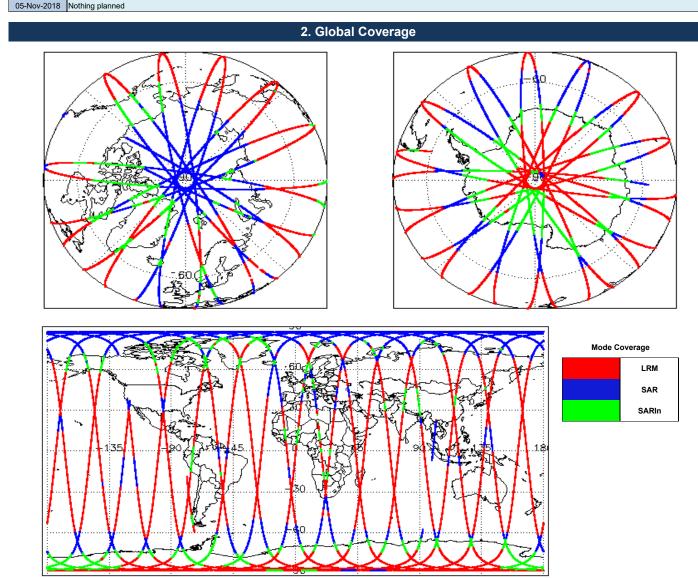


# IDEAS+ Daily Report for GOP data:

# <u>04/11/2018</u>



		1. Overview		
		Check	L1 & L2	P2P
Report Producti	on: 05-Dec-2018	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
		Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Use	d: CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used: Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data	Geophysical Ocean Products (GOP)	Product Format Check	Nominal	Nominal
	L1B, L2 & P2P Science Data	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
			L	
Mission / Instrume	nt News			
03-Nov-2018 Nor	ne			
04-Nov-2018 Nor	ne			
05 Nov 2019 Not	hing planned			



## 3. Instrument Configuration

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

SIRAL instrument(s) in use:

in use: 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

4.3 L1B Auxilary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a pre Number of products with errors: 0	-determined baseline and also to	check the validity of Auxiliary Data Files is correct.
4.4 L1B Auxiliary Correction Error Check		
CryoSat L1B data includes a correction error flag for each measurement record	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 measurem	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 produ	ucts 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.I.1B Waveform Group Data Check		
4.6 L1B Waveform Group Data Check	The bit of the static flag in the static st	
CryoSat L1B data includes a waveform data flag for each measurement record	-	es any problems when set.
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	-	es any problems when set.
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	-	es any problems when set.
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: 19	-	es any problems when set.  Description
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 in Number of products with errors: 19 Product	this is to be expected.	
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: 19 Product CS_OFFL_SIR_GOPM1B_20181104T085528_20181104T091210_C001	this is to be expected.	Description
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: 19 Product CS_OFFL_SIR_GOPM1B_20181104T085528_20181104T091210_C001 CS_OFFL_SIR_GOPM1B_20181104T092456_20181104T092830_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: 19 Product CS_OFFL_SIR_GOPM1B_20181104T085528_20181104T091210_C001 CS_OFFL_SIR_GOPM1B_20181104T092456_20181104T092830_C001 CS_OFFL_SIR_GOPM1B_20181104T112408_20181104T113816_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
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 if Number of products with errors: 19 Product CS_OFFL_SIR_GOPM1B_20181104T085528_20181104T091210_C001 CS_OFFL_SIR_GOPM1B_20181104T092456_20181104T092830_C001 CS_OFFL_SIR_GOPM1B_20181104T112408_20181104T113816_C001 CS_OFFL_SIR_GOPM1B_20181104T191202_20181104T191635_C001	this is to be expected.           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
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 if Number of products with errors: 19 Product CS_OFFL_SIR_GOPM1B_20181104T085528_20181104T091210_C001 CS_OFFL_SIR_GOPM1B_20181104T092456_20181104T092830_C001 CS_OFFL_SIR_GOPM1B_20181104T112408_20181104T113816_C001 CS_OFFL_SIR_GOPM1B_20181104T191202_20181104T191635_C001 CS_OFFL_SIR_GOPM1B_20181104T222648_20181104T224248_C001	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
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:         19           Product         19           CS_OFFL_SIR_GOPM1B_20181104T085528_20181104T091210_C001         CS_OFFL_SIR_GOPM1B_20181104T092456_20181104T092830_C001           CS_OFFL_SIR_GOPM1B_20181104T112408_20181104T113816_C001         CS_OFFL_SIR_GOPM1B_20181104T191202_20181104T191635_C001           CS_OFFL_SIR_GOPM1B_20181104T1922648_20181104T224248_C001         CS_OFFL_SIR_GOPM1B_20181104T093829_20181104T093950_C001	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
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:         19           Product         19           CS_OFFL_SIR_GOPM1B_20181104T085528_20181104T091210_C001         CS_OFFL_SIR_GOPM1B_20181104T092456_20181104T092830_C001           CS_OFFL_SIR_GOPM1B_20181104T112408_20181104T113816_C001         CS_OFFL_SIR_GOPM1B_20181104T191202_20181104T191635_C001           CS_OFFL_SIR_GOPM1B_20181104T191202_20181104T191635_C001         CS_OFFL_SIR_GOPM1B_20181104T222648_20181104T224248_C001           CS_OFFL_SIR_GOPM1B_20181104T093829_20181104T093950_C001         CS_OFFL_SIR_GOPN1B_20181104T093829_20181104T102445_C001	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
CryoSat L1B data includes a waveform data flag for each measurement record	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

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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

CS\_OFFL\_SIR\_GOPN1B\_20181104T224248\_20181104T224515\_C001

CS\_OFFL\_SIR\_GOPN1B\_20181104T224643\_20181104T224858\_C001

CS\_OFFL\_SIR\_GOPR1B\_20181104T025447\_20181104T030341\_C001

CS\_OFFL\_SIR\_GOPR1B\_20181104T035417\_20181104T035645\_C001

CS\_OFFL\_SIR\_GOPR1B\_20181104T083619\_20181104T084317\_C001

CS OFFL SIR GOPR1B 20181104T093118 20181104T093721 C001

CS\_OFFL\_SIR\_GOPR1B\_20181104T143214\_20181104T143723\_C001

CS\_OFFL\_SIR\_GOPR1B\_20181104T161113\_20181104T161918\_C001

CS\_OFFL\_SIR\_GOPR1B\_20181104T170933\_20181104T171337\_C001

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:

Loss of Echo

5. GOP Level 2 Data Quality Check

### 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: 0

### 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.

## 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. 84

Desclust	Toot Foiled	Description
Product CS_OFFL_SIR_GOPM_2_20181104T002616_20181104T003103_C001	Test Failed Ice Range Averaging Status	Description The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T003124_20181104T003243_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T003837_20181104T010036_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T010038_20181104T010406_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T013722_20181104T020123_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T020609_20181104T021002_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T021007_20181104T021017_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T021023_20181104T021348_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T021725_20181104T022820_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T023352_20181104T024346_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T030627_20181104T034049_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T034428_20181104T034915_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T035808_20181104T040737_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T040812_20181104T043047_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T044227_20181104T044524_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T051535_20181104T051728_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T052419_20181104T052944_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T053710_20181104T055750_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T060036_20181104T061201_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T062209_20181104T062538_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T064148_20181104T065803_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T070345_20181104T070842_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T071543_20181104T074817_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T074820_20181104T075121_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T080218_20181104T080306_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T081114_20181104T083619_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T084554_20181104T084747_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T085528_20181104T091210_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T091651_20181104T092445_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T094451_20181104T100049_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T100303_20181104T101753_C001	Ocean Range Averaging Status	The loc Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T102741_20181104T103200_C001	Ice Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T103432_20181104T104839_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set to one of more The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T105017_20181104T110505_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T112408_20181104T113816_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T114452_20181104T115814_C001	Ocean Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T120237_20181104T121103_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T121432_20181104T123606_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T130156_20181104T130941_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T131201_20181104T133758_C001	Ocean Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T134139_20181104T134335_C001	Ice Range Averaging Status	records. The lec Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T134424_20181104T134917_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T135412_20181104T141808_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T145049_20181104T150044_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20181104T150622_20181104T151553_C001	Ocean Range Averaging Status	records.

CS_OFFL_SIR_GOPM_2_20181104T152345_20181104T152943_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T153305_20181104T160012_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T160736_20181104T161027_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T162231_20181104T165458_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T170252_20181104T170814_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T171450_20181104T171611_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T174604_20181104T174955_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T180136_20181104T181053_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T181338_20181104T183501_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T184144_20181104T184255_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T184301_20181104T184708_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T185232_20181104T190214_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T190402_20181104T191003_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T191202_20181104T191635_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T193830_20181104T201339_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T201651_20181104T202153_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T202213_20181104T202524_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T203253_20181104T210418_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. 82

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20181104T002616_20181104T003103_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T003124_20181104T003243_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T003837_20181104T010036_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_20181104T010038_20181104T010406_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_20181104T013722_20181104T020123_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_20181104T020609_20181104T021002_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T021007_20181104T021017_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T021023_20181104T021348_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T021725_20181104T022820_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_20181104T023352_20181104T024346_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_20181104T030627_20181104T034049_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_20181104T034428_20181104T034915_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T035808_20181104T040737_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_20181104T040812_20181104T043047_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_20181104T044227_20181104T044524_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_20181104T051535_20181104T051728_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_20181104T052419_20181104T052944_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T053710_20181104T055750_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_20181104T060036_20181104T061201_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_20181104T062209_20181104T062538_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_20181104T064148_20181104T065803_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_20181104T070345_20181104T070842_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181104T071543_20181104T074817_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_20181104T074820_20181104T075121_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_20181104T081114_20181104T083619_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\_20181104T084554\_20181104T084747\_C001 CS OFFL SIR GOPM 2 20181104T085528 20181104T091210 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T091651\_20181104T092445\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T093950\_20181104T094249\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T094451\_20181104T100049\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T100303\_20181104T101753\_C001 CS OFFL SIR GOPM 2 20181104T102741 20181104T103200 C001 CS OFFL SIR GOPM 2 20181104T103432 20181104T104839 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T105017\_20181104T110505\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T112408\_20181104T113816\_C001 CS OFFL SIR GOPM 2 20181104T114452 20181104T115814 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T120237\_20181104T121103\_C001 CS OFFL SIR GOPM 2 20181104T121432 20181104T123606 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T130156\_20181104T130941\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T131201\_20181104T133758\_C001 CS OFFL SIR GOPM 2 20181104T134424 20181104T134917 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T135412\_20181104T141808\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T145049\_20181104T150044\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T150622\_20181104T151553\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T152345\_20181104T152943\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T153305\_20181104T160012\_C001 CS OFFL SIR GOPM 2 20181104T160736 20181104T161027 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T162231\_20181104T165458\_C001 CS OFFL SIR GOPM 2 20181104T170252 20181104T170814 C001 CS OFFL SIR GOPM 2 20181104T174604 20181104T174955 C001 CS OFFL SIR GOPM 2 20181104T180136 20181104T181053 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T181338\_20181104T183501\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T184144\_20181104T184255\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T184301\_20181104T184708\_C001 CS OFFL SIR GOPM 2 20181104T185232 20181104T190214 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T190402\_20181104T191003\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T191202\_20181104T191635\_C001 CS OFFL SIR GOPM 2 20181104T193830 20181104T201339 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T201651\_20181104T202153\_C001 CS OFFL SIR GOPM 2 20181104T202213 20181104T202524 C001 CS OFFL SIR GOPM 2 20181104T203253 20181104T210418 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T210527\_20181104T210703\_C001 CS OFFL SIR GOPM 2 20181104T210703 20181104T210844 C001 CS OFFL SIR GOPM 2 20181104T211801 20181104T213134 C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T213510\_20181104T213709\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20181104T213712\_20181104T215313\_C001

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 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 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

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

Ice 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 SWH Averaging Status, Ocean Backscatter Averaging Status

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 record

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

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 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 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.

#### 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:

## 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:

60

6.2 P2P Product Header Analysis		
	d SDH in order to identify any inconsistension	and/or arran raised by the ground cogment processing chain
For all products, a series of pre-defined checks are performed on the MPH an Number of products with errors: 0	a SPH in order to identify any inconsistencies	and/or enois raised by the ground-segment processing chain.
6.3 P2P Auxiliary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a pro- Number of products with errors: 0	e-determined baseline and also to check the	validity of Auxiliary Data Files is correct.
6.4 P2P Auxiliary Correction Error Check		
For all products, the auxiliary corrections within the Geophysical Group are ch	ecked 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 me	easurement record. The bit value of this flag i	ndicates any problems when set.
Number of products with errors: 0		
6.6 P2P Range Measurement Check		
CryoSat P2P data includes an Ocean and Ice Range Averaging Status flag for	r 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. A	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 of	over land and sea ice, but this is to be expost	ed
Ice Range Averaging Status Flag: This flag is currently set for products over		
Number of products with errors: 30		
Product	Test Failed	Description
CS_OFFL_SIR_GOP_220181103T234132_20181104T003110_C002	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181104T003110_20181104T012045_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181104T012045_20181104T021023_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_220181104T021023_20181104T025959_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181104T025959_20181104T034937_C001	Ocean Range Averaging Status, Ice	The Ocean and Ice Range Averaging Status Flags have been set for one
CS_OFFL_SIR_GOP_2_20181104T034937_20181104T043912_C001	Range Averaging Status Ocean Range Averaging Status	or more records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOP_2_20181104T043912_20181104T052850_C001	Ocean Range Averaging Status, Ice	records. The Ocean and Ice Range Averaging Status Flags have been set for one
CS_OFFL_SIR_GOP_220181104T052850_20181104T061826_C001	Range Averaging Status Ocean Range Averaging Status	or more records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOP_2_20181104T061826_20181104T070804_C001	Ocean Range Averaging Status, Ice	records. The Ocean and Ice Range Averaging Status Flags have been set for one
	Range Averaging Status	or more records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOP_2_20181104T070804_20181104T075739_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOP_220181104T075739_20181104T084717_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOP_220181104T084717_20181104T093653_C001	Ocean Range Averaging Status Ocean Range Averaging Status, Ice	records. The Ocean and Ice Range Averaging Status Flags have been set for one
CS_OFFL_SIR_GOP_220181104T093653_20181104T102631_C001	Range Averaging Status	or more records.
CS_OFFL_SIR_GOP_2_20181104T102631_20181104T111606_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20181104T111606_20181104T120544_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_20181104T120544_20181104T125520_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_220181104T125520_20181104T134458_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_220181104T134458_20181104T143434_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_220181104T143434_20181104T152412_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181104T152412_20181104T161347_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_220181104T161347_20181104T170325_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_220181104T170325_20181104T175301_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_220181104T175301_20181104T184239_C001	Ocean Range Averaging Status Range Averaging Status	The Ocean and Ice Range Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_GOP_2_20181104T184239_20181104T193214_C001	Ocean Range Averaging Status, Ice	The Ocean and Ice Range Averaging Status Flags have been set for one
CS_OFFL_SIR_GOP_2_20181104T193214_20181104T202152_C001	Range Averaging Status Ocean Range Averaging Status, Ice	or more records. The Ocean and Ice Range Averaging Status Flags have been set for one
CS_OFFL_SIR_GOP_2_20181104T202152_20181104T211128_C001	Range Averaging Status Ocean Range Averaging Status, Ice	or more records. The Ocean and Ice Range Averaging Status Flags have been set for one
	Range Averaging Status Ocean Range Averaging Status, Ice	or more records. The Ocean and Ice Range Averaging Status Flags have been set for one
CS_OFFL_SIR_GOP_2_20181104T211128_20181104T220106_C001	Range Averaging Status Ocean Range Averaging Status, Ice	or more records. The Ocean and Ice Range Averaging Status Flags have been set for one
CS_OFFL_SIR_GOP_220181104T220106_20181104T225041_C001	Range Averaging Status Ocean Range Averaging Status, Ice	or more records. The Ocean and Ice Range Averaging Status Flags have been set for one
CS_OFFL_SIR_GOP_220181104T225041_20181104T234019_C001	Range Averaging Status	or more records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOP_220181104T234019_20181105T002955_C002	Ocean Range Averaging Status	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_220181103T234132_20181104T003110_C002	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181104T003110_20181104T012045_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_220181104T012045_20181104T021023_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_220181104T021023_20181104T025959_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_220181104T025959_20181104T034937_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_20181104T034937_20181104T043912_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_220181104T043912_20181104T052850_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_220181104T052850_20181104T061826_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_220181104T061826_20181104T070804_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_220181104T070804_20181104T075739_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_220181104T075739_20181104T084717_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_220181104T084717_20181104T093653_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_220181104T093653_20181104T102631_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_220181104T102631_20181104T111606_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_220181104T111606_20181104T120544_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_220181104T120544_20181104T125520_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_220181104T125520_20181104T134458_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_220181104T134458_20181104T143434_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_220181104T143434_20181104T152412_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_220181104T152412_20181104T161347_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_220181104T161347_20181104T170325_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_220181104T170325_20181104T175301_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_220181104T175301_20181104T184239_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_220181104T184239_20181104T193214_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_220181104T193214_20181104T202152_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_220181104T202152_20181104T211128_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_220181104T211128_20181104T220106_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_220181104T220106_20181104T225041_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_220181104T225041_20181104T234019_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_220181104T234019_20181105T002955_C002	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.

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

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20181104T003110_20181104T012045_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T012045_20181104T021023_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T025959_20181104T034937_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T034937_20181104T043912_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T043912_20181104T052850_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T052850_20181104T061826_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T061826_20181104T070804_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T070804_20181104T075739_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T075739_20181104T084717_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T084717_20181104T093653_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T093653_20181104T102631_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T102631_20181104T111606_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T111606_20181104T120544_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T120544_20181104T125520_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T125520_20181104T134458_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T134458_20181104T143434_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T152412_20181104T161347_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T161347_20181104T170325_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T170325_20181104T175301_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T175301_20181104T184239_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T184239_20181104T193214_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T193214_20181104T202152_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T202152_20181104T211128_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T211128_20181104T220106_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T220106_20181104T225041_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T225041_20181104T234019_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record
CS_OFFL_SIR_GOP_220181104T234019_20181105T002955_C002	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more record