



Contribution ID: 8

Type: **Poster Presentation**

High-speed data playback of VLBI hardware correlator

Monday, 14 March 2016 15:45 (1 hour)

VLBI (Very Long Baseline Interferometry) is an important radio astronomy technology, is widely used in deep-space probes high-precision measurement. The correlator as the core data pre-processing equipment of VLBI, its performance is very important. At present, China VLBI data acquisition system (CDAS) can collect data 2Gbps, and multiband combination can reach 16Gbps or 32Gbps. For ensure the requirements of high-speed and high-precision, there used Uniboard as the hardware platform, used 10G Ethernet as the data playback interface and 1G Ethernet as the control interface, research the VLBI data playback which speed up to 4Gbps for single CDAS, and design some pre-processing method just like data correct and data decode specific to the VLBI data characteristic. Now we have finished the preliminary system, and there will show the design and some results.

Primary author: Ms GAN, Jiangying (Shanghai Astronomical Observatory, CAS)

Co-authors: Mr GUO, Shaoguang (Shanghai Astronomical Observatory, CAS); XU, zhijun (Shanghai Astronomical Observatory, CAS)

Presenter: Ms GAN, Jiangying (Shanghai Astronomical Observatory, CAS)

Session Classification: Poster1-3

Track Classification: 3: Stations, Correlators, and Operations Centers