

INVESTIGATION OF EXTENSIVE AIR SHOWER DEVELOPMENT USING LARGE SLANT DEPTH OF ATMOSPHERE

S. H. Sokhoyan, A. A. Chilingarian, G. V. Gharagyozyan, S. S. Ghazaryan, G. G. Hovsepyan and L. G. Melkumyan

Cosmic Ray Division, Yerevan Physics Institute, Alikhanyan Brothers' St. 2, 375036 Yerevan, Armenia.

`serg@crd1x5.yerphi.am`

By using different numerical methods of cascade curve analysis, determining the slant depths interval where exponential attenuation of cascade is apparent and applying methods of isolation of the different groups of primaries we approach the problem of physical inference from cascade curves, obtained from MAKET ANI data. Comparisons with KASCADE experiment data are performed. Energy dependence of the attenuation length at large slant depth of atmosphere ($700 - 1250g/cm^2$) is obtained and discussed.