

REMOTE SENSING OF MANGROVES FORESTS: PAST, PRESENT AND FUTURE

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Abstract

Mangroves, once occupied 75% of the world's tropical and subtropical coastlines, are a unique forest type that provide critical ecosystem services, one of which was evidenced in the 2004 Indian Ocean Tsunami, i.e. areas with intact seaward mangrove forests suffered much less human death and property destruction than otherwise. However, anthropogenic alteration of global climate will exert significant direct and indirect negative impacts on mangrove ecosystems. The history of applying remote sensing to studying mangrove can be traced back to 1956. In this talk, I will identify key milestones that evolved the field from distribution mapping to biophysical parameters inversion, and to ecosystem process characterization. In addition, I will summarize the current state of knowledge and limitations, as well as share some of the future research directions.

Speaker bio

Le Wang received his Ph.D. degree from the University of California at Berkeley (2003). Currently, he is Full Professor in the department of Geography at the State University of New York at Buffalo. He also served as an associate editor for International Journal of Remote Sensing, an editorial board member for the Annals of the American Association of Geographers.

Dr. Wang's research falls in three directions: 1) small area population estimation; 2) space-time dynamics of coastal mangrove forest; 3) Invasive species spread modeling. He has published more than one hundred peer-reviewed articles on leading remote sensing and GIScience journals. His publications have been cited 7500 times with an H-Index of 48 on Google Scholar.

