3.8 Ga zircons sampled by Neogene ignimbrite eruptions in Central Anatolia

Serhat Köksal1, Fatma Toksoy-Köksal2, M. Cemal Göncüoglu2, Andreas Möller3, Axel Gerdes4, and Dirk Frei5

1 Middle East Technical University, Central Laboratory, R&D Research and Training Center, Radiogenic Isotope Laboratory, 06800 Ankara, Turkey
2 Middle East Technical University, Department of Geological Engineering, 06800 Ankara, Turkey
3 University of Kansas, Department of Geology, 1475 Jayhawk Boulevard, 120 Lindley Hall, Lawrence, Kansas 66045-7613, USA
4 Johann Wolfgang Goethe University, Institut für Geowissenschaften, Altenhöferallee 1, D-60438 Frankfurt Am Main, Germany
5 Stellenbosch University, Department of Earth Sciences, Private Bag X1, Matieland, 7602, South Africa

To conclude, there is no doubt that the igneous rocks within the CACC contain inherited zircons with ages dating back to the Early Archean, but we consider the statement by Paquette and Le Penne, that there are “lower Proterozoic and/or Archean terranes” in this region an overinterpretation. The large range of inherited U-Pb ages in the widespread Cretaceous granites of the CACC suggests zircons are more likely to be derived from various Gondwana sources and later reworked by sedimentary (similar to examples from other orogens in the world, e.g., Becker et al., 2005) and/or igneous events.

REFERENCES CITED


