

# Will the next monsoon cause drought or flooding?



The Asian-Australian (AA) monsoon is a key component of the earth's climate system and affects the livelihood of more than 60% of humanity. Better predictions of the monsoon will greatly benefit the social and economic well-being of this large segment of the world's population. Improved predictions of the AA-monsoon require enhanced understanding of the mechanisms of the monsoon system through well co-ordinated international scientific research efforts.

The prediction of the monsoon is limited by the high frequency variability arising from the internal dynamics of atmospheric and surface hydrologic processes within the monsoon region. Thus, one of the key research areas in **CLIVAR** is the Asian-Australian monsoon system.

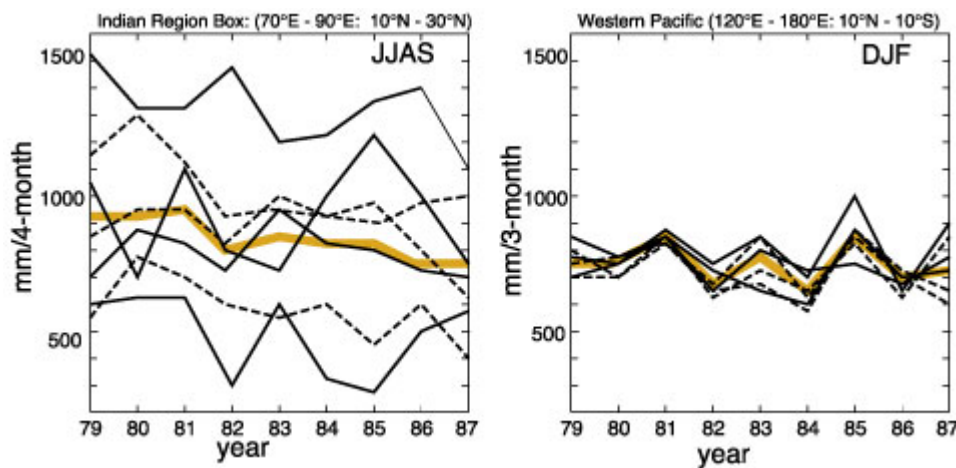


The section of the **CLIVAR** Implementation Plan on [Asian-Australian Monsoon](#) is written based on the fundamental premise that

- There are predictable elements of the Asian-Australian monsoon system, which when fully exploited, will be extremely beneficial to society.

For instance there is statistical evidence that e.g. the ENSO phenomenon, snow cover of Asia and the 30-60 day waves influence the onset, resp. strength of the Asian-Australian monsoon.

The figure below illustrates that although present climate models are in general to simulate climatological mean precipitation over some areas around the world (right figure for the tropical Pacific), substantial differences occur over the Indian subcontinent.



Comparison of AMIP normalized annual precipitation estimates of 8 models for (b) for the western Pacific Ocean warm pool. Brown curve represent the ensemble mean (from Webster, 1998).

Nevertheless, the continuous improvement of models and statistical methods supported a regional component of **CLIVAR**, as defined in the [Implementation Plan](#) will hopefully enable us to make reliable forecasts of the Asian-Australian monsoon in the near future. **CLIVAR's** focus on the Asian - Australian Monsoon system is organized through the [Asian-Australian Monsoon Panel](#) and the [Working Group on Seasonal to Interannual Prediction](#) (WGSIP).

For further information about the Asian-Australian Monsoon system please visit the web-sites given below:

- [Monsoon On Line \(U. Reading\)](#)
- [Studies of the Hydrology, Influence and Variability of the Asian Summer Monsoon \(Shiva\)](#)
- [Asian Meteorological Online Newsletter](#)

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