

Preface

BeiDou Navigation Satellite System (BDS) is China's global navigation satellite system which has been developed independently. BDS is similar in principle to global positioning system (GPS) and compatible with other global satellite navigation systems (GNSS) worldwide. The BDS will provide highly reliable and precise positioning, navigation and timing (PNT) services as well as short-message communication for all users under all-weather, all-time, and worldwide conditions.

China Satellite Navigation Conference (CSNC) is an open platform for academic exchanges in the field of satellite navigation. It aims to encourage technological innovation, accelerate GNSS engineering, and boost the development of the satellite navigation industry in China and in the world.

The 7th China Satellite Navigation Conference (CSNC2016) is held during May 18–20, 2016, Changsha, China. The theme of CSNC2016 is Smart Sensing, Smart Perception, including technical seminars, academic exchanges, forums, exhibitions, and lectures. The main topics are as follows:

- S1 BDS/GNSS Application Technology
- S2 Navigation and Location-Based Services
- S3 Satellite Navigation Signals
- S4 Satellite Orbit and Clock Offset Determination
- S5 BDS/GNSS Precise Positioning Technology
- S6 Atomic Clock and Time-frequency Technology
- S7 BDS/GNSS Augmentation Systems and Technology
- S8 BDS/GNSS Test and Assessment Technology
- S9 BDS/GNSS User Terminal Technology
- S10 Multi-sensor Fusion Navigation
- S11 PNT System and Emerging Navigation Technology
- S12 Standardization, Intellectual Properties, Policies, and Regulations

The proceedings (Lecture Notes in Electrical Engineering) have 176 papers in ten topics of the conference, which were selected through a strict peer-review process from 440 papers presented at CSNC2016. In addition, another 193 papers

were selected as the electronic proceedings of CSNC2016, which are also indexed by “China Proceedings of Conferences Full-text Database (CPCD)” of CNKI and Wan Fang Data.

We thank the contribution of each author and extend our gratitude to 237 referees and 48 session chairmen who are listed as members of editorial board. The assistance of CNSC2016’s organizing committees and the Springer editorial office is highly appreciated.

China Satellite Navigation Conference (CSNC) 2016

Proceedings: Volume I

Sun, J.; Liu, J.; Fan, S.; Wang, F. (Eds.)

2016, XVIII, 675 p. 401 illus., Hardcover

ISBN: 978-981-10-0933-4