

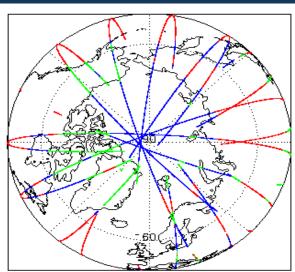
1. Overview

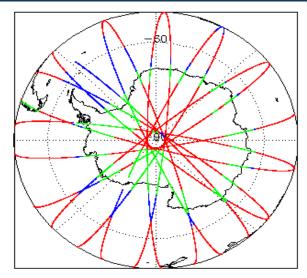
| Report Production: | 20-Jan-2020 | |
|--------------------|--|--|
| Processor Used: | CryoSat Ocean Processor | |
| Data Used: | Near Real Time Ocean Products (NOP) L1B & L2 Science Data | |

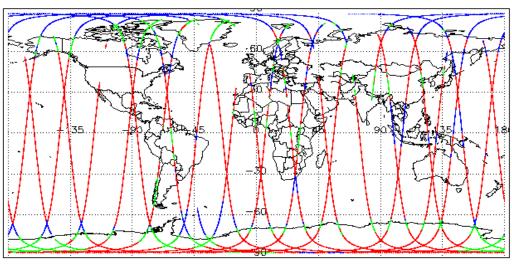
| Check | L1 & L2 |
|---|----------------------|
| Server check: science-pds.cryosat.esa.int | Nominal |
| Server check: calval-pds.cryosat.esa.int | Nominal |
| Product Software Check | Nominal |
| Product Format Check | Nominal |
| Product Header Analysis | Nominal |
| Auxiliary Data File Usage Check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

| Mission / Instrument News | | |
|---------------------------|-----------------|--|
| 16-Jan-2020 | None | |
| 17-Jan-2020 | None | |
| 18-Jan-2020 | Nothing planned | |

2. Global Coverage









3. Instrument Configuration

The SIRAL instrument configuration for the day of acquisition is provided below.

| SIRAL instrument(s) in use: | SIRAL - A |
|-----------------------------|----------------|
| Star Tracker(s) in use: | Star Tracker 1 |

4. NOP Level 1B Data Quality Check

4.1 L1B Product Format Check

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

4.2 L1B Product Header Analysis

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

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

Number of products with errors:

4.3 L1B Auxilary Data File Usage Check

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

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

Number of products with errors:

4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

_

15

4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

4.6 L1B Waveform Group Data Check

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

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

Number of products with errors:

Test Failed CS_OFFL_SIR_NOPN1B_20200117T012305_20200117T012559_C001 Loss of Echo The tracking echo is missing for one or more records CS OFFL SIR NOPN1B 20200117T012646 20200117T012858 C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_NOPN1B_20200117T022155_20200117T022609_C001 Loss of Echo The tracking echo is missing for one or more records CS OFFL SIR NOPN1B 20200117T103706 20200117T104239 C001 Loss of Echo The tracking echo is missing for one or more records CS OFFL SIR NOPN1B 20200117T130658 20200117T130807 C001 Loss of Echo The tracking echo is missing for one or more records CS OFFL SIR NOPN1B 20200117T133919 20200117T134458 C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_NOPN1B_20200117T140019_20200117T140208_C001 Loss of Echo The tracking echo is missing for one or more records CS OFFL SIR NOPN1B 20200117T144614 20200117T145209 C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_NOPN1B_20200117T152906_20200117T153054_C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_NOPN1B_20200117T192712_20200117T192842_C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_NOPN1B_20200117T211826_20200117T211958_C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_NOPR1B_20200117T004518_20200117T004912_C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_NOPR1B_20200117T011903_20200117T012000_C001 Loss of Echo The tracking echo is missing for one or more records CS OFFL SIR NOPR1B 20200117T175528 20200117T175737 C001 Loss of Echo The tracking echo is missing for one or more records CS_OFFL_SIR_NOPR1B_20200117T175838_20200117T180824_C001 Loss of Echo The tracking echo is missing for one or more records

5. NOP Level 2 Data Quality Check

5.1 L2 Product Format Check

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

Number of products with errors:

5.2 L2 Product Header Analysis

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

Number of products with errors:

0

5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

5.4 L2 Auxiliary Correction Error Check

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

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

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

Number of products with errors:

46

| Product | Test Failed | Description |
|---|------------------------------|---|
| CS_OFFL_SIR_NOPM_2_20200117T001822_20200117T003407_C001 | IMean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_NOPM_2_20200117T005006_20200117T005824_C001 | IMean Dynamic Longgraphy (1) | There is an error with the Mean Dynamic Topography height for one or more records |

| | | There is an error with the Mean Dynamic Tanagraphy height for any |
|---|---|--|
| CS_OFFL_SIR_NOPM_2_20200117T124034_20200117T124957_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records There is an error with the Mean Dynamic Topography height for one or |
| CS_OFFL_SIR_NOPM_2_20200117T163901_20200117T170621_C001 | Mean Dynamic Topography (1) | more records |
| CS_OFFL_SIR_NOPN_2_20200117T004255_20200117T004518_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_20200117T012305_20200117T012559_C001 | Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide | There is an error with the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records |
| CS_OFFL_SIR_NOPN_2_20200117T012646_20200117T012858_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_20200117T021303_20200117T021512_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_20200117T022155_20200117T022609_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_20200117T030328_20200117T030720_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_20200117T031235_20200117T031309_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_20200117T054210_20200117T054347_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_20200117T071217_20200117T071333_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_20200117T081016_20200117T081111_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_20200117T081317_20200117T081434_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_20200117T085135_20200117T085253_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_20200117T085802_20200117T090114_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic | 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_20200117T103231_20200117T103508_C001 | 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_20200117T103706_20200117T104239_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_20200117T112753_20200117T113201_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_20200117T121137_20200117T121413_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_20200117T130658_20200117T130807_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_20200117T133919_20200117T134458_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_NOPN_2_20200117T144614_20200117T145209_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_20200117T153904_20200117T154129_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_20200117T162627_20200117T162727_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_20200117T170833_20200117T171015_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_20200117T180824_20200117T181235_C001 | Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_NOPN_2_20200117T184841_20200117T185212_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_20200117T202753_20200117T203115_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_20200117T203628_20200117T203752_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_20200117T211826_20200117T211958_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_20200117T221528_20200117T221637_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_20200117T235229_20200117T235424_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_20200117T012858_20200117T013549_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_20200117T014932_20200117T015804_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_20200117T030720_20200117T031235_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 There is an error with the Mean Dynamic Topography height for one or |
| CS_OFFL_SIR_NOPR_2_20200117T064004_20200117T064201_C001 | Mean Dynamic Topography (1) | more records |
| CS_OFFL_SIR_NOPR_2_20200117T112226_20200117T112600_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 There is an error with the Mean Dynamic Topography height for one or |
| CS_OFFL_SIR_NOPR_2_20200117T130020_20200117T130205_C001 | Mean Dynamic Topography (1) | more records |
| CS_OFFL_SIR_NOPR_2_20200117T162134_20200117T162627_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_20200117T175838_20200117T180824_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_20200117T193828_20200117T194717_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records There is an error with the MSS height (solution 1) and the Mean Dynamic. |
| CS_OFFL_SIR_NOPR_2_20200117T211958_20200117T212746_C001 | 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_20200117T212817_20200117T212953_C001 | Total Geocentric Ocean Tide (FES), Non- | There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT and solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records |
|---|---|---|
| CS_OFFL_SIR_NOPR_2_20200117T225905_20200117T230618_C001 | (). | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |

5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

5.6 L2 Measurement Quality Flag Check

L2 Quality Flags (20Hz)

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

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

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

Number of products with errors:

79

| Product | Test Failed | Description |
|---|--|--|
| CS_OFFL_SIR_NOPM_2_20200117T000433_20200117T001618_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_20200117T001822_20200117T003407_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_20200117T003554_20200117T004054_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_20200117T004133_20200117T004255_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_20200117T005006_20200117T005824_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_20200117T010653_20200117T011756_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_20200117T014034_20200117T014104_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_20200117T015804_20200117T021253_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_20200117T021512_20200117T022006_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_20200117T022012_20200117T022024_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_20200117T022633_20200117T030028_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_20200117T045536_20200117T045546_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_20200117T050213_20200117T053154_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_20200117T053335_20200117T053835_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_20200117T053842_20200117T054210_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_20200117T054604_20200117T062001_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_20200117T064436_20200117T065136_C001 | | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T070522_20200117T071130_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_20200117T071333_20200117T071906_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_20200117T072506_20200117T075824_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_20200117T081209_20200117T081317_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_20200117T083133_20200117T085048_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_20200117T085253_20200117T085802_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_20200117T090344_20200117T093751_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_20200117T100238_20200117T100705_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_20200117T100754_20200117T102534_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_20200117T104401_20200117T105846_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_20200117T110007_20200117T110125_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_20200117T110606_20200117T111306_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_20200117T113310_20200117T115049_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_20200117T115220_20200117T120624_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_20200117T122303_20200117T123833_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_20200117T124034_20200117T124957_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_20200117T130807_20200117T130912_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_20200117T131811_20200117T132900_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_20200117T133600_20200117T133800_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_20200117T134458_20200117T134902_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_20200117T135217_20200117T140019_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_20200117T140242_20200117T141741_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_20200117T145429_20200117T152821_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_20200117T153054_20200117T153302_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_20200117T153331_20200117T153904_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_20200117T154142_20200117T160649_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_20200117T161720_20200117T161730_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_20200117T163033_20200117T163120_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_20200117T163901_20200117T170621_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_20200117T171015_20200117T171120_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_20200117T171303_20200117T171745_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records. |
|---|--|---|
| CS_OFFL_SIR_NOPM_2_20200117T171816_20200117T171900_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T172041_20200117T174927_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T175737_20200117T175838_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T181235_20200117T184542_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T185212_20200117T185744_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T185936_20200117T190531_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T192456_20200117T192627_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T193634_20200117T193828_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T195157_20200117T202533_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T203115_20200117T203628_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T203832_20200117T205808_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T212953_20200117T215020_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T215055_20200117T220336_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T221132_20200117T221528_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T221919_20200117T225347_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T231207_20200117T232050_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T232531_20200117T232947_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T233022_20200117T234311_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T234455_20200117T235013_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records. |
| CS_OFFL_SIR_NOPM_2_20200117T235031_20200117T235229_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records. |
| CS_OFFL_SIR_NOPN_2_20200117T045546_20200117T045645_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records. |
| CS_OFFL_SIR_NOPN_2_20200117T053205_20200117T053335_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records. |
| CS_OFFL_SIR_NOPN_2_20200117T081919_20200117T082001_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records. |
| CS_OFFL_SIR_NOPN_2_20200117T103706_20200117T104239_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPN_2_20200117T122117_20200117T122256_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |
| CS_OFFL_SIR_NOPN_2_20200117T134912_20200117T134929_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records. |

| | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
|---|--|--|
| CS OFFE SIR NOPN 2 202001171194717 202001171194903 C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| | 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_20200117T063115_20200117T063235_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_20200117T202533_20200117T202753_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. |

L2 Quality Flags (20Hz PLRM)

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

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

Number of products with errors: 78

| Product | Test Failed | Description |
|---|---|--|
| CS_OFFL_SIR_NOPN_2_20200117T003412_20200117T003554_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_20200117T004255_20200117T004518_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_20200117T010035_20200117T010141_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_20200117T010357_20200117T010653_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_20200117T012305_20200117T012559_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_20200117T012646_20200117T012858_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_20200117T030328_20200117T030720_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_20200117T031235_20200117T031309_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_20200117T032425_20200117T032744_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_20200117T050107_20200117T050213_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_20200117T053205_20200117T053335_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_20200117T062213_20200117T062318_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_20200117T065226_20200117T065600_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_20200117T082947_20200117T083133_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_20200117T085135_20200117T085253_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_20200117T085802_20200117T090114_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_20200117T103231_20200117T103508_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_20200117T103706_20200117T104239_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_20200117T112753_20200117T113201_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_20200117T121137_20200117T121413_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_20200117T121616_20200117T121719_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_20200117T122117_20200117T122256_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_20200117T124957_20200117T125238_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_20200117T133919_20200117T134458_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_20200117T140019_20200117T140208_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_20200117T142728_20200117T143103_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_20200117T144614_20200117T145209_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_20200117T152906_20200117T153054_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_20200117T153302_20200117T153331_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_20200117T153904_20200117T154129_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_20200117T160911_20200117T161052_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_20200117T171745_20200117T171816_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_20200117T171900_20200117T172023_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_20200117T180824_20200117T181235_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_20200117T185744_20200117T185900_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_20200117T191635_20200117T191759_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_20200117T194717_20200117T194903_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_20200117T203628_20200117T203752_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_20200117T220503_20200117T220659_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_20200117T235229_20200117T235424_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_20200117T004518_20200117T004912_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_20200117T011756_20200117T011837_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_20200117T012140_20200117T012305_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_20200117T012858_20200117T013549_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_20200117T014932_20200117T015804_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_20200117T030028_20200117T030222_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_20200117T031309_20200117T031432_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_20200117T062143_20200117T062213_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_20200117T063115_20200117T063235_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_20200117T063322_20200117T063618_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_20200117T072226_20200117T072506_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_20200117T081447_20200117T081746_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_20200117T082254_20200117T082314_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_20200117T093751_20200117T093913_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_20200117T093916_20200117T093935_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_20200117T105846_20200117T110007_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_20200117T111506_20200117T111510_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_20200117T111525_20200117T111755_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_20200117T112036_20200117T112200_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_20200117T112226_20200117T112600_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_20200117T123833_20200117T124034_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_20200117T130020_20200117T130205_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_20200117T131035_20200117T131504_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_20200117T131602_20200117T131811_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_20200117T141923_20200117T142555_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_20200117T145209_20200117T145429_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_20200117T152821_20200117T152906_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_20200117T161730_20200117T161945_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_20200117T162007_20200117T162104_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_20200117T175838_20200117T180824_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_20200117T184542_20200117T184841_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_20200117T192627_20200117T192712_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_20200117T193217_20200117T193524_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_20200117T193828_20200117T194717_C001 | Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
|---|---|--|
| CS_OFFL_SIR_NOPR_2_20200117T211958_20200117T212746_C001 | Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_NOPR_2_20200117T225905_20200117T230618_C001 | Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS OFFI SIR NOPR 2 20200117T23/311 20200117T23/315 C001 | | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been |

PLRM

PLRM

Ocean Altimeter Range, SSHA, SWH

and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Set for one or more records. set for one or more records.

The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

L2 Quality Flags (1 Hz & 1Hz PLRM)

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

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

Number of products with errors:

CS_OFFL_SIR_NOPR_2_20200117T235424_20200118T000050_C001

5.7 L2 Ocean Retracking Quality Check

L2 Retracking Flags (20Hz)

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

Ocean Retracking Quality Flag: This flag is currently set for products falling at ocean/ land boundaries, but this is expected.

Number of products with errors:

L2 Retracking Flags (20Hz, PLRM)

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

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

Number of products with errors: 124