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Table 1

Location on the map	River Kamniška Bistrica	Q (m ³ /s)	Distance from the source (km)	pH	T (°C)	Conductivity (μS/cm)	Alkalinity (mM)	Ca (mM)	Mg (mM)	Na (mM)	K (mM)	Si (mM)	SO ₄ (mM)	Cl (mM)	NO ₃ (mM)	pCO ₂ (bars)	Si _{calcite}	Si _{dolomite}	m _{TSS} (mg/l)	δ ¹³ C _{DIC} (‰)	δ ¹³ C _{POC} (‰)	δ ¹⁵ N _{NO3} (‰)	δ ¹⁵ N _{PNH} (‰)	δ ¹⁸ O (‰)	δD (‰)	
1	Kamniška Bistrica spring	2.05	0	7.35	5.9	160.7	1.93	0.73	0.18	0.05	0.00	0.01	0.01	0.01	0.03	-2.37	-0.77	-2.34	0.3	-3.6	-25.4	-1.9		-10.3	-65.0	
3	Kamniška Bistrica before Stahovica		4.5	8.02	6.5	211	2.74	0.96	0.29	0.07	0.01	0.01	0.02	0.02	0.04	-2.89	0.15	-0.39	2.3	-6.7	-27.0			-9.5		
6	Kamniška Bistrica after Stahovica		7.8	8.1	6.8	225.5	3.00	1.00	0.32	0.07	0.01	0.03	0.03	0.03	0.04	-2.9	0.28	-2.95	2.2	-7.3	-27.1			-9.3		
8	Kamniška Bistrica at Kamnik	11.9	14.3	8.15	7.7	269.3	3.48	1.21	0.35	0.11	0.02	0.05	0.06	0.06	0.06	-2.91	0.48	0.28	14.5	-9.2	-27.5	2.9	2.2	-9.0	-58.2	
11	Kamniška Bistrica at Vir		20.4	8.23	9.3	277.9	3.51	1.29	0.35	0.12	0.02	0.06	0.06	0.07	0.06	-2.98	0.61	0.54	15.8	-9.7	-27.9			-9.2		
13	Kamniška Bistrica Domžale	12.1	23.0	8.18	9.1	259.7	3.72	1.30	0.39	0.17	0.02	0.07	0.07	0.12	0.07	-2.91	0.61	0.59	13.1	-10.1	-27.8			-9.0		
16	Kamniška Bistrica at Videm		33.0	7.92	9.7	334.8	4.19	1.43	0.45	0.25	0.03	0.07	0.08	0.20	0.11	-2.59	0.42	0.24	16.2	-10.7	-27.5	8.0	2.5	-8.8	-57.0	
Location on the map	River Kamniška Bistrica tributaries			pH	T (°C)	Conductivity (μS/cm)	Alkalinity (mM)	Ca (mM)	Mg (mM)	Na (mM)	K (mM)	Si (mM)	SO ₄ (mM)	Cl (mM)	NO ₃ (mM)	pCO ₂ (bars)	Si _{calcite}	Si _{dolomite}	m _{TSS} (mg/l)	δ ¹³ C _{DIC} (‰)	δ ¹³ C _{POC} (‰)	δ ¹⁵ N _{NO3} (‰)	δ ¹⁵ N _{PNH} (‰)	δ ¹⁸ O (‰)		
2	Dolski Graben		2.7	7.82	7	259.7	3.61	1.34	0.19	0.096	0.01	0.02	0.03	0.02	0.05	-2.57	0.2	-0.6		-10.8					-8.9	
4	Bistričica		6.7	8.12	7.3	267	4.31	1.27	0.66	0.111	0.02	0.07	0.07	0.04	0.06	-2.79	0.54	0.64		-10					-8.6	
5	Črna		6.8	8.26	6.8	272.6	3.25	1.07	0.41	0.165	0.02	0.07	0.07	0.12	0.09	-3.06	0.49	0.41		-9.9					-9	
7	Nevljica	2.17	11.4	8.04	8.3	355.6	4.58	1.93	0.22	0.116	0.01	0.06	0.09	0.06	0.10	-2.68	0.67	0.28	9.59	-12.6	-27.0				-8.5	-54.4
9	Radomejska Mlinščica		17.8	8.21	8.3	274.5	3.55	1.24	0.35	0.109	0.02	0.05	0.06	0.06	0.06	-2.96	0.56	0.45		-9.2					-9	
10	Pšata	1.82	18.8	8.07	8.4	309.1	3.9	1.46	0.33	0.161	0.03	0.10	0.08	0.11	0.10	-2.78	0.53	0.29	13.08	-12.1	-27.3		3.3		-8.8	-57.4
12	Rača	7.9	24.2	8.03	9	329.1	3.92	1.29	0.52	0.297	0.04	0.09	0.10	0.25	0.09	-2.73	0.45	0.39	18.38	-12.7	-28.0				-8.6	-55.2
14	Homška Mlinščica		25.4	8.25	8.8	276.4	3.45	1.21	0.35	0.152	0.02	0.00	0.07	0.09	0.07	-3.01	0.59	0.52		-8.8					-9.2	
15	Pšata channel		27.0	7.93	9.5	338	4.12	1.51	0.42	0.172	0.03	0.09	0.09	0.13	0.11	-2.61	0.44	0.23		-12.6	-27.7	7.8	3.6		-8.6	

Locations are plotted on Figs. 1 B and C

Table 2

Location on the map	River Kamniška Bistrica	Q (m ³ /s)	Distance from the source (km)	pH	T (°C)	D.O. (%)	Conductivity (μS/cm)	Alkalinity (mM)	Ca (mM)	Mg (mM)	Na (mM)	K (mM)	Si (mM)	SO ₄ (mM)	Cl (mM)	NO ₃ (mM)	pCO ₂ (bars)	SI _{calcite}	SI _{dolomite}	m _{TSS} (mg/l)	δ ¹³ C _{DIC} (‰)	δ ¹³ C _{POC} (‰)	δ ¹⁵ N _{NO3} (‰)	δ ¹⁵ N _{PN} (‰)	δ ¹⁸ O (‰)	δD (‰)
1	Kamniška Bistrica spring	0.51	0	7.27	4.5	63.8	164.7	1.88	0.69	0.21	0.04	0.02	0.01	0.01	0.01	0.03	-2.3	-0.91	-2.55	0.1	-3.2	-26.4	-5.2		-10.4	-68.0
3	Kamniška Bistrica before Stahovica		4.5	8.03	3.5	65.9	212.7	2.57	0.9	0.3	0.07	0.02	0.01	0.03	0.02	0.05	-2.94	0.06	-0.59	0.4	-6.0	-27.1			-9.8	
6	Kamniška Bistrica after Stahovica		7.8	8.56	3.2	63.3	239.5	2.85	0.98	0.36	0.11	0.01	0.02	0.04	0.05	0.06	-3.43	0.64	0.6	0.6	-7.2	-26.7			-9.4	
8	Kamniška Bistrica at Kamnik	4.08	14.3	8.59	3.1	69.9	292.5	3.45	1.23	0.42	0.14	0.02	0.04	0.07	0.10	0.08	-3.38	0.82	0.95		-7.8	-27.9	-1.9			
11	Kamniška Bistrica at Vir		20.4	8.78	3.1	76.8	297.5	3.54	1.25	0.42	0.15	0.02	0.03	0.07	0.11	0.08	-3.57	1.01	1.33	2.2	-8.0	-27.2			-9	
13	Kamniška Bistrica Domžale	2.9	23.0	8.39	4.5	71.2	370.7	4.32	1.43	0.58	0.35	0.03	0.05	0.10	0.31	0.10	-3.08	0.8	1.01	2.9	-9.3	-28.6		3.7	-8.9	
16	Kamniška Bistrica at Videm		33.0	8.05	6.8	71.2	475.9	4.99	1.8	0.56	0.24	0.04	0.06	0.10	0.22	0.18	-2.66	0.66	0.65	3.0	-10.7	-26.7	4.5	1.6	-8.8	
Location on the map	River Kamniška Bistrica tributaries			pH	T (°C)	D.O. (%)	Conductivity (μS/cm)	Alkalinity (mM)	Ca (mM)	Mg (mM)	Na (mM)	K (mM)	Si (mM)	SO ₄ (mM)	Cl (mM)	NO ₃ (mM)	pCO ₂ (bars)	SI _{calcite}	SI _{dolomite}	m _{TSS} (mg/l)	δ ¹³ C _{DIC} (‰)	δ ¹³ C _{POC} (‰)	δ ¹⁵ N _{NO3} (‰)	δ ¹⁵ N _{PN} (‰)	δ ¹⁸ O (‰)	δD (‰)
2	Dolski Graben		2.7	7.74	4.2	63.4	259.6	3.22	1.25	0.28	0.06	0.02	0.02	0.04	0.02	0.07	-2.55	0	-0.86		-9.1				-9.2	
4	Bistričica		6.7	8.15	1.7	59.6	324.3	4.08	1.13	0.75	0.11	0.02	0.05	0.07	0.05	0.07	-2.87	0.4	0.36		-9.0				-8.8	
5	Črna		6.8	8.83	2	61.9	244.7	2.6	0.83	0.52	0.17	0.03	0.20	0.11	0.14	0.10	-3.75	0.76	1.05	5.5	-9.0	-27.3			-9.2	
7	Nevljica	1	11.4	8.21	3.2	61.7	349.3	4.47	1.81	0.22	0.11	0.01	0.05	0.09	0.07	0.10	-2.89	0.72	0.3	1.0	-11.4	-28.6			-8.4	-54.9
9	Radomejska Mlinščica		17.8	8.47	3.5	61.5	299.1	3.62	1.26	0.41	0.15	0.02	0.04	0.07	0.10	0.08	-3.24	0.75	0.78		-8.7				-9.3	
10	Pšata	1.03	18.8	8.45	5	62.4	467.7	5.38	2.03	0.63	0.37	0.04	0.06	0.10	0.31	0.41	-3.04	1.09	1.47	1.1	-10.3	-26.7			-8.6	-56.0
12	Rača	2.85	24.2	8.33	3.4	63.3	405.3	4.66	1.38	0.76	0.46	0.03	0.08	0.10	0.48	0.11	-2.99	0.74	0.99		-10.8	-31.4			-8.5	-54.8
14	Homška Mlinščica		25.4	8.59	4.2	64.6	298.7	3.64	1.28	0.42	0.17	0.02	0.04	0.08	0.10	0.08	-3.35	0.88	1.06		-8.0				-9.0	
15	Pšata channel		27.0	8.1	3.9	59.6	417.5	5.52	1.81	0.65	0.63	0.07	0.06	0.11	0.56	0.28	-2.68	0.7	0.74	1.1	-11.0	-25.2	3.0	2.4		

Table 3

Location on the map	River Kamniška Bistrica	Q (m ³ /s)	Distance from the source (km)	pH	T (°C)	D.O. (%)	Conductivity (μS/cm)	Alkalinity (mM)	Ca (mM)	Mg (mM)	Na (mM)	K (mM)	Si (mM)	SO ₄ (mM)	Cl (mM)	NO ₃ (mM)	pCO ₂ (bars)	SI _{calcite}	SI _{dolomite}	m _{TSS} (mg/l)	δ ¹³ C _{DIC} (‰)	δ ¹³ C _{POC} (‰)	δ ¹⁵ N _{NO3} (‰)	δ ¹⁵ N _{PN} (‰)	δ ¹⁸ O (‰)	δD (‰)
1	Kamniška Bistrica spring	2.1	0	8.29	5.7	68	188.5	1.55	0.7	0.18	0.04	0	0	0.01	9E-04	0.03	-3.42	0.04	-0.68	9.9	-2.7	-26.7	-0.9	-10.7	-69.4	
3	Kamniška Bistrica before Stahovica		4.5	8.40	7.1	85	194	2.33	0.8	0.24	0.03	0	0.01	0.02	0.013	0.04	-3.36	0.39	0.1		-5.0	-26.1			-10.1	
6	Kamniška Bistrica after Stahovica		7.8	8.63	7.7	92	198.6	2.38	0.9	0.27	0.05	0	0.01	0.029	0.029	0.04	-3.60	0.64	0.62		-5.6	-26.8			-10.0	
8	Kamniška Bistrica at Kamnik	4.3	14.3	8.61	11	126	238.4	2.86	1.04	0.33	0.11	0.01	0.02	0.03	0.06	0.04	-3.54	0.8	0.97	5.2	-7.4	-26.5			-9.9	-63.1
11	Kamniška Bistrica at Vir		20.4	8.73	15	130	239.3	2.82	1.04	0.32	0.09	0.01	0.02	0.01	0.03	0.02	-3.59	0.98	1.45	3.5	-6.9	-27.7			-9.8	
13	Kamniška Bistrica Domžale	1.7	23.0	8.54	9.5	113	282.7	3.35	1.2	0.42	0.21	0.02	0.03	0.06	0.16	0.04	-3.34	0.85	1.15	5.8	-7.3	-26.5			-9.5	
16	Kamniška Bistrica at Videm		33.0	8.34	13	136	368.3	4.39	1.5	0.5	0.38	0.05	0.05	0.037	0.16	0.11	-3.01	0.91	1.36	23.8	-9.6	-26.3	9.8	4.2	-9.3	-59.8
Location on the map	River Kamniška Bistrica tributaries			pH	T (°C)	D.O. (%)	Conductivity (mS/cm)	Alkalinity (mM)	Ca (mM)	Mg (mM)	Na (mM)	K (mM)	Si (mM)	SO ₄ (mM)	Cl (mM)	NO ₃ (mM)	pCO ₂ (bars)	SI _{calcite}	SI _{dolomite}	m _{TSS} (mg/l)	δ ¹³ C _{DIC} (‰)	δ ¹³ C _{POC} (‰)	δ ¹⁵ N _{NO3} (‰)	δ ¹⁵ N _{PN} (‰)	δ ¹⁸ O (‰)	δD (‰)
2	Dolski Graben		2.7	8.15	7.8	93	239.7	2.92	1.21	0.18	0.05	0	0.35	0.032	0.02	0.05	-3.00	0.41	-0.13		-9.8				-9.2	
4	Bistričica		6.7	8.49	9.9	118	317.1	3.79	1.17	0.66	0.13	0.02	0.06	0.08	0.06	0.05	-3.25	0.85	1.36		-8.7				-9.0	
5	Črna		6.8	8.47	8.7	104	291	2.72	1.12	0.5	0.24	0.02	0.06	0.08	0.22	0.05	-3.36	0.66	0.86	6.0	-8.7	-27.1		0.9	-9.2	
7	Nevljica	0.5	11.4	8.42	10	124	358.4	4.53	1.72	0.43	0.18	0.02	0.07	0.11	0.11	0.05	-3.07	0.99	1.28	3.1	-11.0	-28.2		2.1	-8.6	-54.6
9	Radomejska Mlinščica		17.8	8.54	8.9	106	234	2.91	1.05	0.32	0.11	0.01	0.02	0.04	0.07	0.04	-3.40	0.74	0.85		-7.1				-9.8	
10	Pšata	0.4	18.8	8.34	16	116	409.4	4.25	1.2	0.35	0.24	0.04	0.04	0.09	0.23	0.22	-2.96	0.82	1.11	22.5	-10.5	-26.6	7.3	2.1	-8.5	-54.4
12	Rača	2.6	24.2	8.38	14	140	390.3	4.33	0.6	0.38	0.21	0.02	0.03	0.09	0.41	0.05	-3.04	0.59	0.96	3.5	-10.7			5.9	-8.6	-56.5
14	Homška Mlinščica		25.4	8.61	11	125	243.9	3.09	1.05	0.33	0.19	0.01	0.02	0.05	0.17	0.05	-3.43	0.85	1.12		-6.9	-28.0			-9.8	
15	Pšata channel		27.0	8.38	9.8	117	327.1	3.58	1.4	0.41	0.22	0.04	0.08	0.08	0.16	0.09	-3.15	0.8	0.96	15.1	-10.9	-26.7	7.1	1.4	-8.6	

Table 4

Location on the map	River Kamniška Bistrica	Q (m ³ /s)	Distance from the source (km)	pH	T (°C)	D.O. (%)	Conductivity (μS/cm)	Alkalinity (mM)	Ca (mM)	Mg (mM)	Na (mM)	K (mM)	Si (mM)	SO ₄ (mM)	Cl (mM)	NO ₃ (mM)	pCO ₂ (bars)	SI _{calcite}	SI _{dolomite}	m _{TSS} (mg/l)	δ ¹³ C _{DIC} (‰)	δ ¹³ C _{POC} (‰)	δ ¹⁵ N _{PN} (‰)	δ ¹⁸ O (‰)	δD (‰)
1	Kamniška Bistrica spring	0.9	0	7.10	8.1		185.1	1.70	0.71	0.16	0.04	0.00	0.00	0.01	0.01	0.02	-2.17	-1.05	-2.9		-3.1	-26.3		-10.0	-63.0
3	Kamniška Bistrica before Stahovica		4.5	7.93	9.1		205.4	2.36	0.85	0.24	0.05	0.00	0.01	0.02	0.01	0.03	-2.86	-0.01	-0.68	1.2	-6.0	-27.4		-9.7	
6	Kamniška Bistrica after Stahovica		7.8	8.00	15		278.8	2.60	0.95	0.31	0.07	0.01	0.02	0.03	0.04	0.04	-2.87	0.23	-0.03		-6.9			-9.5	
8	Kamniška Bistrica at Kamnik	2.7	14.3	8.82	21		254.3	2.69	0.97	0.33	0.10	0.02	0.01	0.05	0.07	0.03	-3.68	1.09	1.8	6.2	-7.6	-27.7		-9.5	-59.8
11	Kamniška Bistrica at Vir		20.4	8.61	26		295.5	3.26	1.17	0.37	0.13	0.02	0.01	0.05	0.08	0.04	-3.35	1.11	1.88		-8.0			-9.3	
13	Kamniška Bistrica Domžale	0.7	23.0	8.36	22		368.5	4.06	1.36	0.48	0.30	0.03	0.03	0.07	0.21	0.04	-3.01	0.98	1.61	4.9	-8.1	-28.0		-9.1	
16	Kamniška Bistrica at Videm		33.0	7.62	23		491.9	5.57	1.81	0.62	0.59	0.07	0.06	0.09	0.38	0.17	-2.05	0.58	0.81		-10.9	-26.1		-9.1	-57.8
Location on the map	River Kamniška Bistrica tributaries			pH	T (°C)	D.O. (%)	Conductivity (μS/cm)	Alkalinity (mM)	Ca (mM)	Mg (mM)	Na (mM)	K (mM)	Si (mM)	SO ₄ (mM)	Cl (mM)	NO ₃ (mM)	pCO ₂ (bars)	SI _{calcite}	SI _{dolomite}	m _{TSS} (mg/l)	δ ¹³ C _{DIC} (‰)	δ ¹³ C _{POC} (‰)	δ ¹⁵ N _{PN} (‰)	δ ¹⁸ O (‰)	δD (‰)
2	Dolski Graben		2.7	7.47	12		287.3	3.71	1.25	0.25	0.08	0.00	0.01	0.04	0.02	0.05	-2.20	-0.08	-0.92		-10.0			-9.0	
4	Bistričica		6.7	7.99	18		373.9	4.19	1.30	0.79	0.13	0.03	0.06	0.09	0.05	0.04	-2.14	-0.02	-0.6		-10.1			-8.7	
5	Črna		6.8	7.87	15		330.9	3.42	1.19	0.48	0.19	0.02	0.07	0.08	0.14	0.05	-2.62	0.3	0.19	1.1	-10.2	-27.5		-9.2	
7	Nevjica	0.2	11.4	8.11	19		410.3	4.78	1.90	0.42	0.18	0.03	0.07	0.09	0.11	0.06	-2.71	0.9	1.2	2.2	-11.6	-29.2		-8.6	-54.5
9	Radomejska Mlinščica		17.8	8.45	17		289.2	3.17	1.17	0.33	0.11	0.02	0.02	0.05	0.07	0.05	-3.24	0.85	1.17		-8.9			-9.3	
10	Pšata	0.3	18.8	8.47	20		497.4	4.86	1.36	0.48	0.30	0.03	0.03	0.10	0.41	0.29	-3.06	1.12	1.87	4.5	-9.8	-28.2		-8.1	-52.5
12	Rača	1.9	24.2	8.16	21		471.2	4.82	1.39	0.92	0.53	0.04	0.08	0.09	0.49	0.05	-2.74	0.84	1.6		-11.5	-29.9	5.8	-8.5	-54.8
14	Homška Mlinščica		25.4	8.46	20		291.3	3.37	1.17	0.34	0.14	0.02	0.02	0.06	0.08	0.04	-3.21	0.92	1.38		-8.7			-9.3	
15	Pšata channel		27.0	8.37	27		412.6	4.50	1.63	0.45	0.29	0.06	0.06	0.08	0.21	0.08	-2.96	1.16	1.93	84.4	-11.0	-28.3	4.3	-8.0	

