

**Monitoring and quantifying future climate projections of dryness and wetness extremes: SPI bias**

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**5 Reply to referee 3**

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We thank the referee for the useful comments and especially the question regarding the spatial AICD pattern.

**Lines 25-26, page 10643.** Linear trends are estimated by linear regression. A further discussion is given in our reply to comment 5 from referee 2. We include more details in Section 2 of the manuscript.

The used precipitation data set (CRU) is tested for inhomogeneities. Details on the homogenization procedure are given in Mitchell and Jones (2005).

The dependence is considered as to be low due to monthly separate calculation of the SPI. Our reply to comment 6 from referee 2 includes additional remarks on this topic.

**Figure 2.** We include the acronyms in the caption.

**Figure 6.** We change the dotted to dashed-dotted lines.

**Section 3.2, Distributions.** Yes, this is of interest. We suggest to include 4 additional figures as supplementary material and reference them in the manuscript.

## References

Mitchell, T. D. and Jones, P. D.: An improved method of constructing a database of monthly climate observations and associated high-resolution grids, *Int. J. Climatol.*, 25, 693–712, 2005.