

Westerbork VLBI station report for the EVN TOG meeting,  
at Cagliari Observatory, Italy, October 5-6, 2014.

#### Regular Session Participation:

Westerbork participated in the M, C, X, P and L-band experiments of sessions 2014-1 and 2014-2.

In Session 2014-1, 11 dishes contributed to the WSRT tied-array.  
3 radio telescopes were in the process of being equipped with APERTIF front-ends.  
In Session 2014-2, 8 dishes were available for the tied array. (3 more RT's were out due to extra maintenance).

Observing was successful.

In 2014-1, 3 minutes were missed due to a bad diskpack, and 4 minutes due to late start FS schedule.

In 2014-2, 17 minutes were missed due a backend problem.

FTP fringe files were produced by the system, and fringes were found on all occasions.

The WSRT also participated in all scheduled RadioAstron Space VLBI observations with success.

Data were recorded on disk packs and subsequently sent to the FTP server in Moscow.

Furthermore the WSRT participated succesfully in all scheduled e-VLBI observations.

#### Field System:

For session 2014-1 we used FSL8 (Lenny)+ FS-9.11.4

For session 2014-2 we upgraded to FS-9.11.5

Also the spare FS was upgraded to this version.

We will upgrade to FSL9 after EVN session 2014-3

#### Mark5B:

For all sessions we used SDK8.2 + Firmware version 12.13

All sessions worked ok with this firmware. Both pata and sata disks were used.

Wb participated in tests for new jive5ab software.

#### Current versions:

DIMINO : Mark5B DIM : 2007y222d04h : 1 : mark5-XX : 1 : 1 : 2.7x : 0x1b :  
0x5bdb

Linux : Etch 2.6.18-6-686:(Debian 2.6.18.dfsg.1-26etch2)

Firmware : 12.13

Current eVLBI software : jive5ab 2.4.4

#### Diskpack purchase:

In 2014 we purchased hardware to assemble 4 packs of 8 TB. They became available for session 2014-3.

The plan is to do the same for 2015

#### Future Participation:

For 2014 Session 3, the WSRT will continue to support EVN/Global observations at the standard MFFE frequencies with 8 or 9 telescopes. (3 RT's for apertif; RT7 damaged HA drive; one RT out for painting)

By the spring of 2015, conversion of more dishes may be under way. It is expected that WSRT may be able to participate in session 2015-1 and 2015-2 with a reduced amount of dishes (but at least 6 dishes).

In the longer term, WSRT will contribute with a single dish, equipped with the current (modified) MFFE at all frequencies. The MFFE needs to be modified to supply circular polarization output. Our TADUMax will be replaced by a DBBC. The DBBC has been ordered this year. Tied array capability at L-band, using the Apertif frontends, will be added at a later stage.

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