

CASE STUDIES ON THE QUATERNARY AND GEOMORPHOLOGY OF ARGENTINA: PREFACE

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During the last decades there was a worldwide renew interest in the study of the Quaternary and the Geomorphology, associated to the growing concern regarding the environment, the landscape use and the uncertainty about the climate change. Argentina was not an exception and many regions of all the provinces were the subject of geologic research to establish the Quaternary evolution of the landscape, and, in many cases, the significance of the inferred paleoclimatic changes. Meanwhile, some members of the geologic community of Argentina started to congregate and as a result the 1st Argentinian Congress of Quaternary and Geomorphology (CACyG for its Spanish acronym) was held in Santa Rosa (La Pampa), in the year 1999. Since then, five of those meetings were organized and the following one will find us next year, 8-12 April of 2015, in Ushuaia. Some of the contributions presented during the 5th CACyG (held in Río Cuarto during 2012) dealing with Quaternary and Geomorphology topics were selected to send an extended version to the Latin American Journal of Sedimentology and Basin Analysis to be published as an Special Issue. As a result of that initiative we are here presenting this Special Issue “**Case studies on the Quaternary and Geomorphology of Argentina**” with four original papers that received the standard peer-review of the LAJSBA and embrace different areas of central to north Argentina, from the Andean piedmont to the Pampean plain, the Pampean Ranges and up to the tropical Mesopotamia.

In the first article, “Sedimentology and stratigraphy of upper Miocene deposits from the transverse

valleys of La Pampa province, Argentina”, Lorenzo *et al.* deal with unconsolidated and barely exposed deposits closely related to a distinctive geomorphic feature of the western Pampas, the transverse valleys that cross west-east that region of Argentina. These valleys have received variable interpretations but there is no consensus in the geologic community about their origin; the mentioned paper discusses novel evidence that can help to elucidate the evolution of this landscape.

In a second contribution, “Paleoenvironmental analysis and interpretation of upper Quaternary sequences in summit planation surfaces of center-south of sierra de Comechingones, Córdoba, Argentina”, Andreazzini *et al.* present a case study of loess /loessoid sequences situated at high altitude (1750 -1600 m a.s.l.) in central Argentina, loess mantles that are less known and studied than those of the Pampean plain. The authors provide the geomorphic context, the sedimentology and chronology of the deposits, along with their paleoenvironmental and paleoclimatic implications.

Ojeda *et al.*, authors of “Eolian deposits associated with the alluvial plain of the Desaguadero River, Mendoza Province, Argentina”, focus attention on the eolian component of alluvial plains developed under arid-semiarid climates, showing the importance of sand and clay (lunette) dunes in the infilling of these fluvial systems. A detailed characterization of the landscape is there presented together with a proposed evolution of the studied area of the Desaguadero River plain during the Quaternary.

Finally, the last paper, “New microscopic evidences of the autochthony of the ferrallitic pedological

mantle of the Misiones Province, Argentina” by Moretti and Morrás, offers novel information about the origin of the archetypal red soils of Misiones. The autochthonous or allochthonous origin of these materials is there discussed, based on the analysis of thin sections and the previously published information.

We would like to thank to the Editor G. Veiga and to the Asociación Argentina de Sedimentología for kindly give us the opportunity of publishing these contributions that, we hope, will be of interest to the scientific community and will stimulate further research about Quaternary and Geomorphology in Argentina.