Interactive comment on “Year-to-year correlation, record length, and overconfidence in wind resource assessment” by Nicola Bodini et al.

Anonymous Referee #3

Received and published: 17 June 2016

The manuscript “Year-to-year correlation, record length, and overconfidence in wind resource assessment” analyzes a 62 year, monthly averaged, surface wind speed record from Canadian stations and by comparing the original annual averaged time series to a randomized control sequence, the authors show that trends in time series can result in a substantial overconfidence in estimated resource levels.

In the title, abstract, and throughout the whole manuscript “record length” has been used. In my opinion, it would be more appropriate to replace this with “segment length”, since in all experiments long term time series (62 or 42 years) have been used, splitted into different segment lengths.
Please state that the “annual averaged” wind speed data $u_i$ have been used.

It would be helpful to state explicitly that the first 42 year data has been used and not the first 42 $j$’s of the 62 year sample.

Wouldn’t it be more appropriate to use the P50 instead of the mean value, since the distribution of the annual wind speeds of the original data is not normally distributed. From Fig. 6c it seems that the mean wind speed in the 42 year chronological data set increases with increasing $j$, but the P50 value would not necessarily increase.

Isn’t the data sample of the first at least 5 $j$’s (number of values inside a distribution) too small to make second moment statistics?