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Selenium and Tellurium in Chondrites

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Highly accurate and precise Selenium and Tellurium concentrations in different classes of chondrites obtained by isotope dilution analyses are presented and discussed. We observed unfractionated CI chondritic Se/Te in almost all carbonaceous chondrite groups. This implies that Se and Te, that both have very similar 50% condensation temperatures about 700 K [1], were relative to CI depleted to the same extent and by the same process. In ordinary, Enstatite, and Rumuruti chondrites Te is depleted relative to Se and elevated Se/Te relative to carbonaceous chondrites may display different environmental/source region conditions and a different or an additional depletion/fractionation process. Additional sulfur abundances from the literature show unfractionated Se-Te-S in carbonaceous chondrites. In ordinary, Enstatite and Rumuruti chondrites, Se follows the depletion trend of S while Te falls below. This may reflect that Te underwent another and or additional fractionation process than Se and S.

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[1] Lodders (2003) *Astrophys. J.* **591**, 1220-1247.

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