

Variables	Winter average water temperature (°C)	Winter discharge (m ³ s ⁻¹)	Winter NO ₃ -N (μg l ⁻¹)	Winter NH ₄ -N (μg l ⁻¹)	Winter Tot-N (μg l ⁻¹)	Winter ON (μg l ⁻¹)	Winter PO ₄ -P (μg l ⁻¹)	Winter Tot-P (μg l ⁻¹)	Winter OP (μg l ⁻¹)	Winter DOC (mg l ⁻¹)	Winter precipitation (mm)	Winter average daily temperature (°C)
Winter average water temperature (°C)	1	0.643	0.369	0.372	0.500	0.574	0.362	0.332	0.259	0.762	0.406	0.672
Winter discharge (m ³ s ⁻¹)	0.643	1	0.841	0.656	0.882	0.404	0.661	0.652	0.563	0.884	0.653	0.775
Winter NO ₃ -N (μg l ⁻¹)	0.369	0.841	1	0.463	0.967	0.269	0.564	0.531	0.422	0.682	0.591	0.569
Winter NH ₄ -N (μg l ⁻¹)	0.372	0.656	0.463	1	0.484	0.012	0.808	0.828	0.751	0.498	0.458	0.451
Winter Tot-N (μg l ⁻¹)	0.500	0.882	0.967	0.484	1	0.496	0.573	0.533	0.416	0.785	0.684	0.635
Winter ON (μg l ⁻¹)	0.574	0.404	0.269	0.012	0.496	1	0.085	0.032	-0.028	0.601	0.530	0.414
Winter PO ₄ -P (μg l ⁻¹)	0.362	0.661	0.564	0.808	0.573	0.085	1	0.957	0.788	0.509	0.464	0.491
Winter Tot-P (μg l ⁻¹)	0.332	0.652	0.531	0.828	0.533	0.032	0.957	1	0.932	0.524	0.469	0.466
Winter OP (μg l ⁻¹)	0.259	0.563	0.422	0.751	0.416	-0.028	0.788	0.932	1	0.484	0.430	0.384
Winter DOC (mg l ⁻¹)	0.762	0.884	0.682	0.498	0.785	0.601	0.509	0.524	0.484	1	0.722	0.717
Winter precipitation (mm)	0.406	0.653	0.591	0.458	0.684	0.530	0.464	0.469	0.430	0.722	1	0.548
Winter average daily temperature (°C)	0.672	0.775	0.569	0.451	0.635	0.414	0.491	0.466	0.384	0.717	0.548	1
Variables	Spring average water temperature (°C)	Spring discharge (m ³ s ⁻¹)	Spring NO ₃ -N (μg l ⁻¹)	Spring NH ₄ -N (μg l ⁻¹)	Spring Tot-N (μg l ⁻¹)	Spring ON (μg l ⁻¹)	Spring PO ₄ -P (μg l ⁻¹)	Spring Tot-P (μg l ⁻¹)	Spring OP (μg l ⁻¹)	Spring DOC (mg l ⁻¹)	Spring precipitation (mm)	Spring average daily temperature (°C)
Spring average water temperature (°C)	1	0.066	-0.209	-0.192	-0.165	0.179	-0.391	-0.324	-0.113	-0.017	-0.283	0.360
Spring discharge (m ³ s ⁻¹)	0.066	1	0.474	-0.019	0.411	-0.055	0.133	0.079	0.028	0.233	0.472	0.075
Spring NO ₃ -N (μg l ⁻¹)	-0.209	0.474	1	0.115	0.849	-0.243	0.425	0.231	-0.001	-0.028	0.165	0.058
Spring NH ₄ -N (μg l ⁻¹)	-0.192	-0.019	0.115	1	0.549	0.634	0.520	0.697	0.547	0.751	0.159	0.022
Spring Tot-N (μg l ⁻¹)	-0.165	0.411	0.849	0.549	1	0.278	0.562	0.511	0.274	0.359	0.212	0.088
Spring ON (μg l ⁻¹)	0.179	-0.055	-0.243	0.634	0.278	1	0.224	0.479	0.549	0.598	0.115	0.081
Spring PO ₄ -P (μg l ⁻¹)	-0.391	0.133	0.425	0.520	0.562	0.224	1	0.872	0.466	0.330	0.170	0.021
Spring Tot-P (μg l ⁻¹)	-0.324	0.079	0.231	0.697	0.511	0.479	0.872	1	0.812	0.414	0.056	-0.132
Spring OP (μg l ⁻¹)	-0.113	0.028	-0.001	0.547	0.274	0.549	0.466	0.812	1	0.265	-0.031	-0.241
Spring DOC (mg l ⁻¹)	-0.017	0.233	-0.028	0.751	0.359	0.598	0.330	0.414	0.265	1	0.390	0.383
Spring precipitation (mm)	-0.283	0.472	0.165	0.159	0.212	0.115	0.170	0.056	-0.031	0.390	1	0.257
Spring average daily temperature (°C)	0.360	0.075	0.058	0.022	0.088	0.081	0.021	-0.132	-0.241	0.383	0.257	1
Variables	Summer average water temperature (°C)	Summer discharge (m ³ s ⁻¹)	Summer NO ₃ -N (μg l ⁻¹)	Summer NH ₄ -N (μg l ⁻¹)	Summer Tot-N (μg l ⁻¹)	Summer ON (μg l ⁻¹)	Summer PO ₄ -P (μg l ⁻¹)	Summer Tot-P (μg l ⁻¹)	Summer OP (μg l ⁻¹)	Summer DOC (mg l ⁻¹)	Summer precipitation (mm)	Summer average daily temperature (°C)
Summer average water temperature (°C)	1	-0.541	-0.334	-0.235	-0.364	-0.254	-0.256	-0.200	-0.134	-0.499	-0.497	0.597
Summer discharge (m ³ s ⁻¹)	-0.541	1	0.594	0.284	0.719	0.707	-0.012	0.198	0.323	0.788	0.923	-0.472
Summer NO ₃ -N (μg l ⁻¹)	-0.334	0.594	1	0.222	0.941	0.467	0.207	0.318	0.367	0.361	0.495	-0.293
Summer NH ₄ -N (μg l ⁻¹)	-0.235	0.284	0.222	1	0.397	0.390	0.642	0.875	0.910	0.696	0.296	-0.326
Summer Tot-N (μg l ⁻¹)	-0.364	0.719	0.941	0.397	1	0.728	0.294	0.451	0.513	0.575	0.652	-0.410
Summer ON (μg l ⁻¹)	-0.254	0.707	0.467	0.390	0.728	1	0.222	0.371	0.432	0.692	0.730	-0.458
Summer PO ₄ -P (μg l ⁻¹)	-0.256	-0.012	0.207	0.642	0.294	0.222	1	0.877	0.663	0.295	-0.070	-0.339
Summer Tot-P (μg l ⁻¹)	-0.200	0.198	0.318	0.875	0.451	0.371	0.877	1	0.941	0.555	0.169	-0.312
Summer OP (μg l ⁻¹)	-0.134	0.323	0.367	0.910	0.513	0.432	0.663	0.941	1	0.661	0.314	-0.244
Summer DOC (mg l ⁻¹)	-0.499	0.788	0.361	0.696	0.575	0.692	0.295	0.555	0.661	1	0.773	-0.535
Summer precipitation (mm)	-0.497	0.923	0.495	0.296	0.652	0.730	-0.070	0.169	0.314	0.773	1	-0.550
Summer average daily temperature (°C)	0.597	-0.472	-0.293	-0.326	-0.410	-0.458	-0.339	-0.312	-0.244	-0.535	-0.550	1
Variables	Autumn average water temperature (°C)	Autumn discharge (m ³ s ⁻¹)	Autumn NO ₃ -N (μg l ⁻¹)	Autumn NH ₄ -N (μg l ⁻¹)	Autumn Tot-N (μg l ⁻¹)	Autumn ON (μg l ⁻¹)	Autumn PO ₄ -P (μg l ⁻¹)	Autumn Tot-P (μg l ⁻¹)	Autumn OP (μg l ⁻¹)	Autumn DOC (mg l ⁻¹)	Autumn precipitation (mm)	Autumn average daily temperature (°C)
Autumn average water temperature (°C)	1	0.303	0.166	-0.380	0.143	0.136	-0.166	-0.121	-0.027	0.310	0.369	0.883
Autumn discharge (m ³ s ⁻¹)	0.303	1	0.697	0.401	0.851	0.768	0.462	0.579	0.668	0.920	0.741	0.210
Autumn NO ₃ -N (μg l ⁻¹)	0.166	0.697	1	0.351	0.938	0.311	0.674	0.683	0.593	0.612	0.371	0.319
Autumn NH ₄ -N (μg l ⁻¹)	-0.380	0.401	0.351	1	0.486	0.335	0.850	0.871	0.759	0.496	0.401	-0.306
Autumn Tot-N (μg l ⁻¹)	0.143	0.851	0.938	0.486	1	0.610	0.679	0.752	0.752	0.803	0.503	0.230
Autumn ON (μg l ⁻¹)	0.136	0.768	0.311	0.335	0.610	1	0.176	0.372	0.624	0.802	0.505	0.005
Autumn PO ₄ -P (μg l ⁻¹)	-0.166	0.462	0.674	0.850	0.679	0.176	1	0.960	0.743	0.476	0.429	-0.023
Autumn Tot-P (μg l ⁻¹)	-0.121	0.579	0.683	0.871	0.752	0.372	0.960	1	0.900	0.626	0.520	0.016
Autumn OP (μg l ⁻¹)	-0.027	0.668	0.593	0.759	0.752	0.624	0.743	0.900	1	0.757	0.570	0.077
Autumn DOC (mg l ⁻¹)	0.310	0.920	0.612	0.496	0.803	0.802	0.476	0.626	0.757	1	0.711	0.239
Autumn precipitation (mm)	0.369	0.741	0.371	0.401	0.503	0.505	0.429	0.520	0.570	0.711	1	0.227
Autumn average daily temperature (°C)	0.883	0.210	0.319	-0.306	0.230	0.005	-0.023	0.016	0.077	0.239	0.227	1