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**Potassium systematics in tektites**

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Potassium elemental and isotope systematics are presented for central European tektites (moldavites) and sediments from the Ries crater and its vicinity, SE Germany. Possible parental materials broadly ranging from clay-rich silts to residual karst soils to limestones and quartz sand show  $\delta^{41}\text{K}$  between  $-0.72$  and  $-0.29\text{‰}$ ; moldavites span a  $\delta^{41}\text{K}$  range from  $-0.78$  to  $-0.13\text{‰}$ , significantly expanding the existing data [1]. The greater K isotope range in moldavites is paralleled by overall enrichments in K contents compared with all sedimentary materials tested, indicating no K loss from moldavite melt as a consequence of high temperature, consistent with earlier observations [2]. Still, slightly different mean  $\delta^{41}\text{K}$  values for moldavites from three distinct strewn sub-fields in Czech Republic indicate geographically-related K isotope diversity, with the heaviest values found for the Cheb basin sub-field closest to the impact site and on average lighter values measured for more distal Moravian specimens. Prolonged heating during flight could thus impart measurable effects to K isotopes.

[1] Jiang, Y. et al. (2019) GCA 259, 170–187. [2]

+ Humayun, M. & Koeberl, C. (1995) MAPS 39, 1509–  
+ 1516.

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