

## Appendix 6. Raw wind data for Santorini tephra model for June 15<sup>th</sup> to June 17<sup>th</sup> 1993

The wind vectors were acquired from the British Atmospheric Data Centre and were part of the ECMWF ERA-15 Re-Analysis (January 1979 - February 1994) data repository. Full details on this data set can be found at <http://www.badc.rl.ac.uk/data/ecmwf-era/>. The data set contains two U and V vectors on 17 pressure levels from 1000 hPa to 10 hPa. The U and V values are on a 2.5 ° latitude and 2.5 ° longitude global grid. The vectors are recorded in m/s with a negative or positive notation representing the direction of the vector (Positive U = East, Negative U = West, Positive V = North, Negative V = South).

**Table A6.1 Raw wind vector data from ECMWF for June 15<sup>th</sup> 1993.**

hPa	June 15 00 hrs U	June 15 00 hrs V	June 15 06 hrs U	June 15 06 hrs V	June 15 12 hrs U	June 15 12 hrs V	June 15 18 hrs U	June 15 18 hrs V
1000	2.36	-0.68	3.62	-0.68	9.57	-3.79	4.51	-3.47
925	7.35	-2.78	9.07	-2.49	12.31	-6.51	5.46	-6.63
850	8.07	-3.06	10.28	-0.46	11.25	-4.33	4.9	-6.72
775	11.99	-2.19	13.98	1.97	13.11	-0.77	7.45	-6.06
700	15.18	-0.26	17.31	3.93	15.84	-0.13	11.97	-5.43
600	23.23	2.81	23.56	3.09	21.05	-2.39	16.9	-4.66
500	28.78	4.92	28.95	1.74	27.61	-5.01	19.56	-3.91
400	33.65	9.34	32.59	5.97	35.69	-7.4	24.03	-3.59
300	38.29	8.78	40.11	12.52	43.59	-6.79	33.86	-1.97
250	37.36	10.89	40.8	17.17	41.69	-0.96	39.65	2.26
200	37.64	12.36	42.27	17.62	43.06	6.39	40.57	7.05
150	33.42	10.27	34.77	14.94	37.54	5.65	32.09	10.96
100	20.53	7.84	18.25	6.73	20.2	5.51	17.17	6.69
70	6.45	5.36	4.63	3.44	5.44	3.5	8.66	2.21
50	-2.55	3.85	-2.47	3.86	-1.11	5.4	1.45	3.38
30	-6.66	1.04	-6.45	5.35	-3.36	4.62	-4.36	2.42
10	-4.29	-2.04	-5.51	0.56	-5.33	8.25	-4.14	0.02

**Table A6.2 Raw wind vector data from ECMWF for June 16<sup>th</sup> 1993.**

hPa	June 16 00 hrs U	June 16 00 hrs V	June 16 06 hrs U	June 16 06 hrs V	June 16 12 hrs U	June 16 12 hrs V	June 16 18 hrs U	June 16 18 hrs V
1000	3.22	-4.17	0.84	-7.71	0.61	-5.05	2.9	-8.46
925	3.02	-5.95	-0.86	-8.83	-1.3	-7.16	0.87	-12.21
850	1.12	-5.71	-1.12	-7.01	-2.33	-6.1	-0.34	-11.12
775	1.33	-5.03	1.11	-5.23	-0.62	-5.41	-0.44	-9.21
700	4.98	-4.28	4.18	-3.49	2.26	-3.91	0.14	-7.8
600	11.08	-3.69	7.81	-1.84	4.75	-1.67	1.73	-6.42
500	16.63	-3.5	11.81	-0.24	5.88	0.24	4.85	-6.15
400	22.95	-1.88	17.5	2.68	7.2	1.7	6.98	-5.29
300	32.7	-0.89	25.23	5.52	11.59	3.45	10.43	-2.5

250	38.01	0.86	29.62	6.72	19.19	7.24	17.19	1.92
200	37.77	5.83	30.81	7.52	27.66	10.9	24.69	5.91
150	28.35	7.51	25.91	8.08	29.93	7.28	21.58	3.57
100	16.99	4.62	14.62	3.6	13.44	4.51	12.35	4.35
70	9	3.52	6.49	0.78	2.64	3.84	5.25	2.44
50	1.21	-0.37	-3.85	1.36	-3.68	4.09	-1.09	1.75
30	-4.63	-0.81	-8.11	0.45	-4.16	2.53	-7.75	2.55
10	-1.09	-3.83	-4.5	1.22	-4.46	6.18	-6.34	2.69

**Table A6.3** Raw wind vector data from ECMWF for June 17<sup>th</sup> 1993

hPa	June 17 00 hrs U	June 17 00 hrs V	June 17 06 hrs U	June 17 06 hrs V	June 17 12 hrs U	June 17 12 hrs V	June 17 18 hrs U	June 17 18 hrs V
1000	2.19	-6.9	-0.28	-8.98	2.24	-6.98	2.96	-5.99
925	1.13	-11.71	-2.23	-13.14	1.67	-9.86	1.95	-9.96
850	0.32	-11.53	-1.54	-11.77	1.7	-9.58	2.09	-10.44
775	-0.28	-9.88	-1.01	-10.45	1.65	-9.42	2.98	-9.58
700	0.19	-7.78	-0.06	-9.73	1.97	-8.76	3.67	-9.01
600	1.09	-6.46	1.97	-9.56	3.43	-8.65	5.71	-10.74
500	0.68	-7.16	3.54	-9.06	6.43	-6.76	8.84	-14.86
400	1.49	-7.66	3.26	-8.45	8.86	-6.43	9.85	-20.07
300	4.62	-6.8	7.96	-6.47	11.49	-9.99	12.33	-22.49
250	10.37	-4.41	12.16	-3.54	13.63	-12.14	16.15	-16.16
200	18.5	0.25	16.67	-2.12	16.8	-10.72	21.22	-6.01
150	18.67	3.04	19.06	-0.69	17.51	-1.29	21.13	-0.03
100	13.13	2.93	10.69	-0.06	11.88	5.56	11.61	2.07
70	4.06	0.41	3.6	1.11	3.27	4.85	3.38	2.94
50	-3.37	-0.26	-3.5	3.22	-4.45	4.2	-3.56	2.7
30	-6.89	2.53	-9.16	2.92	-6.81	3.99	-6.9	2.6
10	-6.59	0.59	-7.5	2.51	-6.02	3.09	-4.48	-2.27