

Table SI.4. Locations, values and literature references for ground-based measurements used to evaluate CAET performance in representing carbon storage and net primary productivity for both employed modeling approaches: TBA (trait-based modeling approach) and PFTA (PFT modeling approach). AGB: aboveground biomass. TB: total biomass. NPP: net primary productivity. Lat: latitude. Lon: longitude.

Reference	Lat	Lon	Variable	Value	Unit
Malhi, Y. et al., 2009	-1.7	-51.53	AGB	20.1	kgCm ⁻²
	-2.5	-55	AGB	15.27	kgCm ⁻²
	-2.5	-60	AGB	16.5	kgCm ⁻²
Clark et al., 2001	-2.5	-60	AGB	17.18	kgCm ⁻²
	-2.98	-47.52	AGB	6.25	kgCm ⁻²
Baker et al., 2004	-1.7	-51.53	AGB	33.91	kgCm ⁻²
	-3.31	-54.94	AGB	32.76	kgCm ⁻²
	-1	-52.05	AGB	36.97	kgCm ⁻²
Houghton et al., 2001	-2.5	-53.5	AGB	16.64	kgCm ⁻²
	-3.5	-57.5	AGB	15.65	kgCm ⁻²
	-2.25	-50.75	AGB	16.02	kgCm ⁻²
	-2.5	-48.5	AGB	15.52	kgCm ⁻²
	-3.63	-47.35	AGB	18.18	kgCm ⁻²
	-1.25	-46.5	AGB	17.46	kgCm ⁻²
	1.47	-61.11	AGB	12.95	kgCm ⁻²
	-2.98	-47.52	AGB	16.41	kgCm ⁻²
	-1.18	-47.32	AGB	14.1	kgCm ⁻²
	-2.58	-59.98	AGB	19.33	kgCm ⁻²
	-3.1	-60	AGB	18.64	kgCm ⁻²
	-2.5	-60.8	AGB	15.29	kgCm ⁻²
	-3.42	-49.44	AGB	14.61	kgCm ⁻²
	-2.32	-60.09	AGB	13.68	kgCm ⁻²
	-5.23	-49.1	AGB	14.3	kgCm ⁻²
	-4.88	-47.5	AGB	9.87	kgCm ⁻²
	1.9	-67.1	AGB	12.02	kgCm ⁻²
	-0.63	-72.36	AGB	12.73	kgCm ⁻²
	-3	-47	AGB	14.97	kgCm ⁻²
	-8.75	-63.38	AGB	13.55	kgCm ⁻²
	-10.75	-68.75	AGB	12.57	kgCm ⁻²
	-10.31	-67.76	AGB	11.26	kgCm ⁻²
	1.9	-67.1	AGB	16.63	kgCm ⁻²
	-3.2	-55	AGB	13.7	kgCm ⁻²
	-11.77	-72.93	AGB	16.81	kgCm ⁻²
	-5.86	-49.18	AGB	15.61	kgCm ⁻²
	-9.2	-60.5	AGB	13.64	kgCm ⁻²
	-4.5	-49	AGB	11.09	kgCm ⁻²
	-3.1	-45.97	TB	13.48	kgCm ⁻²
	-2.67	-46.33	TB	16.64	kgCm ⁻²

Malhi et al., 2006	-2.4	-59.9	TB	15.65	kgCm ⁻²
	-2.63	-60.17	TB	16.02	kgCm ⁻²
	-10.75	-61.92	TB	15.52	kgCm ⁻²
	-0.17	-51.62	TB	18.18	kgCm ⁻²
	-1.7	-51.53	TB	17.46	kgCm ⁻²
	-3	-60	TB	12.95	kgCm ⁻²
	-10.12	-69.22	TB	16.41	kgCm ⁻²
	-2.63	-60.17	TB	14.1	kgCm ⁻²
	-2.5	-62	TB	19.33	kgCm ⁻²
	-1	-52.05	TB	18.64	kgCm ⁻²
	-4.78	-66.25	TB	15.29	kgCm ⁻²
	-1.75	-61.25	TB	14.61	kgCm ⁻²
	-5.73	-49.05	TB	13.68	kgCm ⁻²
	-1.45	-48.45	TB	14.3	kgCm ⁻²
	-7.54	-73.28	TB	9.87	kgCm ⁻²
	-1	-47.5	TB	12.02	kgCm ⁻²
	-10.82	-68.77	TB	12.73	kgCm ⁻²
	-11	-62.25	TB	14.97	kgCm ⁻²
	-1.07	-47.78	TB	13.55	kgCm ⁻²
	-8.75	-63.38	TB	12.57	kgCm ⁻²
	-6	-50.25	TB	11.26	kgCm ⁻²
	-2.75	-55	TB	16.63	kgCm ⁻²
	-1.5	-56.5	TB	13.7	kgCm ⁻²
	-4.85	-65.27	TB	16.81	kgCm ⁻²
	-1.88	-46.75	TB	15.61	kgCm ⁻²
	-3.48	-51.67	TB	13.64	kgCm ⁻²
Doughty et al. 2013	-1.72	-51.45	TB	11.09	kgCm ⁻²
Malhi et al., 2009	-2.5	-60	NPP	1.01	kgCm ⁻² yr ⁻¹
	-1.72	-51.5	NPP	1.01	kgCm ⁻² yr ⁻¹
	-2.5	-55	NPP	1.44	kgCm ⁻² yr ⁻¹
Aragão et al., 2009	-12.8	-69.7	NPP	1.53	kgCm ⁻² yr ⁻¹
	-4	-69.9	NPP	1.15	kgCm ⁻² yr ⁻¹
	-3.72	-70.3	NPP	0.93	kgCm ⁻² yr ⁻¹
Malhi, Doughty & Galbraith, 2011	-13.18	-71.58	NPP	0.51	kgCm ⁻² yr ⁻¹
	-13.1	-71.58	NPP	0.52	kgCm ⁻² yr ⁻¹
	-13.03	-71.53	NPP	0.71	kgCm ⁻² yr ⁻¹
	-12.95	-71.55	NPP	0.71	kgCm ⁻² yr ⁻¹
	1.93	-67.05	NPP	0.11	kgCm ⁻² yr ⁻¹
	-16.02	-62.73	NPP	1.34	kgCm ⁻² yr ⁻¹
Araujo-murakami et al., 2014	-16.02	-62.73	NPP	1.34	kgCm ⁻² yr ⁻¹
Malhi et al., 2015	-3.95	-73.4	NPP	1.44	kgCm ⁻² yr ⁻¹