

TAMSAT Data Policy

The following supersedes any previously published policies.

Motivation

The TAMSAT Research Group (Tropical Applications of Meteorology using SATellite data and ground-based observations) is a university-based team of scientists funded by national and international projects since the mid-1980s, and it is within this context that the TAMSAT Data Policy is designed. We investigate the use of satellite imagery for estimating rainfall and other surface water budget components mainly in Africa but also in other regions as required. Routine products of the group for Africa are:

Rainfall estimates

- Spatial Coverage: Africa
- Spatial Resolution: 0.0375° Geographic Lat-Lon
- Temporal Coverage: 1983 - present
- Temporal Resolution: Daily, Dekadal (10-daily), Monthly, Seasonal
- Data Formats: NetCDF (data), PNG (QuickLook images)

Rainfall anomalies

- Spatial Coverage: Africa
- Spatial Resolution: 0.0375° Geographic Lat-Lon
- Temporal Coverage: 1983 - present against 1983-2012 rainfall climatology
- Temporal Resolution: Dekadal (10-daily), Monthly, Seasonal
- Data Formats: NetCDF (data), PNG (QuickLook images)

Rainfall climatologies

- Spatial Coverage: Africa
- Spatial Resolution: 0.0375° Geographic Lat-Lon
- Temporal Coverage: 1983 - 2012
- Temporal Resolution: Dekadal, Monthly, Seasonal
- Data Formats: NetCDF (data), PNG (QuickLook images)

Tercile anomalies

- Spatial Coverage: Africa
- Spatial Resolution: 0.0375° Geographic Lat-Lon
- Temporal Coverage: 1983 - present against 1983-2012 rainfall climatology
- Temporal Resolution: Monthly
- Data Formats: NetCDF (data), PNG (QuickLook images)

The TAMSAT rainfall estimates and derived products are based on Meteosat thermal infra-red (TIR) imagery provided by EUMETSAT. The TIR is calibrated against an extensive ground-based rain gauge data archive. The last calibration was carried out in 2011. The calibration procedure for TAMSAT is described in Tarnavsky et al. (2014).

The TAMSAT rainfall estimates are collated into the TAMSAT African Rainfall Climatology And Time-series (TARCAT) dataset. The development of the TARCAT dataset is described in Maidment et al. (2014). The current version of TARCAT is version 2.0. This replaces any previous TAMSAT dataset versions and comes with the health warning that the TAMSAT method performs well in regions and during months of predominantly convective rainfall.

Data are made available by the TAMSAT Research Group within 48 hours after the end of a dekad (for example, for the first dekad of January 2014, data are made available on 11th January or within 48 hours afterwards; further delays may be incurred in case of weekends and public holidays).

Terms of Use

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- The TAMSAT rainfall estimation system and the TARCAT dataset (henceforth referred to as TAMSAT/TARCAT) are owned by the University of Reading.
- TAMSAT/TARCAT can be freely used for research purposes, as long as Tarnavsky et al. (2014) and Maidment et al. (2014) are acknowledged in any resulting publications or presentations and the author(s) is/are encouraged sending us a copy of the final publication.
- Any operational or commercial use of TAMSAT/TARCAT data, including images derived from TAMSAT/TARCAT data or descriptions based on TAMSAT/TARCAT data, must be explicitly agreed with the University of Reading.

The following are representative examples of such usage:

- The inclusion of TAMSAT/TARCAT based images in famine early warning bulletins.
- The use of TAMSAT/TARCAT data in risk management/assessment tools.
- The use of TAMSAT/TARCAT data for operating weather index-based insurance.

Bibliography

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