The first year of VERA geodetic experiments

Takaaki Jike[1]; Kobayashi Hideyuki VERA Group[2]

[1] National Astronomy Observatory; [2] -

VERA aims the revelation of the structure and dynamics of our Galaxy by measuring 3-D positions and motions of radio sources with 10 micro arc-seconds level accuracy. Main objective of VERA geodetic VLBI experiment is to monitor the motion and stability of VERA network for precise astrometry. We started the semi-regular geodetic VLBI experiments one years ago. The 1-Gbit recording system, the Mitaka FX Correlator and CALC3/MSOLV software package are used in the experiment. Form about 20 experiments, we obtained the long-term avaraged coordinates of VERA antenna reference points with 2-3mm accuracy. We also monitored the positions of VERA stations by using GPS and compared the two results.