

Interactive comment on “Reply to “Basal buoyancy and fast-moving glaciers: in defense of analytic force balance” by C. J. van der Veen (2016)” by Terence J. Hughes

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May I add one more comment regarding Van der Veen (2016) and the subsequent exchanges, including comments by Anonymous Referee #2? Van der Veen (2016) states his Equations (13) through (15) containing my floating fraction "phi" are my equations, but they are not. My equations for these stresses are given in Table 1 of my 12 January 2017 reply to Van der Veen (2016). Both signs and terms in his equations are different from those in my equations. Also, his Equation (9) for the force balance has signs different from the signs in my geometrical force balance. The easiest demonstration of this is to substitute his Equations (13) through (15) into his Equation (9) and you will not get $0 = 0$. When my correct equations are substituted into my correct geometrical force

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balance equation, $0 = 0$ is obtained. So it is no wonder his Figure 2, which is his plot of these equations, makes no sense. Had I made these substitutions earlier myself, much of these exchanges could have been avoided, but I appreciate the exchanges as a way to more clearly present the geometrical force balance.

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