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Tracing devastating fires in Portugal to a snow archive in the Swiss Alps: a case study

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Table 1: Snow pit data underlying Figs. 2 and 3, including density, BC concentration and size, and concentrations of major ions ammonium, calcium, acetate, formate, and sulfate (all with repeat samples).

Depth																			
from	to	#	Density	BC		BC size		Ammonium		Calcium		Acetate		Formate		Nitrate		Sulfate	
(cm)	(cm)		(g/cm^3)	(ng/g)		(nm)		(ng/g)											
0	7	1	0.20	0.09	0.16	572	236	-	13	-	18	-	30	-	26	-	89	-	25
7	14	2	0.30	0.19	0.27	-	206	30	18	15	12	53	19	40	19	118	144	35	33
14	22	3	0.37	0.36	0.52	272	187	54	65	14	25	46	28	39	31	286	331	50	61
22	27	4	0.54	7.70	9.81	260	196	36	39	56	54	26	7	56	27	68	99	20	21
27	32	5	0.54	7.33	6.75	248	196	79	85	31	27	21	10	86	80	159	182	36	40
32	37	6	0.54	6.40	7.48	298	260	106	103	42	24	28	8	97	96	166	156	45	39
37	44	7	0.54	1.88	2.32	359	343	102	106	19	21	30	15	80	85	139	145	46	47
44	50	8	0.54	1.59	1.61	272	285	118	102	18	22	39	21	69	56	156	142	67	53
50	54	9	0.85	0.98	0.79	298	285	42	47	11	<10	9	6	28	30	62	72	13	14
54	58	10	0.54	1.92	1.34	248	343	83	72	14	15	22	7	73	55	125	119	24	21
58	61	11	0.85	0.73	2.37	298	285	249	242	50	23	57	5	359	164	310	559	30	63
61	67	12	0.55	4.85	2.41	298	359	250	135	21	<10	17	10	129	91	486	205	133	60
67	72	13	0.55	4.26	1.59	498	792	130	96	15	11	37	19	65	50	221	142	71	46
72	76	14	0.55	2.70	2.29	298	298	216	203	17	13	16	11	177	168	438	398	34	31
76	78	15	0.85	1.95	1.38	285	394	212	201	15	13	10	2	169	68	391	347	34	38
78	84	16	0.52	3.08	1.69	248	272	72	78	13	<10	16	77	65	68	118	99	25	25
84	90	17	0.52	2.37	2.00	206	236	65	69	11	<10	11	9	47	47	107	118	22	20
90	92	18	0.85	1.00	0.52	453	248	188	237	18	11	31	19	173	221	312	403	18	12
92	100	19	0.52	0.66	0.40	187	179	37	57	14	28	22	16	31	36	71	121	26	37
100	110	20	0.52	0.27	0.23	215	226	56	83	16	22	14	12	57	76	91	136	21	34

Table 2: Snow pit charcoal data underlying Fig. 2.

Mid depth (cm)	25	35	45	55	65	75
Charcoal conc. (fragments/L)	830	19298	786	1088	4316	1785