

The Effect of Weather Conditions on Muon Flux

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The purpose of our research was to determine whether various weather conditions, such as temperature, barometric pressure, and humidity, have an effect on muon flux. To perform this experiment we collected data using a Cosmic Ray Muon Detector and recorded muon flux four times a day for four weeks. We believed that these factors would not have an effect on the flux and our data collection supported this hypothesis. Our data shows no correlation between the variables of weather and muon flux; there were no variations in the data other than the random fluctuations in flux that fell well within the margin of error expected as a result of random chance. Further research will need to be completed to understand these inconsistent flux readings.