Referee comment on "Radiative energy budget and cloud radiative forcing in the daytime marginal sea ice zone during Arctic spring and summer" by Johannes Stapf et al., Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2021-279-RC1, 2021

In this paper the authors use aircraft observations to study radiation budgets and cloud radiative forcing over sea ice, open water and the marginal ice zone. There is a wealth of very interesting information here and the study appears to be carefully performed carried out. However, the work is not done until its done and this manuscript needs a lot more work. I therefore recommend that it is rejected and encourage the authors to go back to the drawing board and make a new attempt.

The author instructions call for a concise text; this is anything but. It completely lacks organization; I gave up reading around page 20 or 21, still not sure if I actually had come to the results section, or if I were still in the introductory lead-up. Besides it would be about radiation, I still don’t see where this study is leading me and what important new finding it will lead up to. The text is much too long and contains too many different lines of thought without a clear connecting concept. It feels like a pile of detailed but unconnected case studies.

It also has too complicated and poorly explained plots; sometimes more and simpler plots are better than really ingenious constructions that are poorly explained. To top that off, the language is not very good. I get the feeling the authors are making a real effort to write “fancy” English, but the sentence structure is often strange with many short subordinate clauses piled on top of each other (German influence?), and in many cases sentences contains too many ideas. I was once told by a mentor: "One sentence, one thought"! Hard to stick to but useful to think about when writing.

I normally try and provide detailed comments when I review papers to help young scientists; I’m not an expert per see but have gained some experience over the years. But also here I gave up; comments are much too many. I’d be very happy to review a new version of this manuscript and provide detailed help, but it has to be organized and possibly split into more than one manuscript with some cohesive structure.
Make no mistake; I would really like for these results to be published! But this manuscript is not ready yet and if I were to recommend major revision, it might never be; hence reject and resubmit.