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40Ar/39Ar age calibration against counted annual layers

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The $^{40}\text{Ar}/^{39}\text{Ar}$ method, based on the decay of the naturally occurring radioactive isotope ^{40}K , is capable of producing ages with precision better than $\pm 0.1\%$. However, accuracy is limited to no better than 1% mainly due to the relatively large uncertainty in the ^{40}K decay constants. One approach worth exploring for an improved absolute age basis for the $^{40}\text{Ar}/^{39}\text{Ar}$ system is through cross-calibration with counted annual layers (e.g. tree rings, varves and ice cores). North Atlantic Ash Zone (NAAZ) II is found within the dated part of the annual Greenland ice core record. NAAZ II has been correlated to the Icelandic peralkaline rhyolitic Thorsmörk ignimbrite. We will present preliminary $^{40}\text{Ar}/^{39}\text{Ar}$ results on the age of this eruption.