

Table S1. CA-ID-TIMS zircon U-Th-Pb data for SI88 samples collected from the upper part of the Taghdout Volcanic Field (TVF) volcanic pile in the Siroua Window, Anti-Atlas. (GPS WGS84: latitude: N 30.7243025; longitude: W -7.3625674).

Table S2. Database of whole-rock major and trace element geochemical data for the Ediacaran effusive and pyroclastic units of the Taghdout Volcanic Field (TVF) in the Siroua Window, Anti-Atlas. The geochemical database is from this work (samples with Asterix), unpublished theses of two co-authors (Ben Chra, 1997 and Youbi, 1998) and literature data are from two unpublished theses of Diallo (1989) and El Khanchaoui (1990). Loss-on-ignition (L.O.I.) determined by weight loss after ignition of the sample at 1000 °C.

Table S3. Selected representative electron microprobe analyses of clinopyroxene from basaltic andesite of the Adrar Tougmast Formation (sample YS 60) and basalt of the Tizi-n'Bachkoun Formation (sample YS 22).

Table S4. Database of U-Pb geochronological data from the Ouarzazate Group in the Central Anti-Atlas, Morocco. Radiometric dates are tabulated as reported in the original literature. No corrections have been made with regard to decay constant, standard calibration, and trace calibration. After the compilation of Youbi et al., 2020 completed by this work.