

Interactive comment on “Air temperature and light intensity in a tropical rainforest of Brunei Darussalam: Time series recorded in 2017” by Kazimierz Becek and Kamaria A. Salim

Kazimierz Becek and Kamaria A. Salim

kazimierz.becek@pwr.edu.pl

Received and published: 2 November 2019

Comment 1: This is a very interesting proposal that seems likely to collect some useful data. However, it reads like a research proposal rather than a reporting of work that has been done.

A1: This manuscript is designed to comprehensively describe all technical details concerning the long-term experiment, of which the first phase is the acquisition of time series of air and light intensity data over a long time period. Naturally, our intention is to use the data to investigate the issue indicated in the manuscript, i.e., the interaction between meteorological/climate variation and transparency of the forest canopy. We

Printer-friendly version

Discussion paper



deliberately did not mention what kinds of possible research projects can be derived from the datasets; rather, we hope that publication of the one-year data will stimulate other researchers to develop their own ideas about possible applications in their relevant disciplines.

Comment 2: In addition there are some key aspects the really need addressing. Much of the work is "anticipated". It seems like a great plan, it just seems to belong in a proposal rather than a journal article. The first that needs to be addressed with the correlation between the fall through of rain and the light transmittance. If one is going to be used as a proxy for the other, it would be nice to have some idea of the relationship between them. I suspect that it is monotone, but also nonlinear. Understanding this relationship - in at least one location in the project zone - would enable a better metric for not just explaining that the canopy is becoming more transparent, but how much that would affect the fall through.

A2: The purpose of this paper is not to show or investigate the relationship between the fall through of rain and the light intensity at the bottom of a forest, rather to describe the setting for the experiment and the data that have been captured by the sensors. This is why we don't discuss or show any results concerning the said relationship or correlation. Our future papers, published somewhere else, and not in this particular journal (which is designed to promote and describe environmental data relevant for wider audience) will be discussing this correlation between the light, temperature and the fall through of rain, and possibly other issues.

Comment 3: Finally, there is one sentence that seems to be mis-worded. Line 23 on the first page "depletion of the forest canopy's transparency" would imply that the transparency is decreasing - making the canopy more opaque. I think that they mean that the depletion of the forest canopy is causing -increased- transparency.

[Printer-friendly version](#)[Discussion paper](#)

A 3: You are correct. In the new version of the manuscript this will be rectified.

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2019-35>, 2019.

ESSDD

Interactive
comment

Printer-friendly version

Discussion paper

