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



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**Appendix 7. Annual average (standard error) nitrogen (as ammonium) from various sources at sites with data**

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

Site code	Precipitation (concentration) mg/L	Wet deposition kg/ha	Coastal water μM/L	Lake mg/L	Stream mg/L
<b>Alpine and arctic</b>					
ARC	0.08 (0.02)	0.10 (0.01)			0.006 (0.001)*
GLA	0.10 (0.01)*	1.20 (0.08)*			
LVW	0.12 (0.01)*	1.19 (0.06)*			0.014 (0.002)*
MCM				0.01 (0.002)	
NWT	0.11 (0.01)*	1.99 (0.19)*		0.03 (0.004)	
<b>Aridlands</b>					
JRN	0.51 (0.04)*	0.03 (0.002)			
RCE	0.15 (0.01)*	0.38 (0.04)*			
WGE	0.23 (0.02)	0.79 (0.09)			
<b>Coastal</b>					
FCE	0.08 (0.01)	1.24 (0.11)*	5 (1.2)*		
PAL			2 (0.4)		
PIE	0.12 (0.004)*	1.28 (0.06)*			0.002 (0.0002)
SBC			1 (0.1)		
VCR	0.24 (0.07)	2.59 (0.67)	3 (0.5)		
<b>Eastern forests</b>					
BEN	0.11 (0.01)*	1.83 (0.16)*			
CRO	0.20 (0.01)	2.67 (0.18)			
CWT	0.11 (0.005)	1.89 (0.09)			
FER	0.17 (0.005)	2.24 (0.08)			
HBR	0.13 (0.005)	1.57 (0.07)			0.013 (0.001)*
HFR	0.14 (0.01)	1.72 (0.09)			
LUQ	0.03 (0.002)	0.78 (0.07)			0.022 (0.005)*
MAR	0.28 (0.01)	2.10 (0.08)			
NTL	0.27 (0.01)	2.08 (0.11)		0.03 (0.002)	
SAN	0.11 (0.01)*	1.19 (0.07)*			

Appendix 7. Annual average (standard error) nitrogen (as ammonium) from various sources at sites with data—Continued

Site code	Precipitation (concentration) mg/L	Wet deposition kg/ha	Coastal water µM/L	Lake mg/L	Stream mg/L
TAL	0.14 (0.01)	1.97 (0.14)			
WBW	0.15 (0.01)	1.94 (0.09)			0.003 (0.0003)
<b>Temperate grasslands and savannas</b>					
CDR	0.45 (0.02)	3.31 (0.28)			
GRL	0.23 (0.01)*	2.05 (0.08)			
KBS	0.35 (0.01)	3.19 (0.11)			0.017 (0.001)
KNZ	0.31 (0.01)*	2.59 (0.12)*			0.009 (0.002)*
SGS	0.48 (0.02)*	1.53 (0.08)			
<b>Urban</b>					
BES	0.19 (0.01)	2.19 (0.10)			
CAP	0.97 (0.14)	1.07 (0.21)			0.018 (0.003)
<b>Western forests</b>					
AND	0.02 (0.001)	0.33 (0.02)			0.009 (0.001)
BLA	0.04 (0.005)	0.35 (0.04)			
BNZ	0.02 (0.005)				
CSP	0.04 (0.003)	0.34 (0.03)			
FRA	0.11 (0.01)*	1.99 (0.19)*			
PRI	0.10 (0.005)	0.76 (0.02)			

\* indicates significant slopes ( $p < 0.05$ ) for regression of each variable against time.