

Abstract Submitted  
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**The melting of an ice blok assembly**<sup>1</sup> STEPHANE DORBOLO, FRS-FNRS, Universite de Liege, NICOLAS VANDEWALLE, Universite de Liege, CLAUDE LAROCHE, Private Laboratory, GRASP TEAM, PRIVATE LABORATORY TEAM — The melting of an assembly of ice blocks under an unidirectional controlled load was investigated. The volume occupied by the ice blocks and the volume of ice were simultaneously measured. While the ice volume continuously decreases, sudden breakdown of the total volume was observed suggesting large reorganization of the whole assembly. The waiting-times between two successive collapses and the magnitudes of the collapse have been correlated. The pile structure was studied using a x-ray tomography before and after a collapse. The arch network re-organization is responsible for the melting dynamics as the pile becomes more and more ordered during the melting.

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