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## **Qualifications:**

Bachelor of Engineering, Wuhan Technical University of Surveying and Mapping, China

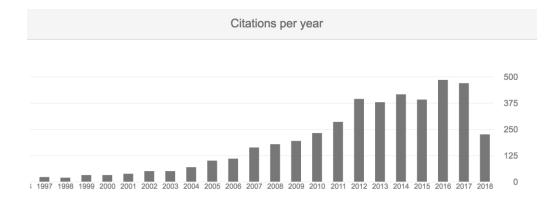
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Research Interests: Professor Kefei Zhang is the founder and director of the Satellite Positioning for Atmosphere, Climate and Environment (SPACE) Research Centre and the Satellite Positioning and Navigation (SPAN) Laboratory at RMIT University. Professor Zhang has over 25-year research experience in satellite positioning, geodesy and geospatial sciences. His current research interest is primarily involved in algorithm development and innovative applications of GNSS/GPS technologies for high-accuracy positioning, atmospheric studies (e.g. radio occultation, space weather, climate change, weather and environment), space situational awareness (e.g. space debris tracking, surveillance and collision warning and orbit determination) and people mobility and object tracking. He is a co-inventor of eight patents and has authored over 250 peer-reviewed publications in these fields and has attracted in excess of 20 million dollars in funding from the Australian Research Council, government, research organizations and industry sectors since 1990.

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## Publication List:

He, C., Wu, S., Wang, X., Hu, A., Zhang, K. (2017). A new voxel-based model for the determination of atmospheric weighted mean temperature in GPS atmospheric sounding In: Atmospheric Measurement Techniques, 10, 2045 - 2050

Li, L., Wu, S., Wang, X., Tian, Y., He, C., Zhang, K. (2017). Modelling of weighted-mean temperature using regional radiosonde observations in Hunan, China In: TAO: Terrestrial, Atmospheric and Oceanic Sciences, 28, 1 - 13

Li, W., Yue, J., Yang, Y., Li, Z., Guo, J., Pan, Y., Zhang, K. (2017). Analysis of ionospheric disturbances associated with powerful cyclones in East Asia and North America In: Journal of Atmospheric and Solar-Terrestrial Physics, 161, 43 - 54

Wang, X., Cheng, Y., Wu, S., Zhang, K. (2016). An effective toolkit for the interpolation and gross error detection of GPS time series In: Survey Review, 48, 202 - 211

Peng, X., Zang, J., Fan, S., Wu, S., Liu, Y., Zhang, K. (2016). Validation of atmospheric water vapor derived from ship-borne GPS measurements in the Chinese Bohai Sea In: The Journal of Terrestrial, Atmospheric and Oceanic Sciences (TAO), 27, 213 - 220

Carter, B., Yizengaw, E., Pradipta, R., Retterer, J., Groves, K., Valladares, C., Caton, R., Bridgwood, C., Norman, R., Zhang, K. (2016). Global equatorial plasma bubble occurrence during the 2015 St. Patrick's Day storm In: Journal of Geophysical Research: Space Physics, 121, 894 - 905

Wang, X., Cheng, Y., Wu, S., Zhang, K. (2016). An enhanced singular spectrum analysis method for constructing non-linear model of GPS site movement In: Journal of Geophysical Research: Solid Earth, 121, 2193 - 2211

Wang, X., Zhang, K., Wu, S., Fan, S., Cheng, Y. (2016). Water-vapor-weighted mean temperature and its impact in the determination of precipitable water vapor and climate change analyses In: Journal of Geophysical Research, , 1 - 20

Wang, X., Zhang, K., Wu, S., Fan, S., Cheng, Y. (2016). Water vapor-weighted mean temperature and its impact on the determination of precipitable water vapor and its linear trend In: Journal of Geophysical Research: Atmospheres, 121, 833 - 852

Carter, B., Yizengaw, E., Pradipta, R., Weygand, J., Piersanti, M., Pulkkinen, A., Moldwin, M., Norman, R., Zhang, K. (2016). Geomagnetically induced currents around the world during the 17 March 2015 storm In: Journal of Geophysical Research Space Physics, 121, 10496 - 10507

Zhang, K, Fu, E, Liu, G, Whitman, S and Zhu, M 2010, 'Action research for a new e-learning GPS/Surveying platform', in Paul Harcombe (ed.) Proceedings of the XXIV FIG International Congress, Copenhagen, Denmark, 11-16 April 2010, pp. 1-10.

Yuan, Y, Rohm, W, Wu, S, Zhang, K and Choy, S 2012, 'Advanced weather prediction and severe weather monitoring using national GNSS CORS infrastructure - preliminary results', in Arrowsmith, C. A., Bellman,

C. J., Cartwright, W. E., Jones, S. and Shortis, M. R. (ed.) Proceedings of the CD-ROM Geospatial Science Research\_2 Symposium 2012, Melbourne, Australia, 10-12 December, 2012, pp. 1-8.

Liu, G, Fu, E, Wang, Y, Zhang, K, Han, B and Arrowsmith, C 2007, 'A framework of environmental modelling and information sharing for urban air pollution control and management', Journal of China University of Mining and Technology, vol. 17, no. 2, pp. 172-178.

Wen, D, Yuan, Y, Ou, J, Zhang, K and Liu, K 2008, 'A hybrid reconstruction algorithm for 3-D ionospheric tomography', IEEE Transactions on Geoscience and Remote Sensing, vol. 46, no. 6, pp. 1733-1739.

Xu, H, Zhang, K, Zhu, M and Wu, S 2010, 'A low-cost multiple sensor monitoring system for wheelchair sports', in Proceeding of The 7th International Symposium on LBS & TeleCartography (LBS 2010), Guangzhou, China, 20-22 September 2010, pp. 1-11.

Fan, S, Zhang, K and Wu, F 2005, 'Ambiguity resolution in GPS-based, low-cost attitude determination', Journal of Global Positioning Systems, vol. 4, pp. 207-214.

Bai, Y, Williams, M, Wu, F, Kealy, A and Zhang, K 2014, 'An accuracy enhancement algorithm for fingerprinting method', in V.S. Subrahmanian, Shu-Heng Chen, Huan Liu, Guandong Xu, Wolfgang Nejdl, Frank Jiang (ed.) Proceedings of the 2014 IEEE International Conference on Data Science and Advanced Analytics (DSAA 2014), Shanghai, China, 30 October - 1 November 2014, pp. 1-5. 164

Liu, Z, Chen, B, Chan, S, Cao, Y, Gao, Y and Zhang, K 2015, 'Analysis and modeling of water vapor and temperature changes in Hong Kong using 40-year radiosonde data: 1973-2012', International Journal of Climatology, vol. 35, no. 3, pp. 462-474. 150

Li, W, Yue, J, Yang, Y, Li, Z, Guo, J, Pan, Y and Zhang, K 2017, 'Analysis of ionospheric disturbances associated with powerful cyclones in East Asia and North America', Journal of Atmospheric and Solar-Terrestrial Physics, vol. 161, pp. 43-54. 60

Pavelyev, A, Zhang, K, Wang, C, Liou, Y and Kuleshov, Y 2012, 'Analytical method for determining the location of ionospheric and atmospheric layers from radio occultation data', Radiophysics and Quantum Electronics, vol. 55, no. 3, pp. 168-175. 208

Pavelyev, A, Zhang, K, Matyugov, S, Liou, Y, Wang, C, Yakovlev, O, Kucherjavenkov, I and Kuleshov, Y 2011, 'Analytical model of bistatic reflections and radio occultation signals', Radio Science, vol. 46, pp. 1-16.

Pavelyev, A, Liou, Y, Wickert, J, Zhang, K, Wang, C and Kuleshov, Y 2010, 'Analytical model of electromagnetic waves propagation and location of inclined plasma layers using occultation data', Progress In Electromagnetics Research, vol. 106, pp. 177-202. 225

Carter, B, Yizengaw, E, Retterer, J, Francis, M, Terkildsen, M, Marshall, R, Norman, R and Zhang, K 2014, 'An analysis of the quiet-time day-to-day variability in the formation of post-sunset equatorial plasma bubbles in the Southeast Asian region', Journal of Geophysical Research Space Physics, vol. 119, no. 4, pp. 3206-3223.

Xu, X, Luo, J and Zhang, K 2011, 'An Analysis of the Structure and Variation of the Tropopause over China with GPS Radio Occultation Data', The Journal of Navigation, vol. 64, no. 1, pp. S103-S111.