## First Observational Evidence of Sausage Soliton Propagation in the Solar Lower Atmosphere Observed by Hinode/sot

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Acoustic waves and pulses propagating from the solar photosphere upwards may quickly develop into shocks due to the rapid decrease of atmospheric density. However, if they propagate along a magnetic flux tube, then the nonlinear steepening may be balanced by tube dispersion effects. This may result in the formation of sausage soliton. Here we report the first observational evidence of sausage soliton in the solar chromosphere. Time series of Ca II H line obtained at the solar limb with the Solar Optical Telescope (SOT) on board of HINODE are analysed. Observations show an intensity blob, which propagates from 500 km to 1700 km above the solar surface with the mean apparent speed of 35 km/s. The speed is much higher than the expected local sound speed, therefore the blob can not be a simple pressure pulse. The blob speed, length to width ratio and relative intensity correspond to slow sausage soliton propagating along a magnetic tube. The blob width is increased with height corresponding to the magnetic tube expansion in the stratified atmosphere.