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Long-Term Trends in Ecological Systems: A Basis for Understanding Responses to Global Change



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Long-Term Trends in Ecological Systems:

Appendix 10. Regression coefficients and R² values for sulfur (sulfate) from various sources for which linear regression against time is significant (p < 0.05)

(Sites are grouped by ecosystem type. See Appendix 27 for length of record for each station at a site.)

Site code	Source	Slope	Y-intercept ¹	R ²
Alpine and arctic				
ARC	Precipitation (concentration)	-0.007	0.1	0.3
GLA	Precipitation (concentration)	-0.002	0.2	0.3
LVW	Precipitation (concentration)	-0.003	0.2	0.5
	Stream	0.018	0.6	0.4
	Wet deposition	-0.046	2.4	0.5
NWT	Lake	0.091	1.0	0.5
	Precipitation (concentration)	-0.004	0.2	0.6
Aridlands				
JRN	Wet deposition	-0.001	0.1	0.4
RCE	Precipitation (concentration)	-0.003	0.2	0.2
Coastal				
FCE	Wet deposition	0.037	2.9	0.2
PIE	Precipitation (concentration)	-0.015	0.8	0.6
	Wet deposition	-0.127	8.4	0.5
Eastern forests				
CRO	Precipitation (concentration)	-0.003	0.4	0.2
CWT	Precipitation (concentration)	-0.007	0.5	0.4
	Wet deposition	-0.158	9.6	0.6
	Precipitation (concentration)	-0.022	1.2	0.7
FER	Wet deposition	-0.293	15.2	0.6
	Precipitation (concentration)	-0.015	0.8	0.8
HBR	Stream	-0.022	2.2	0.9
	Wet deposition	-0.157	8.8	0.7
	Precipitation (concentration)	-0.017	0.8	0.7
HFR	Wet deposition	-0.135	8.3	0.4
	Precipitation (concentration)	-0.009	0.5	0.7
MAR	Wet deposition	-0.075	3.7	0.7
	Lake	-0.016	1.2	0.7
NTL	Precipitation (concentration)	-0.013	0.6	0.8
	Wet deposition	-0.120	4.8	0.7
	Precipitation (concentration)	-0.005	0.4	0.4
TAL	Wet deposition	-0.050	5.4	0.2
	Precipitation (concentration)	-0.013	0.9	0.7
WBW	Wet deposition	-0.120	10.8	0.3

Appendix 10. Regression coefficients and R² values for sulfur (sulfate) from various sources for which linear regression against time is significant (p < 0.05)—Continued

Site code	Source	Slope	Y-intercept ¹	R ²
Temperate grasslands and savannas				
GRL	Wet deposition	-0.051	4.1	0.3
KBS	Precipitation (concentration)	-0.023	1.1	0.9
	Wet deposition	-0.231	10.8	0.8
KNZ	Precipitation (concentration)	-0.006	0.5	0.6
	Wet deposition	-0.039	4.0	0.2
SGS	Precipitation (concentration)	-0.007	0.4	0.3
	Wet deposition	-0.031	1.6	0.4
Urban				
BES	Precipitation (concentration)	-0.017	0.9	0.7
	Wet deposition	-0.170	8.9	0.4
CAP	Stream	-1.215	29.9	0.4
Western forests				
AND	Precipitation (concentration)	-0.001	0.1	0.3
CSP	Precipitation (concentration)	-0.002	0.1	0.5
	Wet deposition	-0.022	1.1	0.2
FRA	Precipitation (concentration)	-0.004	0.2	0.6

¹ Y-intercept was calculated for the first year of a dataset, which contains records of one variable over time for one site.