THE STATUS AND PLANS OF SATELLITE LASER RANGING AT YUNNAN OBSERVATORIES.

Y. H. Xiong, Z. L. Li, Y. Q. Li, H. L.Fu, D. S. Zhai, R. W. Li, and S. H. He, Yunnan Observatories, CAS, (396 Yangfangwang, Guandu District, Kunming, Yunan, China, 650216, xyh@ynao.ac.cn)

Abstract: Kunming station at Yunnan Observatories has performed 1kHz frequency Satellites Laser Ranging Since 2009, and got many valid observed data. At the same time, we began to do diffuse reflection laser ranging experiment, and the first diffuse reflection laser ranging echo of space debris was received successfully in June 2010. Also we have established a new 53cm double tubes telescope which is located at Yunnan Observatories, and about 25m distance from 1.2m telescope, and it will start to work this end of year. In the future, we will utilize 53cm double tubes telescope to transmit laser and use 1.2m telescope to only receive incoming laser photons, realizing transmitting optics path and receiving optics separate that is significant to diffuse reflection laser ranging or other observing experiments.