

## Multiple heating events deduced from distribution of O and Mg isotopes in an Efremovka CAI

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Distribution of O and Mg isotopes in an Efremovka CAI (type-B1) was studied using SIMS. Anorthite as well as spinel and fassaite showed large O isotopic anomalies with  $\delta^{17}\text{O}$  and  $\delta^{18}\text{O}$  values around -45 permil, while melilite showed  $\delta^{18}\text{O}$  values from -10 to +10 permil. The initial  $\text{Al}^{26}/\text{Al}^{27}$  values in anorthite calculated from the observed excess  $\text{Mg}^{26}$  varied from a canonical value for CAIs (5E-5) to its 1/5 depending on the analyzed position. Based on diffusion data for O and Mg, it is shown that there were two different events, one reset the O isotopic signature in melilite and the other disturbed the Mg isotopic signature in anorthite.