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**PALEOENVIRONMENTAL AND GLACIAL EVENTS RECORDED AT THE CONTACT OF
THE LA MESETA (EOCENE) AND WEDDELL SEA (LATE PLIOCENE-EARLY
PLEISTOCENE?) FORMATIONS IN SEYMOUR ISLAND, WEST ANTARCTICA**

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Preliminary results of field work performed last summer season on Seymour Island contribute to reconcile the existing different views on the local stratigraphy. Seven sections located around the upper plateau of Seymour have been logged in detail, accompanied by extensive sampling. Special attention was given to lithofacies interpreted as of glacial origin and stratigraphic relations of the upper La Meseta and the Weddell Sea formations. The first is mainly made up of fine marine fossiliferous shelf sand, with carbonate concretions and sporadic cross-bedding and dispersed clasts. The second is mostly a pebbly mudstone succession. Possible cryogenic structures found on uppermost La Meseta Formation sand, including small (involution-like structures, mottled sediment) and a possible sand wedge, suggest periglacial conditions preceding initial deposition of the Weddell Sea Formation. Arrival of grounded, possibly terrestrially based glacier in Seymour Island, in the latest Pliocene, is demonstrated by presence of subglacial glaciotectionic features and a well preserved boulder pavement at the base of the overlying Weddell Sea Formation. Different conditions and processes may have existed at the contact between the glacier and its bed. Placement of the paleoenvironmental events identified on Seymour Island in the context of Cenozoic West Antarctic climate evolution depends on availability of precise ages for the succession studied. A more consistent approach to the interpretation of the Cenozoic glacial lithofacies and processes is advisable.