The Mebe Gis Database: A Tool for Middle East Geology

Bruno Vrielynck[1], Martin Bochud[2], Eric Barrier[1], Marie Francoise Brunet[3], Francoise Bergerat[4], Jean-Francois Brouillet[3], Isabelle Morgant[5], and Daniele Pasquier[3]. (1) Laboratoire de Tectonique, CNRS UMR 7072 - P. & M. Curie University, 4 place Jussieu, case 129, Paris, 75252, France, phone: 00 33 1 44 27 50 42, vrielync@ccr.jussieu.fr, (2) Département des Geosciences / Institut de Géologie, Fribourg University, Ch. du Musée 6, Fribourg, 1700, Switzerland, (3) CNRS UMR 7072 - P. & M. Curie University, Paris, 75252, France, (4) Centre Parisien de Geologie, CNRS FR 32 - P. & M. Curie University, case 129, Paris Cedex 05, 75 252, France, (5) CNRS UMR 5143 - P. & M. Curie University, Paris, 75252, France

The MEBE relational database is built to integrate the geological data collected and synthesized during the Middle East Basins Evolution Programme (MEBE). It aims at providing an interactive interface between the MEBE, observations, analysis and syntheses and the users. The database includes tectonic, stratigraphic, sedimentological, geochronological data for the Middle-East, Caucasian and Black-Sea domains revisited during field works. Most of recorded data are interpreted data, such as cross-sections, biostratigraphical charts and figures, subsidence curves, paleostress maps, stratigraphic charts and logs, sedimentological logs and maps, tectonic logs and maps, stratigraphic charts. Those data recorded as explained pictures and draws in jpeg format, synthesize our observations and analysis. Thus the MEBE database is not restricted to raw data. Those accurate data are yet included in the linked tabular database. The MEBE Database is being developed using Microsoft Access and ESRI ArcGis. Particular filters will be available to help the users in their request. The final product will run under ArcGis 9 and display interactive maps of the Middle East area. A considerable effort was dedicated to bring online manipulation and visualization tools that are available on desktops. The MEBE spatial database combines digital topographic (SRTM tins 30" and 3") and geological maps (1:1.000.000 and/or 1:200.000 scales at least), and various types of original geological information concerning the Mesozoic to Present geological evolution of Middle East (s.l.). The GIS MEBE database is an important tool for geoscientists examining the geological and geodynamical evolutions of the Eurasian, Arabian and African lithosphere in Middle East since Mesozoic.