

Curriculum Vitae

Yang, Yan

Mobile: 6174808397

E-mail: yangyannn@gmail.com

Education and Research Experience

- ❖ PHD, Boston University, 2011- 2017
- ❖ Research Staff, UCLA, 2013-present
- ❖ Master, Nanjing University, 2005-2008
- ❖ Bachelor, Nanjing Forestry University, 2001-2005

Research Interests and Specialities

- ❖ Biomass estimation and carbon dynamics
- ❖ Model constraints and data assimilations
- ❖ Spectral invariant application on hyperspectral data

Skills

- ❖ Programming Languages: Matlab, R, IDL, C and Python
- ❖ Remote Sensing Software: Arcgis, Qgis, and ENVI
- ❖ Statistical Analyses: Machine Learning, Spatial Regression, Time Series Analysis

Publication:

Yang, Y., Saatchi, S.S., Xu, L., Yu, Y., Choi, S., Phillips, N., Kennedy, R., Keller, M., Knyazikhin, Y., Myneni, R.B., 2018. Post-drought decline of the Amazon carbon sink. *Nature Communications* 9, 3172. <https://doi.org/10.1038/s41467-018-05668-6>

Yang, Y., Saatchi, S.S., Xu, L., Yu, Y., Lefsky, M.A., White, L., Knyazikhin, Y., Myneni, R.B., 2016. Abiotic Controls on Macroscale Variations of Humid Tropical Forest Height. *Remote Sensing* 8, 494. doi:10.3390/rs8060494

Xu, L., Saatchi, S.S., Meyer, V., Ferraz, A., **Yang, Y.**, Bastin, J-F., Banks, N., Boeckx, P., Verbeeck, H., Lewis, S., Shapiro, A., 2017. Spatial Distribution of Carbon Stored in Forests of Democratic Republic of Congo. *Scientific Reports* 7(1), 15030. doi:10.1038/s41598-017-15050-z

Xu, L., Saatchi, S.S., **Yang, Y.**, Yu, Y., White, L., 2016. Performance of non-parametric algorithms for spatial mapping of tropical forest structure. *Carbon Balance and Management* 11, 18. doi:10.1186/s13021-016-0062-9

Xu, L., Saatchi, S.S., **Yang, Y.**, Myneni, R.B., Frankenberg, C., Chowdhury, D., Bi, J., 2015. Satellite observation of tropical forest seasonality: spatial patterns of carbon exchange in Amazonia. *Environmental Research Letters* 10, 084005. doi:10.1088/1748-9326/10/8/084005

Konings, A.G., Yu, Y., Xu, L., **Yang, Y.**, Schimel, D.S., Saatchi, S.S., 2017. Active Microwave Observations of Diurnal and Seasonal Variations of Canopy Water Content Across the Humid African Tropical Forests. *Geophys. Res. Lett.* 2016GL072388. doi:10.1002/2016GL072388

Saatchi, S., Mascaró, J., Xu, L., Keller, M., **Yang, Y.**, Duffy, P., Espírito-Santo, F., Baccini, A., Chambers, J., Schimel, D., 2015. Seeing the forest beyond the trees. *Global Ecology and Biogeography* 24, 606–610. doi:10.1111/geb.12256

P Latorre-Carmona, Knyazikhin, Y., Alonso, L., Moreno, J.F., Pla F; **Yang, Y.**, 2014. On Hyperspectral Remote Sensing of Leaf Biophysical Constituents: Decoupling Vegetation Structure and Leaf Optics Using CHRIS–PROBA Data Over Crops in Barrax, *Geoscience and Remote Sensing*, Volume 11, issue 9.

Yuri Knyazikhina, Philip Lewis, Mathias I. Disney, Pauline Stenberg, Matti Mõttus, Miina Rautiainen, Robert K. Kaufmann, Alexander Marshake, Mitchell A. Schullf, Pedro Latorre Carmona, Vern Vanderbilt, Anthony B. Davisi, Frédéric Baret, Stéphane Jacquemoud, Alexei Lyapustine, **Yan Yang**, and Ranga B.

Mynenia, 2013. Reply to Ollinger et al.: Remote Sensing of Leaf Nitrogen and Emergent Ecosystem Properties, Proc. Natl. Acad. Sci. USA (www.pnas.org/cgi/doi/10.1073/pnas.1305930110)

Yuri Knyazikhina, Philip Lewisb, Mathias I. Disneyb, Pauline Stenbergc, Matti Mõttusd, Miina Rautiainen, Robert K. Kaufmanna, Alexander Marshake, Mitchell A. Schullf, Pedro Latorre Carmonag, Vern Vanderbilth, Anthony B. Davisi, Frédéric Baretj, Stéphane Jacquemoudk, Alexei Lyapustine, **Yan Yang**, and Ranga B.

Mynenia, 2013. Reply to Townsend et al.: Decoupling contributions from canopy structure and leaf optics is critical for remote sensing leaf biochemistry. Proc. Natl. Acad. Sci. USA, (www.pnas.org/cgi/doi/10.1073/pnas.1301247110)

Yuri Knyazikhin, Mitchell A. Schull, Pauline Stenberg, Matti Mõttus, Miina Rautiainen, **Yan Yang**, Alexander Marshak, Pedro Latorre Carmona, Robert K. Kaufmann, Philip Lewis, Mathias I. Disney, Vern Vanderbilt, Anthony B. Davis, Frédéric Baret, Stéphane Jacquemoud, Alexei Lyapustin and Ranga B. Myneni, 2013.

Hyperspectral remote sensing of foliar nitrogen content, Proc. Natl. Acad. Sci. USA, www.pnas.org/cgi/doi/10.1073/pnas.1210196109

Conferences

Y Yang, SS Saatchi, L Xu. Decline of the Amazon Carbon Sink from Recent Climate Extremes. American Geophysical Union Fall Meeting, Washington, D.C., CA, Dec. 10-14, 2018.

Y Yang, SS Saatchi, L Xu, Y Yu, RB Myneni, Y Knyazikhin, S CHOI. Proof of the Post-drought Effect of Amazonian Forests from Space. American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 14-18, 2015.

Y Yang, SS Saatchi, L Xu. Climate and Edaphic Controls on Humid Tropical Forest Tree Height. American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 15-19, 2014.

S Saatchi, L Xu, AA Bloom, AG Konings, **Y Yang**, et al. Is the Amazon Rainforest Drying Out? American Geophysical Union Fall Meeting, New Orleans, Dec. 11-15, 2018.

SS Saatchi, L Xu, V Meyer, A Ferraz, **Y Yang**, A Shapiro, JF Bastin. VT0005 In Action: National Forest Biomass Inventory Using Airborne Lidar Sampling. American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 12-16, 2016.

L Xu, SS Saatchi, **Y Yang**. Is the seasonal forest more vulnerable to drought effects in tropical Amazonia. American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 14-18, 2015.

L Xu, SS Saatchi, **Y Yang**, R Myneni, C Frankenberg, D Chowdhury. Spatial Patterns of Carbon Exchange Seasonality in Amazonian Forest. American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 15-19, 2014.

SS Saatchi, Y Yu, L Xu, **Y Yang**, et al. Geography of Global Forest Carbon Stocks & Dynamics. American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 15-19, 2014.