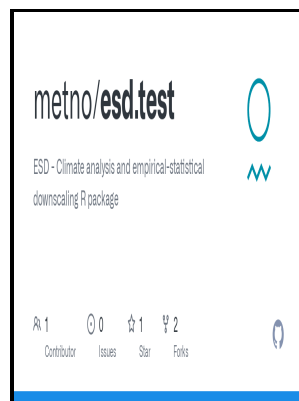


# Empirical-statistical downscaling

World Scientific Pub Co Inc. - Dynamical and statistical downscaling of a global seasonal hindcast in eastern Africa



Description: -

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Ansai Xian (Shaanxi Sheng, China) -- History.

Mass media -- Directories.

Climatic changes -- Mathematical models Empirical-statistical downscaling

-Empirical-statistical downscaling

Notes: Includes bibliographical references (p. 201-212) and index.

This edition was published in 2008



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Tags: #Evaluation #of #the #empirical

## GFDL's Statistical Downscaling Research Efforts

ENSO alone is found to account for almost 50% of the East African rainfall variance.

### Interrogating empirical

Statistical downscaling is a two-step process consisting of i the development of statistical relationships between local climate variables e. In this case, both simulations are by the GFDL HIRAM, an experimental high-resolution model.

## Dynamical and statistical downscaling of a global seasonal hindcast in eastern Africa

Unfortunately, after the downscaling step AFREG the daily distribution of the precipitation classes still differs from the observed distribution.

## Dynamical and statistical downscaling of a global seasonal hindcast in eastern Africa

Interactions within and between the various components of the climate system result in positive and negative feedbacks that can act to enhance or dampen the effect of human emissions on the climate system. It relates to the physical size of such phenomena or processes e.

### What is downscaling?

EPISODES is a comparably simple, computationally rather inexpensive technique, providing multi-variable and multi-site data that are suitable for being merged in an ensemble of RCM projections. Very high resolution interpolated climate surfaces for global land areas. The objectives of this work are 1 to assess and establish links between large-scale circulation patterns and local precipitation in Tanzania, 2 to develop ESD models based on the identified links, 3 to assess the skill of the ESD models, 4 to create climate change scenarios using ESD models and GCMs projections, and 5 to identify causes of the spread and differences in the multimodel downscaled results.

## Evaluation of Empirical Statistical Downscaling Models' Skill in Predicting Tanzanian Rainfall and Their Application in Providing

## **Future Downscaled Scenarios in: Journal of Climate Volume 29 Issue 9 (2016)**

Key Finding 3 Beyond the next few decades, the magnitude of climate change depends primarily on cumulative emissions of greenhouse gases and aerosols and the sensitivity of the climate system to those emissions.

## **Evaluation of Empirical Statistical Downscaling Models' Skill in Predicting Tanzanian Rainfall and Their Application in Providing Future Downscaled Scenarios in: Journal of Climate Volume 29 Issue 9 (2016)**

In the following equations  $n$  denotes an individual grid cell,  $N$  the number of grid cells analyzed e. Evaluation of the success of a specific model often depends on the variable or metric being considered in the analysis, with some models performing better than others for certain regions or variables.

### **Evaluation of the empirical**

We rely on the hypothesis that the local rainfall is connected with larger-scale conditions and that we can use GCMs to describe the statistics of year to year variations in seasonal precipitation in Tanzania.

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- [Risa to Gasupāru depāto no ichinichi](#)
- [Netive ha-hayim - 'iyun be-toda'ah Yehudit](#)
- [Histoire de Paris et des Parisiens](#)
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