

Table S2. Summary of generalised linear model (GLM) comparisons using Akaike's information criterion (AIC) relative to the null model for the two modelled response variables.

Dependent variable	Model type	Model	DF	AIC	$\Delta AIC_{\text{null}}$	Deviance explained (%)
Ascent attempt outcome (0 or 1 binary response)	Binomial GLM	null	4030	3442		0
		substrate * lateral slope * flow rate (maximal model)	4023	2391	-1051	31.0
		substrate * lateral slope + substrate * flow rate + lateral slope * flow rate (best model)	4024	2389	-1053	31.0
		substrate * lateral slope + lateral slope * flow rate	4025	2392	-1050	30.8
		substrate + lateral slope + flow rate	4027	2505	-937	27.4
Speed of ascent step (m s <sup>-1</sup> ) (continuous numerical response)	Gamma GLM	null	31392	-165545		0
		substrate * lateral slope * flow rate (maximal model) (best model)	31373	-182280	-16735	35.7
		substrate * lateral slope + substrate * flow rate + lateral slope * flow rate	31386	-182088	-16543	35.3
		substrate + lateral slope + flow rate	31389	-181798	-16253	34.8