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Preliminary geochemical data on shallow marine mollusc from middle Pleistocene-Holocene beach ridges in the gulf of S. Jorge (Patagonia, Argentina)

Ilaria Consoloni (1), Giovanni Zanchetta (1), Marina L. Aguirre (2), Ilaria Baneschi (3), Gabriella M. Boretto (2), Luigi Dallai (3), Massimo D'Orazio (1), Anthony E. Fallick (4), Ilaria Isola (5), and Marta Pappalardo Adriano Ribolini (1)

(1) Dipartimento di Scienze della Terra, Pisa, Italy, (2) CONICET, INGEA UNLP, La Plata, Argentina, (3) IGG-CNR, Institute of geosciences and earth resources, Pisa, Italy, (4) Scottish Universities Environmental Research Centre, Glasgow, Scotland., (5) INGV, Pisa, Italy

The Patagonia coast comprised between ca 45° S and 43° S preserves a spectacular succession of Quaternary raised beach deposits mostly composed by gravelly beach-ridge successions containing abundant storm accumulations of mollusc remains. Currently, this coastal area is interested by the competing action of the warm Brazilian current from north and the Falkland (Malvinas) current from the south, and roughly it corresponds to the boundary of the Magellanean and Argentinean zooprovinces. Although paleontological studies have been conducted in the recent past (e.g. Aguirre, 2003) there are not practically geochemical studies on these natural archives to infer local paleoceanographic and paleoclimate changes. Preliminary geochemical studies (petrography, stable isotopes, trace elements) on the aragonitic shell *Prototaqua antiqua* collected in various localities spanning from Holocene to Middle Pleistocene (MIS 9 to MIS 1, e.g. Schellmann and Radke, 2000) successions indicate that this species is relatively well preserved and can be used for the reconstruction of the past coastal oceanographic changes in the area.

Aguirre, M.L., 2003. Late Pleistocene and Holocene palaeoenvironments in Golfo San Jorge, Patagonia: molluscan evidence. Marine Geology 194, 3–30.

Schellmann, G., Radtke, U., 2000. ESR dating of stratigraphically well-constrained marine terraces along the Patagonian Atlantic coast (Argentina). Quaternary International 68/71, 261–273.