

MOON AND SUN SHADOWING EFFECT ON THE MACRO APPARATUS

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We present the results of the analysis of the entire sample of $5 \cdot 10^7$ muons collected by the MACRO detector from 1989 to 19 December 2000. We have observed the moon shadowing effect with a statistical significance of about 5.5σ . Using the same sample of data we have detected a similar effect due to the Sun. A brief comparison of the shadowing effect due to these two sources will be discussed. Based on this analysis, we have performed an all-sky survey searching for pointlike sources producing excesses of muons above the expected background. We establish upper limits of selected interesting sources.