

## *Interactive comment on* "Dust sputtering within the inner heliosphere" *by* Carsten Baumann et al.

## Anonymous Referee #1

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This nice paper presents modelling calculations on sputtering on dust particles, and how solar wind and CME influence the lifetime of the particles. Such studies are of importance to better understand the complex content of the F-corona, in particular in the frame of the Parker Solar Probe mission. The paper is well written, the modelling calculations are well conducted and provide new insights of the dust evolution close to the Sun. The paper can be published if the following comments are considered. Since this work is based on modelling calculations, the word "modelling" must be added in the title and in the first sentence of the abstract. Line 49: I am not sure that this comment on nanometer-sized dust particles around other stars in necessary in the paper. Line 118-125: What could be the effect on the results of the "additional parameters"? Are the results still valid even if these parameters are not considered? Perhaps the authors can provide an estimate of the uncertainties on the results presented here when not considering these parameters. Line 147: "ten orbital period"; it is orbital period of the

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dust? can you give the value in day or years as for the FeMgO nanodust?

Interactive comment on Ann. Geophys. Discuss., https://doi.org/10.5194/angeo-2020-30, 2020.