

Interactive comment on “High-resolution mapping of circum-Antarctic landfast sea ice distribution, 2000–2018” by Alexander D. Fraser et al.

Anonymous Referee #4

Received and published: 31 July 2020

This paper evaluates the detection of Antarctic fast ice variations, then is scientifically very good. I recommend the MS for publication in ESSD with minor revisions. The followings are minor comments: 1) How have authors distinguished between fast ice and ice shelves from satellites data? As with fast ice, it is expected to occasionally collapse at the edge of the ice shelves. 2) Regarding the Figure 4, why are the solid line discontinuous in some places in this figure? Also, in the discussion section 3.2, the authors have described the results of the comparison between the East and West Antarctic regions. Is it possible to consider the reasons for the differences in terms of sea ice, ocean processes and/or atmospheric fields?

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2020-99>, 2020.