## Supporting Information for "Thermal convection as a possible mechanism at the origin of polygonal structures on Pluto's surface"

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Contents of this file Additional Supporting Information (Files uploaded separately)

1. Caption for Movie S1.

Movie S1. Change of the imposed surface temperature as a function of the conductive time (top left panel) where the red dot indicates the current time of the movie. Evolution of the horizontally averaged temperature profile as a function of the dimensionless height (top right panel) and of the sub-surface temperature field (bottom panel). Blue and red colors correspond to cold and hot material, respectively. The color scale changes with time in order to make the convective structure more visible. The numerical simulation is conducted for Ra = 10000 with a free slip surface and a rigid base. The grid resolution is  $512 \times 512 \times 64$  and the aspect ratio is 16/16/1. The temperature is dimensionless and can be rescaled using  $\delta T = 1$  K.

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