

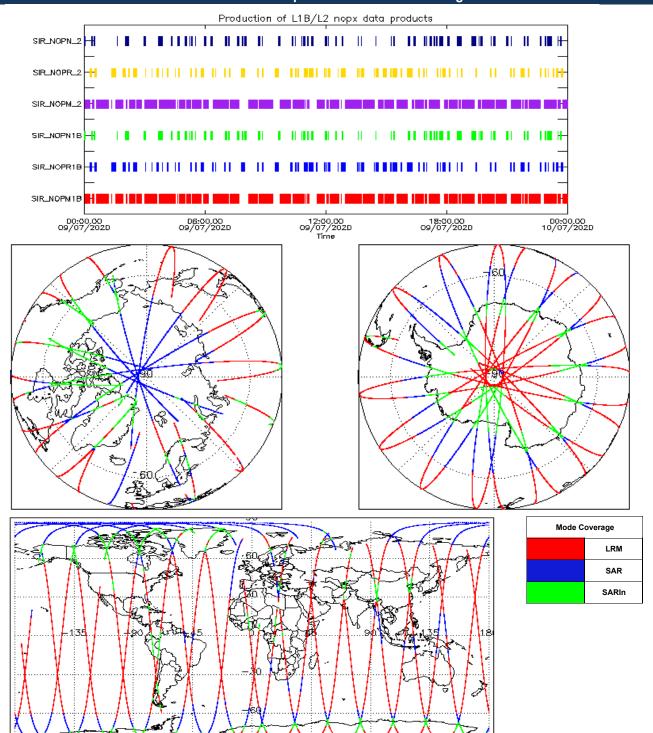
1. Overview

Report Production:	21-Jul-2020	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Near Real Time Ocean Products (NOP) L1B & L2 Science Data	

Check	L1 & L2
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5
Measurement Quality Flag Check	See Section 5.6
Ocean Retracking Quality Check	See Section 5.7
QCC Error/ Warning Check	See Section 6.1 and 6.2

Mission / Instrument News	
08-Jul-2020	None
09-Jul-2020	None
10-Jul-2020	Nothing planned

2. Production Completeness & Global Coverage



3. Instrument Configuration

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

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

4. NOP Level 1B Data Quality Check

4.1 L1B Product Format Check

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

Number of products with errors:

0

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:

0

4.3 L1B Auxilary Data File Usage Check

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

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

Number of products with errors:

0

4.4 L1B Auxiliary Correction Error Check

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:

Λ

4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20200709T062447_20200709T063108_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_NOPM1B_20200709T143623_20200709T145102_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:

8

Product	Test Failed	Description
CS_OFFL_SIR_NOPN1B_20200709T030153_20200709T030313_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20200709T053030_20200709T053218_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20200709T124805_20200709T125016_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20200709T174155_20200709T174534_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20200709T174539_20200709T174708_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20200709T220041_20200709T220152_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20200709T001756_20200709T002149_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20200709T065733_20200709T065918_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.

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

Number of products with errors:

0

5.4 L2 Auxiliary Correction Error Check

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

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

- > ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Corection, 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.

imber of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20200709T145936_20200709T151248_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_20200709T002149_20200709T002303_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_20200709T002811_20200709T003126_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20200709T020244_20200709T020521_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_20200709T020715_20200709T021255_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_20200709T025805_20200709T030044_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_20200709T034119_20200709T034250_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_20200709T043714_20200709T043821_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_20200709T052013_20200709T052220_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_20200709T061628_20200709T062218_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_20200709T075644_20200709T080234_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_20200709T083905_20200709T084026_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_20200709T101854_20200709T102221_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_20200709T115801_20200709T120121_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_20200709T120638_20200709T120801_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_20200709T124805_20200709T125016_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_20200709T134536_20200709T134645_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_20200709T152235_20200709T152434_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_20200709T160616_20200709T160832_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_20200709T170906_20200709T171019_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_20200709T174539_20200709T174708_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_20200709T183148_20200709T183453_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_20200709T184132_20200709T184405_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_20200709T192140_20200709T192530_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_20200709T205745_20200709T210223_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_20200709T211216_20200709T211307_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_20200709T215116_20200709T215240_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_20200709T233729_20200709T234033_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_20200709T033648_20200709T034119_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20200709T043026_20200709T043208_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_20200709T075145_20200709T075644_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_20200709T092929_20200709T093843_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_20200709T110929_20200709T111736_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_20200709T125016_20200709T125753_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_20200709T142918_20200709T143623_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_20200709T154402_20200709T154616_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPR_2_20200709T160833_20200709T161046_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_20200709T161046_20200709T161542_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_20200709T174708_20200709T175331_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_20200709T192531_20200709T192846_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20200709T062447_20200709T063108_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_20200709T143623_20200709T145102_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.

79

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20200709T000134_20200709T001756_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_20200709T002303_20200709T002811_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_20200709T003512_20200709T011048_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_20200709T013306_20200709T013737_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_20200709T013744_20200709T015545_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_20200709T021450_20200709T022718_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_20200709T022839_20200709T023137_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_20200709T023619_20200709T025043_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_20200709T030325_20200709T032044_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_20200709T032233_20200709T033648_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_20200709T034421_20200709T034625_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_20200709T034723_20200709T035128_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_20200709T035342_20200709T040718_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_20200709T041045_20200709T042008_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_20200709T043821_20200709T043918_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_20200709T044300_20200709T045932_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_20200709T050508_20200709T051325_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_20200709T051415_20200709T051737_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_20200709T052220_20200709T053030_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

CO. CHILDRING NO. 12, 2020/10/10/10/10 2020/10/10/10/10 2020/10/10/10/10/10/10/10/10/10/10/10/10/10	CS_OFFL_SIR_NOPM_2_20200709T053329_20200709T054826_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.
Backdord Culting Cal Cities Silk NOPM 2 (2020/08/10019) 2020/08/1007/09 (2011) Cal Cities Silk NOPM 2 (2020/08/10019) 2020/08/1007/09 (2011) Cal Cities Silk NOPM 2 (2020/08/10019) 2020/08/1009/09 (2011) Cal Cities S	CS_OFFL_SIR_NOPM_2_20200709T060256_20200709T060412_C001		, ,
Col. OFFL. SRI, NORM_2_20200709710306_20200709710908_0001 Col. OFFL. SRI, NORM_2_2020070970908_0001 Col. OFFL. SRI, NORM_2_20200709710908_0001 Col. OFFL. SRI, NORM_2_20200709710908	CS_OFFL_SIR_NOPM_2_20200709T060415_20200709T060419_C001		
The American Landon Control (1986) and account (198	CS_OFFL_SIR_NOPM_2_20200709T063119_20200709T065733_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SR_NOPM_2_2000700719140_202007007190401_CO1 Dean Allereder Range_SR_NOPM_200070071914017_20007007100401_CO1 Dean Allereder Range_SR_NOPM_200070071904017_20007007100401_CO1 Dean Allereder Range_SR_NOPM_200070071904017_20007007100401_CO1 Dean Allereder Range_SR_NOPM_200070071904017_20007007100401_CO1 Dean Allereder Range_SR_NOPM_200070071904017_20007007100401_CO1 Dean Allereder Range_SR_NOPM_20007007104017_20007007100401_CO1 Dean Allereder Range_SR_NOPM_20007007104007_20007007100401_CO1 Dean Allereder Range_SR_NOPM_20007007104007_20007007100401_CO1 Dean Allereder Range_SR_NOPM_20007007104007_2000700710040_CO1 Dean Allereder Range_SR_NOPM_20007007104007_20007007110040_CO1 Dean Allereder Range_SR_NOPM_20007007104007_20007007110040_CO1 Dean Allereder Range_SR_NOPM_20007007104007_20007007110040_CO1 Dean Allereder Range_SR_NOPM_20007007110040_CO1 Dean Allereder Range_SR_NOPM_20007007104007_20007007110040_CO1 Dean Allereder Range_SR_NOPM_20007007104007_20007007110040_CO1 Dean Allereder Range_SR_NOPM_200070071104007	CS_OFFL_SIR_NOPM_2_20200709T070346_20200709T070908_C001		
CS_OFFL_SR_NOPM_2_20007067103193_20007067103195_0001 CS_OFFL_SR_NOPM_2_20007067103193_20007067103197_0001 CS_OFFL_SR_NOPM_2_20007067103202_20007067103197_0001 CS_OFFL_SR_NOPM_2_20007067103202_20007067103190_0001 CS_OFFL_SR_NOPM_2_20007067103202_20007067103190_0001 CS_OFFL_SR_NOPM_2_20007067103202_20007067103190_0001 CS_OFFL_SR_NOPM_2_20007067103202_20007067103190_0001 CS_OFFL_SR_NOPM_2_20007067103190_20007067103190_0001 CS_OFFL_SR_NOPM_2_20007067103190_20007067103190_0001 CS_OFFL_SR_NOPM_2_20007067103190_20007067103190_0001 CS_OFFL_SR_NOPM_2_20007067103190_0001 CS_OFFL_SR_NOPM_2_200070	CS_OFFL_SIR_NOPM_2_20200709T071343_20200709T073700_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Doesn't Linder Range, SSHA, SWH and Backscater Quality Flags bere been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags bere been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags bere been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags bere been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags bere been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags bere been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags bere been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags bere been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags have been set to COP Allimeter Range, SSHA, SWH and Backscater Quality Flags hav	CS_OFFL_SIR_NOPM_2_20200709T080917_20200709T083603_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscater Quality, COCS Affirmeter Range and Backscater Quality Rags have been self to cock of Affirmeter Range and Backscater Quality Rags have been self to cock of Affirmeter Range and Backscater Quality Rags have been self to cock of Affirmeter Range and Backscater Quality Rags have been self to cock of Affirmeter Range and Backscater Quality Rags have been self to cock of Affirmeter Range and Backscater Quality Rags have been self to cock of Affirmeter Range and Backscater Quality Rags have been self to cock of Affirmeter Range and Backscater Quality Rags have been self to cock of Range and	CS_OFFL_SIR_NOPM_2_20200709T084313_20200709T084915_C001		
and the COGO Allimeter Range and Backscatter Quality Flags have been all meter Range and Backscatter Quality Flags have been set for one or more record. CS_OFFL_SIR_NOPM_2_202007091102222_202007091102750_C001 CS_OFFL_SIR_NOPM_2_202007091102318_202007091102750_C001 CS_OFFL_SIR_NOPM_2_20200709110030_20200709110220_C001 CS_OFFL_SIR_NOPM_2_20200709110030_20200709110220_C001 CS_OFFL_SIR_NOPM_2_20200709110300_20200709110220_C001 CS_OFFL_SIR_NOPM_2_20200709110300_20200709110220_C001 CS_OFFL_SIR_NOPM_2_20200709110300_20200709110220_C001 CS_OFFL_SIR_NOPM_2_20200709110300_20200709110200_C001 CS_OFFL_SIR_NOPM_2_20200709110300_20200709110200_C001 CS_OFFL_SIR_NOPM_2_20200709110300_20200709110200_C001 CS_OFFL_SIR_NOPM_2_20200709110300_20200709110200_C001 CS_OFFL_SIR_NOPM_2_20200709110200_20000 CS_OFFL_SIR_NOPM_2_20200709110200_20000 CS_OFFL_SIR_NOPM_2_20200709110200_20000 CS_OFFL_SIR_NOPM_2_20200709110200_20000 CS_OFFL_SIR_NOPM_2_20200709110200_20000 CS_OFFL_SIR_NOPM_2_20200709110200_20000 CS_OFFL_SIR_NOPM_2_20200709110200_20000 CS_OFFL_SIR_NOPM_2_20200709110200_20000000000 CS_OFFL_SIR_NOPM_2_2020007091102000000000000000000000000000	CS_OFFL_SIR_NOPM_2_20200709T085213_20200709T091847_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Bockscater Quality CS_OFFL_SIR_NOPM_2_20200709T10318_20200709T10929_C001 CS_OFFL_SIR_NOPM_2_20200709T10539_20200709T10929_C001 CS_OFFL_SIR_NOPM_2_20200709T10539_20200709T10929_C001 CS_OFFL_SIR_NOPM_2_20200709T10539_20200709T10929_C001 CS_OFFL_SIR_NOPM_2_20200709T10539_20200709T10929_C001 CS_OFFL_SIR_NOPM_2_20200709T10539_20200709T10929_C001 CS_OFFL_SIR_NOPM_2_20200709T10539_20200709T10929_C001 CS_OFFL_SIR_NOPM_2_20200709T105122_20200709T10929_C001 CS_OFFL_SIR_NOPM_2_20200709T105122_20200709T10939_C001 CS_OFFL_SIR_NOPM_2_20200709T105122_20200709T10939_C001 CS_OFFL_SIR_NOPM_2_20200709T105139_C000709T10939_C001 CS_OFFL_SIR_NOPM_2_20200709T105139_C000709T10939_C001 CS_OFFL_SIR_NOPM_2_20200709T105139_C000709T10939_C001 CS_OFFL_SIR_NOPM_2_20200709T105139_C000709T10939_C001 CS_OFFL_SIR_NOPM_2_20200709T105139_C000709T10939_C001 CS_OFFL_SIR_NOPM_2_20200709T105139_C000709T105139_C000709T10939_C001 CS_OFFL_SIR_NOPM_2_20200709T1051309_C000709T10939_C001 CS_OFFL_SIR_NOPM_2_20200709T1051309_C000709T10939_C001 CS_OFFL_SIR_NOPM_2_20200709T1051309_C000709T10939_C001 CS_OFFL_SIR_NOPM_2_20200709T109309_C001 CS_OFFL_SIR_NOPM_2_20200709T109509_C001 CS_OFFL_SIR_NOPM_2_20200709T109509_C001 CS_OFFL_SIR_NOPM_2_20200709T109509_C001 CS_OFFL_SIR_NOPM_2_20200709T109509_C001 CS_OFFL_SIR_NOPM_2_20200709T109509_C001 CS_OFFL_SIR_NOPM_2_20200709T109509_C001 CS_OFFL_SIR_NOPM_2_20200709T109509_C001 CS_OFFL_SIR_NOPM_2_20200709T109509_C001 CS_OFFL_SIR_NOPM_2_20200709T109509_C001 CS_OFFL_SIR_NOPM_2_20200709T109509_C001009_C001 CS_OFFL_SIR_NOPM_2_20200709T109509_C001009_C0	CS_OFFL_SIR_NOPM_2_20200709T094236_20200709T101427_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COCG Allmeter Range and Backscatter Quality Flags have been self to cone or more records. CS_OFFL_SIR_NOPM_2_20200709T110539_20200709T110539_C0001 CS_OFFL_SIR_NOPM_2_20200709T110539_20200709T110539_C0001 CS_OFFL_SIR_NOPM_2_20200709T120122_20200709T120286_C001 CS_OFFL_SIR_NOPM_2_20200709T120122_20200709T120286_C001 CS_OFFL_SIR_NOPM_2_20200709T120122_20200709T120288_C001 CS_OFFL_SIR_NOPM_2_20200709T120122_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120122_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120122_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120122_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120122_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120123_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120123_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120133_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120133_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120133_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120133_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120133_20200709T120383_C001 CS_OFFL_SIR_NOPM_2_20200709T120133_20200709T13054_D00000000000000000000000000000000000	CS_OFFL_SIR_NOPM_2_20200709T102222_20200709T102750_C001		
and Backscatter Quality, COGA Allmeter Range and Backscatter Quality Flags have been after one or more records. CS_OFFL_SIR_NOPM_2_202007097113310_202007097115434_C001 CS_OFFL_SIR_NOPM_2_202007097120122_202007097120228_C001 CS_OFFL_SIR_NOPM_2_202007097120122_202007097120228_C001 CS_OFFL_SIR_NOPM_2_202007097120122_202007097120238_C001 CS_OFFL_SIR_NOPM_2_202007097120122_202007097120238_C001 CS_OFFL_SIR_NOPM_2_202007097120123_20200709712038_C001 CS_OFFL_SIR_NOPM_2_202007097120123_20200709712038_C001 CS_OFFL_SIR_NOPM_2_202007097120123_20200709712038_C001 CS_OFFL_SIR_NOPM_2_202007097120728_2000709712038_C001 CS_OFFL_SIR_NOPM_2_202007097120728_2000709712038_C001 CS_OFFL_SIR_NOPM_2_202007097120728_20007097120728_001 CS_OFFL_SIR_NOPM_2_202007097120728_001 CS_OFFL_SIR_NOPM_2_202007097120728_001 CS_OFFL_SIR_NOPM_2_202007097120728_001 CS_OFFL_SIR_NOPM_2_202007097120728_001 CS_OFFL_SIR_NOPM_2_202007097120742000 CS_OFFL_SIR_NOPM_2_202007097120742000 CS_OFFL_SIR_NOPM_2_202007097130520_202007097134100_C001 CS_OFFL_SIR_NOPM_2_202007097135200_20200709714200_C001 CS_OFFL_SIR_NOPM_2_202007097135200_20200709714200_C001 CS_OFFL_SIR_NOPM_2_202007097135200_20200709714200_C001 CS_OFFL_SIR_NOPM_2_202007097145064_20200709714500_C001 CS_OFFL_SIR_NOPM_2_202007097145004_202007097145002_C001 CS_OFFL_SIR_NOPM_2_202007097145004_202007097145002_C001 CS_OFFL_SIR_NOPM_2_202007097145004_202007097152001_C001 CS_OFFL_SIR_NOPM_2_202007097145004_202007097152001 CS_OFFL_SIR_NOPM_2_202007097145004_202007097152001_C001 CCO	CS_OFFL_SIR_NOPM_2_20200709T103118_20200709T103540_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality COCG Altimeter Range and Backscatter Quality set from or or more records. CS_OFFL_SIR_NOPM_2_20200709T120122_20200709T120226_CO01 CS_OFFL_SIR_NOPM_2_20200709T120122_20200709T120238_CO01 CS_OFFL_SIR_NOPM_2_20200709T120128_20200709T120238_CO01 CS_OFFL_SIR_NOPM_2_20200709T120138_CO01 CS_OFFL_SIR_NOPM_2_20200709T12138_20200709T120139_CO01 CS_OFFL_SIR_NOPM_2_20200709T120138_CO01 CS_OFFL_SIR_NOPM_2_20200709T120138_CO00709T13315_CO01 CS_OFFL_SIR_NOPM_2_20200709T120138_CO00709T13315_CO01 CS_OFFL_SIR_NOPM_2_20200709T133654_20200709T134123_CO01 CS_OFFL_SIR_NOPM_2_20200709T133654_20200709T134123_CO01 CS_OFFL_SIR_NOPM_2_20200709T133654_20200709T134123_CO01 CS_OFFL_SIR_NOPM_2_20200709T135226_20200709T142403_CO01 CS_OFFL_SIR_NOPM_2_20200709T135226_20200709T142403_CO01 CS_OFFL_SIR_NOPM_2_20200709T1450226_CO01 CS_OFFL_SIR_NOPM_2_20200709T145023_C000709T145102_CO01 CS_OFFL_SIR_NOPM_2_20200709T145023_C000709T145102_CO01 CS_OFFL_SIR_NOPM_2_20200709T145023_C000709T14548_CO01 CS_OFFL_SIR_NOPM_2_20200709T145023_C000709T14548_CO01 CS_OFFL_SIR_NOPM_2_20200709T145023_C000709T14548_CO01 CS_OFFL_SIR_NOPM_2_20200709T14504_20200709T14548_CO01 CS_OFFL_SIR_NOPM_2_20200709T14504_20200709T14548_CO01 CS_OFFL_SIR_NOPM_2_20200709T14504_20200709T14548_CO01 CS_OFFL_SIR_NOPM_2_20200709T14504_20200709T14548_CO01 CS_OFFL_SIR_NOPM_2_20200709T14504_20200709T15285_CO01 CS_OFFL_SIR_NOPM_2_20200709T14504_20200709T15285_CO01 CS_OFFL_SIR_NOPM_2_20200709T14504_20200709T15285_CO01 CS_OFFL_SIR_NOPM_2_20200709T14504_20200709T15285_CO01 CS_OFFL_SIR_NOPM_2_20200709T15204_20200709T15285_CO01 CS_OFFL_SIR_NOPM_2_20200709T15204_20200709T15285_CO01 CCO_GARimeter Range and Backscatter Quality Flags have been set for one or more records. CC_OFFL_SIR_NOPM_2_20200709T15204_20200709T152021_CO01 CCO_GARimeter Range and Backscatter Quality Flags have been set for one or more records. CC_OFFL_SIR_NOPM_2_20200709T15204_20200709T152025_CO01 CCO_GARimeter Range and Backscatter Quality Flags have been set for one or more re	CS_OFFL_SIR_NOPM_2_20200709T110639_20200709T110929_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_NOPM_2_20200709T120228_20200709T120638_C001 CS_OFFL_SIR_NOPM_2_20200709T12138_20200709T122818_C001 CS_OFFL_SIR_NOPM_2_20200709T125754_20200709T133315_C001 CS_OFFL_SIR_NOPM_2_20200709T125754_20200709T133315_C001 CS_OFFL_SIR_NOPM_2_20200709T135526_20200709T133315_C001 CS_OFFL_SIR_NOPM_2_20200709T135526_20200709T142403_C001 CS_OFFL_SIR_NOPM_2_20200709T135526_20200709T142403_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145102_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T151248_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T151248_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145621_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T152021_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T152021_C001 CS_OFFL_SIR_NOPM_2_20200709T15504_20200709T152021_C001 CS_OFFL_SIR_NOPM_2_20200709T15504_20200709T152021_C001 CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	CS_OFFL_SIR_NOPM_2_20200709T113310_20200709T115434_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_NOPM_2_20200709T121138_20200709T122818_C001 CS_OFFL_SIR_NOPM_2_20200709T121138_20200709T122818_C001 CS_OFFL_SIR_NOPM_2_20200709T125754_20200709T133315_C001 CS_OFFL_SIR_NOPM_2_20200709T125754_20200709T133315_C001 CS_OFFL_SIR_NOPM_2_20200709T133654_20200709T133315_C001 CS_OFFL_SIR_NOPM_2_20200709T133654_20200709T134123_C001 CS_OFFL_SIR_NOPM_2_20200709T136526_20200709T142403_C001 CS_OFFL_SIR_NOPM_2_20200709T143623_20200709T145102_C001 CS_OFFL_SIR_NOPM_2_20200709T143623_20200709T145102_C001 CS_OFFL_SIR_NOPM_2_20200709T145544_20200709T151248_C001 CS_OFFL_SIR_NOPM_2_20200709T145936_20200709T151248_C001 CS_OFFL_SIR_NOPM_2_20200709T145936_20200709T151248_C001 CS_OFFL_SIR_NOPM_2_20200709T145936_20200709T151248_C001 CS_OFFL_SIR_NOPM_2_20200709T145936_20200709T151248_C001 CS_OFFL_SIR_NOPM_2_20200709T145936_20200709T151248_C001 CS_OFFL_SIR_NOPM_2_20200709T145936_20200709T151248_C001 CS_OFFL_SIR_NOPM_2_20200709T145936_20200709T151248_C001 CS_OFFL_SIR_NOPM_2_20200709T151504_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T15204_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T15504_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T15504_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T15504_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T15504_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T15504_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T15504_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T152040_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T152040_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T152040_20	CS_OFFL_SIR_NOPM_2_20200709T120122_20200709T120226_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality set for one or more records. CS_OFFL_SIR_NOPM_2_20200709T125754_20200709T133315_C001 CS_OFFL_SIR_NOPM_2_20200709T133654_20200709T133315_C001 CS_OFFL_SIR_NOPM_2_20200709T133654_20200709T134123_C001 CS_OFFL_SIR_NOPM_2_20200709T133654_20200709T134123_C001 CS_OFFL_SIR_NOPM_2_20200709T135226_20200709T142403_C001 CS_OFFL_SIR_NOPM_2_20200709T135226_20200709T142403_C001 CS_OFFL_SIR_NOPM_2_20200709T143623_20200709T145102_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145821_C001 CS_OFFL_SIR_NOPM_2_20200709T145644_20200709T145821_C001 CS_OFFL_SIR_NOPM_2_20200709T145936_20200709T15248_C001 CS_OFFL_SIR_NOPM_2_20200709T145936_20200709T15248_C001 CS_OFFL_SIR_NOPM_2_20200709T15044_20200709T152021_C001 CS_OFFL_SIR_NOPM_2_20200709T15044_20200709T152021_C001 CS_OFFL_SIR_NOPM_2_20200709T15044_20200709T150422_C001 CS_OFFL_SIR_NOPM_2_20200709T15044_20200709T150422_C001 CS_OFFL_SIR_NOPM_2_20200709T15044_20200709T150422_C001 CS_OFFL_SIR_NOPM_2_20200709T15044_20200709T150422_C001 CS_OFFL_SIR_NOPM_2_20200709T15044_20200709T150422_C001 CCS_OFFL_SIR_NOPM_2_20200709T15044_20200709T150422_C001 CCS_OFFL_SIR_NOPM_2_20200709T15044_20200709T150422_C001 CCS_OFFL_SIR_NOPM_2_20200709T15044_20200709T150422_C001 CCS_OFFL_SIR_NOPM_2_20200709T15044_20200709T15040_202	CS_OFFL_SIR_NOPM_2_20200709T120228_20200709T120638_C001		
CS_OFFL_SIR_NOPM_2_20200709T135754_20200709T133315_C001 Altimeter Range and Backscatter Quality Flags have been altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_NOPM_2_20200709T133654_20200709T142403_C001 CS_OFFL_SIR_NOPM_2_20200709T135226_20200709T142403_C001 CS_OFFL_SIR_NOPM_2_20200709T143623_20200709T145102_C001 CS_OFFL_SIR_NOPM_2_20200709T145544_20200709T145821_C001 CS_OFFL_SIR_NOPM_2_20200709T145544_20200709T15248_C001 CS_OFFL_SIR_NOPM_2_20200709T151504_20200709T152021_C001 CS_OFFL_SIR_NOPM_2_20200709T151504_20200709T152021_C001 CS_OFFL_SIR_NOPM_2_20200709T151504_20200709T152035_C001 CS_OFFL_SIR_NOPM_2_20200709T151504_20200709T152040_C00709T152035_C001 CS_OFFL_SIR_NOPM_2_20200709T15004_20200709T152040_20200709T152035_C001 CS_OFFL_SIR_NOPM_2_20200709T15004_20200709T152035_C001 CS_OFFL_SIR_NOPM_2_20200709T15004_20200709T152005_C001 CS_OFFL_SIR_NOPM_2_20200709T15004_20200709T152005_C001 CS_OFFL_SIR_NOPM_2_20200709T15004_20200709T152005_C001 CS_OFFL_SIR_NOPM_2_20200709T15004_20200709T152005_C001 CS_OFFL_SIR_NOPM_2_20200709T15004_20200709T152005_C001 CS_OFFL_SIR_NOPM_2_20200709T15004_20200709T152005_C001 CS_OFFL_SIR_NOPM_2_20200709T15004_20200709T152005_C001 CS_OFFL_SIR_NOPM_	CS_OFFL_SIR_NOPM_2_20200709T121138_20200709T122818_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_NOPM_2_20200709T135226_20200709T142403_C001 CS_OFFL_SIR_NOPM_2_20200709T135226_20200709T142403_C001 CS_OFFL_SIR_NOPM_2_20200709T143623_20200709T145102_C001 CS_OFFL_SIR_NOPM_2_20200709T143623_20200709T145102_C001 CS_OFFL_SIR_NOPM_2_20200709T145544_20200709T145821_C001 CS_OFFL_SIR_NOPM_2_20200709T145544_20200709T145821_C001 CS_OFFL_SIR_NOPM_2_20200709T145544_20200709T15248_C001 CS_OFFL_SIR_NOPM_2_20200709T15504_20200709T152021_C001 CS_OFFL_SIR_NOPM_2_20200709T15504_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T155045_20200709T152045_C001 CS_OFFL_SIR_NOPM_2_20200709T155045_20200709T152440_C001 CS_OFFL_SIR_NOPM_2_20200709T155045_20200709T1524402_C001 CS_OFFL_SIR_NOPM_2_20200709T155045_20200709T15245_C001 CS_OFFL_SIR_NOPM_2_20200709T155045_20200709T15245_C001 CS_OFFL_SIR_NOPM_2_20200709T155045_20200709T15245_C001 CS_OFFL_SIR_NOPM_2_20200709T155045_20200709T15245_C001 CS_OFFL_SIR_NOPM_2_20200709T151045_20200709T152035_C001 CS_OFFL_SIR_NOPM_2_20200709T15045_20200709T152035_C001 CS_OFFL_SIR_NOPM_2_20200709T15045_20200709T152035_C001 CCCG_Altimeter Range Quality, OCOG_Backscatter Quality Flags have been set for one or more records. CCCG_Altimeter Range And Backscatter Quality Flags have been set for one or more records. CCCG_Altimeter Range Quality, OCOG_Backscatter Quality Flags have been set for one or more records. CCCG_Altimeter Range Quality, OCOG_Backscatter Quality Flags have been set for one or more records. CCCG_Altimeter Range Quality, OCOG_Backscatter Quality Flags have been set for one or more records. CCCG_Altimeter Range Quality, OCOG_Backscatter Quality Flags have been set for one or more records. CCCG_Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. CCCG_Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records. CCCCG_Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records. CCCCG_Altimeter Range Altimeter Range	CS_OFFL_SIR_NOPM_2_20200709T125754_20200709T133315_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_NOPM_2_20200709T143623_20200709T145102_C001 DCean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. Cean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_NOPM_2_20200709T151504_20200709T151248_C001 DCOG Altimeter Range Quality, OCOG Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_NOPM_2_20200709T152040_20200709T152235_C001 DCOG Altimeter Range Quality, OCOG Backscatter Quality, OCO	CS_OFFL_SIR_NOPM_2_20200709T133654_20200709T134123_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. The Ocean Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG 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 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 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 and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_NOPM_2_20200709T151504_20200709T152021_C001 OCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records. OCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records. OCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records. OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPM_2_20200709T135226_20200709T142403_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPM_2_20200709T145544_20200709T145821_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_NOPM_2_20200709T145936_20200709T151248_C001 CS_OFFL_SIR_NOPM_2_20200709T151504_20200709T152021_C001 CS_OFFL_SIR_NOPM_2_20200709T151504_20200709T152021_C001 CS_OFFL_SIR_NOPM_2_20200709T152040_20200709T152021_C001 CS_OFFL_SIR_NOPM_2_20200709T152040_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T152040_20200709T152235_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T154402_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T154402_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T154402_C001 Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_NOPM_2_20200709T152040_20200709T154402_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T154402_C001 The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T154402_C001 The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T154402_C001 CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T154402_C001	CS_OFFL_SIR_NOPM_2_20200709T143623_20200709T145102_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPM_2_20200709T151248_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_NOPM_2_20200709T151504_20200709T152021_C001 OCOG Altimeter Range Quality, OCOG Backscatter Quality CS_OFFL_SIR_NOPM_2_20200709T152040_20200709T152035_C001 OCOG Altimeter Range Quality, OCOG Backscatter Quality CS_OFFL_SIR_NOPM_2_20200709T152040_20200709T152235_C001 OCOG Altimeter Range Quality, OCOG Backscatter Quality CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T154402_C001 OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T154402_C001 OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPM_2_20200709T145544_20200709T145821_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality Gr one or more records. CS_OFFL_SIR_NOPM_2_20200709T15104_20200709T152035_C001 Backscatter Quality Gr one or more records. The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. OCOG Altimeter Range Quality, OCOG Backscatter Quality Gr one or more records. The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. Ocean Altimeter Range, SSHA, SWH 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_20200709T145936_20200709T151248_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality for one or more records. Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_NOPM_2_20200709T151504_20200709T152021_C001		
CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T154402_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_NOPM_2_20200709T152040_20200709T152235_C001		
	CS_OFFL_SIR_NOPM_2_20200709T153045_20200709T154402_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_NOPM_2_20200709T154616_20200709T160256_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_20200709T162158_20200709T162235_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_20200709T162540_20200709T163603_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_20200709T163742_20200709T165133_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_20200709T165430_20200709T165932_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_20200709T171446_20200709T172026_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_20200709T172549_20200709T172955_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_20200709T173118_20200709T173222_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_20200709T173238_20200709T173827_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_20200709T181004_20200709T183005_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_20200709T183453_20200709T183849_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_20200709T183910_20200709T184132_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_20200709T184603_20200709T191347_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_20200709T194544_20200709T200936_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_20200709T201239_20200709T201802_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_20200709T201809_20200709T202135_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_20200709T202524_20200709T205745_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_20200709T212921_20200709T214130_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_20200709T214430_20200709T214905_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_20200709T220539_20200709T223753_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_20200709T225053_20200709T225217_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_20200709T231949_20200709T232658_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_20200709T233214_20200709T233729_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_20200709T234428_20200710T000543_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_20200708T235922_20200709T000134_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_20200709T002811_20200709T003126_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_20200709T162235_20200709T162540_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20200709T171209_20200709T171446_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20200709T172027_20200709T172504_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20200709T075145_20200709T075644_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_20200709T152434_20200709T153045_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_20200709T160256_20200709T160343_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_20200709T175354_20200709T175416_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20200709T202256_20200709T202523_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

L2 Quality Flags (20Hz PLRM)

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

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

Number of products with errors:

69

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20200708T235922_20200709T000134_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_20200709T002811_20200709T003126_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_20200709T020244_20200709T020521_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_20200709T020715_20200709T021255_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_20200709T034119_20200709T034250_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_20200709T042008_20200709T042234_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_20200709T045932_20200709T050508_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_20200709T055729_20200709T060111_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_20200709T061628_20200709T062218_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_20200709T070310_20200709T070345_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_20200709T070908_20200709T071139_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_20200709T073700_20200709T073757_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_20200709T073938_20200709T074041_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_20200709T075644_20200709T080234_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_20200709T084915_20200709T085038_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.

	Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_NOPN_2_20200709T093843_20200709T094236_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20200709T101854_20200709T102221_C001	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_20200709T104755_20200709T104827_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_20200709T110623_20200709T110638_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_20200709T111736_20200709T111955_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_20200709T122818_20200709T123145_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_20200709T124805_20200709T125016_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_20200709T162235_20200709T162540_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_20200709T170906_20200709T171019_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_20200709T172027_20200709T172504_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_20200709T172955_20200709T173117_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_20200709T174155_20200709T174534_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_20200709T180257_20200709T180653_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_20200709T192140_20200709T192530_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_20200709T194135_20200709T194321_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_20200709T201119_20200709T201239_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_20200709T205745_20200709T210223_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_20200709T223753_20200709T223913_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_20200709T224009_20200709T224054_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_20200709T225359_20200709T225522_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_20200709T230756_20200709T230940_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_20200709T231205_20200709T231300_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_20200709T001756_20200709T002149_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_20200709T003126_20200709T003512_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_20200709T012129_20200709T012207_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_20200709T015546_20200709T020244_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_20200709T033648_20200709T034119_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_20200709T040844_20200709T041045_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_20200709T043026_20200709T043208_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_20200709T051738_20200709T052013_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_20200709T053218_20200709T053328_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_20200709T062219_20200709T062447_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_20200709T071140_20200709T071343_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_20200709T083604_20200709T083905_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_20200709T101427_20200709T101854_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_20200709T102907_20200709T103118_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_20200709T110236_20200709T110522_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_20200709T115434_20200709T115801_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_20200709T125016_20200709T125753_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_20200709T134646_20200709T135023_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_20200709T142918_20200709T143623_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_20200709T154402_20200709T154616_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_20200709T160256_20200709T160343_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_20200709T160352_20200709T160616_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_20200709T161046_20200709T161542_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_20200709T183005_20200709T183148_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_20200709T202256_20200709T202523_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_20200709T211041_20200709T211141_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_20200709T214906_20200709T215115_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_20200709T220153_20200709T220539_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_20200709T223913_20200709T224009_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_20200709T225523_20200709T225621_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_20200709T232658_20200709T233048_C001

CS_OFFL_SIR_NOPR_2_20200709T234033_20200709T234427_C001

Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM

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.

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

L2 Quality Flags (1 Hz & 1Hz PLRM)

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

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

Number of products with errors:

166

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:

52

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:

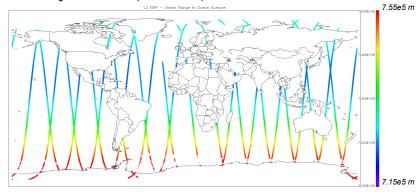
129

5.8 L2 Parameters Check

The following section provides plots and statistics of some key science parameters extracted from the L2 products.

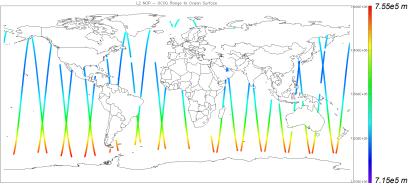
Range to Ocean Surface (Ocean and OCOG retrackers)

L2 NOP - Range to Ocean Surface (Ocean Retracker)



Parameter		NOPM	NOPN	NOPR
Range Ocean (1	mean	729.14 km	739.62 km	732.96 km
Hz)	st dev	9.55 km	14.65 km	125.46 km
Range OCOG (1	mean	729.07 km	N/A	N/A
Hz)	st dev	9.54 km	N/A	N/A

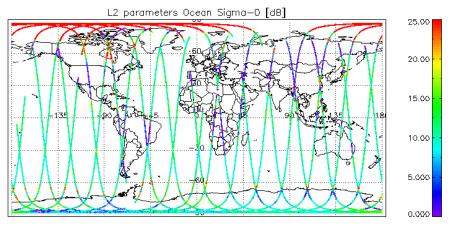
L2 NOP - Range to Ocean Surface (OCOG Retracker)



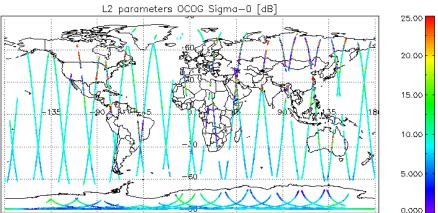
Sea Surface Height Anomaly (20 Hz)

L2 parameters Sea surface height anomaly (20 Hz) [m]	
	1.000
	_
I I I I I I I I I I I I I I I I I I I	
	0.5000
138 190 224 5 18	
	0.000
-10.4-3-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	
	-0.5000
I / / / / / / / / / / / / / / / / / / /	
Z.	
-90	
[: : : -90 : : : :	-1.000

Parameter	NOPM	NOPN	NOPR
SSHA (1 Hz)	mean +/- std	mean +/- std	mean +/- std
33HA (1 HZ)	0.0 +/- 0.2	0.7 +/- 4.1	0.0 +/- 0.5
SSHA (20 Hz)	mean +/- std	mean +/- std	mean +/- std
33HA (20 HZ)	0.0 +/- 0.5	0.8 +/- 4.7	-0.1 +/- 1.0



Parameter	NOPM	NOPN	NOPR
Ocean Sigma-0	mean +/- std	mean +/- std	mean +/- std
(1 Hz)	11.1 +/- 2.1	11.9 +/- 4.2	12.5 +/- 3.7
Ocean Sigma-0	mean +/- std	mean +/- std	mean +/- std
(20 Hz)	10.6 +/- 3.5	9.0 +/- 13.2	17.9 +/- 10.1
OCOG Sigma-0	mean +/- std	17.9 +/- 10.1	mean +/- std
(1 Hz)	9.4 +/- 2.3	N/A	N/A
OCOG Sigma-0	mean +/- std	0.725	mean +/- std
(20 Hz)	10.0 +/- 5.7	N/A	N/A
		U	·



6. NOP QCC Report Analysis

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

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_NOPM1B	142	142	2	140	0
SIR_NOPR1B	92	92	0	92	0
SIR_NOPN1B	94	94	0	94	0
SIR_NOPM_2	142	142	94	48	0
SIR_NOPR_2	92	92	25	66	1
SIR NOPN 2	94	94	33	61	0

6.1 QCC Errors

Number of QCC reports with errors:

4

i otai number	or occurrences	or each error

Product Type RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_NOPR_2 1	1	1	1							

Test Description Key:	Test Description Key:					
Abbreviation	Test name	Details				
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7 - NetCDF				
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7				
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7 - NetCDF				
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7				

6.2 QCC Warnings

Number of QCC reports with warnings

0

Fest Description Key:						
Abbreviation	Test name	Details				
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter				
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)				
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only				
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitude between -70 and 70 degrees				
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitude between -70 and 70 degrees				
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitude between -70 and 70 degrees				
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) fi surface type = ocean				
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				

RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

7.3 Missing QCC Reports

Number of products with missing QCC reports:

0