



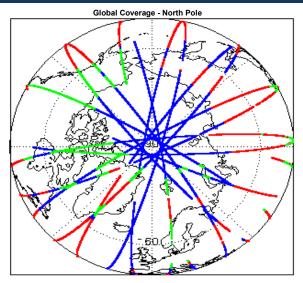
## 1. Overview

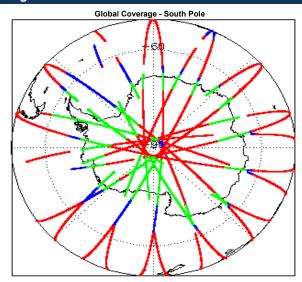
Report Production Date:	05-May-2016	
Processor Used:	CryoSat Ice Processor	
Data Used:	L1B and L2 OFFLINE Data	

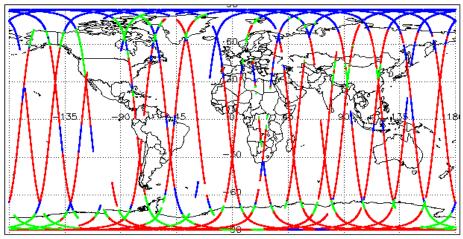
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Star Tracker Usage Check	Nominal
L1B Calibration Usage Check	Nominal
L1B & L2 Auxiliary Data File Usage Check	Nominal
L1B & L2 Auxiliary Correction Error Check	Nominal
L1B & L2 Measurement Confidence Data Check	See Section 4.7 and 5.5

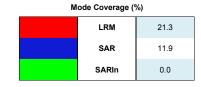
Mi	Mission / Instrument News		
(	06-Apr-2016	SIRAL unavailability on 05-April-2016 from 22:11:20 to 06-April 2016 11:32:22 due to a collision avoidance manoeuvre.	
(	07-Apr-2016	None	
(	08-Apr-2016	SAR and SARIn data missing on 08-Apr-2016 from 15:21:58 to 20:26:50 due to an unplanned ground segment anomaly	

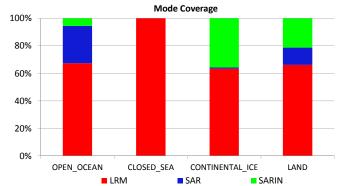
## 2. Global Coverage

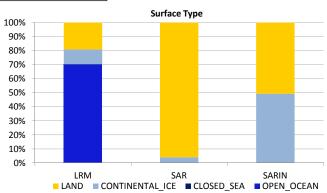












# 3. Instrument Configuration

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

SIRAL instrument(s) in use:	SIRAL - A
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## 4. 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:

#### 4.2 L1B Product Header Analysis

For all products, a series of pre-defined checks are carried out 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:

#### 4.3 Star Tracker Usage Check

Each product is checked in order to ensure a valid star tracker file has been used in processing

Number of products with errors:

#### 4.4 L1B Calibration Usage Check

Each product is checked in order to ensure that the necessary calibration files have been used in processing

Number of products with errors: 0

#### 4.5 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:

0

#### 4.6 L1B Auxiliary Correction Error Check

CryoSat L1B data includes a correction error flag (field 54) for each measurement record. The bit value of this flag indicates any problems when set

Number of products with errors:

#### 4.7 L1B Measurement Confidence Data Check

CryoSat L1B data includes a measurement confidence flag (field 18) for each measurement record. The bit value of this flag indicates any problems when set

Currently, there are several common error flags raised in the Level 1B products which are expected due to operational mode or surface type. All common flags are summarised in the list below, followed by a table of any additional issues arising from this test.

Block Degraded Flag: This flag is currently set for a number of individual records generally at the start or end of products (all modes), but this is to be expected.

Phase Perturbation Flag: This flag is currently set for all L1B SARIn products, indicating that the ADC correction application is deactivated, but this is in line with the current configuration.

lumber of products with errors:

#### 5. 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 carried out 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.

Number of products with errors:

#### 5.4 L2 Auxiliary Correction Error Check

CryoSat L2 data includes a correction error flag (field 30) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

## 5.5 L2 Measurement Quality Flag Check

CryoSat L2 data includes a quality flag (field 50) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set

Currently, there are several common error flags raised in the Level 2 products which are expected due to operational mode or surface type. All common flags are summarised in the list below, followed by a table of any additional issues arising from this test.

Freeboard error: This flag is correctly set in all L2 SAR products that are not discriminated as sea-ice, and for which freeboard cannot be calculated.

Height and Backscatter errors: These flags are currently set for products over land, but this is to be expected. Retracker 1 Height and Backscatter error flags are also set for products over sea-ice, but this is to be expected.

Peakiness error: This flag is currently set for products over sea-ice, but this is to be expected.

SARIn X-Track Angle Error: This flag is set when the difference between the computed surface elevation and the DEM is >50 m. The DEM is only available over Greenland and Antarctica and as a result this flag is set for L2 SARIn products in all other locations as expected.

SSHA interpolation error: This flag is currently set for a number of SAR products occurring at surface type boundaries, but this is to be expected.

Number of products with errors: 8

Product	Test Failed	Description
CS_OFFL_SIR_LRM_220160407T000629_20160407T003139_C001	, ,	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T003904_20160407T004230_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
		There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records

	Height Error (Retracker 2), Height Error	There is a height and backscatter error for Retracker 2 and a height error
CS_OFFL_SIR_LRM_220160407T014050_20160407T021126_C001	(Retracker 3), Backscatter Error (Retracker 2)	for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160407T022453_20160407T023612_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T024145_20160407T025933_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T040416_20160407T042845_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T045314_20160407T045329_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T050144_20160407T053006_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160407T053219_20160407T053723_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160407T054320_20160407T061635_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160407T072331_20160407T073840_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T073921_20160407T074048_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T074528_20160407T075406_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160407T081300_20160407T082935_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T083142_20160407T084614_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T090227_20160407T091753_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_2_20160407T091953_20160407T092914_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160407T095643_20160407T100842_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160407T101400_20160407T102828_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T103125_20160407T103942_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160407T104202_20160407T105822_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_2_20160407T121300_20160407T121810_C001	(Retracker 2) Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS OFFI SID LDM 2 20460407T422404 20460407T422292 C004	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	There is a height and backscatter error for Retracker 2 and a height error
CS_OFFL_SIR_LRM_220160407T122101_20160407T123828_C001	(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter	for Retracker 3 for one or more records  There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220160407T131808_20160407T132923_C001	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220160407T133502_20160407T134615_C001	Error (Retracker 2) Height Error (Retracker 2), Height Error	records
CS_OFFL_SIR_LRM_220160407T135957_20160407T142849_C001	(Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160407T145129_20160407T152519_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T160853_20160407T161002_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160407T163054_20160407T163933_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T164218_20160407T170443_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T171750_20160407T174524_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T180921_20160407T184253_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T190135_20160407T193256_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T200453_20160407T202228_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160407T203941_20160407T205312_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T205526_20160407T210737_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160407T213451_20160407T214513_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160407T214652_20160407T220123_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160407T222225_20160407T223005_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_2_20160407T223415_20160407T223904_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_2_20160407T224147_20160407T224733_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_2_20160407T231611_20160407T234046_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_2_20160407T235416_20160408T002257_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_SIN_220160407T003231_20160407T003501_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160407T003841_20160407T003848_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160407T004230_20160407T004413_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160407T013208_20160407T013232_C001	SARIn X-track Angle Error, Surface Model Unavailable	An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records
	1	1

An ambiguous angle was detected for CADIn	
CS_OFFL_SIR_SIN_2_20160407T021135_20160407T021300_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn I records	
CS_OFFL_SIR_SIN_2_20160407T021755_20160407T021802_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	
CS_OFFL_SIR_SIN_2_20160407T022131_20160407T022312_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T035136_20160407T035258_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T035826_20160407T040140_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T044938_20160407T045050_C001  SARIn X-track Angle Error, Surface Model Unavailable  An ambiguous angle was detected for SARIn Model Was used for one or more records	mode and no DEM or Slope
CS_OFFL_SIR_SIN_2_20160407T053105_20160407T053219_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T053723_20160407T054041_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T071157_20160407T071434_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T071627_20160407T072253_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T080710_20160407T080831_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T081111_20160407T081226_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T085538_20160407T085629_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T090041_20160407T090216_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T094816_20160407T094909_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T102927_20160407T103125_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T103942_20160407T104130_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T112536_20160407T113046_C001  SARIn X-track Angle Error, Surface Model Unavailable  An ambiguous angle was detected for SARIn I Model Was used for one or more records	mode and no DEM or Slope
CS_OFFL_SIR_SIN_2_20160407T120859_20160407T121018_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T121810_20160407T122052_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T125850_20160407T125920_C001  SARIn X-track Angle Error, Surface Model Unavailable  SARIn X-track Angle Error, Surface Model Was used for one or more records	mode and no DEM or Slope
CS_OFFL_SIR_SIN_2_20160407T134820_20160407T134941_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T135029_20160407T135225_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T135828_20160407T135957_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T152809_20160407T153133_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T153659_20160407T153816_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T170710_20160407T171030_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T171549_20160407T171713_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T184349_20160407T184546_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T185428_20160407T185556_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T193315_20160407T193419_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T202240_20160407T202417_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T203004_20160407T203008_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T203143_20160407T203346_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T211523_20160407T211738_C001  SARIn X-track Angle Error, Surface Model Unavailable  Model Unavailable  Model was used for one or more records	mode and no DEM or Slope
CS_OFFL_SIR_SIN_2_20160407T221023_20160407T221717_C001  SARIn X-track Angle Error  Frecords  An ambiguous angle was detected for SARIn I records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T234800_20160407T234806_C001  SARIn X-track Angle Error  SARIn X-track Angle Error  records	mode for one or more
CS_OFFL_SIR_SIN_2_20160407T235108_20160407T235319_C001  SARIn X-track Angle Error  An ambiguous angle was detected for SARIn records	mode for one or more
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