**Appendix Table S2. Bayesian model of radiocarbon ages and calibrated date ranges, 2σ**

Parameter Laboratory # Context Cal AD Range Intercept P

**Terminus post quem island construction 110-950 530 0.95**

Beta-50314 Op I Level 46 **560-900 730** 0.94

 930-940 940 0.01

**Beginning Dehe phase 840-990 920 0.95**

 Beta-41911 Op G Level 16 **900-1160 1030 0.95**

 Beta-41913 Op I Level 15 **890-1030 960 0.95**

 Beta-50313Op I Level 32 **890-1060 980 0.85**

1080-1160 1120 0.10

 Beta-50317 Op T Level 15 **890-1020 960 0.95**

 Beta-110219 Op G4 Level 29L **880-1030 960 0.95**

 Beta-210271 Op Y5 Level 17 Feat. 13 1050-1100 1080 0.11

 **1120-1250 1190 0.84**

 Beta-210272 Op Z2 Level 27 Area Y **1000-1240 1120 0.95**

 Beta-210273 Op Z2 Level 25 Area X **1020-1180 1100 0.95**

 Beta-210274 Op Z1 Level 16 Locus 1 1040-1110 1080 0.26

 **1120-1230 1170 0.70**

 Beta-210275 Op Z1 Level 13 Locus 2 **1000-1160 1080 0.95**

 Beta-243613 Zoc A Level 9 Feat. 11 **1170-1250 1210 0.95**

 Beta-243614 Zoc A Level 13 Area BB **1020-1180 1100 0.95**

 Beta-243615 Zoc A Level 15 Area JJ **1040-1210 1130 0.95**

 Beta-243616 Zoc A Level 17 Area NN **950-1050 1000 0.79**

 1080-1150 1120 0.16

 Beta-243619 Zoc B Level 10 Feat. 10 **1040-1210** **1130** 0.95

 Beta-243620 Zoc B Level 13 Feat. 17 **1170-1250 1210 0.95**

 Beta-243621 Zoc B Level 17 Feat. 26 1040-1100 1070 0.19

 **1120-1240 1180 0.76**

 Beta-243622Zoc B Level 18 Feat. 31 1050-1100 1080 0.14

 **1120-1250 1190 0.82**

 Beta-243623 Zoc C Level 7 Area I **1030-1210 1120 0.95**

 Beta-243624 Zoc C Level 8 Area K 1050-1080 1070 0.04

 **1150-1250 1200 0.91**

 Beta-243625 Zoc C Level 13 Area S **1160-1250 1210 0.95**

 Beta-243626 Zoc C Level 15 piso **1020-1190 1110 0.95**

 Beta-243627 Zoc C Level 18 Area V 1050-1100 1080 0.14

 **1120-1250 1190 0.82**

 Beta-243628 Zoc A Level 18 Area NN **1020-1180 1100 0.95**

**End Dehe phase/Beginning Hai phase**  **1220-1260 1240 0.95**

 Beta-41910 Op D Level 25 **1230-1300 1270 0.95**

 Beta-41912 Op H Level 10 **1270-1360 1320 0.95**

 Beta-41914 Op J Level 13 **1250-1360 1310 0.95**

 Beta-110217 Op G2 Level 9 Feat. 2 **1240-1360 1300 0.95**

 Beta-243611 Zoc A Level 6 Area L **1240-1320 1280 0.95**

 Beta-243612 Zoc A Level 7 Feat. 3 **1230-1280 1260 0.95**

 Beta-243617 Zoc B Level 6 Feat. 2 **1230-1270 1250 0.95**

 Beta-243618 Zoc B Level 7 Area B **1290-1360 1330 0.95**

AA84393 Z3 Level 14 Area Q **1260-1310 1290 0.95**

 AA91377 Este 6 Area S midden **1230-1280 1260 0.95**

 AA91378 Este 6 Area V midden **1230-1280 1260 0.95**

 AA91381 Este 2 Feature 1 midden **1230-1280 1260 0.95**

 AA91383 Este 9 Area H midden **1250-1330 1290 0.94**

 1360-1370 1370 0.01

 AA91367 Este 14 Burial 3 **1290-1360 1330 0.95**

 AA91368 Este 25 Burial 2 **1290-1360 1330 0.95**

 AA91370 Este 14 Burial 7 **1280-1360 1320 0.95**

**End Hai phase/Beginning Tlalli phase**  **1310-1380 1350 0.95**

 Beta-50316 Op R Level 3 **1320-1460 1390 0.95**

 AA91379 Este 5 Area G1 midden **1340-1410 1380 0.95**

 AA91385 Este 12 Feature 2 **1330-1420 1380 0.95**

 AA91366 Este 14 Burial 2 **1430-1520 1480 0.95**

 AA91369 Este 8 Burial 4 1330-1360 1350 0.20

 **1390-1440 1420 0.76**

 AA91371 Este 14 Burial 6 **1430-1500 1470 0.95**

 AA91372 Este 6 Burial 1 **1410-1450 1430 0.95**

 AA91373 Este 7 Burial 1 **1400-1450 1430 0.95**

 AA91374 Este 8 Burial 5 1330-1350 1340 0.13

 **1390-1440 1420 0.89**

 AA91375 Este 34 Burial 1 **1330-1430** **1380 0.95**

 AA91376 Este 10 Burial 2 **1400-1450 1430 0.95**

**End Tlalli phase/Beginning Isla phase**  Pre-defined at 1521

 AA91380 Este 3 Area D **1520-1600 1560 0.87**

 1620-1650 1640 0.09

 AA91387 Este 20 Feature 1 **1520-1590 1560 0.78**

 1630-1670 1650 0.17

**End Isla phase**  **1520-1830 1680 0.95**