

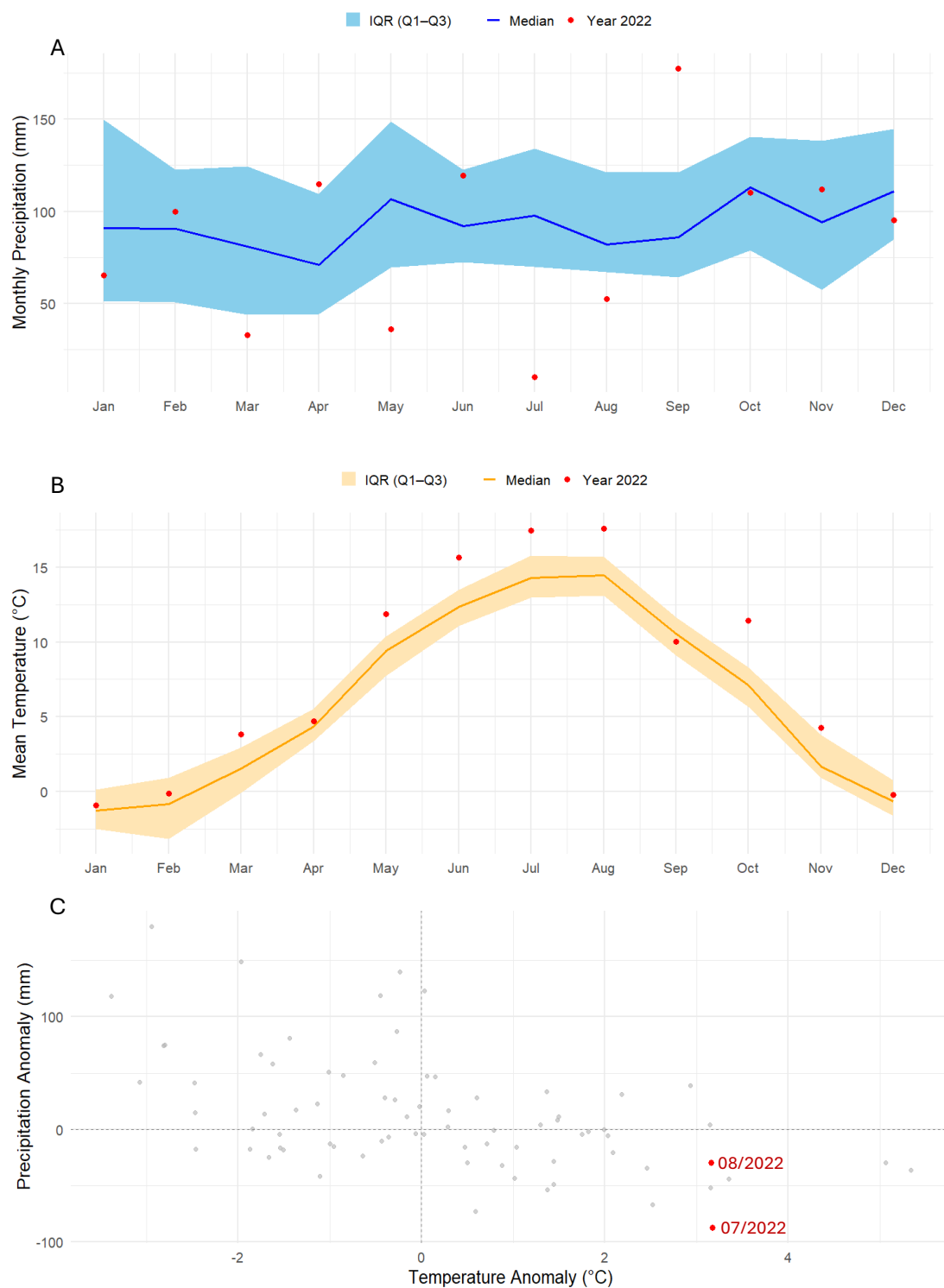


Figure S1: Monthly precipitation (mm) of the year 2022 (red points) compared with the median and the interquartile range (IQR) of the 1987-2024 period (A). Monthly mean temperature (°C) of the year 2022 (red points) compared with the median and the interquartile range (IQR) of the 1987-2024 period (B). Monthly precipitation anomalies versus monthly temperature anomalies for the month of July and August during the 1987-2024 period with the year 2022 in red (C).

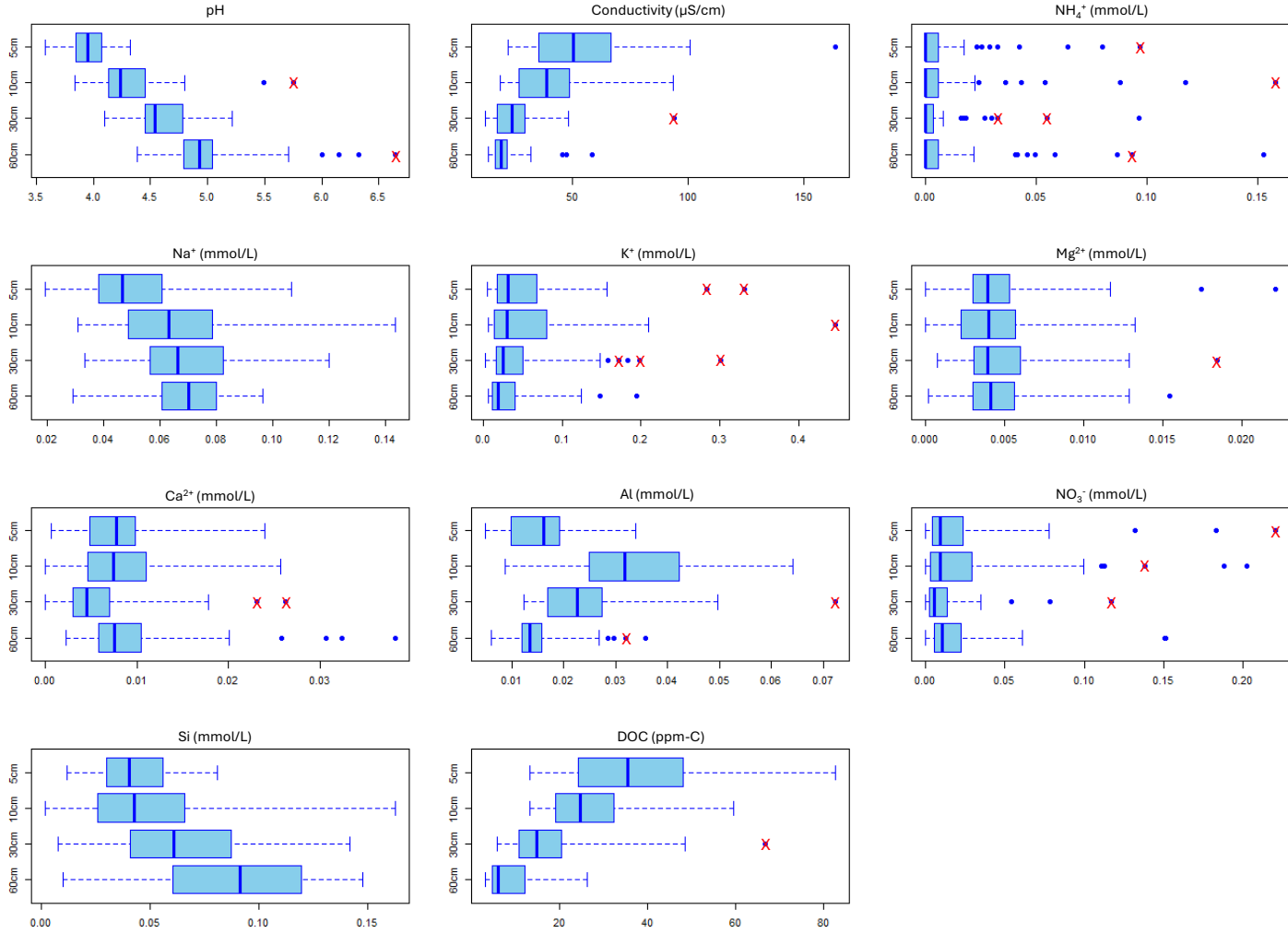


Figure S2: Boxplots of pH, conductivity (Cond. in $\mu\text{S/cm}$), Dissolved Organic Carbon (DOC in ppm-C), and concentrations (mmol/L) in ions (Na^+ , K^+ , Mg^{2+} , Ca^{2+} , Al , Si , NH_4^+ and NO_3^-) for the 2015-2023 period in soil solutions at 5, 10, 30, 60 cm depth. The boxes represent the interquartile range (IQR) with on the left the first quartile Q_1 , on the right the third quartile Q_3 and the bar in the box represents the median. The whiskers extend from the box to the farthest data point located within the interval $[Q_1 - 3 \times \text{IQR}; Q_3 + 3 \times \text{IQR}]$. The outliers, outside this interval, are represented in blue points. Points of the summer 2022 (from June to September) are represented with red crosses. NH_4^+ concentrations are often below detection limit (more than half of the values), so a lot of value might be considered as outliers with this method.

			(uS/cm)	mmol/L								ppm-C
Depth (cm)	Date (dd/mm/yyyy)	pH	Conductivity	Na+	K+	Mg2+	Ca2+	Al	NH4+	NO3-	Si	DOC
5	20/01/2015	3.94	49.9	0.046	0.015	0.005	0.010	0.018	0.001	0.008	0.054	35.57
5	31/03/2015	4.17	29.8	0.043	0.016	0.004	0.008	0.011	0.007	0.024	0.033	18.90
5	26/05/2015	4.12	31.7	0.034	0.009	0.002	0.004	0.011	0.001	0.005	0.033	23.12
5	21/07/2015	3.91	49.3	0.050	0.016	0.005	0.010	0.019	0.001	0.001	0.065	40.10
5	15/09/2015	3.93	92.3	0.073	0.284	0.022	0.020	0.015	0.064	0.183	0.066	50.46
5	10/11/2015	3.95	72.3	0.071	0.144	0.017	0.018	0.009	0.025	0.132	0.040	37.54
5	19/01/2016	4.30	31.3	0.056	0.038	0.004	0.008	0.020	0.001	0.011	0.018	17.62
5	15/03/2016	4.27	26.3	0.046	0.018	0.004	0.004	0.008	0.001	0.007	0.019	19.33
5	10/05/2016	4.15	33.9	0.046	0.014	0.004	0.005	0.014	0.001	0.004	0.029	30.16
5	05/07/2016	4.07	35.2	0.048	0.016	0.003	0.008	0.018	0.001	0.008	0.035	38.09
5	30/08/2016	4.00	44.5	0.032	0.040	0.006	0.010	0.010	0.029	0.013	0.040	29.95
5	08/11/2016	3.89	66.5	0.051	0.097	0.011	0.019	0.011	0.033	0.078	0.050	37.30
5	17/01/2017	3.92	51.2	0.049	0.018	0.008	0.011	0.010	<d.l.	0.017	0.045	26.90
5	14/03/2017	4.08	37.5	0.049	0.015	0.005	0.008	0.007	<d.l.	0.015	0.028	16.82
5	09/05/2017	4.03	35.7	0.040	0.010	0.004	0.006	0.011	<d.l.	0.011	0.038	24.85
5	04/07/2017	4.04	37.1	0.041	0.018	0.003	0.008	0.011	<d.l.	0.003	0.038	31.52
5	29/08/2017	3.92	48.8	0.040	0.017	0.003	0.009	0.013	<d.l.	0.009	0.057	38.57
5	07/11/2017	4.00	53.4	0.066	0.070	0.006	0.013	0.016	0.080	0.015	0.052	39.59
5	15/01/2018	3.95	35.1	0.031	0.006	0.004	0.007	0.009	<d.l.	<d.l.	0.017	19.52
5	13/03/2018	4.03	22.1	0.029	0.005	0.002	0.002	0.005	<d.l.	0.009	0.012	13.32
5	09/05/2018	4.00	44.0	0.059	0.016	0.003	0.007	0.011	<d.l.	0.044	0.031	25.01
5	04/07/2018	3.97	49.1	0.061	0.033	0.005	0.010	0.017	<d.l.	0.031	0.041	37.26
5	28/08/2018	4.20	49.2	0.032	0.152	0.005	0.008	0.008	0.042	0.055	0.019	29.48
5	23/10/2018	3.97	50.3	0.043	0.098	0.005	0.008	0.009	0.004	0.035	0.039	33.82
5	07/01/2019	3.90	58.3	0.050	0.059	0.005	0.008	0.010	<d.l.	0.017	0.032	34.41
5	06/03/2019	4.12	32.0	0.033	0.022	0.004	0.003	0.008	<d.l.	0.006	0.018	20.50
5	30/04/2019	4.11	33.4	0.042	0.031	0.005	0.005	0.009	<d.l.	0.011	0.015	21.33
5	24/06/2019	3.93	51.0	0.068	0.051	0.005	0.007	0.016	<d.l.	0.008	0.034	41.07
5	20/08/2019	3.85	68.6	0.059	0.086	0.006	0.009	0.015	<d.l.	0.023	0.055	43.39
5	29/10/2019	3.73	76.7	0.064	0.043	0.008	0.010	0.018	0.002	0.023	0.050	45.34
5	06/01/2020	4.16	29.8	0.037	0.020	0.003	0.004	0.010	<d.l.	0.011	0.018	21.73
5	03/03/2020	4.24	29.9	0.040	0.027	0.002	0.003	0.007	<d.l.	<d.l.	0.013	16.47
5	18/05/2020	4.32	25.2	0.042	0.025	0.000	0.003	0.007	<d.l.	0.007	0.016	23.64
5	07/07/2020	3.99	51.1	0.085	0.053	0.002	0.007	0.017	<d.l.	0.009	0.040	46.62
5	04/08/2020	3.77	83.2	0.070	0.112	0.004	0.009	0.019	<d.l.	<d.l.	0.053	82.65
5	27/10/2020	3.80	65.5	0.068	0.063	0.004	0.007	0.021	<d.l.	0.004	0.064	54.38
5	18/12/2020	3.79	62.4	0.053	0.022	0.003	0.024	0.023	<d.l.	<d.l.	0.060	55.65
5	02/03/2021	4.24	24.2	0.020	0.010	<d.l.	0.004	0.009	<d.l.	0.003	0.018	14.43
5	27/04/2021	4.07	38.2	0.034	0.021	0.003	0.004	0.014	<d.l.	0.008	0.033	18.59
5	22/06/2021	3.91	51.2	0.044	0.024	0.002	0.004	0.018	<d.l.	0.005	0.028	27.69
5	17/08/2021	3.79	62.7	0.061	0.026	0.003	0.006	0.034	<d.l.	0.003	0.060	49.69
5	26/10/2021	3.67	100.6	0.060	0.111	0.007	0.012	0.024	0.023	0.054	0.069	60.28
5	07/01/2022	3.77	66.7	0.047	0.031	0.004	0.007	0.023	<d.l.	0.002	0.058	45.43
5	15/02/2022	3.87	53.8	0.035	0.026	0.003	0.004	0.016	<d.l.	0.001	0.040	32.55
5	13/04/2022	3.85	68.0	0.078	0.063	0.003	0.001	0.017	0.004	0.027	0.045	34.84

5	21/06/2022	3.79	76.6	0.086	0.085	0.005	0.008	0.023	0.008	0.029	0.069	54.64
5	20/07/2022	3.84	75.5	0.075	0.119	0.006	0.008	0.019	0.006	0.030	0.078	56.34
5	30/08/2022	3.58	163.4	0.107	0.331	0.012	0.018	0.022	0.097	0.220	0.081	68.06
5	10/11/2022	3.70	84.7	0.078	0.096	0.004	0.009	0.026	0.017	0.011	0.069	62.23
5	17/01/2023	3.71	65.9	0.050	0.042	0.004	0.007	0.026	0.005	<d.l.	0.054	51.46
5	14/03/2023	3.99	45.6	0.036	0.024	0.002	0.004	0.016	0.007	0.009	0.050	29.60
5	09/05/2023	3.93	48.1	0.029	0.032	0.002	0.003	0.019	<d.l.	<d.l.	0.035	39.06
5	04/07/2023	4.00	59.5	0.036	0.157	0.007	0.018	0.018	0.016	0.016	0.040	49.55
5	29/08/2023	3.74	76.2	0.041	0.066	0.004	0.008	0.023	0.001	0.007	0.067	59.42
5	07/11/2023	3.70	81.1	0.037	0.066	0.006	0.012	0.021	<d.l.	0.004	0.067	54.69
10	20/01/2015	4.42	26.6	0.063	0.008	0.004	0.011	0.024	0.001	0.014	0.045	13.40
10	31/03/2015	4.62	18.9	0.055	0.010	0.004	0.011	0.027	0.007	0.016	0.043	13.30
10	26/05/2015	4.40	20.3	0.041	0.006	0.002	0.003	0.027	0.001	0.005	0.032	14.31
10	21/07/2015	4.79	21.1	0.035	0.050	0.005	0.009	0.018	0.022	0.001	0.017	17.08
10	15/09/2015	4.25	60.0	0.052	0.173	0.013	0.026	0.025	0.088	0.188	0.018	26.69
10	10/11/2015	4.18	53.5	0.072	0.116	0.009	0.021	0.027	0.004	0.111	0.024	24.99
10	19/01/2016	4.11	38.7	0.062	0.036	0.007	0.009	0.009	0.001	0.008	0.034	24.82
10	15/03/2016	4.47	21.7	0.047	0.014	0.002	0.008	0.016	0.001	0.006	0.023	15.28
10	10/05/2016	4.08	26.0	0.066	0.008	0.002	0.000	0.031	0.001	0.004	0.065	20.69
10	05/07/2016	4.39	21.2	0.067	0.006	0.001	0.001	0.036	0.001	0.005	0.061	24.78
10	30/08/2016	4.80	26.7	0.031	0.085	0.005	0.010	0.017	0.043	0.031	0.012	19.63
10	08/11/2016	4.24	59.8	0.046	0.157	0.012	0.024	0.022	0.054	0.203	0.018	24.04
10	17/01/2017	4.41	22.4	0.032	0.031	0.003	0.005	0.014	<d.l.	0.009	0.018	14.55
10	14/03/2017	4.46	24.3	0.064	0.016	0.004	0.007	0.030	<d.l.	<d.l.	0.049	16.26
10	09/05/2017	4.33	25.1	0.052	0.014	0.004	0.005	0.033	<d.l.	0.020	0.052	19.55
10	04/07/2017	4.64	19.4	0.053	0.028	0.003	0.006	0.026	<d.l.	0.002	0.041	19.99
10	29/08/2017	4.24	38.9	0.040	0.058	0.004	0.009	0.023	<d.l.	0.055	0.020	26.39
10	07/11/2017	4.10	48.5	0.072	0.102	0.006	0.013	0.030	<d.l.	0.044	0.027	25.94
10	15/01/2018	4.14	32.8	0.048	0.015	0.004	0.006	0.027	<d.l.	<d.l.	0.030	18.60
10	13/03/2018	4.13	27.9	0.044	0.011	0.003	0.002	0.024	<d.l.	0.008	0.032	14.99
10	09/05/2018	4.47	32.9	0.078	0.025	0.005	0.008	0.042	0.008	0.056	0.108	24.07
10	04/07/2018	4.56	20.5	0.053	0.022	0.005	0.006	0.025	<d.l.	0.021	0.030	17.50
10	28/08/2018	5.49	46.4	0.035	0.196	0.009	0.019	0.016	0.117	0.096	0.002	22.78
10	23/10/2018	4.31	48.8	0.043	0.138	0.008	0.017	0.023	0.036	0.112	0.021	29.83
10	07/01/2019	4.13	46.0	0.050	0.070	0.004	0.009	0.024	<d.l.	0.026	0.024	29.15
10	06/03/2019	4.38	26.8	0.047	0.027	0.004	0.003	0.018	<d.l.	0.017	0.026	13.70
10	30/04/2019	4.11	45.9	0.078	0.028	0.006	0.007	0.037	<d.l.	0.014	0.047	23.16
10	24/06/2019	4.17	38.8	0.072	0.032	0.005	0.008	0.039	<d.l.	0.014	0.038	33.54
10	20/08/2019	4.00	60.3	0.047	0.095	0.007	0.011	0.027	0.007	0.094	0.025	31.21
10	29/10/2019	3.91	64.9	0.079	0.050	0.008	0.012	0.046	0.012	0.041	0.046	43.36
10	06/01/2020	4.35	39.1	0.101	0.012	0.003	0.006	0.055	<d.l.	0.008	0.094	29.29
10	03/03/2020	4.48	30.9	0.082	0.010	0.002	0.003	0.039	<d.l.	<d.l.	0.079	26.80
10	18/05/2020	4.44	27.4	0.058	0.020	0.001	0.004	0.027	0.005	0.028	0.030	24.74
10	07/07/2020	4.42	27.0	0.055	0.035	0.002	0.008	0.030	<d.l.	<d.l.	0.024	34.03
10	04/08/2020	4.18	44.0	0.050	0.076	0.004	0.010	0.034	<d.l.	<d.l.	0.029	54.40
10	27/10/2020	4.22	37.3	0.057	0.062	0.003	0.006	0.035	0.001	0.017	0.040	33.55
10	18/12/2020	4.07	48.6	0.094	0.024	0.004	0.008	0.053	<d.l.	0.006	0.113	48.36
10	02/03/2021	4.55	22.7	0.050	0.007	<d.l.	0.003	0.032	<d.l.	0.002	0.050	14.48

10	27/04/2021	4.52	27.3	0.064	0.015	0.002	0.003	0.039	0.002	<d.l.	0.116	16.07
10	22/06/2021	4.20	39.7	0.074	0.011	0.002	0.003	0.044	<d.l.	0.009	0.073	18.56
10	17/08/2021	4.39	28.3	0.073	0.015	0.001	0.005	0.044	0.005	0.004	0.082	22.62
10	26/10/2021	4.13	68.5	0.085	0.172	0.008	0.016	0.042	0.007	0.099	0.034	43.22
10	07/01/2022	4.18	41.9	0.078	0.030	0.004	0.006	0.038	<d.l.	0.002	0.071	28.30
10	15/02/2022	4.16	40.8	0.081	0.012	0.003	0.003	0.032	<d.l.	<d.l.	0.104	19.90
10	13/04/2022	4.21	40.3	0.088	0.010	0.001	<d.l.	0.036	<d.l.	0.004	0.099	20.52
10	21/06/2022	4.64	40.9	0.098	0.044	0.009	0.009	0.044	0.024	0.048	0.043	24.90
10	20/07/2022	4.16	58.1	0.091	0.135	0.006	0.018	0.049	<d.l.	0.011	0.049	49.48
10	30/08/2022	5.75	93.5	0.102	0.447	0.013	0.017	0.042	0.158	0.138	0.016	43.52
10	10/11/2022	3.93	77.0	0.090	0.185	0.005	0.012	0.064	0.006	0.004	0.067	57.61
10	17/01/2023	3.84	76.3	0.143	0.050	0.004	0.007	0.057	<d.l.	<d.l.	0.163	36.14
10	14/03/2023	4.15	53.7	0.123	0.024	0.004	0.005	0.044	<d.l.	0.005	0.150	26.32
10	09/05/2023	4.27	37.2	0.091	0.015	0.002	0.003	0.038	<d.l.	<d.l.	0.109	25.54
10	04/07/2023	4.05	43.5	0.063	0.066	0.002	0.005	0.048	<d.l.	0.004	0.056	39.13
10	29/08/2023	4.15	42.2	0.044	0.107	0.002	0.003	0.046	<d.l.	<d.l.	0.048	45.61
10	07/11/2023	4.12	58.0	0.052	0.210	0.007	0.011	0.055	<d.l.	0.012	0.053	59.64
30	20/01/2015	4.50	26.8	0.120	0.004	0.002	0.002	0.014	0.001	0.005	0.142	9.88
30	31/03/2015	4.83	15.4	0.088	0.003	0.002	0.001	0.015	0.001	0.005	0.094	9.60
30	26/05/2015	4.73	16.9	0.083	0.004	0.001	0.000	0.014	0.001	0.005	0.072	9.57
30	21/07/2015	4.51	23.8	0.071	0.033	0.004	0.007	0.022	0.001	0.001	0.040	21.20
30	19/01/2016	4.54	28.6	0.098	0.032	0.004	0.007	0.015	0.001	0.003	0.041	13.78
30	15/03/2016	4.67	16.2	0.055	0.011	0.002	0.001	0.012	0.001	0.006	0.038	9.05
30	10/05/2016	4.53	15.9	0.060	0.005	0.001	0.001	0.013	0.001	<d.l.	0.102	8.76
30	05/07/2016	4.79	14.4	0.074	0.006	0.001	0.001	0.015	0.001	0.005	0.125	11.59
30	30/08/2016	4.85	22.1	0.076	0.049	0.004	0.005	0.016	0.016	0.008	0.063	17.61
30	08/11/2016	4.24	44.2	0.080	0.060	0.009	0.011	0.026	0.004	0.117	0.033	15.79
30	17/01/2017	4.60	18.7	0.051	0.017	0.003	0.004	0.015	<d.l.	0.005	0.032	10.01
30	14/03/2017	4.82	17.4	0.066	0.018	0.004	0.005	0.017	<d.l.	<d.l.	0.061	8.80
30	09/05/2017	4.84	14.9	0.059	0.012	0.004	0.004	0.017	<d.l.	0.013	0.067	8.71
30	04/07/2017	5.17	13.3	0.064	0.023	0.004	0.006	0.015	<d.l.	0.002	0.062	11.03
30	29/08/2017	4.55	21.7	0.056	0.029	0.002	0.005	0.023	<d.l.	<d.l.	0.044	19.21
30	07/11/2017	4.52	27.7	0.088	0.110	0.004	0.009	0.023	<d.l.	0.019	0.030	19.04
30	15/01/2018	4.52	17.8	0.033	0.010	0.004	0.007	0.029	<d.l.	<d.l.	0.083	12.55
30	13/03/2018	4.47	16.4	0.051	0.014	0.003	0.002	0.015	<d.l.	<d.l.	0.047	8.71
30	09/05/2018	4.72	15.9	0.062	0.012	0.003	0.003	0.017	<d.l.	<d.l.	0.098	11.72
30	04/07/2018	4.75	17.5	0.074	0.016	0.004	0.004	0.017	<d.l.	<d.l.	0.060	11.23
30	28/08/2018	4.77	42.8	0.048	0.149	0.009	0.014	0.017	0.096	0.054	0.008	19.85
30	23/10/2018	4.47	42.9	0.043	0.158	0.007	0.014	0.026	0.018	0.078	0.026	25.96
30	07/01/2019	4.35	33.7	0.065	0.051	0.006	0.008	0.028	<d.l.	0.014	0.034	23.15
30	06/03/2019	4.47	27.7	0.057	0.035	0.005	0.004	0.026	<d.l.	0.007	0.053	16.36
30	30/04/2019	4.50	23.6	0.077	0.024	0.006	0.005	0.021	<d.l.	<d.l.	0.068	13.36
30	24/06/2019	4.53	24.1	0.085	0.019	0.005	0.006	0.020	<d.l.	0.005	0.077	12.80
30	20/08/2019	4.42	36.3	0.067	0.093	0.008	0.008	0.026	<d.l.	0.035	0.031	22.71
30	29/10/2019	5.09	29.9	0.085	0.088	0.009	0.014	0.037	0.005	0.014	0.061	24.90
30	06/01/2020	4.78	22.7	0.116	0.030	0.005	0.004	0.023	<d.l.	0.008	0.128	14.10
30	03/03/2020	4.88	20.1	0.098	0.022	0.004	0.004	0.021	<d.l.	0.006	0.103	16.08
30	18/05/2020	4.95	17.4	0.074	0.029	0.003	0.005	0.020	<d.l.	0.008	0.051	17.84

30	07/07/2020	5.02	17.9	0.068	0.038	0.004	0.006	0.021	0.007	0.009	0.032	16.98
30	27/10/2020	4.60	26.2	0.053	0.072	0.004	0.006	0.026	0.005	0.016	0.036	22.71
30	18/12/2020	4.42	26.7	0.076	0.025	0.004	0.006	0.028	<d.l.	0.013	0.087	22.51
30	02/03/2021	4.70	18.7	0.067	0.017	0.003	0.004	0.027	<d.l.	0.003	0.073	11.52
30	27/04/2021	4.63	21.3	0.063	0.023	0.004	0.004	0.027	<d.l.	0.013	0.097	10.73
30	22/06/2021	4.95	12.4	0.039	0.016	0.003	0.004	0.012	<d.l.	0.006	0.041	5.94
30	17/08/2021	4.61	17.3	0.060	0.015	0.003	0.003	0.029	<d.l.	<d.l.	0.087	12.77
30	26/10/2021	4.57	48.1	0.050	0.183	0.008	0.018	0.045	0.030	0.025	0.044	40.71
30	07/01/2022	4.42	25.9	0.054	0.031	0.004	0.005	0.024	<d.l.	0.003	0.065	18.52
30	15/02/2022	4.45	23.9	0.064	0.017	0.004	0.001	0.019	<d.l.	0.001	0.086	10.37
30	13/04/2022	4.49	23.1	0.071	0.018	0.002	<d.l.	0.021	<d.l.	0.004	0.104	10.72
30	21/06/2022	5.21	47.8	0.082	0.198	0.013	0.023	0.050	0.055	0.006	0.017	44.30
30	20/07/2022	4.38	44.8	0.057	0.172	0.007	0.015	0.039	0.002	0.022	0.043	48.65
30	30/08/2022	4.10	94.1	0.083	0.301	0.018	0.026	0.072	0.033	0.117	0.054	66.81
30	10/11/2022	4.22	40.6	0.064	0.086	0.004	0.008	0.042	0.017	0.014	0.048	36.25
30	17/01/2023	4.29	35.1	0.107	0.024	0.008	0.003	0.032	0.008	<d.l.	0.126	17.66
30	14/03/2023	4.45	32.2	0.102	0.024	0.006	0.003	0.022	<d.l.	0.007	0.128	12.88
30	09/05/2023	4.79	26.0	0.087	0.029	0.009	0.004	0.024	0.027	0.004	0.114	14.01
30	04/07/2023	4.46	25.6	0.061	0.034	0.005	0.005	0.029	<d.l.	0.008	0.069	18.73
30	29/08/2023	4.33	27.2	0.055	0.025	0.004	0.002	0.037	<d.l.	0.004	0.055	25.64
30	07/11/2023	4.39	23.9	0.039	0.027	0.004	0.003	0.027	<d.l.	0.004	0.042	19.32
60	20/01/2015	4.96	17.7	0.089	0.009	0.003	0.005	0.009	0.001	0.006	0.111	4.87
60	31/03/2015	5.12	15.5	0.087	0.008	0.003	0.008	0.009	0.001	0.007	0.116	4.91
60	26/05/2015	4.91	15.5	0.071	0.007	0.002	0.003	0.012	0.001	0.012	0.084	5.10
60	21/07/2015	6.00	19.1	0.067	0.034	0.003	0.006	0.007	0.058	0.011	0.041	9.65
60	15/09/2015	5.18	45.5	0.067	0.148	0.011	0.038	0.016	0.087	0.151	0.024	18.91
60	10/11/2015	6.15	31.0	0.060	0.124	0.008	0.032	0.013	0.003	0.008	0.025	20.17
60	19/01/2016	4.74	19.0	0.039	0.033	0.003	0.007	0.018	0.008	0.011	0.031	12.27
60	15/03/2016	4.80	20.1	0.080	0.018	0.004	0.005	0.022	0.001	0.008	0.086	8.92
60	10/05/2016	4.92	14.5	0.063	0.009	0.002	0.002	0.013	0.001	0.004	0.093	5.59
60	05/07/2016	5.01	13.7	0.068	0.009	0.001	0.004	0.014	0.001	0.005	0.108	6.92
60	30/08/2016	5.41	23.3	0.073	0.047	0.006	0.017	0.014	0.041	0.022	0.062	12.80
60	08/11/2016	4.71	47.3	0.050	0.195	0.009	0.020	0.030	0.041	0.152	0.024	23.82
60	17/01/2017	4.93	15.0	0.047	0.040	0.002	0.006	0.016	<d.l.	0.002	0.041	9.80
60	14/03/2017	5.04	17.3	0.073	0.020	0.005	0.009	0.015	<d.l.	0.011	0.096	4.76
60	09/05/2017	4.76	20.9	0.068	0.021	0.006	0.009	0.016	<d.l.	0.030	0.087	4.85
60	04/07/2017	5.57	13.8	0.060	0.023	0.005	0.011	0.013	<d.l.	<d.l.	0.075	17.95
60	29/08/2017	5.17	17.5	0.040	0.040	0.004	0.014	0.014	<d.l.	0.005	0.055	12.20
60	07/11/2017	4.40	58.4	0.082	0.125	0.015	0.015	0.028	0.153	0.050	0.089	24.40
60	15/01/2018	4.80	17.7	0.063	0.015	0.004	0.008	0.012	<d.l.	<d.l.	0.121	6.27
60	13/03/2018	4.79	18.4	0.079	0.010	0.003	0.013	0.011	<d.l.	0.009	0.132	4.49
60	09/05/2018	5.02	17.8	0.090	0.009	0.004	0.010	0.014	<d.l.	<d.l.	0.129	4.64
60	04/07/2018	5.29	15.9	0.074	0.025	0.007	0.011	0.011	<d.l.	0.006	0.096	5.95
60	28/08/2018	5.71	22.5	0.044	0.096	0.006	0.007	0.008	0.049	<d.l.	0.012	10.71
60	23/10/2018	4.67	32.0	0.039	0.093	0.007	0.013	0.013	0.046	0.035	0.020	14.36
60	07/01/2019	4.56	26.5	0.053	0.051	0.005	0.009	0.011	0.004	0.040	0.044	6.59
60	06/03/2019	4.96	15.9	0.061	0.017	0.005	0.006	0.011	<d.l.	0.015	0.065	4.30
60	30/04/2019	4.82	18.2	0.072	0.015	0.006	0.006	0.013	<d.l.	<d.l.	0.061	4.32

60	24/06/2019	4.87	19.1	0.075	0.022	0.008	0.008	0.007	0.012	0.012	0.089	4.88
60	20/08/2019	6.32	21.4	0.029	0.070	0.013	0.026	0.006	0.022	<d.l.	0.010	13.85
60	29/10/2019	4.97	19.4	0.070	0.024	0.008	0.008	0.013	0.012	0.006	0.091	7.04
60	06/01/2020	4.91	17.2	0.085	0.015	0.004	0.005	0.012	<d.l.	<d.l.	0.123	4.05
60	03/03/2020	4.82	21.5	0.097	0.012	0.004	0.006	0.014	<d.l.	0.006	0.147	5.25
60	18/05/2020	4.87	18.9	0.085	0.011	0.003	0.006	0.014	<d.l.	<d.l.	0.118	6.04
60	07/07/2020	4.93	16.2	0.074	0.013	0.003	0.006	0.012	<d.l.	<d.l.	0.115	6.17
60	18/12/2020	4.94	19.6	0.087	0.017	0.004	0.008	0.009	<d.l.	0.013	0.119	4.59
60	02/03/2021	4.79	21.5	0.089	0.009	0.003	0.006	0.018	<d.l.	0.043	0.133	4.26
60	27/04/2021	4.85	21.0	0.088	0.010	0.005	0.006	0.017	<d.l.	0.061	0.122	3.28
60	22/06/2021	5.00	17.3	0.087	0.011	0.004	0.005	0.015	<d.l.	0.022	0.132	4.02
60	17/08/2021	5.04	17.8	0.093	0.014	0.004	0.007	0.014	<d.l.	0.038	0.146	4.06
60	07/01/2022	4.81	19.7	0.078	0.013	0.000	0.004	0.013	<d.l.	0.018	0.120	4.91
60	15/02/2022	4.74	20.7	0.077	0.011	0.004	0.005	0.015	<d.l.	0.030	0.123	4.87
60	13/04/2022	4.79	19.6	0.080	0.011	0.002	0.007	0.015	<d.l.	0.027	0.132	4.18
60	21/06/2022	6.64	24.1	0.077	0.034	0.004	0.008	0.007	0.093	0.020	0.119	7.65
60	20/07/2022	4.57	28.6	0.067	0.044	0.006	0.008	0.025	0.017	0.036	0.061	17.33
60	30/08/2022	5.09	30.9	0.092	0.111	0.008	0.011	0.032	<d.l.	0.027	0.039	26.32
60	10/11/2022	4.56	28.3	0.064	0.065	0.004	0.010	0.036	0.006	0.017	0.082	20.59
60	17/01/2023	4.84	16.7	0.070	0.016	0.003	0.005	0.013	<d.l.	0.008	0.125	5.32
60	14/03/2023	4.99	15.5	0.067	0.014	0.003	0.006	0.013	<d.l.	0.016	0.118	5.06
60	09/05/2023	5.10	13.4	0.065	0.010	0.003	0.031	0.013	<d.l.	0.006	0.129	5.68
60	04/07/2023	4.94	17.9	0.063	0.031	0.004	0.008	0.019	<d.l.	0.010	0.097	10.07
60	29/08/2023	5.02	14.1	0.050	0.025	0.003	0.008	0.017	<d.l.	0.007	0.075	9.64
60	07/11/2023	4.92	15.5	0.046	0.028	0.004	0.008	0.017	<d.l.	0.005	0.065	10.60

Table S1 : pH, conductivity ($\mu\text{S}/\text{cm}$), Dissolved Organic Carbon (DOC in ppm-C), and concentrations (mmol/L) in ions (Na^+ , K^+ , Mg^{2+} , Ca^{2+} , Al, Si, NH_4^+ and NO_3^-) for the 2015-2023 period in soil solutions at 5, 10, 30, 60 cm depth.