A NEW STAGE IN THE UPPER CENOZOIC OF SOUTHERN SOUTH AMERICA

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Former workers developed in South America a chronostratigraphic system not essentially different to that of European stage/age system. However, the authors of this paper believe that accurate biostratigraphic studies have to be done in southern South America for establishing the precise boundary stratotypes of most stage/ages. A new South American Upper Cenozoic continental stage/age is recognized. The stratotype is located in the fossiliferous southeastern Buenos Aires Province marine cliffs between Mar del Plata and Miramar. The outcrops in the area are the best continental representation of Plio-Pleistocene times in South America. It is younger than Chapadmalalan and older than Ensenadan and replaces the "Uquian". We consider that the "Uquian" actually emcopasses Chapadmalalan and Ensenadan times. The Uquía outcrops are here considered inadequate as stratotype especially by the dearth of micromanmals, the relatively poor fossil record and the comparatively inadequate geographic location. The new stage would be correlated with the Gauss Chron and possibly with the lower Matuyama Chron. The lower boundary is tentatively stated. For so doing, a biostratigraphic scheme is proposed. This lower boundary approximately corresponds to the base of the Barranca de los Lobos "Formation" of Kraglievich (1952) and a new (unpublished) unconformity bounded unit (Zárate, 1989). Some taxa that apparently ranges from the base are candidates to define it after a detailed biostratigraphic study.

Additionally, a different timing for the arrival of North American mammals to southern South America is given.