ABSTRACT

The studies of crater distribution on the surface of moon provide us basic information about planetary surface like the age of the surface. In general the surface age can be determined with the help of rock samples which provide the age by the radiometric method (e.g., Basaltic Volcanism Study Project, 1981; Soderblom, 1970, Schultz et al., 1977). This can be done without the rock sample, by using the crater size frequency distribution (CSFD) over the surface. The CSFD which is a function between the crater diameter and the crater number (cumulative or incremental) is described by the relation N \approx D^{\alpha(D)}; where N is the crater number density(1/km²), D is the crater diameter and $\alpha(D)$ is a function depending on D. It is found that the lunar impact crater size distribution is almost constant over the range of diameter 10km \leq D \leq 20km with the formation age between 4×10^9 years and 4.4×10^9 years. The above relationship allows the comparison of crater frequency in different diameter range.