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Table S1. Positions of Snow Sampling Sites, Snow Depth, and Concentration of Insoluble Particles in the SnowPack (C, mg/L) in February 2020.

Site	Date	Latitude, °N	Longitude, °E	Snow depth, cm	C, mg/L
1	08.02.2020	53.353110	84.115650	49	10.8
2	08.02.2020	54.313820	83.268000	43	1.32
3	09.02.2020	55.267670	82.721080	46	0.66
4	09.02.2020	56,030940	83.776950	41	2.01
5	09.02.2020	56.539973	84.059395	36	3.21
6	09.02.2020	57.253698	83.923628	61	2.50
7	09.02.2020	57.639776	83.551018	66	2.00
8	09.02.2020	58.165450	82.552152	61	2.86
9	09.02.2020	58.644013	81.665805	50	3.04
10	11.02.2020	58.980790	80.612990	50	3.42
11	11.02.2020	59.339339	79.765788	72	1.60
12	11.02.2020	59.696980	78.935680	72	1.60
13	11.02.2020	60.075950	78.135140	70	1.64
14	11.02.2020	60.353770	77.478310	67	0.71
15	12.02.2020	60.830600	77.240780	73	1.98
16	12.02.2020	61.116430	75.851770	70	0.86
17	13.02.2020	61.379444	74.916667	86	1.03
18	13.02.2020	61.343056	73.683333	84	0.92
19	13.02.2020	60.962170	72.538410	70	1.24
20	13.02.2020	60.879560	71.367550	60	1.63
21	13.02.2020	61.033490	69.985940	58	1.96
22	14.02.2020	61.052037	68.652663	35	1.14
23	15.02.2020	60.999156	68.900517	53	1.75
24	15.02.2020	61.138230	67.769780	52	3.15
25	15.02.2020	61.480500	66.831950	84	1.30
26	15.02.2020	61.828180	66.024740	52	0.80
27	16.02.2020	62.231080	65.458900	59	1,03
28	16.02.2020	62.735510	65.456760	47	0.48
29	16.02.2020	62.734590	65.419840	70	0.70
30	16.02.2020	63.154290	64.769320	71	0.90
31	16.02.2020	63.656070	64.724190	50	0.88
32	17.02.2020	64.184470	65.392610	60	0.56
33	17.02.2020	64.773900	65.146220	54	0,52
34	17.02.2020	65.292940	64.747451	70	0.70
35	18.02.2020	65.854647	65.027917	82	0.51
36	18.02.2020	66.400238	66.234517	52	0.70









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Figure S2. Scanning electron microscope photography (SEM images) of selected insoluble particles and their energy-dispersive X-ray spectra (the probe zone is shown by a white rectangle): : \mathbf{a} , \mathbf{b} – 5 fragments of plants; **c**–**f** – ash; g–m – minerals (**g** – silica; **h** – quartz; **I** – biotite; **j** – saponite; **k** – augite; 6 l, m – corundum); n – ash.

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