



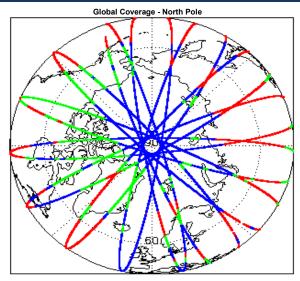
# 1. Overview

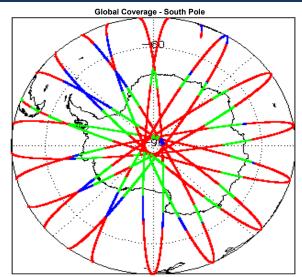
Report Production Date:	30-Mar-2017		
Processor Used:	CryoSat Ice Processor		
Data Used:	L1B and L2 OFFLINE Data		

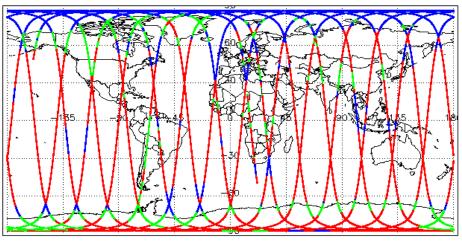
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Star Tracker Usage Check	Nominal
L1B Calibration Usage Check	Nominal
L1B & L2 Auxiliary Data File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

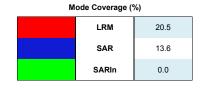
Mission / Instru	ment News
25-Feb-2017	None
26-Feb-2017	None
27-Feb-2017	Nothing planned

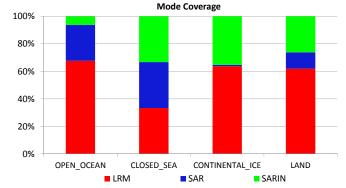
# 2. Global Coverage

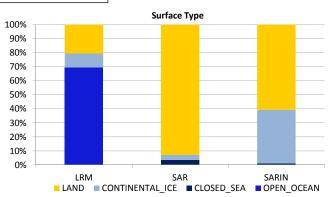












# 3. Instrument Configuration

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

SIRAL instrument(s) in use:	SIRAL - A
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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:

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### 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.

Number 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: 101

Product	Test Failed	Description
CS_OFFL_SIR_LRM_220170226T000438_20170226T000606_C001	,	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220170226T003128_20170226T003403_C001		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_220170226T004803_20170226T005639_C001		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_220170226T005925_20170226T012203_C001		There is a height and backscatter error for Retracker 2 for one or more
CS OFFI SIR LPM 2 20170226T013420 20170226T014800 C001	leight Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS OFFI SIR LRM 2 20170226T014947 20170226T015601 C001	leight Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS OFFI SIR LRM 2 20170226T015738 20170226T020220 C001		records There is a height and backscatter error for Retracker 2 for one or more
	,	records There is a height and backscatter error for Retracker 2 for one or more
E H	,	records There is a height and backscatter error for Retracker 2 for one or more
	Height Error (Retracker 2) Height Error	records
		There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
		There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220170226T042400_20170226T043950_C001 (F		There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS OFFI SIR LRM 2 20170226T045606 20170226T050614 C001	leight Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more records
CS OFFI SIR LRM 2 20170226T051233 20170226T052355 C001	leight Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220170226T054639_20170226T055816_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 OFFI SIR LRM 2 20170226T055938 20170226T060221 C001		There is a height and backscatter error for Retracker 2 for one or more
CS OFFI SIR LRM 2 20170226T060400 20170226T061838 C001	leight Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS OFFI SIR I PM 2 20170226T063220 20170226T065600 C001	leight Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS OFFI SIR LPM 2 20170226T065718 20170226T070600 C001		records There is a height and backscatter error for Retracker 2 for one or more
CS OFFI SIR LRM 2 20170226T070831 20170226T070908 C001	leight Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
H	Height Error (Retracker 2), Height Error	records  There is a height and backscatter error for Retracker 2 and a height error
(F	Retracker 3), Backscatter Error Retracker 2) Height Error (Retracker 2) Height Error	for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220170226T081110_20170226T084017_C001 (F	Petracker 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
	• ,	There is a height and backscatter error for Retracker 2 for one or more records
		There is a height and backscatter error for Retracker 2 for one or more records
		There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220170226T104747_20170226T104810_C001 (F		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_220170226T105152_20170226T105806_C001	Height Error (Retracker 2), Height Error	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
	• ,	There is a height and backscatter error for Retracker 2 for one or more records
		There is a height and backscatter error for Retracker 2 for one or more records
	• ,	There is a height and backscatter error for Retracker 2 for one or more records
	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_220170226T125834_20170226T130344_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS OFFE SIR FRM 2 201702261130901 201702261134356 C001		There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220170226T140817_20170226T141245_C001 (F		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_220170226T141334_20170226T143111_C001	Height Error (Retracker 2), Height 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_220170226T144937_20170226T151907_C001 (F		There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS OFFI SIR LPM 2 20170226T153842 20170226T155659 C001	leight Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220170226T155800_20170226T161135_C001	Height Error (Retracker 2), Height Error	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
	·	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 for one or more records
CS_OFFL_SIR_LRM_220170226T164617_20170226T165539_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 20170226T172334 20170226T173500 C001	Retracker 2) Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS OFFI SIR LRM 2 20170226T175103 20170226T175223 C001		records There is a height and backscatter error for Retracker 2 for one or more
	,	records  No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_2_20170226T175810_20170226T180559_C001		There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_2_20170226T175810_20170226T180559_C001  CS_OFFL_SIR_LRM_2_20170226T180746_20170226T182320_C001  H H	error (Retracker 2) Height Error (Retracker 2), Height Error	records
CS_OFFL_SIR_LRM_2_20170226T175810_20170226T180559_C001  CS_OFFL_SIR_LRM_2_20170226T180746_20170226T182320_C001  CS_OFFL_SIR_LRM_2_20170226T190117_20170226T193407_C001  (F	Error (Retracker 2) Height Error (Retracker 2), Height Error Retracker 3), Backscatter Error Retracker 2)	records  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_20170226T175810_20170226T180559_C001  CS_OFFL_SIR_LRM_2_20170226T180746_20170226T182320_C001  CS_OFFL_SIR_LRM_2_20170226T190117_20170226T193407_C001  (FCS_OFFL_SIR_LRM_2_20170226T193632_20170226T193846_C001  S	Error (Retracker 2) Height Error (Retracker 2), Height Error Retracker 3), Backscatter Error Retracker 2) Surface Model Unavailable	records There is a height and backscatter error for Retracker 2 and a height error

	Height Error (Retracker 2), Height Error	There is a height and backscatter error for Retracker 2 and a height error
CS_OFFL_SIR_LRM_220170226T194711_20170226T201302_C001	(Retracker 3), Backscatter Error (Retracker 2)	for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220170226T204419_20170226T205540_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_20170226T210116_20170226T211248_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_220170226T212555_20170226T215411_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_20170226T221841_20170226T225154_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_220170226T230453_20170226T231114_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_220170226T234226_20170226T234350_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_220170226T235711_20170227T003140_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_220170226T012330_20170226T012724_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T013254_20170226T013419_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T021045_20170226T021130_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
CS_OFFL_SIR_SIN_220170226T021307_20170226T021629_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T030045_20170226T030226_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T031051_20170226T031233_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T034914_20170226T035050_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T035430_20170226T035526_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T043950_20170226T044132_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T044708_20170226T044715_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T044840_20170226T045056_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T053227_20170226T053440_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
CS_OFFL_SIR_SIN_220170226T061857_20170226T062046_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T062733_20170226T063220_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2_20170226T075857_20170226T080129_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_2_20170226T080504_20170226T080510_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_2_20170226T080845_20170226T081037_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T093739_20170226T093912_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T094752_20170226T094924_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T111756_20170226T111910_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T112450_20170226T112556_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T112652_20170226T112807_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T125709_20170226T125834_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T130344_20170226T130651_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_2_20170226T143750_20170226T144040_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T144247_20170226T144812_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T153337_20170226T153802_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T162156_20170226T162312_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2_20170226T162658_20170226T162838_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220170226T171236_20170226T171347_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220170226T171510_20170226T171721_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more records
CS OFFL SIR SIN 2 20170226T175434 20170226T175810 C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220170226T180559 _20170226T180745_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220170226T185155_20170226T185420_C001	SARIn X-track Angle Error, Surface	records An ambiguous angle was detected for SARIn mode and no DEM or Slope
CS_OFFL_SIR_SIN_220170226T185428_20170226T185635_C001	Model Unavailable SARIn X-track Angle Error, Surface	Model was used for one or more records  An ambiguous angle was detected for SARIn mode and no DEM or Slope
CS_OFFL_SIR_SIN_2_20170226T193442_20170226T193632_C001	Model Unavailable SARIn X-track Angle Error	Model was used for one or more records  An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220170226T193846_20170226T193859_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2_20170226T194451_20170226T194711_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220170226T202648_20170226T202720_C001	SARIn X-track Angle Error, Surface	records An ambiguous angle was detected for SARIn mode and no DEM or Slope
CS_OFFL_SIR_SIN_2_20170226T211416_20170226T211555_C001	Model Unavailable SARIn X-track Angle Error	Model was used for one or more records  An ambiguous angle was detected for SARIn mode for one or more
CS OFFL SIR SIN 2 20170226T211711 20170226T211842 C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2_20170226T212306_20170226T212555_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
		records

CS_OFFL_SIR_SIN_220170226T225414_20170226T225753_C001		An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T230331_20170226T230445_C001	ISARIN X-frack Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170226T234441_20170226T234512_C001		An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records

# 6. 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	Nb. Products	Nb. QCC Reports	Nb. Valid	Nb. Warnings	Nb. Errors
SIR_LRM_1B	162	162	162	0	0
SIR_LRM_2	162	162	162	0	0
SIR_LRMI2_	162	162	162	0	0
SIR_SAR_1B	109	109	109	0	0
SIR_SAR_2	109	109	109	0	0
SIR_SARI2_	109	109	109	0	0
SIR_SIN_1B	115	115	115	0	0
SIR_SIN_2	115	115	115	0	0
SIR_SINI2	115	115	115	0	0
SIR GDR 2	15	15	15	0	0

# 6.1 QCC Errors

Number of products with QCC errors:

## 6.2 QCC Warnings

Number of QCC reports with warnings

0

0

# 6.2 Missing QCC Reports

Number of products with missing QCC reports:

119