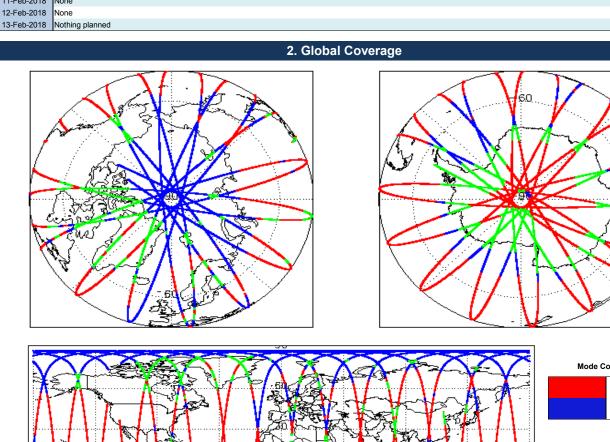


IDEAS+ Daily Report for IOP data:

12/02/2018

1. Overview				
Dement Dreductions	14 Eab 2010	Check	L1 & L2	P2P
Report Production:	14-Feb-2018	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	Cruc Cat Occar Processor	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Usea:	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
	Intermediate Ocean Products (IOP)	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 4.6	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

Mission / Instrument News 11-Feb-2018 None 12-Feb-2018 None





3. Instrument Configuration

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

SIRAL instrument(s) in use:

SIRAL - A

0

4. IOP 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).

60

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 pr	e-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 reco	rd. The bit value of this flag indicat	es any problems when set.
lumber of products with errors: 0		
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	lag indicates any problems when set.
Attitude Correction Missing: This flag is currently set in error for IOPR prod	ucts due to a configuration issue.	This is being investigated and will be updated in the next SW update.
Number of products with errors: 0		
4.6 L1B Waveform Group Data Check		
ryoSat L1B data includes a waveform data flag for each measurement record	d. The bit value of this flag indicat	es any problems when set.
	-	es any problems when set.
oss of Echo Flag: This flag is currently set for products over land, but this is	-	es any problems when set.
oss of Echo Flag: This flag is currently set for products over land, but this is lumber of products with errors: 9	-	es any problems when set. Description
Loss of Echo Flag: This flag is currently set for products over land, but this is lumber of products with errors: 9 Product	s to be expected.	
coss of Echo Flag: This flag is currently set for products over land, but this is lumber of products with errors: 9 Product 9 CS_OFFL_SIR_IOPM1B_20180212T160607_20180212T163222_C001	s to be expected. Test Failed	Description
coss of Echo Flag: This flag is currently set for products over land, but this is lumber of products with errors: 9 Product 9 CS_OFFL_SIR_IOPM1B_20180212T160607_20180212T163222_C001 CS_OFFL_SIR_IOPM1B_20180212T232306_20180212T233844_C001	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records
CryoSat L1B data includes a waveform data flag for each measurement recorsors of Echo Flag: This flag is currently set for products over land, but this is number of products with errors: 9 Product CS_OFFL_SIR_IOPM1B_20180212T160607_20180212T163222_C001 CS_OFFL_SIR_IOPM1B_20180212T055039_20180212T055134_C001 CS_OFFL_SIR_IOPN1B_20180212T090649_20180212T091104_C001	s to be expected. Test Failed Loss of Echo Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records
Loss of Echo Flag: This flag is currently set for products over land, but this is Number of products with errors: 9 Product 9 CS_OFFL_SIR_IOPM1B_20180212T160607_20180212T163222_C001 0 CS_OFFL_SIR_IOPM1B_20180212T232306_20180212T233844_C001 0 CS_OFFL_SIR_IOPM1B_20180212T055039_20180212T055134_C001 0	s to be expected. Test Failed Loss of Echo Loss of Echo Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records
Loss of Echo Flag: This flag is currently set for products over land, but this is Number of products with errors: 9 Product 9 CS_OFFL_SIR_IOPM1B_20180212T160607_20180212T163222_C001 05 CS_OFFL_SIR_IOPM1B_20180212T232306_20180212T233844_C001 05 CS_OFFL_SIR_IOPN1B_20180212T055039_20180212T055134_C001 05 CS_OFFL_SIR_IOPN1B_20180212T090649_20180212T091104_C001 05	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records
coss of Echo Flag: This flag is currently set for products over land, but this is Number of products with errors: 9 Product 0 CS_OFFL_SIR_IOPM1B_20180212T160607_20180212T163222_C001 0 CS_OFFL_SIR_IOPM1B_20180212T232306_20180212T233844_C001 0 CS_OFFL_SIR_IOPN1B_20180212T055039_20180212T055134_C001 0 CS_OFFL_SIR_IOPN1B_20180212T090649_20180212T091104_C001 0 CS_OFFL_SIR_IOPN1B_20180212T104007_20180212T105009_C001 0	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records
coss of Echo Flag: This flag is currently set for products over land, but this is lumber of products with errors: 9 Product 9 S_OFFL_SIR_IOPM1B_20180212T160607_20180212T163222_C001 SS_OFFL_SIR_IOPM1B_20180212T232306_20180212T233844_C001 SS_OFFL_SIR_IOPM1B_20180212T055039_20180212T055134_C001 SS_OFFL_SIR_IOPN1B_20180212T090649_20180212T091104_C001 SS_OFFL_SIR_IOPN1B_20180212T104907_20180212T105009_C001 SS_OFFL_SIR_IOPN1B_20180212T164238_20180212T164401_C001 SS_OFFL_SIR_IOPN1B_20180212T191032_20180212T191120_C001	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records
coss of Echo Flag: This flag is currently set for products over land, but this is Number of products with errors: 9 Product 0 CS_OFFL_SIR_IOPM1B_20180212T160607_20180212T163222_C001 0 CS_OFFL_SIR_IOPM1B_20180212T232306_20180212T233844_C001 0 CS_OFFL_SIR_IOPN1B_20180212T055039_20180212T055134_C001 0 CS_OFFL_SIR_IOPN1B_20180212T090649_20180212T091104_C001 0 CS_OFFL_SIR_IOPN1B_20180212T104907_20180212T105009_C001 0 CS_OFFL_SIR_IOPN1B_20180212T164238_20180212T164401_C001 0	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records
Loss of Echo Flag: This flag is currently set for products over land, but this is sumber of products with errors: 9 Product 9 ScoFFL_SIR_IOPM1B_20180212T160607_20180212T163222_C001 0 CS_OFFL_SIR_IOPM1B_20180212T055039_20180212T055134_C001 0 CS_OFFL_SIR_IOPN1B_20180212T05039_20180212T055134_C001 0 CS_OFFL_SIR_IOPN1B_20180212T090649_20180212T091104_C001 0 CS_OFFL_SIR_IOPN1B_20180212T164238_20180212T164401_C001 0 CS_OFFL_SIR_IOPN1B_20180212T164238_20180212T164401_C001 0 CS_OFFL_SIR_IOPN1B_20180212T191032_20180212T191120_C001 0 CS_OFFL_SIR_IOPN1B_20180212T191032_20180212T191120_C001 0 CS_OFFL_SIR_IOPN1B_20180212T191032_20180212T191120_C001 0 CS_OFFL_SIR_IOPN1B_20180212T191032_20180212T191120_C001 0 CS_OFFL_SIR_IOPN1B_20180212T191032_0180212T191120_C001 0	s to be expected. Test Failed Loss of Echo Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records 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
Loss of Echo Flag: This flag is currently set for products over land, but this is sumber of products with errors: 9 Product 9 ScoFFL_SIR_IOPM1B_20180212T160607_20180212T163222_C001 0 CS_OFFL_SIR_IOPM1B_20180212T055039_20180212T055134_C001 0 CS_OFFL_SIR_IOPN1B_20180212T05039_20180212T055134_C001 0 CS_OFFL_SIR_IOPN1B_20180212T090649_20180212T091104_C001 0 CS_OFFL_SIR_IOPN1B_20180212T164238_20180212T164401_C001 0 CS_OFFL_SIR_IOPN1B_20180212T164238_20180212T164401_C001 0 CS_OFFL_SIR_IOPN1B_20180212T191032_20180212T191120_C001 0 CS_OFFL_SIR_IOPN1B_20180212T191032_20180212T191120_C001 0 CS_OFFL_SIR_IOPN1B_20180212T191032_20180212T191120_C001 0 CS_OFFL_SIR_IOPN1B_20180212T191032_20180212T191120_C001 0 CS_OFFL_SIR_IOPN1B_20180212T191032_0180212T191120_C001 0	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records

5.2 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. 0 Number of products with errors:

5.3 L2 Auxiliary Data File Usage Check

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

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. 83

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20180212T000448_20180212T000722_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T000744_20180212T001210_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T001353_20180212T002855_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T003035_20180212T003318_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T010728_20180212T011347_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T011602_20180212T014012_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T014234_20180212T015123_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOPM_2_20180212T015329_20180212T021735_C001 CS OFFL SIR IOPM 2 20180212T024437 20180212T031919 C001 CS_OFFL_SIR_IOPM_2_20180212T032203_20180212T032340_C001 CS_OFFL_SIR_IOPM_2_20180212T032450_20180212T032913_C001 CS_OFFL_SIR_IOPM_2_20180212T033204_20180212T035808_C001 CS_OFFL_SIR_IOPM_2_20180212T042615_20180212T044107_C001 CS OFFL SIR IOPM 2 20180212T044641 20180212T045839 C001 CS OFFL SIR IOPM 2 20180212T050404 20180212T050951 C001 CS_OFFL_SIR_IOPM_2_20180212T051116_20180212T051845_C001 CS_OFFL_SIR_IOPM_2_20180212T051939_20180212T053514_C001 CS OFFL SIR IOPM 2 20180212T054901 20180212T054944 C001 CS_OFFL_SIR_IOPM_2_20180212T060236_20180212T063737_C001 CS OFFL SIR IOPM 2 20180212T064309 20180212T064823 C001 CS_OFFL_SIR_IOPM_2_20180212T065000_20180212T065308_C001 CS_OFFL_SIR_IOPM_2_20180212T065508_20180212T065916_C001 CS OFFL SIR IOPM 2 20180212T065935 20180212T070925 C001 CS_OFFL_SIR_IOPM_2_20180212T072540_20180212T072821_C001 CS_OFFL_SIR_IOPM_2_20180212T074225_20180212T075117_C001 CS_OFFL_SIR_IOPM_2_20180212T075403_20180212T081619_C001 CS_OFFL_SIR_IOPM_2_20180212T082138_20180212T082309_C001 CS_OFFL_SIR_IOPM_2_20180212T082316_20180212T082726_C001 CS OFFL SIR IOPM 2 20180212T082939 20180212T085138 C001 CS_OFFL_SIR_IOPM_2_20180212T085234_20180212T085639_C001 CS OFFL SIR IOPM 2 20180212T090155 20180212T090433 C001 CS OFFL SIR IOPM 2 20180212T092315 20180212T094547 C001 CS OFFL SIR IOPM 2 20180212T094550 20180212T095515 C001 CS_OFFL_SIR_IOPM_2_20180212T095642_20180212T100208_C001 CS_OFFL_SIR_IOPM_2_20180212T100227_20180212T100455_C001 CS_OFFL_SIR_IOPM_2_20180212T101311_20180212T102539_C001 CS OFFL SIR IOPM 2 20180212T102619 20180212T104329 C001 CS_OFFL_SIR_IOPM_2_20180212T110505_20180212T111637_C001 CS_OFFL_SIR_IOPM_2_20180212T111840_20180212T113426_C001 CS OFFL SIR IOPM 2 20180212T113609 20180212T114105 C001 CS_OFFL_SIR_IOPM_2_20180212T114125_20180212T114137_C001 CS_OFFL_SIR_IOPM_2_20180212T115006_20180212T120225_C001 CS OFFL SIR IOPM 2 20180212T120706 20180212T121854 C001 CS_OFFL_SIR_IOPM_2_20180212T125803_20180212T131309_C001 CS OFFL SIR IOPM 2 20180212T131533 20180212T132018 C001 CS OFFL SIR IOPM 2 20180212T132627 20180212T135335 C001 CS_OFFL_SIR_IOPM_2_20180212T142740_20180212T145308_C001 CS_OFFL_SIR_IOPM_2_20180212T145557_20180212T145932_C001 CS OFFL SIR IOPM 2 20180212T145955 20180212T150321 C001 CS_OFFL_SIR_IOPM_2_20180212T150542_20180212T152105_C001 CS_OFFL_SIR_IOPM_2_20180212T152321_20180212T153447_C001 CS_OFFL_SIR_IOPM_2_20180212T160607_20180212T163222_C001 CS_OFFL_SIR_IOPM_2_20180212T163350_20180212T163846_C001 CS OFFL SIR IOPM 2 20180212T163853 20180212T164221 C001 CS_OFFL_SIR_IOPM_2_20180212T164529_20180212T165659_C001 CS_OFFL_SIR_IOPM_2_20180212T170234_20180212T172030_C001 CS OFFL SIR IOPM 2 20180212T180537 20180212T180659 C001 CS_OFFL_SIR_IOPM_2_20180212T180858_20180212T181207_C001

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

CS_OFFL_SIR_IOPM_2_20180212T182445_20180212T185842_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T191216_20180212T191344_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T193135_20180212T195056_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T195307_20180212T195813_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T200333_20180212T203748_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T210309_20180212T212549_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T213524_20180212T213717_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T214358_20180212T215234_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T215243_20180212T215859_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T215907_20180212T220138_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T220619_20180212T221400_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T223332_20180212T225044_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T225237_20180212T230654_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T231423_20180212T231628_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T231724_20180212T232129_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T232306_20180212T233844_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T234045_20180212T235008_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180212T081714_20180212T082138_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180212T172225_20180212T172337_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180212T064937_20180212T065000_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180212T102540_20180212T102619_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180212T104330_20180212T104332_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180212T114926_20180212T115006_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180212T154505_20180212T155302_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180212T233844_20180212T234044_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. 80

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20180212T000744_20180212T001210_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T001353_20180212T002855_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_IOPM_2_20180212T003035_20180212T003318_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_IOPM_2_20180212T010728_20180212T011347_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_IOPM_2_20180212T011602_20180212T014012_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_IOPM_2_20180212T014234_20180212T015123_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T015329_20180212T021735_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_IOPM_2_20180212T024437_20180212T031919_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_IOPM_2_20180212T032203_20180212T032340_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T032450_20180212T032913_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T033204_20180212T035808_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_IOPM_2_20180212T042615_20180212T044107_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_IOPM_2_20180212T044641_20180212T045839_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_IOPM_2_20180212T050404_20180212T050951_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T051116_20180212T051845_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_IOPM_2_20180212T051939_20180212T053514_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_IOPM_2_20180212T054901_20180212T054944_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_IOPM_2_20180212T060236_20180212T063737_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_IOPM_2_20180212T064309_20180212T064823_C001 CS_OFFL_SIR_IOPM_2_20180212T065000_20180212T065308_C001 CS_OFFL_SIR_IOPM_2_20180212T065508_20180212T065916_C001 CS_OFFL_SIR_IOPM_2_20180212T065935_20180212T070925_C001 CS OFFL SIR IOPM 2 20180212T072540 20180212T072821 C001 CS_OFFL_SIR_IOPM_2_20180212T074225_20180212T075117_C001 CS OFFL SIR IOPM 2 20180212T075403 20180212T081619 C001 CS OFFL SIR IOPM 2 20180212T082316 20180212T082726 C001 CS_OFFL_SIR_IOPM_2_20180212T082939_20180212T085138_C001 CS_OFFL_SIR_IOPM_2_20180212T085234_20180212T085639_C001 CS_OFFL_SIR_IOPM_2_20180212T092315_20180212T094547_C001 CS_OFFL_SIR_IOPM_2_20180212T094550_20180212T095515_C001 CS OFFL SIR IOPM 2 20180212T095642 20180212T100208 C001 CS_OFFL_SIR_IOPM_2_20180212T100227_20180212T100455_C001 CS_OFFL_SIR_IOPM_2_20180212T101311_20180212T102539_C001 CS OFFL SIR IOPM 2 20180212T102619 20180212T104329 C001 CS OFFL SIR IOPM 2 20180212T104730 20180212T104907 C001 CS_OFFL_SIR_IOPM_2_20180212T110505_20180212T111637_C001 CS OFFL SIR IOPM 2 20180212T111840 20180212T113426 C001 CS_OFFL_SIR_IOPM_2_20180212T113609_20180212T114105_C001 CS_OFFL_SIR_IOPM_2_20180212T114125_20180212T114137_C001 CS OFFL SIR IOPM 2 20180212T115006 20180212T120225 C001 CS_OFFL_SIR_IOPM_2_20180212T120706_20180212T121854_C001 CS OFFL SIR IOPM 2 20180212T125803 20180212T131309 C001 CS OFFL SIR IOPM 2 20180212T131533 20180212T132018 C001 CS OFFL SIR IOPM 2 20180212T132627 20180212T135335 C001 CS_OFFL_SIR_IOPM_2_20180212T142740_20180212T145308_C001 CS_OFFL_SIR_IOPM_2_20180212T145557_20180212T145932_C001 CS_OFFL_SIR_IOPM_2_20180212T150542_20180212T152105_C001 CS OFFL SIR IOPM 2 20180212T152321 20180212T153447 C001 CS_OFFL_SIR_IOPM_2_20180212T160607_20180212T163222_C001 CS_OFFL_SIR_IOPM_2_20180212T163350_20180212T163846_C001 CS OFFL SIR IOPM 2 20180212T163853 20180212T164221 C001 CS_OFFL_SIR_IOPM_2_20180212T164529_20180212T165659_C001 CS_OFFL_SIR_IOPM_2_20180212T170234_20180212T172030_C001 CS OFFL SIR IOPM 2 20180212T180537 20180212T180659 C001 CS_OFFL_SIR_IOPM_2_20180212T180858_20180212T181207_C001 CS_OFFL_SIR_IOPM_2_20180212T182445_20180212T185842_C001 CS OFFL SIR IOPM 2 20180212T191216 20180212T191344 C001 CS OFFL SIR IOPM 2 20180212T193135 20180212T195056 C001 CS_OFFL_SIR_IOPM_2_20180212T195307_20180212T195813_C001 CS_OFFL_SIR_IOPM_2_20180212T200333_20180212T203748_C001 CS_OFFL_SIR_IOPM_2_20180212T210309_20180212T212549_C001 CS OFFL SIR IOPM 2 20180212T213524 20180212T213717 C001 CS_OFFL_SIR_IOPM_2_20180212T214358_20180212T215234_C001 CS_OFFL_SIR_IOPM_2_20180212T215243_20180212T215859_C001 CS OFFL SIR IOPM 2 20180212T215907 20180212T220138 C001 CS_OFFL_SIR_IOPM_2_20180212T220619_20180212T221400_C001 CS_OFFL_SIR_IOPM_2_20180212T223332_20180212T225044_C001 CS OFFL SIR IOPM 2 20180212T225237 20180212T230654 C001 CS OFFL SIR IOPM 2 20180212T231423 20180212T231628 C001 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 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

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Ice Backscatter Averaging Status

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Ice Backscatter Averaging Status

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

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

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

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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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The 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.

CS_OFFL_SIR_IOPM_2_20180212T231724_20180212T232129_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180212T232306_20180212T233844_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_IOPM_2_20180212T234045_20180212T235008_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_IOPN_2_20180212T081714_20180212T082138_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180212T172225_20180212T172337_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_IOPR_2_20180212T064937_20180212T065000_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_IOPR_2_20180212T102540_20180212T102619_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_IOPR_2_20180212T104330_20180212T104332_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_IOPR_2_20180212T114926_20180212T115006_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_IOPR_2_20180212T154505_20180212T155302_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_IOPR_2_20180212T233844_20180212T234044_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.

5.8 L2 Ocean Retracking Quality Check

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

Ocean Retracking Quality Flag: This flag is currently set for products over land and sea ice, but this is to be expected. The number of products with this error flag set is given below. Number of products with errors: 57

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

6.1 P2P Product Format Check	
Each product, retrieved and unpacked from the	ne 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:	0

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: 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:

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. 28

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220180212T000654_20180212T005632_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_IOP_220180212T005632_20180212T014607_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_IOP_2_20180212T014607_20180212T023545_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_IOP_220180212T023545_20180212T032521_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_IOP_220180212T032521_20180212T041459_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_IOP_220180212T041459_20180212T050435_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T050435_20180212T055413_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_IOP_220180212T055413_20180212T064348_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_IOP_220180212T064348_20180212T073326_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_IOP_2_20180212T073326_20180212T082302_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T082302_20180212T091240_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_IOP_220180212T091240_20180212T100215_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_IOP_220180212T100215_20180212T105153_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T105153_20180212T114129_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_IOP_220180212T114129_20180212T123107_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T123107_20180212T132042_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_IOP_220180212T132042_20180212T141020_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T141020_20180212T145956_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_IOP_220180212T145956_20180212T154934_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_IOP_220180212T154934_20180212T163910_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_IOP_220180212T163910_20180212T172848_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T172848_20180212T181823_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_IOP_220180212T181823_20180212T190801_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T190801_20180212T195737_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_IOP_220180212T195737_20180212T204715_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T204715_20180212T213650_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T213650_20180212T222628_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T222628_20180212T231604_C001	Ocean Range Averaging Status, Ice Range Averaging Status	The Ocean and Ice Range Averaging Status Flags have been set for one or more records.

6.7 P2P SWH and Backscatter Measurement Check

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

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

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

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

Ice Backscatter Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 28

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220180212T000654_20180212T005632_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_IOP_220180212T005632_20180212T014607_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_IOP_220180212T014607_20180212T023545_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_IOP_220180212T023545_20180212T032521_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_IOP_220180212T032521_20180212T041459_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_IOP_220180212T041459_20180212T050435_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_IOP_220180212T050435_20180212T055413_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_IOP_220180212T055413_20180212T064348_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_IOP_220180212T064348_20180212T073326_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_IOP_220180212T073326_20180212T082302_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_IOP_220180212T082302_20180212T091240_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_IOP_220180212T091240_20180212T100215_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_IOP_220180212T100215_20180212T105153_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_IOP_220180212T105153_20180212T114129_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_IOP_220180212T114129_20180212T123107_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_IOP_220180212T123107_20180212T132042_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_IOP_220180212T132042_20180212T141020_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_IOP_220180212T141020_20180212T145956_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_IOP_220180212T145956_20180212T154934_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_IOP_220180212T154934_20180212T163910_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_IOP_220180212T163910_20180212T172848_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_IOP_220180212T172848_20180212T181823_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_IOP_220180212T181823_20180212T190801_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_IOP_220180212T190801_20180212T195737_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_IOP_220180212T195737_20180212T204715_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_IOP_220180212T204715_20180212T213650_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_IOP_220180212T213650_20180212T222628_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_IOP_220180212T222628_20180212T231604_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.

6.8 P2P Ocean Retracking Quality Check

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

27

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_IOP_220180211T231718_20180212T000654_C002	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T000654_20180212T005632_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T005632_20180212T014607_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T023545_20180212T032521_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T032521_20180212T041459_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T041459_20180212T050435_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T050435_20180212T055413_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T055413_20180212T064348_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T064348_20180212T073326_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T073326_20180212T082302_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T082302_20180212T091240_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T091240_20180212T100215_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T100215_20180212T105153_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T105153_20180212T114129_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T114129_20180212T123107_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T123107_20180212T132042_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T132042_20180212T141020_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T141020_20180212T145956_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T145956_20180212T154934_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T154934_20180212T163910_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T163910_20180212T172848_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T172848_20180212T181823_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T181823_20180212T190801_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T190801_20180212T195737_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T195737_20180212T204715_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T213650_20180212T222628_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180212T222628_20180212T231604_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.