



Simple Hadronic Cascade Simulations

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We obtain results for the average number of muons at sea level in a proton-initiated vertical atmospheric cascade using a simple model of hadronic interactions based on the Hillas splitting algorithm. We study the muon yield at sea level as a function of the proton primary energy, varying the parameters of the interaction model in order to see the behavior of our results. We find that our results are in agreement with experimental data and with those of more sophisticated simulation models for some particular values of the model parameters.

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