

# Minutes of teleconference on the formation of the Asia-Australia Monsoon Working Group, 1600UTC 15 Feb 2016

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## Attendees

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## Agenda

Suitability of the ToR  
Possible membership  
Important regional issues  
Possible activities in year 1-2  
Regional funding opportunities

## Minutes

### Suitability of the ToR

Annamalai's previous review of the ToR suggested that it could be quite a challenge to address all points. In particular that trying to list activities to be achieved over a 3-5 year time horizon may not be possible. Better would be to have a clear focus for priority activities 1-2 years ahead. It was clarified that the spirit of the ToR (specifically term #2) is not to produce a list of tasks that must be achieved over 3-5 years, but to keep highlighting the main issues of the region to the community. It was suggested that as with other regional WGs, the role of the WG could be in coordination of existing activities rather than all activities being performed by the members themselves.

The A-A MWG is also keen not to be repeating activities that the main Monsoons Panel is doing.

The WG should also act to communicate with GEWEX GASS/GLASS panels to tap their experience of model behaviour.

One way of helping define the objectives of the WG will be to consider what position it wants to reach in 3-5 years' time, identifying what success for the working group would look like, and listing the necessary steps over the next couple of years to help achieve that. Getting the WG to a position where it is regarded as the place to go for those interested in monsoon prediction, modelling assessment, and for the most reliable information on the topic.

## Membership

Membership numbers were suggested at around 8-12 although there are no defined limits. Initial membership suggestions have not yet been made although it will be relatively straightforward to tap the knowledge and experience of R Krishnan (IITM, Pune, India) and Tianjun Zhou (IAP, Beijing, China) in addition to gaining their suggestions for regional members. For determining membership from Southeast Asia and the Maritime Continent, determining suitable membership might be more problematic, but there are good links already developed through schemes such as the Year of Maritime Continent. Links could also be made with the Climate Services Centre in Singapore.

It is noted that the Monsoons Panel will be working toward a system over the next few years whereby Co-Chair(s) of the various Regional Working Groups sit on the main panel, thus providing a direct link to their activities. This is already embedded in the case of the Americas activity (and likely to be also for Africa) but not at this stage for Asia-Australia. However R Krishnan and Tianjun Zhou are members of the Monsoons Panel.

Interactions with the Indian Ocean Panel will also be key.

## Important regional issues and possible activities in years 1-2

Annamalai is keen to prioritise item #5 of the ToR, on process-based diagnostics. Such activities are getting attention from NOAA, which has task force devoted to running a test-bed for looking at the representation of certain processes. Several of the Monsoon Mission projects funded via India until 2017 are aligned with such methodologies. COLA is also involved in similar land surface processes work.

Additionally, the need to better communicate with the end-user community in India and elsewhere was highlighted, with the need to bring on board specific groups within India. Activities similar to those in RIMES (Regional Integrated Multi-Hazard Early Warning System for Africa and Asia) would be explored. Aurel added the need to engage with stakeholders to bring end users along with the latest research, identifying the additional information needed to help them continue.

Next, improving prediction is seen as an important activity, in particular exploiting the low-hanging fruit available from the S2S resource. This is possible since the data and its distribution platform is already in place. The initial task in this regard could be to see what different models say about the onset in various parts of the Asia-Australia monsoon region. A benefit of encouraging this analysis work in-country is that capacity can be developed in institutions that do not have the capability to run their own modelling exercises.

A component related to S2S and other analyses is in the benefits that would be given by sharing diagnostics packages for the monsoon. Harry Hendon and Andrew Marshall have been developing some tools to examine one of the S2S models; similar analyses could be extended to all models and across institutes. Such a package could form part of a *monsoons toolbox* also to take in standard

diagnostics such as those of Sperber et al. (2013). Making the code available for such diagnostics (e.g. via github) would enable enhanced work to be done throughout the community. If this were not possible, a first step would be to bring together a list of instructions and pros/cons of different diagnostics for the monsoon, together with reference publications (for example as in similar initiatives for land-atmosphere coupling [http://cola.gmu.edu/dirmeyer/Coupling\\_metrics.html](http://cola.gmu.edu/dirmeyer/Coupling_metrics.html)). Other options such as virtual laboratories (such as that being developed at the Australia B.O.M.) could be explored.

Finally, while lots of attention has been paid to the summer monsoons (in India and Australia), much less focus has been given to the winter monsoons, either for southeast India, or for the Maritime Continent region. Thus systematic studies should be performed for these regions/seasons.

Meanwhile longer-term goals would continue to be examining the sources of systematic errors in simulating the mean monsoon. This is being pursued for example through the Annamalai/Shukla workshop in Trieste, June 2016.

### **Regional funding opportunities**

Against the background of limited support from the WMO, the WG will need to organise workshops around other activities where possible. Other opportunities could be tapped through the Asian Pacific Network, the Asian Development Bank or the Green Climate Fund. However this requires regional co-investment and long spin-up times, as well as applications being made by developing countries. Many of these activities will take time to spin up and implement. The Monsoons Portal will serve as a useful resource for drawing attention to funding schemes and bringing communities together.

### **Actions**

- Annamalai and Aurel to begin drawing up list of potential members, in consultation with R Krishnan and Tianjun Zhou
- Annamalai and Aurel to construct list of priority activities for the next couple of years
- Annamalai to speak to Rokkam and Kripalani about specific end-user groups within India
- Annamalai to discuss with Ken Sperber if diagnostics code can be made available.
- Rokkam Rao to determine if there is institutional programming support within ICMPO or IITM to assist with enabling diagnostics to be coded and shared in a user-friendly manner.
- ICMPO to collate resulting lists and display on Asia-Australia portion of CLIVAR Monsoons Panel webpage, as a prelude to the eventual Monsoons Portal.