Response to RC2:

Based on the EC observation data from 2016 to 2020, this paper analyzes the impact of weather conditions on the net ecosystem productivity (NEP) of Beihai Wetland. The purpose is to study the influence of weather conditions on NEP, LUE and WUE, as well as the control of scattered radiation and other environmental factors on NEP under different weather conditions.

It is found that the influence of weather conditions on NEP is different on different time scales. On the half-hour scale, the daytime response of NEP to PAR is stronger under cloudy conditions than under sunny conditions. In addition, results show that the daily LUE and WUE change with the cloud, and both LUE and WUE reach the maximum under cloudy conditions.

Using EC observations, this paper analyzes the impact of weather conditions on the net ecosystem productivity of the North Sea wetlands. The authors ultimately want to study the effect of weather conditions on NEP, LUE, and WUE, as well as the control of scattered radiation and other environmental factors on NEP under different weather conditions. Overall, the author can control the full paper, with clever ideas, clear, smooth writing, and attractive titles. It is a rare observational research paper. I suggest publishing after minor revisions.

Response: We would like to thank anonymous Referee #2 for his valuable comments on this manuscript. It is very helpful to improve this paper. Responses to all the points raised by the referee are in the following:

There is a small suggestion, you can seriously think about it. In Section 4.2, the impact of scattered radiation on NEP will also be controlled by the vegetation characteristics of the region, are not introduced and analyzed in detail in this paper. I hope you can add some more in detailed expression.

Response: We agree that the vegetation characteristics could be one of the factors influencing the impact of diffuse radiation on NEP. However, we lack the vegetation amount measurement, while the vegetation indices (LAI, etc) are greatly affected in this area due to the long rainy season, so the effects of these vegetation features are not analyzed in detail. We will try supplement vegetation amount measurement in the future, and will add more discussions about the impact of some vegetation characteristics in the revised manuscript.