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Interactive comment on "Mechanical effect of mélange-induced buttressing on embayment-terminating glacier dynamics" by D. Seneca Lindsey and T. K. Dupont

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I should clarify the comment that I made regarding ice melange thickness. In winter, it can be difficult to identify the terminus of Jakobshavn Isbrae because there is a gradual transition from glacier to melange (Fig. 2 in Amundson et al., 2010). However, this transition occurs over a span of about a kilometer. Farther down fjord the melange looks pretty similar to what it looks like in the summer time. Therefore stating that the melange is 20% of the glacier thickness is probably only conservative for the portion of the melange that is immediately adjacent to the terminus – and not for the entire length of the melange (15 km in your model).

C2216

Interactive comment on The Cryosphere Discuss., 6, 4123, 2012.