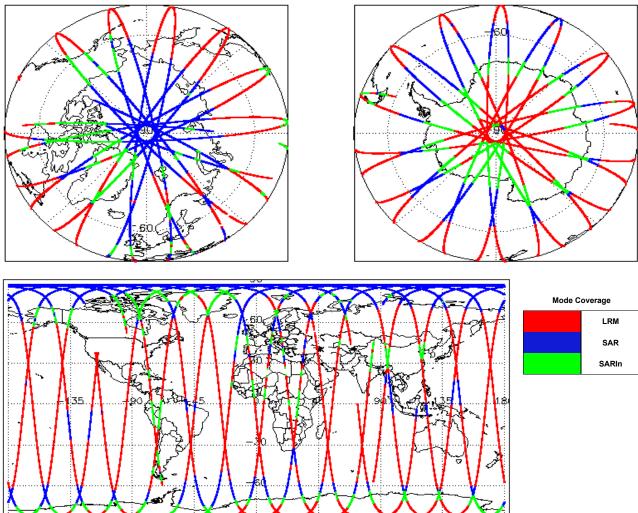


IDEAS+ Daily Report for GOP data:

<u>21/11/2018</u>



onort Broduction	07-Jan-2019	Check	L1 & L2	P2P
eport Production:	07-Jan-2019	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used: CrvoSat Ocean Processor		Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Useu.	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used: Geophysical Oc	Geophysical Ocean Products (GOP)	Product Format Check	Nominal	Nominal
Data Oseu.	L1B, L2 & P2P Science Data	Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
		Auxiliary Correction Error Check	Nominal	Nominal
		Measurement Confidence Data Check	See Section 4.5, 4.6	Nominal
		Range, SWH & Backscatter Measurement Check	See Section 5.6, 5.7	See Section 6.6, 6.7
		Ocean Retracking Quality Check	See Section 5.8	See Section 6.8
ission / Instrument Ne 20-Nov-2018 None 21-Nov-2018 None	9WS			
	planned			



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

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.			
Number of products with errors: 0			
4.4 L1B Auxiliary Correction Error Check			
CryoSat L1B data includes a correction error flag for each measurement record. The bit value of this flag indicates any problems when set.			
lumber of products with errors: 0			
4.5.1.4.P. Maaaurament Confidence Date Check			
4.5 L1B Measurement Confidence Data Check			
CryoSat L1B data includes a measurement confidence flag for each measure	ment record. The bit value of this f	ag indicates any problems when set.	
Attitude Correction Missing: This flag is currently set in error for GOPR proc	ducts due to a configuration issue.	This is being investigated and will be updated in the next SW update.	
Number of products with errors: 0			
4.6 L1B Waveform Group Data Check			
CryoSat L1B data includes a waveform data flag for each measurement recor	d. The bit value of this flag indicate	es any problems when set.	
Loss of Echo Flag: This flag is currently set for some products over land, but this is to be expected.			
Loss of Echo Flag: This flag is currently set for some products over land, but	. this is to be expected.		
	this is to be expected.		
	Test Failed	Description	
Number of products with errors: 14		Description The tracking echo is missing for one or more records	
Number of products with errors: 14 Product	Test Failed	•	
Number of products with errors: 14 Product	Test Failed Loss of Echo	The tracking echo is missing for one or more records	
Number of products with errors: 14 Product	Test Failed Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records	
Number of products with errors: 14 Product	Test Failed Loss of Echo Loss of Echo Loss of Echo	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	
Number of products with errors: 14 Product	Test Failed Loss of Echo Loss of Echo Loss of Echo Loss of Echo	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	
Number of products with errors: 14 Product 14 CS_OFFL_SIR_GOPM1B_20181121T094053_20181121T095015_C001 14 CS_OFFL_SIR_GOPM1B_20181121T145701_20181121T145926_C001 14 CS_OFFL_SIR_GOPM1B_20181121T145701_20181121T145926_C001 14 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T145926_C001 14 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T1204312_C001 14 CS_OFFL_SIR_GOPM1B_20181121T211623_20181121T213302_C001 14 CS_OFFL_SIR_GOPM1B_20181121T104320_20181121T104439_C001 14	Test Failed Loss of Echo	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	
Number of products with errors: 14 Product CS_OFFL_SIR_GOPM1B_20181121T094053_20181121T095015_C001 CS_OFFL_SIR_GOPM1B_20181121T145701_20181121T145926_C001 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T204312_C001 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T204312_C001 CS_OFFL_SIR_GOPM1B_20181121T21623_20181121T213302_C001 CS_OFFL_SIR_GOPM1B_20181121T104320_20181121T104439_C001 CS_OFFL_SIR_GOPN1B_20181121T132125_20181121T132151_C001	Test Failed Loss of Echo	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	
Number of products with errors: 14 Product	Test Failed Loss of Echo	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	
Number of products with errors: 14 Product 14 CS_OFFL_SIR_GOPM1B_20181121T094053_20181121T095015_C001 1 CS_OFFL_SIR_GOPM1B_20181121T145701_20181121T145926_C001 1 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T204312_C001 1 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T204312_C001 1 CS_OFFL_SIR_GOPM1B_20181121T21623_20181121T213302_C001 1 CS_OFFL_SIR_GOPN1B_20181121T104320_20181121T104439_C001 1 CS_OFFL_SIR_GOPN1B_20181121T132125_20181121T132151_C001 1 CS_OFFL_SIR_GOPN1B_20181121T181821_20181121T182020_C001 1 CS_OFFL_SIR_GOPN1B_20181121T231201_20181121T231714_C001 1 CS_OFFL_SIR_GOPN1B_20181121T001324_20181121T001451_C001 1	Test Failed Loss of Echo	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	
Number of products with errors: 14 Product 14 CS_OFFL_SIR_GOPM1B_20181121T094053_20181121T095015_C001 14 CS_OFFL_SIR_GOPM1B_20181121T145701_20181121T145926_C001 14 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T204312_C001 14 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T204312_C001 14 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T204312_C001 14 CS_OFFL_SIR_GOPM1B_20181121T21623_20181121T204312_C001 14 CS_OFFL_SIR_GOPN1B_20181121T104320_20181121T104439_C001 14 CS_OFFL_SIR_GOPN1B_20181121T132125_20181121T132151_C001 14 CS_OFFL_SIR_GOPN1B_20181121T181821_20181121T182020_C001 14 CS_OFFL_SIR_GOPN1B_20181121T231201_20181121T231714_C001 14 CS_OFFL_SIR_GOPN1B_20181121T001324_20181121T001451_C001 14 CS_OFFL_SIR_GOPR1B_20181121T003240_20181121T033110_C001 14	Test Failed Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records	
Number of products with errors: 14 Product	Test Failed Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records	
Number of products with errors: 14 Product CS_OFFL_SIR_GOPM1B_20181121T094053_20181121T095015_C001 CS_OFFL_SIR_GOPM1B_20181121T145701_20181121T145926_C001 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T204312_C001 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T204312_C001 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T213302_C001 CS_OFFL_SIR_GOPM1B_20181121T104320_20181121T104439_C001 CS_OFFL_SIR_GOPN1B_20181121T132125_20181121T132151_C001 CS_OFFL_SIR_GOPN1B_20181121T132125_20181121T132151_C001 CS_OFFL_SIR_GOPN1B_20181121T132125_20181121T132151_C001 CS_OFFL_SIR_GOPN1B_20181121T1321201_20181121T132151_C001 CS_OFFL_SIR_GOPN1B_20181121T03240_20181121T032151_C001 CS_OFFL_SIR_GOPR1B_20181121T001324_20181121T001451_C001 CS_OFFL_SIR_GOPR1B_20181121T03240_20181121T033110_C001 CS_OFFL_SIR_GOPR1B_20181121T060136_20181121T03324_C001 CS_OFFL_SIR_GOPR1B_20181121T060136_20181121T073254_C001	Test Failed Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records	
Number of products with errors: 14 Product 14 CS_OFFL_SIR_GOPM1B_20181121T094053_20181121T095015_C001 14 CS_OFFL_SIR_GOPM1B_20181121T145701_20181121T145926_C001 14 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T204312_C001 14 CS_OFFL_SIR_GOPM1B_20181121T202551_20181121T204312_C001 14 CS_OFFL_SIR_GOPM1B_20181121T211623_20181121T213302_C001 14 CS_OFFL_SIR_GOPM1B_20181121T104320_20181121T104439_C001 14 CS_OFFL_SIR_GOPN1B_20181121T132125_20181121T132151_C001 14 CS_OFFL_SIR_GOPN1B_20181121T181821_20181121T182020_C001 14 CS_OFFL_SIR_GOPN1B_20181121T231201_20181121T182020_C001 14	Test Failed Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records	

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: 0

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. Number of products with errors: 0

5.4 L2 Auxiliary Correction Error Check

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

Number of products with errors:

5.5 L2 Measurement Confidence Data Check

CryoSat L2 data includes a measurement confidence flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set. 0

Number of products with errors:

5.6 L2 Range Measurement Check

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

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

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

Ice Range Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 72

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20181121T002828_20181121T004941_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T005608_20181121T005940_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T010003_20181121T010330_C001	Lice Rande Averading Status	The Ice Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_GOPM_2_20181121T010713_20181121T012319_C001 CS OFFL SIR GOPM 2 20181121T012329 20181121T013321 C001 CS_OFFL_SIR_GOPM_2_20181121T020412_20181121T023028_C001 CS_OFFL_SIR_GOPM_2_20181121T023356_20181121T023854_C001 CS_OFFL_SIR_GOPM_2_20181121T024738_20181121T025706_C001 CS_OFFL_SIR_GOPM_2_20181121T030241_20181121T032030_C001 CS OFFL SIR GOPM 2 20181121T033244 20181121T033510 C001 CS OFFL SIR GOPM 2 20181121T040542 20181121T040704 C001 CS_OFFL_SIR_GOPM_2_20181121T041354_20181121T041925_C001 CS_OFFL_SIR_GOPM_2_20181121T042643_20181121T050009_C001 CS_OFFL_SIR_GOPM_2_20181121T051219_20181121T051343_C001 CS_OFFL_SIR_GOPM_2_20181121T053144_20181121T054740_C001 CS_OFFL_SIR_GOPM_2_20181121T055313_20181121T055822_C001 CS_OFFL_SIR_GOPM_2_20181121T060515_20181121T064113_C001 CS_OFFL_SIR_GOPM_2_20181121T065218_20181121T065241_C001 CS OFFL SIR GOPM 2 20181121T070312 20181121T070739 C001 CS_OFFL_SIR_GOPM_2_20181121T070814_20181121T072555_C001 CS_OFFL_SIR_GOPM_2_20181121T073530_20181121T073725_C001 CS OFFL SIR GOPM 2 20181121T074456 20181121T080145 C001 CS_OFFL_SIR_GOPM_2_20181121T080626_20181121T081857_C001 CS_OFFL_SIR_GOPM_2_20181121T083322_20181121T085056_C001 CS OFFL SIR GOPM 2 20181121T085241 20181121T090654 C001 CS_OFFL_SIR_GOPM_2_20181121T091734_20181121T092137_C001 CS OFFL SIR GOPM 2 20181121T092340 20181121T093852 C001 CS OFFL SIR GOPM 2 20181121T094053 20181121T095015 C001 CS OFFL SIR GOPM 2 20181121T101313 20181121T102940 C001 CS_OFFL_SIR_GOPM_2_20181121T103521_20181121T104319_C001 CS_OFFL_SIR_GOPM_2_20181121T104439_20181121T104805_C001 CS_OFFL_SIR_GOPM_2_20181121T105232_20181121T110039_C001 CS OFFL SIR GOPM 2 20181121T110335 20181121T111823 C001 CS_OFFL_SIR_GOPM_2_20181121T115357_20181121T120526_C001 CS_OFFL_SIR_GOPM_2_20181121T120529_20181121T122728_C001 CS OFFL SIR GOPM 2 20181121T123354 20181121T123920 C001 CS_OFFL_SIR_GOPM_2_20181121T124336_20181121T125925_C001 CS_OFFL_SIR_GOPM_2_20181121T134033_20181121T135021_C001 CS OFFL SIR GOPM 2 20181121T135559 20181121T140543 C001 CS_OFFL_SIR_GOPM_2_20181121T141323_20181121T141923_C001 CS OFFL SIR GOPM 2 20181121T142240 20181121T145302 C001 CS OFFL SIR GOPM 2 20181121T145701 20181121T145926 C001 CS_OFFL_SIR_GOPM_2_20181121T151245_20181121T154432_C001 CS_OFFL_SIR_GOPM_2_20181121T155232_20181121T155801_C001 CS OFFL SIR GOPM 2 20181121T160202 20181121T160550 C001 CS_OFFL_SIR_GOPM_2_20181121T163647_20181121T163939_C001 CS_OFFL_SIR_GOPM_2_20181121T165134_20181121T170255_C001 CS_OFFL_SIR_GOPM_2_20181121T170317_20181121T172436_C001 CS_OFFL_SIR_GOPM_2_20181121T173133_20181121T173236_C001 CS OFFL SIR GOPM 2 20181121T174217 20181121T175825 C001 CS_OFFL_SIR_GOPM_2_20181121T182800_20181121T190325_C001 CS_OFFL_SIR_GOPM_2_20181121T190708_20181121T191133_C001 CS OFFL SIR GOPM 2 20181121T192047 20181121T192216 C001 CS_OFFL_SIR_GOPM_2_20181121T192235_20181121T195413_C001 Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status

The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more record The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more record The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more record The Ice Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more record The Ice Range Averaging Status Flag has been set for one or more The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records The Ice Range Averaging Status Flag has been set for one or more records The 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_20181121T195527_20181121T195817_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T200819_20181121T202109_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T202551_20181121T204312_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T204514_20181121T205032_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T205050_20181121T205246_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T210058_20181121T211409_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T211623_20181121T213302_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T220751_20181121T222141_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T222440_20181121T222942_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T223006_20181121T223121_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T223815_20181121T223913_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T224515_20181121T225025_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T230123_20181121T230832_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T234011_20181122T000028_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20181121T092138_20181121T092315_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPN_2_20181121T172811_20181121T173132_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20181121T050913_20181121T051035_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPR_2_20181121T192217_20181121T192235_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. 74

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20181121T002828_20181121T004941_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_20181121T005608_20181121T005940_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T010003_20181121T010330_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T010713_20181121T012319_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_20181121T012329_20181121T013321_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_20181121T020412_20181121T023028_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_20181121T023356_20181121T023854_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T024738_20181121T025706_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_20181121T030241_20181121T032030_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_20181121T033244_20181121T033510_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_20181121T040542_20181121T040704_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_20181121T041354_20181121T041925_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T042643_20181121T050009_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_20181121T051219_20181121T051343_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_20181121T053144_20181121T054740_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_20181121T055313_20181121T055822_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T060515_20181121T064113_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_20181121T065218_20181121T065241_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_20181121T070312_20181121T070739_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_20181121T070814_20181121T072555_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_20181121T073530_20181121T073725_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOPM_2_20181121T074456_20181121T080145_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_20181121T080626_20181121T081857_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_20181121T083322_20181121T085056_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_20181121T085241_20181121T090654_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_20181121T091432_20181121T091636_C001 CS OFFL SIR GOPM 2 20181121T091734 20181121T092137 C001 CS_OFFL_SIR_GOPM_2_20181121T092340_20181121T093852_C001 CS_OFFL_SIR_GOPM_2_20181121T094053_20181121T095015_C001 CS_OFFL_SIR_GOPM_2_20181121T101313_20181121T102940_C001 CS_OFFL_SIR_GOPM_2_20181121T103521_20181121T104319_C001 CS OFFL SIR GOPM 2 20181121T104439 20181121T104805 C001 CS OFFL SIR GOPM 2 20181121T105232 20181121T110039 C001 CS_OFFL_SIR_GOPM_2_20181121T110335_20181121T111823_C001 CS_OFFL_SIR_GOPM_2_20181121T115357_20181121T120526_C001 CS_OFFL_SIR_GOPM_2_20181121T120529_20181121T122728_C001 CS_OFFL_SIR_GOPM_2_20181121T123354_20181121T123920_C001 CS_OFFL_SIR_GOPM_2_20181121T124336_20181121T125925_C001 CS_OFFL_SIR_GOPM_2_20181121T134033_20181121T135021_C001 CS_OFFL_SIR_GOPM_2_20181121T135559_20181121T140543_C001 CS OFFL SIR GOPM 2 20181121T141323 20181121T141923 C001 CS_OFFL_SIR_GOPM_2_20181121T142240_20181121T145302_C001 CS_OFFL_SIR_GOPM_2_20181121T145701_20181121T145926_C001 CS_OFFL_SIR_GOPM_2_20181121T151245_20181121T154432_C001 CS_OFFL_SIR_GOPM_2_20181121T155232_20181121T155801_C001 CS_OFFL_SIR_GOPM_2_20181121T160202_20181121T160550_C001 CS OFFL SIR GOPM 2 20181121T163647 20181121T163939 C001 CS_OFFL_SIR_GOPM_2_20181121T165134_20181121T170255_C001 CS OFFL SIR GOPM 2 20181121T170317 20181121T172436 C001 CS OFFL SIR GOPM 2 20181121T173133 20181121T173236 C001 CS OFFL SIR GOPM 2 20181121T173238 20181121T173647 C001 CS_OFFL_SIR_GOPM_2_20181121T174217_20181121T175825_C001 CS_OFFL_SIR_GOPM_2_20181121T182800_20181121T190325_C001 CS_OFFL_SIR_GOPM_2_20181121T190708_20181121T191133_C001 CS OFFL SIR GOPM 2 20181121T191152 20181121T191546 C001 CS_OFFL_SIR_GOPM_2_20181121T192047_20181121T192216_C001 CS_OFFL_SIR_GOPM_2_20181121T192235_20181121T195413_C001 CS OFFL SIR GOPM 2 20181121T195527 20181121T195817 C001 CS_OFFL_SIR_GOPM_2_20181121T200819_20181121T202109_C001 CS OFFL SIR GOPM 2 20181121T202551 20181121T204312 C001 CS OFFL SIR GOPM 2 20181121T204514 20181121T205032 C001 CS_OFFL_SIR_GOPM_2_20181121T205050_20181121T205246_C001 CS OFFL SIR GOPM 2 20181121T211623 20181121T213302 C001 CS OFFL SIR GOPM 2 20181121T220751 20181121T222141 C001 CS_OFFL_SIR_GOPM_2_20181121T222440_20181121T222942_C001 CS_OFFL_SIR_GOPM_2_20181121T223006_20181121T223121_C001 CS OFFL SIR GOPM 2 20181121T223815 20181121T223913 C001 CS_OFFL_SIR_GOPM_2_20181121T224515_20181121T225025_C001 CS_OFFL_SIR_GOPM_2_20181121T230123_20181121T230832_C001 CS_OFFL_SIR_GOPM_2_20181121T234011_20181122T000028_C001 CS_OFFL_SIR_GOPN_2_20181121T092138_20181121T092315_C001 CS OFFL SIR GOPN 2 20181121T172811 20181121T173132 C001 CS_OFFL_SIR_GOPR_2_20181121T050913_20181121T051035_C001 CS_OFFL_SIR_GOPR_2_20181121T192217_20181121T192235_C001

Ice Backscatter Averaging Status

records

ecords

Ice Backscatter Averaging Status

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

Ice Backscatter Averaging Status

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

Ice Backscatter Averaging Status

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

Ice Backscatter Averaging Status SWH Averaging Status, Ocean

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

Ice Backscatter Averaging Status

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

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 SWH Averaging Status, Ocean Backscatter Averaging Status

Ice Backscatter Averaging Status Ice Backscatter Averaging Status

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

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

Backscatter Averaging Status

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The 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

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 ecords

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

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

5.8 L2 Ocean Retracking Quality Check

CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

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

Number of products with errors:

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

6.1 P2P Product Format Check

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

Number of products with errors:

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).

60

Number of products with errors:

6.5 P2P Measurement Confidence Data Check

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

6.6 P2P Range Measurement Check

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

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

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

Ice Range Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 29

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220181121T001020_20181121T005959_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_220181121T005959_20181121T014933_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_220181121T014933_20181121T023913_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_220181121T023913_20181121T032847_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T032847_20181121T041827_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_220181121T041827_20181121T050800_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T050800_20181121T055740_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_220181121T055740_20181121T064714_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T064714_20181121T073654_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_220181121T073654_20181121T082628_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T082628_20181121T091607_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_220181121T091607_20181121T100541_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_220181121T100541_20181121T105521_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T105521_20181121T114455_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_220181121T114455_20181121T123434_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_220181121T123434_20181121T132408_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_220181121T132408_20181121T141348_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_220181121T141348_20181121T150322_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_220181121T150322_20181121T155302_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T155302_20181121T164236_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_220181121T164236_20181121T173215_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T173215_20181121T182149_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_220181121T182149_20181121T191129_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_220181121T191129_20181121T200103_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_220181121T200103_20181121T205042_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_220181121T205042_20181121T214016_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_220181121T214016_20181121T222956_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_220181121T222956_20181121T231930_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_220181121T231930_20181122T000909_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. 29

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20181121T001020_20181121T005959_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_20181121T005959_20181121T014933_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_20181121T014933_20181121T023913_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_20181121T023913_20181121T032847_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_220181121T032847_20181121T041827_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_20181121T041827_20181121T050800_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_20181121T050800_20181121T055740_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_20181121T055740_20181121T064714_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_20181121T064714_20181121T073654_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_20181121T073654_20181121T082628_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_220181121T082628_20181121T091607_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_20181121T091607_20181121T100541_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_20181121T100541_20181121T105521_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_20181121T105521_20181121T114455_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_20181121T114455_20181121T123434_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_20181121T123434_20181121T132408_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_220181121T132408_20181121T141348_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_20181121T141348_20181121T150322_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_20181121T150322_20181121T155302_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_20181121T155302_20181121T164236_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_20181121T164236_20181121T173215_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_20181121T173215_20181121T182149_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_20181121T182149_20181121T191129_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_20181121T191129_20181121T200103_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_20181121T200103_20181121T205042_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_20181121T205042_20181121T214016_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_20181121T214016_20181121T222956_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__20181121T231930_20181122T000909_C001

28

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

SWH Averaging Status, Ocean Backscatter Averaging Status The SWH, Ocean and Ice 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.

6.8 P2P Ocean Retracking Quality Check

Number of products with errors:

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

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20181120T232046_20181121T001020_C002	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T001020_20181121T005959_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T005959_20181121T014933_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T014933_20181121T023913_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T023913_20181121T032847_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T032847_20181121T041827_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T041827_20181121T050800_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T055740_20181121T064714_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T064714_20181121T073654_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T073654_20181121T082628_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T082628_20181121T091607_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T091607_20181121T100541_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T100541_20181121T105521_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T114455_20181121T123434_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T123434_20181121T132408_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T132408_20181121T141348_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T141348_20181121T150322_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T150322_20181121T155302_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T155302_20181121T164236_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T164236_20181121T173215_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T173215_20181121T182149_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T182149_20181121T191129_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T191129_20181121T200103_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T200103_20181121T205042_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T205042_20181121T214016_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T214016_20181121T222956_C002	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T222956_20181121T231930_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220181121T231930_20181122T000909_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
	1	