OVERVIEW OF THE CHICXULUB IMPACTITE AND PROXIMAL EJECTA

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Several types of impactites have now been recovered from the various wells drilled in the Chicxulub crater in Yucatan. The old Pemex wells (Yucatan 6 and Chicxulub 1) contain a highly heterogeneous and stratified suevite, which upper unit is unusually rich in carbonates, impact breccia and a possibly an impact melt at the very bottom of C1. They are located towards the crater center (C1), on the flank of the peak ring (Y6). The thickness of impactite in this zone exceeds 250 m. The UNAM wells just outside the crater rim reveal sedimentary breccia and a fall-out suevite richer in silicate melt and basement fragments, than its crater equivalent. There, the thickness of the impactite was probably several hundred meters, considering that its top might have been eroded. It can also be speculated that a cover of fall-back suevite extended over the ejecta blanket in Yucatan, all the way to Belize and perhaps even to the region of Tabasco, in Southern Mexico. The recently drilled Yaxcopoil contains about 100 m of impactites, which is currently under study. Preliminary data seem to show less variability than the material recovered from Y6. As in the UNAM well, the impactite is dominated by basement material, and shows alternating severely altered and better preserved horizons.