

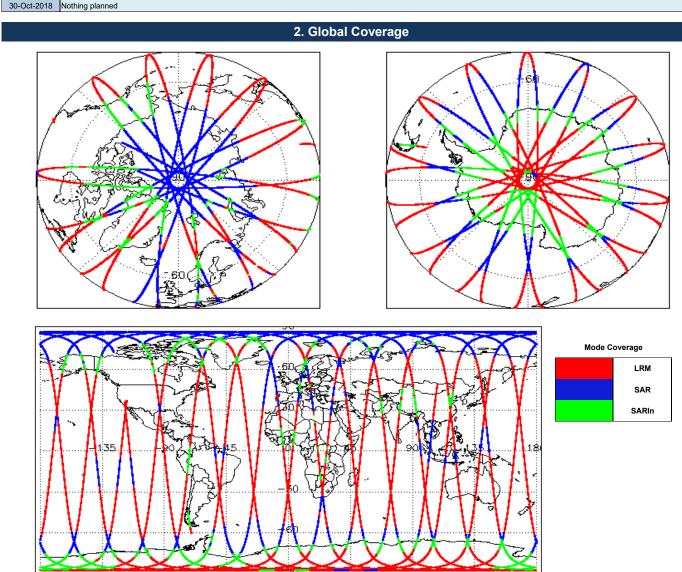
# IDEAS+ Daily Report for GOP data:

# <u>29/10/2018</u>

an aut Draduation.	29-Nov-2018	Check	L1 & L2	P2P
eport Production:	29-1100-2018	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	On an Orth October Deservoirs	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Useu.	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Usadu	Data Used: Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data	Product Format Check	Nominal	Nominal
Data Useu.		Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
		Auxiliary Correction Error Check	Nominal	Nominal
		Measurement Confidence Data Check	See Section 4.5, 4.6	Nominal
		Range, SWH & Backscatter Measurement Check	See Section 5.6, 5.7	See Section 6.6, 6.7
		Ocean Retracking Quality Check	See Section 5.8	See Section 6.8

Overview

MISSION / Instrument News		
28-Oct-2018	None	
29-Oct-2018	None	
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## 3. Instrument Configuration

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

SIRAL instrument(s) in use:

ISE: SIRAL - A

0

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

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				
4.4 L1B Auxiliary Correction Error Check				
CryoSat L1B data includes a correction error flag for each measurement recor	d. The bit value of this flag indicat	es any problems when set.		
Number of products with errors: 0				
4.5 L1B Measurement Confidence Data Check				
CryoSat L1B data includes a measurement confidence flag for each measurer	nent record. The bit value of this f	ag indicates any problems when set.		
Attitude Correction Missing: This flag is currently set in error for GOPR prod	lucts due to a configuration issue.	This is being investigated and will be updated in the next SW update.		
Number of products with errors: 0				
4.6 L1B Waveform Group Data Check				
CryoSat L1B data includes a waveform data flag for each measurement record	d. The bit value of this flag indicate	es any problems when set.		
	-	es any problems when set.		
Loss of Echo Flag: This flag is currently set for some products over land, but	-	es any problems when set.		
Loss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 14	this is to be expected.			
Loss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 14 Product	-	es any problems when set.           Description           The tracking echo is missing for one or more records		
Loss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 14 Product CS_OFFL_SIR_GOPM1B_20181029T092411_20181029T093533_C001	this is to be expected.	Description		
Loss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 14 Product CS_OFFL_SIR_GOPM1B_20181029T092411_20181029T093533_C001 CS_OFFL_SIR_GOPM1B_20181029T115239_20181029T120530_C001	this is to be expected.           Test Failed           Loss of Echo	Description The tracking echo is missing for one or more records		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 14 Product CS_OFFL_SIR_GOPM1B_20181029T092411_20181029T093533_C001 CS_OFFL_SIR_GOPM1B_20181029T115239_20181029T120530_C001 CS_OFFL_SIR_GOPN1B_20181029T022110_20181029T022253_C001 CS_OFFL_SIR_GOPN1B_20181029T062820_20181029T062931_C001	this is to be expected.           Test Failed           Loss of Echo           Loss of Echo	Description           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records		
Loss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 14 Product CS_OFFL_SIR_GOPM1B_20181029T092411_20181029T093533_C001 CS_OFFL_SIR_GOPM1B_20181029T115239_20181029T120530_C001 CS_OFFL_SIR_GOPN1B_20181029T022110_20181029T022253_C001 CS_OFFL_SIR_GOPN1B_20181029T062820_20181029T062931_C001	Test Failed       Loss of Echo       Loss of Echo       Loss of Echo	Description           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records		
Loss of Echo Flag: This flag is currently set for some products over land, but           Number of products with errors:         14           Product         14           CS_OFFL_SIR_GOPM1B_20181029T092411_20181029T093533_C001         14           CS_OFFL_SIR_GOPM1B_20181029T115239_20181029T120530_C001         152.0001           CS_OFFL_SIR_GOPM1B_20181029T022110_20181029T022253_C001         14           CS_OFFL_SIR_GOPM1B_20181029T022110_20181029T02253_C001         14           CS_OFFL_SIR_GOPN1B_20181029T022110_20181029T02253_C001         152.0001           CS_OFFL_SIR_GOPN1B_20181029T062820_20181029T062931_C001         152.001           CS_OFFL_SIR_GOPN1B_20181029T130418_20181029T130928_C001         152.001	Test Failed         Loss of Echo	Description           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records		
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Loss of Echo Flag: This flag is currently set for some products over land, but           Number of products with errors:         14           Product         14           CS_OFFL_SIR_GOPM1B_20181029T092411_20181029T093533_C001         14           CS_OFFL_SIR_GOPM1B_20181029T120330_C001         16           CS_OFFL_SIR_GOPM1B_20181029T022110_20181029T022253_C001         16           CS_OFFL_SIR_GOPN1B_20181029T062820_20181029T062931_C001         16           CS_OFFL_SIR_GOPN1B_20181029T130418_20181029T130928_C001         16           CS_OFFL_SIR_GOPN1B_20181029T193526_20181029T193805_C001         16           CS_OFFL_SIR_GOPN1B_20181029T225101_20181029T225159_C001         17	this is to be expected.           Test Failed           Loss of Echo	Description           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records		
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Loss of Echo Flag: This flag is currently set for some products over land, but           Number of products with errors:         14           Product         14           CS_OFFL_SIR_GOPM1B_20181029T092411_20181029T093533_C001         CS_OFFL_SIR_GOPM1B_20181029T092411_20181029T092253_C001           CS_OFFL_SIR_GOPM1B_20181029T022110_20181029T022253_C001         CS_OFFL_SIR_GOPN1B_20181029T062820_20181029T062931_C001           CS_OFFL_SIR_GOPN1B_20181029T062820_20181029T130928_C001         CS_OFFL_SIR_GOPN1B_20181029T193526_20181029T193805_C001           CS_OFFL_SIR_GOPN1B_20181029T225101_20181029T225159_C001         CS_OFFL_SIR_GOPN1B_20181029T235715_20181030T000059_C001           CS_OFFL_SIR_GOPN1B_20181029T020843_20181029T021111_C001         CS_OFFL_SIR_GOPR1B_20181029T102720_20181029T102830_C001	Test Failed         Loss of Echo         Loss of Echo	Description           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records		
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Loss of Echo Flag: This flag is currently set for some products over land, but           Number of products with errors:         14           Product         14           CS_OFFL_SIR_GOPM1B_20181029T092411_20181029T093533_C001         14           CS_OFFL_SIR_GOPM1B_20181029T092411_20181029T093533_C001         14           CS_OFFL_SIR_GOPM1B_20181029T0922110_20181029T0203533_C001         14           CS_OFFL_SIR_GOPM1B_20181029T0922110_20181029T0203533_C001         14           CS_OFFL_SIR_GOPM1B_20181029T0122330_C001         14	Test Failed         Loss of Echo         Loss of Echo	Description           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records		

#### 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: 0

#### 5.4 L2 Auxiliary Correction Error Check

For all products, the auxiliary corrections within the Geophysical Group are checked for the default error value (32767). 0

0

Number of products with errors:

#### 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

#### 5.6 L2 Range Measurement Check

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

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

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

Ice Range Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 82

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20181029T001549_20181029T002938_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T003327_20181029T003808_C001	Lice Rande Averading Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T004601_20181029T011129_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

CS\_OFFL\_SIR\_GOPM\_2\_20181029T014509\_20181029T020843\_C001 CS OFFL SIR GOPM 2 20181029T021340 20181029T021721 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T022442\_20181029T023543\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T024112\_20181029T025209\_C001 CS OFFL SIR GOPM 2 20181029T031917 20181029T034801 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T035140\_20181029T035635\_C001 CS OFFL SIR GOPM 2 20181029T035642 20181029T040012 C001 CS OFFL SIR GOPM 2 20181029T040519 20181029T041453 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T042027\_20181029T043815\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T044947\_20181029T045236\_C001 CS OFFL SIR GOPM 2 20181029T052325 20181029T052447 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T053138\_20181029T053706\_C001 CS OFFL SIR GOPM 2 20181029T054436 20181029T060707 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T060754\_20181029T061912\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T062931\_20181029T063146\_C001 CS OFFL SIR GOPM 2 20181029T064911 20181029T070517 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T071100\_20181029T071603\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T072303\_20181029T075750\_C001 CS OFFL SIR GOPM 2 20181029T080910 20181029T081026 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T082043\_20181029T084338\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T085314\_20181029T085507\_C001 CS OFFL SIR GOPM 2 20181029T090252 20181029T091052 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T091055\_20181029T091750\_C001 CS OFFL SIR GOPM 2 20181029T091755 20181029T091930 C001 CS OFFL SIR GOPM 2 20181029T092411 20181029T093533 C001 CS OFFL SIR GOPM 2 20181029T094713 20181029T094953 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T095109\_20181029T100815\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T101023\_20181029T102455\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T103210\_20181029T103418\_C001 CS OFFL SIR GOPM 2 20181029T103509 20181029T103921 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T104144\_20181029T105634\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T105835\_20181029T110756\_C001 CS OFFL SIR GOPM\_2\_20181029T112858\_20181029T112937\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T113122\_20181029T114723\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T115239\_20181029T120529\_C001 CS OFFL SIR GOPM 2 20181029T121005 20181029T121822 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T122150\_20181029T123708\_C001 CS OFFL SIR GOPM 2 20181029T123952 20181029T124203 C001 CS OFFL SIR GOPM 2 20181029T130928 20181029T131819 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T131918\_20181029T134519\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T134858\_20181029T135059\_C001 CS OFFL SIR GOPM 2 20181029T135141 20181029T135650 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T140144\_20181029T142458\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T145650\_20181029T150804\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T151342\_20181029T152327\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T153105\_20181029T153708\_C001 CS OFFL SIR GOPM 2 20181029T154030 20181029T160732 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T161503\_20181029T161750\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T163010\_20181029T170209\_C001 CS OFFL SIR GOPM 2 20181029T171013 20181029T171539 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T172007\_20181029T172332\_C001 Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status 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 Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status 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

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CS_OFFL_SIR_GOPM_2_20181029T175355_20181029T175722_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T180907_20181029T181815_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T182059_20181029T184220_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T184910_20181029T185016_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T185021_20181029T185430_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T185956_20181029T191606_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T193410_20181029T193441_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T194545_20181029T202101_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T202934_20181029T203307_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T204016_20181029T211157_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T212545_20181029T213853_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T214418_20181029T220028_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T220257_20181029T220813_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T221821_20181029T223047_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T223408_20181029T225101_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T231332_20181029T232354_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T232533_20181029T233908_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T234221_20181029T234723_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20181029T021738_20181029T021744_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20181029T053016_20181029T053138_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20181029T070945_20181029T071100_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20181029T121822_20181029T122010_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20181029T001424_20181029T001549_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20181029T052035_20181029T052325_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20181029T070517_20181029T070945_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20181029T081026_20181029T082043_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20181029T171657_20181029T172007_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20181029T184220_20181029T184549_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. 79

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20181029T001549_20181029T002938_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_20181029T003327_20181029T003808_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T004601_20181029T011129_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_20181029T014509_20181029T020843_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_20181029T021340_20181029T021721_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T022442_20181029T023543_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_20181029T024112_20181029T025209_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_20181029T031917_20181029T034801_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_20181029T035140_20181029T035635_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T035642_20181029T040012_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181029T040519_20181029T041453_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_20181029T042027_20181029T043815_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_20181029T044947_20181029T045236_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_20181029T052325_20181029T052447_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_20181029T053138_20181029T053706_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.

CS\_OFFL\_SIR\_GOPM\_2\_20181029T054436\_20181029T060707\_C001 CS OFFL SIR GOPM 2 20181029T060754 20181029T061912 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T062931\_20181029T063146\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T064911\_20181029T070517\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T071100\_20181029T071603\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T072303\_20181029T075750\_C001 CS OFFL SIR GOPM 2 20181029T080910 20181029T081026 C001 CS OFFL SIR GOPM 2 20181029T082043 20181029T084338 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T085314\_20181029T085507\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T090252\_20181029T091052\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T091055\_20181029T091750\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T091755\_20181029T091930\_C001 CS OFFL SIR GOPM 2 20181029T092411 20181029T093533 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T094713\_20181029T094953\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T095109\_20181029T100815\_C001 CS OFFL SIR GOPM 2 20181029T101023 20181029T102455 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T104144\_20181029T105634\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T105835\_20181029T110756\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T112611\_20181029T112657\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T113122\_20181029T114723\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T115239\_20181029T120529\_C001 CS OFFL SIR GOPM 2 20181029T121005 20181029T121822 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T122150\_20181029T123708\_C001 CS OFFL SIR GOPM 2 20181029T123952 20181029T124203 C001 CS OFFL SIR GOPM 2 20181029T130928 20181029T131819 C001 CS OFFL SIR GOPM 2 20181029T131918 20181029T134519 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T134858\_20181029T135059\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T135141\_20181029T135650\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T140144\_20181029T142458\_C001 CS OFFL SIR GOPM 2 20181029T145650 20181029T150804 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T151342\_20181029T152327\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T153105\_20181029T153708\_C001 CS OFFL SIR GOPM 2 20181029T154030 20181029T160732 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T161503\_20181029T161750\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T163010\_20181029T170209\_C001 CS OFFL SIR GOPM 2 20181029T171013 20181029T171539 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T172007\_20181029T172332\_C001 CS OFFL SIR GOPM 2 20181029T175355 20181029T175722 C001 CS OFFL SIR GOPM 2 20181029T180907 20181029T181815 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T182059\_20181029T184220\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T184910\_20181029T185016\_C001 CS OFFL SIR GOPM 2 20181029T185956 20181029T191606 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T193410\_20181029T193441\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T194545\_20181029T202101\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T202934\_20181029T203307\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T204016\_20181029T211157\_C001 CS OFFL SIR GOPM 2 20181029T212545 20181029T213853 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T214418\_20181029T220028\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T220257\_20181029T220813\_C001 CS OFFL SIR GOPM 2 20181029T221821 20181029T223047 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181029T223408\_20181029T225101\_C001 SWH Averaging Status, Ocean 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 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 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 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

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Ice Backscatter Averaging Status

Ice Backscatter Averaging Status

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Ice Backscatter Averaging Status

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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 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 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 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 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 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 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 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 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.

CS_OFFL_SIR_GOPM_2_20181029T231332_20181029T232354_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_20181029T232533_20181029T233908_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_20181029T234221_20181029T234723_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20181029T021738_20181029T021744_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20181029T053016_20181029T053138_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20181029T070945_20181029T071100_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20181029T121822_20181029T122010_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_GOPR_2_20181029T001424_20181029T001549_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_GOPR_2_20181029T052035_20181029T052325_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_GOPR_2_20181029T070517_20181029T070945_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_GOPR_2_20181029T081026_20181029T082043_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_GOPR_2_20181029T171657_20181029T172007_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_GOPR_2_20181029T184220_20181029T184549_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: 57

## 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).

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: 0

#### 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

### 6.4 P2P Auxiliary Correction Error Check

For all products, the auxiliary corrections within the Geophysical Group are checked for the default error value (32767). 0

0

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:

#### 6.6 P2P Range Measurement Check

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

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

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

Ice Range Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 30

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20181028T234852_20181029T003829_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_20181029T003829_20181029T012806_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20181029T012806_20181029T021743_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_20181029T021743_20181029T030719_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_220181029T030719_20181029T035656_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_20181029T035656_20181029T044633_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20181029T044633_20181029T053610_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_20181029T053610_20181029T062546_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_20181029T062546_20181029T071524_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20181029T071524_20181029T080500_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20181029T080500_20181029T085437_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T085437_20181029T094414_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_GOP_2_20181029T094414_20181029T103351_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_220181029T103351_20181029T112327_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_220181029T112327_20181029T121304_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T121304_20181029T130241_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_220181029T130241_20181029T135218_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_220181029T135218_20181029T144154_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_220181029T144154_20181029T153131_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T153131_20181029T162108_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_220181029T162108_20181029T171045_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T171045_20181029T180021_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_220181029T180021_20181029T184959_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T184959_20181029T193935_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T193935_20181029T202912_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_220181029T202912_20181029T211848_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_220181029T211848_20181029T220826_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_220181029T220826_20181029T225802_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T225802_20181029T234739_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_20181029T234739_20181030T003716_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.

### 6.7 P2P SWH and Backscatter Measurement Check

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

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

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

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

Ice Backscatter Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 30

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220181028T234852_20181029T003829_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_20181029T003829_20181029T012806_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_20181029T012806_20181029T021743_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_20181029T021743_20181029T030719_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_220181029T030719_20181029T035656_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_220181029T035656_20181029T044633_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_220181029T044633_20181029T053610_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_220181029T053610_20181029T062546_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_220181029T062546_20181029T071524_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_220181029T071524_20181029T080500_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_220181029T080500_20181029T085437_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_220181029T085437_20181029T094414_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_220181029T094414_20181029T103351_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_20181029T103351_20181029T112327_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_20181029T112327_20181029T121304_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_20181029T121304_20181029T130241_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_220181029T130241_20181029T135218_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_220181029T135218_20181029T144154_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_220181029T144154_20181029T153131_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_20181029T153131_20181029T162108_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_220181029T162108_20181029T171045_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_220181029T171045_20181029T180021_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_220181029T180021_20181029T184959_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_220181029T184959_20181029T193935_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_220181029T193935_20181029T202912_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_220181029T202912_20181029T211848_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_20181029T211848_20181029T220826_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_220181029T220826_20181029T225802_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_220181029T225802_20181029T234739_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_220181029T234739_20181030T003716_C002	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.

## 6.8 P2P Ocean Retracking Quality Check

Number of products with errors:

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.

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Product	Test Failed	Description
CS_OFFL_SIR_GOP_220181029T003829_20181029T012806_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T021743_20181029T030719_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T030719_20181029T035656_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T035656_20181029T044633_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T044633_20181029T053610_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T053610_20181029T062546_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T062546_20181029T071524_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T071524_20181029T080500_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T085437_20181029T094414_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T094414_20181029T103351_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T103351_20181029T112327_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T112327_20181029T121304_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T121304_20181029T130241_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T130241_20181029T135218_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T135218_20181029T144154_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T144154_20181029T153131_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T153131_20181029T162108_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T162108_20181029T171045_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T171045_20181029T180021_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T180021_20181029T184959_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T184959_20181029T193935_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T193935_20181029T202912_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T202912_20181029T211848_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T211848_20181029T220826_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T220826_20181029T225802_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T225802_20181029T234739_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181029T234739_20181030T003716_C002	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.