



Contribution ID: 1378

Type: Poster

Transfer the neutron monitor from Daejeon and deploy at Mt. Gamak in Geochang

The cosmic ray neutron monitor detects secondary cosmic ray neutrons with energies ranging from $\sim 500\text{MeV}$ to several GeV. This energy range is associated with solar activity. Therefore, it is useful for studying the Sun and the space environment. We operate two neutron monitors: one in Daejeon on the Korean Peninsula and the other at Jang-Bogo research station in Antarctica. Recently, we relocated the Daejeon neutron monitor to Mt. Gamak in Geochang in collaboration with the Korea Astronomy and Space Science Institute (KASI). The neutron monitor site at Mt. Gamak is located approximately 100km southeast of Daejeon (35.59°N , 127.92°E) at an altitude of 925m. Analysis of the Mt. Gamak neutron monitor data from September to December 2024 showed that the average pressure was 915 hPa, the barometric coefficient was $-0.7101\%/\text{hPa}$, and the average count rate is approximately 1.79 times higher than at the Daejeon site. In this presentation, we aim to introduce the relocated neutron monitor at Mt. Gamak.

Collaboration(s)

Author: JUNG, Jongil (Korea Astronomy and Space Science Institute)

Co-authors: Dr KWAK, Young-Sil (Korea Astronomy and Space Science Institute); Dr SOHN, Jongdae (Korea Astronomy and Space Science Institute); OH, Suyeon (Chonnam National University); Prof. YI, Yu (Chungnam National University); Prof. KIM, Youngkyun (Hanyang University); Dr CHOI, Seonghwan (Korea Astronomy and Space Science Institute); EVENSON, Paul (Bartol Research Institute, University of Delaware Department of Physics and Astronomy)

Presenter: JUNG, Jongil (Korea Astronomy and Space Science Institute)

Session Classification: PO-1

Track Classification: Solar & Heliospheric Physics