

The Pointing Model of 4.5-m Small Radio Telescope at NARIT.

The efficiency of a radio telescope decisively depends on its pointing accuracy. Telescope's pointing model (PM) contains repeatable errors due to the antenna control system's imperfections, which can be corrected during observation. The 4.5m Small Radio Telescope (SRT) has been developed for education and experiments, at Astropark, National Astronomical Research Institute of Thailand (NARIT), Chiang mai ($18^{\circ}\text{N } 51' 5''$ and $98^{\circ}\text{E } 57' 27''$). We have implemented a 10-cm optical camera system installed on the SRT's antenna structure to measure the offset of individual pointings covering all sky direction, which then are modelled and the telescope's PM is obtained.

Here, we report preliminary results of SRT's PM, where we obtain for each epoch -551.116 and -3811.549 arcsec for Azimuth encoder offset, and 1217.105 and -3343.866 arcsec for Elevation encoder offset. More accurate results can be obtained with better sky coverage observation.

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