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1 Tables

Table S1: Principal Investigators of Data Collection Teams for Each Forest Plot Used

Plot Code	Principal Investigators
ALF_01	Jon Lloyd, Ted Feldpausch
ALF_02	Jon Lloyd, Ted Feldpausch
ALM_01	John Terborgh, Oliver Phillips, Roel Brienen
ALP_01	Abel Monteagudo-Mendoza, Javier Silva Espejo, Oliver Phillips, Rodolfo Vasquez Martinez, Roel Brienen, Yadvinder Malhi
ALP_02	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Roel Brienen
ALP_30	Abel Monteagudo-Mendoza, Javier Silva Espejo, Oliver Phillips, Rodolfo Vasquez Martinez, Roel Brienen, Yadvinder Malhi
ALP_40	Abel Monteagudo-Mendoza, Freddy Ramirez Arevalo, Oliver Phillips, Roel Brienen
AMA_02	Esteban Álvarez Dávila, Irina Mendoza Polo, Oliver Phillips
BAC_01	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
BAC_02	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
BAC_03	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
BAC_04	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
BAC_05	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
BAC_06	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
BEE_01	Alexander Parada Gutierrez, Luzmila Arroyo, Oliver Phillips
BEE_05	Alexander Parada Gutierrez, Luzmila Arroyo, Oliver Phillips
BES_01	Esteban Álvarez Dávila, Irina Mendoza Polo, Oliver Phillips
BET_01	Esteban Álvarez Dávila, Irina Mendoza Polo, Oliver Phillips
BET_02	Esteban Álvarez Dávila, Irina Mendoza Polo, Oliver Phillips
BOG_01	Abel Monteagudo-Mendoza, David Neill, Oliver Phillips
BOG_02	David Neill, Oliver Phillips
CAI_04	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
CAX_01	Oliver Phillips, Samuel Almeida
CAX_02	Oliver Phillips, Samuel Almeida
CAX_06	Luiz Aragão, Oliver Phillips, Samuel Almeida, Yadvinder Malhi
CAX_08	Luiz Aragão, Oliver Phillips, Samuel Almeida, Yadvinder Malhi
CLA_03	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
CLA_04	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
CRP_02	Alejandro Araujo-Murakami, Luzmila Arroyo, Oliver Phillips, Roel Brienen
CUZ_01	Abel Monteagudo-Mendoza, Oliver Phillips
CUZ_02	Abel Monteagudo-Mendoza, Oliver Phillips
CUZ_03	Abel Monteagudo-Mendoza, Oliver Phillips
CUZ_04	Abel Monteagudo-Mendoza, Oliver Phillips
DIV_01	Esteban Álvarez Dávila, Irina Mendoza Polo, Oliver Phillips
DOI_01	Marcos Silveira, Oliver Phillips, Ted Feldpausch
ECE_01	Esteban Álvarez Dávila, Irina Mendoza Polo, Oliver Phillips
ECE_02	Esteban Álvarez Dávila, Irina Mendoza Polo
ELD_01	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
ELD_02	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
ELD_03	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
ELD_04	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
ESP_01	Miles Silman, William Farfan-Rios
HCC_21	Luzmila Arroyo, Oliver Phillips, Roel Brienen
HCC_22	Alejandro Araujo-Murakami, Luzmila Arroyo, Oliver Phillips, Roel Brienen
HCC_24	Alejandro Araujo-Murakami, Luzmila Arroyo, Oliver Phillips, Roel Brienen
JAS_02	David Neill, Oliver Phillips, Roel Brienen
JAS_03	David Neill, Roel Brienen
JAS_04	David Neill, Oliver Phillips, Roel Brienen
JEN_11	Abel Monteagudo-Mendoza, Eurídice Honorio Coronado, Oliver Phillips, Roel Brienen
JEN_12	Eurídice Honorio Coronado, Oliver Phillips, Roel Brienen
JFR_01	Ted Feldpausch
JFR_02	Ted Feldpausch
JFR_03	Ted Feldpausch
JFR_04	Ted Feldpausch
JFR_05	Ted Feldpausch
JFR_06	Ted Feldpausch
JFR_07	Ted Feldpausch
JFR_08	Ted Feldpausch
JFR_09	Ted Feldpausch
KAL_01	Esteban Álvarez Dávila, Irina Mendoza Polo, Oliver Phillips
LAS_02	Fernando Cornejo Valverde, Nigel Pitman, Oliver Phillips
LFB_01	Alejandro Araujo-Murakami, Luzmila Arroyo, Oliver Phillips, Roel Brienen, Timothy Killeen
LFB_02	Alejandro Araujo-Murakami, Luzmila Arroyo, Oliver Phillips, Roel Brienen
LSL_01	Alejandro Araujo-Murakami, Luzmila Arroyo, Oliver Phillips, Roel Brienen
LSL_02	Alejandro Araujo-Murakami, Luzmila Arroyo, Oliver Phillips, Roel Brienen
MIN_01	Marcos Silveira, Oliver Phillips, Ted Feldpausch
MNU_05	John Terborgh, Oliver Phillips, Roel Brienen
MNU_06	Fernando Cornejo Valverde, John Terborgh, Oliver Phillips, Roel Brienen
MTH_01	Marcos Silveira, Oliver Phillips, Ted Feldpausch

Plot Code	Principal Investigators
PNY_01	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez
PNY_02	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez
PNY_03	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez
PNY_04	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez
PNY_05	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez
PNY_06	Abel Monteagudo-Mendoza, Nadir Pallqui Camacho, Oliver Phillips, Rodolfo Vasquez Martinez
PNY_07	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez
POR_01	Marcos Silveira, Oliver Phillips, Ted Feldpausch
POR_02	Oliver Phillips, Ted Feldpausch
PTN_01	Esteban Álvarez Dávila, Oliver Phillips, Zorayda Restrepo Correa
RAS_01	Esteban Álvarez Dávila, Irina Mendoza Polo, Oliver Phillips
RCS_01	Abel Monteagudo-Mendoza, Luis Valenzuela Gamarra, Oliver Phillips
RCS_02	Abel Monteagudo-Mendoza, Luis Valenzuela Gamarra, Oliver Phillips
RCS_03	Abel Monteagudo-Mendoza, Luis Valenzuela Gamarra, Oliver Phillips
RET_05	Alejandro Araujo-Murakami, Guido Pardo, Oliver Phillips, Roel Brienen, Vincent Vos
RET_06	Alejandro Araujo-Murakami, Guido Pardo, Oliver Phillips, Roel Brienen, Vincent Vos
RET_08	Alejandro Araujo-Murakami, Guido Pardo, Oliver Phillips, Roel Brienen, Vincent Vos
RET_09	Alejandro Araujo-Murakami, Guido Pardo, Oliver Phillips, Roel Brienen, Vincent Vos
RFH_01	Marcos Silveira, Oliver Phillips, Ted Feldpausch
RIO_01	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
RIO_02	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
RST_01	Jorcely Barroso, Marcos Silveira, Oliver Phillips, Ted Feldpausch
SCT_01	Alexander Parada Gutierrez, Casimiro Mendoza, Luzmila Arroyo, Oliver Phillips
SCT_06	Alexander Parada Gutierrez, Casimiro Mendoza, Luzmila Arroyo, Oliver Phillips
SEU_01	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
SEU_02	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
SEU_03	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
SEU_04	Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
SEU_05	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
SEU_06	Emilio Vilanova Torre, Geertje van der Heijden, Hirma Ramírez-Angulo, Oliver Phillips
SUC_01	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Roel Brienen
SUC_02	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Roel Brienen
SUC_03	Abel Monteagudo-Mendoza, Roel Brienen
SUC_04	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Roel Brienen
SUC_05	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Roel Brienen
TAM_01	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Ted Feldpausch, Timothy Baker
TAM_02	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Ted Feldpausch
TAM_03	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Ted Feldpausch
TAM_04	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Ted Feldpausch
TAM_05	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez
TAM_06	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez
TAM_07	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Ted Feldpausch
TAM_08	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez
TAM_09	Javier Silva Espejo, Oliver Phillips, Yadvinder Malhi
TAN_03	Beatriz Marimon, Ben Hur Marimon Junior, Oliver Phillips, Ted Feldpausch
TAN_04	Beatriz Marimon, Ben Hur Marimon Junior, Jon Lloyd, Ted Feldpausch
TIP_01	Abel Monteagudo-Mendoza, Oliver Phillips
TIP_02	David Neill, Oliver Phillips
TIP_03	Abel Monteagudo-Mendoza, Oliver Phillips
YAN_01	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Roel Brienen
YAN_02	Abel Monteagudo-Mendoza, Oliver Phillips, Rodolfo Vasquez Martinez, Roel Brienen
ZAR_02	Eliana Jimenez-Rojas, Maria Cristina Peñuela-Mora , Oliver Phillips
ZAR_03	Eliana Jimenez-Rojas, Maria Cristina Peñuela-Mora , Oliver Phillips
ZAR_04	Eliana Jimenez-Rojas, Maria Cristina Peñuela-Mora , Oliver Phillips

Table S2: Results from fitting each forest plot individually for trunk diameter data.

	Country	Allom Region	Num	Plot	Mean	1 Param		2 Param			MST
Plot			Trees	Area	DBH	μ_1	n_L	μ_1	phi	n_L	n_L
ALF_01	Brazil	Brazilian Shield	513	1.00	19.99	0.266	63.38	0.396	0.471	68.68	56.20
ALF_02	Brazil	Brazilian Shield	564	1.00	21.14	0.239	62.63	0.167	0.211	58.07	62.31
ALM_01	Peru	S.Western	1324	2.00	20.97	0.242	74.38	0.155	0.181	67.79	72.52
ALP_01	Peru	N.Western	589	1.00	20.08	0.266	72.70	0.505	0.556	82.85	64.67
ALP_02	Peru	N.Western	621	1.00	19.79	0.269	77.65	0.294	0.364	79.01	69.35
ALP_30	Peru	N.Western	477	1.00	21.50	0.232	51.29	0.126	0.126	45.06	54.54
ALP_40	Peru	N.Western	1193	1.00	16.13	0.406	224.71	0.387	0.316	223.08	148.19
AMA_02	Colombia	N.Western	433	1.00	23.17	0.208	41.62	0.101	0.090	35.34	45.74
BAC_01	Venezuela	N.Western	83	0.25	29.45	0.150	22.81	0.028	-0.192	14.86	35.22
BAC_02	Venezuela	N.Western	74	0.25	30.30	0.143	19.30	0.004	-0.757	7.85	32.49
BAC_03	Venezuela	N.Western	60	0.25	35.91	0.121	13.10	0.041	0.007	9.63	23.65
BAC_04	Venezuela	N.Western	75	0.25	28.22	0.165	22.55	0.170	0.343	22.72	30.72
BAC_05	Venezuela	N.Western	98	0.25	22.01	0.228	41.22	0.146	0.183	37.49	43.94
BAC_06	Venezuela	N.Western	59	0.25	33.42	0.130	13.88	0.023	-0.193	8.66	24.49
BEE_01	Bolivia	S.Western	574	1.00	20.43	0.261	69.44	0.653	0.649	84.09	62.34
BEE_05	Bolivia	S.Western	545	1.00	21.67	0.232	58.71	0.275	0.392	60.94	59.30
BES_01	Colombia	N.Western	306	1.00	22.83	0.217	30.79	0.394	0.533	35.30	33.68
BET_01	Colombia	N.Western	832	1.03	17.22	0.350	130.63	0.284	0.258	126.17	96.03
BET_02	Colombia	N.Western	768	1.03	17.26	0.347	119.48	0.207	0.147	109.66	87.24
BOG_01	Ecuador	N.Western	539	1.00	22.08	0.227	56.67	0.330	0.461	61.61	58.33
BOG_02	Ecuador	N.Western	675	1.00	18.92	0.293	91.78	0.368	0.414	95.85	74.99
CAI_04	Venezuela	N.Western	66	0.25	30.40	0.144	17.51	0.063	0.075	14.01	28.77
CAX_01	Brazil	Eastern-Central	524	1.00	23.65	0.201	49.00	0.156	0.248	46.17	56.87
CAX_02	Brazil	Eastern-Central	523	1.00	22.76	0.213	51.81	0.165	0.246	48.87	56.64
CAX_06	Brazil	Eastern-Central	437	1.00	25.08	0.185	37.59	0.157	0.278	36.07	47.89
CAX_08	Brazil	Eastern-Central	558	1.00	20.61	0.255	65.94	0.360	0.452	70.88	58.73
CDM_01	Peru	S.Western	520	1.00	21.09	0.249	60.20	0.870	0.759	78.83	55.71
CLA_03	Venezuela	N.Western	125	0.26	22.56	0.217	48.52	0.191	0.290	47.16	55.36
CLA_04	Venezuela	N.Western	158	0.25	20.86	0.258	73.84	0.212	0.267	71.09	68.66
CRP_02	Bolivia	Brazilian Shield	503	1.00	20.97	0.245	57.14	0.311	0.415	60.09	57.34
CUZ_01	Peru	S.Western	433	1.00	20.91	0.252	50.67	0.749	0.705	63.97	46.69
CUZ_02	Peru	S.Western	555	1.00	20.54	0.258	66.47	0.550	0.593	77.88	58.52
CUZ_03	Peru	S.Western	504	1.00	20.98	0.247	57.76	0.409	0.506	64.27	55.95
CUZ_04	Peru	S.Western	599	1.00	20.50	0.256	71.05	0.373	0.464	76.85	66.44
DIV_01	Colombia	N.Western	752	1.10	17.55	0.339	107.39	0.444	0.430	112.49	77.52
DOI_01	Brazil	S.Western	486	1.00	21.21	0.245	55.06	0.416	0.514	61.59	52.37
ECE_01	Colombia	N.Western	393	1.00	20.65	0.252	46.06	0.427	0.514	51.39	45.21
ECE_02	Colombia	N.Western	369	1.00	24.35	0.204	34.95	0.893	0.817	50.16	39.32
ELD_01	Venezuela	Guyana Shield	117	0.25	25.05	0.187	40.55	0.176	0.313	39.95	52.96
ELD_02	Venezuela	Guyana Shield	134	0.25	24.99	0.193	47.35	0.228	0.388	49.25	59.87
ELD_03	Venezuela	Guyana Shield	148	0.25	18.59	0.307	83.52	0.059	-0.254	62.83	69.73
ELD_04	Venezuela	Guyana Shield	152	0.25	21.38	0.234	65.70	0.060	-0.133	49.51	70.52
ESP_01	Peru	S.Western	837	1.00	18.43	0.302	117.27	0.100	-0.061	96.09	91.60
HCC_21	Bolivia	Brazilian Shield	557	1.00	20.06	0.268	69.16	0.642	0.636	82.69	61.00
HCC_22	Bolivia	Brazilian Shield	616	1.00	19.19	0.289	82.55	0.575	0.575	94.40	66.89
HCC_24	Bolivia	Brazilian Shield	659	1.00	19.32	0.283	86.53	0.442	0.489	94.37	74.05
JAS_02	Ecuador	N.Western	752	1.00	18.72	0.297	103.62	0.255	0.279	100.71	86.18
JAS_03	Ecuador	N.Western	622	1.00	20.89	0.244	70.57	0.193	0.251	67.14	69.52
JAS_04	Ecuador	N.Western	794	1.00	20.69	0.250	91.99	0.250	0.334	92.04	87.62
JEN_11	Peru	N.Western	595	1.00	20.08	0.263	72.55	0.301	0.380	74.55	67.20
JEN_12	Peru	N.Western	744	1.00	18.63	0.297	102.42	0.120	0.013	86.85	86.10
JFR_01	Brazil	Brazilian Shield	472	0.93	21.60	0.231	54.45	0.163	0.215	50.51	56.46
JFR_02	Brazil	Brazilian Shield	241	0.53	20.64	0.256	54.51	0.611	0.632	65.45	50.62
JFR_03	Brazil	Brazilian Shield	573	1.02	21.23	0.242	62.89	0.378	0.485	69.17	60.19
JFR_04	Brazil	Brazilian Shield	569	1.00	20.29	0.261	69.01	0.466	0.533	77.73	62.07
JFR_05	Brazil	Brazilian Shield	555	1.00	21.09	0.243	62.49	0.291	0.395	64.93	61.97
JFR_06	Brazil	Brazilian Shield	507	1.00	19.32	0.279	65.63	0.175	0.170	60.01	56.96
JFR_07	Brazil	Brazilian Shield	476	1.02	20.83	0.246	53.01	0.210	0.280	51.31	50.96
JFR_08	Brazil	Brazilian Shield	505	1.00	20.72	0.248	58.22	0.218	0.288	56.67	56.16
JFR_09	Brazil	Brazilian Shield	604	0.97	18.99	0.289	83.24	0.273	0.312	82.30	68.59
KAL_01	Colombia	N.Western	365	1.00	23.50	0.206	34.87	0.240	0.385	36.14	38.57
LAS_02	Peru	S.Western	592	1.00	20.53	0.254	69.88	0.314	0.406	73.01	62.49
LFB_01	Bolivia	Brazilian Shield	564	1.00	19.69	0.283	73.96	1.735	0.961	107.02	61.82
LFB_02	Bolivia	Brazilian Shield	536	1.00	20.64	0.262	65.27	1.780	0.987	98.34	58.75
LSL_01	Bolivia	Brazilian Shield	505	1.00	18.55	0.306	71.73	0.610	0.577	81.58	55.49
LSL_02	Bolivia	Brazilian Shield	626	1.00	20.27	0.255	74.09	0.117	0.063	63.35	73.45
MIN_01	Brazil	S.Western	691	1.00	19.57	0.272	87.21	0.151	0.127	77.76	77.59
MNU_05	Peru	S.Western	1235	2.25	21.21	0.243	61.96	0.413	0.514	69.41	58.32
MNU_06	Peru	S.Western	1212	2.25	22.64	0.216	54.00	0.199	0.306	53.00	58.65
MTH_01	Brazil	S.Western	501	1.00	19.69	0.270	62.78	0.184	0.199	58.21	54.57
PNY_01	Peru	S.Western	558	1.00	17.71	0.326	84.33	0.069	-0.224	64.82	70.84

	Country	Allom Region	Num	Plot	Mean	1 Param		2 Param			MST
Plot			Trees	Area	DBH	μ_1	n_L	μ_1	phi	n_L	n_L
PNY_02	Peru	S.Western	634	1.00	20.06	0.269	79.16	0.598	0.609	93.21	66.40
PNY_03	Peru	S.Western	739	1.00	18.00	0.320	109.77	0.283	0.290	107.43	84.69
PNY_04	Peru	S.Western	524	1.00	20.27	0.258	62.73	0.239	0.306	61.75	57.69
PNY_05	Peru	S.Western	619	1.00	20.12	0.264	75.96	0.443	0.512	84.36	66.79
PNY_06	Peru	S.Western	464	1.00	21.88	0.227	48.92	0.200	0.291	47.59	51.21
PNY_07	Peru	S.Western	508	1.00	20.37	0.254	59.82	0.146	0.141	53.45	58.31
POR_01	Brazil	S.Western	550	1.00	22.25	0.224	57.27	0.359	0.492	63.62	59.60
POR_02	Brazil	S.Western	520	1.00	20.25	0.257	61.99	0.163	0.176	56.57	57.82
PTN_01	Colombia	N.Western	551	1.00	18.17	0.312	79.81	0.166	0.108	71.32	65.36
RAS_01	Colombia	N.Western	654	1.03	20.99	0.242	70.92	0.156	0.183	64.73	67.83
RCS_01	Peru	S.Western	635	1.00	20.27	0.255	75.13	0.116	0.061	64.15	74.21
RCS_02	Peru	S.Western	758	1.00	18.70	0.294	103.61	0.125	0.029	88.50	93.72
RCS_03	Peru	S.Western	737	1.00	20.86	0.241	82.58	0.071	-0.088	64.18	80.64
RET_05	Bolivia	Brazilian Shield	597	1.00	19.84	0.269	74.43	0.301	0.373	76.14	64.06
RET_06	Bolivia	Brazilian Shield	524	1.00	20.47	0.259	62.94	0.496	0.557	72.07	55.88
RET_08	Bolivia	Brazilian Shield	505	1.00	20.56	0.257	60.24	0.492	0.556	68.98	53.63
RET_09	Bolivia	Brazilian Shield	474	1.00	21.57	0.235	51.73	0.318	0.436	55.24	50.76
RFH_01	Brazil	S.Western	380	1.00	21.96	0.230	40.53	0.398	0.519	45.78	40.96
RIO_01	Venezuela	Guyana Shield	138	0.25	23.40	0.203	51.94	0.066	-0.041	40.31	64.65
RIO_02	Venezuela	Guyana Shield	130	0.25	23.95	0.202	48.18	0.092	0.074	40.43	58.47
RST_01	Brazil	S.Western	538	1.00	22.21	0.219	54.57	0.073	-0.040	42.88	58.69
SCT_01	Bolivia	S.Western	576	1.00	19.81	0.268	71.76	0.282	0.350	72.46	66.49
SCT_06	Bolivia	S.Western	602	1.00	19.32	0.281	78.53	0.305	0.362	79.80	69.00
SEU_01	Venezuela	N.Western	245	0.25	19.48	0.280	126.15	0.345	0.406	131.30	110.33
SEU_02	Venezuela	N.Western	286	0.25	17.71	0.335	176.00	0.289	0.280	171.59	135.72
SEU_03	Venezuela	N.Western	157	0.25	22.76	0.220	63.31	0.379	0.516	71.61	68.16
SEU_04	Venezuela	N.Western	182	0.25	21.76	0.238	79.11	0.483	0.573	92.10	78.15
SEU_05	Venezuela	N.Western	216	0.25	18.99	0.296	118.34	0.459	0.487	128.51	95.64
SEU_06	Venezuela	N.Western	168	0.25	20.46	0.257	80.19	0.403	0.488	88.02	73.40
SUC_01	Peru	N.Western	610	1.00	20.61	0.253	71.55	0.364	0.459	77.18	66.97
SUC_02	Peru	N.Western	591	1.00	20.94	0.244	66.85	0.204	0.273	64.43	67.03
SUC_03	Peru	N.Western	568	1.00	21.08	0.242	63.72	0.253	0.349	64.33	63.43
SUC_04	Peru	N.Western	606	1.00	21.11	0.242	68.12	0.308	0.415	71.68	66.78
SUC_05	Peru	N.Western	565	1.00	21.89	0.227	59.61	0.222	0.326	59.32	62.99
TAM_01	Peru	S.Western	620	1.00	20.94	0.242	69.65	0.131	0.123	61.32	67.67
TAM_02	Peru	S.Western	680	1.00	20.12	0.260	82.13	0.182	0.209	76.41	73.24
TAM_03	Peru	S.Western	368	0.58	25.66	0.173	50.86	0.005	-0.827	21.70	74.38
TAM_04	Peru	S.Western	302	0.42	19.85	0.268	89.45	0.281	0.350	90.31	77.59
TAM_05	Peru	S.Western	535	1.00	20.90	0.247	61.42	0.352	0.454	66.16	58.23
TAM_06	Peru	S.Western	660	1.00	21.51	0.233	71.48	0.181	0.246	67.67	69.53
TAM_07	Peru	S.Western	508	1.00	20.36	0.257	60.71	0.301	0.387	62.70	54.75
TAM_08	Peru	S.Western	511	1.00	20.06	0.267	63.09	0.322	0.398	65.49	55.17
TAM_09	Peru	S.Western	556	1.00	20.76	0.248	64.05	0.253	0.340	64.30	60.32
TAN_03	Brazil	Brazilian Shield	589	1.00	18.44	0.307	83.88	0.375	0.404	87.02	67.65
TAN_04	Brazil	Brazilian Shield	578	1.00	18.39	0.307	82.30	0.243	0.251	78.91	65.78
TIP_01	Ecuador	N.Western	553	1.00	20.50	0.257	66.02	0.503	0.564	75.90	58.71
TIP_02	Ecuador	N.Western	543	0.80	20.10	0.261	82.32	0.219	0.272	79.45	74.47
TIP_03	Ecuador	N.Western	471	1.00	22.01	0.230	50.19	0.548	0.627	60.91	52.64
YAN_01	Peru	N.Western	604	1.00	21.18	0.242	67.80	0.354	0.463	73.54	67.02
YAN_02	Peru	N.Western	590	1.00	21.84	0.230	62.93	0.302	0.426	66.79	64.77
ZAR_02	Colombia	N.Western	601	1.00	18.57	0.297	82.98	0.095	-0.073	67.42	75.59
ZAR_03	Colombia	N.Western	664	1.00	18.79	0.293	90.17	0.156	0.110	80.21	73.40
ZAR_04	Colombia	N.Western	600	1.00	20.96	0.240	66.95	0.091	-0.001	54.75	65.96

Table S3: Table of AIC and BIC Citerion for each of 3 models for fitting to trunk diameter data

	Log Likelihood			AIC			BIC		
Plot	MST	1 Param	2 Param	MST	1 Param	2 Param	MST	1 Param	2 Param
ALF_01	-1,717	-1,683	-1,682	66.2	**0.0**	**0.0574**	61.9	**0.0**	**4.3**
ALF_02	-1,951	-1,922	-1,921	57.5	**0.0**	**0.195**	53.1	**0.0**	**4.53**
ALM_01	-4,579	-4,494	-4,490	173.0	**4.12**	**0.0**	163.0	**0.0**	**1.07**
ALP_01	-1,966	-1,932	-1,929	69.6	**4.31**	**0.0**	60.9	**0.0**	**0.0635**
ALP_02	-2,066	-2,030	-2,030	71.3	**0.0**	**1.91**	66.9	**0.0**	**6.34**
ALP_30	-1,650	-1,643	-1,641	12.5	**1.85**	**0.0**	**6.48**	**0.0**	**2.32**
ALP_40	-3,473	-3,349	-3,349	247.0	**0.0**	**1.96**	242.0	**0.0**	**7.04**
AMA_02	-1,584	-1,549	-1,545	72.5	**4.78**	**0.0**	64.3	**0.711**	**0.0**
BAC_01	-333	-330	-327	**9.15**	**4.13**	**0.0**	**4.32**	**1.71**	**0.0**
BAC_02	-301	-299	-290	18.0	15.2	**0.0**	13.4	12.9	**0.0**
BAC_03	-260	-255	-253	**8.23**	**0.325**	**0.0**	**5.81**	**0.0**	**1.77**
BAC_04	-290	-289	-289	**0.713**	**0.0**	**2.0**	**0.0**	**1.6**	**5.92**
BAC_05	-341	-340	-340	**0.111**	**0.0**	**1.55**	**0.0**	**2.47**	**6.61**
BAC_06	-248	-245	-243	**6.83**	**2.69**	**0.0**	**2.67**	**0.615**	**0.0**
BEE_01	-1,925	-1,895	-1,888	71.2	12.3	**0.0**	62.5	**7.97**	**0.0**
BEE_05	-1,898	-1,874	-1,874	46.2	**0.0**	**1.58**	41.9	**0.0**	**5.88**
BES_01	-1,077	-1,076	-1,074	**1.61**	**1.44**	**0.0**	**0.0**	**3.55**	**5.84**
BET_01	-2,543	-2,473	-2,473	138.0	**0.0**	**1.39**	134.0	**0.0**	**6.12**
BET_02	-2,370	-2,292	-2,290	157.0	**1.57**	**0.0**	151.0	**0.0**	**3.07**
BOG_01	-1,889	-1,868	-1,867	39.3	**0.189**	**0.0**	34.8	**0.0**	**4.1**
BOG_02	-2,200	-2,141	-2,141	116.0	**0.0**	**1.19**	111.0	**0.0**	**5.7**
CAI_04	-266	-265	-264	**0.0**	**0.11**	**0.736**	**0.0**	**2.3**	**5.12**
CAX_01	-1,908	-1,890	-1,889	35.2	**0.0**	**1.04**	30.9	**0.0**	**5.3**
CAX_02	-1,876	-1,851	-1,851	47.8	**0.0**	**1.03**	43.5	**0.0**	**5.28**
CAX_06	-1,622	-1,618	-1,618	**5.42**	**0.0**	**1.66**	**1.34**	**0.0**	**5.74**
CAX_08	-1,915	-1,859	-1,858	109.0	**0.207**	**0.0**	105.0	**0.0**	**4.12**
CDM_01	-1,762	-1,741	-1,729	62.6	22.7	**0.0**	54.1	18.5	**0.0**
CLA_03	-438	-440	-440	**0.0**	**5.49**	**7.43**	**0.0**	**8.31**	13.1
CLA_04	-532	-526	-526	**8.81**	**0.0**	**1.87**	**5.74**	**0.0**	**4.93**
CRP_02	-1,703	-1,699	-1,698	**5.63**	**0.0**	**1.29**	**1.41**	**0.0**	**5.51**
CUZ_01	-1,464	-1,445	-1,437	49.5	14.0	**0.0**	41.3	**9.98**	**0.0**
CUZ_02	-1,887	-1,839	-1,834	101.0	**7.91**	**0.0**	92.1	**3.59**	**0.0**
CUZ_03	-1,712	-1,696	-1,695	30.2	**1.64**	**0.0**	24.3	**0.0**	**2.58**
CUZ_04	-2,020	-1,993	-1,992	51.4	**0.307**	**0.0**	46.7	**0.0**	**4.09**
DIV_01	-2,347	-2,261	-2,260	172.0	**0.0**	**0.898**	167.0	**0.0**	**5.52**
DOI_01	-1,665	-1,641	-1,639	47.0	**1.87**	**0.0**	40.9	**0.0**	**2.32**
ECE_01	-1,312	-1,313	-1,311	**0.0**	**3.16**	**2.46**	**0.0**	**7.14**	10.4
ECE_02	-1,310	-1,319	-1,303	10.2	30.2	**0.0**	**2.4**	26.2	**0.0**
ELD_01	-428	-432	-432	**0.0**	10.4	12.3	**0.0**	13.1	17.9
ELD_02	-483	-491	-491	**0.0**	16.6	18.5	**0.0**	19.5	24.3
ELD_03	-471	-464	-460	18.0	**4.69**	**0.0**	12.0	**1.7**	**0.0**
ELD_04	-525	-523	-520	**5.87**	**4.07**	**0.0**	**0.0**	**1.22**	**0.173**
ESP_01	-2,745	-2,631	-2,621	243.0	17.1	**0.0**	233.0	12.4	**0.0**
HCC_21	-1,853	-1,822	-1,817	67.5	**9.19**	**0.0**	58.9	**4.87**	**0.0**
HCC_22	-2,020	-1,963	-1,959	119.0	**5.77**	**0.0**	110.0	**1.35**	**0.0**
HCC_24	-2,154	-2,116	-2,114	76.2	**1.03**	**0.0**	70.7	**0.0**	**3.46**
JAS_02	-2,427	-2,375	-2,375	101.0	**0.0**	**1.63**	96.2	**0.0**	**6.25**
JAS_03	-2,129	-2,103	-2,103	48.9	**0.0**	**1.16**	44.5	**0.0**	**5.59**
JAS_04	-2,708	-2,665	-2,665	84.5	**0.0**	**2.0**	79.8	**0.0**	**6.68**
JEN_11	-1,985	-1,962	-1,961	44.0	**0.0**	**1.76**	39.6	**0.0**	**6.15**
JEN_12	-2,404	-2,353	-2,347	110.0	**8.78**	**0.0**	101.0	**4.17**	**0.0**
JFR_01	-1,646	-1,627	-1,626	34.9	**0.0**	**0.483**	30.8	**0.0**	**4.64**
JFR_02	-809	-801	-798	17.6	**3.34**	**0.0**	10.8	**0.0**	**0.145**
JFR_03	-1,975	-1,941	-1,939	67.3	**1.48**	**0.0**	61.4	**0.0**	**2.88**
JFR_04	-1,913	-1,878	-1,875	70.7	**3.35**	**0.0**	63.0	**0.0**	**0.989**
JFR_05	-1,897	-1,880	-1,880	30.5	**0.0**	**1.52**	26.2	**0.0**	**5.84**
JFR_06	-1,678	-1,638	-1,637	77.5	**0.527**	**0.0**	72.7	**0.0**	**3.7**
JFR_07	-1,635	-1,606	-1,606	55.0	**0.0**	**1.7**	50.8	**0.0**	**5.87**
JFR_08	-1,723	-1,698	-1,698	47.5	**0.0**	**1.78**	43.3	**0.0**	**6.0**
JFR_09	-1,982	-1,925	-1,925	111.0	**0.0**	**1.95**	107.0	**0.0**	**6.35**
KAL_01	-1,326	-1,306	-1,306	37.5	**0.0**	**1.73**	33.6	**0.0**	**5.63**
LAS_02	-2,032	-1,974	-1,973	114.0	**0.0**	**1.24**	110.0	**0.0**	**5.62**
LFB_01	-1,830	-1,807	-1,781	92.4	49.0	**0.0**	83.7	44.7	**0.0**
LFB_02	-1,765	-1,761	-1,731	64.0	58.3	**0.0**	55.4	54.1	**0.0**
LSL_01	-1,627	-1,576	-1,573	103.0	**3.15**	**0.0**	96.0	**0.0**	**1.08**
LSL_02	-2,096	-2,088	-2,084	19.5	**5.68**	**0.0**	10.7	**1.24**	**0.0**
MIN_01	-2,305	-2,254	-2,251	105.0	**3.63**	**0.0**	96.6	**0.0**	**0.906**
MNU_05	-4,264	-4,178	-4,173	179.0	**8.78**	**0.0**	169.0	**3.66**	**0.0**
MNU_06	-4,320	-4,272	-4,272	93.6	**0.0**	**1.74**	88.5	**0.0**	**6.84**
MTH_01	-1,687	-1,638	-1,637	96.1	**0.0**	**0.234**	91.9	**0.0**	**4.45**
PNY_01	-1,714	-1,706	-1,696	31.8	17.8	**0.0**	23.2	13.5	**0.0**

	Log Likelihood			AIC			BIC		
Plot	MST	1 Param	2 Param	MST	1 Param	2 Param	MST	1 Param	2 Param
PNY_02	-2,136	-2,071	-2,064	139.0	10.4	**0.0**	130.0	**5.98**	**0.0**
PNY_03	-2,339	-2,271	-2,271	133.0	**0.0**	**1.81**	128.0	**0.0**	**6.41**
PNY_04	-1,774	-1,739	-1,739	67.5	**0.0**	**1.92**	63.3	**0.0**	**6.18**
PNY_05	-2,082	-2,035	-2,033	95.1	**2.3**	**0.0**	88.4	**0.0**	**2.13**
PNY_06	-1,624	-1,608	-1,608	29.6	**0.0**	**1.81**	25.5	**0.0**	**5.95**
PNY_07	-1,711	-1,697	-1,695	28.7	**1.3**	**0.0**	23.2	**0.0**	**2.93**
POR_01	-1,929	-1,912	-1,910	33.7	**1.53**	**0.0**	27.9	**0.0**	**2.78**
POR_02	-1,764	-1,730	-1,728	66.9	**0.519**	**0.0**	62.1	**0.0**	**3.74**
PTN_01	-1,741	-1,710	-1,708	62.0	**1.83**	**0.0**	55.8	**0.0**	**2.48**
RAS_01	-2,277	-2,221	-2,219	112.0	**1.11**	**0.0**	106.0	**0.0**	**3.37**
RCS_01	-2,128	-2,118	-2,114	23.4	**5.65**	**0.0**	14.5	**1.2**	**0.0**
RCS_02	-2,403	-2,403	-2,398	**6.32**	**7.88**	**0.0**	**0.0**	**6.19**	**2.94**
RCS_03	-2,565	-2,506	-2,495	137.0	20.7	**0.0**	128.0	16.1	**0.0**
RET_05	-2,012	-1,953	-1,953	115.0	**0.0**	**1.81**	111.0	**0.0**	**6.2**
RET_06	-1,776	-1,735	-1,732	85.4	**4.91**	**0.0**	76.9	**0.653**	**0.0**
RET_08	-1,717	-1,676	-1,673	84.3	**4.59**	**0.0**	75.9	**0.365**	**0.0**
RET_09	-1,652	-1,623	-1,622	56.2	**0.0**	**0.711**	52.1	**0.0**	**4.87**
RFH_01	-1,325	-1,310	-1,309	29.6	**1.51**	**0.0**	24.2	**0.0**	**2.43**
RIO_01	-493	-497	-495	**0.0**	**9.85**	**8.01**	**0.0**	12.8	13.9
RIO_02	-467	-470	-469	**0.0**	**7.84**	**7.99**	**0.0**	10.7	13.7
RST_01	-1,928	-1,892	-1,884	84.6	13.9	**0.0**	76.0	**9.6**	**0.0**
SCT_01	-1,899	-1,885	-1,885	26.1	**0.0**	**1.97**	21.8	**0.0**	**6.33**
SCT_06	-1,965	-1,938	-1,938	52.1	**0.0**	**1.91**	47.7	**0.0**	**6.31**
SEU_01	-801	-790	-790	19.3	**0.0**	**1.77**	15.8	**0.0**	**5.27**
SEU_02	-882	-865	-865	31.7	**0.0**	**1.88**	28.1	**0.0**	**5.54**
SEU_03	-551	-550	-549	**0.124**	**0.0**	**0.48**	**0.0**	**2.93**	**6.47**
SEU_04	-625	-621	-620	**6.33**	**0.497**	**0.0**	**2.63**	**0.0**	**2.71**
SEU_05	-701	-683	-682	33.5	**0.0**	**0.987**	30.1	**0.0**	**4.36**
SEU_06	-568	-558	-557	17.9	**0.0**	**1.03**	14.8	**0.0**	**4.15**
SUC_01	-2,068	-2,037	-2,036	59.9	**0.0793**	**0.0**	55.4	**0.0**	**4.33**
SUC_02	-2,015	-2,000	-2,000	27.8	**0.0**	**1.53**	23.4	**0.0**	**5.92**
SUC_03	-1,944	-1,927	-1,927	32.1	**0.0**	**1.97**	27.8	**0.0**	**6.31**
SUC_04	-2,078	-2,054	-2,054	45.4	**0.0**	**1.09**	40.9	**0.0**	**5.5**
SUC_05	-1,969	-1,957	-1,957	21.3	**0.0**	**1.99**	17.0	**0.0**	**6.33**
TAM_01	-2,152	-2,105	-2,102	94.7	**3.81**	**0.0**	86.5	**0.0**	**0.62**
TAM_02	-2,319	-2,251	-2,250	134.0	**0.223**	**0.0**	129.0	**0.0**	**4.3**
TAM_03	-1,405	-1,399	-1,356	94.2	85.4	**0.0**	86.3	81.5	**0.0**
TAM_04	-1,017	-989	-989	54.7	**0.0**	**1.98**	51.0	**0.0**	**5.69**
TAM_05	-1,830	-1,800	-1,799	57.0	**0.0**	**0.149**	52.7	**0.0**	**4.43**
TAM_06	-2,331	-2,268	-2,267	124.0	**0.0**	**0.746**	119.0	**0.0**	**5.24**
TAM_07	-1,728	-1,687	-1,686	81.1	**0.0**	**1.66**	76.9	**0.0**	**5.9**
TAM_08	-1,718	-1,677	-1,677	81.0	**0.0**	**1.55**	76.8	**0.0**	**5.78**
TAM_09	-1,908	-1,870	-1,870	74.1	**0.0**	**1.99**	69.8	**0.0**	**6.31**
TAN_03	-1,878	-1,838	-1,837	78.5	**0.0**	**1.53**	74.1	**0.0**	**5.91**
TAN_04	-1,855	-1,804	-1,804	98.6	**0.0**	**1.39**	94.3	**0.0**	**5.75**
TIP_01	-1,879	-1,835	-1,831	91.3	**4.88**	**0.0**	82.7	**0.565**	**0.0**
TIP_02	-1,836	-1,795	-1,794	80.9	**0.0**	**1.59**	76.6	**0.0**	**5.89**
TIP_03	-1,619	-1,623	-1,618	**0.0**	11.3	**3.5**	**0.0**	15.5	11.8
YAN_01	-2,065	-2,048	-2,047	32.5	**0.329**	**0.0**	27.8	**0.0**	**4.08**
YAN_02	-2,054	-2,036	-2,035	34.1	**0.0**	**0.811**	29.7	**0.0**	**5.19**
ZAR_02	-1,894	-1,899	-1,892	**0.0**	12.4	**0.691**	**0.0**	16.8	**9.49**
ZAR_03	-2,181	-2,110	-2,107	144.0	**3.13**	**0.0**	137.0	**0.0**	**1.36**
ZAR_04	-2,086	-2,043	-2,036	95.1	10.7	**0.0**	86.3	**6.27**	**0.0**

Table S4: Table of results from fitting each forest plot individually for mass.

	Country	Allom Region	Num	Plot	m_P	Biomass	1 Param		2 Param			MST
Plot			Trees	Area			μ_1	n_P	μ_1	phi	n_P	n_P
ALF_01	Brazil	Brazilian Shield	467	1.00	41.1	18.7	0.205	5.89	0.254	0.792	6.25	4.85
ALF_02	Brazil	Brazilian Shield	434	1.00	58.2	21.0	0.204	4.20	0.227	0.770	4.31	3.22
ALM_01	Peru	S.Western	1142	2.00	51.9	24.0	0.199	5.88	0.128	0.666	5.25	4.83
ALP_01	Peru	N.Western	545	1.00	46.1	25.5	0.197	6.07	0.230	0.780	6.33	4.96
ALP_02	Peru	N.Western	508	1.00	61.4	21.8	0.209	4.84	0.181	0.723	4.68	3.71
ALP_30	Peru	N.Western	412	1.00	60.1	20.9	0.176	3.36	0.072	0.588	2.67	3.08
ALP_40	Peru	N.Western	986	1.00	54.3	21.8	0.303	14.93	0.323	0.763	15.12	8.84
AMA_02	Colombia	N.Western	310	1.00	102.7	25.6	0.187	1.79	0.313	0.837	2.01	1.27
BAC_01	Venezuela	N.Western	78	0.25	48.4	22.4	0.132	2.24	0.022	0.431	1.27	2.85
BAC_02	Venezuela	N.Western	73	0.25	47.1	22.0	0.123	1.99	0.012	0.347	0.93	2.73
BAC_03	Venezuela	N.Western	59	0.25	52.1	39.0	0.101	1.23	0.043	0.612	0.91	1.88
BAC_04	Venezuela	N.Western	66	0.25	75.2	24.9	0.145	1.50	0.072	0.632	1.25	1.51
BAC_05	Venezuela	N.Western	73	0.25	76.5	14.2	0.212	2.40	0.190	0.730	2.34	1.77
BAC_06	Venezuela	N.Western	58	0.25	39.0	27.4	0.104	1.55	0.027	0.519	0.93	2.57
BEE_01	Bolivia	S.Western	505	1.00	50.8	22.9	0.220	5.83	0.430	0.878	6.91	4.30
BEE_05	Bolivia	S.Western	497	1.00	45.6	20.9	0.195	5.52	0.163	0.716	5.26	4.71
BES_01	Colombia	N.Western	274	1.00	49.0	14.6	0.183	2.71	0.191	0.758	2.74	2.46
BET_01	Colombia	N.Western	655	1.03	54.3	16.6	0.267	8.46	0.220	0.712	8.12	5.59
BET_02	Colombia	N.Western	625	1.03	56.4	15.7	0.281	8.25	0.314	0.772	8.44	4.99
BOG_01	Ecuador	N.Western	475	1.00	52.9	26.6	0.180	4.36	0.195	0.765	4.46	3.90
BOG_02	Ecuador	N.Western	595	1.00	49.6	19.3	0.239	7.62	0.273	0.776	7.86	5.31
CAI_04	Venezuela	N.Western	58	0.25	57.9	27.2	0.120	1.33	0.069	0.657	1.11	1.74
CAX_01	Brazil	Eastern-Central	463	1.00	52.4	37.5	0.143	3.39	0.086	0.661	2.91	3.77
CAX_02	Brazil	Eastern-Central	471	1.00	50.2	33.0	0.156	3.90	0.117	0.698	3.58	3.91
CAX_06	Brazil	Eastern-Central	417	1.00	39.3	35.9	0.130	3.46	0.090	0.684	3.04	4.47
CAX_08	Brazil	Eastern-Central	501	1.00	42.3	24.8	0.212	6.41	0.279	0.803	6.90	4.85
CDM_01	Peru	S.Western	486	1.00	43.1	29.1	0.183	5.28	0.264	0.819	5.87	4.69
CLA_03	Venezuela	N.Western	111	0.26	80.6	24.7	0.185	2.94	0.114	0.666	2.63	2.46
CLA_04	Venezuela	N.Western	130	0.25	91.7	24.4	0.210	3.66	0.063	0.536	2.87	2.80
CRP_02	Bolivia	Brazilian Shield	465	1.00	42.1	19.1	0.188	5.28	0.123	0.669	4.69	4.84
CUZ_01	Peru	S.Western	372	1.00	43.3	22.5	0.188	4.15	0.318	0.849	4.83	3.54
CUZ_02	Peru	S.Western	408	1.00	64.5	23.2	0.217	3.89	0.572	0.927	4.90	2.66
CUZ_03	Peru	S.Western	466	1.00	43.9	22.6	0.199	5.44	0.268	0.807	5.91	4.55
CUZ_04	Peru	S.Western	534	1.00	49.1	24.9	0.205	5.89	0.245	0.784	6.17	4.60
DIV_01	Colombia	N.Western	667	1.10	45.3	16.0	0.256	8.88	0.214	0.714	8.51	5.95
DOI_01	Brazil	S.Western	435	1.00	55.3	23.6	0.192	4.12	0.221	0.776	4.27	3.34
ECE_01	Colombia	N.Western	340	1.00	60.7	13.5	0.215	3.36	0.179	0.716	3.22	2.63
ECE_02	Colombia	N.Western	336	1.00	55.1	28.7	0.177	2.95	0.520	0.942	3.99	2.58
ELD_01	Venezuela	Guyana Shield	99	0.25	75.3	48.3	0.124	1.92	0.071	0.659	1.63	2.35
ELD_02	Venezuela	Guyana Shield	129	0.25	59.5	55.0	0.130	3.13	0.116	0.730	3.02	3.86
ELD_03	Venezuela	Guyana Shield	112	0.25	95.5	18.6	0.241	3.53	0.099	0.590	3.01	2.29
ELD_04	Venezuela	Guyana Shield	150	0.25	39.7	28.9	0.153	5.82	0.030	0.445	3.51	6.78
ESP_01	Peru	S.Western	707	1.00	54.3	19.8	0.242	8.55	0.071	0.508	6.54	5.57
HCC_21	Bolivia	Brazilian Shield	392	1.00	59.0	20.4	0.202	3.72	0.301	0.824	4.11	2.85
HCC_22	Bolivia	Brazilian Shield	509	1.00	41.5	21.3	0.216	6.72	0.330	0.833	7.54	5.15
HCC_24	Bolivia	Brazilian Shield	548	1.00	38.9	21.0	0.202	7.09	0.186	0.734	6.93	6.04
JAS_02	Ecuador	N.Western	591	1.00	54.4	18.1	0.249	7.35	0.312	0.794	7.73	5.07
JAS_03	Ecuador	N.Western	532	1.00	53.4	21.5	0.205	5.52	0.166	0.711	5.24	4.42
JAS_04	Ecuador	N.Western	669	1.00	55.0	27.9	0.214	7.08	0.291	0.808	7.64	5.35
JEN_11	Peru	N.Western	495	1.00	63.6	24.1	0.196	4.31	0.158	0.711	4.09	3.41
JEN_12	Peru	N.Western	664	1.00	53.4	22.5	0.214	7.20	0.076	0.552	5.63	5.54
JFR_01	Brazil	Brazilian Shield	420	0.93	32.5	19.6	0.189	6.28	0.190	0.750	6.28	5.89
JFR_02	Brazil	Brazilian Shield	219	0.53	29.8	21.1	0.199	6.50	0.403	0.892	8.15	5.81
JFR_03	Brazil	Brazilian Shield	397	1.02	51.8	25.6	0.192	3.86	0.389	0.880	4.67	3.12
JFR_04	Brazil	Brazilian Shield	532	1.00	29.0	20.7	0.208	8.86	0.317	0.836	10.09	7.61
JFR_05	Brazil	Brazilian Shield	503	1.00	30.8	20.4	0.204	7.84	0.332	0.848	9.11	6.84
JFR_06	Brazil	Brazilian Shield	478	1.00	30.1	12.9	0.228	8.48	0.195	0.717	8.10	6.72
JFR_07	Brazil	Brazilian Shield	426	1.02	35.8	15.2	0.207	5.87	0.231	0.772	6.06	4.83
JFR_08	Brazil	Brazilian Shield	405	1.00	45.0	16.2	0.212	4.95	0.301	0.818	5.42	3.92
JFR_09	Brazil	Brazilian Shield	554	0.97	34.1	18.4	0.214	8.60	0.176	0.711	8.14	6.98
KAL_01	Colombia	N.Western	314	1.00	54.2	19.7	0.175	2.75	0.143	0.713	2.61	2.41
LAS_02	Peru	S.Western	435	1.00	66.2	23.2	0.215	4.04	0.401	0.864	4.67	2.77
LFB_01	Bolivia	Brazilian Shield	504	1.00	34.0	23.3	0.205	7.34	0.508	0.929	9.65	6.20
LFB_02	Bolivia	Brazilian Shield	475	1.00	34.4	26.8	0.191	6.38	0.529	0.948	8.79	5.81
LSL_01	Bolivia	Brazilian Shield	470	1.00	37.5	14.3	0.231	7.18	0.291	0.796	7.63	5.24
LSL_02	Bolivia	Brazilian Shield	591	1.00	37.5	18.7	0.199	7.74	0.084	0.580	6.09	7.11
MIN_01	Brazil	S.Western	618	1.00	49.7	21.9	0.219	7.24	0.144	0.669	6.54	5.48
MNU_05	Peru	S.Western	951	2.25	65.1	27.3	0.206	3.80	0.416	0.878	4.50	2.70
MNU_06	Peru	S.Western	1109	2.25	45.8	25.8	0.182	5.11	0.167	0.734	4.99	4.59
MTH_01	Brazil	S.Western	432	1.00	57.4	16.3	0.226	4.68	0.184	0.711	4.47	3.27
PNY_01	Peru	S.Western	480	1.00	51.3	10.6	0.272	6.81	0.071	0.480	5.16	4.78

	Country	Allom Region	Num	Plot	m_P	Biomass	1 Param		2 Param			MST
Plot			Trees	Area			μ_1	n_P	μ_1	phi	n_P	n_P
PNY_02	Peru	S.Western	549	1.00	47.1	27.4	0.216	6.58	0.331	0.833	7.36	4.73
PNY_03	Peru	S.Western	637	1.00	43.9	18.7	0.221	8.24	0.098	0.589	6.73	6.57
PNY_04	Peru	S.Western	465	1.00	48.7	19.3	0.198	4.99	0.133	0.675	4.50	4.07
PNY_05	Peru	S.Western	487	1.00	64.6	25.2	0.204	4.36	0.276	0.805	4.69	3.23
PNY_06	Peru	S.Western	396	1.00	59.3	21.2	0.177	3.28	0.105	0.656	2.87	2.94
PNY_07	Peru	S.Western	439	1.00	49.8	16.2	0.199	4.67	0.085	0.588	3.76	4.01
POR_01	Brazil	S.Western	512	1.00	50.0	31.5	0.175	4.76	0.219	0.791	5.07	4.29
POR_02	Brazil	S.Western	447	1.00	62.0	20.5	0.211	4.28	0.252	0.782	4.46	3.16
PTN_01	Colombia	N.Western	495	1.00	46.5	13.0	0.234	6.52	0.076	0.526	5.00	5.13
RAS_01	Colombia	N.Western	600	1.03	45.1	22.9	0.195	6.50	0.106	0.633	5.53	5.36
RCS_01	Peru	S.Western	598	1.00	43.5	22.1	0.186	6.57	0.062	0.538	4.85	6.37
RCS_02	Peru	S.Western	649	1.00	52.4	21.1	0.218	7.27	0.092	0.583	5.92	5.94
RCS_03	Peru	S.Western	642	1.00	52.0	19.4	0.239	7.94	0.117	0.610	6.76	5.23
RET_05	Bolivia	Brazilian Shield	524	1.00	38.9	21.9	0.198	6.65	0.164	0.713	6.30	5.51
RET_06	Bolivia	Brazilian Shield	471	1.00	39.6	26.8	0.197	5.87	0.278	0.817	6.49	4.84
RET_08	Bolivia	Brazilian Shield	436	1.00	43.0	26.8	0.194	5.02	0.263	0.809	5.48	4.11
RET_09	Bolivia	Brazilian Shield	427	1.00	43.4	25.6	0.184	4.64	0.233	0.795	4.97	4.02
RFH_01	Brazil	S.Western	336	1.00	52.9	22.1	0.175	3.00	0.218	0.790	3.19	2.66
RIO_01	Venezuela	Guyana Shield	128	0.25	61.7	40.1	0.140	3.25	0.051	0.575	2.42	3.84
RIO_02	Venezuela	Guyana Shield	116	0.25	66.1	40.7	0.134	2.68	0.039	0.539	1.87	3.17
RST_01	Brazil	S.Western	493	1.00	50.1	22.4	0.188	4.92	0.112	0.653	4.29	4.29
SCT_01	Bolivia	S.Western	488	1.00	52.3	18.8	0.211	5.30	0.196	0.736	5.20	4.24
SCT_06	Bolivia	S.Western	531	1.00	45.8	18.4	0.217	6.54	0.205	0.739	6.44	5.07
SEU_01	Venezuela	N.Western	179	0.25	60.1	31.0	0.200	6.58	0.148	0.695	6.12	5.51
SEU_02	Venezuela	N.Western	230	0.25	53.7	26.6	0.238	10.95	0.114	0.606	9.27	8.35
SEU_03	Venezuela	N.Western	142	0.25	55.2	36.2	0.169	4.71	0.142	0.718	4.49	4.49
SEU_04	Venezuela	N.Western	160	0.25	62.4	35.6	0.192	5.50	0.288	0.823	6.08	4.50
SEU_05	Venezuela	N.Western	206	0.25	50.6	28.4	0.226	9.80	0.165	0.689	9.09	7.26
SEU_06	Venezuela	N.Western	135	0.25	71.2	27.2	0.215	4.74	0.313	0.818	5.16	3.35
SUC_01	Peru	N.Western	516	1.00	55.9	25.1	0.196	4.95	0.217	0.769	5.08	4.02
SUC_02	Peru	N.Western	492	1.00	62.3	25.3	0.190	4.21	0.155	0.713	4.01	3.58
SUC_03	Peru	N.Western	497	1.00	59.8	28.2	0.173	4.00	0.122	0.688	3.65	3.78
SUC_04	Peru	N.Western	519	1.00	56.8	27.6	0.185	4.64	0.175	0.741	4.57	3.97
SUC_05	Peru	N.Western	460	1.00	64.3	27.0	0.176	3.57	0.132	0.698	3.32	3.15
TAM_01	Peru	S.Western	562	1.00	43.8	22.4	0.206	6.78	0.169	0.712	6.44	5.46
TAM_02	Peru	S.Western	610	1.00	47.4	24.1	0.221	7.48	0.219	0.748	7.46	5.36
TAM_03	Peru	S.Western	344	0.58	55.0	31.8	0.148	4.34	0.008	0.222	1.89	5.12
TAM_04	Peru	S.Western	239	0.42	60.7	27.7	0.203	5.31	0.143	0.685	4.88	3.95
TAM_05	Peru	S.Western	492	1.00	45.6	24.6	0.185	5.20	0.156	0.718	4.96	4.54
TAM_06	Peru	S.Western	576	1.00	45.9	27.7	0.198	6.47	0.189	0.741	6.39	5.15
TAM_07	Peru	S.Western	419	1.00	60.4	21.3	0.201	3.89	0.174	0.723	3.75	2.95
TAM_08	Peru	S.Western	457	1.00	52.8	20.6	0.217	5.07	0.275	0.795	5.37	3.64
TAM_09	Peru	S.Western	485	1.00	54.3	21.9	0.205	4.97	0.228	0.770	5.11	3.90
TAN_03	Brazil	Brazilian Shield	530	1.00	41.7	16.2	0.220	7.09	0.159	0.686	6.52	5.71
TAN_04	Brazil	Brazilian Shield	508	1.00	44.2	14.3	0.234	6.94	0.155	0.668	6.28	5.14
TIP_01	Ecuador	N.Western	487	1.00	53.4	23.3	0.197	4.86	0.200	0.753	4.88	3.84
TIP_02	Ecuador	N.Western	441	0.80	64.8	24.1	0.219	5.30	0.231	0.759	5.36	3.71
TIP_03	Ecuador	N.Western	436	1.00	45.3	24.8	0.174	4.34	0.237	0.808	4.76	4.24
YAN_01	Peru	N.Western	488	1.00	56.7	25.3	0.187	4.41	0.172	0.735	4.32	3.76
YAN_02	Peru	N.Western	505	1.00	57.8	28.5	0.180	4.34	0.157	0.726	4.19	3.76
ZAR_02	Colombia	N.Western	522	1.00	55.1	16.0	0.229	5.91	0.088	0.564	4.76	4.73
ZAR_03	Colombia	N.Western	603	1.00	50.2	20.0	0.213	6.82	0.080	0.560	5.37	5.24
ZAR_04	Colombia	N.Western	546	1.00	57.7	25.7	0.183	4.77	0.072	0.579	3.76	4.10

Table S5: Table of AIC and BIC Citerion for each of 3 models for fitting to mass data

	Log Likelihood			AIC			BIC		
Plot	MST	1 Param	2 Param	MST	1 Param	2 Param	MST	1 Param	2 Param
ALF_01	-3,027	-2,997	-2,997	58.1	**0.0**	**1.01**	53.8	**0.0**	**5.25**
ALF_02	-2,912	-2,874	-2,874	74.1	**0.0**	**1.81**	69.7	**0.0**	**6.14**
ALM_01	-7,635	-7,559	-7,555	156.0	**6.68**	**0.0**	146.0	**1.49**	**0.0**
ALP_01	-3,617	-3,572	-3,572	88.1	**0.0**	**1.39**	83.7	**0.0**	**5.77**
ALP_02	-3,394	-3,360	-3,360	67.5	**0.0**	**1.66**	63.0	**0.0**	**6.09**
ALP_30	-2,866	-2,857	-2,852	24.6	**8.29**	**0.0**	16.3	**4.12**	**0.0**
ALP_40	-5,962	-5,834	-5,834	254.0	**0.0**	**1.91**	249.0	**0.0**	**6.99**
AMA_02	-2,235	-2,196	-2,195	76.5	**0.498**	**0.0**	71.9	**0.0**	**3.57**
BAC_01	-581	-580	-575	**8.6**	**8.62**	**0.0**	**3.76**	**6.2**	**0.0**
BAC_02	-555	-553	-546	12.6	12.4	**0.0**	**8.02**	10.1	**0.0**
BAC_03	-473	-472	-471	**1.13**	**0.159**	**0.0**	**0.0**	**1.12**	**3.06**
BAC_04	-492	-490	-489	**2.57**	**0.0**	**0.695**	**0.254**	**0.0**	**3.01**
BAC_05	-495	-490	-490	**7.3**	**0.0**	**1.97**	**4.71**	**0.0**	**4.56**
BAC_06	-456	-455	-452	**3.74**	**3.72**	**0.0**	**0.0**	**2.06**	**0.412**
BEE_01	-3,273	-3,230	-3,225	90.1	**8.01**	**0.0**	81.4	**3.65**	**0.0**
BEE_05	-3,298	-3,269	-3,269	55.2	**0.0**	**1.32**	50.9	**0.0**	**5.62**
BES_01	-1,849	-1,843	-1,843	**9.27**	**0.0**	**1.98**	**5.55**	**0.0**	**5.7**
BET_01	-4,071	-4,012	-4,011	117.0	**0.0**	**1.32**	112.0	**0.0**	**6.04**
BET_02	-3,876	-3,787	-3,787	176.0	**0.0**	**1.79**	171.0	**0.0**	**6.43**
BOG_01	-3,243	-3,228	-3,228	28.9	**0.0**	**1.87**	24.6	**0.0**	**6.16**
BOG_02	-3,785	-3,721	-3,720	126.0	**0.0**	**1.61**	122.0	**0.0**	**6.13**
CAI_04	-442	-444	-443	**0.0**	**4.86**	**6.08**	**0.0**	**7.05**	10.5
CAX_01	-3,367	-3,361	-3,358	14.6	**3.46**	**0.0**	**6.86**	**0.0**	**0.799**
CAX_02	-3,345	-3,323	-3,322	42.0	**0.0**	**0.155**	37.8	**0.0**	**4.41**
CAX_06	-3,040	-3,042	-3,040	**0.0**	**5.18**	**4.13**	**0.0**	**9.26**	12.3
CAX_08	-3,252	-3,192	-3,191	120.0	**0.096**	**0.0**	115.0	**0.0**	**4.23**
CDM_01	-3,256	-3,229	-3,228	51.8	**1.54**	**0.0**	46.0	**0.0**	**2.72**
CLA_03	-778	-776	-776	**2.38**	**0.0**	**1.32**	**0.0**	**0.446**	**4.6**
CLA_04	-893	-890	-889	**4.45**	**1.91**	**0.0**	**0.0**	**0.517**	**1.67**
CRP_02	-3,092	-3,075	-3,074	31.8	**1.47**	**0.0**	26.1	**0.0**	**2.75**
CUZ_01	-2,475	-2,449	-2,446	52.7	**3.7**	**0.0**	44.9	**0.0**	**0.376**
CUZ_02	-2,720	-2,669	-2,661	114.0	13.7	**0.0**	105.0	**9.39**	**0.0**
CUZ_03	-3,057	-3,031	-3,030	50.3	**0.155**	**0.0**	45.9	**0.0**	**4.07**
CUZ_04	-3,531	-3,482	-3,482	95.0	**0.0**	**1.2**	90.6	**0.0**	**5.6**
DIV_01	-4,148	-4,064	-4,064	166.0	**0.0**	**1.22**	162.0	**0.0**	**5.84**
DOI_01	-2,949	-2,915	-2,915	66.0	**0.0**	**1.64**	61.8	**0.0**	**5.83**
ECE_01	-2,241	-2,230	-2,230	19.5	**0.0**	**1.64**	15.5	**0.0**	**5.62**
ECE_02	-2,288	-2,283	-2,272	27.9	19.1	**0.0**	20.1	15.2	**0.0**
ELD_01	-760	-765	-764	**0.0**	10.7	11.6	**0.0**	13.5	17.1
ELD_02	-958	-966	-966	**0.0**	16.6	18.6	**0.0**	19.5	24.4
ELD_03	-755	-744	-743	20.1	**0.0**	**0.124**	17.1	**0.0**	**3.12**
ELD_04	-1,053	-1,053	-1,044	12.3	14.4	**0.0**	**6.2**	11.3	**0.0**
ESP_01	-4,590	-4,464	-4,449	278.0	28.6	**0.0**	269.0	23.9	**0.0**
HCC_21	-2,634	-2,602	-2,601	63.2	**0.451**	**0.0**	58.4	**0.0**	**3.87**
HCC_22	-3,266	-3,218	-3,215	98.4	**2.64**	**0.0**	91.4	**0.0**	**1.78**
HCC_24	-3,557	-3,523	-3,523	66.3	**0.0**	**1.82**	61.8	**0.0**	**6.31**
JAS_02	-3,732	-3,685	-3,685	91.5	**0.0**	**1.09**	86.9	**0.0**	**5.71**
JAS_03	-3,529	-3,497	-3,497	61.9	**0.0**	**1.21**	57.5	**0.0**	**5.64**
JAS_04	-4,400	-4,350	-4,348	98.3	**0.283**	**0.0**	93.4	**0.0**	**4.39**
JEN_11	-3,378	-3,341	-3,341	70.6	**0.0**	**1.26**	66.3	**0.0**	**5.65**
JEN_12	-4,386	-4,327	-4,316	136.0	19.9	**0.0**	127.0	15.3	**0.0**
JFR_01	-2,724	-2,707	-2,707	31.5	**0.0**	**2.0**	27.3	**0.0**	**6.16**
JFR_02	-1,380	-1,373	-1,369	18.4	**5.68**	**0.0**	11.5	**2.2**	**0.0**
JFR_03	-2,662	-2,635	-2,630	60.2	**7.8**	**0.0**	51.5	**3.45**	**0.0**
JFR_04	-3,325	-3,292	-3,289	68.0	**3.98**	**0.0**	59.6	**0.0**	**0.364**
JFR_05	-3,171	-3,147	-3,143	51.7	**5.19**	**0.0**	43.0	**0.876**	**0.0**
JFR_06	-2,948	-2,901	-2,901	91.1	**0.0**	**1.36**	86.9	**0.0**	**5.59**
JFR_07	-2,732	-2,696	-2,696	70.2	**0.0**	**1.75**	66.0	**0.0**	**5.92**
JFR_08	-2,616	-2,592	-2,591	47.0	**0.132**	**0.0**	42.6	**0.0**	**4.09**
JFR_09	-3,519	-3,466	-3,465	105.0	**0.0**	**0.936**	101.0	**0.0**	**5.34**
KAL_01	-2,184	-2,158	-2,158	48.5	**0.0**	**1.41**	44.6	**0.0**	**5.31**
LAS_02	-2,922	-2,865	-2,861	117.0	**4.4**	**0.0**	108.0	**0.0125**	**0.0**
LFB_01	-3,184	-3,163	-3,151	62.0	21.9	**0.0**	53.4	17.6	**0.0**
LFB_02	-3,044	-3,042	-3,027	31.4	28.5	**0.0**	22.8	24.2	**0.0**
LSL_01	-2,946	-2,890	-2,889	111.0	**0.0**	**0.929**	107.0	**0.0**	**5.15**
LSL_02	-3,828	-3,816	-3,808	36.9	14.9	**0.0**	28.0	10.4	**0.0**
MIN_01	-4,027	-3,970	-3,968	114.0	**2.11**	**0.0**	107.0	**0.0**	**2.42**
MNU_05	-6,438	-6,323	-6,313	245.0	18.6	**0.0**	235.0	13.5	**0.0**
MNU_06	-7,492	-7,434	-7,434	114.0	**0.0**	**1.61**	109.0	**0.0**	**6.71**
MTH_01	-2,838	-2,784	-2,783	107.0	**0.0**	**1.37**	103.0	**0.0**	**5.59**
PNY_01	-2,938	-2,918	-2,909	55.3	17.1	**0.0**	46.6	12.8	**0.0**

	Log Likelihood			AIC			BIC		
Plot	MST	1 Param	2 Param	MST	1 Param	2 Param	MST	1 Param	2 Param
PNY_02	-3,588	-3,511	-3,509	154.0	**2.92**	**0.0**	147.0	**0.0**	**1.53**
PNY_03	-4,085	-4,045	-4,037	90.9	12.6	**0.0**	81.6	**7.96**	**0.0**
PNY_04	-3,108	-3,067	-3,066	79.7	**0.922**	**0.0**	74.5	**0.0**	**3.34**
PNY_05	-3,298	-3,250	-3,249	94.7	**0.0**	**0.441**	90.3	**0.0**	**4.87**
PNY_06	-2,749	-2,735	-2,733	28.7	**1.69**	**0.0**	22.9	**0.0**	**2.45**
PNY_07	-2,913	-2,898	-2,893	35.6	**8.48**	**0.0**	27.2	**4.25**	**0.0**
POR_01	-3,513	-3,488	-3,487	47.8	**0.0**	**0.793**	43.5	**0.0**	**5.1**
POR_02	-2,987	-2,947	-2,946	78.7	**0.0**	**1.52**	74.5	**0.0**	**5.78**
PTN_01	-3,123	-3,108	-3,099	44.1	16.7	**0.0**	35.4	12.4	**0.0**
RAS_01	-4,013	-3,950	-3,946	130.0	**6.91**	**0.0**	121.0	**2.42**	**0.0**
RCS_01	-3,978	-3,984	-3,971	**9.93**	23.3	**0.0**	**1.03**	18.9	**0.0**
RCS_02	-4,208	-4,198	-4,190	31.3	12.6	**0.0**	22.0	**7.99**	**0.0**
RCS_03	-4,156	-4,045	-4,040	229.0	**8.98**	**0.0**	220.0	**4.37**	**0.0**
RET_05	-3,447	-3,391	-3,390	110.0	**0.0**	**1.06**	106.0	**0.0**	**5.45**
RET_06	-3,090	-3,046	-3,044	88.5	**1.35**	**0.0**	82.9	**0.0**	**2.91**
RET_08	-2,897	-2,853	-2,852	86.0	**0.375**	**0.0**	81.4	**0.0**	**3.85**
RET_09	-2,872	-2,837	-2,837	66.3	**0.0**	**0.676**	62.2	**0.0**	**4.84**
RFH_01	-2,317	-2,298	-2,298	35.9	**0.0**	**1.25**	32.0	**0.0**	**5.19**
RIO_01	-940	-947	-944	**0.0**	15.5	12.9	**0.0**	18.5	18.7
RIO_02	-870	-873	-870	**0.0**	**7.59**	**2.99**	**0.0**	10.5	**8.72**
RST_01	-3,334	-3,307	-3,304	55.9	**3.36**	**0.0**	48.3	**0.0**	**0.926**
SCT_01	-3,194	-3,174	-3,174	38.5	**0.0**	**1.9**	34.2	**0.0**	**6.26**
SCT_06	-3,431	-3,390	-3,390	79.6	**0.0**	**1.93**	75.2	**0.0**	**6.33**
SEU_01	-1,199	-1,196	-1,196	**2.39**	**0.0**	**1.51**	**0.0**	**1.11**	**6.12**
SEU_02	-1,460	-1,455	-1,453	**9.83**	**1.46**	**0.0**	**4.72**	**0.0**	**2.19**
SEU_03	-988	-986	-986	**2.05**	**0.0**	**1.8**	**0.0**	**1.01**	**5.87**
SEU_04	-1,087	-1,081	-1,080	10.4	**0.0**	**1.03**	**7.23**	**0.0**	**4.24**
SEU_05	-1,333	-1,314	-1,314	35.0	**0.0**	**1.23**	31.6	**0.0**	**4.61**
SEU_06	-909	-896	-895	24.3	**0.0**	**1.37**	21.1	**0.0**	**4.49**
SUC_01	-3,473	-3,442	-3,442	60.3	**0.0**	**1.8**	55.8	**0.0**	**6.22**
SUC_02	-3,358	-3,344	-3,344	24.4	**0.0**	**1.28**	20.0	**0.0**	**5.66**
SUC_03	-3,450	-3,453	-3,452	**0.0**	**8.39**	**8.33**	**0.0**	12.7	17.0
SUC_04	-3,550	-3,524	-3,524	49.8	**0.0**	**1.95**	45.3	**0.0**	**6.35**
SUC_05	-3,214	-3,197	-3,197	32.0	**0.0**	**0.645**	27.6	**0.0**	**4.98**
TAM_01	-3,682	-3,632	-3,632	98.2	**0.0**	**0.989**	93.7	**0.0**	**5.42**
TAM_02	-3,969	-3,885	-3,885	168.0	**0.0**	**2.0**	163.0	**0.0**	**6.52**
TAM_03	-2,492	-2,503	-2,460	60.0	83.9	**0.0**	52.2	80.0	**0.0**
TAM_04	-1,624	-1,594	-1,594	57.7	**0.0**	**0.862**	54.0	**0.0**	**4.57**
TAM_05	-3,319	-3,284	-3,283	68.1	**0.0**	**1.32**	63.9	**0.0**	**5.6**
TAM_06	-3,838	-3,774	-3,773	128.0	**0.0**	**1.94**	123.0	**0.0**	**6.43**
TAM_07	-2,842	-2,798	-2,798	87.1	**0.0**	**1.65**	82.9	**0.0**	**5.88**
TAM_08	-3,007	-2,949	-2,949	114.0	**0.0**	**0.918**	110.0	**0.0**	**5.15**
TAM_09	-3,222	-3,188	-3,188	66.7	**0.0**	**1.78**	62.4	**0.0**	**6.1**
TAN_03	-3,376	-3,348	-3,347	53.9	**0.0743**	**0.0**	49.5	**0.0**	**4.3**
TAN_04	-3,213	-3,169	-3,167	88.5	**1.04**	**0.0**	83.1	**0.0**	**3.32**
TIP_01	-3,279	-3,232	-3,232	90.6	**0.0**	**2.0**	86.3	**0.0**	**6.31**
TIP_02	-2,943	-2,891	-2,891	102.0	**0.0**	**1.96**	97.3	**0.0**	**6.26**
TIP_03	-2,944	-2,949	-2,948	**0.0**	12.9	12.9	**0.0**	17.0	21.2
YAN_01	-3,328	-3,305	-3,305	45.1	**0.0**	**1.88**	40.7	**0.0**	**6.28**
YAN_02	-3,488	-3,460	-3,460	54.2	**0.0**	**1.64**	49.8	**0.0**	**6.02**
ZAR_02	-3,344	-3,346	-3,339	**5.24**	11.0	**0.0**	**0.0**	10.1	**3.56**
ZAR_03	-3,975	-3,913	-3,904	138.0	17.2	**0.0**	129.0	12.7	**0.0**
ZAR_04	-3,776	-3,737	-3,729	88.8	13.7	**0.0**	80.0	**9.34**	**0.0**

2 Region and Country DBH Size-Distributions

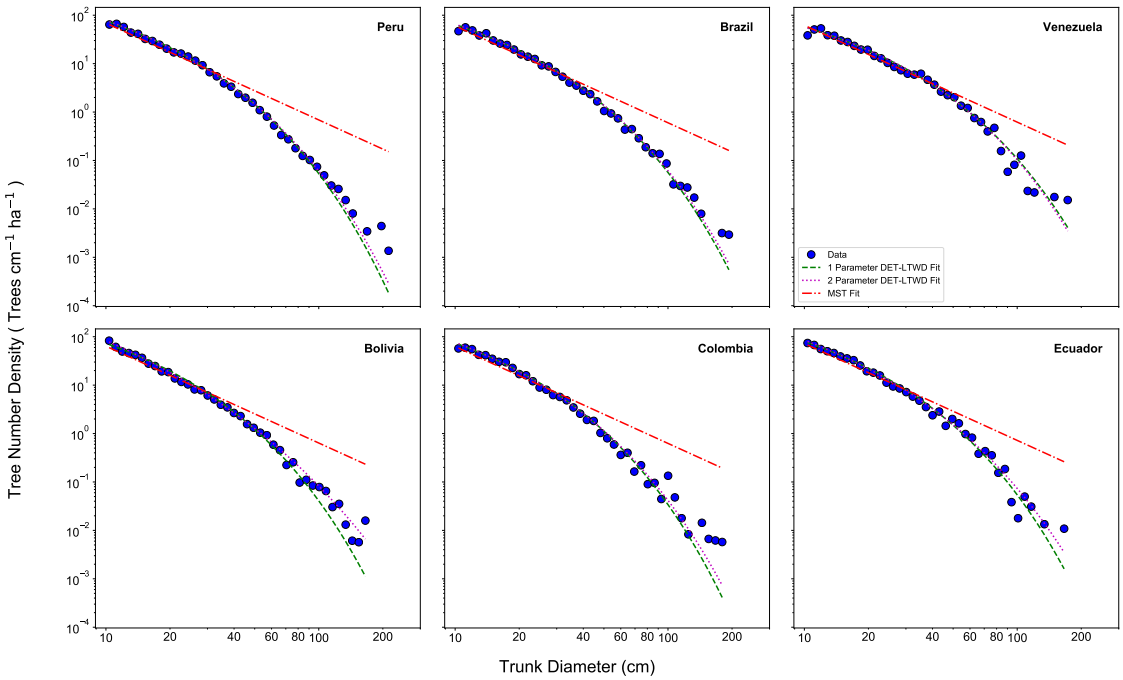

Figure S1: Shows the fit of the three models to the trunk diameter data for each country.

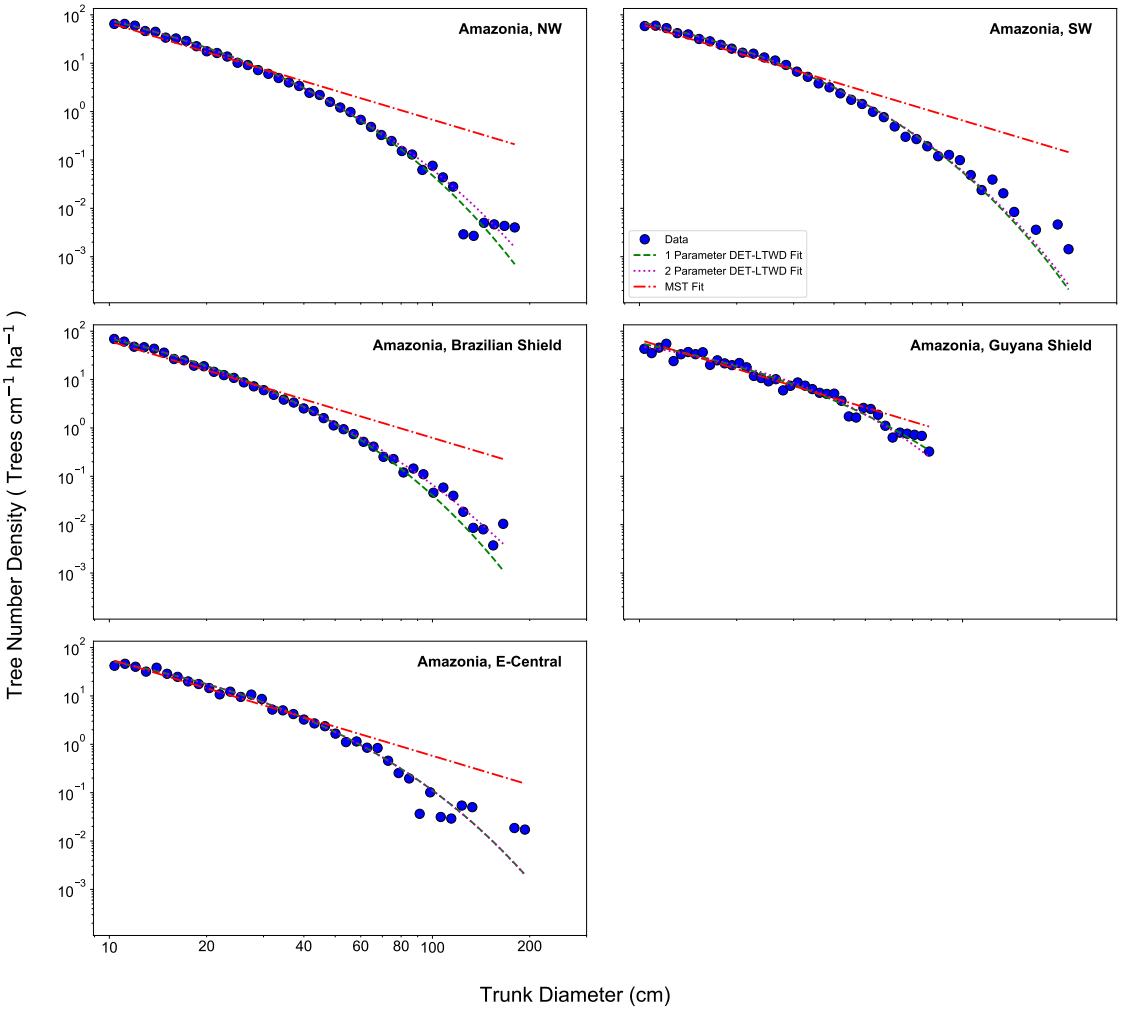

Figure S2: Shows the fit of the three models to the trunk diameter data for each allometric region.

3 Region and Country Mass Size-Distributions

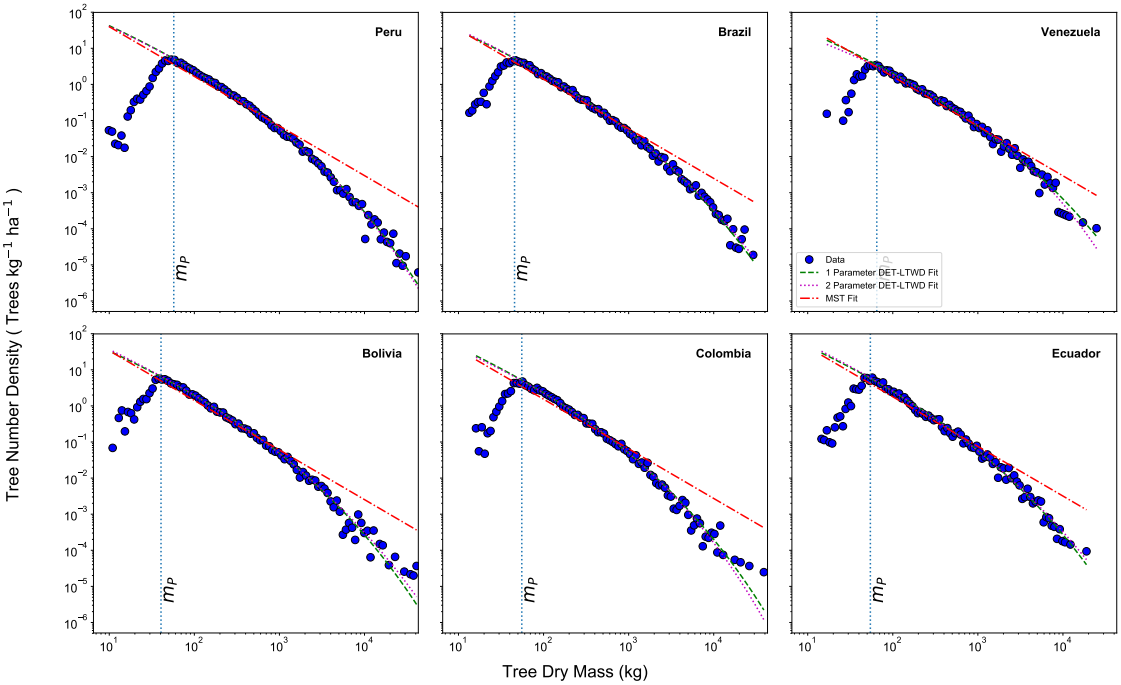

Figure S3: Shows the fit of the three models to the mass data for each country.

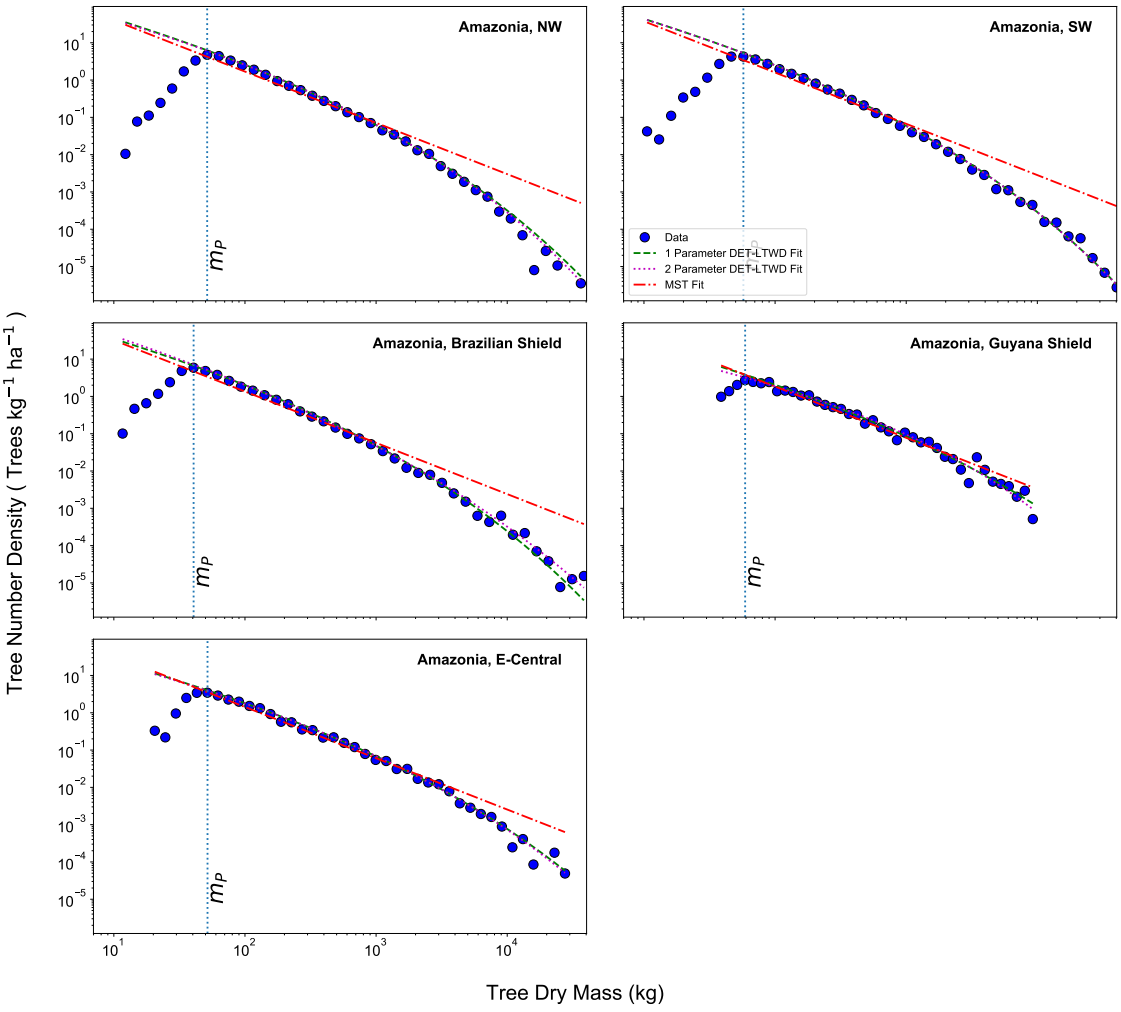

Figure S4: Shows the fit of the three models to the mass data for each allometric region.

4 Forest Plot DBH Size-Distributions

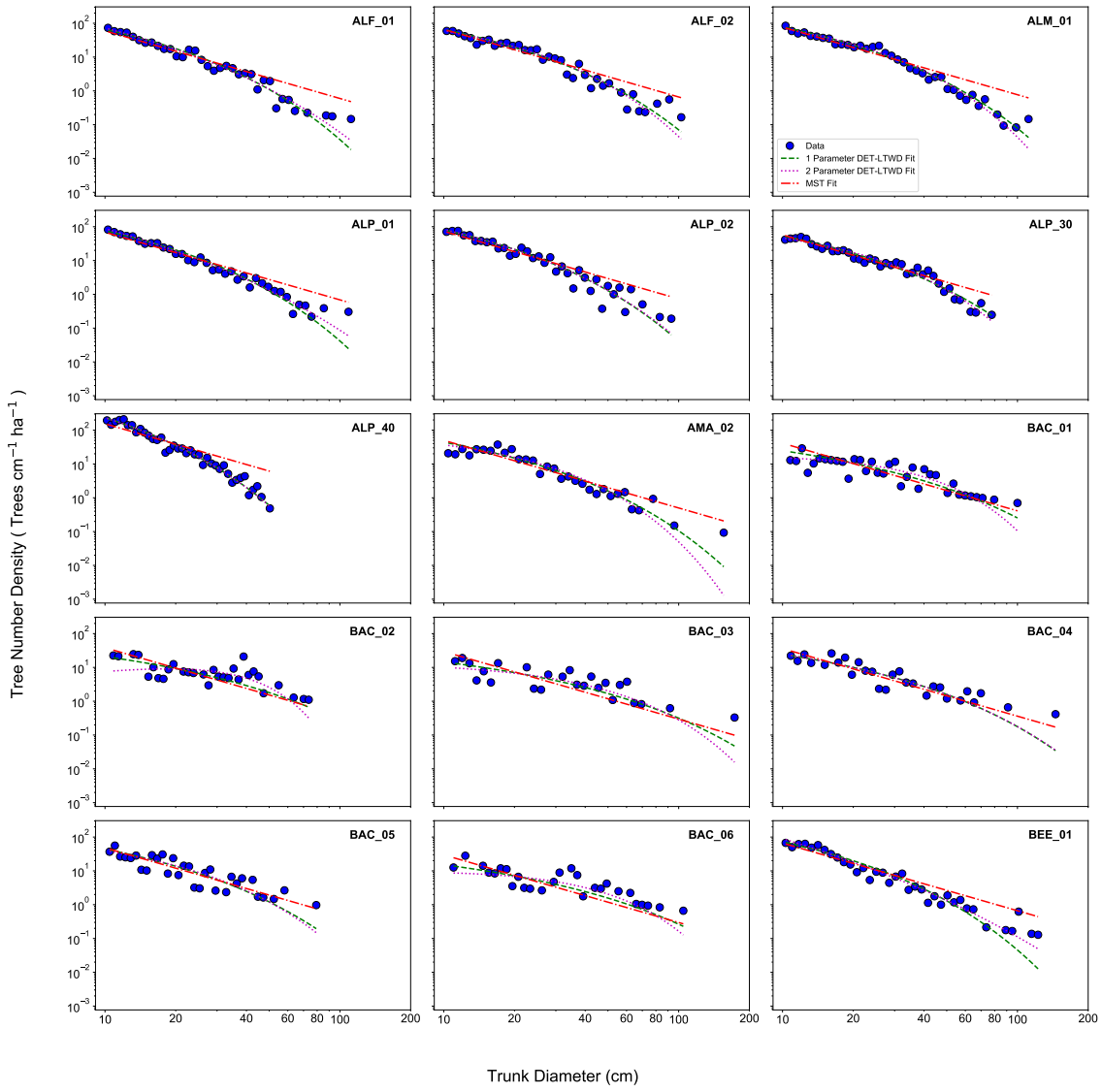

Figure S5: Diameter Size Distributions of Individual Forest Plots.

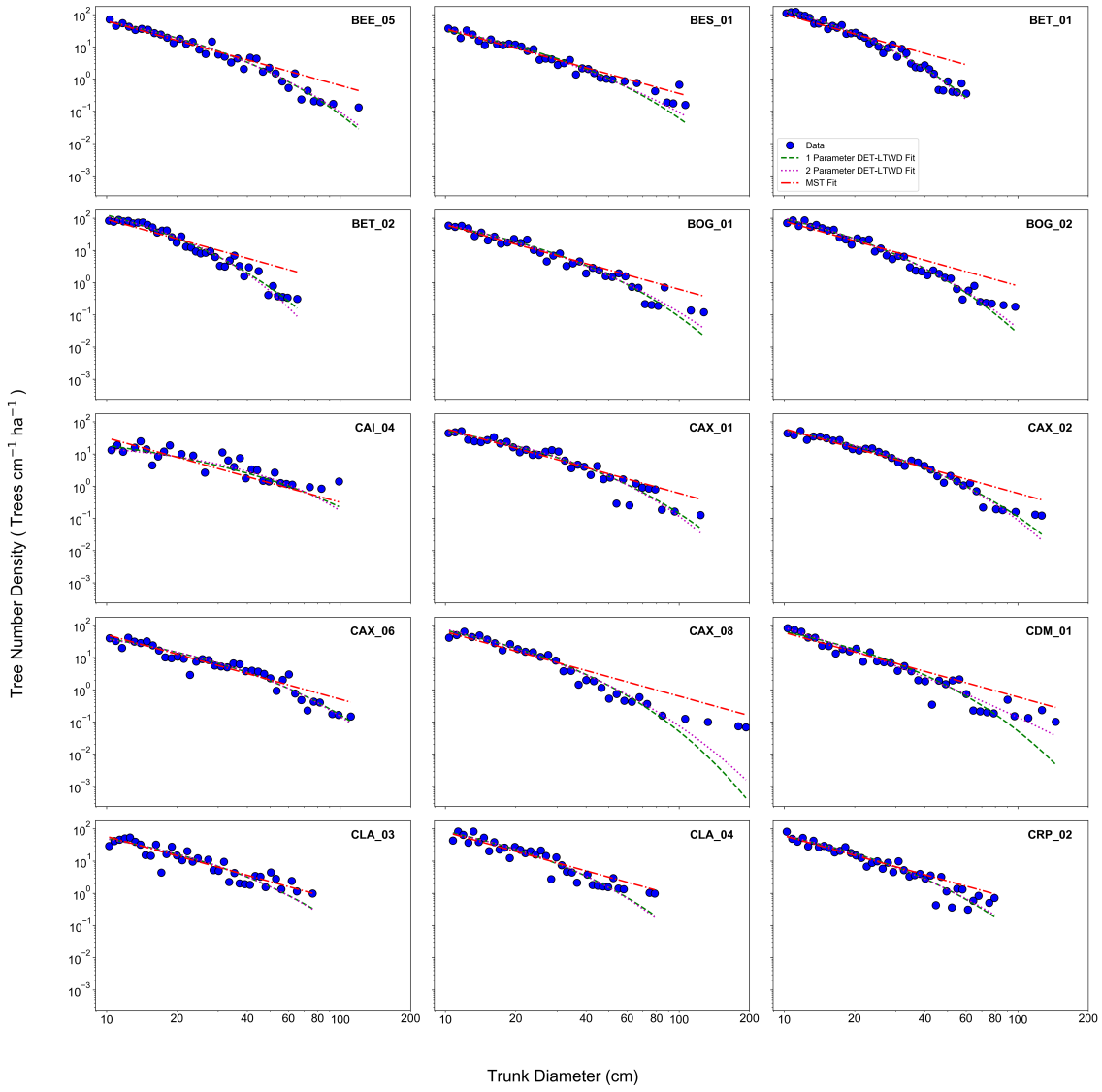

Figure S6: Diameter Size Distributions of Individual Forest Plots.

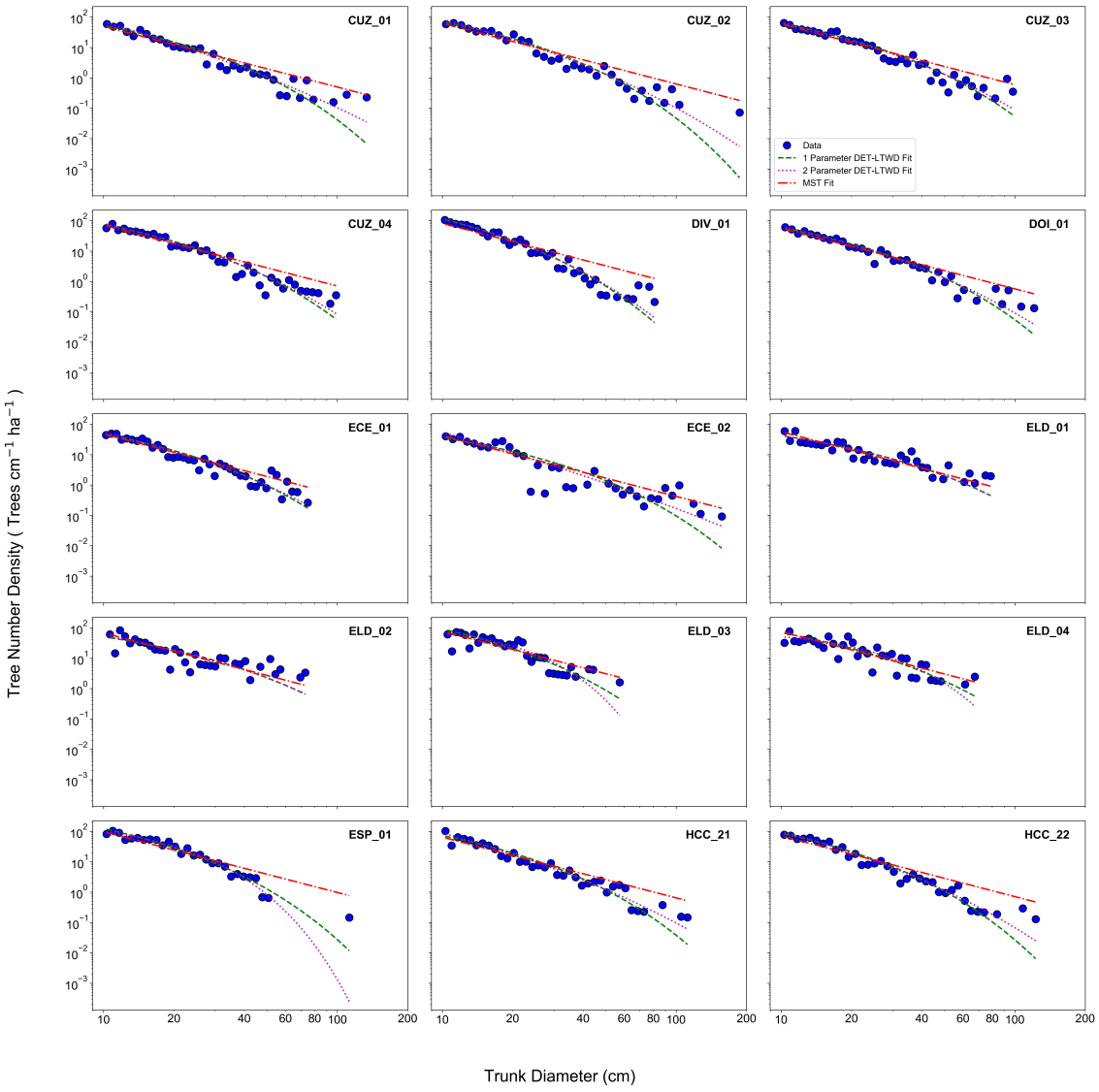

Figure S7: Diameter Size Distributions of Individual Forest Plots.

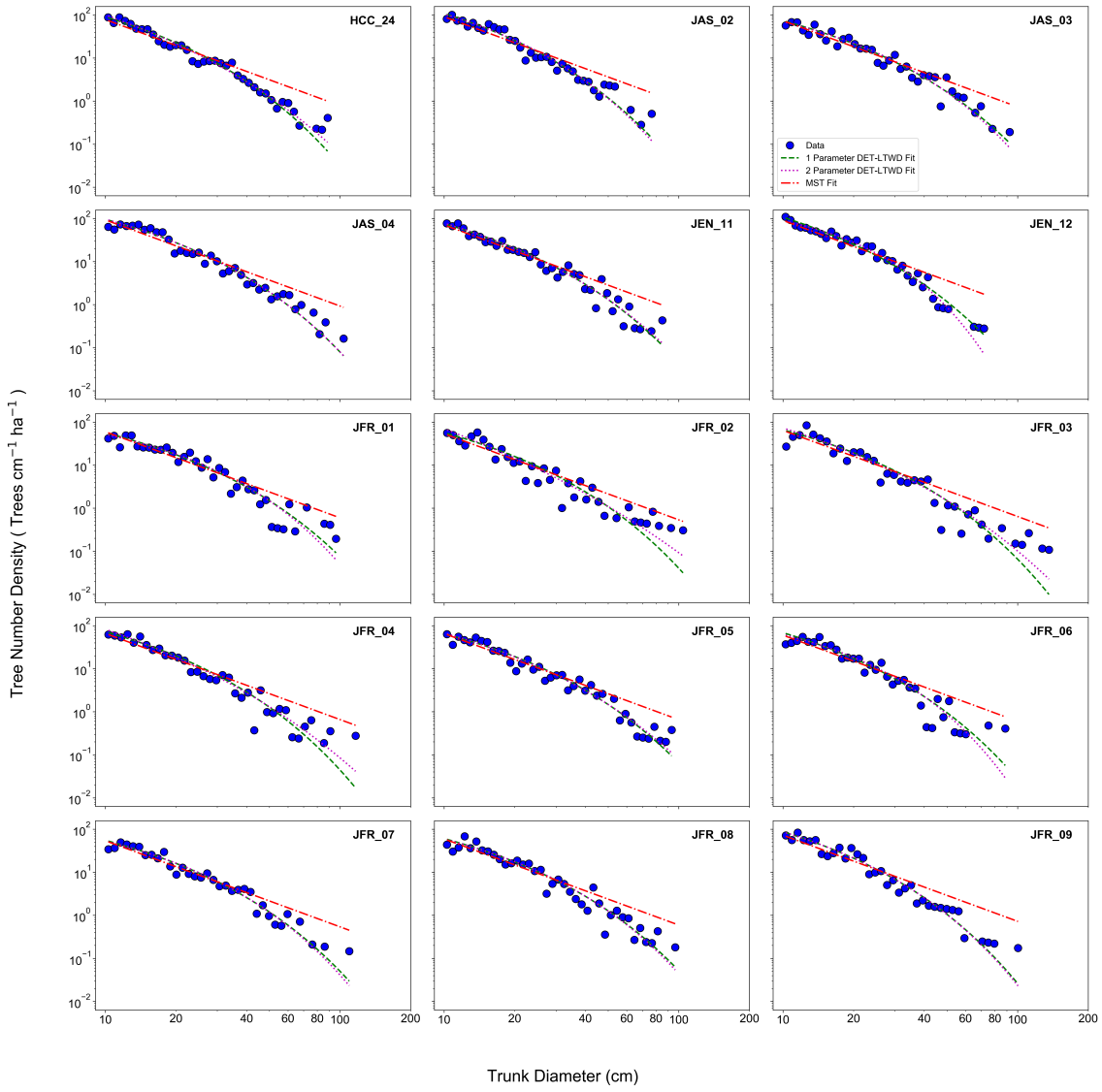

Figure S8: Diameter Size Distributions of Individual Forest Plots.

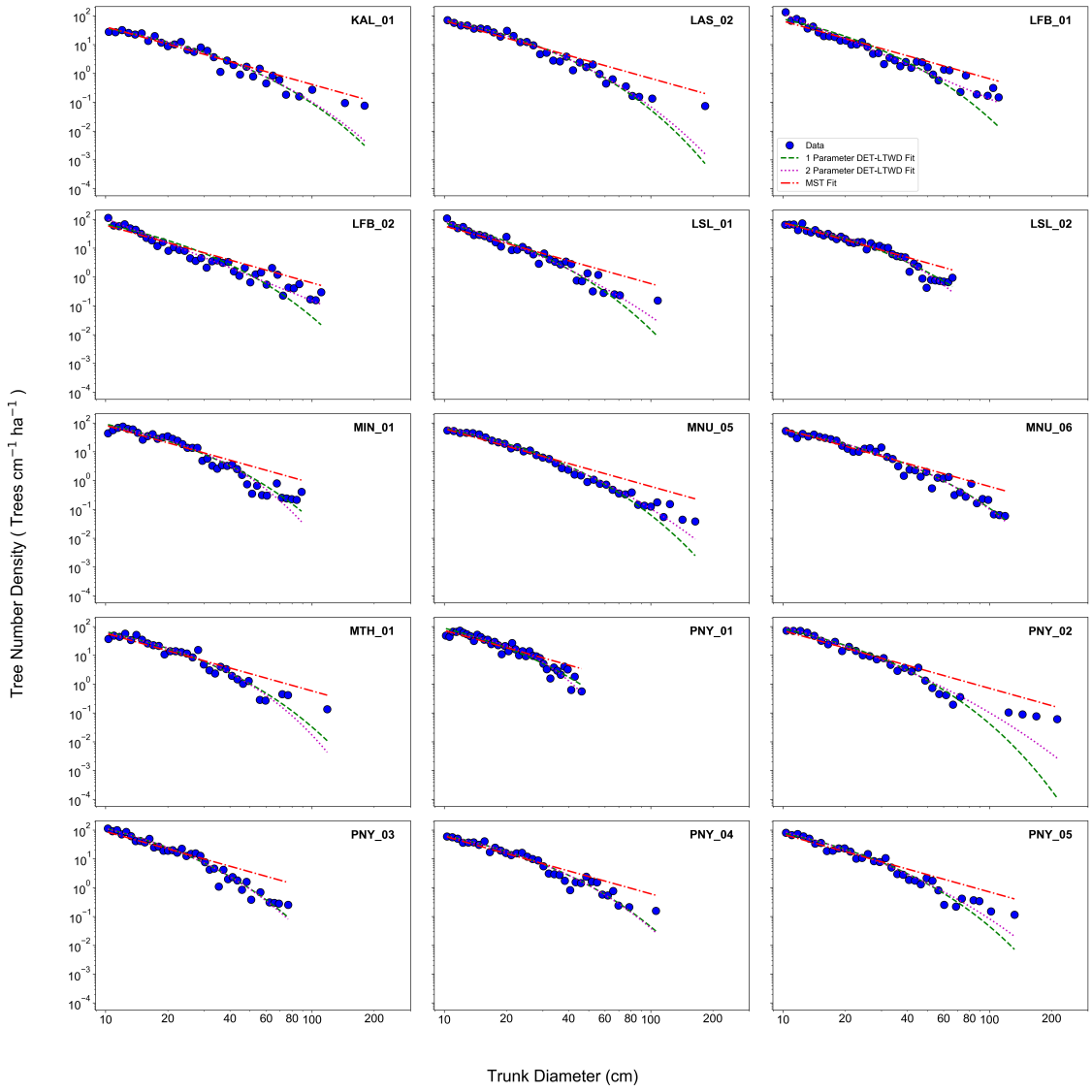

Figure S9: Diameter Size Distributions of Individual Forest Plots.

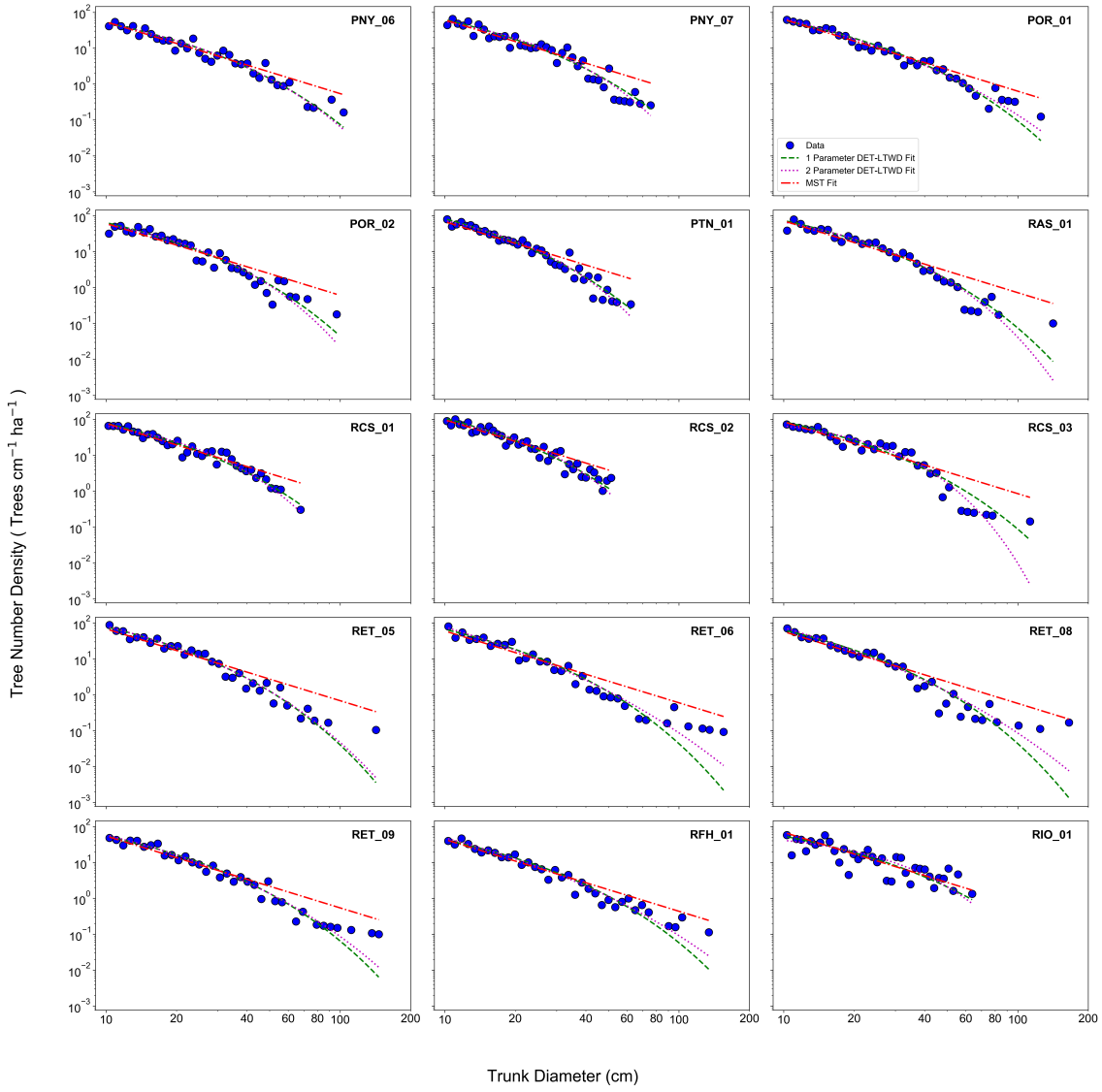

Figure S10: Diameter Size Distributions of Individual Forest Plots.

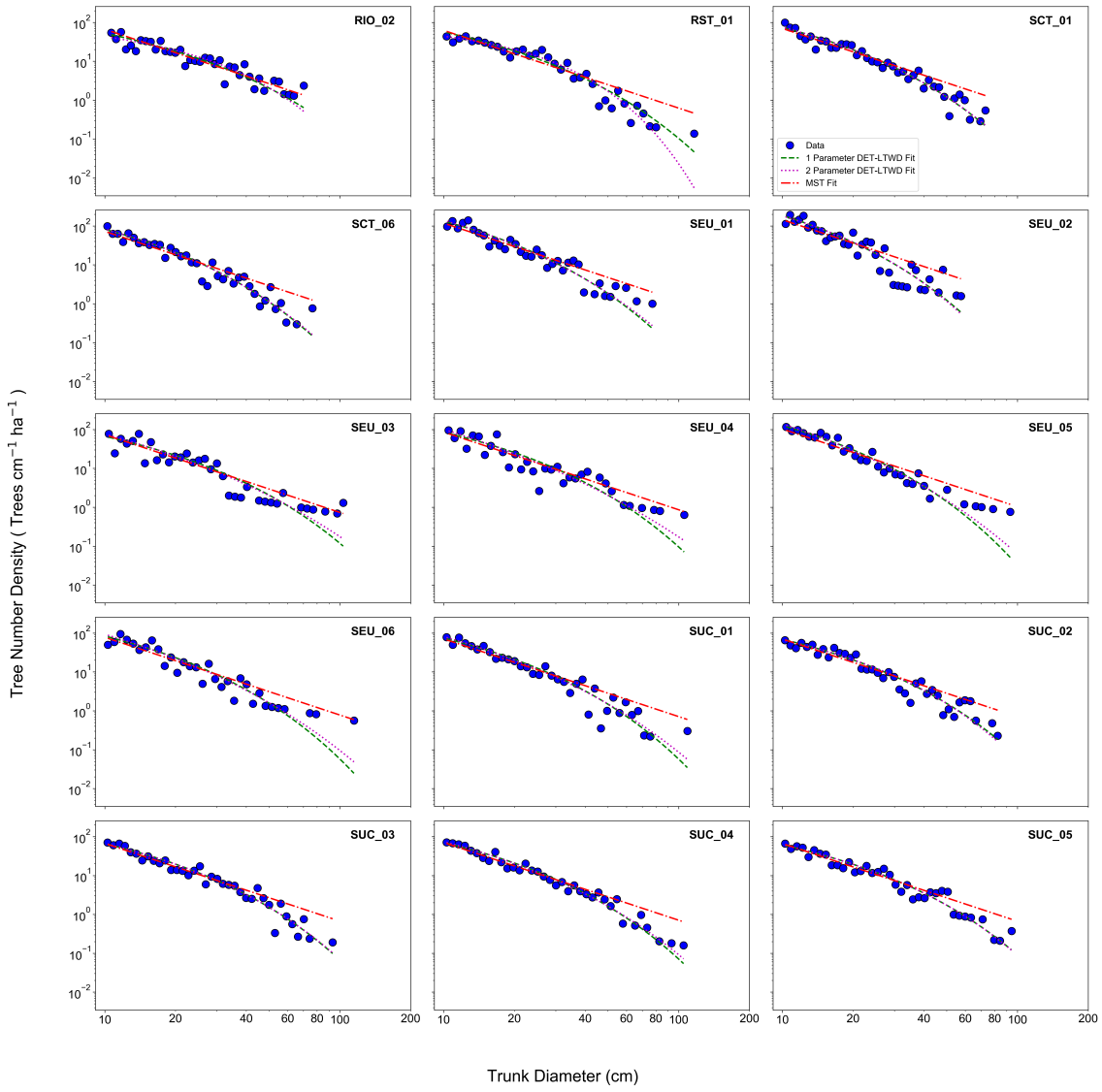

Figure S11: Diameter Size Distributions of Individual Forest Plots.

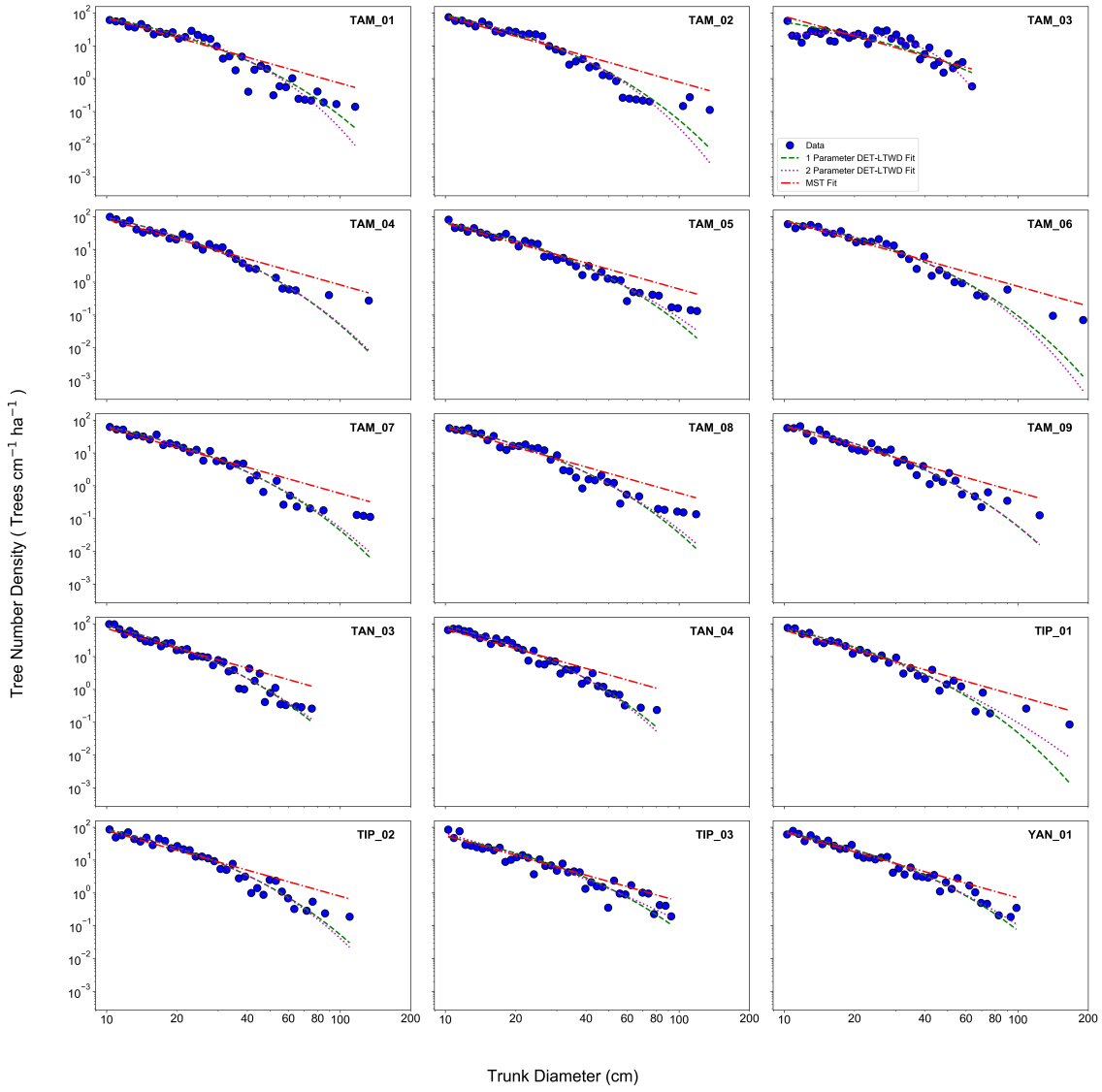

Figure S12: Diameter Size Distributions of Individual Forest Plots.

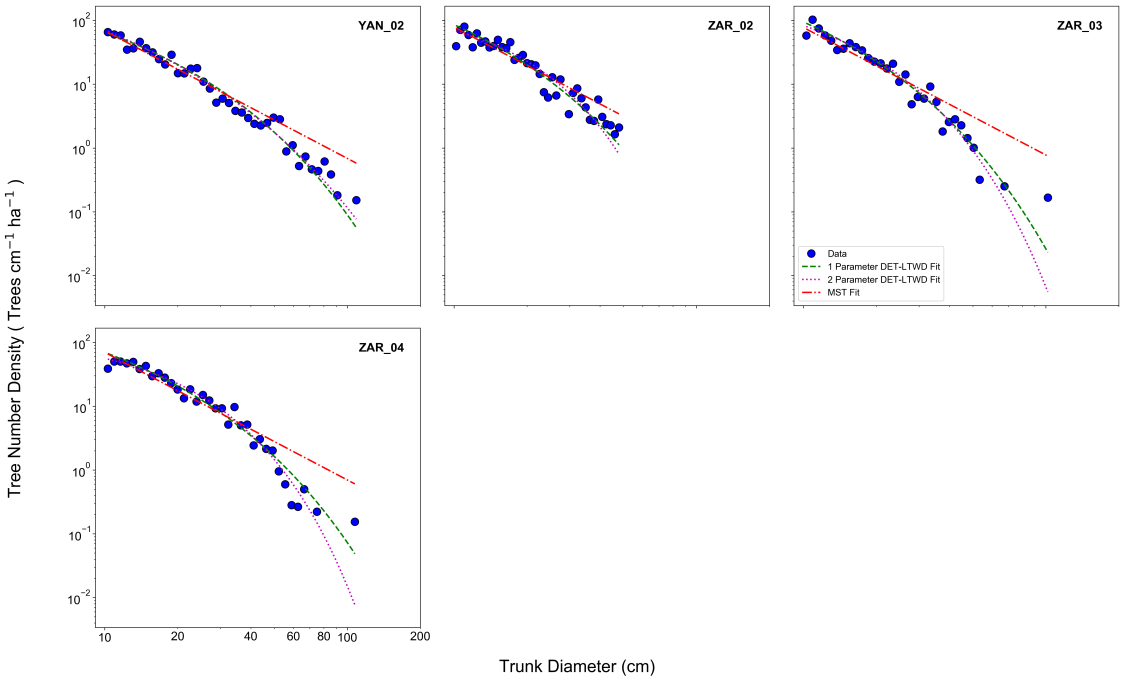

Figure S13: Diameter Size Distributions of Individual Forest Plots.

5 Forest Plot Mass Size-Distributions

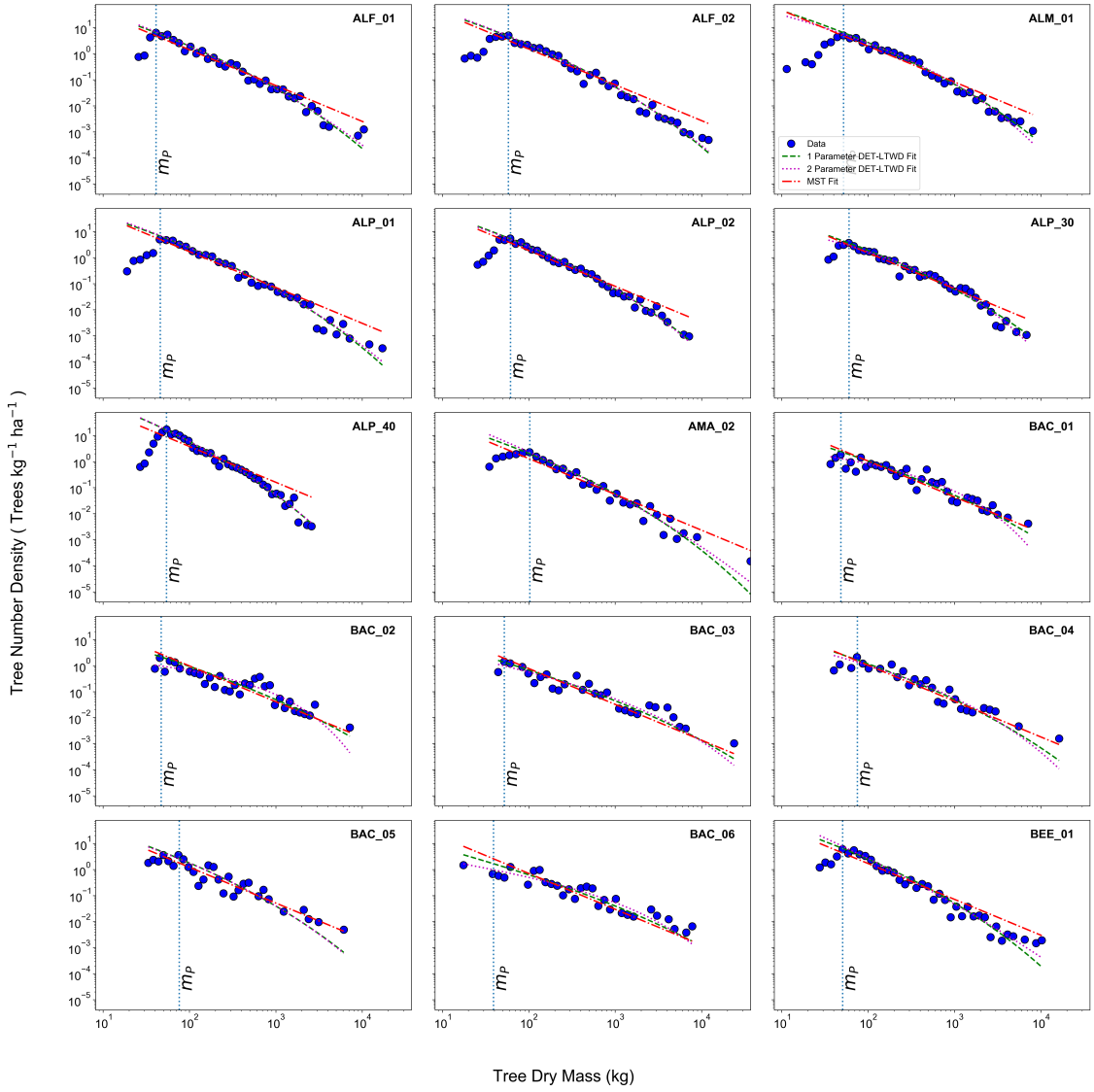

Figure S14: Mass Size Distributions of Individual Forest Plots.

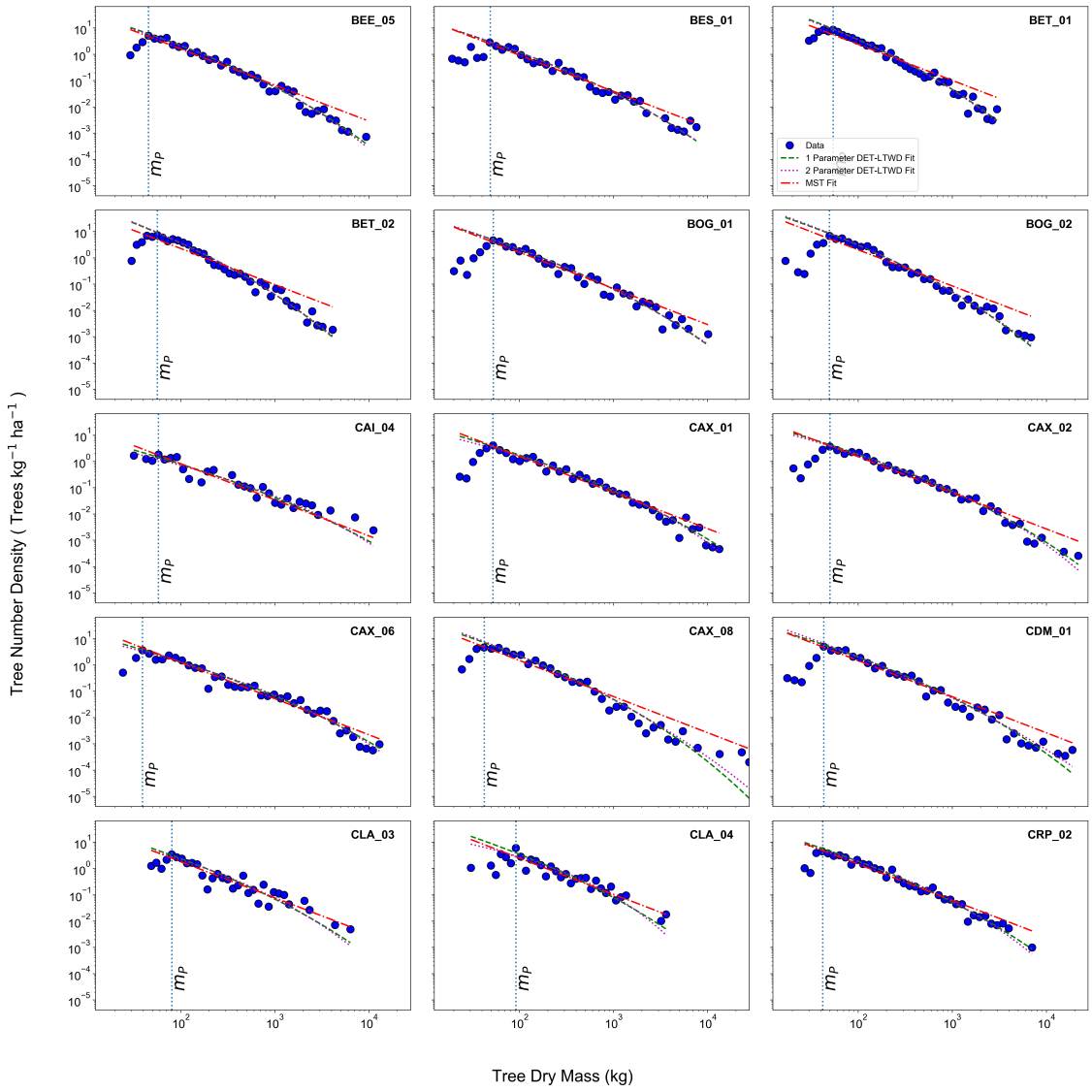

Figure S15: Mass Size Distributions of Individual Forest Plots.

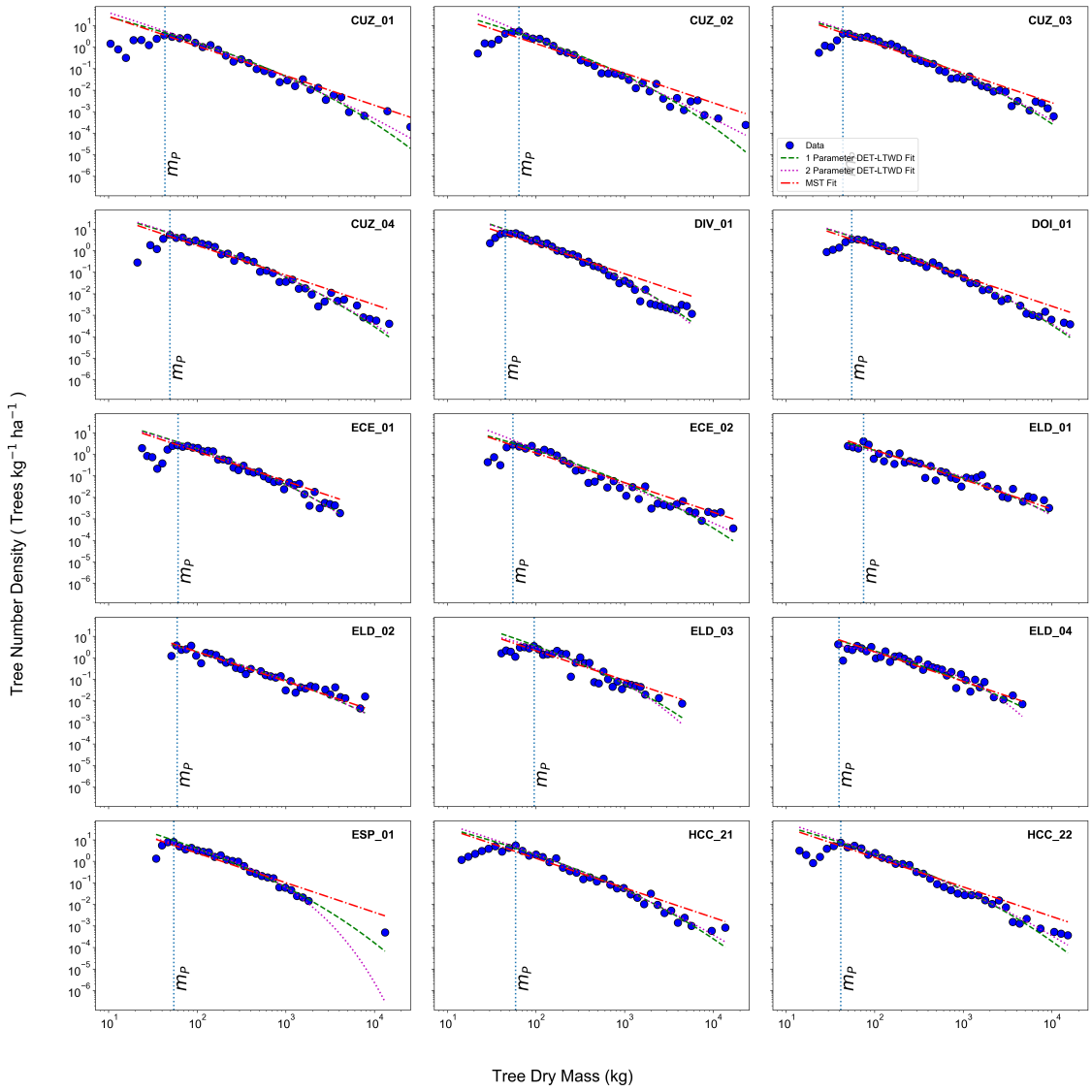

Figure S16: Mass Size Distributions of Individual Forest Plots.

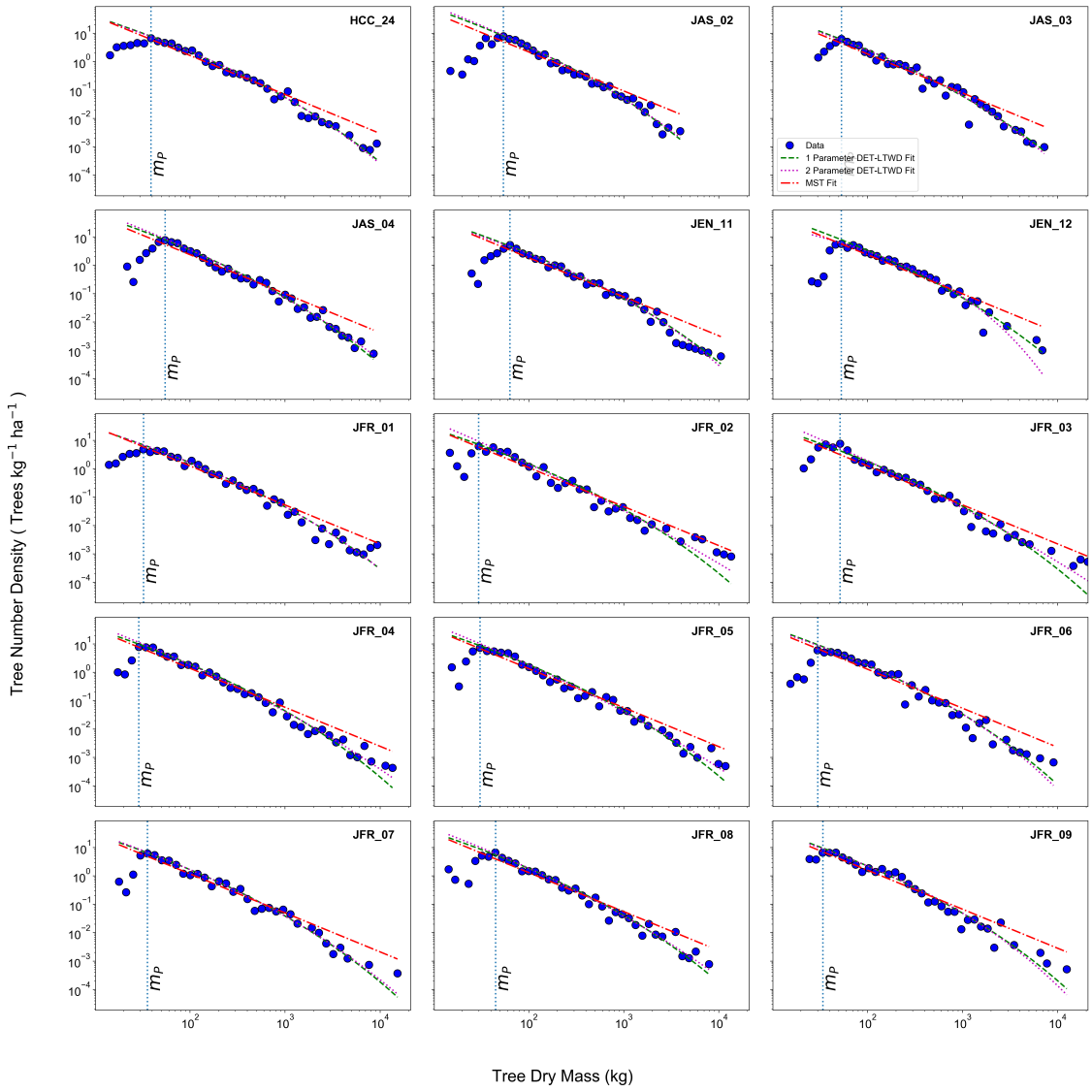

Figure S17: Mass Size Distributions of Individual Forest Plots.

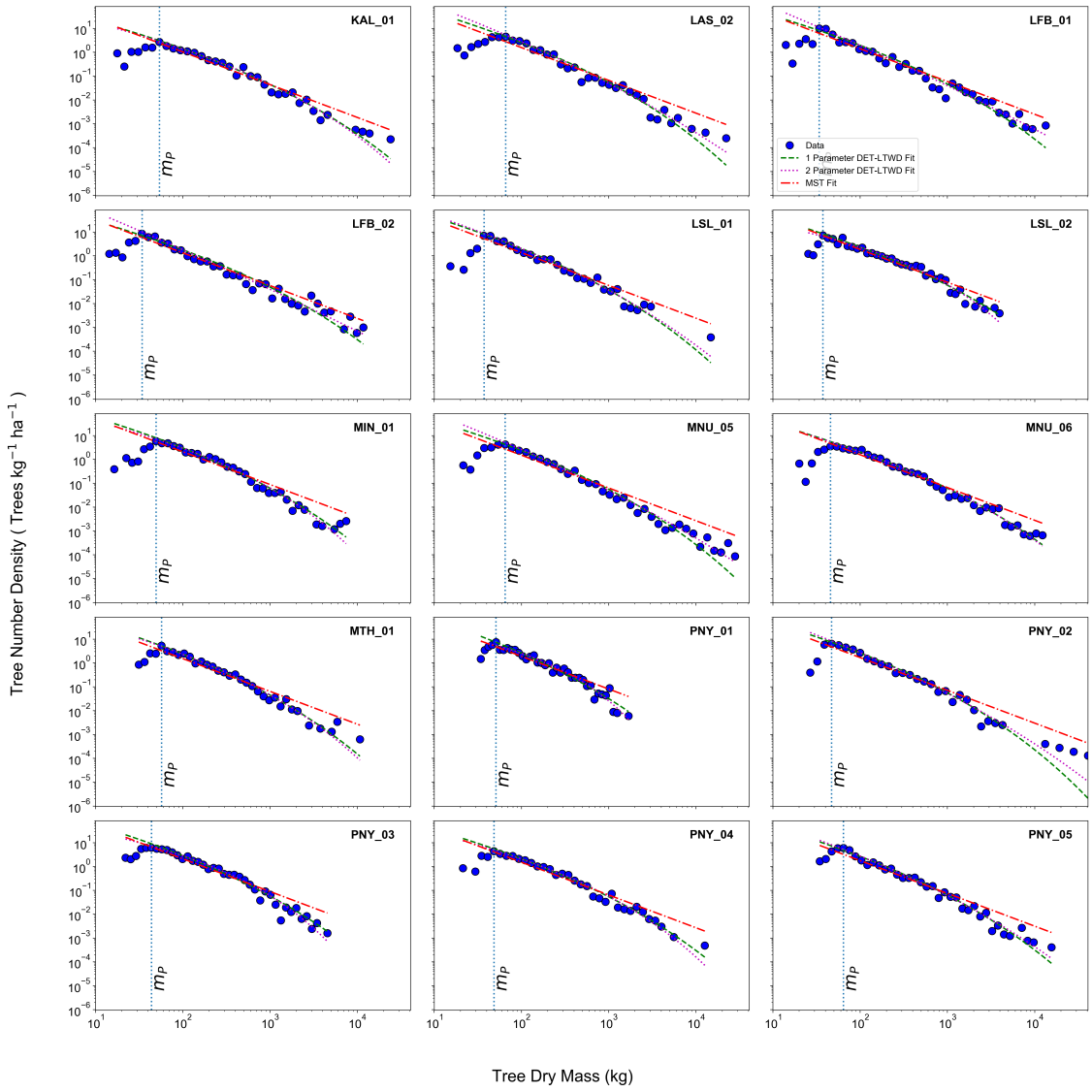

Figure S18: Mass Size Distributions of Individual Forest Plots.

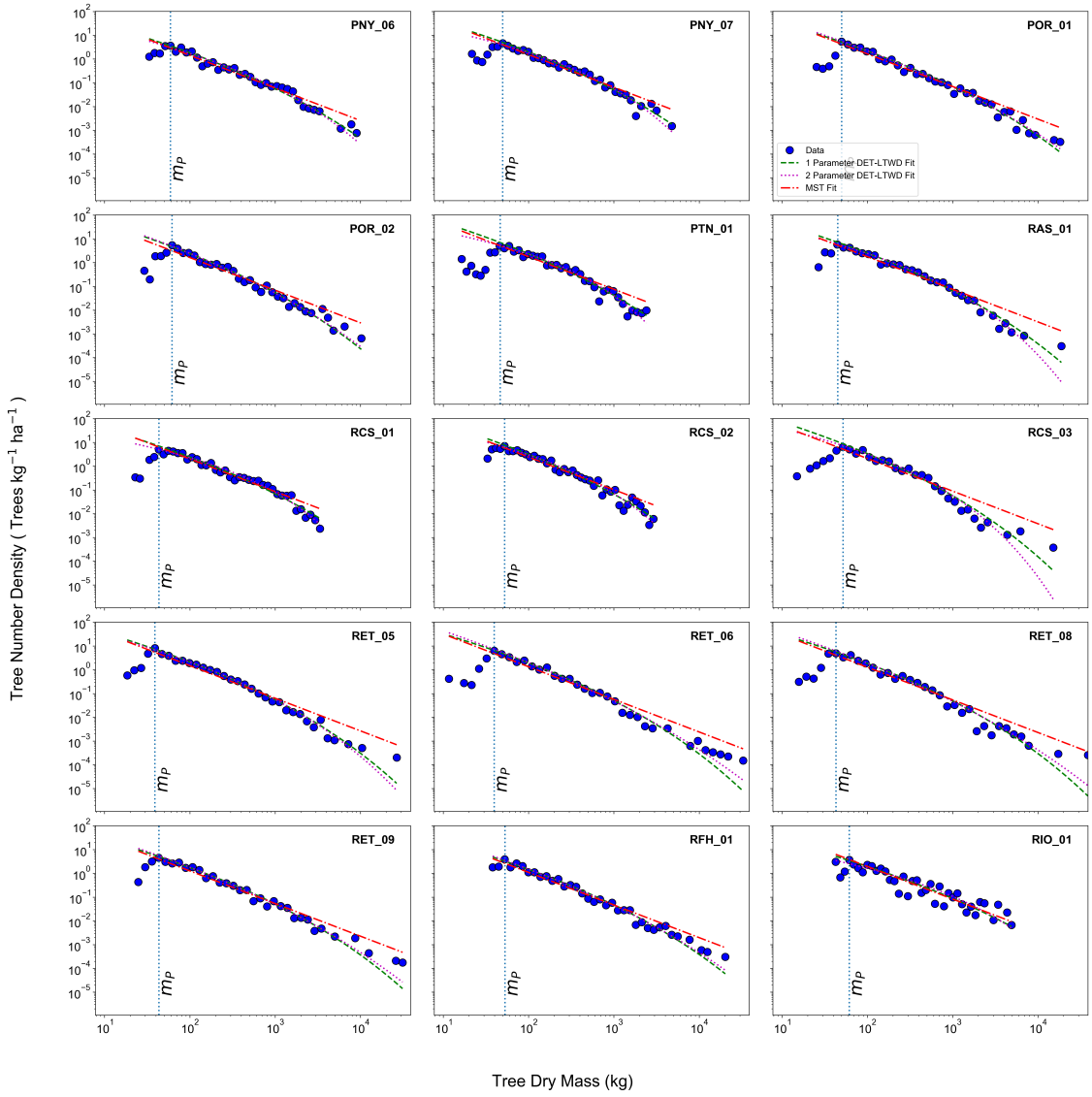

Figure S19: Mass Size Distributions of Individual Forest Plots.

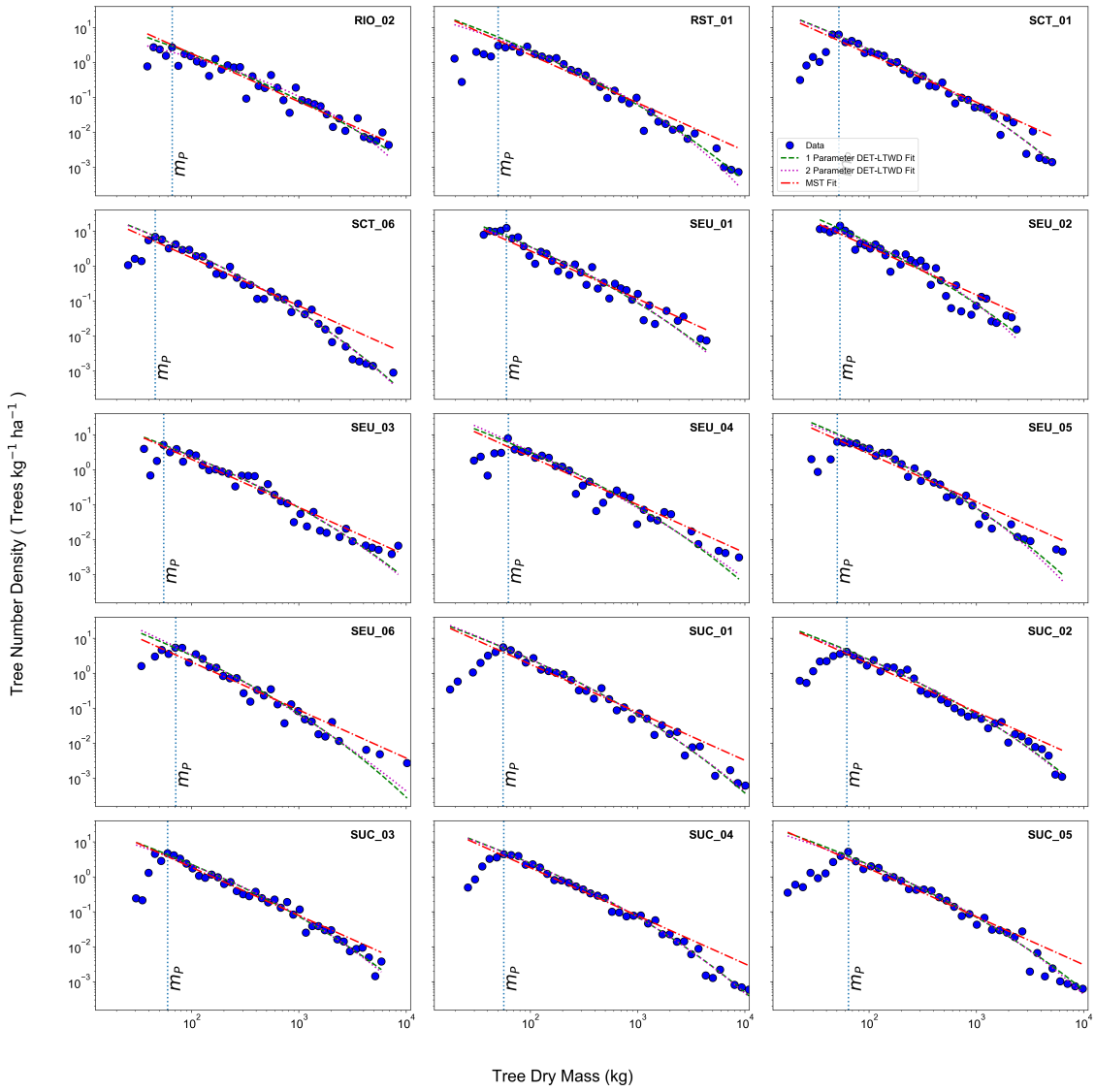

Figure S20: Mass Size Distributions of Individual Forest Plots.

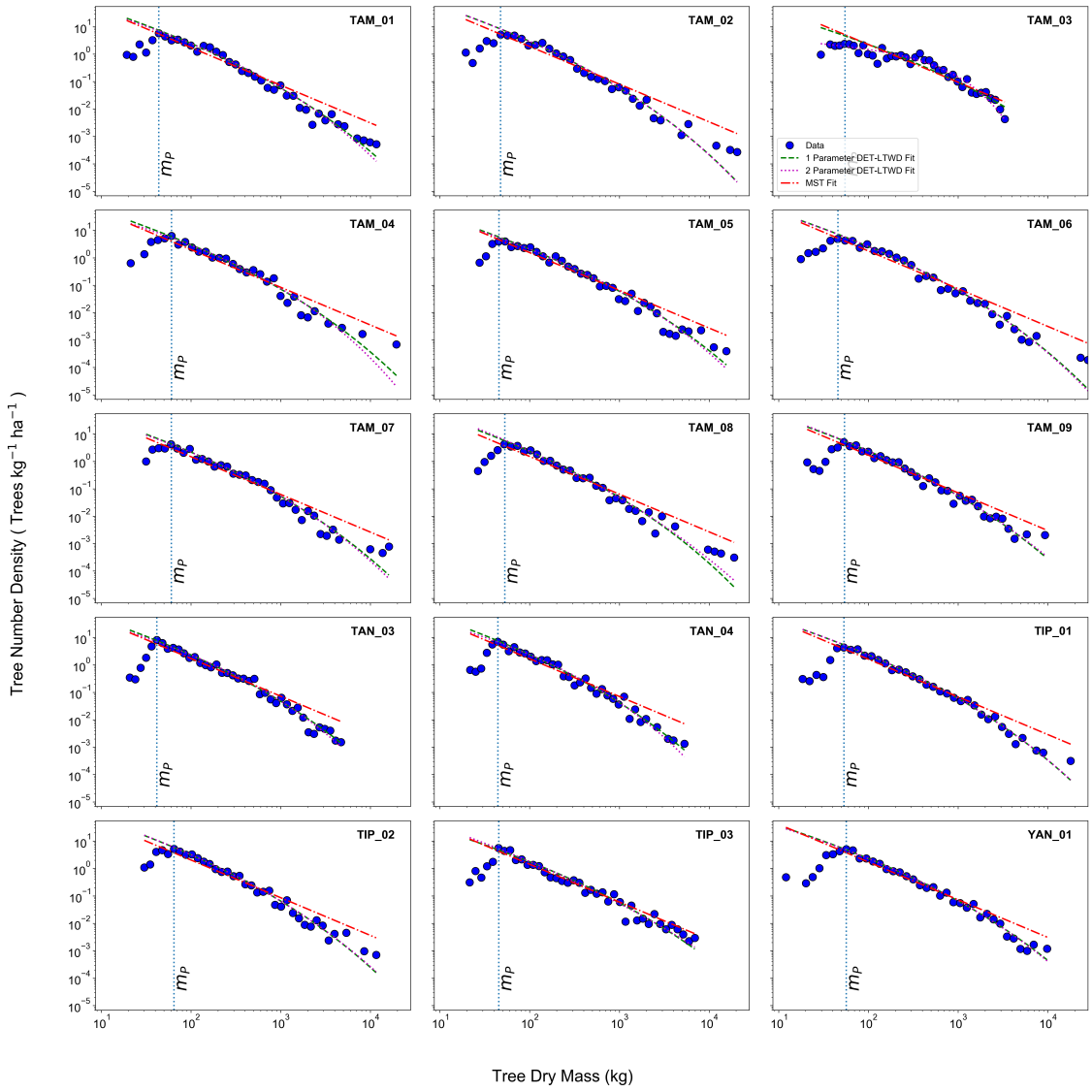

Figure S21: Mass Size Distributions of Individual Forest Plots.

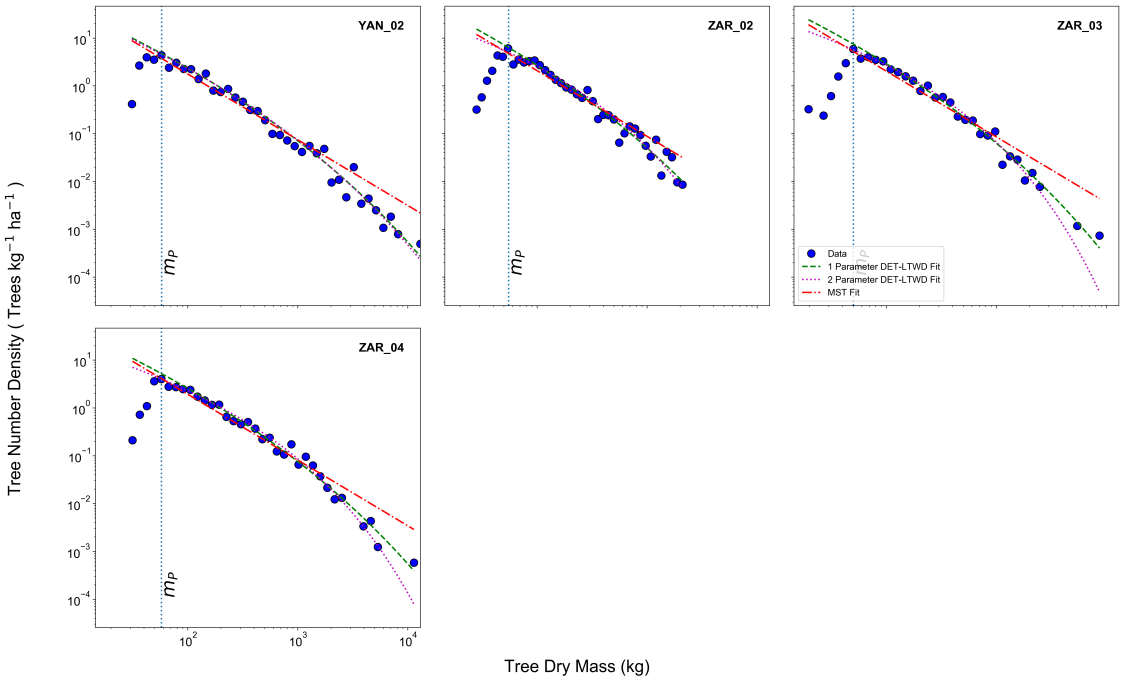

Figure S22: Mass Size Distributions of Individual Forest Plots.

6 Cumulative Biomass v Tree Mass

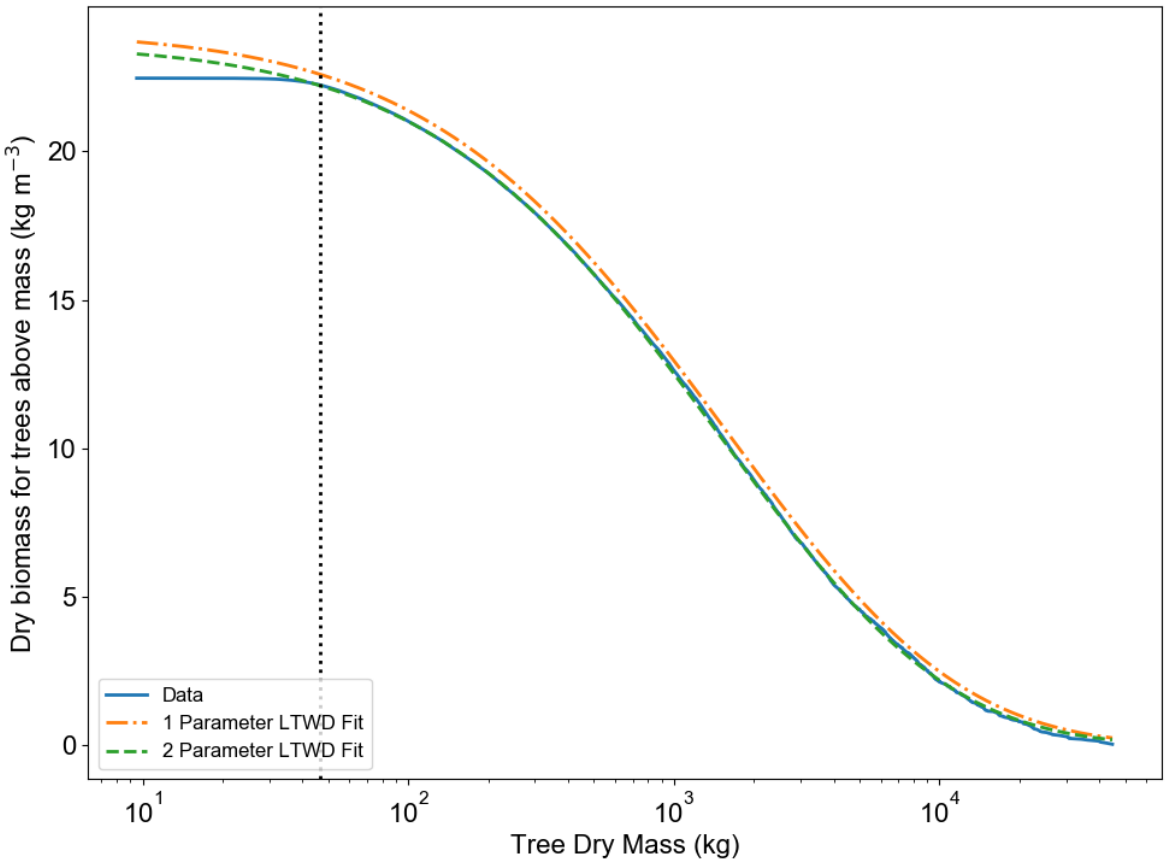

Figure S23: Shows the amount of biomass for all S.America consisting of trees equal or greater than a given tree mass, infinite maximum tree size assumption.

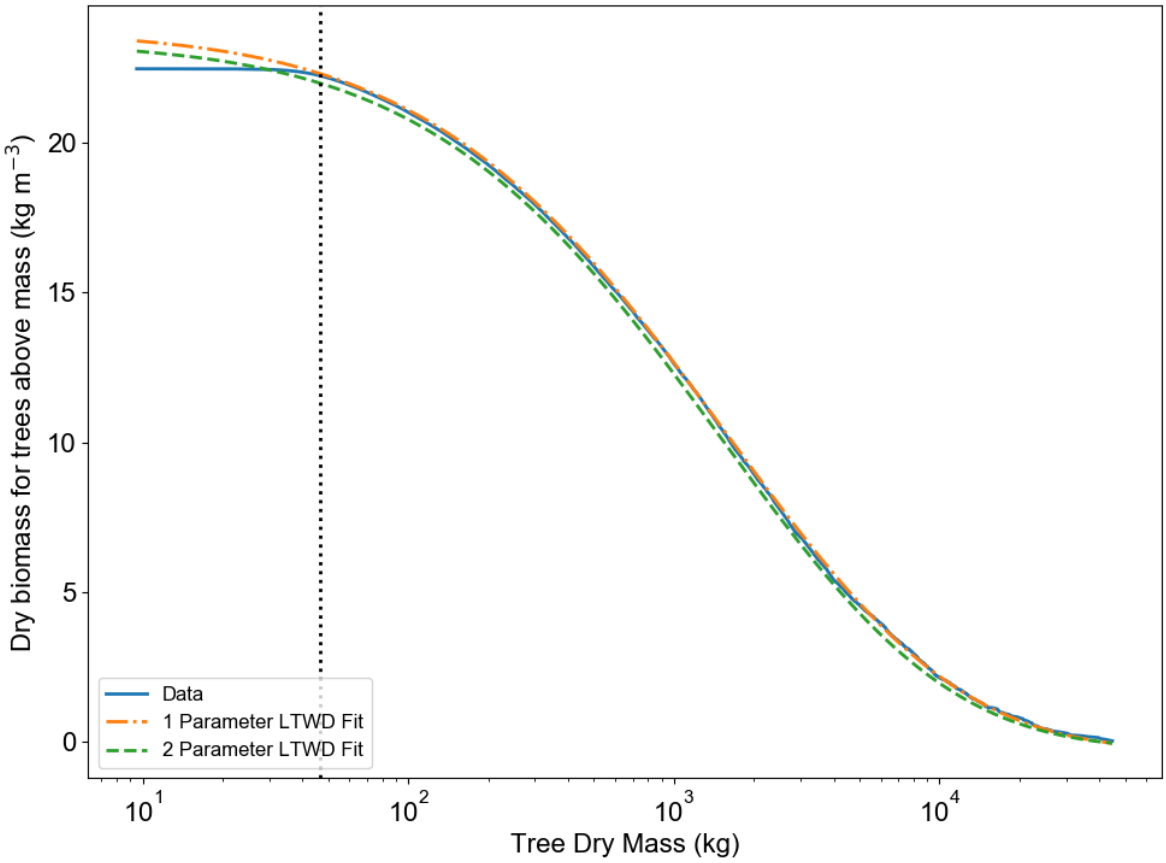

Figure S24: Shows the amount of biomass for all S.America consisting of trees equal or greater than a given tree mass, finite maximum tree size assumption (theory corrected by largest tree in the dataset).

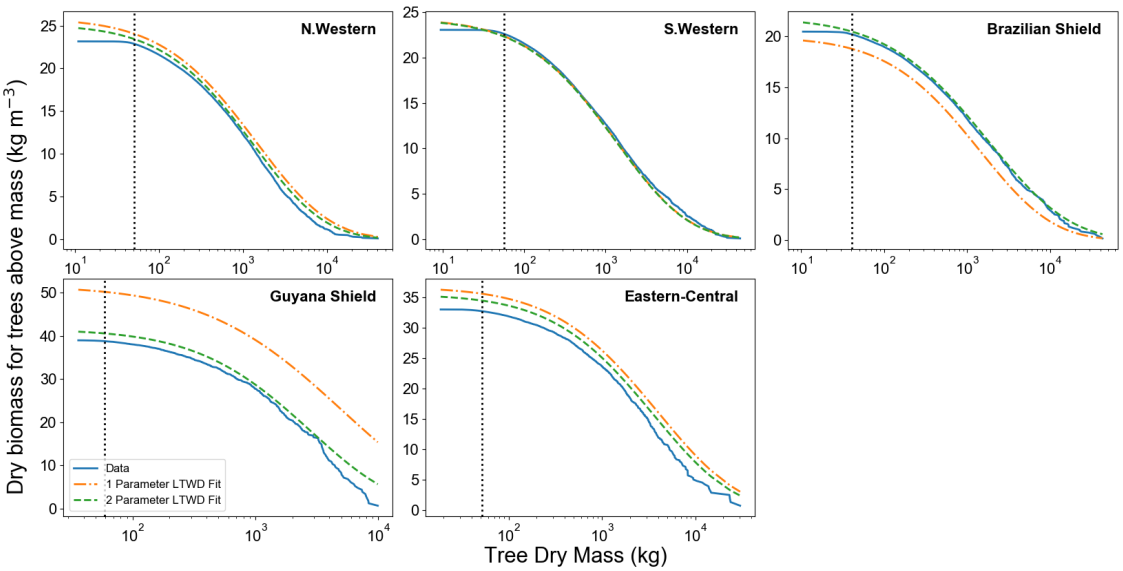

Figure S25: Shows the amount of biomass for each allometric region consisting of trees equal or greater than a given tree mass, infinite maximum tree size assumption.

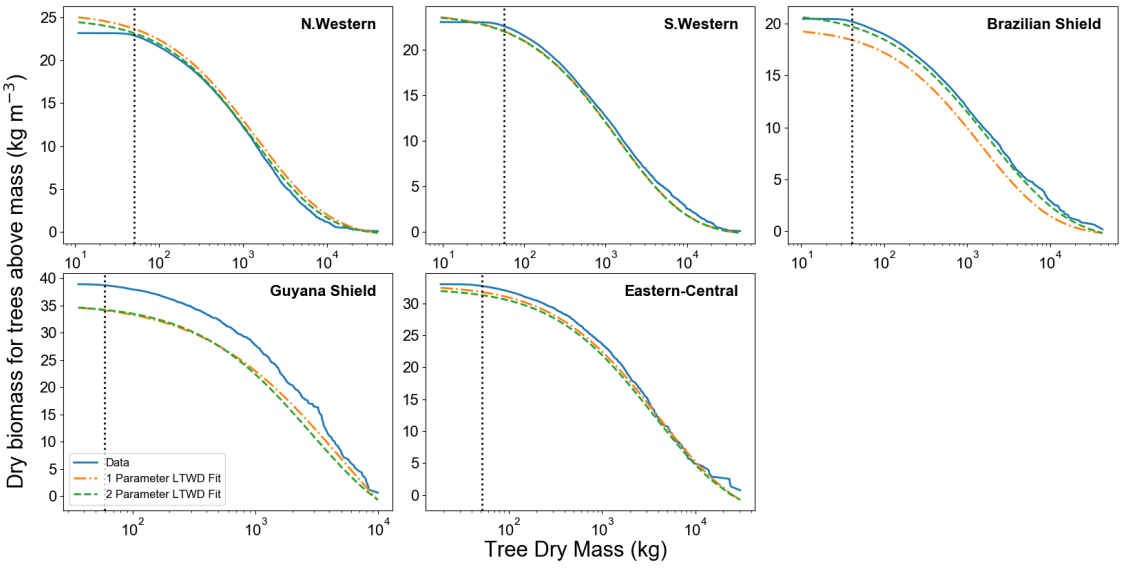

Figure S26: Shows the amount of biomass for each allometric region consisting of trees equal or greater than a given tree mass, finite maximum tree size assumption (theory corrected by largest tree in the dataset).

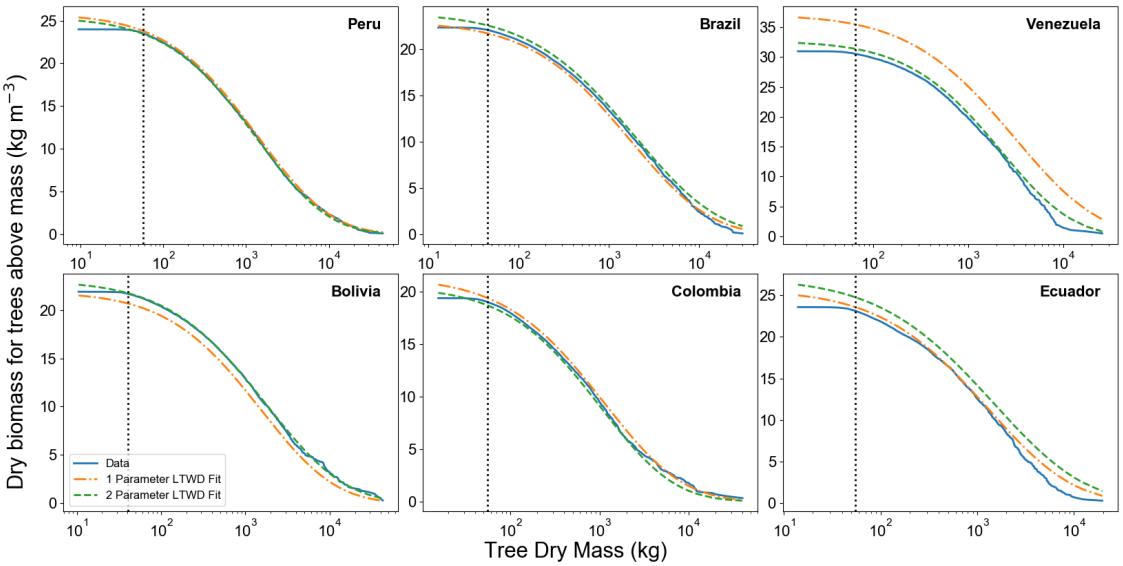

Figure S27: Shows the amount of biomass for each country consisting of trees equal or greater than a given tree mass, infinite maximum tree size assumption.

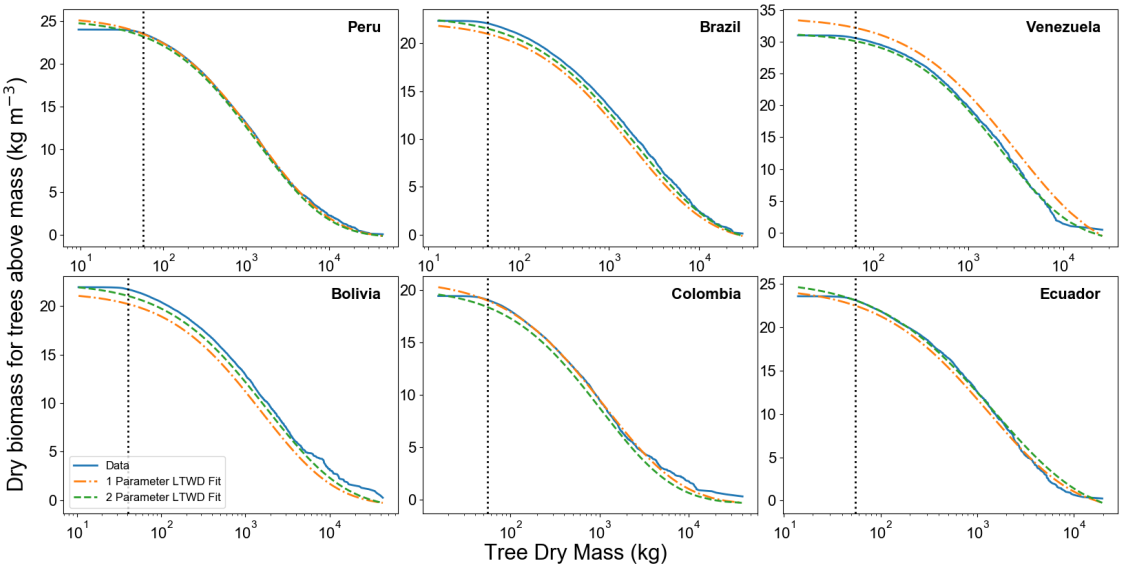

Figure S28: Shows the amount of biomass for each country consisting of trees equal or greater than a given tree mass, finite maximum tree size assumption (theory corrected by largest tree in the dataset).

7 Cumulative Biomass v Height and Trunk Diameter

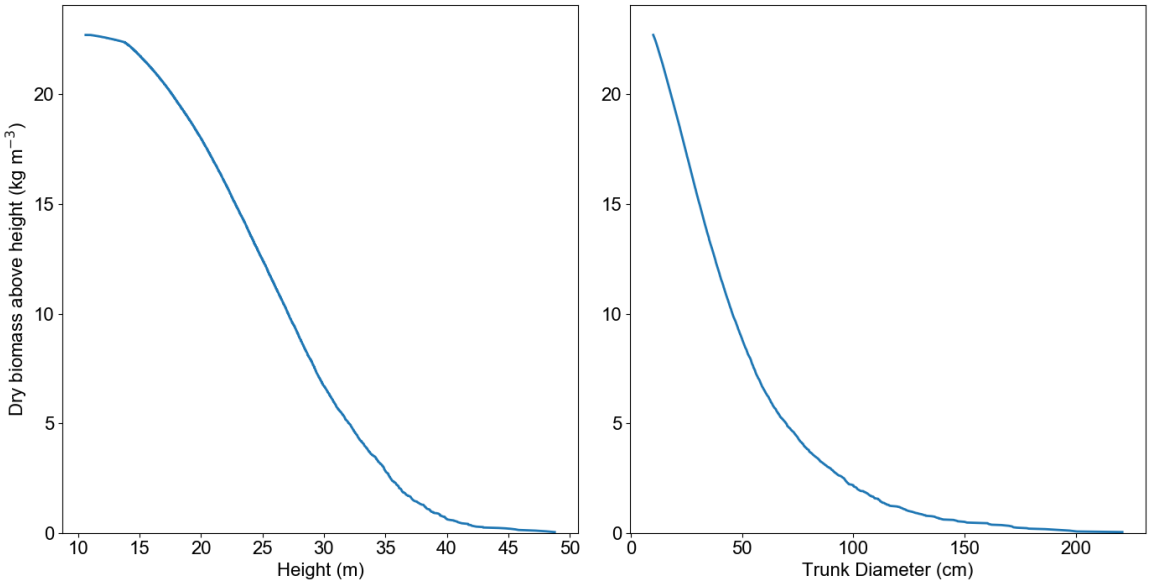

Figure S29: Shows the amount of biomass for all S.America consisting of trees equal or greater than a) a given height and b) a given diameter.