

**Ministry of Earth Sciences (MoES)  
Government of India**

**Call for Proposal- Improvement in the understanding of Indian monsoon teleconnection on intraseasonal, seasonal, interannual and decadal scales**

Ministry of Earth Sciences (MoES) invites project proposals from Universities, Research/Academic institutions in the country for funding the proposals focused to improve the understanding of Indian monsoon teleconnection on intraseasonal, seasonal, interannual and decadal scales under Project Appraisal and Monitoring Committee-Atmospheric Sciences (PAMC-AS) of MoES.

The Indian monsoon varies on all time scales, i.e., diurnal, intra-seasonal, inter-annual and annual-decadal scales. It is important to understand the physical mechanisms of this spectrum of variability to improve forecasting systems. Although our understanding of monsoon variability and drivers (teleconnections) has improved considerably, there are still many large grey areas that need to be understood. The availability of data from newer reanalysis datasets, ground-based and satellite platforms together with the model hindcasts will allow us to gain more insight into these physical mechanisms. Accurate simulation/prediction of this variability spectrum is very important for societal applications. But the models have shown systematic biases and errors.

In view of this proposals are invited on the theme “Improvement in the understanding of Indian monsoon teleconnection on intraseasonal, seasonal, interannual and decadal scales”. The proposal may cover the following areas:

1. What are the main drivers for these observed variabilities (Diurnal, Intra-seasonal, inter-annual and annual-to decadal)? What is the role of atmospheric, oceanic, and coupled drivers?

2. What are the impacts of climate change/global warming on the observed monsoon teleconnections?
3. What are the model biases and errors in the weather and climate models in simulating/predicting the variabilities and teleconnections? What are the reasons for such biases and errors?
4. Can the solutions be provided to reduce these biases and errors in the models?

The proposals can cover aspects of both summer monsoon (southwest) and winter monsoon (northeast).

The proposals may be submitted online on <https://reachout.moes.gov.in>

The last date for receiving the completed project proposals is 14<sup>th</sup> June 2024.

For any further queries related to this call, please contact

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