
 **ALOS PALSAR dataset**

1. IDENTIFICATION INFORMATION

Name	ALOS PALSAR dataset
Metadata Identifier	ALOS_PALSAR20230727082248-en

2. CONTACT

2.1 CONTACT on DATASET

Name	Remote Sensing Technology Center
E-mail	alos_od@restec.or.jp

2.2 CONTACT on PROJECT

3. DOCUMENT AUTHOR

Name	Satoko Miura
Organization	JAXA/Mission Operations System Office(MOSS)

4. DATASET CREATOR

Name	JAXA
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5. DATE OF THIS DOCUMENT

2023-07-27

6. DATE OF DATASET

creation : 2013-04-30

7. DATASET OVERVIEW

7.1 Abstract

The Phased Array type L-band Synthetic Aperture Radar (PALSAR) is an active microwave sensor using L-band frequency to achieve cloud-free and day-and-night land observation. It provides higher performance than the JERS-1's synthetic aperture radar (SAR). Fine resolution in a conventional mode, but PALSAR will have another advantageous observation mode. ScanSAR, which will enable us

to acquire a 250 to 350km width of SAR images (depending on the number of scans) at the expense of spatial resolution. This swath is three to five times wider than conventional SAR images. The development of the PALSAR is a joint project between JAXA and the Japan Space Systems.

7.2 Topic Category(ISO19139)

geoscientificInformation

imageryBaseMapsEarthCover

7.3 Temporal Extent

Begin Date	2006-01-24
End Date	2011-04-22

7.4 Geographic Bounding Box

North latitude	bound	90
West longitude	bound	-180
Eastbound longitude		180
South latitude	bound	-90

7.5 Grid

Dimension Name	Dimension Size (slice number of the dimension)	Resolution Unit
		()
		()

7.6 Geographic Description

7.7 Keywords

7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Land Surface > Erosion/Sedimentation > Landslides, Land Surface > Soils > Soil Moisture/Water Content, Land Surface > Surface Radiative Properties > Reflectance, Land Surface > Topography > Landforms, Spectral/Engineering > Radar > Radar Backscatter, Spectral/Engineering > Radar > Radar Reflectivity, Spectral/Engineering > Radar > Radar Imagery,	GCMD_science

7.7.2 Keywords on Project

7.8 Online Resource

JAXA ALOS User Interface Gateway (AUIG) (Products order is available only for JAXA research project members). : <https://auig.eoc.jaxa.jp/>

7.9 Data Environmental Information

7.10 Distribution Information

name	version	specification
Based on CEOS SAR format		

8. DATA PROCESSING

8.1 Data Processing (1)

8.1.1 General Explanation of the data producer's knowledge about the lineage of a dataset

There are following processing levels.

[Level 1.0 The data of 1 scene area is extracted from received data.

Data type is 8 bit.

The number of SAR data files is the same as the number of polarizations in the case of dual polarization and polarimetry modes.

The data in SCAN SAR mode is not divided into individual scans.

[Level 1.1]

Range compression and 1 look azimuth compression are performed.

Data is complex data on the slant range coordinate.

The phase history is included.

[Level 1.5]

After range and multi-look azimuth compression are performed, radiometric and geometric corrections are performed according to the map projection.

Pixel spacing can be selected for the Fine mode.

8.1.2 Data Source

Data Source Citation Name	Description of derived parameters and processing techniques used
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9. DATA REMARKS

10. DATA POLICY

10.1 Data Policy by the Data Provider

10.2 Data Policy by the Project

11. LICENSE

12. DATA SOURCE ACKNOWLEDGEMENT

12.1 Acknowledge the Data Provider

12.2 Acknowledge the Project

13. REFERENCES