

PLIO-PLEISTOCENE GLACIAL-EUSTATIC MARINE TRANSGRESSIONS IN THE ARGENTINE INNER CONTINENTAL SHELF

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Geological and geophysical investigations carried out recently in the Argentine inner continental shelf adjacent to Buenos Aires Province and in the Río de la Plata, Argentina, made possible to interpret the regional evolution during the Late Cenozoic. The stratigraphical record of this age is constituted by three major units: pre-Pliocene, Plio-Pleistocene and Holocene. The Plio-Pleistocene comprises, in the inner shelf, four seismic-stratigraphic units or marine depositional sequences that change to continental deposits towards the continent. They accumulated during transgressive-regressive events occurred in the last 2.9 M.a. following a general climatic change when alternating regime of glaciations-interglaciations commenced. In the Río de la Plata, instead, only the wedges of two of them appear, thus indicating different preservation of the geological record than that in the adjacent marine regions. It is due to the shape of the Río de la Plata paleovalley, which narrowness (added to the lack of tectonic subsidence) induced the successive transgressions to occupy the same room so that almost complete erosion of the sediments deposited by each event was necessary before the deposition of the following one. It did not occur in the shelf, where under subsidence, units piled-up. Correlation with moraine deposits of mountain areas allows to infer the occurrence of at least two more interglacial periods than those known from the marine regions. As a consequence, if we accept that each interglaciation induced a transgression, then six plio-pleistocene glacial-eustatic transgressive events could possibly affect the coastal regions.