

Structure and origin of the K/T boundary mega-tsunami deposits of the Penalver Formation in northwestern Cuba

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The Penalver formation in northwestern Cuba is about 180m thick and consists of calcareous clastic rocks which show upward fining. The depositional age of this formation which is biostratigraphically constrained between 65.4 and 65Ma, and existence of altered vesicular glass and shocked quartz strongly supports Penalver formation was formed in association with the KT impact. Furthermore, mineral composition, sedimentary structure, and grain size distribution indicate that the Penalver formation was formed by high density suspension possibly produced by mega tsunami. In this presentation, we report the results of the geological survey on December 1999, and discuss mechanism of sedimentation from high density suspension and formation of water escaped structure.