

IDEAS+ Daily Report for GOP data:

24/04/2019



1. Overview				
Den est Des du stiene	04 Mar 0040	Check	L1 & L2	P2P
Report Production:	24-May-2019	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Duese and Lloads	Cruce Cat Occar Dresses	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Used: CryoSat Ocean Processor	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	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

Mission / Instrument News			
23-Apr-2019	None		
24-Apr-2019	None		
25-Apr-2019	SIRAL unavailability on 25-Apr-2019 from approximately 03:29:00 to 06:52:10 and also from approximately 16:01:00 to 19:11:39 due to a planned roll campaign.		

3. Instrument Configuration

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

SIRAL instrument(s) in use:

s) 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

2. Global Coverage

4.3 L1B Auxilary Data File Usage Check				
Each product is checked for missing Data Set Descriptors with respect to a pre-de	termined baseline and also to check the val	lidity 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. T	he bit value of this flag indicates any proble	ms 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 measurement record. The bit value of this flag indicates any problems when set.				
Attitude Correction Missing: This flag is currently set in error for GOPR products due to a configuration issue. This is being investigated and will be updated in the next SW update.				
Number of products with errors: 1				
Product	Test Failed	Description		

4.6 L1B Waveform Group Data Check

CryoSat L1B data includes a waveform data flag for each measurement record. The bit value of this flag indicates any problems when set.

Loss of Echo Flag: This flag is currently set for some products over land, but this is to be expected.

25

Number of products with errors:

CS_OFFL_SIR_GOPM1B_20190424T013526_20190424T02407_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPM1B_20190424T024114_20190424T022407_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPM1B_20190424T134935_20190424T139397_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPM1B_20190424T124710_20190424T123190_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T02252_20190424T002704_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T024T02252_20190424T002713_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T021402252_20190424T082142_C0014Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T082142_20190424T082142_C0014Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T082142_20190424T083145_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T082142_20190424T18357_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T13272_20190424T13312_C0014Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T13272_20190424T13327_C0014Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T13272_20190424T13327_C0014Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_G	Product	Test Failed	Description
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CS_OFFL_SIR_GOPN1B_20190424T084416_20190424T084556_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T115239_20190424T115357_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T12429_20190424T124913_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T124729_20190424T133121_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T133140_20190424T133309_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T142552_20190424T143207_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T150746_20190424T15159_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T202553_20190424T202624_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T205253_20190424T215424_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T051629_20190424T052044_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1	CS_OFFL_SIR_GOPN1B_20190424T082142_20190424T082342_C001	Loss of Echo	The tracking echo is missing for one or more records
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CS_OFFL_SIR_GOPN1B_20190424T124729_20190424T124913_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T132723_20190424T133121_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T133140_20190424T133309_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T142552_20190424T143207_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T1205253_20190424T15159_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T202553_20190424T202624_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T215332_20190424T215424_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T051629_20190424T052044_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T100500_20190424T10664_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR	CS_OFFL_SIR_GOPN1B_20190424T084416_20190424T084556_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190424T132723_20190424T133121_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T133140_20190424T133309_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T142552_20190424T143207_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T142552_20190424T15159_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T20253_20190424T202624_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T20253_20190424T205624_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T205253_20190424T215424_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T051629_20190424T052044_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T0803344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T100500_20190424T10604_C001Loss of EchoThe tracking echo is missing for one or more records	CS_OFFL_SIR_GOPN1B_20190424T115239_20190424T115357_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190424T133140_20190424T133309_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T142552_20190424T143207_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T150746_20190424T15159_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T202553_20190424T202624_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T20532_20190424T20524_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T051629_20190424T052044_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T05050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T080304_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T080344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T100500_20190424T100604_C001Loss of EchoThe tracking echo is missing for one or more records	CS_OFFL_SIR_GOPN1B_20190424T124729_20190424T124913_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190424T142552_20190424T143207_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T150746_20190424T151159_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T202553_20190424T202624_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T215332_20190424T215424_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T051629_20190424T052044_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T100500_20190424T100604_C001Loss of EchoThe tracking echo is missing for one or more records	CS_OFFL_SIR_GOPN1B_20190424T132723_20190424T133121_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190424T150746_20190424T151159_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T202553_20190424T202624_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T215332_20190424T215424_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T051629_20190424T052044_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T0803344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T0803344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T0803344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more records	CS_OFFL_SIR_GOPN1B_20190424T133140_20190424T133309_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190424T202553_20190424T202624_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPN1B_20190424T215332_20190424T215424_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T051629_20190424T052044_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T0803344_20190424T0804_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T100500_20190424T100604_C001Loss of EchoThe tracking echo is missing for one or more records	CS_OFFL_SIR_GOPN1B_20190424T142552_20190424T143207_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190424T215332_20190424T215424_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T051629_20190424T052044_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T0803344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T100500_20190424T10804_C001Loss of EchoThe tracking echo is missing for one or more records	CS_OFFL_SIR_GOPN1B_20190424T150746_20190424T151159_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190424T051629_20190424T052044_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T0800_20190424T084212_C001Loss of EchoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_GOPR1B_20190424T100500_20190424T100604_C001Loss of EchoThe tracking echo is missing for one or more records	CS_OFFL_SIR_GOPN1B_20190424T202553_20190424T202624_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_GOPR1B_20190424T100500_20190424T100604_C001 Loss of Echo The tracking echo is missing for one or more records	CS_OFFL_SIR_GOPN1B_20190424T215332_20190424T215424_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_GOPR1B_20190424T100500_20190424T100604_C001 Loss of Echo The tracking echo is missing for one or more records	CS_OFFL_SIR_GOPR1B_20190424T051629_20190424T052044_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190424T100500_20190424T100604_C001 Loss of Echo The tracking echo is missing for one or more records	CS_OFFL_SIR_GOPR1B_20190424T082050_20190424T082142_C001	Loss of Echo	The tracking echo is missing for one or more records
	CS_OFFL_SIR_GOPR1B_20190424T083344_20190424T084212_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190424T150721_20190424T150746_C001 Loss of Echo The tracking echo is missing for one or more records	CS_OFFL_SIR_GOPR1B_20190424T100500_20190424T100604_C001	Loss of Echo	The tracking echo is missing for one or more records
	CS_OFFL_SIR_GOPR1B_20190424T150721_20190424T150746_C001	Loss of Echo	The tracking echo is missing for one or more records

5. GOP Level 2 Data Quality Check

5.1 L2 Product Format Check

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

Number of products with errors:

5.2 L2 Product Header Analysis

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

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. 0

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).

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.

Number of products with errors: 1

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20190424T050550_20190424T051023_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

5.6 L2 Range Measurement Check

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

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

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

Ice Range Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 73

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20190423T233848_20190424T000842_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T000900_20190424T000936_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T002745_20190424T004637_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T004706_20190424T010008_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T010902_20190424T011059_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T011748_20190424T013323_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T013526_20190424T014448_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T020257_20190424T020441_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T021144_20190424T022407_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T024029_20190424T024129_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T024726_20190424T025022_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T025031_20190424T025503_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T025711_20190424T031152_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T035858_20190424T042304_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T042534_20190424T043402_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T043639_20190424T050210_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T053415_20190424T054446_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T055019_20190424T060135_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T060746_20190424T061202_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T061534_20190424T064222_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T070821_20190424T072401_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T072930_20190424T074053_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T074657_20190424T075242_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T075406_20190424T080022_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T084556_20190424T091958_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T092602_20190424T093113_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T093321_20190424T095237_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T102500_20190424T105312_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T110402_20190424T110601_C001	Ice Range Averaging Status	The loe Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T110608_20190424T111022_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T111239_20190424T114818_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T114818_20190424T114846_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T115134_20190424T115239_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_20190424T120511_20190424T121655_C001	Ocean Range Averaging Status	records.
CS_OFFL_SIR_GOPM_2_20190424T122019_20190424T122243_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T122251_20190424T123753_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T123939_20190424T124500_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_GOPM_2_20190424T124518_20190424T124729_C001	Ice Range Averaging Status	records.
CS_OFFL_SIR_GOPM_2_20190424T125610_20190424T130652_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T131013_20190424T132313_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_GOPM_2_20190424T132401_20190424T132723_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T134935_20190424T135937_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T140139_20190424T141654_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T141905_20190424T142359_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T143207_20190424T143604_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T145002_20190424T150300_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T154022_20190424T155556_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T155843_20190424T160327_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T160934_20190424T163640_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T170942_20190424T173526_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T173830_20190424T174226_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T174247_20190424T174612_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T174846_20190424T180042_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T180615_20190424T181611_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T184453_20190424T191522_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T191656_20190424T192140_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T192832_20190424T200310_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T201630_20190424T201751_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T204748_20190424T204954_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T205645_20190424T210207_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T210759_20190424T213015_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T213301_20190424T214155_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T215449_20190424T215810_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T221418_20190424T222029_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T222056_20190424T223345_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T223612_20190424T224106_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T224710_20190424T231950_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T234212_20190425T000845_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20190424T060623_20190424T060746_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20190424T114922_20190424T115134_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190424T035614_20190424T035735_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190424T043559_20190424T043639_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190424T150431_20190424T150644_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. 72

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20190423T233848_20190424T000842_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_20190424T000900_20190424T000936_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_20190424T002745_20190424T004637_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_20190424T004706_20190424T010008_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_20190424T010902_20190424T011059_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T011234_20190424T011602_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T011748_20190424T013323_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_20190424T013526_20190424T014448_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_20190424T020257_20190424T020441_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T021144_20190424T022407_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_20190424T024029_20190424T024129_C001 CS OFFL SIR GOPM 2 20190424T024726 20190424T025022 C001 CS_OFFL_SIR_GOPM_2_20190424T025031_20190424T025503_C001 CS_OFFL_SIR_GOPM_2_20190424T025711_20190424T031152_C001 CS OFFL SIR GOPM 2 20190424T035858 20190424T042304 C001 CS OFFL SIR GOPM 2 20190424T042534 20190424T043402 C001 CS OFFL SIR GOPM 2 20190424T043639 20190424T050210 C001 CS OFFL SIR GOPM 2 20190424T053415 20190424T054446 C001 CS_OFFL_SIR_GOPM_2_20190424T055019_20190424T060135_C001 CS_OFFL_SIR_GOPM_2_20190424T060746_20190424T061202_C001 CS_OFFL_SIR_GOPM_2_20190424T061534_20190424T064222_C001 CS_OFFL_SIR_GOPM_2_20190424T070821_20190424T072401_C001 CS OFFL SIR GOPM 2 20190424T072930 20190424T074053 C001 CS_OFFL_SIR_GOPM_2_20190424T074657_20190424T075242_C001 CS_OFFL_SIR_GOPM_2_20190424T075406_20190424T080022_C001 CS OFFL SIR GOPM 2 20190424T084556 20190424T091958 C001 CS_OFFL_SIR_GOPM_2_20190424T093321_20190424T095237_C001 CS_OFFL_SIR_GOPM_2_20190424T102500_20190424T105312_C001 CS_OFFL_SIR_GOPM_2_20190424T105323_20190424T105825_C001 CS_OFFL_SIR_GOPM_2_20190424T110402_20190424T110601_C001 CS_OFFL_SIR_GOPM_2_20190424T110608_20190424T111022_C001 CS OFFL SIR GOPM 2 20190424T111239 20190424T114818 C001 CS_OFFL_SIR_GOPM_2_20190424T115134_20190424T115239_C001 CS OFFL SIR GOPM 2 20190424T120511 20190424T121655 C001 CS OFFL SIR GOPM 2 20190424T122019 20190424T122243 C001 CS OFFL SIR GOPM 2 20190424T122251 20190424T123753 C001 CS_OFFL_SIR_GOPM_2_20190424T123939_20190424T124500_C001 CS_OFFL_SIR_GOPM_2_20190424T124518_20190424T124729_C001 CS_OFFL_SIR_GOPM_2_20190424T125610_20190424T130652_C001 CS OFFL SIR GOPM 2 20190424T131013 20190424T132313 C001 CS_OFFL_SIR_GOPM_2_20190424T132401_20190424T132723_C001 CS_OFFL_SIR_GOPM_2_20190424T134935_20190424T135937_C001 CS OFFL SIR GOPM 2 20190424T140139 20190424T141654 C001 CS_OFFL_SIR_GOPM_2_20190424T141905_20190424T142359_C001 CS_OFFL_SIR_GOPM_2_20190424T143207_20190424T143604_C001 CS OFFL SIR GOPM 2 20190424T145002 20190424T150300 C001 CS_OFFL_SIR_GOPM_2_20190424T154022_20190424T155556_C001 CS_OFFL_SIR_GOPM_2_20190424T155843_20190424T160327_C001 CS OFFL SIR GOPM 2 20190424T160934 20190424T163640 C001 CS OFFL SIR GOPM 2 20190424T170942 20190424T173526 C001 CS_OFFL_SIR_GOPM_2_20190424T173830_20190424T174226_C001 CS_OFFL_SIR_GOPM_2_20190424T174247_20190424T174612_C001 CS_OFFL_SIR_GOPM_2_20190424T174846_20190424T180042_C001 CS_OFFL_SIR_GOPM_2_20190424T180615_20190424T181611_C001 CS_OFFL_SIR_GOPM_2_20190424T184453_20190424T191522_C001 CS_OFFL_SIR_GOPM_2_20190424T191656_20190424T192140_C001 CS OFFL SIR GOPM 2 20190424T192832 20190424T200310 C001 CS_OFFL_SIR_GOPM_2_20190424T201630_20190424T201751_C001 CS_OFFL_SIR_GOPM_2_20190424T204748_20190424T204954_C001 CS OFFL SIR GOPM 2 20190424T205645 20190424T210207 C001 CS OFFL SIR GOPM 2 20190424T210759 20190424T213015 C001 SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status Ice Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status SWH Averaging Status, Ocean

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Ice Backscatter Averaging Status

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

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Ice Backscatter Averaging Status

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The 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.

CS_OFFL_SIR_GOPM_2_20190424T213301_20190424T214155_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_20190424T215449_20190424T215810_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_20190424T221418_20190424T222029_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_20190424T222056_20190424T223345_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_20190424T223612_20190424T224106_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190424T224710_20190424T231950_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_20190424T234212_20190425T000845_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_20190424T060623_20190424T060746_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190424T035614_20190424T035735_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_20190424T043559_20190424T043639_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_20190424T150431_20190424T150644_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: 56

6. GOP L2 Pole-to-Pole Data Quality Check

6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a NetCDF product file (.nc). Number of products with errors:

6.2 P2P Product Header Analysis

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

6.3 P2P Auxiliary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct. Number of products with errors: 0

6.4 P2P Auxiliary Correction Error Check

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

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: 1				
Product Test Failed Description				
CS OFEL SIR GOP 2 20100/2/10/2858 20100/2/1051837 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

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220190423T233117_20190424T002056_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T002056_20190424T011030_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T011030_20190424T020010_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_220190424T020010_20190424T024944_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T024944_20190424T033923_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_220190424T033923_20190424T042858_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_220190424T042858_20190424T051837_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_220190424T051837_20190424T060811_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T060811_20190424T065751_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_220190424T065751_20190424T074725_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T074725_20190424T083704_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_220190424T083704_20190424T092638_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_GOP_220190424T092638_20190424T101618_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_220190424T101618_20190424T110552_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T110552_20190424T115531_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_220190424T115531_20190424T124505_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_220190424T124505_20190424T133445_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_220190424T133445_20190424T142419_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_220190424T142419_20190424T151358_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_220190424T151358_20190424T160333_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_220190424T160333_20190424T165312_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T165312_20190424T174246_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_220190424T174246_20190424T183226_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_220190424T183226_20190424T192200_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_220190424T192200_20190424T201139_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T201139_20190424T210113_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_220190424T210113_20190424T215053_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_220190424T215053_20190424T224027_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_220190424T224027_20190424T233006_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T233006_20190425T001940_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

6.7 P2P SWH and Backscatter Measurement Check

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

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

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20190423T233117_20190424T002056_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_20190424T002056_20190424T011030_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_20190424T011030_20190424T020010_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_20190424T020010_20190424T024944_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_20190424T024944_20190424T033923_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_20190424T033923_20190424T042858_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_20190424T042858_20190424T051837_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_20190424T051837_20190424T060811_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_20190424T060811_20190424T065751_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_20190424T065751_20190424T074725_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_20190424T074725_20190424T083704_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_20190424T083704_20190424T092638_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_20190424T092638_20190424T101618_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_20190424T101618_20190424T110552_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_20190424T110552_20190424T115531_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_20190424T115531_20190424T124505_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_20190424T124505_20190424T133445_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_220190424T133445_20190424T142419_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_220190424T142419_20190424T151358_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_20190424T151358_20190424T160333_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_20190424T160333_20190424T165312_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_20190424T165312_20190424T174246_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_220190424T174246_20190424T183226_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_20190424T183226_20190424T192200_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_220190424T192200_20190424T201139_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_20190424T201139_20190424T210113_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_20190424T210113_20190424T215053_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_20190424T215053_20190424T224027_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_20190424T224027_20190424T233006_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_220190424T233006_20190425T001940_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.

6.8 P2P Ocean Retracking Quality Check

Cryosat P2P data includes an ocean retracking quality flag (field 19) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set. Ocean Retracking Quality Flag: This flag is currently set for products over land and sea ice, but this is to be expected. The number of products with this error flag set is given below. Number of products with errors: 28

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20190424T002056_20190424T011030_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T011030_20190424T020010_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T020010_20190424T024944_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T033923_20190424T042858_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T042858_20190424T051837_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T051837_20190424T060811_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T060811_20190424T065751_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T065751_20190424T074725_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T074725_20190424T083704_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T083704_20190424T092638_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T092638_20190424T101618_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T101618_20190424T110552_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T110552_20190424T115531_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T115531_20190424T124505_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T124505_20190424T133445_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T133445_20190424T142419_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T142419_20190424T151358_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T151358_20190424T160333_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T160333_20190424T165312_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T165312_20190424T174246_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T174246_20190424T183226_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T183226_20190424T192200_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T192200_20190424T201139_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T201139_20190424T210113_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T210113_20190424T215053_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220190424T215053_20190424T224027_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
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CS_OFFL_SIR_GOP_220190424T224027_20190424T233006_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20190424T233006_20190425T001940_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.