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## Seasonal waves on glaciers

A.C. Fowler (1) and **I.J. Hewitt** (1)

(1) Mathematical Institute, Oxford University (fowler@maths.ox.ac.uk)

Seasonal waves are waves of ice surface velocity which propagate down glacier at speeds at speeds 20-150 times the surface speed. They are associated with seasonal variation in the supply of meltwater to the glacier bed. We give a simple theory which can explain these waves, based on coupled models of ice dynamics, a linked cavity drainage system, and subglacial sliding with cavitation.