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1 **Tracing the geomagnetic field intensity variations in Upper Mesopotamia during the**
2 **Pottery Neolithic to improve ceramic-based chronologies**

3 Y. Gallet¹, A. Fournier¹, P. W. Livermore²

4 *¹Université de Paris, Institut de Physique du Globe de Paris, CNRS, F-75005 Paris, France*

5 *²School of Earth & Environment, University of Leeds, Leeds LS2 9JT, UK*

6

7 **Abstract**

8 The transdimensional Bayesian method AH-RJMCMC applied to archeomagnetic intensity
9 data available in the Balkans and the Near East allows us to estimate the variations in
10 intensity of the geomagnetic field in Upper Mesopotamia during the 7th and 6th millennia BCE
11 (Late Neolithic), with adequate treatment of the dating and intensity uncertainties. The results
12 for the 6th millennium BCE appear particularly interesting because there is enough data to
13 trace rapid geomagnetic field intensity variations, with two century-scale peaks around 5800
14 BCE and 5550 BCE, associated with rates of changes ($>0.2 \mu\text{T}/\text{year}$) higher than the
15 maximum rate observed in the current geomagnetic field. We show that these variations could
16 help decipher the correlations between different archeological sequences or periodizations
17 established from scattered sites in Upper Mesopotamia. So far documented only from the
18 Balkan data, the intensity peak occurring around 5800 BCE may provide accurate
19 chronological constraints for the Early Halaf phase. New insights are also obtained for the
20 Halaf-Ubaid Transitional phase (end of the 6th millennium BCE), which remains poorly
21 defined from an archeological point of view. The AH-RJMCMC results imply that either the
22 archeointensity data currently available from Upper Mesopotamia document only the
23 beginning of this phase, or that this phase occurred between ~ 5400 and ~ 5200 BCE, shorter

24 than often considered. Such preliminary archeological inferences will progress and broaden
25 with the addition of new archeointensity data.

26 *Keywords:* archeomagnetic intensity variation, transdimensional Bayesian method, pottery
27 horizons, Late Neolithic, archeological inferences

28

29 **1. Introduction**

30 The end of the Neolithic in the Near East was a period of profound cultural and social
31 transformations probably linked, at least in part, to the definitive adoption of pottery around
32 7000 BCE and then to its wide regional diffusion and diversification, with technological
33 improvements, throughout the 7th and 6th millennia BCE (e.g. Akkermans and Schwartz,
34 2003; Nieuwenhuys et al., 2010; 2013; Tsuneki et al. 2017; Gómez-Bach et al., 2018a;
35 Nieuwenhuys, 2018a,b). As early as the period known as the Pottery Neolithic or Late
36 Neolithic, ceramic horizons are therefore of great importance for establishing a regional
37 periodization valid for scattered archeological sites, especially in Syria and Iraq, and/or for
38 synchronizing occupation phases between different agricultural settlements in Upper
39 Mesopotamia whose number increased considerably during the 7th and 6th millennia BCE
40 (e.g. Akkermans and Schwartz, 2003; Huot, 2004).

41 Many questions remain with regard to the meaning and interpretation, in terms of
42 chronological constraints, of the stylistic differences (vessel shapes and decorations) observed
43 between ceramics found in Neolithic sites scattered across Upper Mesopotamia. They are all
44 the more significant as the degree of standardization of ceramic production remains poorly
45 understood for this ancient period, the very notion of regional standardization not even being
46 assured (see the discussions by Hole (2013), Frangipane (2013) and Nieuwenhuys (2013)).
47 To briefly summarize, it is indeed particularly difficult to disentangle a difference of

48 essentially local origin (what Hole (2013) compared to dialect variations in language),
49 possibly associated with a lack of social interaction, rejection or different conservatism
50 between villages, from a difference of broader origin that could reflect changes of techniques
51 and/or preferences, for example through artistic emulation between settlements (recall the
52 beauty and sophistication of the decorations on ceramics from the so-called Halaf period
53 during the 6th millennium BCE; e.g. Akkermans and Schwartz, 2003; Nieuwenhuys et al.,
54 2013 and references therein). This last option would allow for a regional network of social
55 interactions to be envisaged. Such interactions may have taken the form of trade (e.g.
56 Davidson and McKerrell, 1980; Davidson, 1981; Spataro and Fletcher, 2010), the pottery
57 being a commercial product par excellence, surplus exchanges (Gómez-Bach et al., 2018b), or
58 they may have been associated with the displacement of artisan potters throughout Upper
59 Mesopotamia. Furthermore, the possibility that women played a role in the dissemination of
60 pottery know-how through marriages between people from different localities cannot be ruled
61 out (e.g. Robert, 2010; Forest, 2013).

62 Dates are crucial here, especially since the history of archeological discoveries and
63 regional geopolitical vicissitudes have led to archeological chronologies with different
64 terminologies established between the east and west of Upper Mesopotamia since the 1930s
65 (e.g. Nieuwenhuys et al., 2013 and references therein). Nowadays it is very difficult to
66 accurately synchronize these chronologies due to the lack of sufficient radiocarbon dating in
67 many sites, as well as sometimes to the lack of precise description of the ceramic typologies
68 and/or of the archeological contexts in which the pottery was discovered more than half a
69 century ago (a synthesis of available data is provided by Nieuwenhuys et al. (2013),
70 Nieuwenhuys (2018a), Gómez-Bach et al. (2018a) and references therein).

71 This study aims to enable progress in the study of chronologies, by demonstrating the
72 importance of using variations in geomagnetic intensities as chronological markers. Recent

73 studies have shown the potential of archeomagnetism for archeological practice, in particular
74 for dating burnt structures found in situ (such as pottery or domestic kilns) and the associated
75 archeological contexts. For the most part, they focused on structures dated from the past two
76 millennia, the archeomagnetic dating relying mainly on the directional geomagnetic field
77 variations (e.g. Gallet et al., 2009; Principe et al., 2018; Korte et al., 2019; Genevey et al.,
78 2021). Thanks to the recent acquisition of numerous new data on geomagnetic field
79 intensities, particularly in the Near East, archeointensities can now also be used to provide
80 chronological constraints, opening a wide field of investigation on ceramic productions (i.e.
81 materials found displaced from the place where they were fired and therefore for which all
82 information from geomagnetic directions is lost; e.g. Genevey et al., 2021). The technique
83 used for this purpose can either rely on a statistical correlation between a result of unknown
84 age and a reference (dated) geomagnetic secular variation curve (e.g. Le Goff et al., 2002;
85 Pavón-Carrasco et al., 2011) or on posterior probability distributions of age values determined
86 by marginalization from a Bayesian approach (e.g. Schnepf et al., 2015; Hervé and Lanos,
87 2017; Livermore et al., 2018) (see further discussion and comparison between the two
88 methods in Genevey et al., 2021). It should be noted that dating based on a single
89 archeointensity value can lead to poorly constrained results, especially if analyzed in the
90 absence of other archeological, archeomagnetic (i.e. direction-based) or isotopic (radiocarbon)
91 information. However, two studies focusing on time-ordered series of results dated to the 3rd
92 and 2nd millennia BCE in the Near East recently illustrated the contribution of
93 archeointensity alone to archeomagnetic dating (Gallet et al., 2020; Shaar et al., 2020). They
94 both rely on the recent development of a new transdimensional Bayesian technique allowing
95 the construction of regional geomagnetic intensity variation curves, not based on any a priori
96 assumption as to the nature of the geomagnetic variations sought (Livermore et al., 2018;
97 2021). This method makes it possible to trace fluctuations of highly variable nature both in

98 amplitude and duration (from a few decades to several millennia), without the need to seek a
99 compromise through a global regularization parameter that smoothes the entire model. The
100 main objective of our study is to apply this method to the archeomagnetic intensity results
101 obtained in the Balkans dating from the 6th millennium BCE (Fanjat et al., 2013; Kovacheva
102 et al., 2014; Kostadinova-Avramova et al., 2019), to the data from the 7th and 6th millennia
103 BCE currently available in the Near East (Gallet et al., 2015; Yutsis-Akimova et al., 2018a,
104 2018b), and finally, to construct a composite Upper Mesopotamian archeointensity variation
105 curve between 7000 BCE and 5000 BCE, with adequate treatment of the dating and intensity
106 uncertainties, assuming that the Balkans and Upper Mesopotamia shared the same secular
107 variation in geomagnetic field intensity during this time interval.

108 At this stage, our study is intended to illustrate the potential of a method that could
109 later integrate new archeological contexts, with pottery fragments already available in
110 archeological repositories or still to be discovered in the Near East. In addition to the
111 information on the behavior of the geomagnetic field during the 7th and 6th millennia BCE,
112 the results already obtained bring new perspectives to refine the archeological chronologies of
113 the Pottery Neolithic period in the Near East.

114

115 **2. Selected datasets and methodology**

116 *2.a Archeointensity datasets*

117 For the Balkans, the results dating from the 6th millennium BCE were obtained in the
118 Paleomagnetism laboratory of Sofia (Bulgaria) under the direction of M. Kovacheva. Mainly
119 deriving from in-situ burnt structures, the Bulgarian dataset was compiled by Kovacheva et al.
120 (2014). More recently, new archeointensity data were obtained by Kostadinova-Avramova et
121 al. (2019), which have therefore also been taken into account in the present work. To these

122 data, a result obtained in Northern Greece by Fanjat et al. (2013) was also added. In total, the
123 database compiled for the Balkans contains 51 archeointensity values whose dating is based
124 on archeological constraints and/or radiocarbon data (Table S1; more information is available
125 in the associated articles). For simplicity, given the lack of precise information on the
126 probability distributions of radiocarbon dates, we considered below only uniformly
127 distributed age uncertainties. Furthermore, a time-order relationship was applied for a few
128 limited sets of data (Kostadinova-Avramova et al., 2014; 2019; Table S1).

129 The Upper Mesopotamian data were obtained from groups of pottery fragments sampled
130 in Syria, at Tell Halula (e.g. Molist et al., 2013) and Tell Masaikh (Robert, 2010), and in
131 Northern Iraq, at Yarim Tepe I and II (e.g. Merpert and Munchaev, 1987, 1993a,b; Amirov,
132 1994; 2018). In all cases, these are multi-layered sites that have been the subject of detailed
133 excavations. Each group, which includes a minimum of three fragments from different pottery
134 that gave intensity values satisfying a set of selection criteria using the Triaxe experimental
135 protocol (e.g. Le Goff and Gallet, 2004; Gallet and Le Goff, 2006; Gallet et al., 2020), is
136 directly associated with an archeological level, itself placed in a stratigraphic/temporal
137 sequence. Here we consider the ceramic (chronological) phasing as provided by the
138 archeologists. At Tell Halula, 22 groups of potsherds gave archeointensity values spanning
139 the 7th and 6th millennia BCE, i.e. during the so-called Initial Pottery Neolithic, Early Pottery
140 Neolithic, pre Halaf, proto-Halaf and Halaf cultural phases (Molist et al., 2013; Gallet et al.,
141 2015; Nieuwenhuys et al., 2013; Nieuwenhuys, 2018a). However, the last centuries of the
142 6th millennium corresponding to the so-called Halaf Ubaid Transitional (HUT) period are not
143 represented in this site, which is instead likely represented at Tell Masaikh with two
144 archeointensity values (Robert et al., 2008; Robert, 2010; Gallet et al., 2015). It is
145 nevertheless important to emphasize the great archeological uncertainties that remain
146 concerning the definition, or even the existence, of the HUT phase (e.g. Campbell, 2007;

147 Campbell and Fletcher, 2010; Gómez-Bach et al., 2016; Nieuwenhuysse et al., 2016). The
148 Iraqi sites of Yarim Tepe II and I excavated by Soviet archeologists in the 1970s yielded
149 respectively 23 and 9 archeointensity values, from nine and eight different archeological
150 levels (or building horizons). At Yarim Tepe II, the temporal sequence with intensity data
151 ranges from the end of the Early Halaf / beginning of the Middle Halaf to the HUT period
152 (e.g. Amirov, 1994; 2018; Yutsis-Akimova et al., 2018a), while that of Yarim Tepe I partially
153 covers the archaic Hassuna and the standard Hassuna phases dated from the end of the 7th
154 millennium and beginning of the 6th millennium BCE (e.g. Bashilov et al., 1980; Bader,
155 1989; Bernbeck and Nieuwenhuysse, 2013; see also Yutsis-Akimova et al., 2018b). To all
156 these data is added a new Triaxe archeointensity result obtained from a group of potsherds
157 sampled at Tell Begum in Iraqi Kurdistan, dated archeologically and by radiocarbon from the
158 HUT period around 5400 BCE (Fig. S1; Table S2; Nieuwenhuysse et al., 2016;
159 Nieuwenhuysse, 2018; Odaka et al., 2019). In total, the Near-Eastern archeointensity database
160 contains 57 values (Table S1). Uniformly distributed age uncertainties were considered for all
161 these data.

162

163 *2.b Outline of the transdimensional Bayesian method AH-RJMCMC*

164 The transdimensional Bayesian method AH-RJMCMC (Age Hyperparameter Reverse
165 Jump Monte Carlo Markov Chain) was developed by Livermore et al. (2018) to model
166 regional geomagnetic field intensities. The detailed description of this approach is provided in
167 the 2018 publication, and only the main points are outlined below. An ensemble of piecewise
168 linear fits to the data are calculated, whose statistics converge to those of the posterior
169 probability distribution of the intensity variation given the dataset. Each member of the
170 ensemble comprises a series of linear segments whose number, which defines the complexity
171 of the underlying geomagnetic variations, is determined by the data themselves according to

172 their dating and experimental uncertainties. AH (from AH-RJMCMC) means that the ages of
173 the data are themselves introduced into the model vector, which makes it possible to take into
174 account, in addition to the uncertainties on dating, possible temporal relationships existing
175 between certain data or certain datasets (Livermore et al., 2018; Gallet et al., 2020; Shaar et
176 al., 2020). This is a crucial element when analyzing the Near-Eastern data obtained from
177 multi-layered archeological sites. The output is dependent on the prior information adopted,
178 which includes a maximum number of linear segments, set here to 150, large compared to the
179 2000 years of the time interval considered (~7000-5000 BCE), and minimum and maximum
180 values of the intensity of each interior vertex, set respectively to 20 μT and 70 μT . An
181 ensemble size of 200 million individual models, large enough to ensure convergence, is
182 computed following a perturbation scheme, using a Monte Carlo Markov chain algorithm,
183 applied to the number of segments (with the addition or removal of a segment), the age and
184 intensity of the knots and the data ages. Note that no form of weighting between the data,
185 other than that introduced by their experimental and age uncertainties, was implemented for
186 these calculations.

187 The AH-RJMCMC algorithm provides a probability density distribution as a function of
188 time for geomagnetic field intensity, for which the average, median, mode and 95% credible
189 interval are determined. Although each individual model is piecewise linear, these diagnostics
190 over the whole ensemble are smooth curves. By marginalization, it is also possible to
191 determine the posterior probability distributions of the age and intensity of each datum, which
192 indicate their most probable values given the characteristics (number, temporal distribution
193 and uncertainties) of the dataset available during the age interval studied. Finally, it should be
194 noted that an important advantage of this method lies in the absence of an ad-hoc
195 regularization parameter and that it therefore allows variations with very different timescales
196 to be determined, if these are actually required by the data. Such a characteristic is

197 particularly valuable for identifying rapid variations as seems to be the case in the 6th
198 millennium BCE (Livermore et al., 2018; 2021; Yutsis-Akimova et al., 2018a,b).

199

200 **3. Modeling results**

201 *3.a Balkans (6th millennium BCE)*

202 The evolution of the geomagnetic field intensity obtained in the Balkans from the AH-
203 RJMCMC method is shown in Fig. 1a (Table S3; note that all data were transferred to the
204 latitude of Sofia, Bulgaria). The median values of the intensity probability distribution are
205 reported because this indicator is less sensitive than the average to the extreme values given
206 by some of the model ensemble. This evolution, similar to that proposed by Kovacheva et al
207 (2014) using the Bayesian method developed by Lanos (2004) (pale-orange area in Fig. 1a), is
208 marked by two intensity peaks of ~ 200 years duration, the most recent with a maximum
209 around 5555 BCE, the oldest with its maximum around 5805 BCE. The latter is still rather
210 poorly defined due to the small number of data (two) available for the first two centuries of
211 the 6th millennium BC; this translates into a large credible interval during this period. The
212 minimum of geomagnetic intensities during the 6th millennium occurs around 5400 BCE and
213 is followed by a steady increase in intensities until the end of the millennium.

214 The median intensity values range from ~ 30 μT to more than 60 μT throughout the 6th
215 millennium BCE (Fig. 1a), suggesting rapid fluctuations. This is attested by the calculation of
216 the variation rates (time derivative of the median intensity curve) shown in Fig. 1b (Table S3).
217 The two intensity peaks mentioned above are associated with maximum rates of change of the
218 order of ~ 0.25 - 0.27 $\mu\text{T}/\text{year}$. This value is significantly higher than that mentioned by
219 Kostadinova-Avramova et al. (2019), with a value of ~ 0.11 $\mu\text{T}/\text{year}$ estimated for the peak
220 centered around 5550 BCE. This difference is related to both the different databases and

221 characteristics of the two methods used for the calculation of geomagnetic evolutions (Lanos,
222 2004; Livermore et al., 2018), in particular with the absence of any regularization applied in
223 the AH-RJMCMC method.

224 The data reported in Kovacheva et al (2014) were obtained over many years, and they
225 do not all share the same experimental criteria. In order to assess at first order the sensitivity
226 of the evolution described above to these experimental differences, the Balkan database was
227 subdivided according to whether or not the intensity determinations included pTRM checks
228 (Thellier and Thellier, 1959). When pTRM checks were carried out at least partially, i.e. for
229 the most recent data, the experimental uncertainties of the intensity values were kept as
230 published (circles in Figs. 1a and S2a,c). Conversely, when the data were not constrained by
231 pTRM checks, their experimental uncertainties have been arbitrarily set to 5 μT when the
232 published ones are below this threshold (otherwise they have been kept as published; blue
233 triangles in Figs. 1a and S2a,c; Table S1). In addition, we roughly and arbitrarily considered
234 that the temporal uncertainties of the data could not be less than ± 50 years. The variations in
235 geomagnetic field intensity calculated from this modified dataset are shown in Fig. S2a
236 (Table S3). These are very close to those exhibited in Fig. 1a, with two intensity peaks still
237 well expressed. This is also the case when the minimum temporal uncertainty is set to ± 75
238 years (Fig. S2c; Tables S1, S3). The maximum rates of change associated with the intensity
239 peaks also remain of the order of 0.17-0.25 $\mu\text{T}/\text{year}$ (Fig. S2b,d). The variations shown in Fig.
240 1a thus appear reasonably robust, even if the acquisition of new archeointensity data appears
241 to be still necessary, especially for the beginning of the 6th millennium BCE.

242

243 *3.b Upper Mesopotamia (7th-6th millennium BCE)*

244 The archeointensity results available in the Near East have been dated according to the
245 typo-morphology of ceramics and by some radiocarbon data (Bernbeck and Nieuwenhuysen,
246 2013; Molist et al., 2013; Yutis-Akimova et al., 2018a,b; Nieuwenhuysen, 2018a, Gómez-
247 Bach et al., 2018a and references therein). Here we adopt a cautious approach that emphasizes
248 the link of the groups of potsherds with archeological periods (such as Middle Halaf or Late
249 Halaf) and the fact that these fragment groups are all associated with well-recognized
250 archeological levels, with time order relationships between them in the different sites. On the
251 other hand, the constraints provided by the relative thicknesses of the stratigraphic layers
252 identified at Yarim Tepe II and I (see in Yutis-Akimova et al., 2018a,b) are ignored because
253 these thicknesses vary laterally on the surface of the sites and so certain stratigraphic layers
254 may have been partially or completely leveled, which casts some doubt on their relevance.
255 Neglecting the relative thicknesses of the layers also avoids the need for a priori knowledge
256 on the evolution of accumulation rates across these sequences. Hence, for these two sites,
257 temporal relationships were only considered between the different archeological levels
258 defined by the archeologists. This means that any subset of archeointensity data within a level
259 is not ordered in time (regardless of their stratigraphic position), but nevertheless must have
260 an age, which is (respectively) greater or younger than those data in levels immediately above
261 or below. This approach also places much less emphasis on individual dating of data (a
262 radiocarbon-dated bone fragment may have moved within a stratigraphic sequence; e.g.
263 Yutis-Akimova et al., 2018b). It is thus very different from that previously used by Yutis-
264 Akimova et al. (2018a,b).

265 The archeological periodization used and the associated dates are essentially those
266 given by Molist et al (2013) (see more discussion in Bernbeck and Nieuwenhuysen, 2013) and
267 Nieuwenhuysen (2018a). For the cultural phases preceding the Halaf (Initial Pottery Neolithic,
268 Early Pottery Neolithic, pre Halaf, proto-Halaf), the dating of the archeological transitions

269 relies primarily on the large set of radiocarbon dates obtained at Tell Sabi Abyad, Syria (van
270 der Plicht et al., 2011, Nieuwenhuys, 2018a). We arbitrarily assigned reasonable age
271 uncertainties of ± 25 years to the dates of these transitions. This yields the Initial to Early
272 Pottery Neolithic transition dated to 6675 ± 25 BCE (base of level A9 at Tell Sabi Abyad dated
273 between 6675 and 6620 BCE; Nieuwenhuys, 2018a), the Early Pottery Neolithic – pre Halaf
274 transition dated at 6635 ± 25 BCE (base of level A1 dated between 6335 and 6225 BCE;
275 Nieuwenhuys, 2018a) and the pre Halaf – proto-Halaf transition dated at 6015 ± 25 BCE (this
276 transition occurring within level B3 dated between 6040 and 5995 BCE; Nieuwenhuys,
277 2018a). Note that, following Nieuwenhuys et al. (2010), the beginning of the Initial Pottery
278 Neolithic was placed at 7000 BCE without making a rough estimate (unnecessary for our
279 purpose) of the uncertainties on this date. The same age uncertainties of ± 25 years were also
280 optimistically assigned to the proto-Halaf - Early Halaf, Early - Middle Halaf and Middle -
281 Late Halaf transitions (5900 ± 25 BCE, 5750 ± 25 BCE, 5575 ± 25 BCE, respectively; Bernbeck
282 and Nieuwenhuys, 2013; Molist et al., 2013; Gómez-Bach et al., 2018; Gómez-Bach and
283 Cruells, 2018). The case of the Late Halaf to HUT transition is different because the HUT
284 phase remains archeologically very poorly constrained (Campbell, 2007; Campbell and
285 Fletcher, 2010; see further discussion in Nieuwenhuys et al., 2016 and Gómez-Bach et al.,
286 2016). For this reason, its age uncertainties were arbitrarily increased to ± 75 years, with a date
287 at 5350 ± 75 BCE. The time interval allowed for this transition (5425 – 5275 BCE) appears
288 reasonable in light of current archeological uncertainties (Campbell, 2007; O. Nieuwenhuys,
289 personal communication). The end of HUT is just as loosely established. According to
290 Campbell (2007), it could be dated between 5200 and 5000 BCE. A dating of 5100 ± 100 BCE
291 is thus roughly considered. More generally, the overall chronological framework above,
292 which is necessarily based on some approximations and arbitrary choices (some of which are

293 probably rather optimistic), seems to us to reasonably reflect the current state of knowledge,
294 although other interpretations are possible.

295 The following age intervals were thus considered for the AH-RJMCMC calculations,
296 with the overlaps between them being treated by the algorithm through the time order
297 relationships:

298 + Initial Pottery Neolithic (ceramic phase I at Tell Halula): 7000 - 6650 BCE

299 + Early Pottery Neolithic (ceramic phase II at Tell Halula): 6700 - 6310 BCE

300 + Pre Halaf (ceramic phase III at Tell Halula): 6360 - 5990 BCE

301 + Proto-Halaf (ceramic phase IV at Tell Halula): 6040 - 5875 BCE

302 + Early Halaf (ceramic phase V at Tell Halula): 5925 - 5725 BCE

303 + Middle Halaf (ceramic phase VI at Tell Halula): 5775 - 5550 BCE

304 + Late Halaf (ceramic phase VII at Tell Halula): 5600 - 5275 BCE

305 + HUT: 5425 - 5000 BCE

306 The data obtained at Yarim Tepe I are archeologically dated to the archaic Hassuna
307 and standard Hassuna periods, which thus involves a different terminology from that with the
308 pre-Halaf, proto-Halaf and Halaf. Here we use a correlation scheme close to that proposed by
309 Bernbeck and Nieuwenhuys (2013), but with a wide age interval between 6300 and 5800
310 BCE without approximation made for the dating of the transition between the archaic and
311 standard Hassuna, and with the possibility that part of the standard Hassuna defined in Iraq
312 overlaps with part of the Early Halaf defined further east (Yutsis-Akimova et al., 2018b; O.
313 Nieuwenhuys, personal communication).

314 The results of the AH-RJMCMC modeling are shown in Fig. 2a (all data were
315 transferred to the latitude of Tell Halaf, Syria; Tables S1, S3). Instead of showing the

316 individual data according to their prior values, it is the posterior values (median ages and
317 intensities with the 95% credible interval) that are exhibited (Fig. S3 shows the data using
318 both their prior and posterior age values). This figure underlines that despite the long duration
319 of the age intervals considered for most of the data, the time-order relationships existing
320 between them lead to a coherent evolution of the geomagnetic intensities during the 7th and
321 6th millennia BCE. This evolution is marked by a steady decreasing trend during the 7th
322 millennium, until ~6200 BCE, while it is more complex around the middle of the 6th
323 millennium BCE, with a sharp minimum around 35 μT leading to an intensity peak between
324 ~5600 BCE and ~5400 BCE (maximum around 5530 BCE). The maximum rates of change
325 associated with this intensity peak are of ~0.37 $\mu\text{T}/\text{year}$ (Fig. 2b; Table S3), slightly higher
326 than those determined for the Balkans. It should be noted that the 95% credible interval
327 during these periods remains wide, especially during the first half of the 7th millennium BCE
328 where data are still scarce (note that these are the oldest archeointensity data obtained so far
329 from ceramics). On the other hand, the period between ~6200 BCE and ~5600 BCE, i.e.
330 between the end of the pre-Halaf and the Middle Halaf (with data obtained at Tell Halula,
331 Yarim Tepe II and Yarim Tepe I), seems to be characterized by the lack of significant
332 intensity variations, as well as during the last three centuries of the 6th millennium BCE, the
333 latter period being also marked by the lowest geomagnetic intensities over the entire 2000-
334 year interval analyzed. It is worth pointing out that similar inferences are obtained if the time
335 order relationship considered for the Yarim Tepe II and Yarim Tepe I data is not between the
336 nine and eight different archeological levels as before, but between respectively 14 and 7
337 successive non-overlapping stratigraphic layers (still regardless of their thicknesses; Fig.
338 S4a,b; Tables S1, S3). In this case, the data obtained in overlapping stratigraphic layers are
339 grouped in a same layer without time order (see Table 1 in Yutis-Akimova et al., 2018a,b).

340 As previously mentioned, the Late Neolithic archeological chronologies established in
341 different areas of Mesopotamia are difficult to synchronize with each other. For this reason,
342 we tested at first order the robustness of the curves shown in Fig. 2 by ignoring in a second
343 calculation the age and stratigraphic position of the Middle - Late Halaf and Late Halaf -
344 HUT transitions inside the Yarim Tepe II sequence. This amounts to considering that the
345 Yarim Tepe II data lie in a single large time interval between ~5800 and ~5000 BCE, which
346 therefore puts fewer constraints on correlation with data obtained further west, in Tell Halula
347 and Tell Masaikh (Table S1). The AH-RJMCMC results presented in Fig. S4c,d show the
348 same intensity evolution as in Fig. 2, although the amplitude of the variations is significantly
349 smaller around 5600-5400 BCE (Table S3). The rates of change associated with the peak
350 around 5500 BCE are also lower (maximum of ~0.17 $\mu\text{T}/\text{year}$), highlighting the sensitivity of
351 this parameter to archeological determinations or assumptions.

352

353 **4. A master Upper Mesopotamian archeointensity variation curve for the Pottery** 354 **Neolithic**

355 The regional geomagnetic field intensity models obtained for the Balkans and Upper
356 Mesopotamia show the same peak in intensity around the middle of the 6th millennium BCE,
357 with similar rates of change. This underlines, at least for this period, a good homogeneity of
358 the secular variation of intensity in a large area between Bulgaria and the Near East (with a
359 distance of ~1600 km between Sofia, Bulgaria, and the archeological site of Tell Halaf in
360 Syria). However, two main differences are observed. The first concerns the intensity peak
361 observed around 5800 BCE in the Balkans but not in the Near East. This age corresponds to
362 the Early Halaf (e.g. Molist et al, 2013; Bernbeck and Nieuwenhuys, 2013), for which a
363 single archeointensity result was obtained at Tell Halula (Gallet et al., 2015), while there is a
364 question as to whether the recent part of the so-called standard Hassuna period (with data

365 obtained at Yarim Tepe I) could extend to the beginning of the Early Halaf (Yutsis-Akimova
366 et al., 2018b; O. Nieuwenhuys, personal communication). The second difference is in the
367 behavior of the geomagnetic field at the end of the 6th millennium BCE, marked by an
368 increase in intensities in the Balkans while they are fairly constant in the Near East. It is
369 worth remarking that these two differences occur when comparing the median posterior
370 models, it does not mean that the datasets are themselves mutually incompatible. It remains
371 important to test whether the data obtained independently in the Balkans and in the Near East
372 can produce a coherent evolution of geomagnetic intensities throughout the 6th millennium
373 BCE, integrating the characteristics mentioned above. In other words, this amounts to
374 determining what would be the influence, or implication, of the data available in the Balkans
375 on the pattern of intensity variations in Upper Mesopotamia, assuming that the two regions
376 shared the same secular variation in intensity during this time interval. Such a reconciliation
377 between these two datasets might be achieved by virtue of the uncertainty in both intensity
378 and ages, allowing the posterior distribution to effectively shift the data in both intensity and
379 time (within their given prior distributions) to a mutually favorable configuration, in which all
380 data are compatible with a single intensity variation curve.

381 A master intensity variation curve was determined for Upper Mesopotamia by
382 transferring all Balkan data to the latitude of Tell Halaf (the Near-Eastern data used for Fig.
383 2a remaining unchanged). However, given the rather large distance between Bulgaria and
384 northern Syria, this transfer carried out using the hypothesis of a simple geocentric axial
385 dipole raises uncertainties. These are illustrated by a simple calculation: the intensity
386 determined in Sofia from the most recent IGRF (Alken et al., 2021) is 47.9 μT ; its transfer to
387 the latitude of Tell Halaf using the same hypothesis gives 44.7 μT , to be compared to 47.6 μT
388 determined at Tell Halaf from the IGRF. The difference of ~ 3 μT corresponds to $\sim 7\%$ of the
389 "true" value, which is far from negligible. In order to take into account this discrepancy at

390 first order, without of course knowing its evolution over the past millennia, we arbitrarily
391 considered that the experimental errors on the Balkan intensity values transferred to the Near
392 East could not be less than $3 \mu\text{T}$ (same approach as before). On the other hand, we note that
393 the intensity variation curve derived from the Balkan data transferred to the latitude of Tell
394 Halaf might indicate a shift in intensity around 5700-5400 BCE with respect to the Near-
395 Eastern curve (Fig. S3). If significant, the origin of this offset would remain unclear. A
396 possible bias due to the effect of cooling rate on thermoremanent magnetization acquisition
397 (see discussion for example in Genevey et al., 2008) could be suggested for the Balkan data,
398 however, this effect was considered essentially negligible for the entire dataset (Fanjat et al.,
399 2013; Kovacheva et al., 2014; Kostadinova-Avramova et al., 2019).

400 Furthermore, to account very roughly for the fact that the signature of the non-dipole
401 component of the geomagnetic field may have drifted slightly from east to west, or from west
402 to east between the Balkans and the Near East during the 6th millennium BCE, we arbitrarily
403 considered that the dating of the Balkan data could not be more accurate than ± 75 years
404 (Table S1). This appears all the more justified since the Balkan curve transferred to the
405 latitude of Tell Halaf also seems to present around 5700-5400 BCE a time delay of ~ 50 years
406 with respect to the Near-Eastern curve (Fig. S3). However, given the data currently available
407 and the error bars of the models, it seems premature to consider a phenomenon of eastward
408 drift of the secular variation at this period and to shift the age of the Balkan data as a whole
409 by ~ 50 years. By increasing the age uncertainties of the Balkan data, this offset, if significant,
410 should be accounted for in the AH-RJMCMC calculations.

411 There are now two ways we can combine the two datasets. We could calculate the
412 posterior distribution from only the Balkan dataset and use it as a prior to calculate the
413 posterior distribution from the Upper Mesopotamian dataset. Alternatively, we can combine
414 the two datasets and discover the posterior in a single calculation from this super-set. We

415 adopt the latter strategy as it is computationally much simpler and accordingly a database of
416 108 data was compiled to trace the geomagnetic field intensity evolution in Upper
417 Mesopotamia (Table S1). Below, we focus only on the 6th millennium BCE.

418 This master curve is shown in Fig. 3a (Table S3). As in Fig. 2a, the data are reported
419 using their median posterior age and intensity values and the associated 95% credible interval
420 (see details of the different symbols in the figure caption). The median intensity curve (in
421 blue) shows a regular evolution on the multi-century time scale, which is however associated
422 with a rather wide 95% credible interval (shaded area). This evolution now integrates the
423 intensity peak around 5800 BCE (maximum at ~5810 BCE) seen from the Balkan data,
424 whereas the plateau previously mentioned during the Middle Halaf is strongly attenuated (Fig.
425 2a). Unsurprisingly an intensity peak is clearly observed around 5550 BCE (date of the
426 maximum). A major change concerns the end of the 6th millennium BCE where the medians
427 of the posterior age values obtained for the HUT data are all concentrated around 5300 BCE,
428 allowing the increase in geomagnetic intensities observed from the Balkan data.

429 The implications of the Balkan data on the master Upper Mesopotamian curve are also
430 illustrated by the posterior probability distributions of median ages for some archeointensity
431 data (Fig. 4; data indicated by open symbols in Fig. 3a). For the only result of the Early Halaf
432 obtained at Tell Halula (SY91, Fig. 4a), it can be seen that the posterior age is mainly
433 concentrated at both sides of the prior age interval, which leaves some room (in terms of
434 probability) for a peak of intensity lasting about a century towards the middle of this
435 archeological period. Moreover, two HUT results obtained at Tell Masaikh (SY37, Fig. 4b)
436 and Yarim Tepe II (YT01, Fig. 4c) show that the posterior probability distribution of their age
437 values is strongly concentrated in the older part of their prior age interval, suggesting that
438 only a small part of the HUT (i.e. the oldest part) was sampled in the two sites (and see

439 below). Such a possibility had already been raised by Yutsis-Akimova et al (2018a), but only
440 on a purely empirical basis.

441 With respect to the rates of intensity change, combining the Balkan and Near-East data
442 in the calculation yields maximum values of $\sim 0.22 \mu\text{T}/\text{year}$ for the peak around 5800 BCE,
443 similar to those previously obtained from the Balkan data alone (Fig. 1b). Conversely, the
444 maximum rates of change are higher ($\sim 0.52 \mu\text{T}/\text{year}$) for the peak around 5550 BCE, albeit
445 with large uncertainties, than when considering the Balkan and Near East data separately. At
446 this stage, it is unclear whether these values are relevant from a geomagnetic point of view
447 given the approximations that have been made to combine together the Near East and Balkan
448 data. In any case, the variation rates associated with the peak around 5550 BCE appear to be
449 at least $\sim 0.2 \mu\text{T}/\text{year}$, about twice the maximum rate observed in the modern geomagnetic
450 field (Alken et al., 2021).

451

452 **5. Concluding remarks on the archeological inferences**

453 Although Near-Eastern archeointensity datasets are still limited for the Late Neolithic,
454 the use of the AH-RJMCMC method is already shedding light on archeological issues, whose
455 resolution remains largely in the realm of archeology. The new insights can be summarized as
456 follows:

457 • The Upper Mesopotamian data available for the Early Halaf are currently too sparse to
458 reliably trace the geomagnetic field intensity variations during this period. Confirmation in
459 Upper Mesopotamia of the intensity peak around 5800 BCE, still observed only from the
460 Balkan data, would provide a crucial chronological marker, all the more important as recent
461 excavations in Iraqi Kurdistan show that, according to the ceramic typology, the Early Halaf
462 time interval is not clearly attested in this region (Nieuwenhuys, 2018b and personal

463 communication). Moreover, if the standard Hassuna defined at Yarim Tepe I does indeed
464 extend into the Early Halaf (Yutis-Akimova et al., 2018b; see also discussion in Cruells and
465 Nieuwenhuysse, 2004), this overlap should not extend beyond the beginning of the Early Halaf
466 defined further east.

467 • According to the Balkan results, all the archeointensity data obtained so far in Upper
468 Mesopotamia for the Halaf-Ubaid Transitional could be dated to the beginning of this
469 archeological phase, whose transition with the Late Halaf, defined from subtle changes in the
470 typology and decoration of ceramics, is currently poorly circumscribed (e.g. Campbell, 2007;
471 Nieuwenhuysse, 2018b and references therein). From the archeomagnetic point of view, the
472 alternatives are the following: either the sampled HUT actually corresponds to the Late Halaf,
473 or only the very beginning of the HUT is represented at Tell Masaikh and Yarim Tepe II, or
474 the HUT was shorter than expected and does not span the last two centuries of the 6th
475 millennium BCE (occurring between ~5400 and ~5200 BCE). It should also be noted that, at
476 this stage, the available data are insufficient to test whether the HUT could have had a
477 different duration between the east and west of Upper Mesopotamia. These various options
478 echo the large archeological uncertainties still existing on the HUT phase.

479 • A close examination of Figs. 2 and S4 indicates that part of the Late Halaf present at Tell
480 Halula, at ~5500-5450 BCE (see blue dots intercalated between red dots), might be absent at
481 Yarim Tepe II, suggesting a short hiatus in the latter sequence, while the end of the Late Halaf
482 may be absent in Tell Halula. At this stage, such a possibility is statistically far from proven,
483 but it might be further analyzed in light of the comparative changes in ceramic typology
484 between the two sequences. In addition, it seems conceivable that the very thin thickness (~30
485 cm) of archeological level VII at Yarim Tepe II, compared to the thicknesses of the other
486 levels, is the result of low accumulation rates, perhaps a short hiatus, around the Middle to
487 Late Halaf transition, which an age model constructed primarily from the thicknesses of the

488 archeological levels and layers, in contrast to our AHRJMCMC age model, tends to minimize
489 due to lack of sufficient dating constraints (see Figs. 7 and 8 in Yutsis-Akimova et al., 2018a).

490 In conclusion, the rapid variations in geomagnetic field intensities during the 6th
491 millennium BCE as determined by the AH-RJMCMC method offer promising constraints for
492 the correlation of archeological sequences established from widely distributed settlements in
493 the Near East. In particular, these variations could help to synchronize the pottery horizons
494 and/or archeological layers discovered in Upper Mesopotamia (Turkey, Syria, Iraq), the
495 Levant and in the Zagros (Iran) region (e.g. Akkermans and Schwartz, 2003; Nieuwenhuys
496 et al., 2013; Gómez-Bach et al., 2018a).

497

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509

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698

699

700 **Figure captions**

701

702 **Fig. 1.** (a) Evolution of the geomagnetic field intensity in the Balkans during the 6th
703 millennium BCE estimated using the AH-RJMCMC method (Livermore et al., 2018). Blue
704 dots and triangles: data with and without pTRM checks from Kovacheva et al. (2014); red
705 dots: data from Kostadinova-Avramova et al. (2019); green dot: a result from Greece obtained
706 by Fanjat et al. (2013); see text for further description. The variation curve (median values) is
707 in blue and the light blue shaded area show its 95% credible interval. The average curve
708 calculated by Kovacheva et al. (2014) using the Lanos (2004) method is also shown (pale
709 orange). (b) Medians and credible interval of the intensity variation rates estimated for the
710 Balkans using the AH-RJMCMC method. All data are transferred to the latitude of Sofia
711 ($\lambda=42.70^\circ\text{N}$).

712 **Fig. 2.** Same as in Fig. 1 but for the Upper Mesopotamian region during the 7th and 6th
713 millennia BCE. Blue dots and triangles: data from Tell Halula and Tell Masaikh (Gallet et al.,
714 2015); red dots and triangles: data from Yarim Tepe II (Yutisis-Akimova et al., 2018a) and
715 Yarim Tepe I (Yutisis-Akimova et al., 2018b). All data are transferred to the latitude of Tell
716 Halaf (Syria; $\lambda=36.82^\circ\text{N}$). The archeological periodization is shown at the top of the figure.
717 The grey zones indicate the estimated uncertainties in the age of the archeological transitions
718 (see text).

719 **Fig. 3.** Same as in Figs. 1 and 2 but for a dataset combining the results available from the
720 Balkans and Upper Mesopotamia. See text for changes to the Balkan archeointensity data.
721 Same symbols and color code as before for the Upper Mesopotamian data, except for three
722 data shown by empty symbol that are further illustrated in Fig. 4 (dot circled in blue: SY91,

723 Tell Halula; triangle with blue lines: SY37, Tell Masaikh; dot circled in red: YT01, Yarim
724 Tepe II). Grey dots, triangles and square: Data from the Balkans obtained by Kovacheva et al.
725 (2014), Kostadinova-Avramova et al. (2019) and Fanjat et al. (2013), respectively.

726 **Fig. 4.** Comparison between the joint posterior probability distributions of the median age and
727 intensity values (green bars) and the corresponding prior values (pale orange) for three
728 different archeointensity results. (a) Early Halaf-dated result obtained at Tell Halula (SY91;
729 Gallet et al., 2015); (b) HUT result from Tell Masaikh (SY37; Gallet et al., 2015); (c) HUT
730 result from Yarim Tepe II (YT01; Yutsis-Akimova et al., 2018a).

731

732 **Supplementary material**

733 **Fig. S1.** New archeointensity data from Tell Begum ($\lambda=35^{\circ}17'5''N$, $\phi=45^{\circ}53'05''E$) in Iraqi
734 Kurdistan obtained from HUT fine ware pottery. Archeological reference: Level IV, Lower
735 Trench (LT) sounding locus 4, BEG39-40. The data were obtained using the Triaxe protocol
736 (Le Goff and Gallet, 2004) and obey the same selection criteria as for instance in Gallet and
737 Le Goff (2006), Gallet et al. (2015; 2020), Yutsis-Akimova et al. (2018a,b). Each curve
738 shows the $R'(Ti)$ data obtained for one specimen (Le Goff and Gallet, 2004), with a minimum
739 of two, but more often three specimens successfully analyzed per fragment. Five fragments
740 provided archeointensity results, although the presence of a secondary magnetization
741 component in these fragments required intensity determinations at relatively high
742 temperatures ($T1' >300^{\circ}C$; see details in Gallet and Le Goff, 2004 and other references
743 mentioned above).

744 **Fig. S2.** (a,c) Evolution of the geomagnetic field intensities in the Balkans during the 6th
745 millennium BCE estimated using the AH-RJMCMC method (Livermore et al., 2018). Blue
746 dots and triangles: data with and without pTRM checks from Kovacheva et al. (2014); red

747 dots: data from Kostadinova-Avramova et al. (2019); green dot: a result from Greece obtained
748 by Fanjat et al. (2013); see text for further description. The variation curve (median values) is
749 in blue and the shaded area show its 95% credible interval. For these computations, the data
750 that were not constrained by pTRM checks were modified so that their minimum
751 experimental errors cannot be less than ± 5.0 mT (see text). In addition the dating accuracy of
752 all the data cannot be more accurate than ± 50 years (a) and ± 75 years (c). (b,d) Medians and
753 95% credible interval of the intensity variation rates estimated for the Balkans using the AH-
754 RJMCMC method (with minimum age uncertainties of ± 50 years (b) and ± 75 years (d)). All
755 data are transferred to the latitude of Sofia ($\lambda=42.70^\circ\text{N}$).

756 **Fig. S3.** Evolution of the geomagnetic field intensities in Upper Mesopotamia during the 7th
757 and 6th millennia BCE estimated using the AH-RJMCMC method (Livermore et al., 2018).
758 (a) The data available in the Near East are shown using their prior dating. The variation curve
759 (median values) and its 95% credible interval are in blue. The orange curve and shaded area
760 show the evolution of the intensities derived from the Balkan data transferred to the latitude
761 of Tell Halaf and assigning to these data minimum age uncertainties of ± 50 years. (b) Same as
762 in (a) but the data are exhibited using the posterior probability distributions of their age
763 values.

764 **Fig. S4.** Behavior in geomagnetic field intensity as derived from the Upper Mesopotamian
765 data (Gallet et al., 2015; Yutsis-Akimova et al., 2018a,b; this study). All data are transferred
766 to the latitude of Tell Halaf, Syria. (a,b) Same as in Fig. 2 but the time order relationship
767 between the data from Yarim Tepe II concerns 14 non-overlapping stratigraphic layers,
768 instead of nine archeological levels (see text). (c,d) Same as in Fig. 2 but the archeological
769 transitions inside the Yarim Tepe II sequence are ignored for the AH-RJMCMC calculations
770 (see Section 3b).

771 **Table S1.** Different datasets from the Balkans and the Near East used for AH-RJMCMC
772 modeling (see text and details in the table).

773 **Table S2.** New archeointensity data obtained at Tell Begum. Mean intensities are first
774 estimated at the specimen level, then at the fragment level, and finally at the fragment group
775 level. This last group-mean value is used for the AH-RJMCMC modeling, with a dating of
776 5400 ± 75 BCE (Odaka et al., 2019). T_1' - T_2 , Temperature interval (in °C) for intensity
777 determination; H_{lab} , laboratory field used for TRM acquisition; NRM T_1' (%), fraction of
778 NRM involved in intensity determination; Slope R' (%), slope of the $R'(T_i)$ data within the
779 temperature interval used for intensity determination; F , intensity value in μT derived per
780 specimen; F mean value per fragment $\pm \sigma$, mean intensity in μT computed per fragment with
781 its standard deviation. Group F mean value $\pm \sigma$, mean intensity in μT computed for each
782 group of fragments.

783 **Table S3.** Medians and 95% credible intervals estimated using the AH-RJMCMC method
784 (Livermore et al. 2018) and associated rates of changes (based on the time derivative of the
785 medians) shown in Figs. 1, 2, 3, S2 and S4. The datasets are those provided in Table S1. See
786 text

787

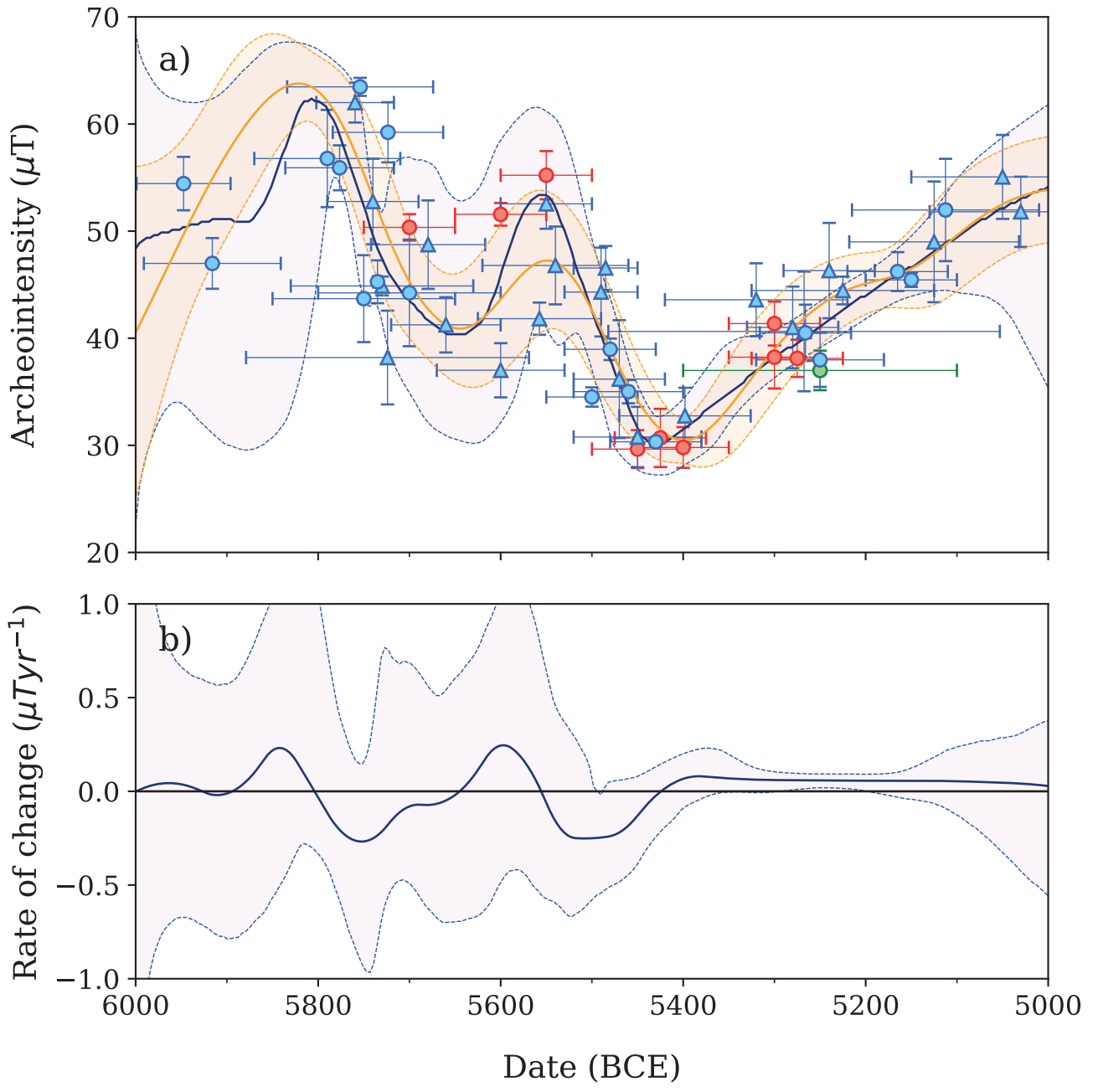


Figure 1

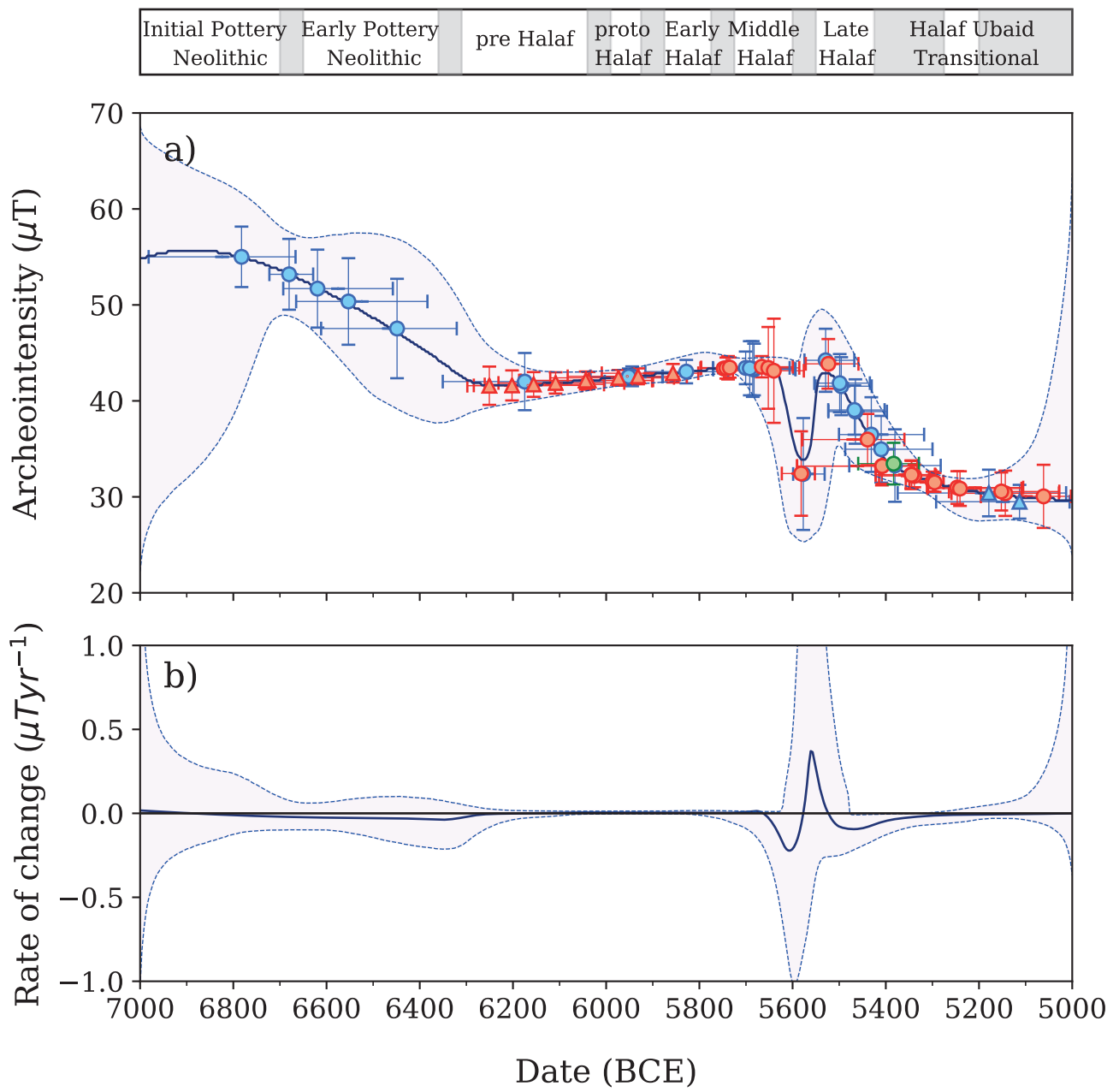


Figure 2

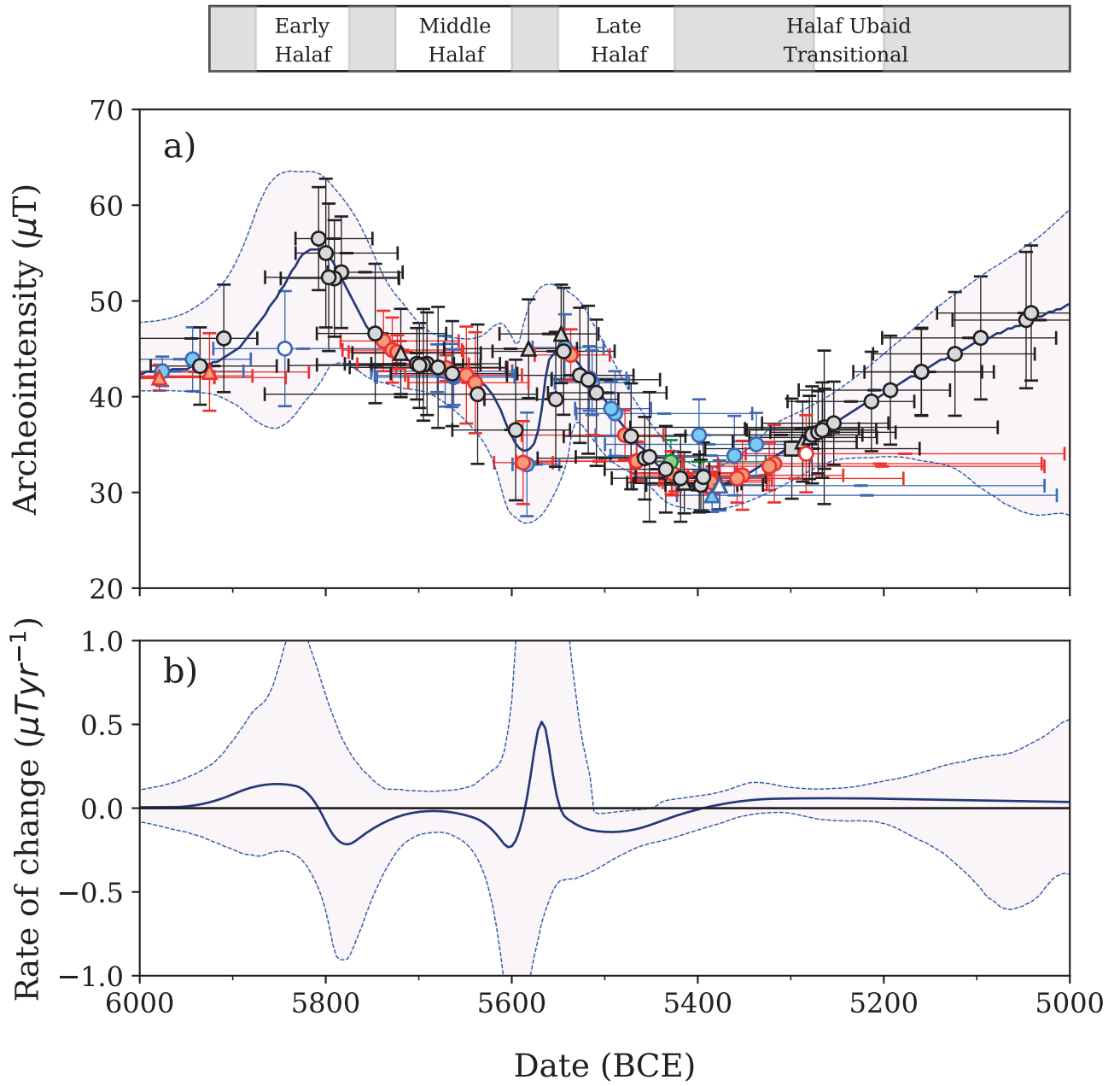


Figure 3

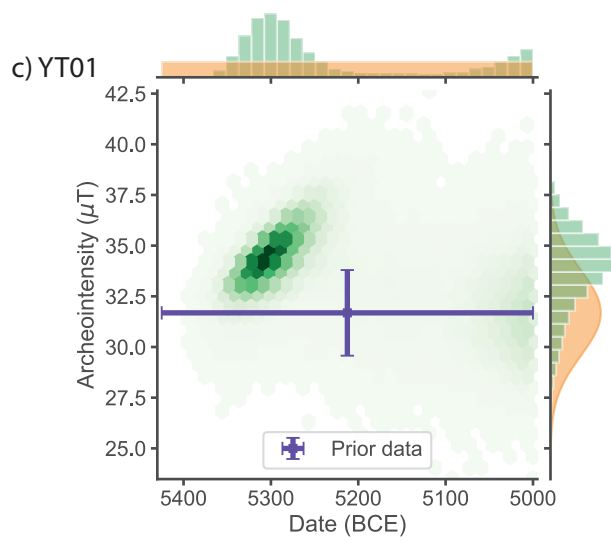
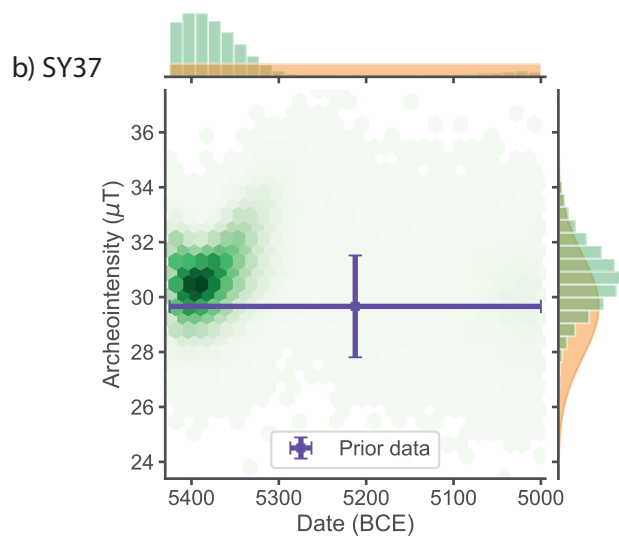
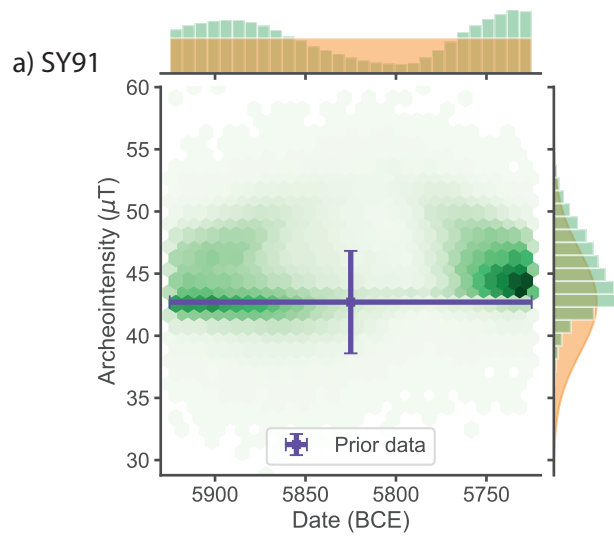


Figure 4

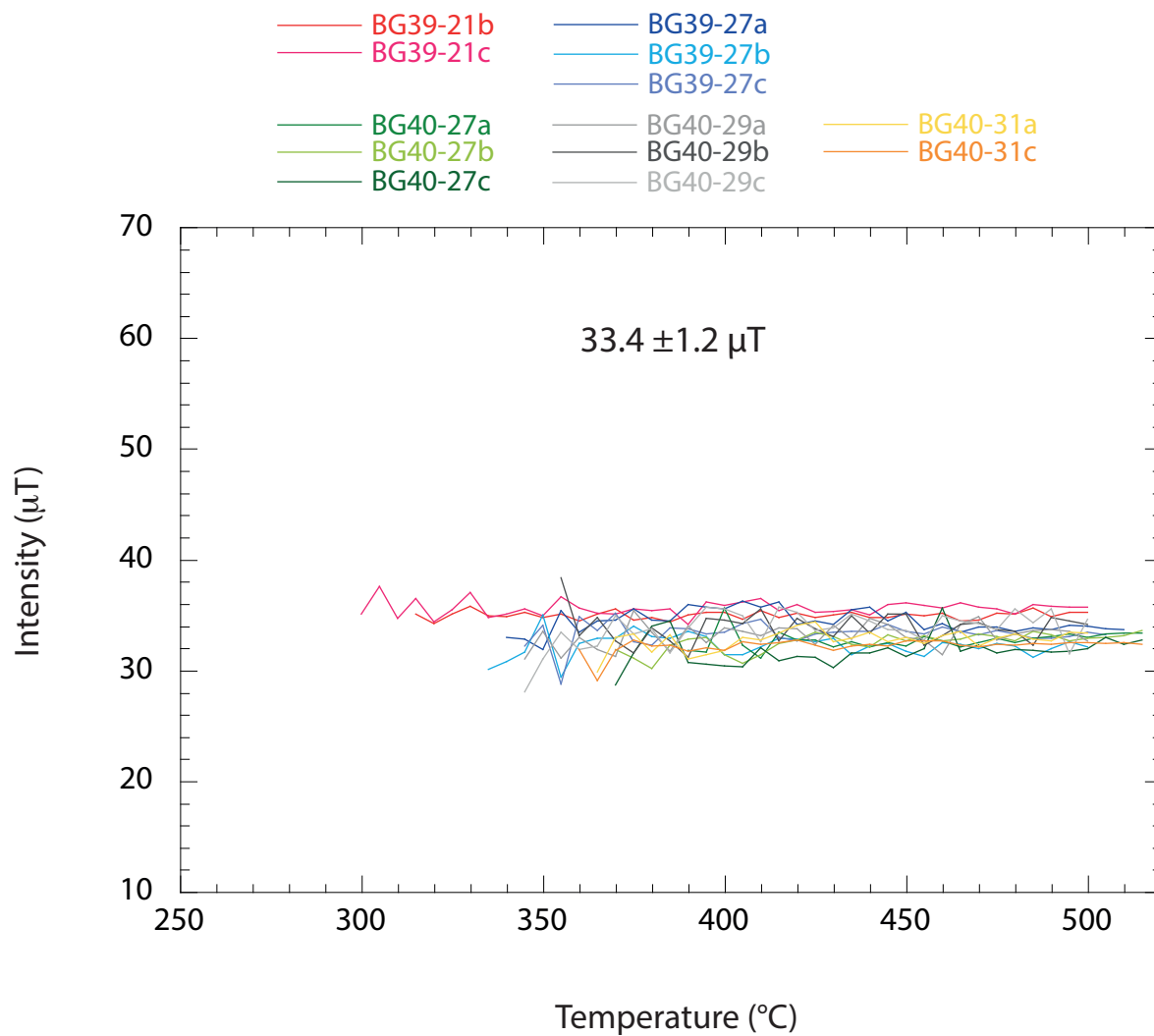


Figure S1

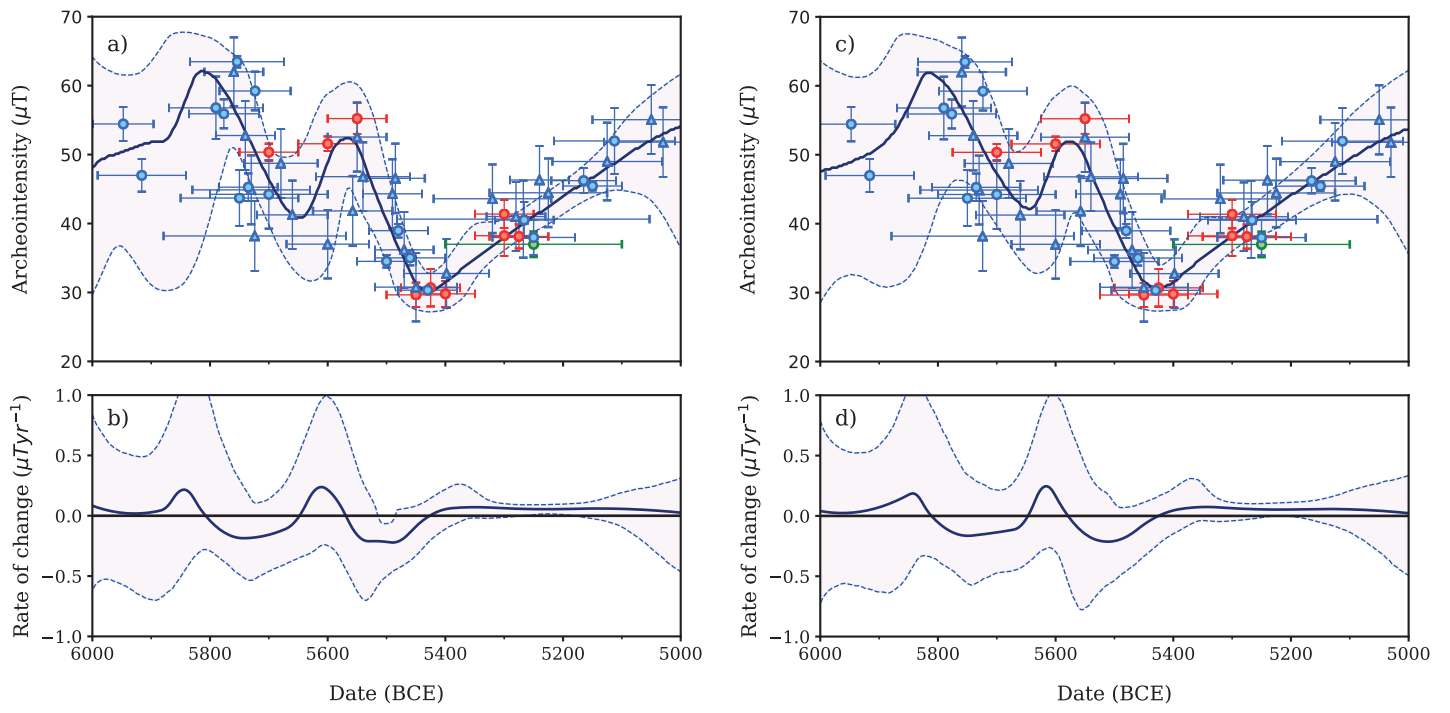


Figure S2

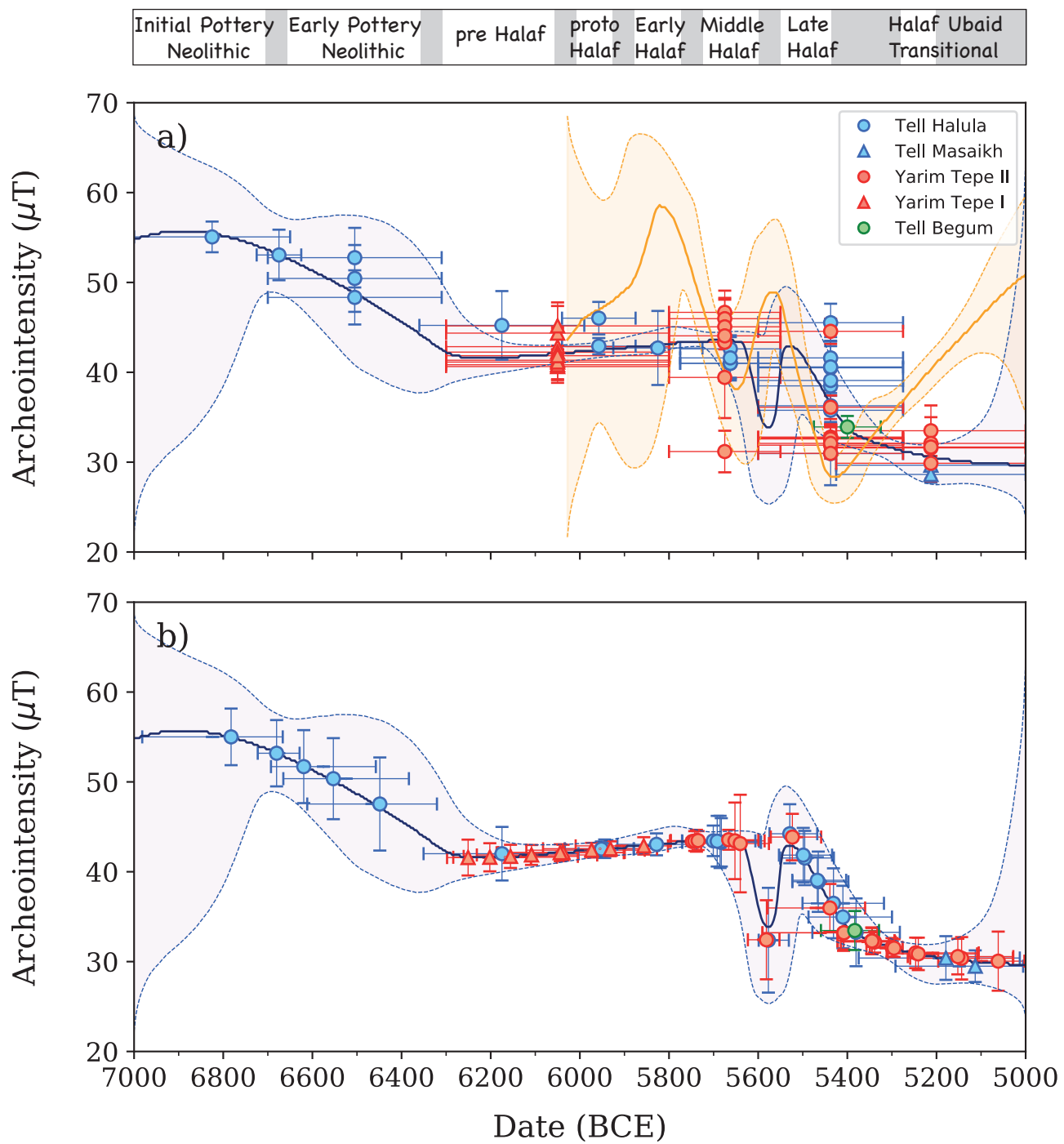


Figure S3

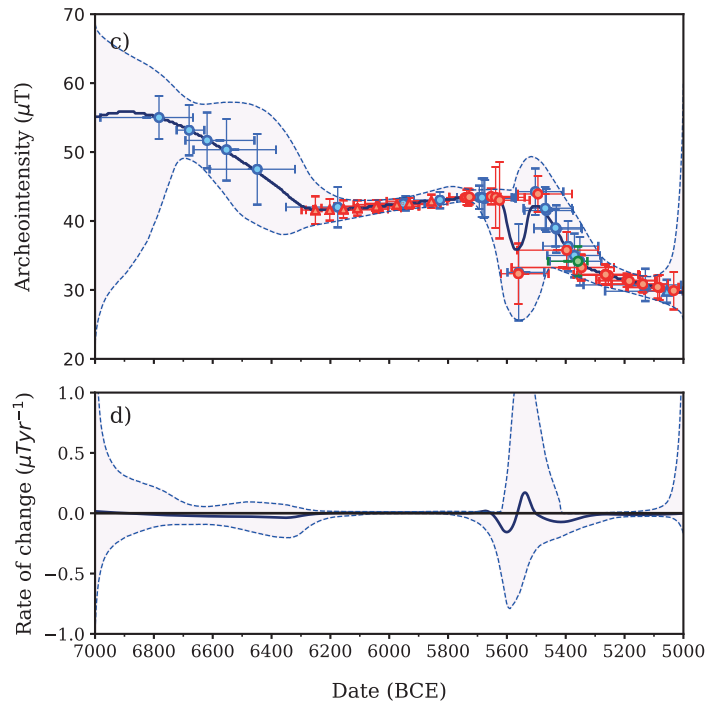
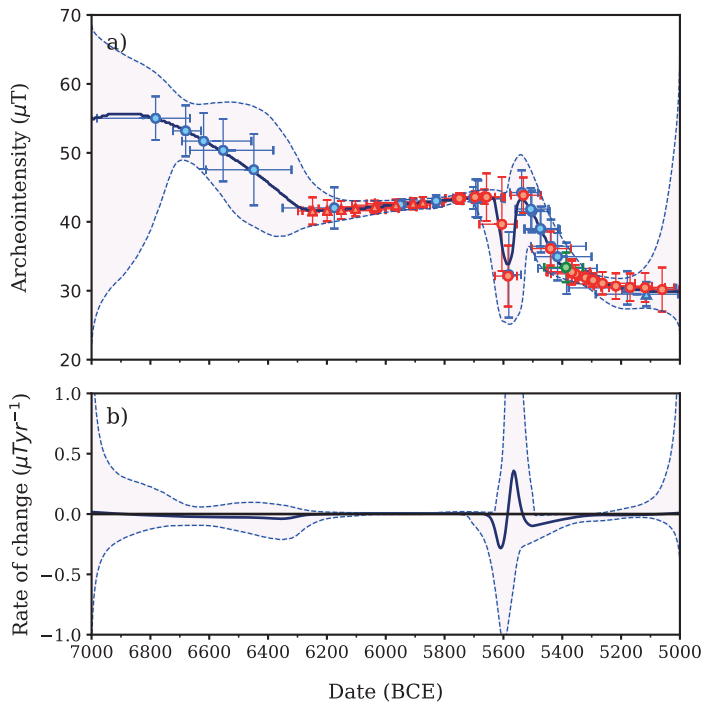


Figure S4

Table S1

(All data transferred to the latitude of Sofia, Bulgaria)

Data Fig. 1

Ref.	Date	dt	Intensity	sd	Order
Fanjat et al. (2013)					
AVGI	-5250.0	150.00	36.992	1.8444	0
Kostadinova-Avramova et al. (2019)					
Ilindentsi	-5700.0	50.000	50.35	1.23	0
Site15-II	-5600.0	50.000	51.57	1.06	1a
Site15-I	-5550.0	50.000	55.22	2.25	2a
Site14	-5425.0	50.000	30.69	2.72	0
Chavd1	-5450.0	50.000	29.65	1.77	1b
Chavd2	-5400.0	50.000	29.8	1.9	2b
Chavd3	-5300.0	50.000	38.23	2.92	3b
Site16	-5300.0	50.000	41.37	2.05	0
Site15-BDR	-5275.0	50.000	38.12	1.74	0
Kovacheva et al. (2014)					
no09	-5660.0	60.000	41.249	2.5787	1c
no10	-5600.0	70.000	37.008	2.5289	2c
no354	-5540.0	80.000	46.795	3.6341	3c
no355	-5450.0	70.000	30.775	2.8177	4c
no19	-5320.0	100.00	43.589	3.4051	5c
no17	-5225.0	100.00	44.455	1.2943	6c
no13	-5490.0	40.000	44.309	4.1445	1d
no18	-5267.5	214.50	40.635	5.5861	2d
no358	-5500.0	50.000	34.513	0.90017	1e
no294	-5430.0	50.000	30.329	0.37590	2e
no293	-5150.0	50.000	45.444	0.65287	3e
no250	-5916.0	75.000	46.985	2.3678	1f
no249	-5754.0	80.000	63.469	0.84277	2f
no11	-5723.5	60.500	59.225	2.8093	3f
no26	-5030.0	100.00	51.806	3.2789	0
no25	-5050.0	100.00	55.061	3.9186	0
no260	-5112.5	102.50	51.975	4.7785	0
no24	-5125.0	93.000	48.995	5.6353	0
no302	-5165.0	55.000	46.220	1.8172	0
no16	-5240.0	50.000	46.316	4.4508	0
no263	-5250.0	70.000	37.981	2.5234	0
no353	-5266.0	50.000	40.501	2.6291	0
no23	-5280.0	50.000	41.010	3.8133	0
no05	-5398.0	72.000	32.751	2.6256	0
no326	-5460.0	60.000	35.013	1.0875	0
no06	-5470.0	50.000	36.181	5.5019	0
no262	-5480.0	50.000	38.964	1.0034	0
no14	-5485.0	35.000	46.557	2.0535	0
no259	-5550.0	50.000	52.545	2.3251	0

no08	-5557.5	67.500	41.824	1.5049	0
no07	-5679.5	62.500	48.737	4.1291	0
no324	-5700.0	100.00	44.234	4.9819	0
no261	-5724.0	155.00	38.195	4.3779	0
no04	-5730.0	100.00	44.880	0.88000	0
no241	-5735.0	5.0000	45.270	2.0000	0
no02	-5740.0	50.000	52.766	3.9907	0
no139	-5750.0	100.00	43.693	4.0581	0
no242	-5759.5	42.500	62.000	1.8600	0
no243	-5776.5	59.500	55.912	2.0985	0
no246	-5790.0	80.000	56.779	4.5399	0
no247	-5947.5	51.500	54.440	2.4929	0

Column "Order": 0 indicates the absence of a time-order relationship in the AH-RJMCMC calculations

(All data transferred to the latitude of Tell Halaf, Syria)

Data Fig. 2

Ref.	Date	dt	Intensity	sd	order
Gallet et al. (2015)					
SY127	-6825.0	175.00	55.066	1.7083	1a
SY125	-6675.0	50.000	53.057	2.8136	2a
SY98-128	-6505.0	195.00	50.444	3.7180	3a
SY97-129	-6505.0	195.00	52.755	3.3160	4a
SY96	-6505.0	195.00	48.334	3.0146	5a
SY130	-6175.0	185.00	45.219	3.8185	6a
SY94-137	-5957.5	82.500	46.023	1.8088	7a
SY95	-5957.5	82.500	42.908	0.90438	7a
SY91	-5825.0	100.00	42.707	4.1199	8a
SY87	-5662.5	112.50	40.998	1.6078	9a
SY88	-5662.5	112.50	42.606	1.5073	9a
SY89	-5662.5	112.50	40.998	1.9092	9a
SY90	-5662.5	112.50	41.601	2.3112	9a
SY86-131	-5437.5	162.50	30.950	3.5170	10a
SY135	-5437.5	162.50	45.520	2.1102	11a
SY84	-5437.5	162.50	40.496	2.4117	12a
SY138	-5437.5	162.50	41.601	2.3112	12a
SY82	-5437.5	162.50	38.486	2.8136	13a
SY83-136	-5437.5	162.50	39.089	1.7083	13a
SY80	-5437.5	162.50	35.773	3.5170	14a
SY81	-5437.5	162.50	36.276	2.0097	14a
SY132	-5437.5	162.50	40.596	2.9141	14a
SY37	-5212.5	212.50	29.662	1.8539	0
SY38	-5212.5	212.50	28.632	0.92693	0
Yutsis-Akimova et al. (2018a)					
YT29	-5675.0	125.00	43.352	0.20117	1b
YT28	-5675.0	125.00	46.671	1.6093	1b
YT27	-5675.0	125.00	45.967	2.1123	1b
YT26	-5675.0	125.00	45.062	0.90526	1b
YT25	-5675.0	125.00	43.352	0.80467	2b
YT24	-5675.0	125.00	44.056	5.0292	2b
YT23	-5675.0	125.00	39.429	4.5263	2b
YT22A	-5675.0	125.00	31.181	2.3134	3b
YT22	-5437.5	162.50	44.559	1.4082	4b
YT21	-5437.5	162.50	36.110	1.3076	4b
YT20	-5437.5	162.50	32.690	1.2070	4b
YT19	-5437.5	162.50	32.790	1.1064	4b
YT17	-5437.5	162.50	32.690	1.5088	5b
YT16	-5437.5	162.50	31.885	1.0058	5b
YT15	-5437.5	162.50	32.589	1.5088	5b
YT14	-5437.5	162.50	32.589	1.6093	5b
YT11	-5437.5	162.50	32.086	1.1064	6b
YT10	-5437.5	162.50	30.980	0.60350	6b
YT07	-5212.5	212.50	33.494	2.8163	7b

YT06	-5212.5	212.50	29.874	2.0117	7b
YT04	-5212.5	212.50	31.583	3.4199	8b
YT03	-5212.5	212.50	32.086	1.4082	8b
YT01	-5212.5	212.50	31.684	2.1123	9b
Yutis-Akimova et al. (2018b)					
YTI-12	-6050.0	250.00	40.636	1.4082	1c
YTI-11	-6050.0	250.00	42.849	2.2129	2c
YTI-10	-6050.0	250.00	40.837	1.7099	3c
YTI-08A	-6050.0	250.00	44.358	3.4199	4c
YTI-06	-6050.0	250.00	42.245	0.70409	5c
YTI-05	-6050.0	250.00	41.340	1.2070	5c
YTI-03	-6050.0	250.00	45.162	2.2129	6c
YTI-02A	-6050.0	250.00	41.139	0.70409	7c
YTI-01	-6050.0	250.00	41.843	3.0175	8c
This study					
TellBegum	-5400.0	75.000	33.917	1.2186	0

Column "Order": 0 indicates the absence of a time-order relationship in the AH-RJMCMC calculations

(All data transferred to the latitude of Tell Halaf, Syria)

Data Fig. 3

Ref.	Date	dt	Intensity	sd	order
Near East					
SY127	-6825.0	175.00	55.066	1.7083	1a
SY125	-6675.0	50.000	53.057	2.8136	2a
SY98-128	-6505.0	195.00	50.444	3.7180	3a
SY97-129	-6505.0	195.00	52.755	3.3160	4a
SY96	-6505.0	195.00	48.334	3.0146	5a
SY130	-6175.0	185.00	45.219	3.8185	6a
SY94-137	-5957.5	82.500	46.023	1.8088	7a
SY95	-5957.5	82.500	42.908	0.90438	7a
SY91	-5825.0	100.00	42.707	4.1199	8a
SY87	-5662.5	112.50	40.998	1.6078	9a
SY88	-5662.5	112.50	42.606	1.5073	9a
SY89	-5662.5	112.50	40.998	1.9092	9a
SY90	-5662.5	112.50	41.601	2.3112	9a
SY86-131	-5437.5	162.50	30.950	3.5170	10a
SY135	-5437.5	162.50	45.520	2.1102	11a
SY84	-5437.5	162.50	40.496	2.4117	12a
SY138	-5437.5	162.50	41.601	2.3112	12a
SY82	-5437.5	162.50	38.486	2.8136	13a
SY83-136	-5437.5	162.50	39.089	1.7083	13a
SY80	-5437.5	162.50	35.773	3.5170	14a
SY81	-5437.5	162.50	36.276	2.0097	14a
SY132	-5437.5	162.50	40.596	2.9141	14a
SY37	-5212.5	212.50	29.662	1.8539	0
SY38	-5212.5	212.50	28.632	0.92693	0
YT29	-5675.0	125.00	43.352	0.20117	1b
YT28	-5675.0	125.00	46.671	1.6093	1b
YT27	-5675.0	125.00	45.967	2.1123	1b
YT26	-5675.0	125.00	45.062	0.90526	1b
YT25	-5675.0	125.00	43.352	0.80467	2b
YT24	-5675.0	125.00	44.056	5.0292	2b
YT23	-5675.0	125.00	39.429	4.5263	2b
YT22A	-5675.0	125.00	31.181	2.3134	3b
YT22	-5437.5	162.50	44.559	1.4082	4b
YT21	-5437.5	162.50	36.110	1.3076	4b
YT20	-5437.5	162.50	32.690	1.2070	4b
YT19	-5437.5	162.50	32.790	1.1064	4b
YT17	-5437.5	162.50	32.690	1.5088	5b
YT16	-5437.5	162.50	31.885	1.0058	5b
YT15	-5437.5	162.50	32.589	1.5088	5b
YT14	-5437.5	162.50	32.589	1.6093	5b
YT11	-5437.5	162.50	32.086	1.1064	6b
YT10	-5437.5	162.50	30.980	0.60350	6b
YT07	-5212.5	212.50	33.494	2.8163	7b
YT06	-5212.5	212.50	29.874	2.0117	7b
YT04	-5212.5	212.50	31.583	3.4199	8b

YT03	-5212.5	212.50	32.086	1.4082	8b
YT01	-5212.5	212.50	31.684	2.1123	9b
YTI-12	-6050.0	250.00	40.636	1.4082	1c
YTI-11	-6050.0	250.00	42.849	2.2129	2c
YTI-10	-6050.0	250.00	40.837	1.7099	3c
YTI-08A	-6050.0	250.00	44.358	3.4199	4c
YTI-06	-6050.0	250.00	42.245	0.70409	5c
YTI-05	-6050.0	250.00	41.340	1.2070	5c
YTI-03	-6050.0	250.00	45.162	2.2129	6c
YTI-02A	-6050.0	250.00	41.139	0.70409	7c
YTI-01	-6050.0	250.00	41.843	3.0175	8c
TellBegum	-5400.0	75.000	33.917	1.2186	0

Balkans

AVGI	-5250.0	150.00	34.563	3.0000	0
Ilindentsi	-5700.0	75.000	47.046	3.0000	0
Site15-II	-5600.0	75.000	48.183	3.0000	1d
Site15-I	-5550.0	75.000	51.597	3.0000	2d
Site14	-5425.0	75.000	28.671	3.0000	0
Chavd1	-5450.0	75.000	27.692	3.0000	1e
Chavd2	-5400.0	75.000	27.834	3.0000	2e
Chavd3	-5300.0	75.000	35.712	3.0000	3e
Site16	-5300.0	75.000	38.665	3.0000	0
Site15-BDR	-5275.0	75.000	35.611	3.0000	0
no09	-5660.0	75.000	38.541	4.6514	1f
no10	-5600.0	75.000	34.578	4.6514	2f
no354	-5540.0	80.000	43.723	4.6514	3f
no355	-5450.0	75.000	28.755	4.6514	4f
no19	-5320.0	100.00	40.727	4.6514	5f
no17	-5225.0	100.00	41.537	4.6514	6f
no13	-5490.0	75.000	41.400	4.6769	1g
no18	-5267.5	214.50	37.967	5.2194	2g
no358	-5500.0	75.000	32.247	3.0000	1h
no294	-5430.0	75.000	28.338	3.0000	2h
no293	-5150.0	75.000	42.460	3.0000	3h
no250	-5916.0	75.000	43.900	3.0000	1i
no249	-5754.0	80.000	59.302	3.0000	2i
no11	-5723.5	75.000	55.337	3.0000	3i
no26	-5030.0	100.00	48.405	4.7132	0
no25	-5050.0	100.00	51.446	4.6820	0
no260	-5112.5	102.50	48.562	4.4647	0
no24	-5125.0	93.000	45.779	5.2653	0
no302	-5165.0	75.000	43.186	3.0000	0
no16	-5240.0	75.000	43.275	4.6413	0
no263	-5250.0	75.000	35.487	3.0000	0
no353	-5266.0	75.000	37.842	3.0000	0
no23	-5280.0	75.000	38.318	4.6514	0
no05	-5398.0	75.000	30.601	4.6463	0
no326	-5460.0	75.000	32.714	3.0000	0
no06	-5470.0	75.000	33.806	5.1407	0
no262	-5480.0	75.000	36.406	3.0000	0

no14	-5485.0	75.000	43.500	4.7028	0
no259	-5550.0	75.000	49.096	4.6820	0
no08	-5557.5	75.000	39.078	4.7185	0
no07	-5679.5	75.000	45.537	4.6820	0
no324	-5700.0	100.00	41.330	4.6548	0
no261	-5724.0	155.00	35.687	4.7343	0
no04	-5730.0	100.00	41.933	4.6717	0
no241	-5735.0	75.000	42.298	3.0000	0
no02	-5740.0	75.000	49.302	4.7080	0
no139	-5750.0	100.00	40.824	3.7917	0
no242	-5759.5	75.000	57.930	4.6717	0
no243	-5776.5	75.000	52.241	3.0000	0
no246	-5790.0	80.000	53.052	4.2419	0
no247	-5947.5	75.000	50.866	3.0000	0

Column "Order": 0 indicates the absence of a time-order relationship in the AH-RJMCMC calculations

(All data at the latitude of Sofia, Bulgaria)

Data Fig. S2a,b						Data Fig. S2c,d				
Ref.	Date	dt	Intensity	sd	Order	Date	dt	Intensity	sd	Order
Fanjat et al. (2013)										
AVGI	-5250.0	150.00	36.992	1.8444	0	-5250.0	150.00	36.992	1.8444	0
Kostadinova-Avramova et al. (2019)										
Ilindentsi	-5700.0	50.000	50.35	1.23	0	-5700.0	75.000	50.35	1.23	0
Site15-II	-5600.0	50.000	51.57	1.06	1a	-5600.0	75.000	51.57	1.06	1a
Site15-I	-5550.0	50.000	55.22	2.25	2a	-5550.0	75.000	55.22	2.25	2a
Site14	-5425.0	50.000	30.69	2.72	0	-5425.0	75.000	30.69	2.72	0
Chavd1	-5450.0	50.000	29.65	1.77	1b	-5450.0	75.000	29.65	1.77	1b
Chavd2	-5400.0	50.000	29.8	1.9	2b	-5400.0	75.000	29.8	1.9	2b
Chavd3	-5300.0	50.000	38.23	2.92	3b	-5300.0	75.000	38.23	2.92	3b
Site16	-5300.0	50.000	41.37	2.05	0	-5300.0	75.000	41.37	2.05	0
Site15-BDR	-5275.0	50.000	38.12	1.74	0	-5275.0	75.000	38.12	1.74	0
Kovacheva et al. (2014)										
no09*	-5660.0	60.000	41.249	4.9782	1c	-5660.0	75.000	41.249	4.9782	1c
no10*	-5600.0	70.000	37.008	4.9782	2c	-5600.0	75.000	37.008	4.9782	2c
no354*	-5540.0	80.000	46.795	4.9782	3c	-5540.0	80.000	46.795	4.9782	3c
no355*	-5450.0	70.000	30.775	4.9782	4c	-5450.0	75.000	30.775	4.9782	4c
no19*	-5320.0	100.00	43.589	4.9782	5c	-5320.0	100.00	43.589	4.9782	5c
no17*	-5225.0	100.00	44.455	4.9782	6c	-5225.0	100.00	44.455	4.9782	6c
no13*	-5490.0	50.000	44.309	5.0055	1d	-5490.0	75.000	44.309	5.0055	1d
no18*	-5267.5	214.50	40.635	5.5861	2d	-5267.5	214.50	40.635	5.5861	2d
no358	-5500.0	50.000	34.513	0.90017	1e	-5500.0	75.000	34.513	0.90017	1e
no294	-5430.0	50.000	30.329	0.37590	2e	-5430.0	75.000	30.329	0.37590	2e
no293	-5150.0	50.000	45.444	0.65287	3e	-5150.0	75.000	45.444	0.65287	3e
no250	-5916.0	75.000	46.985	2.3678	1f	-5916.0	75.000	46.985	2.3678	1f
no249	-5754.0	80.000	63.469	0.84277	2f	-5754.0	80.000	63.469	0.84277	2f
no11	-5723.5	60.500	59.225	2.8093	3f	-5723.5	75.000	59.225	2.8093	3f
no26*	-5030.0	100.00	51.806	5.0444	0	-5030.0	100.00	51.806	5.0444	0
no25*	-5050.0	100.00	55.061	5.0110	0	-5050.0	100.00	55.061	5.0110	0
no260	-5112.5	102.50	51.975	4.7785	0	-5112.5	102.50	51.975	4.7785	0
no24*	-5125.0	93.000	48.995	5.6353	0	-5125.0	93.000	48.995	5.6353	0
no302	-5165.0	55.000	46.220	1.8172	0	-5165.0	75.000	46.220	1.8172	0
no16*	-5240.0	50.000	46.316	4.9674	0	-5240.0	75.000	46.316	4.9674	0
no263	-5250.0	70.000	37.981	2.5234	0	-5250.0	75.000	37.981	2.5234	0
no353	-5266.0	50.000	40.501	2.6291	0	-5266.0	75.000	40.501	2.6291	0
no23*	-5280.0	50.000	41.010	4.9782	0	-5280.0	75.000	41.010	4.9782	0
no05*	-5398.0	72.000	32.751	4.9728	0	-5398.0	75.000	32.751	4.9728	0
no326	-5460.0	60.000	35.013	1.0875	0	-5460.0	75.000	35.013	1.0875	0
no06*	-5470.0	50.000	36.181	5.5019	0	-5470.0	75.000	36.181	5.5019	0
no262	-5480.0	50.000	38.964	1.0034	0	-5480.0	75.000	38.964	1.0034	0
no14*	-5485.0	50.000	46.557	5.0332	0	-5485.0	75.000	46.557	5.0332	0
no259*	-5550.0	50.000	52.545	5.0110	0	-5550.0	75.000	52.545	5.0110	0
no08*	-5557.5	67.500	41.824	5.0500	0	-5557.5	75.000	41.824	5.0500	0
no07*	-5679.5	62.500	48.737	5.0110	0	-5679.5	75.000	48.737	5.0110	0
no324	-5700.0	100.00	44.234	4.9819	0	-5700.0	100.00	44.234	4.9819	0
no261*	-5724.0	155.00	38.195	5.0670	0	-5724.0	155.00	38.195	5.0670	0
no04*	-5730.0	100.00	44.880	5.0000	0	-5730.0	100.00	44.880	5.0000	0
no241	-5735.0	50.000	45.270	2.0000	0	-5735.0	75.000	45.270	2.0000	0
no02*	-5740.0	50.000	52.766	5.0388	0	-5740.0	75.000	52.766	5.0388	0
no139	-5750.0	100.00	43.693	4.0581	0	-5750.0	100.00	43.693	4.0581	0
no242*	-5759.5	50.000	62.000	5.0000	0	-5759.5	75.000	62.000	5.0000	0
no243	-5776.5	59.500	55.912	2.0985	0	-5776.5	75.000	55.912	2.0985	0
no246	-5790.0	80.000	56.779	4.5399	0	-5790.0	80.000	56.779	4.5399	0
no247	-5947.5	51.500	54.440	2.4929	0	-5947.5	75.000	54.440	2.4929	0

Column "Order": 0 indicates the absence of a time-order relationship in the AH-RJMCMC calculations

Archeol. Ref.	Fragment	Specimen	T ₁ '-T ₂ (°C)	H _{Lab} (μT)	NRM T ₁ ' (%)	Slope R' (%)	F (μT)	F mean value per fragment ± σ (μT)	Group F mean value ± σ (μT)	
Level IV LT, Loc 4 Lot39-40	BEG39-21	BG39-21b	315 - 510	35	85	0	35.0	35.3 ± 0.4		
		BG39-21c	320 - 510	35	86	1	35.6			
	BEG39-27	BG39-27a	315 - 510	35	75	-1	34.4	33.3 ± 1.1		
		BG39-27b	315 - 510	35	75	0	32.2			
		BG39-27c	390 - 515	35	73	1	33.3			
	BEG40-27	BG40-27a	370 - 515	35	68	3	32.7	32.3 ± 0.5		
		BG40-27a	370 - 515	35	69	7	32.5			
		BG40-27a	315 - 510	35	69	5	31.7			
	BEG40-29	BG40-29a	345 - 510	35	75	4	33.1	33.6 ± 0.4		
		BG40-29b	355 - 510	35	69	-1	33.9			
		BG40-29c	345 - 510	35	69	8	33.7			
	BEG40-31	BG40-31a	365 - 510	35	72	5	32.7	32.5 ± 0.4		
		BG40-31c	360 - 510	35	75	3	32.2			
	MEAN									33.4 ± 1.2

Table S2

Table S3**Figure 1**

Date	Median (muT)	Cred_Int Upper	Cred_Int Lower	dFdt (muT/yr)	dFdt Upper	dFdt Lower
-6000.000	48.375	68.527	22.567	-0.00110	4.2570	-2.8730
-5995.985	48.875	66.694	26.083	0.00790	2.3180	-1.7160
-5991.971	49.125	65.713	27.805	0.0162	1.6990	-1.2820
-5987.956	49.375	65.002	29.186	0.0235	1.3730	-1.0770
-5983.942	49.375	64.398	30.268	0.0297	1.1800	-0.95400
-5979.927	49.625	63.838	31.213	0.0348	1.0540	-0.87200
-5975.912	49.625	63.419	32.048	0.0387	0.94900	-0.81400
-5971.898	49.875	63.048	32.686	0.0416	0.87600	-0.76600
-5967.883	49.875	62.763	33.255	0.0433	0.81500	-0.73500
-5963.869	49.875	62.524	33.672	0.0440	0.77200	-0.71100
-5959.854	50.125	62.400	33.973	0.0435	0.72900	-0.69400
-5955.839	50.125	62.323	34.010	0.0420	0.69500	-0.67800
-5951.825	50.125	62.162	34.003	0.0393	0.67400	-0.67300
-5947.810	50.375	62.084	33.823	0.0355	0.65300	-0.67300
-5943.796	50.375	62.050	33.497	0.0306	0.63900	-0.67300
-5939.781	50.625	62.038	33.201	0.0247	0.62200	-0.68100
-5935.766	50.625	61.994	32.811	0.0176	0.61200	-0.68700
-5931.752	50.625	62.016	32.406	0.00940	0.60400	-0.70500
-5927.737	50.875	62.077	32.071	0.000400	0.60100	-0.71000
-5923.723	50.875	62.139	31.731	-0.00800	0.58800	-0.72300
-5919.708	50.875	62.262	31.407	-0.0144	0.58000	-0.73300
-5915.693	51.125	62.361	31.098	-0.0184	0.57600	-0.75300
-5911.679	51.125	62.539	30.790	-0.0202	0.56600	-0.76400
-5907.664	51.125	62.770	30.498	-0.0195	0.56700	-0.77400
-5903.650	51.125	63.052	30.216	-0.0166	0.57400	-0.77400
-5899.635	51.125	63.373	30.025	-0.0113	0.57200	-0.78800
-5895.620	51.125	63.740	29.946	-0.00380	0.58200	-0.78500
-5891.606	50.875	64.113	29.814	0.00620	0.59500	-0.78200
-5887.591	50.875	64.484	29.692	0.0184	0.61800	-0.77900
-5883.577	50.875	64.881	29.609	0.0330	0.65200	-0.75800
-5879.562	50.875	65.179	29.553	0.0499	0.68700	-0.74800
-5875.547	50.875	65.496	29.590	0.0691	0.73100	-0.72900
-5871.533	51.125	65.853	29.634	0.0906	0.77200	-0.70500
-5867.518	51.625	66.159	29.740	0.115	0.82300	-0.68300
-5863.504	52.125	66.512	29.943	0.141	0.87200	-0.66800
-5859.489	52.625	66.820	30.078	0.168	0.92000	-0.64600
-5855.474	53.375	67.082	30.385	0.194	0.97100	-0.61600
-5851.460	54.125	67.284	30.633	0.213	1.0190	-0.57800
-5847.445	55.125	67.442	30.930	0.226	1.0790	-0.55100
-5843.431	56.125	67.538	31.352	0.231	1.1420	-0.51500
-5839.416	57.125	67.635	31.791	0.230	1.1960	-0.48300
-5835.401	57.875	67.652	32.296	0.222	1.2570	-0.44800
-5831.387	58.875	67.663	33.095	0.207	1.3010	-0.40700
-5827.372	59.875	67.647	34.101	0.185	1.3460	-0.36500
-5823.358	60.875	67.613	35.272	0.157	1.3510	-0.32300
-5819.343	61.625	67.570	36.569	0.125	1.3650	-0.28900
-5815.328	62.125	67.490	38.093	0.0925	1.3480	-0.27900

-5811.314	62.125	67.386	39.919	0.0598	1.3150	-0.28600
-5807.299	62.375	67.253	42.042	0.0270	1.2570	-0.29900
-5803.285	62.125	67.114	44.064	-0.00600	1.1550	-0.31600
-5799.270	62.125	66.911	46.454	-0.0392	1.0330	-0.33800
-5795.255	61.875	66.693	49.260	-0.0726	0.91000	-0.36200
-5791.241	61.625	66.468	51.835	-0.106	0.79700	-0.39700
-5787.226	60.875	66.238	53.855	-0.138	0.67100	-0.43800
-5783.212	60.375	65.951	55.018	-0.166	0.56300	-0.49200
-5779.197	59.625	65.677	54.933	-0.191	0.45600	-0.54700
-5775.182	58.625	65.373	54.210	-0.212	0.38000	-0.60300
-5771.168	57.625	65.033	53.174	-0.230	0.31700	-0.66500
-5767.153	56.625	64.606	51.768	-0.245	0.25700	-0.73400
-5763.139	55.625	64.108	50.003	-0.256	0.20600	-0.78700
-5759.124	54.625	63.482	47.725	-0.263	0.16500	-0.83800
-5755.109	53.625	62.540	45.374	-0.267	0.14800	-0.88600
-5751.095	52.625	60.540	43.882	-0.268	0.14800	-0.93200
-5747.080	51.625	57.673	43.058	-0.265	0.18800	-0.96200
-5743.066	50.375	54.925	42.988	-0.259	0.26400	-0.96700
-5739.051	49.375	53.122	43.305	-0.249	0.39400	-0.91600
-5735.036	48.375	52.090	42.984	-0.235	0.56000	-0.81300
-5731.022	47.625	51.678	41.887	-0.219	0.71300	-0.69700
-5727.007	46.875	52.298	40.293	-0.198	0.76700	-0.60900
-5722.993	46.125	54.378	38.936	-0.175	0.75400	-0.55400
-5718.978	45.625	55.759	38.010	-0.152	0.71300	-0.51600
-5714.964	45.125	56.430	37.189	-0.131	0.69700	-0.48900
-5710.949	44.625	56.725	36.522	-0.113	0.67900	-0.47700
-5706.934	44.125	56.847	35.867	-0.0983	0.69500	-0.47200
-5702.920	43.875	56.908	35.316	-0.0869	0.69000	-0.48200
-5698.905	43.375	56.882	34.759	-0.0785	0.68300	-0.49600
-5694.891	43.125	56.713	34.185	-0.0733	0.66500	-0.51900
-5690.876	42.625	56.623	33.563	-0.0712	0.64200	-0.54800
-5686.861	42.375	56.666	32.975	-0.0718	0.61400	-0.57500
-5682.847	41.875	56.526	32.459	-0.0731	0.58500	-0.60700
-5678.832	41.625	56.409	32.088	-0.0730	0.55500	-0.62900
-5674.818	41.375	56.214	31.720	-0.0712	0.53200	-0.64900
-5670.803	41.125	55.845	31.437	-0.0675	0.51100	-0.67200
-5666.788	40.875	55.222	31.235	-0.0622	0.51100	-0.68900
-5662.774	40.625	54.445	31.044	-0.0550	0.52500	-0.70100
-5658.759	40.375	53.754	30.863	-0.0460	0.54800	-0.69900
-5654.745	40.375	53.382	30.708	-0.0353	0.57400	-0.69800
-5650.730	40.375	53.047	30.595	-0.0225	0.59900	-0.69700
-5646.715	40.375	52.863	30.499	-0.00750	0.61800	-0.69400
-5642.701	40.375	52.777	30.400	0.00980	0.63900	-0.69400
-5638.686	40.375	52.921	30.278	0.0294	0.66700	-0.68500
-5634.672	40.625	53.057	30.233	0.0512	0.69000	-0.67900
-5630.657	40.875	53.322	30.179	0.0754	0.71500	-0.67600
-5626.642	41.125	53.701	30.174	0.102	0.74700	-0.66800
-5622.628	41.375	54.177	30.291	0.131	0.78600	-0.65700
-5618.613	41.875	54.858	30.449	0.161	0.83800	-0.63900
-5614.599	42.375	55.690	30.722	0.189	0.88500	-0.61600
-5610.584	43.375	56.620	31.074	0.212	0.92400	-0.59000

-5606.569	44.125	57.445	31.355	0.229	0.97600	-0.54600
-5602.555	45.125	58.178	31.806	0.241	1.0250	-0.50700
-5598.540	46.375	58.675	32.296	0.246	1.0450	-0.47500
-5594.526	47.375	59.145	32.820	0.245	1.0690	-0.44600
-5590.511	48.375	59.561	33.491	0.238	1.0740	-0.42600
-5586.496	49.375	60.034	34.150	0.225	1.0810	-0.42200
-5582.482	50.375	60.403	35.090	0.208	1.0840	-0.41800
-5578.467	51.125	60.726	36.301	0.187	1.0850	-0.42100
-5574.453	51.875	61.047	37.600	0.162	1.0850	-0.43800
-5570.438	52.375	61.338	39.006	0.134	1.0370	-0.45800
-5566.423	52.875	61.494	40.402	0.103	0.96900	-0.49200
-5562.409	53.125	61.561	41.365	0.0677	0.90600	-0.51600
-5558.394	53.375	61.551	41.939	0.0293	0.82400	-0.53300
-5554.380	53.375	61.422	41.692	-0.0127	0.73200	-0.56100
-5550.365	53.375	61.226	41.019	-0.0574	0.65000	-0.57200
-5546.350	53.125	60.986	40.352	-0.101	0.56400	-0.58100
-5542.336	52.625	60.712	39.830	-0.140	0.48700	-0.58700
-5538.321	51.875	60.349	39.372	-0.172	0.43700	-0.60400
-5534.307	50.875	59.767	39.346	-0.199	0.40000	-0.61900
-5530.292	50.125	58.972	39.627	-0.220	0.37000	-0.64400
-5526.277	49.125	58.031	39.995	-0.236	0.34300	-0.66300
-5522.263	48.125	56.889	40.251	-0.246	0.31200	-0.67000
-5518.248	46.875	55.649	40.518	-0.250	0.28600	-0.65600
-5514.234	45.875	54.265	40.335	-0.251	0.24800	-0.64400
-5510.219	45.125	52.809	39.703	-0.252	0.21400	-0.63000
-5506.204	44.125	51.367	38.766	-0.252	0.17900	-0.61000
-5502.190	43.125	49.995	37.722	-0.251	0.12400	-0.58900
-5498.175	42.125	48.656	36.479	-0.250	0.024000	-0.57000
-5494.161	41.125	47.438	35.244	-0.249	0.0020000	-0.55200
-5490.146	40.375	46.322	34.129	-0.247	-0.018000	-0.54300
-5486.131	39.375	45.310	32.922	-0.244	0.019000	-0.52900
-5482.117	38.375	44.309	31.576	-0.242	0.048000	-0.51400
-5478.102	37.625	43.271	30.355	-0.237	0.053000	-0.50300
-5474.088	36.625	42.148	29.670	-0.230	0.057000	-0.49400
-5470.073	35.875	40.989	29.215	-0.220	0.059000	-0.48500
-5466.058	34.875	39.752	28.815	-0.207	0.062000	-0.46900
-5462.044	34.125	38.582	28.450	-0.192	0.066000	-0.45300
-5458.029	33.125	37.412	28.183	-0.174	0.069000	-0.43600
-5454.015	32.375	36.441	27.930	-0.153	0.074000	-0.41400
-5450.000	31.625	35.623	27.712	-0.129	0.080000	-0.38800
-5445.985	30.875	34.887	27.524	-0.105	0.089000	-0.35500
-5441.971	30.625	34.193	27.394	-0.0826	0.099000	-0.32200
-5437.956	30.375	33.586	27.326	-0.0612	0.11000	-0.29400
-5433.942	30.125	33.055	27.269	-0.0414	0.12100	-0.26700
-5429.927	30.125	32.724	27.231	-0.0230	0.13200	-0.24300
-5425.912	30.125	32.668	27.226	-0.00610	0.14200	-0.22100
-5421.898	30.375	32.773	27.231	0.00920	0.15200	-0.20000
-5417.883	30.375	32.974	27.260	0.0231	0.16200	-0.18100
-5413.869	30.625	33.229	27.367	0.0355	0.17100	-0.16400
-5409.854	30.875	33.515	27.512	0.0463	0.18000	-0.14400
-5405.839	31.125	33.833	27.730	0.0557	0.18900	-0.12100

Figure 2

Date	Median (muT)	Cred_Int Upper	Cred_Int Lower	dFdt (muT/yr)	dFdt Upper	dFdt Lower
-7000.000	54.875	68.604	22.238	0.0172	1.9990	-1.0300
-6995.992	54.875	67.926	24.027	0.0165	1.4130	-0.81200
-6991.984	54.875	67.578	25.073	0.0158	1.1230	-0.69200
-6987.976	54.875	67.338	25.853	0.0151	0.94700	-0.60200
-6983.968	55.125	67.130	26.494	0.0144	0.83300	-0.53600
-6979.959	55.125	66.941	27.019	0.0138	0.74900	-0.48800
-6975.951	55.125	66.778	27.489	0.0131	0.68400	-0.45000
-6971.943	55.125	66.617	27.914	0.0124	0.63000	-0.41600
-6967.935	55.125	66.482	28.272	0.0118	0.58600	-0.38800
-6963.927	55.375	66.346	28.648	0.0111	0.54800	-0.36400
-6959.919	55.375	66.212	28.923	0.0105	0.51600	-0.34700
-6955.911	55.375	66.099	29.165	0.00980	0.49000	-0.33100
-6951.903	55.375	65.975	29.399	0.00920	0.46700	-0.31700
-6947.894	55.375	65.841	29.584	0.00860	0.44800	-0.30300
-6943.886	55.375	65.727	29.792	0.00790	0.43200	-0.29000
-6939.878	55.625	65.621	30.054	0.00730	0.41900	-0.28100
-6935.870	55.625	65.501	30.292	0.00670	0.40500	-0.27000
-6931.862	55.625	65.384	30.485	0.00610	0.39000	-0.26300
-6927.854	55.625	65.272	30.727	0.00550	0.37900	-0.25500
-6923.846	55.625	65.172	30.894	0.00490	0.36700	-0.24800
-6919.838	55.625	65.064	31.060	0.00430	0.35700	-0.24000
-6915.830	55.625	64.946	31.208	0.00370	0.34700	-0.23500
-6911.821	55.625	64.844	31.371	0.00310	0.34100	-0.22900
-6907.813	55.625	64.738	31.585	0.00260	0.33400	-0.22400
-6903.805	55.625	64.630	31.721	0.00200	0.32800	-0.21800
-6899.797	55.625	64.543	31.912	0.00140	0.32000	-0.21200
-6895.789	55.625	64.444	32.086	0.000900	0.31300	-0.20900
-6891.781	55.625	64.343	32.301	0.000300	0.30700	-0.20600
-6887.773	55.625	64.230	32.456	-0.000200	0.30300	-0.20000
-6883.765	55.625	64.140	32.684	-0.000800	0.29800	-0.19500
-6879.757	55.625	64.053	32.874	-0.00130	0.29200	-0.19100
-6875.748	55.625	63.960	33.089	-0.00180	0.28700	-0.18800
-6871.740	55.625	63.877	33.336	-0.00240	0.28300	-0.18400
-6867.732	55.625	63.796	33.481	-0.00290	0.27900	-0.18200
-6863.724	55.625	63.707	33.691	-0.00340	0.27600	-0.18000
-6859.716	55.625	63.614	33.905	-0.00390	0.27200	-0.17600
-6855.708	55.625	63.519	34.161	-0.00440	0.27000	-0.17100
-6851.700	55.625	63.428	34.435	-0.00490	0.26700	-0.16700
-6847.692	55.625	63.348	34.660	-0.00540	0.26600	-0.16400
-6843.683	55.625	63.266	34.905	-0.00590	0.26200	-0.16300
-6839.675	55.625	63.196	35.185	-0.00640	0.26000	-0.15900
-6835.667	55.625	63.105	35.441	-0.00690	0.25900	-0.15500
-6831.659	55.375	63.017	35.713	-0.00730	0.25600	-0.15200
-6827.651	55.375	62.921	36.083	-0.00780	0.25200	-0.14800
-6823.643	55.375	62.832	36.365	-0.00830	0.25200	-0.14500
-6819.635	55.375	62.726	36.683	-0.00870	0.24900	-0.14200
-6815.627	55.375	62.622	37.006	-0.00920	0.24800	-0.13900
-6811.619	55.375	62.532	37.400	-0.00960	0.24600	-0.13300

-6807.610	55.375	62.407	37.733	-0.0101	0.24400	-0.13000
-6803.602	55.125	62.312	38.091	-0.0105	0.24100	-0.12800
-6799.594	55.125	62.197	38.492	-0.0109	0.23700	-0.12500
-6795.586	55.125	62.080	38.943	-0.0114	0.23200	-0.12300
-6791.578	55.125	61.953	39.341	-0.0118	0.22800	-0.12000
-6787.570	55.125	61.837	39.840	-0.0122	0.22400	-0.11700
-6783.562	54.875	61.694	40.341	-0.0126	0.21900	-0.11400
-6779.554	54.875	61.558	40.826	-0.0130	0.21200	-0.11300
-6775.545	54.875	61.426	41.255	-0.0134	0.20600	-0.11100
-6771.537	54.875	61.288	41.797	-0.0138	0.20300	-0.10900
-6767.529	54.875	61.135	42.304	-0.0142	0.19900	-0.10800
-6763.521	54.625	60.992	42.890	-0.0146	0.19100	-0.10700
-6759.513	54.625	60.830	43.467	-0.0149	0.18300	-0.10600
-6755.505	54.625	60.667	43.991	-0.0153	0.17700	-0.10500
-6751.497	54.625	60.504	44.521	-0.0157	0.17300	-0.10500
-6747.489	54.375	60.335	45.083	-0.0160	0.16600	-0.10400
-6743.481	54.375	60.165	45.575	-0.0164	0.15900	-0.10300
-6739.472	54.375	59.965	46.068	-0.0167	0.15300	-0.10300
-6735.464	54.375	59.774	46.568	-0.0171	0.14700	-0.10200
-6731.456	54.125	59.566	47.066	-0.0174	0.14000	-0.10100
-6727.448	54.125	59.387	47.493	-0.0177	0.13400	-0.10000
-6723.440	54.125	59.197	47.853	-0.0181	0.12800	-0.10000
-6719.432	53.875	59.014	48.188	-0.0184	0.12100	-0.10000
-6715.424	53.875	58.825	48.431	-0.0187	0.11600	-0.099000
-6711.416	53.875	58.644	48.577	-0.0190	0.11100	-0.10000
-6707.408	53.875	58.480	48.699	-0.0193	0.10600	-0.10000
-6703.399	53.625	58.322	48.790	-0.0196	0.10100	-0.10000
-6699.391	53.625	58.165	48.878	-0.0199	0.097000	-0.10000
-6695.383	53.625	58.027	48.920	-0.0202	0.092000	-0.099000
-6691.375	53.375	57.903	48.932	-0.0205	0.087000	-0.099000
-6687.367	53.375	57.793	48.919	-0.0208	0.083000	-0.099000
-6683.359	53.375	57.688	48.891	-0.0210	0.080000	-0.098000
-6679.351	53.125	57.580	48.839	-0.0213	0.076000	-0.098000
-6675.343	53.125	57.484	48.778	-0.0216	0.073000	-0.098000
-6671.334	53.125	57.391	48.697	-0.0218	0.070000	-0.098000
-6667.326	52.875	57.298	48.615	-0.0221	0.068000	-0.097000
-6663.318	52.875	57.228	48.532	-0.0223	0.066000	-0.097000
-6659.310	52.625	57.171	48.415	-0.0226	0.064000	-0.097000
-6655.302	52.625	57.106	48.303	-0.0228	0.063000	-0.097000
-6651.294	52.625	57.057	48.177	-0.0230	0.062000	-0.097000
-6647.286	52.375	57.029	48.038	-0.0232	0.061000	-0.097000
-6643.278	52.375	57.006	47.885	-0.0235	0.061000	-0.097000
-6639.270	52.375	57.002	47.744	-0.0237	0.061000	-0.097000
-6635.261	52.125	56.992	47.577	-0.0239	0.060000	-0.097000
-6631.253	52.125	56.992	47.413	-0.0241	0.060000	-0.097000
-6627.245	51.875	57.002	47.219	-0.0243	0.061000	-0.097000
-6623.237	51.875	57.018	47.014	-0.0245	0.061000	-0.097000
-6619.229	51.875	57.045	46.825	-0.0247	0.061000	-0.097000
-6615.221	51.625	57.076	46.644	-0.0248	0.062000	-0.097000
-6611.213	51.625	57.098	46.429	-0.0250	0.063000	-0.097000
-6607.205	51.375	57.129	46.205	-0.0252	0.064000	-0.097000

-6603.196	51.375	57.146	45.992	-0.0253	0.065000	-0.098000
-6599.188	51.375	57.198	45.803	-0.0255	0.066000	-0.099000
-6595.180	51.125	57.215	45.597	-0.0257	0.066000	-0.100000
-6591.172	51.125	57.251	45.372	-0.0258	0.067000	-0.10100
-6587.164	50.875	57.297	45.171	-0.0259	0.069000	-0.10200
-6583.156	50.875	57.302	44.955	-0.0261	0.070000	-0.10300
-6579.148	50.875	57.328	44.740	-0.0262	0.072000	-0.10500
-6575.140	50.625	57.327	44.535	-0.0263	0.074000	-0.10600
-6571.132	50.625	57.334	44.330	-0.0265	0.075000	-0.10700
-6567.123	50.375	57.325	44.110	-0.0266	0.077000	-0.10800
-6563.115	50.375	57.360	43.865	-0.0267	0.079000	-0.11000
-6559.107	50.375	57.406	43.679	-0.0268	0.081000	-0.11100
-6555.099	50.125	57.425	43.461	-0.0269	0.082000	-0.11300
-6551.091	50.125	57.486	43.235	-0.0270	0.083000	-0.11600
-6547.083	49.875	57.487	43.007	-0.0271	0.084000	-0.11800
-6543.075	49.875	57.493	42.806	-0.0272	0.085000	-0.12100
-6539.067	49.625	57.485	42.566	-0.0272	0.087000	-0.12200
-6535.059	49.625	57.500	42.318	-0.0273	0.089000	-0.12300
-6531.050	49.625	57.495	42.086	-0.0274	0.090000	-0.12500
-6527.042	49.375	57.486	41.883	-0.0274	0.090000	-0.12700
-6523.034	49.375	57.471	41.656	-0.0275	0.091000	-0.12900
-6519.026	49.125	57.470	41.470	-0.0275	0.092000	-0.13200
-6515.018	49.125	57.477	41.247	-0.0276	0.094000	-0.13400
-6511.010	48.875	57.477	41.055	-0.0276	0.094000	-0.13800
-6507.002	48.875	57.475	40.888	-0.0277	0.096000	-0.14000
-6502.994	48.625	57.444	40.718	-0.0277	0.097000	-0.14200
-6498.985	48.625	57.419	40.579	-0.0277	0.098000	-0.14500
-6494.977	48.625	57.399	40.451	-0.0277	0.099000	-0.14700
-6490.969	48.375	57.383	40.286	-0.0278	0.099000	-0.15000
-6486.961	48.375	57.356	40.178	-0.0279	0.099000	-0.15300
-6482.953	48.125	57.330	40.068	-0.0279	0.099000	-0.15600
-6478.945	48.125	57.284	39.969	-0.0280	0.100000	-0.15800
-6474.937	47.875	57.223	39.878	-0.0282	0.100000	-0.16100
-6470.929	47.875	57.174	39.763	-0.0283	0.100000	-0.16300
-6466.921	47.625	57.117	39.657	-0.0285	0.099000	-0.16500
-6462.912	47.625	57.055	39.548	-0.0286	0.099000	-0.16700
-6458.904	47.375	57.034	39.436	-0.0288	0.099000	-0.16900
-6454.896	47.375	56.953	39.345	-0.0290	0.099000	-0.17100
-6450.888	47.125	56.918	39.217	-0.0293	0.100000	-0.17200
-6446.880	47.125	56.870	39.111	-0.0295	0.101000	-0.17400
-6442.872	46.875	56.788	39.009	-0.0298	0.101000	-0.17600
-6438.864	46.875	56.699	38.922	-0.0301	0.100000	-0.17900
-6434.856	46.625	56.624	38.823	-0.0304	0.098000	-0.18300
-6430.847	46.625	56.522	38.741	-0.0307	0.098000	-0.18400
-6426.839	46.375	56.422	38.628	-0.0310	0.097000	-0.18600
-6422.831	46.375	56.278	38.518	-0.0314	0.096000	-0.18800
-6418.823	46.125	56.122	38.442	-0.0317	0.095000	-0.18900
-6414.815	46.125	56.001	38.412	-0.0321	0.095000	-0.19200
-6410.807	45.875	55.870	38.320	-0.0326	0.094000	-0.19400
-6406.799	45.875	55.752	38.234	-0.0330	0.093000	-0.19500
-6402.791	45.625	55.590	38.161	-0.0334	0.093000	-0.19600

-6398.783	45.625	55.429	38.082	-0.0339	0.092000	-0.19800
-6394.774	45.375	55.252	38.013	-0.0344	0.091000	-0.20000
-6390.766	45.375	55.097	37.965	-0.0349	0.091000	-0.20100
-6386.758	45.125	54.961	37.900	-0.0354	0.089000	-0.20200
-6382.750	45.125	54.800	37.851	-0.0359	0.088000	-0.20200
-6378.742	44.875	54.612	37.825	-0.0365	0.086000	-0.20400
-6374.734	44.875	54.400	37.764	-0.0371	0.085000	-0.20500
-6370.726	44.625	54.169	37.732	-0.0376	0.085000	-0.20700
-6366.718	44.625	53.960	37.692	-0.0381	0.081000	-0.21000
-6362.710	44.375	53.743	37.710	-0.0384	0.080000	-0.21100
-6358.701	44.125	53.479	37.735	-0.0386	0.079000	-0.21100
-6354.693	44.125	53.234	37.734	-0.0385	0.077000	-0.21300
-6350.685	43.875	52.999	37.733	-0.0383	0.076000	-0.21300
-6346.677	43.875	52.740	37.744	-0.0379	0.074000	-0.21300
-6342.669	43.625	52.473	37.771	-0.0373	0.070000	-0.21200
-6338.661	43.625	52.194	37.852	-0.0365	0.069000	-0.21200
-6334.653	43.375	51.926	37.898	-0.0356	0.067000	-0.21100
-6330.645	43.125	51.606	37.950	-0.0344	0.064000	-0.21000
-6326.636	43.125	51.321	38.002	-0.0331	0.063000	-0.20800
-6322.628	42.875	50.998	38.079	-0.0316	0.061000	-0.20500
-6318.620	42.875	50.708	38.147	-0.0299	0.059000	-0.20100
-6314.612	42.625	50.345	38.235	-0.0280	0.057000	-0.19500
-6310.604	42.625	50.018	38.336	-0.0259	0.054000	-0.19100
-6306.596	42.375	49.702	38.435	-0.0237	0.051000	-0.18500
-6302.588	42.375	49.357	38.513	-0.0214	0.049000	-0.17700
-6298.580	42.125	49.012	38.610	-0.0193	0.047000	-0.16800
-6294.572	42.125	48.653	38.706	-0.0173	0.045000	-0.15900
-6290.563	42.125	48.283	38.780	-0.0154	0.043000	-0.15000
-6286.555	41.875	47.970	38.858	-0.0137	0.042000	-0.14200
-6282.547	41.875	47.642	38.921	-0.0121	0.039000	-0.13400
-6278.539	41.875	47.345	38.975	-0.0106	0.037000	-0.12600
-6274.531	41.875	47.061	39.015	-0.00930	0.035000	-0.12000
-6270.523	41.875	46.784	39.084	-0.00810	0.033000	-0.11300
-6266.515	41.625	46.517	39.137	-0.00700	0.031000	-0.10600
-6262.507	41.625	46.282	39.183	-0.00610	0.030000	-0.10000
-6258.498	41.625	46.063	39.233	-0.00530	0.028000	-0.093000
-6254.490	41.625	45.859	39.281	-0.00470	0.027000	-0.088000
-6250.482	41.625	45.666	39.313	-0.00410	0.026000	-0.082000
-6246.474	41.625	45.502	39.353	-0.00370	0.024000	-0.077000
-6242.466	41.625	45.336	39.400	-0.00340	0.024000	-0.073000
-6238.458	41.625	45.179	39.436	-0.00310	0.023000	-0.068000
-6234.450	41.625	45.039	39.478	-0.00280	0.022000	-0.063000
-6230.442	41.625	44.899	39.505	-0.00250	0.021000	-0.059000
-6226.434	41.625	44.754	39.540	-0.00230	0.021000	-0.056000
-6222.425	41.625	44.629	39.574	-0.00200	0.020000	-0.052000
-6218.417	41.625	44.518	39.615	-0.00170	0.020000	-0.049000
-6214.409	41.625	44.401	39.650	-0.00140	0.019000	-0.046000
-6210.401	41.625	44.288	39.685	-0.00120	0.018000	-0.043000
-6206.393	41.625	44.179	39.719	-0.000900	0.018000	-0.041000
-6202.385	41.625	44.074	39.756	-0.000600	0.017000	-0.039000
-6198.377	41.625	43.982	39.783	-0.000400	0.017000	-0.037000

-6194.369	41.625	43.883	39.814	-0.000200	0.017000	-0.035000
-6190.361	41.625	43.797	39.845	1.00e-04	0.016000	-0.033000
-6186.352	41.625	43.711	39.884	0.000300	0.016000	-0.032000
-6182.344	41.625	43.634	39.918	0.000500	0.016000	-0.030000
-6178.336	41.625	43.554	39.949	0.000800	0.016000	-0.029000
-6174.328	41.625	43.483	39.979	0.00100	0.015000	-0.028000
-6170.320	41.625	43.423	40.014	0.00120	0.015000	-0.027000
-6166.312	41.625	43.364	40.043	0.00140	0.015000	-0.027000
-6162.304	41.625	43.310	40.077	0.00160	0.015000	-0.026000
-6158.296	41.625	43.266	40.110	0.00180	0.015000	-0.025000
-6154.287	41.625	43.225	40.143	0.00200	0.015000	-0.024000
-6150.279	41.625	43.189	40.172	0.00220	0.014000	-0.024000
-6146.271	41.625	43.156	40.202	0.00230	0.014000	-0.023000
-6142.263	41.625	43.130	40.237	0.00250	0.014000	-0.022000
-6138.255	41.625	43.106	40.268	0.00270	0.014000	-0.022000
-6134.247	41.875	43.086	40.302	0.00280	0.014000	-0.021000
-6130.239	41.875	43.067	40.334	0.00300	0.014000	-0.020000
-6126.231	41.875	43.055	40.367	0.00310	0.014000	-0.020000
-6122.223	41.875	43.043	40.400	0.00330	0.014000	-0.019000
-6118.214	41.875	43.034	40.434	0.00340	0.014000	-0.018000
-6114.206	41.875	43.025	40.464	0.00360	0.014000	-0.018000
-6110.198	41.875	43.014	40.498	0.00370	0.014000	-0.017000
-6106.190	41.875	43.007	40.532	0.00380	0.014000	-0.016000
-6102.182	41.875	43.002	40.568	0.00390	0.014000	-0.015000
-6098.174	41.875	42.997	40.601	0.00400	0.013000	-0.014000
-6094.166	41.875	42.996	40.632	0.00410	0.013000	-0.013000
-6090.158	41.875	42.993	40.666	0.00420	0.013000	-0.012000
-6086.149	41.875	42.994	40.700	0.00430	0.013000	-0.011000
-6082.141	41.875	42.995	40.734	0.00440	0.013000	-0.010000
-6078.133	41.875	42.996	40.766	0.00450	0.013000	-0.009000
-6074.125	41.875	42.998	40.799	0.00460	0.013000	-0.008000
-6070.117	42.125	43.001	40.833	0.00470	0.013000	-0.007000
-6066.109	42.125	43.005	40.865	0.00470	0.013000	-0.007000
-6062.101	42.125	43.009	40.898	0.00480	0.013000	-0.006000
-6058.093	42.125	43.013	40.933	0.00490	0.013000	-0.006000
-6054.085	42.125	43.018	40.964	0.00490	0.013000	-0.006000
-6050.076	42.125	43.025	40.997	0.00500	0.013000	-0.005000
-6046.068	42.125	43.032	41.030	0.00500	0.013000	-0.005000
-6042.060	42.125	43.039	41.063	0.00500	0.013000	-0.005000
-6038.052	42.125	43.045	41.095	0.00510	0.013000	-0.005000
-6034.044	42.125	43.054	41.128	0.00510	0.013000	-0.005000
-6030.036	42.125	43.061	41.158	0.00510	0.013000	-0.005000
-6026.028	42.125	43.071	41.189	0.00510	0.013000	-0.004000
-6022.020	42.125	43.080	41.220	0.00510	0.013000	-0.004000
-6018.012	42.125	43.089	41.249	0.00510	0.013000	-0.004000
-6014.003	42.125	43.099	41.280	0.00510	0.013000	-0.004000
-6009.995	42.375	43.110	41.309	0.00510	0.013000	-0.004000
-6005.987	42.375	43.121	41.339	0.00510	0.013000	-0.004000
-6001.979	42.375	43.134	41.367	0.00510	0.013000	-0.004000
-5997.971	42.375	43.148	41.395	0.00510	0.012000	-0.004000
-5993.963	42.375	43.162	41.424	0.00500	0.012000	-0.004000

-5989.955	42.375	43.177	41.451	0.00500	0.012000	-0.0040000
-5985.947	42.375	43.190	41.477	0.00500	0.013000	-0.0030000
-5981.938	42.375	43.205	41.502	0.00500	0.013000	-0.0030000
-5977.930	42.375	43.223	41.527	0.00490	0.013000	-0.0030000
-5973.922	42.375	43.239	41.551	0.00490	0.013000	-0.0030000
-5969.914	42.375	43.259	41.575	0.00490	0.013000	-0.0030000
-5965.906	42.375	43.279	41.600	0.00480	0.013000	-0.0030000
-5961.898	42.375	43.302	41.622	0.00480	0.013000	-0.0030000
-5957.890	42.375	43.324	41.645	0.00480	0.013000	-0.0030000
-5953.882	42.625	43.351	41.667	0.00480	0.013000	-0.0030000
-5949.874	42.625	43.379	41.687	0.00470	0.013000	-0.0030000
-5945.865	42.625	43.408	41.708	0.00470	0.013000	-0.0030000
-5941.857	42.625	43.436	41.728	0.00470	0.013000	-0.0030000
-5937.849	42.625	43.467	41.745	0.00460	0.013000	-0.0030000
-5933.841	42.625	43.504	41.762	0.00460	0.013000	-0.0030000
-5929.833	42.625	43.541	41.779	0.00460	0.013000	-0.0030000
-5925.825	42.625	43.581	41.797	0.00450	0.013000	-0.0030000
-5921.817	42.625	43.619	41.810	0.00450	0.013000	-0.0030000
-5917.809	42.625	43.663	41.822	0.00450	0.013000	-0.0030000
-5913.801	42.625	43.709	41.833	0.00440	0.013000	-0.0030000
-5909.792	42.625	43.752	41.846	0.00440	0.013000	-0.0030000
-5905.784	42.625	43.800	41.858	0.00430	0.013000	-0.0030000
-5901.776	42.625	43.845	41.870	0.00430	0.014000	-0.0030000
-5897.768	42.625	43.891	41.880	0.00430	0.014000	-0.0030000
-5893.760	42.875	43.939	41.889	0.00420	0.014000	-0.0030000
-5889.752	42.875	43.988	41.899	0.00420	0.014000	-0.0030000
-5885.744	42.875	44.034	41.910	0.00420	0.014000	-0.0030000
-5881.736	42.875	44.085	41.921	0.00410	0.014000	-0.0030000
-5877.727	42.875	44.131	41.929	0.00410	0.014000	-0.0030000
-5873.719	42.875	44.175	41.936	0.00400	0.014000	-0.0030000
-5869.711	42.875	44.224	41.944	0.00400	0.014000	-0.0030000
-5865.703	42.875	44.273	41.960	0.00400	0.014000	-0.0030000
-5861.695	42.875	44.319	41.976	0.00390	0.015000	-0.0030000
-5857.687	42.875	44.369	41.992	0.00390	0.015000	-0.0030000
-5853.679	42.875	44.416	42.012	0.00380	0.015000	-0.0030000
-5849.671	42.875	44.465	42.039	0.00380	0.015000	-0.0030000
-5845.663	42.875	44.516	42.060	0.00370	0.015000	-0.0040000
-5841.654	42.875	44.565	42.091	0.00370	0.016000	-0.0040000
-5837.646	43.125	44.611	42.127	0.00360	0.016000	-0.0040000
-5833.638	43.125	44.664	42.164	0.00360	0.016000	-0.0040000
-5829.630	43.125	44.712	42.205	0.00360	0.016000	-0.0050000
-5825.622	43.125	44.763	42.249	0.00350	0.016000	-0.0050000
-5821.614	43.125	44.810	42.304	0.00350	0.017000	-0.0050000
-5817.606	43.125	44.857	42.350	0.00340	0.017000	-0.0060000
-5813.598	43.125	44.898	42.400	0.00340	0.017000	-0.0070000
-5809.589	43.125	44.935	42.445	0.00330	0.017000	-0.0080000
-5805.581	43.125	44.970	42.491	0.00330	0.017000	-0.0090000
-5801.573	43.125	45.003	42.535	0.00320	0.017000	-0.0100000
-5797.565	43.125	45.023	42.578	0.00320	0.017000	-0.011000
-5793.557	43.125	45.051	42.613	0.00310	0.017000	-0.013000
-5789.549	43.125	45.055	42.647	0.00310	0.017000	-0.014000

-5785.541	43.125	45.062	42.677	0.00300	0.017000	-0.016000
-5781.533	43.375	45.053	42.703	0.00300	0.017000	-0.018000
-5777.525	43.375	45.033	42.729	0.00290	0.017000	-0.020000
-5773.516	43.375	44.998	42.754	0.00290	0.016000	-0.022000
-5769.508	43.375	44.965	42.778	0.00280	0.016000	-0.024000
-5765.500	43.375	44.928	42.800	0.00280	0.016000	-0.026000
-5761.492	43.375	44.887	42.820	0.00270	0.016000	-0.028000
-5757.484	43.375	44.851	42.838	0.00270	0.016000	-0.031000
-5753.476	43.375	44.815	42.853	0.00260	0.016000	-0.033000
-5749.468	43.375	44.781	42.867	0.00260	0.015000	-0.036000
-5745.460	43.375	44.742	42.877	0.00250	0.015000	-0.040000
-5741.452	43.375	44.698	42.884	0.00250	0.015000	-0.044000
-5737.443	43.375	44.651	42.882	0.00260	0.015000	-0.048000
-5733.435	43.375	44.604	42.874	0.00280	0.014000	-0.052000
-5729.427	43.375	44.561	42.859	0.00300	0.014000	-0.056000
-5725.419	43.375	44.526	42.823	0.00340	0.014000	-0.060000
-5721.411	43.375	44.496	42.753	0.00390	0.014000	-0.064000
-5717.403	43.375	44.471	42.633	0.00440	0.014000	-0.068000
-5713.395	43.375	44.450	42.467	0.00510	0.013000	-0.072000
-5709.387	43.625	44.440	42.268	0.00580	0.013000	-0.077000
-5705.378	43.625	44.436	42.040	0.00670	0.013000	-0.082000
-5701.370	43.625	44.435	41.793	0.00760	0.013000	-0.088000
-5697.362	43.625	44.442	41.517	0.00860	0.013000	-0.095000
-5693.354	43.625	44.450	41.233	0.00970	0.012000	-0.10200
-5689.346	43.625	44.461	40.926	0.0109	0.012000	-0.11000
-5685.338	43.625	44.473	40.597	0.0122	0.012000	-0.11900
-5681.330	43.625	44.484	40.249	0.0135	0.012000	-0.12900
-5677.322	43.625	44.499	39.884	0.0138	0.011000	-0.14200
-5673.314	43.625	44.510	39.508	0.0124	0.011000	-0.15500
-5669.305	43.625	44.522	39.102	0.00920	0.011000	-0.17000
-5665.297	43.625	44.535	38.674	0.00410	0.011000	-0.18800
-5661.289	43.625	44.538	38.229	-0.00290	0.010000	-0.20700
-5657.281	43.625	44.545	37.725	-0.0118	0.010000	-0.23200
-5653.273	43.375	44.553	37.180	-0.0226	0.010000	-0.26000
-5649.265	43.375	44.559	36.541	-0.0352	0.010000	-0.29000
-5645.257	43.375	44.561	35.814	-0.0498	0.010000	-0.32300
-5641.249	43.375	44.555	35.008	-0.0662	0.010000	-0.36300
-5637.240	43.375	44.550	34.049	-0.0844	0.010000	-0.40800
-5633.232	43.125	44.541	32.969	-0.105	0.010000	-0.45900
-5629.224	42.625	44.536	31.791	-0.127	0.011000	-0.51700
-5625.216	41.875	44.526	30.489	-0.150	0.015000	-0.58300
-5621.208	41.125	44.509	29.261	-0.176	0.041000	-0.65400
-5617.200	40.125	44.480	28.196	-0.198	0.13200	-0.72500
-5613.192	39.375	44.446	27.379	-0.213	0.19900	-0.80000
-5609.184	38.375	44.399	26.738	-0.221	0.26600	-0.87700
-5605.176	37.375	44.346	26.309	-0.222	0.34100	-0.94800
-5601.167	36.375	44.284	26.085	-0.215	0.44600	-1.0000
-5597.159	35.625	44.213	25.977	-0.201	0.58900	-1.0310
-5593.151	34.875	44.148	25.774	-0.179	0.80900	-1.0250
-5589.143	34.375	44.144	25.590	-0.149	1.0510	-0.98400
-5585.135	34.125	44.323	25.460	-0.110	1.2350	-0.94200

-5581.127	33.875	45.170	25.392	-0.0603	1.3900	-0.88600
-5577.119	33.875	46.149	25.316	0.00100	1.4820	-0.83100
-5573.111	33.875	46.861	25.331	0.0754	1.5630	-0.77800
-5569.103	34.125	47.482	25.452	0.172	1.6080	-0.71500
-5565.094	34.625	47.935	25.539	0.290	1.6680	-0.64300
-5561.086	35.375	48.371	25.651	0.370	1.7000	-0.56400
-5557.078	36.875	48.708	25.884	0.365	1.6990	-0.48600
-5553.070	38.875	48.984	26.142	0.308	1.6840	-0.41400
-5549.062	40.875	49.224	26.259	0.248	1.6350	-0.35600
-5545.054	42.125	49.416	26.465	0.194	1.5430	-0.31600
-5541.046	42.625	49.516	26.820	0.146	1.4370	-0.28800
-5537.038	42.875	49.560	27.322	0.103	1.2870	-0.27100
-5533.029	42.875	49.491	27.977	0.0658	1.1760	-0.26300
-5529.021	42.875	49.391	28.841	0.0346	1.0380	-0.26000
-5525.013	42.875	49.224	29.863	0.00890	0.91100	-0.25900
-5521.005	42.875	49.060	30.979	-0.0126	0.79000	-0.25800
-5516.997	42.625	48.871	32.283	-0.0310	0.68800	-0.25700
-5512.989	42.625	48.669	33.734	-0.0467	0.59800	-0.25700
-5508.981	42.375	48.403	34.751	-0.0597	0.51000	-0.25600
-5504.973	42.125	48.124	35.245	-0.0699	0.42700	-0.25400
-5500.965	41.875	47.835	35.300	-0.0774	0.35200	-0.25200
-5496.956	41.625	47.494	35.225	-0.0823	0.29300	-0.24900
-5492.948	41.125	47.159	34.989	-0.0856	0.24000	-0.24600
-5488.940	40.875	46.821	34.723	-0.0882	0.19900	-0.24200
-5484.932	40.625	46.466	34.429	-0.0904	0.15900	-0.23800
-5480.924	40.125	46.130	34.154	-0.0920	0.11500	-0.23300
-5476.916	39.875	45.747	33.899	-0.0932	-0.0030000	-0.22800
-5472.908	39.625	45.389	33.679	-0.0939	-0.0080000	-0.22300
-5468.900	39.125	45.011	33.478	-0.0941	-0.0090000	-0.21800
-5464.891	38.875	44.611	33.294	-0.0939	-0.0090000	-0.21300
-5460.883	38.625	44.222	33.141	-0.0931	-0.0090000	-0.20800
-5456.875	38.125	43.819	33.000	-0.0919	-0.0080000	-0.20200
-5452.867	37.875	43.392	32.862	-0.0902	-0.0080000	-0.19700
-5448.859	37.375	42.968	32.749	-0.0880	-0.0080000	-0.19200
-5444.851	37.125	42.538	32.644	-0.0853	-0.0080000	-0.18600
-5440.843	36.875	42.121	32.546	-0.0821	-0.0070000	-0.18200
-5436.835	36.375	41.706	32.457	-0.0785	-0.0070000	-0.17700
-5432.827	36.125	41.296	32.369	-0.0744	-0.0070000	-0.17100
-5428.818	35.875	40.903	32.283	-0.0702	-0.0060000	-0.16600
-5424.810	35.375	40.512	32.206	-0.0661	-0.0060000	-0.16000
-5420.802	35.125	40.138	32.130	-0.0623	-0.0060000	-0.15500
-5416.794	34.875	39.766	32.058	-0.0586	-0.0060000	-0.14900
-5412.786	34.625	39.417	31.989	-0.0551	-0.0050000	-0.14300
-5408.778	34.375	39.084	31.921	-0.0519	-0.0050000	-0.13800
-5404.770	34.125	38.755	31.858	-0.0488	-0.0050000	-0.13400
-5400.762	33.875	38.435	31.792	-0.0459	-0.0040000	-0.12900
-5396.754	33.625	38.114	31.727	-0.0432	-0.0040000	-0.12500
-5392.745	33.625	37.803	31.669	-0.0408	-0.0040000	-0.12000
-5388.737	33.375	37.496	31.607	-0.0385	-0.0040000	-0.11600
-5384.729	33.125	37.205	31.551	-0.0364	-0.0030000	-0.11200
-5380.721	33.125	36.909	31.494	-0.0346	-0.0030000	-0.10800

-5376.713	32.875	36.626	31.437	-0.0329	-0.0030000	-0.10400
-5372.705	32.875	36.349	31.382	-0.0314	-0.0030000	-0.10000
-5368.697	32.875	36.078	31.327	-0.0300	-0.0020000	-0.097000
-5364.689	32.625	35.811	31.271	-0.0287	-0.0020000	-0.094000
-5360.680	32.625	35.550	31.220	-0.0275	-0.0020000	-0.091000
-5356.672	32.625	35.295	31.162	-0.0262	-0.0020000	-0.088000
-5352.664	32.375	35.048	31.104	-0.0250	-0.0010000	-0.085000
-5348.656	32.375	34.802	31.049	-0.0239	-0.0010000	-0.082000
-5344.648	32.375	34.564	30.986	-0.0228	-0.0010000	-0.080000
-5340.640	32.125	34.326	30.921	-0.0217	0.0000	-0.078000
-5336.632	32.125	34.091	30.851	-0.0207	0.0000	-0.076000
-5332.624	32.125	33.860	30.781	-0.0197	0.0000	-0.074000
-5328.616	32.125	33.637	30.703	-0.0188	0.0010000	-0.073000
-5324.607	31.875	33.422	30.631	-0.0179	0.0010000	-0.072000
-5320.599	31.875	33.217	30.542	-0.0171	0.0020000	-0.070000
-5316.591	31.875	33.030	30.445	-0.0162	0.0020000	-0.069000
-5312.583	31.875	32.868	30.337	-0.0155	0.0030000	-0.068000
-5308.575	31.625	32.727	30.222	-0.0148	0.0030000	-0.067000
-5304.567	31.625	32.609	30.091	-0.0141	0.0040000	-0.067000
-5300.559	31.625	32.511	29.955	-0.0134	0.0050000	-0.066000
-5296.551	31.625	32.430	29.805	-0.0128	0.0050000	-0.065000
-5292.542	31.375	32.363	29.654	-0.0123	0.0060000	-0.065000
-5288.534	31.375	32.307	29.502	-0.0118	0.0070000	-0.064000
-5284.526	31.375	32.257	29.344	-0.0113	0.0080000	-0.064000
-5280.518	31.375	32.210	29.185	-0.0108	0.0090000	-0.063000
-5276.510	31.125	32.171	29.038	-0.0105	0.0100000	-0.062000
-5272.502	31.125	32.136	28.896	-0.0101	0.011000	-0.062000
-5268.494	31.125	32.102	28.751	-0.00980	0.013000	-0.061000
-5264.486	31.125	32.070	28.616	-0.00950	0.014000	-0.060000
-5260.478	31.125	32.041	28.494	-0.00930	0.016000	-0.059000
-5256.469	31.125	32.014	28.385	-0.00910	0.018000	-0.058000
-5252.461	30.875	31.991	28.281	-0.00900	0.020000	-0.057000
-5248.453	30.875	31.968	28.165	-0.00890	0.021000	-0.056000
-5244.445	30.875	31.948	28.063	-0.00880	0.023000	-0.054000
-5240.437	30.875	31.933	27.981	-0.00870	0.025000	-0.053000
-5236.429	30.875	31.919	27.895	-0.00860	0.026000	-0.052000
-5232.421	30.875	31.910	27.819	-0.00850	0.028000	-0.050000
-5228.413	30.625	31.897	27.746	-0.00850	0.030000	-0.049000
-5224.405	30.625	31.894	27.677	-0.00840	0.031000	-0.047000
-5220.396	30.625	31.894	27.626	-0.00830	0.033000	-0.046000
-5216.388	30.625	31.894	27.580	-0.00820	0.034000	-0.043000
-5212.380	30.625	31.904	27.547	-0.00810	0.036000	-0.042000
-5208.372	30.625	31.918	27.513	-0.00800	0.037000	-0.040000
-5204.364	30.625	31.937	27.502	-0.00790	0.039000	-0.038000
-5200.356	30.375	31.967	27.485	-0.00780	0.041000	-0.036000
-5196.348	30.375	31.986	27.496	-0.00770	0.042000	-0.035000
-5192.340	30.375	32.017	27.492	-0.00760	0.044000	-0.034000
-5188.331	30.375	32.067	27.500	-0.00740	0.045000	-0.033000
-5184.323	30.375	32.113	27.510	-0.00730	0.047000	-0.032000
-5180.315	30.375	32.153	27.523	-0.00720	0.048000	-0.031000
-5176.307	30.375	32.216	27.536	-0.00710	0.050000	-0.031000

-5172.299	30.375	32.278	27.549	-0.00700	0.051000	-0.030000
-5168.291	30.125	32.339	27.555	-0.00690	0.053000	-0.030000
-5164.283	30.125	32.414	27.572	-0.00670	0.054000	-0.030000
-5160.275	30.125	32.476	27.582	-0.00660	0.056000	-0.029000
-5156.267	30.125	32.557	27.590	-0.00650	0.058000	-0.029000
-5152.258	30.125	32.648	27.596	-0.00630	0.059000	-0.029000
-5148.250	30.125	32.726	27.605	-0.00620	0.061000	-0.029000
-5144.242	30.125	32.812	27.618	-0.00610	0.063000	-0.029000
-5140.234	30.125	32.919	27.621	-0.00590	0.066000	-0.029000
-5136.226	30.125	33.028	27.623	-0.00580	0.068000	-0.030000
-5132.218	30.125	33.148	27.621	-0.00570	0.071000	-0.030000
-5128.210	30.125	33.263	27.609	-0.00550	0.074000	-0.030000
-5124.202	30.125	33.399	27.602	-0.00540	0.077000	-0.031000
-5120.193	29.875	33.547	27.583	-0.00520	0.081000	-0.032000
-5116.185	29.875	33.703	27.560	-0.00510	0.085000	-0.033000
-5112.177	29.875	33.866	27.539	-0.00490	0.089000	-0.034000
-5108.169	29.875	34.052	27.507	-0.00480	0.093000	-0.036000
-5104.161	29.875	34.234	27.484	-0.00460	0.10000	-0.037000
-5100.153	29.875	34.449	27.441	-0.00440	0.10500	-0.039000
-5096.145	29.875	34.718	27.398	-0.00430	0.11200	-0.041000
-5092.137	29.875	35.010	27.360	-0.00410	0.12300	-0.043000
-5088.129	29.875	35.321	27.318	-0.00390	0.13300	-0.045000
-5084.120	29.875	35.682	27.272	-0.00380	0.14400	-0.047000
-5080.112	29.875	36.075	27.223	-0.00360	0.15700	-0.050000
-5076.104	29.875	36.549	27.167	-0.00340	0.17300	-0.052000
-5072.096	29.875	37.101	27.111	-0.00330	0.18900	-0.055000
-5068.088	29.875	37.700	27.054	-0.00310	0.20900	-0.058000
-5064.080	29.875	38.329	26.994	-0.00290	0.22900	-0.062000
-5060.072	29.875	39.047	26.919	-0.00270	0.24900	-0.066000
-5056.064	29.875	39.795	26.849	-0.00250	0.27400	-0.070000
-5052.056	29.875	40.701	26.783	-0.00230	0.30100	-0.074000
-5048.047	29.875	41.637	26.702	-0.00220	0.33100	-0.080000
-5044.039	29.875	42.664	26.616	-0.00200	0.36300	-0.086000
-5040.031	29.875	43.730	26.524	-0.00180	0.40200	-0.094000
-5036.023	29.625	44.850	26.419	-0.00160	0.44300	-0.10200
-5032.015	29.625	46.078	26.300	-0.00140	0.49000	-0.11100
-5028.007	29.625	47.375	26.179	-0.00120	0.54600	-0.12100
-5023.999	29.625	48.775	26.042	-0.00100	0.61300	-0.13300
-5019.991	29.625	50.316	25.887	-0.000800	0.69800	-0.14800
-5015.982	29.625	51.914	25.693	-0.000600	0.80000	-0.16800
-5011.974	29.625	53.750	25.496	-0.000400	0.96300	-0.19600
-5007.966	29.625	55.816	25.210	-1.00e-04	1.1780	-0.23100
-5003.958	29.625	58.572	24.775	1.00e-04	1.5880	-0.28300
-4999.950	29.625	63.706	23.872	0.000300	2.4740	-0.36800

-5401.825	31.375	34.168	27.977	0.0636	0.19700	-0.098000
-5397.810	31.625	34.538	28.203	0.0700	0.20400	-0.082000
-5393.796	31.875	34.944	28.412	0.0748	0.21100	-0.071000
-5389.781	32.125	35.409	28.609	0.0782	0.21600	-0.061000
-5385.766	32.375	35.860	28.799	0.0801	0.22300	-0.053000
-5381.752	32.625	36.327	28.986	0.0805	0.22700	-0.044000
-5377.737	33.125	36.790	29.225	0.0795	0.23000	-0.035000
-5373.723	33.375	37.245	29.495	0.0778	0.23100	-0.026000
-5369.708	33.625	37.745	29.775	0.0761	0.22900	-0.021000
-5365.693	33.875	38.189	30.145	0.0744	0.22700	-0.014000
-5361.679	34.125	38.621	30.574	0.0729	0.22300	-0.0100000
-5357.664	34.375	39.014	31.076	0.0714	0.21800	-0.0060000
-5353.650	34.625	39.319	31.604	0.0700	0.20700	-0.0050000
-5349.635	34.875	39.559	32.111	0.0687	0.19600	-0.0040000
-5345.620	35.125	39.760	32.580	0.0676	0.18500	-0.0030000
-5341.606	35.375	39.907	33.013	0.0665	0.17300	-0.0030000
-5337.591	35.625	40.042	33.415	0.0654	0.16200	-0.0040000
-5333.577	35.875	40.127	33.779	0.0645	0.15100	-0.0060000
-5329.562	36.375	40.168	34.131	0.0637	0.14100	-0.0070000
-5325.547	36.625	40.193	34.471	0.0630	0.13300	-0.0070000
-5321.533	36.875	40.226	34.795	0.0623	0.12600	-0.0070000
-5317.518	37.125	40.297	35.098	0.0617	0.12000	-0.0070000
-5313.504	37.375	40.387	35.389	0.0613	0.11500	-0.0080000
-5309.489	37.625	40.499	35.668	0.0609	0.11100	-0.0070000
-5305.474	37.875	40.599	35.940	0.0606	0.10800	-0.0060000
-5301.460	38.125	40.730	36.208	0.0602	0.10500	-0.0030000
-5297.445	38.375	40.883	36.468	0.0599	0.10300	-0.0020000
-5293.431	38.625	41.047	36.725	0.0597	0.10100	0.0000
-5289.416	38.875	41.232	36.972	0.0594	0.099000	0.0030000
-5285.401	39.125	41.429	37.214	0.0591	0.098000	0.0050000
-5281.387	39.125	41.633	37.453	0.0589	0.097000	0.0070000
-5277.372	39.375	41.841	37.678	0.0586	0.096000	0.0100000
-5273.358	39.625	42.066	37.901	0.0584	0.095000	0.011000
-5269.343	39.875	42.293	38.123	0.0582	0.094000	0.014000
-5265.328	40.125	42.522	38.337	0.0580	0.094000	0.015000
-5261.314	40.375	42.762	38.547	0.0578	0.093000	0.016000
-5257.299	40.625	42.999	38.750	0.0576	0.093000	0.018000
-5253.285	40.875	43.245	38.951	0.0575	0.093000	0.019000
-5249.270	41.125	43.501	39.144	0.0573	0.093000	0.019000
-5245.255	41.375	43.749	39.342	0.0572	0.092000	0.019000
-5241.241	41.625	43.993	39.551	0.0571	0.092000	0.018000
-5237.226	41.875	44.233	39.747	0.0570	0.092000	0.018000
-5233.212	42.125	44.462	39.962	0.0569	0.092000	0.018000
-5229.197	42.375	44.708	40.186	0.0568	0.092000	0.017000
-5225.182	42.625	44.939	40.409	0.0567	0.092000	0.016000
-5221.168	42.875	45.167	40.634	0.0566	0.092000	0.015000
-5217.153	43.125	45.370	40.859	0.0566	0.092000	0.013000
-5213.139	43.375	45.573	41.084	0.0566	0.092000	0.011000
-5209.124	43.625	45.771	41.304	0.0565	0.091000	0.0090000
-5205.109	43.875	45.962	41.535	0.0565	0.091000	0.0060000
-5201.095	43.875	46.142	41.755	0.0565	0.091000	0.0020000

-5197.080	44.125	46.333	41.974	0.0566	0.090000	-0.0010000
-5193.066	44.375	46.540	42.182	0.0566	0.090000	-0.0050000
-5189.051	44.625	46.766	42.385	0.0566	0.091000	-0.0080000
-5185.036	44.875	47.007	42.581	0.0567	0.092000	-0.012000
-5181.022	45.125	47.267	42.774	0.0568	0.093000	-0.016000
-5177.007	45.375	47.526	42.954	0.0568	0.094000	-0.021000
-5172.993	45.625	47.796	43.132	0.0569	0.096000	-0.024000
-5168.978	45.625	48.087	43.297	0.0570	0.099000	-0.028000
-5164.964	45.875	48.379	43.458	0.0571	0.10200	-0.032000
-5160.949	46.125	48.675	43.601	0.0571	0.10700	-0.036000
-5156.934	46.375	48.977	43.727	0.0571	0.11200	-0.039000
-5152.920	46.625	49.295	43.847	0.0571	0.11900	-0.042000
-5148.905	46.625	49.627	43.952	0.0570	0.12700	-0.043000
-5144.891	46.875	49.982	44.043	0.0569	0.13400	-0.046000
-5140.876	47.125	50.346	44.141	0.0568	0.14300	-0.048000
-5136.861	47.375	50.722	44.232	0.0566	0.15300	-0.052000
-5132.847	47.625	51.111	44.280	0.0564	0.16300	-0.056000
-5128.832	47.875	51.520	44.346	0.0562	0.17400	-0.059000
-5124.818	48.125	51.958	44.414	0.0560	0.18200	-0.066000
-5120.803	48.375	52.430	44.449	0.0557	0.19400	-0.072000
-5116.788	48.625	52.901	44.466	0.0554	0.20300	-0.080000
-5112.774	48.875	53.373	44.469	0.0551	0.21600	-0.091000
-5108.759	49.125	53.902	44.440	0.0547	0.22400	-0.10000
-5104.745	49.125	54.388	44.374	0.0543	0.22800	-0.11300
-5100.730	49.375	54.803	44.302	0.0539	0.23600	-0.12500
-5096.715	49.625	55.193	44.216	0.0534	0.24100	-0.13500
-5092.701	49.875	55.583	44.193	0.0530	0.24600	-0.15000
-5088.686	50.125	55.967	44.159	0.0524	0.25100	-0.16400
-5084.672	50.375	56.281	44.114	0.0519	0.25500	-0.18000
-5080.657	50.625	56.622	44.039	0.0513	0.25900	-0.19100
-5076.642	50.875	56.938	44.027	0.0507	0.26500	-0.20700
-5072.628	51.125	57.226	43.935	0.0501	0.26900	-0.22400
-5068.613	51.125	57.488	43.888	0.0494	0.26900	-0.24200
-5064.599	51.375	57.781	43.756	0.0487	0.27000	-0.25700
-5060.584	51.625	58.058	43.564	0.0480	0.27600	-0.27600
-5056.569	51.875	58.329	43.352	0.0473	0.27900	-0.29600
-5052.555	52.125	58.610	43.103	0.0465	0.28600	-0.31500
-5048.540	52.125	58.878	42.755	0.0457	0.28600	-0.33300
-5044.526	52.375	59.133	42.302	0.0448	0.29000	-0.35300
-5040.511	52.625	59.385	41.915	0.0440	0.29300	-0.37100
-5036.496	52.625	59.629	41.351	0.0430	0.29600	-0.39100
-5032.482	52.875	59.897	40.662	0.0420	0.30400	-0.41300
-5028.467	53.125	60.110	40.023	0.0409	0.31300	-0.43400
-5024.453	53.125	60.361	39.382	0.0396	0.32400	-0.45200
-5020.438	53.375	60.629	38.706	0.0382	0.33400	-0.47200
-5016.423	53.625	60.841	38.064	0.0366	0.34300	-0.48900
-5012.409	53.625	61.108	37.440	0.0348	0.35300	-0.50100
-5008.394	53.875	61.331	36.771	0.0329	0.36200	-0.52000
-5004.380	53.875	61.576	36.117	0.0309	0.37100	-0.53700
-5000.365	54.125	61.762	35.443	0.0287	0.37500	-0.55600
-4996.350	54.125	61.924	34.759	0.0263	0.38000	-0.57400

-4992.336	54.375	62.099	34.219	0.0238	0.39100	-0.58000
-4988.321	54.375	62.289	33.678	0.0212	0.40200	-0.59900
-4984.307	54.375	62.445	33.181	0.0183	0.41300	-0.61300
-4980.292	54.375	62.629	32.741	0.0154	0.42100	-0.62500
-4976.277	54.625	62.792	32.348	0.0123	0.43000	-0.63700
-4972.263	54.625	62.971	31.862	0.00900	0.43600	-0.65400
-4968.248	54.625	63.154	31.404	0.00560	0.44500	-0.67000
-4964.234	54.625	63.387	30.987	0.00210	0.45900	-0.67800
-4960.219	54.625	63.573	30.627	-0.00170	0.47700	-0.69100
-4956.204	54.625	63.781	30.285	-0.00550	0.48100	-0.71200
-4952.190	54.625	63.979	29.943	-0.00950	0.49300	-0.73000
-4948.175	54.375	64.181	29.574	-0.0137	0.51700	-0.74900
-4944.161	54.375	64.370	29.207	-0.0180	0.54500	-0.76600
-4940.146	54.375	64.578	28.918	-0.0225	0.57400	-0.78800
-4936.131	54.125	64.770	28.647	-0.0271	0.60500	-0.82400
-4932.117	54.125	64.986	28.354	-0.0319	0.64600	-0.86500
-4928.102	53.875	65.223	28.036	-0.0368	0.68900	-0.92200
-4924.088	53.875	65.458	27.781	-0.0418	0.75100	-0.99400
-4920.073	53.625	65.710	27.395	-0.0471	0.82800	-1.0860
-4916.058	53.375	65.991	26.940	-0.0524	0.92500	-1.2140
-4912.044	53.125	66.275	26.368	-0.0580	1.0800	-1.4200
-4908.029	52.875	66.654	25.563	-0.0636	1.3240	-1.7500
-4904.015	52.875	67.189	24.387	-0.0695	1.7500	-2.3820
-4900.000	52.875	68.454	21.835	-0.0754	2.9090	-4.4410

Figure 3

Date	Median (muT)	Cred_Int Upper	Cred_Int Lower	dFdt (muT/yr)	dFdt Upper	dFdt Lower
-7000.000	51.375	68.625	21.707	0.0459	3.1340	-2.2780
-6995.988	51.375	67.611	23.500	0.0445	1.9460	-1.5350
-6991.977	51.625	67.175	24.348	0.0431	1.4770	-1.1880
-6987.965	51.625	66.867	24.965	0.0418	1.2270	-0.99500
-6983.953	51.875	66.646	25.436	0.0404	1.0630	-0.86300
-6979.942	52.125	66.466	25.778	0.0390	0.94100	-0.77600
-6975.930	52.125	66.337	26.065	0.0377	0.84600	-0.70900
-6971.919	52.375	66.219	26.300	0.0364	0.78800	-0.66000
-6967.907	52.625	66.094	26.516	0.0351	0.73700	-0.61900
-6963.895	52.625	66.014	26.680	0.0338	0.69300	-0.58400
-6959.884	52.875	65.927	26.842	0.0325	0.65800	-0.55500
-6955.872	52.875	65.843	26.888	0.0313	0.62500	-0.53300
-6951.860	53.125	65.761	26.993	0.0301	0.60100	-0.51100
-6947.849	53.125	65.673	27.059	0.0288	0.58200	-0.49800
-6943.837	53.375	65.622	27.105	0.0276	0.56100	-0.48100
-6939.826	53.375	65.531	27.196	0.0264	0.54800	-0.46900
-6935.814	53.625	65.479	27.211	0.0253	0.53900	-0.45800
-6931.802	53.625	65.428	27.264	0.0241	0.52800	-0.44700
-6927.791	53.625	65.353	27.389	0.0230	0.52200	-0.43800
-6923.779	53.875	65.296	27.493	0.0218	0.51700	-0.43600
-6919.767	53.875	65.220	27.515	0.0207	0.51500	-0.43100
-6915.756	53.875	65.173	27.586	0.0196	0.51300	-0.42400
-6911.744	54.125	65.116	27.628	0.0186	0.51100	-0.41800
-6907.733	54.125	65.076	27.724	0.0175	0.51100	-0.41400
-6903.721	54.125	65.020	27.779	0.0165	0.51200	-0.40800
-6899.709	54.375	64.968	27.925	0.0154	0.51100	-0.40600
-6895.698	54.375	64.932	27.984	0.0144	0.51000	-0.40200
-6891.686	54.375	64.899	28.076	0.0134	0.50500	-0.40100
-6887.674	54.375	64.854	28.133	0.0124	0.50600	-0.40200
-6883.663	54.375	64.830	28.258	0.0115	0.49900	-0.39800
-6879.651	54.375	64.801	28.361	0.0105	0.49200	-0.39500
-6875.640	54.625	64.765	28.495	0.00960	0.49400	-0.39500
-6871.628	54.625	64.709	28.565	0.00870	0.49400	-0.39700
-6867.616	54.625	64.693	28.603	0.00780	0.48500	-0.39300
-6863.605	54.625	64.641	28.674	0.00690	0.48100	-0.38800
-6859.593	54.625	64.615	28.791	0.00600	0.48500	-0.38600
-6855.581	54.625	64.584	28.863	0.00510	0.48800	-0.38400
-6851.570	54.625	64.550	28.983	0.00430	0.48600	-0.38000
-6847.558	54.625	64.497	29.093	0.00350	0.48900	-0.37600
-6843.547	54.625	64.437	29.199	0.00270	0.48000	-0.37600
-6839.535	54.625	64.374	29.310	0.00190	0.47700	-0.37500
-6835.523	54.625	64.317	29.462	0.00110	0.47800	-0.36900
-6831.512	54.625	64.296	29.617	0.000300	0.47500	-0.36600
-6827.500	54.625	64.241	29.754	-0.000400	0.47400	-0.36100
-6823.488	54.625	64.181	29.929	-0.00110	0.47300	-0.35900
-6819.477	54.625	64.111	30.157	-0.00180	0.46900	-0.35600
-6815.465	54.625	64.025	30.341	-0.00250	0.46800	-0.35100
-6811.453	54.625	63.966	30.498	-0.00320	0.46600	-0.34800

-6807.442	54.625	63.900	30.678	-0.00390	0.46000	-0.34600
-6803.430	54.625	63.821	30.891	-0.00450	0.46400	-0.33600
-6799.419	54.625	63.756	31.065	-0.00520	0.46400	-0.32700
-6795.407	54.625	63.664	31.362	-0.00580	0.46000	-0.32300
-6791.395	54.625	63.571	31.569	-0.00640	0.45900	-0.31400
-6787.384	54.625	63.494	31.846	-0.00700	0.45700	-0.30700
-6783.372	54.625	63.422	32.177	-0.00750	0.45400	-0.30200
-6779.360	54.625	63.325	32.499	-0.00810	0.45100	-0.29400
-6775.349	54.625	63.242	32.874	-0.00860	0.44600	-0.29000
-6771.337	54.625	63.112	33.177	-0.00920	0.44400	-0.28500
-6767.326	54.625	63.006	33.589	-0.00970	0.44100	-0.27500
-6763.314	54.375	62.863	33.998	-0.0101	0.43300	-0.27000
-6759.302	54.375	62.743	34.398	-0.0106	0.42900	-0.26200
-6755.291	54.375	62.629	34.925	-0.0111	0.42000	-0.25500
-6751.279	54.375	62.473	35.442	-0.0115	0.41100	-0.25000
-6747.267	54.375	62.317	35.994	-0.0119	0.40500	-0.24500
-6743.256	54.375	62.143	36.612	-0.0124	0.40000	-0.24100
-6739.244	54.125	61.972	37.262	-0.0128	0.38900	-0.23700
-6735.233	54.125	61.773	37.939	-0.0131	0.37900	-0.23400
-6731.221	54.125	61.528	38.632	-0.0135	0.36900	-0.23200
-6727.209	54.125	61.297	39.342	-0.0139	0.36200	-0.22800
-6723.198	53.875	61.035	40.150	-0.0143	0.35200	-0.22900
-6719.186	53.875	60.778	40.817	-0.0146	0.33600	-0.22900
-6715.174	53.875	60.490	41.633	-0.0150	0.32500	-0.22800
-6711.163	53.875	60.255	42.504	-0.0153	0.31200	-0.22600
-6707.151	53.625	60.027	43.313	-0.0157	0.30100	-0.22500
-6703.140	53.625	59.810	43.908	-0.0160	0.28800	-0.22700
-6699.128	53.625	59.568	44.483	-0.0164	0.27500	-0.22900
-6695.116	53.625	59.367	44.954	-0.0167	0.26400	-0.23000
-6691.105	53.375	59.183	45.311	-0.0170	0.25300	-0.23100
-6687.093	53.375	59.044	45.523	-0.0173	0.24200	-0.23300
-6683.081	53.375	58.865	45.643	-0.0177	0.23100	-0.23600
-6679.070	53.125	58.710	45.740	-0.0180	0.22000	-0.23900
-6675.058	53.125	58.577	45.720	-0.0183	0.21300	-0.24100
-6671.047	53.125	58.503	45.642	-0.0186	0.20700	-0.24200
-6667.035	52.875	58.413	45.540	-0.0189	0.20000	-0.24400
-6663.023	52.875	58.361	45.352	-0.0192	0.19400	-0.24600
-6659.012	52.875	58.314	45.135	-0.0195	0.19000	-0.24900
-6655.000	52.625	58.271	44.810	-0.0197	0.18700	-0.25000
-6650.988	52.625	58.287	44.492	-0.0200	0.18500	-0.25200
-6646.977	52.375	58.310	44.157	-0.0203	0.18500	-0.25200
-6642.965	52.375	58.370	43.778	-0.0206	0.18400	-0.25400
-6638.953	52.375	58.451	43.296	-0.0208	0.18400	-0.25500
-6634.942	52.125	58.547	42.802	-0.0211	0.18600	-0.25500
-6630.930	52.125	58.662	42.315	-0.0213	0.18600	-0.25700
-6626.919	52.125	58.796	41.826	-0.0216	0.18900	-0.25500
-6622.907	51.875	58.926	41.331	-0.0218	0.19000	-0.25700
-6618.895	51.875	59.022	40.822	-0.0221	0.19500	-0.25800
-6614.884	51.875	59.175	40.413	-0.0223	0.20300	-0.25500
-6610.872	51.625	59.306	40.063	-0.0225	0.20700	-0.25600
-6606.860	51.625	59.435	39.650	-0.0227	0.21100	-0.25700

-6602.849	51.375	59.542	39.343	-0.0229	0.21600	-0.25700
-6598.837	51.375	59.599	38.976	-0.0232	0.22200	-0.25900
-6594.826	51.375	59.684	38.688	-0.0234	0.22900	-0.25900
-6590.814	51.125	59.792	38.420	-0.0236	0.23400	-0.26100
-6586.802	51.125	59.860	38.110	-0.0238	0.24000	-0.26000
-6582.791	51.125	59.936	37.881	-0.0240	0.24700	-0.26300
-6578.779	50.875	60.002	37.639	-0.0241	0.25000	-0.26500
-6574.767	50.875	60.048	37.452	-0.0243	0.25600	-0.26700
-6570.756	50.625	60.056	37.243	-0.0245	0.26300	-0.27000
-6566.744	50.625	60.107	37.022	-0.0247	0.26700	-0.27100
-6562.733	50.625	60.146	36.910	-0.0248	0.27000	-0.27300
-6558.721	50.375	60.199	36.665	-0.0250	0.27900	-0.27400
-6554.709	50.375	60.221	36.541	-0.0251	0.28300	-0.27600
-6550.698	50.375	60.267	36.483	-0.0253	0.28400	-0.27800
-6546.686	50.125	60.296	36.331	-0.0254	0.28700	-0.28000
-6542.674	50.125	60.304	36.282	-0.0256	0.29100	-0.28100
-6538.663	50.125	60.342	36.241	-0.0257	0.29600	-0.28500
-6534.651	49.875	60.354	36.114	-0.0258	0.29600	-0.29000
-6530.640	49.875	60.371	36.022	-0.0260	0.29800	-0.29200
-6526.628	49.625	60.392	35.943	-0.0261	0.29800	-0.29500
-6522.616	49.625	60.421	35.826	-0.0262	0.29800	-0.30000
-6518.605	49.625	60.419	35.666	-0.0263	0.29800	-0.30300
-6514.593	49.375	60.443	35.551	-0.0264	0.30100	-0.30500
-6510.581	49.375	60.481	35.459	-0.0265	0.30500	-0.30500
-6506.570	49.375	60.472	35.283	-0.0266	0.30800	-0.30600
-6502.558	49.125	60.480	35.096	-0.0267	0.30500	-0.30900
-6498.547	49.125	60.510	34.919	-0.0268	0.30700	-0.30900
-6494.535	48.875	60.497	34.821	-0.0269	0.31000	-0.31200
-6490.523	48.875	60.549	34.730	-0.0269	0.31400	-0.31400
-6486.512	48.875	60.523	34.613	-0.0270	0.31500	-0.31500
-6482.500	48.625	60.503	34.530	-0.0271	0.31300	-0.31800
-6478.488	48.625	60.492	34.473	-0.0271	0.31200	-0.32100
-6474.477	48.375	60.467	34.323	-0.0272	0.31000	-0.32100
-6470.465	48.375	60.454	34.216	-0.0273	0.31100	-0.32100
-6466.453	48.125	60.456	34.153	-0.0275	0.31100	-0.32500
-6462.442	48.125	60.483	34.034	-0.0276	0.31400	-0.32900
-6458.430	47.875	60.438	33.911	-0.0278	0.31600	-0.33000
-6454.419	47.875	60.412	33.766	-0.0280	0.32000	-0.33200
-6450.407	47.875	60.348	33.631	-0.0282	0.31800	-0.33300
-6446.395	47.625	60.328	33.577	-0.0284	0.32200	-0.33300
-6442.384	47.625	60.295	33.477	-0.0286	0.31800	-0.33900
-6438.372	47.375	60.220	33.334	-0.0289	0.32100	-0.34200
-6434.360	47.375	60.188	33.260	-0.0292	0.32100	-0.34300
-6430.349	47.125	60.121	33.249	-0.0295	0.32100	-0.34400
-6426.337	47.125	60.063	33.186	-0.0298	0.32200	-0.34400
-6422.326	46.875	59.993	33.131	-0.0302	0.31900	-0.34700
-6418.314	46.875	59.950	33.092	-0.0305	0.31500	-0.34700
-6414.302	46.625	59.888	33.004	-0.0309	0.31100	-0.35000
-6410.291	46.375	59.761	32.930	-0.0313	0.30800	-0.35200
-6406.279	46.375	59.612	32.873	-0.0317	0.30600	-0.35600
-6402.267	46.125	59.451	32.836	-0.0322	0.30300	-0.35700

-6398.256	46.125	59.352	32.807	-0.0326	0.30000	-0.36000
-6394.244	45.875	59.231	32.724	-0.0331	0.29900	-0.36300
-6390.233	45.875	59.107	32.700	-0.0336	0.29800	-0.36200
-6386.221	45.625	58.964	32.670	-0.0341	0.29400	-0.36500
-6382.209	45.625	58.805	32.596	-0.0346	0.28800	-0.36800
-6378.198	45.375	58.685	32.587	-0.0352	0.28600	-0.36900
-6374.186	45.125	58.510	32.625	-0.0358	0.28000	-0.37900
-6370.174	45.125	58.258	32.597	-0.0364	0.27700	-0.38100
-6366.163	44.875	58.049	32.609	-0.0370	0.27300	-0.38100
-6362.151	44.625	57.900	32.636	-0.0376	0.27000	-0.38300
-6358.140	44.625	57.656	32.601	-0.0383	0.26200	-0.38600
-6354.128	44.375	57.425	32.703	-0.0389	0.26000	-0.38600
-6350.116	44.375	57.185	32.804	-0.0396	0.25500	-0.38800
-6346.105	44.125	56.924	32.847	-0.0402	0.24900	-0.39100
-6342.093	43.875	56.614	32.921	-0.0405	0.24300	-0.39200
-6338.081	43.875	56.340	32.985	-0.0407	0.23900	-0.38800
-6334.070	43.625	56.014	33.085	-0.0406	0.23400	-0.38400
-6330.058	43.375	55.725	33.232	-0.0403	0.23000	-0.38200
-6326.047	43.375	55.335	33.333	-0.0398	0.22400	-0.38300
-6322.035	43.125	54.977	33.447	-0.0391	0.22100	-0.37800
-6318.023	43.125	54.593	33.602	-0.0381	0.21600	-0.37500
-6314.012	42.875	54.218	33.755	-0.0369	0.21300	-0.36600
-6310.000	42.625	53.932	33.948	-0.0355	0.21000	-0.35600
-6305.988	42.625	53.610	34.230	-0.0339	0.20800	-0.34400
-6301.977	42.375	53.283	34.429	-0.0320	0.20300	-0.33300
-6297.965	42.375	52.837	34.625	-0.0300	0.19800	-0.31600
-6293.953	42.375	52.454	34.863	-0.0277	0.19200	-0.30400
-6289.942	42.125	51.963	35.104	-0.0252	0.18800	-0.29000
-6285.930	42.125	51.535	35.333	-0.0225	0.18500	-0.27600
-6281.919	42.125	51.070	35.563	-0.0197	0.17800	-0.26500
-6277.907	41.875	50.631	35.749	-0.0171	0.17400	-0.25200
-6273.895	41.875	50.129	35.946	-0.0147	0.16700	-0.24200
-6269.884	41.875	49.686	36.157	-0.0125	0.16200	-0.22700
-6265.872	41.875	49.261	36.355	-0.0104	0.15700	-0.21600
-6261.860	41.875	48.795	36.528	-0.00850	0.14900	-0.20500
-6257.849	41.875	48.390	36.698	-0.00670	0.14200	-0.19800
-6253.837	41.875	48.000	36.860	-0.00520	0.13700	-0.18800
-6249.826	41.625	47.599	36.985	-0.00380	0.13100	-0.17700
-6245.814	41.625	47.278	37.138	-0.00250	0.12600	-0.16600
-6241.802	41.625	46.930	37.276	-0.00150	0.12100	-0.15600
-6237.791	41.625	46.640	37.415	-0.000600	0.11800	-0.14600
-6233.779	41.625	46.418	37.522	1.00e-04	0.11400	-0.13600
-6229.767	41.625	46.226	37.669	0.000700	0.10900	-0.12800
-6225.756	41.625	46.045	37.757	0.00110	0.10700	-0.11900
-6221.744	41.625	45.886	37.883	0.00130	0.10300	-0.11100
-6217.733	41.625	45.696	38.009	0.00140	0.10000	-0.10400
-6213.721	41.625	45.533	38.101	0.00150	0.096000	-0.097000
-6209.709	41.625	45.401	38.201	0.00170	0.093000	-0.089000
-6205.698	41.625	45.291	38.268	0.00180	0.091000	-0.082000
-6201.686	41.625	45.182	38.357	0.00190	0.086000	-0.077000
-6197.674	41.625	45.092	38.442	0.00200	0.083000	-0.072000

-6193.663	41.625	45.025	38.525	0.00210	0.080000	-0.068000
-6189.651	41.625	44.948	38.578	0.00220	0.077000	-0.065000
-6185.640	41.625	44.894	38.636	0.00240	0.074000	-0.061000
-6181.628	41.625	44.852	38.688	0.00250	0.072000	-0.058000
-6177.616	41.625	44.801	38.756	0.00260	0.070000	-0.055000
-6173.605	41.625	44.762	38.822	0.00270	0.068000	-0.053000
-6169.593	41.875	44.710	38.865	0.00280	0.067000	-0.049000
-6165.581	41.875	44.689	38.911	0.00290	0.065000	-0.047000
-6161.570	41.875	44.675	38.967	0.00300	0.064000	-0.045000
-6157.558	41.875	44.650	39.047	0.00310	0.063000	-0.044000
-6153.547	41.875	44.623	39.101	0.00320	0.062000	-0.042000
-6149.535	41.875	44.615	39.156	0.00330	0.061000	-0.040000
-6145.523	41.875	44.625	39.211	0.00340	0.061000	-0.039000
-6141.512	41.875	44.646	39.255	0.00350	0.061000	-0.037000
-6137.500	41.875	44.662	39.306	0.00360	0.060000	-0.036000
-6133.488	41.875	44.687	39.344	0.00370	0.060000	-0.035000
-6129.477	41.875	44.697	39.391	0.00370	0.061000	-0.035000
-6125.465	41.875	44.718	39.436	0.00380	0.061000	-0.034000
-6121.453	41.875	44.746	39.482	0.00390	0.061000	-0.033000
-6117.442	41.875	44.789	39.524	0.00400	0.061000	-0.033000
-6113.430	41.875	44.839	39.567	0.00410	0.062000	-0.032000
-6109.419	41.875	44.896	39.603	0.00420	0.062000	-0.032000
-6105.407	41.875	44.973	39.653	0.00420	0.062000	-0.032000
-6101.395	41.875	45.046	39.687	0.00430	0.062000	-0.032000
-6097.384	41.875	45.114	39.729	0.00440	0.063000	-0.032000
-6093.372	41.875	45.189	39.779	0.00450	0.064000	-0.032000
-6089.360	42.125	45.267	39.818	0.00450	0.065000	-0.032000
-6085.349	42.125	45.372	39.855	0.00460	0.066000	-0.032000
-6081.337	42.125	45.471	39.893	0.00470	0.067000	-0.032000
-6077.326	42.125	45.575	39.928	0.00470	0.068000	-0.033000
-6073.314	42.125	45.706	39.968	0.00480	0.070000	-0.033000
-6069.302	42.125	45.830	40.008	0.00490	0.072000	-0.034000
-6065.291	42.125	45.967	40.056	0.00490	0.073000	-0.035000
-6061.279	42.125	46.070	40.103	0.00500	0.075000	-0.036000
-6057.267	42.125	46.183	40.144	0.00510	0.077000	-0.037000
-6053.256	42.125	46.282	40.191	0.00510	0.079000	-0.038000
-6049.244	42.125	46.440	40.226	0.00520	0.081000	-0.039000
-6045.233	42.125	46.581	40.263	0.00520	0.083000	-0.041000
-6041.221	42.125	46.689	40.296	0.00530	0.085000	-0.043000
-6037.209	42.125	46.811	40.341	0.00530	0.087000	-0.045000
-6033.198	42.375	46.963	40.376	0.00540	0.091000	-0.047000
-6029.186	42.375	47.095	40.410	0.00540	0.094000	-0.050000
-6025.174	42.375	47.231	40.441	0.00550	0.095000	-0.053000
-6021.163	42.375	47.356	40.473	0.00550	0.098000	-0.056000
-6017.151	42.375	47.464	40.500	0.00560	0.099000	-0.061000
-6013.140	42.375	47.553	40.523	0.00560	0.10200	-0.065000
-6009.128	42.375	47.645	40.552	0.00570	0.10400	-0.069000
-6005.116	42.375	47.698	40.573	0.00570	0.10600	-0.074000
-6001.105	42.375	47.767	40.596	0.00570	0.10800	-0.080000
-5997.093	42.375	47.801	40.602	0.00580	0.11200	-0.084000
-5993.081	42.625	47.818	40.600	0.00580	0.11600	-0.088000

-5989.070	42.625	47.853	40.609	0.00580	0.11900	-0.093000
-5985.058	42.625	47.892	40.618	0.00590	0.12400	-0.098000
-5981.047	42.625	47.930	40.627	0.00590	0.12900	-0.103000
-5977.035	42.625	48.004	40.641	0.00590	0.13300	-0.108000
-5973.023	42.625	48.072	40.648	0.00590	0.13900	-0.114000
-5969.012	42.625	48.162	40.635	0.00600	0.14400	-0.120000
-5965.000	42.875	48.260	40.622	0.00600	0.15000	-0.126000
-5960.988	42.875	48.398	40.609	0.00640	0.15700	-0.130000
-5956.977	42.875	48.512	40.593	0.00730	0.16600	-0.133000
-5952.965	42.875	48.659	40.594	0.00880	0.17400	-0.139000
-5948.953	42.875	48.848	40.556	0.0108	0.18400	-0.144000
-5944.942	43.125	49.060	40.530	0.0134	0.19200	-0.152000
-5940.930	43.125	49.308	40.484	0.0166	0.20300	-0.158000
-5936.919	43.125	49.561	40.447	0.0204	0.21400	-0.164000
-5932.907	43.375	49.811	40.420	0.0247	0.22700	-0.171000
-5928.895	43.375	50.111	40.386	0.0297	0.24100	-0.182000
-5924.884	43.375	50.428	40.326	0.0352	0.25500	-0.191000
-5920.872	43.625	50.788	40.241	0.0413	0.26900	-0.200000
-5916.860	43.625	51.175	40.121	0.0479	0.29000	-0.209000
-5912.849	43.875	51.615	39.957	0.0552	0.31300	-0.216000
-5908.837	44.125	52.086	39.800	0.0630	0.33800	-0.229000
-5904.826	44.375	52.638	39.575	0.0714	0.37100	-0.235000
-5900.814	44.625	53.284	39.387	0.0804	0.39700	-0.245000
-5896.802	44.875	54.017	39.179	0.0898	0.42600	-0.254000
-5892.791	45.125	54.838	38.914	0.0991	0.46000	-0.264000
-5888.779	45.625	55.702	38.592	0.108	0.49000	-0.272000
-5884.767	46.125	56.698	38.230	0.115	0.52600	-0.277000
-5880.756	46.625	57.749	37.887	0.122	0.56000	-0.278000
-5876.744	47.125	58.878	37.573	0.128	0.58600	-0.283000
-5872.733	47.625	59.939	37.330	0.133	0.60500	-0.286000
-5868.721	48.125	60.810	37.102	0.137	0.62200	-0.285000
-5864.709	48.625	61.620	36.905	0.140	0.64500	-0.278000
-5860.698	49.375	62.237	36.776	0.142	0.68300	-0.269000
-5856.686	49.875	62.675	36.712	0.144	0.73200	-0.264000
-5852.674	50.375	63.059	36.693	0.144	0.80300	-0.258000
-5848.663	51.125	63.311	36.868	0.144	0.87700	-0.256000
-5844.651	51.625	63.450	37.077	0.143	0.96400	-0.256000
-5840.640	52.375	63.536	37.350	0.140	1.0280	-0.260000
-5836.628	53.125	63.584	37.737	0.137	1.0970	-0.270000
-5832.616	53.625	63.516	38.155	0.133	1.1150	-0.280000
-5828.605	54.375	63.490	38.685	0.126	1.1320	-0.294000
-5824.593	54.875	63.517	39.243	0.113	1.0980	-0.316000
-5820.581	55.125	63.530	39.687	0.0950	1.0250	-0.344000
-5816.570	55.375	63.545	40.134	0.0714	0.95500	-0.380000
-5812.558	55.375	63.483	40.606	0.0424	0.89300	-0.421000
-5808.547	55.375	63.356	41.118	0.00780	0.82800	-0.470000
-5804.535	55.375	63.152	41.667	-0.0322	0.75200	-0.527000
-5800.523	55.125	62.840	42.353	-0.0766	0.68400	-0.602000
-5796.512	54.625	62.445	43.062	-0.119	0.61500	-0.700000
-5792.500	54.125	61.986	43.325	-0.155	0.55800	-0.812000
-5788.488	53.375	61.511	43.476	-0.183	0.49700	-0.886000

-5784.477	52.625	61.057	43.536	-0.202	0.44100	-0.90400
-5780.465	51.875	60.565	43.481	-0.213	0.39500	-0.90500
-5776.453	51.125	60.059	43.354	-0.216	0.35500	-0.89900
-5772.442	50.375	59.467	43.180	-0.210	0.31700	-0.86100
-5768.430	49.625	58.863	42.938	-0.197	0.28400	-0.80500
-5764.419	48.875	58.184	42.674	-0.180	0.25800	-0.75000
-5760.407	48.125	57.415	42.388	-0.164	0.22600	-0.69400
-5756.395	47.375	56.611	42.095	-0.148	0.20900	-0.62800
-5752.384	46.875	55.744	41.887	-0.133	0.18600	-0.57300
-5748.372	46.125	54.894	41.754	-0.119	0.16300	-0.51600
-5744.360	45.875	53.955	41.652	-0.106	0.14600	-0.46700
-5740.349	45.375	53.091	41.501	-0.0939	0.12900	-0.42000
-5736.337	45.125	52.346	41.401	-0.0827	0.11500	-0.37400
-5732.326	44.625	51.688	41.310	-0.0724	0.11300	-0.33600
-5728.314	44.375	51.089	41.202	-0.0630	0.11300	-0.29900
-5724.302	44.375	50.581	41.056	-0.0545	0.11300	-0.26500
-5720.291	44.125	50.129	40.926	-0.0469	0.11200	-0.23700
-5716.279	43.875	49.677	40.854	-0.0403	0.10900	-0.21400
-5712.267	43.875	49.162	40.807	-0.0345	0.10500	-0.19600
-5708.256	43.625	48.646	40.781	-0.0297	0.10300	-0.18300
-5704.244	43.625	48.180	40.715	-0.0257	0.10500	-0.17000
-5700.233	43.375	47.768	40.661	-0.0225	0.10300	-0.16000
-5696.221	43.375	47.414	40.567	-0.0201	0.10200	-0.15400
-5692.209	43.375	47.080	40.453	-0.0183	0.10100	-0.15000
-5688.198	43.125	46.774	40.306	-0.0172	0.10000	-0.14700
-5684.186	43.125	46.547	40.122	-0.0169	0.10000	-0.14500
-5680.174	43.125	46.386	39.888	-0.0172	0.10200	-0.14400
-5676.163	42.875	46.277	39.627	-0.0181	0.10300	-0.14400
-5672.151	42.875	46.264	39.368	-0.0198	0.10500	-0.14700
-5668.140	42.625	46.214	39.084	-0.0222	0.10600	-0.15200
-5664.128	42.625	46.187	38.775	-0.0253	0.10800	-0.16100
-5660.116	42.625	46.119	38.449	-0.0290	0.11000	-0.17200
-5656.105	42.375	46.089	38.093	-0.0334	0.11400	-0.18400
-5652.093	42.375	46.056	37.720	-0.0386	0.11900	-0.19800
-5648.081	42.125	46.032	37.334	-0.0444	0.12500	-0.21800
-5644.070	41.875	46.041	36.924	-0.0509	0.13100	-0.24100
-5640.058	41.875	46.113	36.480	-0.0583	0.14100	-0.27100
-5636.047	41.625	46.213	36.014	-0.0676	0.15900	-0.31100
-5632.035	41.375	46.354	35.480	-0.0798	0.17600	-0.36100
-5628.023	41.125	46.640	34.877	-0.0951	0.19400	-0.41900
-5624.012	40.625	46.988	34.145	-0.113	0.21300	-0.49900
-5620.000	40.125	47.351	33.232	-0.135	0.22900	-0.59800
-5615.988	39.375	47.563	32.069	-0.160	0.24500	-0.72200
-5611.977	38.625	47.697	30.697	-0.187	0.27800	-0.87300
-5607.965	37.625	47.473	29.218	-0.216	0.34300	-1.0520
-5603.953	36.625	46.894	28.176	-0.233	0.46600	-1.2070
-5599.942	35.875	46.267	27.641	-0.227	0.64400	-1.3370
-5595.930	35.125	45.474	27.381	-0.195	0.97800	-1.3450
-5591.919	34.625	45.758	27.070	-0.138	1.4520	-1.2530
-5587.907	34.375	47.391	26.811	-0.0543	1.8440	-1.1790
-5583.895	34.375	48.807	26.800	0.0547	2.2040	-1.0930

-5579.884	34.625	49.845	26.840	0.189	2.4040	-0.99900
-5575.872	35.125	50.553	26.997	0.341	2.5310	-0.88400
-5571.860	36.375	51.164	27.295	0.465	2.5990	-0.78900
-5567.849	38.625	51.505	27.623	0.515	2.5230	-0.68400
-5563.837	41.875	51.701	28.154	0.476	2.4620	-0.61200
-5559.826	43.875	51.753	28.786	0.352	2.2450	-0.55000
-5555.814	44.375	51.721	29.514	0.199	1.9840	-0.49200
-5551.802	44.625	51.567	30.290	0.0771	1.7840	-0.45600
-5547.791	44.875	51.438	31.190	-0.00340	1.5950	-0.43200
-5543.779	44.625	51.267	32.233	-0.0454	1.3410	-0.42800
-5539.767	44.375	50.993	33.560	-0.0657	1.1110	-0.42500
-5535.756	44.125	50.715	36.118	-0.0808	0.88500	-0.42200
-5531.744	43.875	50.445	37.238	-0.0941	0.70600	-0.42100
-5527.733	43.375	50.084	37.327	-0.106	0.53000	-0.41200
-5523.721	42.875	49.543	36.948	-0.115	0.39100	-0.40400
-5519.709	42.375	48.938	36.427	-0.123	0.28900	-0.39400
-5515.698	41.875	48.231	35.886	-0.130	0.18500	-0.38300
-5511.686	41.125	47.554	35.355	-0.134	-0.022000	-0.37200
-5507.674	40.625	46.859	34.831	-0.137	-0.031000	-0.36100
-5503.663	40.125	46.095	34.335	-0.140	-0.031000	-0.34800
-5499.651	39.625	45.354	33.893	-0.141	-0.030000	-0.33500
-5495.640	39.125	44.602	33.504	-0.142	-0.027000	-0.32100
-5491.628	38.625	43.828	33.173	-0.142	-0.025000	-0.30700
-5487.616	37.875	43.083	32.890	-0.142	-0.022000	-0.29600
-5483.605	37.375	42.330	32.653	-0.140	-0.020000	-0.28300
-5479.593	36.875	41.604	32.441	-0.138	-0.018000	-0.27200
-5475.581	36.375	40.902	32.238	-0.135	-0.016000	-0.26000
-5471.570	35.875	40.232	32.034	-0.131	-0.014000	-0.25000
-5467.558	35.375	39.585	31.830	-0.127	-0.012000	-0.24000
-5463.547	34.875	38.975	31.605	-0.122	-0.0100000	-0.23100
-5459.535	34.625	38.389	31.338	-0.116	-0.0070000	-0.22300
-5455.523	34.125	37.834	31.023	-0.109	-0.0050000	-0.21700
-5451.512	33.625	37.301	30.647	-0.101	-0.0010000	-0.21000
-5447.500	33.375	36.796	30.234	-0.0930	0.0060000	-0.20500
-5443.488	32.875	36.301	29.789	-0.0845	0.017000	-0.20100
-5439.477	32.625	35.831	29.414	-0.0761	0.035000	-0.19600
-5435.465	32.375	35.379	29.099	-0.0681	0.044000	-0.19100
-5431.453	32.125	34.959	28.861	-0.0603	0.049000	-0.18500
-5427.442	31.875	34.558	28.694	-0.0527	0.052000	-0.17800
-5423.430	31.625	34.181	28.564	-0.0454	0.055000	-0.17200
-5419.419	31.375	33.838	28.468	-0.0383	0.058000	-0.16400
-5415.407	31.125	33.521	28.400	-0.0315	0.061000	-0.15700
-5411.395	30.875	33.230	28.324	-0.0249	0.064000	-0.15000
-5407.384	30.625	32.989	28.269	-0.0186	0.066000	-0.14300
-5403.372	30.625	32.787	28.225	-0.0126	0.069000	-0.13600
-5399.360	30.625	32.626	28.197	-0.00680	0.072000	-0.12900
-5395.349	30.375	32.509	28.174	-0.00120	0.075000	-0.12200
-5391.337	30.625	32.443	28.167	0.00410	0.079000	-0.11500
-5387.326	30.625	32.432	28.186	0.00910	0.083000	-0.10900
-5383.314	30.625	32.495	28.223	0.0139	0.087000	-0.10200
-5379.302	30.625	32.608	28.251	0.0184	0.092000	-0.096000

-5375.291	30.875	32.764	28.299	0.0227	0.098000	-0.090000
-5371.279	30.875	32.948	28.355	0.0268	0.10400	-0.082000
-5367.267	31.125	33.161	28.427	0.0305	0.11000	-0.073000
-5363.256	31.125	33.398	28.507	0.0341	0.11800	-0.065000
-5359.244	31.375	33.639	28.608	0.0374	0.12500	-0.058000
-5355.233	31.625	33.903	28.722	0.0404	0.13300	-0.052000
-5351.221	31.875	34.193	28.860	0.0432	0.14200	-0.047000
-5347.209	31.875	34.500	29.000	0.0457	0.14700	-0.043000
-5343.198	32.125	34.821	29.158	0.0479	0.15300	-0.039000
-5339.186	32.375	35.171	29.321	0.0500	0.15400	-0.035000
-5335.174	32.625	35.538	29.486	0.0517	0.15400	-0.032000
-5331.163	32.875	35.918	29.657	0.0532	0.15200	-0.030000
-5327.151	33.125	36.298	29.832	0.0545	0.14900	-0.029000
-5323.140	33.375	36.652	30.017	0.0555	0.14700	-0.027000
-5319.128	33.625	36.968	30.195	0.0562	0.14200	-0.026000
-5315.116	33.875	37.253	30.396	0.0568	0.13800	-0.025000
-5311.105	34.125	37.494	30.595	0.0571	0.13300	-0.025000
-5307.093	34.375	37.698	30.805	0.0575	0.12900	-0.026000
-5303.081	34.625	37.885	31.011	0.0578	0.12600	-0.028000
-5299.070	34.875	38.047	31.218	0.0581	0.12300	-0.031000
-5295.058	35.125	38.228	31.436	0.0583	0.12100	-0.036000
-5291.047	35.125	38.411	31.649	0.0586	0.11900	-0.040000
-5287.035	35.375	38.594	31.877	0.0588	0.11700	-0.046000
-5283.023	35.625	38.785	32.089	0.0589	0.11600	-0.052000
-5279.012	35.875	38.977	32.300	0.0591	0.11500	-0.057000
-5275.000	36.125	39.195	32.491	0.0592	0.11400	-0.061000
-5270.988	36.375	39.414	32.693	0.0593	0.11400	-0.065000
-5266.977	36.625	39.636	32.871	0.0594	0.11400	-0.068000
-5262.965	36.875	39.853	33.020	0.0594	0.11500	-0.069000
-5258.953	36.875	40.087	33.171	0.0594	0.11600	-0.072000
-5254.942	37.125	40.338	33.309	0.0594	0.11600	-0.074000
-5250.930	37.375	40.599	33.403	0.0594	0.11800	-0.074000
-5246.919	37.625	40.869	33.468	0.0593	0.11900	-0.075000
-5242.907	37.875	41.143	33.520	0.0593	0.12100	-0.076000
-5238.895	38.125	41.425	33.551	0.0591	0.12300	-0.077000
-5234.884	38.375	41.712	33.583	0.0590	0.12600	-0.076000
-5230.872	38.625	42.011	33.597	0.0588	0.12800	-0.076000
-5226.860	38.875	42.304	33.608	0.0586	0.13200	-0.075000
-5222.849	39.125	42.613	33.601	0.0584	0.13700	-0.076000
-5218.837	39.375	42.937	33.622	0.0582	0.14100	-0.076000
-5214.826	39.375	43.262	33.614	0.0579	0.14600	-0.077000
-5210.814	39.625	43.578	33.634	0.0576	0.15000	-0.079000
-5206.802	39.875	43.906	33.692	0.0573	0.15400	-0.083000
-5202.791	40.125	44.233	33.720	0.0569	0.15800	-0.089000
-5198.779	40.375	44.570	33.739	0.0566	0.16400	-0.093000
-5194.767	40.625	44.893	33.741	0.0562	0.16700	-0.10000
-5190.756	40.875	45.221	33.713	0.0557	0.17100	-0.10900
-5186.744	41.125	45.545	33.728	0.0553	0.17500	-0.11800
-5182.733	41.375	45.851	33.711	0.0548	0.18000	-0.12900
-5178.721	41.625	46.179	33.671	0.0543	0.18400	-0.14100
-5174.709	41.875	46.517	33.598	0.0539	0.18900	-0.15300

-5170.698	42.125	46.849	33.552	0.0534	0.19500	-0.16400
-5166.686	42.125	47.193	33.457	0.0530	0.20200	-0.17700
-5162.674	42.375	47.557	33.373	0.0525	0.20700	-0.18800
-5158.663	42.625	47.920	33.283	0.0521	0.21400	-0.19700
-5154.651	42.875	48.269	33.245	0.0516	0.22100	-0.20700
-5150.640	43.125	48.637	33.213	0.0512	0.22600	-0.21900
-5146.628	43.375	48.981	33.151	0.0507	0.23400	-0.23300
-5142.616	43.625	49.330	33.040	0.0503	0.24300	-0.24600
-5138.605	43.875	49.633	32.993	0.0498	0.25000	-0.26100
-5134.593	43.875	49.936	32.880	0.0494	0.25600	-0.27400
-5130.581	44.125	50.214	32.794	0.0490	0.26100	-0.29500
-5126.570	44.375	50.515	32.601	0.0485	0.26600	-0.31200
-5122.558	44.625	50.759	32.450	0.0481	0.27100	-0.33200
-5118.547	44.875	51.032	32.186	0.0477	0.27500	-0.35000
-5114.535	44.875	51.287	31.944	0.0472	0.27700	-0.37100
-5110.523	45.125	51.574	31.599	0.0468	0.28400	-0.39000
-5106.512	45.375	51.845	31.324	0.0464	0.29100	-0.41400
-5102.500	45.625	52.119	30.946	0.0460	0.29500	-0.44000
-5098.488	45.625	52.409	30.635	0.0456	0.30000	-0.46200
-5094.477	45.875	52.664	30.380	0.0452	0.30300	-0.48900
-5090.465	46.125	52.939	30.148	0.0447	0.30700	-0.51900
-5086.453	46.125	53.226	29.889	0.0443	0.30900	-0.54000
-5082.442	46.375	53.452	29.649	0.0439	0.31600	-0.55100
-5078.430	46.625	53.693	29.394	0.0435	0.31700	-0.57200
-5074.419	46.625	53.935	29.107	0.0431	0.31700	-0.59100
-5070.407	46.875	54.174	28.839	0.0427	0.32100	-0.59900
-5066.395	47.125	54.443	28.665	0.0423	0.32600	-0.60400
-5062.384	47.125	54.712	28.479	0.0419	0.33100	-0.60500
-5058.372	47.375	54.947	28.296	0.0416	0.34000	-0.59800
-5054.360	47.375	55.215	28.107	0.0412	0.35000	-0.59200
-5050.349	47.625	55.504	27.950	0.0408	0.36200	-0.58400
-5046.337	47.875	55.801	27.831	0.0404	0.37200	-0.57100
-5042.326	47.875	56.038	27.729	0.0400	0.38600	-0.56400
-5038.314	48.125	56.310	27.694	0.0396	0.39600	-0.54500
-5034.302	48.375	56.604	27.612	0.0393	0.40800	-0.52900
-5030.291	48.375	56.896	27.620	0.0389	0.42000	-0.50400
-5026.279	48.625	57.239	27.674	0.0385	0.43500	-0.47300
-5022.267	48.875	57.572	27.697	0.0382	0.44900	-0.44800
-5018.256	48.875	57.953	27.773	0.0378	0.46900	-0.42200
-5014.244	49.125	58.292	27.806	0.0374	0.48300	-0.40600
-5010.233	49.125	58.652	27.826	0.0371	0.50400	-0.39600
-5006.221	49.375	59.018	27.784	0.0367	0.51700	-0.38900
-5002.209	49.625	59.363	27.685	0.0364	0.52500	-0.39200
-4998.198	49.625	59.643	27.487	0.0360	0.53700	-0.40100
-4994.186	49.875	59.992	27.321	0.0357	0.54300	-0.41500
-4990.174	49.875	60.276	27.291	0.0353	0.55100	-0.43000
-4986.163	50.125	60.598	27.284	0.0350	0.55700	-0.45100
-4982.151	50.375	60.932	27.291	0.0346	0.56300	-0.47700
-4978.140	50.375	61.203	27.328	0.0343	0.56400	-0.50800
-4974.128	50.625	61.484	27.333	0.0339	0.57000	-0.53600
-4970.116	50.625	61.789	27.385	0.0336	0.57900	-0.57400

-4966.105	50.875	62.112	27.393	0.0333	0.59200	-0.61900
-4962.093	50.875	62.434	27.364	0.0329	0.60900	-0.66500
-4958.081	51.125	62.789	27.335	0.0326	0.62800	-0.72200
-4954.070	51.125	63.199	27.207	0.0323	0.66400	-0.79400
-4950.058	51.375	63.639	27.055	0.0320	0.70900	-0.89000
-4946.047	51.375	64.126	26.793	0.0316	0.77400	-1.0050
-4942.035	51.625	64.685	26.331	0.0313	0.87300	-1.1700
-4938.023	51.625	65.397	25.664	0.0310	1.0480	-1.4390
-4934.012	51.875	66.344	24.641	0.0307	1.3320	-1.9150
-4930.000	52.125	68.101	22.284	0.0304	2.0640	-3.2540

Figure S2a,b

Date	Median (muT)	Cred_Int Upper	Cred_Int Lower	dFdt (muT/yr)	dFdt Upper	dFdt Lower
-6028.000	44.875	68.744	21.855	0.1612	3.3890	-2.7630
-6023.986	45.375	67.350	24.284	0.1493	2.0180	-1.6810
-6019.972	45.625	66.502	25.609	0.1376	1.5360	-1.2590
-6015.957	46.125	65.844	26.653	0.1265	1.2680	-1.0300
-6011.943	46.625	65.289	27.515	0.1159	1.0930	-0.87300
-6007.929	46.875	64.836	28.313	0.1059	0.97100	-0.76400
-6003.915	47.375	64.416	29.013	0.09650	0.87900	-0.68100
-5999.900	47.875	63.983	29.689	0.08770	0.82400	-0.62200
-5995.886	48.125	63.622	30.375	0.07940	0.76900	-0.58000
-5991.872	48.625	63.244	31.155	0.07170	0.72800	-0.55600
-5987.858	48.875	62.950	31.950	0.06460	0.69800	-0.53600
-5983.843	49.125	62.677	32.705	0.05800	0.66800	-0.52900
-5979.829	49.375	62.395	33.420	0.05200	0.64400	-0.53000
-5975.815	49.375	62.211	34.162	0.04650	0.62400	-0.52700
-5971.801	49.625	62.032	34.924	0.04170	0.60200	-0.52800
-5967.786	49.625	61.881	35.604	0.03740	0.58600	-0.53300
-5963.772	49.875	61.784	36.177	0.03360	0.57000	-0.54000
-5959.758	50.125	61.704	36.566	0.03050	0.55500	-0.54600
-5955.744	50.125	61.674	36.743	0.02790	0.54700	-0.55000
-5951.730	50.375	61.581	36.758	0.02580	0.53200	-0.56500
-5947.715	50.375	61.515	36.617	0.02440	0.52600	-0.57400
-5943.701	50.625	61.459	36.309	0.02350	0.52000	-0.58000
-5939.687	50.625	61.487	35.947	0.02310	0.51100	-0.58400
-5935.673	50.875	61.477	35.516	0.02340	0.50300	-0.59800
-5931.658	50.875	61.531	34.985	0.02420	0.49500	-0.60700
-5927.644	51.125	61.607	34.411	0.02560	0.48700	-0.61900
-5923.630	51.375	61.759	33.855	0.02750	0.48500	-0.62800
-5919.616	51.375	61.937	33.285	0.03000	0.48400	-0.64300
-5915.601	51.625	62.163	32.706	0.03310	0.48400	-0.65600
-5911.587	51.625	62.460	32.226	0.03670	0.48900	-0.67100
-5907.573	51.875	62.774	31.797	0.04090	0.49700	-0.68400
-5903.559	51.875	63.188	31.452	0.04570	0.50900	-0.69100
-5899.544	52.125	63.618	31.150	0.05110	0.52500	-0.70500
-5895.530	52.125	64.119	30.851	0.05700	0.54300	-0.69800
-5891.516	52.375	64.644	30.605	0.06350	0.57400	-0.69400
-5887.502	52.375	65.168	30.493	0.07050	0.60300	-0.68800
-5883.488	52.625	65.673	30.445	0.07820	0.64100	-0.68100
-5879.473	52.625	66.204	30.447	0.08660	0.68200	-0.66100
-5875.459	53.125	66.710	30.394	0.09600	0.72600	-0.64800
-5871.445	53.625	67.158	30.442	0.1064	0.77500	-0.63300
-5867.431	54.125	67.442	30.540	0.1178	0.83700	-0.61000
-5863.416	54.625	67.634	30.594	0.1303	0.88700	-0.59200
-5859.402	55.375	67.741	30.621	0.1437	0.94200	-0.56700
-5855.388	56.125	67.807	30.825	0.1581	1.0040	-0.53900
-5851.374	56.875	67.827	31.045	0.1735	1.0740	-0.50700
-5847.359	57.625	67.833	31.343	0.1889	1.1320	-0.47000
-5843.345	58.625	67.829	31.762	0.1993	1.1820	-0.44200
-5839.331	59.375	67.830	32.230	0.1994	1.2330	-0.41000
-5835.317	60.125	67.778	32.853	0.1883	1.2810	-0.37000
-5831.302	60.875	67.716	33.560	0.1661	1.3080	-0.34400
-5827.288	61.625	67.648	34.392	0.1339	1.3200	-0.31700

-5823.274	62.125	67.565	35.371	0.09790	1.3260	-0.29400
-5819.260	62.375	67.484	36.505	0.06430	1.3080	-0.27300
-5815.246	62.375	67.410	37.864	0.03430	1.2660	-0.26700
-5811.231	62.375	67.306	39.163	0.007700	1.2020	-0.26800
-5807.217	62.125	67.184	40.487	-0.01620	1.1260	-0.27300
-5803.203	62.125	67.077	41.905	-0.03850	1.0390	-0.28000
-5799.189	61.875	66.936	43.597	-0.05920	0.95300	-0.28800
-5795.174	61.625	66.814	45.116	-0.07830	0.83600	-0.30200
-5791.160	61.375	66.635	46.905	-0.09590	0.74600	-0.31700
-5787.146	60.875	66.399	49.007	-0.1119	0.67100	-0.33300
-5783.132	60.375	66.116	50.621	-0.1264	0.59600	-0.34900
-5779.117	59.875	65.814	52.410	-0.1394	0.52500	-0.36300
-5775.103	59.125	65.542	53.226	-0.1507	0.46100	-0.37700
-5771.089	58.625	65.195	53.438	-0.1606	0.39100	-0.38900
-5767.075	57.875	64.848	53.119	-0.1689	0.32800	-0.40300
-5763.060	57.125	64.442	52.599	-0.1756	0.26500	-0.41500
-5759.046	56.375	64.028	51.979	-0.1808	0.21000	-0.42300
-5755.032	55.875	63.519	51.307	-0.1844	0.15300	-0.42900
-5751.018	55.125	62.910	50.550	-0.1865	0.088000	-0.43500
-5747.004	54.375	62.149	49.733	-0.1871	0.035000	-0.44000
-5742.989	53.625	61.237	48.830	-0.1862	-0.043000	-0.44800
-5738.975	52.875	60.188	47.918	-0.1844	-0.059000	-0.44700
-5734.961	52.375	59.053	46.970	-0.1822	-0.062000	-0.44700
-5730.947	51.625	57.940	46.014	-0.1798	-0.053000	-0.44300
-5726.932	50.875	56.822	45.110	-0.1772	-0.030000	-0.43600
-5722.918	50.125	55.774	44.281	-0.1743	0.014000	-0.42700
-5718.904	49.625	54.708	43.510	-0.1712	0.041000	-0.41800
-5714.890	48.875	53.673	42.786	-0.1678	0.059000	-0.40800
-5710.875	48.125	52.727	42.056	-0.1642	0.074000	-0.40000
-5706.861	47.375	51.880	41.310	-0.1603	0.088000	-0.39000
-5702.847	46.875	51.122	40.523	-0.1562	0.10100	-0.38000
-5698.833	46.125	50.445	39.765	-0.1518	0.11600	-0.37400
-5694.819	45.625	49.841	39.028	-0.1472	0.13200	-0.36900
-5690.804	44.875	49.352	38.299	-0.1424	0.14800	-0.36500
-5686.790	44.375	48.996	37.622	-0.1373	0.16900	-0.36000
-5682.776	43.625	48.797	36.928	-0.1320	0.19000	-0.35500
-5678.762	43.125	48.761	36.300	-0.1264	0.21300	-0.34900
-5674.747	42.625	48.816	35.637	-0.1206	0.23600	-0.34600
-5670.733	42.125	48.903	35.072	-0.1142	0.26600	-0.34400
-5666.719	41.875	49.053	34.570	-0.1056	0.30300	-0.34300
-5662.705	41.375	49.239	34.015	-0.09310	0.34200	-0.34000
-5658.690	41.125	49.482	33.515	-0.07650	0.38600	-0.33800
-5654.676	40.875	49.769	33.059	-0.05560	0.43400	-0.33700
-5650.662	40.625	50.206	32.625	-0.03060	0.48600	-0.33400
-5646.648	40.625	50.674	32.244	-0.001400	0.53700	-0.33300
-5642.633	40.625	51.137	31.930	0.03200	0.59600	-0.33200
-5638.619	40.875	51.702	31.624	0.06960	0.65600	-0.32700
-5634.605	41.125	52.405	31.402	0.1104	0.71000	-0.32100
-5630.591	41.875	53.299	31.256	0.1498	0.76300	-0.31700
-5626.577	42.375	54.262	31.217	0.1830	0.82100	-0.30900
-5622.562	43.125	55.294	31.184	0.2093	0.86800	-0.30100
-5618.548	44.125	56.343	31.243	0.2284	0.92000	-0.29100
-5614.534	45.125	57.216	31.369	0.2405	0.97600	-0.27300
-5610.520	46.125	57.884	31.655	0.2456	1.0170	-0.25800

-5606.505	47.125	58.361	31.982	0.2435	1.0640	-0.24700
-5602.491	48.125	58.786	32.411	0.2348	1.0690	-0.24500
-5598.477	48.875	59.028	33.079	0.2207	1.0720	-0.24700
-5594.463	49.875	59.244	33.902	0.2027	1.0480	-0.25800
-5590.448	50.625	59.471	35.087	0.1812	1.0120	-0.27700
-5586.434	51.375	59.681	36.515	0.1562	0.96400	-0.29800
-5582.420	51.625	59.894	38.331	0.1275	0.92100	-0.32000
-5578.406	52.125	60.153	40.317	0.09530	0.87300	-0.34800
-5574.391	52.375	60.365	42.262	0.05950	0.81300	-0.38000
-5570.377	52.375	60.529	43.905	0.02020	0.75700	-0.41200
-5566.363	52.375	60.637	45.071	-0.02200	0.69600	-0.44900
-5562.349	52.375	60.669	45.469	-0.06330	0.63500	-0.48400
-5558.335	52.375	60.609	45.095	-0.1002	0.56400	-0.52200
-5554.320	52.125	60.494	44.399	-0.1318	0.49100	-0.56900
-5550.306	51.625	60.328	43.587	-0.1582	0.43000	-0.60500
-5546.292	50.875	59.977	42.788	-0.1793	0.36800	-0.65100
-5542.278	49.875	59.550	42.030	-0.1953	0.30900	-0.68100
-5538.263	49.125	58.954	41.358	-0.2060	0.26200	-0.70200
-5534.249	48.125	58.228	40.723	-0.2115	0.21900	-0.70300
-5530.235	47.125	57.458	40.072	-0.2122	0.17800	-0.69200
-5526.221	46.125	56.572	39.383	-0.2107	0.13700	-0.67000
-5522.206	45.375	55.533	38.732	-0.2095	0.10100	-0.64200
-5518.192	44.375	54.341	38.064	-0.2091	0.055000	-0.61600
-5514.178	43.625	53.014	37.350	-0.2094	-0.022000	-0.59300
-5510.164	42.625	51.498	36.518	-0.2105	-0.059000	-0.56800
-5506.149	41.875	50.018	35.678	-0.2123	-0.064000	-0.54500
-5502.135	41.125	48.628	34.872	-0.2149	-0.065000	-0.52300
-5498.121	40.125	47.260	34.030	-0.2182	-0.062000	-0.50400
-5494.107	39.375	45.981	33.085	-0.2220	-0.057000	-0.48700
-5490.093	38.625	44.747	31.990	-0.2245	-0.049000	-0.47200
-5486.078	37.875	43.583	30.843	-0.2240	-0.015000	-0.45900
-5482.064	37.125	42.476	29.931	-0.2201	0.049000	-0.44600
-5478.050	36.375	41.411	29.455	-0.2129	0.053000	-0.43300
-5474.036	35.625	40.368	29.036	-0.2024	0.057000	-0.42100
-5470.021	34.875	39.385	28.667	-0.1885	0.060000	-0.40700
-5466.007	34.125	38.446	28.344	-0.1713	0.063000	-0.39500
-5461.993	33.375	37.558	28.069	-0.1511	0.066000	-0.38000
-5457.979	32.625	36.740	27.834	-0.1298	0.070000	-0.36400
-5453.964	31.875	35.965	27.663	-0.1092	0.075000	-0.34700
-5449.950	31.375	35.276	27.537	-0.08990	0.082000	-0.33100
-5445.936	30.875	34.654	27.440	-0.07160	0.090000	-0.31300
-5441.922	30.625	34.081	27.364	-0.05460	0.099000	-0.28900
-5437.907	30.375	33.561	27.295	-0.03860	0.10900	-0.26700
-5433.893	30.375	33.106	27.251	-0.02380	0.11900	-0.24500
-5429.879	30.375	32.828	27.221	-0.01020	0.12900	-0.22500
-5425.865	30.375	32.775	27.202	0.002300	0.13800	-0.20600
-5421.851	30.375	32.881	27.220	0.01360	0.15000	-0.18800
-5417.836	30.375	33.085	27.246	0.02380	0.16200	-0.17200
-5413.822	30.625	33.351	27.295	0.03280	0.17300	-0.15600
-5409.808	30.875	33.638	27.348	0.04070	0.18400	-0.14200
-5405.794	31.125	33.950	27.423	0.04750	0.19400	-0.12900
-5401.779	31.375	34.324	27.509	0.05300	0.20400	-0.11500
-5397.765	31.625	34.724	27.645	0.05750	0.21400	-0.10200
-5393.751	31.875	35.151	27.791	0.06080	0.22400	-0.091000

-5389.737	32.125	35.609	27.983	0.06300	0.23300	-0.082000
-5385.722	32.375	36.101	28.184	0.06460	0.24100	-0.073000
-5381.708	32.625	36.554	28.378	0.06590	0.24300	-0.066000
-5377.694	32.875	37.024	28.592	0.06710	0.24600	-0.056000
-5373.680	33.125	37.486	28.885	0.06810	0.24700	-0.047000
-5369.665	33.625	37.901	29.210	0.06900	0.24300	-0.035000
-5365.651	33.875	38.302	29.628	0.06970	0.23800	-0.025000
-5361.637	34.125	38.661	30.142	0.07030	0.23400	-0.016000
-5357.623	34.375	39.016	30.750	0.07070	0.22200	-0.012000
-5353.609	34.625	39.315	31.332	0.07090	0.21200	-0.010000
-5349.594	34.875	39.544	31.885	0.07100	0.19900	-0.009000
-5345.580	35.125	39.771	32.383	0.07090	0.18700	-0.009000
-5341.566	35.375	39.917	32.840	0.07070	0.17300	-0.011000
-5337.552	35.625	40.018	33.238	0.07030	0.16200	-0.011000
-5333.537	35.875	40.076	33.612	0.06980	0.15000	-0.013000
-5329.523	36.125	40.103	33.965	0.06910	0.13900	-0.014000
-5325.509	36.375	40.124	34.296	0.06820	0.13000	-0.015000
-5321.495	36.625	40.162	34.617	0.06720	0.12300	-0.016000
-5317.480	36.875	40.216	34.919	0.06610	0.11600	-0.016000
-5313.466	37.125	40.289	35.208	0.06510	0.11100	-0.015000
-5309.452	37.375	40.382	35.490	0.06420	0.10700	-0.014000
-5305.438	37.625	40.486	35.761	0.06320	0.10400	-0.013000
-5301.423	37.875	40.601	36.029	0.06230	0.10100	-0.011000
-5297.409	38.125	40.748	36.288	0.06150	0.09900	-0.010000
-5293.395	38.375	40.902	36.540	0.06070	0.09700	-0.009000
-5289.381	38.625	41.075	36.786	0.06000	0.09600	-0.007000
-5285.367	38.875	41.245	37.028	0.05930	0.09500	-0.006000
-5281.352	39.125	41.432	37.263	0.05860	0.09400	-0.004000
-5277.338	39.375	41.630	37.489	0.05800	0.09300	-0.002000
-5273.324	39.625	41.836	37.708	0.05750	0.09200	-0.001000
-5269.310	39.875	42.057	37.919	0.05690	0.09100	0.002000
-5265.295	40.125	42.277	38.120	0.05650	0.09100	0.004000
-5261.281	40.375	42.506	38.308	0.05610	0.09100	0.005000
-5257.267	40.625	42.741	38.490	0.05570	0.09000	0.007000
-5253.253	40.875	42.985	38.667	0.05540	0.09000	0.010000
-5249.238	41.125	43.222	38.847	0.05510	0.09100	0.012000
-5245.224	41.375	43.468	39.022	0.05480	0.09100	0.013000
-5241.210	41.625	43.716	39.193	0.05460	0.09100	0.015000
-5237.196	41.625	43.958	39.383	0.05450	0.09100	0.015000
-5233.181	41.875	44.199	39.574	0.05440	0.09200	0.016000
-5229.167	42.125	44.447	39.770	0.05440	0.09200	0.016000
-5225.153	42.375	44.678	39.983	0.05440	0.09200	0.016000
-5221.139	42.625	44.913	40.197	0.05440	0.09300	0.015000
-5217.125	42.875	45.145	40.423	0.05450	0.09400	0.015000
-5213.110	43.125	45.379	40.644	0.05460	0.09400	0.014000
-5209.096	43.375	45.609	40.877	0.05480	0.09500	0.013000
-5205.082	43.625	45.819	41.110	0.05500	0.09500	0.012000
-5201.068	43.875	46.039	41.342	0.05530	0.09600	0.010000
-5197.053	44.125	46.263	41.564	0.05560	0.09600	0.008000
-5193.039	44.375	46.495	41.784	0.05600	0.09700	0.006000
-5189.025	44.625	46.747	41.999	0.05640	0.09700	0.004000
-5185.011	44.875	47.004	42.207	0.05690	0.09800	0.002000
-5180.996	45.125	47.270	42.423	0.05740	0.10000	-0.001000
-5176.982	45.125	47.547	42.635	0.05790	0.10100	-0.003000

-5172.968	45.375	47.834	42.841	0.05830	0.10300	-0.0060000
-5168.954	45.625	48.128	43.035	0.05870	0.10400	-0.0100000
-5164.940	45.875	48.420	43.219	0.05910	0.10600	-0.0130000
-5160.925	46.125	48.722	43.397	0.05930	0.10900	-0.0160000
-5156.911	46.375	49.032	43.567	0.05960	0.11200	-0.0190000
-5152.897	46.625	49.342	43.725	0.05980	0.11500	-0.0220000
-5148.883	46.625	49.665	43.890	0.05990	0.11800	-0.0250000
-5144.868	46.875	50.011	44.037	0.05990	0.12200	-0.0280000
-5140.854	47.125	50.354	44.181	0.06000	0.12700	-0.0310000
-5136.840	47.375	50.707	44.313	0.05990	0.13300	-0.0340000
-5132.826	47.625	51.071	44.436	0.05980	0.13900	-0.0380000
-5128.811	47.875	51.434	44.547	0.05970	0.14300	-0.0440000
-5124.797	48.125	51.827	44.632	0.05950	0.15000	-0.0490000
-5120.783	48.375	52.227	44.727	0.05920	0.15700	-0.0530000
-5116.769	48.625	52.646	44.783	0.05890	0.16400	-0.0600000
-5112.754	48.625	53.062	44.837	0.05860	0.17200	-0.0660000
-5108.740	48.875	53.504	44.847	0.05810	0.17900	-0.0730000
-5104.726	49.125	53.963	44.868	0.05770	0.18700	-0.0800000
-5100.712	49.375	54.402	44.807	0.05720	0.19200	-0.0910000
-5096.698	49.625	54.836	44.752	0.05660	0.19900	-0.1000000
-5092.683	49.875	55.225	44.701	0.05590	0.20500	-0.1110000
-5088.669	50.125	55.649	44.655	0.05530	0.20800	-0.1250000
-5084.655	50.375	56.012	44.567	0.05450	0.21200	-0.1380000
-5080.641	50.625	56.397	44.513	0.05370	0.21400	-0.1510000
-5076.626	50.875	56.702	44.438	0.05290	0.21800	-0.1630000
-5072.612	50.875	57.036	44.372	0.05200	0.22200	-0.1760000
-5068.598	51.125	57.348	44.258	0.05100	0.22400	-0.1920000
-5064.584	51.375	57.654	44.097	0.05000	0.22600	-0.2080000
-5060.569	51.625	57.961	43.949	0.04890	0.22900	-0.2250000
-5056.555	51.875	58.240	43.771	0.04780	0.23200	-0.2410000
-5052.541	51.875	58.526	43.511	0.04660	0.23600	-0.2580000
-5048.527	52.125	58.769	43.244	0.04540	0.24100	-0.2750000
-5044.512	52.375	59.073	42.894	0.04410	0.24600	-0.2890000
-5040.498	52.625	59.329	42.530	0.04280	0.25100	-0.3070000
-5036.484	52.625	59.577	42.060	0.04140	0.25600	-0.3210000
-5032.470	52.875	59.836	41.631	0.04000	0.25900	-0.3370000
-5028.456	53.125	60.093	41.171	0.03850	0.26500	-0.3490000
-5024.441	53.125	60.320	40.629	0.03690	0.27100	-0.3670000
-5020.427	53.375	60.563	40.069	0.03530	0.27700	-0.3850000
-5016.413	53.625	60.793	39.464	0.03370	0.28300	-0.4010000
-5012.399	53.625	61.010	38.805	0.03190	0.28700	-0.4210000
-5008.384	53.875	61.253	38.140	0.03020	0.29200	-0.4350000
-5004.370	53.875	61.457	37.489	0.02840	0.30100	-0.4530000
-5000.356	54.125	61.661	36.892	0.02650	0.30600	-0.4680000
-4996.342	54.125	61.837	36.278	0.02460	0.31200	-0.4840000
-4992.327	54.375	62.056	35.690	0.02260	0.32200	-0.4960000
-4988.313	54.375	62.269	35.118	0.02050	0.33300	-0.5120000
-4984.299	54.625	62.437	34.527	0.01840	0.34200	-0.5220000
-4980.285	54.625	62.616	34.076	0.01630	0.35100	-0.5310000
-4976.270	54.625	62.789	33.513	0.01410	0.35800	-0.5470000
-4972.256	54.875	62.985	33.083	0.01180	0.36600	-0.5620000
-4968.242	54.875	63.183	32.561	0.009500	0.37800	-0.5710000
-4964.228	54.875	63.374	32.113	0.007200	0.38900	-0.5910000
-4960.214	54.875	63.582	31.704	0.004800	0.40100	-0.6130000

-4956.199	54.875	63.802	31.241	0.002300	0.41400	-0.62800
-4952.185	54.875	64.020	30.843	-0.0002000	0.43000	-0.64800
-4948.171	54.875	64.233	30.491	-0.002800	0.44700	-0.67100
-4944.157	54.875	64.443	30.142	-0.005500	0.46700	-0.69500
-4940.142	54.875	64.657	29.776	-0.008100	0.49700	-0.72400
-4936.128	54.625	64.894	29.488	-0.01090	0.53100	-0.76000
-4932.114	54.625	65.128	29.116	-0.01370	0.56300	-0.80700
-4928.100	54.625	65.375	28.719	-0.01650	0.60500	-0.86600
-4924.085	54.375	65.615	28.295	-0.01940	0.66300	-0.93300
-4920.071	54.375	65.854	27.894	-0.02240	0.73600	-1.0290
-4916.057	54.125	66.139	27.339	-0.02540	0.83500	-1.1620
-4912.043	53.875	66.471	26.674	-0.02850	0.96200	-1.3440
-4908.028	53.625	66.850	25.767	-0.03160	1.1500	-1.6510
-4904.014	53.625	67.364	24.489	-0.03470	1.5270	-2.2240
-4900.000	53.625	68.491	21.969	-0.03790	2.4580	-3.9120

Figure S2c,d

Date	Median (muT)	Cred_Int Upper	Cred_Int Lower	dFdt (muT/yr)	dFdt Upper	dFdt Lower
-6028.000	44.875	68.540	21.791	0.1048	3.4980	-2.8920
-6023.986	45.375	66.878	23.932	0.09610	2.0660	-1.7530
-6019.972	45.875	65.958	25.057	0.08770	1.5160	-1.3300
-6015.957	46.125	65.240	25.956	0.07970	1.2360	-1.0950
-6011.943	46.375	64.661	26.689	0.07240	1.0620	-0.95700
-6007.929	46.625	64.230	27.309	0.06560	0.94500	-0.85100
-6003.915	46.875	63.821	27.895	0.05930	0.85200	-0.78100
-5999.900	47.125	63.471	28.469	0.05360	0.78300	-0.73100
-5995.886	47.375	63.189	29.026	0.04840	0.73400	-0.68500
-5991.872	47.375	62.933	29.607	0.04380	0.68600	-0.65800
-5987.858	47.625	62.678	30.141	0.03970	0.65300	-0.63600
-5983.843	47.625	62.398	30.626	0.03620	0.63200	-0.61400
-5979.829	47.875	62.225	31.051	0.03320	0.61100	-0.60000
-5975.815	47.875	62.013	31.442	0.03080	0.59000	-0.59400
-5971.801	48.125	61.858	31.789	0.02890	0.57500	-0.58300
-5967.786	48.125	61.685	32.025	0.02760	0.55800	-0.58000
-5963.772	48.375	61.515	32.268	0.02680	0.54600	-0.57800
-5959.758	48.375	61.328	32.355	0.02660	0.54000	-0.57700
-5955.744	48.625	61.217	32.488	0.02690	0.53400	-0.58000
-5951.730	48.625	61.130	32.569	0.02770	0.52900	-0.57500
-5947.715	48.875	61.115	32.608	0.02910	0.52400	-0.57600
-5943.701	49.125	61.043	32.581	0.03110	0.52200	-0.57700
-5939.687	49.125	61.029	32.501	0.03360	0.52500	-0.58100
-5935.673	49.375	61.020	32.453	0.03660	0.52500	-0.58600
-5931.658	49.625	61.086	32.312	0.04020	0.52000	-0.59700
-5927.644	49.875	61.134	32.199	0.04430	0.52300	-0.59700
-5923.630	49.875	61.248	32.123	0.04900	0.53100	-0.60700
-5919.616	50.125	61.407	31.911	0.05430	0.53600	-0.61000
-5915.601	50.375	61.664	31.768	0.06000	0.54600	-0.61700
-5911.587	50.625	61.904	31.617	0.06640	0.55700	-0.62000
-5907.573	50.875	62.225	31.453	0.07320	0.56400	-0.63100
-5903.559	51.125	62.614	31.264	0.08070	0.57900	-0.63200
-5899.544	51.375	63.048	31.189	0.08860	0.59400	-0.63700
-5895.530	51.875	63.583	31.076	0.09720	0.61700	-0.63600
-5891.516	52.125	64.133	30.994	0.1062	0.64100	-0.63200
-5887.502	52.625	64.745	30.833	0.1158	0.67200	-0.63200
-5883.488	52.875	65.401	30.855	0.1258	0.70200	-0.63000
-5879.473	53.375	66.012	30.891	0.1354	0.73600	-0.62000
-5875.459	53.875	66.602	31.071	0.1438	0.77900	-0.61300
-5871.445	54.625	67.104	31.226	0.1508	0.82200	-0.59800
-5867.431	55.125	67.447	31.432	0.1564	0.88000	-0.57400
-5863.416	55.625	67.621	31.661	0.1607	0.94200	-0.55300
-5859.402	56.375	67.715	31.915	0.1636	0.99100	-0.53100
-5855.388	57.125	67.734	32.251	0.1651	1.0530	-0.49600
-5851.374	57.625	67.712	32.644	0.1652	1.1170	-0.45900
-5847.359	58.375	67.661	33.092	0.1637	1.1740	-0.42600
-5843.345	59.125	67.616	33.716	0.1592	1.2090	-0.39000
-5839.331	59.875	67.571	34.365	0.1505	1.2270	-0.35500
-5835.317	60.875	67.505	34.982	0.1371	1.2380	-0.32300
-5831.302	61.625	67.414	35.896	0.1192	1.2220	-0.30200
-5827.288	62.125	67.339	36.950	0.09700	1.1620	-0.28400

-5823.274	62.375	67.221	37.985	0.07210	1.1100	-0.28500
-5819.260	62.375	67.114	39.103	0.04590	1.0500	-0.29200
-5815.246	62.375	67.006	40.286	0.01880	0.98100	-0.30200
-5811.231	62.125	66.927	41.491	-0.008900	0.90800	-0.31400
-5807.217	62.125	66.833	42.761	-0.03560	0.83800	-0.32900
-5803.203	61.875	66.721	43.768	-0.05980	0.78300	-0.34300
-5799.189	61.625	66.623	44.780	-0.08100	0.72800	-0.36500
-5795.174	61.125	66.470	45.687	-0.09930	0.67900	-0.37900
-5791.160	60.625	66.297	46.564	-0.1147	0.62200	-0.39200
-5787.146	60.125	66.121	47.517	-0.1271	0.58100	-0.40000
-5783.132	59.625	65.931	48.337	-0.1367	0.54000	-0.40700
-5779.117	59.125	65.712	48.997	-0.1433	0.49200	-0.41600
-5775.103	58.625	65.482	49.487	-0.1473	0.44700	-0.42700
-5771.089	58.125	65.198	49.475	-0.1497	0.40500	-0.43200
-5767.075	57.375	64.927	49.323	-0.1517	0.36500	-0.44100
-5763.060	56.875	64.612	48.997	-0.1536	0.32800	-0.44700
-5759.046	56.125	64.335	48.574	-0.1553	0.28500	-0.45600
-5755.032	55.625	63.941	48.021	-0.1569	0.24100	-0.46300
-5751.018	54.875	63.459	47.490	-0.1583	0.20600	-0.46800
-5747.004	54.375	62.918	47.053	-0.1596	0.17800	-0.46900
-5742.989	53.625	62.262	46.488	-0.1606	0.15600	-0.46800
-5738.975	52.875	61.511	45.778	-0.1613	0.13800	-0.46300
-5734.961	52.375	60.727	45.111	-0.1616	0.12300	-0.45800
-5730.947	51.625	59.908	44.444	-0.1613	0.11600	-0.45100
-5726.932	51.125	58.986	43.755	-0.1606	0.11100	-0.44500
-5722.918	50.375	58.065	43.157	-0.1593	0.11300	-0.43500
-5718.904	49.875	57.176	42.589	-0.1575	0.12000	-0.42600
-5714.890	49.125	56.361	42.007	-0.1553	0.12700	-0.41600
-5710.875	48.625	55.544	41.386	-0.1525	0.13400	-0.40700
-5706.861	48.125	54.740	40.821	-0.1492	0.14300	-0.39700
-5702.847	47.375	53.901	40.258	-0.1454	0.15200	-0.38900
-5698.833	46.875	53.085	39.720	-0.1411	0.16400	-0.38100
-5694.819	46.375	52.333	39.163	-0.1363	0.17600	-0.37500
-5690.804	45.875	51.648	38.625	-0.1310	0.18900	-0.37100
-5686.790	45.375	51.024	38.082	-0.1252	0.20200	-0.36600
-5682.776	44.875	50.511	37.537	-0.1189	0.21700	-0.36400
-5678.762	44.375	50.068	37.019	-0.1121	0.23300	-0.36300
-5674.747	43.875	49.828	36.521	-0.1047	0.25400	-0.36400
-5670.733	43.625	49.730	36.051	-0.09670	0.27800	-0.36800
-5666.719	43.125	49.801	35.559	-0.08670	0.30700	-0.36800
-5662.705	42.875	49.995	35.094	-0.07370	0.34000	-0.36900
-5658.690	42.625	50.274	34.645	-0.05750	0.38200	-0.36500
-5654.676	42.125	50.638	34.220	-0.03800	0.42200	-0.36000
-5650.662	42.125	51.079	33.799	-0.01530	0.46600	-0.35700
-5646.648	41.875	51.558	33.449	0.01080	0.52000	-0.35600
-5642.633	41.875	52.042	33.159	0.04000	0.57400	-0.35600
-5638.619	42.125	52.651	32.913	0.07260	0.63400	-0.35100
-5634.605	42.375	53.292	32.733	0.1075	0.71000	-0.33400
-5630.591	42.625	54.125	32.623	0.1408	0.78100	-0.32100
-5626.577	43.375	55.016	32.641	0.1681	0.85100	-0.31700
-5622.562	44.375	55.744	32.695	0.1886	0.92200	-0.31000
-5618.548	45.125	56.463	32.778	0.2024	0.98900	-0.30400
-5614.534	46.125	57.158	32.945	0.2094	1.0270	-0.29900
-5610.520	47.125	57.743	33.207	0.2097	1.0600	-0.29600

-5606.505	48.125	58.274	33.459	0.2032	1.0830	-0.30000
-5602.491	49.125	58.635	33.776	0.1904	1.0910	-0.30500
-5598.477	50.125	58.955	34.182	0.1731	1.0710	-0.31800
-5594.463	50.625	59.233	34.714	0.1531	1.0360	-0.35100
-5590.448	51.125	59.487	35.340	0.1310	0.99000	-0.38700
-5586.434	51.625	59.726	36.243	0.1066	0.95100	-0.42600
-5582.420	51.875	59.902	37.280	0.08000	0.90400	-0.47500
-5578.406	51.875	59.998	38.555	0.05120	0.85400	-0.51800
-5574.391	51.875	60.076	39.789	0.02020	0.80400	-0.57000
-5570.377	51.875	60.064	40.844	-0.01310	0.75200	-0.61800
-5566.363	51.875	59.997	41.418	-0.04800	0.69600	-0.65500
-5562.349	51.625	59.838	41.450	-0.08190	0.63700	-0.68700
-5558.335	51.375	59.642	41.117	-0.1121	0.57800	-0.71600
-5554.320	50.875	59.395	40.479	-0.1380	0.51800	-0.73200
-5550.306	50.125	59.132	39.854	-0.1597	0.46300	-0.74500
-5546.292	49.375	58.818	39.310	-0.1771	0.41300	-0.74300
-5542.278	48.375	58.513	38.767	-0.1902	0.36800	-0.73100
-5538.263	47.625	58.160	38.191	-0.1991	0.33500	-0.71100
-5534.249	46.875	57.727	37.594	-0.2037	0.30700	-0.69200
-5530.235	45.875	57.245	36.989	-0.2045	0.29200	-0.66000
-5526.221	45.125	56.689	36.477	-0.2032	0.27300	-0.63100
-5522.206	44.375	56.009	35.895	-0.2020	0.25600	-0.60500
-5518.192	43.625	55.284	35.344	-0.2011	0.24100	-0.58000
-5514.178	42.875	54.450	34.753	-0.2005	0.21100	-0.56600
-5510.164	42.125	53.438	34.068	-0.2003	0.17800	-0.55500
-5506.149	41.375	52.338	33.257	-0.2004	0.14900	-0.54500
-5502.135	40.625	51.096	32.307	-0.2008	0.12000	-0.53300
-5498.121	39.875	49.820	31.290	-0.2016	0.086000	-0.52300
-5494.107	39.125	48.627	30.375	-0.2025	0.065000	-0.51500
-5490.093	38.375	47.524	29.755	-0.2023	0.062000	-0.50500
-5486.078	37.625	46.470	29.327	-0.1999	0.061000	-0.49300
-5482.064	36.875	45.397	29.008	-0.1950	0.063000	-0.48200
-5478.050	36.125	44.355	28.685	-0.1876	0.064000	-0.46800
-5474.036	35.375	43.341	28.438	-0.1777	0.066000	-0.45800
-5470.021	34.875	42.333	28.224	-0.1653	0.070000	-0.44200
-5466.007	34.125	41.373	28.048	-0.1504	0.074000	-0.42300
-5461.993	33.375	40.445	27.905	-0.1333	0.080000	-0.40500
-5457.979	32.875	39.607	27.771	-0.1154	0.087000	-0.38200
-5453.964	32.125	38.791	27.646	-0.09810	0.094000	-0.36300
-5449.950	31.625	37.965	27.587	-0.08170	0.10100	-0.34600
-5445.936	31.375	37.206	27.534	-0.06620	0.10800	-0.32500
-5441.922	31.125	36.464	27.478	-0.05160	0.11600	-0.30800
-5437.907	30.875	35.784	27.444	-0.03790	0.12500	-0.29200
-5433.893	30.875	35.105	27.419	-0.02500	0.13300	-0.27700
-5429.879	30.875	34.507	27.380	-0.01310	0.14300	-0.25900
-5425.865	30.625	33.995	27.350	-0.002100	0.15200	-0.24200
-5421.851	30.625	33.679	27.365	0.008100	0.16400	-0.22600
-5417.836	30.875	33.638	27.355	0.01740	0.17200	-0.21000
-5413.822	30.875	33.807	27.349	0.02580	0.18300	-0.19400
-5409.808	30.875	34.076	27.345	0.03320	0.19600	-0.18000
-5405.794	31.125	34.387	27.332	0.03980	0.20900	-0.16600
-5401.779	31.375	34.744	27.363	0.04550	0.22400	-0.15500
-5397.765	31.625	35.133	27.396	0.05030	0.23900	-0.14400
-5393.751	31.875	35.557	27.431	0.05430	0.25300	-0.13300

-5389.737	32.125	36.040	27.529	0.05740	0.26800	-0.12300
-5385.722	32.375	36.543	27.634	0.05990	0.28200	-0.11100
-5381.708	32.625	37.103	27.811	0.06210	0.29200	-0.098000
-5377.694	33.125	37.620	27.990	0.06420	0.30200	-0.087000
-5373.680	33.375	38.161	28.293	0.06600	0.31000	-0.077000
-5369.665	33.625	38.689	28.682	0.06760	0.30900	-0.068000
-5365.651	33.875	39.183	29.161	0.06900	0.30800	-0.057000
-5361.637	34.125	39.678	29.663	0.07020	0.30100	-0.050000
-5357.623	34.375	40.102	30.211	0.07110	0.29200	-0.044000
-5353.609	34.875	40.438	30.818	0.07190	0.27900	-0.040000
-5349.594	35.125	40.670	31.415	0.07240	0.26100	-0.037000
-5345.580	35.375	40.816	31.957	0.07270	0.24100	-0.037000
-5341.566	35.625	40.909	32.464	0.07270	0.22100	-0.038000
-5337.552	35.875	40.949	32.909	0.07260	0.20000	-0.040000
-5333.537	36.125	40.938	33.320	0.07230	0.18300	-0.042000
-5329.523	36.375	40.926	33.711	0.07170	0.16700	-0.044000
-5325.509	36.625	40.844	34.069	0.07090	0.15200	-0.046000
-5321.495	36.875	40.806	34.400	0.06990	0.14100	-0.047000
-5317.480	37.125	40.798	34.720	0.06880	0.13200	-0.047000
-5313.466	37.375	40.815	35.025	0.06780	0.12500	-0.045000
-5309.452	37.625	40.855	35.322	0.06670	0.12000	-0.044000
-5305.438	37.875	40.923	35.605	0.06580	0.11500	-0.044000
-5301.423	38.125	41.009	35.880	0.06480	0.11200	-0.043000
-5297.409	38.375	41.123	36.149	0.06390	0.10900	-0.041000
-5293.395	38.625	41.263	36.404	0.06300	0.10700	-0.040000
-5289.381	38.875	41.427	36.653	0.06220	0.10500	-0.039000
-5285.367	39.125	41.613	36.887	0.06140	0.10400	-0.038000
-5281.352	39.375	41.808	37.106	0.06070	0.10300	-0.036000
-5277.338	39.625	42.015	37.317	0.06000	0.10200	-0.034000
-5273.324	39.875	42.237	37.517	0.05930	0.10100	-0.031000
-5269.310	40.125	42.468	37.698	0.05870	0.10100	-0.029000
-5265.295	40.375	42.711	37.863	0.05810	0.10000	-0.026000
-5261.281	40.625	42.963	38.016	0.05750	0.10000	-0.023000
-5257.267	40.875	43.218	38.164	0.05700	0.10000	-0.020000
-5253.253	40.875	43.486	38.287	0.05660	0.10100	-0.016000
-5249.238	41.125	43.756	38.411	0.05610	0.10100	-0.011000
-5245.224	41.375	44.029	38.535	0.05570	0.10200	-0.0080000
-5241.210	41.625	44.305	38.677	0.05540	0.10300	-0.0040000
-5237.196	41.875	44.581	38.835	0.05510	0.10400	-0.0010000
-5233.181	42.125	44.856	38.979	0.05480	0.10500	0.0010000
-5229.167	42.375	45.130	39.171	0.05460	0.10700	0.0030000
-5225.153	42.625	45.400	39.372	0.05440	0.10800	0.0040000
-5221.139	42.875	45.682	39.587	0.05420	0.10900	0.0040000
-5217.125	43.125	45.971	39.826	0.05410	0.11000	0.0040000
-5213.110	43.375	46.255	40.055	0.05400	0.11000	0.0020000
-5209.096	43.625	46.544	40.296	0.05400	0.11100	0.0010000
-5205.082	43.875	46.843	40.543	0.05400	0.11200	0.0000
-5201.068	44.125	47.148	40.783	0.05400	0.11300	-0.0020000
-5197.053	44.375	47.443	41.022	0.05410	0.11300	-0.0060000
-5193.039	44.625	47.746	41.259	0.05420	0.11400	-0.0080000
-5189.025	44.625	48.051	41.479	0.05430	0.11400	-0.011000
-5185.011	44.875	48.362	41.695	0.05450	0.11600	-0.014000
-5180.996	45.125	48.658	41.903	0.05480	0.11800	-0.018000
-5176.982	45.375	48.958	42.105	0.05500	0.11900	-0.023000

-5172.968	45.625	49.271	42.294	0.05520	0.12100	-0.028000
-5168.954	45.875	49.599	42.463	0.05540	0.12300	-0.033000
-5164.940	46.125	49.933	42.636	0.05550	0.12500	-0.037000
-5160.925	46.125	50.267	42.800	0.05560	0.12800	-0.043000
-5156.911	46.375	50.615	42.940	0.05570	0.13000	-0.049000
-5152.897	46.625	50.935	43.075	0.05570	0.13300	-0.053000
-5148.883	46.875	51.270	43.214	0.05570	0.13600	-0.058000
-5144.868	47.125	51.606	43.341	0.05560	0.14000	-0.063000
-5140.854	47.375	51.948	43.467	0.05560	0.14500	-0.067000
-5136.840	47.375	52.296	43.579	0.05540	0.14900	-0.073000
-5132.826	47.625	52.643	43.707	0.05530	0.15600	-0.078000
-5128.811	47.875	52.977	43.822	0.05510	0.16300	-0.084000
-5124.797	48.125	53.324	43.907	0.05490	0.16900	-0.091000
-5120.783	48.375	53.673	43.996	0.05460	0.17700	-0.099000
-5116.769	48.625	54.050	44.079	0.05430	0.18200	-0.10800
-5112.754	48.875	54.397	44.166	0.05400	0.18800	-0.11400
-5108.740	48.875	54.775	44.234	0.05370	0.19500	-0.12200
-5104.726	49.125	55.125	44.276	0.05330	0.20200	-0.13000
-5100.712	49.375	55.488	44.302	0.05280	0.20800	-0.13900
-5096.698	49.625	55.823	44.274	0.05240	0.21400	-0.14800
-5092.683	49.875	56.134	44.252	0.05190	0.21900	-0.15700
-5088.669	50.125	56.476	44.180	0.05130	0.22400	-0.17100
-5084.655	50.375	56.774	44.081	0.05080	0.23100	-0.18400
-5080.641	50.375	57.080	43.946	0.05020	0.23500	-0.19500
-5076.626	50.625	57.400	43.841	0.04950	0.23900	-0.21000
-5072.612	50.875	57.700	43.634	0.04890	0.24400	-0.22200
-5068.598	51.125	57.980	43.456	0.04820	0.25000	-0.23300
-5064.584	51.375	58.301	43.232	0.04740	0.25200	-0.24500
-5060.569	51.375	58.593	42.995	0.04660	0.25300	-0.26300
-5056.555	51.625	58.881	42.710	0.04580	0.25700	-0.27700
-5052.541	51.875	59.106	42.378	0.04500	0.26100	-0.29200
-5048.527	52.125	59.385	42.064	0.04410	0.26900	-0.30400
-5044.512	52.125	59.618	41.751	0.04320	0.27100	-0.31700
-5040.498	52.375	59.894	41.365	0.04220	0.27600	-0.33500
-5036.484	52.625	60.150	40.834	0.04120	0.28100	-0.34600
-5032.470	52.625	60.406	40.369	0.04000	0.28700	-0.36100
-5028.456	52.875	60.618	39.751	0.03880	0.29200	-0.37600
-5024.441	53.125	60.900	39.274	0.03740	0.29600	-0.39100
-5020.427	53.125	61.147	38.694	0.03590	0.30200	-0.41200
-5016.413	53.375	61.328	38.123	0.03440	0.30500	-0.43200
-5012.399	53.375	61.555	37.514	0.03270	0.31100	-0.44900
-5008.384	53.625	61.761	36.933	0.03080	0.31600	-0.46200
-5004.370	53.625	61.935	36.316	0.02890	0.32500	-0.47400
-5000.356	53.875	62.137	35.744	0.02690	0.33200	-0.48800
-4996.342	53.875	62.323	35.155	0.02470	0.34000	-0.50000
-4992.327	54.125	62.509	34.561	0.02250	0.34600	-0.51800
-4988.313	54.125	62.682	34.047	0.02010	0.35700	-0.53200
-4984.299	54.125	62.881	33.508	0.01760	0.36700	-0.54700
-4980.285	54.125	63.077	33.020	0.01500	0.37800	-0.55800
-4976.270	54.375	63.265	32.577	0.01230	0.38700	-0.56900
-4972.256	54.375	63.448	32.210	0.009500	0.39800	-0.57800
-4968.242	54.375	63.612	31.791	0.006500	0.40700	-0.59300
-4964.228	54.375	63.819	31.397	0.003500	0.42000	-0.60700
-4960.214	54.375	64.031	31.069	0.0003000	0.42500	-0.62700

-4956.199	54.375	64.232	30.709	-0.003000	0.43800	-0.64400
-4952.185	54.375	64.430	30.269	-0.006300	0.45500	-0.66200
-4948.171	54.375	64.631	29.963	-0.009800	0.47600	-0.68400
-4944.157	54.375	64.818	29.726	-0.01350	0.49900	-0.70900
-4940.142	54.125	65.031	29.440	-0.01720	0.52400	-0.74300
-4936.128	54.125	65.255	29.164	-0.02100	0.55600	-0.77600
-4932.114	54.125	65.459	28.849	-0.02500	0.59400	-0.81700
-4928.100	53.875	65.675	28.479	-0.02900	0.63000	-0.87400
-4924.085	53.625	65.904	28.042	-0.03320	0.69000	-0.94900
-4920.071	53.625	66.169	27.616	-0.03750	0.76500	-1.0400
-4916.057	53.375	66.421	27.110	-0.04190	0.86700	-1.1620
-4912.043	53.125	66.732	26.456	-0.04640	1.0190	-1.3580
-4908.028	53.125	67.105	25.631	-0.05100	1.2270	-1.6630
-4904.014	52.875	67.569	24.401	-0.05570	1.6130	-2.2590
-4900.000	53.125	68.624	21.906	-0.06050	2.5990	-3.9950

Figure S4a,b

Date	Median (muT)	Cred_Int Upper	Cred_Int Lower	dFdt (muT/yr)	dFdt Upper	dFdt Lower
-7000.000	55.125	68.569	22.224	0.0169	1.9560	-1.0510
-6995.992	54.875	67.889	24.083	0.0162	1.4180	-0.83000
-6991.984	54.875	67.557	25.067	0.0156	1.1270	-0.68900
-6987.976	55.125	67.321	25.848	0.0149	0.95600	-0.60400
-6983.968	55.125	67.113	26.476	0.0142	0.84000	-0.53600
-6979.959	55.125	66.935	26.992	0.0135	0.76200	-0.48600
-6975.951	55.125	66.777	27.468	0.0129	0.68900	-0.44900
-6971.943	55.125	66.620	27.867	0.0122	0.63800	-0.41300
-6967.935	55.125	66.470	28.245	0.0115	0.59000	-0.39000
-6963.927	55.375	66.337	28.541	0.0109	0.55100	-0.36700
-6959.919	55.375	66.206	28.821	0.0102	0.51900	-0.34800
-6955.911	55.375	66.060	29.101	0.00960	0.49100	-0.33000
-6951.903	55.375	65.950	29.340	0.00900	0.47000	-0.31600
-6947.894	55.375	65.832	29.615	0.00830	0.45100	-0.30300
-6943.886	55.625	65.704	29.869	0.00770	0.43200	-0.29100
-6939.878	55.625	65.582	30.062	0.00710	0.41500	-0.28200
-6935.870	55.625	65.471	30.324	0.00650	0.40100	-0.27100
-6931.862	55.625	65.354	30.520	0.00590	0.38800	-0.26400
-6927.854	55.625	65.253	30.667	0.00530	0.37600	-0.25500
-6923.846	55.625	65.149	30.873	0.00470	0.36500	-0.24800
-6919.838	55.625	65.031	31.061	0.00410	0.35500	-0.24200
-6915.830	55.625	64.921	31.223	0.00350	0.34600	-0.23600
-6911.821	55.625	64.823	31.413	0.00290	0.33700	-0.23100
-6907.813	55.625	64.711	31.557	0.00230	0.32900	-0.22500
-6903.805	55.625	64.620	31.711	0.00180	0.32200	-0.21800
-6899.797	55.625	64.523	31.899	0.00120	0.31600	-0.21400
-6895.789	55.625	64.424	32.054	0.000700	0.31000	-0.20900
-6891.781	55.625	64.312	32.246	1.00e-04	0.30600	-0.20300
-6887.773	55.625	64.204	32.481	-0.000400	0.30200	-0.19700
-6883.765	55.625	64.103	32.666	-0.00100	0.29800	-0.19300
-6879.757	55.625	63.999	32.898	-0.00150	0.29400	-0.18800
-6875.748	55.625	63.918	33.111	-0.00200	0.29000	-0.18400
-6871.740	55.625	63.840	33.355	-0.00260	0.28600	-0.18100
-6867.732	55.625	63.731	33.596	-0.00310	0.28200	-0.17700
-6863.724	55.625	63.659	33.814	-0.00360	0.28000	-0.17400
-6859.716	55.625	63.567	34.059	-0.00410	0.27700	-0.17000
-6855.708	55.625	63.474	34.311	-0.00460	0.27200	-0.16700
-6851.700	55.625	63.371	34.551	-0.00510	0.27000	-0.16300
-6847.692	55.625	63.288	34.806	-0.00560	0.26700	-0.15900
-6843.683	55.625	63.192	35.102	-0.00610	0.26300	-0.15500
-6839.675	55.625	63.096	35.403	-0.00660	0.26000	-0.15200
-6835.667	55.625	63.040	35.744	-0.00700	0.25900	-0.15000
-6831.659	55.625	62.974	36.039	-0.00750	0.25500	-0.14600
-6827.651	55.375	62.881	36.389	-0.00800	0.25100	-0.14300
-6823.643	55.375	62.775	36.639	-0.00840	0.24600	-0.14000
-6819.635	55.375	62.677	37.012	-0.00890	0.24300	-0.13800
-6815.627	55.375	62.572	37.307	-0.00930	0.23900	-0.13500
-6811.619	55.375	62.470	37.647	-0.00980	0.23400	-0.13300
-6807.610	55.375	62.352	37.997	-0.0102	0.23100	-0.13000
-6803.602	55.125	62.243	38.443	-0.0106	0.22900	-0.12700
-6799.594	55.125	62.144	38.758	-0.0111	0.22700	-0.12400

-6795.586	55.125	62.008	39.189	-0.0115	0.22200	-0.12300
-6791.578	55.125	61.912	39.644	-0.0119	0.21800	-0.12000
-6787.570	55.125	61.793	40.107	-0.0123	0.21300	-0.11800
-6783.562	55.125	61.665	40.627	-0.0127	0.20800	-0.11700
-6779.554	54.875	61.531	41.064	-0.0131	0.20400	-0.11400
-6775.545	54.875	61.381	41.507	-0.0135	0.20000	-0.11300
-6771.537	54.875	61.229	41.950	-0.0139	0.19700	-0.11000
-6767.529	54.875	61.086	42.396	-0.0143	0.19100	-0.11000
-6763.521	54.625	60.933	42.900	-0.0147	0.18700	-0.10800
-6759.513	54.625	60.765	43.410	-0.0150	0.18200	-0.10500
-6755.505	54.625	60.605	43.888	-0.0154	0.17900	-0.10300
-6751.497	54.625	60.444	44.458	-0.0157	0.17200	-0.10300
-6747.489	54.375	60.277	44.955	-0.0161	0.16600	-0.10100
-6743.481	54.375	60.096	45.511	-0.0164	0.16000	-0.10000
-6739.472	54.375	59.905	45.989	-0.0168	0.15500	-0.099000
-6735.464	54.375	59.726	46.443	-0.0171	0.14800	-0.098000
-6731.456	54.125	59.536	46.913	-0.0175	0.14200	-0.097000
-6727.448	54.125	59.346	47.303	-0.0178	0.13500	-0.097000
-6723.440	54.125	59.169	47.678	-0.0181	0.12900	-0.097000
-6719.432	53.875	58.994	48.053	-0.0184	0.12400	-0.096000
-6715.424	53.875	58.825	48.327	-0.0187	0.11900	-0.096000
-6711.416	53.875	58.662	48.538	-0.0190	0.11400	-0.096000
-6707.408	53.875	58.480	48.702	-0.0193	0.10800	-0.096000
-6703.399	53.625	58.324	48.801	-0.0196	0.10300	-0.096000
-6699.391	53.625	58.164	48.897	-0.0199	0.098000	-0.095000
-6695.383	53.625	58.019	48.931	-0.0202	0.094000	-0.095000
-6691.375	53.375	57.903	48.968	-0.0205	0.089000	-0.095000
-6687.367	53.375	57.773	48.957	-0.0208	0.085000	-0.095000
-6683.359	53.375	57.673	48.917	-0.0210	0.081000	-0.095000
-6679.351	53.125	57.559	48.876	-0.0213	0.077000	-0.094000
-6675.343	53.125	57.472	48.825	-0.0215	0.074000	-0.094000
-6671.334	53.125	57.394	48.756	-0.0218	0.072000	-0.094000
-6667.326	52.875	57.315	48.663	-0.0220	0.069000	-0.094000
-6663.318	52.875	57.248	48.579	-0.0223	0.067000	-0.093000
-6659.310	52.625	57.184	48.498	-0.0225	0.065000	-0.094000
-6655.302	52.625	57.144	48.400	-0.0227	0.064000	-0.094000
-6651.294	52.625	57.108	48.276	-0.0229	0.062000	-0.094000
-6647.286	52.375	57.089	48.150	-0.0232	0.060000	-0.094000
-6643.278	52.375	57.073	47.999	-0.0234	0.060000	-0.094000
-6639.270	52.375	57.052	47.855	-0.0236	0.059000	-0.094000
-6635.261	52.125	57.023	47.703	-0.0238	0.059000	-0.094000
-6631.253	52.125	57.037	47.528	-0.0240	0.059000	-0.094000
-6627.245	51.875	57.038	47.345	-0.0242	0.058000	-0.094000
-6623.237	51.875	57.050	47.158	-0.0243	0.059000	-0.094000
-6619.229	51.875	57.063	46.974	-0.0245	0.059000	-0.094000
-6615.221	51.625	57.075	46.779	-0.0247	0.060000	-0.094000
-6611.213	51.625	57.100	46.598	-0.0249	0.061000	-0.094000
-6607.205	51.375	57.129	46.384	-0.0250	0.061000	-0.096000
-6603.196	51.375	57.138	46.190	-0.0252	0.062000	-0.096000
-6599.188	51.375	57.156	45.986	-0.0253	0.062000	-0.097000
-6595.180	51.125	57.172	45.772	-0.0255	0.063000	-0.098000
-6591.172	51.125	57.212	45.568	-0.0256	0.064000	-0.098000
-6587.164	50.875	57.243	45.371	-0.0258	0.066000	-0.10000
-6583.156	50.875	57.251	45.131	-0.0259	0.067000	-0.10100

-6579.148	50.875	57.269	44.933	-0.0260	0.068000	-0.10300
-6575.140	50.625	57.285	44.733	-0.0261	0.069000	-0.10400
-6571.132	50.625	57.280	44.514	-0.0262	0.071000	-0.10500
-6567.123	50.375	57.277	44.325	-0.0263	0.072000	-0.10700
-6563.115	50.375	57.286	44.105	-0.0264	0.073000	-0.10900
-6559.107	50.375	57.302	43.880	-0.0265	0.075000	-0.11000
-6555.099	50.125	57.316	43.636	-0.0266	0.076000	-0.11200
-6551.091	50.125	57.324	43.373	-0.0267	0.077000	-0.11400
-6547.083	49.875	57.366	43.137	-0.0268	0.079000	-0.11600
-6543.075	49.875	57.370	42.907	-0.0269	0.081000	-0.11800
-6539.067	49.625	57.374	42.683	-0.0269	0.081000	-0.12000
-6535.059	49.625	57.368	42.430	-0.0270	0.083000	-0.12300
-6531.050	49.625	57.350	42.181	-0.0271	0.085000	-0.12400
-6527.042	49.375	57.362	41.940	-0.0271	0.086000	-0.12700
-6523.034	49.375	57.362	41.723	-0.0272	0.088000	-0.12800
-6519.026	49.125	57.355	41.528	-0.0272	0.089000	-0.13100
-6515.018	49.125	57.352	41.368	-0.0272	0.090000	-0.13300
-6511.010	48.875	57.334	41.162	-0.0273	0.090000	-0.13500
-6507.002	48.875	57.298	40.996	-0.0273	0.091000	-0.13700
-6502.994	48.875	57.259	40.821	-0.0273	0.092000	-0.13900
-6498.985	48.625	57.248	40.675	-0.0273	0.093000	-0.14100
-6494.977	48.625	57.227	40.533	-0.0273	0.094000	-0.14400
-6490.969	48.375	57.173	40.381	-0.0274	0.094000	-0.14600
-6486.961	48.375	57.156	40.250	-0.0274	0.095000	-0.14700
-6482.953	48.125	57.152	40.140	-0.0275	0.095000	-0.14900
-6478.945	48.125	57.121	40.046	-0.0276	0.096000	-0.15100
-6474.937	47.875	57.069	39.928	-0.0278	0.096000	-0.15400
-6470.929	47.875	57.021	39.823	-0.0279	0.097000	-0.15600
-6466.921	47.625	56.986	39.727	-0.0281	0.097000	-0.15800
-6462.912	47.625	56.950	39.624	-0.0283	0.097000	-0.16100
-6458.904	47.375	56.889	39.538	-0.0285	0.096000	-0.16400
-6454.896	47.375	56.837	39.452	-0.0287	0.097000	-0.16600
-6450.888	47.375	56.773	39.373	-0.0289	0.097000	-0.16800
-6446.880	47.125	56.702	39.310	-0.0292	0.097000	-0.17000
-6442.872	47.125	56.605	39.185	-0.0295	0.098000	-0.17300
-6438.864	46.875	56.541	39.089	-0.0298	0.098000	-0.17500
-6434.856	46.875	56.467	38.991	-0.0301	0.098000	-0.17800
-6430.847	46.625	56.374	38.896	-0.0305	0.097000	-0.18000
-6426.839	46.625	56.288	38.800	-0.0309	0.096000	-0.18400
-6422.831	46.375	56.188	38.710	-0.0313	0.095000	-0.18500
-6418.823	46.375	56.105	38.611	-0.0317	0.095000	-0.18700
-6414.815	46.125	56.011	38.498	-0.0321	0.094000	-0.19000
-6410.807	46.125	55.861	38.416	-0.0326	0.093000	-0.19100
-6406.799	45.875	55.755	38.342	-0.0330	0.092000	-0.19300
-6402.791	45.875	55.615	38.258	-0.0335	0.091000	-0.19400
-6398.783	45.625	55.436	38.193	-0.0341	0.090000	-0.19700
-6394.774	45.375	55.287	38.149	-0.0346	0.088000	-0.19900
-6390.766	45.375	55.120	38.058	-0.0352	0.087000	-0.20200
-6386.758	45.125	54.936	38.020	-0.0357	0.086000	-0.20200
-6382.750	45.125	54.724	37.976	-0.0363	0.084000	-0.20400
-6378.742	44.875	54.506	37.915	-0.0370	0.083000	-0.20400
-6374.734	44.875	54.292	37.885	-0.0376	0.082000	-0.20500
-6370.726	44.625	54.114	37.873	-0.0382	0.081000	-0.20700
-6366.718	44.625	53.854	37.905	-0.0388	0.080000	-0.20800

-6362.710	44.375	53.638	37.909	-0.0392	0.078000	-0.21100
-6358.701	44.125	53.401	37.914	-0.0394	0.077000	-0.21100
-6354.693	44.125	53.180	37.912	-0.0394	0.075000	-0.21100
-6350.685	43.875	52.943	37.908	-0.0392	0.074000	-0.21200
-6346.677	43.875	52.716	37.914	-0.0388	0.073000	-0.21100
-6342.669	43.625	52.489	37.937	-0.0382	0.072000	-0.20800
-6338.661	43.625	52.236	37.970	-0.0374	0.070000	-0.20700
-6334.653	43.375	51.958	38.029	-0.0364	0.069000	-0.20700
-6330.645	43.125	51.685	38.094	-0.0353	0.065000	-0.20600
-6326.636	43.125	51.415	38.167	-0.0339	0.064000	-0.20400
-6322.628	42.875	51.091	38.211	-0.0324	0.061000	-0.20200
-6318.620	42.875	50.780	38.297	-0.0306	0.059000	-0.19900
-6314.612	42.625	50.464	38.402	-0.0287	0.057000	-0.19300
-6310.604	42.625	50.169	38.466	-0.0265	0.055000	-0.18900
-6306.596	42.375	49.867	38.559	-0.0242	0.052000	-0.18300
-6302.588	42.375	49.581	38.617	-0.0219	0.050000	-0.17700
-6298.580	42.125	49.237	38.692	-0.0197	0.047000	-0.16900
-6294.572	42.125	48.860	38.807	-0.0176	0.044000	-0.16100
-6290.563	42.125	48.507	38.891	-0.0157	0.042000	-0.15200
-6286.555	41.875	48.175	38.958	-0.0139	0.040000	-0.14400
-6282.547	41.875	47.845	39.008	-0.0122	0.038000	-0.13500
-6278.539	41.875	47.535	39.070	-0.0107	0.036000	-0.12700
-6274.531	41.875	47.256	39.119	-0.00930	0.034000	-0.12000
-6270.523	41.875	46.950	39.170	-0.00810	0.032000	-0.11300
-6266.515	41.625	46.669	39.234	-0.00700	0.031000	-0.10600
-6262.507	41.625	46.434	39.287	-0.00610	0.029000	-0.10000
-6258.498	41.625	46.205	39.325	-0.00520	0.027000	-0.095000
-6254.490	41.625	46.001	39.363	-0.00460	0.026000	-0.089000
-6250.482	41.625	45.795	39.398	-0.00410	0.025000	-0.083000
-6246.474	41.625	45.608	39.442	-0.00370	0.024000	-0.078000
-6242.466	41.625	45.442	39.484	-0.00330	0.023000	-0.073000
-6238.458	41.625	45.268	39.515	-0.00300	0.022000	-0.069000
-6234.450	41.625	45.118	39.551	-0.00270	0.021000	-0.065000
-6230.442	41.625	44.959	39.584	-0.00240	0.020000	-0.061000
-6226.434	41.625	44.819	39.613	-0.00210	0.020000	-0.057000
-6222.425	41.625	44.688	39.646	-0.00180	0.019000	-0.053000
-6218.417	41.625	44.565	39.683	-0.00160	0.019000	-0.050000
-6214.409	41.625	44.433	39.713	-0.00130	0.018000	-0.048000
-6210.401	41.625	44.316	39.746	-0.00100	0.018000	-0.045000
-6206.393	41.625	44.206	39.780	-0.000800	0.017000	-0.042000
-6202.385	41.625	44.105	39.812	-0.000500	0.017000	-0.040000
-6198.377	41.625	44.008	39.842	-0.000300	0.016000	-0.038000
-6194.369	41.625	43.913	39.874	0.00	0.016000	-0.036000
-6190.361	41.625	43.826	39.905	0.000200	0.016000	-0.034000
-6186.352	41.625	43.746	39.935	0.000400	0.015000	-0.032000
-6182.344	41.625	43.672	39.967	0.000700	0.015000	-0.031000
-6178.336	41.625	43.597	39.998	0.000900	0.015000	-0.030000
-6174.328	41.625	43.531	40.030	0.00110	0.015000	-0.028000
-6170.320	41.625	43.466	40.059	0.00130	0.014000	-0.027000
-6166.312	41.625	43.406	40.089	0.00150	0.014000	-0.027000
-6162.304	41.625	43.354	40.120	0.00170	0.014000	-0.026000
-6158.296	41.625	43.310	40.151	0.00190	0.014000	-0.025000
-6154.287	41.625	43.263	40.182	0.00210	0.013000	-0.024000
-6150.279	41.625	43.225	40.214	0.00230	0.013000	-0.024000

-6146.271	41.625	43.191	40.244	0.00240	0.013000	-0.023000
-6142.263	41.625	43.159	40.272	0.00260	0.013000	-0.022000
-6138.255	41.625	43.137	40.300	0.00280	0.013000	-0.022000
-6134.247	41.875	43.117	40.331	0.00290	0.012000	-0.021000
-6130.239	41.875	43.099	40.363	0.00310	0.012000	-0.020000
-6126.231	41.875	43.084	40.395	0.00320	0.012000	-0.020000
-6122.223	41.875	43.072	40.428	0.00340	0.012000	-0.019000
-6118.214	41.875	43.061	40.461	0.00350	0.012000	-0.018000
-6114.206	41.875	43.052	40.491	0.00360	0.012000	-0.018000
-6110.198	41.875	43.045	40.522	0.00370	0.011000	-0.017000
-6106.190	41.875	43.040	40.552	0.00380	0.011000	-0.016000
-6102.182	41.875	43.034	40.585	0.00400	0.011000	-0.015000
-6098.174	41.875	43.032	40.616	0.00410	0.011000	-0.014000
-6094.166	41.875	43.028	40.648	0.00420	0.011000	-0.013000
-6090.158	41.875	43.027	40.681	0.00420	0.011000	-0.011000
-6086.149	41.875	43.024	40.712	0.00430	0.011000	-0.010000
-6082.141	41.875	43.024	40.744	0.00440	0.011000	-0.009000
-6078.133	41.875	43.024	40.775	0.00450	0.011000	-0.008000
-6074.125	41.875	43.025	40.806	0.00450	0.011000	-0.007000
-6070.117	41.875	43.027	40.838	0.00460	0.010000	-0.007000
-6066.109	42.125	43.027	40.871	0.00470	0.010000	-0.006000
-6062.101	42.125	43.030	40.903	0.00470	0.010000	-0.006000
-6058.093	42.125	43.032	40.935	0.00480	0.010000	-0.006000
-6054.085	42.125	43.034	40.969	0.00480	0.010000	-0.005000
-6050.076	42.125	43.034	41.000	0.00480	0.010000	-0.005000
-6046.068	42.125	43.037	41.030	0.00480	0.010000	-0.005000
-6042.060	42.125	43.040	41.062	0.00490	0.010000	-0.005000
-6038.052	42.125	43.045	41.095	0.00490	0.010000	-0.004000
-6034.044	42.125	43.048	41.126	0.00490	0.010000	-0.004000
-6030.036	42.125	43.052	41.158	0.00490	0.010000	-0.004000
-6026.028	42.125	43.058	41.187	0.00490	0.010000	-0.004000
-6022.020	42.125	43.061	41.217	0.00490	0.010000	-0.004000
-6018.012	42.125	43.065	41.248	0.00490	0.010000	-0.004000
-6014.003	42.125	43.069	41.277	0.00480	0.010000	-0.004000
-6009.995	42.125	43.075	41.305	0.00480	0.010000	-0.004000
-6005.987	42.375	43.079	41.334	0.00480	0.010000	-0.004000
-6001.979	42.375	43.085	41.361	0.00470	0.009000	-0.004000
-5997.971	42.375	43.091	41.389	0.00470	0.009000	-0.004000
-5993.963	42.375	43.096	41.416	0.00470	0.009000	-0.004000
-5989.955	42.375	43.100	41.443	0.00460	0.009000	-0.004000
-5985.947	42.375	43.105	41.469	0.00460	0.009000	-0.004000
-5981.938	42.375	43.112	41.495	0.00450	0.009000	-0.004000
-5977.930	42.375	43.117	41.521	0.00450	0.009000	-0.004000
-5973.922	42.375	43.122	41.545	0.00440	0.009000	-0.004000
-5969.914	42.375	43.129	41.569	0.00440	0.009000	-0.004000
-5965.906	42.375	43.135	41.591	0.00440	0.009000	-0.004000
-5961.898	42.375	43.142	41.612	0.00430	0.009000	-0.004000
-5957.890	42.375	43.148	41.633	0.00430	0.009000	-0.004000
-5953.882	42.375	43.155	41.653	0.00430	0.009000	-0.004000
-5949.874	42.375	43.161	41.672	0.00420	0.009000	-0.004000
-5945.865	42.625	43.168	41.692	0.00420	0.009000	-0.003000
-5941.857	42.625	43.174	41.710	0.00420	0.009000	-0.003000
-5937.849	42.625	43.180	41.729	0.00410	0.009000	-0.003000
-5933.841	42.625	43.187	41.746	0.00410	0.009000	-0.003000

-5929.833	42.625	43.195	41.760	0.00410	0.0090000	-0.0030000
-5925.825	42.625	43.202	41.774	0.00410	0.0090000	-0.0030000
-5921.817	42.625	43.209	41.786	0.00400	0.0090000	-0.0030000
-5917.809	42.625	43.217	41.796	0.00400	0.0090000	-0.0030000
-5913.801	42.625	43.225	41.806	0.00400	0.0090000	-0.0030000
-5909.792	42.625	43.233	41.817	0.00400	0.0090000	-0.0030000
-5905.784	42.625	43.242	41.826	0.00400	0.0090000	-0.0030000
-5901.776	42.625	43.251	41.836	0.00400	0.0090000	-0.0030000
-5897.768	42.625	43.260	41.840	0.00390	0.0090000	-0.0030000
-5893.760	42.625	43.269	41.847	0.00390	0.0090000	-0.0030000
-5889.752	42.625	43.279	41.855	0.00390	0.0090000	-0.0030000
-5885.744	42.875	43.289	41.854	0.00390	0.0090000	-0.0030000
-5881.736	42.875	43.300	41.857	0.00390	0.0100000	-0.0030000
-5877.727	42.875	43.310	41.856	0.00390	0.0100000	-0.0030000
-5873.719	42.875	43.322	41.857	0.00390	0.0100000	-0.0030000
-5869.711	42.875	43.333	41.858	0.00390	0.0100000	-0.0020000
-5865.703	42.875	43.345	41.858	0.00390	0.0100000	-0.0020000
-5861.695	42.875	43.358	41.860	0.00390	0.0100000	-0.0020000
-5857.687	42.875	43.370	41.864	0.00390	0.0100000	-0.0020000
-5853.679	42.875	43.383	41.871	0.00390	0.0100000	-0.0020000
-5849.671	42.875	43.397	41.880	0.00390	0.0100000	-0.0020000
-5845.663	42.875	43.411	41.887	0.00390	0.011000	-0.0020000
-5841.654	42.875	43.427	41.901	0.00390	0.011000	-0.0010000
-5837.646	42.875	43.442	41.918	0.00390	0.011000	-0.0010000
-5833.638	42.875	43.457	41.936	0.00390	0.011000	-0.0010000
-5829.630	43.125	43.474	41.964	0.00400	0.012000	-0.0010000
-5825.622	43.125	43.490	41.992	0.00400	0.012000	-0.0010000
-5821.614	43.125	43.508	42.025	0.00400	0.013000	-0.0010000
-5817.606	43.125	43.526	42.066	0.00400	0.013000	0.0000
-5813.598	43.125	43.544	42.113	0.00400	0.013000	0.0000
-5809.589	43.125	43.562	42.165	0.00400	0.014000	0.0000
-5805.581	43.125	43.581	42.227	0.00400	0.015000	0.0000
-5801.573	43.125	43.601	42.285	0.00410	0.015000	0.0000
-5797.565	43.125	43.623	42.348	0.00410	0.016000	0.0000
-5793.557	43.125	43.646	42.408	0.00410	0.016000	0.0000
-5789.549	43.125	43.673	42.461	0.00410	0.017000	0.0000
-5785.541	43.125	43.702	42.509	0.00420	0.017000	0.0000
-5781.533	43.125	43.730	42.555	0.00420	0.018000	0.0000
-5777.525	43.125	43.758	42.600	0.00420	0.018000	0.0000
-5773.516	43.375	43.787	42.644	0.00430	0.018000	0.0000
-5769.508	43.375	43.817	42.681	0.00430	0.019000	0.0000
-5765.500	43.375	43.847	42.717	0.00430	0.019000	-0.0010000
-5761.492	43.375	43.879	42.748	0.00440	0.019000	-0.0010000
-5757.484	43.375	43.911	42.778	0.00440	0.019000	-0.0010000
-5753.476	43.375	43.945	42.803	0.00440	0.019000	-0.0020000
-5749.468	43.375	43.978	42.826	0.00450	0.020000	-0.0020000
-5745.460	43.375	44.015	42.850	0.00450	0.020000	-0.0030000
-5741.452	43.375	44.054	42.869	0.00460	0.020000	-0.0040000
-5737.443	43.375	44.092	42.888	0.00460	0.020000	-0.0060000
-5733.435	43.375	44.131	42.904	0.00470	0.020000	-0.0080000
-5729.427	43.375	44.173	42.915	0.00470	0.020000	-0.011000
-5725.419	43.375	44.212	42.923	0.00480	0.020000	-0.016000
-5721.411	43.375	44.252	42.925	0.00490	0.020000	-0.021000
-5717.403	43.375	44.295	42.916	0.00500	0.020000	-0.030000

-5713.395	43.625	44.332	42.896	0.00510	0.020000	-0.045000
-5709.387	43.625	44.367	42.849	0.00520	0.019000	-0.063000
-5705.378	43.625	44.405	42.750	0.00530	0.019000	-0.076000
-5701.370	43.625	44.442	42.573	0.00540	0.019000	-0.088000
-5697.362	43.625	44.470	42.307	0.00550	0.018000	-0.098000
-5693.354	43.625	44.503	42.012	0.00560	0.018000	-0.10900
-5689.346	43.625	44.530	41.661	0.00580	0.018000	-0.12100
-5685.338	43.625	44.556	41.269	0.00590	0.017000	-0.13300
-5681.330	43.625	44.576	40.850	0.00600	0.017000	-0.14700
-5677.322	43.625	44.588	40.386	0.00570	0.016000	-0.16100
-5673.314	43.625	44.606	39.893	0.00470	0.016000	-0.17700
-5669.305	43.625	44.613	39.368	0.00290	0.016000	-0.19500
-5665.297	43.625	44.625	38.796	0.000300	0.016000	-0.21500
-5661.289	43.625	44.638	38.190	-0.00310	0.015000	-0.23900
-5657.281	43.625	44.653	37.508	-0.00720	0.015000	-0.26400
-5653.273	43.625	44.654	36.800	-0.0121	0.014000	-0.29600
-5649.265	43.625	44.654	35.983	-0.0183	0.014000	-0.33300
-5645.257	43.625	44.654	35.105	-0.0280	0.014000	-0.37500
-5641.249	43.375	44.655	34.093	-0.0434	0.015000	-0.42300
-5637.240	43.375	44.655	32.963	-0.0650	0.016000	-0.47100
-5633.232	43.375	44.646	31.747	-0.0929	0.019000	-0.53500
-5629.224	42.875	44.633	30.593	-0.127	0.029000	-0.59600
-5625.216	41.875	44.616	29.413	-0.167	0.092000	-0.66900
-5621.208	40.875	44.586	28.317	-0.212	0.16600	-0.74800
-5617.200	39.875	44.550	27.382	-0.251	0.22200	-0.83100
-5613.192	38.875	44.513	26.650	-0.276	0.28400	-0.90800
-5609.184	37.875	44.459	26.042	-0.284	0.34800	-0.98900
-5605.176	36.625	44.394	25.674	-0.275	0.43600	-1.0710
-5601.167	35.625	44.311	25.553	-0.249	0.56800	-1.1350
-5597.159	34.875	44.232	25.517	-0.206	0.77800	-1.1170
-5593.151	34.375	44.193	25.418	-0.147	1.0600	-1.0670
-5589.143	33.875	44.308	25.272	-0.0720	1.3100	-1.0010
-5585.135	33.875	45.022	25.193	0.0116	1.5140	-0.93900
-5581.127	33.875	46.071	25.150	0.0974	1.6930	-0.87600
-5577.119	34.375	46.934	25.137	0.184	1.7880	-0.81000
-5573.111	34.875	47.609	25.187	0.268	1.8620	-0.73500
-5569.103	35.625	48.098	25.289	0.332	1.8870	-0.66500
-5565.094	37.125	48.491	25.454	0.359	1.8930	-0.59600
-5561.086	39.375	48.811	25.655	0.345	1.9090	-0.51800
-5557.078	41.375	49.124	25.962	0.295	1.8550	-0.44800
-5553.070	42.375	49.358	26.237	0.228	1.7860	-0.39100
-5549.062	42.875	49.579	26.476	0.165	1.6660	-0.34600
-5545.054	43.125	49.698	26.811	0.109	1.4980	-0.31100
-5541.046	43.375	49.745	27.313	0.0614	1.3030	-0.29000
-5537.038	43.375	49.676	28.079	0.0208	1.1470	-0.27600
-5533.029	43.125	49.508	29.303	-0.0122	0.99100	-0.26900
-5529.021	43.125	49.299	31.225	-0.0376	0.84900	-0.26200
-5525.013	42.875	49.044	33.734	-0.0559	0.69900	-0.25900
-5521.005	42.625	48.744	35.578	-0.0693	0.57000	-0.25600
-5516.997	42.375	48.419	36.303	-0.0798	0.45800	-0.25100
-5512.989	42.125	48.066	36.444	-0.0880	0.37100	-0.24700
-5508.981	41.875	47.722	36.342	-0.0939	0.29100	-0.24200
-5504.973	41.625	47.356	36.060	-0.0974	0.22500	-0.23700
-5500.965	41.375	46.924	35.734	-0.0985	0.16500	-0.23300

-5496.956	40.875	46.536	35.364	-0.0975	0.069000	-0.22800
-5492.948	40.625	46.136	34.964	-0.0953	-0.0100000	-0.22400
-5488.940	40.375	45.716	34.585	-0.0930	-0.012000	-0.21900
-5484.932	39.875	45.294	34.265	-0.0906	-0.012000	-0.21500
-5480.924	39.625	44.877	33.987	-0.0883	-0.012000	-0.21000
-5476.916	39.125	44.442	33.742	-0.0860	-0.011000	-0.20500
-5472.908	38.875	44.009	33.530	-0.0837	-0.011000	-0.20000
-5468.900	38.625	43.555	33.343	-0.0814	-0.0100000	-0.19500
-5464.891	38.125	43.115	33.183	-0.0792	-0.0100000	-0.19000
-5460.883	37.875	42.684	33.034	-0.0769	-0.0090000	-0.18500
-5456.875	37.625	42.273	32.899	-0.0747	-0.0090000	-0.18100
-5452.867	37.125	41.872	32.779	-0.0725	-0.0080000	-0.17600
-5448.859	36.875	41.478	32.670	-0.0704	-0.0080000	-0.17100
-5444.851	36.625	41.092	32.570	-0.0682	-0.0070000	-0.16600
-5440.843	36.125	40.722	32.476	-0.0661	-0.0070000	-0.16100
-5436.835	35.875	40.361	32.393	-0.0640	-0.0070000	-0.15600
-5432.827	35.625	40.015	32.311	-0.0619	-0.0060000	-0.15100
-5428.818	35.375	39.687	32.231	-0.0598	-0.0060000	-0.14600
-5424.810	34.875	39.368	32.159	-0.0577	-0.0060000	-0.14100
-5420.802	34.625	39.052	32.090	-0.0557	-0.0050000	-0.13600
-5416.794	34.375	38.752	32.023	-0.0537	-0.0050000	-0.13200
-5412.786	34.125	38.464	31.964	-0.0517	-0.0050000	-0.12700
-5408.778	33.875	38.182	31.908	-0.0497	-0.0050000	-0.12200
-5404.770	33.875	37.908	31.852	-0.0478	-0.0040000	-0.11700
-5400.762	33.625	37.635	31.794	-0.0458	-0.0040000	-0.11300
-5396.754	33.375	37.362	31.744	-0.0439	-0.0040000	-0.10900
-5392.745	33.375	37.099	31.690	-0.0420	-0.0040000	-0.10500
-5388.737	33.125	36.841	31.639	-0.0402	-0.0040000	-0.10100
-5384.729	33.125	36.587	31.589	-0.0383	-0.0030000	-0.097000
-5380.721	32.875	36.338	31.539	-0.0365	-0.0030000	-0.094000
-5376.713	32.875	36.095	31.487	-0.0346	-0.0030000	-0.090000
-5372.705	32.875	35.857	31.438	-0.0329	-0.0030000	-0.087000
-5368.697	32.625	35.620	31.389	-0.0311	-0.0030000	-0.084000
-5364.689	32.625	35.389	31.339	-0.0294	-0.0020000	-0.081000
-5360.680	32.625	35.158	31.289	-0.0278	-0.0020000	-0.078000
-5356.672	32.375	34.929	31.241	-0.0262	-0.0020000	-0.076000
-5352.664	32.375	34.707	31.187	-0.0247	-0.0020000	-0.074000
-5348.656	32.375	34.486	31.131	-0.0233	-0.0020000	-0.072000
-5344.648	32.375	34.267	31.074	-0.0219	-0.0010000	-0.070000
-5340.640	32.125	34.049	31.017	-0.0206	-0.0010000	-0.068000
-5336.632	32.125	33.841	30.949	-0.0193	-0.0010000	-0.067000
-5332.624	32.125	33.637	30.876	-0.0181	-0.0010000	-0.065000
-5328.616	32.125	33.438	30.800	-0.0170	-0.0010000	-0.065000
-5324.607	31.875	33.249	30.714	-0.0159	0.0000	-0.064000
-5320.599	31.875	33.080	30.627	-0.0149	0.0000	-0.063000
-5316.591	31.875	32.922	30.529	-0.0140	0.0000	-0.062000
-5312.583	31.875	32.787	30.422	-0.0131	0.0010000	-0.061000
-5308.575	31.625	32.671	30.306	-0.0123	0.0010000	-0.061000
-5304.567	31.625	32.571	30.187	-0.0116	0.0010000	-0.060000
-5300.559	31.625	32.487	30.051	-0.0109	0.0020000	-0.060000
-5296.551	31.625	32.413	29.921	-0.0102	0.0020000	-0.059000
-5292.542	31.375	32.350	29.780	-0.00970	0.0030000	-0.059000
-5288.534	31.375	32.299	29.635	-0.00920	0.0030000	-0.059000
-5284.526	31.375	32.251	29.479	-0.00880	0.0040000	-0.058000

-5280.518	31.375	32.208	29.332	-0.00840	0.0050000	-0.058000
-5276.510	31.375	32.169	29.192	-0.00810	0.0060000	-0.057000
-5272.502	31.125	32.131	29.044	-0.00780	0.0070000	-0.056000
-5268.494	31.125	32.097	28.907	-0.00760	0.0090000	-0.056000
-5264.486	31.125	32.063	28.779	-0.00750	0.0100000	-0.055000
-5260.478	31.125	32.031	28.657	-0.00740	0.012000	-0.055000
-5256.469	31.125	32.001	28.530	-0.00750	0.013000	-0.054000
-5252.461	30.875	31.972	28.408	-0.00750	0.015000	-0.053000
-5248.453	30.875	31.944	28.292	-0.00760	0.017000	-0.052000
-5244.445	30.875	31.918	28.180	-0.00780	0.018000	-0.051000
-5240.437	30.875	31.896	28.081	-0.00790	0.020000	-0.050000
-5236.429	30.875	31.872	27.981	-0.00800	0.022000	-0.049000
-5232.421	30.875	31.855	27.892	-0.00820	0.024000	-0.048000
-5228.413	30.625	31.838	27.808	-0.00830	0.025000	-0.047000
-5224.405	30.625	31.821	27.724	-0.00830	0.027000	-0.046000
-5220.396	30.625	31.807	27.660	-0.00840	0.029000	-0.045000
-5216.388	30.625	31.797	27.598	-0.00850	0.031000	-0.044000
-5212.380	30.625	31.789	27.545	-0.00850	0.032000	-0.042000
-5208.372	30.625	31.782	27.495	-0.00850	0.034000	-0.041000
-5204.364	30.375	31.779	27.451	-0.00860	0.036000	-0.039000
-5200.356	30.375	31.781	27.417	-0.00860	0.038000	-0.037000
-5196.348	30.375	31.788	27.397	-0.00850	0.040000	-0.036000
-5192.340	30.375	31.797	27.377	-0.00850	0.042000	-0.035000
-5188.331	30.375	31.813	27.367	-0.00850	0.044000	-0.033000
-5184.323	30.375	31.835	27.357	-0.00840	0.046000	-0.033000
-5180.315	30.375	31.870	27.360	-0.00840	0.048000	-0.032000
-5176.307	30.375	31.909	27.365	-0.00830	0.050000	-0.031000
-5172.299	30.125	31.953	27.364	-0.00820	0.052000	-0.030000
-5168.291	30.125	32.010	27.364	-0.00810	0.054000	-0.030000
-5164.283	30.125	32.072	27.378	-0.00790	0.057000	-0.029000
-5160.275	30.125	32.140	27.387	-0.00780	0.059000	-0.029000
-5156.267	30.125	32.215	27.398	-0.00770	0.061000	-0.028000
-5152.258	30.125	32.295	27.409	-0.00750	0.064000	-0.028000
-5148.250	30.125	32.387	27.420	-0.00730	0.066000	-0.028000
-5144.242	30.125	32.491	27.429	-0.00710	0.069000	-0.028000
-5140.234	30.125	32.605	27.449	-0.00690	0.072000	-0.028000
-5136.226	30.125	32.731	27.464	-0.00670	0.076000	-0.027000
-5132.218	30.125	32.871	27.472	-0.00650	0.079000	-0.028000
-5128.210	30.125	33.037	27.472	-0.00620	0.083000	-0.028000
-5124.202	30.125	33.207	27.480	-0.00600	0.087000	-0.028000
-5120.193	30.125	33.389	27.481	-0.00570	0.090000	-0.029000
-5116.185	29.875	33.587	27.477	-0.00540	0.096000	-0.029000
-5112.177	29.875	33.785	27.467	-0.00510	0.10100	-0.030000
-5108.169	29.875	34.029	27.462	-0.00480	0.10600	-0.031000
-5104.161	29.875	34.298	27.450	-0.00440	0.11200	-0.032000
-5100.153	29.875	34.587	27.444	-0.00410	0.11900	-0.033000
-5096.145	29.875	34.883	27.420	-0.00370	0.12700	-0.035000
-5092.137	29.875	35.229	27.403	-0.00340	0.13400	-0.037000
-5088.129	29.875	35.604	27.363	-0.00300	0.14200	-0.039000
-5084.120	29.875	36.019	27.334	-0.00260	0.15100	-0.041000
-5080.112	29.875	36.437	27.294	-0.00220	0.16200	-0.045000
-5076.104	29.875	36.954	27.254	-0.00170	0.17500	-0.048000
-5072.096	29.875	37.454	27.213	-0.00130	0.19100	-0.051000
-5068.088	29.875	38.007	27.168	-0.000800	0.20800	-0.055000

-5064.080	29.875	38.673	27.119	-0.000400	0.22500	-0.059000
-5060.072	29.875	39.334	27.068	1.00e-04	0.24600	-0.062000
-5056.064	29.875	40.140	27.014	0.000600	0.27200	-0.067000
-5052.056	29.875	40.933	26.954	0.00110	0.29800	-0.072000
-5048.047	29.875	41.869	26.888	0.00160	0.32800	-0.078000
-5044.039	29.875	42.850	26.811	0.00220	0.35900	-0.084000
-5040.031	29.875	43.905	26.725	0.00270	0.39700	-0.093000
-5036.023	29.875	45.028	26.629	0.00330	0.43200	-0.10000
-5032.015	29.875	46.222	26.519	0.00390	0.48100	-0.11000
-5028.007	29.875	47.451	26.405	0.00450	0.54000	-0.12100
-5023.999	29.875	48.855	26.266	0.00510	0.60900	-0.13400
-5019.991	29.875	50.363	26.115	0.00570	0.69800	-0.15000
-5015.982	29.875	51.926	25.912	0.00630	0.80600	-0.17100
-5011.974	29.875	53.727	25.689	0.00700	0.95800	-0.20100
-5007.966	29.875	55.845	25.379	0.00760	1.1950	-0.23500
-5003.958	29.875	58.609	24.940	0.00830	1.5900	-0.29100
-4999.950	29.875	63.915	23.933	0.00900	2.4660	-0.38100

Figure S4c,d

Date	Median (muT)	Cred_Int Upper	Cred_Int Lower	dFdt (muT/yr)	dFdt Upper	dFdt Lower
-7000.000	55.125	68.591	22.216	0.0158	1.9640	-0.98000
-6995.992	55.125	67.931	24.059	0.0151	1.4130	-0.76900
-6991.984	55.125	67.596	25.112	0.0145	1.1230	-0.65200
-6987.976	55.125	67.341	25.904	0.0138	0.95600	-0.56900
-6983.968	55.125	67.121	26.540	0.0131	0.83300	-0.51300
-6979.959	55.375	66.937	27.084	0.0125	0.73600	-0.46500
-6975.951	55.375	66.782	27.621	0.0118	0.67300	-0.43000
-6971.943	55.375	66.625	28.076	0.0112	0.62100	-0.39800
-6967.935	55.375	66.477	28.443	0.0106	0.57500	-0.37300
-6963.927	55.375	66.330	28.794	0.00990	0.54100	-0.35300
-6959.919	55.375	66.200	29.100	0.00930	0.50900	-0.33600
-6955.911	55.625	66.061	29.336	0.00870	0.48500	-0.32000
-6951.903	55.625	65.941	29.606	0.00800	0.46100	-0.30700
-6947.894	55.625	65.815	29.858	0.00740	0.44100	-0.29500
-6943.886	55.625	65.703	30.083	0.00680	0.42400	-0.28400
-6939.878	55.625	65.580	30.293	0.00620	0.40700	-0.27400
-6935.870	55.625	65.477	30.470	0.00560	0.39500	-0.26500
-6931.862	55.625	65.347	30.713	0.00500	0.38000	-0.25600
-6927.854	55.625	65.237	30.884	0.00440	0.36900	-0.24700
-6923.846	55.625	65.136	31.117	0.00390	0.35800	-0.24000
-6919.838	55.875	65.037	31.312	0.00330	0.34700	-0.23500
-6915.830	55.875	64.924	31.478	0.00270	0.34000	-0.22700
-6911.821	55.875	64.811	31.663	0.00220	0.33200	-0.22200
-6907.813	55.875	64.696	31.828	0.00160	0.32400	-0.21500
-6903.805	55.875	64.586	32.031	0.00100	0.31700	-0.20900
-6899.797	55.875	64.477	32.201	0.000500	0.31100	-0.20400
-6895.789	55.875	64.379	32.401	-1.00e-04	0.30600	-0.19800
-6891.781	55.875	64.277	32.599	-0.000600	0.30200	-0.19200
-6887.773	55.875	64.175	32.817	-0.00110	0.29700	-0.18900
-6883.765	55.875	64.077	33.075	-0.00170	0.29400	-0.18500
-6879.757	55.875	63.971	33.346	-0.00220	0.28800	-0.18200
-6875.748	55.875	63.868	33.513	-0.00270	0.28300	-0.17700
-6871.740	55.875	63.775	33.814	-0.00320	0.28000	-0.17200
-6867.732	55.875	63.693	34.050	-0.00370	0.27600	-0.17000
-6863.724	55.625	63.606	34.291	-0.00420	0.27300	-0.16600
-6859.716	55.625	63.515	34.512	-0.00470	0.27000	-0.16300
-6855.708	55.625	63.417	34.767	-0.00520	0.26600	-0.15900
-6851.700	55.625	63.331	35.045	-0.00570	0.26400	-0.15500
-6847.692	55.625	63.251	35.310	-0.00620	0.26000	-0.15200
-6843.683	55.625	63.175	35.581	-0.00660	0.25400	-0.15000
-6839.675	55.625	63.072	35.852	-0.00710	0.25000	-0.14600
-6835.667	55.625	62.955	36.156	-0.00760	0.24800	-0.14200
-6831.659	55.625	62.861	36.433	-0.00800	0.24400	-0.13900
-6827.651	55.375	62.774	36.678	-0.00850	0.24100	-0.13600
-6823.643	55.375	62.673	37.001	-0.00890	0.24000	-0.13200
-6819.635	55.375	62.560	37.324	-0.00940	0.23500	-0.12900
-6815.627	55.375	62.462	37.761	-0.00980	0.23200	-0.12600
-6811.619	55.375	62.370	38.205	-0.0103	0.22900	-0.12300
-6807.610	55.375	62.247	38.606	-0.0107	0.22700	-0.12000
-6803.602	55.375	62.146	39.073	-0.0111	0.22300	-0.11800
-6799.594	55.125	62.014	39.526	-0.0115	0.21900	-0.11500

-6795.586	55.125	61.894	39.874	-0.0119	0.21500	-0.11300
-6791.578	55.125	61.777	40.306	-0.0123	0.21200	-0.11100
-6787.570	55.125	61.646	40.742	-0.0127	0.20700	-0.10900
-6783.562	55.125	61.495	41.235	-0.0131	0.20100	-0.10700
-6779.554	54.875	61.365	41.762	-0.0135	0.19800	-0.10500
-6775.545	54.875	61.226	42.230	-0.0139	0.19500	-0.10300
-6771.537	54.875	61.079	42.681	-0.0143	0.19000	-0.10200
-6767.529	54.875	60.941	43.111	-0.0147	0.18500	-0.10100
-6763.521	54.625	60.801	43.709	-0.0150	0.18000	-0.10000
-6759.513	54.625	60.636	44.190	-0.0154	0.17500	-0.09900
-6755.505	54.625	60.494	44.704	-0.0158	0.16800	-0.09900
-6751.497	54.625	60.321	45.203	-0.0161	0.16200	-0.09800
-6747.489	54.375	60.154	45.681	-0.0165	0.15600	-0.09700
-6743.481	54.375	59.981	46.144	-0.0168	0.15100	-0.09600
-6739.472	54.375	59.823	46.568	-0.0172	0.14500	-0.09400
-6735.464	54.375	59.633	47.065	-0.0175	0.14000	-0.09400
-6731.456	54.125	59.451	47.504	-0.0178	0.13400	-0.09400
-6727.448	54.125	59.282	47.927	-0.0181	0.12700	-0.09400
-6723.440	54.125	59.088	48.277	-0.0185	0.12100	-0.09400
-6719.432	53.875	58.912	48.514	-0.0188	0.11500	-0.09400
-6715.424	53.875	58.721	48.707	-0.0191	0.10900	-0.09400
-6711.416	53.875	58.562	48.841	-0.0194	0.10400	-0.09400
-6707.408	53.875	58.416	48.967	-0.0197	0.09900	-0.09300
-6703.399	53.625	58.261	49.054	-0.0200	0.09600	-0.09300
-6699.391	53.625	58.123	49.082	-0.0202	0.09100	-0.09300
-6695.383	53.625	57.996	49.099	-0.0205	0.08700	-0.09300
-6691.375	53.375	57.879	49.085	-0.0208	0.08200	-0.09300
-6687.367	53.375	57.749	49.054	-0.0211	0.07800	-0.09300
-6683.359	53.375	57.633	48.995	-0.0213	0.07500	-0.09300
-6679.351	53.125	57.529	48.939	-0.0216	0.07200	-0.09300
-6675.343	53.125	57.433	48.883	-0.0218	0.07000	-0.09300
-6671.334	52.875	57.351	48.799	-0.0221	0.06700	-0.09300
-6667.326	52.875	57.272	48.707	-0.0223	0.06500	-0.09300
-6663.318	52.875	57.198	48.605	-0.0226	0.06200	-0.09300
-6659.310	52.625	57.126	48.505	-0.0228	0.06100	-0.09300
-6655.302	52.625	57.089	48.384	-0.0230	0.06000	-0.09300
-6651.294	52.625	57.031	48.264	-0.0232	0.05900	-0.09300
-6647.286	52.375	57.002	48.139	-0.0235	0.05700	-0.09200
-6643.278	52.375	56.972	47.997	-0.0237	0.05600	-0.09300
-6639.270	52.375	56.950	47.846	-0.0239	0.05600	-0.09300
-6635.261	52.125	56.936	47.675	-0.0241	0.05500	-0.09200
-6631.253	52.125	56.932	47.507	-0.0243	0.05500	-0.09300
-6627.245	51.875	56.934	47.332	-0.0245	0.05500	-0.09200
-6623.237	51.875	56.941	47.141	-0.0247	0.05500	-0.09200
-6619.229	51.875	56.949	46.939	-0.0248	0.05500	-0.09300
-6615.221	51.625	56.970	46.747	-0.0250	0.05500	-0.09300
-6611.213	51.625	56.995	46.536	-0.0252	0.05600	-0.09400
-6607.205	51.375	57.011	46.319	-0.0253	0.05700	-0.09400
-6603.196	51.375	57.018	46.133	-0.0255	0.05800	-0.09400
-6599.188	51.375	57.044	45.930	-0.0256	0.05900	-0.09500
-6595.180	51.125	57.058	45.739	-0.0258	0.06000	-0.09600
-6591.172	51.125	57.073	45.541	-0.0259	0.06100	-0.09600
-6587.164	50.875	57.108	45.332	-0.0261	0.06200	-0.09700
-6583.156	50.875	57.132	45.104	-0.0262	0.06400	-0.09800

-6579.148	50.875	57.122	44.907	-0.0263	0.065000	-0.099000
-6575.140	50.625	57.130	44.695	-0.0265	0.066000	-0.10000
-6571.132	50.625	57.164	44.506	-0.0266	0.067000	-0.10100
-6567.123	50.375	57.186	44.288	-0.0267	0.068000	-0.10400
-6563.115	50.375	57.217	44.055	-0.0268	0.070000	-0.10500
-6559.107	50.125	57.210	43.860	-0.0269	0.071000	-0.10600
-6555.099	50.125	57.210	43.625	-0.0270	0.073000	-0.10800
-6551.091	50.125	57.226	43.394	-0.0271	0.074000	-0.10800
-6547.083	49.875	57.219	43.154	-0.0272	0.075000	-0.11000
-6543.075	49.875	57.234	42.909	-0.0272	0.077000	-0.11200
-6539.067	49.625	57.220	42.696	-0.0273	0.078000	-0.11400
-6535.059	49.625	57.224	42.450	-0.0274	0.079000	-0.11600
-6531.050	49.375	57.227	42.224	-0.0274	0.081000	-0.11800
-6527.042	49.375	57.231	41.979	-0.0275	0.082000	-0.12100
-6523.034	49.375	57.252	41.783	-0.0275	0.083000	-0.12300
-6519.026	49.125	57.215	41.570	-0.0276	0.084000	-0.12500
-6515.018	49.125	57.215	41.366	-0.0276	0.086000	-0.12600
-6511.010	48.875	57.195	41.188	-0.0277	0.087000	-0.12900
-6507.002	48.875	57.186	41.038	-0.0277	0.089000	-0.13100
-6502.994	48.625	57.147	40.873	-0.0277	0.090000	-0.13300
-6498.985	48.625	57.143	40.732	-0.0278	0.090000	-0.13500
-6494.977	48.375	57.131	40.609	-0.0278	0.091000	-0.13800
-6490.969	48.375	57.081	40.476	-0.0278	0.093000	-0.14000
-6486.961	48.375	57.057	40.359	-0.0279	0.094000	-0.14200
-6482.953	48.125	57.019	40.260	-0.0280	0.094000	-0.14500
-6478.945	48.125	57.009	40.157	-0.0280	0.094000	-0.14800
-6474.937	47.875	56.980	40.058	-0.0282	0.094000	-0.15000
-6470.929	47.875	56.935	39.960	-0.0283	0.094000	-0.15200
-6466.921	47.625	56.876	39.875	-0.0284	0.095000	-0.15300
-6462.912	47.625	56.798	39.782	-0.0286	0.093000	-0.15700
-6458.904	47.375	56.739	39.698	-0.0287	0.093000	-0.15800
-6454.896	47.375	56.691	39.599	-0.0289	0.092000	-0.16000
-6450.888	47.125	56.618	39.501	-0.0291	0.092000	-0.16200
-6446.880	47.125	56.517	39.398	-0.0294	0.091000	-0.16500
-6442.872	46.875	56.450	39.313	-0.0296	0.090000	-0.16800
-6438.864	46.875	56.371	39.202	-0.0299	0.089000	-0.17000
-6434.856	46.625	56.272	39.130	-0.0301	0.090000	-0.17100
-6430.847	46.625	56.207	39.066	-0.0304	0.089000	-0.17500
-6426.839	46.375	56.108	38.987	-0.0307	0.088000	-0.17600
-6422.831	46.375	56.024	38.900	-0.0310	0.087000	-0.17700
-6418.823	46.125	55.907	38.830	-0.0314	0.086000	-0.18100
-6414.815	46.125	55.786	38.774	-0.0317	0.085000	-0.18200
-6410.807	45.875	55.626	38.688	-0.0321	0.084000	-0.18500
-6406.799	45.875	55.486	38.616	-0.0325	0.085000	-0.18600
-6402.791	45.625	55.353	38.534	-0.0329	0.085000	-0.18800
-6398.783	45.625	55.181	38.473	-0.0333	0.083000	-0.18900
-6394.774	45.375	55.035	38.382	-0.0337	0.081000	-0.19300
-6390.766	45.375	54.855	38.346	-0.0342	0.081000	-0.19400
-6386.758	45.125	54.666	38.300	-0.0346	0.080000	-0.19400
-6382.750	45.125	54.475	38.218	-0.0351	0.079000	-0.19600
-6378.742	44.875	54.288	38.159	-0.0356	0.078000	-0.19800
-6374.734	44.875	54.082	38.112	-0.0361	0.076000	-0.20000
-6370.726	44.625	53.865	38.075	-0.0366	0.076000	-0.19900
-6366.718	44.625	53.652	38.017	-0.0371	0.075000	-0.20000

-6362.710	44.375	53.413	38.045	-0.0374	0.074000	-0.20000
-6358.701	44.125	53.231	38.042	-0.0375	0.073000	-0.20100
-6354.693	44.125	52.994	38.044	-0.0375	0.070000	-0.20200
-6350.685	43.875	52.764	38.056	-0.0373	0.070000	-0.20300
-6346.677	43.875	52.497	38.076	-0.0370	0.069000	-0.20200
-6342.669	43.625	52.226	38.089	-0.0365	0.067000	-0.20200
-6338.661	43.375	51.978	38.127	-0.0358	0.065000	-0.20300
-6334.653	43.375	51.694	38.160	-0.0350	0.062000	-0.20100
-6330.645	43.125	51.397	38.223	-0.0340	0.059000	-0.19900
-6326.636	43.125	51.096	38.264	-0.0329	0.057000	-0.19600
-6322.628	42.875	50.827	38.326	-0.0316	0.054000	-0.19500
-6318.620	42.875	50.512	38.391	-0.0302	0.053000	-0.19000
-6314.612	42.625	50.205	38.454	-0.0286	0.051000	-0.18800
-6310.604	42.625	49.865	38.540	-0.0268	0.049000	-0.18200
-6306.596	42.375	49.540	38.632	-0.0249	0.047000	-0.17700
-6302.588	42.375	49.214	38.710	-0.0230	0.045000	-0.16900
-6298.580	42.125	48.879	38.782	-0.0211	0.044000	-0.16200
-6294.572	42.125	48.548	38.864	-0.0193	0.041000	-0.15300
-6290.563	42.125	48.230	38.930	-0.0176	0.038000	-0.14500
-6286.555	41.875	47.904	39.010	-0.0160	0.036000	-0.13700
-6282.547	41.875	47.568	39.066	-0.0145	0.033000	-0.13000
-6278.539	41.875	47.243	39.116	-0.0131	0.031000	-0.12100
-6274.531	41.875	46.976	39.163	-0.0117	0.030000	-0.11400
-6270.523	41.875	46.693	39.207	-0.0105	0.028000	-0.10700
-6266.515	41.625	46.445	39.255	-0.00930	0.027000	-0.10100
-6262.507	41.625	46.217	39.296	-0.00830	0.026000	-0.095000
-6258.498	41.625	46.018	39.341	-0.00730	0.025000	-0.090000
-6254.490	41.625	45.820	39.383	-0.00640	0.024000	-0.084000
-6250.482	41.625	45.622	39.414	-0.00560	0.022000	-0.079000
-6246.474	41.625	45.451	39.447	-0.00490	0.022000	-0.074000
-6242.466	41.625	45.296	39.482	-0.00420	0.021000	-0.070000
-6238.458	41.625	45.138	39.510	-0.00360	0.020000	-0.065000
-6234.450	41.625	44.991	39.541	-0.00300	0.019000	-0.061000
-6230.442	41.625	44.847	39.575	-0.00240	0.019000	-0.057000
-6226.434	41.625	44.720	39.608	-0.00180	0.018000	-0.054000
-6222.425	41.625	44.582	39.635	-0.00130	0.018000	-0.051000
-6218.417	41.625	44.448	39.662	-0.000800	0.018000	-0.047000
-6214.409	41.625	44.336	39.691	-0.000300	0.017000	-0.045000
-6210.401	41.625	44.224	39.719	1.00e-04	0.017000	-0.042000
-6206.393	41.625	44.121	39.747	0.000600	0.017000	-0.040000
-6202.385	41.625	44.022	39.778	0.00100	0.016000	-0.038000
-6198.377	41.625	43.933	39.804	0.00140	0.016000	-0.036000
-6194.369	41.625	43.850	39.835	0.00170	0.016000	-0.034000
-6190.361	41.625	43.765	39.870	0.00210	0.016000	-0.033000
-6186.352	41.625	43.679	39.900	0.00240	0.016000	-0.031000
-6182.344	41.625	43.600	39.931	0.00270	0.015000	-0.030000
-6178.336	41.625	43.528	39.966	0.00290	0.015000	-0.029000
-6174.328	41.625	43.462	39.997	0.00320	0.015000	-0.028000
-6170.320	41.625	43.396	40.029	0.00340	0.015000	-0.027000
-6166.312	41.625	43.345	40.062	0.00360	0.015000	-0.026000
-6162.304	41.625	43.301	40.094	0.00370	0.015000	-0.026000
-6158.296	41.625	43.250	40.123	0.00390	0.014000	-0.025000
-6154.287	41.625	43.210	40.154	0.00400	0.014000	-0.024000
-6150.279	41.625	43.175	40.187	0.00410	0.014000	-0.023000

-6146.271	41.625	43.140	40.222	0.00410	0.014000	-0.023000
-6142.263	41.625	43.112	40.254	0.00420	0.014000	-0.022000
-6138.255	41.625	43.089	40.289	0.00420	0.014000	-0.021000
-6134.247	41.875	43.073	40.320	0.00420	0.014000	-0.021000
-6130.239	41.875	43.053	40.352	0.00410	0.014000	-0.020000
-6126.231	41.875	43.042	40.387	0.00410	0.014000	-0.020000
-6122.223	41.875	43.029	40.419	0.00400	0.014000	-0.019000
-6118.214	41.875	43.020	40.449	0.00390	0.013000	-0.018000
-6114.206	41.875	43.013	40.483	0.00380	0.013000	-0.017000
-6110.198	41.875	43.008	40.517	0.00370	0.013000	-0.017000
-6106.190	41.875	43.004	40.552	0.00370	0.013000	-0.016000
-6102.182	41.875	42.998	40.587	0.00360	0.013000	-0.015000
-6098.174	41.875	42.994	40.621	0.00350	0.013000	-0.014000
-6094.166	41.875	42.989	40.654	0.00350	0.013000	-0.013000
-6090.158	41.875	42.987	40.687	0.00340	0.013000	-0.012000
-6086.149	41.875	42.985	40.719	0.00340	0.013000	-0.010000
-6082.141	41.875	42.985	40.752	0.00330	0.013000	-0.009000
-6078.133	41.875	42.985	40.787	0.00330	0.013000	-0.008000
-6074.125	41.875	42.988	40.819	0.00330	0.013000	-0.007000
-6070.117	42.125	42.991	40.854	0.00330	0.013000	-0.007000
-6066.109	42.125	42.994	40.886	0.00330	0.013000	-0.006000
-6062.101	42.125	42.999	40.919	0.00330	0.013000	-0.006000
-6058.093	42.125	43.002	40.951	0.00330	0.013000	-0.005000
-6054.085	42.125	43.009	40.982	0.00330	0.013000	-0.005000
-6050.076	42.125	43.014	41.016	0.00330	0.013000	-0.005000
-6046.068	42.125	43.022	41.049	0.00330	0.013000	-0.004000
-6042.060	42.125	43.030	41.081	0.00340	0.013000	-0.004000
-6038.052	42.125	43.037	41.112	0.00340	0.013000	-0.004000
-6034.044	42.125	43.045	41.144	0.00340	0.013000	-0.004000
-6030.036	42.125	43.052	41.175	0.00350	0.013000	-0.004000
-6026.028	42.125	43.061	41.206	0.00360	0.013000	-0.004000
-6022.020	42.125	43.071	41.236	0.00360	0.013000	-0.004000
-6018.012	42.125	43.083	41.267	0.00370	0.013000	-0.003000
-6014.003	42.125	43.095	41.296	0.00380	0.012000	-0.003000
-6009.995	42.375	43.108	41.323	0.00390	0.012000	-0.003000
-6005.987	42.375	43.123	41.351	0.00390	0.012000	-0.003000
-6001.979	42.375	43.135	41.379	0.00400	0.012000	-0.003000
-5997.971	42.375	43.150	41.407	0.00410	0.012000	-0.003000
-5993.963	42.375	43.167	41.435	0.00420	0.012000	-0.003000
-5989.955	42.375	43.183	41.462	0.00430	0.012000	-0.003000
-5985.947	42.375	43.202	41.489	0.00440	0.012000	-0.003000
-5981.938	42.375	43.219	41.516	0.00450	0.012000	-0.003000
-5977.930	42.375	43.238	41.541	0.00460	0.012000	-0.003000
-5973.922	42.375	43.258	41.565	0.00470	0.012000	-0.003000
-5969.914	42.375	43.276	41.589	0.00480	0.012000	-0.003000
-5965.906	42.375	43.298	41.611	0.00480	0.012000	-0.003000
-5961.898	42.375	43.319	41.634	0.00490	0.013000	-0.003000
-5957.890	42.375	43.344	41.655	0.00490	0.013000	-0.003000
-5953.882	42.375	43.373	41.676	0.00500	0.013000	-0.002000
-5949.874	42.625	43.399	41.697	0.00500	0.013000	-0.002000
-5945.865	42.625	43.429	41.714	0.00510	0.013000	-0.002000
-5941.857	42.625	43.462	41.732	0.00510	0.013000	-0.002000
-5937.849	42.625	43.491	41.749	0.00510	0.013000	-0.002000
-5933.841	42.625	43.526	41.767	0.00520	0.013000	-0.002000

-5929.833	42.625	43.563	41.782	0.00520	0.013000	-0.0020000
-5925.825	42.625	43.599	41.799	0.00520	0.013000	-0.0020000
-5921.817	42.625	43.633	41.815	0.00520	0.013000	-0.0020000
-5917.809	42.625	43.674	41.830	0.00520	0.013000	-0.0020000
-5913.801	42.625	43.714	41.847	0.00520	0.013000	-0.0020000
-5909.792	42.625	43.755	41.862	0.00520	0.013000	-0.0020000
-5905.784	42.625	43.795	41.874	0.00520	0.013000	-0.0020000
-5901.776	42.625	43.838	41.886	0.00520	0.013000	-0.0020000
-5897.768	42.625	43.882	41.898	0.00510	0.013000	-0.0020000
-5893.760	42.875	43.928	41.910	0.00510	0.013000	-0.0020000
-5889.752	42.875	43.971	41.918	0.00510	0.013000	-0.0020000
-5885.744	42.875	44.017	41.927	0.00500	0.014000	-0.0020000
-5881.736	42.875	44.064	41.941	0.00500	0.014000	-0.0020000
-5877.727	42.875	44.110	41.954	0.00490	0.014000	-0.0020000
-5873.719	42.875	44.156	41.967	0.00490	0.014000	-0.0020000
-5869.711	42.875	44.204	41.976	0.00480	0.014000	-0.0020000
-5865.703	42.875	44.252	41.988	0.00480	0.014000	-0.0020000
-5861.695	42.875	44.295	42.007	0.00470	0.014000	-0.0020000
-5857.687	42.875	44.346	42.023	0.00460	0.014000	-0.0020000
-5853.679	42.875	44.393	42.044	0.00450	0.015000	-0.0020000
-5849.671	42.875	44.443	42.064	0.00440	0.015000	-0.0020000
-5845.663	42.875	44.490	42.090	0.00430	0.015000	-0.0030000
-5841.654	42.875	44.538	42.123	0.00430	0.015000	-0.0030000
-5837.646	42.875	44.588	42.152	0.00410	0.015000	-0.0030000
-5833.638	43.125	44.637	42.183	0.00400	0.015000	-0.0030000
-5829.630	43.125	44.688	42.219	0.00390	0.016000	-0.0030000
-5825.622	43.125	44.735	42.255	0.00380	0.016000	-0.0040000
-5821.614	43.125	44.775	42.295	0.00370	0.016000	-0.0040000
-5817.606	43.125	44.816	42.337	0.00350	0.016000	-0.0050000
-5813.598	43.125	44.853	42.377	0.00340	0.016000	-0.0050000
-5809.589	43.125	44.895	42.418	0.00330	0.016000	-0.0060000
-5805.581	43.125	44.933	42.458	0.00310	0.016000	-0.0070000
-5801.573	43.125	44.961	42.497	0.00300	0.016000	-0.0080000
-5797.565	43.125	44.977	42.532	0.00280	0.016000	-0.0090000
-5793.557	43.125	44.996	42.565	0.00260	0.016000	-0.0100000
-5789.549	43.125	45.004	42.597	0.00250	0.016000	-0.012000
-5785.541	43.125	45.006	42.625	0.00230	0.016000	-0.013000
-5781.533	43.125	45.002	42.651	0.00210	0.016000	-0.015000
-5777.525	43.125	44.994	42.678	0.00190	0.015000	-0.016000
-5773.516	43.375	44.975	42.701	0.00170	0.015000	-0.018000
-5769.508	43.375	44.941	42.724	0.00160	0.015000	-0.020000
-5765.500	43.375	44.900	42.746	0.00140	0.015000	-0.022000
-5761.492	43.375	44.872	42.767	0.00110	0.015000	-0.023000
-5757.484	43.375	44.842	42.786	0.000900	0.015000	-0.025000
-5753.476	43.375	44.804	42.805	0.000700	0.015000	-0.028000
-5749.468	43.375	44.756	42.822	0.000500	0.015000	-0.030000
-5745.460	43.375	44.722	42.835	0.000300	0.015000	-0.032000
-5741.452	43.375	44.674	42.845	0.000200	0.014000	-0.034000
-5737.443	43.375	44.639	42.850	0.000200	0.014000	-0.037000
-5733.435	43.375	44.616	42.851	0.000400	0.014000	-0.041000
-5729.427	43.375	44.578	42.845	0.000700	0.014000	-0.044000
-5725.419	43.375	44.558	42.828	0.00120	0.014000	-0.048000
-5721.411	43.375	44.543	42.794	0.00190	0.014000	-0.052000
-5717.403	43.375	44.525	42.729	0.00270	0.014000	-0.057000

-5713.395	43.375	44.515	42.626	0.00370	0.014000	-0.061000
-5709.387	43.375	44.505	42.473	0.00490	0.013000	-0.065000
-5705.378	43.375	44.501	42.285	0.00620	0.013000	-0.070000
-5701.370	43.625	44.502	42.078	0.00770	0.013000	-0.076000
-5697.362	43.625	44.506	41.860	0.00940	0.013000	-0.082000
-5693.354	43.625	44.518	41.609	0.0112	0.013000	-0.089000
-5689.346	43.625	44.525	41.338	0.0132	0.013000	-0.096000
-5685.338	43.625	44.531	41.050	0.0154	0.012000	-0.10400
-5681.330	43.625	44.533	40.740	0.0176	0.012000	-0.11300
-5677.322	43.625	44.540	40.417	0.0192	0.012000	-0.12300
-5673.314	43.625	44.547	40.052	0.0194	0.011000	-0.13400
-5669.305	43.625	44.553	39.658	0.0182	0.011000	-0.14600
-5665.297	43.625	44.558	39.255	0.0156	0.011000	-0.15900
-5661.289	43.625	44.565	38.829	0.0116	0.011000	-0.17200
-5657.281	43.625	44.573	38.373	0.00610	0.011000	-0.18800
-5653.273	43.625	44.578	37.871	-0.000900	0.0100000	-0.20700
-5649.265	43.625	44.588	37.346	-0.00920	0.0100000	-0.22800
-5645.257	43.625	44.597	36.779	-0.0190	0.0100000	-0.25100
-5641.249	43.375	44.599	36.147	-0.0303	0.0100000	-0.27900
-5637.240	43.375	44.602	35.420	-0.0429	0.0100000	-0.31100
-5633.232	43.375	44.599	34.603	-0.0571	0.0100000	-0.34600
-5629.224	43.375	44.601	33.660	-0.0726	0.011000	-0.38500
-5625.216	43.375	44.602	32.649	-0.0896	0.012000	-0.43300
-5621.208	43.125	44.590	31.615	-0.108	0.015000	-0.48200
-5617.200	42.625	44.583	30.550	-0.124	0.026000	-0.53200
-5613.192	42.125	44.568	29.555	-0.138	0.088000	-0.58200
-5609.184	41.625	44.549	28.684	-0.148	0.15700	-0.63500
-5605.176	40.875	44.530	28.051	-0.154	0.21500	-0.69300
-5601.167	39.875	44.512	27.666	-0.156	0.28300	-0.74300
-5597.159	39.125	44.494	27.317	-0.155	0.36600	-0.77400
-5593.151	38.375	44.475	26.985	-0.150	0.47200	-0.78600
-5589.143	37.625	44.469	26.682	-0.142	0.59800	-0.79100
-5585.135	37.125	44.514	26.345	-0.129	0.72600	-0.77800
-5581.127	36.625	44.616	26.086	-0.112	0.84500	-0.76500
-5577.119	36.125	44.949	25.960	-0.0916	0.95600	-0.75200
-5573.111	35.875	45.645	25.818	-0.0668	1.0420	-0.73700
-5569.103	35.875	46.253	25.723	-0.0378	1.0970	-0.72400
-5565.094	35.875	46.737	25.665	-0.00470	1.1570	-0.69900
-5561.086	35.875	47.236	25.625	0.0325	1.1960	-0.68100
-5557.078	36.125	47.584	25.550	0.0726	1.2460	-0.66300
-5553.070	36.375	47.862	25.562	0.110	1.2860	-0.63500
-5549.062	36.625	48.177	25.624	0.139	1.3020	-0.60200
-5545.054	37.125	48.488	25.659	0.159	1.3050	-0.57000
-5541.046	37.625	48.737	25.784	0.170	1.3090	-0.54100
-5537.038	38.375	48.906	25.873	0.171	1.2790	-0.51000
-5533.029	39.375	49.094	25.996	0.163	1.2480	-0.47700
-5529.021	40.375	49.176	26.162	0.146	1.2330	-0.44200
-5525.013	41.125	49.244	26.369	0.120	1.2200	-0.41800
-5521.005	41.625	49.315	26.553	0.0915	1.1670	-0.38900
-5516.997	41.875	49.351	26.794	0.0654	1.1220	-0.36900
-5512.989	42.125	49.311	27.026	0.0430	1.1010	-0.34900
-5508.981	42.125	49.301	27.290	0.0242	1.0470	-0.33200
-5504.973	42.125	49.212	27.669	0.00900	0.99200	-0.31700
-5500.965	42.125	49.130	28.020	-0.00250	0.92100	-0.30200

-5496.956	42.125	49.040	28.374	-0.0107	0.86100	-0.29200
-5492.948	42.125	48.889	28.771	-0.0170	0.80600	-0.28000
-5488.940	42.125	48.757	29.192	-0.0227	0.74500	-0.27000
-5484.932	41.875	48.611	29.668	-0.0280	0.69400	-0.26300
-5480.924	41.625	48.449	30.220	-0.0331	0.63400	-0.25700
-5476.916	41.625	48.247	30.846	-0.0379	0.58200	-0.25300
-5472.908	41.375	48.049	31.485	-0.0423	0.52900	-0.24800
-5468.900	41.125	47.811	32.080	-0.0465	0.47500	-0.24300
-5464.891	40.875	47.539	32.521	-0.0503	0.43600	-0.23700
-5460.883	40.625	47.271	32.841	-0.0538	0.39800	-0.23400
-5456.875	40.375	46.990	33.072	-0.0571	0.36000	-0.23000
-5452.867	40.125	46.704	33.164	-0.0600	0.32700	-0.22800
-5448.859	39.875	46.429	33.219	-0.0626	0.29600	-0.22300
-5444.851	39.625	46.173	33.226	-0.0649	0.27000	-0.22000
-5440.843	39.375	45.932	33.194	-0.0669	0.24000	-0.21700
-5436.835	38.875	45.669	33.135	-0.0686	0.21400	-0.21400
-5432.827	38.625	45.391	33.082	-0.0700	0.18900	-0.21100
-5428.818	38.375	45.096	33.018	-0.0711	0.15900	-0.20700
-5424.810	38.125	44.807	32.944	-0.0719	0.13300	-0.20400
-5420.802	37.875	44.542	32.878	-0.0724	0.098000	-0.20000
-5416.794	37.625	44.267	32.802	-0.0726	0.030000	-0.19700
-5412.786	37.125	44.000	32.730	-0.0724	0.0060000	-0.19200
-5408.778	36.875	43.715	32.664	-0.0720	-0.0020000	-0.18800
-5404.770	36.625	43.432	32.594	-0.0713	-0.0030000	-0.18300
-5400.762	36.375	43.175	32.531	-0.0702	-0.0040000	-0.17800
-5396.754	36.125	42.905	32.466	-0.0689	-0.0040000	-0.17300
-5392.745	35.875	42.670	32.400	-0.0672	-0.0040000	-0.16800
-5388.737	35.625	42.418	32.340	-0.0653	-0.0040000	-0.16400
-5384.729	35.375	42.157	32.286	-0.0630	-0.0040000	-0.16000
-5380.721	35.125	41.917	32.229	-0.0604	-0.0040000	-0.15600
-5376.713	34.875	41.671	32.166	-0.0575	-0.0040000	-0.15100
-5372.705	34.625	41.391	32.110	-0.0544	-0.0040000	-0.14700
-5368.697	34.625	41.133	32.051	-0.0512	-0.0040000	-0.14300
-5364.689	34.375	40.850	31.990	-0.0480	-0.0030000	-0.13900
-5360.680	34.125	40.579	31.930	-0.0450	-0.0030000	-0.13500
-5356.672	34.125	40.295	31.865	-0.0421	-0.0030000	-0.13200
-5352.664	33.875	40.015	31.803	-0.0393	-0.0030000	-0.12800
-5348.656	33.875	39.727	31.744	-0.0366	-0.0030000	-0.12500
-5344.648	33.625	39.458	31.678	-0.0340	-0.0020000	-0.12100
-5340.640	33.625	39.155	31.611	-0.0316	-0.0020000	-0.11700
-5336.632	33.625	38.832	31.545	-0.0293	-0.0020000	-0.11400
-5332.624	33.375	38.516	31.478	-0.0271	-0.0010000	-0.11100
-5328.616	33.375	38.223	31.406	-0.0250	-0.0010000	-0.10700
-5324.607	33.125	37.900	31.337	-0.0230	-0.0010000	-0.10400
-5320.599	33.125	37.608	31.269	-0.0212	0.0000	-0.10100
-5316.591	33.125	37.340	31.205	-0.0194	0.0000	-0.098000
-5312.583	32.875	37.074	31.139	-0.0178	0.0010000	-0.095000
-5308.575	32.875	36.805	31.068	-0.0164	0.0010000	-0.092000
-5304.567	32.875	36.507	30.992	-0.0150	0.0010000	-0.089000
-5300.559	32.875	36.227	30.923	-0.0137	0.0020000	-0.086000
-5296.551	32.625	35.926	30.864	-0.0126	0.0020000	-0.083000
-5292.542	32.625	35.636	30.795	-0.0116	0.0020000	-0.081000
-5288.534	32.625	35.381	30.730	-0.0107	0.0030000	-0.078000
-5284.526	32.625	35.148	30.676	-0.00990	0.0030000	-0.075000

-5280.518	32.375	34.933	30.625	-0.00930	0.0040000	-0.072000
-5276.510	32.375	34.739	30.574	-0.00880	0.0040000	-0.069000
-5272.502	32.375	34.553	30.522	-0.00830	0.0040000	-0.065000
-5268.494	32.375	34.390	30.471	-0.00800	0.0050000	-0.062000
-5264.486	32.125	34.247	30.434	-0.00790	0.0050000	-0.059000
-5260.478	32.125	34.118	30.396	-0.00780	0.0060000	-0.056000
-5256.469	32.125	33.996	30.349	-0.00790	0.0060000	-0.052000
-5252.461	32.125	33.887	30.311	-0.00810	0.0060000	-0.050000
-5248.453	32.125	33.781	30.273	-0.00840	0.0070000	-0.047000
-5244.445	31.875	33.684	30.239	-0.00870	0.0070000	-0.045000
-5240.437	31.875	33.589	30.202	-0.00900	0.0070000	-0.042000
-5236.429	31.875	33.500	30.167	-0.00940	0.0080000	-0.040000
-5232.421	31.875	33.414	30.132	-0.00970	0.0080000	-0.038000
-5228.413	31.875	33.333	30.104	-0.01000	0.0080000	-0.036000
-5224.405	31.625	33.251	30.064	-0.0102	0.0090000	-0.035000
-5220.396	31.625	33.170	30.028	-0.0105	0.0090000	-0.034000
-5216.388	31.625	33.094	29.988	-0.0107	0.0090000	-0.033000
-5212.380	31.625	33.019	29.949	-0.0110	0.0100000	-0.032000
-5208.372	31.625	32.946	29.904	-0.0112	0.0100000	-0.031000
-5204.364	31.625	32.876	29.864	-0.0114	0.0100000	-0.030000
-5200.356	31.375	32.809	29.823	-0.0116	0.011000	-0.030000
-5196.348	31.375	32.741	29.774	-0.0118	0.011000	-0.029000
-5192.340	31.375	32.674	29.729	-0.0119	0.011000	-0.029000
-5188.331	31.375	32.611	29.685	-0.0120	0.012000	-0.028000
-5184.323	31.375	32.547	29.640	-0.0122	0.012000	-0.028000
-5180.315	31.375	32.489	29.593	-0.0123	0.012000	-0.028000
-5176.307	31.125	32.432	29.544	-0.0124	0.013000	-0.027000
-5172.299	31.125	32.378	29.494	-0.0125	0.013000	-0.027000
-5168.291	31.125	32.324	29.446	-0.0125	0.014000	-0.027000
-5164.283	31.125	32.274	29.399	-0.0126	0.015000	-0.027000
-5160.275	31.125	32.225	29.349	-0.0126	0.015000	-0.026000
-5156.267	31.125	32.178	29.303	-0.0126	0.016000	-0.026000
-5152.258	30.875	32.137	29.253	-0.0126	0.016000	-0.026000
-5148.250	30.875	32.099	29.207	-0.0126	0.017000	-0.026000
-5144.242	30.875	32.066	29.161	-0.0126	0.018000	-0.026000
-5140.234	30.875	32.033	29.112	-0.0125	0.019000	-0.026000
-5136.226	30.875	32.003	29.065	-0.0125	0.020000	-0.026000
-5132.218	30.875	31.977	29.012	-0.0124	0.021000	-0.026000
-5128.210	30.625	31.957	28.971	-0.0123	0.022000	-0.025000
-5124.202	30.625	31.944	28.924	-0.0122	0.023000	-0.025000
-5120.193	30.625	31.933	28.875	-0.0121	0.024000	-0.025000
-5116.185	30.625	31.931	28.824	-0.0120	0.026000	-0.025000
-5112.177	30.625	31.940	28.777	-0.0118	0.027000	-0.025000
-5108.169	30.625	31.953	28.726	-0.0117	0.029000	-0.025000
-5104.161	30.375	31.976	28.676	-0.0115	0.031000	-0.025000
-5100.153	30.375	32.011	28.626	-0.0113	0.033000	-0.025000
-5096.145	30.375	32.062	28.572	-0.0111	0.036000	-0.026000
-5092.137	30.375	32.116	28.521	-0.0108	0.039000	-0.026000
-5088.129	30.375	32.182	28.463	-0.0106	0.042000	-0.026000
-5084.120	30.375	32.261	28.409	-0.0104	0.045000	-0.026000
-5080.112	30.125	32.342	28.349	-0.0101	0.049000	-0.026000
-5076.104	30.125	32.444	28.288	-0.00980	0.053000	-0.027000
-5072.096	30.125	32.562	28.223	-0.00950	0.058000	-0.027000
-5068.088	30.125	32.695	28.160	-0.00920	0.064000	-0.027000

-5064.080	30.125	32.846	28.094	-0.00880	0.071000	-0.028000
-5060.072	30.125	33.011	28.029	-0.00850	0.080000	-0.029000
-5056.064	29.875	33.236	27.961	-0.00810	0.090000	-0.030000
-5052.056	29.875	33.480	27.887	-0.00780	0.10400	-0.031000
-5048.047	29.875	33.778	27.817	-0.00740	0.12300	-0.033000
-5044.039	29.875	34.187	27.738	-0.00700	0.14800	-0.035000
-5040.031	29.875	34.675	27.656	-0.00650	0.17700	-0.039000
-5036.023	29.875	35.313	27.570	-0.00610	0.21700	-0.043000
-5032.015	29.875	36.160	27.481	-0.00560	0.26700	-0.047000
-5028.007	29.625	37.240	27.377	-0.00520	0.33100	-0.053000
-5023.999	29.625	38.628	27.268	-0.00470	0.39900	-0.061000
-5019.991	29.625	40.312	27.145	-0.00420	0.49100	-0.069000
-5015.982	29.625	42.364	27.008	-0.00370	0.61000	-0.079000
-5011.974	29.625	44.856	26.837	-0.00310	0.76900	-0.095000
-5007.966	29.625	48.086	26.630	-0.00260	1.0090	-0.11200
-5003.958	29.625	52.016	26.325	-0.00200	1.4140	-0.13600
-4999.950	29.625	59.894	25.640	-0.00150	2.3370	-0.17400

(All data transferred to the latitude of Tell Halaf, Syria)

Data Fig. S4a,b						Data Fig. S4c,d				
Ref.	Date	dt	Intensity	sd	Order	Date	dt	Intensity	sd	Order
SY127	-6825.0	175.00	55.066	1.7083	1a	-6825.0	175.00	55.066	1.7083	1a
SY125	-6675.0	50.000	53.057	2.8136	2a	-6675.0	50.000	53.057	2.8136	2a
SY98-128	-6505.0	195.00	50.444	3.7180	3a	-6505.0	195.00	50.444	3.7180	3a
SY97-129	-6505.0	195.00	52.755	3.3160	4a	-6505.0	195.00	52.755	3.3160	4a
SY96	-6505.0	195.00	48.334	3.0146	5a	-6505.0	195.00	48.334	3.0146	5a
SY130	-6175.0	185.00	45.219	3.8185	6a	-6175.0	185.00	45.219	3.8185	6a
SY94-137	-5957.5	82.500	46.023	1.8088	7a	-5957.5	82.500	46.023	1.8088	7a
SY95	-5957.5	82.500	42.908	0.90438	7a	-5957.5	82.500	42.908	0.90438	7a
SY91	-5825.0	100.00	42.707	4.1199	8a	-5825.0	100.00	42.707	4.1199	8a
SY87	-5662.5	112.50	40.998	1.6078	9a	-5662.5	112.50	40.998	1.6078	9a
SY88	-5662.5	112.50	42.606	1.5073	9a	-5662.5	112.50	42.606	1.5073	9a
SY89	-5662.5	112.50	40.998	1.9092	9a	-5662.5	112.50	40.998	1.9092	9a
SY90	-5662.5	112.50	41.601	2.3112	9a	-5662.5	112.50	41.601	2.3112	9a
SY86-131	-5437.5	162.50	30.950	3.5170	10a	-5437.5	162.50	30.950	3.5170	10a
SY135	-5437.5	162.50	45.520	2.1102	11a	-5437.5	162.50	45.520	2.1102	11a
SY84	-5437.5	162.50	40.496	2.4117	12a	-5437.5	162.50	40.496	2.4117	12a
SY138	-5437.5	162.50	41.601	2.3112	12a	-5437.5	162.50	41.601	2.3112	12a
SY82	-5437.5	162.50	38.486	2.8136	13a	-5437.5	162.50	38.486	2.8136	13a
SY83-136	-5437.5	162.50	39.089	1.7083	13a	-5437.5	162.50	39.089	1.7083	13a
SY80	-5437.5	162.50	35.773	3.5170	14a	-5437.5	162.50	35.773	3.5170	14a
SY81	-5437.5	162.50	36.276	2.0097	14a	-5437.5	162.50	36.276	2.0097	14a
SY132	-5437.5	162.50	40.596	2.9141	14a	-5437.5	162.50	40.596	2.9141	14a
SY37	-5212.5	212.50	29.662	1.8539	0	-5212.5	212.50	29.662	1.8539	0
SY38	-5212.5	212.50	28.632	0.92693	0	-5212.5	212.50	28.632	0.92693	0
YT29	-5675.0	125.00	43.352	0.20117	1b	-5400.0	400.00	43.352	0.20117	1b
YT28	-5675.0	125.00	46.671	1.6093	1b	-5400.0	400.00	46.671	1.6093	1b
YT27	-5675.0	125.00	45.967	2.1123	1b	-5400.0	400.00	45.967	2.1123	1b
YT26	-5675.0	125.00	45.062	0.90526	2b	-5400.0	400.00	45.062	0.90526	1b
YT25	-5675.0	125.00	43.352	0.80467	3b	-5400.0	400.00	43.352	0.80467	2b
YT24	-5675.0	125.00	44.056	5.0292	3b	-5400.0	400.00	44.056	5.0292	2b
YT23	-5675.0	125.00	39.429	4.5263	4b	-5400.0	400.00	39.429	4.5263	2b
YT22A	-5675.0	125.00	31.181	2.3134	4b	-5400.0	400.00	31.181	2.3134	3b
YT22	-5437.5	162.50	44.559	1.4082	5b	-5400.0	400.00	44.559	1.4082	4b
YT21	-5437.5	162.50	36.110	1.3076	6b	-5400.0	400.00	36.110	1.3076	4b
YT20	-5437.5	162.50	32.690	1.2070	7b	-5400.0	400.00	32.690	1.2070	4b
YT19	-5437.5	162.50	32.790	1.1064	7b	-5400.0	400.00	32.790	1.1064	4b
YT17	-5437.5	162.50	32.690	1.5088	7b	-5400.0	400.00	32.690	1.5088	5b
YT16	-5437.5	162.50	31.885	1.0058	7b	-5400.0	400.00	31.885	1.0058	5b
YT15	-5437.5	162.50	32.589	1.5088	7b	-5400.0	400.00	32.589	1.5088	5b
YT14	-5437.5	162.50	32.589	1.6093	8b	-5400.0	400.00	32.589	1.6093	5b
YT11	-5437.5	162.50	32.086	1.1064	9b	-5400.0	400.00	32.086	1.1064	6b
YT10	-5437.5	162.50	30.980	0.60350	9b	-5400.0	400.00	30.980	0.60350	6b
YT07	-5212.5	212.50	33.494	2.8163	10b	-5400.0	400.00	33.494	2.8163	7b
YT06	-5212.5	212.50	29.874	2.0117	11b	-5400.0	400.00	29.874	2.0117	7b
YT04	-5212.5	212.50	31.583	3.4199	12b	-5400.0	400.00	31.583	3.4199	8b
YT03	-5212.5	212.50	32.086	1.4082	13b	-5400.0	400.00	32.086	1.4082	8b
YT01	-5212.5	212.50	31.684	2.1123	14b	-5400.0	400.00	31.684	2.1123	9b
YTI-12	-6050.0	250.00	40.636	1.4082	1c	-6050.0	250.00	40.636	1.4082	1c
YTI-11	-6050.0	250.00	42.849	2.2129	2c	-6050.0	250.00	42.849	2.2129	2c
YTI-10	-6050.0	250.00	40.837	1.7099	3c	-6050.0	250.00	40.837	1.7099	3c
YTI-08A	-6050.0	250.00	44.358	3.4199	4c	-6050.0	250.00	44.358	3.4199	4c
YTI-06	-6050.0	250.00	42.245	0.70409	5c	-6050.0	250.00	42.245	0.70409	5c
YTI-05	-6050.0	250.00	41.340	1.2070	5c	-6050.0	250.00	41.340	1.2070	5c
YTI-03	-6050.0	250.00	45.162	2.2129	6c	-6050.0	250.00	45.162	2.2129	6c
YTI-02A	-6050.0	250.00	41.139	0.70409	7c	-6050.0	250.00	41.139	0.70409	7c
YTI-01	-6050.0	250.00	41.843	3.0175	7c	-6050.0	250.00	41.843	3.0175	8c
TellBegum	-5400.0	75.000	33.917	1.2186	0	-5400.0	75.000	33.917	1.2186	0

Column "Order": 0 indicates the absence of a time-order relationship in the AH-RJMCMC calculations