

Recent Progress of Japanese VLBI Network

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Japanese VLBI Network (JVN) is a VLBI network operated by six universities and the National Astronomical Observatory of Japan. The network consists of more than 10 radio telescopes with diameter of 11 m to 64 m those are owned or operated by universities and research institutes. The baseline length of JVN ranges 50 - 2500 km, and the observation frequencies are 6.7, 8 and 22 GHz. Since 2017, we have focused on non-imaging (fringe detection) observation with a few large (>30m) telescopes at 6 and 8 GHz as a new observation mode of JVN. The advantage of this mode is high detection sensitivity at a few mJy, and large amount of observation time up to 1000 hours per year. Utilizing these features, high-z AGN and gamma-ray emitting AGN surveys have been carried out. Since 2018, the Japanese VLBI Group including JVN, together with Chinese and Korean collaborators, have established the East Asian VLBI Network. The EAVN has been used for common-use observation which is opened to the all astronomical community of the world.