**Appendix A. Supplementary Data**

The following are the supplementary data of this article:

Supplementary Data 1: additional figures

Supplementary Data 2: 40Ar/39Ar analytical data

Supplementary Data 3: quality control data of geochemical analysis

Supplementary Data 4: major and trace element data CHRISP

**Appendix B. Sample Data**

Table S1: 40Ar/39Ar ages

Table S2: XRF major element data of whole rocks

Table S3: EMP major element data of glasses

Table S4: ICPMS trace element data of whole rocks

Table S5: LA-ICPMS trace element data of glasses

Table S6: SIMS volatile contents of glasses

Table S7: Radiogenic Sr-Nd-Pb-Hf isotope data of whole rocks and glasses