

Torun (Tr) Station Report

(Apr 30th, 2020)

Recent EVN Sessions

Two EVN sessions have been carried out since the previous report (Jun 19th, 2019).

Oct/Nov 2019 session.

Tr was scheduled in 28 regular disk projects. Observations were carried out at L, C, C-methanol and K bands. EK45B and EK45C failed due to wrong LO frequency set. N19M3 was unsuccessful as a result of Fila10G overheat.

Feb/Mar 2020 session.

Tr was scheduled in 29 regular disk projects. Observations were carried out at L, C, C-methanol and K bands. During N20C1 calibration signal failed. All other C band experiments were carried out successfully but without continuous 80Hz cal. Due to high wind, EP119 observations were cancelled until 14:15.

One e-EVN experiment on Oct 15/16 could not be carried out due to C band receiver failure.

Personnel Changes

As of October 1st 2019, Agnieszka Słowikowska is a new head of TRAO replacing Andrzej Marecki. Krzysztof Katrzyński became a director of the Institute of Astronomy of the Nicolaus Copernicus University in Toruń (former Centre for Astronomy of NCU).

Since February, 1st 2020, Marcin Gawroński is working as an assistant professor, therefore he is no longer a member of the technical team of the IA NCU. However, he still is in charge of the general time allocation of the Torun radio telescope.

Since February 1st, 2020, Rafał Sarniak joined our technical team. He is in charge of the observing team and the time allocation of the local projects.

Current Developments

A new receiver covering 8-16 GHz frequency band was build and installed on the antenna. It passed successfully first tests and is used for monitoring of methanol masers at 12.2 GHz.

Future Developments

In this spring-summer period, we are planning for the anti-corrosion maintenance work of the whole RT4 antenna. Therefore, the Tr station is going to be shut down between May/June and October this year. The decision about this work will be confirmed not later than May, 25th.

Parallel to the anti-corrosion maintenance, we are planning to change the signal cables as well as the power supply cables.

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.

Agnieszka Słowikowska

Paweł Wołak