The DARIUS Programme: Investigation of the Middle East – Central Asia fold-belts and Basins

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The DARIUS Programme is a consortium-type programme funded by major oil companies and French research organizations. It aims at investigating the 6000km-long continuous orogenic belt extending from Crimea-Anatolia in the west to Tien-Shan in the east, through the Caucasus, northern Iran and Zagros. Its major objective is understanding the tectonic and stratigraphic evolution of these orogenic domains and their associated basins. These long-lasting orogenic belts (about 300 My) resulted from the collision of Gondwanan blocks with southern Eurasia from the Mesozoic (Cimmerian blocks) until the Cenozoic (India, then Arabia).

To realize this objective the DARIUS Programme funds scientific projects submitted by invited senior geoscientists. For 2009-2010, 36 projects were selected covering most of the DARIUS’s area of interest. These scientific projects involve 40 research institutions and universities from 15 countries, and scientists from about 150 organizations from European, Middle East and Western Central Asia countries. The expertise of the participants of DARIUS includes the various disciplines of tectonics, as well as stratigraphy and sedimentology, mechanical and thermal modelling, kinematics, and geophysics.

The Darius works develop through cooperation programmes in many of the countries of interest. In 2010, one-third of the DARIUS projects target Central Asia objectives because several regions of this vast area are of importance in terms of academic and oil interests. Central Asia represents an unusually complicated collage of different aged tectonic blocks and zones of collision. This complex area is our priority for the next years.

The final objective of DARIUS, a new regional synthesis, will also be realized through a set of palinspastic maps of the Middle-east – Central Asia domain depicting the tectonic evolution since the Late Paleozoic. After the next 3-4 years of original works, we expect that the results of the DARIUS Programme will form a major contribution to new interpretations and debates regarding the evolution of the northern Middle East – Central Asia region.