

[Supplementary material]

The Jarigole mortuary tradition reconsidered

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Online supplementary materials

Code for single phase radiocarbon model in Figure 8, run in Oxcal 4.4 (Bronk Ramsey 2009a). Data available in Table S1 below.

Plot()

```
{  
  Curve("SHCal20","shcal20.14c");  
  Curve("IntCal20","intcal20.14c");  
  Mix_Curve("Mixed","IntCal20","SHCal20",U(0,100));  
  Outlier_Model("Charcoal",Exp(1,-10,0),U(0,3),"t");  
  Sequence("Jarigole")  
 {  
   Boundary("Jarigole start");  
   KDE_Plot("Jarigole phase")  
 }
```

```

{
color="Blue";
R_Date("AA85132", 4251, 39);
R_Date("AA85131", 4381, 39);
R_Date("AA85133", 4401, 39);
R_Date("AA85134", 4146, 53);
R_Date("UCIAMS 229042", 4215, 15);
R_Date("UCIAMS 229028", 4130, 15);
R_Date("UCIAMS 229043", 4275, 15);
R_Date("UCIAMS 229026", 4185, 15);
R_Date("UCIAMS 229027", 4165, 15);
Interval("Jarigole span");
};

Boundary("Jarigole end");
};

Sequence("Lothagam N")
{
Boundary("Lothagam N start");
KDE_Plot("Lothagam N phase")
{
color="Blue";
R_Date("ISGS-A1491", 4385, 15);
R_Date("ISGS-A2624", 4280, 15);
R_Date("ISGS-A1492", 4265, 15);
R_Date("ISGS-A2649", 4240, 15);
R_Date("ISGS-A1505", 4165, 20);
R_Date("ISGS-A2625", 4140, 20);
R_Date("ISGS-A3793", 4135, 20);
R_Date("ISGS-A3792", 3845, 20)
{
Outlier();
};
Interval("Lothagam N span");
}

```

```
};  
Boundary("Lothagam N end");  
};  
R_Date("ISGS-A1494", 4290, 20);  
R_Date("ISGS-A1504", 4255, 20);  
R_Date("ISGS-A1490", 3805, 15);  
R_Date("ISGS-A1493", 3890, 15);  
R_Date("TO-4911", 4180, 60);  
R_Date("Beta-447966", 4490, 30);  
};
```

Table S1. All available radiocarbon dates for pillar sites (see Figure 8). Dates calibrated in OxCal v4.4.2 with a mixed IntCal20 and SHCal20 calibration curve (Bronk Ramsey, 2009; Hogg *et al.* 2020; Marsh *et al.* 2018; Reimer *et al.* 2020) and rounded to the nearest five years. KFFS = Koobi Fora Field School; OSE = ostrich eggshell.

Site	Lab #	Context	Material	Uncalibrated date	cal BP (95.4% confidence)	Original date
						Reference
Jarigole (GbJj1)	AA85133	Intermediate cap fill, S26-27, E14-15 (Unit 14 in 2019 system), 0.65m below surface, associated with primary burial, excavated by KFFS	OES bead	4401±39	5260–4840	Hildebrand & Grillo 2012
Jarigole (GbJj1)	AA85131	Intermediate cap fill, S26-27, E14-15 (Unit 14 in 2019 system), 0.55m below surface, excavated by KFFS	OES bead	4381±39	5045–4840	Hildebrand & Grillo 2012
Jarigole (GbJj1)	AA85132	Upper cap fill, S26-27, E14-15 (Unit 14 in 2019 system), 50–100mm below surface, excavated by KFFS	OES bead	4251±39	4865–4585	Hildebrand & Grillo 2012
Jarigole (GbJj1)	AA85134	Lower cap fill, S26-27, E14-15 (Unit 14 in 2019 system), 1.0–1.05m, excavated by KFFS	OES bead	4146±53	4830–4445	Hildebrand & Grillo 2012
Jarigole (GbJj1)	UCIAMS 229043	Central mortuary cavity, Unit 31, Level 31, 1.56m below surface, from bracelet worn by Burial 6 individual	OES bead	4275±15	4860–4655	This study
Jarigole (GbJj1)	UCIAMS 229042	Central mortuary cavity, upper mid-depth, Unit 30, Level 8, 300mm below surface	OES bead	4215±15	4840–4620	This study

Jarigole (GbJj1)	UCIAMS	Edge of cavity, Unit 8, Level 5, 1.12m	Charcoal	4185±15	4830–4580	This study
	229026	below surface, in pit with Burial 3 individual				
Jarigole (GbJj1)	UCIAMS	Edge of cavity, Unit 9, Level 3, 1.14m	Charcoal	4165±15	4825–4535	This study
	229027	below surface, just above Burial 2 feature				
Jarigole (GbJj1)	UCIAMS	Central mortuary cavity, lower mid-depth,	Charcoal	4130±15	4810–4520	This study
	229028	Unit 31, Level 17, 0.6m below surface				
Lothagam North (GeJi9)	ISGS-A1491	Deposits just above stone pavement on east side of platform, Unit N14.5E84.2, Level 3, 180mm below surface	OES bead	4385±15	5025–4850	Hildebrand & Grillo 2012
Lothagam North (GeJi9)	ISGS-A2624	Ashy area at base of western platform, Unit N04E36, Level 10, approximately 0.43m below surface	Charcoal	4280±15	4865–4720	Hildebrand <i>et al.</i> 2018
Lothagam North (GeJi9)	ISGS-A1492	Mortuary cavity: upper limit of core mortuary deposits, Unit N05E42, Level 13, 0.63m below surface	OES bead	4265±15	4860–4650	Hildebrand & Grillo 2012
Lothagam North (GeJi9)	ISGS-A2649	Stone circle 30m east of platform, N14.5 E84.2, from fill above pit for Burial 6 (secondary bundle burial), approximately 280mm below surface	OES fragment	4240±15	4850–4645	Hildebrand <i>et al.</i> 2018
Lothagam North (GeJi9)	ISGS-A1505	Platform cap deposits covering west-central area of mortuary cavity, Unit N05E42, Level 4, 220mm below surface	OES bead	4165±20	4825–4530	Hildebrand & Grillo 2012
Lothagam North (GeJi9)	ISGS-A2625	Mortuary cavity: core mortuary deposits, Unit N04E42, Level 10, approximately	Charcoal	4140±20	4815–4520	Hildebrand & Grillo 2012

		0.85m below surface, from fill around Burial 2 cranium				
Lothagam North (GeJi9)	ISGS-A3793	Mortuary cavity, western edge, Unit N04E39, Level 16, approximately 0.83m below surface, from cluster of perforated hippo tusks capping Burial 26B/C/D (bundle burial)	Charcoal	4135±20	4815–4520	Hildebrand <i>et al.</i> 2018
Lothagam North (GeJi9)	ISGS-A3792	Platform cap deposits covering western edge of mortuary cavity, Unit N04E39, Level 4, approximately 230mm below surface	OES bead	3845±20	4355–4090	Hildebrand <i>et al.</i> 2018
Lothagam West (GeJi10)	ISGS-A1494	Test unit in center of platform. Level 5, 0.55–0.65m below surface	Charcoal	4290±20	4870–4720	Hildebrand & Grillo 2012
Manemanya (GcJh5)	ISGS-A1504	Test unit by pillars, Level 2, 180mm below surface. Platform fill.	OES bead	4255±20	4855–4645	Hildebrand & Grillo 2012
Manemanya (GcJh5)	ISGS-A1490	Test unit by pillars, Level 8, 0.89m below surface. Pit fill above Burial 1	OES bead	3805±15	4240–4015	Hildebrand & Grillo 2012
Kalokol (GcJh3)	ISGS-A1493	Test unit adjacent to pillars, Level 4, 290–400mm below surface.	OES fragment	3890±15	4410–4155	Hildebrand & Grillo 2012
Il Lokeridede (GaJi23)	TO-4911	Not specified	Charcoal	4180±60	4845–4520	Koch <i>et al.</i> 2002
Aliel	Beta-447966	Nderit ware surface find	Bulk organics in pottery	4490±30	5295–4965	Wilshaw <i>et al.</i> 2016

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