TABLE 1 THERMOLUMINESCENCE DATES FROM ALLUVIAL AND EOLIAN SEDIMENTS, AUSTRALIA

	Lab No.	Age (ka)	
Lake Eyre basin			
Fluvial			
Naccowlah	W566	232	±29
Naccowlah	W567	252	±74
Brighton Downs	W582	97.0	±10.0
Western River	W598	35.8	±2.7
Western River	W599	41.5	±3.5
Longreach 3	W605	128	±14
Longreach 5	W606	263	±35
Longreach 3	W638	109	±11
Tilla Tilla Sth.	W803	117	±14
Tilla Tilla Sth.	W804	220	±27
Cuttupirra	W807	115	±18
Cuttupirra	W808	115	±15
Katipiri	W812	108	±10
Pirranna	W813	132	±23
Pirranna	W814	101	±13
Diamantina Crossing	W843	140	±21
Winton	W844	242	±47
Lookout 4	W960	103	±11
Lookout 2	W962	90.8	±9.3
Aeolian			
Diamantina Lakes	W626	32.5	±6.0
Diamantina Lakes	W627	274	±22
Old Cork	W628	55.5	±6.0
Cuttupirra	W806	32.5	±3.0
Brighton Downs 1--2.0 m	W845*	2.2	±0.4
Brighton Downs –5.0 m	W846*	11.9	±1.4
Brighton Downs –7.4 m	W847	26.0	±6.3
Diamantina Lakes 2 –4.7 m	W849	60.6	±6.1
Diamantina Lakes –3.4 m	W850	18.9	±3.9
Brighton Downs 2 –5.0 m	W851	20.2	±2.1
Brighton Downs –7.0 m	W852	21.4	±2.2
Brighton Downs 3	W853	40.1	±3.1
Windorah, Sheep Creek –16.0 m	W870	74.1	±10.6
Windorah, Sheep Creek –18.0 m	W871	95.8	±13.7
South Galway, Hole 2	W873	22.1	±2.8
Carranya	W874	17.0	±2.2
Trafalgar	W875	43.9	±7.5

Note: TL measurements were made using a heating rate of 5°C s with an E.M.I. 9635QB photomultiplier fitted with a Chance Pilkington heat filter and a Corning 7-57 blue transmission filter. A correction for surface residual TL has been made by subtraction of a comparable modern sample analogue; annual radiation determinations were made by thick-source alpha counting, X-ray Fluorescence and Atomic Emission Spectroscopy. Errors are briefly discussed in the text. Further details of the method are given in Nanson et al. (1991). Dates from Riverine Plain and Shoalhaven Basin are from Page et al. (1991) and Nott and Price (1991), respectively.

* Additive method.

Table 1 (continued).

	Lab No.	Age (ka)
Riverine Plain		
Fluvial		
Kulki Pit #3	W745	86.8 ±7.5
Hay Pit #6	W746	46.8 ±3.0
Green Gully #9	W747	93.9 ±5.2
Gahla Vale #4	W758	83.5 ±7.1
Cadel Fault #7	W759	94.2 ±8.5
Green Gully #8	W760	84.2 ±15.5
West Strathmurton	W762	90.1 ±4.3
Bundure Pit	W904	104 ±9
Kerarbury Pit	W906	45.9 ±3.8
McGrath Pit	W938	37.8 ±10.3
Aeolian		
Barmah Sand Hills	W749	30.5 ±2.3
Lake Urana 1–2.2 m	W756	19.8 ±1.5
Lake Urana –1.2 m	W757	11.9 ±0.8
Little Kanyapella	W761	29.8 ±2.1
Lake Urana 1	W829	26.6 ±7.3
Lake Urana 2	W830	32.4 ±8.5
Lake Urana 4	W832	60.1 ±4.0
Lake Cullivel –1.6 m	W902	16.8 ±1.8
Lake Cullivel –3. 1m	W903	34.6 ±3.1
Kulki –1.3 m	W905	11.8 ±0.7
Kerarbury –2.2 m	W907	18.2 ±1.1
Conargo –2.5 m	W909	14.7 ±1.2
Quarry St –2.5 m	W910	14.8 ±0.7
Moonie Swamp –1.5 m	W912	18.6 ±0.9
Lake Urana Sec. 8	W913	44.0 ±3.1
Nepean River		
Alluvial		
Cranebrook Terrace	W717	91.4 ±12.4
	W718	73.0 ±7.6
	W719	107 ±11
	W928	84.7 ±11.9
	W929	73.2 ±12.3
	W931	72.9 ±9.8
	W934	43.0 ±6.3
	W935	49.8 ±8.9
	W937	45.1 ±8.8
Shoalhaven River Basin		
Aeolian		
Windellama	W697	13.5 ±5.9
Jembaicumbere	W699	6.1 ±0.9
W. Durram Durra, Lower	W700	12.5 ±2.4
W. Durram Durra, Upper	W701	6.6 ±2.6
E. Durram Durra, Lower	W702	18.0 ±2.9
E. Durram Durra, Upper	W774	8.5 ±2.2
Sandhills	W934	19.1 ±1.5

TABLE 2 U/Th DATES FROM LAKE EYRE BASIN

	Lab No.	Corresp. TL sample	Mineral		Age (ka)
Naccowlah	LH480C	W866	Calcrete	242	+38, -30
Naccowlah	LH480G	W566	Cypcrete	106	+11, -10
Naccowlah	LH505	W567	Calcrete	93	±10
Piranna	LH696	W813	Gypcrete	112	+8, -7
Tilla Tilla South	LH697	W803	Calcrete	97	+7, -6
Punkra	LH974	-	Ferricrete	113	+23, -20
Punkra	LH1233	W969	Gypcrete	<11.0	
Punkra	LH1234	W969	Gypcrete	<2.6	
Bilicoorinna	LH973	W959	Ferricrete	260	+31, -26
Bilicoorinna	LH975	W959	Ferricrete	221	+21, -18
Bilicoorinna	LH976	W959	Ferricrete	105	±7
Lookout	LH1250	W964	Gypcrete	<5.2	
Lookout	LH1231	W963	Gypcrete	<7.4	
Toolapinna	LH1237	W971	Gypcrete	<2.0	
Toolapinna	LH1239	W973	Gypcrete	16.6	±1.0
Toolapinna	LH1232	-	Gypcrete	347	+00, -64
Toolapinna	LH1309	-	Gypcrete	<6.0	

Note: Dates obtained by ^{232}Th-index isochron method (Ku and Liang, 1984). Purified U and T isotope fractions (containing ^{234}U and ^{229}Th yield tracers) were isolated radiochemically from a (separate) selective leach of the indurated secondary mineral and a strong acid leach of the detutal residue. Estimates of U and Th isotopic concentrations were made by alpha spectrometry using electroplated sources.

Nanson et al.