MEBE GeoIIS is one of the final products of Middle East Basin Evolution programme which has revisited the geology of Middle-East, Caucasian and Black-Sea. Data collected and synthesized by the geologists involved in the project are integrated in the MEBE Database. Different types of data have been encoded and georeferenced: geological maps, local and regional syntheses, raw data, illustrations as drawings and pictures, references as reports, publications and presentations. Like so, the MEBE GeoIIS is a huge geological database in which each data is georeferenced. Finally this product is a GIS (Geographical Information System) in which most information are geological: we name it MEBE GeoIIS. At last an interactive interface has been developed to help users to do own requests on the MEBE observations, analysis and syntheses.

The MEBE GeoIIS gathers two levels of data: - maps which constitute the spatial database and - factual data which compose the tabular database.

The final product displays interactive maps of the Middle East area. The MEBE spatial database combines digital topographic (SRTM 30” and 3”) and 145 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.). At last 15 palaeogeographical maps are available. They show steps of the geodynamic and sedimentary evolution from Norian to Piacenzian of the MEBE area. On these maps the geological data encoded in the database are relocated in their palaeoposition and can be displayed.

The tabular database includes tectonic, stratigraphical, sedimentological, geochronological data for the domains revisited by MEBE teams. Many observations and analyses could have been encoded as tabular data only, but the MEBE GeoIIS is not restricted to raw data. Most of recorded data are interpreted data, such as cross-sections, biostratigraphical charts and plates, subsidence curves, paleostress maps, stratigraphic charts and logs, sedimentological logs and maps, tectonic logs and maps. Those data, recorded as explained pictures and drawings, synthesize our observations and analyses. They are included as links in tabular database tables.

At time being, 12 stratigraphical sections and 88 detailed stratigraphical columns (some of them describe more than 2 km deposits) are recorded and illustrated with palaeontological and sedimentological labelled pictures. 23 tectonic logs rich illustrated and 1313 paleostress sites finely described are available in the database. 80 tectonic sections, 30 diagrams illustrate with the previous features the tectonic evolution of the Middle East. 95 detailed maps at very large scale illustrate some regional evolution. More, 408 labelled and oriented pictures have been georeferenced in the database and illustrate the field observations.

Development of such a GeoIIS where so diverse geological features are compiled requires implicating researchers and technicians experienced in the various geological specialities and aware of GIS technical and scientific constrains. The MEBE GeoIIS has been mainly developed using ESRI ArcGis. A considerable effort was dedicated to bring online manipulation and visualization tools that are available on desktops. More than 50 specific tools compound the developed user interface which helps the users in their request on land, age, data type, ... Users are independent from the ArcGis procedures.
MEBE GeolIS will be an important tool for geoscientists interested in the geological and geodynamical evolutions of Middle East since Mesozoic. Any geologist, researchers as consultant, will get interest in this tool. Researchers may enter their field work observations, laboratory analyses and their syntheses. Consultants may read syntheses and, if they have interest in them, retrieve the original observations and analyses. Such a GeolIS is never finished. It will evolve: area of interest will be extended, new geological data and new types of geological data will be added, new queries and data treatments will be developed on the MEBE GeolIS frame model.