

Metsähovi station report Q2/2016
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EVN TOG meeting – St. Petersburg (Russia)

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1) Receiver status

The new 86 GHz-VLBI receiver worked very well during the May 2016 session. The quality of the detected fringes was extremely good. Some minor modifications and improvements were still made mainly to receiver's IF-signal chain. The receiver is now fully completed and it will be tested in September 2016 on the GMVA session again. Other Metsähovi's VLBI-receivers (2/8, 22 and 43 GHz) are working fine without any problems.

2) DBBC status

In June 2016, cause of heavy thunderstorm and lightning dBBC's 1pps distribution board went broken (1pps TTL driver board MAX9372). During June 2016 session we used a temporary 1 pps distribution board, which worked fine over the session. The original broken board was fixed and replaced in July 2016.

3) Mark5B+ and other recording systems

No any special notices about recording systems. Local Flexbuff is also available with the space capacity of 93.67 TB.

4) Software versions

We have installed FS 9.11.8, SDK 9.2 and jive5ab 2.7.1. We are using DBBC firmware versions DDC v 105_1, DDC v 105_E_1 and PFB v 15_1.

5) Sessions

Metsähovi participated in one normal EVN-session (6/2016) and two out of sessions (4/2016 and 5/2016). All the observations were completed without any known problems. In addition Metsähovi participated in two IVS sessions (4/2016 and 6/2016) and GMVA session (5/2016).

6) Other issues

- Phase coherence tests will be done prior to every session.
- Continuous calibration (80 Hz) is implemented to 22 GHz-VLBI receiver but not yet tested during observations.
- New subreflector control system will be installed in later part of this year.