

Radiation pattern measurement for Chinese Spectral Radio Heliograph

Li Sha , Yan Yihua, Wang Wei, Liu Donghao (*National Astronomical Observatories*)

lisha1400@bao.ac.cn, yyh@bao.ac.cn, wwang@bao.ac.cn, dhliu@bao.ac.cn

Session: SpS6 Science with large solar telescopes

Type of presentation: Poster

The Chinese Spectral Radio Heliograph (CSRH) is an Interferometry that is currently being built in Inner-Mongolia. The CSRH system will consist of 100 antennas covering 0.4~15GHz frequency range. The program utilizes the antenna in two frequency bands about 0.4~2GHz and 2~15GHz. The design and far field performance of the feed for CSRH-I(0.4~2GHz) is introduced in this paper. Amplitude and phase, co-polar and cross-polar patterns of the feed were measured and simulated at phi angles of 0° , 90° and for theta rotation angles of -90° to $+90^\circ$ in 1.3° step. The measured far field patterns coincide with simulation results very well.