



$^{40}\text{Ar}/^{39}\text{Ar}$ age determinations of the Thorsmörk ignimbrite, Iceland and geochemical correlation with North Atlantic Z2 ash

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The peralkaline Thorsmörk ignimbrite, the largest Pleistocene rhyolite eruption on Iceland, has been proposed as the source of widespread Ash Zone 2 ash, found in North Atlantic sediments and the Greenland ice cores and deposited ~ 420 yr after the onset of Greenland interstadial 15 at $\sim 56,000$ BP (marine isotopic stage 3). Here we present ongoing single crystal (anorthoclase) and glass (fiamme) $^{40}\text{Ar}/^{39}\text{Ar}$ age determinations for the Thorsmörk ignimbrite. In combination with our new geochemical data for the Z2 ash and the Thorsmörk ignimbrite we discuss the proposed correlation of these proximal and distal volcanic deposits. We then examine the possibility of using the $^{40}\text{Ar}/^{39}\text{Ar}$ age for the Thorsmörk ignimbrite as a cross-calibration check on the Greenland ice core chronology, derived by counting annually deposited ice layers.