

KVN Station Report (2018 March)

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EVN Sessions

KVN participated in all 1.3cm experiments of the session I and OoS in 2017. During the session I 2018, KVN couldn't participate in the N18K1 experiment due to other observation, but other observations will be conducted.

System Updates and Technical Developments

1) K-band Rx upgrade

One of the KVN K-band receiver at Yonsei (Ky) was upgraded during the summer maintenance season in 2017 (mid-June ~ mid-August). The original K-band receiver has relatively narrow RF range with 2 GHz width (21.25 ~ 23.25 GHz). The new K-band receiver covers the RF range from 18 GHz to 26.5 GHz. Several components such as band pass filters, an amplifier and LO were replaced. Other two K-band receivers will be upgraded during the summer maintenance in 2018 as well.

2) OCTAD: New Backend System (under testing)

The new digital backend system, OCTAD, was introduced to support wideband observations. The OCTAD is capable of sampling an RF signal at up to 8192 MHz. The initial test has been made at the laboratory and it is installed at each KVN site. Thus KVN will be able to support 2Gbps EVN observation using FILA10G, OCTAD, and Mark6 in near future.

Recorder Firmware

- Current MK5B Software Version:
Squeeze, SDK 9.2 & jive5ab-2.6.0, mark5_2.2.0 & mk5bio_2.0.1