

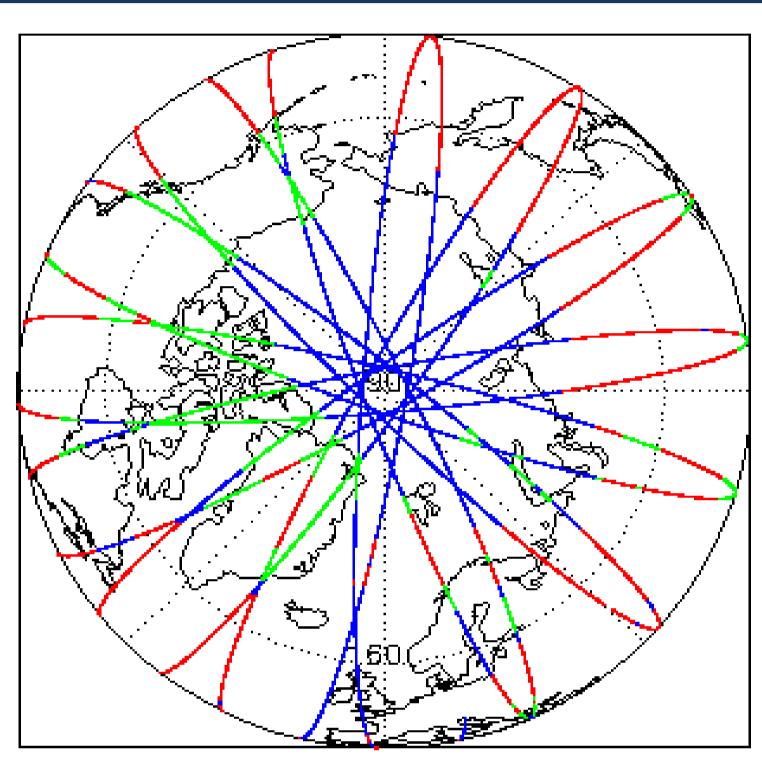
1. Overview

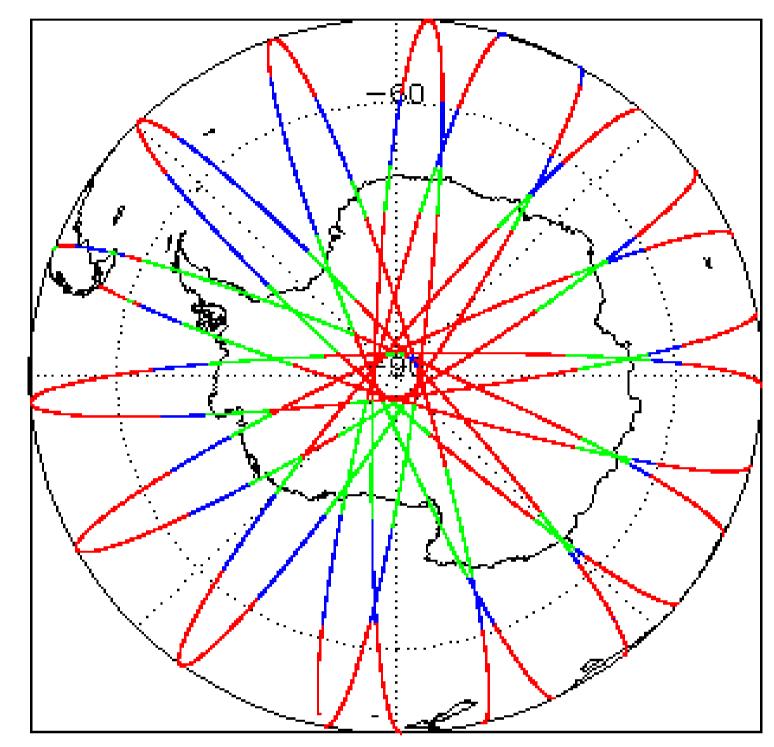
Report Production:	06-Jul-2020	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data	

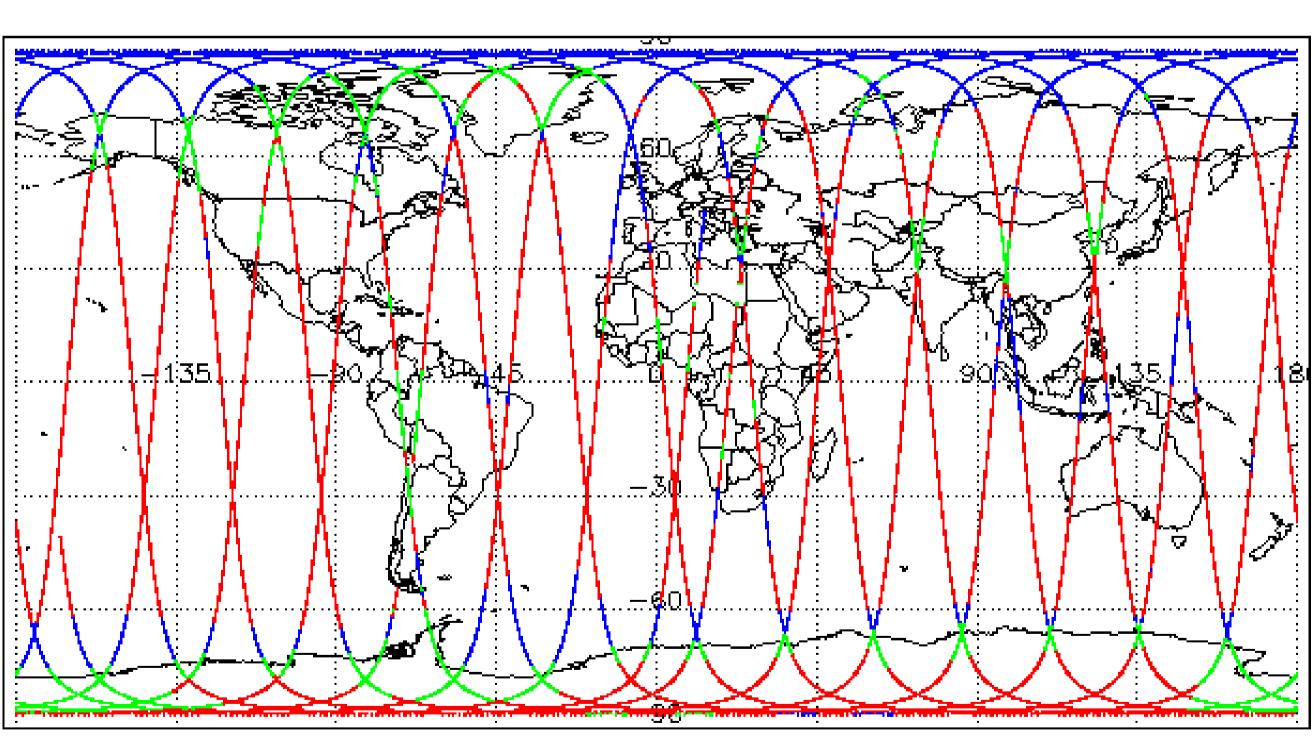
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
Measurement Confidence Data Check	See Section 4.5, 4.6	Nominal
Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
QCC Error/ Warning Check	See Section 7.1 and 7.2	See Section 7.2

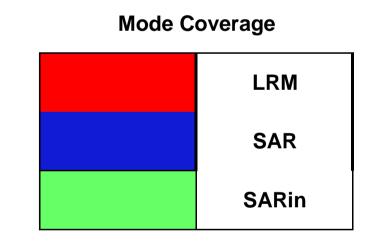
Mission / Instrument News		
30-Jun-2020	None	
01-Jul-2020	Due to scheduled system maintenance at SSALTO on 2020-07-01 from 09:30 to 17:30 UTC, AUX files will be delayed.	
02-Jul-2020	Nothing planned	

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).

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.

L1B Processing Quality HR: The I1b_proc_flag_hr flag is currently set all L1B IOPR and IOPN products because the I1b_processing_quality_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

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 for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

0

0

4.5 L1B Measurement Confidence Data Check

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

Attitude Correction Missing: This flag is currently set in error for IOPR products due to a configuration issue. This is being investigated and will be updated in the next SW update.

Number of products with errors:

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:

20

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20200701T023959_20200701T024042_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200701T040321_20200701T041831_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200701T155600_20200701T161309_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200701T172815_20200701T172928_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200701T174100_20200701T174803_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200701T001027_20200701T001134_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200701T021700_20200701T022228_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200701T044656_20200701T044732_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200701T080103_20200701T080137_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200701T094819_20200701T095251_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200701T110650_20200701T110845_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200701T143754_20200701T143905_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200701T161731_20200701T161819_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200701T170228_20200701T170414_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200701T175236_20200701T175701_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200701T012035_20200701T012753_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200701T124620_20200701T124654_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200701T164528_20200701T164726_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200701T203238_20200701T203453_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200701T215910_20200701T220053_C001	Loss of Echo	The tracking echo is missing for one or more records

5. OP Level 2 Data Quality Check

5.1 L2 Product Format Check

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

Number of products with errors:

5.2 L2 Product Header Analysis

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

Number of products with errors:

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:

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 some 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.

- > ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.
- > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.
- > Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.
- > Mean Dynamic Topography: 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: 46

Product Test Failed Description There is an error with the Mean Dynamic Topography height for one or CS_OFFL_SIR_IOPM_2_20200701T081853_20200701T082059_C001 Mean Dynamic Topography (1) more records There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T003125_20200701T003248_C001 Topography height (solution 1) Topography (1) wean Sea Surrace (1), wean Dynamic Topography (1), Total Geocentric Ocean There is an error with the MSS height (solution 1), the Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T003757_20200701T004106_C001 Topography (solution 1), and tidal corrections for one or more records Tide (GOT), Total Geocentric Ocean Tide (FFS) Non-Fauilibrium Long Period There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T021213_20200701T021457_C001 Topography (1) Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T021700_20200701T022228_C001 Topography (1) Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T030755_20200701T030836_C001 Topography (1) Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T035134_20200701T035410_C001 Topography (1) Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS OFFL SIR IOPN 2 20200701T044656 20200701T044732 C001 Topography height (solution 1) Topography (1) There is an error with the Total Geocentric Ocean Tide height (solution 1: CS OFFL SIR IOPN 2 20200701T044923 20200701T045113 C001 Total Geocentric Ocean Tide (GOT) GOT) for one or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T062615_20200701T063113_C001 Topography height (solution 1) Topography (1) There is an error with the Mean Dynamic Topography height for one or Mean Dynamic Topography (1) CS_OFFL_SIR_IOPN_2_20200701T070858_20200701T071047_C001 more records There is an error with the Mean Dynamic Topography height for one or CS_OFFL_SIR_IOPN_2_20200701T071902_20200701T072124_C001 Mean Dynamic Topography (1) more records There is an error with the Mean Dynamic Topography height for one or CS_OFFL_SIR_IOPN_2_20200701T080618_20200701T081037_C001 Mean Dynamic Topography (1) more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T102831_20200701T103206_C001 Topography (1) Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T120751_20200701T121110_C001 Topography (1) Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T125839_20200701T125952_C001 Topography height (solution 1) Topography (1) There is an error with the Mean Dynamic Topography height for one or CS_OFFL_SIR_IOPN_2_20200701T135525_20200701T135634_C001 Mean Dynamic Topography (1) more records There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS OFFL SIR IOPN 2 20200701T143754 20200701T143905 C001 Topography (1) Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T153228_20200701T153418_C001 Topography (1) Topography height (solution 1) There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR IOPN 2 20200701T161545 20200701T161727 C001 Mean Dynamic Topography (1) more records There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T171058_20200701T171626_C001 Topography (1) Topography height (solution 1) There is an error with the Mean Dynamic Topography height for one or Mean Dynamic Topography (1) CS_OFFL_SIR_IOPN_2_20200701T175236_20200701T175701_C001 more records There is an error with the Mean Dynamic Topography height for one or CS_OFFL_SIR_IOPN_2_20200701T193135_20200701T193523_C001 Mean Dynamic Topography (1) more records There is an error with the Mean Dynamic Topography height for one or CS_OFFL_SIR_IOPN_2_20200701T203120_20200701T203238_C001 Mean Dynamic Topography (1) more records iviean Sea Surrace (1), iviean Dynamic Topography (1), Total Geocentric Ocean There is an error with the MSS height (solution 1), the Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T210643_20200701T211215_C001 Tide (GOT), Total Geocentric Ocean Topography (solution 1), and tidal corrections for one or more records Tide (FFS) Non-Fauilibrium Long Period There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS_OFFL_SIR_IOPN_2_20200701T234715_20200701T235022_C001 Topography height (solution 1) Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_20200701T012035_20200701T012753_C001 Topography (1) Topography height (solution 1)

CS_OFFL_SIR_IOPR_2_20200701T012753_20200701T013048_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T030034_20200701T030154_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20200701T030226_20200701T030645_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T030645_20200701T030755_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T044013_20200701T044309_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20200701T044309_20200701T044656_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T045420_20200701T045534_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) Non-Equilibrium Long Period	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOPR_2_20200701T062000_20200701T062614_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T080137_20200701T080617_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T093818_20200701T094819_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T111930_20200701T112717_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T125953_20200701T130739_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T143905_20200701T144614_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T161820_20200701T162545_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T175701_20200701T180418_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T193523_20200701T194407_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T211216_20200701T211954_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T225147_20200701T225811_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200701T225811_20200701T230110_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

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:

5.6 L2 Measurement Quality Flag Check

L2 Quality Flags (20Hz)

CryoSat L2 data includes Quality Flags for each 20 Hz, 20 Hz PLRM and 1 Hz measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common flags raised in the Level 2 products, which are summarised below. The table provides the full list of products flagged.

- > Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags: These flags are currently set for some records over ocean.
- > OCOG Altimeter Range and Backscatter Quality Flags: These flags are currently set for some records over continental ice.

0

Number of products with errors: 80

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20200701T000328_20200701T000506_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T001134_20200701T002839_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T003248_20200701T003757_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T004426_20200701T012035_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T013048_20200701T013125_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T013136_20200701T013221_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

Control Security Control Con	CS_OFFL_SIR_IOPM_2_20200701T014236_20200701T014656_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Col. CHI., \$1,0014_2, \$122,00113261_12,0020113261_2,000	CS_OFFL_SIR_IOPM_2_20200701T014752_20200701T020527_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Col.	CS_OFFL_SIR_IOPM_2_20200701T022431_20200701T023954_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Sex SPEL_SIRL (DIPS_2_20000011 (DISSO_2000011 (DISS	CS_OFFL_SIR_IOPM_2_20200701T024116_20200701T024412_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
De COPTLESIR, CPP 2-20207017000701, 2000001100401, CO21 Control Sill Corp. 2-2020701700701, CO20701100701, CO2070110	CS_OFFL_SIR_IOPM_2_20200701T024602_20200701T030034_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
As DePL SIR 10PV 2 3000075***T05003 (200376***T05003 COST) As Read Substitute Guidery, COCCO Afference Range Classify, COCCO A	CS_OFFL_SIR_IOPM_2_20200701T031306_20200701T033105_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Resistantian Capting	CS_OFFL_SIR_IOPM_2_20200701T033405_20200701T034601_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_OFFL_2020779*T010031_020070*T010395_02007 CS_OFFL_SIR_OFFL_2020779*T010033_020070*T010395_02007 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T010395_02007 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T010395_02007 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T010470_0200 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T010470_0200 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T010470_0200 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T010470_0200 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T010470_0200 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T010470_0200 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T010035_020070*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T0100357_0200 CS_OFFL_SIR_OFFL_2020779*T0100470_0200 CS_OFFL_SIR_OFFL_2020779*T0100470_0200 CS_OFFL_SIR_OFFL_2020779*T0100470_0200 CS_OFFL_SIR_OFFL_2020779*T0100470_0200 CS_OFFL_SIR_OFFL_2020779*T0100470_0200 CS_OFFL_SIR_OFFL_2020779*T0100470_0200 CS_OFFL_SIR_OFFL_2020779*T0100470_0200 CS_OFFL_SIR_OFFL_2020779*T0100470_0200 CS_OFFL_SIR_OFFL_2020779*T0100470_0200 CS_OFFL_SIR_OFFL_2020779*T0100470_02000 CS_OFFL_SIR_OFFL_2020779*T0100470_02000 CS_OFFL_SIR_OFFL_2020779*T0100470_02000 CS_OFFL_SIR_OFFL_2020779*T0100470_02000 CS_OFFL_SIR_OFFL_2020779*T0100470_02000 CS_OFFL_SIR_OFFL_2020779*T0100470_02000 CS_OFFL_SIR_OFFL_2020779*T0100470_02000 CS_OFFL_SIR_OFFL_2020779*T0100470_02000 CS_OFFL_SIR_OFFL_2020779*T0100470_020000 CS_OFFL_SIR_OFFL_2020779*T0100470_020000 CS_OFFL_SIR_OFFL_2020779*T0100470_020000 CS_OFFL_SIR_OFFL_2020779*T0100470_0200000 CS_OFFL_SIR_OFFL_2020779*T0100470_0200000 CS_OFFL_SIR_OFFL_20207	CS_OFFL_SIR_IOPM_2_20200701T035722_20200701T040111_C001	•	·
and the COGO Allender Range and Redeccenter Quality Flags have been as the COGO Allender Range and Redeccenter Quality Flags have been as the CoGO Allender Range and Redeccenter Quality Flags have been as the CoGO Allender Range and Redeccenter Quality Flags have been as the CoGO Allender Range and Redeccenter Quality Flags have been as the CoGO Allender Range and Redeccenter Quality Flags have been as the CoGO Allender Range and Redeccenter Quality Flags have been as the CoGO Allender Range and Redeccenter Quality Flags have been as the CoGO Allender Range, SSHA, SVHH are Deckarder Quality Flags have been as the CoGO Allender Range, SSHA, SVHH are Deckarder Quality Flags have been as the CoGO Allender Range, SSHA, SVHH are Deckarder Quality Flags as 16 COGO Allender Range, SSHA, SVHH are Deckarder Quality Flags as 16 COGO Allender Range, SSHA, SVHH are Deckarder Quality Flags as 16 COGO Allender Range, SSHA, SVHH are Deckarder Quality Flags as 16 COGO Allender Range, SSHA, SVHH are Deckarder Quality Flags as 16 COGO Allender Range, SSHA, SVHH are Deckarder Range and Backerder Quality Flags as 16 COGO Allender Range, SSHA, SVHH are Deckarder Range and Backerder Quality Flags have been as 16 COGO Allender Range, SSHA, SVHH are Deckarder Range and Backerder Quality Flags have been as 16 COGO Allender Range, SSHA, SVHH are Deckarder Quality Flags have been as 16 COGO Allender Range, SSHA, SVHH are Deckarder Quality Flags have been as 16 COGO Allender Range, SSHA, SVHH are Deckarder Quality Flags have been as 16 COGO Allender Range, SSHA, SVHH are Deckarder Quality Flags have been as 16 COGO Allender Range, SSHA, SVHH are Deckarder Quality Flags have been as 16 COGO Allender Range, SSHA, SVHH are Deckarder Quality Flags have been as 16 COGO Allender Range and Backedoster Quality Flags have been as 16 COGO Allender Range and Backedoster Quality Flags have been as 16 COGO Allender Range and Backedoster Quality Flags have b	CS_OFFL_SIR_IOPM_2_20200701T040321_20200701T041831_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscritter Challey CS_OFFL_SIR_JOPM_2_2020070**T040219_202070**T040210_COUR Affinite Range_SSHA_SWH and Backscratter Quality_COCO Affinite Range and Backscratter Quality_COCO Affinite Range_SSHA_SWH and Backscratter Quality_COCO Affinite Range and Backscratter Quality_Flags have been set for one or more records. CS_OFFL_SIR_JOPM_2_2020070**T05458_2020070*T00458_0000* Affinite Range_SSHA_SWH and Backscratter Quality_COCO Affinite Range and Backscratter Quality_Flags have	CS_OFFL_SIR_IOPM_2_20200701T042033_20200701T042956_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backacetter Quality. GOOG Altrimeter Range and Backacetter Quality. Flags have been affected to the control of the Coog Altrimeter Range and Backacetter Quality. Flags have been affected to the Coog Altrimeter Range. SHA, SWH and Backacetter Quality. Flags have been affected to the Coog Altrimeter Range. SHA, SWH and Backacetter Quality. Flags have been affected to the Coog Altrimeter Range. SHA, SWH and Backacetter Quality. Flags have been affected to the Coog Altrimeter Range. SHA, SWH and Backacetter Quality. Flags have been affected to the Coog Altrimeter Range. SHA, SWH and Backacetter Quality. Flags have been affected to the Coog Altrimeter Range. SHA, SWH and Backacetter Quality. Flags have been affected to the Coog Altrimeter Range. SHA, SWH and Backacetter Quality. Flags have been affected to the Coog Altrimeter Range. SHA, SWH and Backacetter Quality. Flags have been affected to the Coog Altrimeter Range. SHA, SWH and Backacetter Quality. Flags have been set for one or more records. CS_OFFL_SR_JOPM_2_20200701T052919_20200701T054013_C001 CS_OFFL_SR_JOPM_2_20200701T05498_20200701T054013_C001 CS_OFFL_SR_JOPM_2_20200701T05498_20200701T054013_C001 CS_OFFL_SR_JOPM_2_20200701T06498_20200701T05403_C001 CS_OFFL_SR_JOPM_2_20200701T063517_20200701T06403_C001 CS_OFFL_SR_JOPM_2_20200701T063517_20200701T06403_C001 CS_OFFL_SR_JOPM_2_20200701T063517_20200701T06403_C001 CS_OFFL_SR_JOPM_2_20200701T063517_20200701T06403_C001 CS_OFFL_SR_JOPM_2_20200701T063517_20200701T06403_C001 CS_OFFL_SR_JOPM_2_20200701T06498_20200701T07404_20200701T0	CS_OFFL_SIR_IOPM_2_20200701T043515_20200701T044013_C001		
GS_OFFL_SIR_IOPM_2_20000701T052603_2000701T052567 C001 CS_OFFL_SIR_IOPM_2_20000701T052503_2000701T052567 C001 CS_OFFL_SIR_IOPM_2_20000701T052503_2000701T052716_C001 CS_OFFL_SIR_IOPM_2_20000701T052503_2000701T052716_C001 CS_OFFL_SIR_IOPM_2_20000701T052503_2000701T052716_C001 CS_OFFL_SIR_IOPM_2_20000701T052503_2000701T052716_C001 CS_OFFL_SIR_IOPM_2_20000701T052503_2000701T050103_C001 CS_OFFL_SIR_IOPM_2_20000701T052503_2000701T050103_C001 CS_OFFL_SIR_IOPM_2_20000701T052503_2000701T050103_C001 CS_OFFL_SIR_IOPM_2_20000701T052513_2000701T050103_C001 CS_OFFL_SIR_IOPM_2_20000701T052513_2000701T050103_C001 CS_OFFL_SIR_IOPM_2_20000701T052513_2000701T050103_C001 CS_OFFL_SIR_IOPM_2_20000701T050103_C001 CS_OFFL_SIR_IOPM_2_20000701T07100102_C001 CS_OFFL_SIR_IOPM_2_20000701T07100102_C001 CS_OFFL_SIR_IOPM_2_20000701T07100102_C001 CS_OFFL_SIR_IOPM_2_20000701T07100102_C001 CS_OFFL_SIR_IOPM_2_20000701T071002_C001 CCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Plags have been set for one or more records. CCOG Altimeter Range and Backscatter Quality Plags have been set for one or more records. CCOG Altimeter Range Quality, OCOG Altimeter Ra	CS_OFFL_SIR_IOPM_2_20200701T045219_20200701T045420_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and flackscatter Quality. OCOG Allimeter Range and Blackscatter Quality Flags have been and far OCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far OCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far OCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far OCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far OCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far OCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range and Blackscatter Quality Flags have been and far oCOGA Allimeter Range. SSHA, SWH and Blackscatter Quality Flags have been and far oCOGA Allimeter Range and Blackscatter Quality Flags have been and far oCOGA Allimeter Range and Blackscatter Quality Flags have been and far oCOGA Allimeter	CS_OFFL_SIR_IOPM_2_20200701T045618_20200701T050917_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the OCOG Altimeter Range and Backscatter Quality Flags have been extended and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200701T053219_20000701T054013_C001 CS_OFFL_SIR_IOPM_2_20200701T054258_20200701T054736_C001 CS_OFFL_SIR_IOPM_2_20200701T054258_20200701T054736_C001 CS_OFFL_SIR_IOPM_2_20200701T054258_20200701T054736_C001 CS_OFFL_SIR_IOPM_2_20200701T064258_20200701T064230_C001 CS_OFFL_SIR_IOPM_2_20200701T064258_20200701T064233_C001 CS_OFFL_SIR_IOPM_2_20200701T064938_20200701T064933_C001 CS_OFFL_SIR_IOPM_2_20200701T064938_20200701T07404_C001 CS_OFFL_SIR_IOPM_2_20200701T07404_20200701T07404_C001 CS_OFFL_SIR_IOPM_2_20200701T07404_2001 CS_OFFL_SIR_IOPM_2_20200701T07404_001 CS_OFFL_SI	CS_OFFL_SIR_IOPM_2_20200701T052509_20200701T052637_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_IOPM_2_20200701T054258_20200701T055736_C001 CS_OFFL_SIR_IOPM_2_20200701T064258_20200701T065736_C001 CS_OFFL_SIR_IOPM_2_20200701T064258_20200701T061230_C001 CS_OFFL_SIR_IOPM_2_20200701T064258_20200701T061230_C001 CS_OFFL_SIR_IOPM_2_20200701T064258_20200701T064333_C001 CS_OFFL_SIR_IOPM_2_20200701T0643517_20200701T064333_C001 CS_OFFL_SIR_IOPM_2_20200701T0643517_20200701T064333_C001 CS_OFFL_SIR_IOPM_2_20200701T064936_20200701T070730_C001 CS_OFFL_SIR_IOPM_2_20200701T064936_20200701T070730_C001 CS_OFFL_SIR_IOPM_2_20200701T070730_C001 CS_OFFL_SIR_IOPM_2_20200701T07074704_C001 CS_OFFL_SIR_IOPM_2_20200701T07074704_C001 CS_OFFL_SIR_IOPM_2_20200701T07074704_C001 CS_OFFL_SIR_IOPM_2_20200701T07074704_C001 CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T084616_C001 CCCCAN Altimeter Range and Backscatter Quality Flags have been set for one or more records. CCCCAN Altimeter Range and Backscatter Quality Flags have been set for one or more records. CCCCAN Altimeter Range and Backscatter Quality Flags have been set for one or more records. CCCCAN Altimeter Range and Backscatter Quality Flags have been set for one or more records. CCCCAN Altimeter Range and Backscatter Quality Flags have been set for one or more records. CCCCAN Altimeter Range and Backscatte	CS_OFFL_SIR_IOPM_2_20200701T052651_20200701T052716_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality COCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Backscatter Quality CS_OFFL_SIR_IOPM_2_20200701T061226_20200701T061230_C001 CS_OFFL_SIR_IOPM_2_20200701T063517_20200701T064933_C001 CS_OFFL_SIR_IOPM_2_20200701T063517_20200701T064933_C001 CS_OFFL_SIR_IOPM_2_20200701T063517_20200701T064933_C001 CS_OFFL_SIR_IOPM_2_20200701T064936_20200701T070730_C001 CS_OFFL_SIR_IOPM_2_20200701T064936_20200701T070730_C001 CS_OFFL_SIR_IOPM_2_20200701T070447_20200701T071258_C001 CS_OFFL_SIR_IOPM_2_20200701T071047_20200701T071258_C001 CS_OFFL_SIR_IOPM_2_20200701T071047_20200701T071258_C001 CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T071902_C001 CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T071902_C001 CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T071902_C001 CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T074704 C001 CS_OFFL_SIR_IOPM_2_20200701T0712249 20200701T074704 C001 CS_OFFL_SIR_IOPM_2_20200701T0712249 20200701T074704 C001 CS_OFFL_SIR_IOPM_2_20200701T072249 20200701T074704 C001 CS_OFFL_SIR_IOPM_2_20200701T08257 20200701T084616 C001 CS_OFFL_SIR_IOPM_2_20200701T08257 20200701T084726 C001 CCOG_Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. CCOG_Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. CCOG_Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. CCOG_Altimeter Range, SSHA, SWH and Back	CS_OFFL_SIR_IOPM_2_20200701T053219_20200701T054013_C001		· · ·
Backscatter Quality CS_OFFL_SIR_IOPM_2_20200701T063517_20200701T064933_C001 CS_OFFL_SIR_IOPM_2_20200701T064936_20200701T070730_C001 CS_OFFL_SIR_IOPM_2_20200701T064936_20200701T070730_C001 CS_OFFL_SIR_IOPM_2_20200701T071064936_20200701T070730_C001 CS_OFFL_SIR_IOPM_2_20200701T071064936_20200701T070730_C001 CS_OFFL_SIR_IOPM_2_20200701T071064936_20200701T070730_C001 CS_OFFL_SIR_IOPM_2_20200701T0710710710710710710710710710710710710710	CS_OFFL_SIR_IOPM_2_20200701T054258_20200701T055736_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality COG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality CS_OFFL_SIR_IOPM_2_20200701T064936_20200701T070730_C001 CS_OFFL_SIR_IOPM_2_20200701T071047_20200701T071258_C001 CS_OFFL_SIR_IOPM_2_20200701T071047_20200701T071258_C001 CS_OFFL_SIR_IOPM_2_20200701T071047_20200701T071902_C001 CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T071902_C001 CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T071902_C001 CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T071902_C001 CS_OFFL_SIR_IOPM_2_20200701T0712249_20200701T074704_C001 CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001 CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001 CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001 CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T084616_C001 CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T085726_C001 CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001 COCG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. The Ocean Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001 COCG Altimeter Range Quality, OCOG Backscatter Quality, OCOG Backscatter Quality, OCOG COCG Altimeter Range Quality, OCOG Backscatter Quality, OCOG Backscatter Quality, OCOG Backscatter Quality, OCOG COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records. The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20200701T061226_20200701T061230_C001		· · ·
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200701T071047_20200701T071258_C001 CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T071902_C001 CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T071902_C001 CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T071902_C001 CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001 CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001 CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001 CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T084616_C001 CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T085726_C001 CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001 CS_OFFL_SIR_IOPM_2_20200701T090138_20200701T092850_C001 Altimeter Range Quality, OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T085726_C001 CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001 CS_OFFL_SIR_IOPM_2_20200701T090138_20200701T092850_C001 Altimeter Range Quality, OCOG Backscatter Quality,	CS_OFFL_SIR_IOPM_2_20200701T063517_20200701T064933_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T071902_C001 Backscatter Quality CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001 CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001 CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T084616_C001 CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T084616_C001 CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001 Backscatter Quality The OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001 CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T092850_C001 Backscatter Quality The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200701T090138_20200701T092850_C001 The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20200701T064936_20200701T070730_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001 Backscatter Quality CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001 CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T084616_C001 CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T084616_C001 CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001 Backscatter Quality for one or more records. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001 CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T092550_C001 Backscatter Quality The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200701T090138_20200701T092850_C001 The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200701T090138_20200701T092850_C001 The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20200701T071047_20200701T071258_C001		, ,
CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001 CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T095726_C001 OCEAN Altimeter Range Quality, OCOG Backscatter Quality OCEAN Altimeter Range Quality, OCOG CS_OFFL_SIR_IOPM_2_20200701T090138_20200701T092850_C001 The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records. The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20200701T071320_20200701T071902_C001		
CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T084616_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001 CS_OFFL_SIR_IOPM_2_20200701T090138_20200701T092850_C001 Altimeter Range Quality, OCOG Backscatter Quality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20200701T072249_20200701T074704_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001 Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, OCOG The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20200701T082102_20200701T084616_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200701T090138_20200701T092850_C001 and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20200701T085257_20200701T085726_C001	3	
	CS_OFFL_SIR_IOPM_2_20200701T090138_20200701T092850_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_IOPM_2_20200701T093311_20200701T093818_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T095251_20200701T102452_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T103207_20200701T103742_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T104040_20200701T104527_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T110951_20200701T111114_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T111641_20200701T111903_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T113129_20200701T120438_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T121110_20200701T121622_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T122020_20200701T123808_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T130901_20200701T133135_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T133242_20200701T134306_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T134821_20200701T135109_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T140009_20200701T142626_C001	- I	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T142641_20200701T143349_C001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T144615_20200701T150047_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T150528_20200701T151906_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T151911_20200701T152238_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T152449_20200701T153008_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T154103_20200701T155346_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T155600_20200701T161309_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T163521_20200701T164451_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T164726_20200701T170129_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T170414_20200701T170919_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T171750_20200701T171847_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T172156_20200701T172439_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T172815_20200701T172928_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_IOPM_2_20200701T173646_20200701T173937_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T174100_20200701T174803_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T182414_20200701T184012_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T184414_20200701T184835_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T185535_20200701T192028_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T195510_20200701T201946_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T202227_20200701T202749_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T203453_20200701T210157_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T210323_20200701T210643_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T212421_20200701T212925_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T213017_20200701T213214_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T213217_20200701T215910_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T220217_20200701T221026_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T221448_20200701T224801_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T233140_20200701T233805_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T234156_20200701T234715_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200701T235408_20200702T001527_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T044656_20200701T044732_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T044923_20200701T045113_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T224801_20200701T224936_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T111229_20200701T111540_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T143421_20200701T143425_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

L2 Quality Flags (20Hz PLRM)

Currently, there are several common flags raised in the Level 2 products, which are summarised below. The table provides the full list of products flagged.

- > Ocean Altimeter Range, SSHA, SWH and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over sea ice.
- > OCOG Altimeter Range and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over continental ice.

Number of products with errors:

87	

Product	Test Failed	Description
CS OFFE SIR TOPN / 202007011001027 202007011001134 C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_IOPN_2_20200701T003125_20200701T003248_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T003757_20200701T004106_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T021213_20200701T021457_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T021700_20200701T022228_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T030154_20200701T030226_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T030840_20200701T031211_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T042957_20200701T043255_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T044923_20200701T045113_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T050917_20200701T051519_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T052638_20200701T052651_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T052855_20200701T053219_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T060705_20200701T061103_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T062615_20200701T063113_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T070858_20200701T071047_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T071902_20200701T072124_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T074705_20200701T075054_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T080103_20200701T080137_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T080618_20200701T081037_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T081119_20200701T081241_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T084829_20200701T085009_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T085726_20200701T090011_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T102831_20200701T103206_C001	TAITIMETER RANGE AND BACKSCATTER CHAITIVE	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T103742_20200701T103857_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T112718_20200701T112856_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T112955_20200701T113129_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T123808_20200701T124124_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_IOPN_2_20200701T143754_20200701T143905_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T153228_20200701T153418_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T163140_20200701T163521_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T171058_20200701T171626_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T172440_20200701T172617_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T172929_20200701T173513_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T174812_20200701T174935_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T175236_20200701T175701_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T181329_20200701T181632_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T192933_20200701T193055_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T193135_20200701T193523_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T195113_20200701T195510_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T202112_20200701T202227_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T203120_20200701T203238_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T210643_20200701T211215_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T220053_20200701T220217_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T225013_20200701T225147_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T230344_20200701T230507_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T231017_20200701T231218_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200701T234030_20200701T234156_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T000043_20200701T000327_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T004106_20200701T004426_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T012035_20200701T012753_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T013221_20200701T014235_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T020527_20200701T021212_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T033105_20200701T033217_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_IOPR_2_20200701T034601_20200701T035134_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T044013_20200701T044309_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T044309_20200701T044656_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T045420_20200701T045534_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T054224_20200701T054257_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T055737_20200701T055918_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T055920_20200701T060459_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T072124_20200701T072249_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T075729_20200701T075950_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T090011_20200701T090138_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T093025_20200701T093033_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T102452_20200701T102831_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T103858_20200701T104040_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T111229_20200701T111540_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T111930_20200701T112717_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T112856_20200701T112954_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T120438_20200701T120750_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T121747_20200701T122019_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T124620_20200701T124654_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T125135_20200701T125604_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T125953_20200701T130739_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T130746_20200701T130901_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T153418_20200701T154103_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T155346_20200701T155524_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T161820_20200701T162545_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200701T164528_20200701T164726_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

L2 Quality Flags (1 Hz & 1Hz PLRM)

Currently, there are several common flags raised in the Level 2 products, which are summarised below.

61

157

> 1Hz and 1Hz Ocean SSHA Quality Flags: These flags are currently set for products over sea ice, which is to be expected.

Number of products with errors:

201

5.8 L2 Ocean Retracking Quality Check

L2 Retracking Flags (20Hz)

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:

L2 Retracking Flags (20Hz, PLRM)

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

Ocean Retracking Quality Flag (PLRM): This flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.

Number of products with errors:

6. OP 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:

6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

6.4 P2P Auxiliary Correction Error Check

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

0

Currently, there are some 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.

- > ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Corection, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.
- > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.
- > Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.
- > Mean Dynamic Topography: 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: 28

CS_OFFL_SIR_IOP_2_20200701T003718_20200701T012655_C001 Topography (1), Total Geocentric Ocean True (FS), Mon.Emultibrium I non Partice (1), Mean Dynamic Topography (3), United Section (1), Mean Dynamic Topography (3), Mean Dynamic Topography (3), United Section (1), Mean Dynamic Topography (3), United Section (1), Mean Dynamic Topography (3), Mean Dynamic Topography (4), Mean Dynamic Topography (5), Mean Dynamic Topography (6), Mean Dynamic T	Product	Test Failed	Description
CS_OFFL_SIR_IOP_2_20200701T012655_20200701T021629_C001 Topography (1), Total Geocentric Ocean Tride (EFS), Mon.Enuillibrium I non Pariord Topography (solution 1), and tidal corrections for one or more records Tride (EFS), Mon.Enuillibrium I non Pariord Topography (solution 1), and tidal corrections for one or more records Topography (solution 1), and tidal corrections for one or more records Topography (solution 1), and tidal corrections for one or more records Topography (solution 1), and tidal corrections for one or more records Topography (solution 1) and the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records The feet is an error with the MSS height (solution 1) and the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records The feet is an error with the MSS height (solution 1) and the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records The feet is an error with the MSS height (solution 1) and the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records The feet is an error with the MSS height (solution 1) and the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records The feet is an error with the MSS height (solution 1) and the Mean Dynamic Topography (soluti	CS_OFFL_SIR_IOP_220200630T234742_20200701T003716_C002		, , , , , , , , , , , , , , , , , , ,
Topography (1) Topography height (solution 1) CS_OFFL_SIR_IOP_2_20200701T021629_20200701T030609_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1) CS_OFFL_SIR_IOP_2_20200701T035543_20200701T044522_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOP_2_20200701T035543_20200701T044522_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT). Mean Dynamic Topography (1) CS_OFFL_SIR_IOP_2_20200701T053456_20200701T062436_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1), and the Mean Dynamic Topography (1) CS_OFFL_SIR_IOP_2_20200701T062436_20200701T071410_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There	CS_OFFL_SIR_IOP_220200701T003716_20200701T012655_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean	Topography (solution 1), and tidal corrections for one or more records
Topography (1) Topography height (solution 1) Topography (solution 1) Topography (solution 1) Topography (solution 1) Topography height (solution 1) Top	CS_OFFL_SIR_IOP_220200701T012655_20200701T021629_C001	· · ·	, , , , , , , , , , , , , , , , , , , ,
Topography (1) CS_OFFL_SIR_IOP_2_20200701T035543_20200701T044522_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FSS). Non-Familibrium Long Period Topography (1), Mean Dynamic Topography (1), Mean Dynamic Topography (1) CS_OFFL_SIR_IOP_2_20200701T053456_20200701T062436_C001 CS_OFFL_SIR_IOP_2_20200701T062436_20200701T062436_C001 CS_OFFL_SIR_IOP_2_20200701T062436_20200701T071410_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1) CS_OFFL_SIR_IOP_2_20200701T062436_20200701T071410_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOP_2_20200701T071410_20200701T080349_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOP_2_20200701T080349_20200701T080349_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOP_2_20200701T080349_20200701T085324_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOP_2_20200701T080349_20200701T084303_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOP_2_20200701T085324_20200701T094303_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dy	CS_OFFL_SIR_IOP_220200701T021629_20200701T030609_C001		, , , , , , , , , , , , , , , , , , , ,
Topography (1) CS_OFFL_SIR_IOP_2_20200701T044522_20200701T053456_C001 Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FEN) Non-Equilibrium Long Period Mean Sea Surface (1), Mean Dynamic Topography (solution 1), and tidal corrections for one or more records There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (fill) CS_OFFL_SIR_IOP_2_20200701T053456_20200701T071410_C001 CS_OFFL_SIR_IOP_2_20200701T062436_20200701T071410_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOP_2_20200701T080349_20200701T085324_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)	CS_OFFL_SIR_IOP_220200701T030609_20200701T035543_C001		, , , , , , , , , , , , , , , , , , , ,
Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (Topography (solution 1), and tidal corrections for one or more records Tide (FEX) Non-Fertility Topography (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)	CS_OFFL_SIR_IOP_220200701T035543_20200701T044522_C001	Topography (1)	
Topography (1) Topography height (solution 1) Topography height (solution 1) Topography height (solution 1) Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)	CS_OFFL_SIR_IOP_220200701T044522_20200701T053456_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean	Topography (solution 1), and tidal corrections for one or more records
Topography (1) CS_OFFL_SIR_IOP_2_20200701T062436_20200701T071410_C001 Topography (1) Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)	CS_OFFL_SIR_IOP_220200701T053456_20200701T062436_C001		, , ,
Topography (1) CS_OFFL_SIR_IOP_2_20200701T080349_20200701T085324_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOP_2_20200701T085324_20200701T094303_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOP_2_20200701T085324_20200701T094303_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic The	CS_OFFL_SIR_IOP_220200701T062436_20200701T071410_C001		
Topography (1) CS_OFFL_SIR_IOP_2_20200701T080349_20200701T085324_C001 Topography (1) Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOP_2_20200701T085324_20200701T094303_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the MS	CS_OFFL_SIR_IOP_220200701T071410_20200701T080349_C001	. , ,	, , , , , , , , , , , , , , , , , , , ,
CS_OFFL_SIR_IOP_220200701T085324_20200701T094303_C001 Topography (1) Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic	CS_OFFL_SIR_IOP_220200701T080349_20200701T085324_C001		
US OFFI SIR IOP / 202007011094303 202007011103237 C001	CS_OFFL_SIR_IOP_220200701T085324_20200701T094303_C001		, , , , , , , , , , , , , , , , , , , ,
	CS_OFFL_SIR_IOP_220200701T094303_20200701T103237_C001		, ,

CS_OFFL_SIR_IOP_220200701T103237_20200701T112217_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T112217_20200701T121151_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T121151_20200701T130130_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T130130_20200701T135104_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T135104_20200701T144044_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T144044_20200701T153018_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T153018_20200701T161957_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T161957_20200701T170931_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T170931_20200701T175911_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T175911_20200701T184845_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T202759_20200701T211738_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOP_220200701T211738_20200701T220712_C002	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T220712_20200701T225652_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T225652_20200701T234626_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220200701T234626_20200702T003605_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

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 Measurement Quality Flag Check

P2P Quality Flags (20Hz)

CryoSat P2P data includes Quality Flags for each 20 Hz, 20 Hz PLRM and 1 Hz measurement record, copied from the corresponding L2 products.

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.

0

Number of products with errors: 30

P2P Quality Flags (20Hz PLRM)

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.

Number of products with errors: 2

P2P Quality Flags (1 Hz & 1Hz PLRM)

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.

Number of products with errors: 30

6.8 P2P Ocean Retracking Quality Check

P2P Retracking Flags (20Hz)

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

Ocean Retracking Quality Flag (PLRM): This flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.

Number of products with errors: 28

P2P Retracking Flags PLRM

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

Ocean Retracking Quality Flag (PLRM): This flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.

Number of products with errors:

7. IOP QCC Report Analysis

The Quality Control for CryoSat (QCC) facility performs a primary survey of data products immediately after production by the PDS and LTA processing facilities. A list of the tests which raised errors or warnings is provided below.

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_IOPM1B	149	149	2	147	0
SIR_IOPR1B	113	113	0	113	0
SIR_IOPN1B	108	108	4	104	0
SIR_IOPM_2	149	149	101	48	0
SIR_IOPR_2	113	113	36	76	1
SIR_IOPN_2	108	108	41	67	0
SIR_IOP_P2P	29	29	0	29	0

7.1 QCC Errors

_

	lotal number of occurrences of each error										
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR IOPR 2	1	1	1	1							

Test Description Key:					
Abbreviation	Test name	Details			
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7			
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7			
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7			
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7			

7.2 QCC Warnings

Number of QCC reports with warnings

	Total number of occurrences of each warming								
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC		
SIR_IOPM1B	147	0	0	0	0	0	0		
SIR_IOPM_2	0	0	41	39	0	42	0		
SIR_IOPN1B	102	0	0	0	0	0	0		
SIR_IOPN_2	0	0	10	39	3	24	29		
SIR_IOPR1B	110	0	0	0	0	0	0		
SIR IOPR 2	0	1	39	51	1	38	37		

Product Type	RBSZOPOEPNCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCI	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	38	34	0	0	0	0	28
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	19	0	0	27	0	39	0
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	23	0	48	0	60	0	0

Product Type	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	0	0	7	24	0	4	34
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	0	30	20	51	56	28	35
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	50	0	1	66	45	12	39

Product Type	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
SIR_IOPM1B	0	0	0	0	0	
SIR_IOPM_2	0	1	0	0	0	
SIR_IOPN1B	0	0	0	54	3	
SIR_IOPN_2	34	16	1	0	0	
SIR_IOPR1B	0	0	0	113	5	
SIR IOPR 2	53	3	4	0	0	

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR IOP 2	19	29	29	2	29	16	29

Product Type	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_IOP_2_	15	28	21	18	29	18	23

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-	-
SIR_IOP_2_	29	17	15	29			

Test Description Key:							
Abbreviation	Test name	Details					
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter					
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)					
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only					
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					

RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70
		and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

7.3 Missing QCC Reports

Number of products with missing QCC reports: