

TAMSAT Data Extraction Tool

The TAMSAT data extraction tool is designed to allow users to easily extract time-series for different time-steps and for any domain. The tool is currently being trialled on the TAMSAT development website: <http://52.171.139.33>

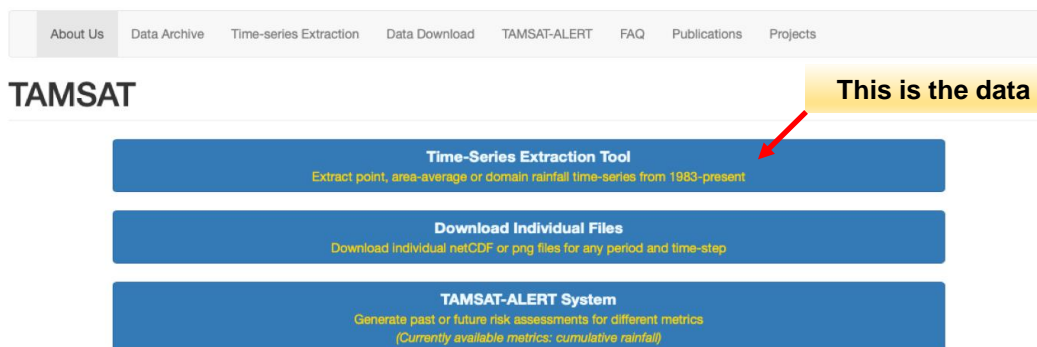
Please note that as this site and the tool are still being developed, there is the possibility that the site or the tool may be intermittently down or produce unrealistic data. The new data extraction tool will be made available on the main TAMSAT website (www.tamsat.org.uk) this summer once final testing has been completed.

We would like you to test the tool and we would be very grateful if you can provide feedback using this online survey <https://www.surveymonkey.com/r/SBTXTCY>. If you have any questions about the tool or TAMSAT in general, please do contact TAMSAT (tamsat@reading.ac.uk), Caroline Wainwright (c.wainwright@reading.ac.uk) or Ross Maidment (r.i.maidment@reading.ac.uk).

The TAMSAT data extraction tool is very straightforward to use, however, we have provided some details below on how to use the tool.

The landing page provides 3 tools, indicated by the blue buttons:

- The top button is the data extraction tool.
- The middle button is the individual file download tool.
- The bottom button is the TAMSAT-ALERT (agricultural early warning) tool – this is currently being developed, so isn't live, but if you have any questions please contact TAMSAT!



What is TAMSAT?

TAMSAT* enhances the capacity of African meteorological agencies and other organizations by providing and supporting the use of satellite-based rainfall estimates and related data products.

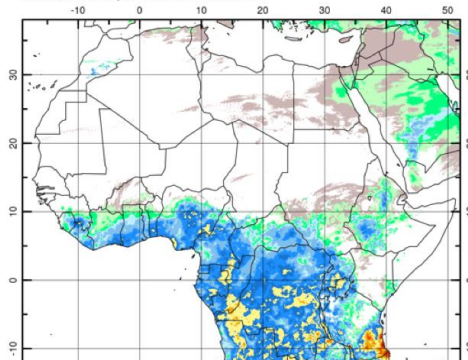
TAMSAT produces daily rainfall estimates for all of Africa at 4km resolution. The TAMSAT archive spans 1983 to the delayed present. The longevity of the dataset makes it especially suitable for risk assessment. Applications of the data include famine early warning, drought insurance and agricultural decision support.

Rainfall estimates and other TAMSAT products are issued on the 1st, 6th, 11th, 16th, 21st, and 26th of the month. All TAMSAT data are released for operational, research and commercial use under a creative commons license.

TAMSAT was established by the University of Reading in 1977. In the last three years, the group has developed close collaborations with the Climate Division of the National Centre for Atmospheric Science (NCAS) and the National Centre for Earth Observation (NCEO) to extend the range of climate services it provides. These collaborations are supporting the development of new datasets and other products, including rainfall estimate uncertainties, full column soil moisture, and probabilistic forecasts of drought.

*TAMSAT stands for Tropical Applications of Meteorology using SATellite data and ground-based observations.

Period: Year 2019, Month 04, Pentad 2
Theme: Rainfall Estimate (accumulated rainfall in period)
Source: TAMSAT, derived from Meteosat TIR



The data extraction tool, as illustrated below, provides the ability to extract a rainfall time-series for the following criteria:

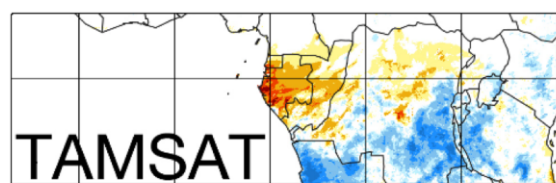
Time-steps:

- Daily
- Pentadal (5-day)
- Dekadal (10-day)
- Monthly
- Seasonal (DJF, MAM, JJA, SON)
- Anomalies for all the above with respect to a 30-year (1983-2012) average

Spatial domain:

- rainfall at a point (in CSV format)
- area-average rainfall over a given rectangular domain (in CSV format)
- area-average rainfall for a given country (in CSV format)
- rainfall subset ("Regional data") for a given rectangular domain (in netCDF format)

Rainfall estimates are available from January 1st 1983 to the delayed present (TAMSAT latency is 2 days).



Data Subset Service

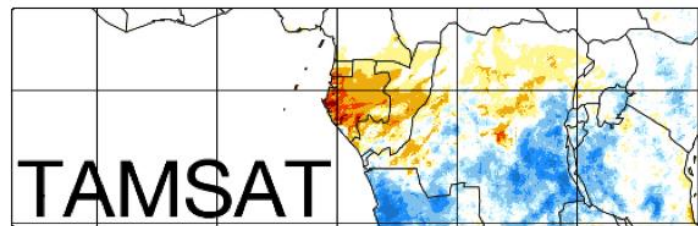
Dataset	TAMSAT v3 Daily
<input checked="" type="radio"/> Timeseries at a point (CSV)	
<input type="radio"/> Timeseries over a region (CSV)	
<input type="radio"/> Regional data (NetCDF)	
Latitude	0
Longitude	0
Start Date:	1/1983
End Date:	5/2019
Email address	<input type="text"/>
Job/Group Reference ⓘ	<input type="text"/>
Submit Job	

If you have already requested a data subset, and wish to check whether it is available to download, please [click here](#).

Things to note when submitting a data request:

- The start and end dates displayed are at monthly intervals – as such, if sub-monthly data are required e.g. '15/01/2000' to '10/03/2000', select '01/2000' to '03/2000'.
- Users must provide an email address – you will be notified when the data is ready for download.
- Users must provide a job reference – you can use the same reference for different jobs.

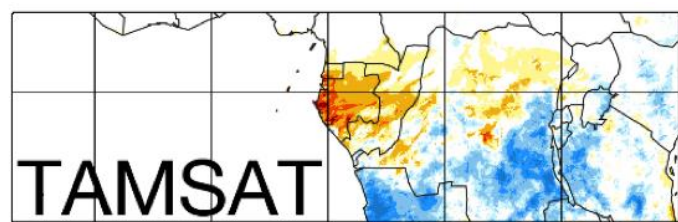
When you submit a request, you will see this box:



Subset job submitted

Your job has been successfully submitted to the queue. When completed, it will be available from [here](#).
Note that your job will be available for download for 7 days after completion, or 24 hours after it has been downloaded for the first time.
[Click here to submit another job](#)

If you click on the “*here*” link, this will redirect you to another page which will list your job when it is ready for download (you will also be redirected here when you click on the link sent in the email notification). Simply click the “*Download*” button to retrieve your data:



Job list

List of completed jobs for r.i.maidment@reading.ac.uk with reference kenya_subset:

Description	Link
Timeseries of KEN From dataset: 04-tamsatMonthly.v3 Between 1983-01-01 and 2019-03-31	Download

Note that jobs are available for download for 7 days after completion, or 24 hours after it has been downloaded for the first time.

Suggested practical – comparing rainfall time-series

- Download the area-average pentadal rainfall time-series for your country from 2002 to 2004.
- Download the area-average pentadal anomaly rainfall time-series for the same period and domain.
- Plot both of these time-series using the downloaded CSV files.

[Note that there are some negative values (-9999) in the time-series which correspond to missing rainfall estimates. Such gaps are more common during the early part of the TAMSAT time-series (1980s and 1990s). However, these gaps will be recovered in the next version of the TAMSAT rainfall dataset (v3.1) which will be released this summer.]