

The zip folder contains the data files used to analyze forest canopy structural types as described in the paper:

Fahey, R.T., J.W. Atkins, C.M. Gough, B.S. Hardiman, L.E. Nave, P. Curtis, J. Tallant, L. Turner, K. Nadehoffer, C. Vogel, C. Scheuermann, E. Stuart-Haentjens, A. Fotis, R. Ricart. Defining a spectrum of integrative trait-based vegetation canopy structural types. *Ecology Letters*.

Corresponding Author for communication about data and analysis:

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File List:

Fahey_et_al_ALL_Main_Matrix.csv
Fahey_et_al_LQNEON_pcl_2018.csv
Fahey_et_al_NEON_CST_PFT_NPP_fPAR_LUE.csv
Fahey_et_al_UMBS_pcl_2018.csv
PC-ORD_Input_Output.zip
RF_Analysis_Files.zip

File Description:

Fahey_et_al_ALL_Main_Matrix.csv:

Data matrix containing canopy structural metrics for all plots used in analysis and depicted in Figs. 2 & 3. Metric names and descriptions can be found in Supplementary Material Table S2.

Fahey_et_al_LQNEON_pcl_2018.csv:

Data output for all LQNEON PCL transects after processing using *forestr* package in *R*:
<https://CRAN.R-project.org/package=forestr>. Metric names and descriptions can be found in Supplementary Material Table S2.

Fahey_et_al_NEON_CST_PFT_NPP_fPAR_LUE.csv

Data for selected NEON sites with necessary data to calculate wood net primary productivity (npp) and light use efficiency (LUE) – including fraction of above canopy photosynthetically active radiation absorbed by the canopy (fPAR_mean). See Supporting Information 2: NPP/fPAR/LUE Methods for details. Raw data for calculations available from NEON (NEON.DOM SITE.DP1.10098.001) and in the following repositories:

<https://doi.org/10.5281/zenodo.3359986> and <https://doi.org/10.6084/m9.figshare.5977825.v1>

Fahey_et_al_UMBS_pcl_2018.csv:

Data output for all LQNEON PCL transects after processing using *forestr* package in *R*:
<https://CRAN.R-project.org/package=forestr>. Metric names and descriptions can be found in Supplementary Material Table S2.

PC-ORD_Input_Output.zip:

Folder containing input files and analysis output from multivariate analysis conducted using PC-ORD v.5.31: McCune, B. & Mefford, M.J. (2006). PC-ORD. Multivariate Analysis of Ecological Data. MjM Software Design. Gleneden Beach, Oregon, USA.

RF_Analysis_Files.zip:

Folder containing input files (variables described in Supporting Information Table S3) for Random Forest analysis of predictors of canopy structural type membership. *R* code used in analysis included for use with *randomForest* package: <https://CRAN.R-project.org/package=randomForest>