743_20171209T052858_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_201712091052126_201712091052265_C001	Attitude correction missing	The attitude has not been corrected
CS OFFL SIR GOPR1B 20171209T061729 20171209T061950 C001	Attitude correction missing	The attitude has not been corrected
	-	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T062006_20171209T062103_C001 CS_OFFL_SIR_GOPR1B_20171209T064956_20171209T065532_C001	Attitude correction missing Attitude correction missing	The attitude has not been corrected
	Attitude correction missing	
CS_OFFL_SIR_GOPR1B_20171209T075856_20171209T080818_C001	Ű	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T084500_20171209T084831_C001	Attitude correction missing Attitude correction missing	The attitude has not been corrected The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T085859_20171209T090051_C001	Ű	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T093209_20171209T093541_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T093848_20171209T093902_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T094855_20171209T094951_C001	Attitude correction missing	
CS_OFFL_SIR_GOPR1B_20171209T095129_20171209T095134_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T102447_20171209T102751_C001	Attitude correction missing Attitude correction missing	The attitude has not been corrected The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T110621_20171209T110657_C001 CS_OFFL_SIR_GOPR1B_20171209T111136_20171209T111839_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209111035_20171209111055_2001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_201712091121110_201712091121116_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_201712097121635_201712097122011_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_201712091121035_201712091122011_0001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_201712091125905_201712091125926_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_201712091132047_201712091132020_001	Attitude correction missing	The attitude has not been corrected
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CS_OFFL_SIR_GOPR1B_20171209T135009_20171209T135015_C001 CS_OFFL_SIR_GOPR1B_20171209T135021_20171209T135027_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T141347_20171209T141601_C001	Attitude correction missing	The attitude has not been corrected The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_201712091141347_201712091141001_0001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_201712091150304_201712091150509_C001	Attitude correction missing	
	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T161214_20171209T161237_C001	č	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T162946_20171209T162954_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T163752_20171209T164132_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T164132_20171209T164136_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T170039_20171209T170132_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T190551_20171209T191127_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T194013_20171209T194125_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T194301_20171209T194416_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T211812_20171209T212058_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T212506_20171209T212549_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T215716_20171209T220030_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T221024_20171209T221350_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T223528_20171209T223814_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_GOPR1B_20171209T224955_20171209T225711_C001	Attitude correction missing	The attitude has not been corrected

CS_OFFL_SIR_GOPR1B_20171209T225711_20171209T225848_C001
CS_OFFL_SIR_GOPR1B_20171209T225917_20171209T225920_C001
CS_OFFL_SIR_GOPR1B_20171209T230945_20171209T231101_C001
CS_OFFL_SIR_GOPR1B_20171209T233631_20171209T234013_C001
CS OFFL SIR GOPR1B 20171209T234950 20171209T235305 C001

Attitude correction missing Attitude correction missing Attitude correction missing Attitude correction missing Attitude correction missing

The attitude has not been corrected 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.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20171209T203509_20171209T210802_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20171209T030923_20171209T031116_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20171209T044614_20171209T045109_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20171209T092650_20171209T092845_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20171209T125426_20171209T125537_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20171209T125754_20171209T125905_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20171209T143542_20171209T143819_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20171209T154448_20171209T154848_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20171209T161238_20171209T161701_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20171209T192642_20171209T193215_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20171209T062138_20171209T062616_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20171209T070549_20171209T070829_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20171209T084500_20171209T084831_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20171209T110833_20171209T111136_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20171209T111952_20171209T112941_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20171209T120325_20171209T120503_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20171209T185239_20171209T185458_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20171209T203142_20171209T203509_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20171209T221024_20171209T221350_C001	Loss of Echo	The tracking echo is missing for one or more records

## 5. GOP Level 2 Data Quality Check

### 5.1 L2 Product Format Check

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

Number of products with errors:

### 5.2 L2 Product Header Analysis

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

#### 5.3 L2 Auxiliary Data File Usage Check

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

#### 5.4 L2 Auxiliary Correction Error Check

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

## 5.5 L2 Measurement Confidence Data Check

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

#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20171209T031544_20171209T032916_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. 71

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20171209T000751_20171209T002526_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T003457_20171209T003701_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T004414_20171209T010434_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_GOPM_2_20171209T010603_20171209T011431_C001 CS OFFL SIR GOPM 2 20171209T013301 20171209T015105 C001 CS_OFFL_SIR_GOPM_2_20171209T015216_20171209T020559_C001 CS_OFFL_SIR_GOPM_2_20171209T021411_20171209T021610_C001 CS OFFL SIR GOPM 2 20171209T021723 20171209T022112 C001 CS_OFFL_SIR_GOPM_2_20171209T022311_20171209T023832_C001 CS OFFL SIR GOPM 2 20171209T024034 20171209T024957 C001 CS OFFL SIR GOPM 2 20171209T031226 20171209T031424 C001 CS OFFL SIR GOPM 2 20171209T031544 20171209T032916 C001 CS_OFFL_SIR_GOPM_2_20171209T034510_20171209T034637_C001 CS_OFFL_SIR_GOPM_2_20171209T034702_20171209T034826_C001 CS_OFFL_SIR_GOPM_2_20171209T035220_20171209T040014_C001 CS OFFL SIR GOPM 2 20171209T040255 20171209T041738 C001 CS_OFFL_SIR_GOPM_2_20171209T045531_20171209T052743_C001 CS_OFFL_SIR_GOPM_2_20171209T053048_20171209T053259_C001 CS OFFL SIR GOPM 2 20171209T053320 20171209T053903 C001 CS_OFFL_SIR_GOPM_2_20171209T054235_20171209T060707_C001 CS_OFFL_SIR_GOPM_2_20171209T063831_20171209T064956_C001 CS_OFFL_SIR_GOPM_2_20171209T065532_20171209T070548_C001 CS_OFFL_SIR_GOPM_2_20171209T071257_20171209T071726_C001 CS_OFFL_SIR_GOPM_2_20171209T072114_20171209T074845_C001 CS OFFL SIR GOPM 2 20171209T075700 20171209T075856 C001 CS_OFFL_SIR_GOPM_2_20171209T081251_20171209T084459_C001 CS OFFL SIR GOPM 2 20171209T085207 20171209T085743 C001 CS OFFL SIR GOPM 2 20171209T090051 20171209T090529 C001 CS OFFL SIR GOPM 2 20171209T093641 20171209T093848 C001 CS_OFFL_SIR_GOPM_2_20171209T095134_20171209T102447_C001 CS_OFFL_SIR_GOPM_2_20171209T103111_20171209T103623_C001 CS_OFFL_SIR_GOPM_2_20171209T104102_20171209T105809_C001 CS OFFL SIR GOPM 2 20171209T112941 20171209T120325 C001 CS_OFFL_SIR_GOPM_2_20171209T121126_20171209T121526_C001 CS_OFFL_SIR_GOPM_2_20171209T122011_20171209T124625_C001 CS OFFL SIR GOPM 2 20171209T124641 20171209T125351 C001 CS_OFFL_SIR_GOPM_2_20171209T125537_20171209T125753_C001 CS_OFFL_SIR_GOPM_2_20171209T130934_20171209T132046_C001 CS OFFL SIR GOPM 2 20171209T132527 20171209T132649 C001 CS_OFFL_SIR_GOPM_2_20171209T132651_20171209T134248_C001 CS OFFL SIR GOPM 2 20171209T134449 20171209T135008 C001 CS OFFL SIR GOPM 2 20171209T140106 20171209T141347 C001 CS_OFFL_SIR_GOPM_2_20171209T141601_20171209T143306_C001 CS_OFFL_SIR_GOPM_2_20171209T145520_20171209T150447_C001 CS OFFL SIR GOPM 2 20171209T150725 20171209T152137 C001 CS_OFFL_SIR_GOPM_2_20171209T152414_20171209T152919_C001 CS_OFFL_SIR_GOPM_2_20171209T153751_20171209T153848_C001 CS_OFFL_SIR_GOPM_2_20171209T160101_20171209T160728_C001 CS_OFFL_SIR_GOPM_2_20171209T164416_20171209T170039_C001 CS OFFL SIR GOPM 2 20171209T170413 20171209T170835 C001 CS_OFFL_SIR_GOPM_2_20171209T171510_20171209T174004_C001 CS_OFFL_SIR_GOPM_2_20171209T181506_20171209T184012_C001 CS OFFL SIR GOPM 2 20171209T184227 20171209T184749 C001 CS_OFFL_SIR_GOPM_2_20171209T184756_20171209T185121_C001 Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status

The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more record The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords. The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_GOPM_2_20171209T191127_20171209T192641_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T195016_20171209T201901_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T202217_20171209T203027_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T203509_20171209T210802_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T212058_20171209T212210_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T215142_20171209T215715_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T220156_20171209T220716_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T221350_20171209T223528_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T223814_20171209T224757_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T225920_20171209T230347_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T231934_20171209T232418_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T232606_20171209T233631_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T234254_20171209T234615_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T235305_20171209T235811_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20171209T155938_20171209T160101_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20171209T061729_20171209T061950_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20171209T232418_20171209T232606_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.

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Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20171209T000751_20171209T002526_C001	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_GOPM_2_20171209T003457_20171209T003701_C001	Backscatter Averaging Status	more records. The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T004414_20171209T010434_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_GOPM_2_20171209T010603_20171209T011431_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_GOPM_2_20171209T013301_20171209T015105_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_GOPM_2_20171209T015216_20171209T020559_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_GOPM_2_20171209T021411_20171209T021610_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T021723_20171209T022112_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T022311_20171209T023832_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_GOPM_2_20171209T024034_20171209T024957_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_GOPM_2_20171209T031226_20171209T031424_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_GOPM_2_20171209T031544_20171209T032916_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_GOPM_2_20171209T035220_20171209T040014_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T040255_20171209T041738_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_GOPM_2_20171209T045531_20171209T052743_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_GOPM_2_20171209T053048_20171209T053259_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T053320_20171209T053903_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T054235_20171209T060707_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_GOPM_2_20171209T063831_20171209T064956_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_GOPM_2_20171209T065532_20171209T070548_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_GOPM_2_20171209T071257_20171209T071726_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T072114_20171209T074845_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_GOPM_2_20171209T075700_20171209T075856_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_GOPM_2_20171209T081251_20171209T084459_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_GOPM_2_20171209T085207_20171209T085743_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20171209T090051_20171209T090529_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_GOPM_2_20171209T095134_20171209T102447_C001 CS OFFL SIR GOPM 2 20171209T103111_20171209T103623_C001 CS_OFFL_SIR_GOPM_2_20171209T104102_20171209T105809_C001 CS_OFFL_SIR_GOPM_2_20171209T112941_20171209T120325_C001 CS OFFL SIR GOPM 2 20171209T120827 20171209T121110 C001 CS_OFFL_SIR_GOPM_2_20171209T121126_20171209T121526_C001 CS_OFFL_SIR_GOPM_2_20171209T122011_20171209T124625_C001 CS OFFL SIR GOPM 2 20171209T124641 20171209T125351 C001 CS_OFFL_SIR_GOPM_2_20171209T125537_20171209T125753_C001 CS_OFFL_SIR_GOPM_2_20171209T130934_20171209T132046_C001 CS OFFL SIR GOPM 2 20171209T132527 20171209T132649 C001 CS_OFFL_SIR_GOPM_2_20171209T132651_20171209T134248_C001 CS OFFL SIR GOPM 2 20171209T134449 20171209T135008 C001 CS_OFFL_SIR_GOPM_2_20171209T140106_20171209T141347_C001 CS_OFFL_SIR_GOPM_2_20171209T141601_20171209T143306_C001 CS OFFL SIR GOPM 2 20171209T145520 20171209T150447 C001 CS_OFFL_SIR_GOPM_2_20171209T150725_20171209T152137_C001 CS_OFFL_SIR_GOPM_2_20171209T152414_20171209T152919_C001 CS OFFL SIR GOPM 2 20171209T153751 20171209T153848 C001 CS_OFFL_SIR_GOPM_2_20171209T160101_20171209T160728_C001 CS_OFFL_SIR_GOPM_2_20171209T164416_20171209T170039_C001 CS OFFL SIR GOPM 2 20171209T170413 20171209T170835 C001 CS_OFFL_SIR_GOPM_2_20171209T171510_20171209T174004_C001 CS OFFL SIR GOPM 2 20171209T181506 20171209T184012 C001 CS OFFL SIR GOPM 2 20171209T184227 20171209T184749 C001 CS OFFL SIR GOPM 2 20171209T184756 20171209T185121 C001 CS_OFFL_SIR_GOPM_2_20171209T191127_20171209T192641_C001 CS_OFFL_SIR_GOPM_2_20171209T195016_20171209T201901_C001 CS_OFFL_SIR_GOPM_2_20171209T202217_20171209T203027_C001 CS OFFL SIR GOPM 2 20171209T203509 20171209T210802 C001 CS_OFFL_SIR_GOPM_2_20171209T215142_20171209T215715_C001 CS_OFFL_SIR_GOPM_2_20171209T220156_20171209T220716_C001 CS OFFL SIR GOPM 2 20171209T221350 20171209T223528 C001 CS_OFFL_SIR_GOPM_2_20171209T223814_20171209T224757_C001 CS_OFFL_SIR_GOPM_2_20171209T225920_20171209T230347_C001 CS OFFL SIR GOPM 2 20171209T231934 20171209T232418 C001 CS_OFFL_SIR_GOPM_2_20171209T232606_20171209T233631_C001 CS_OFFL_SIR_GOPM_2_20171209T234254_20171209T234615_C001 CS OFFL SIR GOPM 2 20171209T235305 20171209T235811 C001 CS_OFFL_SIR_GOPN_2_20171209T155938_20171209T160101_C001 CS_OFFL_SIR_GOPR_2_20171209T061729_20171209T061950_C001 CS_OFFL_SIR_GOPR_2_20171209T232418_20171209T232606_C001

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

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

The SWH and Ocean Averaging Status Flags have been set for one or more record: The Ice Backscatter Averaging Status Flag has 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 Ice Backscatter Averaging Status Flag has been set for one or more records. The Ice Backscatter Averaging Status Flag has 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 Ice Backscatter Averaging Status Flag has been set for one or more records The SWH and Ocean Averaging Status Flags have been set for one or more record 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 Ice Backscatter Averaging Status Flag has 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 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 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 Ice Backscatter Averaging Status Flag has 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 Ice Backscatter Averaging Status Flag has been set for one or more records The Ice Backscatter Averaging Status Flag has 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 Ice Backscatter Averaging Status Flag has 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 Ice Backscatter Averaging Status Flag has 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 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 Ice Backscatter Averaging Status Flag has 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 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: 53

## 6. GOP 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).

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:         0					
6.3 P2P Auxiliary Data File Usage Check					
Each product is checked for missing Data Set Descriptors with respect to a pre-c	determined baseline and also to check the v	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 check	ked for the default error value (32767).				
Number of products with errors: 0					
6.5 P2P Measurement Confidence Data Check					
CryoSat P2P data includes a measurement confidence flag for each 20-Hz measurement	surement record. The bit value of this flag ir	ndicates any problems when set.			
Number of products with errors: 1					
Product	Test Failed	Description			
CS_OFFL_SIR_GOP_220171209T030522_20171209T035458_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					
On a Ont DOD state includes on One on a the Damas Automatics Otatus flag for a					

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. 27

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220171208T234655_20171209T003631_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20171209T003631_20171209T012608_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20171209T012608_20171209T021544_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_GOP_220171209T021544_20171209T030522_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_GOP_2_20171209T030522_20171209T035458_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220171209T035458_20171209T044435_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_GOP_220171209T044435_20171209T053411_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220171209T053411_20171209T062349_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_GOP_220171209T062349_20171209T071325_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220171209T071325_20171209T080303_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_GOP_220171209T080303_20171209T085239_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220171209T085239_20171209T094216_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_GOP_220171209T094216_20171209T103152_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220171209T103152_20171209T112130_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_GOP_220171209T112130_20171209T121106_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_GOP_220171209T121106_20171209T130043_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_GOP_220171209T130043_20171209T135019_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_GOP_220171209T135019_20171209T143957_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220171209T152933_20171209T161910_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220171209T161910_20171209T170846_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_GOP_220171209T170846_20171209T175824_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220171209T175824_20171209T184800_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_GOP_220171209T184800_20171209T193737_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_GOP_220171209T193737_20171209T202714_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_GOP_220171209T211651_20171209T220627_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220171209T220627_20171209T225605_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220171209T225605_20171209T234541_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

### 6.7 P2P SWH and Backscatter Measurement Check

CryoSat P2P data includes a SWH Averaging Status flag and an Ocean and Ice Backscatter Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when 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. 27

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20171208T234655_20171209T003631_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_GOP_2_20171209T003631_20171209T012608_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_GOP_2_20171209T012608_20171209T021544_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_GOP_2_20171209T021544_20171209T030522_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_GOP_220171209T030522_20171209T035458_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_GOP_220171209T035458_20171209T044435_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_GOP_220171209T044435_20171209T053411_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_GOP_220171209T053411_20171209T062349_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_GOP_220171209T062349_20171209T071325_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_GOP_220171209T071325_20171209T080303_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_GOP_220171209T080303_20171209T085239_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_GOP_2_20171209T085239_20171209T094216_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_GOP_220171209T094216_20171209T103152_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_GOP_220171209T103152_20171209T112130_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_GOP_2_20171209T112130_20171209T121106_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_GOP_2_20171209T121106_20171209T130043_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_GOP_2_20171209T130043_20171209T135019_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_GOP_2_20171209T135019_20171209T143957_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_GOP_2_20171209T152933_20171209T161910_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_GOP_2_20171209T161910_20171209T170846_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_GOP_2_20171209T170846_20171209T175824_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_GOP_2_20171209T175824_20171209T184800_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_GOP_2_20171209T184800_20171209T193737_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_GOP_2_20171209T193737_20171209T202714_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_GOP_2_20171209T211651_20171209T220627_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_GOP_220171209T220627_20171209T225605_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_GOP_220171209T225605_20171209T234541_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: 24		
Product	Test Failed	Description
CS_OFFL_SIR_GOP_220171208T234655_20171209T003631_C002	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20171209T003631_20171209T012608_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20171209T012608_20171209T021544_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220171209T021544_20171209T030522_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.

CS_OFFL_SIR_GOP_2_20171209T030522_20171209T035458_C001 CS_OFFL_SIR_GOP_2_20171209T044435_20171209T053411_C001 CS_OFFL_SIR_GOP_2__20171209T053411_20171209T062349_C001 CS_OFFL_SIR_GOP_2_20171209T062349_20171209T071325_C001 CS OFFL SIR GOP 2 20171209T071325 20171209T080303 C001 CS_OFFL_SIR_GOP_2__20171209T080303_20171209T085239_C001 CS_OFFL_SIR_GOP_2__20171209T085239_20171209T094216_C001 CS OFFL SIR GOP 2 20171209T094216 20171209T103152 C001 CS_OFFL_SIR_GOP_2__20171209T103152_20171209T112130_C001 CS OFFL SIR GOP 2 20171209T112130 20171209T121106 C001 CS_OFFL_SIR_GOP_2_20171209T121106_20171209T130043_C001 CS_OFFL_SIR_GOP_2_20171209T130043_20171209T135019_C001 CS_OFFL_SIR_GOP_2_20171209T135019_20171209T143957_C001 CS_OFFL_SIR_GOP_2__20171209T152933_20171209T161910_C001 CS_OFFL_SIR_GOP_2_20171209T170846_20171209T175824_C001 CS OFFL SIR GOP 2 20171209T175824 20171209T184800 C001 CS_OFFL_SIR_GOP_2__20171209T184800_20171209T193737_C001 CS_OFFL_SIR_GOP_2__20171209T193737_20171209T202714_C001 CS_OFFL_SIR_GOP_2_20171209T211651_20171209T220627_C001 CS_OFFL_SIR_GOP_2_20171209T220627_20171209T225605_C001

Ocean Retracking Quality Flag The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records. The Ocean Retracking Quality Flag has been set for one or more records.