

Project: Global Probable Maximum Precipitation (PMP) Datasets

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Authors: Kenneth Ekpeterere | James Coll | Xingong Li | Jude Kastens | David B. Mechem

Description: The Global PMP Datasets in Geotiff format at the 0.5-hr, 1-hr, 2-hr, 3-hr, 6-hr, 12-hr, and 24-hr durations, are statistically derived based on WMO-NOAA’s endorsed Hershfield PMP estimation technique using IMERG’s 30-min precipitation dataset.

Data tool: The Google Earth Engine’s script for assessing and interacting with the datasets is also made publicly available at

<https://code.earthengine.google.com/4fab5af250760d93298d206de2520e17>

Web App: The associated web application is available at <https://kenneth-ekpeterere.users.earthengine.app/view/pmp-calculator>

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Contact: Kenneth.ekpeterere@gmail.com | Kennethekpeterere@ku.edu

Organization: All PMP datasets organized by durations as follows:

- “Global_PMP05hr”: The 30-min or sub-hourly duration PMP data.
- “Global_PMP1hr”: The 1-hr or hourly duration PMP data.
- “Global_PMP2hr”: The 2-hourly duration PMP data.
- “Global_PMP3hr”: The 3-hourly duration PMP data.
- “Global_PMP6hr”: The 6-hourly duration PMP data.
- “Global_PMP12hr”: The 12-hourly duration PMP data.
- “Global_PMP24hr”: The 24-hourly duration PMP data.

Methods: The study methods for data development, processing, and validation will presented in a paper to be published in 2022 in *Water Resource Research* from the American Geophysical Union. The associated graphs, tables, and charts are explained in the said paper.

Citation: Ekpeterere, K., J. Coll, X. Li, J. Kastens, D. B. Mechem (2022). Global PMP Datasets, KU

Scholar Works. <http://hdl.handle.net/1808/32756>