The Triassic of Succession of Socotra Island (Yemen): Preliminary Results

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The Triassic marine succession exposed on the eastern coast of Socotra Island (Yemen) is of great interest for both the understanding of the evolution of Socotran platform and the calibration of the correlations along the northern coast of the Gondwanaland between Oman, Madagascar and Himalaya. Despite of the great significance, the succession is poorly known and only a short description of the first half of the about 300 m thick succession was provided in the past. Two field excursions were carried out in 2004 and 2005. Two stratigraphic sections were measured at Ras Falanj and Ras Momi. The succession rests on crystalline basement and it is truncated by Jurassic sediments with slight angular unconformity. At the present stage the following points can be summarized:

1) The marine transgression on the basement was very fast. It is documented by bioclastic wackestones with microgasteropods on 5-6 m of fluvial conglomerates and sandstones.

2) The succession is deposited on a rather shallow shelf, with fluctuations from rather protected to high energy environments.

3) Age dating is provided by ammonoids and conodonts. Ammonoids mostly occur in two fossil bearing intervals, about 65 and 80 m above the base. The first occurrence of conodonts is recorded in the lowermost bioclastic wackestone levels. Brachiopods and Bivalves are also common.