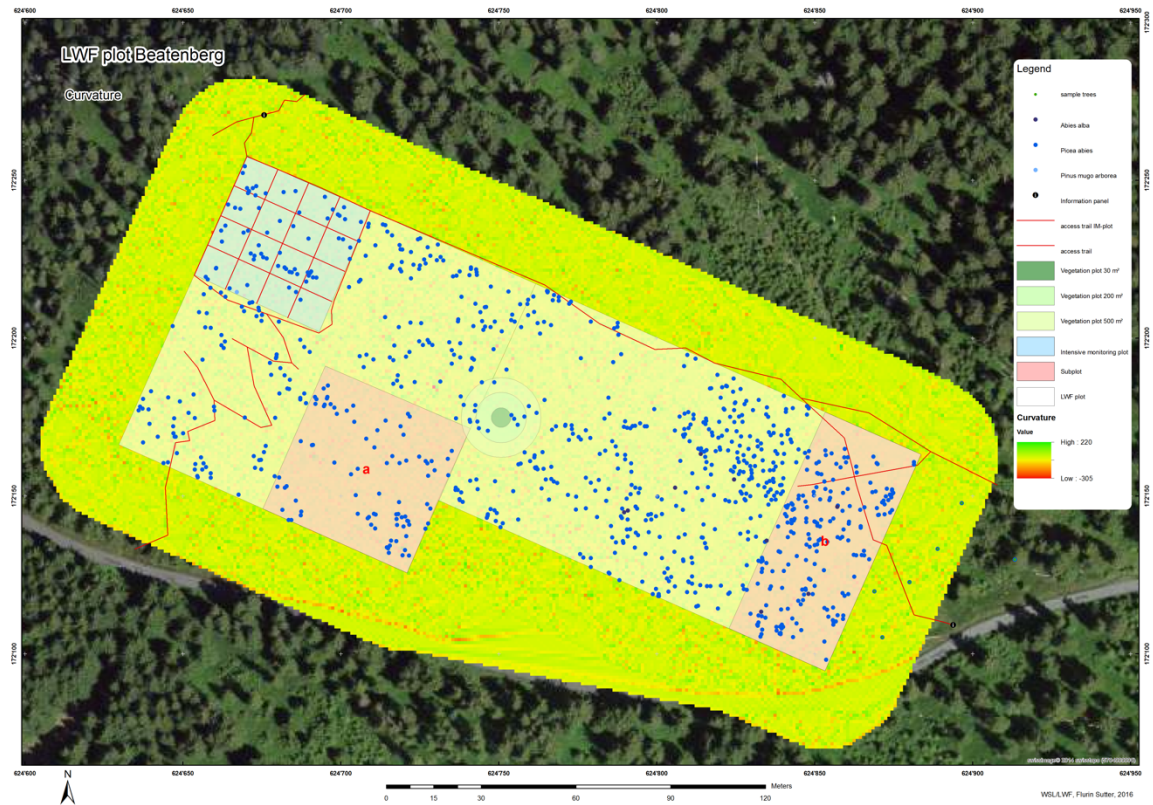
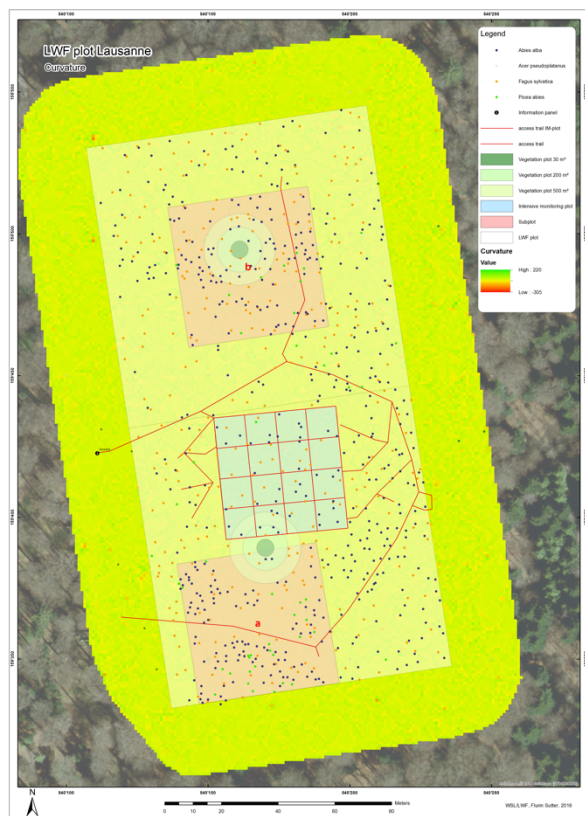


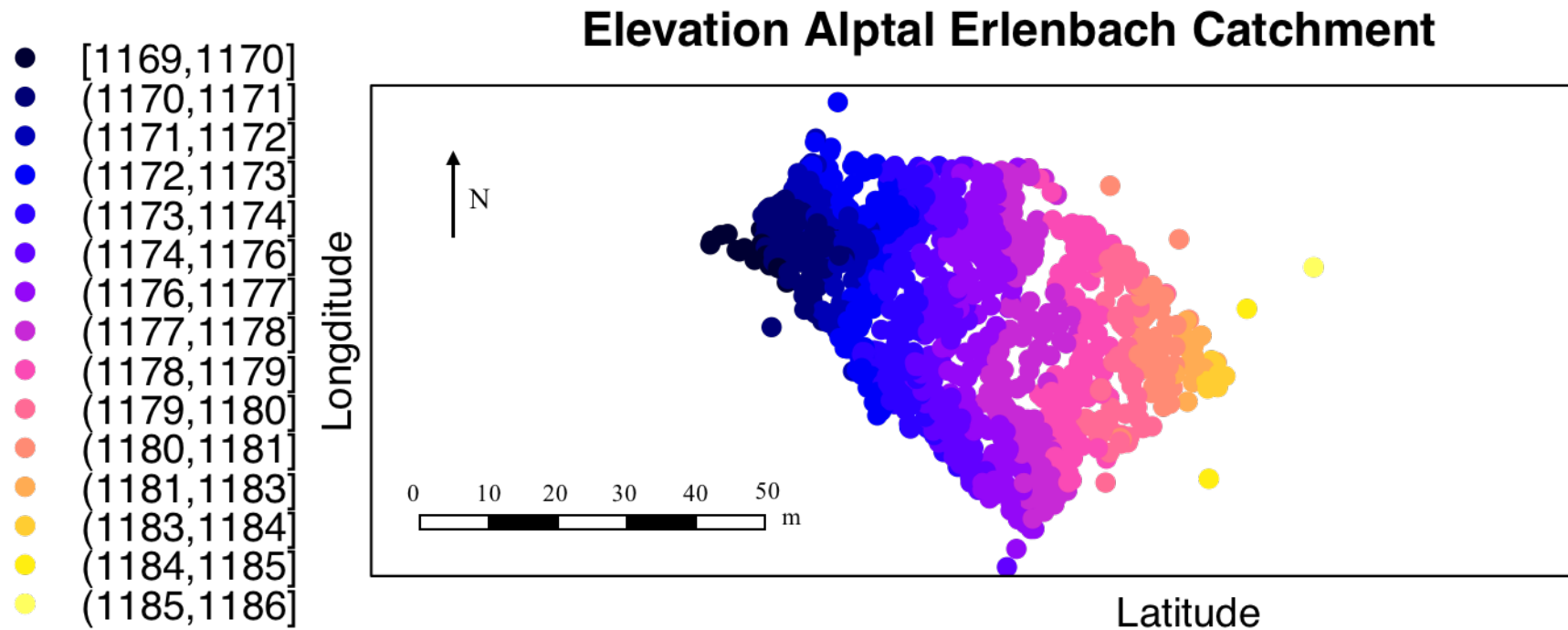
Supplement Table S1. Overview of WSL LWF sampling locations and main compositional parameters (Walthert et al., 2003).

	Soil type ¹	Location ¹	Sand _{0-5 cm} (%) ¹	Silt _{0-5 cm} (%) ¹	Clay _{0-5 cm} (%) ¹	Total soil depth (cm) ¹	pH _{0-5 cm} ¹	Bulk density _{0-5 cm} ¹	C %	SOC stocks _{0-5 cm} (kgm ⁻²) ¹	SOC stocks _{organic layer} (kgm ⁻²) ¹	MRT _{0-5 cm}	CEC _{0-5 cm} ^{1,2}
1	Gleysol	Alpthal	60	18	22	60-100	-	0.53	-	-	0.07	71	1225
2	Podzol	Beatenberg	-	-	-	65-100	3.9	-	-	-	2.80	-	340
3	Cambisol	Lausanne	62	25	13	300-320	-	1.14	3.94	-	-	-	-
4	Calcisol	Nationalpark	29	47	25	95-110	7.7	0.89	8.60	3.98	1.31	115	984
5	Regosol	Othmarsingen	65	25	10	190-220	4.4	-	-	-	0.55	67	757
6	Cambisol	Bettlachstock	22	30	48	100-120	6.9	0.60	28.1	3.21	0.24	67	879
7	Cambisol	Isonne	59	27	14	120	-	0.34	6.51	4.76	0.78	64.5	405
8	Stagnosol	Jussy	-	-	-	100	-	-	-	-	-	-	-
9	Calcisol	Lens	42	43	15	90-100	7.1	0.86	8.94	2.79	0.64	11.5	925
10	Umbrisol	Novaggio	69	18	14	150-180	4.4	1.37	4.17	5.90	1.16	63	465
11	Cambisol	Schaenis	43	35	22	220	6.7	0.92	12.69	2.85	0.08	77	947
12	Regosol	Visp	31	53	16	140	6.2	0.31	6.41	1.94	1.13	70	796
13	Stagnosol	Vordemwald	43	47	11	300	3.8	0.67	-	2.14	1.26	76	422

¹ (Walthert et al., 2003)² Cation Exchange Capacity (CEC) calculated in mmol/kg as obtained by NH₄Cl extraction (Walthert et al., 2003) as described by Blume et al., (2002).



Supplement Fig. S1. Micro-topography expressed as curvature using Digital Terrain Mapping (DTM) of WSL LWF sites (a) Lausanne and (b) Beatenberg. Colourshading indicate that the curvature (± 360 degrees) of soil topography in Lausanne is negligible whilst it is clearly present and variable in Beatenberg. Map courtesy of Flurin Sutter, WSL.



Supplement Fig. S2. Micro-topography in the Alptal NITREX in the site as determined by Digital Elevation Model (DEM). Empty spots indicate mounds with trees, all other elevation (m) is colour-coded. It is noticeable that despite the strong slope there is significant lateral micro-topographic differences. Courtesy of Patrick Schleppi, WSL.