

## Supplementary Table 1

<sup>230</sup>Th dating results. The error is 2s error.

Sample	DFT	<sup>238</sup> U	<sup>232</sup> Th	<sup>230</sup> Th / <sup>232</sup> Th	$\delta^{234}\text{U}^*$	<sup>230</sup> Th / <sup>238</sup> U	<sup>230</sup> Th Age (yr)	<sup>230</sup> Th Age (yr)	$\delta^{234}\text{U}_{\text{Initial}}^{**}$	<sup>230</sup> Th Age (yr BP) <sup>***</sup>
Number	(mm)	(ppb)	(ppt)	(atomic x10 <sup>-6</sup> )	(measured)	(activity)	(uncorrected)	(corrected)	(corrected)	(corrected)
<i>LAVI-4</i>										
LAVI4-78.5	78.5	91 ±0	14 ±1	3154 ±293	65.9 ±1.3	0.0293 ±0.0008	3043 ±83	<b>3039 ±83</b>	66 ±1	<b>2972 ±83</b>
*LAVI4-80	79	72.4 ±0.1	26 ±2	1380 ±141	69.8 ±2.3	0.0298 ±0.0018	3079 ±185	<b>3069 ±185</b>	70 ±2	<b>3002 ±185</b>
LAVI4-90	90	97.1 ±0.1	33 ±1	1479 ±66	67.5 ±1.6	0.0301 ±0.0007	3118 ±72	<b>3109 ±73</b>	68 ±2	<b>3042 ±73</b>
LAVI4-113.5	113.5	136 ±0	32 ±1	2217 ±87	65.4 ±1.3	0.0318 ±0.0004	3304 ±45	<b>3298 ±45</b>	66 ±1	<b>3231 ±45</b>
*LAVI4-113	113	148.8 ±0.2	21 ±2	3656 ±335	69.0 ±1.8	0.0319 ±0.0008	3304 ±82	<b>3300 ±82</b>	70 ±2	<b>3233 ±82</b>
LAVI4-121.5	121.5	135.5 ±0.2	19 ±2	3881 ±369	70.7 ±1.7	0.0332 ±0.0008	3434 ±84	<b>3430 ±84</b>	71 ±2	<b>3363 ±84</b>
*L4-123	121.5	117.2 ±0.2	41 ±1	1543 ±42	67.0 ±1.5	0.0325 ±0.0003	3369 ±37	<b>3359 ±37</b>	68 ±2	<b>3292 ±37</b>
*L4-124-5	121.5	132.2 ±0.1	24 ±2	2979 ±221	68.9 ±1.3	0.0329 ±0.0008	3406 ±81	<b>3401 ±81</b>	70 ±1	<b>3334 ±81</b>
LAVI-4-4	124.5	70.9 ±0.1	15 ±2	2747 ±317	69.1 ±2.4	0.0351 ±0.0004	3639 ±46	<b>3634 ±46</b>	70 ±2	<b>3567 ±46</b>
L4-124-6	126	76.9 ±0.1	95 ±2	480 ±14	66.7 ±1.7	0.0361 ±0.0007	3755 ±78	<b>3721 ±81</b>	67 ±2	<b>3654 ±81</b>
L4-134.5	134.5	49.1 ±0.0	45 ±2	687 ±44	117.1 ±1.2	0.0386 ±0.0019	3834 ±194	<b>3810 ±195</b>	118 ±1	<b>3743 ±195</b>
L4-144.5	144.5	66.8 ±0.1	170 ±4	257 ±10	72.3 ±1.5	0.0397 ±0.0013	4113 ±133	<b>4044 ±142</b>	73 ±2	<b>3977 ±142</b>
L4-1	149	66.7 ±0.1	113 ±1	393 ±11	67.5 ±1.3	0.0403 ±0.0010	4190 ±110	<b>4144 ±115</b>	68 ±1	<b>4077 ±115</b>
L4-152.5	152.5	76.6 ±0.1	39 ±2	1362 ±65	72.3 ±1.6	0.0419 ±0.0011	4340 ±115	<b>4326 ±116</b>	73 ±2	<b>4259 ±116</b>
L4-161.5	161.5	91.0 ±0.1	74 ±2	864 ±26	71.3 ±1.6	0.0424 ±0.0007	4399 ±76	<b>4377 ±77</b>	72 ±2	<b>4310 ±77</b>
LAVI4-168.5	168.5	131 ±0	29 ±1	3273 ±126	71.0 ±1.4	0.0434 ±0.0004	4507 ±43	<b>4501 ±43</b>	72 ±1	<b>4434 ±43</b>
L4-173.5	173.5	131.3 ±0.1	31 ±1	3030 ±111	70.6 ±1.3	0.0429 ±0.0004	4462 ±46	<b>4456 ±46</b>	71 ±1	<b>4389 ±46</b>
L4-180-8	178.5	137.7 ±0.2	21 ±1	4778 ±234	69.1 ±1.4	0.0449 ±0.0004	4673 ±48	<b>4669 ±48</b>	70 ±1	<b>4602 ±48</b>
L4-2	184	84.9 ±0.1	94 ±1	679 ±15	70.2 ±1.3	0.0458 ±0.0008	4762 ±90	<b>4732 ±93</b>	71 ±1	<b>4665 ±93</b>
L4-3	202.5	113.6 ±0.1	36 ±1	2471 ±92	70.5 ±1.2	0.0473 ±0.0006	4929 ±66	<b>4920 ±66</b>	71 ±1	<b>4853 ±66</b>
LAVI4-209	219.5	120 ±0	47 ±1	2098 ±62	72.1 ±1.2	0.0501 ±0.0004	5219 ±47	<b>5209 ±48</b>	73 ±1	<b>5142 ±48</b>
L4-4	227.5	76.2 ±0.1	44 ±1	1475 ±51	69.9 ±1.2	0.0511 ±0.0009	5336 ±92	<b>5320 ±93</b>	71 ±1	<b>5253 ±93</b>
LAVI4-228	238	108 ±0	61 ±2	1551 ±43	72.5 ±1.2	0.0534 ±0.0005	5570 ±53	<b>5555 ±55</b>	74 ±1	<b>5488 ±55</b>
L4-251	245.5	93.9 ±0.1	56 ±1	1495 ±36	75.0 ±1.4	0.0543 ±0.0004	5647 ±44	<b>5631 ±46</b>	76 ±1	<b>5564 ±46</b>
LAVI-4-5	260	131.7 ±0.2	45 ±2	2710 ±103	74.6 ±2.1	0.0559 ±0.0003	5820 ±38	<b>5811 ±39</b>	76 ±2	<b>5744 ±39</b>
LAVI4-262.5	272.5	76 ±0	109 ±2	672 ±17	73.0 ±1.3	0.0584 ±0.0007	6100 ±75	<b>6061 ±80</b>	74 ±1	<b>5994 ±80</b>

Sample	DFT	<sup>238</sup> U	<sup>232</sup> Th	<sup>230</sup> Th / <sup>232</sup> Th	δ <sup>234</sup> U*	<sup>230</sup> Th / <sup>238</sup> U	<sup>230</sup> Th Age (yr)	<sup>230</sup> Th Age (yr)	δ <sup>234</sup> U <sub>initial</sub> **	<sup>230</sup> Th Age (yr BP)***
Number	(mm)	(ppb)	(ppt)	(atomic x10 <sup>-6</sup> )	(measured)	(activity)	(uncorrected)	(corrected)	(corrected)	(corrected)

***PATA-1***

<b>PATA-1-1</b>	16.5	182.9 ±0.2	506 ±10	226 ±6	108.8 ±1.7	0.0379 ±0.0005	3786 ±55	<b>3713 ±75</b>	110 ±2	<b>3646 ±75</b>
<b>A1-1</b>	25.2	169 ±0.2	636 ±13	215 ±5	107.5 ±1.4	0.0492 ±0.0005	4947 ±49	<b>4848 ±85</b>	109 ±1	<b>4781 ±85</b>
<b>P1-27</b>	27	143.4 ±0.2	553 ±11	226 ±5	107.4 ±1.8	0.0528 ±0.0005	5327 ±56	<b>5225 ±91</b>	109 ±2	<b>5158 ±91</b>
<b>P1-31</b>	31	164.1 ±0.3	961 ±19	158 ±3	107.4 ±2.1	0.0561 ±0.0005	5665 ±48	<b>5511 ±119</b>	109 ±2	<b>5444 ±119</b>
<b>PATA1-34</b>	34	134.4 ±0.2	1421 ±29	101 ±2	104.8 ±1.4	0.0645 ±0.0005	6553 ±50	<b>6275 ±203</b>	107 ±1	<b>6208 ±203</b>

U decay constants:  $\lambda_{238} = 1.55125 \times 10^{-10}$  (Jaffey et al., 1971) and  $\lambda_{234} = 2.82206 \times 10^{-6}$  (Cheng et al., 2013).

Th decay constant:  $\lambda_{230} = 9.1705 \times 10^{-6}$  (Cheng et al., 2013).

\* $\delta^{234}\text{U} = ([^{234}\text{U}/^{238}\text{U}]_{\text{activity}} - 1) \times 1000$ . \*\*  $\delta^{234}\text{U}_{\text{initial}}$  was calculated based on <sup>230</sup>Th age (T), i.e.,  $\delta^{234}\text{U}_{\text{initial}} = \delta^{234}\text{U}_{\text{measured}} \times e^{\lambda_{234} \times T}$ .

Corrected <sup>230</sup>Th ages assume the initial <sup>230</sup>Th/<sup>232</sup>Th atomic ratio of  $4.4 \pm 2.2 \times 10^{-6}$ . Those are the values for a material at secular equilibrium, with the bulk earth <sup>232</sup>Th/<sup>238</sup>U value of 3.8. The errors are arbitrarily assumed to be 50%.

\*\*\*B.P. stands for “Before Present” where the “Present” is defined as the year 1950 A.D.

Sample Numbers started with \* are dated for replication, not used for age model.

Supplementary Table 2

<i>LAVI-4</i>				
DFT(mm)	Copra_Age (yr BP)	Iscam_Age (yr BP)	$\delta^{13}\text{C}(\text{‰})$	$\delta^{18}\text{O}(\text{‰})$
83	3000.78	2994	-6.65	-3.49
83.2	3003.02	2996	-6.21	-3.39
83.4	3005.24	2997	-6.51	-3.68
83.6	3007.43	2998	-6.70	-3.37
83.8	3009.61	3000	-6.33	-3.08
84	3011.76	3001	-6.51	-3.63
84.2	3013.89	3002	-6.71	-3.85
84.4	3015.99	3004	-6.66	-3.59
84.6	3018.08	3005	-6.72	-3.12
84.8	3020.14	3007	-6.84	-3.23
85	3022.17	3008	-6.66	-3.23
85.2	3024.19	3009	-7.13	-3.14
85.4	3026.18	3011	-7.15	-3.05
85.6	3028.14	3012	-7.19	-3.10
85.8	3030.08	3013	-7.28	-3.18
86	3032.00	3015	-7.57	-3.80
86.2	3033.89	3016	-7.31	-4.44
86.4	3035.76	3017	-7.70	-4.75
86.6	3037.60	3019	-8.03	-4.21
86.8	3039.41	3020	-7.96	-4.41
87	3041.20	3021	-7.91	-5.25
87.2	3042.97	3023	-7.88	-5.18
87.4	3044.71	3024	-7.80	-4.66
87.6	3046.42	3026	-7.64	-4.08
87.8	3048.10	3027	-7.17	-3.25
88	3049.76	3028	-7.36	-3.45
88.2	3051.39	3030	-7.39	-3.33
88.4	3053.00	3031	-7.18	-2.92
88.6	3054.57	3032	-7.71	-3.15
88.8	3056.12	3034	-7.97	-3.10
89	3057.64	3035	-7.90	-3.12
89.2	3059.14	3036	-8.07	-3.51
89.4	3060.60	3038	-8.11	-3.44
89.6	3062.04	3039	-7.71	-3.24
89.8	3063.44	3040	-7.66	-3.19
90	3064.82	3042	-7.81	-3.27
90.2	3066.18	3043	-7.67	-3.22
90.4	3067.54	3045	-7.91	-3.15
90.6	3068.89	3047	-8.04	-3.26
90.8	3070.23	3048	-8.20	-3.41
91	3071.57	3050	-8.16	-3.39
91.2	3072.90	3052	-7.92	-3.93
91.4	3074.22	3053	-8.03	-3.87
91.6	3075.55	3055	-7.90	-3.64
91.8	3076.86	3056	-7.88	-3.98
92	3078.17	3058	-8.13	-4.02
92.2	3079.48	3060	-7.93	-4.27

92.4	3080.78	3061	-8.03	-5.11
92.6	3082.08	3063	-8.12	-4.88
92.8	3083.38	3064	-8.14	-3.91
93	3084.67	3066	-8.00	-3.86
93.2	3085.96	3068	-8.15	-4.46
93.4	3087.24	3069	-8.17	-4.84
93.6	3088.52	3071	-8.02	-4.16
93.8	3089.80	3073	-7.82	-3.92
94	3091.07	3074	-7.67	-3.75
94.2	3092.34	3076	-7.55	-3.69
94.4	3093.61	3077	-7.48	-3.81
94.6	3094.88	3079	-7.61	-4.10
94.8	3096.15	3081	-7.57	-4.22
95	3097.41	3082	-7.59	-4.37
95.2	3098.67	3084	-7.70	-4.21
95.4	3099.93	3085	-7.57	-4.32
95.6	3101.19	3087	-7.53	-4.51
95.8	3102.44	3089	-7.68	-4.51
96	3103.70	3090	-7.79	-4.38
96.2	3104.95	3092	-7.80	-4.09
96.4	3106.21	3093	-7.87	-3.89
96.6	3107.46	3095	-7.80	-3.68
96.8	3108.71	3097	-7.88	-3.74
97	3109.97	3098	-7.80	-3.84
97.2	3111.22	3100	-7.70	-4.08
97.4	3112.47	3102	-7.49	-4.20
97.6	3113.73	3103	-7.47	-4.09
97.8	3114.98	3105	-7.55	-3.82
98	3116.23	3106	-7.54	-3.81
98.2	3117.49	3108	-7.44	-4.25
98.4	3118.74	3110	-7.35	-4.99
98.6	3120.00	3111	-7.35	-5.37
98.8	3121.26	3113	-7.39	-4.97
99	3122.52	3114	-7.63	-4.90
99.2	3123.78	3116	-7.72	-4.51
99.4	3125.05	3118	-7.77	-4.07
99.6	3126.31	3119	-7.80	-4.05
99.8	3127.58	3121	-7.97	-4.17
100	3128.85	3123	-8.08	-4.12
100.2	3130.13	3124	-8.35	-4.08
100.4	3131.40	3126	-8.34	-4.18
100.6	3132.68	3127	-8.31	-4.32
100.8	3133.96	3129	-8.28	-4.53
101	3135.25	3131	-8.29	-4.39
101.2	3136.54	3132	-8.18	-4.13
101.4	3137.83	3134	-8.16	-4.12
101.6	3139.13	3135	-7.96	-4.25
101.8	3140.43	3137	-7.71	-4.33
102	3141.74	3139	-7.64	-4.37
102.2	3143.05	3140	-7.69	-4.38
102.4	3144.36	3142	-7.95	-4.43

102.6	3145.68	3143	-8.08	-4.71
102.8	3147.01	3145	-8.17	-4.73
103	3148.34	3147	-8.18	-4.59
103.2	3149.67	3148	-8.11	-4.38
103.4	3151.01	3150	-8.07	-4.25
103.6	3152.36	3152	-8.07	-4.23
103.8	3153.71	3153	-8.05	-4.16
104	3155.07	3155	-8.16	-4.03
104.2	3156.43	3156	-8.21	-3.96
104.4	3157.80	3158	-8.09	-3.82
104.6	3159.18	3160	-8.05	-3.76
104.8	3160.57	3161	-8.07	-3.86
105	3161.96	3163	-7.97	-3.65
105.2	3163.36	3164	-7.88	-3.54
105.4	3164.76	3166	-7.59	-3.42
105.6	3166.17	3168	-7.39	-3.48
105.8	3167.59	3169	-7.40	-3.57
106	3169.02	3171	-7.45	-3.71
106.2	3170.46	3173	-7.63	-3.89
106.4	3171.91	3174	-7.68	-3.74
106.6	3173.36	3176	-7.72	-3.62
106.8	3174.82	3177	-7.73	-3.49
107	3176.29	3179	-7.74	-3.30
107.2	3177.77	3181	-7.67	-3.33
107.4	3179.26	3182	-7.63	-3.51
107.6	3180.76	3184	-7.64	-3.69
107.8	3182.27	3185	-7.67	-3.98
108	3183.78	3187	-7.54	-3.92
108.2	3185.31	3189	-7.51	-4.11
108.4	3186.85	3190	-7.46	-4.14
108.6	3188.39	3192	-7.42	-4.16
108.8	3189.95	3193	-7.46	-4.14
109	3191.52	3195	-7.48	-4.02
109.2	3193.10	3197	-7.44	-4.11
109.4	3194.69	3198	-7.48	-3.94
109.6	3196.29	3200	-7.36	-3.90
109.8	3197.90	3202	-7.32	-3.80
110	3199.52	3203	-7.38	-3.92
110.2	3201.16	3205	-7.33	-3.92
110.4	3202.81	3206	-7.48	-4.15
110.6	3204.47	3208	-7.69	-4.25
110.8	3206.14	3210	-7.89	-4.52
111	3207.82	3211	-7.98	-4.47
111.2	3209.52	3213	-7.83	-4.26
111.4	3211.23	3214	-7.81	-4.06
111.6	3212.95	3216	-7.70	-3.92
111.8	3214.68	3218	-7.35	-3.58
112	3216.43	3219	-7.40	-3.76
112.2	3218.19	3221	-7.37	-3.75
112.4	3219.97	3223	-7.30	-3.70
112.6	3221.75	3224	-7.50	-3.65

112.8	3223.56	3226	-7.61	-3.46
113	3225.37	3227	-7.75	-3.50
113.2	3227.21	3229	-7.85	-3.50
113.4	3229.05	3231	-7.95	-3.60
113.6	3230.92	3233	-8.05	-3.54
113.8	3232.88	3236	-8.00	-3.66
114	3234.94	3240	-8.01	-3.67
114.2	3237.10	3243	-8.05	-3.90
114.4	3239.35	3246	-7.98	-3.78
114.6	3241.70	3250	-7.96	-3.86
114.8	3244.14	3253	-7.97	-3.82
115	3246.68	3256	-7.94	-4.08
115.2	3249.31	3260	-7.86	-4.00
115.4	3252.03	3263	-7.82	-3.93
115.6	3254.83	3266	-7.65	-4.08
115.8	3257.73	3270	-7.65	-3.92
116	3260.71	3273	-7.65	-3.88
116.2	3263.78	3276	-7.67	-3.78
116.4	3266.94	3280	-7.60	-3.60
116.6	3270.18	3283	-7.62	-3.53
116.8	3273.50	3286	-7.61	-3.44
117	3276.90	3290	-7.68	-3.49
117.2	3280.38	3293	-7.65	-3.45
117.4	3283.95	3296	-7.72	-3.53
117.6	3287.59	3300	-7.71	-3.42
117.8	3291.30	3303	-7.79	-3.51
118	3295.09	3306	-7.83	-3.53
118.2	3298.96	3309	-7.92	-3.57
118.4	3302.90	3313	-7.91	-3.64
118.6	3306.91	3316	-7.99	-3.67
118.8	3310.99	3319	-7.94	-3.63
119	3315.15	3323	-7.88	-3.59
119.2	3319.37	3326	-7.84	-3.51
119.4	3323.66	3329	-7.80	-3.46
119.6	3328.01	3333	-7.77	-3.50
119.8	3332.43	3336	-7.70	-3.46
120	3336.92	3339	-7.71	-3.45
120.2	3341.46	3343	-7.64	-3.37
120.4	3346.07	3346	-7.62	-3.43
120.6	3350.74	3349	-7.57	-3.37
120.8	3355.47	3353	-7.38	-3.44
121	3360.25	3356	-7.34	-3.30
121.2	3365.10	3359	-7.31	-3.14
121.4	3370.00	3363	-7.23	-2.93
121.6	3375.21	3371	-7.06	-2.86
121.8	3382.24	3384	-6.93	-2.43
122	3391.10	3398	-6.85	-2.65
122.2	3401.55	3411	-6.76	-2.62
122.4	3413.35	3424	-6.64	-2.75
122.6	3426.26	3438	-6.09	-2.69
122.8	3440.03	3451	-6.67	-2.74

123	3454.41	3464	-5.40	-2.35
123.2	3469.16	3478	-6.27	-3.52
123.4	3484.05	3491	-6.81	-3.73
123.6	3498.81	3505	-7.24	-4.20
123.8	3513.22	3518	-7.35	-4.10
124	3527.02	3531	-3.45	-2.35
124.2	3539.97	3545	-1.41	-1.70
124.4	3551.83	3558	-1.74	-1.73
124.6	3563.00	3570	-1.73	-2.08
124.8	3576.68	3581	-2.49	-1.74
125	3592.34	3592	-3.35	-2.71
125.2	3608.74	3602	-3.47	-3.01
125.4	3624.66	3613	-3.47	-2.62
125.6	3638.85	3624	-3.56	-2.87
125.8	3650.10	3635	-3.50	-2.83
126	3657.17	3645	-3.93	-3.00
126.2	3661.70	3648	-4.38	-3.37
126.4	3666.14	3650	-4.92	-2.58
126.6	3670.51	3653	-4.43	-3.01
126.8	3674.79	3655	-4.28	-2.18
127	3679.00	3658	-4.86	-2.72
127.2	3683.13	3660	-4.30	-2.86
127.4	3687.19	3663	-4.44	-3.70
127.6	3691.18	3665	-4.65	-3.86
127.8	3695.09	3668	-4.44	-3.73
128	3698.93	3671	-4.30	-3.46
128.2	3702.70	3673	-4.34	-3.20
128.4	3706.41	3676	-5.48	-3.34
128.6	3710.04	3678	-4.63	-3.58
128.8	3713.62	3681	-4.82	-3.87
129	3717.13	3683	-4.99	-2.94
129.2	3720.57	3686	-4.16	-2.65
129.4	3723.96	3688	-5.16	-3.01
129.6	3727.29	3691	-5.10	-2.67
129.8	3730.55	3693	-4.87	-2.44
130	3733.77	3696	-4.44	-2.55
130.2	3736.92	3698	-4.68	-3.03
130.4	3740.03	3701	-3.83	-2.35
130.6	3743.08	3703	-4.03	-2.39
130.8	3746.07	3706	-4.09	-2.28
131	3749.02	3708	-3.77	-2.45
131.2	3751.92	3711	-4.02	-3.18
131.4	3754.78	3713	-3.93	-2.38
131.6	3757.59	3716	-4.28	-1.93
131.8	3760.35	3718	-4.59	-2.13
132	3763.07	3721	-4.32	-2.15
132.2	3765.75	3723	-4.38	-2.37
132.4	3768.39	3726	-4.17	-2.78
132.6	3770.99	3728	-4.23	-3.37
132.8	3773.56	3731	-4.27	-3.44
133	3776.09	3734	-4.41	-3.00

133.2	3778.58	3736	-4.43	-2.95
133.4	3781.04	3739	-4.94	-3.28
133.6	3783.47	3741	-4.99	-3.95
133.8	3785.87	3744	-5.55	-3.85
134	3788.24	3746	-5.67	-3.36
134.2	3790.58	3749	-5.01	-2.82
134.4	3792.90	3751	-4.97	-3.31
134.6	3795.20	3755	-5.16	-3.07
134.8	3797.57	3761	-4.80	-2.93
135	3800.00	3767	-4.70	-2.74
135.2	3802.50	3773	-4.77	-4.11
135.4	3805.06	3779	-4.54	-4.45
135.6	3807.69	3785	-5.16	-3.82
135.8	3810.38	3791	-4.97	-4.08
136	3813.12	3797	-5.58	-2.73
136.2	3815.92	3803	-5.57	-3.00
136.4	3818.78	3809	-5.05	-3.31
136.6	3821.69	3815	-5.07	-3.28
136.8	3824.64	3821	-5.50	-3.27
137	3827.64	3827	-5.18	-3.09
137.2	3830.69	3833	-5.47	-3.10
137.4	3833.78	3839	-4.73	-3.28
137.6	3836.91	3845	-4.74	-3.02
137.8	3840.08	3851	-5.41	-2.95
138	3843.29	3857	-5.32	-3.32
138.2	3846.53	3863	-5.10	-2.30
138.4	3849.80	3868	-5.09	-2.10
138.6	3853.10	3874	-4.68	-2.21
138.8	3856.43	3880	-5.43	-2.40
139	3859.78	3886	-5.12	-2.65
139.2	3863.16	3892	-5.13	-2.81
139.4	3866.55	3898	-5.10	-3.27
139.6	3869.97	3904	-5.56	-2.51
139.8	3873.40	3910	-5.73	-2.48
140	3876.84	3916	-5.87	-2.66
140.2	3880.30	3922	-5.66	-2.44
140.4	3883.77	3928	-5.78	-2.80
140.6	3887.24	3934	-5.45	-3.60
140.8	3890.72	3940	-5.24	-3.59
141	3894.20	3946	-5.44	-2.96
141.2	3897.68	3952	-5.47	-3.72
141.4	3901.17	3958	-5.65	-3.71
141.6	3904.64	3964	-6.35	-3.98
141.8	3908.12	3970	-6.25	-3.34
142	3911.58	3976	-5.82	-3.23
142.2	3915.03	3982	-5.89	-3.57
142.4	3918.48	3988	-6.01	-3.38
142.6	3921.90	3993	-5.77	-3.52
142.8	3925.31	3999	-5.86	-3.96
143	3928.70	4005	-6.39	-3.73
143.4	3935.42	4017	-6.13	-3.35



143.6	3938.74	4023	-5.84	-3.87
143.8	3942.03	4029	-5.79	-3.67
144	3945.30	4035	-5.77	-3.99
144.2	3948.53	4041	-6.29	-3.52
144.6	3954.96	4051	-6.15	-3.63
144.8	3958.68	4053	-6.29	-3.82
145	3962.92	4055	-6.23	-4.25
145.2	3967.63	4058	-6.19	-4.91
145.4	3972.77	4060	-6.22	-3.79
145.6	3978.29	4062	-6.08	-3.35
145.8	3984.14	4064	-6.38	-3.43
146	3990.29	4066	-6.52	-3.34
146.2	3996.69	4068	-6.67	-2.65
146.4	4003.28	4071	-6.71	-3.07
146.6	4010.03	4073	-6.93	-3.38
146.8	4016.89	4075	-6.79	-4.09
147	4023.82	4077	-6.35	-3.79
147.2	4030.76	4079	-6.43	-3.51
147.4	4037.68	4081	-6.50	-3.61
147.6	4044.53	4084	-6.79	-3.62
147.8	4051.27	4086	-6.32	-4.00
148	4057.84	4088	-6.36	-3.61
148.2	4064.21	4090	-6.34	-3.69
148.6	4076.15	4094	-6.51	-4.60
148.8	4081.62	4097	-6.58	-4.41
149	4086.71	4099	-6.60	-4.61
149.2	4092.17	4107	-7.03	-4.71
149.4	4098.66	4115	-7.30	-4.43
149.6	4106.04	4123	-7.24	-4.26
149.8	4114.16	4131	-7.01	-3.76
150	4122.87	4139	-6.95	-3.47
150.2	4132.02	4148	-6.75	-2.98
150.4	4141.45	4156	-6.67	-2.93
150.6	4151.03	4164	-6.59	-3.28
150.8	4160.59	4172	-6.69	-3.60
151	4169.98	4180	-6.47	-3.78
151.2	4179.06	4188	-6.53	-3.72
151.4	4187.68	4196	-6.37	-3.50
151.6	4195.68	4205	-6.47	-3.65
151.8	4202.91	4213	-6.56	-4.01
152	4209.23	4221	-6.54	-3.62
152.2	4214.49	4229	-6.68	-2.95
152.4	4218.52	4237	-6.49	-2.89
152.6	4221.37	4242	-6.39	-2.90
152.8	4224.01	4243	-6.33	-3.30
153	4226.62	4245	-6.44	-3.34
153.2	4229.20	4246	-6.34	-3.56
153.4	4231.75	4247	-6.59	-3.66
153.6	4234.27	4249	-6.68	-3.46
153.8	4236.75	4250	-6.46	-2.65
154	4239.21	4251	-6.59	-3.15

154.2	4241.64	4253	-6.08	-3.24
154.4	4244.04	4254	-5.96	-3.84
154.6	4246.41	4255	-5.77	-3.65
154.8	4248.75	4257	-5.41	-4.03
155	4251.07	4258	-5.94	-4.31
155.2	4253.36	4259	-6.35	-3.92
155.4	4255.62	4261	-6.26	-3.84
155.6	4257.86	4262	-6.14	-3.56
155.8	4260.07	4263	-6.38	-2.87
156	4262.26	4265	-6.54	-2.87
156.2	4264.42	4266	-6.92	-3.20
156.4	4266.56	4268	-6.74	-3.34
156.6	4268.67	4269	-6.91	-3.58
156.8	4270.77	4270	-6.86	-2.93
157	4272.84	4272	-7.17	-3.26
157.2	4274.89	4273	-7.04	-3.31
157.4	4276.91	4274	-6.86	-3.28
157.6	4278.92	4276	-6.94	-3.17
157.8	4280.90	4277	-6.94	-3.34
158	4282.87	4278	-7.03	-3.25
158.2	4284.81	4280	-6.35	-3.26
158.4	4286.74	4281	-6.71	-3.57
158.6	4288.65	4282	-6.77	-3.93
158.8	4290.54	4284	-6.44	-3.99
159	4292.41	4285	-6.59	-4.19
159.2	4294.26	4286	-6.29	-3.93
159.4	4296.10	4288	-6.63	-3.76
159.6	4297.92	4289	-6.72	-3.91
159.8	4299.73	4290	-6.28	-3.82
160	4301.52	4292	-6.13	-3.77
160.2	4303.30	4293	-6.19	-3.03
160.4	4305.06	4294	-6.34	-3.29
160.6	4306.80	4296	-6.60	-3.76
160.8	4308.54	4297	-5.98	-3.60
161.2	4311.97	4300	-6.16	-4.25
161.4	4313.67	4301	-6.67	-3.99
161.6	4315.37	4303	-6.83	-3.84
161.8	4317.22	4305	-6.95	-2.99
162	4319.21	4307	-7.00	-2.98
162.2	4321.34	4309	-7.25	-3.35
162.4	4323.60	4311	-7.11	-3.99
162.6	4325.98	4313	-6.84	-3.60
162.8	4328.46	4315	-6.89	-3.60
163	4331.05	4317	-6.68	-3.58
163.2	4333.72	4319	-7.04	-4.51
163.4	4336.47	4321	-7.31	-4.36
163.6	4339.29	4323	-7.23	-3.73
163.8	4342.17	4325	-6.98	-3.42
164	4345.10	4327	-6.96	-3.73
164.2	4348.07	4329	-7.01	-3.46
164.4	4351.07	4331	-7.55	-4.02

164.6	4354.08	4333	-7.45	-4.40
164.8	4357.11	4335	-7.40	-4.07
165	4360.13	4337	-7.35	-3.35
165.2	4363.15	4339	-7.29	-2.97
165.4	4366.14	4341	-6.93	-3.83
165.6	4369.10	4343	-7.16	-3.66
165.8	4372.03	4345	-6.95	-3.62
166	4374.90	4347	-6.83	-3.73
166.2	4377.71	4349	-6.63	-3.42
166.4	4380.45	4351	-6.73	-4.33
166.6	4383.11	4353	-6.76	-4.40
166.8	4385.68	4355	-6.51	-3.35
167	4388.16	4357	-6.61	-3.33
167.2	4390.52	4359	-6.60	-3.53
167.4	4392.76	4361	-6.70	-3.22
167.6	4394.87	4363	-6.56	-3.82
167.8	4396.84	4365	-6.83	-4.35
168	4398.66	4367	-6.88	-2.95
168.2	4400.32	4369	-6.95	-3.04
168.4	4401.81	4371	-7.21	-3.45
168.6	4403.15	4373	-7.51	-3.46
168.8	4404.42	4373	-7.34	-3.44
169	4405.67	4373	-7.38	-3.34
169.2	4406.90	4373	-7.19	-2.67
169.4	4408.10	4373	-7.52	-2.93
169.6	4409.28	4373	-7.18	-3.00
169.8	4410.46	4373	-7.49	-3.48
170	4411.63	4373	-7.45	-3.51
170.2	4412.80	4373	-7.06	-3.61
170.4	4413.97	4373	-6.65	-3.43
170.6	4415.15	4373	-5.67	-3.79
170.8	4416.34	4373	-6.49	-4.23
171	4417.55	4373	-6.94	-4.40
171.2	4418.78	4373	-6.86	-4.79
171.4	4420.04	4373	-7.34	-4.30
171.6	4421.33	4373	-7.11	-3.92
171.8	4422.66	4373	-7.19	-4.35
172	4424.02	4373	-7.07	-4.04
172.2	4425.44	4374	-7.23	-4.15
172.4	4426.90	4374	-7.16	-3.57
172.6	4428.43	4374	-6.87	-2.84
172.8	4430.01	4374	-6.93	-3.31
173	4431.65	4374	-6.89	-3.61
173.2	4433.37	4374	-7.22	-4.20
173.4	4435.16	4374	-7.14	-4.04
173.6	4437.13	4378	-7.08	-3.74
173.8	4439.83	4388	-6.95	-3.95
174	4443.29	4397	-6.84	-3.56
174.2	4447.47	4406	-6.84	-3.60
174.4	4452.28	4415	-6.69	-3.68
174.6	4457.68	4425	-6.74	-3.87

174.8	4463.60	4434	-6.73	-3.90
175	4469.97	4443	-6.78	-4.23
175.2	4476.74	4452	-6.64	-4.38
175.4	4483.85	4461	-7.06	-4.64
175.6	4491.22	4471	-7.15	-4.44
175.8	4498.80	4480	-6.85	-3.66
176	4506.53	4489	-6.88	-3.70
176.2	4514.34	4498	-6.49	-3.05
176.4	4522.18	4507	-6.29	-3.54
176.6	4529.97	4517	-6.40	-3.88
176.8	4537.66	4526	-6.42	-4.20
177	4545.19	4535	-6.50	-4.05
177.2	4552.49	4544	-7.12	-3.69
177.4	4559.50	4554	-7.18	-3.92
177.6	4566.17	4563	-7.03	-4.30
177.8	4572.41	4572	-7.04	-4.69
178	4578.19	4581	-7.09	-3.81
178.2	4583.42	4590	-6.95	-3.45
178.4	4588.06	4600	-6.73	-3.38
178.6	4592.13	4606	-6.61	-3.49
178.8	4596.22	4611	-6.84	-3.45
179	4600.42	4615	-6.81	-3.50
179.2	4604.70	4620	-5.98	-3.71
179.4	4609.06	4624	-4.70	-3.64
179.6	4613.48	4629	-4.03	-3.40
179.8	4617.94	4633	-3.77	-2.69
180	4622.44	4638	-3.88	-3.13
180.2	4626.95	4642	-4.07	-3.03
180.4	4631.46	4647	-4.56	-2.56
180.6	4635.96	4651	-4.98	-2.45
180.8	4640.43	4656	-4.65	-2.35
181	4644.86	4660	-4.44	-2.46
181.2	4649.24	4665	-5.06	-2.41
181.4	4653.54	4669	-5.16	-3.16
181.6	4657.76	4674	-5.06	-3.40
181.8	4661.88	4678	-5.07	-2.57
182	4665.89	4683	-5.39	-2.97
182.2	4669.77	4687	-5.60	-2.91
182.4	4673.50	4692	-5.48	-3.39
182.6	4677.08	4696	-5.44	-4.32
182.8	4680.49	4701	-5.35	-4.49
183	4683.71	4705	-5.14	-4.42
183.2	4686.73	4710	-4.87	-3.93
183.4	4689.54	4714	-4.75	-4.24
183.6	4692.12	4719	-5.01	-3.65
183.8	4694.45	4723	-5.24	-2.82
184	4696.53	4728	-5.16	-2.59
184.2	4698.47	4729	-5.30	-2.57
184.4	4700.39	4730	-5.41	-2.97
184.6	4702.29	4732	-5.40	-3.35
184.8	4704.19	4733	-5.34	-2.80

185	4706.07	4734	-5.07	-3.32
185.2	4707.94	4736	-5.27	-3.54
185.4	4709.79	4737	-5.67	-2.69
185.6	4711.63	4738	-5.10	-2.98
185.8	4713.47	4740	-5.58	-2.56
186	4715.28	4741	-5.33	-2.72
186.2	4717.09	4742	-5.10	-2.88
186.4	4718.89	4744	-5.24	-3.31
186.6	4720.68	4745	-5.40	-3.69
186.8	4722.46	4746	-5.28	-3.21
187	4724.22	4748	-5.56	-3.22
187.2	4725.98	4749	-5.72	-4.14
187.4	4727.73	4750	-5.89	-3.60
187.6	4729.47	4752	-6.35	-3.60
187.8	4731.20	4753	-6.33	-3.70
188	4732.92	4754	-6.34	-3.62
188.2	4734.64	4755	-6.13	-3.08
188.4	4736.35	4757	-6.27	-2.50
188.6	4738.05	4758	-5.32	-1.96
188.8	4739.74	4759	-5.25	-2.19
189	4741.43	4761	-5.41	-2.26
189.2	4743.11	4762	-5.94	-2.60
189.4	4744.78	4763	-5.84	-3.03
189.6	4746.45	4765	-5.31	-3.11
189.8	4748.12	4766	-5.80	-2.94
190	4749.78	4767	-5.90	-2.76
190.2	4751.43	4769	-6.14	-3.07
190.4	4753.08	4770	-6.16	-2.99
190.6	4754.73	4771	-6.06	-3.25
190.8	4756.37	4773	-6.13	-3.88
191	4758.01	4774	-6.30	-4.02
191.2	4759.65	4775	-6.29	-3.70
191.4	4761.28	4777	-6.21	-3.39
191.6	4762.91	4778	-6.49	-3.35
191.8	4764.54	4779	-6.22	-3.48
192	4766.17	4781	-6.57	-3.99
192.2	4767.80	4782	-6.69	-3.70
192.4	4769.42	4783	-6.70	-4.06
192.6	4771.05	4785	-7.14	-5.01
192.8	4772.67	4786	-6.46	-5.01
193	4774.30	4787	-6.20	-4.54
193.2	4775.93	4789	-6.65	-4.10
193.4	4777.55	4790	-6.00	-3.40
193.6	4779.18	4791	-6.13	-3.76
193.8	4780.81	4793	-6.50	-4.02
194	4782.44	4794	-6.80	-4.68
194.2	4784.07	4795	-6.30	-4.11
194.4	4785.71	4797	-6.03	-4.53
194.6	4787.34	4798	-5.93	-4.14
194.8	4788.98	4799	-6.32	-4.07
195	4790.63	4801	-6.42	-3.93

195.2	4792.27	4802	-6.40	-4.10
195.4	4793.93	4803	-6.59	-4.65
195.6	4795.58	4805	-6.64	-4.10
195.8	4797.24	4806	-6.43	-3.83
196	4798.91	4807	-6.77	-4.34
196.2	4800.58	4809	-6.67	-4.06
196.4	4802.25	4810	-6.69	-3.73
196.6	4803.94	4811	-6.68	-3.45
196.8	4805.63	4813	-6.80	-4.36
197	4807.32	4814	-7.05	-4.37
197.2	4809.02	4815	-6.95	-3.71
197.4	4810.73	4817	-6.31	-3.95
197.6	4812.45	4818	-6.43	-3.67
197.8	4814.17	4819	-6.35	-3.15
198	4815.91	4820	-6.49	-3.66
198.2	4817.65	4822	-6.49	-4.41
198.4	4819.40	4823	-6.90	-5.13
198.6	4821.16	4824	-7.02	-4.67
198.8	4822.93	4826	-6.60	-4.34
199	4824.71	4827	-6.75	-4.48
199.2	4826.50	4828	-6.44	-4.82
199.4	4828.30	4830	-6.71	-4.11
199.6	4830.11	4831	-6.50	-4.17
199.8	4831.94	4832	-6.66	-4.51
200	4833.77	4834	-6.80	-4.28
200.2	4835.62	4835	-6.67	-3.94
200.4	4837.47	4836	-6.64	-4.67
200.6	4839.35	4838	-6.98	-3.90
200.8	4841.23	4839	-6.92	-3.87
201	4843.13	4840	-6.87	-4.05
201.2	4845.04	4842	-7.44	-4.35
201.4	4846.96	4843	-7.68	-4.25
201.6	4848.90	4844	-7.35	-4.06
201.8	4850.85	4846	-7.38	-3.68
202	4852.82	4847	-7.58	-3.77
202.2	4854.81	4848	-7.71	-3.23
202.4	4856.80	4850	-7.71	-3.49
202.6	4858.83	4852	-7.82	-4.19
202.8	4860.91	4855	-7.89	-4.56
203	4863.05	4859	-8.33	-4.09
203.2	4865.26	4862	-8.31	-3.57
203.4	4867.53	4866	-7.60	-3.45
203.6	4869.86	4869	-6.87	-2.87
203.8	4872.25	4873	-6.94	-2.99
204	4874.70	4876	-6.49	-3.52
204.2	4877.20	4879	-5.76	-3.82
204.4	4879.76	4883	-6.36	-3.53
204.6	4882.38	4886	-6.55	-3.87
204.8	4885.04	4890	-6.69	-3.91
205	4887.76	4893	-6.60	-3.85
205.2	4890.53	4897	-6.53	-3.35

205.4	4893.35	4900	-6.62	-3.26
205.6	4896.21	4904	-6.53	-3.06
205.8	4899.12	4907	-6.20	-2.29
206	4902.08	4910	-6.18	-2.14
206.2	4905.08	4914	-5.96	-2.29
206.4	4908.12	4917	-6.13	-2.07
206.6	4911.20	4921	-6.51	-2.33
206.8	4914.32	4924	-6.84	-2.37
207	4917.48	4928	-7.01	-2.71
207.2	4920.68	4931	-7.11	-2.88
207.4	4923.91	4934	-6.78	-2.91
207.6	4927.18	4938	-6.97	-3.36
207.8	4930.48	4941	-6.88	-3.65
208	4933.81	4945	-6.45	-3.69
208.2	4937.17	4948	-6.34	-3.62
208.4	4940.56	4952	-6.07	-3.97
208.6	4943.98	4955	-6.49	-3.92
208.8	4947.42	4958	-6.28	-3.73
209	4950.89	4962	-6.31	-4.18
209.2	4954.39	4965	-6.04	-4.24
209.4	4957.90	4969	-5.76	-3.60
209.6	4961.44	4972	-6.05	-3.32
209.8	4965.00	4976	-5.93	-3.49
210	4968.57	4979	-5.85	-3.67
210.2	4972.17	4982	-5.84	-4.00
210.4	4975.78	4986	-5.94	-3.82
210.6	4979.40	4989	-6.26	-3.46
210.8	4983.04	4993	-6.31	-3.13
211	4986.68	4996	-6.23	-3.15
211.2	4990.34	5000	-6.06	-3.20
211.4	4994.01	5003	-6.01	-3.30
211.6	4997.69	5006	-6.03	-3.72
211.8	5001.37	5010	-6.45	-3.83
212	5005.06	5013	-6.32	-3.76
212.2	5008.75	5017	-6.62	-3.82
212.4	5012.45	5020	-6.93	-3.15
212.6	5016.15	5024	-7.15	-3.20
212.8	5019.84	5027	-6.89	-3.21
213	5023.54	5030	-6.93	-3.78
213.2	5027.23	5034	-7.00	-3.87
213.4	5030.92	5037	-7.09	-3.83
213.6	5034.61	5041	-7.12	-4.42
213.8	5038.29	5044	-7.21	-4.93
214	5041.96	5048	-7.42	-4.83
214.2	5045.62	5051	-6.98	-4.41
214.4	5049.27	5054	-7.02	-4.71
214.6	5052.91	5058	-7.06	-4.01
214.8	5056.53	5061	-6.60	-3.55
215	5060.15	5065	-6.82	-3.59
215.2	5063.74	5068	-7.08	-3.56
215.4	5067.32	5072	-7.08	-4.09

215.6	5070.88	5075	-7.24	-5.02
215.8	5074.42	5078	-7.31	-5.43
216	5077.94	5082	-7.19	-4.22
216.2	5081.44	5085	-7.14	-4.41
216.4	5084.92	5089	-7.14	-4.34
216.6	5088.37	5092	-6.91	-3.91
216.8	5091.79	5096	-6.74	-4.45
217	5095.19	5099	-6.97	-4.15
217.2	5098.55	5102	-7.14	-4.14
217.4	5101.89	5106	-6.90	-4.44
217.6	5105.20	5109	-7.03	-4.57
217.8	5108.47	5113	-7.27	-4.28
218	5111.71	5116	-7.43	-4.34
218.2	5114.91	5120	-7.34	-5.10
218.4	5118.08	5123	-7.25	-5.62
218.6	5121.21	5127	-7.36	-5.67
218.8	5124.30	5130	-7.21	-4.58
219	5127.35	5133	-6.98	-4.37
219.2	5130.36	5137	-6.77	-3.37
219.4	5133.32	5140	-6.54	-2.71
219.6	5136.26	5143	-7.00	-3.56
219.8	5139.25	5145	-6.99	-3.00
220	5142.33	5146	-6.96	-3.26
220.2	5145.47	5148	-6.58	-3.43
220.4	5148.67	5150	-6.70	-3.19
220.6	5151.94	5152	-6.58	-3.10
220.8	5155.27	5153	-6.39	-3.40
221	5158.65	5155	-6.52	-3.54
221.2	5162.08	5157	-6.50	-3.60
221.4	5165.56	5159	-6.27	-3.62
221.6	5169.08	5160	-6.32	-3.59
221.8	5172.63	5162	-6.63	-3.13
222	5176.22	5164	-6.47	-3.11
222.2	5179.84	5166	-6.41	-3.45
222.4	5183.49	5168	-6.68	-3.52
222.6	5187.15	5169	-6.51	-2.55
222.8	5190.83	5171	-6.61	-2.90
223	5194.53	5173	-6.84	-3.22
223.2	5198.24	5175	-7.24	-3.42
223.4	5201.95	5176	-6.78	-2.81
223.6	5205.66	5178	-7.01	-3.42
223.8	5209.37	5180	-6.59	-3.50
224	5213.07	5182	-6.67	-3.51
224.2	5216.76	5183	-6.77	-3.51
224.4	5220.44	5185	-6.61	-3.32
224.6	5224.09	5187	-6.47	-2.96
224.8	5227.73	5189	-6.70	-3.43
225	5231.33	5190	-6.81	-2.72
225.2	5234.91	5192	-6.93	-3.03
225.4	5238.45	5194	-7.18	-3.34
225.6	5241.95	5196	-6.99	-3.00



225.8	5245.41	5198	-6.87	-2.95
226	5248.82	5199	-7.45	-3.41
226.2	5252.17	5201	-7.73	-3.59
226.4	5255.48	5203	-7.59	-3.61
226.6	5258.72	5205	-7.59	-3.75
226.8	5261.90	5206	-7.66	-3.82
227	5265.01	5208	-7.37	-3.74
227.2	5268.05	5210	-7.31	-3.85
227.4	5271.01	5212	-6.96	-3.38
227.6	5273.92	5215	-6.79	-3.05
227.8	5276.94	5221	-6.45	-3.12
228	5280.09	5227	-6.05	-3.53
228.2	5283.36	5232	-5.66	-2.53
228.4	5286.75	5238	-6.34	-2.85
228.6	5290.25	5244	-6.81	-3.21
228.8	5293.85	5249	-6.68	-3.36
229	5297.56	5255	-6.21	-3.41
229.2	5301.36	5260	-6.35	-4.07
229.4	5305.26	5266	-6.46	-3.58
229.6	5309.24	5272	-6.72	-3.93
229.8	5313.29	5277	-6.47	-4.59
230	5317.43	5283	-6.60	-4.36
230.2	5321.63	5289	-6.86	-4.05
230.4	5325.89	5294	-7.25	-4.01
230.6	5330.21	5300	-7.05	-3.44
230.8	5334.58	5306	-7.02	-3.41
231	5339.00	5311	-6.96	-3.97
231.2	5343.46	5317	-7.09	-4.39
231.4	5347.95	5322	-6.87	-3.77
231.6	5352.48	5328	-6.77	-3.23
231.8	5357.02	5334	-6.66	-3.25
232	5361.59	5339	-6.80	-3.18
232.2	5366.17	5345	-7.01	-2.91
232.4	5370.76	5351	-6.85	-3.09
232.6	5375.35	5356	-7.02	-3.24
232.8	5379.93	5362	-6.72	-3.05
233	5384.51	5368	-6.63	-2.95
233.2	5389.08	5373	-6.35	-2.87
233.4	5393.62	5379	-6.63	-3.09
233.6	5398.14	5385	-6.52	-3.27
233.8	5402.63	5390	-6.47	-3.27
234	5407.08	5396	-5.78	-2.96
234.2	5411.49	5401	-5.02	-2.70
234.4	5415.85	5407	-5.03	-2.64
234.6	5420.16	5413	-4.49	-2.14
234.8	5424.41	5418	-5.13	-2.16
235	5428.60	5424	-5.63	-2.81
235.2	5432.72	5430	-5.48	-3.16
235.4	5436.76	5435	-4.26	-2.43
235.6	5440.72	5441	-5.82	-3.56
235.8	5444.60	5447	-6.45	-3.41

236	5448.39	5452	-6.28	-3.47
236.2	5452.08	5458	-6.27	-4.04
236.4	5455.67	5463	-6.71	-4.47
236.6	5459.15	5469	-6.75	-3.26
236.8	5462.51	5475	-5.55	-2.85
237	5465.76	5480	-6.84	-3.79
237.2	5468.88	5486	-7.14	-4.24
237.4	5471.88	5492	-7.06	-3.84
237.6	5474.73	5497	-6.68	-3.70
237.8	5477.45	5503	-5.21	-3.30
238	5480.02	5509	-3.79	-1.70
238.2	5482.53	5510	-4.70	-2.05
238.4	5485.05	5510	-6.56	-2.90
238.6	5487.58	5511	-6.94	-3.07
238.8	5490.12	5512	-7.19	-2.92
239	5492.68	5513	-6.47	-2.66
239.2	5495.24	5514	-6.41	-2.76
239.4	5497.81	5515	-6.64	-2.90
239.6	5500.39	5516	-6.83	-3.05
239.8	5502.97	5517	-6.70	-3.12
240	5505.55	5518	-6.56	-3.16
240.2	5508.14	5519	-6.30	-3.19
240.4	5510.72	5520	-6.60	-3.34
240.6	5513.31	5521	-6.87	-3.13
240.8	5515.89	5522	-6.99	-3.21
241	5518.46	5523	-7.10	-3.46
241.2	5521.03	5524	-7.01	-3.28
241.4	5523.59	5524	-6.75	-3.30
241.6	5526.13	5525	-6.86	-2.95
241.8	5528.67	5526	-6.86	-2.86
242	5531.20	5527	-6.77	-2.88
242.2	5533.71	5528	-6.89	-3.02
242.4	5536.20	5529	-6.80	-3.02
242.6	5538.68	5530	-6.96	-3.01
242.8	5541.14	5531	-7.11	-3.34
243	5543.58	5532	-7.18	-3.46
243.2	5545.99	5533	-7.44	-3.36
243.4	5548.38	5534	-7.61	-3.53
243.6	5550.75	5535	-7.61	-3.83
243.8	5553.09	5536	-7.60	-3.87
244	5555.40	5537	-7.40	-3.90
244.2	5557.69	5538	-6.84	-4.03
244.4	5559.94	5538	-6.32	-3.53
244.6	5562.15	5539	-5.52	-3.13
244.8	5564.34	5540	-6.27	-3.69
245	5566.48	5541	-6.58	-4.28
245.2	5568.59	5542	-6.09	-3.66
245.4	5570.66	5543	-6.79	-4.57
245.6	5572.70	5545	-6.67	-3.78
245.8	5574.74	5547	-6.00	-3.74
246	5576.78	5550	-6.09	-3.84

246.2	5578.84	5552	-5.89	-3.44
246.4	5580.90	5555	-5.77	-2.59
246.6	5582.97	5557	-6.21	-3.26
246.8	5585.05	5560	-6.32	-3.44
247	5587.13	5562	-6.49	-3.66
247.2	5589.23	5565	-6.36	-3.12
247.4	5591.33	5567	-6.47	-3.39
247.6	5593.44	5570	-6.07	-3.72
247.8	5595.56	5572	-6.32	-3.40
248	5597.69	5575	-6.89	-3.83
248.2	5599.83	5577	-6.22	-2.88
248.4	5601.97	5580	-6.40	-3.39
248.6	5604.13	5582	-6.15	-3.41
248.8	5606.29	5585	-5.78	-2.61
249	5608.46	5587	-6.24	-2.57
249.2	5610.64	5590	-6.80	-3.14
249.4	5612.83	5592	-6.71	-3.31
249.6	5615.03	5595	-7.25	-3.37
249.8	5617.23	5597	-7.28	-3.72
250	5619.45	5599	-7.18	-3.95
250.2	5621.68	5602	-7.00	-3.51
250.4	5623.91	5604	-7.21	-4.86
250.6	5626.15	5607	-7.01	-3.41
250.8	5628.41	5609	-6.88	-3.59
251	5630.67	5612	-6.46	-3.91
251.2	5632.94	5614	-7.34	-3.82
251.4	5635.22	5617	-7.65	-4.04
251.6	5637.51	5619	-7.68	-3.87
251.8	5639.81	5622	-7.51	-3.72
252	5642.12	5624	-7.57	-3.84
252.2	5644.44	5627	-7.74	-3.89
252.4	5646.77	5629	-7.79	-4.06
252.6	5649.11	5632	-7.65	-4.00
252.8	5651.45	5634	-7.81	-4.37
253	5653.81	5637	-7.76	-4.54
253.2	5656.18	5639	-7.90	-4.56
253.4	5658.56	5642	-7.93	-3.85
253.6	5660.95	5644	-7.54	-4.36
253.8	5663.34	5647	-7.65	-5.11
254	5665.75	5649	-7.64	-4.87
254.2	5668.17	5652	-7.62	-4.93
254.4	5670.60	5654	-8.04	-4.32
254.6	5673.04	5657	-7.74	-3.90
254.8	5675.48	5659	-7.64	-4.06
255	5677.94	5662	-7.36	-3.92
255.2	5680.41	5664	-7.06	-4.18
255.4	5682.89	5667	-7.06	-4.06
255.6	5685.38	5669	-6.53	-3.87
255.8	5687.89	5672	-6.90	-4.83
256	5690.40	5674	-6.86	-4.25
256.2	5692.92	5677	-5.97	-3.58

256.4	5695.45	5679	-6.43	-3.54
256.6	5698.00	5682	-7.11	-4.20
256.8	5700.55	5684	-7.09	-4.51
257	5703.12	5686	-6.81	-4.01
257.2	5705.69	5689	-6.68	-3.76
257.4	5708.28	5691	-6.86	-3.37
257.6	5710.88	5694	-6.68	-3.70
257.8	5713.49	5696	-6.66	-3.60
258	5716.11	5699	-6.56	-2.75
258.2	5718.74	5701	-6.60	-2.84
258.4	5721.39	5704	-6.92	-3.22
258.6	5724.04	5706	-7.18	-3.27
258.8	5726.71	5709	-6.87	-2.92
259	5729.39	5711	-7.20	-3.75
259.2	5732.08	5714	-7.05	-4.13
259.4	5734.78	5716	-7.14	-3.26
259.6	5737.49	5719	-6.78	-2.68
259.8	5740.21	5721	-7.03	-3.34
260	5742.95	5724	-6.88	-3.28
260.2	5745.74	5728	-6.74	-3.20
260.4	5748.64	5733	-6.91	-3.46
260.6	5751.62	5737	-6.78	-3.23
260.8	5754.71	5742	-6.98	-3.18
261	5757.88	5746	-7.03	-3.56
261.2	5761.14	5751	-7.05	-3.29
261.4	5764.49	5756	-6.89	-3.13
261.6	5767.92	5760	-6.93	-3.02
261.8	5771.42	5765	-6.76	-2.95
262	5775.00	5769	-6.81	-3.08
262.2	5778.66	5774	-6.78	-3.34
262.4	5782.38	5778	-6.88	-3.59
262.6	5786.17	5783	-6.93	-3.68
262.8	5790.02	5787	-7.16	-3.39
263	5793.93	5792	-6.97	-3.33
263.2	5797.90	5796	-7.08	-2.83
263.4	5801.93	5801	-7.12	-2.85
263.6	5806.00	5806	-6.59	-2.81
263.8	5810.12	5810	-6.79	-3.15
264	5814.29	5815	-6.79	-3.30
264.2	5818.50	5819	-6.69	-3.65
264.4	5822.74	5824	-6.86	-3.99
264.6	5827.03	5828	-6.51	-4.14
264.8	5831.34	5833	-6.74	-4.09
265	5835.68	5837	-6.91	-3.71
265.2	5840.05	5842	-7.14	-3.82
265.4	5844.45	5846	-7.29	-4.10
265.6	5848.86	5851	-7.26	-4.39
265.8	5853.29	5856	-7.20	-4.83
266	5857.74	5860	-7.31	-4.87
266.2	5862.20	5865	-7.20	-4.12
266.4	5866.66	5869	-7.17	-3.73

266.6	5871.13	5874	-7.20	-3.68
266.8	5875.60	5878	-7.32	-3.71
267	5880.07	5883	-7.33	-3.81
267.2	5884.54	5887	-7.23	-3.68
267.4	5888.99	5892	-7.16	-3.54
267.6	5893.44	5896	-7.30	-3.51
267.8	5897.88	5901	-7.01	-3.33
268	5902.29	5906	-7.20	-3.83
268.2	5906.69	5910	-7.24	-4.11
268.4	5911.07	5915	-7.28	-3.76
268.6	5915.42	5919	-7.46	-3.81
268.8	5919.74	5924	-7.56	-3.80
269	5924.03	5928	-7.49	-4.20
269.2	5928.28	5933	-7.45	-4.07
269.4	5932.50	5937	-7.05	-3.76
269.6	5936.67	5942	-6.72	-3.56
269.8	5940.80	5946	-6.55	-3.00
270	5944.89	5951	-6.93	-3.06
270.2	5948.92	5956	-7.50	-3.36
270.4	5952.90	5960	-7.52	-3.50
270.6	5956.83	5965	-7.60	-3.71
270.8	5960.69	5969	-7.84	-3.80
271	5964.49	5974	-7.76	-3.99
271.2	5968.23	5978	-7.97	-4.35
271.4	5971.90	5983	-7.55	-4.21
271.6	5975.49	5987	-7.32	-4.39
271.8	5979.01	5992	-7.25	-4.62
272	5982.46	5996	-7.53	-4.60
272.2	5985.82	6001	-7.80	-4.29
272.4	5989.10	6005	-7.77	-3.87
272.6	5992.30	6009	-7.86	-3.75
272.8	5995.48	6011	-7.47	-3.47
273	5998.65	6013	-7.59	-3.57
273.2	6001.81	6016	-7.59	-3.60
273.4	6004.96	6018	-7.76	-4.13
273.6	6008.11	6020	-7.81	-4.28
273.8	6011.24	6023	-7.44	-4.16
274	6014.37	6025	-7.24	-4.31

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*PATA-I*

DFT(mm)	Copra_Age (yr BP)	Iscam_Age (yr BP)	$\delta^{13}\text{C}(\text{‰})$	$\delta^{18}\text{O}(\text{‰})$
14.8	3457.70		3.57	-0.95
14.9	3467.42		3.22	-0.79
15	3477.25		3.16	-0.56
15.1	3487.17		2.76	-0.58
15.2	3497.18		2.38	-0.74
15.3	3507.29		2.23	-0.89
15.4	3517.50		1.99	-1.13
15.5	3527.79		1.96	-1.18
15.6	3538.18		1.60	-1.23
15.7	3548.66	3545	1.43	-1.48
15.8	3559.23	3559	1.18	-1.52
15.9	3569.89	3572	0.96	-1.75
16	3580.64	3585	1.02	-1.98
16.1	3591.47	3599	0.94	-1.93
16.2	3602.39	3612	0.65	-2.07
16.3	3613.40	3625	0.65	-1.93
16.4	3624.49	3639	0.91	-1.77
16.5	3635.66	3652	0.98	-1.82
16.6	3646.92	3665	0.65	-1.85
16.7	3658.25	3679	0.44	-1.98
16.8	3669.67	3692	0.33	-1.90
16.9	3681.17	3705	0.36	-1.99
17	3692.75	3719	0.53	-2.13
17.1	3704.40	3732	0.76	-1.99
17.2	3716.13	3746	0.48	-1.81
17.3	3727.94	3759	1.04	-1.64
17.4	3739.83	3772	1.03	-1.79
17.5	3751.78	3786	0.82	-1.78
17.6	3763.81	3799	1.04	-2.11
17.7	3775.92	3812	1.00	-1.87
17.8	3788.09	3826	0.89	-1.81
17.9	3800.34	3839	0.75	-1.74
18	3812.65	3852	0.77	-1.65
18.1	3825.04	3866	0.84	-1.48
18.2	3837.49	3879	0.64	-1.87
18.3	3850.01	3892	0.68	-1.70
18.4	3862.60	3906	0.43	-1.76
18.5	3875.25	3919	0.15	-2.05
18.6	3887.96	3933	0.11	-2.38
18.7	3900.74	3946	0.18	-1.77
18.8	3913.58	3959	0.05	-1.68
18.9	3926.48	3973	0.06	-1.81
19	3939.44	3986	0.00	-2.26
19.1	3952.46	3999	0.14	-2.31
19.2	3965.54	4013	-0.15	-2.36
19.3	3978.68	4026	-0.34	-2.60
19.4	3991.87	4039	-0.25	-2.47

19.5	4005.12	4053	-0.20	-2.23
19.6	4018.43	4066	-0.38	-2.11
19.7	4031.79	4079	-0.69	-2.32
19.8	4045.20	4093	-0.55	-2.63
19.9	4058.67	4106	-0.54	-2.67
20	4072.18	4120	0.12	-2.29
20.1	4085.75	4133	0.79	-1.85
20.2	4099.36	4146	0.63	-1.88
20.3	4113.03	4160	0.06	-2.24
20.4	4126.74	4173	-0.43	-2.24
20.5	4140.50	4186	-0.40	-2.39
20.6	4154.30	4200	-0.10	-2.21
20.7	4168.15	4213	0.08	-2.17
20.8	4182.04	4226	-0.13	-1.67
20.9	4195.98	4240	-0.43	-1.89
21	4209.96	4253	-0.56	-1.87
21.1	4223.98	4266	-0.77	-2.24
21.2	4238.04	4280	-0.46	-2.22
21.3	4252.14	4293	-0.33	-1.82
21.4	4266.27	4307	-0.59	-1.94
21.5	4280.45	4320	-0.76	-2.16
21.6	4294.66	4333	-0.91	-2.32
21.7	4308.91	4347	-0.94	-2.55
21.8	4323.19	4360	-0.85	-2.47
21.9	4337.50	4373	-0.59	-2.39
22	4351.85	4387	-0.36	-2.62
22.1	4366.23	4400	-0.48	-2.27
22.2	4380.64	4413	-0.93	-2.70
22.3	4395.08	4427	-0.87	-2.59
22.4	4409.55	4440	-0.82	-2.55
22.5	4424.05	4453	-1.12	-3.04
22.6	4438.58	4467	-0.91	-3.00
22.7	4453.13	4480	-0.42	-2.29
22.8	4467.70	4494	-0.46	-1.98
22.9	4482.31	4507	-0.75	-2.43
23	4496.93	4520	-0.99	-2.77
23.1	4511.58	4534	-0.99	-2.97
23.2	4526.25	4547	-0.78	-3.05
23.3	4540.94	4560	-0.78	-3.33
23.4	4555.65	4574	-0.69	-2.72
23.5	4570.38	4587	-0.55	-2.50
23.6	4585.13	4600	-0.59	-2.47
23.7	4599.90	4614	-0.51	-2.42
23.8	4614.68	4627	-0.47	-2.34
23.9	4629.48	4640	-0.35	-2.11
24	4644.29	4654	-0.31	-1.75
24.1	4659.11	4667	-0.29	-2.23
24.2	4673.95	4681	0.05	-2.13
24.3	4688.80	4694	0.07	-2.12
24.4	4703.66	4707	0.17	-2.09
24.5	4718.53	4721	0.38	-1.90

24.6	4733.41	4734	0.33	-2.03
24.7	4748.29	4747	0.13	-2.08
24.8	4763.19	4761	0.03	-2.10
24.9	4778.09	4774	-0.31	-2.44
25	4792.99	4787	-0.21	-2.40
25.1	4807.90	4801	-0.41	-2.33
25.2	4822.81	4814	-0.63	-2.45
25.3	4838.22	4831	-0.71	-2.50
25.4	4854.53	4847	-0.42	-2.36
25.5	4871.59	4864	-0.15	-2.21
25.6	4889.27	4880	-0.30	-2.32
25.7	4907.41	4897	-0.52	-2.05
25.8	4925.88	4913	-0.76	-2.31
25.9	4944.54	4930	-0.66	-2.55
26	4963.24	4946	-1.17	-2.79
26.1	4981.84	4963	-1.19	-2.91
26.2	5000.19	4979	-1.07	-2.56
26.3	5018.17	4995	-0.92	-2.45
26.4	5035.61	5012	-0.80	-2.38
26.5	5052.39	5028	-0.92	-2.39
26.6	5068.35	5045	-1.02	-2.18
26.7	5083.36	5061	-1.31	-2.46
26.8	5097.27	5078	-1.26	-2.70
26.9	5109.94	5094	-0.95	-2.82
27	5121.24	5111	-0.74	-2.79
27.1	5131.60	5117	-0.40	-2.47
27.2	5141.59	5122	-0.24	-2.31
27.3	5151.23	5128	-0.46	-2.32
27.4	5160.54	5133	-0.38	-2.38
27.5	5169.55	5139	-0.04	-2.29
27.6	5178.27	5145	-0.02	-2.27
27.7	5186.72	5150	-0.03	-2.37
27.8	5194.92	5156	-0.03	-2.19
27.9	5202.90	5162	-0.13	-2.51
28	5210.67	5167	0.08	-2.18
28.1	5218.26	5173	-0.10	-2.33
28.2	5225.68	5178	-0.11	-2.30
28.3	5232.96	5184	-0.20	-2.15
28.4	5240.11	5190	-0.21	-2.41
28.5	5247.16	5195	-0.21	-2.51
28.6	5254.13	5201	-0.10	-2.43
28.7	5261.03	5206	-0.16	-2.40
28.8	5267.90	5212	0.03	-2.30
28.9	5274.74	5218	0.14	-2.24
29	5281.58	5223	0.25	-2.25
29.1	5288.44	5229	0.21	-1.89
29.2	5295.34	5235	0.17	-1.89
29.3	5302.30	5240	0.17	-1.98
29.4	5309.34	5246	-0.15	-2.11
29.5	5316.48	5251	-0.67	-2.37
29.6	5323.74	5257	-0.86	-2.93



29.7	5331.15	5263	-1.25	-3.19
29.8	5338.72	5268	-1.49	-3.28
29.9	5346.47	5274	-1.24	-3.14
30	5354.43	5280	-0.73	-2.61
30.1	5362.61	5285	-0.54	-2.40
30.2	5371.03	5291	-0.79	-2.55
30.3	5379.72	5296	-0.89	-2.46
30.4	5388.69	5302	-0.38	-2.38
30.5	5397.97	5308	-0.44	-2.80
30.6	5407.58	5313	-0.46	-2.84
30.7	5417.54	5319	-0.68	-2.61
30.8	5427.86	5325	-0.67	-2.45
30.9	5438.57	5330	-0.96	-2.36
31	5449.68	5336	-0.79	-2.17
31.1	5462.13	5365	-0.76	-1.98
31.2	5476.71	5394	-1.00	-2.21
31.3	5493.27	5423	-1.16	-2.22
31.4	5511.64	5452	-0.72	-2.24
31.5	5531.67	5481	-0.60	-2.48
31.6	5553.21	5510	-0.93	-2.65
31.7	5576.10	5539	-1.08	-2.16
31.8	5600.18	5568	-0.72	-2.04
31.9	5625.28	5597	-0.46	-2.09
32	5651.27	5626	-0.66	-2.35
32.1	5677.97	5655	-0.95	-2.54
32.2	5705.23	5685	-1.03	-2.89
32.3	5732.90	5714	-0.86	-2.68
32.4	5760.81	5743	-0.53	-2.44
32.5	5788.81	5772	-0.36	-2.02
32.6	5816.74	5801	-0.19	-1.92
32.7	5844.45	5830	-0.02	-1.69
32.9	5898.57	5888	0.00	-2.16
33	5924.66	5917	0.37	-2.03
33.1	5949.89	5946	0.49	-1.73
33.2	5974.12	5975	0.16	-2.08
33.3	5997.17	6004	0.18	-2.01
33.4	6018.91	6033	0.42	-2.00
33.5	6039.16	6062	0.20	-2.26
33.6	6057.76	6091	0.38	-2.36
33.7	6074.58	6120	0.31	-1.87
33.8	6089.43	6149	0.26	-1.84
33.9	6102.18	6179	0.67	-1.63
34	6112.66	6208	1.15	-1.94

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