

## Second comments of Reviewer 1 for Anna von Brandis et al

1. L120 [original line number] About “normed”, please can this process be clarified. I think it refers to how many degrees of turning there is per 100 km. The comment is some addressed. Perhaps better would be: “..the wind direction changes \*expressed as degrees\* per 100 km were evaluated. . . “
2. L299 [original line number] Again the “normed” term again, please correct. Also in caption of Fig. 4.  
⇒ *The word “normed” has been fully replaced by “per 100Km”*

## Second Comments of Reviewer 2 for Anna von Brandis et al

1. There is just one point remaining, namely point 4: My point was that now the authors take the yearly median of the change and then average this over 30 years. I suggest to take the median of all timeframes in the 30 years, if this would still be possible.

### Answer of the Authors

⇒ *We kindly thank both the reviewers for insisting on improving section 5.1.1, dealing with the wind direction changes “normed over 100Km” or “per 100Km” (figure 5 and Table 2). After an additional round of internal discussion, we established that the display of such a quantity could cause confusion, mostly on the procedure through which it is derived. We finally decided to entirely remove the normalization of wind direction changes from the manuscript. All the wind direction changes now showed are the actual wind direction differences with respect to the reference location. For this reason, the current figure 5 and Table 2 have been updated and their content changed. However, the message they convey remains identical. The same figure and table have been also updated considering the comment from Reviewer 2. Therefore, median and quartiles are computed from the whole 30 years dataset directly and no longer as the mean of the yearly values.*