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Interactive comment on "Discussing the role of tropical and subtropical moisture sources in extreme precipitation events in the Mediterranean region from a climate change perspective" by S. O. Krichak et al.

## **Anonymous Referee #2**

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In the present paper the authors are presenting a summary of the literature on the role of tropical and subtropical moisture sources in extreme precipitation events in the Mediterranean. The authors have submitted the paper as review paper, but in my opinion the paper is limited in the presentation of the relevant works in the literature and is more similar to an extended introduction than a review. The text is interesting but in my opinion there is not enough content for a review paper and thus I cannot propose it for publication into NHESS.

C1212

## Specific major concerns.

- In general the text is very interesting to read but it is limited to the citation of the works and findings of the other authors without any deepening or discussion or concluding remarks that would summarise the current status of our understanding, the open questions and the prospects for future research.
- The paper in the introduction part is to a large degree similar to the relevant section of the paper Krickak et al. 2014 (Krichak, S. O., Barkan, J., Breitgand, J. S., Gualdi, S., and Feldstein, S. B.: The role of the export of tropical moisture into midlatitudes for extreme precipitation events in the Mediterranean region, Theor. Appl. Climatol., in press, doi:10.1007/s00704-014-1244-6, 2014b), although it misses the important references for each of the extreme cases presented in the first paragraph.
- In general the paper is very much related to the paper of Krichak et al., 2014.
- The title says that all this discussion in put in a climate change perspective. The perspective should have been given in section 4 on "Climate change and processes leading to Mediterranean extreme precipitation events". The climate change perspective discussion is only limited to the suggestions on the role of Arctic sea ice area and cover on precipitation. The authors produced and discuss a figure that relates the sea-ice area and extend with the monthly mean frequency of intense precipitation events but there is no information on the source of data for the definition of the intense precipitation events.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 3, 3983, 2015.