

Onsala Station Report

EVN Session 2/2015

There were clearly fringes to Onsala in all the ftp-fringe tests. Only three experiments (EM115A, EP092B, ER040) have been partly affected by the strong winds. We also recorded VDIF data on Flexbuff in all the NME and some user experiments with our 2nd VLBI backend. There were good ftp-test fringes to the 2nd system as well.

EVN Session 1/2015

We lost 2 experiments due to high winds (EI012C and EP092A) and 1 partly (EP092). We had some technical problems due to a power outage in experiment EB052E (lost the control to the noise diode, no Tsys data in the experiment). We recorded the session in parallel using the Onsala FlexBuff. We participated successfully in the 2 Gbps test experiment, FR022.

EVN Session 3/2014

We lost 2 experiments due to high winds (GP053B and EG084A). We had some technical problems due to data communication problems and experiment setup in experiments GB074 and EA055A. We recorded the session in parallel using the Onsala FlexBuff.

Technical Development

We have installed and tested 2 parallel VLBI systems; each backend (DBBC2) can be automatically connected to either the 25 m or the 20 m radio telescope. This means that we can run 2 VLBI experiments in parallel. The data can be recorded on either a Mark5B+, Mark5C and/or a FlexBuff system.

The hardware of the 80Hz continuous calibration system has been tested with the latest DBBC2 DDC V105 control program (version of 2015 Jun 10). The slightly updated program now supports to swap the total power sampling values between the two registers of Cal-On and Cal-Off. After the swapping function is applied, FS can do proper measurements of Tsys, On-Off, and FIVEPT. So, there are no any operational problems with the new calibration system at Onsala now.

The GPS receiver has been replaced with a new one at Onsala. Now, the precision of fmout-gps has been improved by an order.

We are building a new Flexbuff dedicated for the EVN observations at Onsala. Furthermore, we are planning for a 16 Gbps test at 22 GHz on June 22 (1x4 GHz). The participating stations are Noto, Onsala and Effelsberg. The experiment is a deliverable in the RadioNet3 Joint Research Activity DIVA.

VLBI Support Team at OSO, 2015 Jun 18