The Tuxtla Volcanic Field (TVF) is a basaltic volcanic enclave in eastern Mexico at the margin of the Gulf of Mexico. Due to the high rates of precipitation floods and mudflows are common. Resulting from a systematic study of geologic hazard in the TVF we found several mudflow deposits that impacted pre-Columbian settlements.

Sections of the deposits were observed in detail and sampled for granulometric studies. The deposits contained materials suitable for dating: ceramic shards and some of them charcoal fragments. Shards from the interior of the deposit were collected and placed in black bags to prevent the action of light and to be analyzed by thermoluminiscense (TL), the charcoal samples were dated using standard radiocarbon methods (C-14).

The sites were dubbed La Mojarra (18°37.711', 95°18.860'), Pisatal (18°36.618', 95°10.634'), Revolución (18° 35.848', 95°11.412') and Toro Prieto (18°38.229, 95°12.037'). These deposits occur in the margins of riverbeds or lakes. Samples of these sites yielded ages of 1176±100 (TL), 1385±70 (C-14), 1157±105 (TL), 2050±245-235 (C-14), respectively.

These sites have undergone floods recently, showing that these phenomena impact the same areas over centuries. The dates mentioned are important because the area, was covered by a dense forest where no archeological sites have been reported; probably because the settlements were small and depended of such cities as nearby Matacapan an important city with strong ties to Teotihuacán in central Mexico. The ages agree with the findings of archeologic studies in Matacapan, which indicate that the population became increasingly ruralized since the late classic period.