

REVIEW

Daytime low-level clouds in West Africa – occurrence, associated drivers and shortwave radiation attenuation

Derrick K. Danso, Sandrine Anquetin, Arona Diedhiou, Kouakou Kouadio, Arsène T. Kobéa

I thank the authors for the corrections made in the new version of the paper and the detailed responses for the attention of the reviewers. I still have some concerns about the section 4.2 which needs some corrections.

- Figure 8, text line 287: “During NoLLC events in both regions, there is a high negative sensible heating in all months”. I think this sentence is a bit misleading since in Guinean region the NO LLC cases occur only in January.
- Lines 288-289: “due to ... upward”. This sentence is strange at this place. Why do the authors introduce a sentence about longwave radiation emitted by the surface in between two sentences about sensible tranferts? I agree with the first part of the sentence but the second part is again misleading.
- Line 292-293: “This is due to the lack...”. The latent heat flux is proportional to the gradient between surface moisture and air moisture, so the Figure of annexe B can hardly explain alone the high bowen ratio. I would say that the bowen ration (SSH/LHF) has a seasonal evolution, as expected, with high value during the dry season and higher values during the monsoon season.
- Line 304-307: “In terms of anomalies.... Therefore the atmosphere tends to warm the surface by transferring sensible downward.”. The author must reconsider their comment here. Positive anomalies mean that the sensible heat flux is larger during LLC class2 than for the other class. That’s all!
- Please reconsider the whole paragraph down to line 312 since again the authors analyze the Fig9 as if it was the flux value instead of the flux anomaly.
- Line 308 :”As these LLCs....” Again comment about longwave radiation?
- I wonder if the authors should not rather present the anomaly of the SSH normalized by the net radiation to get free of the very large variation of this parameter which drives the surface flux.