**Supplementary Information Table S1:** Profile description of deposits at KAT1, with dates as published in Blinkhorn et al. (2013).

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| Unit | Depth (m) | Description | Date ka BP (method) |
| 1 | 0-0.38 | Mid reddish-brown poorly sorted, fine to very fine sand (mean = 81.8 - 147.2 µm) with a symmetrical distribution, with some rooting evident and rare powdery calcretes. |  |
| 2 | 0.38-1.3 | Mid brown poorly sorted fine to very fine sand (mean = 125 - 149.3 µm) with a symmetrical distribution, rare powdery and small, nodular calcretes. | 12±4 (OSL) |
| 3 | 1.3-3.04 | Mid yellowish-grey poorly to very poorly sorted medium to fine sand (mean = 154.8 - 339.3 µm) with symmetrical to finely skewed distribution, occasional small nodular calcretes, with a thin granule to pebble conglomerate horizon occurring in the top of the deposits.  | 61±9 (OSL) |
| 4 | 3.04-3.64 | Mid yellowish/brownish-grey poorly to very poorly sorted medium to fine sand (mean = 213 - 409.1 µm), with fine to coarsely skewed distribution supporting common small calcrete nodules and occasional pebbles and small cobbles. | 48±11 (OSL); >57.9 (AMS); >62 (AMS) |
| 5 | 3.64-4.16 | Mid yellowish grey poorly sorted medium sand (mean = 354.7 - 538.1 µm) with a very finely skewed distribution, supporting common nodular calcretes and rare granule and pebble inclusions. | 77±18 (OSL) |
| 6 | 3.74-4.14 | Mid yellowish grey sand matrix supporting frequent pebbles and cobbles. |  |
| 7 | 4.1-4.35 | Mid yellowish grey sand with common nodular calcretes and rare granule and pebble inclusions. |  |
| 8 | 4.16-4.48 | Mid reddish-orangish brown poorly sorted medium to coarse sand (mean = 382.2 – 550.4 µm) with a very finely skewed distribution, supporting frequent pebble and cobble inclusions with common nodular calcretes with some fusing of nodules evident.  | 95.6±13.1 (OSL) |