

Sample Name	description of sampling point	location	x (UTM, WGS 84, Zone 31N)	y (UTM, WGS 84, Zone 31N)	height over sea level (m) from SRTM data in 50x50 grid	air temperature (°C)	water temperature (°C)	pH	O ₂ (mg/l)	O ₂ saturation (%)	el. conductivity (µS/cm)	Eh (mV)	HCO ₃ ⁻ (mg/l)	CO ₂ mg/l	Cl ⁻ (mg/l)	SO ₄ ²⁻ (mg/l)	F ⁻ (mg/l)	Br ⁻ [mg/l]
R05-H-ALF-1	handpump	Alafiarou	434335	998041	283.74		29.2	6.65	2.75	37.2	392	122	244	44	9.8	3.1	nn	0.44
R05-H-BAKU-P	handpump	Bakou	399724	1040456	356		28.3	6.45	2.84	37.7	247	69	161.65	26.4	0.4	0.9	nn	0.44
R05-H-BANI-P	handpump	Banigri	424962	1012545	301		29	6.15	3.48	46.7	222	199	97.6	35.2	4.7	0.3	nn	0.44
R05-W-BDOG-1	well	Dogué	383221	1006210	323.64		27.3	7.01	3.75	48.8	905	132	289.75	17.6	83.4	14	nn	0.44
R05-W-BDOG-2	well	Dogué	383034	1006505	332.35		25.3	7.34	3.45	43.6	1425	192	805.2	26.4	81.7	34.0	nn	0.44
R05-F-BEL-P	footpump	Bélléfoungou	360267	1085332	415.71		29.1	6.98	1.93	27.4	530	35	311.1	22	13.6	4.5	nn	0.44
R05-F-BET-P	footpump	Bétérou	420558	1017292	276		29.7	7.21	2.32	31.6	365	148	219.6	22	8.5	1.7	nn	0.44
R05-F-BRI-3	footpump	Birni	338470	1104932	417.62		28.2	6.45	2.25	30.3	221	40	128.1	35.2	1.2	0.5	nn	0.44
R05-W-DDU-1	well	Dendougou	360617	1076428	401.87		26.7	7.15	3.23	42	532	144	237.9	22	35.1	8.7	nn	0.44
R05-F-FOB-2	footpump	Fô-Bouré	425992	1118195	363.67		29.4	6.4	2.43	33.1	206	179	140.3	30.8	3.0	1.8	nn	0.44
R05-F-GRO-P	footpump	Ganrou	385490	1123858	414		29.2	6.48	2.1	28.4	533	191	170.8	39.6	22.5	3.7	nn	0.44
R05-P-HVO-1	piezometer	Fô-Bouré	438723	1116084	351.42		28.5	6.02	2.65	35.6	284	87	155.55	22	2.9	0.7	nn	0.44
R05-P-HVO-10	piezometer	Tchaourou	450988	1010770	348.9		28.7	5.7	3.05	40.8	220	68	134.2	30.8	3.3	1.0	nn	0.44
R05-F-HVO-2	footpump	Bariénou	365564	1074180	420.73		28.7	7.11	1.65	22.4	375	143	256.2	17.6	0.7	0.5	nn	0.44
R05-P-HVO-3	piezometer	Komiguéa	459224	1045697	368.8		26.4	6.3	2.11	27.4	338	146	195.2	30.8	9.8	0.6	nn	0.44
R05-F-HVO-4	footpump	Bori	438147	1078043	325.73		28.8	6.16	2.46	33	352	183	189.1	52.8	16.1	2.9	nn	0.44
R05-F-HVO-6	footpump	Warika	466115	1075122	381.89		29.8	6.27	2.32	31.8	201	180	128.1	44	2.9	0.6	nn	0.44
R05-F-HVO-7	footpump	Tchérou	345041	1011265	394.17		28.8	7	1.6	21.5	389	164	244	17.6	1.6	3.3	nn	0.44
R05-P-HVO-9	piezometer	Bétérou	345041	1011265	398.17		29.7	6.38	2.6	34.5	252	48	140.3	26.4	4.7	3.5	nn	0.44
R05-F-HVO-8	footpump	Djoungou	350850	1072648	453.89		28.2	7.15	1.21	16.4	398	15	244	8.8	0.8	1.3	nn	0.44
R05-H-IGB-P	handpump	Igbomakoro	380114	1003884	311.09		27.2	6.57	3.09	40	518	202	283.65	52.8	21.5	0.7	nn	0.44
R05-H-IGER-P	handpump	Igbéré	385405	994399	332		27.9	6.33	3.06	39.7	209	35	146.4	30.8	1.7	0.6	nn	0.44
R05-H-KAK-P2	handpump	Kakikoka	426767	1018834	270.92		30	7.3	3.8	51.8	453	180	286.7	26.4	1.5	1.6	nn	0.44
R05-H-KBG-2	handpump	Kpabégou	343644	1082896	489.96		28.9	6.33	2.72	36.8	126	210	79.3	17.6	0.4	0.3	nn	0.44
R05-H-KIK-P	handpump	Kikelé	360219	996473	378		27.7	6.15	3.09	40.8	170	194	109.8	35.2	7.9	0.3	nn	0.44
R05-F-KKP-2	footpump	Kénoukpanou	445529	1003577	327.18		29	6	2.62	35.1	155	233	91.5	57.2	2.3	0.5	nn	0.44
R05-F-KOM-2	footpump	Komiguéa	459456	1046260	367.06		28.8	6.05	2.06	27.8	148	264	170.8	52.8	1.5	0.5	nn	0.44
R05-F-KOR-P	footpump	Kori	445010	1100335	324.61		29	7.35	1.32	17.9	648	90	305	28.6	28.5	9.6	nn	0.44
R05-H-KPS-P	handpump	Kpéssou	409973	1028012	324.8		29.7	6.6	2.82	38.7	305	175	149.45	22	10.7	2.0	nn	0.44
R05-F-MNG-P	footpump	Manigri	361127	992158	387.38		29.5	6.22	2.8	38.3	134	214	97.6	35.2	0.9	0.3	nn	0.44
R05-H-OUB-P	handpump	Ouberou	415657	1018023	306		29.5	6.56	1.75	23.5	312	-88	170.8	30.8	3.3	1.0	nn	0.44
R05-F-OUE-1	footpump	Ouérou	460079	1082047	370.26		29.9	6.34	2.7	37.1	359	185	97.6	30.8	19.9	1.1	nn	0.44
R05-H-OUN-P	handpump	Wannou	395894	997902	317.02		28.3	6.89	2.38	31.6	1780	176	597.8	52.8	71.6	96.4	nn	0.44
R05-H-PELE-P	handpump	Pelebina	350403	1047477	452		28.8	6.54	3.13	42.3	554	238	140.3	30.8	35.8	7.0	nn	0.44
R05-H-PRA-1	handpump	Parakou	463055	1031511	347.6		28.3	5.78	3.45	45.8	164	150	109.8	48.4	1.8	0.5	nn	0.44
R05-H-SEB-P	handpump	Sébou	443940	1029716	334.94		29.1	6.43	1.37	18.6	620	65	176.9	52.8	39.5	14.1	nn	0.44
R05-H-SER-P	handpump	Sérou	357472	1068612	418.93		28.2	6.9	1.78	23.7	936	165	347.7	22	34.0	113.0	nn	0.44
R05-F-SRO-1	footpump	Sirou	447871	1109470	369.51		29.3	6.23	2.7	36.5	314	179	176.9	44	7.3	2.0	nn	0.44
R05-F-TOM-2	footpump	Toumé	439911	1115216	357.77		27.7	7	1.71	22.5	567	125	335.5	22	7.5	15.5	nn	0.44
R05-H-TOR-P2	handpump	Tourou	449830	1033059	373.81		29.5	6.57	3.25	44.2	222	40	140.3	35.2	4.5	0.6	nn	0.44
R05-H-VAN-1	handpump	Vanhoui	370763	1057500	392.53		28.5	5.97	2.68	36.1	94	168	61	35.2	0.6	0.5	nn	0.44
R05-H-WARI-P	handpump	Wari-Marou	407864	1013209	309.27		27.1	6.98	3.44	43.9	998	255	381.25	30.8	110.2	42.7	nn	0.44
R05-H-WEWE-F	handpump	Wéwé	402344	1038032	338		29.5	6.3	2.82	38.3	235	55	149.45	44	1.7	1.4	nn	0.44

Sample Name	(NO ₃) ⁻ (mg/l)	NO ₂ ⁻ (mg/l)	PO ₄ ³⁻ (mg/l)	SiO ₂ (mg/l)	Na ⁺ (mg/l)	K ⁺ (mg/l)	Ca ²⁺ (mg/l)	Mg ²⁺ (mg/l)	Sr ²⁺ (mg/l)	Fe ²⁺ (mg/l)	Mn ²⁺ (mg/l)	NH ₄ ⁺ (mg/l)	Cl ⁻ (mmol(eq)/l)	SO ₄ ²⁻ (mmol(eq)/l)	HCO ₃ ⁻ (mmol(eq)/l)	NO ₃ ⁻ (mmol(eq)/l)
R05-H-ALF-1	4.3	0.3	0.53	27.47	19.1	6	39	15.8	0.6	0.036	0.281	0.093	0.276	0.065	4.000	0.069
R05-H-BAKU-P	0.3	0.3	0.89	32.05	23	4.5	23	6.5	0.3	0.181	0.145	0.427	0.011	0.019	2.650	0.004
R05-H-BANI-P	28.6	0.3	1.21	28.8	17.2	5.3	20	5	0.5	0.038	0.008	0.093	0.133	0.006	1.600	0.461
R05-W-BDOG-1	95.0	0.3	1.95	28.92	65	10	70	32	3.3	0.02	0.042	0.093	2.353	0.291	4.750	1.533
R05-W-BDOG-2	28.9	0.3	1.65	28.8	144	14	71	81	4	0.017	0.009	0.084	2.305	0.708	13.200	0.466
R05-F-BEL-P	0.3	0.3	0.84	27.95	19.4	6.6	67	18	1.2	0.254	0.476	0.093	0.384	0.094	5.100	0.004
R05-F-BET-P	0.3	0.3	5.2	25.42	23	6.8	35	11.8	0.3	0.029	0.092	0.093	0.240	0.035	3.600	0.004
R05-F-BRI-3	0.3	0.3	1.19	28.92	16.8	3.9	8.7	8.6	0.2	0.202	0.131	0.093	0.034	0.010	2.100	0.004
R05-W-DDU-1	17.4	0.3	1.05	26.99	25	13	50	22	1.1	0.204	0.078	0.093	0.990	0.181	3.900	0.281
R05-F-FOB-2	2.3	0.3	1.17	33.25	14.4	4	14.2	9.1	0.3	0.037	0.036	0.093	0.085	0.037	2.300	0.037
R05-F-GRO-P	108.3	0.3	0.79	32.77	15.9	6.6	43	27	0.7	0.018	0.282	0.093	0.635	0.077	2.800	1.747
R05-P-HVO-1	1.8	0.3	1.31	35.18	13.8	6	28	14.1	0.7	0.041	0.435	0.838	0.082	0.015	2.550	0.029
R05-P-HVO-10	5.3	0.3	1.81	38.8	22	5	12.4	3.6	0.4	0.081	0.04	0.251	0.093	0.021	2.200	0.086
R05-F-HVO-2	0.3	0.3	0.69	30.6	14.1	7.2	14.8	35	0.1	0.015	0.047	0.093	0.020	0.000	4.200	0.004
R05-P-HVO-3	1.4	0.3	0.87	28.67	21	9	30	12.2	0.9	0.018	0.06	0.509	0.276	0.012	3.200	0.023
R05-F-HVO-4	18.0	0.3	1.67	37.11	26	5.9	30	10	0.9	0.012	0.148	0.578	0.454	0.060	3.100	0.290
R05-F-HVO-6	0.3	0.3	1.64	30.96	15.8	5.5	18	7.5	0.5	0.021	0.037	0.093	0.082	0.000	2.100	0.004
R05-F-HVO-7	0.3	0.3	0.71	27.45	14.8	7.4	46	14.5	0.6	0.747	0.217	0.093	0.045	0.069	4.000	0.004
R05-P-HVO-9	8.3	0.3	1.79	32.05	17.6	5.7	24	8.5	0.4	0.021	0.028	0.591	0.133	0.073	2.300	0.134
R05-F-HVO-8	0.3	0.3	0.55	22.41	16.3	5.9	40	16	0.5	0.048	0.075	0.093	0.023	0.027	4.000	0.004
R05-H-IGB-P	0.3	0.3	2.03	29.16	19.2	6.1	41	24	1	0.012	0.025	1.331	0.606	0.015	4.650	0.004
R05-H-IGER-P	0.3	0.3	1.12	32.77	17.8	4.3	14.5	5.4	0.4	2.237	0.13	0.093	0.048	0.012	2.400	0.004
R05-H-KAK-P2	0.3	0.3	0.2	18.31	27	3.6	47	20	0.9	0.017	0.048	0.093	0.042	0.033	4.700	0.004
R05-H-KBG-2	0.3	0.3	1.05	28.19	13	3.6	12.3	1.4	0.1	0.009	0	0.093	0.011	0.006	1.300	0.004
R05-H-KIK-P	5.7	0.8	1.88	29.4	16.6	3.8	15	2.9	0.3	0.013	0.004	0.093	0.223	0.006	1.800	0.092
R05-F-KKP-2	0.5	0.3	1.27	31.33	17.7	5.2	13.7	2.9	0.2	0.012	0.005	0.093	0.065	0.010	1.500	0.008
R05-F-KOM-2	0.3	0.3	1.29	29.64	15.6	4.4	12.4	3.3	0.3	0.019	0.032	0.093	0.042	0.010	2.800	0.004
R05-F-KOR-P	47.5	0.3	0.61	16.14	46	5.5	53	20	3.7	0.02	0.011	0.093	0.804	0.200	5.000	0.766
R05-H-KPS-P	17.3	0.3	0.59	20.96	19.3	6.4	26	11.7	0.4	1.447	0.033	0.341	0.302	0.042	2.450	0.279
R05-F-MNG-P	0.3	0.3	0.65	22.29	11.5	4.2	14.2	3.1	0.2	0.326	0.017	0.093	0.025	0.006	1.600	0.004
R05-H-OUB-P	0.3	0.3	0.69	35.78	17.4	4.5	26	8.8	0.4	18.298	2.066	1.848	0.093	0.021	2.800	0.004
R05-F-OUE-1	59.6	0.3	0.89	30	22	5.7	31	9.4	0.5	0.033	0.139	0.093	0.561	0.023	1.600	0.962
R05-H-OUN-P	269.0	0.3	0.33	19.88	34	26	113	100	6.8	0.116	0.143	0.093	2.020	0.000	9.800	4.340
R05-H-PELE-P	94.7	0.3	1.09	28.19	31	12	37	23	1.4	0.055	0.044	0.356	1.010	0.146	2.300	1.528
R05-H-PRA-1	0.3	0.3	1.37	33.01	14.3	5	14.8	5	0.3	0.026	0.009	0.093	0.051	0.010	1.800	0.004
R05-H-SEB-P	100.6	0.6	0.86	30.96	26	7.4	63	23	1.3	0.302	0.212	0.093	1.114	0.294	2.900	1.623
R05-H-SER-P	42.6	0.7	0.51	18.92	33	13	118	28	2.8	0.027	0.286	0.188	0.959	2.353	5.700	0.687
R05-F-SRO-1	9.0	0.3	0.92	28.8	12.1	5.4	39	9	0.4	0.036	0.006	0.093	0.206	0.042	2.900	0.145
R05-F-TOM-2	0.3	0.3	0.97	30.36	10.5	3.8	61	36	0.3	0.033	0.026	0.093	0.212	0.323	5.500	0.004
R05-H-TOR-P2	1.5	0.3	1.19	36.14	18	4.9	21	6.5	0.5	0.032	0.042	0.093	0.127	0.012	2.300	0.024
R05-H-VAN-1	0.3	0.3	0.68	27.83	12.8	3.4	6.1	1.2	0.1	0.08	0.023	0.093	0.017	0.010	1.000	0.004
R05-H-WARI-P	31.3	0.3	0.56	32.65	38	6.1	75	64	1.3	0.471	0.568	0.501	3.109	0.889	6.250	0.505
R05-H-WEWE-F	0.3	0.3	1.27	29.88	13	5.7	20	10.3	0.3	0.808	0.026	0.814	0.048	0.029	2.450	0.004

Sample Name	NO ₂ ⁻ (mmol(eq)/l)	HP0 ₄ ²⁻ (mmol(eq)/l)	Na ⁺ (mmol(eq)/l)	K ⁺ (mmol(eq)/l)	Ca ²⁺ (mmol(eq)/l)	Mg ²⁺ (mmol(eq)/l)	Fe ²⁺ (mmol(eq)/l)	Mn ²⁺ (mmol(eq)/l)	NH ₄ ⁺ (mmol(eq)/l)	sum of cations (mmol(eq)/l)	sum of anions (mmol(eq)/l)	balance of ions (mmol(eq)/l)	balance between -15 and 15 is okay (green), others (red)
R05-H-ALF-1	0.000	0.011	0.831	0.153	1.946	1.300	0.001	0.010	0.005	4.247	4.421	-3.020877857	
R05-H-BAKU-P	0.000	0.019	1.000	0.115	1.148	0.535	0.006	0.005	0.024	2.834	2.703	1.445220958	
R05-H-BANI-P	0.000	0.025	0.748	0.136	0.998	0.411	0.001	0.000	0.005	2.300	2.225	0.678540539	
R05-W-BDOG-1	0.000	0.041	2.827	0.256	3.493	2.633	0.001	0.002	0.005	9.217	8.967	9.062611948	
R05-W-BDOG-2	0.000	0.034	6.264	0.358	3.543	6.665	0.001	0.000	0.005	16.835	16.713	8.201912774	
R05-F-BEL-P	0.000	0.018	0.844	0.169	3.343	1.481	0.009	0.017	0.005	5.869	5.599	6.179675178	
R05-F-BET-P	0.000	0.108	1.000	0.174	1.747	0.971	0.001	0.003	0.005	3.901	3.988	-1.366694548	
R05-F-BRI-3	0.000	0.025	0.731	0.100	0.434	0.708	0.007	0.005	0.005	1.989	2.174	-1.532364969	
R05-W-DDU-1	0.000	0.022	1.087	0.332	2.495	1.810	0.007	0.003	0.005	5.741	5.374	8.15036234	
R05-F-FOB-2	0.000	0.024	0.626	0.102	0.709	0.749	0.001	0.001	0.005	2.194	2.484	-2.710604194	
R05-F-GRO-P	0.000	0.016	0.692	0.169	2.146	2.222	0.001	0.010	0.005	5.244	5.276	-0.664802735	
R05-P-HVO-1	0.000	0.027	0.600	0.153	1.397	1.160	0.001	0.016	0.046	3.375	2.703	8.170817608	
R05-P-HVO-10	0.000	0.038	0.957	0.128	0.619	0.296	0.003	0.001	0.014	2.018	2.437	-3.734098304	
R05-F-HVO-2	0.000	0.014	0.613	0.184	0.739	2.880	0.001	0.002	0.005	4.423	4.239	3.20279469	
R05-P-HVO-3	0.000	0.018	0.913	0.230	1.497	1.004	0.001	0.002	0.028	3.676	3.530	2.10272515	
R05-F-HVO-4	0.000	0.035	1.131	0.151	1.497	0.823	0.000	0.005	0.032	3.640	3.940	-4.55074746	
R05-F-HVO-6	0.000	0.034	0.687	0.141	0.898	0.617	0.001	0.001	0.005	2.351	2.220	1.189388285	
R05-F-HVO-7	0.000	0.015	0.644	0.189	2.295	1.193	0.027	0.008	0.005	4.361	4.133	3.878907492	
R05-P-HVO-9	0.000	0.037	0.766	0.146	1.198	0.699	0.001	0.001	0.033	2.843	2.677	1.835053307	
R05-F-HVO-8	0.000	0.011	0.709	0.151	1.996	1.317	0.002	0.003	0.005	4.182	4.066	1.922931243	
R05-H-IGB-P	0.000	0.042	0.835	0.156	2.046	1.975	0.000	0.001	0.074	5.087	5.318	-4.801439866	
R05-H-IGER-P	0.000	0.023	0.774	0.110	0.724	0.444	0.080	0.005	0.005	2.142	2.488	-3.205215132	
R05-H-KAK-P2	0.000	0.004	1.174	0.092	2.345	1.646	0.001	0.002	0.005	5.265	4.784	9.664075163	
R05-H-KBG-2	0.000	0.022	0.565	0.092	0.614	0.115	0.000	0.000	0.005	1.392	1.343	0.266148991	
R05-H-KIK-P	0.000	0.039	0.722	0.097	0.749	0.239	0.000	0.000	0.005	1.812	2.160	-2.761163318	
R05-F-KKP-2	0.000	0.026	0.770	0.133	0.684	0.239	0.000	0.000	0.005	1.831	1.610	1.521443362	
R05-F-KOM-2	0.000	0.027	0.679	0.113	0.619	0.272	0.001	0.001	0.005	1.688	2.884	-10.93413559	
R05-F-KOR-P	0.000	0.013	2.001	0.141	2.645	1.646	0.001	0.000	0.005	6.438	6.783	-9.113364159	
R05-H-KPS-P	0.000	0.012	0.839	0.164	1.297	0.963	0.052	0.001	0.019	3.335	3.085	3.21488306	
R05-F-MNG-P	0.000	0.014	0.500	0.107	0.709	0.255	0.012	0.001	0.005	1.589	1.649	-0.390783502	
R05-H-OUB-P	0.000	0.014	0.757	0.115	1.297	0.724	0.655	0.075	0.102	3.726	2.933	10.57000541	
R05-F-OUE-1	0.000	0.019	0.957	0.146	1.547	0.774	0.001	0.005	0.005	3.435	3.164	3.564899937	
R05-H-OUN-P	0.000	0.007	1.479	0.665	5.639	8.229	0.004	0.005	0.005	16.026	16.167	-9.07028357	
R05-H-PELE-P	0.000	0.023	1.348	0.307	1.846	1.893	0.002	0.002	0.020	5.418	5.006	8.574518287	
R05-H-PRA-1	0.000	0.029	0.622	0.128	0.739	0.411	0.001	0.000	0.005	1.906	1.894	0.091796866	
R05-H-SEB-P	0.000	0.018	1.131	0.189	3.144	1.893	0.011	0.008	0.005	6.380	5.949	10.63633793	
R05-H-SER-P	0.000	0.011	1.435	0.332	5.888	2.304	0.001	0.010	0.010	9.982	9.710	10.72094448	
R05-F-SRO-1	0.000	0.019	0.526	0.138	1.946	0.741	0.001	0.000	0.005	3.358	3.312	0.611327608	
R05-F-TOM-2	0.000	0.020	0.457	0.097	3.044	2.962	0.001	0.001	0.005	6.567	6.059	12.84142524	
R05-H-TOR-P2	0.000	0.025	0.783	0.125	1.048	0.535	0.001	0.002	0.005	2.499	2.488	0.104036416	
R05-H-VAN-1	0.000	0.014	0.557	0.087	0.304	0.099	0.003	0.001	0.005	1.056	1.046	0.041039692	
R05-H-WARI-P	0.000	0.012	1.653	0.156	3.743	5.266	0.017	0.021	0.028	10.883	10.764	5.144839715	
R05-H-WEWE-F	0.000	0.026	0.565	0.146	0.998	0.848	0.029	0.001	0.045	2.632	2.558	0.765998191	