## 1.3. ORGANISING DATABASE

In a GIS compatible database, each file contains the horizontal coordinates and elevation of the observation points, to which one or more attributes that describe the additional information will be added.

The horizontal coordinates can be defined either as geographical coordinates (latitude and longitude) or as STEREO70 rectangular coordinates (Xstereo –northing and Ystereo - easting).

The simplest files are the DTM (digital terrain models) files. There is an example of such a file:

| ID | latitude (degrees) | longitude (degrees) | Xstereo (meters) | Ystereo (meters) | Height (meters) |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

where Xstereo and Ystereo are the Stereo 1970 horizontal coordinates, and the height defined in the national 1978 Black Sea height system.

The gravity data files may contain also additional information such as:

| ID | latitude (degrees) | longitude (degrees) | Xstereo (meters) | Ystereo (meters) | Height (meters) | dg (mgals) (2.20 g/ccm) | dg (mgals) (2.67 g/ccm) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |

where dg is the Bouguer anomaly computed for different reference densities.

The geomagnetic data files contain an attribute referring to the geomagnetic epoch too:

| ID | latitude (degrees) | longitude (degrees) | Xstereo (meters) | Ystereo (meters) | Height (meters) | Geomag epoch | F (nT) | DF (nT) |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |

where F is the geomagnetic total field and DF the geomagnetic anomaly.