

The authors summarized research articles related to marine atmospheric boundary layer and pointed out current problems and limitations of existing theories and methods for offshore wind resource assessment. Additionally, the latest researches of effects of precipitations related to a lifetime of wind turbine blades are also referred. This article is the great contribution to offshore wind generation. I think this paper is acceptance for publication after the minor revision.

- The authors described relations between dT (temperature - SST) and vertical wind speed profiles in Section 3. The wind profile can be definitely affected by SST. Meanwhile, strong winds (e.g., with tropical cyclones) can also decrease SST because of vertical convections in the sea surface. It could be worth adding a description mutuality and complexity of the relation.
- On page 2, line 47, I would prefer to move the annotation 1 to the reference list.
- On page 6, line 159, the quote O'Neil 2012 is missing in the reference list.
- On page 7, Figure 2 would be more "reader friendly" if heading symbols (e.g., a), b), ...) were used for figures, respectively.
- On pages 11 and 14, Figures 3 and 5 would be better if heading symbols were used as same as below.
- On page 17, lines 431 and 432, brackets should be changed from italic to normal fonts.
- On page 32, line 913, information of the article should be updated. It was published already.