

LSGI Distinguished Lecture Series

“System Biases in GNSS (A Review)”

Overview

It was our pleasure to invite Dr. Peng Fang, Academic Specialist Scripps Institution of Oceanography at the University of California in San Diego, to deliver a seminar of the LSGI Distinguished Lecture Series on 15 February 2017.



Dr. Peng presented his research on the system biases in GNSS. He found that there had always been a special type of system error in GNSS systems, known as system biases. This error was a result of small delays between the events that ideally should have been simultaneous in transmission of signal from a satellite or in the reception of the signal in a GNSS receiver. In order to fully take advantage of any one or multiple GNSS constellations available, especially for providing high precision service (e.g. orbits and clocks) or for high precision applications (e.g. PPP-AR, ionospheric modeling), he believed there was great need to address the issues related to various system biases, regardless they would be existed within single constellation or when there would be multiple constellations involved. The objective of this study was to review the types of GNSS system biases and understand them, as well as how to derive them and finally how to eliminate them.

Dr. Peng Fang



Education

- PH.D., Geodesy, Uppsala University, 1989
- Electrical and Electronics Engineering, Huazhong University of Science and Technology, 1977