

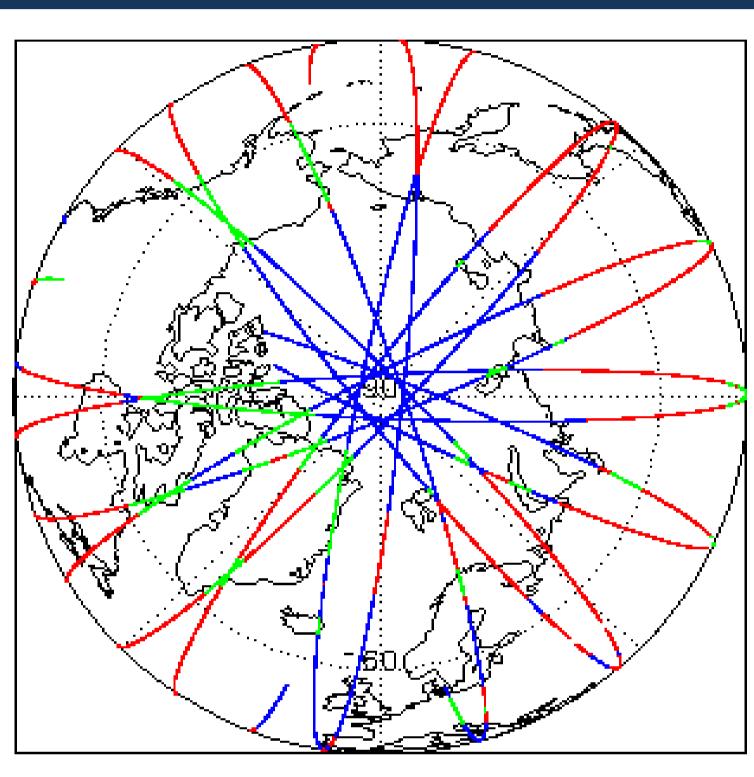
1. Overview

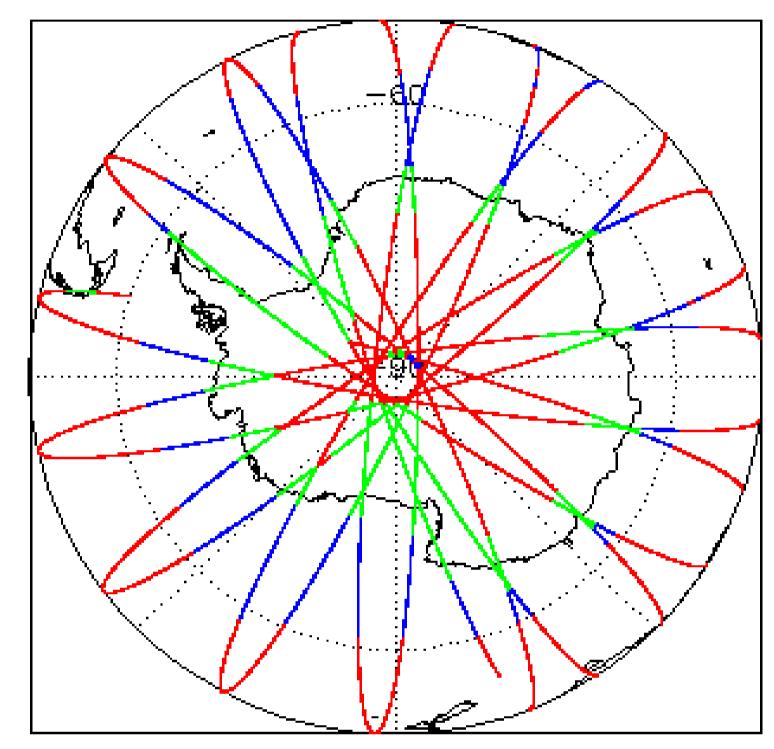
Report Production:	17-Aug-2020	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data	

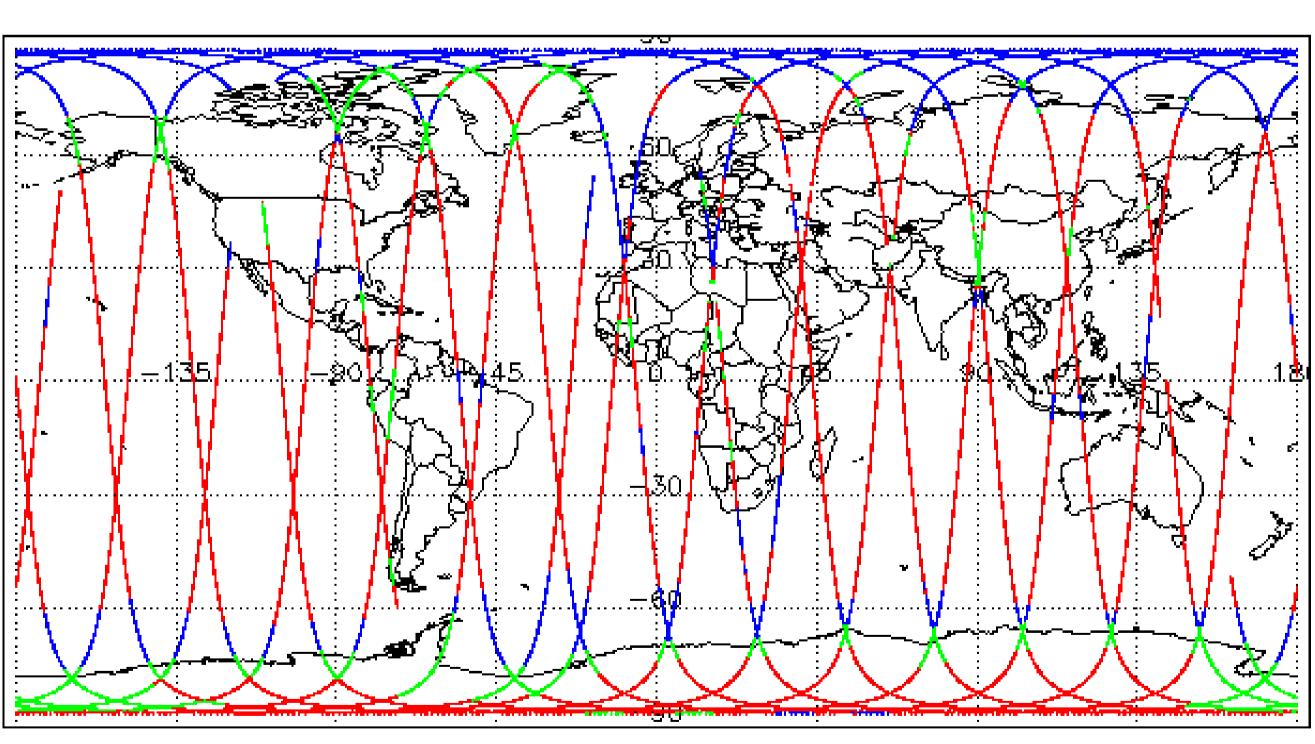
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
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 7.1 and 7.2

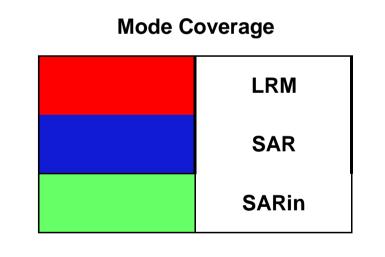
Mission / Instru	ument News
12-Aug-2020	None
13-Aug-2020	SIRAL Unavailability due to MMFU from 09:36:10 to 09:56:38
14-Aug-2020	Nothing planned

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:

0

4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

0

4.5 L1B Measurement Confidence Data Check

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

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:

.

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20200813T031647_20200813T033037_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

4.6 L1B Waveform Group Data Check

CryoSat L1B data includes a waveform data flag 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:

17

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20200813T072539_20200813T075229_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200813T130935_20200813T132418_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200813T141932_20200813T143538_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200813T161553_20200813T161604_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200813T031441_20200813T031647_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200813T044938_20200813T045436_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200813T111754_20200813T111829_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200813T112031_20200813T112327_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200813T130128_20200813T130227_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200813T143928_20200813T144143_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200813T154305_20200813T154458_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200813T194321_20200813T194354_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200813T002856_20200813T003554_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200813T054420_20200813T054654_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200813T092932_20200813T093333_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200813T104117_20200813T104512_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200813T233950_20200813T234434_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: 0

5.2 L2 Product Header Analysis

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

Number of products with errors: 0

5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

0

5.4 L2 Auxiliary Correction Error Check

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

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: 49

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20200813T031647_20200813T033037_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPM_2_20200813T045436_20200813T045451_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_IOPM_2_20200813T075913_20200813T080329_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPM_2_20200813T161553_20200813T161604_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_IOPM_2_20200813T180818_20200813T180849_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200813T003555_20200813T003830_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_IOPN_2_20200813T013105_20200813T013225_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20200813T021112_20200813T021724_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_IOPN_2_20200813T031024_20200813T031128_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_IOPN_2_20200813T044938_20200813T045436_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20200813T062235_20200813T062313_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200813T071418_20200813T071626_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_IOPN_2_20200813T085217_20200813T085535_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_IOPN_2_20200813T090057_20200813T090216_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200813T103109_20200813T103428_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_IOPN_2_20200813T103952_20200813T104116_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200813T112031_20200813T112327_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20200813T121812_20200813T121946_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_IOPN_2_20200813T130128_20200813T130227_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_IOPN_2_20200813T135545_20200813T135752_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_IOPN_2_20200813T152601_20200813T152748_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200813T161604_20200813T162010_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200813T202444_20200813T202609_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200813T220412_20200813T220538_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_IOPN_2_20200813T221050_20200813T221353_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) Non-Equilibrium Long Period	Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20200813T234434_20200813T234734_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200813T234953_20200813T235511_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_20200813T012342_20200813T012955_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_20200813T012956_20200813T013105_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_20200813T015327_20200813T015540_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPR_2_20200813T030356_20200813T030528_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_20200813T030600_20200813T030749_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_20200813T030750_20200813T031024_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_20200813T044226_20200813T044333_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_20200813T044333_20200813T044938_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_20200813T062453_20200813T063000_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_20200813T075251_20200813T075402_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_20200813T075407_20200813T075449_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_20200813T080352_20200813T081159_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_20200813T112327_20200813T113117_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_20200813T130228_20200813T130811_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_20200813T144143_20200813T144836_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_20200813T162011_20200813T162532_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_20200813T175834_20200813T180818_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_20200813T193547_20200813T194321_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_20200813T211513_20200813T212140_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_20200813T212141_20200813T212322_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_20200813T225321_20200813T230041_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_20200813T230042_20200813T230240_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:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20200813T031647_20200813T033037_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

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.

Number of products with errors: 79

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20200813T000430_20200813T002855_C001	j	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 OFFE SIR TOPM 2 202008131003831 202008131004023 C001	9	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

DO 11 ON 10 ON 2 (ACCOUNTS ON	CS_OFFL_SIR_IOPM_2_20200813T004812_20200813T010445_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.
ord Development Capt 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Understance Loady Flags from Page 1 (2012) and the COCO distance for gar or Underst	CS_OFFL_SIR_IOPM_2_20200813T010926_20200813T011726_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
20_0FF_28R_[JVM_2_20000F31C3722_C000B131200C_C01 20_0FF_28R_[JVM_2_20000F31C3722_C000B131200C_C01 20_0FF_28R_[JVM_2_20000F31C3722_C000B131200C_C01 20_0FF_28R_[JVM_2_20000F31C3722_C000B13120C_C01 20_0FF_28R_[JVM_2_20000F31C3722_C0	CS_OFFL_SIR_IOPM_2_20200813T013714_20200813T015326_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Souther Charley Code Animone Person Cardinal Code Animone Person	CS_OFFL_SIR_IOPM_2_20200813T015541_20200813T020959_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Control Cont	CS_OFFL_SIR_IOPM_2_20200813T021724_20200813T021936_C001		
CS_OFT_SR_OFM_2_2020619706276_200915***216095_C001 An electronic Range_SS IA_CWI and COOK Afferter Range_SS	CS_OFFL_SIR_IOPM_2_20200813T022021_20200813T022438_C001		
GS_OPPL_SIR_IOPNL_2_20200913T001632_20001 GS_OPPL_SIR_IOPNL_2_20200913T001637_20200913T003007_CD01 Annual Formation of the Special Advanced County of the County of the County Advanced County of the	CS_OFFL_SIR_IOPM_2_20200813T022703_20200813T024115_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFT_SR_IOPY_2_2000813T003057_0001 CS_OFT_SR_IOPY_2_2000813T003052_000183T005052_0001 CS_OFT_SR_IOPY_2_2000813T003052_000183T005052_0001 CS_OFT_SR_IOPY_2_2000813T003052_000183T005	CS_OFFL_SIR_IOPM_2_20200813T024254_20200813T030328_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_LOPM_2_20000913103375_202206131040341_C001	CS_OFFL_SIR_IOPM_2_20200813T031647_20200813T033037_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscarter Quality CS_OFFL_SIR_IDFM_2_20200813T040703_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T040703_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T040955_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T04095_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T04095_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T04095_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T04095_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T04095_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T04095_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T04095_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T04095_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T04095_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T04095_20200813T04095_20200813T040943_CD01 CS_OFFL_SIR_IDFM_2_20200813T0495_20200813T04095_2	CS_OFFL_SIR_IOPM_2_20200813T033735_20200813T035058_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality. COCO SPEL SIR IOPM 2 2020813T045519 2020813T05922 CD01 All natural Range and Backscatter Quality. Flags have been addressed to recommend the property of the propert	CS_OFFL_SIR_IOPM_2_20200813T035517_20200813T040341_C001		
GS_OFFL_SIR_JOPM_2_20200813T050805_20200813T0503040_C001 GS_OFFL_SIR_JOPM_2_20200813T050805_20200813T0503040_C001 GS_OFFL_SIR_JOPM_2_20200813T050805_20200813T0503040_C001 GS_OFFL_SIR_JOPM_2_20200813T050805_20200813T054158_C001 GS_OFFL_SIR_JOPM_2_20200813T054056_20200813T054158_C001 GS_OFFL_SIR_JOPM_2_20200813T054056_20200813T054724_C001 GS_OFFL_SIR_JOPM_2_20200813T054056_20200813T054724_C001 GS_OFFL_SIR_JOPM_2_20200813T054056_20200813T054724_C001 GS_OFFL_SIR_JOPM_2_20200813T054056_20200813T054724_C001 GS_OFFL_SIR_JOPM_2_20200813T054756_20200813T054724_C001 GS_OFFL_SIR_JOPM_2_20200813T054756_20200813T054724_C001 GS_OFFL_SIR_JOPM_2_20200813T054756_20200813T054724_C001 GS_OFFL_SIR_JOPM_2_20200813T054756_20200813T054724_C001 GS_OFFL_SIR_JOPM_2_20200813T064330_20200813T070889_C001 GS_OFFL_SIR_JOPM_2_20200813T074827_20200813T070889_C001 GS_OFFL_SIR_JOPM_2_20200813T074827_20200813T070889_C001 GS_OFFL_SIR_JOPM_2_20200813T075239_20001 GS_OFFL_SIR_JOPM_2_20200813T075239_20001 GS_OFFL_SIR_JOPM_2_20200813T075039_20001 GG_OFFL_SIR_JOPM_2_20200813T075039_20001 GG_OFFL_SIR_JOPM_2_20200813T090444_2020	CS_OFFL_SIR_IOPM_2_20200813T040703_20200813T042843_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and flanceter Quality COGO Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200813T053705_20200813T054158_CO01 CS_OFFL_SIR_IOPM_2_20200813T054054_2020813T054724_CO01 CS_OFFL_SIR_IOPM_2_20200813T054054_2020813T064724_CO01 CS_OFFL_SIR_IOPM_2_20200813T054054_2020813T064054_CO01 CS_OFFL_SIR_IOPM_2_20200813T054054_2020813T064054_CO01 CS_OFFL_SIR_IOPM_2_20200813T054054_2020813T061042_CO01 CS_OFFL_SIR_IOPM_2_20200813T054054_CO01 CS_OFFL_SIR_IOPM_2_20200813T074057_2020813T061042_CO01 CS_OFFL_SIR_IOPM_2_20200813T074057_2020813T070859_CO01 CS_OFFL_SIR_IOPM_2_20200813T074057_2020813T070859_CO01 CS_OFFL_SIR_IOPM_2_20200813T075253_2020813T070859_CO01 CS_OFFL_SIR_IOPM_2_20200813T075253_2020813T070859_CO01 CS_OFFL_SIR_IOPM_2_20200813T075253_2020813T070859_CO01 CS_OFFL_SIR_IOPM_2_20200813T075253_2020813T070859_CO01 CS_OFFL_SIR_IOPM_2_20200813T075253_2020813T070859_CO01 CS_OFFL_SIR_IOPM_2_20200813T075913_2020813T084030_CO01 CS_OFFL_SIR_IOPM_2_20200813T075913_2020813T084030_CO01 CS_OFFL_SIR_IOPM_2_20200813T075913_2020813T084030_CO01 CS_OFFL_SIR_IOPM_2_20200813T075913_2020813T084030_CO01 CS_OFFL_SIR_IOPM_2_20200813T075913_2020813T084030_CO01 CS_OFFL_SIR_IOPM_2_20200813T075913_2020813T084030_CO01 CS_OFFL_SIR_IOPM_2_20200813T081514_2020813T084030_CO01 CS_OFFL_SIR_IOPM_2_20200813T080444_2020813T	CS_OFFL_SIR_IOPM_2_20200813T045519_20200813T050222_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
GS_OFFL_SIR_JOPM_2_20200813T05454_20200813T064724_C001 CS_OFFL_SIR_JOPM_2_20200813T054554_20200813T064724_C001 CS_OFFL_SIR_JOPM_2_20200813T054751_20200813T061042_C001 CS_OFFL_SIR_JOPM_2_20200813T064751_20200813T081042_C001 CS_OFFL_SIR_JOPM_2_20200813T064751_20200813T081042_C001 CS_OFFL_SIR_JOPM_2_20200813T064751_20200813T081042_C001 CS_OFFL_SIR_JOPM_2_20200813T064330_20200813T070859_C001 CS_OFFL_SIR_JOPM_2_20200813T074627_20200813T070859_C001 CS_OFFL_SIR_JOPM_2_20200813T074627_20200813T0702225_C001 CS_OFFL_SIR_JOPM_2_20200813T075639_20200813T070529_C001 CS_OFFL_SIR_JOPM_2_20200813T075639_20200813T070529_C001 CS_OFFL_SIR_JOPM_2_20200813T075639_20200813T070529_C001 CS_OFFL_SIR_JOPM_2_20200813T075913_20200813T080329_C001 CS_OFFL_SIR_JOPM_2_20200813T075913_20200813T080329_C001 CS_OFFL_SIR_JOPM_2_20200813T075913_20200813T080329_C001 CS_OFFL_SIR_JOPM_2_20200813T085538_20200813T080957_C001 CS_OFFL_SIR_JOPM_2_20200813T085538_20200813T080957_C001 CS_OFFL_SIR_JOPM_2_20200813T085538_20200813T080957_C001 CS_OFFL_SIR_JOPM_2_20200813T085538_20200813T080957_C001 CS_OFFL_SIR_JOPM_2_20200813T085538_20200813T080957_C001 CS_OFFL_SIR_JOPM_2_20200813T085538_20200813T080957_C001 CS_OFFL_SIR_JOPM_2_20200813T085538_20200813T080957_C001 CS_OFFL_SIR_JOPM_2_20200813T085538_20200813T080957_C001 CS_OFFL_SIR_JOPM_2_20200813T0805538_20200813T080957_C001 CS_OFFL_SIR_JOPM_2_20200813T0805538_202	CS_OFFL_SIR_IOPM_2_20200813T050805_20200813T053040_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the COGO Altimeter Range and Bankscatter Quality Flags have been altimeter Range and Bankscatter Quality Flags have been altimeter Range and Bankscatter Quality Flags and the COGO Altimeter Range and Bankscatter Quality Flags and the COGO Altimeter Range and Bankscatter Quality Flags and the COGO Altimeter Range and Bankscatter Quality Flags and the COGO Altimeter Range and Bankscatter Quality Flags and the COGO Altimeter Range and Bankscatter Quality Flags and the COGO Altimeter Range and Bankscatter Quality Flags and the COGO Altimeter Range and Bankscatter Quality Flags and the COGO Altimeter Range and Bankscatter Quality Flags and the COGO Altimeter Range and Bankscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200813T07627_20200813T075229_CO01 CS_OFFL_SIR_IOPM_2_20200813T075239_20200813T075229_CO01 CS_OFFL_SIR_IOPM_2_20200813T075239_20200813T075229_CO01 CS_OFFL_SIR_IOPM_2_20200813T075913_20200813T080329_CO01 CS_OFFL_SIR_IOPM_2_20200813T075913_20200813T080329_CO01 CS_OFFL_SIR_IOPM_2_20200813T081514_20200813T084803_CO01 CS_OFFL_SIR_IOPM_2_20200813T08535_20200813T080057_CO01 CS_OFFL_SIR_IOPM_2_20200813T08535_20200813T080057_CO01 CS_OFFL_SIR_IOPM_2_20200813T08535_20200813T080057_CO01 CS_OFFL_SIR_IOPM_2_20200813T080057_2_CO01 CS_OFFL_SIR_IOPM_2_20200813T080057_CO01 CS_OFFL_SIR_IOPM_2_20200813T080057_2_CO01 CS_OFFL_SIR_IOPM_2_20200813T080057_CO01 CS_OFFL_SIR_	CS_OFFL_SIR_IOPM_2_20200813T053705_20200813T054158_C001		
Admeter Range and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality (CS_OFFL_SIR_IOPM_2_20200813T0764330_20200813T070859_C001) CS_OFFL_SIR_IOPM_2_20200813T071627_20200813T072225_C001 CS_OFFL_SIR_IOPM_2_20200813T071627_20200813T072225_C001 CS_OFFL_SIR_IOPM_2_20200813T075239_20200813T075229_C001 CS_OFFL_SIR_IOPM_2_20200813T075239_20200813T075229_C001 CS_OFFL_SIR_IOPM_2_20200813T0758913_20200813T075229_C001 CS_OFFL_SIR_IOPM_2_20200813T0758913_20200813T084803_C001 CS_OFFL_SIR_IOPM_2_20200813T081514_20200813T084803_C001 CS_OFFL_SIR_IOPM_2_20200813T085535_20200813T084803_C001 CS_OFFL_SIR_IOPM_2_20200813T085535_20200813T090067_C001 CS_OFFL_SIR_IOPM_2_20200813T085535_20200813T090067_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090067_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090667_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090667_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090667_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090667_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090	CS_OFFL_SIR_IOPM_2_20200813T054654_20200813T054724_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
S_OFFL_SIR_IOPM_2_20200813T084330_20200813T070859_C001 and Backscatter Quality Set for one or more records. CS_OFFL_SIR_IOPM_2_20200813T071627_20200813T072225_C001 CS_OFFL_SIR_IOPM_2_20200813T072539_20200813T075229_C001 CS_OFFL_SIR_IOPM_2_20200813T075539_20200813T075229_C001 CS_OFFL_SIR_IOPM_2_20200813T075913_20200813T080329_C001 CS_OFFL_SIR_IOPM_2_20200813T081514_20200813T080329_C001 CS_OFFL_SIR_IOPM_2_20200813T081514_20200813T084803_C001 CS_OFFL_SIR_IOPM_2_20200813T085535_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001	CS_OFFL_SIR_IOPM_2_20200813T054751_20200813T061042_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_IOPM_2_20200813T075239_20200813T075229_C001 CS_OFFL_SIR_IOPM_2_20200813T075239_20200813T075229_C001 CS_OFFL_SIR_IOPM_2_20200813T075913_20200813T080329_C001 CS_OFFL_SIR_IOPM_2_20200813T075913_20200813T080329_C001 CS_OFFL_SIR_IOPM_2_20200813T085535_20200813T080329_C001 CS_OFFL_SIR_IOPM_2_20200813T085535_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T085535_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090053_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090053_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090053_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090053_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090053_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090053_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090053_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090053_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090707_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090707_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T09	CS_OFFL_SIR_IOPM_2_20200813T064330_20200813T070859_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality SHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Set for one or more records. CS_OFFL_SIR_IOPM_2_20200813T081514_20200813T084803_C001 CS_OFFL_SIR_IOPM_2_20200813T085535_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090055_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090055_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090055_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090055_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090853_C001 CS	CS_OFFL_SIR_IOPM_2_20200813T071627_20200813T072225_C001		, ,
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200813T081514_20200813T084803_C001 CS_OFFL_SIR_IOPM_2_20200813T085535_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090707_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090707_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 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. 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_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T0911513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T0911513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T0911513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T0911513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T0911513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_	CS_OFFL_SIR_IOPM_2_20200813T072539_20200813T075229_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200813T081514_20200813T084803_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20200813T085535_20200813T090057_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090707_C001 CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090707_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001 CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001	CS_OFFL_SIR_IOPM_2_20200813T075913_20200813T080329_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200813T09057_C001 Backscatter Quality CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090707_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090707_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T091513_C001	CS_OFFL_SIR_IOPM_2_20200813T081514_20200813T084803_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090707_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Set for one or more records. Ocean Altimeter Range, SSHA, SWH 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. 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. OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set	CS_OFFL_SIR_IOPM_2_20200813T085535_20200813T090057_C001		
CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range	CS_OFFL_SIR_IOPM_2_20200813T090444_20200813T090707_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
US OFFI SIR IOPM / 202008131091141 202008131091513 COOL	CS_OFFL_SIR_IOPM_2_20200813T090732_20200813T090853_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPM_2_20200813T091141_20200813T091513_C001		

CS_OFFL_SIR_IOPM_2_20200813T095638_20200813T100335_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_20200813T100621_20200813T102738_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_20200813T103544_20200813T103952_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_20200813T104513_20200813T105456_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_20200813T105644_20200813T110244_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_20200813T113117_20200813T120621_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_20200813T121458_20200813T121811_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_20200813T122538_20200813T125706_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_20200813T130935_20200813T132418_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_20200813T132959_20200813T134552_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_20200813T134827_20200813T135337_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_20200813T140327_20200813T141719_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_20200813T141932_20200813T143538_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_20200813T145902_20200813T150920_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_20200813T151100_20200813T152437_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_20200813T152748_20200813T153248_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_20200813T154125_20200813T154304_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_20200813T154459_20200813T155544_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_20200813T155733_20200813T160311_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_20200813T160554_20200813T161522_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_20200813T164159_20200813T170251_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_20200813T170826_20200813T171206_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200813T171228_20200813T171529_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_20200813T171929_20200813T174532_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_20200813T181829_20200813T184243_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_20200813T184609_20200813T185121_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_20200813T185128_20200813T185455_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_20200813T185849_20200813T193151_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_20200813T194427_20200813T195134_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_20200813T195208_20200813T195357_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_20200813T195445_20200813T200416_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_20200813T200801_20200813T201240_C001	1	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200813T201759_20200813T202207_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_20200813T202610_20200813T203156_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_20200813T203946_20200813T211132_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_20200813T212403_20200813T212538_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_20200813T213641_20200813T213750_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_20200813T214301_20200813T214848_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_20200813T214904_20200813T215959_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_20200813T220538_20200813T221049_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_20200813T221753_20200813T223903_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_20200813T224028_20200813T225321_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_20200813T232052_20200813T233950_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_20200813T235732_20200814T003329_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_20200813T093337_20200813T093408_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_IOPN_2_20200813T093448_20200813T093532_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_IOPN_2_20200813T160311_20200813T160433_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_20200813T181609_20200813T181610_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_20200813T015327_20200813T015540_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_20200813T135337_20200813T135343_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_20200813T213320_20200813T213641_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

L2 Quality Flags (20Hz PLRM)

CS_OFFL_SIR_IOPN_2_20200813T120742_20200813T120937_C001

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:** 78 Description **Product** Test Failed Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T003555_20200813T003830_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T004024_20200813T004650_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T021112_20200813T021724_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T022438_20200813T022613_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T030528_20200813T030600_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS OFFL SIR IOPN 2 20200813T031024 20200813T031128 C001 OCOG Backscatter Quality more records. Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG CS_OFFL_SIR_IOPN_2_20200813T031441_20200813T031647_C001 and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality set for one or more records. PLRM OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS_OFFL_SIR_IOPN_2_20200813T033242_20200813T033734_C001 OCOG Backscatter Quality more records. Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T035325_20200813T035517_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS OFFL SIR IOPN 2 20200813T040342 20200813T040529 C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T044938_20200813T045436_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T062429_20200813T062452_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T071226_20200813T071346_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T072225_20200813T072354_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS_OFFL_SIR_IOPN_2_20200813T085217_20200813T085535_C001 OCOG Backscatter Quality more records. Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T090057_20200813T090216_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS_OFFL_SIR_IOPN_2_20200813T091513_20200813T091635_C001 OCOG Backscatter Quality more records. The OCOG Range and Backscatter Quality Flags have been set for one or OCOG Altimeter Range Quality PLRM, CS_OFFL_SIR_IOPN_2_20200813T092110_20200813T092135_C001 OCOG Backscatter Quality more records. OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS OFFL SIR IOPN 2 20200813T093448 20200813T093532 C001 OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPN_2_20200813T103952_20200813T104116_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS_OFFL_SIR_IOPN_2_20200813T110244_20200813T110447_C001 OCOG Backscatter Quality more records. OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS_OFFL_SIR_IOPN_2_20200813T112031_20200813T112327_C001 OCOG Backscatter Quality more records. Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG

Altimeter Range and Backscatter Quality

PLRM

and the OCOG Altimeter Range and Backscatter Quality Flags have been

set for one or more records.

CS_OFFL_SIR_IOPN_2_20200813T121812_20200813T121946_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_20200813T143538_20200813T143750_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_20200813T143928_20200813T144143_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_20200813T145657_20200813T145902_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_20200813T160311_20200813T160433_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_20200813T161604_20200813T162010_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_20200813T163510_20200813T163543_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_20200813T170531_20200813T170826_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_20200813T174708_20200813T175008_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_20200813T180849_20200813T181009_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_20200813T181814_20200813T181829_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_20200813T185456_20200813T185622_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_20200813T193207_20200813T193547_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_20200813T202444_20200813T202609_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_20200813T211132_20200813T211449_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_20200813T214116_20200813T214301_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_20200813T221050_20200813T221353_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_20200813T234953_20200813T235511_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_20200813T002856_20200813T003554_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_20200813T004650_20200813T004812_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_20200813T015327_20200813T015540_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.
US OFFE SIR IOPR / /U/U08131U3U396 /U/U08131U3U9/8 U0U1	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_20200813T035058_20200813T035325_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_20200813T040530_20200813T040703_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_20200813T044226_20200813T044333_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_20200813T050222_20200813T050443_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_20200813T053041_20200813T053259_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_20200813T054420_20200813T054654_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_20200813T062453_20200813T063000_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_20200813T070900_20200813T071226_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_20200813T072355_20200813T072539_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_20200813T075827_20200813T075913_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_20200813T084803_20200813T085216_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_20200813T090216_20200813T090443_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_20200813T092932_20200813T093333_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_20200813T100336_20200813T100621_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_20200813T102739_20200813T103108_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_20200813T104117_20200813T104512_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_20200813T112327_20200813T113117_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_20200813T120621_20200813T120741_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_20200813T121947_20200813T122203_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_20200813T122203_20200813T122538_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_20200813T135753_20200813T140327_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_20200813T141719_20200813T141932_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_20200813T144143_20200813T144836_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_20200813T161522_20200813T161553_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_20200813T171732_20200813T171929_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_20200813T202208_20200813T202444_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_20200813T212141_20200813T212322_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_20200813T212651_20200813T213018_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_20200813T215959_20200813T220412_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_20200813T221353_20200813T221753_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_20200813T230509_20200813T231234_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_20200813T233950_20200813T234434_C001	Tann Backscaller Ullalliv PLRIVI ULLUI	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_20200813T235511_20200813T235731_C001	Tann Backscandr Unann Pi Rivi Ciclora	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 (1 Hz & 1Hz PLRM)

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

> 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: 174

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: 61

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: 123

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

6.1 P2P Product Format Check

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

Number of products with errors:

6.2 P2P Product Header Analysis

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

Number of products with errors:

6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors: 0

6.4 P2P Auxiliary Correction Error Check

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

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 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: 30

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220200812T235015_20200813T003954_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_220200813T003954_20200813T012930_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_220200813T012930_20200813T021909_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_220200813T021909_20200813T030844_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_220200813T030844_20200813T035824_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_220200813T035824_20200813T044759_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_220200813T044759_20200813T053739_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_220200813T053739_20200813T062714_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_220200813T062714_20200813T071653_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FFS) Non-Equilibrium Long Period	Topography (solution 1), and tidal corrections for one or more records

CS_OFFL_SIR_IOP_220200813T071653_20200813T080629_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_220200813T080629_20200813T085608_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_220200813T085608_20200813T094543_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOP_220200813T094543_20200813T103523_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_220200813T103523_20200813T112458_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_220200813T112458_20200813T121437_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_220200813T121437_20200813T130412_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_220200813T130412_20200813T135352_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_220200813T135352_20200813T144327_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_220200813T144327_20200813T153307_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_220200813T153307_20200813T162242_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_220200813T162242_20200813T171221_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_220200813T171221_20200813T180157_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_220200813T180157_20200813T185136_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_220200813T185136_20200813T194111_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_220200813T194111_20200813T203051_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_220200813T203051_20200813T212026_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_220200813T212026_20200813T221006_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_220200813T221006_20200813T225941_C001	Iviean Sea Surrace (1), Iviean Dynamic 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_IOP_220200813T225941_20200813T234920_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_220200813T234920_20200814T003855_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:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220200813T030844_20200813T035824_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

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.

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: 30

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:

27

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:

30

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	157	157	2	155	0
SIR_IOPR1B	100	94	1	93	0
SIR_IOPN1B	94	100	0	100	0
SIR_IOPM_2	157	157	102	55	0
SIR_IOPR_2	100	94	40	54	0
SIR_IOPN_2	94	100	30	69	1
SIR_IOP_P2P	29	29	0	28	1

7.1 QCC Errors

Number of QCC reports with errors:

8

Total number of occurrences of each error

Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOPR_2	1	1	1	1							
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-

Test Description Key:	est 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

0

7.3 Missing QCC Reports

Number of products with missing QCC reports:

0