

[P-117/ID-2-2] Classifying Astronomical Seeing Patterns of KSA SEM Observatory

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We report patterns of Astronomical Seeing in KSA SEM Observatory. Though the data of seeing measured at local observatory is essential in identifying the seeing condition of the observatory, systematic measurement of seeing has not been made in Korea yet.. For this reason, we adopted a seeing-monitoring system, capable of measuring standardized seeing throughout an entire nighttime continually. We measured and accumulated the seeing data of KSA SEMO for 5 months and classified the data into 5 categories. We expect to use the data in many ways such as predicting astronomical seeing in Korea, after verifying relations between the seeing and various weather conditions.

[P-118/ID-2-3] Study of high-energy cosmic rays by measuring coincidence events with plastic scintillation detector arrays at Kyeonggibuk Science High School and Hansung Science High School.

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COREA (COsmic ray Research and Education Array) collaboration installed plastic scintillation detector arrays at Kyeonggibuk Science High School and Hansung Science High School to measure high-energy cosmic ray air showers. Consisting of four large scintillation plates each, three stations were set up on top of the school buildings with 1 m spacing. All recorded events have been checked for the coincidence by comparing the time difference between any two single events from each station. Detected high-energy air showers using coincidence detection technique have been evaluated to determine the coincidence signals from each site. The simulation of air shower events by AIRES (AIR-shower Extended Simulations) program has been performed to make a comparison with collected shower events.