Supplementary Table S1. Electric conductivity (EC), δ^2H, $\delta^{18}O$, and ^{222}Rn data of the surface water and riparian groundwater samples for this study

Sample	Data	River	Location Description	Distance (Km)	Water Type	δ^2H (‰)	$\delta^{18}O$ (‰)	^{222}Rn (Bq/m^3)	EC (μS/cm)	Hydrochemical Type
T1	15/04/19	Suoxu	Chulou Reservoir		lake	-48.65	-6.38	958	573	Ca-Mg·HCO3-SO4
T1	07/08/19	Suoxu	Chulou Reservoir		lake	-43.08	-5.08	1144	515	Ca-Mg-NaSO4-HCO3
T1-1	15/04/19	Suoxu	Chulou Reservoir	0.39	Groundwater	-53.04	-7.44	16704	692	Ca·HCO3
T1-1	07/08/19	Suoxu	Chulou Reservoir	0.39	Groundwater	-62.19	-8.93	3987	510	CaHCO3
T1-2	15/04/19	Suoxu	Chulou Reservoir	0.54	Groundwater	-57.90	-8.34	4893	539	Ca·HCO3
T1-2	07/08/19	Suoxu	Chulou Reservoir	0.54	Groundwater	-58.15	-8.28	6426	525	CaHCO3
T2	15/04/19	Suoxu	Hewang Reservoir		lake	-52.35	-7.12	57	903	Na-Ca·HCO3-Cl-SO4
T2	07/08/19	Suoxu	Hewang Reservoir		lake	-48.82	-6.43	57	871	Na-CaCl-SO4-HCO3
T2-1	15/04/19	Suoxu	Hewang Reservoir	1.75	Groundwater	-51.62	-7.04	6689	981	Ca-Na-Mg·HCO3-SO4
T2-1	07/08/19	Suoxu	Hewang Reservoir	1.75	Groundwater	-47.64	-6.44	6042	1010	Ca-NaHCO3-SO4-Cl
T3	15/04/19	Suoxu	3km above confluence of Suoxu and Jialu River		river	-64.88	-8.24	153	963	Na·HCO3-SO4-Cl
T3	08/08/19	Suoxu	3km above confluence of Suoxu and Jialu River		river	-57.04	-8.76	95	709	Na-CaHCO3-Cl-SO4
J1	15/04/19	Jialu	Jiangang Reservoir		lake	-43.01	-5.71	208	387	Ca-Na-Mg·HCO3-SO4
J1	08/08/19	Jialu	Jiangang Reservoir		lake	-43.17	-6.32	606	241	Ca-MgHCO3-SO4
J2	08/08/19	Jialu	Xiliu Lake		lake	-42.84	-5.77	171	299	Na-Ca-MgSO4-HCO3
J3	15/04/19	Jialu	4km above confluence of Suoxu and Jialu River		river	-63.19	-8.58	88	1040	Na·SO4-Cl-HCO3
J3	08/08/19	Jialu	4km above confluence of Suoxu and Jialu River		river	-55.08	-8.23	121	765	NaCl-HCO3
J4	16/04/19	Jialu	4km below confluence of Suoxu and Jialu River		river	-59.04	-8.40	778	999	Na-Ca·HCO3-Cl-SO4
J4	08/08/19	Jialu	4km below confluence of Suoxu and Jialu River		river	-56.37	-8.39	75	731	Na-CaHCO3-Cl
J4-1	16/04/19	Jialu	4km below confluence of Suoxu and Jialu River	1.20	Groundwater	-69.82	-9.17	4182	1221	Na-Mg-Ca·HCO3-SO4
J5	16/04/19	Jialu	Zhongmou		river	-57.40	-7.95	400	975	Na-Ca·HCO3-Cl-SO4
J5	09/08/19	Jialu	Zhongmou		river	-58.51	-8.42	1687	615	Na-CaHCO3-Cl
J5-1	16/04/19	Jialu	Zhongmou	0.42	Groundwater	-59.84	-8.18	1405	1467	Ca-Na-Mg·HCO3-Cl
J5-1	09/08/19	Jialu	Zhongmou	0.42	Groundwater	-60.14	-8.45	3975	1425	Ca-Na-MgHCO3-Cl
J6	16/04/19	Jialu	Weishi		river	-57.42	-7.75	555	915	Na-Ca·HCO3-Cl-SO4
J6	09/08/19	Jialu	Weishi		river	-57.51	-7.94	635	538	Na-CaHCO3-Cl
J6-1	16/04/19	Jialu	Weishi	0.7	Groundwater	-53.35	-7.23	4694	881	Ca·HCO3
J6-1	09/08/19	Jialu	Weishi	0.7	Groundwater	-60.29	-8.14	2043	743	CaHCO3-Cl
J7	16/04/19	Jialu	Fugou		river	-56.39	-7.87	268	926	Na-Ca·HCO3-Cl-SO4
J7	09/08/19	Jialu	Fugou		river	-58.29	-8.02	680	582	Na-CaHCO3-Cl
J7-1	17/04/19	Jialu	Fugou	0.11	Groundwater	-63.79	-8.94	3259	2067	Na·HCO3-Cl
J7-1	09/08/19	Jialu	Fugou	0.11	Groundwater	-63.30	-8.81	5522	1911	NaHCO3-Cl
J7-2	17/04/19	Jialu	Fugou	0.09	Groundwater	-51.81	-7.21	19617	2073	Na-Mg·HCO3-Cl
J7-2	09/08/19	Jialu	Fugou	0.09	Groundwater	-52.29	-7.19	23681	2500	Na-Mg-CaHCO3-Cl
J8	17/04/19	Jialu	Xihua		river	-56.07	-7.66	2909	936	Na-Ca·HCO3-Cl-SO4
J8	09/08/19	Jialu	Xihua		river	-57.84	-8.03	5610	622	Na-CaHCO3-Cl
J8-1	17/04/19	Jialu	Xihua	0.05	Groundwater	-53.85	-7.51	17453	2089	Ca-Mg-Na·HCO3-Cl
J8-1	09/08/19	Jialu	Xihua	0.05	Groundwater	-51.95	-7.43	21900	1983	Ca-Mg-NaHCO3-Cl
J8-2	17/04/19	Jialu	Xihua	0.09	Groundwater	-52.94	-7.34	14764	2190	Mg-Ca-Na·HCO3-Cl
J8-2	09/08/19	Jialu	Xihua	0.09	Groundwater	-51.93	-7.39	16671	1980	Ca-Mg-NaHCO3-Cl

Sample	Data	River	Location Description	Distance (Km)	Water Type	$\delta^{2}H$ (‰)	$\delta^{18}O$ (‰)	^{222}Rn (Bq/m^3)	EC (μS/cm)	Hydrochemical Type
J8-3	17/04/19	Jialu	Xihua	0.12	Groundwater	-58.72	-7.79	5938	1320	Na-Mg-Ca·HCO3
J8-3	09/08/19	Jialu	Xihua	0.12	Groundwater	-55.01	-8.07	10251	1179	Mg-Ca-NaHCO3
J8-4	17/04/19	Jialu	Xihua	0.22	Groundwater	-59.71	-8.14	4162	3680	Mg-Na·Cl-SO4-HCO3
J8-4	09/08/19	Jialu	Xihua	0.22	Groundwater	-59.91	-8.50	970	2850	Mg-Na-CaCl-HCO3
J9	17/04/19	Jialu	1.5km above confluence of Shaying and Jialu River		river	-56.54	-7.42	353	966	Na-Ca·HCO3-Cl
J9	11/08/19	Jialu	1.5km above confluence of Shaying and Jialu River		river	-57.95	-8.68	397	615	Na-CaHCO3-Cl-SO4
J9-1	19/04/19	Jialu	1.5km above confluence of Shaying and Jialu River	1.05	Groundwater	-69.43	-9.88	5791	1505	Na·Cl-HCO3
J9-1	11/08/19	Jialu	1.5km above confluence of Shaying and Jialu River	1.05	Groundwater	-70.94	-9.83	2720	1366	NaCl-HCO3
L1	20/04/19	Li River	Li River bridge		river	-37.05	-5.04	1009	752	Na-Ca·Cl-SO4-HCO3
L1	13/08/19	Li River	Li River bridge		river	-32.81	-4.13	3756	309	Ca-MgHCO3-Cl
L1-1	21/04/19	Li River	Li River bridge	0.16	Groundwater	-53.72	-8.26	14207	1366	Ca·HCO3
L1-1	13/08/19	Li River	Li River bridge	0.16	Groundwater	-53.18	-7.88	8989	2183	CaHCO3-Cl
S1	20/04/19	Sha	Sha River bridge		river	-37.19	-5.14	460	790	Ca-Na·HCO3-SO4-Cl
S1	13/08/19	Sha	Sha River bridge		river	-34.05	-4.46	2503	655	Na-CaSO4-Cl-HCO3
S1-1	21/04/19	Sha	Sha River bridge	0.37	Groundwater	-57.90	-8.73	8815	1131	Ca·HCO3
S1-1	13/08/19	Sha	Sha River bridge	0.37	Groundwater	-60.62	-8.96	5750	1015	CaHCO3
S2	20/04/19	Sha	10km below confluence of Li and Sha River		river	-37.86	-4.94	3022	790	Ca-Na·Cl-HCO3-SO4
S2	13/08/19	Sha	10km below confluence of Li and Sha River		river	-39.87	-5.17	11228	578	Na-CaCl-SO4-HCO3
S2-1	20/04/19	Sha	10km below confluence of Li and Sha River	1.3	Groundwater	-54.39	-8.12	30358	1206	Ca·HCO3
S2-1	13/08/19	Sha	10km below confluence of Li and Sha River	1.3	Groundwater	-54.51	-8.07	28040	1141	CaHCO3
S3	19/04/19	Sha	Shanghui		river	-39.40	-5.02	1179	541	Ca-Na·HCO3-Cl-SO4
S3	10/08/19	Sha	Shanghui		river	-29.16	-2.37	2040	636	Na-Ca-MgCl-SO4-HCO3
S3-1	19/04/19	Sha	Shanghui	0.49	Groundwater	-64.41	-9.31	2998	1511	Na-Mg·HCO3
S3-1	10/08/19	Sha	Shanghui	0.49	Groundwater	-61.39	-8.39	5414	1418	Na-MgHCO3
S3-2	19/04/19	Sha	Shanghui	0.51	Groundwater	-63.86	-9.59	3916	1237	Na-Mg·HCO3
S3-2	10/08/19	Sha	Shanghui	0.51	Groundwater	-65.62	-9.16	4348	992	Na-MgHCO3
S3-3	19/04/19	Sha	Shanghui	0.84	Groundwater	-62.76	-9.35	3742	1065	Na-Mg·HCO3
S3-3	10/08/19	Sha	Shanghui	0.84	Groundwater	-61.28	-8.77	5210	1011	Na-MgHCO3
Y1	11/08/19	Ying	4 km above confluence of Sha and Ying River		river	-58.29	-8.23	10989	758	Na-MgCl-SO4-HCO3
Y1-1	19/04/19	Ying	4 km above confluence of Sha and Ying River	0.65	Groundwater	-58.72	-8.88	12873	985	Mg-Ca·HCO3
Y1-1	11/08/19	Ying	4 km above confluence of Sha and Ying River	0.65	Groundwater	-59.72	-8.49	14184	979	Ca-MgHCO3
Y1-2	19/04/19	Ying	4 km above confluence of Sha and Ying River	0.55	Groundwater	-56.08	-8.42	20851	1248	Ca-Mg·HCO3
Y1-2	11/08/19	Ying	4 km above confluence of Sha and Ying River	0.55	Groundwater	-52.53	-7.58	30749	1240	Ca-MgHCO3
Y1-3	19/04/19	Ying	4 km above confluence of Sha and Ying River	0.05	Groundwater	-51.38	-7.67	25401	2007	Ca-Mg·Cl-HCO3
Y1-3	11/08/19	Ying	4 km above confluence of Sha and Ying River	0.05	Groundwater	-51.54	-7.18	27053	1904	Ca-MgHCO3
Y1-4	19/04/19	Ying	4 km above confluence of Sha and Ying River	0.49	Groundwater	-53.31	-7.51	24840	1465	Mg-Ca-Na·HCO3-SO4
Y1-4	11/08/19	Ying	4 km above confluence of Sha and Ying River	0.49	Groundwater	-54.99	-8.02	24710	1422	Ca-Mg-NaHCO3-SO4
Y1-5	20/04/19	Ying	4 km above confluence of Sha and Ying River	0.9	Groundwater	-53.56	-7.37	16585	1036	Ca-Mg·HCO3
Y1-5	11/08/19	Ying	4 km above confluence of Sha and Ying River	0.9	Groundwater	-53.59	-7.92	16125	1031	CaHCO3
Y1-6	20/04/19	Ying	4 km above confluence of Sha and Ying River	0.6	Groundwater	-52.46	-7.46	17668	1047	Ca-Mg·HCO3
Y1-6	11/08/19	Ying	4 km above confluence of Sha and Ying River	0.6	Groundwater	-52.66	-7.87	21481	1093	Ca-MgHCO3
Y2	17/04/19	Ying	2 km above confluence of Sha and Ying River		river	-44.91	-5.55	632	881	Na-Ca·Cl-SO4-HCO3

Sample	Data	River	Location Description	Distance (Km)	Water Type	$\delta^{2}H$ (‰)	$\delta^{18}O$ (‰)	^{222}Rn (Bq/m^3)	EC (μS/cm)	Hydrochemical Type
Y2	11/08/19	Ying	2 km above confluence of Sha and Ying River		river	-36.51	-3.92	2716	745	Na-MgCl-SO4-HCO3
Y2-1	17/04/19	Ying	2 km above confluence of Sha and Ying River	0.15	Groundwater	-44.90	-5.79	2953	1125	Na-Ca·HCO3-Cl
Y2-1	11/08/19	Ying	2 km above confluence of Sha and Ying River	0.15	Groundwater	-47.92	-6.29	7703	1162	Ca-NaHCO3-Cl
Y3	10/08/19	Ying	2km above Zhoukou Sluice		river	-34.51	-3.83	2280	690	Na-MgCl-SO4-HCO3
Y3-1	20/04/19	Ying	2km above Zhoukou Sluice	0.34	Groundwater	-55.15	-7.96	11034	1432	Ca-Mg·HCO3
Y3-1	10/08/19	Ying	2km above Zhoukou Sluice	0.34	Groundwater	-55.43	-8.06	9040	1255	Ca-MgHCO3
Y4	17/04/19	Ying	200m above Zhoukou Sluice		river	-38.81	-5.09	391	652	Na-Ca·HCO3-Cl-SO4
Y4	11/08/19	Ying	200m above Zhoukou Sluice		river	-35.19	-4.26	505	709	Na-MgCl-SO4-HCO3
SY1	19/04/19	Shaying	200m above Zhoukou Sluice		river	-44.00	-5.29	248	728	Na-Ca·HCO3-Cl-SO4
SY1	11/08/19	Shaying	200m above Zhoukou Sluice		river	-38.58	-4.26	666	634	Na-CaHCO3-Cl-SO4
SY2	21/04/19	Shaying	3km above Shenqiu Sluice		river	-50.49	-7.12	3513	996	Na-Ca·HCO3-Cl-SO4
SY2	12/08/19	Shaying	3km above Shenqiu Sluice		river	-48.50	-6.38	12651	789	NaCl-HCO3-SO4
SY2-1	21/04/19	Shaying	3km above Shenqiu Sluice	0.11	Groundwater	-55.75	-7.84	12791	1234	Ca-Mg·HCO3
SY2-1	12/08/19	Shaying	3km above Shenqiu Sluice	0.11	Groundwater	-53.77	-7.90	19003	1131	Ca-MgHCO3
SY2-2	21/04/19	Shaying	3km above Shenqiu Sluice	0.38	Groundwater	-56.26	-8.42	20049	3270	Ca-Mg·Cl-HCO3
SY2-2	12/08/19	Shaying	3km above Shenqiu Sluice	0.38	Groundwater	-57.66	-8.51	30129	2840	Ca-MgCl-HCO3
SY2-3	21/04/19	Shaying	3km above Shenqiu Sluice	0.52	Groundwater	-55.17	-8.20	11619	1320	Ca-Mg·HCO3
SY2-3	12/08/19	Shaying	3km above Shenqiu Sluice	0.52	Groundwater	-55.68	-8.15	19053	1214	Ca-MgHCO3
SY2-4	21/04/19	Shaying	3km above Shenqiu Sluice	1.2	Groundwater	-53.44	-8.04	27992	1202	Ca·HCO3
SY2-4	12/08/19	Shaying	3km above Shenqiu Sluice	1.2	Groundwater	-53.01	-8.03	33869	1146	CaHCO3

RW is river water, GW is groundwater, and LW is lake.

Distance[a] is the direct distance between river bank and sample position.

Supplementary Table S2. Hydro-chemical parameters, NO_2-N, NH_3-N, NO_2-N, TN, DOC and CODcr data of the surface water and riparian groundwater samples for this study.

Sample	Data	DO (mg/L)	pH (-)	T (℃)	ORP (mV)	Ca^{2+} (mg/L)	Mg^{2+} (mg/L)	Na^{+} (mg/L)	K^{+} (mg/L)	Cl^{-} (mg/L)	SO_4^{2-} (mg/L)	HCO_3^{-} (mg/L)	NO_3-N (mg/L)	NH_3-N (mg/L)	NO_2-N (mg/L)	TN (mg/L)	DOC (mg/L)	CODcr (mg/L)
T1	c	18.29	8.98	20.1	182.2	65.94	22.33	31.65	5.52	32.07	113.38	207.47	0.41	2.000	0.31	4.90	–	27
T1	07/08/19	11.58	8.82	31.5	32.9	49.94	23.35	36.04	7.52	38.31	134.24	126.92	0.33	0.690	0.073	2.48	6.46	15
T1-1	15/04/19	4.75	7.42	17.3	190.4	104.40	23.18	20.17	0.55	37.59	54.99	335.61	8.28	0.010	0.006	8.57	–	6
T1-1	07/08/19	8.13	7.10	22.0	91.7	90.60	17.59	18.80	0.78	11.02	13.08	331.95	4.68	0.110	0.000	4.79	3.43	<3
T1-2	15/04/19	9.20	7.78	17.5	197.0	87.45	17.51	18.49	2.13	19.78	26.51	305.10	4.14	0.010	0.001	4.59	–	9
T1-2	07/08/19	7.59	7.38	25.4	89.8	88.74	18.20	17.14	0.42	18.20	23.84	297.78	4.28	0.040	0.000	4.32	3.18	<3
T2	15/04/19	19.66	9.34	17.0	157.7	58.31	23.47	104.70	21.99	108.09	141.73	256.28	7.31	0.000	0.205	10.16	–	29
T2	07/08/19	8.15	8.29	33.1	15.1	53.55	21.99	101.40	24.35	125.97	141.48	170.86	8.21	0.300	0.375	8.89	8.21	19
T2-1	15/04/19	9.33	7.73	16.2	228.4	108.10	34.03	70.73	0.79	80.69	138.07	366.12	2.66	0.100	0.000	3.61	–	8
T2-1	07/08/19	8.06	7.26	28.4	40.3	108.90	34.04	87.12	0.36	110.68	169.65	331.95	0.92	0.030	0.004	1.23	4.05	<3
T3	15/04/19	15.51	8.90	21.4	-71.5	50.38	29.81	121.80	8.04	110.23	163.08	268.49	0.66	4.000	0.106	6.15	–	28

Sample	Data	DO	pH	T	ORP	Ca^{2+}	Mg^{2+}	Na^{+}	K^{+}	Cl^{-}	SO_4^{2-}	HCO_3^{-}	NO_3-N	NH_3-N	NO_2-N	TN	DOC	CODcr
		(mg/L)	(-)	(℃)	(mV)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
T3	08/08/19	6.55	7.91	32.4	32.5	53.90	21.51	71.02	11.25	78.62	102.34	190.38	2.74	9.000	0.225	11.96	6.14	23
J1	15/04/19	14.44	9.32	19.5	80.8	44.64	15.48	31.68	3.85	29.97	70.44	170.86	0.40	0.060	0.001	0.63	–	17
J1	08/08/19	8.73	8.90	30.3	-14.1	24.50	11.28	12.77	2.48	12.95	38.55	87.87	0.18	0.070	0.003	0.90	5.71	8
J2	08/08/19	11.91	9.65	31.3	-33.9	19.71	10.69	28.62	3.80	28.54	59.06	53.70	0.21	0.080	0.020	2.14	7.70	16
J3	15/04/19	–	9.29	20.1	121.8	49.16	30.35	142.60	7.98	121.61	215.26	201.37	5.01	0.050	0.149	5.98	–	15
J3	08/08/19	17.20	8.69	32.5	21.0	41.11	21.36	99.57	15.79	123.11	86.24	175.74	4.60	0.160	0.233	5.66	9.04	19
J4	16/04/19	14.03	8.28	19.4	172.2	70.10	26.33	119.10	11.79	117.02	144.63	280.69	7.07	0.130	0.106	8.64	–	15
J4	08/08/19	13.55	8.25	32.0	93.0	51.56	20.60	83.23	13.01	98.77	89.52	200.15	4.86	0.350	0.112	5.32	6.81	20
J4-1	16/04/19	25.20	7.60	17.8	130.8	89.77	56.29	129.60	1.56	77.00	235.09	463.75	0.42	0.000	0.003	0.43	–	6
J5	16/04/19	10.95	8.67	24.9	212.1	60.74	29.04	113.60	9.86	112.44	151.27	244.08	4.76	0.090	0.106	6.45	–	30
J5	09/08/19	6.69	7.92	30.3	41.2	44.10	18.28	66.10	10.73	73.58	74.77	185.50	2.80	2.000	0.143	5.05	6.05	7
J5-1	16/04/19	8.67	7.67	17.4	189.1	115.80	52.80	123.10	1.77	179.97	110.09	488.16	25.30	0.080	0.036	26.15	–	9
J5-1	09/08/19	2.71	7.16	18.9	43.0	140.80	52.94	129.00	2.14	190.25	128.56	507.69	26.74	0.040	0.042	26.82	3.87	6
J6	16/04/19	13.26	8.54	22.7	163.5	62.93	25.34	102.30	12.43	108.69	123.52	244.08	5.61	0.010	0.070	7.12	–	19
J6	09/08/19	7.72	7.87	31.1	43.7	45.02	15.33	53.85	10.99	62.63	62.72	170.86	3.24	0.260	0.075	4.17	7.78	20
J6-1	16/04/19	2.63	7.58	19.6	87.2	106.10	28.69	42.89	1.69	78.24	89.96	390.53	0.40	0.090	0.009	0.50	–	5
J6-1	09/08/19	6.06	7.69	28.3	98.4	126.90	23.06	18.89	1.38	92.97	25.51	331.95	0.29	0.000	0.002	0.92	11.91	28
J7	16/04/19	10.54	8.51	19.6	181.0	62.95	26.78	104.10	11.44	110.33	129.71	268.49	4.31	0.010	0.043	6.08	–	20
J7	09/08/19	5.41	7.66	30.6	97.5	45.96	16.58	56.49	11.28	67.46	71.70	180.62	2.90	0.010	0.212	3.59	7.55	17
J7-1	17/04/19	2.38	8.01	17.1	150.6	18.41	25.76	426.50	0.53	299.60	166.66	707.83	0.49	0.110	0.004	0.60	–	10
J7-1	09/08/19	1.94	7.80	18.9	74.0	18.32	26.81	437.10	0.47	309.08	166.67	693.19	0.00	0.070	0.004	0.69	3.81	8
J7-2	17/04/19	4.33	7.39	17.1	175.3	99.41	83.44	256.80	0.46	261.27	272.34	689.53	7.38	0.000	0.011	7.39	–	10
J7-2	09/08/19	1.46	6.95	18.9	72.0	156.10	118.10	303.30	0.00	376.53	334.19	668.78	66.00	0.010	0.054	66.06	3.77	8
J8	17/04/19	8.25	8.24	20.1	164.9	59.08	26.20	105.50	10.95	113.63	131.42	244.08	4.42	0.090	0.053	5.50	–	21
J8	09/08/19	4.41	7.63	30.7	130.4	46.24	17.58	63.74	12.66	76.40	75.60	180.62	3.37	0.550	0.246	4.73	7.39	21
J8-1	17/04/19	1.56	7.02	17.2	208.0	158.60	87.19	156.60	0.96	284.65	260.11	598.00	14.71	0.000	0.135	14.85	–	<3
J8-1	09/08/19	2.38	6.85	18.5	138.5	214.70	92.58	154.10	0.95	321.02	241.56	639.49	14.83	0.000	0.139	14.97	4.29	5
J8-2	17/04/19	2.68	7.12	17.6	238.1	165.80	103.10	164.10	0.56	323.18	283.67	634.61	16.54	0.000	0.096	16.64	–	11
J8-2	09/08/19	2.05	6.93	19.7	128.4	217.00	116.80	162.00	0.08	327.34	279.31	610.20	44.73	0.070	0.115	44.92	12.25	31
J8-3	17/04/19	2.27	7.45	18.9	217.5	74.36	64.04	125.10	0.99	113.47	142.02	585.79	4.65	0.000	0.014	4.67	–	18
J8-3	09/08/19	1.46	7.12	19.7	107.5	94.69	63.36	108.70	1.29	97.53	115.06	566.27	3.38	0.060	0.006	3.78	4.55	7
J8-4	17/04/19	3.75	7.31	18.0	166.0	191.90	189.70	325.90	2.17	610.59	480.80	585.79	99.13	0.000	0.079	104.14	–	12
J8-4	09/08/19	2.13	6.98	18.7	108.1	196.90	148.50	270.20	1.78	482.69	352.19	629.73	80.80	0.020	0.072	80.89	3.70	7
J9	17/04/19	13.51	8.56	20.1	114.1	60.65	27.03	116.90	11.90	120.08	134.91	305.10	4.77	0.390	0.116	6.68	–	23
J9	11/08/19	4.90	7.68	29.4	87.2	45.95	18.03	59.82	10.64	75.34	80.39	168.42	3.13	0.270	0.194	4.35	9.19	19
J9-1	19/04/19	5.25	7.94	23.2	147.8	42.78	33.87	239.80	1.04	270.83	158.68	329.51	0.47	0.080	0.000	0.55	–	5
J9-1	11/08/19	5.21	7.94	25.4	48.9	40.05	32.29	226.00	0.83	268.51	158.26	324.63	0.00	0.090	0.003	0.69	5.85	12
L1	20/04/19	11.70	8.15	22.7	179.7	61.31	19.91	73.87	6.69	101.78	138.36	170.86	3.22	0.060	0.047	3.78	–	17
L1	13/08/19	6.37	7.94	31.0	119.2	34.39	12.14	15.48	1.95	32.01	26.68	109.84	0.16	0.030	0.000	1.40	8.55	22
L1-1	21/04/19	5.93	7.09	17.6	179.0	193.30	38.82	64.85	0.41	82.15	123.69	659.02	23.04	0.040	0.006	23.08	–	8
L1-1	13/08/19	2.18	6.76	19.1	138.6	232.20	63.73	120.00	143.10	192.99	210.34	629.73	96.77	0.040	0.010	96.82	6.17	11
S1	20/04/19	10.84	8.44	22.1	171.3	65.28	20.20	75.03	7.46	101.64	141.13	183.06	2.88	0.210	0.087	3.38	–	15

Sample	Data	DO	pH	T	ORP	Ca^{2+}	Mg^{2+}	Na^{+}	K^{+}	Cl^{-}	SO_4^{2-}	HCO_3^{-}	NO_3-N	NH_3-N	NO_2-N	TN	DOC	CODcr
		(mg/L)	(-)	(℃)	(mV)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
S1	13/08/19	9.63	8.44	32.1	103.2	46.22	18.14	67.53	7.08	92.65	130.52	114.72	0.41	0.070	0.004	1.69	11.83	21
S1-1	21/04/19	5.10	7.11	17.4	186.9	168.60	39.10	31.23	0.62	73.45	95.85	475.96	30.90	0.010	0.004	30.91	–	9
S1-1	13/08/19	6.51	7.14	25.3	142.2	169.80	37.22	31.62	0.00	74.38	92.44	441.78	23.12	0.040	0.003	23.17	6.76	9
S2	20/04/19	10.61	8.34	21.1	189.6	65.87	20.01	75.24	7.01	105.15	140.36	183.06	3.36	0.080	0.055	3.56	–	15
S2	13/08/19	9.43	8.58	31.1	0.0	44.65	17.78	54.32	5.91	78.47	105.24	114.72	0.34	0.020	0.006	1.01	9.50	16
S2-1	20/04/19	3.78	7.22	18.1	230.1	156.10	37.57	64.37	0.40	96.33	102.20	549.18	9.33	0.020	0.018	9.37	–	<3
S2-1	13/08/19	2.64	6.91	20.3	78.9	175.30	40.84	66.07	0.00	86.93	110.99	558.94	10.33	0.000	0.001	10.33	6.65	9
S3	19/04/19	10.84	8.44	20.4	154.8	54.39	15.30	40.24	4.49	57.03	73.76	170.86	2.56	0.110	0.018	2.69	–	14
S3	10/08/19	8.71	8.59	32.4	23.6	38.27	20.92	69.42	6.40	95.30	108.56	122.04	0.00	0.004	0.010	1.26	8.80	18
S3-1	19/04/19	2.56	7.64	17.1	-13.5	44.82	53.43	234.80	0.71	149.64	187.90	646.81	0.38	0.200	0.001	0.58	–	<3
S3-1	10/08/19	2.60	7.44	19.2	-69.6	45.11	55.53	226.30	0.27	152.02	185.66	576.03	0.00	0.006	0.070	0.43	5.89	11
S3-2	19/04/19	4.87	7.64	18.5	48.5	41.12	51.23	181.50	0.71	99.01	123.02	573.59	0.46	0.110	0.003	0.58	–	4
S3-2	10/08/19	1.42	7.40	19.7	-115.6	37.08	47.62	153.20	0.23	69.51	76.83	546.74	0.00	0.006	0.120	0.59	7.79	15
S3-3	19/04/19	1.28	7.51	19.2	-20.8	38.48	46.20	164.60	0.48	67.93	78.73	561.38	0.37	0.050	0.007	0.43	–	<3
S3-3	10/08/19	1.08	7.48	20.3	123.1	35.51	44.59	165.60	1.48	71.42	78.74	566.27	0.00	0.004	0.070	0.37	5.44	8
Y1	11/08/19	7.21	8.41	30.5	69.4	35.56	25.36	89.82	9.94	112.38	127.54	156.21	0.00	0.020	0.001	1.56	8.30	35
Y1-1	19/04/19	4.47	7.24	18.3	-185.3	111.10	66.83	39.09	0.50	10.38	58.52	671.22	0.40	0.020	0.002	0.42	–	<3
Y1-1	11/08/19	3.99	7.02	18.4	102.0	130.20	53.20	39.75	1.08	22.79	89.36	607.76	0.88	0.080	0.011	3.33	9.97	39
Y1-2	19/04/19	5.05	7.01	18.1	188.3	123.80	62.58	49.83	0.18	51.26	77.94	732.24	0.86	0.000	0.002	0.86	–	<3
Y1-2	11/08/19	2.20	6.77	20.0	90.3	171.00	66.13	51.28	0.16	58.94	89.18	749.33	3.51	0.000	0.007	3.65	6.41	18
Y1-3	19/04/19	2.07	7.07	16.8	184.0	201.80	85.71	85.73	4.90	300.04	147.24	500.36	51.05	0.070	0.165	51.29	–	3
Y1-3	11/08/19	2.90	6.86	18.6	110.4	219.90	86.18	99.26	10.18	315.83	209.37	583.35	31.69	0.030	0.101	31.82	3.91	4
Y1-4	19/04/19	3.93	7.30	16.5	189.6	108.10	65.82	121.40	0.47	140.96	215.43	536.98	3.79	0.030	0.021	4.14	–	3
Y1-4	11/08/19	2.28	7.00	18.6	55.4	129.00	70.90	129.20	0.00	154.35	227.48	595.56	2.95	0.000	0.024	3.08	5.24	13
Y1-5	20/04/19	6.89	7.49	18.5	113.1	106.40	32.99	50.22	0.20	83.83	110.90	378.32	5.19	0.110	0.095	5.39	–	4
Y1-5	11/08/19	2.98	7.04	24.4	168.6	154.00	35.09	47.89	0.00	82.55	111.77	458.87	6.57	0.000	0.028	6.60	3.56	7
Y1-6	20/04/19	3.59	7.31	17.2	153.0	137.90	38.13	58.94	0.26	72.06	108.44	549.18	0.77	0.130	0.017	1.02	–	<3
Y1-6	11/08/19	1.13	7.02	18.0	35.4	121.90	49.47	74.39	0.27	99.02	120.43	517.45	0.60	0.020	0.018	0.98	5.53	13
Y2	17/04/19	11.25	9.09	26.3	155.1	55.68	27.17	106.90	7.53	124.34	145.67	170.86	1.10	0.140	0.019	2.51	–	26
Y2	11/08/19	7.22	8.26	30.7	50.7	37.94	25.68	85.03	8.85	110.91	126.68	151.33	0.00	0.040	0.006	2.18	10.91	41
Y2-1	17/04/19	3.35	7.49	19.1	147.2	87.09	27.00	122.00	0.55	176.26	27.09	427.14	0.23	0.000	0.004	0.24	–	8
Y2-1	11/08/19	3.07	7.18	19.9	3.9	109.10	29.36	124.60	0.07	188.60	74.32	439.34	0.00	0.010	0.007	0.71	6.82	22
Y3	10/08/19	9.39	8.81	31.9	50.3	37.56	22.78	82.39	8.61	107.00	119.74	141.57	0.30	0.001	0.030	2.88	5.53	11
Y3-1	20/04/19	5.76	7.24	28.0	183.8	187.10	54.66	57.97	0.96	119.73	149.26	671.22	3.03	0.140	0.005	3.34	–	<3
Y3-1	10/08/19	3.37	6.91	19.8	62.9	177.00	59.69	57.64	0.58	111.18	114.91	649.25	2.67	0.012	0.070	2.75	9.25	23
Y4	17/04/19	11.45	8.96	26.6	140.1	52.02	20.15	67.08	5.66	83.41	99.10	164.75	1.44	0.190	0.018	2.20	–	15
Y4	11/08/19	8.92	8.78	31.8	42.0	37.81	23.86	80.59	8.14	108.04	123.51	139.13	0.00	0.030	0.002	1.98	9.80	21
SY1	19/04/19	11.12	8.57	20.3	154.4	48.92	21.39	77.08	6.46	90.28	105.33	183.06	1.87	0.440	0.045	3.26	–	15
SY1	11/08/19	6.80	7.83	30.4	47.2	44.89	17.85	62.66	10.08	81.46	85.34	170.86	2.94	0.250	0.186	4.02	8.04	19
SY2	21/04/19	14.80	8.74	18.8	129.3	55.92	28.57	116.10	10.08	136.45	143.51	256.28	4.27	0.320	0.159	5.72	–	17
SY2	12/08/19	9.66	8.51	30.8	64.3	38.74	25.51	96.62	11.21	119.51	116.13	183.06	1.59	0.080	0.217	5.46	9.36	20
SY2-1	21/04/19	4.68	7.26	16.7	192.5	165.10	44.71	43.93	1.23	83.41	59.06	585.79	28.42	0.110	0.000	28.53	–	5

Sample	Data	DO	pH	T	ORP	Ca^{2+}	Mg^{2+}	Na^{+}	K^{+}	Cl^{-}	SO_4^{2-}	HCO_3^{-}	NO_3-N	NH_3-N	NO_2-N	TN	DOC	CODcr
		(mg/L)	(-)	(℃)	(mV)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SY2-1	12/08/19	3.81	6.97	18.2	84.6	168.30	43.07	41.65	0.43	75.87	61.43	541.86	27.27	0.030	0.003	27.30	5.47	10
SY2-2	21/04/19	5.11	6.97	16.7	188.0	357.70	140.00	117.70	1.55	506.57	176.72	598.00	148.64	0.080	0.000	164.26	–	11
SY2-2	12/08/19	2.64	6.69	18.9	120.9	347.20	133.30	119.10	0.34	436.96	187.03	722.48	133.05	0.010	0.012	133.07	5.94	14
SY2-3	21/04/19	3.78	7.28	17.1	201.4	176.00	48.11	47.53	1.87	110.52	59.24	554.06	34.17	0.080	0.211	34.47	–	9
SY2-3	12/08/19	3.87	6.98	19.5	65.0	183.20	50.93	44.68	0.86	104.06	60.18	556.50	32.88	0.030	0.206	33.12	5.97	10
SY2-4	21/04/19	4.49	7.18	18.9	210.0	164.20	38.38	42.99	0.86	54.61	84.33	563.82	31.09	0.080	0.021	31.19	–	3
SY2-4	12/08/19	5.27	7.11	21.3	-22.0	189.00	41.01	41.35	0.24	57.58	83.25	529.65	30.22	0.050	0.017	30.29	6.50	8

Values <3 mg/L for CODcr indicate attributes below detection limit.

“-” represents samples not analyzed.