

# **Supplement of Brief Communication : Mimicking periglacial landforms and processes in an ice-rich layered permafrost system with polydispersed melamine materials : a new concept**

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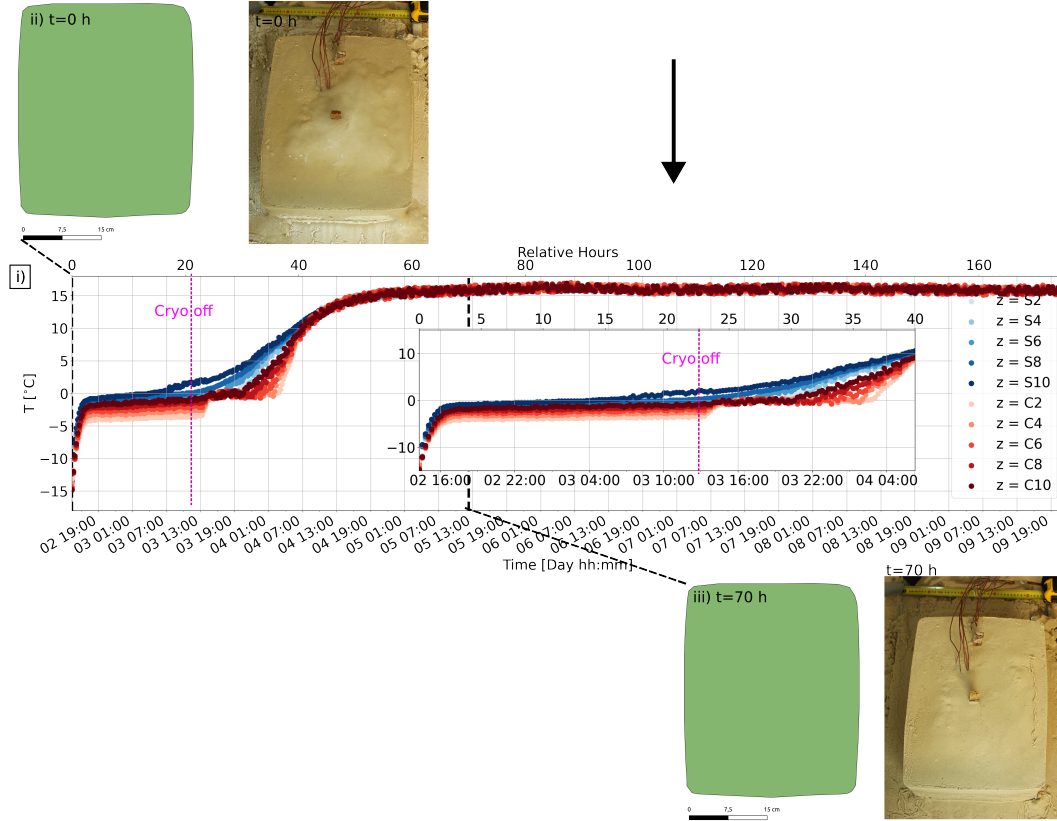
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In addition to the main paper, we add here the side view one of the PPP ice-layer experiment corresponding to 37 hours presented in FigureS 1. Two slump block are visible in the front of the block. Two other experiments are shown here : (i) the homogeneous fontainebleau sand case in Figure S 2 and (ii) the homogeneous PPP case in Figure S 3.

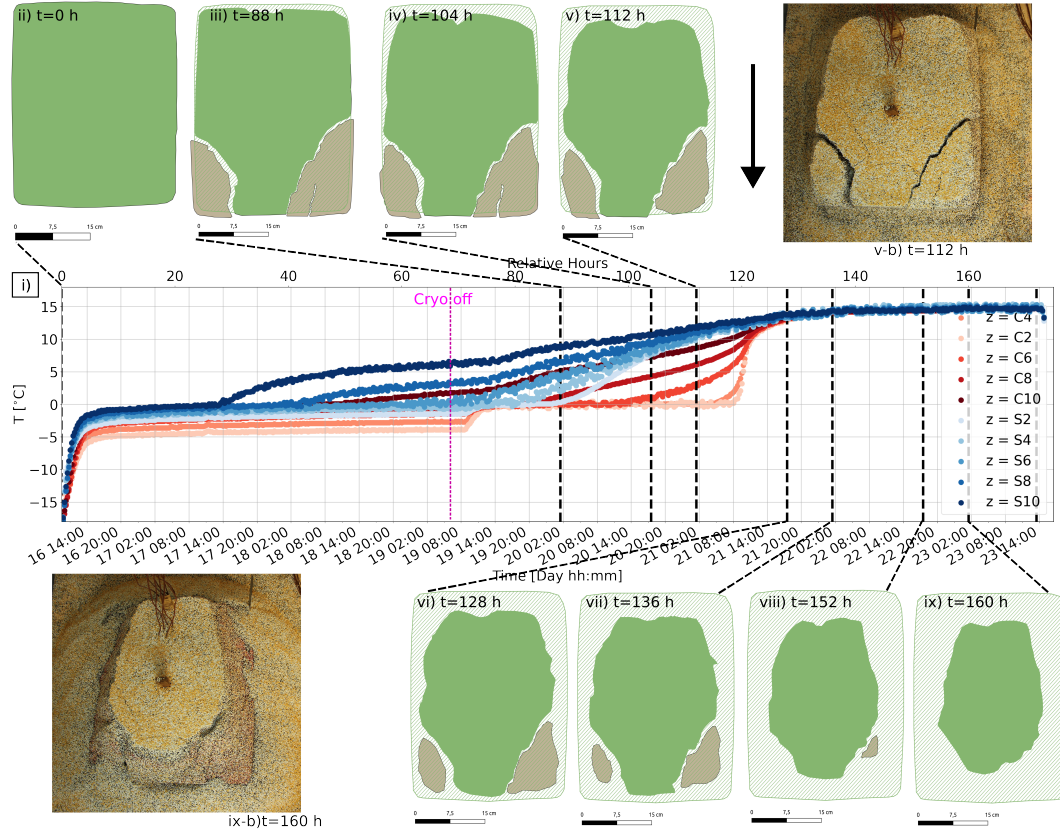


**Fig.S 1.** Side view of the PPP Ice-Layer case at 37 hours. The Block is 15 cm high and two slump blocks are detaching





**Fig.S 2.** i)Thermal and ii-iii)degradation time series for the homogeneous Fontainebleau sand case. In i) red colormap : center thermal monitoring positions in centimeters, in blue colormap: upper side monitoring position in centimeters. The inset is a zoom in of the first 40 relative hours. The "cryo-off" purple vertical line symbolize the stop of the cold basal coil. Drafts ii-iii) symbolize degradation area extracted from snapshots, where the green is what is left in place at each time-lapse. Two pictures from which are extracted the degradation area at 0 h and 70 h are shown. The black arrow symbolizes slope direction.



**Fig.S 3.** i) Thermal and ii-iii) degradation time series for the homogeneous PPP case. In red colormap : center thermal monitoring positions in centimeters, in blue colormap: upper side monitoring position in centimeters. The "cryo-off" purple vertical line symbolize the stop of the cold basal coil. Drafts symbolize degradation area extracted from snapshots, where the stripped green is the initial area, the green is what is left in place at each time-lapse and the light gray correspond to the detached slump block. Two pictures from which are extracted the degradation area at 25 h and 73 h are shown.