

Table 1: Sericitization value inducing a decrease of 1% and 5% for K/Ar ages (AR parameter) for different terrestrial volcanism events, assuming an age difference between alteration and volcanism = 10% and An₇₀ for the chemistry of basaltic plagioclases. All these calculated values are hardly recognized during hand-picking, as well as in thin section study. Related stoichiometric index γ is also reported (see appendix for details).

Trap Volcanism	Age* (Ma)	Range of Ca/K of fresh plagioclase			Stoichio - metric index γ	%Sericitization required for 1% AR	%Sericitization required for 5% AR	References
		Ca/K min	Ca/K max	Mean value				
Kalkarindji	505	25	50	45	0.016	0.18%	1.55%	<i>Evins et al., 2009</i>
Viluy	370	10	50	35	0.02	0.25%	1.95%	<i>Courtillot et al., 2010</i>
Siberia	250	20	25	22	0.032	0.32%	3.1%	<i>Hofmann, 1997</i>
CAMP	199	20	70	45	0.016	0.18%	1.55%	<i>Marzoli et al., 1999, 2011 ; Hames et al., 2000 ; Verati et al., 2005, 2007</i>
Karoo	180	30	60	45				<i>LeGall et al., 2002 Jourdan et al., 2005, 2008</i>
Deccan	65	10	30	20	0.036	0.35%	3.4%	<i>Courtillot et al., 2000 Hofmann et al., 2000</i>
Rajahmundry	65	100	300	200	0.0036	0.035%	0.35%	<i>Knight et al., 2003</i>
Ethiopian	30	40	165	100	0.007	0.08%	0.7%	<i>Hofmann, 1997</i>

**These ages are based on the decay constant of Steiger and Jager, 1977 and are an approximate average of the age of the peak, not accounting for the duration of the magmatism. Note that a more recent calibration of the K decay constant exists (Renne et al., 2011) shifting these ages by about +1%, but that this does not affect the AR values reported in this table.*