

## Kunming Station report for the EVN TOG meeting, November 24, 2020

### Receivers:

Kunming 40m telescope has two working feeds at the second focus: S/X dual-band feed and C-band feed. The two feeds can only be in position alternatively.

Table 1. Receivers at Kunming station

Band	Available RF (MHz)	LO (MHz)	IF OUTPUT (MHz)	Nominal SEFD (Jy)
S	2174 – 2301 (HTS filter)	2000	174 – 301	850
	2160 – 2314 (normal filter)		160 – 314	
C	4000 - 8000	3900 – 7500 Tunable (min step 1kHz)	70 – 512 70 – 1024	290
X	8200 - 9000	8100	100 - 900	300

Note: No valid  $T_{sys}$  calculation during observations. SEFD estimates are provided.

### Data acquisition systems:

Kunming has two recording systems DBBC2/Mark6 and CDAS (Chinese VLBI Data Acquisition System)/Mark5b. CDAS is the main recording system for EVN observations.

All the data transferred with a 1Gbps network, which is becoming a routine at Kunming station. It brings us big convenience.

### Flexbuff:

The plan to send a mark 6 suite to JIVE was delayed because the shipment fee soared and kept to a high level at about 5,800 euro due to the COVID-19. We may wait a bit longer, and the other options are also reconsidered now.

### 2020 Sessions:

Kunming station participated and ran normally in 2020 EVN sessions. And the EVN

experiments have been marked as the highest-priority in all observations except exploration missions for Moon and Mars.

The observations Kunming participated since the last report:

**Session II:** N20M2, ED046A

**Session III:** N20M3, EB079, RSC07, EY035

**e-VLBI:** EX009, EY037

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