

Table 5 Regression coefficients and their significance in full and reduced regression models**Full Model I (log charcoal abundance)**

Predictor (X)	Coefficient (B)	<i>t</i>	<i>p</i>
Constant	3.7390	2.57	0.016
Burn status	0.5278	2.55	0.017
Relative position	0.2271	1.62	0.017
Log of area	-0.2881	-2.40	0.024
Log of depth	-0.0692	-0.31	0.736
Log of distance	-0.1548	-0.43	0.668
Slope (flat)	0.0144	-0.06	0.953
Slope (moderate)	0.1392	0.61	0.546
Margin (0 m)	0.1376	0.82	0.417
Margin (0–3 m)	0.0368	0.27	0.788

$R^2 = 60.6\%$ $R_{\text{adj}}^2 = 46.9\%$; F -ratio = 4.44, $p = 0.001$.

Full model II (log charcoal abundance)

Predictor (X)	Coefficient B	<i>t</i>	<i>p</i>
Constant	3.7740	2.90	0.008
Relative position	0.2106	1.69	0.105
Severity (50–95%)	0.7857	3.12	0.005
Severity (>95%, scorch)	0.2876	1.43	0.164
Severity (>95%, consumption)	0.6661	3.35	0.003
Log of area	-0.2564	-2.29	0.031
Log of depth	0.2629	-1.22	0.235
Log of distance	-0.1807	-0.57	0.575
Slope (flat)	0.0642	0.29	0.778
Slope (moderate)	0.2868	1.32	0.198
Margin (0 m)	0.0107	0.07	0.945
Margin (0–3 m)	-0.0579	-0.46	0.647

$R^2 = 71.4\%$ $R_{\text{adj}}^2 = 58.3\%$; F -ratio = 5.45; $p = 0.000$.

Reduced Model I (log charcoal abundance)

Predictor (X)	Coefficient (B)	<i>t</i>	<i>p</i>
Constant	3.29250	13.50	0.000
Burn status	0.39143	4.70	0.000
Log of area	-0.24459	-3.71	0.001

$R^2 = 51.6\%$ $R_{\text{adj}}^2 = 48.7\%$; f -ratio = 17.61, $p = 0.00$.

Reduced Model II (log charcoal abundance)

Predictor (X)	Coefficient (B)	<i>t</i>	<i>p</i>
Constant	3.45280	13.10	0.000
Severity (50–95%)	0.60420	3.04	0.005
Severity (>95%, scorch)	0.22530	2.11	0.043
Severity (>95%, consumption)	0.46726	4.94	0.000
Log of area	-0.28934	-4.03	0.000

$R^2 = 59.0\%$ $R_{\text{adj}}^2 = 53.7\%$; F -ratio = 11.16, $p = 0.00$.

Gardner, J.J. and Whitlock, C. (2001). Charcoal accumulation following a recent fire in the Cascade Range, northwestern USA, and its relevance for fire-history studies. *Holocene* 11(5): 541-549.