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



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Appendix 26. Stations and length of record for each climate variable by site

(Sites are grouped by ecosystem type.)

Site code	Variable	Station	Start	End	
Alpine and arctic					
ARC	Air temperature	Toolik Lake Field Station	1989	2005	
	Precipitation		1989	2005	
	Ice duration	Toolik Lake	1988	2005	
	Water clarity		1989	2004	
	Water temperature		1975	2004	
GLA	Streamflow	Kuparuk River	1983	2004	
	Air temperature	Glacier Lakes Ecosystem Experiments Site	1989	2005	
	Precipitation		1995	2005	
LVW	Air temperature	USGS Biological Resources Division and Water Resources Division meteorological stations	1984	2006	
	Precipitation		NADP Station CO98, Rocky Mountain National Park, Loch Vale, CO	1984	2006
	Streamflow		Loch Outlet	1984	2004
	Water temperature			1992	2006
MCM	Air temperature	Lake Hoare	1988	2007	
	Precipitation	Lake Bonney	1995	2006	
	Streamflow	Onyx River at Vanda	1969	2004	
	Water temperature	Von Guerard Stream at F6	1990	2005	
NWT	Air temperature	C-1 Meteorological Station	1953	2006	
	Precipitation		1965	2006	
	Ice duration		Green Lake 4	1982	2006
	Streamflow			1982	2001
Aridlands					
EOA	Air temperature	NWS COOP #358029, Squaw Butte Experimental Station, OR	1937	2008	
	Precipitation		1937	2008	
JRN	Air temperature	NWS COOP #294426, Jornada Experimental Range, NM	1916	2008	
	Precipitation		1919	2008	
RCE	Air temperature	NWS COOP #107648, Reynolds, ID	1962	2007	
	Precipitation		1962	2007	
	Streamflow		036x68 streamflow station	1963	1995
SEV	Air temperature	NWS COOP #298387, Socorro, NM	1893	2008	
	Precipitation		1899	2008	
SRE	Air temperature	NWS COOP #027593, Santa Rita Experimental Range, AZ	1951	2004	
	Precipitation		1951	2004	
WGE	Air temperature	NWS COOP #028619 Tombstone, AZ	1898	2007	
	Precipitation		1898	2007	
	Streamflow		Flume 1	1958	2008

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Appendix 26. Stations and length of record for each climate variable by site—*Continued*

Site code	Variable	Station	Start	End
Coastal				
CCE	Air temperature	Lindbergh Field Airport, San Diego, CA	1927	2008
	Precipitation		1927	2008
FCE	Sea level	NOAA Station 9410170, San Diego, CA	1906	2008
	Water clarity	Inshore Area at CCE	1969	2007
	Water temperature	Scripps Institution of Oceanography Pier	1917	2006
	Air temperature	Royal Palm Ranger Station	1950	2008
	Precipitation		1950	2008
GCE	Sea level	NOAA Station 8724580, Key West, FL	1913	2008
	Streamflow	Tamiami Canal at S-12-A (USGS 254543080491101)	1964	2008
	Water clarity	Duck Key, Taylor Slough/Panhandle Site 9	2000	2004
	Water temperature	National Data Buoy Center Station LONF1, Long Key, FL	1993	2008
	Air temperature	NWS COOP #091340, Brunswick, GA	1915	2008
MCR	Precipitation		1918	2008
	Sea level	NOAA Station 8670870, Ft. Pulaski, GA	1936	2008
	Streamflow	Altamaha River at Doctor Town (USGS)	1932	2008
	Water temperature	Hudson Creek	2002	2008
	Air temperature	MeteoFrance Afareaitu #2	1977	2007
PAL	Precipitation		1977	2007
	Sea level	Papeete station, Moorea	1976	2008
	Air temperature	Palmer Station	1975	2008
PIE	Precipitation		1990	2008
	Ice duration	Palmer Basin	1979	2006
	Air temperature	NWS COOP #193505, Haverhill, MA	1901	2008
	Precipitation		1901	2008
SBC	Sea level	NOAA Station 8443970, Boston, MA	1921	2008
	Streamflow	Parker River at Byefield MA (USGS)	1945	2009
	Air temperature	NWS COOP #047902, Mission Creek, Santa Barbara, CA	1895	2006
	Precipitation	Santa Barbara County Public Works Department Flood Control District Site at Ellison Hall Roof, UC Santa Barbara	1952	2007
	Sea level	NOAA Station 9410660, Los Angeles, CA	1924	2008
VCR	Streamflow	USGS Station 11119500, Carpinteria Creek near Carpinteria CA	1941	2007
	Water temperature	Santa Barbara Manual Shore Station, Santa Barbara Harbor	1955	2004
	Air temperature	NWS COOP #446475, Painter 2W, VA	1956	2007
	Precipitation		1956	2007
VCR	Sea level	NOAA Station 8534720, Atlantic City, NJ	1912	2008
	Water clarity	Phillips Creek Mouth	1992	2008

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Appendix 26. Stations and length of record for each climate variable by site—*Continued*

Site code	Variable	Station	Start	End
Eastern forests				
BEN	Air temperature	NWS COOP #310724, Bent Creek, NC	1949	2008
	Precipitation		1949	2004
	Streamflow	USGS Station 03448000, French Broad River at Bent Creek, NC	1935	1986
CRO	Air temperature	NWS COOP #031730, Crossett 7 S, Crossett, AR	1916	2008
	Precipitation		1916	2008
CWT	Air temperature	NWS COOP #312102, Coweeta Experimental Station, NC	1943	2008
	Precipitation		1944	2008
	Streamflow	Watershed 18 flume	1937	2007
FER	Air temperature	NWS COOP #466867, Parsons 1 NE, WV	1899	2006
	Precipitation		1905	2006
	Streamflow	Watershed 1 at Fernow	1952	2007
HAR	Air temperature	NWS COOP #227840, Saucier Experimental Forest, MS	1955	2004
	Precipitation		1955	2006
HBR	Air temperature	Weather Station Headquarters	1957	2007
	Ice duration	Mirror Lake	1968	2005
	Precipitation	Hubbard Brook Ecosystem Study Headquarters	1978	2008
	Streamflow	GS Watershed 6	1963	2007
HFR	Air temperature	Harvard Forest Meteorological Stations Shaler and Fisher (sequential at same site)	1964	2008
	Precipitation		1964	2008
LUQ	Air temperature	Bisley Tower	1996	2004
	Precipitation		1988	2004
	Sea level	NOAA Station 9755371, San Juan, PR	1963	2008
	Streamflow	Puente Roto gage	1987	2006
MAR	Air temperature	NWS COOP #213303, Grand Rapids Forest Lab, MN	1916	2007
	Precipitation		1916	2007
	Streamflow	Total runoff of South Unit Watershed S2 weir	1962	2006
NTL	Air temperature	NWS COOP #475516, Minocqua Dam, WI	1904	2008
	Precipitation		1904	2008
	Ice duration	Lake Mendota	1856	2008
	Streamflow	USGS Station 05427948, Pheasant Branch at Middleton, WI	1975	2007
	Water clarity	Sparkling Lake	1981	2007
SAN	Water temperature		1982	2008
	Air temperature (max and min)	NWS COOP #388922, Walterboro 1 SW, Walterboro, SC	1904	2008
	Air temperature (mean)	Conglomerate of data from Santee, ChARP, Lotti, Met5, Met25, and Witherbee weather stations	1946	2005
	Precipitation		1946	2007
	Streamflow	Control Watershed 80 flume	1990	1999

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Appendix 26. Stations and length of record for each climate variable by site—*Continued*

Site code	Variable	Station	Start	End
TAL	Air temperature	NWS COOP #229079, University, MS	1902	2008
	Precipitation		1905	2008
WBW	Air temperature	NWS COOP #406750, Oak Ridge, TN	1949	2008
	Precipitation		1949	2008
	Streamflow	West Fork of Walker Branch Watershed	1982	2005
Temperate grasslands and savannas				
CDR	Air temperature	NWS COOP #211227, Cambridge 5ESE, MN	1893	2007
	Precipitation	Conglomerate of Ft. Snelling and Composite datasets	1837	2008
FTK	Air temperature	NWS COOP #245690, Miles City-Frank Wiley Field, MT	1938	2008
	Precipitation		1938	2008
GRL	Air temperature	NWS COOP #342818, El Reno 1 N, NV	1893	2006
	Precipitation		1893	2006
GSW	Air temperature	Riesel, TX	1940	2008
	Precipitation	Rain Gauge 75A	1938	2008
	Streamflow	Stream gage Y2	1940	2008
KBS	Air temperature	NWS COOP #203504, Gull Lake Biological Station, MI	1934	2008
	Precipitation		1931	2008
	Ice duration	Gull Lake, MI	1924	2006
	Streamflow	Kalamazoo River at Comstock, MI (USGS)	1931	2009
KNZ	Air temperature	NWS COOP #144972, Manhattan, KS	1899	2008
	Precipitation		1898	2008
	Streamflow	USGS Station 06879650, Kings Creek near Manhattan, KS	1980	2008
SGS	Air temperature	Central Plains Experimental Range (1944-1968) and Shortgrass Steppe 11 (1969-present) weather stations	1944	2008
	Precipitation		1944	2009
SPR	Air temperature	NWS COOP #349760, Woodward, OK	1909	1976
	Precipitation		1909	2007
Urban				
BES	Air temperature	NWS COOP #180465, Baltimore Washington International Airport, MD	1940	2008
	Precipitation		1940	2008
	Sea level	NOAA Station 8574680, Baltimore, MD	1903	2008
	Streamflow	Villanova	1957	2009
CAP	Air temperature	NWS COOP #021026, Buckeye AZ	1894	2002
	Precipitation		1894	2002
	Streamflow	USGS Station 09502000, Salt River below Stewart Mountain Dam, AZ	1941	2007

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Appendix 26. Stations and length of record for each climate variable by site—*Continued*

Site code	Variable	Station	Start	End
Western forests				
AND	Air temperature	Climatic Station at Watershed 2	1958	2006
	Precipitation		1958	2006
	Streamflow	Watershed 2	1953	2008
	Water temperature	Lookout Creek upper thermograph site	1977	2006
BNZ	Air temperature	LTER1	1989	2009
	Streamflow	C3 Flume in the Caribou-Poker Creeks Research Watershed	1969	2007
CHE	Air temperature	NWS COOP #356366, Otis, OR	1950	2008
	Precipitation		1949	2008
CSP	Air temperature	NWS COOP #043161, Fort Bragg 5N, CA	1935	2008
	Precipitation		1913	2008
	Streamflow	South Fork Caspar Creek	1986	2004
	Water temperature	ARF Station	1989	2004
FRA	Air temperature	NWS COOP #053261, Georgetown, CO	1898	2006
	Precipitation		1909	2006
	Streamflow	Lower Fool Creek	1941	1984
PRI	Air temperature	NWS COOP #107386, Priest River Experimental Station, ID	1901	2008
	Precipitation		1901	2008
	Streamflow	USGS Station 12395000, Priest River near Priest River, ID	1950	2008
WIN	Air temperature	NWS COOP #459342, Wind River, WA and NWS COOP #451160, Carson Fish Hatchery, WA	1931	2009
	Precipitation		1931	2008