



JAXA Agency Report

Masumi MATSUNAGA

**Space Applications and Operations Center(SAOC),
JAXA**

SELF INTRODUCTION



- Name: Masumi MATSUNAGA
- worked at Tanegashima space center (TNSC) for 4 months last summer.
- work with G-Portal, GPortal-R (next G-Portal), the operation of SDS-4 satellite.

TODAY'S MAJOR TOPICS

1. Launch schedule
2. About the JERS-1 SAR L0 products
3. The development of GPortal-R

1. LAUNCH SCHEDULE

3/14



Mission

FY2016

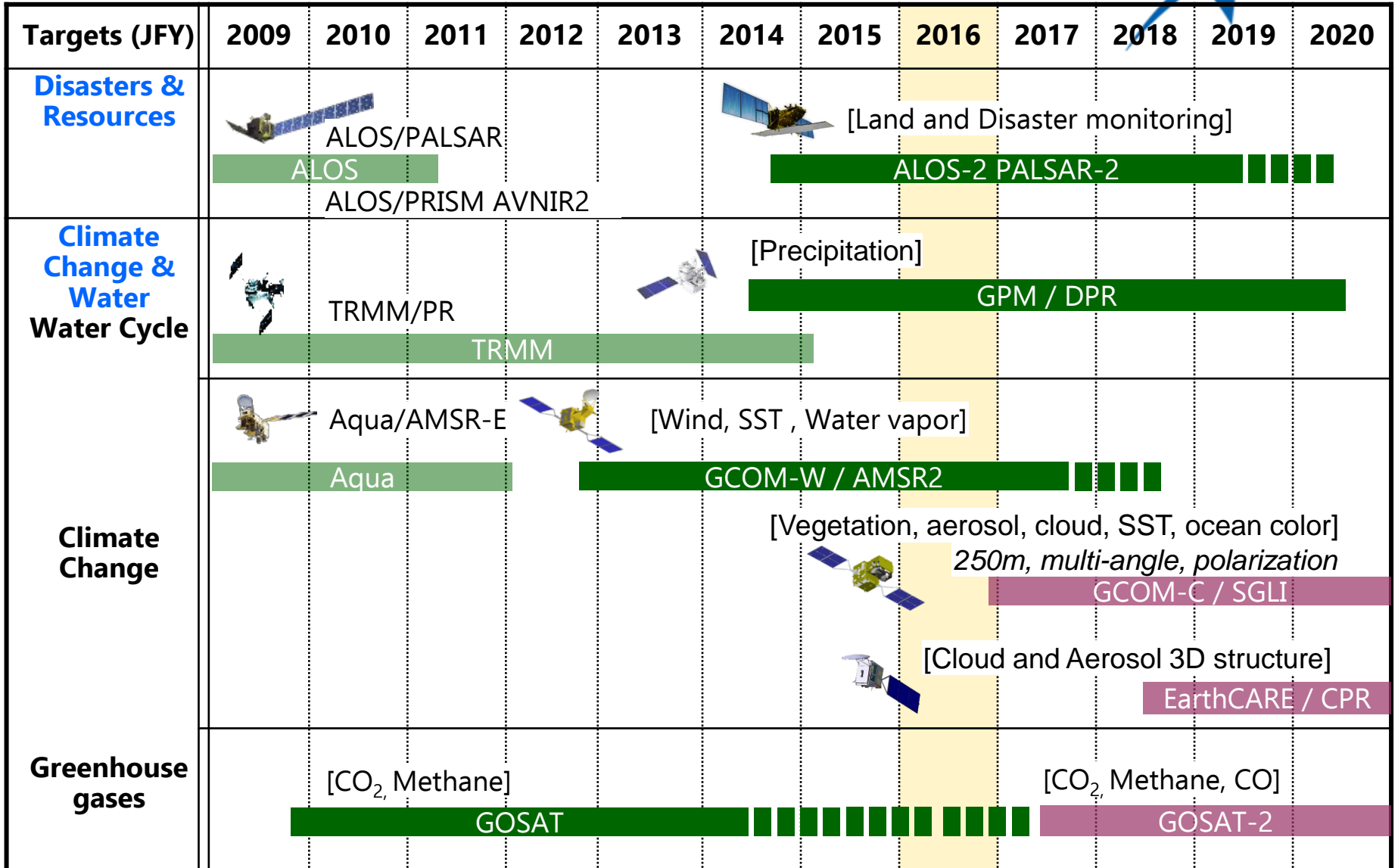
- H-II Transfer Vehicle "KOUNOTORI6" (HTV6)
- Exploration of energization and Radiation in Geospace "ERG"
- Mercury Exploration Mission "BepiColombo,"
- Global Change Observation Mission - Climate "GCOM-C,"
- Super Low Altitude Test Satellite "SLATS"

FY2017 or later

- H-II Transfer Vehicle "KOUNOTORI7" (HTV7)
- H-II Transfer Vehicle "KOUNOTORI8" (HTV8)
- H-II Transfer Vehicle "KOUNOTORI9" (HTV9)
- Earth Cloud, Aerosol and Radiation Explorer / Cloud Profiling Radar (EarthCARE/CPR)
- Greenhouse gases Observing SATellite-2 "GOSAT-2"
- H3 Launch Vehicle TF1
- H3 Launch Vehicle TF2
- Japanese Data Relay System "JDRS" (A data relay satellite.)
- Advanced optical satellite
- Advanced radar satellite
- Next engineering satellite

(Reference: http://global.jaxa.jp/projects/in_progress.html)

2. JAXA EARTH OBSERVATION SATELLITES



3. G-PORTAL



G-Portal's users can download the various satellite's data in free of charge (open and free, except for ALOS and ALOS-2).

<https://www.gportal.jaxa.jp/>

G-Portal
Globe-Portal (BETA)

User account:
Password: **Login**

Forgot your password? [Click here.](#) / Forgot your user account? [Click here.](#)

Japanese English

Home Search Products User registration / Terms Operational information Link Announcement Contact Help

Welcome,
Almost data are free. After user registration, you can download the data. When you want to get the data together, SFTP is more convenient. Read the user manual in Help Page and try the SFTP.

Search products by theme for beginners(movie)
Select one of the following two themes for search and order.
[1.Registration/Login](#) [2.Physical Quantites](#) [3.Spacecrafts/Sensors](#)

Select by Physical Quantites

Select by Spacecrafts/Sensors

[What are the physical quantities? \(Open the PDF file.\)](#)

Atmosphere		
Precipitation	Cloud	Water Vapor
Aerosol	Radiation Balance	Radiance

GPM/ DPR, GMI, COMB **Search**

FAQ and User manual
[Tutorial, FAQ and Recommended Browser and OS.](#)

Contact Us
[Please leave us your comments or report a problem. Your opinions and comments will help us improve our services.](#)

June 31 2016
JERS-1 SAR Level 0 data distribution started.

[Temperature](#) [Wind](#)

4. JERS-1 SAR LEVEL0 PRODUCTS



G-Portal's general users can download the SAR level 0 products of JERS-1.

G-Portal Globe-Portal (BETA)



Home Search Products User registration / Terms Operational information Link Announcement Contact Help

Search products by Spacecrafts/sensors

*Note : You can move back to STEP in light blue.



STEP3 : Select the period and the region and then click the [Search] button.



All the products will become available by May 2017.

Search condition

Spacecrafts/sensors: JERS-1/SAR

Products: JERS-1/SAR L0

Period: 2016/07/01 - 2016/07/01

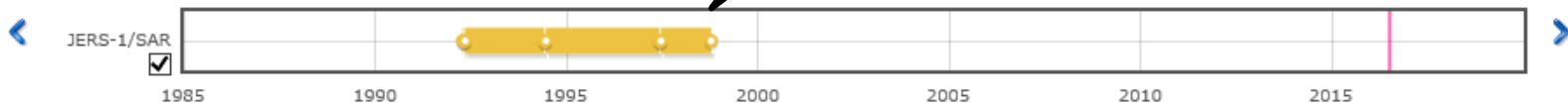
Region: Not entered

Select the period

Specify Periods Specify Season

(Search the product within the specified observation period.)

Observed Year, Month and Day ~ Enter the YYYY/MM/DD(UTC) format.



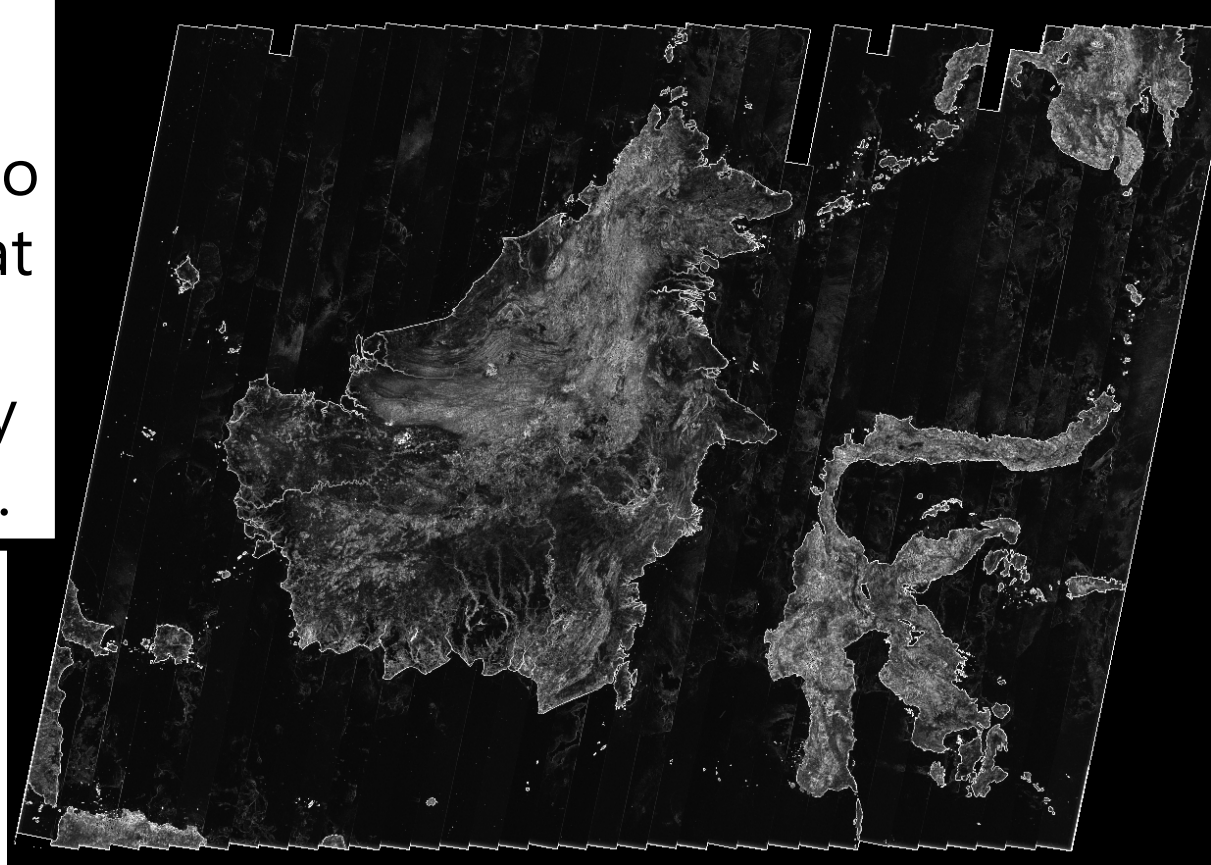
5. ABOUT THE JERS-1 SAR L0 PRODUCTS

JERS-1

- SAR Level2.1
- OPS VNIR Level2
- OPS SWIR Level2

The tool which can convert **CEOS format** to **GeoTIFF or KMZ** format is under development and will be released by the end of **next March**.

Borneo / Kalimantan & Sulawest



6. THE DEVELOPMENT OF GPORTAL-R

Major improved points from G-Portal

G-Portal

G-Portal (Beta)

Home Search Products User Registration Operational Information Contact Us
release the GMI Level 2 and Level 3 Data for the General Research and Global Data Product List and Caveats.

Welcome,

Please read our Terms of Use in User registration and search. Sensors are limited only for search.

Search products by theme

Select one of the following two themes for search.

Select by
Physical Quantities

What are the physical quantities? (Open the PDF file.)

Atmosphere		
Precipitation	Cloud	Water vapor
Aerosol	Atmospheric Boundary Layer	Radiation Balance
Cryosphere		
Sea Ice	Snowpack	Ice
Terrestrial		
Soil Moisture	Snowpack	Land Cover
Radiance/ Reflectance	Atmospheric Boundary Layer	Land Surface Temperature
Vegetation	Fire	
Ocean		
Sea Surface Temperature	Sea Surface Wind	Ocean color
Other		

2. Catalogue search

JAXA's Earth Observation Satellite Data Catalogue

CATS-I BETA Catalogue Query Service Interface

HOME NEWS ABOUT CATS-I LINKS FAQ DOCUMENTS CONTACT US

Step 1: Select Datasets (required)

Node	Source	Parameter
All	All	All
<input type="checkbox"/> JAXA CATS-I	AMSR2 / GCOMW	GCOM-W AMSR2 L1C AM2 Int
<input type="checkbox"/> JAXA CATS-I	AMSR2 / GCOMW	GCOM-W AMSR2 L1C AM2 Int
<input type="checkbox"/> JAXA CATS-I	AMSR2 / GCOMW	GCOM-W AMSR2 L1C AM2 Int
<input type="checkbox"/> JAXA CATS-I	AMSR2 / GCOMW	GCOM-W AMSR2 L1C AM2 Int
<input type="checkbox"/> JAXA CATS-I	ATMS / NPP	NPP ATMS L1C ATS Inter-Calibr
<input type="checkbox"/> JAXA CATS-I	ATMS / NPP	NPP ATMS L1C ATS Inter-Calibr
<input type="checkbox"/> JAXA CATS-I	AVNIR-2 / ALOS	ALOS AVNIR-2 product
<input type="checkbox"/> JAXA CATS-I	COMB / TRMM	TRMM COMB Level 2B31 prod
<input type="checkbox"/> JAXA CATS-I	COMB / TRMM	TRMM COMB Level 3B31 prod
<input type="checkbox"/> JAXA CATS-I	COMB / TRMM	TRMM COMB Level 3B42 prod

Step 2: Specify Observation Condition (options)

Spatial Constraint	Temporal Constraint
Rect Search Polygon Search	Period
90 North -180 West 180 East -90 East	2016-07-04 ~ 2016-07-04
Select	Note: Please select Period within 2 years. <input type="checkbox"/> Observation time (optional)

3. Direct download

gportal - sftp://iyousuke@sftp.gportal.jaxa.jp:2051 - FileZilla

ホスト名: sftp.gportal.jaxa.jp:2051 に接続中...

状態: Connected to sftp.gportal.eorc.jaxa.jp

状態: ディレクトリー一覧を取得中...

状態: Listing directory /

状態: ディレクトリー一覧の表示成功 "A"

ローカル サイト: C:\Users\#0616\Documents\#home¥

リモート サイト: /

ファイル名	ファイルサイズ	ファイルの種類	最終更新日時	ファイル名	ファイルサイズ
..				..	
elmo		ファイルフォルダ	2016/07/12 11:...	dev	
emacs.d		ファイルフォルダ	2016/07/08 19:...	nrt	
gnupg		ファイルフォルダ	2016/02/18 15:...	order	
bin		ファイルフォルダ	2016/06/15 15:...	processing	
Mail		ファイルフォルダ	2016/06/28 10:...	standard	
secure		ファイルフォルダ	2016/02/24 13:...	userdir	
src		ファイルフォルダ	2016/02/04 13:...	README.txt	25,0
stencils		ファイルフォルダ	2016/06/30 14:...		
tmp		ファイルフォルダ	2016/04/21 8:5...		
addresses	3,562	ADDRESSE...	2016/04/15 11:...		

7. MAJOR IMPROVED POINTS



9/14

1. Web Search

Issues of G-Portal

- G-Portal uses step by step interface. (User must click 9 times to download satellite data.)

Improved points

- Web design changed to “1 Page” design from “Step by step” design.

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

GPORTAL-R

トップへ | 初めての方へ | サポート | ログイン

Select products

検索

保存

Select region

の保存

ガイダンスの表示

地球物理量から選ぶ | 衛星、センサーから選ぶ

1.絞り込み条件を設定します。

処理レベル 機能

- 大気圏
- 降水
- 雲
- 水蒸気
- エアロゾル
- 放射収支
- 雪氷圏

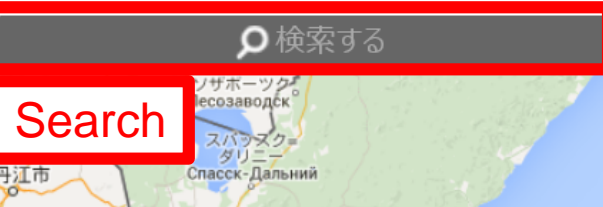
Select region



矩形指定 | 点指定 | 円指定 | 多角形指定 | 全球指定

3.関心領域を設定します。

はじめに地球物理量または、衛星・センサーからプロダクトを選択してください。



Select period

期間指定 | シーズン指定

2.観測日時を設定します。

はじめに地球物理量または、衛星・センサーからプロダクトを選択してください。選択されたプロダクトに従った提供期間が表示されます。

View results

リスト表示 | サムネイル表示 | マイリスト(要ログイン) | 一覧保存(要ログイン) | 生産状況(要ログイン)

	プロダクト名	物理量名	衛星センサ名	観測開始日時	観測終了日時	詳細	データ取
<input type="checkbox"/>	GSMaP 降水量(時間単位 HDF)	降水量	GSMaP/GSMaP	2016/05/01 00:00:00	2016/05/01 00:59:59	詳細	ダウンロード
<input type="checkbox"/>	GSMaP 降水量(時間単位 HDF)	降水量	GSMaP/GSMaP	2016/05/01 00:00:00	2016/05/01 00:59:59	詳細	ダウンロード
<input type="checkbox"/>	GSMaP 降水量(時間単位 HDF)	降水量	GSMaP/GSMaP	2016/05/01 00:00:00	2016/05/01 00:59:59	詳細	ダウンロード

To my list

Download

7. MAJOR IMPROVED POINTS



2. Catalogue Search

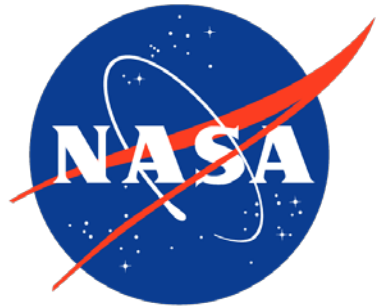
Issues of G-Portal

- Catalogue service only available on some CEOS PVC portal and ESA
- G-Portal can't do cross-search.



Improved points

- Users can also search satellite data from other agencies.
- GPortal-R can do cross-search catalogues.



Server function.
(Import catalogues)



European Space Agency



Server function.
(Export catalogues)



CATS-1 dataset search results

Search parameters : Start index: 1 Start page: 1 Start time: 2015-01-31T00:00:00 End time: 2016-02-02T00:00:00 Box: -30.0,-70.0,30.0,70.0

TRMM PR Level 1B21 product

Short Name: TRMM_PR_1B21F0007

Description: In 1B-21 processing, the radar video signal digital count value is converted into a received power value as well as a noise level value in accordance with the algorithm (calib temperature calibration as well as transfer function) created based on the radiometric model of the precipitation radar. Longitude and latitude information of the ground surface is added reflectivity factor (Z factor) including rain attenuation.

Temporal Extent

Start Time: 1997-12-08T00:00:00 End Time: 2015-04-01T23:59:59

Spatial Extent

BoundaryBox: -160 -38.0 180.0 38.0

Granule Search: http://cats.jaxa.jp/search_atom?datasetId=TRMM_PR_1B21F0007&startTime=2015-01-31T00:00:00&box=-30.0,-70.0,30.0,70.0&endTime=2016-02-02T00:00:00

TRMM PR Level 1C21 product

Short Name: TRMM_PR_1C21F0007

Description: In 1C-21 processing, the dummy radar reflectivity factor (Z factor) including rain attenuation during a rainfall is calculated using the radar equation, from the already calibrated value rainRateIn the 1B-21 processing.

7. MAJOR IMPROVED POINTS



3. Direct download

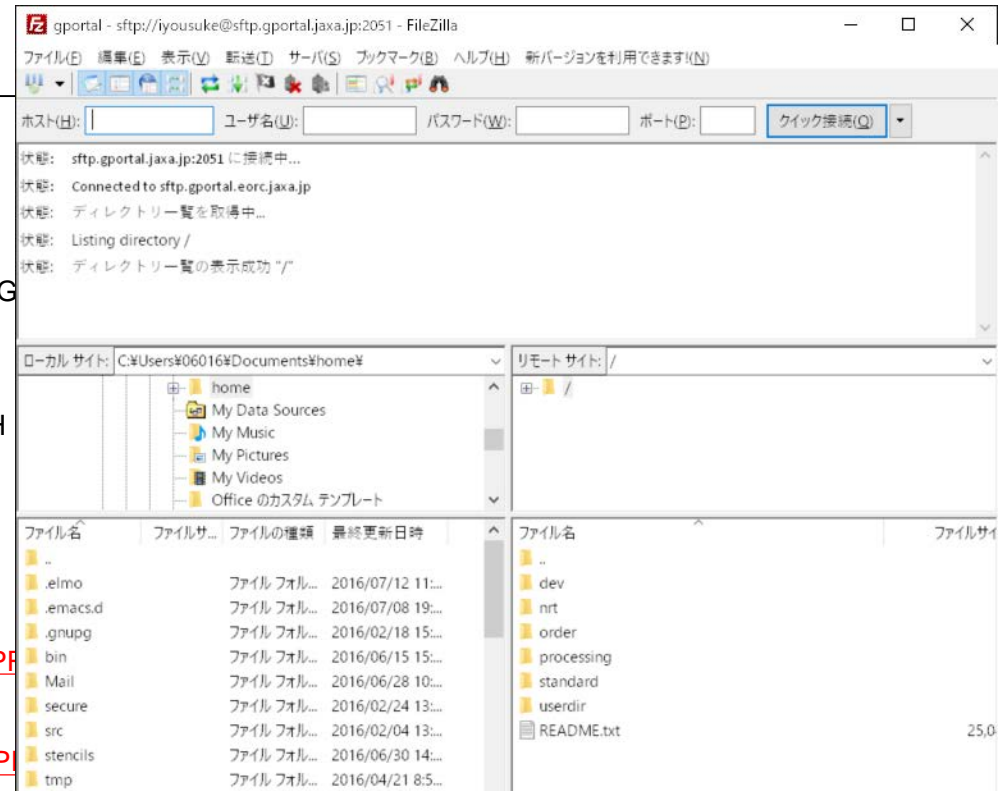
Issues of G-Portal

- User can use SFTP for direct download.
- G-Portal uses 2811 port for SFTP.
- User have to register a public key

Improved points

User can use **FTP** for direct download.

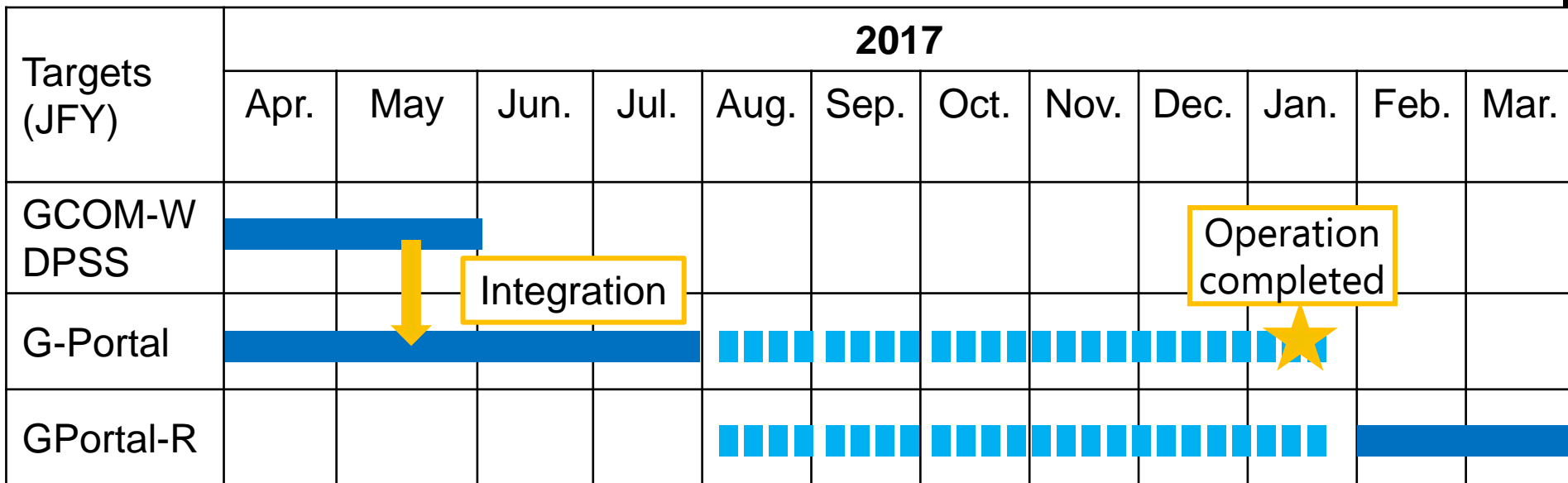
```
[user@host ~]# sftp gportal
Connecting to sftp.gportal.jaxa.jp...
sftp> ls
dev      nrt      order    processing standard  userdir
sftp> ls standard/
standard/ADEOS-II          standard/AQUA              standard/G
standard/GPM               standard/GPMConstellation
standard/TRMM
sftp> ls standard/GPM/
standard/GPM/GPM.COMB      standard/GPM/GPM.COMB.LH
standard/GPM/GPM.DPR       standard/GPM/GPM.DPR.LH
standard/GPM/GPM.ENV
standard/GPM/GPM.GMI        standard/GPM/GPM.GMI.LH
standard/GPM/GPM.KaPR       standard/GPM/GPM.KuPR
standard/GPM/GPM.MAP
sftp> ls standard/GPM/GPM.DPR/
standard/GPM/GPM.DPR/L2.DPR      standard/GPM/GPM.DPR
standard/GPM/GPM.DPR/L3.Monthly
sftp> ls standard/GPM/GPM.DPR/L3.Daily/
standard/GPM/GPM.DPR/L3.Daily/02      standard/GPM/GPM.DPR
sftp> ls standard/GPM/GPM.DPR/L3.Daily/03/
standard/GPM/GPM.DPR/L3.Daily/03/2014
```



8. JAXA'S DATA DISTRIBUTION SERVICE (EXCEPT FOR ALOS AND ALOS-2)



■ Next year's schedule (tentative)



■ Operation ■ Parallel operation

8. JAXA'S DATA DISTRIBUTION SERVICE (EXCEPT FOR ALOS AND ALOS-2)



- The integration of user's authentication(tentative)

Earth observation research's service

- JASMES
- MODIS Near Realtime Data
- GSMap
- Kuroshio Monitor
- JAXA Himawari monitor

⋮

User authentication will be unified.

GPortal-R



THANK YOU FOR YOUR ATTENTION.