

Supplement of *Clim. Past*, 12, 1435–1444, 2016
<http://www.clim-past.net/12/1435/2016/>
doi:10.5194/cp-12-1435-2016-supplement
© Author(s) 2016. CC Attribution 3.0 License.



Climate
of the Past

Open Access

The EGU logo features the letters 'EGU' in a bold, sans-serif font, with a circular arrow graphic behind the 'G'.

Supplement of

**Constant wind regimes during the Last Glacial Maximum and early Holocene:
evidence from Little Llangothlin Lagoon, New England Tablelands,
eastern Australia**

James Shulmeister et al.

Correspondence to: James Shulmeister (james.shulmeister@uq.edu.au)

The copyright of individual parts of the supplement might differ from the CC-BY 3.0 licence.

1 **Supplementary Information Figure Legends**

2 **Table S1.** Overdispersion values based on dose distributions from the LLL OSL samples.

3 **Table S2.** Results from the Finite Mixture Modelling. The dominant age populations used for
4 age calculation are highlighted in italics; the resulting ages for the dominant and second major
5 age populations are also given for comparison.

6

7 **Figure S1.** Cumulative particle size curves for sediment samples from LL1 (orange), LL2 (blue),
8 LL3 (green) and LL4 (purple). The second number gives sample depth. For location of cores
9 see Figure 1.

10 **Figure S2.** Results of the preheat plateau test on single aliquots of the Lake Little Llangothlin
11 sample L-EVA1231 (field code LL4). There does not appear to be a dependence of equivalent
12 dose with preheat temperature, although more inter-aliquot scatter was observed for the preheat
13 temperature of 280°C. Therefore a higher preheat temperature (260°C) was chosen for
14 subsequent SAR measurements. The cutheat temperature was 220°C.

15 **Figure S3.** Dose recovery test results for L-EVA1228, illustrated as a radial plot. The black line
16 corresponds to the administered dose and the shaded line to 2σ on either side of the central age.

17

18

19

20 **Supporting Information Legends (File S1)**

21 **Table S1.** Overdispersion values based on dose distributions from the LLL OSL samples.

Sample code	Overdispersion (%)
L-EVA1228 (LL1)	79.9
L-EVA1229 (LL2)	44.4
L-EVA1230 (LL3)	63.9
L-EVA123 (LL4)	61.4

22

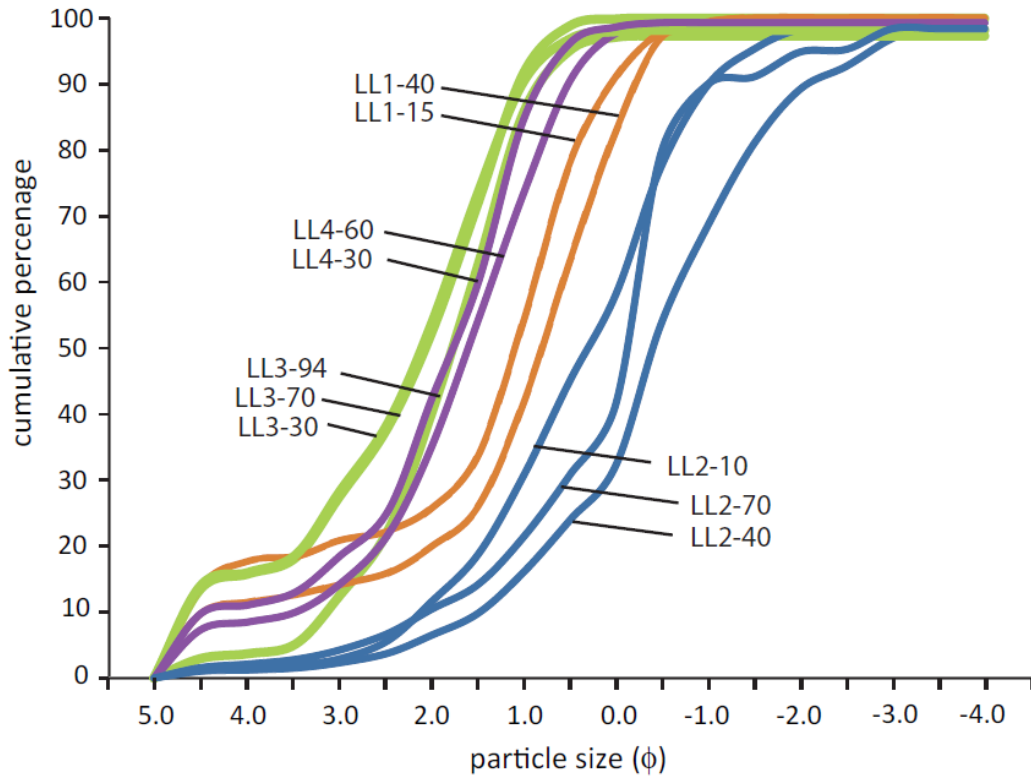
23

24 **Table S2.** Results from the Finite Mixture Modelling. The dominant age populations used for
 25 age calculation are highlighted in italics; the resulting ages for the dominant and second major
 26 age populations are also given for comparison.

Sample code	Number of components	De (Gy)	% population	Age (ka)	BIC
L-EVA1228 (LL1)	4	1.4±0.1 2.8±0.3 <i>6.1±0.6</i> 13.4±1.6	22.4 28.7 <i>32.5</i> 16.5	1.2 ± 0.1 2.3 ± 0.3 <i>5.1 ± 0.5</i> 11.1 ± 1.6	155
L-EVA1229 (LL2)	2	5.7±0.3 <i>19.2±0.4</i>	12.8 <i>87.2</i>	5.6 ± 0.5 <i>18.9 ± 1.2</i>	101
L-EVA1230 (LL3)	3	4.5±0.3 11.8±0.5 <i>26.9±0.9</i>	12.2 39.0 <i>48.8</i>	9.1 ± 0.7 <i>20.6 ± 1.4</i>	234
L-EVA1231 (LL4)	2	7.8±0.5 <i>22.9±1.2</i>	43.2 <i>56.8</i>	8.0 ± 0.7 <i>23.4 ± 1.8</i>	128

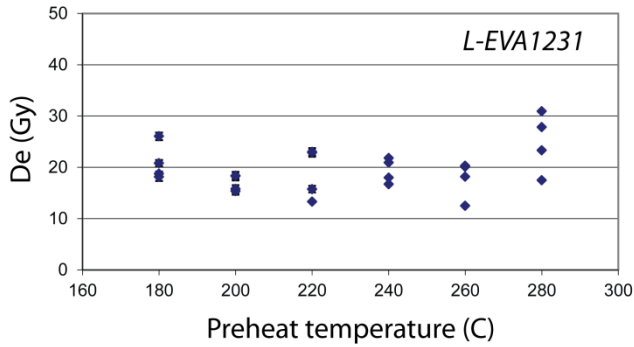
27

28
29



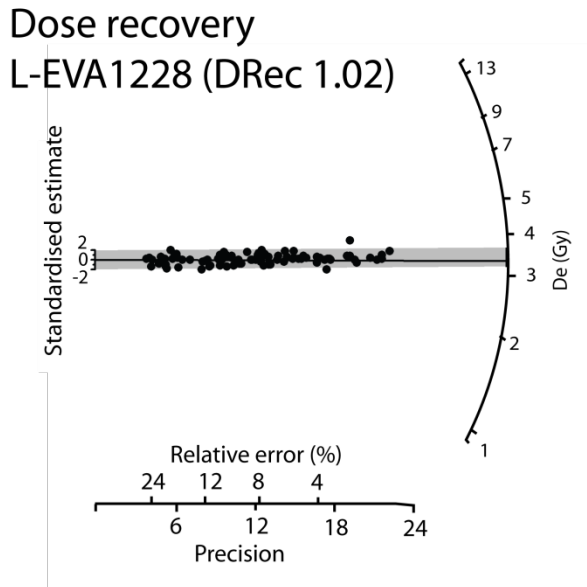
30
31 **Figure S1.** Cumulative particle size curves for sediment samples from LL1 (orange), LL2 (blue),
32 LL3 (green) and LL4 (purple). The second number gives sample depth. For location of cores
33 see Figure 1.

34
35
36



37
 38 **Figure S2.** Results of the preheat plateau test on single aliquots of the Lake Little Llangothlin
 39 sample L-EVA1231 (field code LL4). There does not appear to be a dependence of equivalent
 40 dose with preheat temperature, although more inter-aliquot scatter was observed for the preheat
 41 temperature of 280°C. Therefore a higher preheat temperature (260°C) was chosen for
 42 subsequent SAR measurements; the cutheat temperature was 220°C.

43
 44



45
 46 **Figure S3.** Dose recovery test results for L-EVA1228, illustrated as a radial plot. The black line
 47 corresponds to the administered dose and the shaded line to 2σ on either side of the central age.

48
 49
 50

51 Supplementary Information - References

52

53 Botter-Jensen, L., Bulur, E., Duller, G.A.T., Murray, A.S., 2000. Advances in luminescence
54 instrument systems. *Radiation Measurements* 32, 523-528.

55 Bowler, J.M., 1968. Australian landform example no.11: lunette. *Australian Geographer* 10, 402-
56 404.

57 Bowler, J.M., 1973. Clay dunes: their occurrence, formation and environmental significance.
58 *Earth Science Reviews* 9, 315-338.

59 Bowler, J.M., 1983. Lunettes as indices of hydrologic change: A review of the Australian
60 evidence. *Proceedings of the Royal Society of Victoria* 95, 147-168.

61 Fitzsimmons, K.E., Stern, N., Murray-Wallace, C.V., 2014. Depositional history and
62 archaeology of the central Lake Mungo lunette, Willandra Lakes, southeast Australia. *Journal of*
63 *Archaeological Science* 41, 349-364.

64 Murray, A.S., Wintle, A.G., 2000. Luminescence dating of quartz using an improved single-
65 aliquot regenerative-dose protocol. *Radiation Measurements* 32, 57-73.

66 Murray, A.S., Wintle, A.G., 2003. The single aliquot regenerative dose protocol: potential for
67 improvements in reliability. *Radiation Measurements* 37, 377-381.

68 Prescott, J.R., Hutton, J.T., 1994. Cosmic ray contributions to dose rates for luminescence and
69 ESR dating: Large depths and long term variations. *Radiation Measurements* 23, 497-500.

70

71