

1. Overview

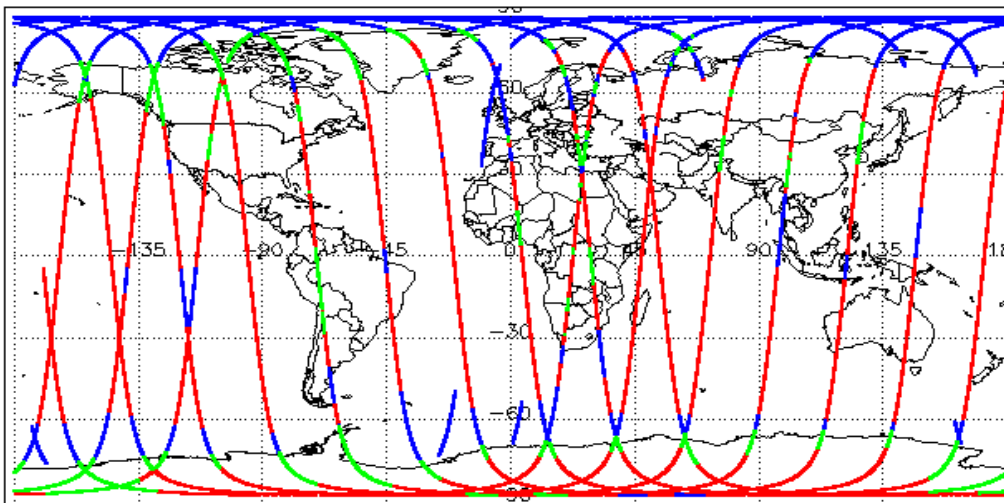
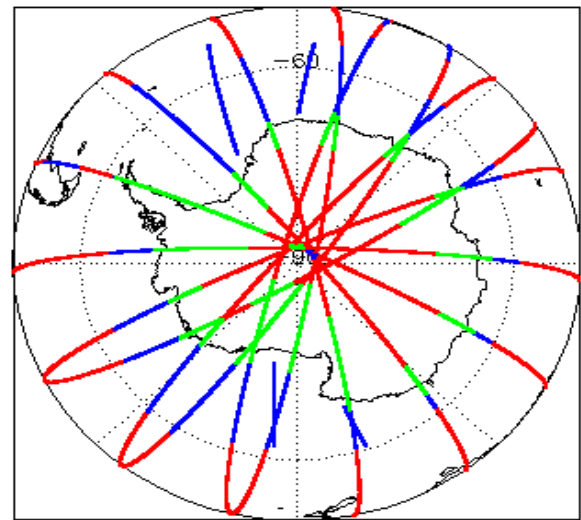
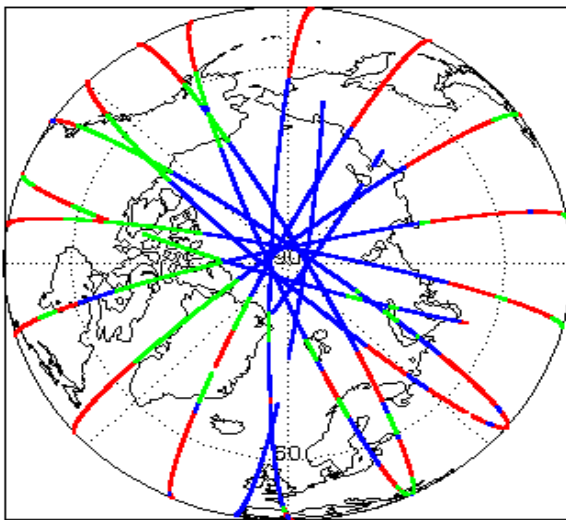
Report Production:	21-Dec-2017
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data

Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary Correction Error Check	Nominal	Nominal
Measurement Confidence Data Check	See Section 4.5, 4.6	Nominal
Range, SWH & Backscatter Measurement Check	See Section 5.6, 5.7	See Section 6.6, 6.7
Ocean Retracking Quality Check	See Section 5.8	See Section 6.8

Mission / Instrument News

05-Nov-2017	None
06-Nov-2017	Ocean Baseline-C TTO on 6-Nov-2017 at ~07:45. Data before this time to be reprocessed at a later date.
07-Nov-2017	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
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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.

Number of products with errors: 0

4.3 L1B 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

4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors: 0

4.5 L1B Measurement Confidence Data Check

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

Number of products with errors: 45

Product	Test Failed	Description
CS_OFFL_SIR_IOPR1B_20171106T001708_20171106T002114_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T012214_20171106T013228_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T025036_20171106T025122_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T025217_20171106T025750_C002	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T075132_20171106T075555_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T081949_20171106T082523_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T083544_20171106T083822_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T084958_20171106T085159_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T092859_20171106T093806_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T102853_20171106T103116_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T103521_20171106T103948_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T105559_20171106T105637_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T110222_20171106T110539_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T110805_20171106T110831_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T110924_20171106T111711_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T123623_20171106T123729_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T124114_20171106T124554_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T124622_20171106T124837_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T134628_20171106T135014_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T142350_20171106T142421_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T142858_20171106T143618_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T151217_20171106T151305_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T152013_20171106T152019_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T152410_20171106T152710_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T154336_20171106T154537_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T160812_20171106T161521_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T165119_20171106T165221_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T165901_20171106T165904_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T165912_20171106T165917_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T170936_20171106T171255_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T174657_20171106T175350_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T180744_20171106T180816_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T180941_20171106T181204_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T181204_20171106T181245_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T181256_20171106T181447_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T192519_20171106T193352_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T202228_20171106T202508_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T210211_20171106T210954_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T220135_20171106T220540_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T224803_20171106T225040_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T225459_20171106T225518_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T225932_20171106T230000_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T230213_20171106T230252_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T232043_20171106T232214_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_IOPR1B_20171106T234017_20171106T234402_C001	Attitude correction missing	The attitude has not been corrected

4.6 L1B Waveform Group Data Check

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

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

Number of products with errors: 19

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20171106T145521_20171106T145700_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20171106T162511_20171106T163441_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20171106T172504_20171106T173045_C001	Loss of Echo	The tracking echo is missing for one or more records

CS_OFFL_SIR_IOPM1B_20171106T173926_20171106T174100_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20171106T212222_20171106T214818_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20171106T075103_20171106T075132_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20171106T093807_20171106T094303_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20171106T174252_20171106T174657_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20171106T205608_20171106T210210_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20171106T220017_20171106T220134_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20171106T230005_20171106T230213_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20171106T003056_20171106T003441_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20171106T075002_20171106T075102_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20171106T075132_20171106T075555_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20171106T123951_20171106T124114_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20171106T124622_20171106T124837_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20171106T192519_20171106T193352_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20171106T210211_20171106T210954_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20171106T234017_20171106T234402_C001	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: 0

5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors: 0

5.4 L2 Auxiliary Correction Error Check

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

Number of products with errors: 0

5.5 L2 Measurement Confidence Data Check

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

Number of products with errors: 0

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.

Number of products with errors: 53

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20171106T081017_20171106T081949_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T082523_20171106T083544_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T084248_20171106T084705_C002	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T085159_20171106T091728_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T092651_20171106T092858_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T094303_20171106T095902_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T100119_20171106T101344_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T102159_20171106T102738_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T103116_20171106T103521_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T110640_20171106T110804_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T112114_20171106T115405_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T120103_20171106T120614_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T121150_20171106T122753_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T125859_20171106T133256_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T133847_20171106T134102_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T134108_20171106T134520_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOPM_2_20171106T135015_20171106T141551_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T141615_20171106T142340_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T143846_20171106T145040_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T145521_20171106T145700_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T145717_20171106T151217_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T151441_20171106T152000_C002	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T152019_20171106T152225_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T153114_20171106T154336_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T154537_20171106T160303_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T162511_20171106T163441_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T163643_20171106T165119_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T165406_20171106T165901_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T165904_20171106T165911_C002	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T172504_20171106T173045_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T173049_20171106T173802_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T173926_20171106T174100_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T181448_20171106T183004_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T183350_20171106T183827_C002	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T184526_20171106T191923_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T194425_20171106T200911_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T201224_20171106T201728_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T201748_20171106T202112_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T202509_20171106T203542_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T204117_20171106T205112_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T205216_20171106T205607_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T212222_20171106T214818_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T215203_20171106T215642_C002	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T220541_20171106T223804_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T225040_20171106T225318_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T232215_20171106T232455_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T233147_20171106T233708_C002	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T234403_20171107T000517_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T115745_20171106T120102_C002	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20171106T192129_20171106T192518_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20171106T095902_20171106T100118_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20171106T152410_20171106T152710_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20171106T211000_20171106T211112_C002	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.

Number of products with errors: 54

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20171106T081017_20171106T081949_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_20171106T082523_20171106T083544_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_20171106T084248_20171106T084705_C002	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20171106T085159_20171106T091728_C002	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_20171106T092651_20171106T092858_C002	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_20171106T094303_20171106T095902_C002	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.

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

6.1 P2P Product Format Check

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

Number of products with errors: 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: 0

6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors: 0

6.4 P2P Auxiliary Correction Error Check

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

Number of products with errors: 0

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: 0

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.

Number of products with errors: 20

Product	Test Failed	Description
CS_OFFL_SIR_IOP_2__20171106T075343_20171106T084318_C004	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__20171106T084318_20171106T093257_C003	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2__20171106T093257_20171106T102232_C004	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2__20171106T102232_20171106T111211_C004	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__20171106T111211_20171106T120145_C005	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__20171106T120145_20171106T125124_C003	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__20171106T125124_20171106T134059_C003	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2__20171106T134059_20171106T143038_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__20171106T134059_20171106T152012_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__20171106T143038_20171106T152012_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__20171106T152012_20171106T160951_C003	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__20171106T160951_20171106T165926_C003	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__20171106T165926_20171106T174905_C004	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2__20171106T174905_20171106T183839_C005	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__20171106T183839_20171106T192818_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2__20171106T192818_20171106T201753_C003	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__20171106T201753_20171106T210732_C003	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__20171106T210732_20171106T215707_C003	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__20171106T224646_20171106T233620_C003	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__20171106T233620_20171107T002559_C003	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

6.7 P2P SWH and Backscatter Measurement Check

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

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

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

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

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

Number of products with errors: 20

