

Metsähovi station report Q1-Q2/2018
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EVN-TOG The Instituto de Astrofísica de Andalucía-CSIC (IAA), on October 4-5,
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1) Receiver status

Following Metsähovi's VLBI-receivers are currently operational: 2/8, 22, 43 and 86 GHz. Some maintenance was made for 22 GHz-VLBI receiver in Summer 2018. The cold head of the receiver was replaced. In addition, some power supplies and cables were replaced. The new cold head improved the cooling properties of the receiver. It can be achieved about 10-20 K lower temperatures in the dewar than with the previous cold head.

2) DBBC status

No special notices about dBBC. dBBC has been working exceptional reliable in the past sessions.

3) Mark5B+ and other recording systems

Flexbuff has been used successfully both in EVN and GMVA sessions. Local Flexbuffs are available with the space capacity of 196 TB (primary Flexbuff 144 T and secondary Flexbuff 52 TB). The disk space was upgraded in Summer 2018 from 96 TB to 196 TB.

4) Software versions

We have installed FS 9.11.19, SDK 9.4 and jive5ab 2.8.1 (Mark5B+) and 2.8.1 (Flexbuff). We are using DBBC firmware versions DDC v 105, DDC v 106 and DDC v 106E and PFB version v 16_2. In addition FILA10G version v3.3.2_1 is in use. We still have some reliability problems with DDC v 106.

5) EVN sessions in 2018 (Q1 and Q2)

Metsähovi participated following regular EVN-sessions:

- 6/2018: K-band
- 11/2018

In addition Metsähovi Radio Observatory (MRO) participated in following EVN-Out-of-Sessions (OoS):

- 4/2018: K-band
- 5/2018: K-band
- 9/2018: K-band
- 11/2018: K-band

Metsähovi also participated in one GMVA session (9/2018).

6) Other issues

The renovation of Metsähovi Radio Observatory has now been scheduled to begin at the beginning of January 2019. The observatory premises will be renovated: the oldest part of the observatory will be dismantled and, new compensatory spaces will be built. In addition, the protective radome of the 14-metre radio telescope will be replaced in the summer of 2019. After these projects have been completed, the motors (+drives) of the 14-metre radio telescope will be replaced. A preliminary schedule for this is Autumn 2019.

Due to these major building projects, there might be some periods when the radio telescope is not fully operational. More precise schedule for possible maintenance breaks will be known when the project has started.