



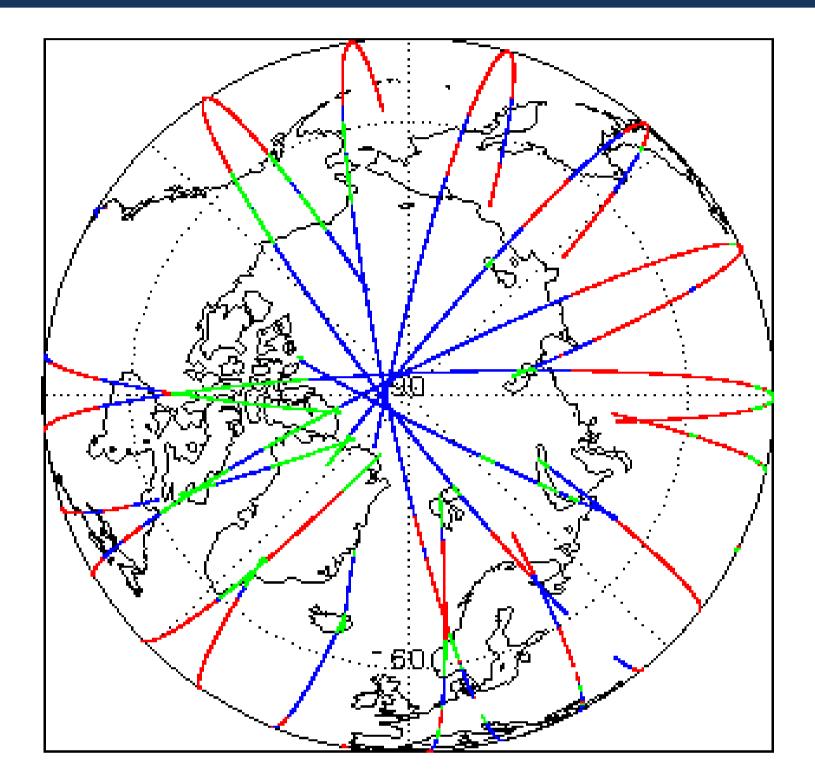
# 1. Overview

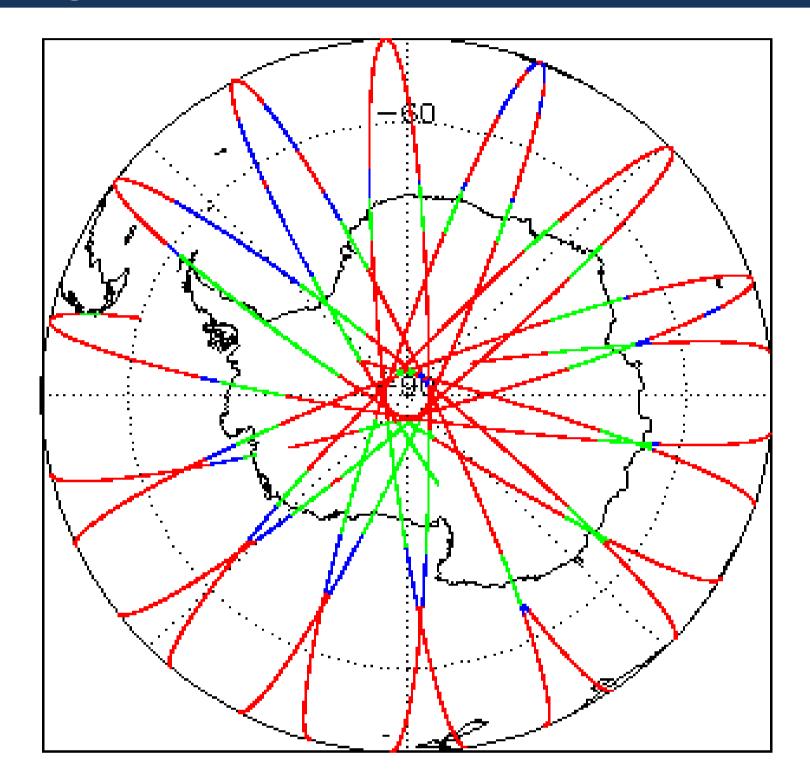
<b>Report Production:</b>	30-Mar-2020
Processor Used:	CryoSat Ocean Processor
Data Used:	Near Real Time Ocean Products (NOP) L1B & L2 Science Data

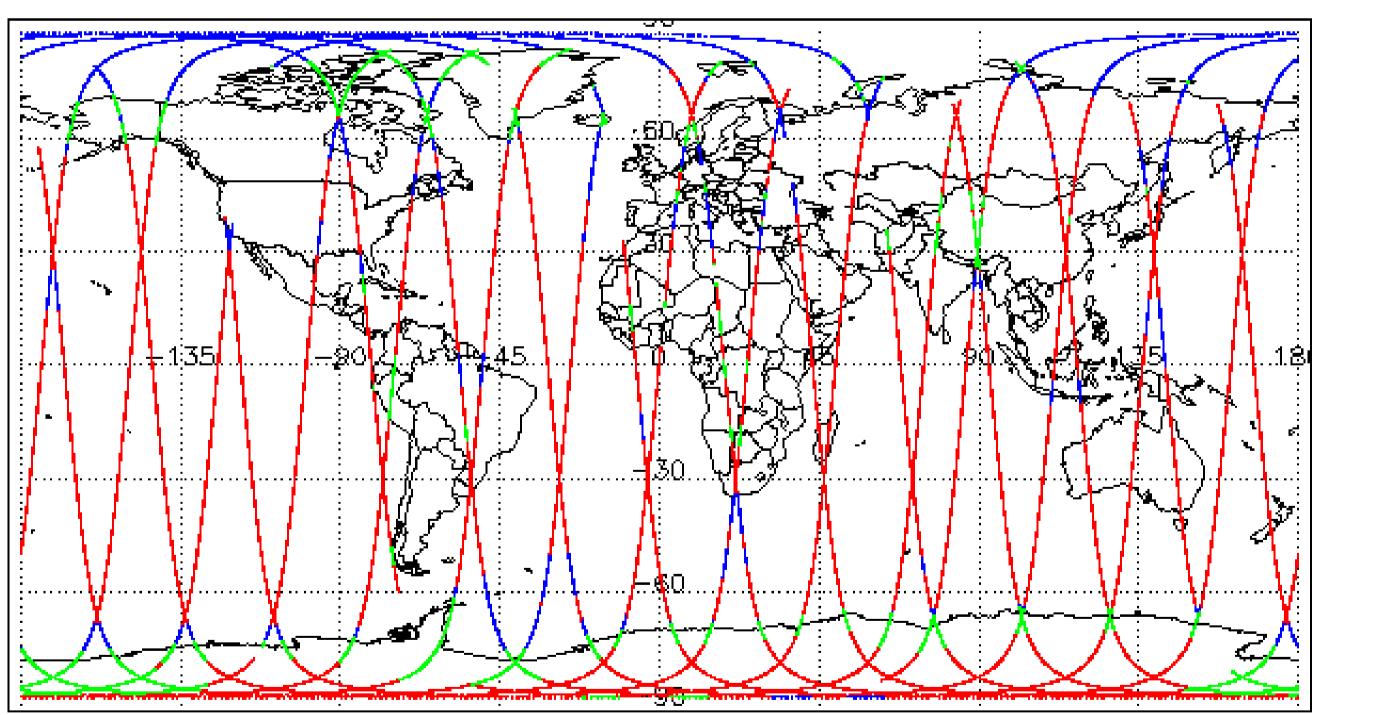
Check	L1 & L2
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5
Measurement Quality Flag Check	See Section 5.6
Ocean Retracking Quality Check	See Section 5.7

Mission / Instrument News	
28-Mar-2020	None
29-Mar-2020	None
30-Mar-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
Star Tracker(s) in use:	Star Tracker 1

# 4. NOP Level 1B Data Quality Check

### 4.1 L1B Product Format Check

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

Number of products with errors:

#### **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 configure	red in the OSAR and
OSARIn chains. A modification is required in the next release.	

Number of products with errors:

0

#### 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.

Dynamic Atmospheric Correction: The DAC is missing in all products because the auxiliary files required are not available in time for processing. This known and expected behaviour.

Number of products with errors:

#### **4.4 L1B Auxiliary Correction Error Check**

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

Number of products with errors:

0

1

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 NOPR 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_NOPM1B_20200329T214719_20200329T215846_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.

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#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20200329T073639_20200329T075226_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20200329T175401_20200329T175848_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20200329T201607_20200329T201926_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20200329T050317_20200329T050411_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20200329T090048_20200329T090655_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20200329T113915_20200329T114408_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20200329T131204_20200329T131239_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20200329T212450_20200329T212741_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20200329T131428_20200329T131937_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20200329T162508_20200329T162642_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20200329T212032_20200329T212217_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20200329T212741_20200329T212856_C001	Loss of Echo	The tracking echo is missing for one or more records

### **5. NOP 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.

> Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.

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> 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:

CS\_OFFL\_SIR\_NOPN\_2\_20200329T054443\_20200329T054557\_C001

**Test Failed** Product Description There is an error with the Mean Dynamic Topography height for one or CS\_OFFL\_SIR\_NOPN\_2\_20200328T235617\_20200329T000007\_C001 Mean Dynamic Topography (1) more records There is an error with the Mean Dynamic Topography height for one or Mean Dynamic Topography (1) CS\_OFFL\_SIR\_NOPN\_2\_20200329T005559\_20200329T005713\_C001 more records There is an error with the Mean Dynamic Topography height for one or CS\_OFFL\_SIR\_NOPN\_2\_20200329T023502\_20200329T023622\_C001 Mean Dynamic Topography (1) more records There is an error with the Total Geocentric Ocean Tide height (solution 1: Total Geocentric Ocean Tide (GOT) CS\_OFFL\_SIR\_NOPN\_2\_20200329T031258\_20200329T031420\_C001 GOT) for one or more records There is an error with the Mean Dynamic Topography height for one or CS\_OFFL\_SIR\_NOPN\_2\_20200329T033340\_20200329T033356\_C001 Mean Dynamic Topography (1) more records There is an error with the Mean Dynamic Topography height for one or CS\_OFFL\_SIR\_NOPN\_2\_20200329T040504\_20200329T040630\_C001 Mean Dynamic Topography (1) more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20200329T041154\_20200329T041505\_C001 Topography height (solution 1) for one or more records Topography (1)

Mean Dynamic Topography (1)

There is an error with the Mean Dynamic Topography height for one or more records

CB         OFFL_SIR_NOPN_2_20200297102004_0001         Mear-Ses Subtract (1), Mean Dynamic Transparative high Subtract (1) from the MSD Staget Subtract (1), Mean Dynamic Transparative high Subtract (1) for one or more seconds           CS_OFFL_SIR_NOPN_2_20200297102004_0001         Mear-Ses Subtract (1), Mean Dynamic Transparative high Subtract (1) and the Mean Dynamic Transparative high Subtract (1) and the Mean Dynamic Transparative high Subtract (1) and the Control Subtract (1), Mean Dynamic Transparative high Subtract (1) and the Control Subtract (1), Mean Dynamic Transparative high Subtract (1) and the Control Subtract (1), Mean Dynamic Transparative high Subtract (1),			
Display (North 2, 200003201102602, 200003201102602, 2001       Topography (1)       Topography (1)       Topography (1)         DS OFFL SIR NOFN 2, 20200320102001, 202003201082201, 202003201082201, 202003201082201, 20200320108200, 202003201080000, 20200000000, 2020000000, 20200000000	CS_OFFL_SIR_NOPN_2_20200329T055053_20200329T055417_C001		
CS         OFFL SIR         NOPN 2         20200329T1082042         20200329T1080046         20200329T1080046         20200329T1080042         20200329T1080042         20200329T1080042         20200329T1080042         20200329T1080042         20200329T108104         Companyly (1)         There is an error with the MSS height (solution 1) and the Neur Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Neur Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Neur Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Neur Dynamic Topography (1)         There is an error with the MSA Dynamic Topography (1)         There is an error with the MSA Dynamic Topography (1)         There is an error with the MSA Dynamic Topography (1)         There is an error with the MSA Dynamic Topography (1)         There is an error with the MSA Dynamic Topography (1)         There is an error with the MSA Dynamic Topography (1)         There is an error with the MSA Dynamic Topography (1)         There is an error with the MSA Dynamic Topography (1)         There is an error with the MSA Dynamic Topography (1)         There is an error	CS_OFFL_SIR_NOPN_2_20200329T072529_20200329T072804_C001		
CS_OFFL_SIR_NOPN_2_202003297000048_202003297000055_0001         Mean Dynamic Topography (1)         more records           OS_OFFL_SIR_NOPN_2_202003297000048_202003297000055_0001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography (1)           OS_OFFL_SIR_NOPN_2_202003297100002_202003297100002_202003297100004_2001         Mean Sea Surface (1), Mean Dynamic         Topography legit (solution 1) and the Mean Dynamic           OS_OFFL_SIR_NOPN_2_202003297104040_0001         Mean Sea Surface (1), Mean Dynamic         Topography legit (solution 1) and the Mean Dynamic           CS_OFFL_SIR_NOPN_2_202003297104040_0001         Mean Sea Surface (1), Mean Dynamic         Topography legit (solution 1) and the Mean Dynamic           CS_OFFL_SIR_NOPN_2_202003297104040_0001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography legit (solution 1) and the Mean Dynamic           CS_OFFL_SIR_NOPN_2_2020032971141315_2020032971141408_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography legit (solution 1) and the Mean Dynamic           CS_OFFL_SIR_NOPN_2_2020032971141408_2020032971141408_C001         Mean Sea Surface (1), Mean Dynamic         Topography (1)         There is an error with the Mean Dynamic Topography legit (solution 1) and the Mean Dynamic           CS_OFFL_SIR_NOPN_2_202003297134104_2001         Mean Sea Surface (1), Mean Dynamic         Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1) and the Mean Dynamic	CS_OFFL_SIR_NOPN_2_20200329T082042_20200329T082203_C001	Topography (1), Total Geocentric Ocean	Topography height (solution 1) and the Total Geocentric Ocean Tide height
CS_OFFL_SIR_NOPN_2_202003281108008_20001         Intell Updatury (1)         Inter is an error with the MSS height (solution 1) and the Mean Dynamic Togography (1)           CS_OFFL_SIR_NOPN_2_202003281108256_202003281104448_C001         Mean Sea Surface (1), Mean Dynamic Togography height (solution 1) for one or more records           CS_OFFL_SIR_NOPN_2_202003281108256_202003281104448_C001         Mean Sea Surface (1), Mean Dynamic Togography height (solution 1) for one or more records           CS_OFFL_SIR_NOPN_2_202003281108214_202003281105502_C001         Mean Dynamic Togography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Togography height (solution 1) for one or more records           CS_OFFL_SIR_NOPN_2_202003281108214_2020032811014408_C001         Mean Dynamic Togography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Togography (1)           CS_OFFL_SIR_NOPN_2_202003281101244_202003281101238_C001         Mean Dynamic Togography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Togography (1)           CS_OFFL_SIR_NOPN_2_202003281101244_202003281101238_C001         Mean Dynamic Togography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Togography (1)           CS_OFFL_SIR_NOPN_2_202003281165024_202003281165038_C001         Mean Dynamic Togography (1)         There is an error with the Mean Dynamic Togography height (solution 1) and the Mean Dynamic Togography height (solution 1) for one or more records           CS_OFFL_SIR_NOPN_2_202003281165024_202003281165143_C001         Mean Sas Surface (1), Mean D	CS_OFFL_SIR_NOPN_2_20200329T082506_20200329T082724_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_2020329110000_20200329110446_C001         Topography (1)         Topography height (solution 1) for one or more records           CS_OFFL_SIR_NOPN_2_20203292110234         20200329110446_C001         Mean Ses Sufface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_NOPN_2_202003291131204_202003291131239_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_NOPN_2_202003291131204_202003291131239_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_NOPN_2_202003291154147_202003291154055_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_NOPN_2_202003291154147_202003291154143_C001         Mean Dynamic Topography (1)         There is an error with the MEan Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_NOPN_2_202003291172034_202003291172034_C001         Mean Dynamic Topography (1)         There is an error with the MEan Dynamic Topography height for one or more records	CS_OFFL_SIR_NOPN_2_20200329T090048_20200329T090655_C001	Mean Dynamic Topography (1)	
DS OFFL SIR NOPN 2 202003291104364 202003291105466 2001         Topography (1)         Topography height (solution 1) for one or more records           CS OFFL SIR NOPN 2 202003291105314 202003291105002 C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height for one or more records           CS_OFFL_SIR_NOPN_2_2020032911131204_202003291114408_C0001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height for one or more records           CS_OFFL_SIR_NOPN_2_202003291131204_202003291131239_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height for one or more records           CS_OFFL_SIR_NOPN_2_202003291140344 202003291140565_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height for one or more records           CS_OFFL_SIR_NOPN_2_202003291140344 202003291140565_C001         Mean Sea Surface (1), Mean Dynamic Topography height for one or more records           CS_OFFL_SIR_NOPN_2_20200329115604_2020032911564603_C001         Mean Sea Surface (1), Mean Dynamic Topography height for one or more records           CS_OFFL_SIR_NOPN_2_202003291156024_202003291172364_C001         Mean Sea Surface (1), Mean Dynamic Topography height for one or more records           CS_OFFL_SIR_NOPN_2_202003291172034_202003291173044_C001         Mean Sea Surface (1), Mean Dynamic Topography height for one or more records           CS_OFFL_SIR_NOPN_2_202003291190731_202003291190644_C001         Mean Sea Surface (1), Mean Dynamic Topography height for one o	CS_OFFL_SIR_NOPN_2_20200329T100002_20200329T100134_C001		
CS_OFFL_SIR_NOPN_2_20200329T110314_20200329T114408_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height for one or more records         CS_OFFL_SIR_NOPN_2_20200329T131204_20200329T131239_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T140344_20200329T140555_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T15404_20200329T154403_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T172034_20200329T172034_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)       There is an error with the MSA height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T172034_20200329T173044_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T19031_20200329T19044_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean	CS_OFFL_SIR_NOPN_2_20200329T104256_20200329T104446_C001		
CS_OFFL_SIR_NOPN_2_20200329T131204_20200329T131239_C001         Investigation         Investigation           CS_OFFL_SIR_NOPN_2_20200329T131204_20200329T131239_C001         Mean Sea Surface (1), Mean Dynamic         There is an error with the MSS height (solution 1) or one or more records           CS_OFFL_SIR_NOPN_2_20200329T140344_20200329T140555_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1) for one or more records           CS_OFFL_SIR_NOPN_2_20200329T164147_20200329T154603_C001         Mean Sea Surface (1), Mean Dynamic         There is an error with the MSS height (solution 1) and the Mean Dynamic           CS_OFFL_SIR_NOPN_2_20200329T155024_20200329T155143_C001         Mean Sea Surface (1), Mean Dynamic         There is an error with the MSS height (solution 1) and the Mean Dynamic           CS_OFFL_SIR_NOPN_2_20200329T172034_20200329T172354_C001         Mean Sea Surface (1), Mean Dynamic         There is an error with the MSS height (solution 1) and the Mean Dynamic           CS_OFFL_SIR_NOPN_2_20200329T172034_20200329T172354_C001         Mean Sea Surface (1), Mean Dynamic         There is an error with the MSS height (solution 1) and the Mean Dynamic           CS_OFFL_SIR_NOPN_2_20200329T172034_20200329T173044_C001         Mean Sea Surface (1), Mean Dynamic         There is an error with the MSS height (solution 1) and the Mean Dynamic           CS_OFFL_SIR_NOPN_2_20200329T195058_20200329T195157         Mean Sea Surface (1), Mean Dynamic         There is an error with the MSS height (solution 1) and the Mean Dynamic	CS_OFFL_SIR_NOPN_2_20200329T105314_20200329T105502_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_20200329T140344_20200329T140565_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height (solution 1) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T140344_20200329T140565_C001Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean DynamicCS_OFFL_SIR_NOPN_2_20200329T154147_20200329T154503_C001Mean Sea Surface (1), Mean DynamicThere is an error with the MSS height (solution 1) and the Mean DynamicCS_OFFL_SIR_NOPN_2_20200329T155024_20200329T155143_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height (solution 1) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T172034_20200329T172354_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height (solution 1) or one or more recordsCS_OFFL_SIR_NOPN_2_20200329T172919_20200329T173044_C001Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean DynamicCS_OFFL_SIR_NOPN_2_20200329T190731_20200329T190844_C001Mean Sea Surface (1), Mean DynamicThere is an error with the MSS height (solution 1) and the Mean DynamicCS_OFFL_SIR_NOPN_2_20200329T190568_20200329T195157_C001Mean Sea Surface (1), Mean DynamicThere is an error with the MSS height (solution 1) or one or more recordsCS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001Mean Sea Surface (1), Mean DynamicThere is an error with the MSS height (solution 1) and the Mean DynamicCS_OFFL_SIR_NOPN_2_20200329T195058_20200329T204718_C001Mean Sea Surface (1), Mean DynamicThere is an error with the MSS height (solution 1) and the Mean DynamicCS_OFFL_SIR_NOPN_2_20200329T204508_	CS_OFFL_SIR_NOPN_2_20200329T113915_20200329T114408_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_20200329T140344_20200329T145503_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) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T155024_20200329T155143_C001       Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T172034_20200329T172034_20200329T172034_20200329T172034_20200329T172034_20200329T172034_20200329T172034_20200329T172034_20200329T172034_20200329T172034_20200329T173044_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) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T172031_20200329T173044_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T190731_20200329T190644_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T190588_20200329T195157_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solu	CS_OFFL_SIR_NOPN_2_20200329T131204_20200329T131239_C001		
CS_OFFL_SIR_NOPN_2_20200329T155024_20200329T155143_C001Topography (1)Topography height (solution 1) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T155024_20200329T155143_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height for one or more records.CS_OFFL_SIR_NOPN_2_20200329T172034_20200329T172034_20200329T172354_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T172034_20200329T172034_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T190731_20200329T190844_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_NOPN_2_20200329T19058_20200329T195157_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OF	CS_OFFL_SIR_NOPN_2_20200329T140344_20200329T140555_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_20200329T172034_20200329T172354_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) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T172034_20200329T172354_C001       Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T172919_20200329T173044_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T190731_20200329T190844_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T195058_20200329T195157_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T212856_20200329T21711       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records	CS_OFFL_SIR_NOPN_2_20200329T154147_20200329T154503_C001		
CS_OFFL_SIR_NOPN_2_20200329T172034_20200329T173044_C001Mean Dynamic Topography (1)Topography height (solution 1) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T172919_20200329T173044_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T190731_20200329T190844_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T195058_20200329T195157_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more recordsGS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height (solution 1) for one or more recordsGS_OFFL_SIR_NOPN_2_20200329T2121525_20200329T21711_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height for one or Topography height (solution 1) for	CS_OFFL_SIR_NOPN_2_20200329T155024_20200329T155143_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_20200329T172919_20200329T173044_C001Inteal Dynamic Topography (1)more recordsCS_OFFL_SIR_NOPN_2_20200329T190731_20200329T190844_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T195058_20200329T195157_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T221525_20200329T221711_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height for one or	CS_OFFL_SIR_NOPN_2_20200329T172034_20200329T172354_C001		
CS_OFFL_SIR_NOPN_2_20200329T190731_20200329T190844_C001Topography (1)Topography height (solution 1) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T195058_20200329T195157_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001Mean 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) for one or more recordsCS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001Mean 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) for one or more records	CS_OFFL_SIR_NOPN_2_20200329T172919_20200329T173044_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_20200329T195056_20200329T195056_20200329T204718_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_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) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T221525_20200329T221711_C001       Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height for one or	CS_OFFL_SIR_NOPN_2_20200329T190731_20200329T190844_C001		
CS_OFFL_SIR_NOPN_2_202003291204508_202003291204718_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_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) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001       Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20200329T221525_20200329T221711_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height for one or	CS_OFFL_SIR_NOPN_2_20200329T195058_20200329T195157_C001		
CS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001 Topography (1) Topography height (solution 1) for one or more records Topography height for one or more records Topography (1) Topography height (solution 1) for one or more records Topography height for one or more records Topography (1)	CS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001		
	CS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001		
	CS_OFFL_SIR_NOPN_2_20200329T221525_20200329T221711_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

CS_OFFL_SIR_NOPN_2_20200329T230535_20200329T230936_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20200329T032734_20200329T032944_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20200329T033323_20200329T033340_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20200329T033357_20200329T033511_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20200329T084302_20200329T084516_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 height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPR_2_20200329T095311_20200329T095407_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPR_2_20200329T100918_20200329T101037_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20200329T131428_20200329T131937_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) for one or more records
CS_OFFL_SIR_NOPR_2_20200329T144224_20200329T144425_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20200329T144758_20200329T144954_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20200329T145327_20200329T150131_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) for one or more records
CS_OFFL_SIR_NOPR_2_20200329T163208_20200329T164044_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) for one or more records
CS_OFFL_SIR_NOPR_2_20200329T181258_20200329T182043_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) for one or more records
CS_OFFL_SIR_NOPR_2_20200329T195157_20200329T195740_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) for one or more records
CS_OFFL_SIR_NOPR_2_20200329T213111_20200329T213344_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) for one or more records
CS_OFFL_SIR_NOPR_2_20200329T213344_20200329T213756_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) for one or more records
CS_OFFL_SIR_NOPR_2_20200329T230936_20200329T231458_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) for one or more records

### 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:

S:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20200329T214719_20200329T215846_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:

90	

Product	Test Failed	Description
C.S. OFFL. SIR. NOPM 2 202003291001649 202003291001725 C.001	C P	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20200329T001930_20200329T004543_C001	0	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_NOPM_2_20200329T004817_20200329T005212_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_NOPM_2_20200329T005233_20200329T005558_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_NOPM_2_20200329T005821_20200329T012558_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_NOPM_2_20200329T014902_20200329T022517_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_NOPM_2_20200329T022641_20200329T023126_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_NOPM_2_20200329T023746_20200329T031258_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_NOPM_2_20200329T032602_20200329T032733_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_NOPM_2_20200329T035738_20200329T035939_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_NOPM_2_20200329T040139_20200329T040446_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_NOPM_2_20200329T040630_20200329T041154_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_NOPM_2_20200329T041700_20200329T044002_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_NOPM_2_20200329T044248_20200329T045146_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_NOPM_2_20200329T050434_20200329T050754_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_NOPM_2_20200329T052402_20200329T054344_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_NOPM_2_20200329T054558_20200329T055052_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_NOPM_2_20200329T055609_20200329T062936_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_NOPM_2_20200329T065233_20200329T065454_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_NOPM_2_20200329T065534_20200329T071830_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_NOPM_2_20200329T072805_20200329T072957_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_NOPM_2_20200329T073639_20200329T075226_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_NOPM_2_20200329T075258_20200329T075421_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_NOPM_2_20200329T075903_20200329T080649_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_NOPM_2_20200329T081305_20200329T081327_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_NOPM_2_20200329T082203_20200329T082506_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_NOPM_2_20200329T082735_20200329T084302_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_NOPM_2_20200329T084516_20200329T090008_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_NOPM_2_20200329T090656_20200329T090910_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_NOPM_2_20200329T090951_20200329T091410_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_NOPM_2_20200329T091547_20200329T093049_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_NOPM_2_20200329T093229_20200329T094811_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_NOPM_2_20200329T101037_20200329T102221_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_NOPM_2_20200329T102659_20200329T104219_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_NOPM_2_20200329T104447_20200329T105313_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_NOPM_2_20200329T105515_20200329T111818_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_NOPM_2_20200329T115409_20200329T122126_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_NOPM_2_20200329T122350_20200329T122545_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_NOPM_2_20200329T122636_20200329T123125_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_NOPM_2_20200329T123413_20200329T123655_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_NOPM_2_20200329T123758_20200329T130025_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_NOPM_2_20200329T133303_20200329T140036_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_NOPM_2_20200329T140556_20200329T141153_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_NOPM_2_20200329T141322_20200329T144201_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_NOPM_2_20200329T144954_20200329T145151_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_NOPM_2_20200329T150442_20200329T153937_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_NOPM_2_20200329T154503_20200329T155024_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_NOPM_2_20200329T155155_20200329T155554_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_NOPM_2_20200329T155700_20200329T155822_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_NOPM_2_20200329T162811_20200329T163054_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_NOPM_2_20200329T164435_20200329T165306_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_NOPM_2_20200329T165551_20200329T171855_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_NOPM_2_20200329T172354_20200329T172505_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_NOPM_2_20200329T172512_20200329T172918_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_NOPM_2_20200329T173054_20200329T174425_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_NOPM_2_20200329T174613_20200329T175217_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_NOPM_2_20200329T175401_20200329T175847_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_NOPM_2_20200329T182319_20200329T185650_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_NOPM_2_20200329T185900_20200329T190403_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_NOPM_2_20200329T190424_20200329T190731_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_NOPM_2_20200329T191012_20200329T191210_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_NOPM_2_20200329T191504_20200329T194554_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_NOPM_2_20200329T200057_20200329T200143_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_NOPM_2_20200329T200536_20200329T201347_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_NOPM_2_20200329T201607_20200329T201926_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_NOPM_2_20200329T201929_20200329T203612_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_NOPM_2_20200329T203753_20200329T204301_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_NOPM_2_20200329T204339_20200329T204508_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_NOPM_2_20200329T205247_20200329T210240_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_NOPM_2_20200329T210900_20200329T212031_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_NOPM_2_20200329T214719_20200329T215846_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_NOPM_2_20200329T220026_20200329T221515_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_NOPM_2_20200329T221712_20200329T222212_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_NOPM_2_20200329T223050_20200329T223254_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_NOPM_2_20200329T223406_20200329T224539_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_NOPM_2_20200329T224613_20200329T225237_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_NOPM_2_20200329T225521_20200329T230221_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_NOPM_2_20200329T232944_20200329T233002_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_NOPM_2_20200329T233125_20200329T235438_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_NOPM_2_20200329T235750_20200330T000128_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_NOPN_2_20200329T005227_20200329T005233_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_NOPN_2_20200329T100002_20200329T100134_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_NOPN_2_20200329T140344_20200329T140555_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_NOPN_2_20200329T160943_20200329T161048_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_NOPN_2_20200329T225238_20200329T225400_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_NOPR_2_20200329T065455_20200329T065534_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_NOPR_2_20200329T122127_20200329T122229_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_NOPR_2_20200329T131240_20200329T131401_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_NOPR_2_20200329T174425_20200329T174613_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_NOPR_2_20200329T185650_20200329T185708_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

### L2 Quality Flags (20Hz PLRM)

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

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

> OCOG Altimeter Range and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over continental ice.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20200329T001726_20200329T001929_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_NOPN_2_20200329T004555_20200329T004817_C001	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_NOPN_2_20200329T005559_20200329T005713_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_NOPN_2_20200329T023502_20200329T023622_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_NOPN_2_20200329T033548_20200329T033559_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_NOPN_2_20200329T034547_20200329T034644_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_NOPN_2_20200329T041154_20200329T041505_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_NOPN_2_20200329T055053_20200329T055417_C001	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_NOPN_2_20200329T082042_20200329T082203_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_NOPN_2_20200329T082506_20200329T082724_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_NOPN_2_20200329T090048_20200329T090655_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_NOPN_2_20200329T090910_20200329T090951_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_NOPN_2_20200329T102221_20200329T102659_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_NOPN_2_20200329T104256_20200329T104446_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_NOPN_2_20200329T105314_20200329T105502_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_NOPN_2_20200329T111952_20200329T112335_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_NOPN_2_20200329T113915_20200329T114408_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_NOPN_2_20200329T123126_20200329T123339_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.

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Bit Will Ball Will AVAILUTE TO ALL ALL CONTROL OF USE OF USE         COOR Selected Caller         Immunol Term Control Caller         Immunol Term Control Caller           66 OFFE, Bit ALOTH 2: 2017/2017 BLACK CONTROL CALLER         COOR Selected Call	CS_OFFL_SIR_NOPN_2_20200329T140157_20200329T140317_C001		
C2. 011. 6 - CAOH: 2. 2023/2011/02/2012/0300. 0201     cf: 6 - Groups and provide and pr	CS_OFFL_SIR_NOPN_2_20200329T141153_20200329T141322_C001	<b>C</b>	
Columna         Columna <t< td=""><td>CS_OFFL_SIR_NOPN_2_20200329T154147_20200329T154503_C001</td><td>and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality</td><td>and the OCOG Altimeter Range and Backscatter Quality Flags have been</td></t<>	CS_OFFL_SIR_NOPN_2_20200329T154147_20200329T154503_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
C2. OFTL B 1 NOTH 2 200000011 00010 0000011 000000000000	CS_OFFL_SIR_NOPN_2_20200329T155024_20200329T155143_C001	<b>C</b>	
DBJ: DBJ: DBJ: DBJ: DBJ: DBJ: DBJ: DBJ:	CS_OFFL_SIR_NOPN_2_20200329T164236_20200329T164347_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CSUPT_SIT_NOT_CARLOUGH_CADAXAGE INST_EACH         DECK Inspector Calify         max monts           CS_CFF_SIF_NOF_L_DADXCG2T26400_2022524119_CON         CCCC0 Minter: Range Calify FLAS         The COCC Responder Subtry FLAS           CS_CFF_SIF_NOF_L_DADXCG2T24400_2022524710419_CON         CCCC0 Minter: Range Calify FLAS         The COCC Responder Subtry FLAS           CS_CFF_SIF_NOFFL_DADXCG2T24400_202252471141001         CCCC0 Minter: Range Calify FLAS         The COCC Responder Calify FLAS           CS_CFF_SIF_NOFFL_DADXCG2T24400_202252471141001         CCCC0 Minter: Range Calify FLAS         The COCC Responder Calify FLAS           CS_CFF_SIF_NOFFL_DADXCG2T24400_202252471141001         CCCC0 Minter: Range Calify FLAS         The COCC Responder Calify FLAS           CS_CFF_SIF_NOFFL_DADXCG2T24400_202252471141001         CCCC0 Minter: Range Calify FLAS         The COCC Responder Calify FLAS           CS_CFF_SIF_NOFFL_DADXCG2T24450_2022524721711_COCI         CCCC0 Minter: Range Calify FLAS         The COCC Responder Calify FLAS           CS_CFF_SIF_NOFFL_DADXCG2T24500_2007         CCCC Minter: Range Calify FLAS         The COCC Responder Calify FLAS           CS_CFF_SIF_NOFFL_DADXCG2T24500_2007         CCCC Minter: Range Calify FLAS         The COCC Responder Calify FLAS           CS_CFF_SIF_NOFFL_DADXCG2T24500_2007         CCCC Responder Calify FLAS         The COCC Responder Calify FLAS           CS_CFF_SIF_NOFFL_DADXCG2T2500_2007         CCCC Responder Calify FLAS         The COCC Responder	CS_OFFL_SIR_NOPN_2_20200329T175217_20200329T175401_C001	<b>C</b>	
CS: DFFL_SR_VDPL_2.0000009712456_2000002F131741_C001         DC00 Readsource Guilly         nov enough           CS: DFFL_SR_VDPL_2.000002971256_2000002F131741_C001         DC00 Advects Range Cuby PLRA, DC00 Advects Range Cuby PLR	CS_OFFL_SIR_NOPN_2_20200329T190731_20200329T190844_C001	<b>-</b>	
Sign DPL Sign RDPL 2 additional PLANE COUNTY       DOOD Backsome During       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       DOOD Backsome During       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       The Open Response During PLANE COUNTY       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       The Open Response During PLANE COUNTY       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       DOOD Backsome During PLANE COUNTY       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       DOOD Backsome During PLANE COUNTY       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       DOOD Backsome During PLANE COUNTY       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       DOOD Response During PLANE COUNTY       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       DOOD Response During PLANE COUNTY       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       DOOD Response During PLANE COUNTY       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       DOOD Response During PLANE COUNTY       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       DOOD Response During PLANE COUNTY       more rearch.         C3_OPT_Sign RDPL_2 additional PLANE COUNTY       DOOD Response During PLANE COUNTY       more rearch.         C3_OPT_Sign RDPL_2 additional	CS_OFFL_SIR_NOPN_2_20200329T204508_20200329T204718_C001	<b>C 1</b>	
C3 OFT, SR NOPN 2 220030711263 2000307121711 C01     methodoxida Cuality FLM, CCCC     CCCC Advances Rung Quality FLM, CCCCC     CCCC Advances Rung Quality FLM, CCCC     CCCC Advances Rung Quality FLM, CCCC     CCCC Advances Rung Quality FLM, CCCC     Minet Caccus Rung Rung Public Rung Quality FLM, CCCC     Minet Rung Quality FLM, CCCC	CS_OFFL_SIR_NOPN_2_20200329T210240_20200329T210346_C001	<b>-</b>	
CS_OFT_SR_NOPL_2_00003012/1565_0200009721111_0001         OCOOR Backeouter Guily         The Ocean Alignet Range SSH_30H           DS_OFT_SR_NOPL_2_000030122155_02000097201011_0001         Design Alignet Range SSH_30H         The Ocean Alignet Range SSH_30H           DS_OFT_SR_NOPL_2_0000301221505_0200009723000_0001         Design Alignet Range SSH_30H         The Ocean Alignet Range SSH_30H           DS_OFT_SR_NOPL_2_00003017201201_0000_000_0000         Design Alignet Range SSH_30H         The Ocean Alignet Range SSH_30H           DS_OFT_SR_NOPL_2_00003021720030_0000_0000_0000         Design Alignet Range SSH_30H         The Ocean Alignet Range SSH_30H           DS_OFT_SR_NOPL_2_00003021720030_0000_0000         DOCOR Alignet Range Collar PLRM,         The OCOR Range and Backscatter Quality Flags have been set for one or more records.           DS_OFT_SR_NOPL_2_000030217202556_00000         DOCOR Alignet Range SSH_30H1         The OCOR Range and Backscatter Quality Flags have been set for one or more records.           DS_OFT_SR_NOPL_2_000030217201582_0001         DOCOR Alignet Range SSH_30H1         The OCOR Range and Backscatter Quality Flags have been set for one or records.           DS_OFT_SR_NOPR_2_00003021701682_0001         DOCOR Alignet Range SSH_30H1         The OCOR Range and Backscatter Quality Flags have been set for one or foceads.           DS_OFT_SR_NOPR_2_00003021701682_0001         OCOR Alignet Range SSH_30H1         The OCOR Range and Backscatter Quality Flags have been set for one or foceads.           DS_OFT_SR_NOPR_2_00003021701682_000	CS_OFFL_SIR_NOPN_2_20200329T212450_20200329T212741_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
C3_OFFL_SR_NOPR_2_20200297291525_20200391729171:0001 and backaceter Quality PLRN_COCO and backaceter Quality PLRN_COCO PLSR_NOPR_2_20200297291535_20200391729155. C001 CALL AND	CS_OFFL_SIR_NOPN_2_20200329T212856_20200329T213111_C001	C ·	
CS_OFFL_SR_NOPN_2_20200239T28068_20200239T28068_C001       and Backscatter Quality PLRN, DCG       File, More To ce models, and Backscatter Quality Files have been and for one or more models.         CS_OFFL_SR_NOPN_2_20200239T28068_20200239T28068_C001       OCCO Attimuter Range Quality PLRN, DCG       The OCCO Range and Backscatter Quality Files have been and for one or more models.         CS_OFFL_SR_NOPN_2_20200239T282668_20200239T282666_C001       OCCO Attimuter Range Quality PLRN, DCG       The OCCO Range and Backscatter Quality Files have been set for one or more records.         CS_OFFL_SR_NOPR_2_20200239T282666_20200239T04816_20200       DCCCO Attimuter Range SLA SWH and Backscatter Quality Files have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200230T038162_20001       OCCOA Attimuter Range SUBA SWH and Backscatter Quality Files have been set for one or more records.       The OCCOO Attimuter Range SUBA SWH and Backscatter Quality Files have been set for one or more records.         CS_OFFL_SIR_N	CS_OFFL_SIR_NOPN_2_20200329T221525_20200329T221711_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS. DFFL_SIR_NOPR_2_20200329T034958_20200329T03594_20001 CCCCB Backacater Quality PLRM CCCCB Altimeter Range SSHA, SWH and Backacater Quality Flags have been set for one or more records. The OCCCG Range and Backacater Quality Flags have been set for one or more records. CCCCB Altimeter Range SSHA, SWH and Backacater Quality Flags have been set for one or more records. CCCCB Altimeter Range SSHA, SWH and Backacater Quality Flags have been set for one or more records. CCCG Altimeter Range SSHA, SWH and Backacater Quality PLRM CCCG Altimeter Range SSHA, SWH and Backacater Quality Flags and the OCCG Altimeter Range SSHA, SWH and Backacater Quality Flags and the OCCG Altimeter Range SSHA, SWH and Backacater Quality Flags and the OCCG Range and Backacater Quality Flags and the OCCG Rang	CS_OFFL_SIR_NOPN_2_20200329T230535_20200329T230936_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS:         OPPEL SIR_NOPR_2_20200329T014806_20200329T014802_C001         OCCIG Backscatter Quality         more records.           C6_0FFL_SIR_NOPR_2_20200329T014816_20200329T014802_C001         Cesan Altimeter Range, SSHA, SWH and Backscatter Quality         The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality         The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality         The Ocean Altimeter Range and Backscatter Quality         The Ocean Altimeter Range and Backscatter Quality           C6_0FFL_SIR_NOPR_2_20200329T031638_0200329T031638_C001         Occon Altimeter Range Quality PLRM, Occon Altimeter Range Quality PLRM, CCG Gackscatter Quality         The Ocean Altimeter Range and Backscatter Quality         The Ocean Altimeter Range and Backscatter Quality           C5_0FFL_SIR_NOPR_2_20200329T032734_20200329T032944_C001         OCCIG Altimeter Range Quality PLRM, CCGG Backscatter Quality         The OCEAR Altimeter Range and Backscatter Quality         The OCEAR Altimeter Range and Backscatter Quality           C5_0FFL_SIR_NOPR_2_20200329T032974_20201         OCCIG Altimeter Range Quality PLRM, CCGG Backscatter Quality         The OCEGR Range and Backscatter Quality Flags have been set for one or more records.           C5_0FFL_SIR_NOPR_2_20200329T041605_20200329T043042_C001	CS_OFFL_SIR_NOPN_2_20200329T232434_20200329T232516_C001	<b>c</b>	
CS_OFFL_SIR_NOPR_2_20200329T014616_20200329T01462_0001       and Backscatter Quality PLEM_OCG       Intel Oscan Alimeter Range and Backscatter Quality PLEM_OCG         CS_OFFL_SIR_NOPR_2_20200329T01626_20200329T031832_0001       Alimeter Range, SSHA, SWH and Backscatter Quality FLEM_OCG         CS_OFFL_SIR_NOPR_2_20200329T031626_20200329T031832_0001       OCGG Alimeter Range, SSHA, SWH and Backscatter Quality FLEM_OCG         CS_OFFL_SIR_NOPR_2_20200329T032734_20200329T032944_C001       OCGG Alimeter Range Quality PLEM, OCGG         CS_OFFL_SIR_NOPR_2_20200329T032734_20200329T032944_C001       OCGG Alimeter Range Quality PLEM, OCGG         CS_OFFL_SIR_NOPR_2_20200329T032940_C001       OCGG Alimeter Range Quality PLEM, OCGG         CS_OFFL_SIR_NOPR_2_20200329T0329T032944_C001       OCGG Alimeter Range Quality PLEM, OCGG         CS_OFFL_SIR_NOPR_2_20200329T041055_20200329T041559_C001       OCGG Alimeter Range Quality PLEM, OCGG         Alimeter Range and Backscatter Quality FLEM, OCGG       The OCGGA Rimeter Range and Backscatter Quality FLEM, OCGG         CS_OFFL_SIR_NOPR_2_20200329T041565_0200329T054442_C001       OCGGA Alimeter Range, SSHA, SWH       The OCGGA Rimeter Range and Backscatter Quality FLEM, OCGG         CS_OFFL_SIR_NOPR_2_20200329T054345_20200329T054442_C001       OCGGA Alimeter Range, SSHA, SWH       The OCGGA Rimeter Range ASHA, SWH and Backscatter Quality FLEM, OCGG         CS_OFFL_SIR_NOPR_2_20200329T054345_20200329T054442_C001       Mater Range and Backscatter Quality FLEM, OCGG       The OCGGA Rimeter Range ASHA, SWH and Backscatter Qualit	CS_OFFL_SIR_NOPN_2_20200329T232558_20200329T232944_C001	<b>C 1</b>	
CS_OFFL_SIR_NOPR_2_20200329T031626_20200329T031626_20200329T031626_20200329T031626_20200329T031626_20200329T031626_20200329T031626_20200329T031626_20200329T032944_C001       OCOG Alimeter Range and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Backscatter Quality PLRM,	CS_OFFL_SIR_NOPR_2_20200329T014616_20200329T014902_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20200329T033605_20200329T033742_C001       OCOG Backscatter Quality PLRM.       The OCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T041505_20200329T041659_C001       Cean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.       The OCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T041505_20200329T041659_C001       Cean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T054345_20200329T054442_C001       Cean Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T055417_20200329T054442_C001       Cean Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T055417_20200329T055409_C001       Cean Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T063019_C001       OCOG Attimeter Range Quality PLRM.       The OCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T063022_20200329T063019_C001       OCOG Attimeter Range Quality PLRM.       The OCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T063022_20200329T063019_C001       OCOG Attimeter Range Quality PLRM.       The OCOG Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPR_2_20200329T031626_20200329T031832_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20200329T041505_20200329T041659_C001       OCGG Backscatter Quality       more records.         CS_OFFL_SIR_NOPR_2_20200329T041505_20200329T041659_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T054345_20200329T054442_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T065617_20200329T063019_C001       OccaG Altimeter Range Quality PLRM, OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T063022_20200329T063019_C001       OCCG Altimeter Range Quality PLRM, OCCG Altimeter Range Quality PLRM, OCCG Gackscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T063022_000329T063022_C001       OCCG Altimeter Range Quality PLRM, OCCG Altimeter Range Quality PLRM, OCCG Gackscatter Quality Flags have been set for one or more records.         CS	CS_OFFL_SIR_NOPR_2_20200329T032734_20200329T032944_C001	<b>C 1</b>	
CS_OFFL_SIR_NOPR_2_20200329T041505_20200329T041659_C001       and Backsoatter Quality PLRM, OCOG Altimeter Range and Backsoatter Quality PLRM       Ine OCean Altimeter Range, SSHA, SWH and Backsoatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T054345_20200329T054442_C001       Ocean Altimeter Range, SSHA, SWH and Backsoatter Quality PLRM, OCOG Altimeter Range and Backsoatter Quality Flags Altimeter Range and Backsoatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backsoatter Quality Flags and the OCOG Altimeter Range and Backsoatter Quality Flags hand Backsoatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T065417_20200329T06509_C001       Ocean Altimeter Range and Backsoatter Quality Flags and Backsoatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T062936_20200329T063019_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM,       The OCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T063022_20200329T063022_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM,       The OCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T060736_20200329T060932_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM,       The OCOG Range a	CS_OFFL_SIR_NOPR_2_20200329T033605_20200329T033742_C001	<b>C 1</b>	
CS_OFFL_SIR_NOPR_2_20200329T054345_20200329T054442_C001       and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality PLRM       Inte OCOG Attimeter Range and Backscatter Quality PLRM         CS_OFFL_SIR_NOPR_2_20200329T055417_20200329T055609_C001       Cean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM         CS_OFFL_SIR_NOPR_2_20200329T055417_20200329T055609_C001       Cean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM         CS_OFFL_SIR_NOPR_2_20200329T062936_20200329T063019_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_NOPR_2_20200329T063022_20200329T063022_20200329T063024_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_NOPR_2_20200329T063022_20200329T063022_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_NOPR_2_20200329T080736_20200329T080932_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_NOPR_2_20200329T080736_20200329T080932_C001       OCOG Altimeter Range Quality PLRM, OCOG Bac	CS_OFFL_SIR_NOPR_2_20200329T041505_20200329T041659_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20200329T055417_20200329T055609_C001       and Backscatter Quality PLRM, OCOG Atimeter Range and Backscatter Quality PLRM       The OCean Attimeter Range, SSFA, SWH and Backscatter Quality Flags ast for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T062936_20200329T063019_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_NOPR_2_20200329T063022_20200329T063024_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_NOPR_2_20200329T063022_20200329T063022_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_NOPR_2_20200329T080736_20200329T080932_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T080736_20200329T080932_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPR_2_20200329T054345_20200329T054442_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_202003291062936_202003291063019_C001       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_NOPR_2_20200329T063022_20200329T063224_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_NOPR_2_20200329T063022_20200329T063022_C001       OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T080736_20200329T080932_C001       OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20200329T084302_20200329T084516_C001       OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPR_2_20200329T055417_20200329T055609_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_202003291063022_202003291063224_C001       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_NOPR_2_20200329T080736_20200329T080932_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_NOPR_2_20200329T080736_20200329T080932_C001       OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records.       The OCOG Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPR_2_20200329T062936_20200329T063019_C001	<b>C I</b>	
CS_OFFL_SIR_NOPR_2_20200329T080736_20200329T080932_C001 OCOG Backscatter Quality more records.  CS_OFFL_SIR_NOPR_2_20200329T084302_20200329T084516_C001 OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or	CS_OFFL_SIR_NOPR_2_20200329T063022_20200329T063224_C001	<b>C</b>	
	CS_OFFL_SIR_NOPR_2_20200329T080736_20200329T080932_C001	<b>C I</b>	
	CS_OFFL_SIR_NOPR_2_20200329T084302_20200329T084516_C001		

CS_OFFL_SIR_NOPR_2_20200329T093050_20200329T093229_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_NOPR_2_20200329T095422_20200329T095505_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_NOPR_2_20200329T100219_20200329T100410_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_NOPR_2_20200329T100619_20200329T100727_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_NOPR_2_20200329T100918_20200329T101037_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_NOPR_2_20200329T114434_20200329T114709_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_NOPR_2_20200329T131001_20200329T131124_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_NOPR_2_20200329T131428_20200329T131937_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_NOPR_2_20200329T140037_20200329T140156_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_NOPR_2_20200329T144224_20200329T144425_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_NOPR_2_20200329T145327_20200329T150131_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_NOPR_2_20200329T153937_20200329T154146_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_NOPR_2_20200329T163208_20200329T164044_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_NOPR_2_20200329T181258_20200329T182043_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_NOPR_2_20200329T182210_20200329T182319_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_NOPR_2_20200329T191210_20200329T191504_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_NOPR_2_20200329T195157_20200329T195740_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_NOPR_2_20200329T200144_20200329T200154_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_NOPR_2_20200329T204718_20200329T205247_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_NOPR_2_20200329T210646_20200329T210900_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_NOPR_2_20200329T212341_20200329T212450_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
	Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags

CS_OFFL_SIR_NOPR_2_20200329T212741_20200329T212856_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_NOPR_2_20200329T213344_20200329T213756_C001	Altimeter Rande and Backscatter ()liality	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_NOPR_2_20200329T230222_20200329T230513_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.

### 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:

# 5.7 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 falling at ocean/ land boundaries, but this is expected.

Number of products with errors: 56

#### 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 NOPR and NOPN products over sea ice, but this is to be expected.

Number of products with errors: