Supplementary Materials: Abrupt Change in Forest Height along a Tropical Elevation Gradient Detected using Airborne Lidar

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Table S1. Summary of AIC scores for models of forest height against elevation for data pooled by bedrock type.

Function	AIC
Linear	19,708.61
Quadratic	19,709.76
Logistic	19,721.15

Table S2. Summary of AIC scores for models of forest height against elevation with separate parameters or functional forms by bedrock (QD: quartz diorite; VC: volcanoclastic).

Function_{QD}	AIC_{QD}	Function_{VC}	AIC_{VC}	ΣAIC
Logistic	7853.8	Quadratic	11,551.43	19,405.23
Logistic	7853.8	Linear	11,553.26	19,407.06
Linear	7986.08	Quadratic	11,551.43	19,537.51
Quadratic	7986.892	Quadratic	11,551.43	19,538.322
Linear	7986.08	Linear	11,553.26	19,539.34
Quadratic	7986.892	Linear	11,553.26	19,540.152
Logistic	7853.8	Logistic	11,722.38	19,576.18
Linear	7986.08	Logistic	11,722.38	19,708.46
Quadratic	7986.892	Logistic	11,722.38	19,709.272
Logistic	7853.8	Quadratic	11,551.43	19,405.23

The ΣAIC term is the sum of the AIC_{QD} and AIC_{VC} terms. Models are sorted by minimum ΣAIC term. Component models are summarized in tables S6–S11. AIC score summaries for models with single functional forms and the same parameters for both bedrocks are summarized in Table S1.

Table S3. Linear model for data pooled by bedrock.

Parameter	Estimate ± S.E.	*p*-Value
β0	26.80 ± 0.2802	<0.0001
β1	−0.0211 ± 0.0004	<0.0001

Table S4. Quadratic model for data pooled by bedrock.

Parameter	Estimate ± S.E.	*p*-Value
β0	25.44 ± 1.503	<0.0001
β1	−0.0164 ± 0.0051	0.0013
β2	$-3.901\times10^{-6} \pm 4.222 \times 10^{-6}$	0.3556

Table S5. Logistic model for data pooled by bedrock.

Parameter	Estimate ± S.E.	*p*-Value
L	7.377 ± 0.2007	<0.0001
k	−0.0268 ± 0.0023	<0.0001
x0	611.3 ± 2.937	<0.0001
b	10.37 ± 0.1264	<0.0001

Table S6. Linear model for quartz diorite bedrock.

Parameter	Estimate ± S.E.	*p*-Value
$\beta 0_{QD}$	27.57 ± 0.5543	$p < 0.0001$
$\beta 1_{QD}$	−0.0233 ± 0.0008	$p < 0.0001$

Table S7. Linear model for volcanoclastic bedrock.

Parameter	Estimate ± S.E.	*p*-Value
$\beta 0_{VC}$	25.54 ± 0.3350	$p < 0.0001$
$\beta 1_{VC}$	−0.0182 ± 0.0006	$p < 0.0001$

Table S8 Quadratic model for quartz diorite bedrock.

Parameter	Estimate ± S.E.	*p*-Value
$\beta 0_{QD}$	24.48 ± 2.890	<0.0001
$\beta 1_{QD}$	−0.0131 ± 0.0093	0.159
$\beta 2_{QD}$	$-8.125 \times 10^{-6} \pm 7.459 \times 10^{-6}$	0.276

Table S9. Quadratic model for volcanoclastic bedrock.

Parameter	Estimate ± S.E.	*p*-Value
$\beta 0_{VC}$	21.96 ± 1.863	<0.0001
$\beta 1_{VC}$	−0.0058 ± 0.0064	0.3665
$\beta 2_{VC}$	$-1.042 \times 10^{-5} \pm 5.329 \times 10^{-6}$	0.507

Table S10. Logistic model for quartz diorite bedrock.

Parameter	Estimate ± S.E.	*p*-Value
L_{QD}	6.805 ± 0.1566	<0.0001
k_{QD}	−0.0539 ± 0.0056	<0.0001
$x0_{QD}$	621.8 ± 2.142	<0.0001
b_{QD}	10.31 ± 0.1093	<0.0001

Table S11. Logistic model for volcanoclastic bedrock.

Parameter	Estimate ± S.E.	*p*-Value
L_{VC}	14.33 ± 0.0252	<0.0001
k_{VC}	−0.0078 ± 0.0001	<0.0001
$x0_{VC}$	651.4 ± 0.0012	<0.0001
b_{VC}	6.164 ± 0.0495	<0.0001