

Interactive comment on “Comparison of published palaeoclimate records suitable for reconstructing annual to sub-decadal hydroclimatic variability in eastern Australia: implications for water resource management and planning” by Anna L. Flack et al.

Anonymous Referee #1

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This paper provides very interesting results, and topic of the research is within the scope of this journal. The manuscript is well written and organized. Some minor revisions are recommended.

[General Comments]

1. P7, L135 The advantage of using "composite index" is a little unclear. We can understand that the composite index would give conservative estimate of wet/dry condition (as described in P16, L294), however, it is still unclear why composite index

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would be better rather than the use of "best-perform single palaeoclimate records". # no palaeoclimate records could be selected as "best-perform" (?)

2. P6, L131 "... uncertainty associated with palaeoclimate records ..." → It would be better to describe (explain) a little more about uncertainty and/or accuracy (precision) of paleoclimate records, if possible. (which sources of uncertainty and how large/small uncertainties are expected, difference in precision between older records (-1000years) and recent (after 1900), ...) # The response to this comment is not mandatory, however, this information would be helpful # for reader's understanding of characteristics (limitation) of palaeoclimate records.

[Specific Comments]

1. P3, L85 "11 palaeoclimate records that were selected ..." → How many "candidates" of palaeoclimate records were reviewed (in total) to select 11 palaeoclimate records?

2. P3, L92 "... however, two records with –4-5 year temporal resolution ..." → How did you use (and composite) 4-5 years temporal resolution data with other annual resolution data? # ex. interpolated in annual resolution (?)

3. P6, L124 "... more than 20% above (below average) ..." → How to set the "20%" as a threshold? # following to other past research (?)

4. P7, L135 "... majority of palaeoclimate records analyzed here agree were wet or dry ..." → - "majority" means that if 6 of palaeoclimate records show the signal of wet/dry, the period is considered as wet/dry period. (?)

- Does the number of agreed palaeoclimate records (wet or dry, among 11 records) have any relationship with degree (severity) of wetness/dryness of the period?

5. P16, L316 "Based on annual rainfall ..." → Which rainfall data was used to calculate averages for wettest, driest and middle input? # AWAP data (?)

