

## **U-Pb PEROVSKITE AGES FOR BRAZILIAN KAMAFUGITES**

1SGARBI,P.B.A.;2HEAMAN,L.M.;3GASPAR,J.C.1-UFMG,Brazil;2-University of Alberta, Canada; 3-UnB,Brazil

The U-Pb perovskite ages were obtained for Mata da Corda and Santo Antônio da Barra kamafugites, part of the Alto do Paranaíba Magmatic Province, one of several Cretaceous alkaline igneous provinces that are located at the periphery of the Paraná sedimentary basin in Brazil and Paraguay. The U-Pb perovskite ages obtained in this study for Mata da Corda rocks are in the range of 68-81 Ma. These results are in general agreement with K-Ar whole rock ages reported for Mata da Corda kamafugite rocks of about 80 Ma, but are somewhat younger than ages obtained by the K-Ar phlogopite method on similar lavas and intrusions of the Alto do Paranaíba Province and U-Pb mantle zircon ages obtained for nearby kimberlites. The ages obtained in this study are in agreement with the 80 Ma peak of magmatic activity proposed for the Mata da Corda region. The U-Pb perovskite ages obtained in this study for Santo Antônio da Barra kamafugites (88.3-89.6 Ma) are slightly older than for the Mata da Corda kamafugites mentioned above. Previous attempts to establish the age of Santo Antônio da Barra kamafugites indicate a range of ages between 72 and 90 Ma. All previous ages reported for these rocks were obtained by whole rock methods. Based on our results, one magmatism may be as much as 10 m.y. older than the other, indicating an eastward decrease in the age of ultramafic alkaline magmatism. This progressive decrease in age of magmatism is consistent with proposed hot spot models.