

## Shanghai VLBI Station (SESHAN25) station report

### **1. Observations**

Shanghai VLBI station participated in the VLBI experiments in 2012 February and October sessions. We missed the June session for the antenna maintenance. The telescope worked well in most experiments. The Shanghai radio telescope, as one of the monitoring station, was involved in the quasi-real-time VLBI tracking lunar satellite of Chinese Chang'E-2. During the year 2012, the tracking mission was scheduled on average with one or two days per week.

### **2. Development and maintenance activities in 2012**

A new pcal unit for S/X band had been installed in December 2012. The pcal was injected before LNA and after the feed. The pcal unit's input was 10MHz from the HMaze. The pulse intervals can be adjusted by FS to 500KHz, 1MHz, 2MHz, 5MHz or 10MHz. In the most time it worked on 1MHz mode.

In 2012 we purchased hardware to assemble 4 SATA packs of 8TB. Some of them were available for the session 2013-1.

We performed routine maintenance of our antenna from this May to June. It included changing the gear box, painting, control room decoration.

### **3. e-VLBI**

More than thirty-two e-VLBI experiments among the EVN have been carried out in 2012. Shanghai Station works at a data rate of 512Mbps.

### **4. Prospects**

In 2013 the Sheshan radio telescope will take part in 3 EVN sessions and 11 e-VLBI sessions.