



The MEBE GIS database: A tool for Middle East geology

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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 by MEBE teams. Thus the MEBE database is not restricted to raw data. 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. Those data recorded as explained pictures and draws in jpeg format, synthesize our observations and analyses are yet included in the linked tabular database.

At time being, 38 detailed stratigraphic columns (some of them describe more than 2 km deposits) are recorded and illustrated with paleontological and sedimentological labelled pictures. 76 tectonic logs rich illustrated and 636 paleostress observation sites finely described are available in the database. 73 tectonic sections, 20 diagrams illustrate with the previous features the tectonic evolution of the Middle East. 48 detailed maps at very large scale illustrate some regional evolution. More, 300 labelled and oriented pictures have been georeferenced in the database. But the recording is not completed. During the next months the database will be enhanced by other data from Lebanon, Iran, Turkey, Oman and Yemen which are near ready to be recorded.

The final product will display interactive maps of the Middle East area. 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 MEBE database is being developed using ESRI ArcGis. A considerable effort was dedicated to bring online manipulation and visualization tools that are available on desktops. Specific MEBE tools will be available to help the users in their request. Selections on land, on age. . . will be assisted. Users will not have to know the ArcGis procedures to use the MEBE database. The GIS MEBE database will be an important tool for geoscientists examining the geological and geodynamical evolutions of the Eurasian, Arabian and African lithosphere in Middle East since Mesozoic.