

site code	site name	location	1950 - 2019 climate			vegetation type(s)	n species	n cores	original publication(s)
			July T_{mean}	Jan T_{mean}	MAP				
BCNM	Barro Colorado Nature Monument	Panama	26.6	25.5	2627	BD, BE	3	84	Alfaro-Sánchez, Muller-Landau, Wright, and Camarero 2017
HKK	Huai Kha Khaeng	Thailand	25.7	22.4	1428	BD, BE	4	470	Vlam, Baker, Bunyavejchewin, and Zuidema 2014
SCBI	Smithsonian Conservation Biology Institute	Virginia, USA	24.3	0.9	1018	BD, NE	14	704	Helcoski et al. 2019; Gonzalez-Akre et al. 2020
LDW	Lilly Dickey Woods	Indiana, USA	24.0	-2.2	1099	BD	6	170	Maxwell, Harley, and Robeson 2016
HF	Harvard Forest	Massachusetts, USA	21.6	-5.1	1104	BD, NE	4	366	Alexander et al. 2019; Finzi et al. 2020
ZOF	Žofín Forest Dynamics Plot	Czech Republic	18.1	-2.0	731	NE, BD	4	2059	Šamonil et al. 2013; Kašpar, Tumaier, Vašíčková, and Šamonil, in review
NIO	Niobrara	Nebraska, USA	23.4	-6.5	520	BD	1	84	Bumann et al. 2019
LT	Little Tesuque	New Mexico, USA	16.2	-3.1	608	NE	2	34	
CB	Cedar Breaks	Utah, USA	13.8	-6.2	842	NE, BD	7	187	Birch et al. 2020a-d
SC	Scotty Creek	Northwest Territories, Canada	16.5	-24.7	373	NE	1	443	Sniderhan and Baltzer 2016

hypotheses and specific predictions	frequency observed
Annual growth is simultaneously influenced by water, temperature, DBH, and time. Water and temperature additively influence annual growth, ...typically over different time windows. Climate and DBH have additive effects on growth, ...and interactive effects are also common There is an additive effect of year.	36 / 46 species-site combinations 9 / 10 sites 44 percent of models
Drought limits tree growth, but the response to water is nonlinear. The time window over which water influences growth is often ≥ 9 months. Growth responses to precipitation are predominantly positive, ...but positive responses decelerate or decline at high precipitation.	5 / 10 sites 34 / ?? Species-site combinations 32 / 34 species-site combinations with positive first-order terms
Temperature has predominantly negative, nonlinear effects on growth. The time window over which T influences growth rarely exceeds 3 months. Annual growth responds more strongly to T_{max} or PET than to T_{min} . Growth responses to T are predominantly negative, particularly at higher T . However, there are cases where growth increases under warmer T .	9 / 10 sites 8 / 10 sites
Climate sensitivity varies with DBH. Growth sensitivity to water varies with DBH Growth sensitivity to temperature varies with DBH	
Growth rate, by any metric, varies nonlinearly with DBH. Ring width increment (RW) declines with DBH for trees established in the open, ...but increases with DBH for trees established in the understory. Basal area increment (BAI) increases to a peak at intermediate DBH and then declines. Biomass increment (ΔAGB) increases to a peak at intermediate DBH and then declines.	98 percent of species-site
Climate- and DBH-corrected growth rates of most populations have changed over time.	