TAIGA-IACT control and monitoring software status

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The TAIGA-IACTs are part of the hybrid TAIGA experimental complex, located near lake Baikal in Tunka valley, Siberia, Russia. The telescopes have segmented mirrors in Davis-Cotton design with the reflector diameter of 4.3 m and an imaging camera with PMTs in its focus to detect nanosecond flashes of Cherenkov light from EAS. The TAIGA-IACTs are operating in wobble mode. Their operation requires high pointing and tracking accuracy, especially important for long exposure times. The telescope positioning system consists of steppers motors, 17-bit angular encoders and a CCD camera for accurate monitoring of the telescope pointing by stars in its field of view and related calibration procedures. The telescope is controlled by using the custom software based on the EPICS (Experimental Physics and Industrial Control System) package. This report presents an overview of the TAIGA-IACT control and monitoring software, pointing accuracy and the relevant calibration procedures.

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Collaboration

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