

Onsala Station Report

EVN Session 2/2018

Fringes to the Onsala radio telescopes were found in all the NMEs. Onsala successfully participated in all the experiments.

The 80Hz continuous calibration system has been installed at S and X bands on the 20m radio telescope and used since the session. The new rxg files have been made and uploaded to the VLBEER server. Tcal is about 8 K at S band and 3 K at X band.

Both 25m and 20m radio telescopes have an updated antenna control software (BIFROST). The new software is more user-friendly. It provides more monitoring data, plots and powerful tools to check the system. The two antenna control computers are getting old and will be replaced soon. Moreover, we plan to replace our FS computer (FOLD) with a new one.

The Flexbuff is still the default recorder. The motherboard of our Astro-Flexbuff was broken and changed at the beginning of the session. The old MK5B+ will be offline soon. The old MK5A and MK5C are not available any more.

The whole control room has been redesigned and refurbished to properly include all the extra equipment for the new twin telescopes. Compared to the previous control room, the new control room looks spacious and neat. The equipment has a better cooling system and a greatly improved noise reduction.

The plan of a new broad band receiver for the 20m radio telescope is still under the investigation.

EVN Session 1/2018

Fringes to the Onsala 25-m radio telescope were found in the NMEs. Because of cold weather at night, the lubricating oil might become sticky to some degree and caused some power-overload errors with the polar motor and requested a manual power cycle to restart the motor. Due to the problem, there were some data loss for a few hours at C bands.