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## Component specific Hf-W dating of CV chondrites

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The extinct <sup>182</sup>Hf-<sup>182</sup>W isotope system provides firm constraints on the chronology of the accretion and early evolution of meteoritic parent bodies. Particularly CV3 carbonaceous chondrites never underwent high-grade thermal metamorphism. Hence, they did not differentiate and still consist of their pristine components: Chondrules, matrix, CAIs, and opaque phases.

Most previous Hf-W studies on chondrites focused on separates prepared by magnetic separation only. In our study we prepared 15 Allende, 10 Vigarano and 3 Bali separates. These include pure handpicked chondrule and matrix splits in addition to magnetic separates and bulk aliquots. Tungsten and hafnium concentrations as well as their W isotope compositions were measured to obtain age information. Strikingly, chondrules and nonmagnetic fractions exhibit higher Hf/W ratios whereas matrix and magnetic samples exhibit lower Hf/W ratios. Notably, chondrule, matrix and whole rock samples all plot on the same isochron. The ages of the resulting isochrons suggest formation of chondrules and matrix within 2 Ma after CAI formation.

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