

Supplementary material S1. VES location, inferred water table and VES Model RMS

VES ID	X ETRS89 31N (m)	Y ETRS89 31N (m)	Elevation (masl)	Inferred Water table (masl)	VES Model RMS (%)
1	354849	4560076	109	108	3.0
AC-125	356888	4575193	273	235	5.8
AC-126	357819	4576961	306	238	4.4
AC-126b	358100	4576197	290	237	3.2
AC-149	358985	4574690	277	232	5.8
AC-150	360111	4575984	306	233	2.1
AC-151	360901	4576984	323	233	4.6
AC-169	361355	4575096	322	228	2.3
AC-170	362126	4576551	294	230	1.6
AC-173	361067	4573715	290	226	2.3
AC-187	362821	4572809	238	216	3.6
AC-196	360615	4569954	245	226	2.1
AC-197	361352	4571494	249	222	3.5
AC-198	362789	4571322	217	215	4.3
AC-199	361394	4572541	263	222	4.5
AC-200	361607	4568925	254	217	2.6
AC-201	362857	4570099	208	207	2.3
AC-202	364129	4571673	270	213	8.6
AC-203	365024	4572352	309	214	3.7
AC-212	363383	4574484	310	222	4.1
AC-213	364390	4575311	353	223	2.8
AC-214	364969	4573472	294	217	3.9
AC-64	353822	4576085	297	231	1.9
AC-65	354459	4576694	311	236	2.5
AC-97	355592	4576013	283	238	2.8
AC-A	352542	4577014	366	228	4.4
BC-183	352525	4559837	78	77	2.1
BC-184	349668	4559867	82	81	7.6
BC-185	350122	4560840	83	82	5.8
BC-186	353216	4561675	92	91	1.1
n10	356486	4564805	163	150	4.8
n11	354919	4563604	131	125	5.9
n12	354314	4564373	161	124	1.9
n13	356033	4565817	178	156	2.9
n14	357205	4566671	217	180	3.2
n15	357634	4565436	180	169	2.8
n16	358839	4564926	152	151	5.6
n17	359216	4564250	180	169	6.4
n18	358273	4566627	193	190	3.1
n19	360565	4563925	182	174	3.7
n2	353981	4560917	99	98	2.4
n20	360517	4564763	209	181	9.3
n21	360003	4565100	162	161	3.1
n22	357527	4567456	239	194	1.7
n23	356284	4567606	203	182	2.1
n24	355109	4569207	186	185	2.4
n25	354521	4567643	215	165	7.1

VES ID	X ETRS89 31N (m)	Y ETRS89 31N (m)	Elevation (masl)	Infered Water table (masl)	VES Model RMS (%)
n26	355158	4566855	185	159	3.6
n27	354097	4565895	159	137	5.0
n28	355757	4568510	221	188	3.3
n29	354077	4568630	170	169	4.3
n3	353224	4561333	92	91	3.1
n30	356380	4569359	236	202	6.1
n31	357287	4568559	232	205	
n32	358187	4569129	248	221	3.7
n33	358908	4568270	250	219	3.9
n34	357440	4569918	254	217	5.9
n35	360673	4563579	115	114	5.3
n36	354459	4575908	285	233	3.9
n37	356521	4573230	252	226	2.3
n38	355767	4575622	270	236	3.1
n39	355445	4574219	258	228	5.6
n4	360204	4563087	137	136	4.7
n40	355514	4572657	243	219	5.1
n41	354816	4573353	246	220	4.0
n42	356895	4575108	272	235	5.8
n43	356061	4571743	237	217	3.4
n44	355171	4576935	313	239	3.7
n45	353381	4576206	307	229	3.8
n46	353142	4575283	280	224	3.1
n47	353765	4574443	256	222	5.5
n48	352799	4574234	259	216	4.5
n49	352094	4575784	313	222	3.8
n5	355677	4562304	129	125	2.1
n50	352039	4573407	235	207	3.8
n51	355223	4571404	227	209	5.7
n52	355665	4570521	205	204	3.8
n53	354115	4570394	204	193	5.7
n54	350349	4572896	189	188	4.1
n55	351498	4571911	215	193	8.1
n56	351209	4569681	136	135	3.9
n57	352305	4570931	185	184	3.0
n58	352962	4569721	209	179	5.8
n59	352471	4568622	194	164	1.0
n6	355889	4563800	137	136	6.2
n60	352828	4567844	194	156	5.8
n61	357166	4572708	246	226	5.2
n62	357969	4573260	251	229	4.5
n63	357402	4574119	260	231	5.7
n64	358209	4574389	270	232	7.3
n65	359149	4573902	267	230	4.0
n66	359657	4572885	276	228	5.2
n67	358556	4572282	273	228	2.8
n68	360731	4572687	266	225	2.6
n69	353375	4564839	139	122	11.7
n7	354124	4562304	119	113	5.5
n70	352673	4563732	116	109	7.3
n71	353550	4560267	91	90	5.4

VES ID	X ETRS89 31N (m)	Y ETRS89 31N (m)	Elevation (masl)	Inferred Water table (masl)	VES Model RMS (%)
n8	357521	4563478	141	140	2.1
n9	355324	4565197	174	140	3.0
BC-28	347526	4571421	242	182	2.4
BC-29	349152	4572295	172	131	5.5
BC-50	345527	4565138	204	162	2.7
BC-54	345069	4564144	203	163	4.5
BC-55	345175	4565705	229	166	2.8
BC-56	346255	4567095	215	162	2.9
BC-57	347324	4567979	204	160	0.0
BC-58	348422	4569201	191	164	3.9
BC-59	349215	4570247	176	172	3.3
BC-60	350030	4571470	161	160	4.1
BC-61	350960	4572648	202	197	3.3
BC-62	351955	4573973	254	211	3.2
BC-63	352684	4575271	291	222	3.9
BC-90	345774	4563825	184	150	2.4
BC-91	346748	4565119	180	146	1.8
BC-92	346826	4565668	186	149	1.3
BC-93	348776	4567139	176	146	3.7
BC-94	349471	4568126	163	154	1.9
BC-95	350248	4569343	154	153	4.9
BC-96	351636	4570287	163	162	4.0
BC-117	344719	4560302	137	135	2.7
BC-118	345650	4561349	150	132	3.8
BC-119	346561	4562546	148	129	2.8
BC-120	347514	4563931	151	126	4.8
BC-121	348430	4564979	142	126	3.2
BC-122	349438	4566427	152	136	3.8
BC-123	350539	4567159	130	129	2.8
BC-124	350937	4568216	123	122	4.9
BC-142	345879	4559435	109	108	6.3
BC-143	346572	4560433	122	119	4.3
BC-144	347694	4561693	121	110	2.5
BC-145	348470	4562827	122	103	5.0
BC-146	348980	4564265	128	112	3.0
BC-147	350455	4565373	117	116	5.2
BC-148	351361	4566230	106	105	5.6
BC-165	347370	4559665	105	104	4.3
BC-166	348308	4560630	102	101	3.5
BC-167	349118	4562152	108	92	3.6
BC-168	350775	4562998	89	88	4.2
BC-F3	352092	4559064	44	43	2.6
BC-F4	351989	4560598	55	54	4.6

Supplementary material S2. VES models

















