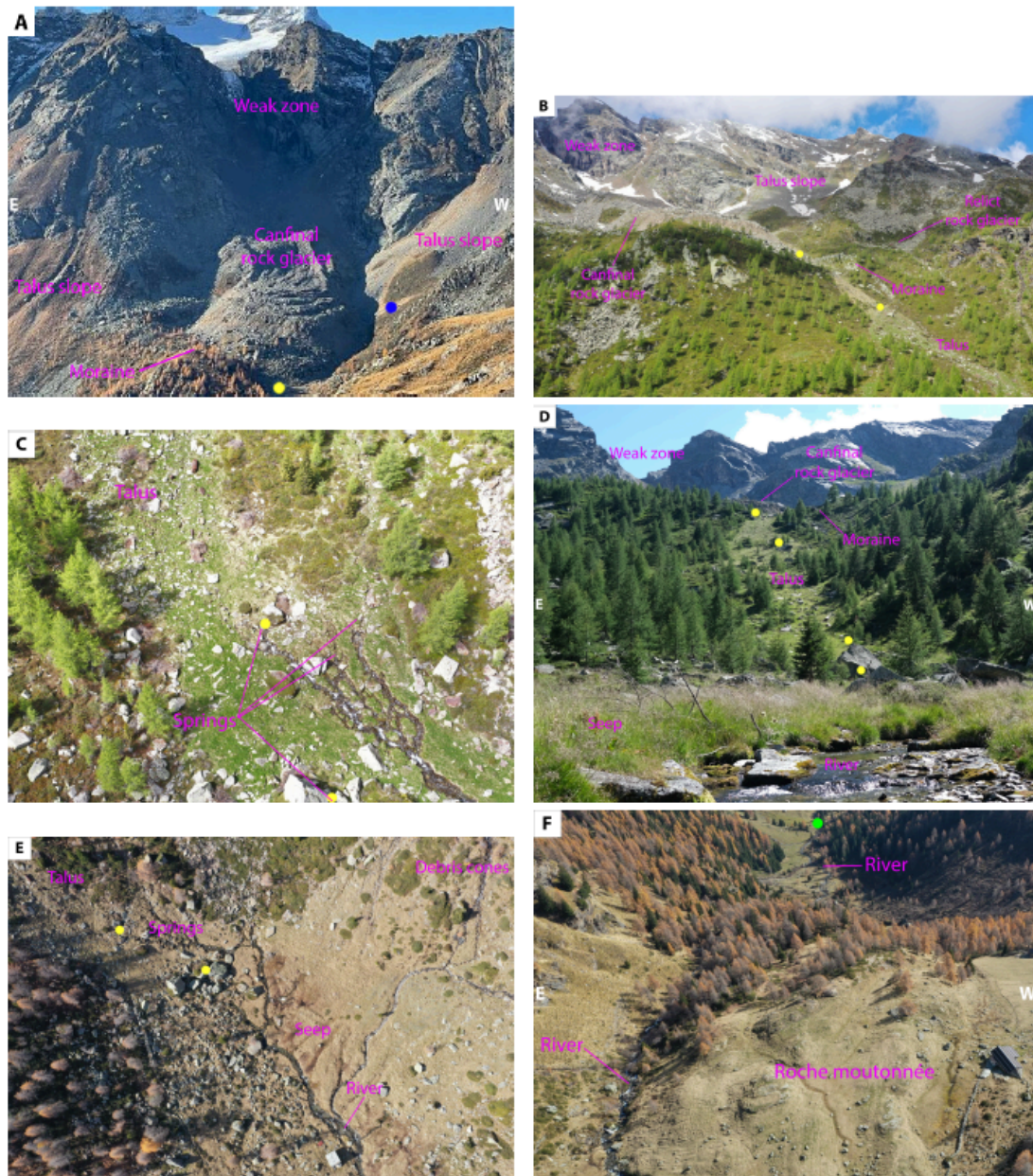Figure S1: Illustrative view of some of the Quarternary features of the Val d'Ursé (UAV imagery and ground-level photography). The dots represent some of the monitored locations: the KB4 borehole (blue), the monitored springs (yellow) and the stream gauge (green). Monitored springs S1-S4 (numbered from highest to lowest) are all visible in D.
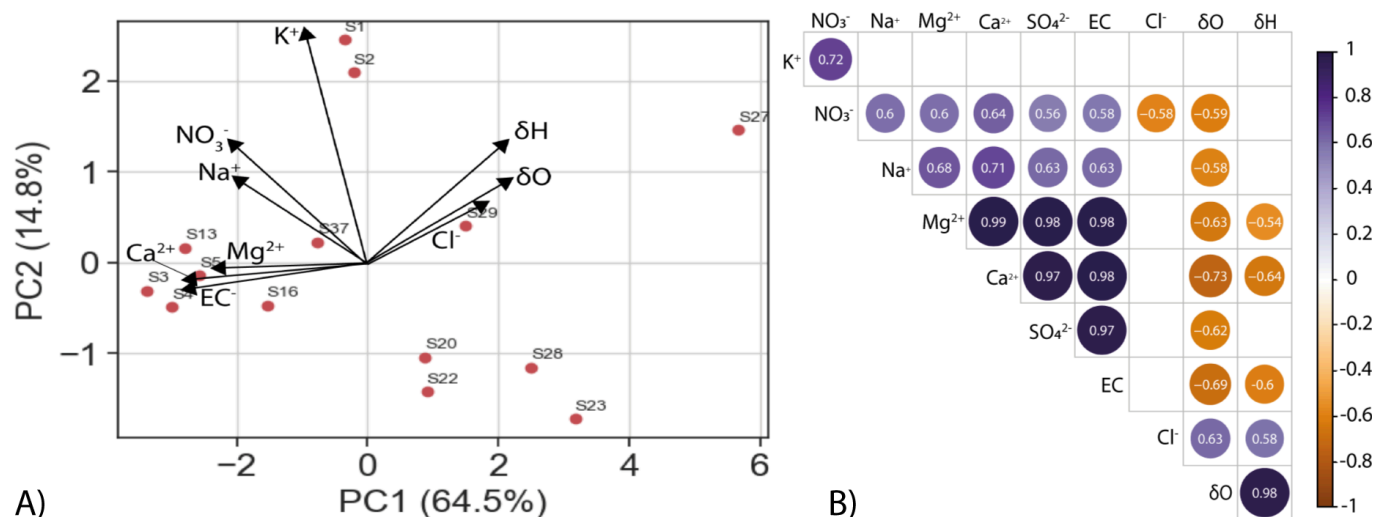
A)

B)

Figure S2: A) Principal component analysis (PCA) biplot of samples taken on 30.10.2022. B) Correlation matrix containing only the significant correlations between variables (p < 0.05). The color intensity and size of the circles are determined by the strength of the correlation (purple = positive correlation, gold = negative correlation). The number represents the correlation coefficient (r) for each correlation.

	NO_3^-	Na^+	Mg^{2+}	Ca^{2+}	SO_4^{2-}	EC	Cl^-	δO	δH
K^+	0.72								
NO_3^-		0.6	0.6	0.64	0.56	0.58	-0.58	-0.59	
Na^+			0.68	0.71	0.63	0.63		-0.58	
Mg^{2+}				0.99	0.98	0.98		-0.63	-0.54
Ca^{2+}					0.97	0.98		-0.73	-0.64
SO_4^{2-}						0.97		-0.62	
EC								-0.69	-0.6
Cl^-								0.63	0.58
δO									0.98

	Cl^-	NO_3^-	SO_4^{2-}	Na^+	K^+	Ca^{2+}	Mg^{2+}	$\delta^2 H$	$\delta^{18}O$	EC
S1	0.32	1.85	24.52	1.23	0.79	12.15	2.9	-68.31	-10.27	100.2
S2	0.16	1.64	22.94	1.31	0.71	11.75	2.76	-67.28	-10.15	96.2
S3	0.11	1.62	81.25	1.32	0.41	24.01	6.78	-70.94	-10.55	202
S4	0.13	1.35	79.2	1.3	0.41	23.43	6.63	-70.54	-10.53	199.5
S5	0.35	1.26	78.86	1.44	0.38	23.30	6.55	-69.93	-10.45	196
S13	0.32	1.32	77.58	1.42	0.46	23.55	6.60	-70.21	-10.49	197.8
S16	0.18	0.68	61.99	1.25	0.47	19.35	5.23	-70.18	-10.39	168
S20	0.38	0.84	15.46	1.11	0.32	10.19	1.65	-71.32	-10.55	74.6
S22	0.29	0.75	14.03	1.09	0.28	9.78	1.65	-71.71	-10.49	72.8
S23	0.4	0.23	5.28	0.7	0.16	5.54	1.23	-67.69	-9.94	85
S27	0.76	0.12	1.98	0.9	0.39	1.2	0.26	-60.52	-9.1	14.2
S28	0.18	0.72	5.76	0.87	0.21	4.81	1.28	-67.59	-10.03	41
S29	0.32	0.71	8.17	1.30	0.4	9.84	2.67	-66.69	-9.92	78.7
S37	0.49	0.93	36.67	1.67	0.43	14.37	3.57	-71.22	-10.51	119
PC1	0.25	-0.3	-0.36	-0.3	-0.14	-0.38	-0.37	0.29	0.33	-0.37
PC2	0.17	0.38	-0.04	0.28	0.73	-0.03	-0.01	0.38	0.26	-0.07

Table S1: Ion concentrations (mg/l), specific conductance (µS/cm) and stable isotopic values (‰ VSMOV) for the springs and streams sampled on 30.10.2022 in the Val d'Ursé, and variable loadings of these in the principal component analysis (PCA) (Figure S2).