ASTROMAT – NASA's Astromaterials Data System

Lehnert K.A.*, Hezel D.C., Elangovan P., Ji P., Mays J., and Koblitz J.

*Lamont-Doherty Earth Observatory, Columbia University, Palisades, New York, USA lehnert@ldeo.columbia.edu.

Astromat is NASA's primary archive for laboratory analyses of astromaterials sample. It provides services for the preservation and open access of data from astromaterials, including meteorites. Researchers can submit their data to the Astromat Data Archive, where they can obtain a DOI for their data as required by an increasing number of scientific journals. MetBase was recently merged into Astromat's synthesis database, which now provides the community the largest compilation of cosmochemical analytical data, with over 2.3 million analytical data points. This compilation can be explored via an interactive web application that allows users to extract customized subsets of the data, e.g. meteorite types, mineral species, or chemical and isotopic variables. We believe MetBase now being a part of Astromat is a match made in heaven and hope Astromat will become a reliable and trusted service within the community.

Hezel DC, Lehnert KA, Elangovan P, Ji P, Mays J, Koblitz J (2025) The MetBase database has been merged into Astromat. *MAPS* 60:143-148.