

Torun (Tr) Station Report

(Apr 24th, 2017)

Brief Report of Recent EVN Session Problems

Two EVN sessions have taken place since the previous report (Oct. 16, 2016).

Tr was scheduled in 25 and 15 regular disk projects during Oct./Nov. and Feb./Mar., respectively. Observations were carried out at L, C, C-methanol, and K bands. No major problems were noticed.

Outside the regular EVN sessions, Tr was scheduled in 8 Global RadioAstron (RA) experiments and successfully participated in all of them. Tr was requested in 281 short-duration (about one hour each) RA experiments. 78 of them were not observed for various reasons: 46 as a result of Nov./Dec. 2016 antenna control system failure, while the remaining 32 – due to conflicting higher-priority projects, receiver failure, antenna servicing, or staff shortage.

Tr could not participate in one out-of-session project GA038 (14/15 Nov.) and one e-EVN session (15/16 Nov.) due to a major failure of the antenna control system. No known problems emerged during the remaining five e-EVN and two ToO sessions.

Changes/Upgrades Made to Software

Current software versions

- Mark5A OS is Debian "Etch" version 4.0 with the package mark5a_1.0.7-i386.deb
- Mark5A application code is Mark5A2007y.225d
- The StreamStor driver library version is 10.31 (SDK 9.2), with API version 11.25 and firmware version 13.05
- FS 9.10.4 version is used for Mark5A, and 9.11.07 for Mark5B/DBBC.
- [Mark5B](#) jive5ab version is 2.7.1-SDK9.2
- The software version of DBBC in the 'tunable' mode is 1.04.2. (During 2-Gbps tests:1.05E.)

Status of the continuum calibration.

Continuous calibration functionality was tried unsuccessfully some time ago. We declare to make it working as soon as possible.

Status of antenna beam shapes.

Beam patterns of L, C, M, and K band receivers have already been measured and provided to JIVE.

VDIF format using perspectives.

Last year we got refused funding for additional CORE2 boards and FILA10G card which are needed to observe at >1Gbps and to produce VDIF packets. We will try to submit the proposal again this year.

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