



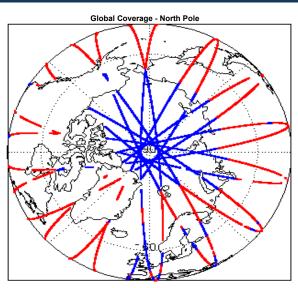
1. Overview

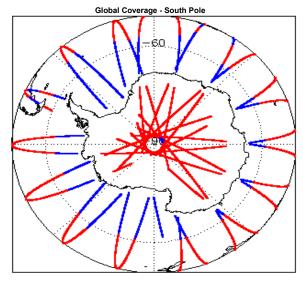
Report Production Date:	08-Aug-2016
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B and L2 Science Data

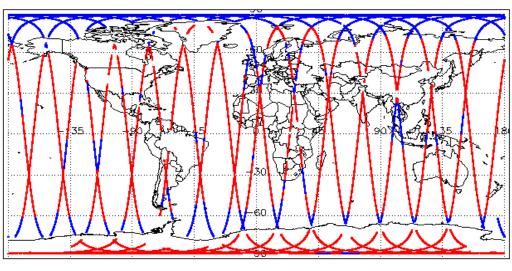
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement Confidence Data Check	See Section 4.5, 4.6, 5.5, 5.6, 5.7 and 5.8

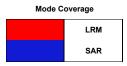
Mission	Mission / Instrument News	
05-Aug	g-2016 N	None
06-Aug	g-2016 N	None
07-Aug	g-2016 N	Nothing planned

2. Global Coverage









3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

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).

Number of products with errors:

0

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.

4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

4.4 L1B Auxiliary Correction Error Check

CryoSat L1B data includes a correction error flag (field 60) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

4.5 L1B Measurement Confidence Data Check

CryoSat L1B data includes a measurement confidence flag (field 12) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

3

Product	Test Failed	Description
CS_OFFL_SIR_IOP_1B_20160806T033748_20160806T034626_B001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_IOP_1B_20160806T063628_20160806T064021_B001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_IOP_1B_20160806T144932_20160806T145502_B001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

4.6 L1B Waveform Group Data Check

CryoSat L1B data includes a waveform data flag (field 65) for each measurement record. The bit value of this flag indicates any problems when set.

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

Number of products with errors:

11

Product	Test Failed	Description
CS_OFFL_SIR_IOP_1B_20160805T235611_20160806T000337_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOP_1B_20160806T024225_20160806T024426_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOP_1B_20160806T031608_20160806T033307_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOP_1B_20160806T062403_20160806T062501_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOP_1B_20160806T095455_20160806T102753_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOP_1B_20160806T111032_20160806T111151_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOP_1B_20160806T111358_20160806T111950_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOP_1B_20160806T133151_20160806T134614_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOP_1B_20160806T151040_20160806T152516_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOP_1B_20160806T161322_20160806T161543_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOP_1B_20160806T195636_20160806T202228_B001	Loss of Echo	The tracking echo is missing for one or more records

5. IOP Level 2 Data Quality Check

5.1 L2 Product Format Check

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

Number of products with errors:

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:

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.

Wind Model File Usage: This file is currently not included in all L2 products.

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).

Currently, there are two common auxiliary correction errors 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.

Sea State Bias Error: The error value is currently set for products over land and sea ice, but this is to be expected.

Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

Number of products with errors: 2

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220160805T235611_20160806T000337_B001	Geocentric Ocean Tide (FES), Non-	There is an error with the GIM Ionospheric correction, the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_IOP_220160806T012612_20160806T013149_B001	Lotal Geocentric Ocean Lide (FES)	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_IOP_220160806T042054_20160806T042941_B001	Fauilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records

Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide Fest SilR_IOP_2_20166806T094043_2016806T094242_8001 Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide Fest SilR_IOP_2_20166806T094043_2016806T094242_8001 Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide Fest SilR_IOP_2_2016806T094042_2016806T094242_8001 Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide Fest SilR_IOP_2_2016806T191358_2016806T11950_8001 Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide Fest SilR_IOP_2_2016806T120227_2016806T120649_8001 Total Geocentric Ocean Tide Fest SilR_IOP_2_2016806T120227_2016806T120649_8001 Total Geocentric Ocean Tide Fest SilR_IOP_2_2016806T120649_8001 Total Geocentric Ocean Tide Fest SilR_IOP_2_2016806T150838_2016806T141916_8001 Total Geocentric Ocean Tide Fest SilR_IOP_2_2016806T150838_2016806T161159_8001 Total Geocentric Ocean Tide Fest SilR_IOP_2_2016806T162057_2016806T162054_8001 Total Geocentric Ocean Tide Fest SilR_IOP_2_2016806T162054_2016806T162054_8001 Total Geocentric Ocean Tide Fe	CS_OFFL_SIR_IOP_220160806T072602_20160806T075203_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_IOP_2_20160806T09424_B01060806T09424_B001 CS_OFFL_SIR_IOP_2_20160806T09424_D0160806T09424_B001 CS_OFFL_SIR_IOP_2_20160806T111358_D0160806T111358	CS_OFFL_SIR_IOP_220160806T093649_20160806T093748_B001		FES) and the Non-equilibrium Long Period Ocean Tide height for one or
CS_OFFL_SIR_IOP_2_20160806T094249_20160806T194321_8001 CS_OFFL_SIR_IOP_2_20160806T111358_20160806T111950_8001 CS_OFFL_SIR_IOP_2_20160806T120227_20160806T120649_8001 CS_OFFL_SIR_IOP_2_20160806T120227_20160806T120649_8001 CS_OFFL_SIR_IOP_2_20160806T141736_20160806T141916_8001 CS_OFFL_SIR_IOP_2_20160806T14736_20160806T141916_8001 CS_OFFL_SIR_IOP_2_20160806T150838_20160806T141916_8001 CS_OFFL_SIR_IOP_2_20160806T150838_20160806T151040_8001 CS_OFFL_SIR_IOP_2_20160806T150838_20160806T161159_8001 CS_OFFL_SIR_IOP_2_20160806T162057_20160806T161159_8001 CS_OFFL_SIR_IOP_2_20160806T162057_20160806T162813_8001 CS_OFFL_SIR_IOP_2_20160806T175958_20160806T174542_8001 CS_OFFL_SIR_IOP_2_20160806T180459_20160806T180741_8001 CS_OFFL_SIR_IOP_2_20160806T180459_20160806T180741_8001 CS_OFFL_SIR_IOP_2_20160806T180459_20160806T192943_8001 CS_OFFL_SIR_IOP_2_20160806T192906_20160806T192943_8001 CS_OFFL_SIR_IOP_2_20160806T1929	CS_OFFL_SIR_IOP_2_20160806T094043_20160806T094242_B001		FES) and the Non-equilibrium Long Period Ocean Tide height for one or
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CS_OFFL_SIR_IOP_2_20160806T171958_20160806T174542_B001 CS_OFFL_SIR_IOP_2_20160806T180459_20160806T180741_B001 CS_OFFL_SIR_IOP_2_20160806T180459_20160806T180741_B001 CS_OFFL_SIR_IOP_2_20160806T181839_20160806T184305_B001 Mean Sea Surface (2) There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records CS_OFFL_SIR_IOP_2_20160806T181839_20160806T184305_B001 Mean Sea Surface (2) There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Perio	CS_OFFL_SIR_IOP_2_20160806T162057_20160806T162813_B001		FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_IOP_2_20160806T180459_20160806T180741_B001 CS_OFFL_SIR_IOP_2_20160806T181839_20160806T184305_B001 Mean Sea Surface (2) There is an error with the MSS height (solution 2) for one or more records There is an error with the Total Geocentric Ocean Tide height for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2). There is an error with the Total Geocentric Ocean Tide height (solution 2).	CS_OFFL_SIR_IOP_2_20160806T171958_20160806T174542_B001		FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (FES) There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide he	CS_OFFL_SIR_IOP_2_20160806T180459_20160806T180741_B001		FES) and the Non-equilibrium Long Period Ocean Tide height for one or
CS_OFFL_SIR_IOP_2_20160806T192906_20160806T192943_B001 CS_OFFL_SIR_IOP_2_20160806T195636_20160806T202228_B001 CS_OFFL_SIR_IOP_2_20160806T212337_20160806T212728_B001 Total Geocentric Ocean Tide (FES) Total Geocentric Ocean Tide (FES) Total Geocentric Ocean Tide (FES) There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records Total Geocentric Ocean Tide (FES) There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-eq	CS_OFFL_SIR_IOP_220160806T181839_20160806T184305_B001	Mean Sea Surface (2)	There is an error with the MSS height (solution 2) for one or more records
CS_OFFL_SIR_IOP_2_20160806T212337_20160806T212728_B001 Total Geocentric Ocean Tide (FES) Total Geocentric Ocean Tide (FES) There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records Total Geocentric Ocean Tide (FES) Total Geocentric Ocean Tide (FES) There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records There is an error with the Total Geocentric Ocean Tide height for one or more records There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide heig	CS_OFFL_SIR_IOP_220160806T192906_20160806T192943_B001		FES) and the Non-equilibrium Long Period Ocean Tide height for one or
CS_OFFL_SIR_IOP_2_201608061212337_201608061212728_B001 Total Geocentric Ocean Tide (FES) Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide height for one or more records Total Geocentric Ocean Tide (FES) Total Geocentric Ocean Tide (FES) There is an error with the Total Geocentric Ocean Tide height (solution 2: Total Geocentric Ocean Tide (FES))	CS_OFFL_SIR_IOP_220160806T195636_20160806T202228_B001	Total Geocentric Ocean Tide (FES)	
CS_OFFL_SIR_IOP_2_20160806T225327_20160806T230230_B001 Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide height for one or more records Total Geocentric Ocean Tide (FES) Total Geocentric Ocean Tide (FES) There is an error with the Total Geocentric Ocean Tide height (solution 2:	CS_OFFL_SIR_IOP_220160806T212337_20160806T212728_B001	Total Geocentric Ocean Tide (FES)	
	CS_OFFL_SIR_IOP_220160806T225327_20160806T230230_B001		FES) and the Non-equilibrium Long Period Ocean Tide height for one or
	CS_OFFL_SIR_IOP_220160806T230844_20160806T231021_B001	Total Geocentric Ocean Tide (FES)	

5.5 L2 Measurement Confidence Data Check

CryoSat L2 data includes a measurement confidence flag (field 14) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220160806T033748_20160806T034626_B001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_IOP_220160806T063628_20160806T064021_B001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_IOP_220160806T144932_20160806T145502_B001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

5.6 L2 Range Measurement Check

CryoSat L2 data includes an Ocean (field 25) and Ice (field 30) 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.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220160806T003838_20160806T004054_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T021805_20160806T022002_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T022136_20160806T022505_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T031155_20160806T031337_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T035628_20160806T035926_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T035934_20160806T040406_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T053437_20160806T054305_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T062403_20160806T062501_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T071402_20160806T071525_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOP_2_20160806T071649_20160806T072105_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T085601_20160806T090145_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T094043_20160806T094242_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T103505_20160806T104016_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T121304_20160806T121504_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T121504_20160806T121510_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T121511_20160806T121925_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T130030_20160806T130137_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T134842_20160806T135403_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T135416_20160806T135421_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T135422_20160806T135632_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T152808_20160806T153302_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T153303_20160806T153306_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T153320_20160806T153331_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T153338_20160806T153455_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T170747_20160806T171230_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T171236_20160806T171245_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T171252_20160806T171413_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T184732_20160806T185129_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T185150_20160806T185515_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T194530_20160806T194703_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T202600_20160806T203043_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T203048_20160806T203418_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T220548_20160806T221110_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T234516_20160806T235009_B001	Ice Range Averaging Status	The Ice 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 (field 49) and an Ocean (field 55) and Ice (field 61) 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.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220160806T003838_20160806T004054_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T021805_20160806T022002_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T022136_20160806T022505_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T031155_20160806T031337_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T035628_20160806T035926_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T035934_20160806T040406_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T053437_20160806T054305_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T062403_20160806T062501_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T071402_20160806T071525_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T071649_20160806T072105_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T085601_20160806T090145_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T094043_20160806T094242_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T103505_20160806T104016_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T121304_20160806T121504_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T121511_20160806T121925_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOP_2_20160806T134842_20160806T135403_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T135416_20160806T135421_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T135422_20160806T135632_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T170747_20160806T171230_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T171252_20160806T171413_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T184732_20160806T185129_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T185150_20160806T185515_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T194530_20160806T194703_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T202600_20160806T203043_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T203048_20160806T203418_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220160806T220548_20160806T221110_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20160806T234516_20160806T235009_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.

5.8 L2 Ocean Retracking Quality Check

CryoSat L2 data includes an ocean retracking quality flag (field 19) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

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

Number of products with errors:

44.