

URUMQI STATION REPORT

Bonn, 2013-04-10

1. Radio telescopes

a. Nanshan 25m

Nanshan 25m telescope is currently fully functional but the due reconstruction will take place in 2014 so no observations could be done during the reconstruction work, especially for the 2014 Session II ad III. The schedule of reconstruction is not fixed yet. Due to the requirement by our founding scheme, the telescope can only be refurbished rather than to be rebuilt, so the new telescope will de facto be reconstructed on the original foundation and the removed old antenna will be left on purpose.

b. QTT 110m

Infrastructures have been developed on site and part of the funding has been allocated. The project is now being driven forward both by VLBI and single dish astronomical and application proposals.

2. Backends

The only digital backend available at Urumqi now is CDAS designed for CLEP. DBBC is planned to be ordered during the reconstruction and RDBE has also been considered for the future.

3. Recording system

Current data recording system is still Mark 5b which suits most EVN astronomical observations but there has been emerging requirement for Mark 6 by future IVS geodetic observations.

4. 2013 Session I

In Session I observations we have found out formatter misset occasionally which led us observe ASTRO-observations with GEO-mode and get fringe failures.

5. Disk inventory

8×4TB and 6×6TB Mark 5 diskpacks are made ready with our stocked IDE modules, 8 SATA modules have been ordered and 2×8TB diskpacks will be ready soon. 48TB will be available for 2013 Session II providing enough shipping boxes. Our total invest is more than 18,000 euros with an equivalent storage volume of 84TB. Urumqi will have new VSN assignments for its VLBI diskpacks. “XAO#1XXX” is for an ASTRO module and “XAO#0XXX” is for a GEO module; the interface character “#” will be “-” for IDE modules and “+” for SATA modules respectively.