Supplementary material for

Multi-Decision Vector Fusion Model for Enhanced Mapping of Aboveground Biomass in Subtropical Forests Integrating Sentinel-1, Sentinel-2, and Airborne LiDAR Data

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This PDF file includes:

Table S1:

Table S1. Multi-source remote sensing predictors adaptively selected with a feature selection model, SFS (stepwise feature selection), for each regression method (MLR: multiple linear regression; EN: Elastic-Net; SVR-linear: support vector regression with linear kernel function; SVR-poly: support vector regression with polynomial kernel function; KNN: k-nearest neighbor; BPNN: back-propagation neural network; RF: random forest; and GBT: gradient-boosting tree) across the nine experiments.

Retrieval model	Exp.[1]	Num.[2]	Detail predictor description
MLR	1	6/10	Band3, Band4, Band6, Band8A, Band8, Band11
	2	8/10	SR, TNDVI, NDVI, IRECI, NDVIre1, NDVIre2, NDVIre3, MDI2
	3	2/3	LAI, FVC
	4	4/8	SM, ENT, VA, HO
	5	3/5	VH, VV+VH, VV
	6	10/23	Band3, Band4, Band6, Band8A, Band8, Band11, TNDVI, NDVI, EVI, MDI1
	7	12/31	Band3, Band4, Band6, Band8A, Band8, Band11, TNDVI, NDVI, EVI, MDI1, SM, DI
	8	11/28	Band3, Band4, Band6, Band8A, Band8, Band11, TNDVI, NDVI, EVI, MDI1, VV+VH
	9	13/36	Band3, Band4, Band6, Band8A, Band8, Band11, TNDVI, NDVI, EVI, MDI1, SM, DI, VV+VH
EN	1	7/10	Band3, Band4, Band6, Band8A, Band8, Band11, Band12
	2	8/10	SR, NDVI, EVI, IRECI, NDVIre1, NDVIre2, NDVIre3, MDI2
	3	2/3	LAI, FVC
	4	4/8	SM, ENT, VA, HO
	5	1/5	VV/VH
	6	10/23	Band3, Band4, Band6, Band8A, Band8, TNDVI, NDVI, MDI1, LAI, FVC
	7	12/31	Band3, Band4, Band6, Band8A, Band8, TNDVI, NDVI, MDI1, LAI, FVC, SM, DI
	8	12/28	Band3, Band4, Band6, Band8A, Band8, TNDVI, NDVI, MDI1, LAI, FVC, VV+VH, VV
	9	13/36	Band3, Band4, Band6, Band8A, Band8, TNDVI, NDVI, MDI1, LAI, FVC, SM, DI, VV+VH
SVR- linear	1	7/10	Band2, Band3, Band5, Band6, Band8A, Band8, Band12
	2	9/10	SR, TNDVI, NDVI, EVI, IRECI, NDVIre1, NDVIre2, NDVIre3, MDI2
	3	2/3	LAI, FVC
	4	5/8	SM, CON, DI, ENT, VA
	5	3/5	VH, VV-VH, VV
	6	5/23	Band3, Band8A, NDVIre2, NDVIre3, MDI2

Retrieval model	Exp.[1]	Num.[2]	Detail predictor description
	7	15/31	Band3, Band4, Band6, Band7, Band8A, Band8, Band12, NDVI, EVI, NDVIre2, MDI1, MDI2, LAI, FVC, VA
	8	12/28	Band3, Band6, Band8A, Band12, NDVI, NDVIre2, NDVIre3, MDI2, LAI, FAPAR, FVC, VV/VH
	9	19/36	Band3, Band4, Band6, Band7, Band8A, Band8, Band11, Band12, NDVI, EVI, NDVIre2, MDI2, LAI, FVC, SM, DI, VA, VH, VV-VH
SVR- poly	1	9/10	Band2, Band3, Band4, Band5, Band7, Band8A, Band8, Band11, Band12
	2	7/10	TNDVI, NDVI, EVI, IRECI, NDVIre1, NDVIre2, NDVIre3
	3	2/3	LAI, FVC
	4	5/8	DI, ENT, ME, VA, HO
	5	2/5	VH, VV+VH, VV
	6	2/23	Band3, LAI
	7	11/31	Band2, Band3, Band4, Band8A, Band11, NDVI, NDVIre2, NDVIre3, LAI, SM, VA
	8	8/28	Band3, Band8A, NDVI, NDVIre2, NDVIre3, MDI1, VV+VH, VV
	9	12/36	Band3, Band8A, Band11, NDVI, NDVIre2, NDVIre3, LAI, SM, CON, VA, VV/VH, VV
KNN	1	6/10	Band2, Band4, Band5, Band8A, Band8, Band12
	2	6/10	SR, TNDVI, NDVI, IRECI, NDVIre2, MDI2
	3	2/3	LAI, FVC
	4	4/8	SM, COR, ME, VA
	5	4/5	VH, VV/VH, VV-VH, VV
	6	5/23	Band12, TNDVI, NDVI, IRECI, MDI1
	7	9/31	Band3, SR, TNDVI, NDVI, IRECI, MDI1, MDI2, LAI, SM
	8	8/28	Band8A, SR, TNDVI, NDVI, NDVIre3, MDI1, LAI, VV/VH
	9	7/36	Band4, SR, TNDVI, NDVI, IRECI, MDI2, SM
BPNN	1	8/10	Band2, Band3, Band4, Band6, Band8A, Band8, Band11, Band12
	2	7/10	SR, TNDVI, NDVI, IRECI, NDVIre1, NDVIre2, NDVIre3
	3	2/3	LAI, FVC
	4	7/8	SM, CON, DI, ENT, COR, ME, VA
	5	2/5	VH, VV-VH
	6	8/23	Band3, Band6, Band8A, Band8, Band11, TNDVI, NDVI, FAPAR
	7	8/31	Band3, Band8A, Band11, TNDVI, NDVIre2,

Retrieval model	Exp.[1]	Num.[2]	Detail predictor description
			FAPAR, ENT, VA
	8	8/28	Band2, Band3, Band8A, TNDVI, NDVI, NDVIre2, FAPAR, VH
	9	11/36	Band3, Band8A, Band8, TNDVI, NDVI, NDVIre2, FAPAR, FVC, ENT, VA, VV+VH
RF	1	8/10	Band3, Band4, Band8
	2	7/10	TNDVI, EVI, IRECI, NDVIre2, MDI1, MDI2
	3	2/3	FAPAR, FVC
	4	7/8	SM, DI, ENT, COR, ME, VA, HO
	5	2/5	VV/VH, VV+VH
	6	8/23	Band3, Band8, TNDVI, IRECI, NDVIre2, MDI1, LAI, FAPAR
	7	8/31	Band3, Band8, NDVI, EVI, IRECI, MDI1, LAI, FAPAR, FVC, SM, VA
	8	8/28	Band3, Band12, TNDVI, IRECI, NDVIre2, MDI1, LAI, FVC
	9	11/36	Band3, Band4, NDVI, IRECI, NDVIre2, MDI1, LAI, SM, CON, VA, HO, VV/VH
GBT	1	5/10	Band3, Band4, Band6, Band8A, Band8
	2	8/10	SR, TNDVI, EVI, IRECI, NDVIre1, NDVIre3, MDI1, MDI2
	3	2/3	LAI, FVC
	4	5/8	CON, DI, ENT, ME, VA
	5	2/5	VV+VH, VV
	6	5/23	Band3, TNDVI, IRECI, MDI2, LAI
	7	6/31	Band3, TNDVI, IRECI, LAI, SM, CON
	8	5/28	Band3, NDVI, IRECI, LAI, VV+VH
	9	19/36	Band2, Band3, Band11, Band12, NDVI, IRECI, NDVIre1, NDVIre3, MDI2, LAI, FAPAR, FVC, SM, CON, COR, VA, HO, VV/VH, VV+VH

[1] "Exp." is an abbreviation for "Experiment".

[2] "Num." represents the initial number of variables for each data scenario.

* The selected predictors listed in the last column of the table correspond to "Perdictor" in Table2 in the main text.