



Contribution ID: 24

Type: not specified

Site environment characterization for Southern Wide-field Gamma-ray Observatory

Friday, 15 July 2022 12:00 (30 minutes)

The Southern Wide-field Gamma-ray Observatory (SWGGO) is a proposed gamma-ray observatory based on the ground-level particle detection technique, with close to 100% duty cycle and an order of steradian field of view. SWGGO will be located in South America at a latitude between 10 and 30 degrees south and an altitude of 4.4 km or higher, covering an energy range from hundreds of GeV to PeV. The SWGGO Site Working Group is gathering, among other information, relevant environmental data to characterize the proposed sites using the AEROSITE instrument. Also atmospheric transparency is monitored to allow for potential enhancement of SWGGO with a Cherenkov telescope. This contribution describes our activities in the study of the atmospheric conditions of selected candidate sites using instruments located onsite or installed at nearby stations.

Primary authors: BAKALOVÁ, Aneta (Institute of Physics of the Czech Academy of Sciences); MORAES, Arthur (CBPF); MANDAT, Dusan (FZU –Institute of Physics of the Czech Academy of Sciences); JÍLEK, Vlastimil (Palacky University); STANÍK, Daniel (Palacky University); VÍCHA, Jakub (Institute of Physics of Czech Academy of Sciences); CHYTKA, Ladislav (Institute of Physics of the Czech Academy of Sciences); SANTANDER, Marcos (UW-Madison); NOVOTNÝ, Vladimír (Institute of Physics of the Czech Academy of Sciences)

Presenter: JÍLEK, Vlastimil (Palacky University)

Session Classification: analysis techniques for atmospheric characterization