

# **QA4EO Daily Report for NOP data:**

<u>27/12/2022</u>

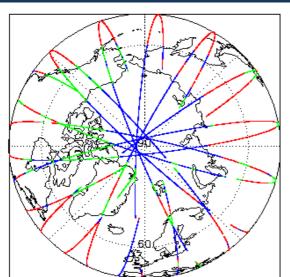
# IDEAS-QA4E0

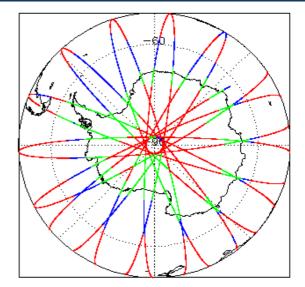
Demost Dreduction.	00 100 0000	Check	L1 & L2
Report Production:	03-Jan-2023	Server check: science-pds.cryosat.esa.int	Nominal
Dreeseer Lload	CriveSet Oppen Brossport	Server check: calval-pds.cryosat.esa.int	Nominal
Processor Used: CryoSat Ocean Processor		Product Software Check	Nominal
Data Used:	Near Real Time Ocean Products (NOP)	Product Format Check	Nominal
Data Used:	L1B & L2 Science Data	Product Header Analysis	Nominal
		Auxiliary Data File Usage Check	Nominal
We would	love to hear from you!	Auxiliary Correction Error Check	See Section 5.4
Please let us know your feedback about these daily quality reports: What do you like/ dislike? What quality information do you need? Send your feedback to cs2_qc_team@telespazio.com		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
		QCC Error/ Warning Check	See Section 7.1 and 7.2

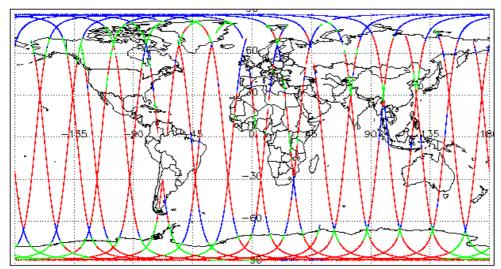
1. Overview

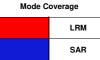
28-Dec-2022 Nothing planned

# 2. Global Coverage









SARIn

## 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 NetCDF product file (.nc). Number of products with errors: 0

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 11b_proc_flag_hr flag is currently set all L1B NOPR and NOPN products because the 11b_processing_quality_hr field is not correctly configured in the OSA OSARIn chains. A modification is required in the next release. Number of products with errors: 0 4.3 L1B Auxiliary Data File Usage Check Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct. > 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: 0 4.4 L1B Auxiliary Correction Error Check CryoSat L1B data includes a correction error flag for each measurement record. The bit value of this flag indicates any problems when set.	AR 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:       0         4.4 L1B Auxiliary Correction Error Check	AR and			
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:       0         4.4 L1B Auxiliary Correction Error Check				
<ul> <li>4.3 L1B Auxiliary Data File Usage Check</li> <li>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.</li> <li>&gt; 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.</li> <li>Number of products with errors:</li> <li>0</li> <li>4.4 L1B Auxiliary Correction Error Check</li> </ul>				
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:  0  4.4 L1B Auxiliary Correction Error Check	_			
<ul> <li>&gt; 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.</li> <li>Number of products with errors:</li> <li>0</li> </ul> 4.4 L1B Auxiliary Correction Error Check				
Number of products with errors:     0       4.4 L1B Auxiliary Correction Error Check				
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				
4514D Maaauwamant Canfidanaa Data Obaak				
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. The attitude correction is not actually missing. This is being investigated and updated in the next SW update.	will be			
Number of products with errors: 1				
Product Test Failed Description				
CS_OFFL_SIR_NOPM1B_20221227T090247_20221227T090340_C001 Power scaling error There is an error in the scaling of the L1B waveform for one or more scaling error to the scaling of the L1B waveform for one or more scaling error to the scaling of the L1B waveform for one or more scaling error to the scaling of the L1B waveform for one or more scaling error to the scali	ore			
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 occasional products over land, but this is to be expected.				
Number of products with errors: 22				
Product         Test Failed         Description           CS_OFFL_SIR_NOPM1B_20221227T015434_20221227T022721_C001         Loss of Echo         The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPM1B_20221227T153019_20221227T153529_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPM1B_20221227T235226_20221227T235529_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T001057_20221227T001207_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T050555_20221227T051119_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T073825_20221227T074044_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T081742_20221227T081834_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T091509_20221227T091733_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T104847_20221227T104903_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T105004_20221227T105035_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T123712_20221227T124201_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T135545_20221227T135745_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T202838_20221227T203001_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T204152_20221227T204605_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPN1B_20221227T235529_20221228T000122_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPR1B_20221227T063442_20221227T064031_C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_NOPR1B_20221227T104624_20221227T104847_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPRIB_20221227T104003_20221227T105003_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPR1B_20221227T113452_20221227T113729_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPR1B_20221227T153529_20221227T153610_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPR1B_20221227T154846_20221227T155626_C001 Loss of Echo The tracking echo is missing for one or more records				
CS_OFFL_SIR_NOPR1B_20221227T190720_20221227T191433_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 NetCDF product file (.nc).				
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.				

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

Number of products with errors:

#### 5.4 L2 Auxiliary Correction Error Check

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

0

Currently, there are some common auxiliary correction errors raised in the Level 2 products which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.

> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update.

> 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:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20221227T203358_20221227T203643_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_20221227T032017_20221227T032142_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_20221227T032652_20221227T032958_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20221227T050056_20221227T050347_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_20221227T050555_20221227T051119_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_20221227T055649_20221227T055906_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_20221227T064031_20221227T064307_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_NOPN_2_20221227T073548_20221227T073659_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_20221227T073825_20221227T074044_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_20221227T081837_20221227T082123_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_20221227T091509_20221227T091733_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_20221227T091744_20221227T091932_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_20221227T095754_20221227T095944_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_20221227T100804_20221227T101021_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_20221227T105503_20221227T105932_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_20221227T123712_20221227T124201_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20221227T131728_20221227T132107_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_20221227T140742_20221227T140828_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_20221227T145654_20221227T150012_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_20221227T150524_20221227T150649_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_20221227T154742_20221227T154846_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_20221227T164430_20221227T164538_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_20221227T172651_20221227T172805_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_NOPN_2_20221227T200004_20221227T200616_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_20221227T204152_20221227T204605_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_20221227T213044_20221227T213308_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_20221227T213936_20221227T214249_C001		There is an error with the Mean Dynamic Topography height for one or more records

CS_OFFL_SIR_NOPN_2_20221227T222040_20221227T222428_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_20221227T232027_20221227T232144_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_20221227T235529_20221228T000122_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_NOPR_2_20221227T005158_20221227T005840_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_20221227T010954_20221227T011052_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_20221227T054927_20221227T055023_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_20221227T084728_20221227T085133_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_20221227T090857_20221227T091509_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_20221227T105035_20221227T105503_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_20221227T122751_20221227T123712_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_20221227T140828_20221227T141616_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_20221227T154846_20221227T155626_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_20221227T172805_20221227T173529_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_20221227T190720_20221227T191433_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_20221227T193406_20221227T193555_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_20221227T204606_20221227T205300_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_20221227T222429_20221227T223303_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

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### 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.

Product         Test Failed         Description           CS_OFFL_SIR_NOPM_2_20221227T090247_20221227T090340_C001         Power scaling error         There is an error in the scaling of the L2 waveform for one or more record	Number of products with errors: 1		
CS_OFFL_SIR_NOPM_2_20221227T090247_20221227T090340_C001 Power scaling error There is an error in the scaling of the L2 waveform for one or more record	Product	Test Failed	Description
	CS_OFFL_SIR_NOPM_2_20221227T090247_20221227T090340_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 (20 Hz)

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.

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Number of	products with	errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20221227T000217_20221227T000723_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_20221227T000730_20221227T001057_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_20221227T001517_20221227T004820_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_20221227T011103_20221227T012015_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_20221227T012309_20221227T012937_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_20221227T013407_20221227T013819_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_20221227T014217_20221227T014756_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_20221227T015434_20221227T022721_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_20221227T024051_20221227T024150_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_20221227T030028_20221227T031654_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_20221227T032142_20221227T032652_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_20221227T033314_20221227T040715_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_20221227T043127_20221227T043559_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_20221227T043644_20221227T045419_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_20221227T051304_20221227T054530_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_20221227T054758_20221227T054800_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_20221227T054841_20221227T054844_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_20221227T060152_20221227T062014_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_20221227T062111_20221227T063442_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_20221227T064625_20221227T065007_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_20221227T065207_20221227T070726_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_20221227T070928_20221227T071850_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_20221227T074440_20221227T075812_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_20221227T081417_20221227T081535_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_20221227T082123_20221227T082909_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_20221227T083150_20221227T084631_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_20221227T090247_20221227T090340_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_20221227T092431_20221227T095640_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_20221227T095944_20221227T100158_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_20221227T100210_20221227T100803_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_20221227T101130_20221227T103620_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_20221227T110818_20221227T113452_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_20221227T114156_20221227T114616_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_20221227T115010_20221227T121600_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_20221227T122604_20221227T122751_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_20221227T124201_20221227T131359_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_20221227T132107_20221227T132646_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_20221227T132949_20221227T133428_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_20221227T134709_20221227T135204_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_20221227T140544_20221227T140728_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_20221227T142025_20221227T145346_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_20221227T150012_20221227T150524_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_20221227T151000_20221227T152707_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_20221227T153847_20221227T153857_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_20221227T154502_20221227T154505_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_20221227T155839_20221227T163230_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_20221227T164019_20221227T164430_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_20221227T164912_20221227T171502_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_20221227T171526_20221227T172252_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_20221227T172501_20221227T172651_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_20221227T173832_20221227T174949_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_20221227T175430_20221227T175600_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_20221227T175603_20221227T180643_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_20221227T180818_20221227T181150_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_20221227T181353_20221227T181912_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_20221227T181931_20221227T182135_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_20221227T183021_20221227T184247_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

	Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_NOPM_2_20221227T184456_20221227T190222_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	and the OCOG 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_20221227T192421_20221227T193353_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_20221227T193555_20221227T195044_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_20221227T195319_20221227T195814_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_20221227T195831_20221227T195842_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_20221227T195848_20221227T200004_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_20221227T203001_20221227T203228_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_20221227T210229_20221227T210240_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_20221227T211346_20221227T212957_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_20221227T213308_20221227T213741_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_20221227T213803_20221227T213935_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_20221227T214415_20221227T220853_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_20221227T224349_20221227T230920_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_20221227T231138_20221227T231644_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_20221227T231703_20221227T232027_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_20221227T232359_20221227T235100_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_20221227T235226_20221227T235529_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_NOPN_2_20221227T005937_20221227T010002_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_NOPN_2_20221227T014756_20221227T014852_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_20221227T023026_20221227T023039_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_NOPN_2_20221227T043559_20221227T043644_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_20221227T104427_20221227T104455_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_20221227T105004_20221227T105035_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_NOPN_2_20221227T114025_20221227T114155_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_20221227T204054_20221227T204058_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_NOPN_2_20221227T213044_20221227T213308_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
	1	1

CS_OFFL_SIR_NOPR_2_20221227T005030_20221227T005035_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_NOPR_2_20221227T122446_20221227T122603_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_NOPR_2_20221227T173720_20221227T173728_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_NOPR_2_20221227T173751_20221227T173832_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_20221227T193353_20221227T193404_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_NOPR_2_20221227T193406_20221227T193555_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_NOPR_2_20221227T195044_20221227T195134_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

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### L2 Quality Flags (20 Hz 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.

1

> 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.

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#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20221227T000044_20221227T000217_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_20221227T004820_20221227T005004_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_20221227T005937_20221227T010002_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_20221227T012124_20221227T012309_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_20221227T014101_20221227T014217_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_20221227T022922_20221227T022959_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_20221227T025953_20221227T030028_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_20221227T032017_20221227T032142_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_20221227T032652_20221227T032958_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_20221227T043559_20221227T043644_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_20221227T050056_20221227T050347_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_20221227T050555_20221227T051119_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_20221227T055649_20221227T055906_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_20221227T064031_20221227T064307_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_20221227T071850_20221227T072202_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_20221227T073548_20221227T073659_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_20221227T081535_20221227T081726_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_20221227T091509_20221227T091733_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_20221227T095754_20221227T095944_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_20221227T100158_20221227T100210_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_20221227T105503_20221227T105932_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_20221227T110505_20221227T110734_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_20221227T114025_20221227T114155_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_20221227T114617_20221227T114907_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_20221227T123712_20221227T124201_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_20221227T132646_20221227T132800_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_20221227T141616_20221227T141749_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_20221227T141830_20221227T142025_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_20221227T145654_20221227T150012_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_20221227T150524_20221227T150649_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_20221227T152707_20221227T153019_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_20221227T164430_20221227T164538_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_20221227T172329_20221227T172500_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_20221227T182135_20221227T182322_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_20221227T192027_20221227T192421_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_20221227T200004_20221227T200616_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_20221227T203713_20221227T203836_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_20221227T204152_20221227T204605_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_20221227T213936_20221227T214249_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_20221227T222040_20221227T222428_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_20221227T223443_20221227T223555_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_20221227T001229_20221227T001517_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_20221227T005016_20221227T005028_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_20221227T005158_20221227T005840_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_20221227T010003_20221227T010256_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_20221227T010302_20221227T010435_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_20221227T010954_20221227T011052_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_20221227T024258_20221227T024646_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_20221227T025048_20221227T025227_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_20221227T040715_20221227T040747_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_20221227T045420_20221227T050056_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_20221227T062015_20221227T062111_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_20221227T063442_20221227T064031_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_20221227T084631_20221227T084725_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_20221227T084728_20221227T085133_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_20221227T085133_20221227T085327_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_20221227T090857_20221227T091509_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_20221227T092051_20221227T092307_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_20221227T104624_20221227T104847_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_20221227T113452_20221227T113729_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_20221227T122751_20221227T123712_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_20221227T133429_20221227T133838_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_20221227T140116_20221227T140446_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_20221227T140828_20221227T141616_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_20221227T145346_20221227T145654_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_20221227T154846_20221227T155626_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_20221227T155628_20221227T155838_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_20221227T164538_20221227T164912_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_20221227T172805_20221227T173529_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_20221227T173707_20221227T173714_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_20221227T173717_20221227T173718_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_20221227T173732_20221227T173749_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_20221227T182322_20221227T182646_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_20221227T190720_20221227T191433_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_20221227T203228_20221227T203358_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_20221227T204606_20221227T205300_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_20221227T222429_20221227T223303_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_20221227T232144_20221227T232359_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 & 1 Hz PLRM)

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

182

54

147

> 1 Hz and 1 Hz 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 (20 Hz)

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.

6

Number of products with errors:

#### L2 Retracking Flags (20 Hz 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:

## 7. NOP QCC Report Analysis

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

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_NOPM1B	187	187	4	183	0
SIR_NOPR1B	119	119	0	119	0
SIR_NOPN1B	107	107	0	107	0
SIR_NOPM_2	187	187	139	48	0
SIR_NOPR_2	119	119	38	80	1
SIR_NOPN_2	107	107	42	65	0

#### 7.1 QCC Errors

### Number of QCC reports with errors:

Total number of occurrences of each error											
Product Type RLOE	BOPNCDF	RL	RL	RLOBOPNCDF	RL	RL	-	-	-	-	-
SIR_NOPR_2	1	1	1	1	1	1					
Test Description Key:											
Abbreviation	Test na	me		Details							
RLOBOPNCDF	RangeLa	titudeOrBlankOP_	7NetCDF	Latitude should be between -90E7 and 90E7 - NetCDF							
RL	RangeLa	titude_6		Latitude should be between -90E6 and 90E6							
RL	RangeLa	titude_7		Latitude should be between -90E7 and 90E7							

#### 7.2 QCC Warnings

Number of QCC report	rts with warnings	1745					
			Total n	umber of occurrences	of each warning		
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC
SIR_NOPM1B	183	0	0	0	0	0	0
SIR_NOPM_2	0	0	33	31	0	41	0
SIR_NOPN1B	106	0	0	0	0	0	0
SIR_NOPN_2	0	0	8	38	6	25	28
SIR_NOPR1B	116	0	0	0	0	0	0
SIR_NOPR_2	0	1	30	45	0	19	19

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNC	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	37	0	27	0	0	0	0
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	19	0	0	0	26	0	35
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	6	5	0	49	0	58	0
	÷						
Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	23	0	0	5	24	0	6
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	0	32	17	40	56	29
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	0	45	0	2	66	32	8
Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
SIR_NOPM1B	0	0	0	1	0	0	0
SIR_NOPM_2	34	0	2	1	0	0	0
SIR_NOPN1B	0	0	0	0	0	49	0
SIR_NOPN_2	30	28	14	1	2	0	0
SIR_NOPR1B	0	0	0	0	0	119	4
SIR NOPR 2	34	47	1	0	2	0	0

Abbreview         Feature         Detail           DCSINDEP         Instructions/DMINDEP         The tracket induction on light with ingest the type induction to turburd           DCMINDEP         Instructions/DMINDEP         The stage induction on light with ingest the type induction to turburd           MINDEPFINDEPF         Minder Statute inductions/DMINDEPINETED/ENGEDF         The value should not be a 'intesing value' for surface type 0 only for talludes between 70 and 70 degrees           MINDEPFINDEPF         Minder Value inductions/DMINDEPENDEPFINDEP         The value should not be a 'intesing value' for surface type 0 only for talludes between 70 and 7500 (or minising) for surface type - ocean for lightlines           RESCOPDEPFINDEP         Insplandouctiant/SignadZarOPORDeenE-toxing/PublicPORDEPENDEPENDE         The value should not be a 'intesing value' for surface type - ocean for lightlines           RESCOPDEPFINDEP         Insplandouctiant/SignadZarOPORDeenE-toxing/PublicPORDEPENDEPENDE         The backstatt signadZarOPORDEENDEPENDEPENDEPENDEPENDEPENDEPENDEPEN	Test Description Key:							
OHHMOCR         Indexpired XMR2         The mapping of 20 Ht to 1Hz masurements should be the man and to fourther of 1 Hz samples - 1           MMODEPFDNDDF         Missing Value/InCeanExcludingPolarPD2HeCDF         The value should not be a missing value' for surface type only for latitudes between -70 and 70 degrees           MMODEPFDNDDF         Missing Value/InCeanExcludingPolarPD2HeCDF         The value should not be a missing value' for surface type only for latitudes between -70 and 70 degrees           MMONCDF         Missing Value/InCeanExcludingPolarPD2HAMECDF         The backacatter signa zone should be between 700 and 7500 (or missing) for surface type ocean for latitudes           RBSZOPDEFPDNDF         Rangeblackatter/Signa ZoneOPCeanExcludingPolarPD2HAMECDF         The backacatter signa zone should be between 700 and 7500 (or missing) for surface type ocean for latitudes           RBSZOPDEFPDNDF         Rangeblackatter/Signa ZoneOPCeanExcludingPolar/PD2HAMECDF         The backacatter signa zone should be between 700 and 7500 (or missing) for surface type ocean for latitudes           RBEEPOFEDLRNNDF         Rangeblackatter/Signa ZoneOPCeanExcludingPolar/PD2HAMECDF         The backacatter signa zone should be between 700 and 7500 (or missing) for surface type - ocean for latitudes           RBEEPOFEDLRNNDF         RangePasitinessExcludingPolar/PD2HAMENDF         The backacatter signa zone should be between 700 and 7500 (or missing) for surface type - ocean for latitudes between 700 and 70 degrees           RBEEPOFENDEM         RangePasitinessExcludingPolar/PD2HAMENDFF         The bachastes should be between 700	Abbreviation	Test name	Details					
MICREPDROEDF         Mesing value into centric ultiding Point-PE2NetCDF         The value should not be a missing value for surface type 0 only for tatilides between 70 and 70 degrees           MICREPNOEDF         Mesing value into centric ultiding Point-PE2NetCDF         The value should not be a missing value for surface type 0 only for tatilides between 70 and 70 degrees           MICREPNEDF         RangeBeakcaster/Sigm2/encoPCeanExcludingPoint-PE2NetCDF         The value should not be a missing value for surface type 0 only           RBS2/DOEEPEPNEDF         RangeBeakcaster/Sigm2/encoPCeanExcludingPoint-PE2NEtMetCDF         The backaster sigma zero should be between 70 and 70 degrees           RBS2/DOEEPENCDF         RangeBeakcaster/Sigm2/encoPCeanExcludingPoint-PE2NEtMetCDF         The backaster sigma zero should be between 70 and 70 degrees           RBECOPCDENNCDF         RangePeakinessExcludingPoint-OPT02FRMetCDF         The backaster sigma zero should be between 70 and 70 degrees           RBECOPFDENNNCDF         RangePeakinessExcludingPoint-OPT02FRMetCDF         The backaster sigma zero should be between 70 and 70 degrees           RBECOPFDENNNCDF         RangePeakinessExcludingPoint-OPT02FRMetCDF         The Pakings Should be between 70 and 70 degrees           RBECOPFDENNNCDF         RangePeakinessExcludingPoint-OPT02FRMetCDF         The Pakings Should be between 70 and 70 degrees           RBEFOPFDENNNCDF         RangePeakinessExcludingPoint-OPT02FRMetCDF         The Pakings Should be between 70 and 70 degrees           RBEFOPFDSINNCDF	BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter					
MOVEPNOCE         Masing Value IntOceanExcludingPolar/NECDF         The value should not be a missing value" for surface type 0 only           MVIORDFN         Resign Value IntOceanExcludingPolar/NECDF         The value should not be a missing value" for surface type 0 only           RBSZOPDEFFDNDFR         RegistratestatistigmaZenoOPCeanExcludingPolar/PD2PLRMNetCDF         The backscatter sigmaZenoOPCeanExcludingPolar/PD2PLRMNetCDF           RBSZOPDEFFNCFR         RegistratestatistigmaZenoOPCeanExcludingPolar/PD2PLRMNetCDF         The backscatter sigmaZenoOPCeanExcludingPolar/PD2PLRMNetCDF           RBSZOPDEFFNCFR         RegistratestatistigmaZenoOPCeanExcludingPolar/PD2PLRMNetCDF         The backscatter sigmaZenoOPCeanExcludingPolar/PD2PLRMNetCDF           RBSZOPDEFFNCFN         Registratestatisticaning garazenooPCeanExcludingPolar/PD2PLRMNetCDF         The backscatter sigmaZenooPCeanExcludingPolar/PD2PLRMNetCDF           RBPEOPFDENRINGR         Registratestatisticaning garazenooPCeanExcludingPolar/PD2PLRMNetCDF         The backscatter sigmaZenooPCeanExcludingPolar/PD2PLRMNetCDF           RBPEOPFDENRINGR         Registratestatisticaning garazenooPCeanExcludingPolar/PD2PLRMNetCDF         The backscatter sigmaZenooPCeanExcludingPolar/PD2PLRMNetCDF           RBPEOPFDENRINGR         Registratestatisticaning garazenooPCeanExcludingPolar/PD2PLRMNetCDF         The backscatter sigmaZenooPCeanExcludingPolar/PD2PLRMNetCDF           RBPEOPFDENRINCPF         Registratestatisticantestatisticantestatisticantestatisticantestatisticantestatistatististatistatisticantestatisticantestatisticantestatisticante	IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)					
MVIONCOF         MesingValueIntOceanNetCDF         The value should not be a missing value' for surface type 0 only           RBSZOPOEPFDLCPF         RangeBackseatterSigmaZeroOPOceanExcludingPolarD2PetCDF         The backscatter sigmaZeroOPOceanExcludingPolarD2PetCDF           RBSZOPOEPFDLFM         RangeBackseatterSigmaZeroOPOceanExcludingPolarD2PetCMNEDF         The backscatter sigmaZeroOPOceanExcludingPolarD2PELMNAteCDF           RBSZOPOEPFNCDF         RangeBackscatterSigmaZeroOPOceanExcludingPolarED2PLMNAteCDF         The backscatter sigmaZeroOPOceanExcludingPolarD2PLMNAteCDF           REELPOTENNCDF         RangePackinesExcludingPolarOPFD2F, RMMAtCDF         The Non-aquilibrum ting particid cean Mading tide height should be between.40m and 40m (or missing) for surface type - ocean for latitudes between.70 and 70 degrees           REEPOFPLIRANCDF         RangePeakinesExcludingPolarOPFD2F, RMMAtCDF         The Pacinese should be between 0 and 4500 (or missing) for surface type - ocean for latitudes between.70 and 70 degrees           REEPOFPLIRANCDF         RangePeakinesExcludingPolarOPFD2F, RMSANKCDF         The Pacinese should be between 0 and 15000 (or missing) for surface type - ocean for latitudes between.70 and 70 degrees           REEPOFPLIRANCDF         RangePeakinesExcludingPolarOPFD2P, RMSANKCDF         The Pacinese should be between 0 and 15000 (or missing) for surface type - ocean for latitudes between .70 and 70 degrees           REEPOFPLIRANCDF         RangePeakinesExcludingPolarOPFD2P, RMSANKCDF         The Pacinese should be between 0 and 15000 (or missing) for surface type - ocean for latitudes between .70	MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
RBS2OPCEPEDNCDC RBS2OPCEPEDNCDC RBS2OPCEPEDNCDC RBS2OPCEPEDNCDC RBS2OPCEPEDNCDC RBS2OPCEPEDNCDC RBS2OPCEPENCEPE RBS2OPCEPENCEPE RBS2OPCEPENCEPE RageBackscatterSigmaZerc0PCeanExcludingPolarH02PELRNNetCDF         The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = coean for latitudes between 70 and 70 degrees.           RBS2OPCEPENCEPE RBS2OPCEPENCEPE RBS2OPCEPENCEPE RBS2OPCEPENCEPE RBS2OPCEPENCEPE RageBackscatterSigmaZerc0PCeanExcludingPolarNetCDF         The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = coean for latitudes between 70 and 70 degrees.           RBSEOPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCEPENENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RBS2OPCENNCEPE RB	MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
HISS.COPCEPTION/CIDF         RangeBackscatterSignm22m0CPCeanExcludingPolarPD2PLRMNetCDF         Detween - 70 and 70 dogrees           RBSZOPOEPTROLPR         RangeBackscatterSignm22m0CPCeanExcludingPolarPD2PLRMNetCDF         TeleActscatter signm22m0 shuld be between 700 and 7500 (or missing) for surface type = ocean for latitudes between - 700 and 700 dogrees           RBSZOPOEPTROLPR         RangeBackscatterSignm22m0CPCeanExcludingPolarNetCDF         TeleActscatter signm22m0 shuld be between 700 and 7500 (or missing) for surface type = ocean for latitudes between - 700 and 7500 (or missing) for surface type = ocean for latitudes between - 700 and 70 dogrees           RPEPOFPLRMSRA         RangePeakinessExcludingPolarOFD22RLMNetCDF         The Peakiness shuld be between 0 and 15000 (or missing) for surface type = ocean for latitudes between - 70 and 70 dogrees           RPEPOFPLRMSRA         RangePeakinessExcludingPolarOFD22RLMSINECDF         The Peakiness shuld be between 0 and 15000 (or missing) for surface type = ocean for latitudes between - 70 and 70 dogrees           RPEPOFPLRMSRA         RangePeakinessExcludingPolarOFD22RLMSINECDF         The Peakiness shuld be between 0 and 15000 (or missing) for surface type = ocean for latitudes between - 70 and 70 dogrees           RPEPOFPLRMSRA         RangePeakinessExcludingPolarOFD22RLMSINECDF         The Peakiness shuld be between 0 and 5000 (or missing) for surface type = ocean for latitudes between - 70 and 70 dogrees           RPEPOFPLSNNCDF         RangePeakinessExcludingPolarOFD22RLMNECDF         The Peakiness shuld be between 0 and 50000 (or missing) for surface type = ocean for latitudes between - 70 and 70 dogree	MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only					
NCDF         Hangebackattersignazero/OC/ceanExcludingPolar/DC/LeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CeanExcludingPolar/DC/CEANExCDF         TelePolariansExcludingPolar/DE/CEANExCDF         TelePolariansExcludingPolar/DE/CEANExCDF         TelePolariansExcludingPolar/DE/XEXEXCDF         TelePolarisses shuidid be between 0 and 50000 (or missing) for surface ty	RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF						
HistSCPCETNCDF         RangeBackscattersplanzar0CPCeanTideOceanNatCDF         between 7.0 and 7.0 degrees           RNELPOTONCDF         RangeNELPOCeanTideOceanNatCDF         The Non-equilibrium long period ocean locating lide height should be between 4.0mm and 40mm (or missing) for surface type - ocean           RPEPOPFDLRMNCDF         RangeNeaLPOCeanTideOceanNatCDF         The Persioness should be between 0 and 5400 (or missing) for surface type - ocean for latitudes between 7.0           RPEPOPFDLRMSINA         RangeNeaknessExoludingPolarOPFD2PLEMSARNetCDF         The Persioness should be between 0 and 5000 (or missing) for surface type - ocean for latitudes between 7.0           RPEPOPFDLRMSINA         RangeNeaknessExoludingPolarOPFD2PLEMSINNetCDF         The Persioness should be between 0 and 5000 (or missing) for surface type - ocean for latitudes between 7.0           RPEPOPFDSINNCDF         RangeNeaknessExoludingPolarOPFD2PLMSINNetCDF         The Persioness should be between 0 and 5000 (or missing) for surface type - ocean for latitudes between 7.0           RPEPOPFDSINNCDF         RangeNeaknessExoludingPolarOPFD2PLMSINNetCDF         The Persioness should be between 0 and 5000 (or missing) for surface type - ocean for latitudes between 7.0           RPEPOPFDSINNCDF         RangeNeaknessExoludingPolarOPFD2PLRNNetCDF         The Persioness should be between 0 and 5000 (or missing) for surface type - ocean for latitudes between 7.0           RPEPOPSINNCDF         RangeNeaknessExoludingPolarOPFD2NARNetCDF         The Sea surface height anomaly should be between 3000mm and 3000mm (or missing) for surface type - ocean for l		RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF						
IntelEPCONCOP         IndigRetPCoestimation         surface type = ocean           RPEPOPFDLRMNCDF         RagePaskinessExcludingPolar/OFFD2LRMNACDF         The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between 70 and 70 degrees           RPEPOPFDLRMSRAR RDEPOPFDLRMSRAR RDEPOPFDLRMSRAR RDEPOPFDLRMSRAR         RagePaskinessExcludingPolar/OFFD2LRMSINACDF         The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between 70 and 70 degrees           RPEPOPFDLRMSINN RDEPOPFDLRMSRAR         RagePaskinessExcludingPolar/OFFD2SARNetCDF         The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between 70 and 70 degrees           RPEPOPFDLRMSRAR         RagePaskinessExcludingPolar/OFFD2SARNetCDF         The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between 70 and 70 degrees           RPEPOPFDSINNCDF         RagePaskinessExcludingPolar/OFFD2SARNetCDF         The Peakiness should be between 0 and 48000 (or missing) for surface type = ocean for latitudes between 70 and 70 degrees           RPEPOPFDSINNCDF         RagePaskinessExcludingPolar/OFASARNetCDF         The Peakiness should be between 0 and 480000 (or missing) for surface type = ocean for latitudes between 70 and 70 degrees           RSESHOACPF         RagePaskinessExcludingPolar/OFASARNetCDF         The Peakiness bould be between 0 and 480000 (or missing) for surface type = ocean for latitudes between 70 and 70 degrees           RSESHOACPFD         RageSestataBelsCorrectinoCoceanNetCDF	RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF						
Interpret/PDLRMIXGLP       Indigree       Interpret/PDLRMIXGLP       Interpret/PDLRMIXGLP         RPEPOPPDLRMSAR       RangePeakinessExcludingPolarOPED2LRMSARNetCDF       Interpret/PDLRMIXGLP       Interpret	RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF						
NCDF         HangePeakmessExcludingPolar(OPFD2PLMIXSARMetCDP         and 70 degrees           RPEPOPFDPLRMSINN         RangePeakmessExcludingPolar(OPFD2PLMIXSINNetCDF         The PeakinessEhold be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPFDSARNCDF         RangePeakinessExcludingPolarOPFD2SARNetCDF         The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPFDSINNCDF         RangePeakinessExcludingPolarOPFD2SINNetCDF         The Peakiness should be between 0 and 4000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPFDSINNCDF         RangePeakinessExcludingPolarOPFD2SINNetCDF         The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPSINNCDF         RangePeakinessExcludingPolarOPFD2NINNetCDF         The Peakiness should be between 0 and 5000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPSINNCDF         RangePeakinessExcludingPolarOPSINNetCDF         The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RSSECONCDF         RangeSeaSlateBlasCorrectionOceanNetCDF         The sea state bias correction should be between -500mm and 3000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RSSHAOFDPLRMNCDF         RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF         The sea state bi	RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF						
RPEPOPFDSARNCDF         RangePeakinessExcludingPolarOPFD2SARNetCDF         The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPFDSINNCDF         RangePeakinessExcludingPolarOPED2SINNetCDF         The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPLRMNCDF         RangePeakinessExcludingPolarOPLRMNetCDF         The Peakiness should be between 0 and 45000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPSINNCDF         RangePeakinessExcludingPolarOPSINNetCDF         The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPSINNCDF         RangePeakinessExcludingPolarOPSINNetCDF         The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RSSBCONCDF         RangeSeaStateBlasCorrectionCeeanNetCDF         The sea strate bias correction should be between -300mm and mm (or missing) for surface type = ocean           RSSHAOFDPLRMNCDF         RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF         The sea surface height anomaly should be between -300mm and 3000mm (or missing) for surface type = ocean for attrudes between -70 and 70 degrees           RSSHAOFDF         RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF         The sea surface height anomaly should be between -300mm and 3000mm (or missing) for surface type = ocean for attrudes between -70 and 70 degrees           RSWHOEPFDN	NCDF							
Interport DSNRNCDF         Nativerestantionssectuating PolarOPFD2SINNetCDF         and 70 degrees           RPEPOPFDSINNCDF         RangePeakinessExcludingPolarOPFD2SINNetCDF         The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPLRMNCDF         RangePeakinessExcludingPolarOPFDSINNetCDF         The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPSINNCDF         RangePeakinessExcludingPolarOPSARNetCDF         The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPSINNCDF         RangePeakinessExcludingPolarOPSINNetCDF         The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RSBCONCDF         RangeSeaStateBiasCorrectionOceanNetCDF         The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean           RSSHAOFDNCDF         RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF         The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean           RSSHAONCDF         RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF         The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean           RSWHOEPFDNCDF         RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF         The sea surface height anomaly should be between 0mm and 15000mm (or missing	RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF						
RPEPOPTOSININODF       RangePeakinessExcludingPolarOPLRMNetCDF       and 70 degrees         RPEPOPLRMNCDF       RangePeakinessExcludingPolarOPLRMNetCDF       and 70 degrees         RPEPOPSARNCDF       RangePeakinessExcludingPolarOPSARNetCDF       and 70 degrees         RPEPOPSINNCDF       RangePeakinessExcludingPolarOPSARNetCDF       and 70 degrees         RPEPOPSINNCDF       RangePeakinessExcludingPolarOPSINNetCDF       The Peakiness should be between 0 and 4500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSSBCONCDF       RangeSeaStateBiasCorrectionOceanNetCDF       The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean         RSSHAOFDPLRMNCDF       RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean         RSSHAOFDPLRMNCDF       RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean         RSSHAONCDF       RangeSeaSurfaceHeightAnomalyOceanNetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean for latitudes between         RSWHOEPFDNCDF       RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF       The sea surface height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPFDLRIMNC       RangeSignificantWa	RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF						
RPEPOPLININCUP         Natigereas           RPEPOPSARNCDF         RangePeakinessExcludingPolarOPSARNetCDF         The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RPEPOPSINNCDF         RangePeakinessExcludingPolarOPSINNetCDF         The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RSSBCONCDF         RangeSeaStateBiasCorrectionOceanNetCDF         The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean           RSSHAOFDNCDF         RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF         The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean           RSSHAOFDPLRMNCD         RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF         The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean           RSSHAONCDF         RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF         The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean           RSWHOEPFDNCDF         RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF         The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RSWHOEPFDPLRMNC         RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF         The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 7	RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF						
RPEPOPSARINCUP         RangePeakinessExcludingPolarOPSINNetCDF         and 70 degrees           RPEPOPSINNCDF         RangePeakinessExcludingPolarOPSINNetCDF         The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RSSBCONCDF         RangeSeaStateBiasCorrectionOceanNetCDF         The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean           RSSHAOFDNCDF         RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF         The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean           RSSHAONCDF         RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF         The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean           RSSHAONCDF         RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF         The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean           RSWHOEPFDNCDF         RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF         The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RSWHOEPFDPLRMNCP         RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF         The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees           RSWHOEPFDPLRMNCP         RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF         The significant wave height should be	RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF						
REPERDISTINUCUEF       RangePeakIntessExtubulingPolar/DFSININGCUEF       and 70 degrees         RSSBCONCDF       RangeSeaStateBiasCorrectionOceanNetCDF       The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean         RSSHAOFDNCDF       RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean         RSSHAOFDPLRMNCD       RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean         RSSHAOFDNCDF       RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean         RSSHAOFDNCDF       RangeSeaSurfaceHeightAnomalyOceanNetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean         RSWHOEPFDNCDF       RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPFDPLRMNC       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPFDNCDF       RangeSignificantWaveHeightOceanExcludingPolarNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocea	RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF						
RSSHAOFDNCDF       RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type =         RSSHAOFDPLRIMCD       RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type =         RSSHAONCDF       RangeSeaSurfaceHeightAnomalyOceanNetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type =         RSWHOEPFDNCDF       RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF       The sea surface height anomaly should be between -3000mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPFDPLRMNC       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPFDPLRMNC       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPNCDF       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         SPHRTASCNSNCDF       SPH_Rel_Time_ASC_Node_Start_v2_NetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees <td>RPEPOPSINNCDF</td> <td>RangePeakinessExcludingPolarOPSINNetCDF</td> <td></td>	RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF						
HASSHAOFDNCDF       HangeseasufraceHeightAnomalyOceanFD3PLRMNetCDF       ocean         RSSHAOFDPLRMNCD F       RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean         RSSHAONCDF       RangeSeaSurfaceHeightAnomalyOceanNetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean         RSWHOEPFDNCDF       RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPFDPLRMNC       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPNCDF       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPNCDF       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         SPHRTASCNSNCDF       SPH_Rel_Time_ASC_Node_Start_v2_NetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         SOHHIFHD       SameOrOneHigher1HzIndexFor20HzData	RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean					
F       Parageseas/unaceHeightAnomalyOceanPD3PLHMNetCDF       ocean       ocean         RSSHAONCDF       RangeSeas/unaceHeightAnomalyOceanPD3PLHMNetCDF       The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPFDPLRMNC       RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPFDPLRMNC       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPNCDF       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         SPHRTASCNSNCDF       SPH_Rel_Time_ASC_Node_Start_v2_NetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         SOHHIFHD       SameOrOneHigher1HzIndexFor20HzData       The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample         SCSTODHRNCDF       SequenceCounterStepTODHRNetCDF       The sequence counter should be modulo 4 higher with regard to the previous sequence counter	RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF						
HSSFACINCUP       HangeSeaSufraceHeightAnomalyOceanNetCUP       ocean       ocean <tdocean< td=""> <tdocean< td="">       ocean       oce</tdocean<></tdocean<>	RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF						
HSWHOEPFDRCDF       HangeSignificantWaveHeightOceanExcludingPolarFD2NEtCDF       Iatitudes between -70 and 70 degrees         RSWHOEPFDPLRMNC DF       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPFDPLCRMNC DF       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         RSWHOEPNCDF       RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         SPHRTASCNSNCDF       SPH_Rel_Time_ASC_Node_Start_v2_NetCDF       Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)         SOOHHIFHD       SameOrOneHigher1HzIndexFor20HzData       The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample         SCSTODHRNCDF       SequenceCounterStepTODHRNetCDF       The sequence counter should be modulo 4 higher with regard to the previous sequence counter	RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF						
DF       HangeSignificantWaveHeightOceanExcludingPolarPD2PLHMNetCDF       latitudes between -70 and 70 degrees         RSWHOEPNCDF       RangeSignificantWaveHeightOceanExcludingPolarNetCDF       The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees         SPHRTASCNSNCDF       SPH_Rel_Time_ASC_Node_Start_v2_NetCDF       Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)         SOOHHIFHD       SameOrOneHigher1HzIndexFor20HzData       The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample         SCSTODHRNCDF       SequenceCounterStepTODHRNetCDF       The sequence counter should be modulo 4 higher with regard to the previous sequence counter	RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF						
HSWHOEPNCDF       Hangesignificant/waveHeightOceanexcludingPolarivetCDF       Iatitudes between -70 and 70 degrees       Iatitudes between -70 and 70 degrees         SPHRTASCNSNCDF       SPH_Rel_Time_ASC_Node_Start_v2_NetCDF       Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)         SOOHHIFHD       SameOrOneHigher1HzIndexFor20HzData       The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample         SCSTODHRNCDF       SequenceCounterStepTODHRNetCDF       The sequence counter should be modulo 4 higher with regard to the previous sequence counter		RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF						
SOOHHIFHD       SameOrOneHigher1HzIndexFor20HzData       The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample         SCSTODHRNCDF       SequenceCounterStepTODHRNetCDF       The sequence counter should be modulo 4 higher with regard to the previous sequence counter	RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF						
SCSTODHRNCDF SequenceCounterStepTODHRNetCDF The sequence counter should be modulo 4 higher with regard to the previous sequence counter	SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)					
	SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample					
SCSTODNCDF SequenceCounterStepTODNetCDF The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter	SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter					
	SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter					

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

0