

姓名：赵东升

学位：博士

职称：讲师

研究方向：GNSS 电离层闪烁监测及建模；GNSS

定位。

Email: dszhao@cumt.edu.cn ;

dszhao_gnss@foxmail.com



● 教育与学历

2014.09-2019.03	测绘科学与技术，博士	英国诺丁汉大学
2010.09-2014.06	测绘工程，学士	武汉大学

● 工作经历

2019.06-至今 中国矿业大学环境与测绘学院，讲师

● 论文

[1] **Dongsheng Zhao; Wang Li***; Chendong Li; Xu Tang; Qianxin Wang; Craig M. Hancock; Gethin Wyn Roberts; Kefei Zhang*. Ionospheric phase scintillation index estimation based on 1 Hz geodetic GNSS receiver measurements by using continuous wavelet transform [J], Space Weather, 2022, 20(4): e2021SW003015. (SCI, JCR 一区)

[2] **Dongsheng Zhao; Wang Li***; Qianxin Wang; Xin Liu; Chendong Li; Craig M. Hancock; Gethin Wyn Roberts; Kefei Zhang. Statistical study on the characterization of phase and amplitude scintillation events in the high-latitude region during 2014-2020 based on ISMR [J], Advances in Space Research, 2022, 69(9): 3435-3459. (SCI, JCR 一区)

[3] **Dongsheng Zhao; Wang Li***; Chendong Li; Craig M. Hancock; Gethin Wyn Roberts; Qianxin Wang. Analysis on the ionospheric scintillation monitoring

performance of ROTI extracted from GNSS observations in high-latitude regions [J], Advances in Space Research, 2022, 69(1): 142-158. (SCI, JCR 一区)

[4] 赵东升; 李旺; 李宸栋; 唐旭; 张克非*. 1 Hz GNSS 电离层相位闪烁因子提取及在北极区域的验证 [J], 测绘学报, 2021, 50(3):368-383. (中文 EI, T1)

[5] **Dongsheng Zhao**; Gethin Wyn Roberts; Craig M. Hancock*; Lawrence Lau; Ruibin Bai. A triple-frequency cycle slip detection and correction method applied on GPS and BDS [J]. GPS Solutions, 2019, 23(1):22. (SCI, JCR 一区)

[6] **Dongsheng Zhao**; Craig M. Hancock*; Gethin Wyn Roberts; Shuanggen Jin*. Cycle slip detection during high ionospheric activities based on combined triple-frequency GNSS signals [J]. Remote Sensing, 2019, 11(3):250. (SCI, JCR 一区)

[7] **Dongsheng Zhao***; Gethin Wyn Roberts*; Lawrence Lau; Craig M. Hancock; Ruibin Bai. A theoretical and empirical integrated method to select the optimal combined signals for geometry-free and geometry-based three-carrier ambiguity resolution [J]. Sensors, 2016, 16(11):1929. (SCI, JCR 一区)

[8] Wang Li; **Dongsheng Zhao***; Changyong He; Craig M. Hancock; Yi Shen; Kefei Zhang; Spatial-temporal behaviors of large-scale ionospheric perturbations during severe geomagnetic storms on September 7-8 2017 using the GNSS, Swarm and TIE-GCM techniques [J], Journal of Geophysical Research: Space Physics, 2022, 127(3): e2021JA029830. (SCI, JCR 二区)

[9] Wang Li*; **Dongsheng Zhao**; Changyong He; Yi Shen; Andong Hu; Kefei Zhang. Application of a multi-layer artificial neural network in a 3-D global electron density model using the long-term observations of COSMIC, Fengyun-3C and Digisonde [J]. Space Weather, 2021, 19(3): e2020SW002605. (SCI, JCR 一区)

区)

[10] Wang Li; **Dongsheng Zhao**; Yi Shen; Kefei Zhang*. Modeling Australian TEC maps using long-term observations of Australian regional GPS network by artificial neural network-aided spherical cap harmonic analysis approach [J]. Remote Sensing. 2020, 12(23): 3851. (SCI, JCR 一区)

[11] Wang Li; **Dongsheng Zhao**; Changyong He; Andong Hu; Kefei Zhang*. Advanced machine learning optimized by the genetic algorithm in ionospheric models using long-term multi-instrument observations [J]. Remote Sensing 2020, 12(5): 866. (SCI, JCR 一区)

[12] Wang Li; Changyong He; Andong Hu; **Dongsheng Zhao**; Yi Shen; Kefei Zhang*. A new method for improving the performance of an ionospheric model developed by multi-instrument measurements based on artificial neural network [J]. Advances in Space Research 2021, 67(1): 20-34. (SCI, JCR 二区)

[13] **Dongsheng Zhao***; Gethin Wyn Roberts; Craig M. Hancock; Lawrence Lau; Ruibin Bai. Cycle-slip detection for triple-frequency GPS observations under ionospheric scintillation, Proceedings of the 30th International Technical Meeting of The Satellite Division of the Institute of Navigation (ION GNSS+ 2017), Portland, Oregon, September 25-29 2017, pp. 4046-4054. (EI)

[14] **Dongsheng Zhao**; Craig M. Hancock*; Gethin Wyn Roberts; Lawrence Lau. Benefit of triple-frequency on cycle-slip detection, Proceedings of FIG Congress 2018, Istanbul, Turkey, May 6-11 2018, 9503.

[15] Craig M. Hancock*; Chendong Li; **Dongsheng Zhao**; Sreeja V. Veettil; You Chong. Respective statistical analysis of the correlation between scintillation parameters and MP&ROTI, Proceedings of International Symposium on GNSS 2018, Bali, Indonesia, November 21-23 2018.

● 专著

[1] 赵东升. 基于三频 GNSS 组合信号的整周模糊度解算和周跳探测. 中国矿业大学出版社, 2021.

● 发明专利

[1] 赵东升; 李旺; 张秋昭; 唐旭; 王潜心; 张克非. 一种低频率 GNSS 电离层闪烁因子的有效性验证方法, 2021-6-3, 中国, ZL2021106192039.

[2] 赵东升; 陶媛媛; 李旺; 王潜心; 李宸栋; 唐旭; 张克非. 基于测地型接收机的电离层不规则体漂移速度估计方法, 2021-5-16, 中国, ZL2021105311473.

[3] 赵东升; 李旺; 王潜心; 张克非. 基于 GNSS 30s 采样频率数据的电离层相位闪烁因子构建方法, 2021-3-1, 中国, ZL2021102255151.

[4] 赵东升; 李旺; 李宸栋; 唐旭; 张克非; 克雷格 · 汉考克. 一种基于 GNSS 的北极区域电离层相位闪烁因子构建方法, 2020-08-24, 中国, ZL2020108547233.

● 会议报告

[1] **Dongsheng Zhao**. Extracting ionospheric phase scintillation index from 1 Hz GNSS observations, Scientific Assembly of the International Association of Geodesy, Beijing, 2021-6-28 至 2021-7-2.

[2] 赵东升; 王潜心. 1 Hz GNSS 电离层相位闪烁因子构建方法, 2020 CPGPS 论坛, 上海, 2020-11-12 至 2020-11-14.

[3] **Dongsheng Zhao**; Craig M. Hancock; Gethin Wyn Roberts; Lawrence Lau. Benefit of triple-frequency on cycle-slip detection, FIG Congress 2018, Istanbul, 2018-5-6 至 2018-5-11.

[4] **Dongsheng Zhao**; Gethin Wyn Roberts; Craig M. Hancock; Lawrence Lau; Ruibin Bai. Cycle-slip detection for triple-frequency GPS observations under

ionospheric scintillation, the 30th International Technical Meeting of the Satellite Division of the Institute of Navigation (ION GNSS+2017), Portland, Oregon, 2017-9-25 至 2017-9-29.

● 项目

[1] 江苏省自然科学基金青年项目, BK20200664, 我国低纬地区电离层闪烁条件下精客单点动态定位关键模型研究, 2020.07-2023.06, 在研, 主持.

[2] 国家测绘地理信息局精密工程与工业测量重点实验室开放基金项目, PF2017-6, 基于多频 BDS/GPS 的桥梁形变监测的关键技术研究, 2017.10-2019.09, 已结题, 主持.

[3] 国家重点研发计划项目, 2020YFA0713500, 智能导航及遥感数据高精度融合的数学方法, 2020-2025, 在研, 参加.

[4] 国家自然科学基金面上项目, 面向大型桥梁动态挠度监测的高频 GNSS/ 加速度计与 MEMS-IMU 融合及一致性监测理论与方法, 2021.01-2024.12, 在研, 参加.

[5] 国家自然科学基金青年项目, 41704024, 星间差分 RTK PPP 大型桥梁动态形变监测关键技术研究, 2018.01-2020.12, 已结题, 参加.

● 获奖

[1] 赵东升. 江苏省“双创博士”, 中共江苏省委组织部, 2020.

[2] 赵东升. 英国诺丁汉大学国际博士创新中心跨校区全额博士奖学金, 英国诺丁汉大学, 2014.

● 学术兼职

[1] 全球华人导航协会会员(CPGPS).

[2] 《Journal of Global Positioning Systems》期刊编委.