

## MARINE LIMESTONE DEPOSITS IN THE ANDES

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In the Central Andes, near 4.000 m a.s.l., a wide and conspicuous belt of siliciclastic and calcareous rocks can be followed from 33°33' to 34°20' S, along the 69°45' W longitude. Those rocks belong to the Saldeño Formation and are related to the first Atlantic marine transgression that occurred in southern South America during the Late Cretaceous. This transgression is well registered in extra-Andean Patagonia and the Neuquén Basin, but the northern limit was not correctly defined. The Saldeño Formation is the northernmost evidence of the flood, and clearly shed light on the fact that this sector of the Andean Cordillera was not uplifted at least during Late Cretaceous times. Three members constitute the unit. The lower one is a conglomerate member associated with the basin border. Siltstones and mudstones predominate in the middle member meanwhile different kinds of limestones are common in the upper member. Isotopes, petrographic and facies analyses were made in order to distinguish the unit's sedimentary environment. As a result of those studies, a tidal flat environment was proposed. The combination of the flexural response to the incipient development of a fold and thrust belt in the Chilean side and the geometry of the basin constrains its origin to an early stage of a foreland basin. The high sea level of the Late Cretaceous times also favored the marine transgression up to these latitudes.