**Answers to Reviewer A (Berbery):**

***The manuscript under review is written in a straightforward manner; it is easy to read and covers a number of issues that are known to be of interest to WCRP. Given the WCRP guidelines, it should be expected an up-to-date discussion of the research that is currently done under the different WCRP panels. Sadly, this is not the case here.***

The description of the outcomes of the different WCRP activities related to monsoon regions has been extensively improved and expanded throughout the text. In particular, the discussion of the future challenges includes more references to the future challenges and imperatives identified by both CLIVAR and GEWEX.

***The title has two key words: Understanding and predicting. Related to understanding, much of the review is dated. It is based on articles or activities of the early to mid-2000s and just does not acknowledge the current status and priorities of the panels in WCRP. References to activities like NAME, AMMA, AAMP, DYNAMO (to name a few) are limited to their early motivations but lack a discussion of the findings that came out from them. Others, like IASCLIP, are not discussed. Better sources for the latest WCRP activities can be found in WRCP Newsletters, like CLIVAR Exchanges and GEWEX News.***

The references to articles related to WCRP activities have been considerably expanded.

***The focus on the diurnal or annual cycles is not new either. It was one of the recommendations of the first Pan-WCRP Monsoon conference back in 2005. The report of that meeting identifies strategies to address the shortcomings, including parameterization development. We now need an assessment of what worked and what did not work from those strategies. There are already experiments that explicitly resolve clouds and therefore bypass some of the parameterization limitations. Is that a path worth following? Additional justification is needed to confirm that parameterizations are the problem, and what should be changed from the original 2005 strategy.***

We agree that the issue about diurnal cycle simulation is not new but we think that it has not been solved yet and remains as a challenge. The fact that the diurnal cycle is still wrong in most models tells us that it is a hard problem requiring deeper insight. Nevertheless, the section has been revised in order to provide more discussion justifying that diurnal cycle is still a challenge.

***Except for a little in the AA, there is no discussion related to predicting (again, in the title of the manuscript).***

Following also the suggestions of Filippo Giorgi, the other reviewer, the discussion about predictability and prediction skills has been considerably expanded along the chapter. In particular the issue is now better addressed in section 2 for each of the monsoon regions, and also section 4 includes now a wider and more profound discussion of the challenges related to climate predictability and skilful climate predictions in the monsoon regions.

***The summaries on projections for the different regions reveal a dim picture of the reliability of the scenario simulations.***

Those summaries have been improved. The chapter also includes in section 4.1 a more comprehensive discussion about the challenges related to climate projections for the monsoon regions.

***The proposal that regional modelling will add information contradicts the statement that the diurnal cycle is not improved by improving resolution in the models. Given all that is done in IPCC and the ongoing CORDEX research, what other activities are suggested here for the future?***

Section 3 discusses the downscaling initiatives being made at different regions to increase the spatial detail of the simulations provided by GCMs. The chapter does not conclude however that they improve the diurnal cycle represented by the GCMs. In fact section 4.2b provides a discussion about the limitations of RCMs in representing the diurnal cycle in Africa.

It is not a purpose of the chapter to suggest new activities, but to highlight the science issues related to the monsoon climate that still need to be addressed by WCRP in the future.