RainMyanmar

A tool for monitoring and evaluating rainfall patterns across Myanmar

Although rainfall stations continue to be an irreplaceable source of data, satellite-derived products provide valuable additional information on spatial patterns and remote sites where no stations are present. Thanks to Google Earth Engine, these data products are now publicly available and can improve water management policies, practice and research worldwide.

RainMyanmar is an app targeted at water professionals from Myanmar from the public, academic and private sectors. The tool facilitates easy access to the wealth of rain data available on the Google Earth Engine platform through an intuitive user interface. RainMyanmar allows for intercomparing five satellite-derived rainfall products to evaluate their performance, but also for comparisons between spatial and temporal rainfall and drought patterns in different states, districts and river basins. Data for specific points, custom shapefiles or administrative units can be exported by the user and evaluated locally in Office or GIS software.

Complying with Google Earth Engine license terms, RainMyanmar will remain freely accessible and is particularly intended for development, research, and educational purposes.

RainMyanmar was developed by FutureWater, as part of the project Leapfrogging Water Management in Myanmar led by VPDelta and supported by the Ministry of Economic Affairs and Climate Policy of The Netherlands under the Partners for Water Programme.

Data availability

RainMyanmar provides access to the following precipitation data:

Product	Method	Cell size	Temporal resolution	Spatial extent	Time span
CFSV2	GFS, GFDL MOM4, NOAH	0.5°	6-hourly	Global	1979-Now
CHIPRS	Infrared and microwave (TRMM), CFSv2, CHPClim, gauge data	0.05°	Daily	50°N-50°S	1981-Now
GLDAS2-1	Infrared SSMI/SSMIS) and passive microwave (GOES, POES), gauge data	0.25°	3-hourly	90°N-60°S	2000-Now

PERSIANN	Infrared (GridSat-B1), gauge data (GPCP)	0.25°	Daily	60°N-60°S	1983-2017
TRMM	Microwave (TMI, SSMI, AMSU and AMSR), Infrared (GMS), gauge data	0.25°	3-hourly	50°N-50°S	1981-Now