

**[AustArch1](#): A database of  $^{14}\text{C}$  and luminescence ages from archaeological sites in the Australian arid zone.**

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[AustArch1](#) is a Microsoft® Excel® database listing radiocarbon, luminescence and uranium series ages from archaeological sites in the Australian arid zone. It was originally compiled to support analysis of time-series trends by the authors (Smith *et al.* 2008; Williams *et al.* 2008) and is now available online at [PalaeoWorks](#). The database is intended as a resource for archaeologists working in the arid zone. It provides a ready checklist of dated sites as well as a comprehensive listing of radiocarbon, luminescence and uranium series age determinations, and in conjunction with calibration programs such as OxCal or Calib, can be used to generate radiocarbon density plots for analysis of trends in occupation. Research in the arid zone has grown over the past decade, making this central listing of chronometric data particularly relevant, and we expect that [AustArch1](#) will become a useful tool for both consultant and academic archaeologists.

**Format:** [AustArch1](#) is a Microsoft® Excel® file, listing ages (rows) by site, location and biogeographic region. The latter are based on the [Interim Biogeographic Regionalisation of Australia](#) (IBRA) 6.1 divisions (see Thackway and Cresswell, 1995). Longitude and latitude are compiled from published sources, or estimated from locality maps. All  $^{14}\text{C}$  ages are given as conventional (uncalibrated) ages. The file includes a bibliography of published and unpublished sources for  $^{14}\text{C}$ , TL/OSL and U/Th data.

**Geographic scope:** [AustArch1](#) covers the entire arid zone, including the following IBRA regions: – BHC, BRT, CAR, CHC, COO, CR, DMR, FIN, FLB (northern section only), GAS, GAW, GD, GS (Shark Bay area only), GSD, GVD, HAM, LSD, MAC, MGD, ML, MUR, NUL, PIL, SSD, STP, TAN, YAL ([Interim Biogeographic Regionalisation for Australia](#)). The Murray-Darling Basin (MDB) is included for comparison.

**Coverage:** [AustArch1](#) is currently the most comprehensive listing of radiocarbon ages for the Australian arid zone. We estimate that it includes >97 % of available  $^{14}\text{C}$  ages - totalling 971 ages from 286 sites, derived from published and unpublished research over the past 40 years. In addition to radiocarbon data, there are 115 TL/OSL or U/Th ages available for arid zone sites (97 dating occupation sediments or hearths). Major gaps in coverage are the Great Victoria Desert, Nullarbor Plain, Tanami Desert and the northern (sub-tropical) margins of the arid zone, reflecting the paucity of archaeological work in these areas. We have not attempted to audit the database for technical and archaeological validity of the ages, preferring to leave this to users.

**Updates and errors:** We intend to maintain and periodically update the database and would appreciate hearing of new  $^{14}\text{C}$ , TL/OSL or U/Th results as they become available. We also ask users to notify us of any errors (on either [u4077044@anu.edu.au](mailto:u4077044@anu.edu.au) or [m.smith@nma.gov.au](mailto:m.smith@nma.gov.au)).

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## References

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