



気候変動観測衛星

GC0M-C  
Global Change Observation Mission-Climate

# Material 3

## GC0M-C data on G-Portal

GC0M Project Team  
September 27, 2019

# G-Portal Screens

## G-Portal

地球観測衛星データ提供システム


まずは目的のデータがあるか検索(どなたでも検索できます)  
※ダウンロードには登録が必要です。

- 物理量から検索  
降水・海色・植生などから絞り込み
- 衛星からの検索  
衛星・センサ・レベルから絞り込み
- 直接ダウンロード  
FTP等でのダウンロード方法

- ログイン
- ユーザ登録
- 初めての方へ
- プロダクト情報・運用情報**
- ツール・ドキュメント
- サポート・問い合わせ
- お知らせ

サイト内検索:  
Google Custom Sea

日本語 ENGLISH

  
Copyright © Japan Aerospace Exploration Agency

G-Portalは、様々な分野で利用いただくことを目的とした地球観測データを無償で提供しています。



**お知らせ** [2019/09/25] NOAA-19 MHS L1Cプロダクト提供の一時停止  
NOAA-19 MHS のチャンネル2 (157GHz) に障害が発生したため、L1Cプロダクトの配信を停止いたします。

利用事例

地域社会に役立つ地球観測衛星 (漁業編)

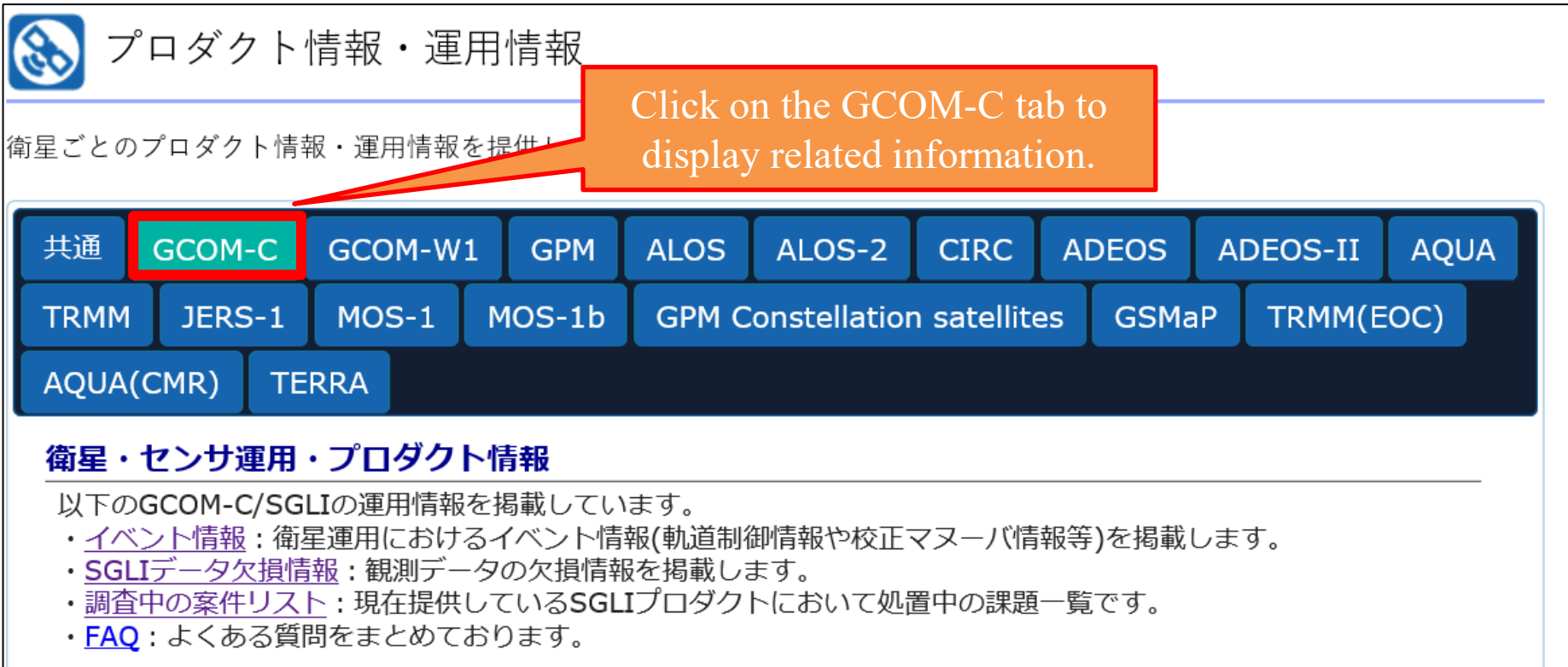


- GCOM-C/SGLI, GCOM-W/AMSR2
- 海面水温



# Information available on G-Portal

- 1) Operation information = “Event information / SGLI data loss information”
- 2) Product information = “List of projects under investigation”
- 3) Frequently-asked questions about data usage = “FAQ”



プロダクト情報・運用情報

衛星ごとのプロダクト情報・運用情報を提供します。

Click on the GCOM-C tab to display related information.

共通 GCOM-C GCOM-W1 GPM ALOS ALOS-2 CIRC ADEOS ADEOS-II AQUA

TRMM JERS-1 MOS-1 MOS-1b GPM Constellation satellites GSMaP TRMM(EOC)

AQUA(CMR) TERRA

衛星・センサ運用・プロダクト情報

以下のGCOM-C/SGLIの運用情報を掲載しています。

- ・ [イベント情報](#)：衛星運用におけるイベント情報(軌道制御情報や校正マヌーバ情報等)を掲載します。
- ・ [SGLIデータ欠損情報](#)：観測データの欠損情報を掲載します。
- ・ [調査中の案件リスト](#)：現在提供しているSGLIプロダクトにおいて処置中の課題一覧です。
- ・ [FAQ](#)：よくある質問をまとめております。

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## ● SGLI Event List

Here shows GCOM-C/SGLI orbit control or calibration information during routine observation phase (from March 28, 2018). Initial checkout period (until March 28) is not included because various operations were carried out.

Table 1. Result

From(UT)		To(UT)		Duration	Comments
Date	Time	Date	Time		
2019/09/14	12:05:01	2019/09/14	12:45:06	0:40:05	Lunar calibration maneuver.
2019/08/16	01:23:26	2019/08/16	02:03:32	0:40:06	Lunar calibration maneuver.
2019/08/01		2019/08/05		96:00:00	TIR Health check.
2019/07/17	07:59:08	2019/07/17	08:39:15	0:40:07	Lunar calibration maneuver.
2019/06/17	21:20:17	2019/06/17	22:00:24	0:40:07	Lunar calibration maneuver.
2019/05/20	00:10:27	2019/05/24	3:26:49	99:16:22	TIR Health check.
2019/05/19	09:02:07	2019/05/19	09:42:14	0:40:07	Lunar calibration maneuver.
2019/05/04	23:19:59	2019/05/04	23:23:01	0:03:02	Delta-V maneuver.

Present

Here are the listed plans and results of operations that involve orientation fluctuations.

# Information available on G-Portal

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- 2) Product information = “List of projects under investigation”
- 3) Frequently-asked questions about data usage = “FAQ”

## ● SGLI Missing Data List

Here shows total missing information of GCOM-C/SGLI data during routine observation phase (from March 28, 2018).

Table 1. Missing Data List

Sensor	From(UT)	To(UT)	duration hh:mm:ss	Comments (※ : relationship with Table 2.)
IRS (SWI)	2019/06/19 02:19:06	2019/06/19 02:19:06	0:00:01	Packet loss
VNR (NP)	2019/02/02 08:21:44	2019/02/02 10:55:26	2:33:42	Tentative stop of POL-tilt operation(※2)
VNR (POL)	2019/02/02 08:19:54	2019/02/02 11:00:50	2:40:56	Tentative stop of POL-tilt operation(※2)
VNR (NP)	2019/01/12 14:44:43	2019/01/12 14:44:44	0:00:01	Packet loss
VNR (POL)	2019/01/06 00:57:14	2019/01/06 00:57:15	0:00:01	Packet loss
VNR (NP)	2018/12/28 14:35:53	2018/12/28 14:35:54	0:00:01	X-downlink data decode loss
VNR (NP)	2018/12/28 14:27:22	2018/12/28 14:27:23	0:00:01	X-downlink data decode loss
IRS (TIR)	2018/12/28 14:27:21	2018/12/28 14:27:22	0:00:01	X-downlink data decode loss
VNR (NP)	2018/08/04 10:06:55	2018/08/04 12:40:28	2:33:33	Tentative stop of POL-tilt operation(※1)

Here are the listed operations (those with unavailable data, changes in observation conditions, etc.) performed differently from the observation plans.



# Information available on G-Portal

- 1) Operation information = “Event information” / “SGLI data loss information”
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調査中案件リスト（詳細な情報が必要な場合には「サポート・問い合わせ」よりサポートデスクまでお問い合わせください。）

更新日：2019/7/26

No.	プロダクト不正（標準／準リアル）	対象プロダクト		備考
		L1	高次	
PRDT_0003	アトリビュート四隅緯度経度の不正	プロダクトVer：1001、1002、1003、1004、1005 センサ：VNR、IRS	左記を入力としたL2シーンプロダクト	
PRDT_0005	タイルプロダクトの観測データ抜け・歪み・位置ずれ	-	L2タイルプロダクトの一部 上記を入力としたL3プロダクト	<a href="#">FAQ：Q15</a>
PRDT_0006	未作成プロダクト	L1Bプロダクトの一部 (6月15日)	LTOA、CLPRCの一部 左記と上記を入力としたL2、L3プロダクト	
PRDT_0015	一部プロダクトのグラニューールID不整合（LTOAF）	-	2019年5月14日～	
PRDT_0016	L3プロダクト（8日統計）のグラニューールID不整合	-	2018年12月27日～31日	

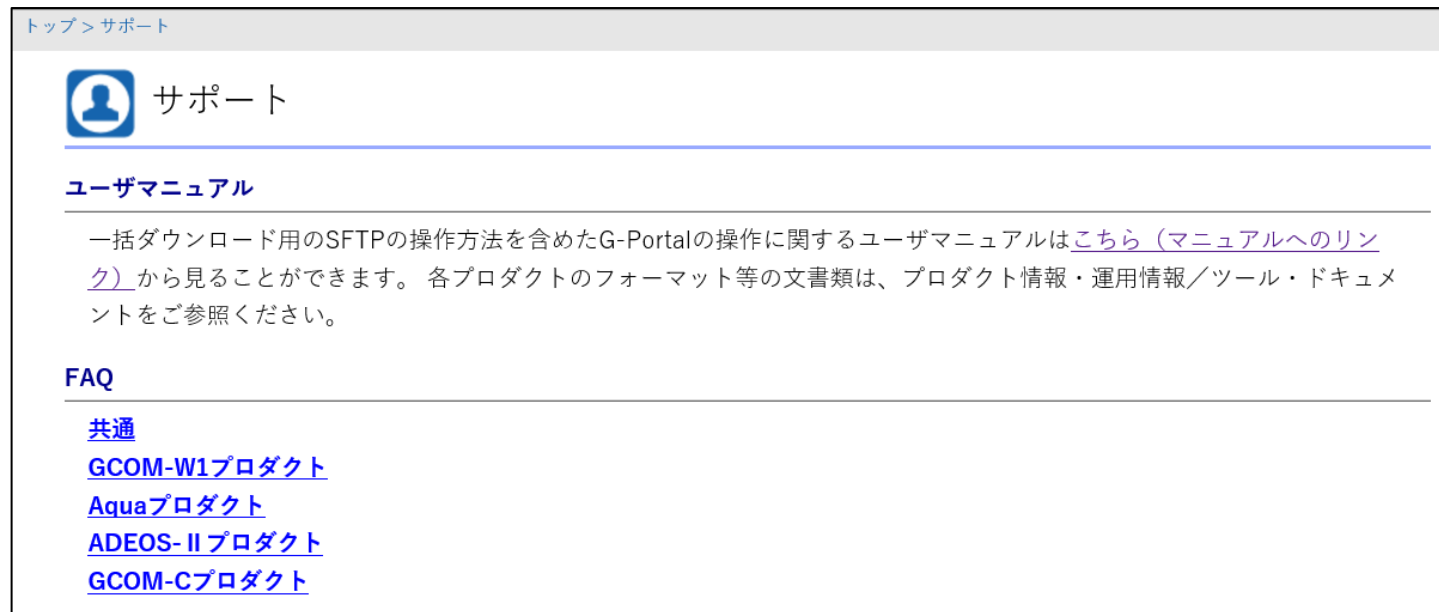
No.	G-Portalデータ提供	対象プロダクト		備考
		L1	高次	
GPTL_0001	Web画面から小サイズプロダクトのダウンロード不可	プロダクトサイズ(MB)が「0」のプロダクト	プロダクトサイズ(MB)が「0」のプロダクト	FTPからのダウンロードは可
GPTL_0002	雲量情報(%)の不正	全てのプロダクト	統計プロダクトを除くL2プロダクト	
GPTL_0003	雲量情報(%)の未掲載	2018年1月からの再処理プロダクト 2019年5月14日～26日のプロダクト	2018年1月からの再処理プロダクト 2019年5月14日～26日のプロダクト	
GPTL_0005	品質情報の不正	一部の低解像度プロダクト	影響プロダクトなし	

No.	G-Portal加工処理	対象プロダクト		備考
		L1	高次	
DMND_0001	Geotiff変換後プロダクトの3km以内の位置ずれ(Q) 他分解能プロダクトのずれ量は調査中	全てのプロダクト	全てのプロダクト	

Here are **the** listed failures or bugs remaining in the available products.

# Information available on G-Portal

- 1) Operation information = “Event information” / “SGLI data loss information”
- 2) Product information = “List of projects under investigation”
- 3) Frequently-asked questions about data usage = “FAQ”



FAQs compiled from past inquiries about the procedures for using products and data provision can be read here.

# FAQs on G-Portal

## G-Portal 地球観測衛星データ提供システム

まずは目的のデータがあるか検索(どなたでも検索できます)  
※ダウンロードには登録が必要です。



### 物理量から検索

降水・海色・植生などから絞り込み



### 衛星からの検索

衛星・センサ・レベルから絞り込み



### 直接ダウンロード

FTP等でのダウンロード方法



ログイン

ユーザ登録

初めての方へ

プロダクト情報・運用情報

ツール・ドキュメント

サポート・問い合わせ

お知らせ

サイト内検索:

Google Custom Sea



日本語

ENGLISH

G-Portalは、様々な分野で利用いただくことを目的とした  
地球観測データを無償で提供しています。

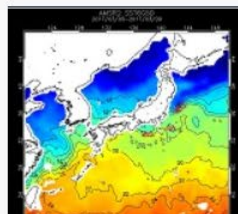
(2019.07.26)

際には、ご配慮頂けますようお願い申し上げます。

お知らせ [2019/07/05] Aqua/AMSR-E\_AMSR2 Format (HDF5) の高次  
2019年7月5日よりAqua/AMSR-E\_AMSR2 Format (HDF5) の高次 (L2及びL3version8)プロダクト

The “FAQ” pages can be opened  
from the G-Portal TOP screen as well.

利用事例



地域社会に役立つ地球観測衛星 (漁業編)



GCOM-C/SGLI, GCOM-W/AMSR2



海面水温





# FAQs about Data Usage

For the latest information, refer to the “FAQ”  
pages of G-Portal:

<https://gportal.jaxa.jp/gpr/information/support>

# FAQs about Data Usage

No.	Question	Answer
1	What are frequently used products?	L1B, SST, LST, CHLA and NDVI data are used most frequently. We recommend the use of L2 RSRF products instead of L1B products for creating attractive products in RGB colors.
2	Are any materials compiled in plain language, more accessible than the Data Users Handbook?	This material and the other four materials contain information for unexperienced data users.
3	I want to know how to convert physical quantities.	For how to convert physical quantities, refer to Material 4.
4	I want to know the appropriate color range and color tone for creating pictures.	Relevant reference documents are listed in Material 4.
5	I want to know geometric projection methods.	For some geometric projection methods, refer to Material 4.
6	I want to convert data from HDF5 format into GeoTIFF or JPG format.	The user tool allows you to convert data from HDF5 format into GeoTIFF or JPG format. Such conversion is not suited for large-size data processing because the tool is intended for unexperienced private users.
7	Please show me how to avoid uneven coloring during the image mosaicking process.	The use of RSRF products lets you avoid color unevenness due to the atmosphere. For details, refer to Material 4.

# FAQs about Data Usage

No.	Question	Answer
8	How is the geometric accuracy?	As of December 2018, a geometric accuracy of less than 0.5 pix has been achieved. This value corresponds to a resolution Q of 125 m or less.
9	Show me how to narrow down data of areas around the Japanese archipelago.	Such data can be narrowed down with the scene, path and tile number of a granule ID.
10	At what timings are data acquisition with FTP available for areas around Japan if one timing is specified per day?	All standard products are created one or two days after observation, and all quasi-real-time products are created about six hours after observation.
11	L1B products that were available in the past have recently disappeared. Why?	Presently, the L1B products for January 2018 to June 2019 are being prepared for rerelease.
12	GeoTIFF products show pixel shifts after having been processed as requested by G-Portal or converted with the user tool.	Pixel shifts has been detected during format conversion. The program is currently being debugged. Please keep this failure in mind when using the format conversion function.
13	Products for the data immediately after launch are not found.	In the period immediately after launch (January 1 to March 28, 2018), the system was operated under unusual operating conditions for testing purposes. Some products were probably not created or lost.

# FAQs about Data Usage

[Reference] List of G-Portal directories and stored product information  
(provided as Appendix 1 to the Material 3 in pdf format)

G-Portal FTP階層構造	G-Portal ツリー階層構造	GCOM-C/SGLIプロダクト											備考
		作成単位	統計期間			レベル		プロダクトID			標準(G)/ 準り(S/L)	保存日数 (即時)	
standard/GCOM-C/GCOM-C.SGLI													
L1A	L1A-可視赤外(非偏光) L1A-可視赤外(偏光) L1A-短波長赤外、熱赤外	シーン 半周回	-	-	-	1A		VNR	POL	IRS	G	無期限	Scene
L1B	L1B-可視赤外(非偏光) L1B-可視赤外(偏光) L1B-短波長赤外、熱赤外	シーン 半周回	-	-	-	1B		VNR	POL	IRS	G	無期限	Scene
L2.ATMOS.ARNP	L2-海洋上・陸上エアロゾル (近紫外)	全球	01D	-	-	L2	-	ARNP			G	無期限	Tile
L2.ATMOS.ARNP.Global	L2全球-海洋上・陸上エアロゾル (近紫外)	全球	01D	-	-	L2	-	ARNP			G	無期限	Global
L2.ATMOS.ARPL	L2-陸上エアロゾル (偏光)	全球	01D	-	-	L2	-	ARPL			G	無期限	Tile
L2.ATMOS.ARPL.Global	L2全球-陸上エアロゾル(偏光)	全球	01D	-	-	L2	-	ARPL			G	無期限	Global
L2.ATMOS.CLFG	L2-雲フラグ	全球	01D	-	-	L2	-	CLFG			G	無期限	Tile
L2.ATMOS.CLFG.Global	L2全球-雲フラグ	全球	01D	-	-	L2	-	CLFG			G	無期限	Global
L2.ATMOS.CLPR	L2-雲種別雲量・雲頂温度・雲頂高度・水雲光学 の厚さ・水雲有効半径・氷晶雲光学の厚さ	全球	01D	-	-	L2	-	CLPR			G	無期限	Tile
L2.ATMOS.CLPR.Global	L2全球-雲種別雲量・雲頂温度・雲頂高度・水雲光 学の厚さ・水雲有効半径・氷晶雲光学の厚さ	全球	01D	-	-	L2	-	CLPR			G	無期限	Global
L2.ATMOS.LCLR.Global	L2全球-大気上端放射輝度(晴天)	全球	01D	-	-	L2	-	LCLR			G	無期限	Global
L2.ATMOS.LTOA.Global	L2全球-大気上端放射輝度	全球	01D	-	-	L2	-	LTOA			G	無期限	Global
L2.CRYOS.OKID	L2-オホーツク海海水分布	シーン	-	-	-	L2	-	OKID			G	31 日	Scene
L2.CRYOS.SGSL.Statistics	L2統計-浅層積雪粒径	全球	-	08D	01M	L2	-	SGSL			G	無期限	Tile
L2.CRYOS.SICE	L2-積雪・海水分布	陸・全球	01D	-	-	L2	-	SICE			G	無期限	Tile
L2.CRYOS.SICE.Statistics	L2統計-積雪・海水分布	全球	-	08D	01M	L2	-	SICE			G	無期限	Tile
L2.CRYOS.SIPR	L2-雪氷面温度・浅層積雪粒径	陸・全球	01D	-	-	L2	-	SIPR			G	無期限	Tile
L2.CRYOS.SIST.Statistics	L2統計-雪氷面温度	全球	-	08D	01M	L2	-	SIST			G	無期限	Tile
L2.LAND.AGB_	L2-地上部バイオマス 植生ラフネス指数	陸	01D	-	-	L2	-	AGB_			G	無期限	Tile
L2.LAND.AGB_Statistics	L2統計-地上部バイオマス	陸	-	08D	01M	L2	-	AGB_			G	無期限	Tile
L2.LAND.EVI_Statistics	L2統計-拡張植生指数	陸	-	08D	01M	L2	-	EVI_			G	無期限	Tile
L2.LAND.FPAR.Statistics	L2統計-光合成有効放射吸収率	陸	-	08D	01M	L2	-	FPAR			G	無期限	Tile
L2.LAND.GEOI.Statistics	L2統計-陸域反射率	陸	-	08D	01M	L2	-	GEOI			G	無期限	Tile
L2.LAND.GEOP.Statistics	L2統計-陸域反射率	陸	-	08D	01M	L2	-	GEOP			G	無期限	Tile
L2.LAND.GEOV.Statistics	L2統計-陸域反射率	陸	-	08D	01M	L2	-	GEOV			G	無期限	Tile
L2.LAND.LAI_	L2-光合成有効放射吸収率 葉面積指数	陸	01D	-	-	L2	-	LAI_			G	無期限	Tile
L2.LAND.LAI_Statistics	L2統計-葉面積指数	陸	-	08D	01M	L2	-	LAI_			G	無期限	Tile

Differences of GCOM-C product provision service

September 26, 2019

	G-Portal *1		JASMES (JAXA Satellite Monitoring for Earth)
	Standard service (Registered user)	Near real time service (Special user *5)	
Products	All standard products <ul style="list-style-type: none"> <li>• Verified accuracy</li> <li>• Radiance products (L1) *6</li> <li>• Physical quantity products (L2)*7</li> <li>• Statistic products (L3 and others)</li> </ul>	<u>Near real time products</u> <ul style="list-style-type: none"> <li>• Prioritize Real-time rather than accuracy</li> <li>• Radiance product (L1B)</li> <li>• <u>A part of physical quantity products (L2)</u></li> <li>• Provide only for 7 days after observation</li> </ul>	<ul style="list-style-type: none"> <li>• Projected on the same latitude and longitude</li> </ul>
Data format	HDF5 format	HDF5 format <u>(processing each downlink *4)</u>	NetCDF, PNG
Download	G-Portal WEB site FTP-get SFTP-get	SFTP-get	FTP-get
Preparation period for data provision (*3)	About 1~2 days after observation date. (Confirming)	About 6 hours after observation time (Confirming)	About 6 hours and a little more after observation time. (Confirming)
User registration	Web site	Web site (as standard service) + Submission and approval of application form	Web site

Some “physical quantity” products such as NDVI are excluded from the service.

For tile products such as LST, multiple files are created for a single tile



Projection type	Product				
	L1	Atmosphere	Ocean	Land	Cryosphere
Scene	L1 250 m/500 m/1 km		L2 Ocean 250 m/500 m/1 km		L2 Cryosphere Okhotsk seawater distribution 250 m/500 m/1 km
Global EQA (sinusoidal equal area)		L2 Atmosphere Global 1/24 deg (4 km)			
Tile		L2 Atmosphere 250 m/1 km		L2 Land 250 m/1 km	L2 Cryosphere* 250 m/1 km
				L2 Statistics Land 250m/1 km	L2 Statistics Cryosphere* 1 km
1-dimension global EQA		L3 Bin Atmosphere 1/12 deg (8 km)	L3 Bin Ocean 1/24 deg (4 km)	L3 Bin Land 1/24 deg (4 km)	L3 Bin Cryosphere* 1/24 deg (4 km)
Global EQR (EQuiRectangular)		L3 Map Atmosphere 1/12 deg (8 km)	L3 Map Ocean 1/24 deg (4 km)	L3 Map Land 1/24 deg (4 km)	L3 Map Cryosphere* 1/24 deg (4 km)
Polar Stereo (PS)					L3 Map Cryosphere* 1/24 deg (4 km)

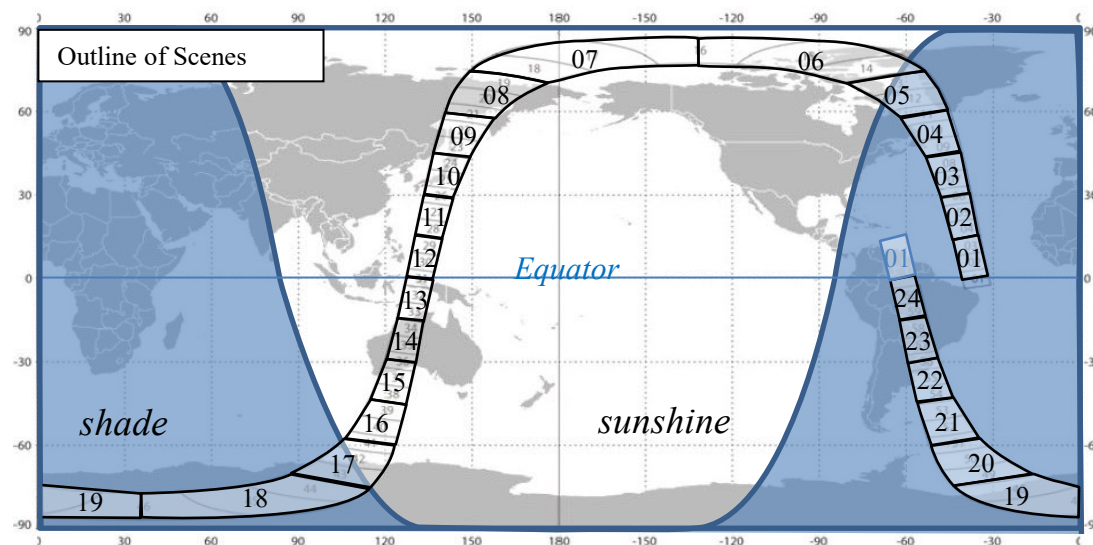
\*Excluding Okhotsk seawater distribution

“Scene,” “Tile” and “PS” products contain observation data for certain parts of Earth.  
 “Global EQA,” “Global EQA (1-dimension)” and “Global EQR” products contain observation data for the entire planet.

For details on the definition of granule ID for different products, see the answer to Q3.

- ◆ Scene: L1 VNR-NP (non-polarization), IRS (infrared)
- ◆ Scene: L2 Ocean products, Cryosphere products (OKID only)

- "Scene" is defined as the range obtained by dividing one orbit of the satellite starting from the ascending node into 24 equal parts (about 15 degrees).
- When the resolution is switched or the sensor is turned off, one scene may be output as divided multiple products.
- Scene numbers of granule IDs are "01" to "24," with the increment starting from the ascending node.
- The IRS product has multiple resolution combinations for each band.
- Since data are stored in the product in the order of observation time, products for ascending orbit (from south to north) have south on top of the image and north on the bottom.



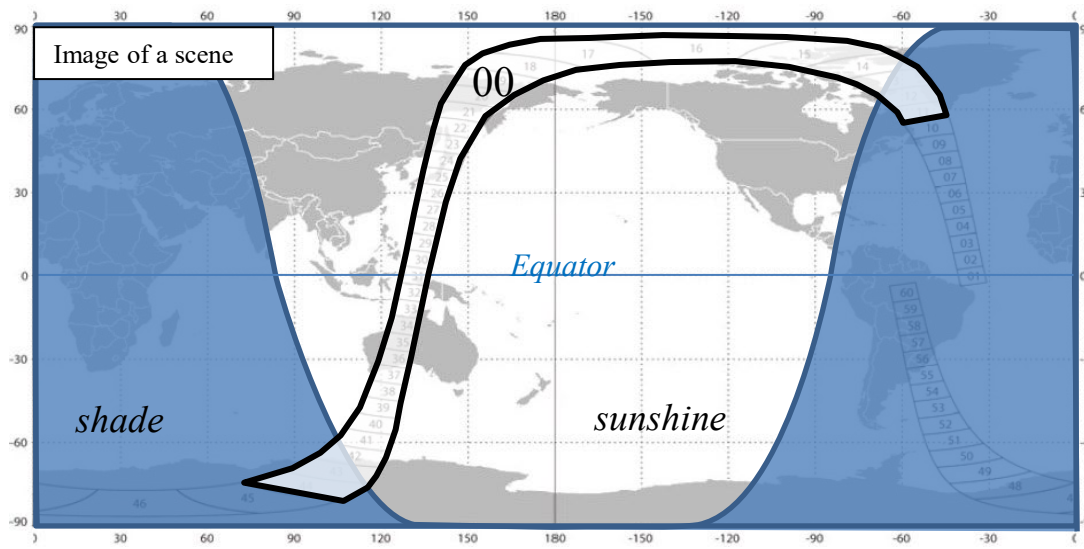
Definition of VNR-NP and IRS scene

プロダクト 種別	VNR-NP プロダクト	VNR-PL プロダクト	IRS プロダクト		
分解能記号	分解能	分解能	SW01,02,04 分解能	SW03 分解能	TIR 分解能
K	1km	1km	1km	1km	1km
			OFF	1km	1km
			1km	1km	OFF
H	—	—	1km	1km	500m
			OFF	1km	500m
Y	—	—	1km	1km	250m
X	—	—	1km	250m	1km
M	—	—	1km	250m	500m
			1km	250m	250m
Q	250m	—	OFF	250m	250m
			1km	250m	OFF
	1km 低解像度 リサンプリング プロダクト	—	1km	1km 低解像度 リサンプリング プロダクト	1km 低解像度 リサンプリング プロダクト
			1km	1km 低解像度 リサンプリング プロダクト	1km
			1km	1km	1km 低解像度 リサンプリング プロダクト

Resolution combinations

## ◆ Scene: L1 VNR-PL (polarization)

- The scene of VNR-PL is defined as the **range that includes the entire daytime observation region within one orbit of the satellite.**
- Because the tilt angle is changed around the latitude 0 deg zone, discontinuous or stretched-looking zones appear in the acquired images.
- All scene numbers of granule IDs are fixed at “00.”



Definition of VNR-PL

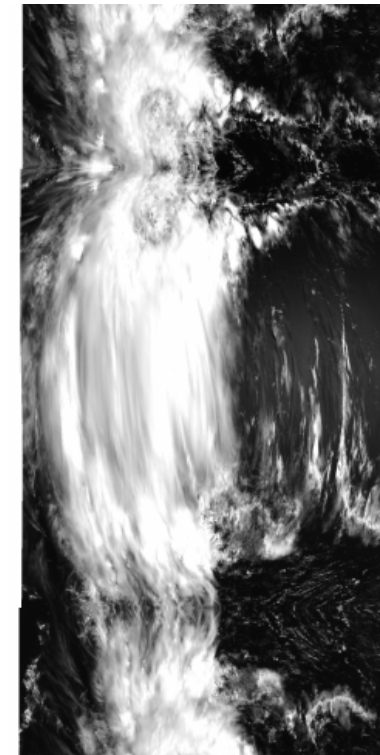
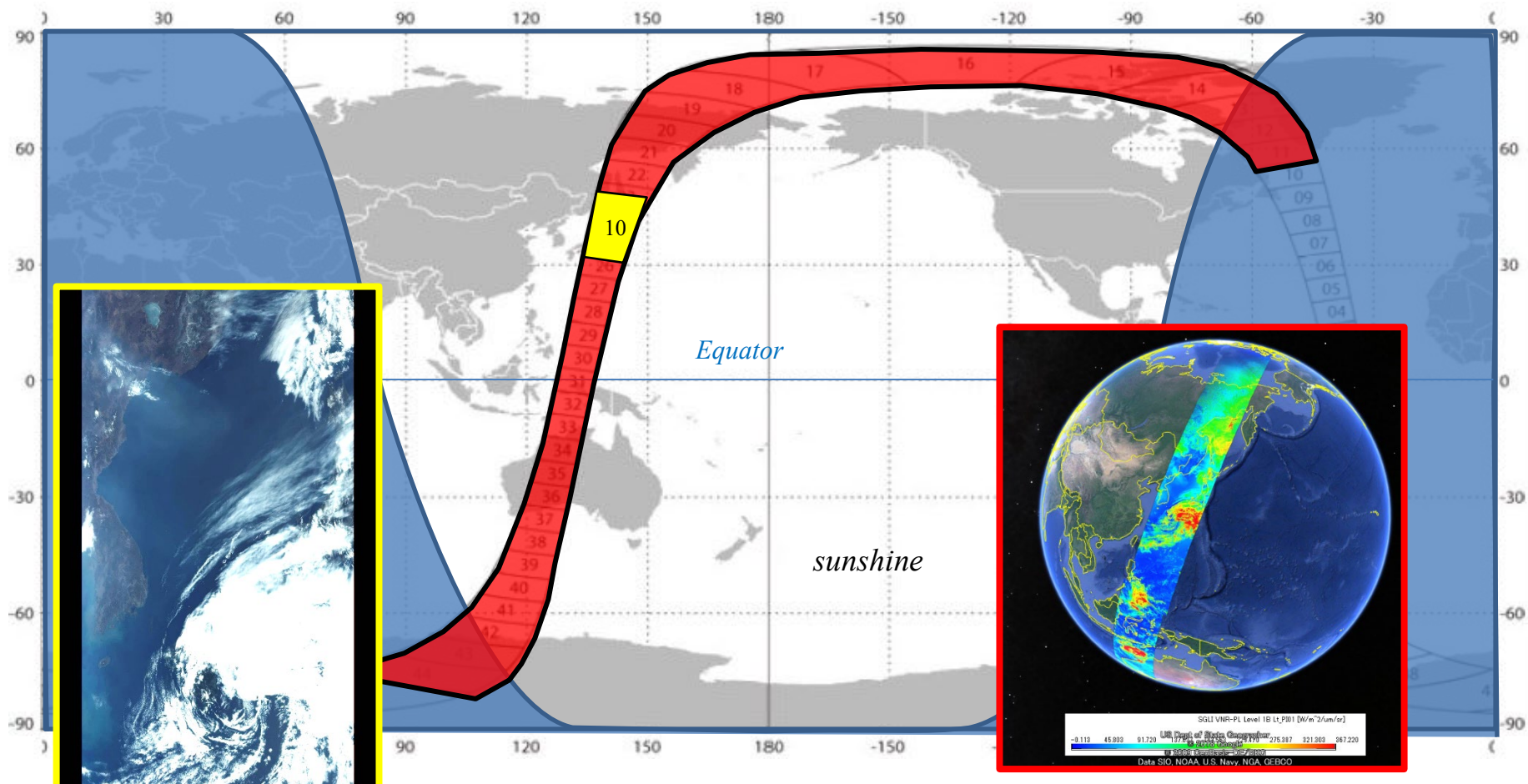


Image captured during change of tilt angle



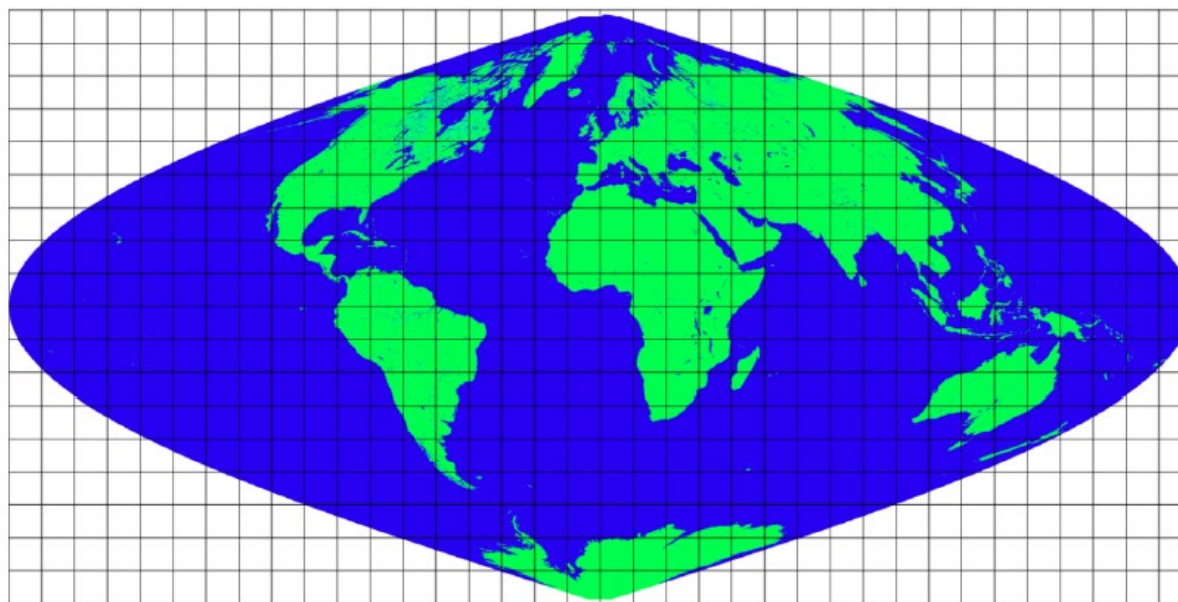
One scene of VNR-  
NP and IRS

One scene of VNR-PL  
(indicated on Google Earth)



## ◆ Global EQA (sinusoidal equal area)

- EQA (sinusoidal equal area) is an equal-area projection drawn on parallel horizontal lines representing latitude lines and sinusoidal curves (with the central meridian bisecting the latitude lines at a right angle) representing longitude lines.
- Global EQR is defined as **EQA projection with image center located at 0 degrees of longitude and latitude.**
- Two Global EQA products are created every day for the satellite flight directions (A: ascending orbit and D: descending orbit).
- The processing level of granule ID is represented by “L2” and the projection is represented by “A.”

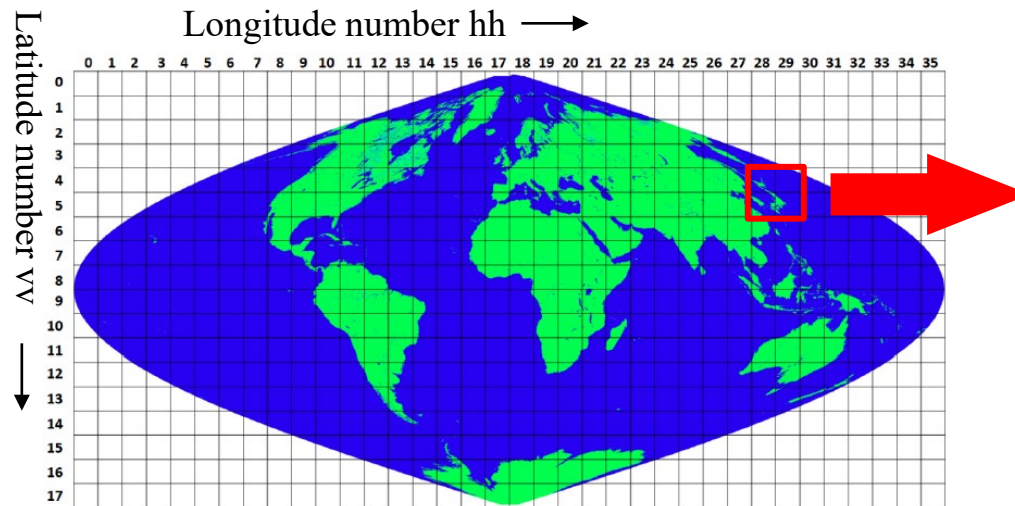


Global EQA

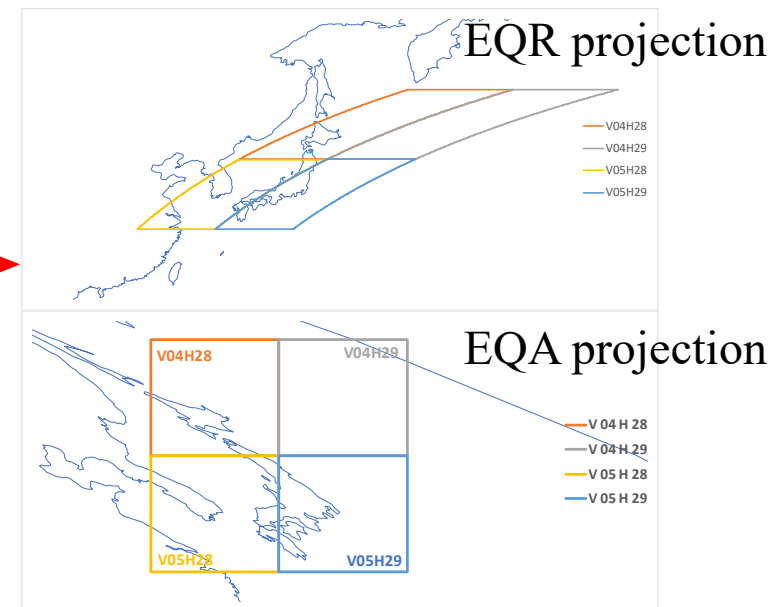


## ◆ Tile

- Tile is defined as a **Global EQA** divided every **10 degrees in latitude** and **10 degrees in longitude on the equator**.
- The tile number of the granule ID is represented by a 4-digit number (vvhh: “0000” to “1735”) created by combining the latitude number (vv) with the longitude number (hh) in series.
- For each tile, two standard products are created for each satellite flight direction (ascending and descending) every day.
- Near-real-time products are created for each downlink. Consequently, multiple products of the same tile number may be created daily. These products are distinguished by the three-digit sequence number from “000” to “999” that is added to the end of the granule ID.



Definition of tile



Tiles around Japan

## ◆ Global EQA (one-dimensional) (EQA bin)

• Global EQA (one-dimensional) is defined as a **one-dimensional arrangement of 4-km or 8-km equal-area grids in order of latitudes from -90 deg to +90 deg, and longitudes from -180 deg to +180 deg.**

• In the latitudinal direction, the image is divided every 1/12 deg into 2160 rows for resolution C, or every 1/24 deg into 4320 rows for resolution F.

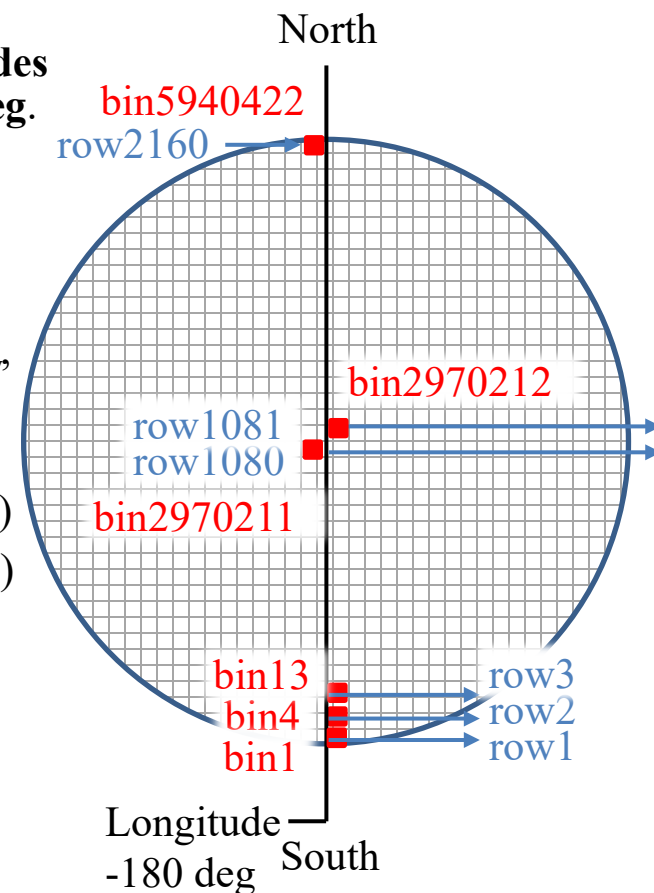
• When the number of rows in the latitudinal direction is A and the central latitude of a given row is  $\Phi$ , the number of binned grids,  $N_{\text{row}}$ , in the longitudinal direction is:

$$N_{\text{row}} = [2 \times A \times \cos \Phi]$$
 ([ ] represents rounding-off)  
(Example for resolution C:  $N_1=3, N_2=9, \dots, N_{1080}=4320, \dots, N_{2160}=3$ )

(Example for resolution F:  $N_1=3, N_2=9, \dots, N_{2160}=8640, \dots, N_{4320}=3$ )

• Two products (ascending and descending) per statistical period are created for each satellite flight direction.

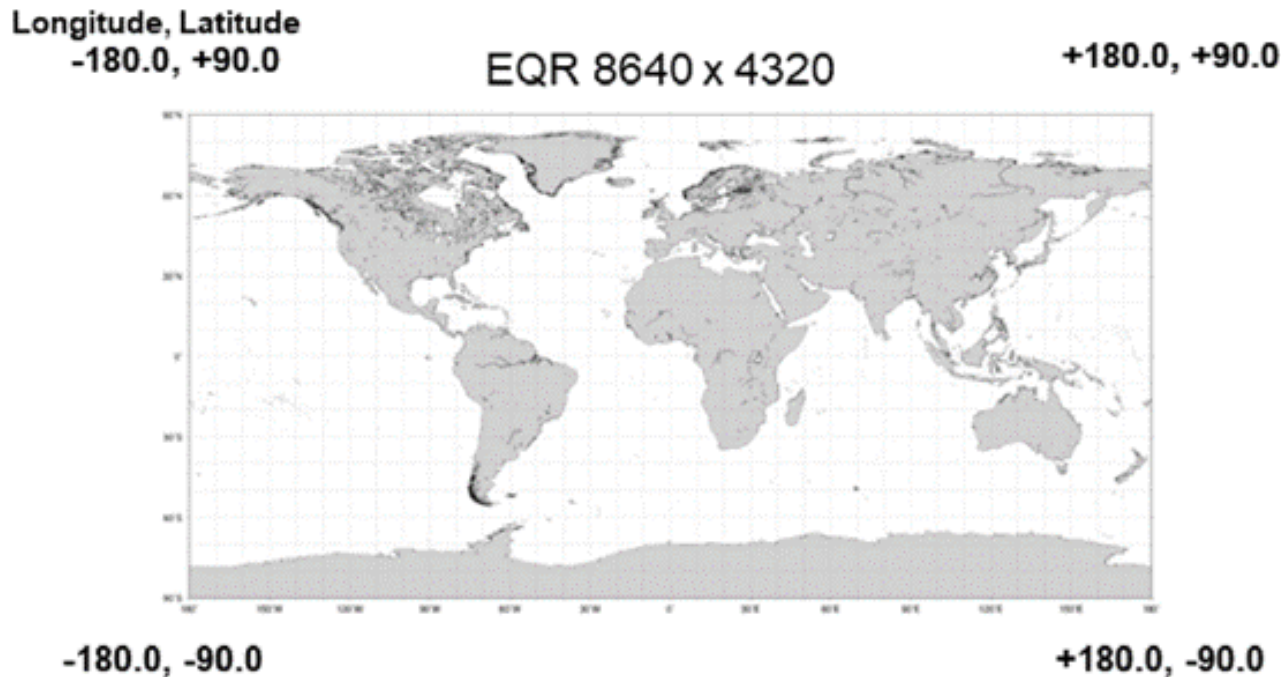
• The processing level of granule ID is represented by “3B” and the projection is represented by “X.”



Definition of Global EQA (one-dimensional)  
for resolution C (1/12 deg)

## ◆ Global EQR

- Global EQR is defined as **equal latitude/longitude projection (latitude of -90 to +90 deg and longitude of -180 to +180 deg)**.
- The grid interval is 1/12 deg (resolution C) and 1/24 deg (resolution F) for both latitude and longitude.
- Two products (ascending and descending) per statistical period are created for each satellite flight direction.
- The processing level of granule ID is represented by “3M” and the projection is represented by “D.”

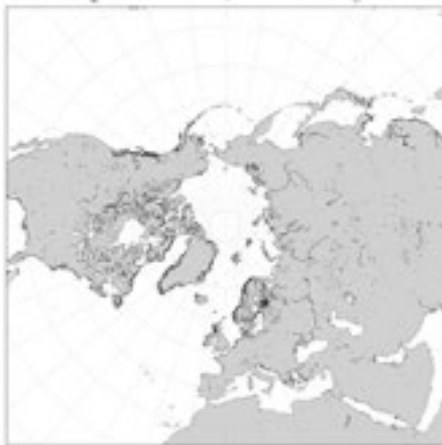


Definition of global EQR

## ◆ PS (Polar Stereo)

- PS is defined as **polar stereo projection centered on the north and south poles.**
- The processing level of granule ID is represented by “3M” and the projection is represented by “N” (North Pole) or “S” (South Pole) depending on the pole.
- Four products [satellite flight directions (ascending and descending) and poles (north and south)] are created per statistical period.

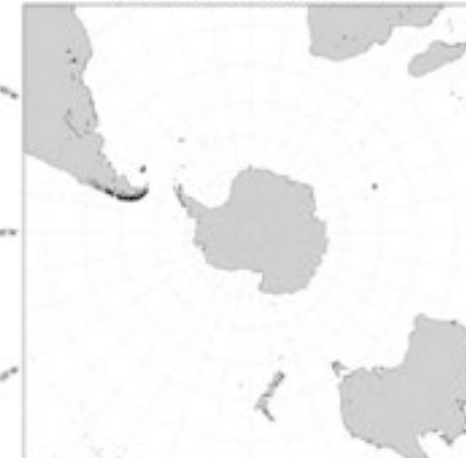
Longitude, Latitude  
-135.0, +6.032568      +135.0, +6.032568  
NPS 3500 x 3500



-45.0, +6.032568      +45.0, +6.032568

Definition of PS-N

Longitude, Latitude  
-45.0, -6.032568      +45.0, -6.032568  
SPS 3500 x 3500



-135.0, -6.032568      +135.0, -6.032568

Definition of PS-S

# Q3 Definition of granule ID

Level-1 products

Byte	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41			
GID	G	C	1	S	G	1	_	Y	Y	Y	Y	M	M	D	D	H	H	m	m	s	P	P	P	S	S	_	L	L	x	x	_	K	K	K	m	r	_	a	p	p	p			
Example	G	C	1	S	G	1	_	2	0	1	1	1	1	1	3	2	3	4	5	A	0	1	2	0	6	_	1	B	S	G	_	I	R	S	N	K	_	1	0	0	1			
Item	Satellite (fix)			Sensor (fix)			-	Year			Month		Day		Hour		min		sec	Path ※2			Scene ※3			-	Level ※8			Type ※9		-	Subsystem ※10			D/N ※11		resolution ※13		-	algorithm ver. ※14		parameter ver. ※15	
								Observation start UT ※1																																				

LL=1B

KKK = VNR (VNR-NP), IRS (IRS), POL (VNR-PL)

m = D (day), N (night)

PPP = path number

SS = scene number

r = VNR-NP: K (1 km), Q (250 m), L (ground averaged 1 km)

VNR-PL: K (1 km)

IRS:K (1 km), Q (250 m), L (ground averaged 1 km), M,X,Y,HR

Resolution	Q	M	X	Y	H	K
SW01,02,04	1 km					
SW03	250 m			1 km		
HR	250 m	500 m	1 km	250 m	500 m	1 km

Level-2 products (Scene), SST, NWLR, OKID products are relevant.

Byte	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
GID	G	C	1	S	G	1	_	Y	Y	Y	Y	M	M	D	D	H	H	m	m	s	P	P	P	S	S	_	L	L	x	x	_	K	K	K	K	r	_	a	p	p	p
Example	G	C	1	S	G	1	_	2	0	1	1	1	1	1	3	2	3	4	5	A	0	1	2	0	6	_	L	2	S	G	_	S	S	T	D	K	_	1	0	0	1

LL=L2

KKKK=Product ID

Level-2 products (Tile and Global) and Level-3 products

Byte	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
GID	G	C	1	S	G	1	_	Y	Y	Y	Y	M	M	D	D	m	t	t	t	_	g	A	A	A	A	_	L	L	x	x	_	K	K	K	K	r	_	a	p	p	p
Example	G	C	1	S	G	1	_	2	0	1	1	1	1	1	3	D	0	1	D	_	T	0	5	2	7	_	L	2	S	G	_	C	L	F	G	Q	_	1	0	0	1
Item	Satellite (fix)			Sensor (fix)			-	Year			Month		Day		A/D ※4	Process time unit ※5			-	Mapping ※6	Area tile No. ※7			-	Level ※8		Type ※9		-	Product ID ※12			resolution ※13		-	algorithm ver. ※14		parameter ver. ※15			
								Observation start UT ※1																																	

LL=L2 (tile, EQA ), 3M (EQR, PS), 3B (EQA bin) KKKK=Product ID r=Q (250 m), K (1 km), F (1/24 deg), C (1/12 deg)

ttt=01D (1 day), 08D (8 days), 01M (1 month) g=T (tile), A (EQA), X (EQA bin), D (EQR), N (PS-N), S (PS-S)

AAAA=tile number

m=A (Ascending), D (Descending)



# Q3 Definition of granule ID

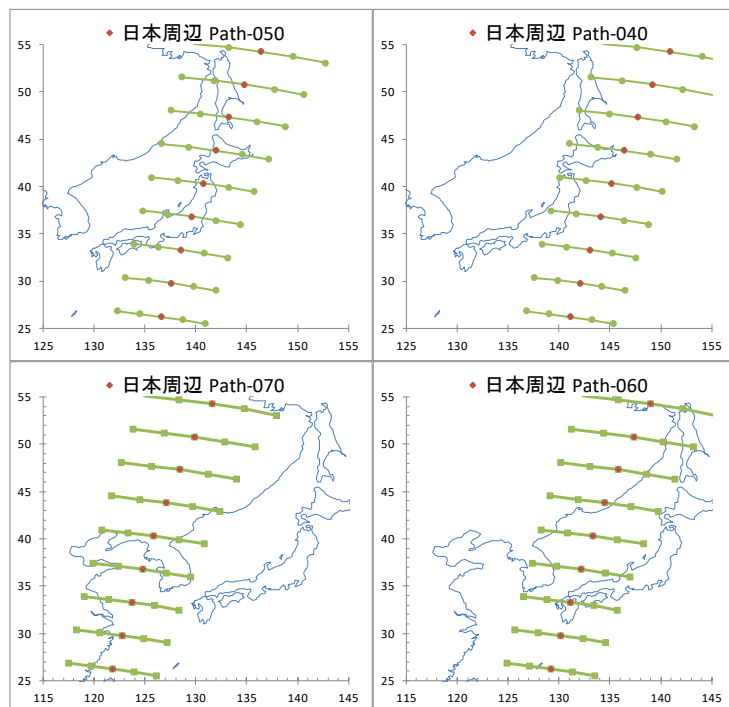
No.	GID	contents	Details			Reference to GCOM-C Data Users Handbook
			L1	L2 (Scene) SST, NWLR, IWPR, OKID	L2 (Tile, Global) 、 L3	
※1	YYYYMMDDHHmms	Observation start UT	UTC time system, Seconds are Alphabet notation. Does not match first line time at product [Please refer the attachment 1 of this material.]		—	table 4-5
	YYYYMMDD		—	—	UTC time system	—
※2	PPP	Path number	1~485		—	4.1.3.3(1)
※3	SS	Scene number	1~24		—	4.1.3.3(2)
※4	m	A/D	—	—	Ascending : A Descending : D	—
※5	ttt	Process time unit	—	—	1日 : 01D 8日 : 08D 1月 : 01M	—
※6	g	Mapping	—	—	EQA(one dimentional) : X EQA : A EQR : D PS-N : N PS-S ; S Tile : T	4.1.5.1
※7	AAAA	Area tile No.	—	—	0000~1735 0000=Global	4.1.4.1
※8	LL	Level	L1A : 1A L1B : 1B	L2	L2 : L2 L3 Bin statistics : 3B L3 Map statistics : 3M	—
※9	xx	Type	Standard Products : SG Near Real Time Products (Japan) : SL Near Resl Time Products (Global) : SN			4.1.3.3(3)
※10	KKK	Subsystem	VNR-NP : VNR VNR-PL : POL IRS (SWIR+TIR) : IRS	—	—	—
※11	m	D/N	Day : D Night : N	—	—	4.1.3.3(4)
※12	KKKK	product ID	—	4-digits product ID		List 4-7, 4-8, 4-9 List 4-14, 4-15
※13	r	resolution	250m : Q 1000m : K 1000m(low resolution resampling product) : L IRS hasothe pattern. ( H, Y, X, M)		250m : Q 1000m : K 1/24deg : F 1/12deg : C	4.1.3.3(5)
※14	a	algorithm ver.	0~9、A~Z			—
※15	ppp	parameter ver.	000~999			—

## ● Cases of scene products (1/2)

GC1SG1\_201908010036G**03408**\_1BSG\_VNRDQ\_1006.h5

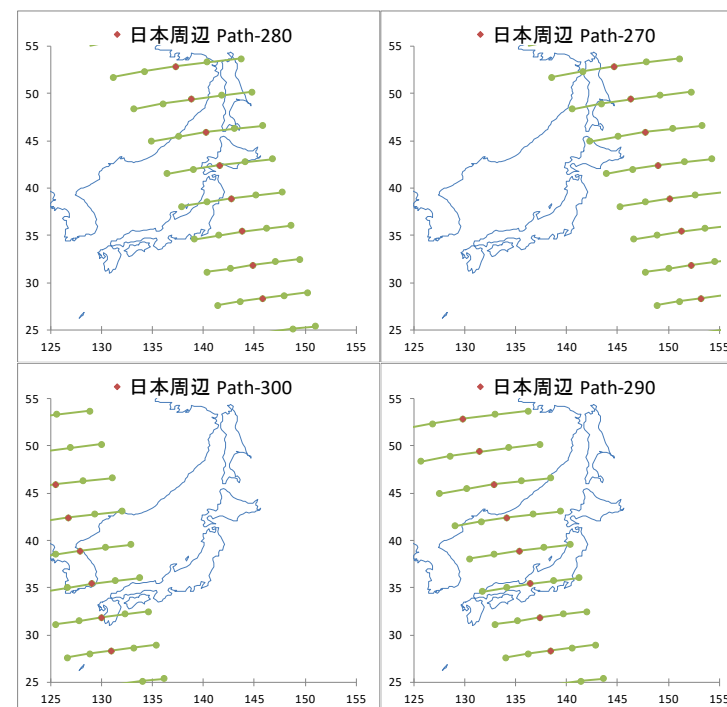
↑  
Path number

↑  
Scene number



sunshine Path numbers: 020 to 080

Scene numbers: 08 to 11



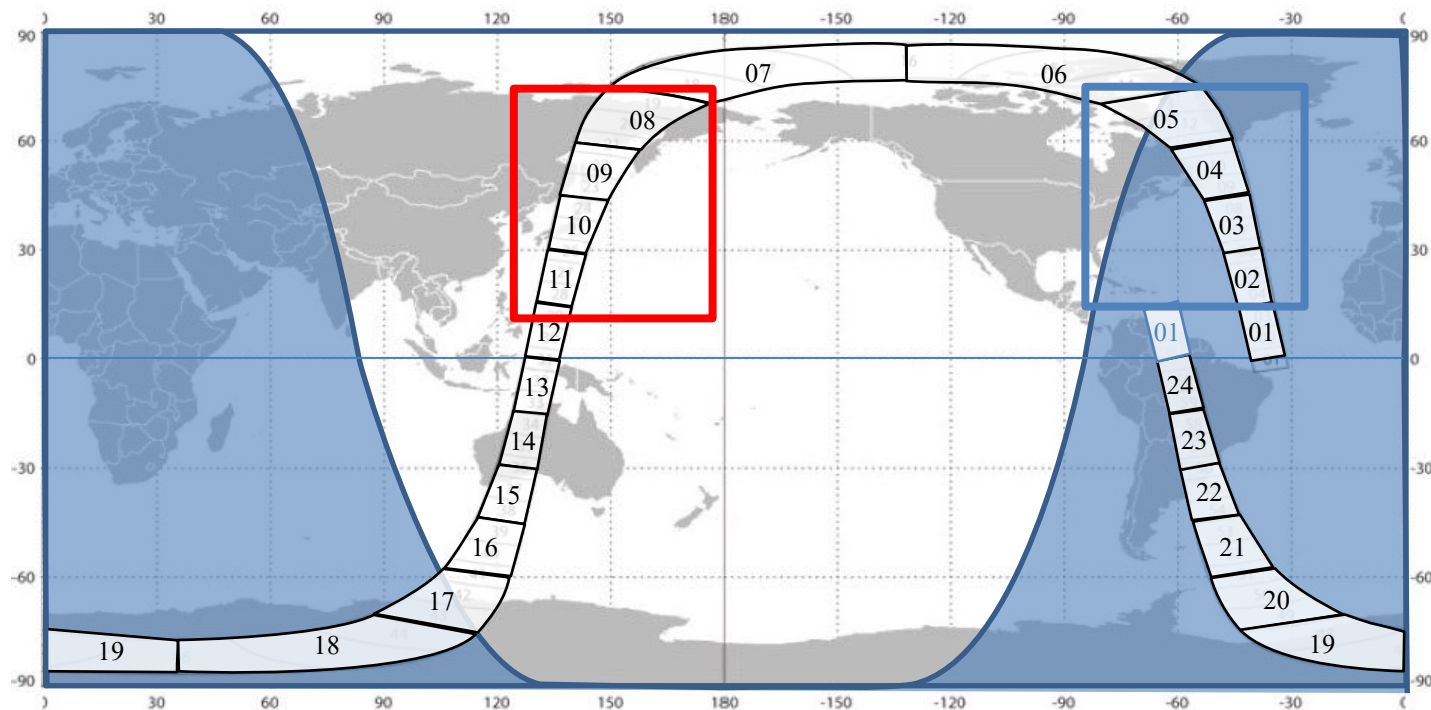
shade Path numbers: 250 to 320

Scene numbers: 02 to 05

## ● Cases of scene products (1/2)

GC1SG1\_201908010036G03408\_1BSG\_VNRDQ\_1006.h5

↑  
Scene number



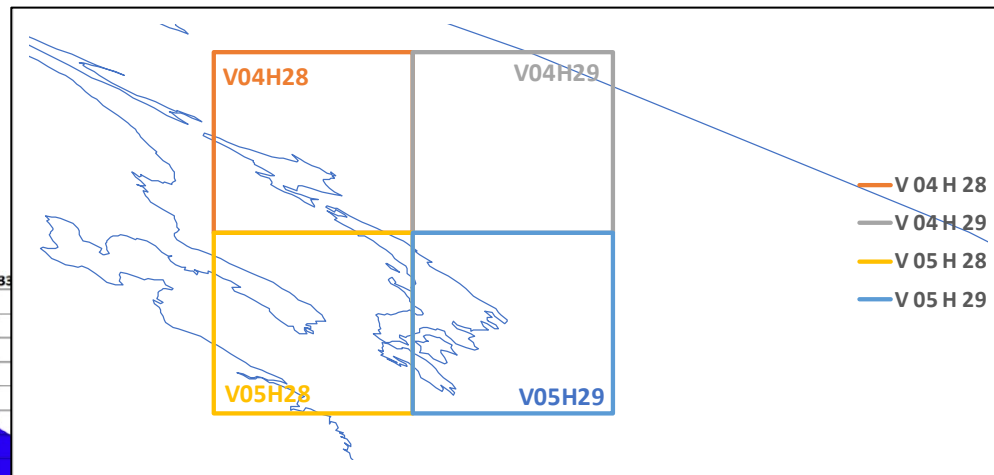
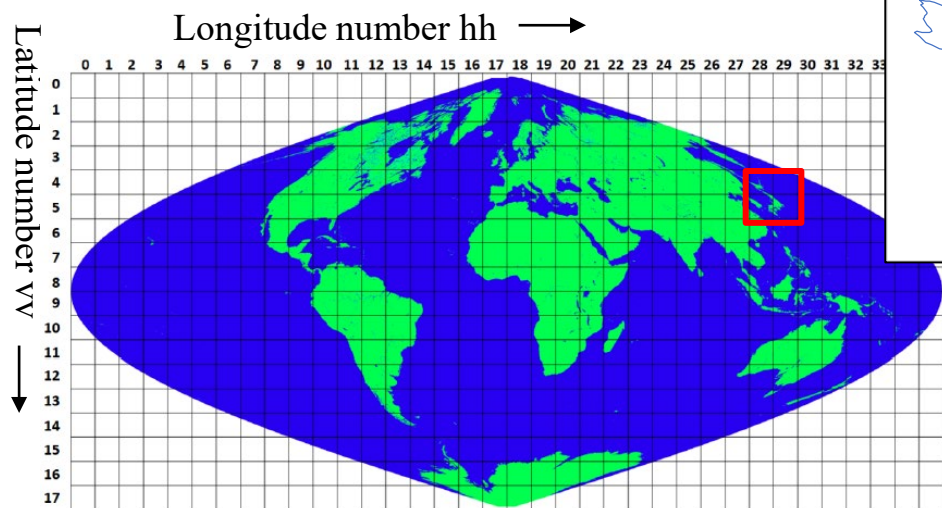
Daytime scene numbers: 08-11

Nighttime scene numbers: 02-05

## ● Cases of tile products

GC1SG1\_20190731D01D\_T0528\_L2SG\_LST\_Q\_1000.h5

↑  
Tile number



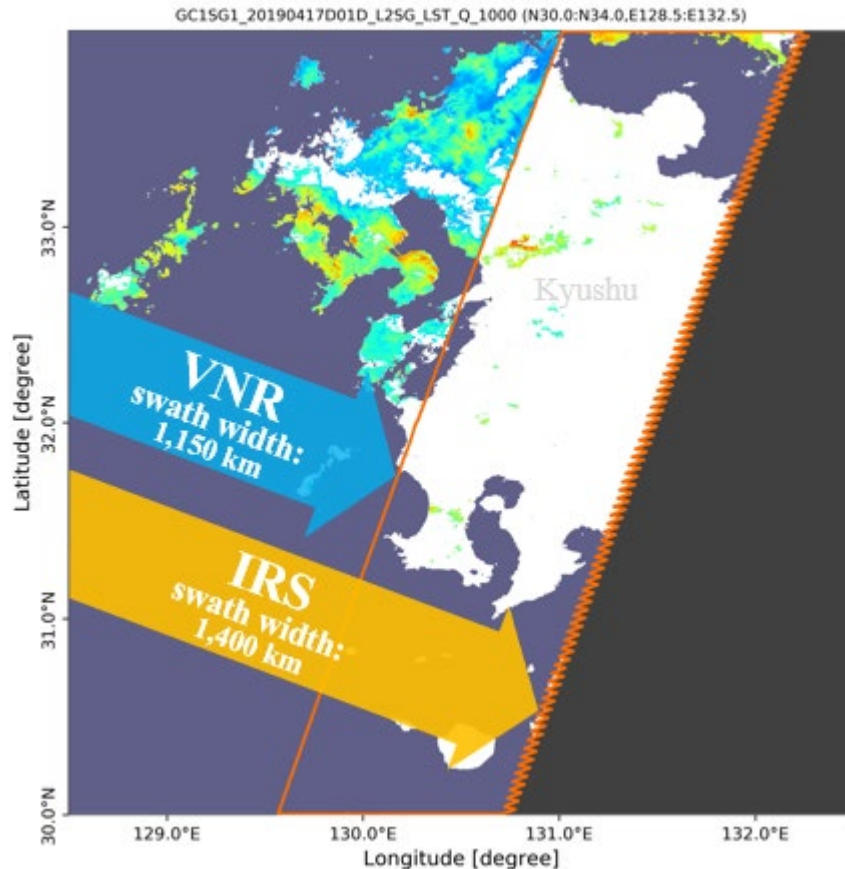
Tile number: vvhh

Latitude numbers: 04-06

Longitude numbers: 27-29

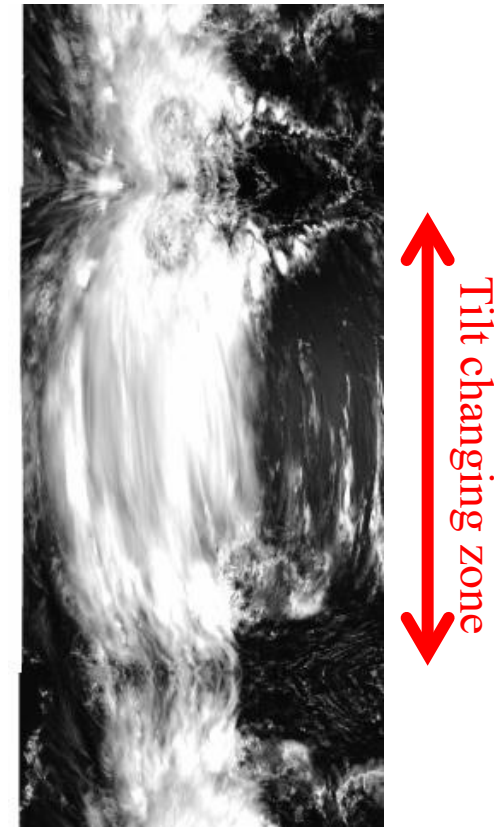
## Q14 Image samples (irregular images)

### ◆ Unnatural lines due to a difference in sensor observation range width



The SGLI comprises two types of observation sensors. Products used for processing both sensors' data may contain a zone (swath) that only IRS data can occupy at the end of the observation range. The cloud discrimination accuracy varies in and out of the zone. This may generate lines delimiting the zone as shown in this picture.

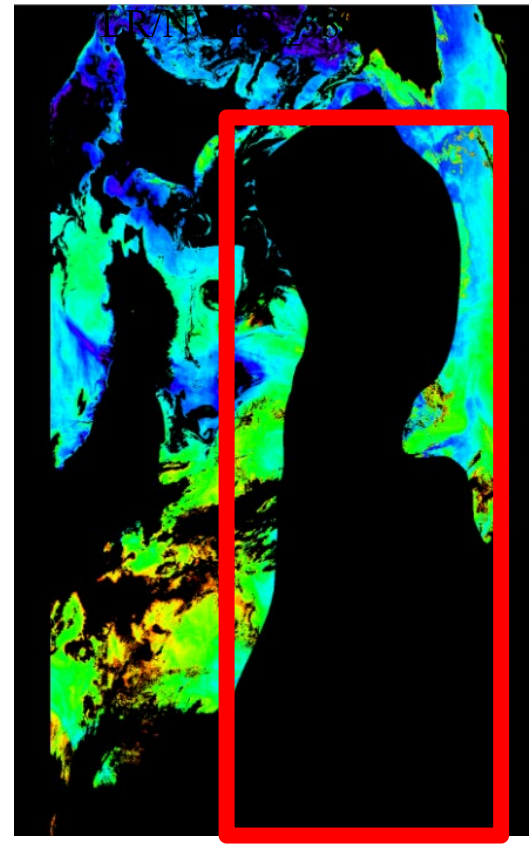
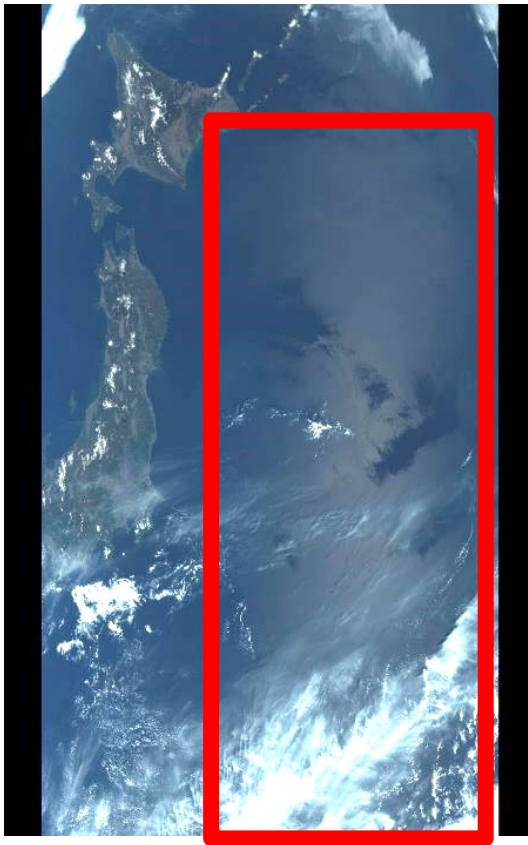
### ◆ Data discontinuance due to a difference in sensor observation method



VNR-PL changes its observation angle (tilt driving or change in tilt angle) to avoid being affected by reflections of sunlight near the equator. During operation for a change in tilt angle, a discontinuous or stretched-looking zone appears (near the center of a scene) as shown in this picture.



### ◆ Data loss due to sunlight reflections at observation points

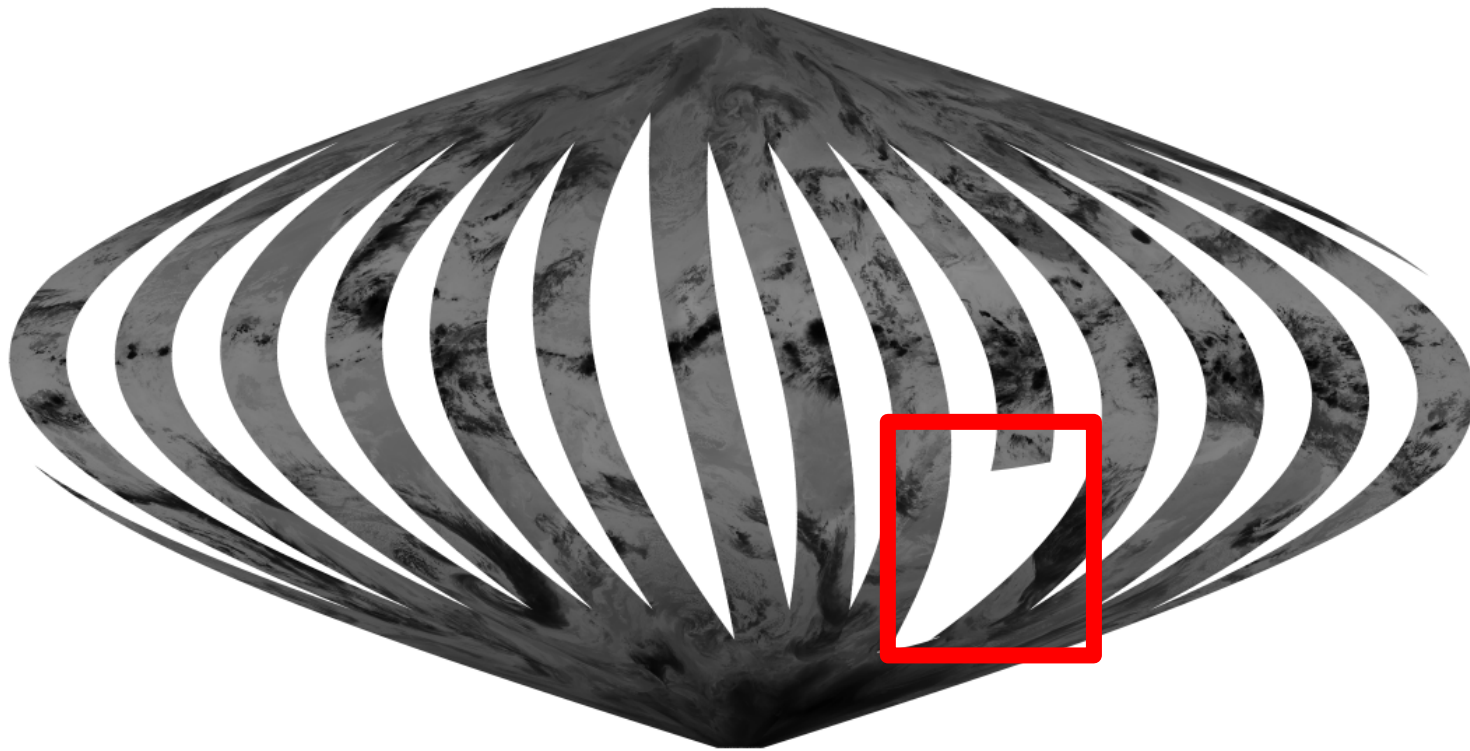


In spring and summer seasons, the GCOM-C/SGLI observes strong sunlight reflections (sun glint) on the sea surface in low- and middle-latitude zones (red frame in the left picture). The current technical level of NWLR and IWPR products does not allow us to determine precise physical quantities in such zones. Therefore, such zones are handled as lost data as shown in the right picture. For data as of June 1, 2019, JASMES ([https://www.eorc.jaxa.jp/cgi-bin/jasmes/sgli\\_nrt/index.cgi](https://www.eorc.jaxa.jp/cgi-bin/jasmes/sgli_nrt/index.cgi)) started to provide products improved for such losses as products of a trial version for research purposes (only in areas around the Japanese archipelago).

## Q14 Image samples (irregular images)

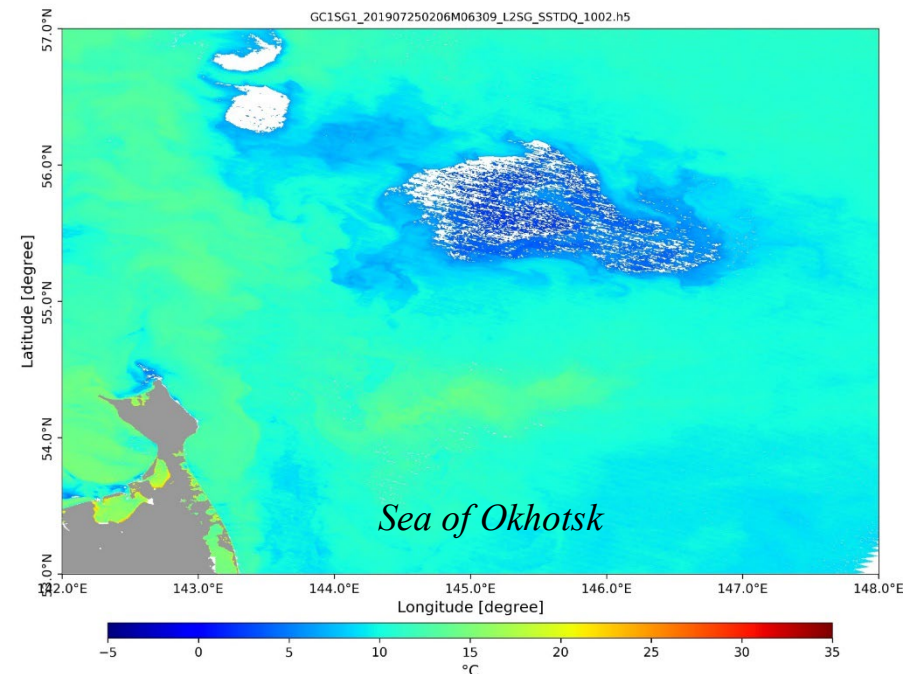
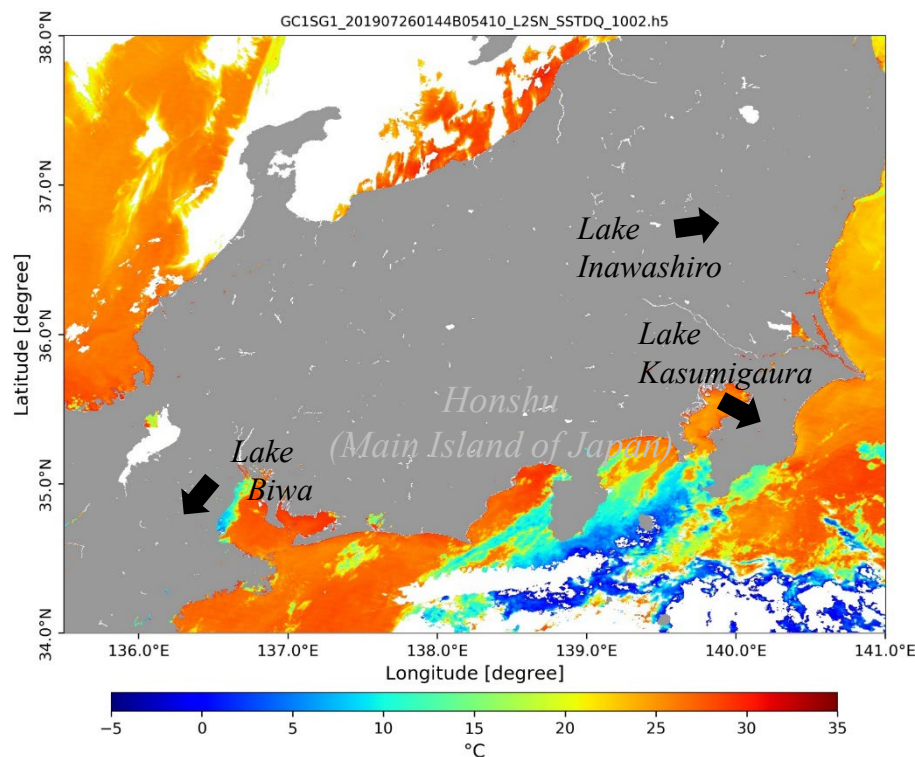
### ◆ Data loss due to calibration operation

LTOAF/Lt\_TI01



Data loss occurs in GCOM/SGLI products during the regular calibration operation. Losses of this kind are not product failures, but planned ones resulting from scheduled calibration. For details of the plans and results of the calibration operations, refer to the Event Information.

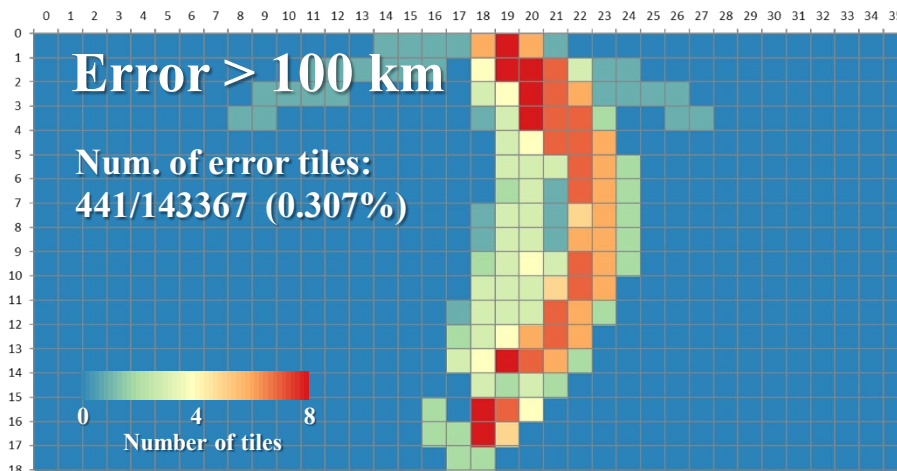
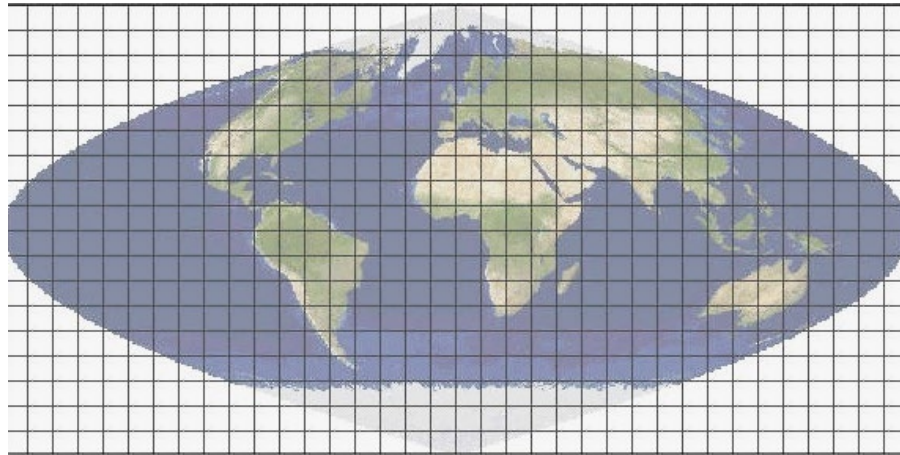
## ◆ Loss of SST data, streaks



The partial loss of data on lakes and streaks in the scanning direction, and the loss of data in SST products will be eliminated in a coming upgraded version of the system.

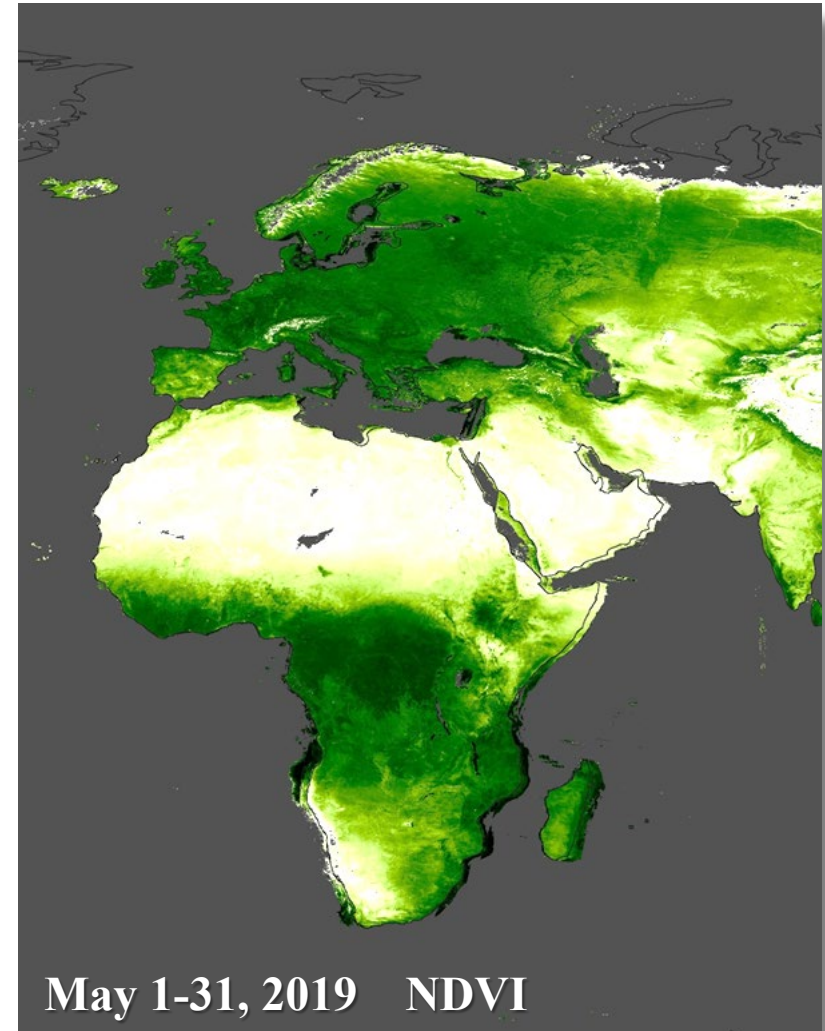


## ◆ Geometrical pixel shifts on tile products



### LTOAQ: Descending

Some tile products from January 1, 2018 to June 19, 2019 contain geometrical pixel shifts. For details of the granule IDs concerned and the degree of influence on each tile, refer to the “FAQ” page of G-Portal.



The coming product upgrades are indicated below.

Along with the upgrades, the granule IDs and FTP hierarchy (of standard products only) will increment.

Year	2017	2018	2019	2020	2021	2022
	▲ Launch	▲ Release of Ver.1		▲ Release of Ver.2 (planned)	▲ Release of Ver.3 (planned)	

## Granule IDs

### Level-1 products

Byte	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
GID	G	C	1	S	G	1	_	Y	Y	Y	Y	M	M	D	D	H	H	m	m	s	P	P	P	S	S	_	L	L	x	x	_	K	K	K	m	r	_	a	p	p	p
Examples	G	C	1	S	G	1	_	2	0	1	1	1	1	1	3	2	3	4	5	A	0	1	2	0	6	_	1	B	S	G	_	I	R	S	N	K	_	1	0	0	1

### Level-2 products (scenes): SST, NWLR, IWPR and OKID products

Byte	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
GID	G	C	1	S	G	1	_	Y	Y	Y	Y	M	M	D	D	H	H	m	m	s	P	P	P	S	S	_	L	L	x	x	_	K	K	K	K	r	_	a	p	p	p
Examples	G	C	1	S	G	1	_	2	0	1	1	1	1	1	3	2	3	4	5	A	0	1	2	0	6	_	L	2	S	G	_	S	S	T	D	K	_	1	0	0	1

### Level-2 products (tile / global) and Level-3 products

Byte	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
GID	G	C	1	S	G	1	_	Y	Y	Y	Y	M	M	D	D	m	t	t	t	_	g	A	A	A	A	_	L	L	x	x	_	K	K	K	K	r	_	a	p	p	p
Examples	G	C	1	S	G	1	_	2	0	1	1	1	1	1	3	D	0	1	D	_	T	0	5	2	7	_	L	2	S	G	_	C	L	F	G	Q	_	1	0	0	1

## FTP hierarchy (example):

/standard/GCOM-C/GCOM-C.SGLI/L2.OCEAN.SST/1/yyyy/mm/dd

Note: No hierarchical structure exists

for each version of Near-real-time products.

↑  
Version number

↑  
Version number