

Search for publications, researchers, or questions



or

Discover by

Join for free

Log in

See all >

1 Citation

See all >

8 References

Share

Download full-text PDF

Validation of TRMM Daily Precipitation Data for Extreme Events Analysis. The Case of Piura Watershed in Peru

Article · December 2016 with 73 Reads

DOI: 10.1016/j.proeng.2016.07.436



1st [Juan Walter Cabrera Cabrera](#)
Universidad Nacional de Ingeniería (Peru)



2nd [Raul Tupac Yupanqui](#)



3rd [Pedro Rau](#)
8.66 · Paul Sabatier University - Toulouse III

Abstract

The use of TRMM satellite daily information (Tropical Rainfall Measuring Mission) is proposed to estimate extreme precipitation over ungauged areas and time periods. Assuming precipitation non-stationarity as signal fluctuations due to the ENSO impact, it is possible to find common features between in-situ and TRMM data sets by multi-resolution analysis (MRA) with wavelet transform, especially during the wet period where maximal precipitation series are obtained. This method could be applied on other stations as a regionalization for obtaining rainfall datasets as a solution of data scarcity. It is shown some results obtained into the objectives of a local project of improving the statistical downscaling of TRMM and its applicability in water engineering projects.

Discover the world's research

- 13+ million members
- 100+ million publications
- 700k+ research projects

Join for free

Full-text (PDF)

Available from: [Juan Walter Cabrera Cabrera](#), Oct 21, 2016

Download full-text PDF

Other full-text sources

People who read this publication also read:

Article: Satellite data planning for flood mapping activities based on high rainfall events generated using T...

Mar 2017 · Annals of GIS