

MEASUREMENT OF THE MUON SPECTRA IN THE ATMOSPHERE

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We report on new measurements of the μ^+ and μ^- spectra at several atmospheric depths in the momentum range 0.3-20 GeV/c. The data were collected by the balloon-borne experiment CAPRICE98 during the ascent of the payload on the 28 May 1998 from Fort Sumner, New Mexico, USA. The experiment used the NMSU-WIZARD/CAPRICE98 balloon-borne magnet spectrometer equipped with a gas Ring Imaging Cherenkov detector and a silicon-tungsten calorimeter. This is the first time that the μ^+ component has been measured over a wide momentum range