

Westerbork VLBI station report for the EVN TOG Meeting,
Max-Planck-Institut für Radioastronomie Bonn, May 05,
2020

Overview:

Westerbork is contributing to VLBI projects with a single dish, equipped with a modified MFFE providing circular polarization and a DBBC backend. Two radio telescopes are available for VLBI operations, one equipped with the MFFE receiver, and the other with the 5cm receiver, currently sharing the DBBC/Mark5B/FlexBuff backend.

The remaining 12 radio telescopes of the WSRT are equipped with the APERTIF receivers and backends.

DBBC:

Our DBBC (used operationally since Session 2015-3), has four Core2 boards and eight BBC's and an internal Fila10G card and its running on Windows 7 and firmware version 1.07.

The WSRT DBBC is capable of delivering 2Gbps setups to a FlexBuff (though the relatively narrow MFFE IF, limits the data rate to >~1Gbps).

FlexBuff:

WSRT's FlexBuff server is equipped with 36 8TB disks (nominal capacity 244TB).

Fieldsystem:

Fieldsystem version 9.13.2.

Session Participation:

Westerbork participated in the X, M, C and L-band experiments of sessions 2019-2, 2019-3, 2020-1 (with marginal loss of data) Furthermore the WSRT participated successfully in e-VLBI, To0 and OoS projects.

VLBI Operations result report of session EVN 2019-2

18/21 cm(L)	total: 146.5 hr	lost: 6 hr
5 cm(M)	total: 25 hr	lost: 0 hr
6 cm(C)	total: 7.5 hr	lost: 0 hr
3.6 cm(X)	total: 16.5 hr	lost: 0 hr
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Total:	195.5 hr	6 hr

Total 3.06% lost

VLBI Operations result report of session EVN 2019-3

18/21 cm(L)	total: 67.5 hr	lost: 0.2 hr
5 cm(M)	total: 41 hr	lost: 0 hr
6 cm(C)	total: 77 hr	lost: 0 hr
3.6 cm(X)	total: 43 hr	lost: 0 hr
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Total:	228.5 hr	0.2 hr

Total 0.09% lost

VLBI Operations result report of session EVN 2020-1

18/21 cm(L)	total: 44 hr	lost: 0 hr
5 cm(M)	total: 43 hr	lost: 0 hr
6 cm(C)	total: 73.5 hr	lost: 0 hr
3.6/13 cm(X/S)	total: 38 hr	lost: 0 hr
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Total:	198.5 hr	0 hr

Total 0.00% lost

Personnel:

Richard Blaauw is the Technical VLBI Friend and there is no dedicated astronomy VLBI Friend.

Richard Blaauw