

Table S1: Database containing 1855 records obtained by selecting analyzed basalt rocks within the area contained within latitude [25°N-54°N] and longitude [12°W to 45°E] from GEOROC database [15].

Table S2: Dataset G90 containing all records from Table S1 that include the following set of analyzed elements: Si, Ti, Al, Ca, Mg, Mn, K, Na and P.

Table S3: Dataset G60 containing all records from Table S2 that include additionally the following set of analyzed elements: V, Ni, Rb, Sr, Y, Zr and Nb.

Table S4: Dataset G30 containing all records from Table S3 that include additionally analyses on the Cu and Zn contents.

The python code for this study is attached: [\[link to Python code file\]](#).