

SIMULATION OF THE PROTON SPECTRA MEASURED BY AMS

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The high flux proton component observed by AMS below the geomagnetic cut-off can be well accounted for by assuming these particles to be secondaries originating from the interaction of Cosmic Ray (CR) protons and heliums with the atmosphere. It consists of a simulation of the incident flux, production of secondaries by collisions between CRs and atmospheric nuclei, and propagation of all particles in the earth environment. This approach appeared very successful [?]. New simulation results which include the CR He flux contribution, are presented and the main features of the secondary component are discussed.

References

- [1] L. Derome et al., Phys. Lett. B 489(2000)1