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James Walsh* (jwalsh@oberlin.edu) and **Christopher Rackauckas**. *New Budyko-type models of a slushball Earth.*

We present two new Budyko-type models appropriate for the extensive glacial periods of the Neoproterozoic Era. In each case we prove the existence of a stable ice sheet with ice edge in tropical latitudes (a “slushball” climate state). Tools used in the analysis include geometric singular perturbation theory and Filippov’s theory of differential inclusions. (Received January 11, 2015)