

Data-driven mineralogy research

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Session Description:

Observational, experimental, and numerical investigations have significantly advanced our understanding of mineralogy and related disciplines. Meanwhile, a large amount of mineralogical data (e.g., physics, chemistry, and images) has been collected and accumulated over the years. With the development of new data science theories and techniques, novel information hidden in such mineralogical data can be revealed. This can participate in enhancing our understanding of the mechanisms driving the Earth system and its environment. This session invites researchers with a broad range of expertise interested in investigating mineralogy and its application through compositional data analysis, machine learning, graphical analysis, database construction, and cyberinfrastructure development.