

## 基本信息

姓名：张克非

学位：博士

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行政职务：资源环境技术研究院院长，空间信息智能感知与创新/太空采矿

中心主任，北星空间信息技术研究院院长

研究方向：大地测量、全球定位系统/全球卫星导航系统、综合 PNT（导航、定位、授时）、GNSS

大气探测、太空采矿/空间资源开发利用、空间态势感知、地下大空间智能感知与应急管理

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## 个人简介

张克非，中国矿业大学特聘教授，博士生导师，中国矿业大学学术委员会常委，国际大地测量协会中国委员会委员，国际矿山测量协会第七委员会主席（ISM Commission VII），澳大利亚皇家墨尔本理工大学名誉教授

## 社会、学会及学术兼职

资源环境技术研究院院长，

空间信息智能感知与创新/太空采矿中心主任，

北星空间信息技术研究院院长，

国际大地测量协会会员、中国委员，

先后担任全球华人定位导航协会主席，副主席，顾问委员会委员，国际大地测量协会专题研究组主席，担任百余次的国际学术会议总会/分会主席、中国科学院海外评审专家，基金委重点项目/国际合作/面上，

青年基金，杰青、优青、海外优青、教育部长江学者等评审专家，科学院青年科学家奖评审专家以及国际上多国基金评委和职称评定专家。

## 教育与科研经历

1981-09 月至 1985-07 月，武汉大学，本科

1985-09 月至 1988-07 月，武汉大学，硕士

1994-03 月至 1997-04 月，澳大利亚科廷大学，博士

1997-04 月至 1999-10 月，英国诺丁汉大学，副研究员

1999-10 月至 2008-12 月，澳大利亚皇家墨尔本理工大学，高级讲师、副教授

2009-01 月至 2020-10 月，澳大利亚皇家墨尔本理工大学，正教授、空间研究中心主任

2016-08 月至今，中国矿业大学，环境与测绘学院测绘工程系，教授

## 荣誉奖励

2024 年，江苏省五一劳动荣誉奖章获得者

2024 年，中国卫星导航定位一等奖，（R1/15）

2024 年，江苏省科学技术奖，（R1/10）

2023 年，测绘科技二等奖（R1/10）

2023 年，中国产学研合作创新奖（个人）

2023 年，中国矿业大学度科研育人先进个人

2023 年，紫金山英才高峰计划

2023 年，第四届全国高等学校 GIS 教学成果奖一等奖

2022 年，中国矿业大学教师成果奖（研究生教育类）

2021 年, 紫金山英才(江北明珠计划、外国人才计划)

2020 年, 中国矿业大学优秀指导教师奖

2019 年, Fellow of the International Association of Geodesy, (国际大地测量协会会员)

2017 年, 江苏省高校创新类“双创人才, 双创团队领军人才

2016 年, 中共中央委员会组织部国家特聘专家

2014 年, The Australian Innovation Challenge Award, 澳大利亚创新挑战杯提名奖

2014 年, RMIT University Innovation Excellence Award, RMIT 卓越创新奖(唯一获奖者)

2013 年, RMIT University Research Excellence Award, RMIT 大学优秀研究成就奖

2012 年, The Excellence in Innovation for Australia (EIA) Team Award 2012 (澳大利亚创新卓越(最高)奖)

2012 年, Research Income Performance Award, 研究基金收入最高成就奖

### **近期科研项目**

(1) 国家自然科学基金重点项目 1 项, 主持

(2) 国家自然科学基金-国际(地区)合作与交流 1 项, 主持

(2) 国家自然科学基金面上项目 2 项, 主持

(3) 教育部空间信息科学与技术创新中心(111)引智基地项目 1 项, 主持

(4) 江苏省“双创团队”项目和“双创个人”项目各 1 项, 主持

(5) 江苏省国际合作重点项目 1 项, 主持

(6) 江苏省外国专家工作室, 主持

(7) 科技部外国专家项目 1 项, 主持

(8) 江苏省徐州市重点研发计划项目 1 项, 主持

(9) 中国矿业大学双一流建设“太空采矿”项目 2 项, 主持

### **科研创新、教育与学术成果**

长期从事 GNSS+大气探测、3S 技术与智慧农业、太空资源开发与利用、地下大空间导航定位与控制技术、矿山变形监测等领域的理论技术和创新应用研究, 是国际上率先将大地测量技术运用到 GNSS 大气探测、空间追踪和太空资源探测与利用等领域的开拓者。

主持的中澳国际科技合作项目“井下人员与设备定位跟踪”被列为中澳科技合作三十年成功典范, 并在 2010 年上海世博会展出; 研发的 GNSS 大气探测技术将澳大利亚天气预报时效性改善了 10 小时, 被誉为“革命性技术”; 研发的多传感器集成体育竞技智能跟踪系统, 被誉为澳大利亚奥林匹克竞技国家队的“神秘武器”。承担国家“111”引智基地计划、国家自然科学基金重点和国际(地区)合作、澳大利亚自然科学基金、联邦工业部、中日、中波、澳中、澳美、澳洲-欧盟等重大项目 50 余项, 累计获得近 1 亿美元研究资金, 发表学术论文 550 余篇, 其中 SCI 收录 260 余篇, 申请授权国际国内发明专利 50 余项, 作国际会议特邀报告和主旨演讲 100 余次, 领导了一个由 60 多名教师、博士后和博士/硕士研究生组成的团队, 研究成果被国际主流媒体采访与报道, 并获得澳大利亚创新卓越最高奖、测绘学会奖、江苏省科技奖、中位协导航定位奖、江苏省五一劳动荣誉奖章等 50 余项国内外重要奖项。

### **学术论文 (近 5 年, IF=影响因子, Q=JCR/科学院分区)**

[1] Bian C, Zhang K\*, Wu Y, Wu S, Lu Y, Shi H, Li H, Zhao D, Duan Y, Zhao L, Wu H (2024) Mapping the Spatial Distributions of Oxide Abundances and Mg# on The Lunar Surface Using Multi-Source Data and A New Ensemble Learning Algorithm, Planetary and Space Science, Vol.254, <https://doi.org/10.1016/j.pss.2024.105894> [SCI, Q2, IF= 2.158].

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[3] Li H, Choy S, Zaminpardaz S, Wang X, Liang H, Zhang K (2024) Flash Drought Monitoring Using Diurnal-provided Evaporative Demand Drought Index, Journal of Hydrology,633C, 130961, <https://doi.org/10.1016/j.jhydrol.2024.130961> [SCI, Q1, IF= 6.4]

[4] 朱童, 张克非, 李龙江, 孙鹏, 张明浩, 赵东升 (2024) 非实测气象参数在 GNSS 水汽反演中的适用性, 导航与定位学报。

[5] 尹智, 张克非, 段亚博, 刘军生, 穆庆禄 (2024) 地球科学和深空探测的引力场建模理论研究进展, 地球与行星物理论评, 55: 1-12.

[6] Wu H, Zhang K\*, Wu S, Liu X, Shi S, Bian C (2024) Unsupervised Blind Spectral-spatial Cross-super-resolution Network for HSI and MSI Fusion, IEEE Transactions on Geoscience and Remote Sensing, <https://doi.org/10.1109/TGRS.2024.3362862> [SCI, Q1, IF= 8,125]

[7] 李冠青,黄声享,郑南山,成益品,赵东升, 张克非 (2024) 基于灰色系统综合评价法的大型工程控制网布测方案设计, 测绘学报 (accepted, 10/2023)

[8] 何琦敏,张克非,李黎,连达军,赵伟,陈国栋,富尔江,王瑞 (2024) 基于 PWV 到达时间差估计台风运动状态的四参数模型,测绘学报 (accepted, 10/2023)

[9] 何佳星, 郑南山, 丁锐, 张克非, 陈天悦 (2023) 粒子群优化卷积神经网络 GNSS-IR 土壤湿度反演方法, 测绘学报,52(8): (EI)

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[25] Zhao D, Li W, Wang Q, Hancock C, Li C, Roberts G, Zhang K \* (2023) Extracting Ionospheric Phase Scintillation Index from Each Carrier of GNSS Observations with 30s-sampling-interval in the High-latitude Region, *GPS Solut* 27(79). [SCI, Q2, IF=4.9]

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[27] 郑志卿,张克非\*, 师嘉奇,张明浩,李龙江 (2023) GNSS-PWV 结合多气象要素分析 “21.7” 河南特大暴雨过程. *大地测量与地球动力学* 43(08): 809-815.

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[29] Ban W, Zhang K, Yu K, Zheng N, Chen S (2022) Detection of Red Tide Over Sea Surface Using GNSS-R Spaceborne Observations. *IEEE Trans Geosci Remote Sens* 60:1-11.[SCI, Q1, IF=8.2]

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[34] Li H, Jiang C, Choy S, Wang X, Zhang K, Zhu D (2022) A Comprehensive Study on Factors Affecting the Calibration of Potential Evapotranspiration Derived from the Thornthwaite Model. *Remote Sensing*, 14(18):4644. [SCI, Q2, IF=5]

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[36] Li H, Wang X, Choy S, Wu S, Jiang C, Zhang J, Qiu C, Li L, Zhang K (2022) A New Cumulative Anomaly-based Model for the Detection of Heavy Precipitation Using GNSS-derived Tropospheric Products. *IEEE Transactions on Geoscience and Remote Sensing*, (60):1-18. [SCI, Q1, IF=8.2].

[37] Li H, Wang X, Choy S, Jiang C, Wu S, Zhang J, Qiu C, Zhou K, Li L, Fu E, Zhang K (2022) Detecting Heavy Rainfall Using Anomaly-based Percentile Thresholds of Predictors Derived from GNSS-PWV. *Atmospheric Research*, 265:105912. [SCI, Q1, IF=5.5]

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[53] Zhang K\* (2021) When Science Fiction Comes into Reality- current Status and the Future of Space Mining, *China Surveying and Mapping*, 210:27.

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