

## Reprocessings of SGLI Standard Monitor AROT NetCDF Creation and Minor Version Updates

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# Overview



### Purpose of the reprocessing

We reprocessed JASEMES AROT NetCDF, because A bug of Mask\_for\_statistics was found on SGLI standart product (L2 ARNPK v3002), input data of JASMES NetCDF. The bug caused a snow contamination.

(Details of the bug: <u>https://suzaku.eorc.jaxa.jp/GCOM\_C/data/V3BugInfo.html</u>) We also reprocessed anomaly images of the period 8-day/Monthly files are reprocessed. To distinguish from NetCDF already published, We set new minor version of reprocessed file as "3103".

### File name format

File names of the reprocessed files are named as follows.

Global Daily: GC1SG1\_YYYMMDDD01D\_D0000\_3MSG\_AROTM\_3103.ncGlobal 8day: GC1SG1\_YYYMMDDD08D\_D0000\_3MSG\_AROTM\_3103.ncGlobal Monthly: GC1SG1\_YYYMMDDD01M\_D0000\_3MSG\_AROTM\_3103.ncIanan Daily: CC1SC1\_YYYMMDDD01M\_D0000\_12SC\_APOTK\_2102.nc

Japan Daily: GC1SG1\_YYYMMDDD08D\_J0000\_L2SG\_AROTK\_3103.ncJapan 8day: GC1SG1\_YYYMMDDD08D\_J0000\_L2SG\_AROTK\_3103.ncJapan Monthly: GC1SG1\_YYYMMDDD01M\_J0000\_L2SG\_AROTK\_3103.nc

Details of the replacement and comparison images of the v3002 and v3003 are shown on the subsequent pages.

# Details of the reprocessing : Global



#### Table 1: Details of the reprocessing Global

Global		~2021/12	2022/01~2022/05	2022/06~
Daily	Exisiting File status	Created from v3003 SGLI standard products.	Created from v3001, v3002 SGLI standard products output as GC1SG1_YYYMMDDD01D_D0000_3MSG_AROTM_3000.nc	Created from v3003 SGLI standard products
	Reprocessing Details	No reprocessing	Created from reprocessed v3003 SGLI standard products	- No reprocessing
	Name of Reprocessed files		GC1SG1_YYYMMDDD01D_D0000_3MSG_AROTM_ <b>3103.</b> nc	
8-day Monthly	Exisiting File status	Created from Daily NetCDF based on v3003 SGLI standard products	Created from Daily NetCDF based on v3001, v3002 output as GC1SG1_YYYMMDDD01D_D0000_3MSG_AROTM_3000.nc	Created from Daily NetCDF based on v3003 SGLI standard products
	Reprocessing Details	No reprocessing	Creasted from reprocessed Daily NetCDF	No reprocessing
	Name of Reprocessed files		GC1SG1_YYYMMDDD08D_D0000_3MSG_AROTM_ <b>3103</b> .nc GC1SG1_YYYMMDDD01M_D0000_3MSG_AROTM_ <b>3103</b> .nc	

Shaded areas in the table are subject to reprocessing.

We modified a part of attribute information with changes of minor version and file name. We also reprocessed anomaly images of the period reprocessed 8-day/Monthly.

# Details of the reprocessing : Japan



#### Table 2: Details of the reprocessing: Japan

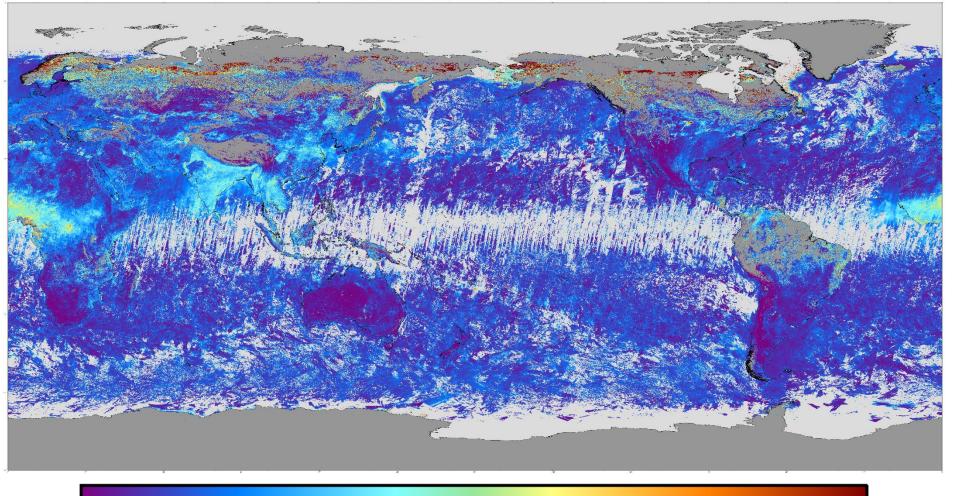
Japan		~2021/12	2022/01~2022/05	2022/06~
Daily	Exisiting File status	Created from v3001, v3002 SGLI standard products output as GC1SG1_YYYMMDDD01D_J0000_L2SG_AROTK_3001.nc GC1SG1_YYYMMDDD01D_J0000_L2SG_AROTK_3002.nc	Created from v3001, v3002 SGLI standard products output as GC1SG1_YYYMMDDD01D_J0000_L2SG_AROTK_3001.nc GC1SG1_YYYMMDDD01D_J0000_L2SG_AROTK_3002.nc	Created from v3003 SGLI standard products
	Reprocessing Details	Rewrite Mask_for_statisitics to the same contents as v3003	Rewrite Mask_for_statisitics to the same contents as v3003	No reprocessing
	Name of Reprocessed files	GC1SG1_YYYMMDDD01D_J0000_L2SG_AROTK_ <b>3103</b> .nc	GC1SG1_YYYMMDDD01D_J0000_L2SG_AROTK_ <b>3103</b> .nc	
8-day Monthly	Exisiting File status	Created from Daily NetCDF based on v3001, v3002 output as GC1SG1_YYYMMDDD08D_J0000_L2SG_AROTK_3100.nc GC1SG1_YYYMMDDD01M_J0000_L2SG_AROTK_3100.nc	Created from Daily NetCDF based on v3001, v3002 output as GC1SG1_YYYMMDDD08D_J0000_L2SG_AROTK_3100.nc GC1SG1_YYYMMDDD01M_J0000_L2SG_AROTK_3100.nc	Created from Daily NetCDF based on v3003 SGLI standard products
	Reprocessing Details	Creasted from reprocessed Daily NetCDF	Creasted from reprocessed Daily NetCDF	No reprocessing
	Name of Reprocessed files	GC1SG1_YYYMMDDD08D_J0000_L2SG_AROTK_ <b>3103</b> .nc GC1SG1_YYYMMDDD01M_J0000_L2SG_AROTK_ <b>3103</b> .nc	GC1SG1_YYYMMDDD08D_J0000_L2SG_AROTK_ <b>3103</b> .nc GC1SG1_YYYMMDDD01M_J0000_L2SG_AROTK_ <b>3103</b> .nc	No reprocessing

Shaded areas in the table are subject to reprocessing.

We modified a part of attribute information with changes of minor version and file name. We also reprocessed anomaly images of the period reprocessed 8-day/Monthly.

### Image comparison of minor version differences

aosol Optical Thickness at 500 nm [(Equal Rectangular projection: Global) 2022/03 Monthly average (Descending)]

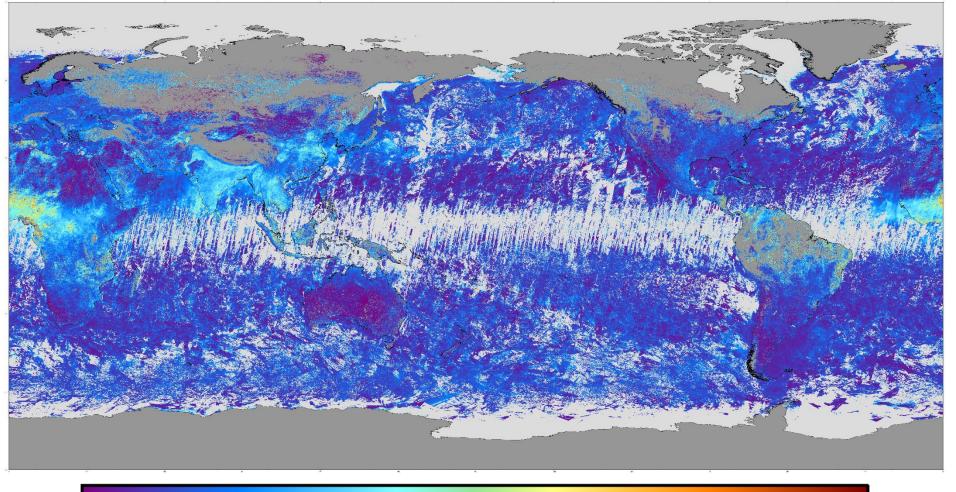


0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0

Figure 1: a monthly AROT image of 2023/03 created from v3002 GC1SG1\_20220301D01M\_D0000\_3MSG\_AROTM\_3100.nc

### Image comparison of minor version differences

rosol Optical Thickness at 500 nm [(Equal Rectangular projection: Global) 2022/03 Monthly average (Descending)]



1.0 1.2 1.3 1.5 1.6 1.7 1.8 1.9 2.0 0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.1 1.4

> Figure 2: a monthly AROT image of 2023/03 created from v3003 GC1SG1\_20220301D01M\_D0000\_3MSG\_AROTM\_3103.nc