

Remarks from JAXA

Kinji Furukawa

JAXA

2ND GPM Applications Workshop



Today's Topics

- * What is JAXA?
- * What is DPR?
- * What is GSMaP?
- * Summary



What is JAXA?



宇宙航空研究開発機構
Japan Aerospace Exploration Agency



What is JAXA?

Management Philosophy

- * To realize a safe and affluent society using space and the sky.
 - * By utilizing leading technological developments, we will succeed and deliver our achievements along with broader wisdom to society.

Corporate Slogan

- * Explore to Realize
 - * This reflects its management philosophy of utilizing space and the sky to achieve a safe and affluent society.

**JAXA cooperates with NASA on GPM program
to realize a safe and affluent society using GPM.**

What is DPR?



DPR in the GPM



JAXA and NICT: DPR
JAXA: H2A Launcher
NASA : Spacecraft bus and GMI

DPR

基準を与える
Providing reference standard

GMI

Partners:
NASA, NOAA, DoD, CNES-ISRO,
etc.

GPM 主衛星
GPM Core Observatory

- Highly sensitive precipitation measurement
- Calibration for constellation radiometers

GPM 副衛星群
Constellation Satellites

- Microwave Radio-meters installed on each satellite
- Frequent precipitation measurement

DPR **provides the reference standard** to the radio-meters installed on constellation satellites through GMI installed on GPM core observatory.



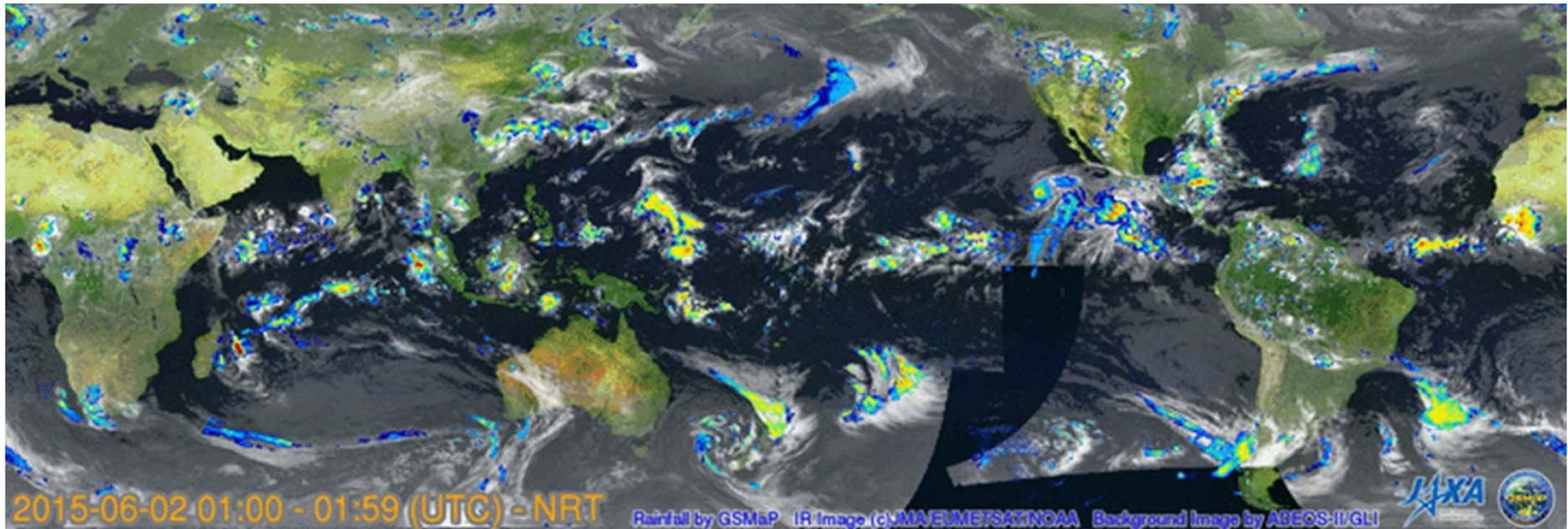
Example of DPR observation data



What is GSMaP?



- * Global Satellite Mapping of Precipitation
 - * One of JAXA GPM product.



- * JAXA offers hourly global rainfall maps in near real time (about four hours after observation).
- * Details will be presented by Ms. Kachi in the next session.



How to get GPM data



- * DPR data are available from JAXA G-Portal.
<https://www.gportal.jaxa.jp/gp/top.html>

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

Select one of the following two themes for search and order.

for beginners(movie)

[1.Registration/Login](#) [2.Physical Quantites](#) [3.Spacecrafts/Sensors](#)

Select by
Physical Quantites >

Select by
Spacecrafts/Sensors >

[What are the physical quantities? \(Open the PDF file.\)](#)⁵¹

Atmosphere

[Precipitation](#) [Cloud](#) [Water Vapor](#)

[Aerosol](#) [Atmospheric Boundary Layer](#) [Radiation Balance](#)



[GPM/ DPR, GMI, COMB](#)

Mar, 2014 - Current



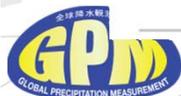
Search

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.](#)



Summary



* What is JAXA?

- * Japan Aerospace Exploration Agency
- * JAXA cooperates with NASA on GPM

* What is DPR?

- * Dual-frequency Precipitation Radar installed on GPM.
- * DPR provides 3 dimensional precipitation data.

* What is GSMaP?

- * Global Satellite Mapping of Precipitation provided by JAXA.

JAXA would like you to use GPM data, especially DPR and GSMaP to realize a safe and affluent society.





Photo taken by Scott Collis of the of
Argonne National Laboratory

JAXA's key message to GPM core
observatory in Japanese

雨雲を
味方にせよ

*Measure rain and snow
for the benefit of all*

*This support message represents our
strong desire to utilize GPM data for
our social benefit.*

List of GPM Products (1/2)

Group	Product	File size	Scene unit (*)	Provision frequency
DPR product	KuPR Level 1	Approx. 17 MB	one orbit	Approx. 16 files/ day
	KaPR Level 1	Approx. 18 MB	one orbit	Approx. 16 files/ day
	KuPR Level 2	Approx. 50 MB	one orbit	Approx. 16 files/ day
	KaPR Level 2	Approx. 44 MB	one orbit	Approx. 16 files/ day
	DPR Level 2	Approx. 93 MB	one orbit	Approx. 16 files/ day
	DPR Level 3 (Daily average) (TEXT)	Approx. 10 MB	Global (0.1° grid, 67° N~67° S)	one file/ day
	DPR Level 3 (Daily average) (HDF)	Approx. 3 MB	Global (0.25° grid, 67° N~67° S; 5° grid, 70° N~70° S)	one file/ day
	DPR Level 3 (Monthly average)	Approx. 50 MB	Global (0.25° grid, 67° N~67° S; 5° grid, 70° N~70° S)	one file / month
GMI product	GMI Level 1B	Approx. 55 MB	one orbit	Approx. 16 files/ day
	GMI Level 1C	Approx. 25 MB	one orbit	Approx. 16 files/ day
	GMI Level 2	Approx. 7MB	one orbit	Approx. 16 files/ day
	GMI Level 3 (Monthly average)	Approx. 3 MB	Global (0.25° grid, 90° N~90° S)	one file/ month
DPR/GMI combined product	DPR/GMI combined (Comb) Level 2	Approx. 85 MB	one orbit	Approx. 16 files/ day
	DPR/GMI combined (Comb) Level 3 (Monthly average)	Approx. 8 MB	Global (0.25° grid, 67° N~67° ; S5° grid, 70° N~70° S)	one file/ month

List of GPM Products (2/2)

Group	Product	File size	Scene unit (*)	Provision frequency
GSMaP product	GSMaP Level 3 (Hourly average) (HDF)	Approx. 4 MB	Global (0.1° grid, 90° N~90° S)	24 files/ day
	GSMaP Level 3 (Hourly average) (TEXT)	Approx. 5 MB	Global (0.1° grid, 90° N~90° S)	one file/ day
	GSMaP Level 3 (Monthly average)	Approx. 4 MB	Global (0.1° grid, 90° N~90° S)	one file/ month
Constellation satellite L1C product	DMSP F16 SSMIS Level 1C	Approx. 23 MB	one orbit	14 files/ day
	DMSP F17 SSMIS Level 1C	Approx. 23 MB	one orbit	14 files/ day
	DMSP F18 SSMIS Level 1C	Approx. 23 MB	one orbit	14 files/ day
	MetopA MHS Level 1C	Approx. 4 MB	one orbit	14files/ day
	MetopB MHS Level 1C	Approx. 4 MB	one orbit	14 files/ day
	NOAA-18 MHS Level 1C	Approx. 4 MB	one orbit	14 files/ day
	NOAA-19 MHS Level 1C	Approx. 4 MB	one orbit	14 files/ day
	NPP ATMS Level 1C	Approx. 20 MB	one orbit	14 files/ day
	Megha Tropiques SAPHIR Level 1C	Approx. 10 MB	one orbit	14 files/ day
	GCOM-W AMSR2 Level 1C	Approx. 85 MB	one orbit	15 files/ day
TRMM TMI Level 1C	Approx. 15 MB	one orbit	16 files/ day	

* Definition of Scene unit for products created in JAXA GPM mission operation system.

* All products except for GSMaP products are available at NASA STORM as well.