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Interactive comment on "Teleconnection between Australian winter temperature and Indian summer monsoon rainfall" *by* S.-Y. Lee and T.-Y. Koh

Anonymous Referee #2

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Although the general idea of the manuscript is scientifically reasonable, there are two major concerns which should be addressed before considering the manuscript for possible publications in ACP. The first one is the lack of a modelling work to check the results. To base the conclusions only on correlation analysis is not enough to support for the proposed mechanism. The second one is the lack of a proper methodology to estimate moisture sources. The single use of backward trajectories does not guarantee the proper estimation of sources of moisture. Even more the time scale (about 16-18 days) is clearly too long (the average residence time of moisture in the atmosphere is about ten days, Numaguti, 1999). Please check the methodologies by Stohl and James (2004, 2005) or Sodeman et al. (2008a, 2008b) to diagnose net water changes along a large number of back trajectories that permit to infer the moisture sources for any given region. Results on global sources of moisture for precipitation using these approaches

(Gimeno et al, 2010 and Gimeno al, 2011) seem to agree with results from this study (the Indian ocean as one of the main source of moisture for JJA Indian subcontinent precipitation) however the result should be conveniently checked.

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