Lesser Caucasus Project : Pre-miocene inverted basins along the Sevan-Akera suture zone as markers of the tectonic and geodynamic evolutions of the Lesser Caucasus mountain belt

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One of the main questions to solve in the Middle-East and Caucasus regions is the continuity of structures, and their evolution in time between the Taurides Anatolides belts, those of the Lesser Caucasus and Transcaucasus with those of Iran. The main problem of this broad area is to be covered by an abundant volcanism since Miocene. Many models tried to reconstruct the tectonic history of this area (Sengör and Yilmaz, 1981; Adamia et al., 1981; Dercourt et al., 1986; Ricou, 1994; Nikishin et al., 1998; Yilmaz et al., 2000; Stampfi et al., 2001; Robertson, 2002; Golonka, 2004; Sosson et al., accepted). However it remains to take into account the recent results obtained thanks to MEBE programme and carry out researches on some key areas in order to solve these belt connections and consequently to precise and validate the reconstruction of the paleotectonic maps previously edited by the MEBE programme in 2008 (Barrier and Vrielynck, 2008).
The MEBE programme allowed us to get new data in the three countries of this region (Armenia, Azerbaijan, Georgia). According to our results we propose to focus the future researches in the DARIUS programme on: 1) the Lesser Caucasus Cenozoic foreland basin evolution, and 2) the relationships between the Adjara-Trialet basin and the syn collisional one's on top of the Sevan Akera suture zone. Moreover the Sevan–Akera suture remains a debated subject in term of structure and tectonic evolution. Consequently we suggest 3) a first step of field works in the SE Lessser Caucasus which present advantages to expose in surface, with good conditions of outcropping, the structural relationships between the Sevan-Akera ophiolites and the allochthonous Mesozoic Eurasian active margin