

Akira KATO, (PhD)

Graduate School Environmental Science and Landscape Architecture Course, Landscape Science Field of Landscape Resource Science, Restoration Ecology Laboratory

Tel. +81 47 3088892 E-mail: akiran@faculty.chiba-u.jp

Web sites: <http://www.h.chiba-u.jp/prof/graduate/ryokuchi/akirane.html>



Dr. Akira Kato received Ph.D. at University of Washington, Seattle, USA. His specialty is forest remote sensing, especially LiDAR (Light Detection and Ranging). There are three main research topics, the reconstruction of tree crown structure from high resolution LiDAR data using computer graphic technique, quantification of the woody biomass using terrestrial laser, and analyzing the ecological network in urban area using large coverage of airborne LiDAR data. A portable terrestrial laser scanner has been developed and used to take 3D data of any type of forest (from tropical to boreal forest) in the world to automate field survey as field validation of satellite remote sensing.

Publication (selected)

1. Kato, A., Wakabayashi, H., Bradford, M., Watanabe, M., and Yamaguchi Y. Tropical Forest Disaster Monitoring with Multi-scale Sensors from Terrestrial Laser, UAV, to satellite radar. *IEEE IGARSS 2017*: 2883-2886 (2017).
2. Kato, A., Moskal, L.M., Schiess, P., Calhoun D., Swanson, M.E., True Orthophoto Creation Through Fusion of LiDAR Derived Digital Surface Model and Aerial Photos, Proceedings of ISPRS Commission VII Symposium 2010, pp.88-93 (2010)
3. Kato, A., Moskal, L.M., Schiess, P., Swanson, M.E., Calhoun, D., and Stuetzle, W., Capturing Tree Crown Formation through Implicit Surface Reconstruction using AirborneLidar Data, *Remote Sensing of Environment* 113, pp. 1148-1162 (2009)