Mendon Muon Research 03-04: So many muons, so little time
Muon Rate & Pressure: Atmosphere as Absorber

Mendon: 9/18/03 - 2/4/04

Muon rate (Hz)

Barometric Pressure (kilopascals)
Muon Rate vs. Pressure

y = -0.0772x + 11.907

R² = 0.579

12/19/03-02/04/04
Pressure-Corrected Muon Rate

9/18/03-2/04/04 Mendon Muon Run

Time (hours since 9/18/03 17:00 EDT)

Pressure-corrected muon rate (Hz)
Halloween Solar Flare:
Forbush Decrease

Mendon and Adelaide Forbush data

![Graph showing Mendon and Adelaide Forbush data with time of day (seconds) on the x-axis and muon rate (Hz) on the y-axis. The graph illustrates a Forbush decrease in the muon rate following a solar flare.]
Solar & Geomagnetic Activity: Muon Rate and K Index

9/18/03-2/4/04

9/18/03-2/4/04
Average Muon rate vs K index

\[ y = -0.0466x + 4.1567 \]

\[ R^2 = 0.7798 \]
Muon Rate vs Solar Wind Speed

$y = -0.0001x + 4.1399$

$R^2 = 0.7952$
Muon Rate vs Time of Day

Mendon: 9/18/03 - 2/4/04

Average Muon Rate vs Time of Day (EST)
October 2003 Daily Cycle
Mendon & Adelaide

Adelaide - October 1-28, 2003

Average Adelaide Muon Rate (Hz)

Average Mendon muon rate (Hz)

Hour of Day (local)