

Petrologic type from plagioclase size distribution

KAWASAKI, Takehiro¹ ; KIMURA, Makoto^{1*} ; NOGUCHI, Takaaki¹

¹Faculty of Science, Ibaraki University

Ordinary chondrites are classified into petrologic types 3-6, reflecting thermal metamorphism. One of the criteria to classify types 5 and 6 is the size distribution of plagioclase. The size, 50 microns, has been commonly used to classify types 5 and 6. However, no any statistic study for plagioclase size has been conducted. Here we measured the size distribution, and discuss the classification of types 5 and 6. We studied 26 thin sections of types 5 and 6 from the H, L, and LL chondrite groups. Our study indicates that plagioclase of 50 microns are commonly encountered both in types 5 and 6. However, plagioclase of 80-100 microns is more abundant in type 6 than type 5. We also noticed that the size distribution of plagioclase in H6 is similar to that in type H5. The different criteria to classify H from L and LL are necessary.

Keywords: ordinary chondrite, petrologic type, plagioclase, thermal metamorphism