

Torun (Tr) Station Report

(Nov 10th, 2020)

Recent EVN Sessions

Two EVN sessions have been carried out since the previous report (Apr 30th, 2020)).

May/Jun 2020 session.

Tr did not participate due to antenna renovation.

Oct/Nov 2020 session.

Tr was scheduled in 29 regular disk projects. Observations carried out at C, C-methanol and K bands were successful. Unfortunately L band part failed due to receiver cooling system malfunction.

Current Developments

After almost 25 years of uninterrupted observation work, the radio telescope was undergone a major renovation. Numerous corrosion centres have been removed from the antenna structure, and the entire instrument was repainted with particular attention paid to the appropriate protection of reflective surfaces of the antenna. The defects in the concrete foundations of the radio telescope were also supplemented and renewed. Additionally, during renovation works, the signal cables between the antenna and the control room were replaced. The new cables ensure the transfer of intermediate frequencies in the 0 to 2 GHz range, with much lower attenuation above 1 GHz compared to the previously used connections. Parallel to this work, thorough maintenance of the receiving systems was carried out, where some cryogenic preamplifiers and filters were replaced. The break in the operation of the radio telescope was also used to modernize the computer and internet infrastructure.

Changes/Upgrades Made to Software

Current software versions

- Mark5B unit:
 - Debian “Wheezy” version 7.11 (64-bit)
 - StreamStor driver version: 11.50 (SDK 9.4), API version 12.06, firmware version 13.05

- Field System version: 9.13.2
- jive5ab version: 2.9.0
- The DBBC firmware version in “tunable” mode is 1.07.

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