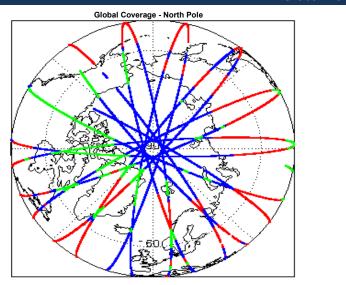


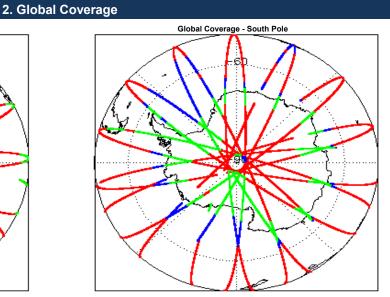
# IDEAS+ Daily Report for OFFLINE data:

# <u>09/04/2016</u>

1. Overview			
Depart Production Date:	06 May 2016	Check	Status
Report Production Date:	06-May-2016	Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ice Processor	Server check: calval-pds.cryosat.esa.int	Nominal
		Product Software Check	Nominal
Dete Use de	L1B and L2 OFFLINE Data	Product Format Check	Nominal
Data Used:		Product Header Analysis	See Section 4.2 and 5.2
•		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

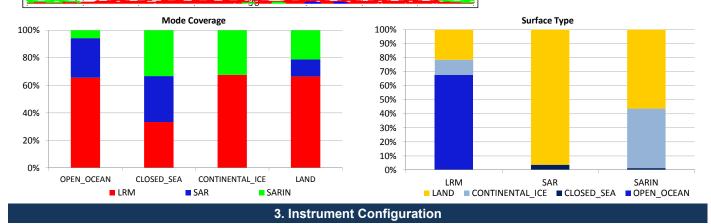
Mission / Instrument News		
08-Apr-2016	SAR and SARIn data missing on 08-Apr-2016 from 15:21:58 to 20:26:50 due to an unplanned ground segment anomaly	
09-Apr-2016	None	
10-Apr-2016	Nothing planned	





Mode	Coverage	(%)
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LRM	22.2
SAR	11.9
SARIn	0.0



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

SIRAL instrument(s) in use: SIR

SIRAL - 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)

Runber of products with enors.		
4.2 L1B Product Header Analysis		
For all products, a series of pre-defined checks are carried out on the MPH and SP	H in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.	
Number of products with errors: 2		
Product	Test Failed	
CS_OFFL_SIR_SAR_1B_20160409T142633_20160409T142633_C001	Percentage of processing errors detected greater than minimum acceptable threshold.	
CS_OFFL_SIR_SAR_1B_20160409T075142_20160409T075142_C001	Percentage of processing errors detected greater than minimum acceptable threshold.	
4.3 Star Tracker Usage Check		
Each product is checked in order to ensure a valid star tracker file has been used in	n processing.	
Number of products with errors: 0		
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:

# 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:

Product	Test Failed
CS_OFFL_SIR_SAR_220160409T075142_20160409T075142_C001	Percentage of processing errors detected greater than minimum acceptable threshold.

# 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_220160409T000353_20160409T002911_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_220160409T004233_20160409T005434_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_220160409T010004_20160409T010956_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_220160409T013240_20160409T020902_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_220160409T021535_20160409T021904_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160409T023915_20160409T025704_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_220160409T031021_20160409T031127_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_220160409T040150_20160409T042406_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_220160409T042646_20160409T043525_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_220160409T045918_20160409T052737_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_220160409T052955_20160409T053456_C001	Surface Model Unavailable Height Error (Retracker 2), Height Error	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160409T054054_20160409T061352_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_220160409T063935_20160409T070231_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_220160409T072103_20160409T073649_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_220160409T073652_20160409T073821_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_220160409T074302_20160409T075141_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_220160409T081047_20160409T082702_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_220160409T082916_20160409T084353_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_220160409T090000_20160409T091525_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_220160409T091726_20160409T092646_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160409T095400_20160409T100615_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_220160409T102856_20160409T103715_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160409T103936_20160409T105618_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_220160409T105843_20160409T110356_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160409T113811_20160409T114150_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_220160409T114202_20160409T120514_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_220160409T121035_20160409T121539_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160409T121834_20160409T124357_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_220160409T131548_20160409T132657_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_220160409T133235_20160409T134350_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160409T135730_20160409T142623_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_220160409T143351_20160409T143527_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_220160409T154514_20160409T154844_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_20160409T160634_20160409T160723_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_220160409T161237_20160409T161609_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_220160409T162827_20160409T163706_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_220160409T163951_20160409T170215_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_220160409T171522_20160409T172833_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_220160409T173014_20160409T174248_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_220160409T180657_20160409T184029_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_220160409T185908_20160409T193022_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_220160409T195027_20160409T195745_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_220160409T203707_20160409T205046_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160409T205259_20160409T210500_C001	Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160409T210620_20160409T210700_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter	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
CS_OFFL_SIR_LRM_220160409T213226_20160409T214138_C001	Error (Retracker 2)	records

CS OFFL SIR LRM 2 20160409T214143 20160409T214246 C001 CS OFFL SIR LRM 2 20160409T214426 20160409T215856 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160409T221914\_20160409T222810\_C001 CS OFFL SIR LRM 2 20160409T223150 20160409T223637 C001 CS OFFL SIR SIN 2 20160409T003002 20160409T003113 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T035837\_20160409T035912\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T044711\_20160409T044819\_C001 CS OFFL SIR SIN 2 20160409T052840 20160409T052955 C001 CS OFFL SIR SIN 2 20160409T053456 20160409T053815 C001 CS OFFL SIR SIN 2 20160409T070931 20160409T071207 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T071400\_20160409T072026\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T080442\_20160409T080603\_C001 CS OFFL SIR SIN 2 20160409T080849 20160409T081003 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T084704\_20160409T085102\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T085312\_20160409T085359\_C001 CS OFFL SIR SIN 2 20160409T085814 20160409T085949 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T094357\_20160409T094502\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T094545\_20160409T094635\_C001 CS OFFL SIR SIN 2 20160409T094824 20160409T095030 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T102700\_20160409T102855\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T103715\_20160409T103903\_C001 CS OFFL SIR SIN 2 20160409T112310 20160409T112815 C001 CS OFFL SIR SIN 2 20160409T120633 20160409T120751 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T121539\_20160409T121816\_C001 CS OFFL SIR SIN 2 20160409T125618 20160409T125650 C001 CS OFFL SIR SIN 2 20160409T134555 20160409T134716 C001 CS OFFL SIR SIN 2 20160409T134758 20160409T134958 C001 CS OFFL SIR SIN 2 20160409T135600 20160409T135730 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T152544\_20160409T152906\_C001 CS OFFL SIR SIN 2 20160409T153430 20160409T153548 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T170441\_20160409T170802\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T171322\_20160409T171446\_C001 CS OFFL SIR SIN 2 20160409T175412 20160409T175656 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T184110\_20160409T184311\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T185153\_20160409T185324\_C001 CS OFFL SIR SIN 2 20160409T193046 20160409T193148 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T193454\_20160409T193557\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T202014\_20160409T202152\_C001 CS OFFL SIR SIN 2 20160409T202737 20160409T202741 C001 CS OFFL SIR SIN 2 20160409T202915 20160409T203119 C001 CS OFFL SIR SIN 2 20160409T210938 20160409T211055 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T211255\_20160409T211511\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T215927\_20160409T220114\_C001 CS OFFL SIR SIN 2 20160409T220634 20160409T220640 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T220757\_20160409T221451\_C001 CS\_OFFL\_SIR\_SIN\_2\_20160409T221615\_20160409T221914\_C001 CS OFFL SIR SIN 2 20160409T233832 20160409T234148 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T234533\_20160409T234539\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160409T234847\_20160409T235054\_C001

Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle 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 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 An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more