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Interactive comment on "Results of the third Marine Ice Sheet Model Intercomparison Project (MISMIP+)" *by* Stephen L. Cornford et al.

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This paper present the results of MISMIP+, a new model intercomparision of marine ice sheet models. I think this paper is fairly well written with some exception below, and can be accepted with minor revision.

L23 to L38: MISMIP+ is the first experiment among MISMIP series, which changes the mass balance. I think this should be emphasized.

Figure 1. Remark at top or bottom as t=0 may help. The vertical directions show a schematic view of ice volume (bigger ice sheet towards upper), which can be mentioned. The subexperiment names (Ice1r, Ice1rr, Ice1ra etc) should be mentioned in the figure.

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Eq (1) and Table 1. I try to draw the bedrock map using the equation and values in the table, but I cannot reproduce the figure. I suspect the signs of Bn are all opposite. If that is correct, evelation around (0,-40) is higher than +300m, which is not clear using the present contours.

L46 in Asay-Davis et al. (2016).

L56. Need to include somewhere around here that the x-direction is toward the flow while the y is across, or at least refer Figure 2.

Eqs.(4) (5): alpha is not defined.

Eq.(7) confusing. max is outside tanh, but not clear.

L145. It is not clear whether m2 is applied only at the base of ice shelf or not. It matters for the regions close to the lateral walls.

Figure 3. Horizntal labels are missing. x(km) and t(yr)?

Figures 4 and 11 top left. Ice1r (t=0) and Ice2r (t=0) is identical by definition, which may be better to mention.

L313 less than 10km. But, this value is correct? It looks around 20km spread for yellow lines.

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