



New model for age determination of lunar regions

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We have revised the lunar impact flux curve that takes into account projectiles in the size range between 1 cm and few km starting from the new model of the Near Earth Objects population. Then using a recent scaling law we have obtained the distribution of the impact craters generated by the flux of meteoroids considered. By assuming constant the flux of meteoroids since 3.9 Gyr, we can determine the age of any lunar region.

In order to calibrate our model we have compared our predicted crater counting with the counting provided by Neukum on some Apollo landing sites, which age has been determined by using radiometric analysis of the samples.

We will show the results of the comparison.

Furthermore we have counted all the craters on few Apollo landing sites and assuming that our model generates the distribution of primary craters we can estimate the number of secondary craters.