





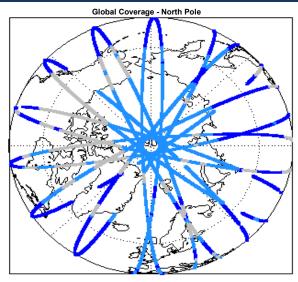
1. Overview

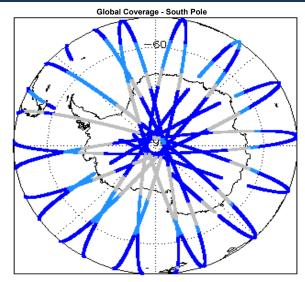
Report Production Date:	15-Jan-2016
Processor Used:	CryoSat Ice Processor
Data Used:	L1B and L2 OFFLINE Data

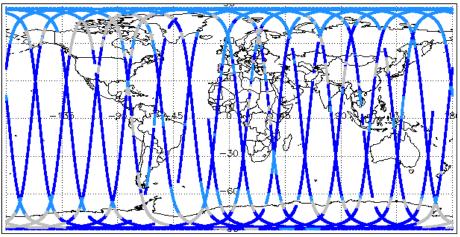
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Star Tracker Usage Check	Nominal
L1B Calibration Usage Check	See Section 4.4
L1B & L2 Auxiliary Data File Usage Check	Nominal
L1B & L2 Auxiliary Correction Error Check	Nominal
L1B & L2 Measurement Confidence Data Check	See Section 4.7 and 5.5

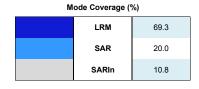
Mission / Instrument News	
17-Dec-2015	None
18-Dec-2015	None
19-Dec-2015	Nothing planned

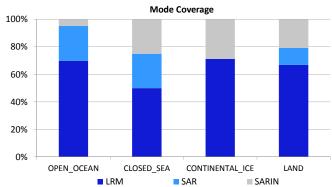
2. Global Coverage

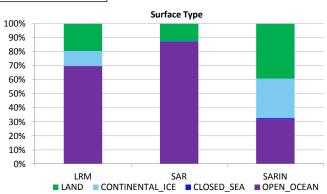












3. Instrument Configuration

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

SIRAL instrument(s) in use:	SIRAL - A
SINAL IIIstrument(s) in use.	SINAL - A

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:

Product	Test Failed	Description
CS_OFFL_SIR_LRM_1B_20151218T141732_20151218T141926_C001	(Call correction from IDELIR	The Cal1 correction has been taken from the IPFDB and not the Calibration products
CS_OFFL_SIR_LRM_1B_20151218T141930_20151218T141938_C001	Cal1 correction from IPEDR	The Cal1 correction has been taken from the IPFDB and not the Calibration products

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:

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:

Product	Test Failed	Description
CS_OFFL_SIR_LRM_1B_20151218T021441_20151218T022818_C001	Echo error, TRK echo error	The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo

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.

Product	Test Failed	Description
CS_OFFL_SIR_LRM_220151217T234426_20151218T001753_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_20151218T003640_20151218T010807_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_20151218T012649_20151218T013517_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_220151218T013959_20151218T014111_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_220151218T014114_20151218T015729_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_220151218T021441_20151218T022818_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_220151218T023032_20151218T024404_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_220151218T024557_20151218T024607_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_220151218T030958_20151218T032018_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_220151218T032158_20151218T033608_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_20151218T035657_20151218T040535_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_20151218T040922_20151218T041410_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_20151218T045248_20151218T051524_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_20151218T052945_20151218T055731_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_220151218T061916_20151218T061945_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_20151218T062943_20151218T065438_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_220151218T070225_20151218T070552_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220151218T070954_20151218T074228_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_20151218T080305_20151218T082428_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_220151218T083702_20151218T084253_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220151218T084256_20151218T084455_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220151218T084929_20151218T092205_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_220151218T095741_20151218T101147_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_220151218T102813_20151218T104958_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_220151218T105242_20151218T110216_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_220151218T112601_20151218T113849_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_220151218T113905_20151218T115107_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_220151218T120745_20151218T124052_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_220151218T125633_20151218T131547_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_220151218T131556_20151218T132836_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_220151218T133757_20151218T133953_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_2_20151218T134655_20151218T140219_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_20151218T140422_20151218T141428_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_20151218T141732_20151218T141926_C001	Calibration Warning	The Calibration correction is missing or has been taken from the IPFDB instead of the Calibration products for one or more records
CS_OFFL_SIR_LRM_220151218T141930_20151218T141938_C001	Calibration Warning	The Calibration correction is missing or has been taken from the IPFDB instead of the Calibration products for one or more records
CS_OFFL_SIR_LRM_220151218T143628_20151218T145257_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_220151218T151627_20151218T151914_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220151218T154225_20151218T154429_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_20151218T162747_20151218T165127_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_20151218T165426_20151218T170303_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_2_20151218T170533_20151218T172420_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_220151218T172521_20151218T172652_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_220151218T180414_20151218T182950_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_20151218T184451_20151218T191421_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_20151218T193732_20151218T200832_C001 CS_OFFL_SIR_LRM_2_20151218T203411_20151218T204006_C001 CS_OFFL_SIR_LRM_2_20151218T203411_20151218T204006_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter error for Retracker 2 frecords There is a height and backscatter error for Retracker 2 frecords	ioi one oi more
	fau ana au mana
CS_OFFL_SIR_LRM_2_20151218T205118_20151218T205122_C001 Height Error (Retracker 2), Backscatter Frror (Retracker 2) Fror (Retrac	or one or more
CS_OFFL_SIR_LRM_2_20151218T210041_20151218T210133_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 frecords	or one or more
CS_OFFL_SIR_LRM_2_20151218T211432_20151218T214817_C001 Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3) and backscatter error for Retracker 2 for Retracker 3 for one or more records	and a height error
CS_OFFL_SIR_LRM_2_20151218T220444_20151218T223030_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) There is a height and backscatter error for Retracker 2 frecords	or one or more
CS_OFFL_SIR_LRM_2_20151218T230333_20151218T232146_C001 Height Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Fackscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Fackscatter Error (Retracker 3), Backscatter Error (Retracker 3), Fackscatter Error (Retracker 3), Fackscatter Error (Retracker 3), Backscatter Error (Retracker 3), Fackscatter Error (Retrac	and a height error
CS_OFFL_SIR_LRM_2_20151218T232157_20151218T232718_C001 Height Error (Retracker 2), Backscatter Error (Retracker 2) From (Retrac	or one or more
CS_OFFL_SIR_LRM_2_20151218T234358_20151219T001741_C001 Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3) For Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for Retracker 3 for one or more records	and a height error
CS_OFFL_SIR_SIN_2_20151218T001841_20151218T002044_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T002928_20151218T003057_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T010819_20151218T010921_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T011227_20151218T011330_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T015746_20151218T015923_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T020509_20151218T020513_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for decords	one or more
CS_OFFL_SIR_SIN_2_20151218T020647_20151218T020851_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T024714_20151218T024827_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T025029_20151218T025244_C001 SARIn X-track Angle Error, Surface Model Unavailable An ambiguous angle was detected for SARIn mode and Model Unavailable	no DEM or Slope
CS_OFFL_SIR_SIN_2_20151218T033659_20151218T033846_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T034406_20151218T034412_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T034528_20151218T035223_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T035345_20151218T035657_C001 SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error, Surface Model Unavailable Model Was used for one or more records	no DEM or Slope
CS_OFFL_SIR_SIN_2_20151218T051604_20151218T051920_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T052305_20151218T052311_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T052618_20151218T052826_C001 SARIn X-track Angle Error records	one or more
CS_OFFL_SIR_SIN_2_20151218T084455_20151218T084607_C001 SARIn X-track Angle Error records	one or more
CS_OFFL_SIR_SIN_2_20151218T101505_20151218T101631_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T102145_20151218T102446_C001 SARIn X-track Angle Error Fecords Fecords	one or more
CS_OFFL_SIR_SIN_2_20151218T115515_20151218T115819_C001 SARIn X-track Angle Error SARIn X-track Angle Error records	one or more
CS_OFFL_SIR_SIN_2_20151218T120046_20151218T120601_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or records	one or more
CS_OFFL_SIR_SIN_2_20151218T134458_20151218T134624_C001 SARIn_X-track_Angle_Error An ambiguous angle was detected for SARIn mode for C	one or more
CS_OFFL_SIR_SIN_2_20151218T160958_20151218T161216_C001 SARIn X-track Angle Error SARIn X-track Angle Error	one or more
CS_OFFL_SIR_SIN_2_20151218T165240_20151218T165425_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or a conditional conditions and the same of the same	one or more
CS_OFFL_SIR_SIN_2_20151218T170303_20151218T170444_C001SAPIn_X-track_Apole ErrorAn ambiguous angle was detected for SARIn mode for 0	one or more
CS_OFFL_SIR_SIN_2_20151218T174926_20151218T175409_C001 SARIn X-track Angle Error, Surface An ambiguous angle was detected for SARIn mode and	no DEM or Slope
CS_OFFL_SIR_SIN_2_20151218T183218_20151218T183352_C001 SARIn X-track Angle Error SARIn X-track Angle Error	one or more
CS_OFFI_SIR_SIN_2_20151218T183522_20151218T183639_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for C	one or more
CS_OFFL_SIR_SIN_2_20151218T184059_20151218T184343_C001 SARIn Mode for CS_OFFL_SIR_SIN_2_20151218T184059_20151218T184343_C001	one or more
CS_OFFL_SIR_SIN_2_20151218T201203_20151218T201552_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for C	one or more
CS_OFFL_SIR_SIN_2_20151218T202139_20151218T202257_C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for C	one or more
CS_OFFI_SIR_SIN_2_20151218T210230_20151218T210316_C001 SARIn X-track Angle Error, Surface An ambiguous angle was detected for SARIn mode and	no DEM or Slope
CS OFFI SIR SIN 2 20151218T215141 20151218T215457 C001 SARIn X-track Angle Error An ambiguous angle was detected for SARIn mode for or	one or more
An ambiguous angle was detected for SARIn mode for	one or more
CS_OFFL_SIR_SIN_2Z01512181220010_Z01512181220129_C001 SARIN X-track Angle Error records An ambiguous angle was detected for SARIn mode for or	
SARIII A-tidok Aligie Elitoi records An ambiguous angle was detected for SARIn mode for or	
CS_OFFL_SIR_SIN_2_20151218T233916_20151218T234027_C001 SARIn X-track Angle Error SARIn 3 SARIN	