

# IDEAS+ Daily Report for GOP data:

# 20/07/2018



SARIn

		1. Overview		
		Check	L1 & L2	P2P
eport Production:	20-Aug-2018		Nominal	Nominal
		Server check: science-pds.cryosat.esa.int Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
	Geophysical Ocean Products (GOP)	Product Format Check	Nominal	Nominal
Data Used:	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 and 5.5	See Section 6.5
		Range, SWH & Backscatter Measurement Check	See Section 5.6, 5.7	See Section 6.6, 6.7
		Ocean Retracking Quality Check	See Section 5.8	See Section 6.8
19-Jul-2018         None           20-Jul-2018         None           21-Jul-2018         Nothing	planned	2. Global Coverage		
P	A A A A			lode Coverage LRM SAR

# 3. Instrument Configuration

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

SIRAL - A

0

SIRAL instrument(s) in use:

4. GOP Level 1B Data Quality Check

## 4.1 L1B Product Format Check

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

Number of products with errors:

## 4.2 L1B Product Header Analysis

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

4.3 L1B Auxilary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a pre-	determined baseline and also to check the v	alidity 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 record.	The hit value of this flag indicates any problem	ome when eet
Number of products with errors: 0	The bit value of this hag indicates any problem	ents when set.
4.5 L1B Measurement Confidence Data Check		
CryoSat L1B data includes a measurement confidence flag for each measurement	ent record. The bit value of this flag indicates	any problems when set.
Attitude Correction Missing: This flag is currently set in error for GOPR produ	cts due to a configuration issue. This is bein	g investigated and will be updated in the next SW update.
Number of products with errors: 1	-	
Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20180720T054150_20180720T055011_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
4.6 L1B Waveform Group Data Check		
CryoSat L1B data includes a waveform data flag for each measurement record.	The bit value of this flag indicates any proble	ems when set.
Loss of Echo Flag: This flag is currently set for some products over land, but the	nis is to be expected.	
Number of products with errors: 15		
Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20180720T075519_20180720T082026_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20180720T210303_20180720T211909_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20180720T224125_20180720T231414_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20180720T005505_20180720T005550_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20180720T005728_20180720T010047_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20180720T132702_20180720T133227_C001	Loss of Echo	The tracking echo is missing for one or more records

Loss of Echo

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.

Level 2 Data Quality Check

**5. GOP** 

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).

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.

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

# 5.6 L2 Range Measurement Check

CS\_OFFL\_SIR\_GOPN1B\_20180720T163847\_20180720T164227\_C001

CS\_OFFL\_SIR\_GOPN1B\_20180720T200719\_20180720T201010\_C001

CS\_OFFL\_SIR\_GOPN1B\_20180720T221649\_20180720T221848\_C001

CS OFFL SIR GOPN1B 20180720T222552 20180720T222646 C001

CS\_OFFL\_SIR\_GOPN1B\_20180720T222845\_20180720T222931\_C001

CS\_OFFL\_SIR\_GOPR1B\_20180720T041157\_20180720T041243\_C001

CS OFFL SIR GOPR1B 20180720T191139 20180720T191606 C001

CS\_OFFL\_SIR\_GOPR1B\_20180720T222931\_20180720T223717\_C001

CS\_OFFL\_SIR\_GOPR1B\_20180720T235632\_20180720T235712\_C001

5.1 L2 Product Format Check

5.2 L2 Product Header Analysis

5.3 L2 Auxiliary Data File Usage Check

5.4 L2 Auxiliary Correction Error Check

5.5 L2 Measurement Confidence Data Check

CS\_OFFL\_SIR\_GOPM\_2\_20180720T054150\_20180720T055011\_C001

Number of products with errors:

Product

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.

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.

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.

Description

There is an error in the scaling of the L2 waveform for one or more records

Test Failed

Power scaling error

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

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

1

Ice Range Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 83

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20180719T234341_20180720T000455_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T001141_20180720T001256_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T002219_20180720T003217_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T003405_20180720T004017_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T004156_20180720T004638_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T010833_20180720T014338_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T014644_20180720T015154_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T015215_20180720T015510_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T020255_20180720T023339_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T023514_20180720T023753_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T024702_20180720T030637_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T030815_20180720T032316_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T032547_20180720T033052_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T033131_20180720T033256_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T034025_20180720T035031_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T042553_20180720T044336_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T044816_20180720T050151_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T050502_20180720T051002_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T051010_20180720T051021_C001		records. The Ice Range Averaging Status Flag has been set for one or more
	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T051044_20180720T051148_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T051807_20180720T054027_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T054150_20180720T055011_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T061932_20180720T064021_C001	Ocean Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T064545_20180720T064919_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T064926_20180720T064935_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T064941_20180720T065258_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T065631_20180720T072424_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T075519_20180720T082026_C001	Ocean Range Averaging Status	records.
CS_OFFL_SIR_GOPM_2_20180720T082327_20180720T082833_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T083617_20180720T084640_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T085218_20180720T090932_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T092207_20180720T092848_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T093204_20180720T093729_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T095515_20180720T095938_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T100326_20180720T100906_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T101001_20180720T101107_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T101634_20180720T104901_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T105014_20180720T105033_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T105109_20180720T105137_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T110122_20180720T110258_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T112135_20180720T113746_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T114250_20180720T114800_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T115453_20180720T123038_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T124023_20180720T124220_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T125234_20180720T125705_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more
28 OFFL SIR GOPNI Z ZU160/201129/90 ZU160/201131929 COUL	ge	records.
CS_OFFL_SIR_GOPM_2_20180720T125750_20180720T131525_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20180720T133437_20180720T141034_C001 CS_OFFL_SIR_GOPM_2_20180720T133437_20180720T141034_C001 CS_OFFL_SIR_GOPM_2_20180720T142237_20180720T144119_C001	Ocean Range Averaging Status Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_GOPM_2_20180720T150731_20180720T151113_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T151334_20180720T152834_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T153036_20180720T153958_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T155806_20180720T155931_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T160151_20180720T161915_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T163521_20180720T163639_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T164227_20180720T165015_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T165311_20180720T170738_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T174534_20180720T181716_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T182048_20180720T182301_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T182315_20180720T182908_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T183302_20180720T185725_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T192929_20180720T193956_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T194531_20180720T195603_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T200259_20180720T200719_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T201206_20180720T203713_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T204313_20180720T204918_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T210303_20180720T211908_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T211942_20180720T213418_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T214209_20180720T214748_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T215059_20180720T215531_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T224125_20180720T231414_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T232113_20180720T232625_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T233139_20180720T234809_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20180720T000822_20180720T001140_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20180720T110018_20180720T110033_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20180720T132702_20180720T133227_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20180720T141131_20180720T141225_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20180720T032317_20180720T032405_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20180720T051639_20180720T051645_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20180720T113746_20180720T114124_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20180720T163829_20180720T163846_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20180720T181716_20180720T181857_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. 83

#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20180719T234341_20180720T000455_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_20180720T001141_20180720T001256_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T001304_20180720T001710_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T002219_20180720T003217_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_20180720T003405_20180720T004017_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_20180720T004156_20180720T004638_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_20180720T010833_20180720T014338_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_20180720T014644_20180720T015154_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T015215_20180720T015510_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T020255_20180720T023339_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\_20180720T023514\_20180720T023753\_C001 CS OFFL SIR GOPM 2 20180720T024702 20180720T030637 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T030815\_20180720T032316\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T032547\_20180720T033052\_C001 CS OFFL SIR GOPM 2 20180720T033131 20180720T033256 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T034025\_20180720T035031\_C001 CS OFFL SIR GOPM 2 20180720T035651 20180720T041156 C001 CS OFFL SIR GOPM 2 20180720T042553 20180720T044336 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T044816\_20180720T050151\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T050502\_20180720T051002\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T051010\_20180720T051021\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T051044\_20180720T051148\_C001 CS OFFL SIR GOPM 2 20180720T051807 20180720T054027 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T054150\_20180720T055011\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T061932\_20180720T064021\_C001 CS OFFL SIR GOPM 2 20180720T064545 20180720T064919 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T064926\_20180720T064935\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T064941\_20180720T065258\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T065631\_20180720T072424\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T075519\_20180720T082026\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T082327\_20180720T082833\_C001 CS OFFL SIR GOPM 2 20180720T083617 20180720T084640 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T085218\_20180720T090932\_C001 CS OFFL SIR GOPM 2 20180720T092207 20180720T092848 C001 CS OFFL SIR GOPM 2 20180720T095515 20180720T095938 C001 CS OFFL SIR GOPM 2 20180720T100326 20180720T100906 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T101001\_20180720T101107\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T101634\_20180720T104901\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T105014\_20180720T105033\_C001 CS OFFL SIR GOPM 2 20180720T105109 20180720T105137 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T110122\_20180720T110258\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T112135\_20180720T113746\_C001 CS OFFL SIR GOPM 2 20180720T115453 20180720T123038 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T124023\_20180720T124220\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T125234\_20180720T125705\_C001 CS OFFL SIR GOPM 2 20180720T125750 20180720T131525 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T133437\_20180720T141034\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T142237\_20180720T144119\_C001 CS OFFL SIR GOPM 2 20180720T144215 20180720T145547 C001 CS OFFL SIR GOPM 2 20180720T150731 20180720T151113 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T151334\_20180720T152834\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T153036\_20180720T153958\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T155806\_20180720T155931\_C001 CS OFFL SIR GOPM 2 20180720T160151 20180720T161915 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T163521\_20180720T163639\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T164227\_20180720T165015\_C001 CS OFFL SIR GOPM 2 20180720T165311 20180720T170738 C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T174534\_20180720T181716\_C001 CS\_OFFL\_SIR\_GOPM\_2\_20180720T182048\_20180720T182301\_C001 CS OFFL SIR GOPM 2 20180720T182315 20180720T182908 C001 CS OFFL SIR GOPM 2 20180720T183302 20180720T185725 C001 Ice Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status Ice Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status Ice 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 Ice Backscatter Averaging Status Ice Backscatter Averaging Status Ice Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status Ice Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean

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

Backscatter Averaging Status Ice Backscatter Averaging Status

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

Ice Backscatter Averaging Status

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

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

Ice Backscatter Averaging Status

Ice 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 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 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 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.

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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 Ice Backscatter Averaging Status Flag has been set for one or more records.

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

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

The Ice Backscatter Averaging Status Flag has been set for one or more records.

The Ice Backscatter Averaging Status Flag has been set for one or more records.

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

CS_OFFL_SIR_GOPM_2_20180720T192929_20180720T193956_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_20180720T194531_20180720T195603_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_20180720T200259_20180720T200719_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T201206_20180720T203713_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_20180720T204313_20180720T204918_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_20180720T210303_20180720T211908_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_20180720T211942_20180720T213418_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_20180720T214209_20180720T214748_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T215059_20180720T215531_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_20180720T222646_20180720T222845_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_20180720T224125_20180720T231414_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_20180720T232113_20180720T232625_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20180720T233139_20180720T234809_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_GOPN_2_20180720T000822_20180720T001140_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20180720T110018_20180720T110033_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_GOPN_2_20180720T132702_20180720T133227_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_GOPN_2_20180720T141131_20180720T141225_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_20180720T032317_20180720T032405_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_20180720T051639_20180720T051645_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_20180720T113746_20180720T114124_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_20180720T163829_20180720T163846_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_20180720T181716_20180720T181857_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: 61

### 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:

#### 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).

1

Number of products with errors:

#### 6.5 P2P Measurement Confidence Data Check

CryoSat P2P data includes a measurement confidence flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20180720T051024_20180720T060000_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

#### 6.6 P2P Range Measurement Check

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

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

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

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

Number of products with errors:

Product **Test Failed** Description Ocean Range Averaging Status, Ice The Ocean and Ice Range Averaging Status Flags have been set for one CS\_OFFL\_SIR\_GOP\_2\_20180719T232306\_20180720T001244\_C002 Range Averaging Status or more records.

CS_OFFL_SIR_GOP_220180720T001244_20180720T010220_C002	Ocean Range Averaging Status, Ice Range Averaging Status	The Ocean and Ice Range Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_GOP_220180720T010220_20180720T015157_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_220180720T015157_20180720T024133_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_220180720T024133_20180720T033111_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_220180720T033111_20180720T042047_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_220180720T042047_20180720T051024_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_220180720T051024_20180720T0600000_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T060000_20180720T064938_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_220180720T064938_20180720T073914_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_220180720T073914_20180720T082852_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_220180720T082852_20180720T091828_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_220180720T091828_20180720T100805_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_220180720T100805_20180720T105741_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_220180720T105741_20180720T114719_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_220180720T114719_20180720T123655_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T123655_20180720T132632_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T132632_20180720T141608_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T141608_20180720T150546_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_220180720T150546_20180720T155522_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_220180720T155522_20180720T164500_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_220180720T164500_20180720T173435_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_220180720T173435_20180720T182413_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T182413_20180720T191349_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_220180720T191349_20180720T200327_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T200327_20180720T205303_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_220180720T205303_20180720T214241_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_220180720T214241_20180720T223216_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_220180720T223216_20180720T232154_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T232154_20180721T001130_C001	Ocean Range Averaging Status, Ice Range Averaging Status	The Ocean and Ice Range Averaging Status Flags have been set for one or more records.

## 6.7 P2P SWH and Backscatter Measurement Check

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

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

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

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220180719T232306_20180720T001244_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.
CS_OFFL_SIR_GOP_2_20180720T001244_20180720T010220_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.
CS_OFFL_SIR_GOP_220180720T010220_20180720T015157_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_220180720T015157_20180720T024133_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_220180720T024133_20180720T033111_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_220180720T033111_20180720T042047_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_220180720T042047_20180720T051024_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_20180720T051024_20180720T060000_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_220180720T060000_20180720T064938_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_20180720T064938_20180720T073914_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_20180720T073914_20180720T082852_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_220180720T082852_20180720T091828_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_20180720T091828_20180720T100805_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_220180720T100805_20180720T105741_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_20180720T105741_20180720T114719_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_20180720T114719_20180720T123655_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_220180720T123655_20180720T132632_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_220180720T132632_20180720T141608_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_20180720T141608_20180720T150546_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_20180720T150546_20180720T155522_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_20180720T155522_20180720T164500_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_220180720T164500_20180720T173435_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_20180720T173435_20180720T182413_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_20180720T182413_20180720T191349_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_20180720T191349_20180720T200327_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_20180720T200327_20180720T205303_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_20180720T205303_20180720T214241_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_20180720T214241_20180720T223216_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_20180720T223216_20180720T232154_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_20180720T232154_20180721T001130_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.

# 6.8 P2P Ocean Retracking Quality Check

Cryosat P2P data includes an ocean retracking quality flag (field 19) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Ocean Retracking Quality Flag: This flag is currently set for products over land and sea ice, but this is to be expected. The number of products with this error flag set is given below. Number of products with errors: 27

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220180720T001244_20180720T010220_C002	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T010220_20180720T015157_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T015157_20180720T024133_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T024133_20180720T033111_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T033111_20180720T042047_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T042047_20180720T051024_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T051024_20180720T060000_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T060000_20180720T064938_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T064938_20180720T073914_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T073914_20180720T082852_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T082852_20180720T091828_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T091828_20180720T100805_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T100805_20180720T105741_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T105741_20180720T114719_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T114719_20180720T123655_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T123655_20180720T132632_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T132632_20180720T141608_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T141608_20180720T150546_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.

CS_OFFL_SIR_GOP_220180720T150546_20180720T155522_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20180720T155522_20180720T164500_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T173435_20180720T182413_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20180720T182413_20180720T191349_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T191349_20180720T200327_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20180720T200327_20180720T205303_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T205303_20180720T214241_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T214241_20180720T223216_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220180720T223216_20180720T232154_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.