

Figure S1: Time-temperature history of sample 14M37 modelled with HeFTy. All modelled ZHe and AHe grains yield a goodness of fit (GOF) of >0.90, except of zircon grain #2 which yields a GOF of 0.62. 10000 attempted tT-paths resulted in 60 “good” and 175 “acceptable” tT-paths. The modelled ZHe ages are 15.2 Ma and imply a effective closure temperature of ~155 °C.



Figure S2: Time-temperature history of sample 15M59 modelled with HeFTy. All modelled AHe grains yield a GOF of >0.56. 25000 attempted tT-paths resulted in 8 “good” and 106 “acceptable” tT-paths. Two AHe grains with high eU values yield modelled ages of 12.1 and 14.3 Ma, whereas the low eU apatite yields a modelled age of 3.5 Ma, resulting from its lower closure temperature.