

Zhang Haifeng, Ding Renjie, Qin Si, Wu Zhibo, Zhang Zhongping

The Current Status and Future Development of Automatic Control of Laser Ranging System at Shanghai Stations

Shanghai stations have upgraded kHz repetition rate laser observation and the performance of SLR system and the amount of laser data have been improved obviously. Based on the achievements made on the SLR system, the development of automatic control at the Chinese SLR station is also being underway. The aspects of automatic downloading CPF files and satellite prediction, automatic setting the range gate, automatic adjustment of telescope pointing offset, automatic post-processing laser data is preliminary realized and the work of remote laser measurement control are also implemented through the installation of monitoring equipment and the remote-control commercial software for control system operation room, laser room and telescope dome. The more work of automatic and remote laser measurement control will be developed and implemented, such as the automatic processing satellite schedule, checking the status of signal cable lines, improving the integration of SLR system and so on, to further increase the performance of SLR system at Shanghai station.