



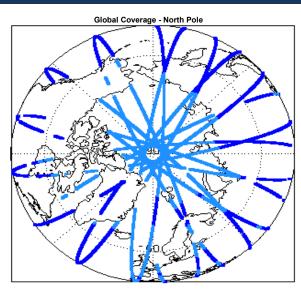
1. Overview

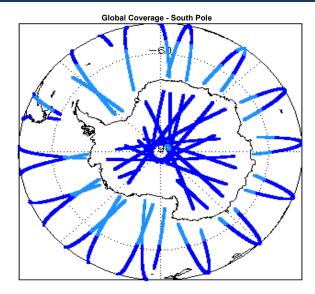
Report Production Date:	18-Dec-2015	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Geophysical Ocean Products (GOP) L1B and L2 Science Data	

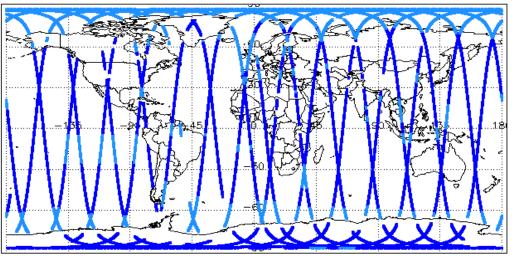
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement Confidence Data Check	See Section 4.5, 4.6, 5.5, 5.6, 5.7 and 5.8

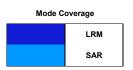
Mission / Instrument News		
18-Nov-2015	None	
19-Nov-2015	None	
20-Nov-2015	Nothing planned	

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. GOP 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 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.

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.

Number of products with errors:

4.4 L1B Auxiliary Correction Error Check

CryoSat L1B data includes a correction error flag (field 60) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

4.5 L1B Measurement Confidence Data Check

CryoSat L1B data includes a measurement confidence flag (field 12) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

Test Failed Product Description There is an error in the scaling of the L1B waveform for one or more CS_OFFL_SIR_GOP_1B_20151119T221337_20151119T221704_B001 Power scaling error records

4.6 L1B Waveform Group Data Check

CryoSat L1B data includes a waveform data flag (field 65) 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:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_1B_20151119T004719_201511119T005529_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T033343_20151119T033935_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T060151_201511119T060248_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T073433_20151119T074410_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T095745_20151119T100028_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T101100_20151119T101522_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T114938_20151119T115337_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T131547_20151119T132005_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T154854_20151119T155528_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T162935_20151119T163331_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T163357_20151119T163415_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T190855_20151119T190952_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T222538_20151119T222637_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T222813_20151119T223600_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T231243_20151119T231633_B001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOP_1B_20151119T235526_20151119T235717_B001	Loss of Echo	The tracking echo is missing for one or more records

5. GOP 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 product file (.DBL).

Number of products with errors:

5.2 L2 Product Header Analysis

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

Number of products with errors:

5.3 L2 Auxiliary Data File Usage Check

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

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

Number of products with errors:

5.4 L2 Auxiliary Correction Error Check

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

Currently, there are two 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.

Sea State Bias Error: 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: 10

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220151119T004719_20151119T005529_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_220151119T024814_20151119T030012_B001	Total Geocentric Ocean Tide (FES)	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_GOP_2_20151119T043307_20151119T043445_B001		There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_GOP_220151119T043445_20151119T044512_B001	Total Geocentric Ocean Tide (FES)	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records

CS_OFFL_SIR_GOP_2_20151119T052203_20151119T053018_B001		There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20151119T060151_20151119T060248_B001		There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20151119T140920_20151119T141036_B001	Fauilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20151119T172849_20151119T173016_B001		There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20151119T174958_20151119T175119_B001		There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_GOP_2_20151119T190602_20151119T190841_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records

5.5 L2 Measurement Confidence Data Check

CryoSat L2 data includes a measurement confidence flag (field 14) 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_GOP_2_20151119T221337_20151119T221704_B001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

5.6 L2 Range Measurement Check

CryoSat L2 data includes an Ocean (field 25) and Ice (field 30) Range Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Total Falled

Currently, there are two common status flags 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.

Ocean Range Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

 $\textbf{Ice Range Averaging Status Flag:} \ \textbf{This flag is currently set for products over land, but this is to be expected.}$

Number of products with errors: 29

CS_OFF_SR_GOP_2_20151119700133_2015119700133_P001 Ice Range Averaging Status Figs has been set for one or more condition. Inc. CR_GOFF_SR_GOP_2_20151119700133_P001 Ice Range Averaging Status The Ice Range Averaging St	Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_201511970153_2015119701631_B001 CS_OFFL_SIR_GOP_2_2015119701435_20151119701631_B001 CS_OFFL_SIR_GOP_2_2015119701631_20151119701631_B001 CS_OFFL_SIR_GOP_2_2015119701631_20151119701631_B001 CS_OFFL_SIR_GOP_2_2015119705041_20151119701631_B001 CS_OFFL_SIR_GOP_2_2015119703641_2015111970542_B001 CS_OFFL_SIR_GOP_2_2015119703641_201511197036328_B001 CS_OFFL_SIR_GOP_2_2015119703641_201511197036328_B001 CS_OFFL_SIR_GOP_2_2015119703641_201511197036328_B001 CS_OFFL_SIR_GOP_2_2015119703641_20151119703638_B001 CS_OFFL_SIR_GOP_2_2015119703641_20151119703638_B001 CS_OFFL_SIR_GOP_2_2015119703641_20151119703638_B001 CS_OFFL_SIR_GOP_2_2015119703641_2015119703638_B001 CS_OFFL_SIR_GOP_2_2015119703641_2015119703648_B001 CS_OFFL_SIR_GOP_2_2015119703641_2015119703648_B001 CS_OFFL_SIR_GOP_2_2015119703641_2015119703648_B001 CS_OFFL_SIR_GOP_2_2015119703641_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703641_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703641_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703641_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703641_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703641_2015119703641_2001 CS_OFFL_SIR_GOP_2_2015119703641_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703641_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703641_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703641_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703648_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703648_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703648_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703648_20151197036475_B001 CS_OFFL_SIR_GOP_2_2015119703648_20151197036475_B001 CS_OFFL_SIR_GOP_2_20151197136442_2015119703648_B001 CS_OFFL_SIR_GOP_2_20151197136442_20151197136446_B001 CS_OFFL_SIR_GOP_2_20151197136442_20151197156446_B001 CS_OFFL_SIR_GOP_2_20151197136442_20151197156446_B001 CS_OFFL_SIR_GOP_2_20151197136442_20151197156446_B001 CS_OFFL_SIR_GOP_2_20151197136442_20151197156446_B001 CS_OFFL_SIR_GOP_2_20151197136442_20151197156446_B001 CS_OFFL_SIR_GOP_2_2015119713644	CS_OFFL_SIR_GOP_220151119T001026_20151119T001133_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119701633_2015119705031_B001 CS_OFFL_SIR_GOP_2_201511197015031_2015119705032_B001 CS_OFFL_SIR_GOP_2_20151119705031_2015119705032_B001 CS_OFFL_SIR_GOP_2_20151119703041_5_015119705032_B001 CS_OFFL_SIR_GOP_2_20151119703041_5_015119703042_B001 CS_OFFL_SIR_GOP_2_20151119703042_5_015119703043_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119703043_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119703045_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119703045_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119703045_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119703045_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119703045_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119703045_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119705045_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119703045_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119703045_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119705045_B001 CS_OFFL_SIR_GOP_2_20151119703045_2015119703045_B001 CS_OFFL_SIR_GOP_2_2015111971031845_20151119703045_B001 CS_OFFL_SIR_GOP_2_2015111971031845_20151119703045_B001 CS_OFFL_SIR_GOP_2_2015111971031845_201511197103045_B001 CS_OFFL_SIR_GOP_2_2015111971031845_201511197103045_B001 CS_OFFL_SIR_GOP_2_201511197103845_201511197103045_B001 CS_OFFL_SIR_GOP_2_201511197103845_201511197103045_B001 CS_OFFL_SIR_GOP_2_201511197103845_201511197103045_B001 CS_OFFL_SIR_GOP_2_201511197103845_2015119710045_B001 CS_OFFL_SIR_GOP_2_201511197103845_20151119710045_B001 CS_OFFL_SIR_GOP_2_201511197103845_2015110710045_B001 CS_OFFL_SIR_GOP_2_201511197104454_20151119710045_B001	CS_OFFL_SIR_GOP_2_20151119T001133_20151119T001137_B001	Ice Range Averaging Status	
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CS_OFFL_SIR_GOP_2_20151119T069418_20151119T069018_20151119T069102_B001 Ice Range Averaging Status Ice Range Aver	CS_OFFL_SIR_GOP_2_20151119T032929_20151119T032935_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T064411_20151119T064756_B001	CS_OFFL_SIR_GOP_2_20151119T032942_20151119T032948_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T1064311_20151119T065107_B001 CS_OFFL_SIR_GOP_2_20151119T082153_20151119T082710_B001 CS_OFFL_SIR_GOP_2_20151119T082153_20151119T082710_B001 CS_OFFL_SIR_GOP_2_20151119T082717_20151119T083043_B001 CS_OFFL_SIR_GOP_2_20151119T082717_20151119T083043_B001 CS_OFFL_SIR_GOP_2_20151119T091948_20151119T092359_B001 CS_OFFL_SIR_GOP_2_20151119T091948_20151119T092359_B001 CS_OFFL_SIR_GOP_2_20151119T100153_20151119T100946_B001 CS_OFFL_SIR_GOP_2_20151119T100153_20151119T114636_B001 CS_OFFL_SIR_GOP_2_20151119T114123_20151119T14646_B001 CS_OFFL_SIR_GOP_2_20151119T132310_20151119T14645_B001 CS_OFFL_SIR_GOP_2_20151119T150349_20151119T150445_B001 CS_OFFL_SIR_GOP_2_20151119T15038_20151119T150445_B001 CS_OFFL_SIR_GOP_2_20151119T150340_20151119T155846_B001 CS_OFFL_SIR_GOP_2_20151119T15038_20151119T150445_B001 CS_OFFL_SIR_GOP_2_20151119T15038_20151119T150445_B001 CS_OFFL_SIR_GOP_2_20151119T15038_20151119T150445_B001 CS_OFFL_SIR_GOP_2_20151119T15038_20151119T150445_B001 CS_OFFL_SIR_GOP_2_20151119T15038_20151119T150445_B001 CS_OFFL_SIR_GOP_2_20151119T15038_20151119T150445_B001 CS_OFFL_SIR_GOP_2_20151119T15038_20151119T150445_B001 CS_OFFL_SIR_GOP_2_20151119T15038_20151119T150405_B001 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164405_B001 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164405_B001 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164405_B001 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164805_B001 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164805_B001 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164805_B001 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164905 CS_OFFL_SIR_GOP_2_20151119T164405_B001 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164905 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164905 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164905 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164905 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164905 CS_OFFL_SIR_GOP_2_20151119T164402_20151119T164905 CS_OFFL_SIR_GOP_2_20151119T189844_20151119T200051_B001 CS_OFFL_SIR_GOP_2_20151119T189844_2	CS_OFFL_SIR_GOP_2_20151119T050918_20151119T051020_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T106815_20151119T082710_B001 Ice Range Averaging Status The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T100153_20151119T100946_B001 Ice Range Averaging Status Ice Range Averaging Status The Ice Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T114123_20151119T114636_B001 Ice Range Averaging Status Ice Range Averaging Status The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T150638_20151119T150949_B001 Ice Range Averaging Status The Ice Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T164405_B001 Ice Range Averaging Status The Ice Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T164405_B001 Ice Range Averaging Status The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Aver	CS_OFFL_SIR_GOP_2_20151119T064411_20151119T064756_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T082717_20151119T083043_B001	CS_OFFL_SIR_GOP_2_20151119T064818_20151119T065107_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T091948_20151119T092359_B001 Lee Range Averaging Status The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Rang	CS_OFFL_SIR_GOP_2_20151119T082153_20151119T082710_B001	Ice Range Averaging Status	records.
CS_OFFL_SIR_GOP_2_20151119T100153_20151119T100946_B001 Loe Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T150249_20151119T150445_B001 Loe Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T150638_20151119T150949_B001 Loe Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T155644_20151119T155846_B001 Loe Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T164120_20151119T164405_B001 Loe Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T164420_20151119T164850_B001 Loe Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T181917_20151119T182755_B001 Loe Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Fl	CS_OFFL_SIR_GOP_220151119T082717_20151119T083043_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T100152_20151119T114636_B001 Ice Range Averaging Status Fecords. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T164420_20151119T164450_B001 Ice Range Averaging Status The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more rec	CS_OFFL_SIR_GOP_2_20151119T091948_20151119T092359_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T132310_20151119T132537_B001 Ice Range Averaging Status Ic	CS_OFFL_SIR_GOP_220151119T100153_20151119T100946_B001	Ice Range Averaging Status	records.
CS_OFFL_SIR_GOP_2_20151119T150249_20151119T150445_B001 Loe Range Averaging Status CS_OFFL_SIR_GOP_2_20151119T150638_20151119T150949_B001 Loe Range Averaging Status Loe Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T181917_20151119T182755_B001 Loe Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T195844_20151119T200014_B001 Loe Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status F	CS_OFFL_SIR_GOP_2_20151119T114123_20151119T114636_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T150249_20151119T150445_B001 CS_OFFL_SIR_GOP_2_20151119T150644_20151119T155846_B001 CS_OFFL_SIR_GOP_2_20151119T155644_20151119T155846_B001 CS_OFFL_SIR_GOP_2_20151119T164420_20151119T164405_B001 CS_OFFL_SIR_GOP_2_20151119T164420_20151119T164850_B001 CS_OFFL_SIR_GOP_2_20151119T164420_20151119T164850_B001 CS_OFFL_SIR_GOP_2_20151119T181917_20151119T182755_B001 CS_OFFL_SIR_GOP_2_20151119T181917_20151119T182755_B001 CS_OFFL_SIR_GOP_2_20151119T195844_20151119T200014_B001 CS_OFFL_SIR_GOP_2_20151119T195844_20151119T200014_B001 CS_OFFL_SIR_GOP_2_20151119T200131_20151119T200551_B001 CS_OFFL_SIR_GOP_2_20151119T200131_20151119T200551_B001 CS_OFFL_SIR_GOP_2_20151119T200131_20151119T200551_B001 CS_OFFL_SIR_GOP_2_20151119T214044_20151119T214630_B001 CS_OFFL_SIR_GOP_2_20151119T214	CS_OFFL_SIR_GOP_220151119T132310_20151119T132537_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T15038_20151119T155846_B001 Ice Range Averaging Status Ice Range Averaging Status The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records.	CS_OFFL_SIR_GOP_2_20151119T150249_20151119T150445_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T164420_20151119T164405_B001 Ice Range Averaging Status	CS_OFFL_SIR_GOP_2_20151119T150638_20151119T150949_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T164420_20151119T164850_B001 Ice Range Averaging Status	CS_OFFL_SIR_GOP_2_20151119T155644_20151119T155846_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T184255_B001 Ice Range Averaging Status	CS_OFFL_SIR_GOP_220151119T164120_20151119T164405_B001	Ice Range Averaging Status	records.
CS_OFFL_SIR_GOP_2_20151119T181917_20151119T1200014_B001 Ice Range Averaging Status Ice Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_GOP_2_20151119T20131_20151119T200551_B001 Ice Range Averaging Status The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records. The loe Range Averaging Status Flag has been set for one or more records.	CS_OFFL_SIR_GOP_220151119T164420_20151119T164850_B001	Ice Range Averaging Status	
CS_OFFL_SIR_GOP_2_20151119T200131_20151119T200551_B001 CS_OFFL_SIR_GOP_2_20151119T200131_20151119T200551_B001 CS_OFFL_SIR_GOP_2_20151119T214044_20151119T214630_B001 Ice Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records. The Ice Range Averaging Status Flag has been set for one or more records.	CS_OFFL_SIR_GOP_220151119T181917_201511119T182755_B001	Ice Range Averaging Status	records.
CS_OFFL_SIR_GOP_2_20151119T214044_20151119T214630_B001 Ice Range Averaging Status records. The lce Range Averaging Status Flag has been set for one or more records. The lce Range Averaging Status Flag has been set for one or more records. The lce Range Averaging Status Flag has been set for one or more records.	CS_OFFL_SIR_GOP_220151119T195844_20151119T200014_B001	Ice Range Averaging Status	records.
records. The Ice Range Averaging Status Flag has been set for one or more	CS_OFFL_SIR_GOP_220151119T200131_20151119T200551_B001	Ice Range Averaging Status	records.
The Ice Range Averaging Status Flag has been set for one or more	CS_OFFL_SIR_GOP_220151119T214044_20151119T214630_B001	Ice Range Averaging Status	records.
CS_OFFL_SIR_GOP_2_20151119T231949_20151119T232501_B001	CS_OFFL_SIR_GOP_220151119T231949_20151119T232501_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.

5.7 L2 SWH and Backscatter Measurement Check

CryoSat L2 data includes a SWH Averaging Status flag (field 49) and an Ocean (field 55) and Ice (field 61) Backscatter Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Currently, there are three common status flags 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.

SWH Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

Ocean Backscatter Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

Ice Backscatter Averaging Status Flag: This flag is currently set for products over land, but this is to be expected.

Number of products with errors:

20

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220151119T001137_20151119T001546_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T014539_20151119T015031_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T015051_20151119T015422_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T032929_20151119T032935_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T032942_20151119T032948_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T050918_20151119T051020_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T064411_20151119T064756_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T064818_20151119T065107_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T082153_20151119T082710_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T082717_20151119T083043_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220151119T091948_20151119T092359_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T100153_20151119T100946_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T114123_20151119T114636_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T132310_20151119T132537_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T150249_20151119T150445_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T150638_20151119T150949_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T164120_20151119T164405_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T164420_20151119T164850_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_2_20151119T181917_20151119T182755_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220151119T195844_20151119T200014_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220151119T200131_20151119T200551_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220151119T231949_20151119T232501_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.

5.8 L2 Ocean Retracking Quality Check

CryoSat L2 data includes an ocean retracking quality flag (field 19) 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 over land and sea ice, but this is to be expected. The number of products with this error flag set is given below.

Number of products with errors:

157