

Data Description

Aug. 2017 JAXA/EORC

Updated in Oct. 2019

Updated in Mar. 2021

Updated in Jul. 2022

Precipitation [GSMaP]

Units	mm
Grid Size	0.1 degrees (Approx. 10 km)
Time Interval and Meaning of the Value	Daily Daily accumulated precipitation calculated from hourly precipitation intensity by multiple satellites
	Half-monthly Half-monthly accumulated precipitation of daily data
	Monthly Monthly accumulated precipitation of daily data
Updated to latest data	approximately 3 days later
No Data Value (Missing value etc.)	-999
Current Data Source	GSMaP Version6 calibrated by rain gauge (GCOM-W, GPM, Himawari etc.)

Short Wave Radiation [Terra/MODIS, Aqua/MODIS]

Units	W/m^2
Grid Size	0.05 degrees (Approx. 5 km)
Time Interval and Meaning of the Value	Daily-Terra Estimated daily average solar radiation amount calculated from solar radiation observed by Terra satellite (local time 10:30)
	Daily-Aqua Estimated daily average solar radiation amount calculated from solar radiation observed by Aqua satellite (local time 13:30)
	Half-monthly Half-monthly average solar radiation amount of the above-mentioned two types of daily data
	Monthly Monthly average solar radiation amount of the above-mentioned two types of daily data
Updated to latest data	approximately half month later
No Data Value (Missing value etc.)	-9999
Current Data Source	JASMES-swr (MODIS)

Land Surface Temperature [Terra/MODIS, Aqua/MODIS]

Units	Degrees Celsius
Grid Size	0.05 degrees (Approx. 5 km)
Time Interval and Meaning of the Value	<p style="text-align: center;">Daily-Terra-Daytime</p> <p style="text-align: center;">Land/sea surface temperature observed by Terra satellite (local time 10:30)</p>
	<p style="text-align: center;">Daily-Terra-Nighttime</p> <p style="text-align: center;">Land/sea surface temperature observed by Terra satellite (local time 22:30)</p>
	<p style="text-align: center;">Daily-Aqua-Daytime</p> <p style="text-align: center;">Land/sea surface temperature observed by Aqua satellite (local time 13:30)</p>
	<p style="text-align: center;">Daily-Aqua-Nighttime</p> <p style="text-align: center;">Land/sea surface temperature observed by Aqua satellite (local time 1:30)</p>
	<p style="text-align: center;">Half-monthly-Terra-Daytime</p> <p style="text-align: center;">Half-monthly average land/sea surface temperature observed by Terra satellite (local time 10:30)</p>
	<p style="text-align: center;">Half-monthly-Terra-Nighttime</p> <p style="text-align: center;">Half-monthly average land/sea surface temperature observed by Terra satellite (local time 22:30)</p>
	<p style="text-align: center;">Half-monthly-Aqua-Daytime</p> <p style="text-align: center;">Half-monthly average land/sea surface temperature observed by Aqua satellite (local time 13:30)</p>
	<p style="text-align: center;">Half-monthly-Aqua-Nighttime</p> <p style="text-align: center;">Half-monthly average land/sea surface temperature observed by Aqua satellite (local time 1:30)</p>
	<p style="text-align: center;">Monthly-Terra-Daytime</p> <p style="text-align: center;">Monthly average land/sea surface temperature observed by Terra satellite (local time 10:30)</p>
	<p style="text-align: center;">Monthly-Terra-Nighttime</p> <p style="text-align: center;">Monthly average land/sea surface temperature observed by Terra satellite (local time 22:30)</p>
	<p style="text-align: center;">Monthly-Aqua-Daytime</p> <p style="text-align: center;">Monthly average land/sea surface temperature observed by Aqua satellite (local time 13:30)</p>
	<p style="text-align: center;">Monthly-Aqua-Nighttime</p> <p style="text-align: center;">Monthly average land/sea surface temperature observed by Aqua satellite (local time 1:30)</p>
Updated to latest data	approximately 3 days later
No Data Value (Missing value etc.)	-9999

Current Data Source	NASA MOD11 (MODIS)
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Land Surface Temperature [GCOM-C SGLI]

Units	Degrees Celsius
Grid Size	0.041666 degrees (Approx. 4 km)
Time Interval and Meaning of the Value	Daily-Daytime Daytime Land surface temperature observed by GCOM-C satellite
	Daily-Nighttime Nighttime Land surface temperature observed by GCOM-C satellite
	8 days-Daytime 8 days average Daytime Land surface temperature observed by GCOM-C satellite
	8 days-Nighttime 8 days average Nighttime Land surface temperature observed by GCOM-C satellite
	Monthly-Daytime Monthly average Daytime Land surface temperature observed by GCOM-C satellite
	Monthly-Nighttime Monthly average Nighttime Land surface temperature observed by GCOM-C satellite
Updated to latest data	approximately 3 days later
No Data Value (Missing value etc.)	-9999
Current Data Source	G-Portal (GCOM-C)

Aerosol Optical Thickness [Terra/MODIS, Aqua/MODIS]

Units	unit less
Grid Size	0.05 degrees (Approx. 5 km)
Time Interval and Meaning of the Value	Daily-Terra Aerosol optical thickness at 550nm observed by Terra satellite (daytime)
	Daily-Aqua Aerosol optical thickness at 550nm observed by Aqua satellite (daytime)
	Half-monthly Half-monthly average aerosol optical thickness of the above-mentioned two types of daily data
	Monthly Monthly average aerosol optical thickness of the above-mentioned two types of daily data
Updated to latest data	approximately half month later
No Data Value (Missing value etc.)	-9999
Current Data Source	JASMES-taua (MODIS)

Aerosol Optical Thickness (500nm) [GCOM-C SGLI]

Units	unit less
Grid Size	0.041666 degrees (Approx. 4 km)
Time Interval and Meaning of the Value	Daily Aerosol optical thickness observed by GCOM-C satellite
	8 days 8 days average Aerosol optical thickness observed by GCOM-C satellite
	Monthly Monthly average Aerosol optical thickness observed by GCOM-C satellite
Updated to latest data	approximately 3 days later
No Data Value (Missing value etc.)	-9999
Current Data Source	G-Portal (GCOM-C)

Normalized Difference Vegetation Index [Terra/MODIS, Aqua/MODIS]

Units	unit less
Grid Size	0.05 degrees (Approx. 5 km)
Time Interval and Meaning of the Value	Half-monthly The maximum value composite of daily normalized difference vegetation index observed by Terra and Aqua satellites (daytime) during the half-month
	Monthly The maximum value composite of daily normalized difference vegetation index observed by Terra and Aqua satellites (daytime) during the month
Updated to latest data	On the 5th of the following month for each month, the 20th of the current month for the first half of the month, and the 5th of the next month for the last half of the month
No Data Value (Missing value etc.)	-9999
Current Data Source	JASMES-ndvi (MODIS)

Normalized Difference Vegetation Index [GCOM-C SGLI]

Units	unit less
Grid Size	0.041666 degrees (Approx. 4 km)
Time Interval and Meaning of the Value	Daily normalized difference vegetation index observed by GCOM-C satellite
	8 days 8 days average normalized difference vegetation index observed by GCOM-C satellite
	Monthly Monthly average normalized difference vegetation index observed by GCOM-C satellite
Updated to latest data	approximately 3 days later
No Data Value (Missing value etc.)	-9999
Current Data Source	G-Portal (GCOM-C)

Soil Moisture Contents [AMSR-E/AMSR-2]

Units	vol%
Grid Size	0.25 degrees (Approx. 25 km)
Time Interval and Meaning of the Value	Daily Soil moisture volumetric water content observed by Aqua, GCOM-W1 satellite (nighttime)
	Half-monthly Half-monthly average soil moisture volumetric water content of the above-mentioned daily data
	Monthly Monthly average soil moisture volumetric water content of the above-mentioned of daily data
Updated to latest data	approximately 3 days later
No Data Value (Missing value etc.)	-9999
Current Data Source	AMSR-E, AMSR-2 Standard Product (AMSR-E,AMSR-2)

Elevation [AW3D30]

Units	m
Grid Size	1 arcsecond (Approx. 30 m)
Time Interval and Meaning of the Value	Elevation of each point observed by ALOS satellite (Precisely, the height of the features from geoid)
No Data Value (Missing value etc.)	-9999
Current Data Source	AW3D30 (PRISM etc.) https://www.eorc.jaxa.jp/ALOS/en/index.htm