Dust deposition fluxes at the gateway to the Southern Ocean: investigating the use of lithogenic tracer measurements in aerosols collected in Tasmania, Australia

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Table S1. Arizona Test Dust (ATD, n=6, Morton et al., 2013) and LOESS (GeoPT13, n=6, Potts et al., 2003) reference material mean measurements (conc.), standard deviations (σ) and recoveries (%) calculated for each lithogenic tracer of interest. Average recoveries for both CRMs also shown.

	Reference value		ATD (measured)			GeoPT13 (measured)			Both CRMs
	ATD	GeoPT13	conc.	σ	%	conc.	σ	%	%
Th (ng mg^{-1})	19.4	8.1	12.0	1.0	62	7.0	1.0	86	73
Ti (%)	0.6	0.4	0.4	0.06	81	0.3	0.09	79	80
Fe (%)	4.6	2.1	3.8	0.4	81	2.0	0.5	93	87
Al (%)	12.3	6.2	10.6	1.1	85	5.7	0.9	91	88
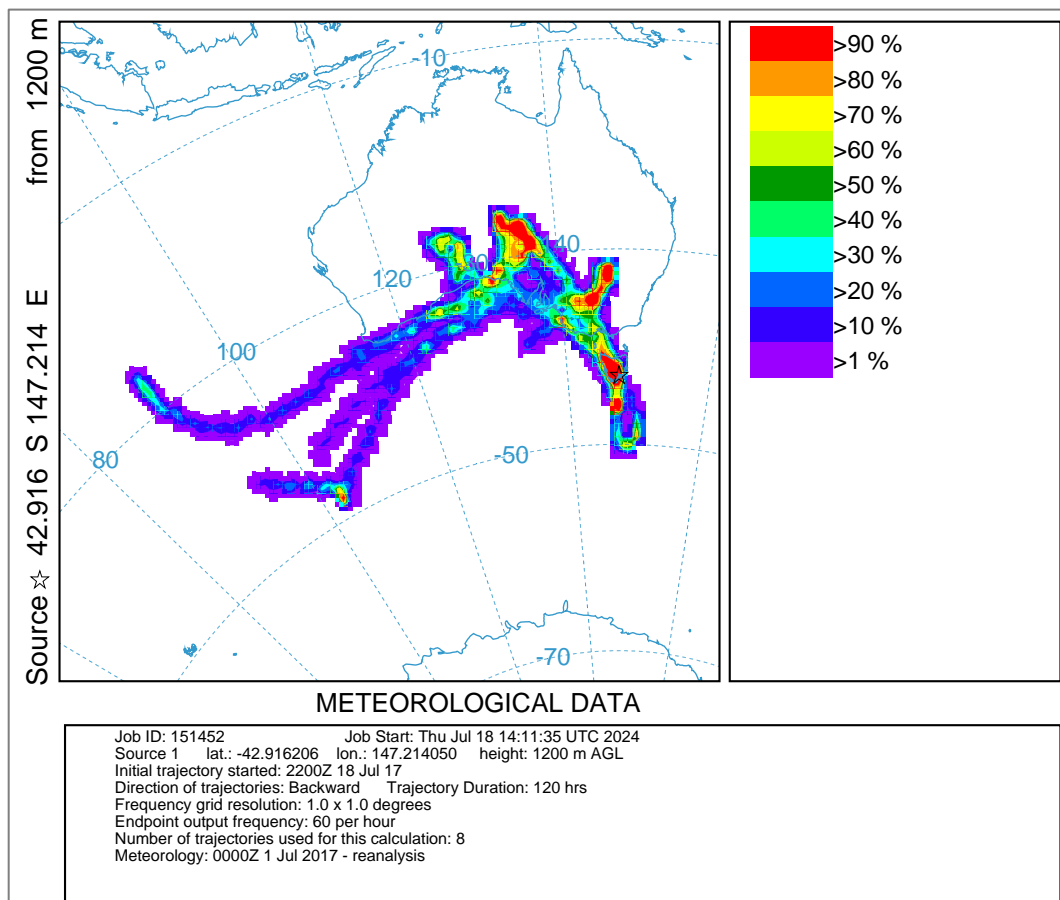
Figure S1. HYSPLIT (NOAA), air-mass back-trajectory frequency showing wind occurring at our kunanyi/Mt Wellington aerosol sampling station (1271m of altitude) and originating from the kati thanda/Lake Eyre and dhungala-barka/Murray-Darling geological basins (see Figure 1) less than 5 days earlier. The back-trajectory was run over 10 days ending on the 18th of July 2017 as an example.

Table S2. Concentrations of total Al, Fe, Th and Ti concentrations (in ng mg^{-1}) measured in eleven individual NGSA soil samples collected in South Australia (SA), Victoria (VIC), and Western Australia (WA) and sieved to <63 µm. Mean and standard deviation (σ) values are shown for each region and mean, median and standard deviation, for all samples.

Region	Abbreviated ID	NGSA site ID	Total Al	Total Fe	Total Th	Total Ti
SA	23	2007190223	22220	19362	13	9032
	26	2007190326	41613	22293	5	2594
	43	2007190743	39924	20788	6	2461
	56	2007190256	24990	19626	15	7371
	88	2007190188	43743	39422	15	5328
		regional mean	34498	24298	11	5357
		σ	10083	8533	5	2898
VIC	62	2007190162	1895	942	5	533
	64	2007190964	62994	33011	10	3829
	74	2007191374	54367	25061	14	4926
	93	2007190493	38617	15759	7	4539
		regional mean	39468	18693	9	3457
		σ	27006	13775	4	2001
WA	28	2007190028	53945	30708	13	3995
	29	2007190029	39857	21807	8	2835
		regional mean	46901	26258	11	3415
		σ	9962	6294	4	820
All		mean	38560	22616	10	4313
		median	39924	21807	10	3995
		σ	17085	10012	4	2372
Mean metal concentration in UCC (McLennan, 2001)			80400	45000	11	41000

Table S3. Elemental ratios of lithogenic tracers (X = Fe, Th, Ti) in kunanyi/Mt Wellington aerosol samples calculated using Al as the crustal reference element. Thorium was only analyzed during analytical runs undertaken form 2020 onward, hence data is missing for all samples analyzed prior to this date.

Sample ID	Date	Fe_Al	Th_Al*	Ti_Al
MW04	05/11/2016	1.03	3.90E-05	0.02
MW05	12/11/2016	1.14	9.61E-05	0.08
MW06	20/11/2016	1.16	1.00E-04	0.07
MW08	03/12/2016	0.61		0.08
MW10	18/12/2016	0.45		0.02
MW11	24/12/2016	0.45		0.02
MW13	07/01/2017	1.15	1.51E-04	0.08
MW15	14/01/2017	0.86	1.09E-04	0.07
MW17	26/01/2017	0.54		0.03
MW18	04/02/2017	0.94	1.28E-04	0.08
MW19	11/02/2017	0.44		0.01
MW20	19/02/2017	0.88	1.51E-04	0.09
MW21	27/02/2017	0.89	1.29E-04	0.09
MW23	13/03/2017	0.56	1.22E-04	0.06
MW24	20/03/2017	0.45		0.02
MW25	26/03/2017	0.46		0.07
MW26	01/04/2017	0.52		0.03
MW28	09/04/2017	0.28		0.01
MW41	29/10/2017	0.39		0.03
MW43	11/11/2017	0.50		0.02
MW44	18/11/2017	0.42		0.03
MW45	25/11/2017	0.44		0.01
MW46	02/12/2017	0.63	8.68E-05	0.04
MW49	16/12/2017	0.97	1.60E-04	0.09
MW50	13/12/2017	0.73		0.02
MW51	14/12/2017	0.86		0.03
MW52	15/12/2017	1.05		0.02
MW53	16/12/2017	1.22		0.08
MW54	17/12/2017	0.87		0.03
MW55	18/12/2017	1.00		0.03
MW58	24/12/2017	0.83	1.42E-04	0.09
MW59	31/12/2018	0.74	1.42E-04	0.08
MW60	06/01/2018	0.88	1.46E-04	0.08
MW61	14/01/2018	0.79	1.40E-04	0.10
MW62	20/01/2018	0.80	1.21E-04	0.07
MW63	28/01/2018	1.13	8.86E-05	0.07

MW64	04/02/2018	0.96	1.02E-04	0.08
MW66	17/02/2018	0.83	1.20E-04	0.10
MW67	24/02/2018	0.89	8.58E-05	0.06
MW68	03/03/2018	0.88	1.60E-04	0.08
MW71	25/03/2018	0.67	1.82E-04	0.08
MW72	01/04/2018	0.82	1.86E-04	0.07
MW82	04/01/2019	0.81		0.08
MW83	07/01/2019	1.23		0.09
MW84	13/01/2019	0.83		0.09
MW85	19/01/2019	0.80		0.07
MW86	23/01/2019	0.90		0.08
MW87	26/01/2019	0.66		0.08
MW88	30/01/2019	0.78		0.08
MW89	02/02/2019	0.68		0.09
MW90	05/02/2019	0.97		0.09
MW91	08/02/2019	0.92		0.07
MW92	12/02/2019	0.92		0.11
MW94	17/02/2019	0.89	1.65E-04	0.07
MW96	04/03/2019	0.59	1.64E-04	0.07
MW97	14/03/2019	0.98	1.40E-04	0.10
MW98	24/03/2019	0.73	1.60E-04	0.08
MW99	01/04/2019	0.85	1.65E-04	0.10
MW100	09/04/2019	0.76	1.36E-04	0.08
MW111	04/11/2019	0.61	1.74E-04	0.07
MW112	13/11/2019	0.60	5.65E-05	0.03
MW113	24/11/2019	0.65	1.53E-04	0.07
MW114	01/12/2019	1.34	1.25E-04	0.07
MW115	08/12/2019	0.70	1.43E-04	0.06
MW116	14/12/2019	1.04	9.64E-05	0.06
MW118	20/12/2019	0.79	1.81E-04	0.08
MW119	31/12/2020	0.74	1.38E-04	0.07
MW120	08/01/2020	0.92	1.36E-04	0.08
MW120_2	13/01/2020	0.77	1.25E-04	0.10
MW121	16/01/2020	0.78	1.36E-04	0.06
MW122	19/01/2020	0.69	1.14E-04	0.07
MW123	25/01/2020	0.64	1.27E-04	0.09
MW124	01/02/2020	0.54	1.50E-04	0.06
MW125	07/02/2020	0.81	8.85E-05	0.07
MW126	14/02/2020	0.68	1.31E-04	0.08
MW127b	01/03/2020	0.91	1.60E-04	0.08
MW128	06/03/2020	0.91	2.33E-05	0.07
MW129	14/03/2020	0.79	1.55E-04	0.08
MW130	20/03/2020	0.81	1.61E-04	0.07

MW131	27/03/2020	0.71	2.09E-04	0.09
MW132	12/04/2020	0.69	1.07E-04	0.07
MW134	26/04/2020	0.78	6.63E-05	0.07
MW136	11/05/2020	0.48		0.04
MW137	17/05/2020	0.54	2.62E-04	0.06
MW138	24/05/2020	0.49	2.03E-03	0.07
MW139	01/06/2020	0.60	1.10E-04	0.07
MW140	07/06/2020	0.26	2.14E-04	0.02
MW141	15/06/2020	0.27	2.12E-05	0.01
MW142	22/06/2020	0.23	4.63E-05	0.02
MW144	15/07/2020	0.26	3.64E-05	0.01
MW145	25/07/2020	0.63	2.59E-03	0.08
MW146	05/08/2020	0.13	7.78E-05	0.01
MW147	19/08/2020	0.33	1.48E-04	0.03
MW148	02/09/2020	0.59	1.46E-04	0.07
MW150	12/09/2020	0.82	1.43E-04	0.07
MW152	06/10/2020	0.28	5.94E-05	0.02
MW153	21/10/2020	0.78	6.00E-05	0.05
MW155	04/11/2020	0.71	8.04E-05	0.08
MW156	09/11/2020	0.64	9.93E-05	0.07
MW157	26/11/2020	0.56	7.90E-05	0.06
MW159	22/12/2020	0.88	1.13E-04	0.09
MW160	31/12/2020	1.02	9.30E-05	0.08
MW161	08/01/2021	0.92	9.49E-05	0.07
MW164	31/01/2021	0.46	6.42E-05	0.03
MW165	06/02/2021	0.55	8.15E-05	0.06
MW166	17/02/2021	0.73	6.88E-05	0.07
MW167	03/03/2021	0.87	1.50E-04	0.08
MW168	19/03/2021	0.83	8.58E-05	0.10
MW169	02/04/2021	0.76	1.70E-04	0.06
MW172	03/05/2021	0.42	1.16E-04	0.03
MW173	13/05/2021	1.10	1.65E-04	0.03
MW174	25/05/2021	0.23	4.74E-05	0.02
MW175	05/06/2021	0.44	2.97E-04	0.05
MW177	20/06/2021	0.44	4.74E-04	0.02
MW179	11/07/2021	0.56	1.96E-04	0.02
MW180	19/07/2021	0.14		0.00
MW182	03/08/2021	0.08	8.79E-06	0.00
MW184	24/08/2021	0.03	3.17E-06	0.00
MW187	13/09/2021	0.22	2.67E-04	0.02
MW189	27/09/2021	0.25	4.81E-05	0.02
MW190	04/10/2021	0.58	2.19E-05	0.02
MW193	06/11/2021	0.59	1.14E-04	0.05

MW194a	15/11/2021	0.18	2.86E-05	0.00
MW194b	25/11/2021	0.33	1.10E-04	0.02
MW195	04/12/2021	0.77	1.61E-04	0.09

Table S4. Lithogenic deposition fluxes (FLith$_{(X)}$, mg m^{-2} d^{-1}) calculated based on the analysis of individual tracer "X" (X=Al, Fe, Th or Ti) in aerosol samples collected at kunanyi/Mt Wellington. FLith$_{(X)}$ are calculated based on the relative abundance of each tracer in the UCC (McLennan, 2001). The average of all four FLith$_{(X)}$ for a single sample is called FLith$_{(Av)}$ and is displayed with its standard deviation (σ). Dates correspond to the sample's mid-sampling collection time. Thorium was only analyzed during analytical runs undertaken form 2020 onward, hence data is missing for all samples analyzed prior to this date.

Sample ID	Date	Flith$_{(Al)}$	Flith$_{(Fe)}$	Flith$_{(Th)}$	Flith$_{(Ti)}$	Flith$_{(Av)}$	σ
MW04	05/11/2016	0.33	0.77	0.10	0.16	0.34	0.31
MW05	12/11/2016	0.58	1.51	0.42	0.86	0.84	0.48
MW06	20/11/2016	0.28	0.74	0.21	0.38	0.40	0.24
MW08	03/12/2016	1.88	2.64		3.06	2.53	0.60
MW10	18/12/2016	1.79	1.86		0.68	1.44	0.66
MW11	24/12/2016	3.80	3.92		1.72	3.15	1.24
MW13	07/01/2017	1.60	4.23	1.81	2.48	2.53	1.19
MW15	14/01/2017	0.26	0.51	0.21	0.35	0.33	0.13
MW17	26/01/2017	0.97	1.21		0.54	0.91	0.34
MW18	04/02/2017	0.42	0.90	0.40	0.69	0.60	0.24
MW19	11/02/2017	0.97	0.97		0.25	0.73	0.42
MW20	19/02/2017	0.83	1.66	0.94	1.48	1.23	0.41
MW21	27/02/2017	2.04	4.18	1.98	3.64	2.96	1.12
MW23	13/03/2017	3.11	3.99	2.86	3.71	3.42	0.52
MW24	20/03/2017	2.63	2.69		1.29	2.20	0.80
MW25	26/03/2017	1.26	1.32		1.78	1.45	0.29
MW26	01/04/2017	1.49	1.78		0.81	1.36	0.50
MW28	09/04/2017	8.41	5.50		1.87		
MW41	29/10/2017	2.00	1.77		1.16		
MW43	11/11/2017	5.67	6.53		2.58	4.93	2.08
MW44	18/11/2017	3.62	3.52		1.80	2.98	1.02
MW45	25/11/2017	5.13	5.21		1.21	3.85	2.28
MW46	02/12/2017	1.07	1.54	0.69	0.91	1.05	0.36
MW49	16/12/2017	1.57	3.48	1.88	2.62	2.39	0.85
MW50	13/12/2017	3.87	6.46		1.86	4.07	2.31
MW51	14/12/2017	0.37	0.73		0.20	0.43	0.27
MW52	15/12/2017	1.18	2.84		0.53	1.52	1.19
MW53	16/12/2017	0.11	0.31		0.17	0.20	0.10
MW54	17/12/2017	1.93	3.84		1.11	2.30	1.40
MW55	18/12/2017	3.57	8.18		2.14	4.63	3.16
MW58	24/12/2017	0.47	0.89	0.50	0.81	0.67	0.22
MW59	31/12/2018	1.07	1.83	1.15	1.60		
MW60	06/01/2018	1.02	2.06	1.12	1.64	1.46	0.48
MW61	14/01/2018	1.31	2.38	1.38	2.44	1.88	0.62
MW62	20/01/2018	1.74	3.21	1.59	2.36	2.23	0.74

MW63	28/01/2018	0.50	1.30	0.33	0.69	0.70	0.42
MW64	04/02/2018	1.23	2.70	0.94	2.05	1.73	0.80
MW66	17/02/2018	1.29	2.46	1.16	2.62	1.88	0.76
MW67	24/02/2018	0.16	0.33	0.10	0.19	0.20	0.10
MW68	03/03/2018	1.07	2.15	1.28	1.72	1.55	0.48
MW71	25/03/2018	0.92	1.42	1.26	1.45	1.26	0.24
MW72	01/04/2018	0.30	0.56	0.42	0.43		
MW82	04/01/2019	3.43	6.40		5.71		
MW83	07/01/2019	1.14	3.22		1.94	2.10	1.05
MW84	13/01/2019	3.73	7.14		6.90	5.92	1.90
MW85	19/01/2019	2.01	3.70		2.70	2.81	0.85
MW86	23/01/2019	1.84	3.80		2.91	2.85	0.98
MW87	26/01/2019	6.83	10.36		10.49	9.23	2.08
MW88	30/01/2019	2.24	4.00		3.54	3.26	0.91
MW89	02/02/2019	2.21	3.45		4.05	3.24	0.94
MW90	05/02/2019	1.65	3.67		2.84	2.72	1.02
MW91	08/02/2019	0.25	0.52		0.33	0.37	0.14
MW92	12/02/2019	0.10	0.21		0.22	0.18	0.07
MW94	17/02/2019	0.57	1.16	0.70	0.82	0.81	0.26
MW96	04/03/2019	6.30	8.52	7.78	8.82	7.85	1.12
MW97	14/03/2019	0.98	2.22	1.04	1.94	1.55	0.63
MW98	24/03/2019	0.54	0.91	0.65	0.86	0.74	0.17
MW99	01/04/2019	0.86	1.68	1.06	1.71	1.33	0.43
MW100	09/04/2019	0.44	0.77	0.45	0.73		
MW111	04/11/2019	3.66	5.13	4.80	5.11		
MW112	13/11/2019	1.15	1.60	0.49	0.60	0.96	0.51
MW113	24/11/2019	3.98	5.97	4.57	5.33	4.96	0.87
MW114	01/12/2019	0.13	0.40	0.12	0.18	0.21	0.13
MW115	08/12/2019	1.11	1.78	1.20	1.35	1.36	0.30
MW116	14/12/2019	0.19	0.46	0.14	0.24	0.26	0.14
MW118	20/12/2019	2.07	3.78	2.82	3.17	2.96	0.71
MW119	31/12/2020	1.58	2.70	1.64	2.25	2.04	0.53
MW120	08/01/2020	2.80	5.90	2.87	4.55	4.03	1.48
MW120_2	13/01/2020	2.23	3.92	2.09	4.18	3.11	1.10
MW121	16/01/2020	7.13	12.71	7.30	8.97	9.03	2.59
MW122	19/01/2020	1.65	2.63	1.42	2.24	1.98	0.55
MW123	25/01/2020	3.42	4.99	3.27	5.78	4.36	1.22
MW124	01/02/2020	3.05	3.76	3.44	3.59	3.46	0.31
MW125	07/02/2020	1.51	2.81	1.00	2.13	1.86	0.78
MW126	14/02/2020	1.21	1.91	1.19	1.83	1.54	0.39
MW127b	01/03/2020	0.24	0.51	0.29	0.40	0.36	0.12
MW128	06/03/2020	1.42	2.97	0.25	1.82	1.61	1.12
MW129	14/03/2020	1.64	2.98	1.91	2.63	2.29	0.62

MW130	20/03/2020	1.05	1.95	1.27	1.35	1.40	0.38
MW131	27/03/2020	1.93	3.13	3.04	3.31	2.85	0.62
MW132	12/04/2020	0.21	0.32	0.16	0.30	0.25	0.08
MW134	26/04/2020	0.13	0.24	0.06	0.21	0.16	0.08
MW136	11/05/2020	0.06	0.06		0.04	0.06	0.01
MW137	17/05/2020	0.74	0.92	1.45	0.94	1.01	0.31
MW138	24/05/2020	0.08	0.08	1.15	0.10	0.35	0.53
MW139	01/06/2020	0.31	0.43	0.26	0.43	0.36	0.09
MW140	07/06/2020	0.08	0.05	0.13	0.03	0.07	0.04
MW141	15/06/2020	1.09	0.67	0.17	0.23	0.54	0.43
MW142	22/06/2020	0.91	0.49	0.32	0.32	0.51	0.28
MW144	15/07/2020	0.83	0.49	0.23	0.22	0.44	0.29
MW145	25/07/2020	0.08	0.11	1.53	0.13	0.46	0.71
MW146	05/08/2020	0.70	0.21	0.41	0.11	0.36	0.26
MW147	19/08/2020	0.35	0.27	0.39	0.19	0.30	0.09
MW148	02/09/2020	0.82	1.12	0.90	1.08	0.98	0.14
MW150	12/09/2020	0.30	0.55	0.32	0.40	0.39	0.12
MW152	06/10/2020	1.85	1.19	0.82	0.77	1.16	0.50
MW153	21/10/2020	0.82	1.48	0.37	0.79	0.86	0.46
MW155	04/11/2020	0.62	1.00	0.37	0.93	0.73	0.29
MW156	09/11/2020	2.71	3.96	2.02	3.79	3.12	0.92
MW157	26/11/2020	1.54	1.97	0.92	1.80	1.56	0.46
MW159	22/12/2020	0.30	0.61	0.26	0.54	0.43	0.17
MW160	31/12/2020	0.33	0.76	0.23	0.51	0.45	0.23
MW161	08/01/2021	1.08	2.27	0.77	1.49	1.40	0.65
MW164	31/01/2021	0.80	0.85	0.39	0.51	0.64	0.22
MW165	06/02/2021	1.00	1.26	0.61	1.12	1.00	0.28
MW166	17/02/2021	1.48	2.48	0.77	2.06	1.70	0.74
MW167	03/03/2021	0.50	0.99	0.56	0.73	0.69	0.22
MW168	19/03/2021	2.10	3.99	1.36	4.13	2.90	1.38
MW169	02/04/2021	0.74	1.29	0.94	0.93	0.98	0.23
MW172	03/05/2021	4.56	4.37	3.99	3.06	3.99	0.67
MW173	13/05/2021	0.35	0.88	0.43	0.21	0.47	0.29
MW174	25/05/2021	1.75	0.94	0.62	0.56	0.97	0.55
MW175	05/06/2021	0.41	0.41	0.91	0.38	0.53	0.25
MW177	20/06/2021	0.15	0.15	0.52	0.06	0.22	0.20
MW179	11/07/2021	0.37	0.48	0.55	0.14	0.39	0.18
MW180	19/07/2021	0.46	0.15		0.04	0.21	0.22
MW182	03/08/2021	1.52	0.28	0.10	0.14	0.51	0.68
MW184	24/08/2021	2.10	0.17	0.05	0.06	0.59	1.01
MW187	13/09/2021	1.66	0.84	3.33	0.50	1.59	1.26
MW189	27/09/2021	1.30	0.75	0.47	0.45	0.74	0.40
MW190	04/10/2021	0.21	0.28	0.03	0.10	0.16	0.11

MW193	06/11/2021	1.23	1.66	1.05	1.28	1.31	0.26
MW194a	15/11/2021	2.30	0.93	0.49	0.14	0.97	0.94
MW194b	25/11/2021	1.43	1.09	1.18	0.56	1.07	0.36
MW195	04/12/2021	5.49	9.67	6.62	9.64	7.85	2.13

Table S5. Average lithogenic deposition fluxes (FLith$_{(Av)}$, mg m^{-2} d^{-1}) calculated based on the relative abundance of each tracer in the UCC (FLith$_{(Av)}$ $_{/UCC}$, McLennan, 2001) and based on measurements in Australian soil samples (FLith$_{(Av)/Aus}$, this study) together with the associated standard deviations (σ).

Sample ID	Date	FLith$_{(Av)/UCC}$	σ	FLith$_{(Av)}$/$_{Aus}$	σ
MW04	05/11/2016	0.34	0.31	0.58	0.57
MW05	12/11/2016	0.84	0.48	1.29	0.92
MW06	20/11/2016	0.40	0.24	0.62	0.45
MW08	03/12/2016	2.53	0.60	3.90	0.93
MW10	18/12/2016	1.44	0.66	2.65	1.84
MW11	24/12/2016	3.14	1.24	5.71	3.76
MW13	07/01/2017	2.53	1.19	3.79	2.35
MW15	14/01/2017	0.33	0.13	0.50	0.28
MW17	26/01/2017	0.90	0.34	1.61	0.97
MW18	04/02/2017	0.60	0.24	0.89	0.47
MW19	11/02/2017	0.73	0.42	1.38	1.05
MW20	19/02/2017	1.23	0.41	1.79	0.77
MW21	27/02/2017	2.95	1.12	4.35	2.09
MW23	13/03/2017	3.42	0.52	5.16	2.18
MW24	20/03/2017	2.20	0.80	3.97	2.56
MW25	26/03/2017	1.45	0.29	2.28	0.66
MW26	01/04/2017	1.36	0.50	2.42	1.47
MW28	09/04/2017	5.26	3.28	10.27	9.10
MW41	29/10/2017	1.64	0.43	2.92	1.82
MW43	11/11/2017	4.93	2.08	8.91	5.78
MW44	18/11/2017	2.98	1.02	5.37	3.47
MW45	25/11/2017	3.85	2.28	7.33	5.63
MW46	02/12/2017	1.05	0.36	1.68	1.01
MW49	16/12/2017	2.39	0.85	3.51	1.71
MW50	13/12/2017	4.07	2.30	7.24	4.86
MW51	14/12/2017	0.43	0.27	0.76	0.53
MW52	15/12/2017	1.52	1.20	2.68	2.15
MW53	16/12/2017	0.20	0.10	0.32	0.19
MW54	17/12/2017	2.30	1.40	4.02	2.76
MW55	18/12/2017	4.63	3.16	8.05	5.90
MW58	24/12/2017	0.66	0.22	0.97	0.42
MW59	31/12/2017	1.41	0.36	2.09	0.86
MW60	06/01/2018	1.46	0.48	2.16	1.00
MW61	14/01/2018	1.88	0.62	2.72	1.07
MW62	20/01/2018	2.22	0.74	3.36	1.70
MW63	28/01/2018	0.70	0.42	1.09	0.80

MW64	04/02/2018	1.73	0.80	2.59	1.51
MW66	17/02/2018	1.88	0.76	2.71	1.19
MW67	24/02/2018	0.20	0.10	0.31	0.20
MW68	03/03/2018	1.55	0.48	2.28	1.01
MW71	25/03/2018	1.26	0.24	1.82	0.54
MW72	01/04/2018	0.43	0.11	0.63	0.25
MW82	04/01/2019	5.18	1.55	8.04	2.75
MW83	07/01/2019	2.10	1.05	3.29	1.88
MW84	13/01/2019	5.92	1.90	9.06	2.83
MW85	19/01/2019	2.80	0.85	4.49	1.88
MW86	23/01/2019	2.85	0.98	4.47	1.86
MW87	26/01/2019	9.23	2.08	14.41	4.14
MW88	30/01/2019	3.26	0.91	5.09	1.73
MW89	02/02/2019	3.24	0.94	4.92	1.06
MW90	05/02/2019	2.72	1.02	4.22	1.80
MW91	08/02/2019	0.37	0.140	0.59	0.28
MW92	12/02/2019	0.18	0.07	0.27	0.10
MW94	17/02/2019	0.81	0.25	1.20	0.57
MW96	04/03/2019	7.85	1.12	11.48	3.61
MW97	14/03/2019	1.55	0.63	2.25	1.10
MW98	24/03/2019	0.74	0.17	1.08	0.39
MW99	01/04/2019	1.33	0.43	1.90	0.71
MW100	09/04/2019	0.60	0.18	0.87	0.36
MW111	04/11/2019	4.67	0.69	6.81	2.10
MW112	13/11/2019	0.96	0.51	1.62	1.24
MW113	24/11/2019	4.96	0.87	7.35	2.75
MW114	01/12/2019	0.21	0.13	0.32	0.25
MW115	08/12/2019	1.36	0.30	2.05	0.90
MW116	14/12/2019	0.26	0.14	0.40	0.28
MW118	20/12/2019	2.96	0.71	4.32	1.62
MW119	31/12/2019	2.04	0.53	3.04	1.31
MW120	08/01/2020	4.03	1.48	5.98	3.00
MW120_2	13/01/2020	3.10	1.10	4.50	1.84
MW121	16/01/2020	9.03	2.59	13.63	6.58
MW122	19/01/2020	1.98	0.55	2.98	1.38
MW123	25/01/2020	4.36	1.22	6.35	2.29
MW124	01/02/2020	3.46	0.30	5.16	1.89
MW125	07/02/2020	1.86	0.78	2.84	1.62
MW126	14/02/2020	1.54	0.39	2.27	0.91
MW127b	01/03/2020	0.36	0.12	0.53	0.24
MW128	06/03/2020	1.61	1.12	2.57	2.04

MW129	14/03/2020	2.29	0.62	3.35	1.35
MW130	20/03/2020	1.40	0.38	2.10	0.95
MW131	27/03/2020	2.85	0.62	4.06	1.03
MW132	12/04/2020	0.25	0.07	0.37	0.17
MW134	26/04/2020	0.16	0.08	0.24	0.14
MW136	11/05/2020	0.06	0.01	0.10	0.05
MW137	17/05/2020	1.01	0.31	1.44	0.39
MW138	24/05/2020	0.35	0.53	0.42	0.56
MW139	01/06/2020	0.36	0.09	0.54	0.23
MW140	07/06/2020	0.07	0.04	0.11	0.07
MW141	15/06/2020	0.54	0.43	1.02	1.12
MW142	22/06/2020	0.51	0.28	0.90	0.86
MW144	15/07/2020	0.44	0.29	0.81	0.81
MW145	25/07/2020	0.46	0.71	0.55	0.76
MW146	05/08/2020	0.36	0.26	0.64	0.69
MW147	19/08/2020	0.30	0.09	0.47	0.27
MW148	02/09/2020	0.98	0.14	1.45	0.53
MW150	12/09/2020	0.39	0.12	0.59	0.28
MW152	06/10/2020	1.16	0.50	2.00	1.68
MW153	21/10/2020	0.86	0.46	1.39	0.98
MW155	04/11/2020	0.73	0.29	1.10	0.58
MW156	09/11/2020	3.12	0.92	4.70	2.18
MW157	26/11/2020	1.56	0.46	2.40	1.27
MW159	22/12/2020	0.43	0.17	0.63	0.32
MW160	31/12/2020	0.45	0.23	0.69	0.44
MW161	08/01/2021	1.40	0.65	2.15	1.32
MW164	31/01/2021	0.64	0.22	1.05	0.73
MW165	06/02/2021	1.00	0.278	1.55	0.82
MW166	17/02/2021	1.70	0.74	2.60	1.51
MW167	03/03/2021	0.69	0.22	1.03	0.49
MW168	19/03/2021	2.90	1.38	4.25	2.19
MW169	02/04/2021	0.98	0.23	1.46	0.61
MW172	03/05/2021	3.99	0.67	6.33	3.50
MW173	13/05/2021	0.47	0.29	0.75	0.56
MW174	25/05/2021	0.97	0.55	1.73	1.67
MW175	05/06/2021	0.53	0.25	0.75	0.30
MW177	20/06/2021	0.22	0.20	0.30	0.21
MW179	11/07/2021	0.38	0.18	0.61	0.34
MW180	19/07/2021	0.21	0.22	0.45	0.55
MW182	03/08/2021	0.51	0.68	1.07	1.68
MW184	24/08/2021	0.59	1.01	1.33	2.42

MW187	13/09/2021	1.58	1.26	2.37	1.70
MW189	27/09/2021	0.74	0.40	1.32	1.23
MW190	04/10/2021	0.16	0.11	0.28	0.24
MW193	06/11/2021	1.31	0.26	2.01	0.97
MW194a	15/11/2021	0.97	0.94	1.91	2.41
MW194b	25/11/2021	1.06	0.36	1.75	1.20
MW195	04/12/2021	7.85	2.13	11.35	4.05