

# High-energy atmospheric muons at sea level

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High-energy atmospheric muons are of special relevance to very large-volume neutrino telescopes as they constitute by far their major event yield. Understanding their characteristics at sea level can help to properly interpret the signal observed deep underwater. This work aims to investigate the flux as well as the charge ratio of atmospheric muons above 100 GeV at sea level. The calculations are carried out using the simulation program CORSIKA in combination with different up-to-date hadronic interaction models. The obtained results are compared with experimental data and with well-known analytical parametric models.

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