

## ***Interactive comment on “Influence of Hydrometeorological Hazards and Sea Coast Morphodynamics onto Unique Coastal Vegetation Sites Development – *Cephalanthero rubrae* – Fagetum on Wolin Island (the Southern Baltic Sea)” by Jacek Tylkowski et al.***

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The article presents a very interesting research on unique vegetation sites (*Cephalanthero rubrae* – Fagetum, Cr-F) on Wolin Island in Poland. It should be emphasized that this is the only position of stenothermal coastal orchid beech wood in the world. Cr-F sites have been analysed on a two-year field study, which was related to the annual rate of the cliff top recession and evolution of slope forms (since 1984) and

C1

hydrometeorological data from 1960-2019.

General comments:

The purpose of the study is clearly and precisely written but method chapter should be completed. There is no detailed information about the climate indicators used in the manuscript. Some parts of the text from the result chapter should be moved to the methods and discussion chapters (details below). Focus in discussing the specific results of this work. Conclusions chapter should be shortened, some part of the text should be moved to the discussion chapter.

Apart from the general comments I have listed some minor comments which the author might find useful to improve the manuscript.

Minor comments:

- page 2, line 42 –delete “on the other hand”
- page 4, line 94 – please remove the space between the number and °C
- page 6, line 159-160 – move the sentence to the discussion chapter
- page 7, line 168 – the first three sentences moved to the methods chapter
- page 7, line 174 – please change 1817°C to 1,817°C
- page 11, line 241-242 – please add references
- page 12, line 263 – please add a comma after the Tylkowski
- page 12, line 279-281 – in the conclusions chapter for the first time there is information about the range of occurrence of *Cephalanthero rubra* in the forest divisions of Miedzzydroje 16 and Wiselka 2. This sentence should be moved to the discussion chapter. Please add a citation.
- page 14, line 343 – add a comma after the name initial (Nauels, Y.,)

C2

- page 15, line 369 – replace a comma to a dot (after the year 2015)
- Fig. 1 - you can add photo from the selected measurement site
- Fig. 2 – please present the precipitation as a bar graph
- Figs., 2,3,4 – please add regression equation, R2 and the level of statistical significance
- Fig. 4 – font size different than in the previous figures, please unify the description of the x and y axes throughout the article
- Fig. 5 – change order first place II, then III, V - as it is in the description

I recommended this valuable article for publishing in the Natural Hazards and Earth System Sciences after minor revision.

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