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ABSTRACT BOOK

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Holocene littoral molluscan assemblages from Uruguay: geochronology, paleoecology and paleoenvironmental reconstruction

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Holocene marine fossiliferous beds from Uruguay allow the reconstruction of the biotic and paleoenvironmental conditions in mid latitudes of the southwestern Atlantic Ocean during the present interglacial. The deposits crop out in a thin strip along the coast which enables a paleoecological/paleoenvironmental comparison with the current conditions that develop in each geographic sector of the Río Uruguay-Río de la Plata-Atlantic Ocean west to east gradient. An ongoing project aims to expand the geochronologic and molluscan database to refine the paleoenvironmental reconstructions in different time slices. We incorporated about 30 AMS shell datings which mostly fall within the previously known age range for the Holocene marine molluscan assemblages, but we also obtained some new slightly older ages circa 7000 ¹⁴C yrs BP. The oldest Northgrippian ages (from 7500 to 6000 cal yrs BP) correspond to dark clayey deposits with shells frequently preserved in life position. Assemblages are dominated by *Heleobia* spp., followed by *Ostrea stentina*, *Anomalocardia flexuosa* (marine euryhaline species). The youngest Northgrippian (6000 to 4200 cal yrs BP) are similar but include a better representation of the euryhaline *Macra isabelleana*. This species and the estuarine *Erodona mactroides* predominate in the sandy deposits in the W and S-SE area of the Uruguayan coast. The oldest Meghalayan sandy deposits (4100 to 3000 cal yrs BP) from the W sector are dominated by *E. mactroides* with a scarce representation of *M. isabelleana*. The youngest Meghalayan assemblages (3000 to 1000 cal yrs BP) crop out mainly in the E sector. The sandy deposits are dominated by *M. isabelleana* or *Glycymeris longior*, and in the very fine grain lagoon deposits *H. australis* and *E. mactroides* predominate. The molluscan distribution pattern indicates higher salinity conditions in all the time slices analyzed towards the current fluvial and estuarine settings influenced by the Río Uruguay and inner Río de la Plata. Also, a higher temperature than present is supported by the record of warm extralimital species better represented in the oldest Holocene assemblages but still recorded in very young ones. This is a contribution to the research grant ANII FCE_1_2021_1_167109 and PEDECIBA Geociencias.