

International Muon Week 2025 - Muon Flux Study



北京汇文中学
朝阳垂杨柳分校



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1. Introduction

- Campus Cosmic-ray Observation Collaboration (CCOC) in China helps students in high schools build detectors and analyze cosmic-ray data.
- Our school joined CCOC in July 2022.
- The open data from CCOC is used by us.

2. Equipment

- A detector array is built on the roof of Dongzhimen Middle School.
- 9 scintillator detectors, spaced 10 meters apart as a 3×3 matrix and each detector has a sensitive area of 0.5 m².



latitude 39.933°N, longitude 116.417°E

3. Data Analysis

- Dataset: between 3rd – 8th March 2025.
- Flux = $\frac{N}{S}$
 - N = number of events in 1 min (60 seconds)
 - S = 9 × 0.5 m² = 4.5 m²
- The atmospheric pressures (hPa) are recorded.

4. Result

