GCOM-W1/AMSR2 & Aqua/AMSR-E
Data Processing and Distribution

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JAXA
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Data Processing
## AMSR2 Algorithm Version up Schedule

<table>
<thead>
<tr>
<th>JFY</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation</strong></td>
<td>On-Orbit C/O</td>
<td>Products release (Brightness Temperature)</td>
<td>Products release L+1Y (Geophysical Parameters)</td>
<td>Post-Ops Phase</td>
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<td></td>
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<tr>
<td><strong>Version</strong></td>
<td>Brightness Temperature (L1/L3)</td>
<td>Ver. 1.0</td>
<td>Ver. 1.1</td>
<td>Ver. 2.0</td>
<td>Ver. 2.1</td>
<td>Ver. 2.2</td>
</tr>
<tr>
<td></td>
<td>Geophysical Parameters (L2/L3)</td>
<td>Ver. 1.0</td>
<td>Ver. 1.1 (SMC, SIC)</td>
<td>Ver. 2.0</td>
<td>Ver. 2.1</td>
<td>Ver. 3.0 (SST,SSW,PRC, SIC,SND,SMC)</td>
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<tr>
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<td></td>
<td>Ver. 2.0 (SMC, SIC)</td>
<td>Ver. 2.2 (SIC)</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

- ▲: fact
- △: plan

- May 18th Launch
- Jul 2nd Observation started
- L+8M
# Reprocessing Schedule

<table>
<thead>
<tr>
<th>JFY</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Month</strong></td>
<td><strong>8</strong></td>
</tr>
<tr>
<td>AMSR-E</td>
<td></td>
</tr>
<tr>
<td>Brightness</td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
</tr>
<tr>
<td>(L1)</td>
<td></td>
</tr>
<tr>
<td>AMSR-E</td>
<td></td>
</tr>
<tr>
<td>Geophysical</td>
<td></td>
</tr>
<tr>
<td>Parameters</td>
<td></td>
</tr>
<tr>
<td>(L2/L3)</td>
<td></td>
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<tr>
<td>AMSR2</td>
<td></td>
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<tr>
<td>Brightness</td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
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</tr>
<tr>
<td>(L1/L3)</td>
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<tr>
<td>AMSR2</td>
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<tr>
<td>Geophysical</td>
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</tr>
<tr>
<td>Parameters</td>
<td></td>
</tr>
<tr>
<td>(L2/L3)</td>
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</table>
AMSR2 Data Providing Services
~DPSS (GCOM-W1 Data Provision Service System) ~

* Web (HTTP) Service
  * Search and order from our DPSS web page.
  * Format conversion is available.
    * HDF5 to netCDF, GeoTiff (AMSR2)
    * HDF4 to HDF5, netCDF, GeoTiff (AMSR/AMSR-E)

* SFTP Service
  * Log in to our SFTP server and download products.
  * Format conversion is not available.

All the Data are OPEN and FREE.

https://gcom-w1.jaxa.jp
AMSR-E Data Providing Services ~DPSS & G-Portal~

- **Web (HTTP) Service**
  - Search and order from our G-Portal web page.
  - Format conversion is not available.

- **SFTP Service**
  - Log in to our SFTP server and download products.
  - Format conversion is not available.

https://www.gportal.jaxa.jp/gp/top.html
GCOM-W1 User Tool

GCOM-W1 User Tool provides users with various functions to use earth observation data of AMSR2 (AMSR/AMSR-E).

The functions are as follows;
- Data display
- Data Clip
- Format conversion
  - Binary, CSV, KML(KMZ), Image: JPEG/TIFF/BMP/PNG
- Animation
  - AVI, KML(KMZ)

AMSR2 Product I/O Toolkit (AMTK)

AMTK is a toolkit developed to access the AMSR2 product data file (HDF) easily on C-language and the Fortran-language program.

AMTK is composed of the I/O function group of AMSR2 product information.
Sep., 2013 updates

* Re-distribution to a third party is now not prohibited.
* Commercial use of AMSR-2 data became allowed without any authorization with JAXA, and no royalties are required.

Sep., 2016 updates

* Special users can re-distribute L1A and NRT products to third parties on conditions that they report the followings to JAXA every year;
  * what organizations are using GCOM-W data
  * the general impacts of their use of GCOM-W data in their applications
# Data Providing Service System Change Plan (TBD)

<table>
<thead>
<tr>
<th>JFY</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
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<td>2</td>
</tr>
<tr>
<td>AMSR-E Data Distribution</td>
<td>DPSS</td>
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<td>G-Portal</td>
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<tr>
<td></td>
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</tr>
<tr>
<td>AMSR2 Data Distribution</td>
<td>DPSS</td>
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<tr>
<td></td>
<td></td>
<td>G-Portal</td>
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GPortal-R = Next generation G-Portal

GPortal-R is a next generation geospatial data distribution system designed to provide Earth observation data for various fields.

Notice [2016/3/22] 3/23 15:00~15:30(JST) Network maintenance due to network maintenance, the site will be temporarily unavailable.

New Data

- 2016/04/24 ALOS-2 PALSAR-2 [Download]
- 2016/04/21 GPM DPR [Download]
- 2016/04/19 GSMaP [Download]
Continued service

Web Search

Catalogue Search

Direct Download (FTP)
Redesigned Web search

Concept: ”One-page design”
User can use FTP for direct download, instead of sftp.

```
[user@host ~]# sftp gportal
Connecting to sftp.gportal.jaxa.jp...
sftp> ls
dev  nrt  order  processing  standard  userid
sftp> ls standard/
standard/ADEOS-II  standard/AQUA  standard/GOSAT
standard/GPMConstellation  standard/TRMM
sftp> ls standard/GPM/
standard/GPM/GPM.COMB  standard/GPM/GPM.COMB.LH  standard/GPM/DPR
standard/GPM/GPM.DPR.LH  standard/GPM/GPM.ENV
standard/GPM/GPM.GMI  standard/GPM/GPM.GMI.LH  standard/GPM/KuPR
standard/GPM/KuPR  standard/GPM/GPM.MAP
sftp> ls standard/GPM/GPM.DPR/
standard/GPM/GPM.DPR/L2.DPR  standard/GPM/GPM.DPR/L2.DPR  standard/GPM/GPM.DPR/L3.Daily
standard/GPM/GPM.DPR/L3.Daily
sftp> ls standard/GPM/GPM.DPR/L3.Daily/
sftp> ls standard/GPM/GPM.DPR/L3.Daily/03/
standard/GPM/GPM.DPR/L3.Daily/03/2014
```
New JAXA’s satellite data repository, GPortal-R will be available in JFY2017 Q2.

Usability and performance will be greatly improved.

All the data provided through GPortal-R will be open and free. Re-distribution and commercial use will be available.
THANK YOU

for

your attention