







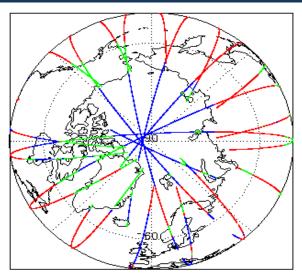
# 1. Overview

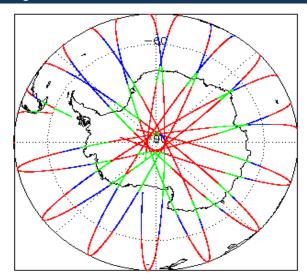
Report Production:	18-Jul-2019	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Near Real Time Ocean Products (NOP)	

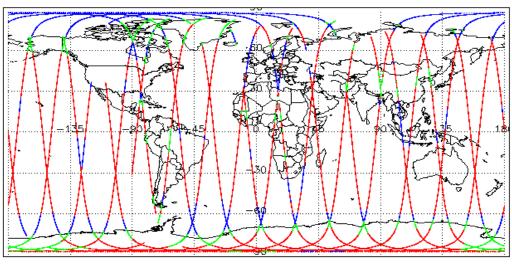
Check	L1 & L2
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement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

Mission / Instrument News	
16-Jul-2019	None
17-Jul-2019	None
18-Jul-2019	Nothing planned

# 2. Global Coverage









# 3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

# 4. 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 pert 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:

0

### 4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

0

#### 4.5 L1B Measurement Confidence Data Check

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

> Attitude Correction Missing: This flag is currently set in error for 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:

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Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20190717T000513_20190717T001202_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_NOPM1B_20190717T101800_20190717T102627_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

### 4.6 L1B Waveform Group Data Check

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

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

Number of products with errors:

15

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20190717T025443_20190717T032219_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20190717T083907_20190717T085346_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20190717T094855_20190717T100452_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20190717T114519_20190717T114527_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190717T001911_20190717T002332_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190717T033309_20190717T033321_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190717T100852_20190717T101059_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190717T201007_20190717T201348_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190717T214859_20190717T214917_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190717T215158_20190717T215429_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190717T233007_20190717T233043_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190717T045859_20190717T050301_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190717T074911_20190717T075305_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190717T123228_20190717T123456_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190717T203356_20190717T203424_C001	Loss of Echo	The tracking echo is missing for one or more records

### 5. NOP Level 2 Data Quality Check

#### 5.1 L2 Product Format Check

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

Number of products with errors:

0

## 5.2 L2 Product Header Analysis

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

Number of products with errors:

0

### 5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

C

#### 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:

Product Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_NOPM\_2\_20190717T000513\_20190717T001202\_C001 Topography (1) Topography height (solution 1) for one or more records There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS OFFL SIR NOPM 2 20190717T002408 20190717T002421 C001 Topography (1) 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 NOPM 2 20190717T025443 20190717T032219 C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR NOPM 2 20190717T032843 20190717T033212 C001 Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_NOPM\_2\_20190717T114519\_20190717T114527\_C001 Topography (1) 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\_NOPM\_2\_20190717T133741\_20190717T133813\_C001 Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1), the Mean Dynamic Topography (1), Total Geocentric Ocean CS\_OFFL\_SIR\_NOPN\_2\_20190717T001911\_20190717T002332\_C001 Topography height (solution 1) and the Total Geocentric Ocean Tide height Tide (GOT)
iviean Sea Suriace (T), iviean Dynamic (solution 1: GOT) for one or more records Topography (1), Total Geocentric Ocean There is an error with the MSS height (solution 1), the Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T024347\_20190717T024555\_C001 Topography (solution 1) and the tidal corrections for one or more records Tide (GOT), Total Geocentric Ocean Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T042145\_20190717T042502\_C001 Topography (1) 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\_NOPN\_2\_20190717T043024\_20190717T043142\_C001 Mean Dynamic Topography (1) more records There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS OFFL SIR NOPN 2 20190717T060035 20190717T060355 C001 Topography height (solution 1) for one or more records Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS OFFL SIR NOPN 2 20190717T060918 20190717T061042 C001 Topography height (solution 1) for one or more records Topography (1) There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR NOPN 2 20190717T074735 20190717T074910 C001 Mean Dynamic Topography (1) more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T083053\_20190717T083153\_C001 Topography (1) Topography height (solution 1) for one or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T092508\_20190717T092716\_C001 Topography height (solution 1) for one or more records Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T100852\_20190717T101059\_C001 Topography (1) Topography height (solution 1) for one or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T101102\_20190717T101108\_C001 Topography (1) Topography height (solution 1) for one or more records Mean Sea Surface (1), Mean Dynamic here is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T105525\_20190717T105711\_C001 Topography (1) 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 NOPN 2 20190717T114528 20190717T114934 C001 Mean Dynamic Topography (1) more records There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR NOPN 2 20190717T124452 20190717T124653 C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR NOPN 2 20190717T155405 20190717T155530 C001 Mean Dynamic Topography (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T173332\_20190717T173457\_C001 Topography (1) Topography height (solution 1) for one or more records еап эеа эшпасе (т), меап рупаппо Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period There is an error with the MSS height (solution 1), the Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T174008\_20190717T174041\_C001 Topography (solution 1) and the tidal corrections for one or more records There is an error with the Mean Dynamic Topography height for one or CS\_OFFL\_SIR\_NOPN\_2\_20190717T191352\_20190717T191652\_C001 Mean Dynamic Topography (1) more records There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T191910\_20190717T192428\_C001 Topography (1) Topography height (solution 1) for one or more records viean sea sunace ( i ), iviean bynamic There is an error with the MSS height (solution 1), the Mean Dynamic Topography (1), Total Geocentric Ocean CS OFFL SIR NOPN 2 20190717T201007 20190717T201348 C001 Topography (solution 1) and the tidal corrections for one or more records Tide (GOT), Total Geocentric Ocean Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS OFFL SIR NOPN 2 20190717T205347 20190717T205621 C001 Topography height (solution 1) for one or more records Topography (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS OFFL SIR NOPN 2 20190717T214859 20190717T214917 C001 Topography height (solution 1) for one or more re Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T214920\_20190717T214924\_C001 Topography (1) Topography height (solution 1) for one or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1), the Mean Dynamic CS\_OFFL\_SIR\_NOPN\_2\_20190717T214927\_20190717T215013\_C001 Topography (1), Total Geocentric Ocean Topography height (solution 1) and the Total Geocentric Ocean Tide height Tide (GOT) (solution 1: GOT) for one or more records

CS_OFFL_SIR_NOPN_2_20190717T215158_20190717T215429_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20190717T232822_20190717T232958_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_20190717T233114_20190717T233303_C001	Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	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_20190717T015423_20190717T015932_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_20190717T032219_20190717T032418_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_20190717T033322_20190717T034129_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_20190717T045859_20190717T050301_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_20190717T051158_20190717T052038_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_20190717T065254_20190717T070037_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_20190717T083154_20190717T083738_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_20190717T101108_20190717T101800_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_20190717T114934_20190717T115456_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_20190717T225909_20190717T230718_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height 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:

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Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20190717T000513_20190717T001202_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_NOPM_2_20190717T101800_20190717T102627_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

## 5.6 L2 Measurement Quality Flag Check

### L2 Quality Flags (20Hz)

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

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

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

Number of products with errors:

02

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20190717T000513_20190717T001202_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_20190717T003415_20190717T010016_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_20190717T010634_20190717T011127_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_20190717T011619_20190717T014012_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_20190717T021301_20190717T022257_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_20190717T022835_20190717T023831_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_20190717T024555_20190717T025152_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_20190717T025443_20190717T032219_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_20190717T032843_20190717T033212_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_20190717T034444_20190717T041732_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_20190717T042502_20190717T043023_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190717T043400_20190717T043626_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_20190717T044107_20190717T044439_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190717T050815_20190717T051158_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_20190717T052348_20190717T053305_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_20190717T053551_20190717T055704_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_20190717T060355_20190717T060505_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190717T060511_20190717T060917_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_20190717T061430_20190717T062421_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_20190717T062609_20190717T063209_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_20190717T070037_20190717T073554_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_20190717T073902_20190717T074403_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_20190717T074423_20190717T074735_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_20190717T075502_20190717T082618_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_20190717T083907_20190717T085346_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_20190717T085752_20190717T085921_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_20190717T085925_20190717T091532_C001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190717T091752_20190717T092301_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_20190717T092338_20190717T092508_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_20190717T093249_20190717T094641_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_20190717T094855_20190717T100452_C001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190717T102829_20190717T103846_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_20190717T104026_20190717T105413_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_20190717T105712_20190717T110211_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_20190717T110219_20190717T110230_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_20190717T111047_20190717T111227_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_20190717T111418_20190717T112509_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_20190717T112651_20190717T113232_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
60_0112_011_0101 IME_201001 11111200100011111110202_0001		set for one or more records.
CS_OFFL_SIR_NOPM_2_20190717T113516_20190717T114203_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_20190717T121124_20190717T123228_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_20190717T123748_20190717T124128_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_20190717T124839_20190717T131451_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_20190717T134752_20190717T141227_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_20190717T141530_20190717T142042_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_20190717T142815_20190717T143843_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_20190717T144421_20190717T150112_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_20190717T151416_20190717T152056_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_20190717T152408_20190717T153715_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_20190717T153719_20190717T154203_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_20190717T154720_20190717T155146_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_20190717T155530_20190717T160115_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_20190717T160831_20190717T164052_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_20190717T165330_20190717T165459_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_20190717T171222_20190717T172952_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_20190717T173457_20190717T174008_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_20190717T174702_20190717T180820_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_20190717T180935_20190717T182248_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_20190717T183219_20190717T183429_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_20190717T185011_20190717T190935_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_20190717T192639_20190717T200243_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_20190717T201439_20190717T203355_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_20190717T203424_20190717T204725_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_20190717T205621_20190717T205818_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_20190717T205953_20190717T210320_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_20190717T210544_20190717T212040_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_20190717T212242_20190717T213204_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_20190717T215013_20190717T215157_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_20190717T215429_20190717T221125_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_20190717T221926_20190717T222436_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_20190717T222749_20190717T222847_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_20190717T223445_20190717T223741_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_20190717T223750_20190717T224221_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_20190717T224516_20190717T225909_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_20190717T233745_20190717T234330_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_20190717T234615_20190718T000921_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_20190717T033309_20190717T033321_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_20190717T034129_20190717T034443_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_20190717T074735_20190717T074910_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_20190717T100501_20190717T100717_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_20190717T200334_20190717T200429_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_20190717T053306_20190717T053551_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_20190717T083154_20190717T083738_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_20190717T203356_20190717T203424_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

# L2 Quality Flags (20Hz PLRM)

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20190716T235947_20190717T000334_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_20190717T001911_20190717T002332_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_20190717T010546_20190717T010634_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_20190717T011127_20190717T011347_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_20190717T014013_20190717T014149_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_20190717T024347_20190717T024555_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T034129_20190717T034443_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T042145_20190717T042502_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_NOPN_2_20190717T043024_20190717T043142_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_NOPN_2_20190717T045028_20190717T045058_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T045236_20190717T045421_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T050718_20190717T050815_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T060035_20190717T060355_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 and the OCOG Altimeter Range and Backscatter Quality Flags hav set for one or more records.
CS_OFFL_SIR_NOPN_2_20190717T064720_20190717T064756_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T073708_20190717T073902_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_NOPN_2_20190717T083053_20190717T083153_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T092508_20190717T092716_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_NOPN_2_20190717T100501_20190717T100717_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_NOPN_2_20190717T102627_20190717T102829_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T111228_20190717T111418_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_NOPN_2_20190717T112509_20190717T112651_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T113233_20190717T113355_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T114528_20190717T114934_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 and the OCOG Altimeter Range and Backscatter Quality Flags hav set for one or more records.
CS_OFFL_SIR_NOPN_2_20190717T133813_20190717T133928_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T150112_20190717T150508_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T155405_20190717T155530_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_NOPN_2_20190717T164052_20190717T164408_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_NOPN_2_20190717T165459_20190717T165549_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 and the OCOG Altimeter Range and Backscatter Quality Flags hav set for one or more records.
CS_OFFL_SIR_NOPN_2_20190717T173332_20190717T173457_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_NOPN_2_20190717T174008_20190717T174041_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set fo more records.
CS_OFFL_SIR_NOPN_2_20190717T184926_20190717T185011_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set fo more records.
CS_OFFL_SIR_NOPN_2_20190717T191352_20190717T191652_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.

CQCH_BRURHP_CRITICITIES DESCRIPTION ACCOUNTS AND CODE And Code Description			
COCC Resident Daily   Cocc American State	CS_OFFL_SIR_NOPN_2_20190717T191910_20190717T192428_C001		
Bell Bell Bell Deck   Deck   1988   2009   2009   17712149   2009   17712149   2009   17712149   2009   17712149   2009	CS_OFFL_SIR_NOPN_2_20190717T200334_20190717T200429_C001		
Sec. OFFL. SRF. NOPPL 2, 20190717120108_2010071719300C_CEST  COS. OFFL. SRF. NOPPL 2, 20190717120108_201071719300C_CEST  COS. OFFL. SRF. NOPPL 2, 20190717120300C_CEST  COS. OFFL. SRF. NOPPL 2, 2019071712	CS_OFFL_SIR_NOPN_2_20190717T205347_20190717T205621_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Cold   Selection Cold   Cold   Sel	CS_OFFL_SIR_NOPN_2_20190717T210320_20190717T210452_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CR. GEFL_SIR, NOPN_2_20160717722546_20180717722105_COX	CS_OFFL_SIR_NOPN_2_20190717T213204_20190717T213539_C001		
DOCS   Backscaller Coulty   Price	CS_OFFL_SIR_NOPN_2_20190717T215158_20190717T215429_C001		
CS_CFFL_SR_NOPR_2_29190717723314_29190717723393_C001  CS_CFFL_SR_NOPR_2_29190717723314_29190717723393_C001  CS_CFFL_SR_NOPR_2_29190717723314_29190717723393_C001  CS_CFFL_SR_NOPR_2_29190717723314_29190717723393_C001  CS_CFFL_SR_NOPR_2_29190717723314_29190717723393_C001  CS_CFFL_SR_NOPR_2_29190717723314_29190717723393_C001  CS_CFFL_SR_NOPR_2_29190717723314_29190717703314_20190717703291_C001  CS_CFFL_SR_NOPR_2_29190717703144_29190717703293_C001  CS_CFFL_SR_NOPR_2_29190717703314_29190717703293_C001  CS_CFFL_SR_NOPR_2_29190717703314_29190717703314_C001  CS_CFFL_SR_NOPR_2_29190717703314_29190717703314_C001  CS_CFFL_SR_NOPR_2_29190717703314_29190717703314_C001  CS_CFFL_SR_NOPR_2_29190717703314_29190717703414_C001  CS_CFFL_SR_NOPR_2_29190717703414_20190717703414_C001  CS_CFFL_SR_NOPR_2_29190717703414_20190717703414_C001  CS_CFFL_SR_NOPR_2_29190717703414_2019071703414_C001  CS_CFFL_SR_NOPR_2_29190717703414_20190717703414_C001  CS_CFFL_SR_NOPR_2_29190717703414_20190717703414_C001  CS_CFFL_SR_NOPR_2_29190717703414_20190717703414_C001  CS_CFFL_SR_NOPR_2_29190717703414_2019071703414_C001  CS_CFFL_SR_NOPR_2_29190717703414_C001  CS_CFFL_SR_NOPR_2_29190717703414_2019071703414_C001  CS_CFFL_SR_NOPR_2_29190717703414_C001  CS_CFFL_SR_NOPR_2_29190717703414_C001  CS_CFFL_SR_NOPR_2_291907177	CS_OFFL_SIR_NOPN_2_20190717T221125_20190717T221526_C001		, ,
Coco   Affinisher Range   SSHA   SWH   and Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   and Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   Coco   Coco   Affinisher Range   Coco   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   Coco   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backscatter Quality   Flags   No.   Coco   Affinisher Range   SSHA   SWH   And Backsc	CS_OFFL_SIR_NOPN_2_20190717T222648_20190717T222749_C001		
## GBASCARDE COUNTY   FLTM, COCK   Afterwise Farge and Selections of the COCK Allerance Farges and Selections of County Flags have been selected from the Cock Allerance Farges and Selections of County Flags have been selected from the Cock Allerance Farges and Selections of County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges Selected County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges and Selections County Flags have been selected from the Cock Allerance Farges Selected County Flags have been selected county Flags have b	CS_OFFL_SIR_NOPN_2_20190717T230910_20190717T231051_C001	OCOG Backscatter Quality	
CS_OFFL_SIR_NOPR_2_20190717T023352_20190717T023354_C001  Almoster Range and Backscatter Quality PLIM. COCG Almoster Range SSHA, SWH and Backscatter Quality Plags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20190717T023742_C001  CS_OFFL_SIR_NOPR_2_20190717T023754_20190717T023754_C001  CS_OFFL_SIR_NOPR_2_20190717T02275_20190717T02275_C001  CS_OFFL_SIR_NOPR_2_20190717T02275_20190717T02275_C001  CS_OFFL_SIR_NOPR_2_20190717T02275_20190717T02275_C001  CS_OFFL_SIR_NOPR_2_20190717T02275_20190717T02275_C001  CS_OFFL_SIR_NOPR_2_20190717T02275_20190717T02275_C001  CS_OFFL_SIR_NOPR_2_20190717T02275_20190717T02275_C001  CS_OFFL_SIR_NOPR_2_20190717T02275_C001  CS_OFFL_SIR_NOPR_2_20190717T02375_C001  CS_OFFL_SIR_NOPR_2_20190717T032715_C001  CS_OFFL_SIR_NOPR_2_20190717T032715_C00100717T030005_C001  CS_OFFL_SIR_NOPR_2_20190717T030005_C001  CS_OFFL_SIR_NOPR_2_20190717T030005_C001  CS_OFFL_SIR_NOPR_2_20190717T030005_C001  CS_OFFL_SIR_NOPR_2_20190717T030005_C001  CS_OFFL_SIR_NOPR_2_20190717T030005_C001  CS_OFFL_SIR_NOPR_2_20190717T030005_C001  CS_OFFL_SIR_NOPR_2_201	CS_OFFL_SIR_NOPN_2_20190717T233114_20190717T233303_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and backscater Quality PLEM, COOD BATTER NOPR 2_20190717T02241_20190717T022719_C001  CS_OFFL_SIR_NOPR 2_20190717T02241_20190717T022719_C001  CS_OFFL_SIR_NOPR 2_20190717T02241_20190717T022719_C001  CS_OFFL_SIR_NOPR 2_20190717T02241_20190717T02295_C001  CS_OFFL_SIR_NOPR 2_20190717T02241_20190717T02295_C001  CS_OFFL_SIR_NOPR 2_20190717T02241_20190717T02295_C001  CS_OFFL_SIR_NOPR 2_20190717T02241_20190717T02295_C001  CS_OFFL_SIR_NOPR 2_20190717T02241_20190717T02241_20190717T02295_C001  CS_OFFL_SIR_NOPR 2_20190717T02241_20190717T0	CS_OFFL_SIR_NOPN_2_20190717T233320_20190717T233353_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRN. GOOS Allmeter Range and Backscatter Quality PLRN. GOOS Allmeter Range and Backscatter Quality PLRN. GOOS Backscatter Quality	CS_OFFL_SIR_NOPN_2_20190717T233618_20190717T233740_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20190717T040172_20190717T042145_C001  CS_OFFL_SIR_NOPR_2_20190717T032831_20190717T022415_C001  CS_OFFL_SIR_NOPR_2_20190717T032831_20190717T032416_C001  CS_OFFL_SIR_NOPR_2_20190717T032831_20190717T032416_C001  CS_OFFL_SIR_NOPR_2_20190717T032831_20190717T032416_C001  CS_OFFL_SIR_NOPR_2_20190717T032831_20190717T032416_C001  CS_OFFL_SIR_NOPR_2_20190717T032416_C001  CS_OFFL_SIR_NOPR_2_20190717T032416_C001  CS_OFFL_SIR_NOPR_2_20190717T032416_C001  CS_OFFL_SIR_NOPR_2_20190717T032416_C001  CS_OFFL_SIR_NOPR_2_20190717T032416_C001  CS_OFFL_SIR_NOPR_2_20190717T047732_20190717T042146_C001  CS_OFFL_SIR_NOPR_2_20190717T047732_20190717T042146_C001  CS_OFFL_SIR_NOPR_2_20190717T047732_0190717T042146_C001  CS_OFFL_SIR_NOPR_2_20190717T047732_0190717T042146_C001  CS_OFFL_SIR_NOPR_2_20190717T047732_0190717T042146_C001  CS_OFFL_SIR_NOPR_2_20190717T043320_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043320_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043520_20190717T043001_C001  CS_OFFL_SIR_NOPR_2_20190717T045859_20190717T040301_C001  CS_OFFL_SIR_NOPR_2_20190717T045859_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T045859_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T045760_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T045760_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T045854_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T045854_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T045854_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T065765_20190717T060035_C001  CCS_OFFL_SIR_NOPR_2_	CS_OFFL_SIR_NOPR_2_20190717T002421_20190717T002710_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20190717T042257_20190717T02235_C001  All mitter Range and Backscatter Quality PLRM, COGO All Mitter Range, SSHA, SWH and Backscatter Quality Plags and the COCO All Mitter Range and Backscatter Quality Plags	CS_OFFL_SIR_NOPR_2_20190717T003154_20190717T003415_C001		
CS_OFFL_SIR_NOPR_2_20190717T02285_20190717T02285_C001  and Backscatter Quality PLRM, COGO Altimeter Range and Backscatter Quality Plags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20190717T03281_20190717T032418_C001  CS_OFFL_SIR_NOPR_2_20190717T032219_20190717T032418_C001  CS_OFFL_SIR_NOPR_2_20190717T032219_20190717T032418_C001  CS_OFFL_SIR_NOPR_2_20190717T041732_20190717T041415_C001  CS_OFFL_SIR_NOPR_2_20190717T041732_20190717T041415_C001  CS_OFFL_SIR_NOPR_2_20190717T041413_20190717T041415_C001  CS_OFFL_SIR_NOPR_2_20190717T041413_20190717T041410_C001  CS_OFFL_SIR_NOPR_2_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043800_20190717T044107_C001  CS_OFFL_SIR_NOPR_2_20190717T043800_20190717T050301_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050658_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T060555_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T060555_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T060555_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T060555_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T060555_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T060555_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T060555_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T060955_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T060955_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T060955_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T070037_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T070037_C001  COGG Altimeter Range CSHA_SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T060955_C001  COGG Altimeter Range GDalaty PLRM. COGG Altimeter Range and Backscatter Quality Flags have be	CS_OFFL_SIR_NOPR_2_20190717T010017_20190717T010229_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20190717T032219_20190717T0322145_C001  CS_OFFL_SIR_NOPR_2_20190717T04732_20190717T042145_C001  CS_OFFL_SIR_NOPR_2_20190717T047132_20190717T042145_C001  CS_OFFL_SIR_NOPR_2_20190717T047132_20190717T042145_C001  CS_OFFL_SIR_NOPR_2_20190717T043143_20190717T042145_C001  CS_OFFL_SIR_NOPR_2_20190717T043143_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043143_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043143_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043820_20190717T053001_C001  CS_OFFL_SIR_NOPR_2_20190717T043820_20190717T050010  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050010  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050505_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050505_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T07004957_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T07004957_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T07004957_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T07004957_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T07004957_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T07004957_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T07004957_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T07004957_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_201907	CS_OFFL_SIR_NOPR_2_20190717T022257_20190717T022835_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20190717T042145_C001  CS_OFFL_SIR_NOPR_2_20190717T041732_20190717T042145_C001  CS_OFFL_SIR_NOPR_2_20190717T043143_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043143_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043820_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043820_20190717T044107_C001  CS_OFFL_SIR_NOPR_2_20190717T045859_20190717T050301_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050658_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050658_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T06035_C001  CS_OFFL_SIR_NOPR_2_20190717T055705_20190717T06035_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T06035_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T06035_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T0604957_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T070377_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T070377_C001  COGG Altimeter Range and Backscater Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T07037_C001  COGG Altimeter Range ABACKSCATER Quality PLRM, COGG Altimeter Range and Backscater Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T07037_C001  COGG Altimeter Range ABACKSCATER Quality PLRM, COGG Altimeter Range and Backscater Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T07037_C001  COGG Altimeter Range ABACKSCATER Quality PLRM, COGG Altimeter Range and Backscater Quality Flags ha	CS_OFFL_SIR_NOPR_2_20190717T023831_20190717T024155_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20190717T041732_20190717T042145_C001  Alimeter Range and Backscatter Quality PLRM. COCG Alimeter Range and Backscatter Quality Plags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20190717T043143_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043820_20190717T043400_C001  CS_OFFL_SIR_NOPR_2_20190717T043820_20190717T044107_C001  CS_OFFL_SIR_NOPR_2_20190717T043820_20190717T050301_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050505_C0190717T050505_C0190717T050505_C0190717T050505_C0190717T064957_C001  CS_OFFL_SIR_NOPR_2_20190717T057705_20190717T064957_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T064957_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T064957_C001  CS_OFFL_SIR_NOPR_2_20190717T065554_20190717T064957_C001  CS_OFFL_SIR_NOPR_2_20190717T065554_20190717T070037_C001  CS_OFFL_SIR_NOPR_2_2019	CS_OFFL_SIR_NOPR_2_20190717T032219_20190717T032418_C001		
and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20190717T043820_20190717T050301_C001  CS_OFFL_SIR_NOPR_2_20190717T045859_20190717T050301_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050658_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050055_C0190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T055705_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T065705_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T065755_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T065755_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T065755_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T065755_20190717T064957_C001  CS_OFFL_SIR_NOPR_2_20190717T065755_20190717T070037_C001  CS_OFFL_SIR_NOPR_	CS_OFFL_SIR_NOPR_2_20190717T041732_20190717T042145_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20190717T043859_20190717T050301_C001  CS_OFFL_SIR_NOPR_2_20190717T045859_20190717T050301_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050658_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T055705_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T064957_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T070377_C001  CS_OFFL_SIR_NOPR_2_20190717T065254_20190717T07037_C001  CS_OFFL_SIR_NOPR_2_20190717T065254_20190717T073708_C001  CS_OFFL_SIR_NOPR_2_20190717T065254_20190717T073708_C001  CS_OFFL_SIR_NOPR_2_20190717T073554_20190717T073708_C001	CS_OFFL_SIR_NOPR_2_20190717T043143_20190717T043400_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050658_C001  CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050658_C001  CS_OFFL_SIR_NOPR_2_20190717T055705_20190717T060035_C001  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T064957_C001  CS_OFFL_SIR_NOPR_2_20190717T065254_20190717T07037_C001  CS_OFFL_SIR_NOPR_2_20190717T065254_20190717T07037_C001  CS_OFFL_SIR_NOPR_2_20190717T073554_20190717T073708_C001  CS_OFFL_SIR_NOPR_2_20190717T073554_20190717T073708_C0	CS_OFFL_SIR_NOPR_2_20190717T043820_20190717T044107_C001		
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20190717T065254_20190717T073708_C001  and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM OCOG Altimeter Range and Backscatter Quality PLRM.  CS_OFFL_SIR_NOPR_2_20190717T065254_20190717T070037_C001  CS_OFFL_SIR_NOPR_2_20190717T073554_20190717T073708_C001  Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPR_2_20190717T045859_20190717T050301_C001		
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM OCOG Altimeter Range and Backscatter Quality PLRM OCOG Altimeter Range and Backscatter Quality PLRM OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM OCOG Altimeter Range and Backscatter Quality PLRM.  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T070037_C001  CS_OFFL_SIR_NOPR_2_20190717T065254_20190717T070037_C001  CS_OFFL_SIR_NOPR_2_20190717T073554_20190717T073708_C001  Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality PLRM.  CS_OFFL_SIR_NOPR_2_20190717T073554_20190717T073708_C001  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20190717T073554_20190717T073708_C001  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPR_2_20190717T050505_20190717T050658_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T070037_C001  CS_OFFL_SIR_NOPR_2_20190717T0705254_20190717T070037_C001  CS_OFFL_SIR_NOPR_2_20190717T073554_20190717T073708_C001  and Backscatter Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  CS_OFFL_SIR_NOPR_2_20190717T073554_20190717T073708_C001  CS_OFFL_SIR_NOPR_2_20190717T073554_20190717T073708_C001  Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter	CS_OFFL_SIR_NOPR_2_20190717T055705_20190717T060035_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCOG Backscatter Quality  OCOG Backscatter Quality  OCOG Backscatter Quality  More records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags are for one or more records.	CS_OFFL_SIR_NOPR_2_20190717T064756_20190717T064957_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPR_2_20190717T065254_20190717T070037_C001		
	CS_OFFL_SIR_NOPR_2_20190717T073554_20190717T073708_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_NOPR_2_20190717T074911_20190717T075305_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_20190717T083752_20190717T083907_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_20190717T094642_20190717T094855_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_20190717T101108_20190717T101800_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_20190717T105430_20190717T105525_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_20190717T115524_20190717T115618_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_20190717T142542_20190717T142724_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_20190717T152359_20190717T152408_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_20190717T155147_20190717T155404_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_20190717T160431_20190717T160831_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_20190717T165612_20190717T165940_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_20190717T172952_20190717T173331_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_20190717T174311_20190717T174701_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_20190717T183429_20190717T184155_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_20190717T190936_20190717T191352_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_20190717T192428_20190717T192639_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_20190717T204726_20190717T205346_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_20190717T210452_20190717T210544_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_20190717T224405_20190717T224516_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_20190717T225909_20190717T230718_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_20190717T230718_20190717T230758_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_20190717T233304_20190717T233319_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_20190717T233354_20190717T233617_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

## L2 Quality Flags (1 Hz & 1Hz PLRM)

 $\label{lem:currently} \textbf{Currently, there are several common flags raised in the Level 2 products, which are summarised below.}$ 

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

## 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:

66

### 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:

128