

## **ARGENTINE LOESSIAL PLAINS: GENESIS**

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The Pampasic Argentine region are largely characterized by very fine sand and silty grains particles with little variable amount of clays. More than 500,000 km<sup>2</sup> are cover by these sediments. Recent studies believe that the age of these sediments fall in the Late Pleistocene to Early Holocene. Several aged are based on TL and <sup>14</sup>C measurements.

The composition of these sediments resembles those of loess rocks, present worldwide and elsewhere like China, Europe or North America although grain size look like to be more fine and constant if we consider the huge volume.

Composition, granulometrical, morphoscopical, petrographical, X-ray, SEM and geochemical studies revealed a great affinity with the infralying layers. These layers belong to the "Paranense Sea Transgression" occurred on the Miocene. They constitute a very typical heterolithic succession with many a non-tide offshore sand body deposits which are constituting typical tempestite deposits.

The geochemical study of trace elements reveals that minor elements are practically the same in quantity either the loessial beds or in the marine shallow marine platform sediments (mud or mudrocks).

The consequence of these data is what not extraordinary aeolian wind events are necessary in order to explain and interpret the presence of the main huge of the neotropical loess of the Pampasic region in Argentina as well as extreme care must be take in climatic changes actions.