

The Quaternary of SW Entre Ríos, Argentina

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The SW of Entre Ríos, at present under a humid subtropical climate, is located around 32°S and 60°W. The region had Pampean environments (steppe semiaridity). It also received sedimentary influences from the tropics through the large rivers Paraná and Uruguay, which conveyed fine quartz sands to the area. Silt and clay fractions, dominated by illite and smectites, were partially blown by wind from southwestern sources in the Pampa. Eolian and paludal sediments deposited under dry climates dominate the (preserved) stratigraphic column: Discordantly on marine Miocene, the Quaternary in the Lower Pleistocene begins with the *Puerto Alvear Fm* (quartz plus v. glass), a paludal deposit characterized by abundant carbonate and Mn precipitates, 2 Ma in age. The middle of the column belongs to Middle Pleistocene *s.l.* (reverse polarity); it is represented by *La Juanita Fm*, an other paludal unit, composed of 90% biogenic aggregates of silt sized quartz and volcanic glass particles. The Upper Pleistocene begins with a pedocomplex formed during IS3 and IS2 (\approx 33 ky B.P. for the upper B-horizon) and finishes with a typical loess (*Tezanos Pinto Fm*) accumulated around 14 ky B.P. The Holocene is represented by a well developed hypsithermal soil, covered by a thin Late Holocene loess (*San Guillermo Fm*, 3.5 to 1.4 ky B.P.)

The mineralogy of the pedocomplex indicate a Paraná main source: on the contrary the loess material is mainly derived from the Pampean source.

The magnetic susceptibility is highly irregular in the loess and more regular (and lower) in the paludal units.