The geochronological evolution of the Paleoproterozoic Baoulé-Mossi domain of the southern West African Craton

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Abstract

Generation and emplacement of felsic magmas in the Paleoproterozoic Baoulé-Mossi domain of the West African Craton does not match the apparent peaks of global crust generation identified between ca. 2900-2600, 1900-1600 and 1200-900 Ma. In contrast, across the Baoulé-Mossi domain, the emplacement of felsic intrusions ranges from ca. 2300 to 2000 Ma. It has proven difficult to place this magmatism within a robust geodynamic framework due to the lack of accurate geochronological data from across the West African Craton. The present study addresses this issue by presenting eighty-four new felsic intrusions zircon ion microprobe and LA-ICP-MS U-Pb ages from areas that up until now have not been targeted for geochronology. The new dataset, when fully integrated with existing age data, reveals a craton-wide diachronous geochronological pattern characterized by a magmatic front that migrated westward. This migration proceeded at a rate of 35 km per million years, with an apparent offset of the initiation and cessation of felsic magmatic activity between the east and west of approximately 50 million years. The new data also show that although the entire Baoulé-Mossi domain was subject to continuous magmatic activity for ~~approximately~~ at least 150 million years, this magmatic activity displays a rather different record in the eastern and western portions of the domain. The differences are expressed as a westward migration of the magmatic activity, cessation of activity around ca. 2100 Ma (easternmost portion) and ca. 2050 Ma (westernmost portion) and a higher incidence of inherited ages in the westernmost portion when compared to the easternmost region. In addition, the new U-Pb data identify some of the oldest felsic intrusions in the region, including a granite from Burkina Faso (2265 ± 17 Ma) and a

diorite porphyry (2216 ± 5 Ma) in southern Mali. This study also reveals inherited Archean zircon cores from across southern Mali. The combination of the new data presented here, along with previously published data, suggests that the Baoulé-Mossi domain formed from the accretion of two major crustal blocks. The Archean inherited ages open a window for further investigation of the interaction between the Archean Kénéma-Man and the Paleoproterozoic Baoulé-Mossi domains.

1 Introduction

Radiometric ages obtained from igneous and metamorphic rocks across the West African Craton are mainly concentrated between ca. 2300 and 2000 Ma. This period falls outside the main peaks of global magmatic activity preserved at ca. 2900-2600, 1900-1600 and 1200-900 Ma (Cawood et al., 2009 and references therein; Condie, 1998, 2009). It is possible that the complete magmatic record of the West African Craton is either under-represented or under-sampled in the current geochronological databases. The southern West African Craton, known as the Leo-Man Rise, comprises the Archean Kénéma-Man and the Paleoproterozoic Baoulé-Mossi domains (Figure 1). Despite the wealth of studies aimed at deciphering the large metallogenic endowment of the Leo-Man rise and in particular of the Baoulé-Mossi domain (e.g. Béziat et al., 2000; Feybesse et al., 2006a; Milési et al., 1991, 1992; Oberthür et al., 1998), the southern West African Craton remains one of the least understood and controversial lithospheric blocks on Earth. One of those controversies is directly related to the age of emplacement of the felsic igneous suites, and the apparent lack of involvement of older Archean crust in a region that is regarded to be the result of juvenile magmatic activity (Abouchami et al., 1990; Boher et al., 1992).

Multiple studies on the geochronological evolution of the southern West African Craton have been carried out across the Baoulé-Mossi domain (e. g. Baratoux et al., 2011; Block et al., 2016a; de Kock et al., 2011, 2012; Egal et al., 2002; Feybesse et al., 2006a, 2006b, 2006c; Gueye et al., 2007; Tshibubudze et al., 2013, 2015). Nonetheless, most of these studies are the result of mine-scale to belt-scale mapping projects, in many cases restricted to small regions or particular countries, thus failing to attempt large-scale correlations across the Baoulé-Mossi domain. According to these studies, the emplacement ages of felsic intrusions from across the domain are mainly associated with the Eburnean Orogeny (ca. 2200-1800 Ma, Liégeois et al., 1991) and represent approximately half of the total rock exposures across the domain (Boher et al., 1992; Roddaz et al., 2007).

Felsic intrusions from across the Baoulé-Mossi domain were described by Bessoles (1977) and originally divided into 3 main types: Belt or Dixcove, Sedimentary-Basin or Winneba and Basin or Cape Coast suites (e.g. Abouchami et al., 1990; Boher et al., 1992; Davis et al., 1994; Hirdes et al., 1992, 1996; Taylor et al., 1992). de Kock et al. (2011), (2012) further summarize the magmatic activity into 4 major age clusters or peaks at: ca. 2210-2190, 2185-2150, 2115-2100 and 2090-2070 Ma. Despite this apparent periodicity, published ages for these clusters tend to overlap within uncertainty, suggesting a continuous period of magmatic activity between ca. 2210 and 2050 Ma (de Kock et al., 2011, 2012).

The present study is a comprehensive evaluation of the chronological evolution of the Paleoproterozoic Baoulé-Mossi domain of the southern portion of the West African Craton, aimed at establishing regional-scale correlations and shedding new light on the evolution of the region. The study area extends over Burkina Faso, southern Mali, eastern Guinea and parts of Ghana (Figure 1). A total of seventy-five new ion microprobe (SHRIMP II) and nine LA-ICP-MS U-Pb zircon ages are presented in this study and covers an area of over 250 000 km^2. The new data establish that the magmatic activity across the Baoulé-Mossi domain was continuous for ~~approximately~~ at least 150 million years (Myrs), and migrated westward at a rate of 35 km/Myrs.

2 Geological Setting

The West African Craton is composed of three major provinces: the Reguibat Rise to the north, the Kédougou-Kéniéba and Kayes Inliers to the west and the Leo-Man rise to the south (Abouchami et al., 1990; Bessoles, 1977; Boher et al., 1992) which circumscribe the younger Taoudenni Basin (Figure 1). The Leo-Man Rise, covering Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Liberia, Mali, Niger, Senegal, Sierra Leone and Togo is geologically divided into the Archean Kénéma-Man and the Paleoproterozoic Baoulé-Mossi domains (Figure 1). The Archean portion of the Leo-Man Rise is composed of highly metamorphosed, amphibolite to granulite facies, gneisses formed between ca. 3600 and 2600 Ma (Milési et al., 1992; Rollinson, 2016) and believed to be largely the result of the Leonian (ca. 3200-3000 Ma) and/or Liberian (ca. 2800-2700 Ma) orogenic cycles (Egal et al., 2002). Recently De Waele et al. (2015) refined the timing of crust formation to a pulse of magmatic activity at ca. 3400 Ma, which was followed by semi-continuous magmatic activity between ca. 3000 and 2600 Ma.

The Paleoproterozoic counterpart ~~which~~ is divided into two main phases, the Eoeburnean or Tangaean (ca. 2266 and 2150 Ma) and the Eburnean (ca. 2130 and 1980 Ma) phases (Baratoux et al., 2011, 2015; Block et al., 2015; de Kock et al., 2012; Feybesse et al., 2006; Hein 2010; Perrouty et al., 2012; Vidal et al., 1996). The Paleoproterozoic crust comprises narrow sedimentary basins and linear to arcuate belts comprising volcanic and volcaniclastic rocks intruded by multiple generations of granitic rocks (Abouchami et al., 1990; Boher et al., 1992; Taylor et al., 1992). The Eoeburnean phase is dominated by mafic and felsic volcanism, granitic emplacement and folding as the result of a collisional event and crustal thickening (Baratoux et al., 2015; Lambert-Smith et al., 2016; Tshibubudze et al., 2015), while the Eburnean phase is characterized by plutonic activity. The Eoeburnean and Eburnean terminology and characteristics are not uniform across the entire Paleoproterozoic domain as summarized by Lambert-Smith et al. (2016). The stratigraphic sequence of the Baoulé-Mossi domain is defined in Vidal et al. (1996) and later refined by Béziat et al. (2000), de Kock et al., (2009, 2011), Baratoux et al. (2011), and Ganne et al. (2014) (Figure 2). Recent studies by Pitra et al. (2010), Baratoux et al. (2011), Ganne et al. (2014) and Block et al. (2015)de Kock et al., (2009, 2011), Baratoux et al. (2011), Béziat et al. (2000), and Ganne et al. (2014) (Figure 2). Recent studies by Baratoux et al. (2011), Block et al. (2015), Ganne et al. (2014) and Pitra et al. (2010) have reiterated that the lithostratigraphic sequence has been generally affected by greenschist facies metamorphism, but also highlight regional amphibolite facies and locally granulite facies metamorphism.

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2.1 The Birimian terranes

The term "Birimian terranes" after the type locality defined from the Birim River Valley in Ghana (Kitson, 1918) is applied to the Paleoproterozoic domain of the southern West African Craton. The Birimian stratigraphy (*sensu lato*) is defined, bottom to top, by the presence of: 1) a thick sequence of locally pillowed basalts and gabbros of tholeiitic affinity (Hirdes et al., 1996; Leube et al., 1990), interlayered with immature sedimentary rocks and carbonates; 2) a volcano-sedimentary sequence mainly dominated by turbidites, mudstones and carbonates, interbedded with calc-alkaline volcanic and volcaniclastic rocks (Kesse, 1985; Olson et al., 1992); and 3) a coarse, clastic sedimentary sequence that was originally defined by Junner (1940), (1954) and later by Trashliev (1974) as a series of turbidites (Attoh, 1982; Béziat et al., 2000, 2008; Pouclet et al., 1996; Vidal et al., 1996).

Regionally, across Burkina Faso, the Birimian terranes comprise a series of basaltic to basaltic andesitic belts, from east to west, the NNW-striking Bouroum Belt, the NW-striking Goren Belt, and the N-S striking Boromo, Hounde and Banfora belts (Figure 1). All belts are intruded by N-S trending granitic bodies (Hein, 2010; Metelka et al., 2011). Additionally, Baratoux et al. (2011) and Castaing et al. (2003) summarized several NNW to NE-trending shear zones, defined as the Greenville-Ferkessedougou-Bobo Dioulasso, the Bossie, the West Batie and the Boromo-Poura shear zones (Figure 1).

Further to the west across southern Mali, the Birimian is composed of three N-S trending volcano-sedimentary belts and two regional shear zones. These belts from east to west are: 1) the Bagoe Belt, considered to be the NW extension of the Diaoulla-Boundiali Belt of Côte d'Ivoire (Traoré et al., 2016; Turner, 1995) near the Burkina Faso-Mali border; 2) the Morila Belt, just east of the large Bougouni granitic batholith (Hammond et al., 2011; Parra-Avila et al., 2016); and 3) the Yanfolila Belt, which sits between the town of Bougouni and the Mali-Guinea border. Major shear zones in the region are the Siekeroli and Bannifin shear zones (Figure 1) (Feybesse et al., 2006b, 2006c; Liégeois et al., 1991; McFarlane et al., 2011).

2.2 Geochronology and geochemical overview of the Paleoproterozoic Baoulé-Mossi domain felsic intrusions

Felsic intrusions in Burkina Faso are divided according to their host volcanic belts. Across the NE-E portion of the country, authors such as Castaing et al. (2003), Hein et al. (2004), (2010), Naba et al. (2004), Tshibubudze et al. (2009), (2013), (2015) and Vegas et al. (2008) described the intrusions as NE-SW-trending, medium to coarse-grained equigranular granodiorites, tonalites, quartz-diorites, quartz-monzodiorites and granites. Zircon U-Pb ages indicate that the intrusions are as old as ca. 2260 Ma (Tshibubudze et al., 2015).

Metelka et al. (2011) subdivided the felsic intrusions across Burkina Faso into three types: 1) medium to coarse grained, amphibole and biotite rich, with minor occurrences of K-feldspar tonalites, trondhjemites and granodiorites, emplaced between ca. 2150 and 2130 Ma; 2) K-feldspar and biotite rich granodiorites and granites, rarely containing muscovite or amphibole, and granodiorites with ages between ca. 2110 and 2100 Ma; and 3) K-feldspar rich potassic granites, which occasionally bear muscovite (ca. 2110-2090 Ma, Eburnean).

Baratoux et al. (2011) suggested that volcanic activity across western Burkina Faso occurred between ca. 2190 and 2160 Ma (Eoeburnean). Additionally, by combining field observations and airborne geophysical data Baratoux et al. (2011), Block et al. (2015), and Metelka et al. (2011) determined that the granitic intrusions in northern Ghana and western Burkina Faso can be grouped into four main magmatic episodes: granite, granodiorite and gabbroid emplaced between 2195and 2160 Ma (Pre –ME1), ME1 composed mainly of tonalite, trondhjemite, granodiorite (TTG) emplaced at ca. 2160-2120 Ma; ME2, dominated by granodiorites and granites (ca. 2120-2110 Ma, Eburnean); and ME3 represented by granites (2110-2090 Ma, Eburnean).

Farther to the west across southern Mali, felsic intrusions are far less studied, and no large-scale correlations have been made. Most studies across southern Mali are at the local/mine-scale. Liégeois et al. (1991) recognized three main types of N-S striking felsic intrusions around the Bannifin shear zone: 1) plagioclase, microcline, quartz, hornblende and biotite rich, equigranular, fine-grained (occasionally aplitic) quartz-diorites, quartz-monzodiorites and granodiorites (ca. 2075 Ma, Eburnean), locally known as the Sadiola type; 2) foliated homogenous potassic pink leucogranites known as the Massigui type; and 3) fine to medium grained granitic intrusions containing biotite and variable amounts of K-feldspar, locally known as the Doubalakoro type.

In a study around the Morila gold mine, McFarlane et al. (2011) identified gold-bearing granodiorites as well as foliated porphyritic intrusive bodies and granites with pegmatitic textures. Granodiorite bodies are described as being biotite rich with plagioclase phenocrysts, similar to the Sadiola type. The porphyritic intrusions are composed of very fine grained plagioclase, quartz, actinolite and biotite. A second generation of intrusions is described as quartz diorites to biotite leucogranites similar to the Doubalakoro pluton of Liégeois et al. (1991). Finally, the third generation described by McFarlane et al. (2011) consists of leucogranites and two mica (muscovite/biotite) rich granites and pegmatites, with U-Pb zircon ages ranging between ca. 2130 and 2090 Ma (Eburnean). In addition to the types described by Liégeois et al. (1991) and McFarlane et al. (2011), an older generation has been documented by Feybesse et al. (2006b), (2006c) and references therein. This older intrusion is represented by a monzonitic orthogneiss that yielded a zircon U-Pb age of 2150 ± 15 Ma, with an inherited zircon population at 2174 ± 8 Ma (Eoeburnean) (Feybesse et al., 2006b, 2006c).

In general, intrusions across the Paleoproterozoic domain of the southern West African Craton have been mainly described as TTG-like (Doumbia et al., 1998; Vidal et al., 2009, and references therein), based on normative Anorthite-Albite-Orthoclase discrimination diagrams after Barker (1979) and O'connor (1965). The intrusions have historically been divided into three main groups: 1) amphibole bearing granitic rocks, with or without biotite, usually foliated; 2) biotite bearing granitic rocks without amphibole; and 3) potassic alkaline plutons (Castaing et al., 2003; Doumbia et al., 1998; Egal et al., 2002; Gasquet et al., 2003; Hirdes et al., 1992, 1996; Liégeois et al., 1991; Lompo, 2009; Naba et al., 2004; Oberthür et al., 1998; Tapsoba et al., 2013; Vegas et al., 2008). Supplementary Material A summarizes the emplacement ages reported for these intrusions.

The geochemistry of felsic intrusions across Burkina Faso, Mali~~a~~ and Ghana, are extensively documented and broadly summarized as calc-alkaline/magnesian with arc-like trace element signatures, including negative Nb, Ta, P, Ti as well as REE fractionation and Eu anomalies (e.g. Baratoux et al., 2011; Block et al., 2016a; Castaing et al., 2003; Egal et al., 2002; Eglinger et al., 2017; Feybesse et al., 2006a, 2006b, 2006c; Gasquet et al., 2003; Hein et al., 2004, 2010; Lambert-Smith et al., 2016; McFarlane et al., 2011; Metelka et al., 2011; Naba et al., 2004; Peterssen et al., 2016, Tapsoba et al., 2013 and Vegas et al., 2008).

3 Samples and Analytical Methods

To compare the magmatic activity of the Paleoproterozoic Baoulé-Mossi domain, where precise ages are scarce, with the age peaks recognized in the global magmatic record an integrated geochronological dataset on igneous rocks from southern Mali, was established. Additional samples from Burkina Faso and some from eastern Guinea and Ghana provide ages from the whole Paleoproterozoic domain. Samples were collected over 3 field seasons and were carefully selected to give the most representative and comprehensive overview of the characteristics of the different plutons across the region (Figure 3). Each sample was approximately 3-6 kg in weight.

In Burkina Faso, granitic intrusions were sampled from east to west: 1) across the Po-Tenkodogo-Yamba region and the Goren Belt; 2) around the Inata-Belahouro gold district, Bouroum Belt; 3) in the surroundings of the Perkoa zinc mine, Boromo Belt; 4) in the Gaoua region, Hounde Belt; and 5) adjacent to the Banfora Belt. In Mali, sampling focused: 1) across the Syama Mine, Bagoe Belt; 2) on granitic intrusions around the Morila mine, Morila Belt; 3) on granitic outcrops of the Bougouni region; and 4) across the Kalana and Komana regions of the Yanfolila Belt. In Guinea, samples were obtained from granitic intrusions outcropping in the Siguiri Basin area. Finally, in Ghana samples were obtained from the Koudougou-Tumu granitic domain, northern Ghana, and across the Ashanti Belt-Kumasi Basin region of southern Ghana (Table 1, Figure 1 and larger insets with the sample points). In addition to surface samples, a series of felsic porphyries were collected from drill cores provided by exploration and mining operators, mainly across the Yanfolila Belt (Mali) and the Siguiri Basin (Guinea).

3.1 Rock description and petrology

Rock classification was made based on 3 parameters: 1) hand specimen observations; 2) CIPW norm; and 3) modal composition determined from microscopic evaluation of thin sections, characterized after Streckeisen (1976) (Tables 2 and 3).

3.2 Zircon morphology and U-Pb dating

Zircon concentrates were obtained following the standard procedures described in Claoué-Long et al. (1995). Sample processing to obtain zircon concentrates, zircon mount procedures and zircon imaging, which include the use of backscattered electron (BSE) and cathodoluminescence (CL) detectors, are described in Appendix A1. Detailed information about U-Pb isotope analysis of zircon by SHRIMP (Appendix A2) and LA-ICP-MS (Appendix A3), the criteria for rejection of analyses and data reduction are explained in Appendix A2.

4 Results

4.1 Rock description and Petrology overview

The petrological characteristics of the igneous rock samples are summarized in Table 2. Macroscopic and microscopic observations reveal that 48% of the samples are represented by granites while the rest ~~is~~ are represented by granodiorites, monzodiorites, diorites, aplites and syenites. Additionally, two gabbros are identified. The drill core samples are classified as porphyries (Tables 1 and 2).

Based on mineralogy, 3 main groups of intrusions were identified: 1) biotite bearing, characterized by plagioclase, alkali feldspar, quartz, with or without hornblende, titanite, apatite, zircon and variable amounts of sulfide and oxide phases (Figure 4-A, C and E); 2) two mica intrusions, rich in plagioclase, alkali feldspar, muscovite, biotite, quartz, and zircon as well as variable amounts of sulfides (Figure 4-B and G); and 3) porphyries, mainly from drill core samples, consisting of altered to very altered fine-grained and recrystallized matrix with abundant calcite (Figure 4-H). Other minerals within the matrix include biotite, traces of muscovite, epidote and chlorite. Overall, the biotite in the single mica intrusions is greenish to (primarily) reddish-brown. Biotite in the two mica intrusions is mainly greenish and occasionally reddish-brown. Hornblende appears to be only present in a limited number of single mica samples. Titanite is mainly euhedral, bladed and light brown in color, but is also present as wedge-shaped grains that are darker brown in color. Zircon forms euhedral, elongated grains with visible oscillatory zoning, characteristic of an igneous origin.

In the case of the porphyry samples, original matrix textures are not easily identifiable. Relict phenocrysts are for the most part plagioclase. Deformation and mineral alignment is evident in some samples. Phenocryst grain boundaries appear sharp and unaltered in some samples while in others they appear deformed, with signs of recrystallization.

4.2 Zircon morphology

The majority of zircon grains are clear to slightly translucent and pale reddish-brown, while a small percentage are more intense reddish-brown. Most crystals are elongated, with either sharp or in some cases slightly rounded dipryramidal crystal form~~prismatic terminations~~, and between 25 to 80 µm wide and 120 to 300 µm in length. Fragmented or broken zircons are probably the result of the mineral separation process. Most zircons show clear oscillatory zoning of variable intricacy, whereas others have either faint or broad zoning. Additional features evident in CL images include the recognition of high U concentration, which is identified due to metamict features, and distinct central regions with very dark brown coloration, possibly reflecting the presence of xenocrystic cores (Figure 5).

4.3 Zircon U-Pb dating

A total of 84 samples were dated by zircon U-Pb method, 27 samples from Burkina Faso, 50 from Mali, 5 from Guinea and 2 from Ghana (Figures 6 and 7, Table 3). Table 3 summarizes the $^{207}Pb/^{206}Pb$ age results (weighted mean ages are at 95% confidence limit). Figures 8 and 9 shows U-Pb Concordia plots and weighted mean $^{207}Pb/^{206}Pb$ ages for the 9 belts and 2 large batholiths studied. Supplementary Materials B (SHRIMP) C (LA-ICP-MS) contains the full set of (U-Th)-Pb isotope data.

Zircons from 58 samples yielded a single age population, while the remaining 26 samples contain zircon with older cores, which are interpreted as inherited components. The number of inherited grains is variable between samples and ranges from 1 or 2 analyses to 10 (Table 3). Across Burkina Faso, the Goren Belt/Po-Tenkodogo-Yamba regions, yield ages between ca. 2270 and 2120 Ma. For the Belahouro region the ages are between ca. 2180 and 2120 Ma and in the Boromo-Hounde belts the range is between ca. 2180 and 2110 Ma, while the Banfora region have ages between ca. 2150 and 2110 Ma (Figures 6 and 7).

In southern Mali, the felsic intrusion from the Syama mine (Bagoe Belt) is dated at ca. 2150 Ma. Farther to the west, the Morila Belt granites and granodiorites have inferred emplacement ages between 2140 to 2080 Ma. Across the Bougouni domain, the emplacement occurred between ca. 2100 and 2080 Ma while the Yanfolila Belt, was intruded between ca. 2220 and 2070 Ma (Table 3, Figures 6, 7 and 9).

The rocks analyzed are mainly granites and granodiorites with the bulk dated between ca. 2140 and 2080 Ma. The other dated intrusions are mainly porphyries, diorites and tonalites (Figure 6). Three of the 9 diorites have inherited grains of up to ca. 3500 Ma. A total of 12 granites have inherited zircon cores up to ca. 2250 Ma. The porphyry intrusions shows significant inheritance of material up to ca. 2500 Ma old. The granitic intrusions with Archean inheritance are mainly biotite bearing, characterized by plagioclase, alkali feldspar, quartz, with or without hornblende and muscovite. Assimilation of older crust during the generation of the

2 mica (biotite and muscovite) and 1 mica (mainly biotite) intrusions, as illustrated by inherited zircon, is also evident.

5 Discussion

The new data presented here constitute a comprehensive and spatially representative geochronological dataset from the Paleoproterozoic Baoulé-Mossi domain of the West African Craton. Together with previously reported ages, broad U-Pb age and inheritance patterns can be visualized across the craton. The implications of these new data for tectonic evolution are explored in the following sections.

5.1 Magmatic activity~~,~~ from the Goren/Po-Tenkodogo-Yamba to the Banfora Belt

A granodiorite from the Goren/Po-Tenkodogo-Yamba region (BF8) with an apparent age of 2265 ± 17 Ma is similar to that obtained by Tshibubudze et al. (2013), (2015) for granites across the Oudalan-Gorouol Belt (ca. 2265 Ma) expanding the known occurrences of older intrusives presented in compiled data, by e.g. Baratoux et al. (2011), de Kock et al. (2011), (2012), Feybesse et al. (2006b), (2006c), McFarlane et al. (2011), Tapsoba et al. (2013) and Tshibubudze et al. (2015).

The youngest ages across the easternmost portion of the study area in Burkina Faso are ~2105 Ma (BF12-05), 2115 Ma (HO640C) and 2120 Ma (BF1), belonging to the Eburnean phase, which are mainly concentrated along the Banfora Belt region, with minor occurrences in the Boromo-Hounde and Belahouro belts. These young granite ages make it clear that felsic magmatic activity across the eastern portion of the Paleoproterozoic Baoulé-Mossi domain occurred over a period of about ~~150~~ 160 Myrs. ~~Within~~ During this period, ~~magmatism~~ magmatic ~~was~~activity was ~~low~~ minor between ca. 2275 and 2190 Ma, after which ~~activity~~ it increased to peak between 2140-2130 Ma. Magmatic activity~~, but~~ then waned, with the last bodies emplaced at ca. 2105 Ma (Figures 6, 7, and 9). After ca. 2105 Ma the magmatic activity appears to be concentrated in the western portion of the Baoulé-Mossi across southern Mali.

5.2 Magmatic activity from the Banfora Belt to the Siguiri Basin

West of the Banfora Belt and into southern Mali and eastern Guinea, this study clearly lengthens the magmatic evolution of the Baoulé-Mossi domain. Previous studies that evaluated the magmatic activity indicated a period of 30 Myrs between ca. 2100 and 2070 Ma, which was associated with the Eburnean orogenesis (Liégeois et al., 1991). Conversely, Doumbia et al. (1998), Hirdes and Davis (2002), and Hirdes et al. (1996) indicated that the granitic intruded between ca. 2150 and 2070, a period of 80 Myrs. The Porphyries from the Yanfolila Belt, however revealed intrusions at 2159 ± 11 Ma (MWAXI-135), 2174 ± 15 Ma (MWAXI-130) and 2216 ± 15 Ma (MWAXI-134) extending the range of magmatism across the region. The felsic magmatic activity progressively increased during the Eburnean phase between ca. 2100 Ma and 2070 Ma, peaking around ca. 2090 Ma and abruptly ~~waning~~ declining after ca. 2070 Ma (Figures 6, 7 and 9). Overall the range of magmatic activity lasted about 150 Myrs, mostly concentrated between ca. 2100 and 2070 Ma. These findings ~~thus~~ may suggest an accretionary evolution for the southern West African Craton (section 6).

5.3 Broad age patterns across the Baoulé-Mossi domain

The early and punctuated magmatic activity recorded in the Yanfolila Belt contrasts with the rest of southern Mali, where only a limited number of samples are older than ca. 2110 Ma. Volcanism in the belt has been recognized as early as ca. 2212 Ma by Lahondère et al. (2002) whom associated this early activity with felsic to intermediate volcanism resulting ~~of~~ from subduction or underplating. Early volcanism is present in the east of the Banfora Belt, as reported by Hein (2010) and Tshibubudze et al. (2013), (2015). Since these older ages (> ca.

2250 Ma in Burkina Faso and > ca. 2200 Ma in southern Mali) are not more common, either the overall volume of magmatism was relatively low during this period, or intrusions of this age are buried or have been eroded away. Alternatively, a more mafic style of magmatism may have resulted in less zircon crystallization.

Integration of the new and published data shows that for the southern West African Craton the emplacement ages fall into an "early" period at ~~2250~~2260-2130 Ma, which is dominated by pluton emplacement (Figure 11-A), followed diachronously by a "late" period (2130-2050 Ma). The boundary between the early and late periods was chosen after considering peak metamorphism in the region, deformation history, and spatial distribution of the ages across the study area and identifiable age peaks (Figures 2, 6, 7 and 11). While the probability of occurrence of ages shown in figure 10 suggests a boundary can be placed around ca. 2110 Ma, the spatial distribution is more in agreement with a boundary ca. 2140-2130 Ma. Additionally, the peak metamorphism identified by Block et al. (2015) between ca. 2140-2130 Ma, roughly coincides with the peak of magmatism in the eastern portion of the study area. ~~The comparable to the Eoeburnean phase,~~The early period, which is comparable to the Eoeburnean phase, is dominated by a major peak at ca. 2135 Ma and a secondary peak at ca. 2170 Ma. The late period coincides with the Eburnean phase of de Kock et al, (2011) and can be further subdivided into two age brackets, between ca. 2130-2090 Ma (Figure 11-B) dominated by craton wide magmatic activity, and 2090-2050 Ma (Figure 11-C) where magmatic activity was predominantly concentrated in the western portion of the craton. As observed in figures 2 and 11 emplacement and deformation events did not occurred synchronously across the study area and it is clear that diachronism between east and west presents difficulties in the definition of the Eoeburnean and Eburnean phases across the study area as summarized in Lambert-Smith et al. (2016).

Additionally, when all magmatic, metamorphic and detrital zircon ages are plotted as a function of longitude for the whole southern West African Craton (Figure 12-A), it is possible to define the onset and cessation of magmatic activity as a function of distance across the southern West African Craton. This reveals an apparent offset of 50 Myrs in the beginning and end of magmatism between the eastern and western part of the Baoulé-Mossi domain (Figure 12-B). Such patterns indicate that magmatic activity progressively retreated from east to west across the southern West African Craton at a rate of approximately 35 km/Myr (Section 6). This inference is strengthened by the fact that 95 % of the plotted ages lie above the dashed bottom arrow in Figure 12-B, which shows the diachronism in the onset and ~~offset~~ cessation of magmatism.

5. 4 Zircon inheritance

The majority of the inherited zircons are within 50 Myrs or less of the crystallization ages of the individual intrusions, and mostly occur across southern Mali and to a lesser extent in the easternmost portion of Burkina Faso, across the Goren/Po-Tenkodogo-Yamba and Belahouro belts. Inheritance is mainly present in samples younger than ca. 2130 Ma. Only a limited number of samples have inherited cores/grains (30 out 90 samples), of which a half (15 samples) have inherited material older than 2200 Ma. The previous findings are in agreement with studies along the southern margin of the Bole-Nangodi Belt of northern Ghana, where de Kock et al (2011) identified Eoeburnean inheritance in intrusions up to 2130 Ma.

Only 4 samples (KADD119-M, KL000274, ML12-078 in Mali, and BF9 in Burkina Faso) assimilated Archean crust, as indicated by inherited zircons with ages between ca. 3700 and 2500 Ma. Evaluation of rejected discordant analyses (criteria explained in Appendix A) does not reveal age groups different from the inferred crystallization ages, or from the reported inherited ages (Table 3).

With the exception of de Kock, (2011) and Lambert-Smith et al. (2016) ~~that~~ who identified inherited Archean zircons~~,~~ in northern Ghana and in the Kédougou-Kéniéba ~~and Kayes~~ Inlier~~s~~ of Mali, respectively early studies failed to identify Archean inheritance. The absence of Archean crust has been used to argue that the Baoulé-Mossi domain was mostly the result of juvenile magmatic activity (Abouchami et al., 1990; Boher et al., 1992; Tapsoba et al., 2013). The present study identified 2 zircon grains with ages between ca. 3600 and 3500 Ma, 1 grain at ca. 2880 Ma and 3 grains that yield ages between ca. 2600-2500 Ma; these are from ~~across~~ the Goren/Po-Tenkodogo-Yamba region and Belahouro Belts in Burkina Faso and in the Yanfolila Belt in southwestern Mali (Table 3).

5.4.1 Possible origin of the zircon inheritance

Two scenarios are envisaged to explain the zircon inheritance found in some samples: 1) assimilation of older crust by ascending magmas (contamination of ascending magmas by older basement rocks); and 2) assimilation from a sedimentary source where they were detrital grains. Both scenarios could potentially be the result of Eburnean orogenesis. According to Baratoux et al. (2011), Tshibubudze et al. (2013) and (2015) eastern Burkina Faso was subject to an early compressional event (2200-2160 Ma) that led to significant shortening and crustal thickening. ~~Across southern Mali,~~ Liégeois et al. (1991) also identified deformation events across southern Mali that resulted in intense folding and thickening and, plausibly, subsequent uplift. Recently, Block et al. (2015), (2016a), (2016b) described the implications of compressional deformation across northern Ghana and southwest Burkina Faso. These compressional events resulted in significant crustal thickening. Crustal thickening provides a way to underthrust and uplift sedimentary rocks, and allows greater interaction between the older basement rocks and ascending magmas, facilitating the entrainment of older zircons.

The interleaving of Archean-Paleoproterozoic crust appears, to be limited and with the exception of western Côte d'Ivoire, surface expressions indicate a relatively sharp, well constrained Archean-Paleoproterozoic geological boundary (Eglinger et al., 2016), although this may not be the case at depth. In addition, within the study area, there is no geochronological or field evidence for the existence of large Archean exposures, arguing against the Paleoproterozoic Baoulé-Mossi domain having underthrust the Archean Kénéma-Man domain. If in contrast, the Archean block was overridden by, or resurfaced by, the Paleoproterozoic assemblage, it is likely that the juvenile magmas would have interacted with Archean crustal fragments during their ascent, potentially entraining the older zircons. This hypothesis is at odds with the majority of published isotope Nd and Hf isotope data that advocates a predominately juvenile origin with limited amount of reworked crust (e.g. Abati et al., 2012; Abouchami et al., 1990; Boher et al., 1992; Petersson et al., 2016; Tapsoba et al., 2013; Taylor et al., 1992).

Alternatively, if the inherited ages are the result of reworking sedimentary rocks it is necessary to account for long distance transport of detritus now represented by the inherited components. The present geological configuration indicates that the distance between the Banfora and Yanfolila belts is over 300 km, whereas the distance from the known Archean Kénéma-Man domain and the Yanfolila Belt is over 80 km. It is expected that these distances were greater at the time of emplacement at ca. 2200-2000 Ma. The uplifted units following crustal thickening would have been eroded more easily, thus providing a source for the inherited zircon grains. This scenario provides a possible source for the Paleoproterozoic inheritance found across the western portion of the study area, as zircons from the early magmatic episode (ca. 2300-2130 Ma) are incorporated into magmatic intrusions emplaced after ca. 2130 Ma. Conversely, in the case of Archean inherited ages from across Burkina Faso a plausible source of transported grains would be the Archean basement identified within the

Nigerian Shield, as reported by Bruguier et al. (1994) and Kröner et al. (2001) or previously unrecognized Archean slivers. The most likely source of inherited grains in the Mali samples is the Archean Kénéma-Man domain. We note that incorporation of older zircon cores from the reworking of sedimentary rocks is a testable hypothesis – in this case, the emplacement-aged zircons of the host granite should have high $\delta^{18}O$ values (e.g. Hawkesworth and Kemp, 2006; Kemp et al., 2007, 2009; Valley, 2003; Valley et al., 1994).

6 Tectonic implications and accretionary model

The crustal evolutionary patterns of the southern West African Craton, and in particular of the Baoulé-Mossi domain, reflect a complex assemblage (puzzle) that requires understanding of the spatial and temporal distribution of emplacement ages and the presence of inherited zircon grains. During the Phanerozoic, migrating magmatic fronts and abrupt cessations of magmatic activity, as inferred here, have been associated with arc type systems, such as the Andes in central Chile (Hildreth and Moorbath, 1988) and South China, where flat slab subduction has been proposed (Li and Li, 2007). It is possible that similar accretionary processes shaped the crustal evolution of the southern West African Craton

An ~~If under such~~ accretionary process may have involved at least two crustal blocks that join to form~~ed~~ the Baoulé-Mossi domain. During the Eoeburnean magmatic phase the magmatic activity was mainly concentrated in the easternmost block of the study area (minor peak at ca. 2170 Ma, figure 10). As the magmatic activity migrated westward a large pulse of magmatism is identified at around ca. 2135 Ma, potentially heralding ~~preceding~~ the docking of the two blocks at ca. 2130 Ma. After ca. 2130 Ma the magmatic activity appears concentrated in the westernmost region with peak magmatism at ca. 2090 Ma. The inherited age pattern is the result of the younger magmas sampling material derived from the easternmost portion suggest the westward migration of the magmatic front (Figure 13). Recently, Block et al.

(2016a) proposed a collision model between blocks in Ghana and Burkina Faso/Côte d'Ivoire. We suggest that the Paleoproterozoic Baoulé-Mossi domain was the result of the accretion of at least two crustal blocks that were subsequently amalgamated with the Archean Kénéma-Man domain (Figure 13).

The boundary between these inferred crustal blocks is based on the distribution of intrusion emplacement ages and inherited zircons. East of the Banfora-Bagoe belts, intrusion ages are predominantly older than ca. 2130 Ma, mostly free of inheritance, while to the west the ages are predominantly younger than ca. 2130 Ma and commonly contain an inherited component. Multiple crustal blocks explain the occurrences of inherited ages between ca. 2250 and 2150 Ma across Southern Mali, due to potential crustal thickening and subsequent underthrusting or uplift and erosion of older crust (section 5.4.1). Certainly, across southern Mali this study and previous studies (e.g. Feybesse et al. (2006b), (2006c)) have identified ages between ca. 2215 and 2150 Ma, but the geographical distribution and number of identified intrusions within that range does not account for the relatively widespread inheritance across southern Mali. Subsequently, the Paleoproterozoic crustal blocks of the Baoulé-Mossi domain, proposed here were accreted into the Archean Kénéma-Man domain.

7 Conclusions

The new data presented in this study support observations that the Paleoproterozoic portion of the southern West African Craton developed during an accretion process, as follows:

- Evaluation of all zircon ages (magmatic, metamorphic and detrital) plotted as a function of longitude supports the notion that the Paleoproterozoic Baoulé-Mossi domain underwent a diachronous evolution reflected by a westward migration of the magmatic front. It also highlights an abrupt cessation and retreat of activity across the southern West African Craton that started around ca. 2100 Ma at the eastern end of the craton

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and ended at ca. 2050 Ma at the westernmost portion. This retreat is represented by a westward migration of the magmatic front of approximately 35 km/Myr and is analogous~~ue~~ to that shown by Phanerozoic subduction- accretion systems as described by e.g. Li and Li~~,~~ (2007) and Hildreth and Moorbath~~,~~ (1988).

- The offset of magmatism and distribution of inherited zircons indicates that the Paleoproterozoic domain part of this study was composed of at least two crustal blocks with the boundary probably located between the Banfora and Bagoe belts.
- An accretionary process might have started as early as ca. 2175 Ma. At this time a minor peak of magmatic activity is identified east of the Banfora Belt.
- Early peak metamorphism identified at ca. 2130 Ma (Block et al., 2015) is taken as an indication of the timing at which the two blocks were docked and it coincides with peak magmatism in the eastern portion of the study area. Intrusions younger than ca. 2130 Ma generally contain inherited grains with ages up to 2250 Ma. This suggests that the crust was thicker after that time, allowing for incorporation of older components, which is also consistent with an accretionary model. Additionally the distribution of inherited ages up to ca. 2250 Ma indicates that the ca. 2130 Ma magmas interacted with, or sampled sediments derived from, previously emplaced intrusions with ages between ca. 2250 and 2150 Ma.

These observations are consistent with an arc type environment, as suggested by e.g. Ama Salah et al. (1996), Béziat et al. (2000), Sylvester and Attoh (1992), Abati et al. (2012), Block et al. (2015) and (2016b), Lambert-Smith et al. (2016), Petersson et al. (2016) and Tapsoba et al. (2013). ~~arc type environment, as suggested by e.g. Ama Salah et al. (1996), Béziat et al. (2000), Sylvester and Attoh (1992), Abati et al. (2012), Block et al. (2015), Lambert-Smith et al. (2016), Petersson et al. (2016) and Tapsoba et al. (2013), and Block et al. (2016b).~~

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This study identified Archean zircon inheritance, particularly in the <2130 Ma intrusions. These occurrences could imply a greater involvement of Archean crust in the Paleoproterozoic granitic magmas than previously proposed. Recent studies, Abati et al. (2012), Begg et al. (2009) and Petersson et al. (2016), have also advocated a greater role of Archean crust, and future isotope studies are required to evaluate this further. Ultimately, however, the distribution and scarcity of Archean inheritance points toward a predominately juvenile crustal growth during the Paleoproterozoic across the Baoulé-Mossi domain, as long argued by Nd and Hf isotope studies (e.g. Abati et al., 2012; Abouchami et al., 1990; Boher et al., 1992; Tapsoba et al., 2013; Taylor et al., 1992).

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GEMOC Key Centre (http://www.gemoc.mq.edu.au)."~~This is the CCFS contribution number XXXXXXX.~~

9 Tables, Figures and Supplementary Materials

Table 1 *Sample information, location, rock type and basic field description as part of the present study.*

Table 2 *Summary of main mineralogical characteristics by volcanic belt or geologic region of interest.*

Table 3 *Summary of interpreted crystallization ages and identified inherited ages.*

Figure 1 *A) Simplified geological map of the West African craton after Boher et al. (1992) Sketch shows the extension of the Leo-Man rise in the southern portion of the craton, defined by the Archean Kénéma-Man and Paleoproterozoic Baoulé-Mossi domain. Boxed area shown in detail in insert B; B) Simplified geological map, after Lebrun et al. (2016) of the study areas delineated in insert A. Zone 1 covers Burkina Faso, Mali northern Ghana and eastern Guinea, while zone 2 covers a portion of the Ashanti belt in southern Ghana. Map includes major structures and samples collected for geochronological work.*

Figure 2 *Simplified lithostratigraphic, deformation, geochronological chart highlighting geologic areas of interest for the present study, showing the timing of emplacement of the studied felsic intrusions. Modified after Baratoux et al. (2011), Block et al. (2015), (2016b), Lebrun et al. (2016), Miller et al. (2013), Perrouty et al. (2012), (2015), Miller et al. (2013) and Tshibubudze et al. (2015).*

Figure 3 *A) Characteristic rock exposure found across southern Mali and Burkina Faso; B) Granitic intrusion mostly composed of a fine grained quartz matrix, mineral assemblage includes biotite, quartz, and plagioclase phenocrysts of 2 mm by 4 to 5 mm (ML12-080); C) Least deformed portion of the Diallo Granite, which is quartz-feldspar-biotite rich (SU-021); and D) A granite, of equigranular texture, fine to medium grained. K-feldspar dominated, quartz and some plagioclase, black minerals are mostly biotite (ML12-105). All images refer to exposures in southern Mali.*

Figure 4 *Thin section images in XPL of characteristic samples showing mineral composition of rock samples identified across the study area; A) Major minerals, K-feldspar, quartz, plagioclase, biotite, small amounts of hornblende. Chlorite, sericitic alteration and traces of sulphides, other minerals include zircons, titanite and some hematite (ML12-068); B) Quartz, plagioclase, small amounts of K-feldspar, traces of pyrite and chalcopyrite, biotite and hornblende (SU_002); C) Angular K-feldspar crystals, minor amounts of plagioclase, relatively large amounts of brownish red biotite and some hornblende, chlorite and quartz (SU_001); D) Sericitic alteration, primary structures relatively easy to identify, mainly composed of large plagioclase crystals within a quartz matrix* *and traces of biotite, titanite, zircon, epidote and chlorite (BE5); E) Plagioclase, K-feldspar, quartz. Biotite is common, small amounts of sericitic alteration, most feldspar crystals appear intact (ML12-104); F) Plagioclase rich, original textures hard to identify due to pervasive sericitic alteration from the center of the crystals outwards, amphibole (hornblende) in some cases visible alteration into chlorite, minor amounts of quartz and small amounts of biotite, visible apatite/zircons, and additionally extensive occurrence of opaque minerals, majority of which appear to be pyrite (BNF150559); G) Quartz, plagioclase, biotite and muscovite. Quartz matrix is fine grained when compared to the plagioclase crystals. Accessory minerals include titanite, zircon, chlorite, ilmenite, signs of alteration some sericite visible (SU_007); and H) Quartz content between 5 to 15%, sample is plagioclase dominated, k-feldspar is not visible as samples is strongly altered and it is difficult to identify minerals and textures. Biotite and hornblende are also present. Alteration products are chlorite, epidote, and maybe actinolite (ML12-086).*

Figure 5 *Selected zircon images showing the different morphological characteristics of zircon. A and B) Granites from the Belahouro Belt; C) Granodiorite from the Boromo-Hounde belts; D and E) Represent zircons from a diorite and a granite from the Banfora Belt; F) Zircon obtain from a granite of the Morila Belt; G, H, I and J) Zircons representing a porphyry, two granites and a syenite representative of the Yanfolila Belt; and K, L and M) Zircons from a granite, a dacite and a diorite from the Siguiri Basin. Notice that the zircons from granites and granodiorites are mostly elongated and tabular, while the zircons from diorites are slightly more rounded and display a faint zoning instead of the well-defined oscillatory zoning of zircons from the granites. Scale bar in all images represents 100 µm.*

Figure 6 *A) Histogram showing new interpreted U-Pb crystallization ages distributed by belts and regions of geologic interest as described in the regional geology section; and B) Histogram showing the age distribution of the studied samples base on identified rock types.*

Figure 7 *Age distribution by longitude color coded by volcanic belts and regions of geologic interest. A) Shows all ages while B) focuses on the age range between 2400 and 2000 Ma. Solid symbols represent U-Pb ages interpreted as crystallization ages; open symbols represent individual U-Pb analyses interpreted to represent inherited ages.*

Figure 8 *Left Weight mean average age; right Concordia age plots. Black symbols are accepted analyses while red symbols represent rejected analyses. From top to bottom samples: across Burkina Faso, BF1 (Goren/Po-Tenkodogo-Yamba), BE5 (Belahouro Belt), HO629 (Boromo-Hounde belts). BNF 150559 (Banfora Belt) and from Mali ML12-086 (Bagoe Belt).*

Figure 9 *Weight mean average age; right Concordia age plots. Black symbols are accepted analyses while red symbols represent rejected analyses. Samples from across Mali: ML12-105 (Morila Belt), ML12-107 Bougouni region, MWAXI-126 (Yanfolila Belt), and from Guinea, KL000565 (Siguiri Basin).*

Figure 10 *Relative probability density diagrams, top A) this study ages east of the Bagoe Belt dominated by ages older than 2130 Ma Main peak ca. 2135 Ma, secondary peak at 2175 Ma; Bottom B) ages west of the Bagoe Belt dominated by ages between ca. 2100 and 2070 with a major peak at ca. 2095 Ma. 2130 Ma boundary after peak metamorphism exhumation of high-grade rocks identified by Block et al. (2015).*

Figure 11 *Zircon and monazite U-Pb age distribution across the southern West African Craton for the period between 2250 and 2050 Ma. A)) Ages between 2300 and 2130 Ma, showing a marked concentration of ages in the eastern craton, and no recorded ages within the Archaean host rocks; B) Ages between 2130 and 2090 Ma, showing a uniform coverage of ages across craton for this age bracket, and several ages recorded within the Archaean host rocks; and C) Ages for the period 2090-2050 Ma, clearly showing that most ages are concentrated west of the Banfora-Bagoe belts in the westernmost portion of the study area. (520 ages from bibliography, Supplementary Material A).*

Figure 12 *Longitudinal variations in magmatic activity. A) Zircon and monazite U-Pb age distribution as a function of longitude (520 ages from bibliography, Supplementary Material A, Table 1, WAXI II compilation and this work). Notice this compilation only includes interpreted crystallization ages and metamorphic ages. Other not specified refers to ages from which the reference does not clarifies specify source rock type or if it is a crystallization or metamorphic age. The sharp cessation of magmatism across the craton is clearly defined, with subsequent reworking limited to the margins of the craton, dashed line; B) zircon and monazite U-Pb age distribution as a function of longitude for the age bracket 2300-2000 Ma (455 ages) (Table 1, WAXI II age compilation and this work). The progressive cessation of the magmatic activity from east to west during this period in the southern West African Craton equates to a migration of approximately 35 km/Myr. Over 95% of all ages plot above the offset of magmatism line "magmatic front" (dashed bottom arrow).*

Figure 13 *Schematic cartoon showing the proposed boundaries and crustal blocks. Top, shows the Archean Kénéma-Man and the Baoulé-Mossi domain. The Baoulé-Mossi domain, which is divided into two blocks during the period 2160-2130 Ma. During the mentioned period the assemblage blocks is are affected by compressional forces, first N-S (D1) as mentioned described by Baratoux et al. (2011), Block et al. (2016a), and Perrouty et al. (2012) the followed by a E-W compression (D2) (Baratoux et al., 2011; Block et al., 2016a; Perrouty et al., 2012). Density of the dot pattern indicates distribution of magmatic activity. Greater density = greater magmatism, and* *less density = less magmatism; and Bottom shows the amalgamation of the Paleoproterozoic blocks under a D2 compressions for the period 2130-2110 Ma. Notice the occurrence of inherited grains. Inheritance is mainly concentrated in the eastern portion of the Baoulé-Mossi and predominately represented by ages between ca. 2500 and 2125 Ma which are common crystallization ages across the easternmost portion of the study area, indicating that the western block is contaminated by crustal material derived from the eastern block.*

Supplementary Material A. *Summary of published ages. The ages include emplacement and metamorphic events as well as multiple dating methods. Blank spaces indicate a lack of available information in the data source.*

Supplementary Material B. *Raw SHRIMP U-Pb data.*

Supplementary Material C. *Raw LA-ICP-MS data.*

10 Appendix A – Sample Preparation and Analytical Methods.

A.1 Zircon mount preparation

The epoxy mounts are discs of 5 mm thick by 25 mm diameter. Three to four samples were placed in each mount. Chips of the primary zircon standards BR266 (559 Ma, 903 U ppm; Stern (2001)) or M257 (561.3 Ma and 840 ppm; Nasdala et al. (2008)), were used for U/Pb calibration. Accuracy and reproducibility was monitored by including the secondary zircon standards OGC1 (3465 Ma; Stern et al. (2009)), and Temora2 (416.8 Ma; Black et al. (2004)). In addition chips of the silicate glass NIST 610 were included in the mounts for instrument set-up purposes. The mounts were polished with diamond film polishing mats as fine as 0.5 µm. Subsequently, the epoxy discs were cleaned using ethanol and petroleum spirits, a soap solution, and rinsed with deionized water in an ultrasonic bath. Mounts were oven dried (1 hour at 60ºC) and the analytical surface was coated with a 40 µm gold layer. Detailed mounting procedures and preparation can be reviewed in Claoué-Long et al. (1995).

Mounts were imaged using the backscattered electron and cathodoluminescence detectors of a JEOL 6400 Scanning Electron Microscope (SEM) or a VEGA 3 Tescan SEM at the Centre for Microscopy, Characterization and Analysis (CMCA), University of Western Australia (UWA). The acquired images allowed the identification of internal structures. Grains showing a large number of cracks or obvious radiation damage were not analyzed.

A.2 Sensitive High Resolution Ion Micro Probe (SHRIMP) dating

Zircon mounts were analyzed by means of Sensitive High Resolution Ion Micro Probe (SHRIMP II) at the John de Laeter (JDL) Centre for Isotope Research of Curtin University, Perth, Australia. Details of instrument operating conditions are described in De Laeter and Kennedy (1998) and Kennedy and De Laeter (1994) while analytical conditions are described in detail in Claoué-Long et al. (1995), Compston et al. (1984), and Williams (1988). The analytical procedure usually includes the use of a 25-30 μm diameter elliptical spot due to a mass-filtered $(O_2)^-$ primary beam between 2.0 and 2.5 nA. Each dataset included six scans through the mass range of $^{196}Zr_2O^+$ (2 seconds), $^{204}Pb^+$ (10 seconds), background (204.1) (10 seconds), $^{206}Pb^+$ (20 seconds), $^{207}Pb^+$ (30 seconds), $^{208}Pb^+$ (10 seconds), $^{238}U^+$ (5 seconds), $^{248}ThO^+$ (5 seconds), and $^{254}UO^+$ (2 seconds) (Nasdala et al., 2008). The data from each sample were reduced using the excel-based add-in program SQUID version 2.2 (Ludwig, 2003). Data reduction procedures were after Wingate and Kirkland (2014).

Zircon is a very resilient, refractory mineral that can survive partial melting and high grade regional metamorphism without losing its isotopic information (Mezger and Krogstad, 1997 references therein; Scherer et al., 2007). However, low grade metamorphism, fluid circulation and in some instances weathering can affect the U-Pb systematics, which results in discordant U-Pb ages. These discordant ages are for the most part due to Pb-loss (Mezger and Krogstad, 1997 references therein). In order to minimize the difficulties associated with potentially disturbed U-Pb systematics, for the purpose of this study U-Pb ages were only calculated from concordant to near concordant grains (discordance between -5% and +10%). Additionally, analyses that comprise more than 1% of non-radiogenic ^{206}Pb (i.e., from common lead) and yield U concentrations over a 1000 ppm were also rejected.

A.3 LA-ICP-MS Zircon dating

Laser ablation U-Pb zircon dating was carried out at the GEMOC/CCFS Centre. The method used an Agilent 7700 quadrupole Inducted Coupled Plasma Mass Spectrometer (ICP-MS) attached to a New Wave/Merchantek UP-213 laser ablation system (λ=213 nm). Beam diameter was set at 30 or 40μm, based on zircon size. Beam repetition was set at 5 Hz rate and energy around 0.06 μJ and 8 J/cm2. He was used as transport media, as it increases sample transport efficiency during the ablation process. Using He provides a more stable signal, and therefore a more reproducible Pb/U fractionation. Additional description and details are founded in Belousova et al. (2010) and Jackson et al. (2004).

U-Pb data was determined by analyzing twelve unknown samples for every two analyses of the GEMOC GJ-1 zircon standard (Elhlou et al., 2006). GJ-1, TIMS^{207}Pb/^{206}Pb age of 608.5 Ma (Jackson et al., 2004). Zircon standards 91500 (U-Pb age 1065 Ma, Wiedenbeck et al., 1995) and Mud Tank (U-Pb age 732 Ma, Black and Gulson, 1978) were analyzed as secondary control standards for reproducibility and instrument accuracy. U-Pb ages were calculated from the raw signal data using the GLITTER software program after Griffin et al. (2008). Further details on integrated ration, fractionation, time resolved intervals, and instrumental mass bias and calibrating procedures are provided in Griffin et al. (2008) and Jackson et al. (2004). Information on common-Pb correction procedures are provided in Andersen (2002). Analyses reported in this study were corrected assuming recent Pb-loss and a common-Pb composition similar to present day average orogenic Pb as given by the second-stage growth curve of Stacey and Kramers (1975) for ^{238}U/^{204}Pb = 9.74. No correction has been applied to analyses that are concordant within 2σ analytical error in ^{206}Pb/^{238}U and ^{207}Pb/^{235}U, or which have less than 0.2% common-Pb. All described procedures are after Andersen et al. (2004), Belousova et al. (2010), Griffin et al. (2008) and Jackson et al. (2004).

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The geochronological evolution of the Paleoproterozoic Baoulé-Mossi domain of the southern West African Craton

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Highlights

- 84 new U-Pb zircon ages on rocks from across the Paleoproterozoic Baoulé-Mossi domain.
- Newly identified U-Pb age patterns and distribution across the southern West African Craton with a westward migration of the magmatic front.
- Recognition of U-Pb age inherited patterns as well as Archean inherited grains across the Paleoproterozoic Baoulé-Mossi domain of the West African Craton.

The geochronological evolution of the Paleoproterozoic Baoulé-Mossi domain of the southern West African Craton

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West African Craton, Paleoproterozoic, Baoulé-Mossi domain, U-Pb zircon dating

Abstract

Generation and emplacement of felsic magmas in the Paleoproterozoic Baoulé-Mossi domain, West African Craton does not match the apparent peaks of global crust generation identified between ca. 2900-2600, 1900-1600 and 1200-900 Ma. In contrast, across the Baoulé-Mossi domain, the emplacement of felsic intrusions ranges from ca. 2300 to 2000 Ma. It has proven difficult to place this magmatism within a robust geodynamic framework due to the lack of accurate geochronological data from across the West African Craton. The present study addresses this issue by presenting eighty-four new felsic intrusions zircon ion microprobe and LA-ICP-MS U-Pb ages from areas that up until now have not been targeted for geochronology. The new dataset, when fully integrated with existing age data, reveals a craton-wide diachronous geochronological pattern characterized by a magmatic front that migrated westward. This migration proceeded at a rate of 35 km per million years, with an apparent offset of the initiation and cessation of felsic magmatic activity between the east and west of approximately 50 million years. The new data also show that although the entire Baoulé-Mossi domain was subject to continuous magmatic activity for at least 150 million years, this magmatic activity displays a rather different record in the eastern and western portions of the domain. The differences are expressed as a westward migration of the magmatic activity, cessation of activity around ca. 2100 Ma (easternmost portion) and ca. 2050 Ma (westernmost portion) and a higher incidence of inherited ages in the westernmost portion when compared to the easternmost region. In addition, the new U-Pb data identify some of the oldest felsic intrusions in the region, including a granite from Burkina Faso (2265 ± 17 Ma) and a diorite porphyry (2216 ± 5 Ma) in southern Mali. This study also reveals inherited Archean zircon

cores from across southern Mali. The combination of the new data presented here, along with previously published data, suggests that the Baoulé-Mossi domain formed from the accretion of two major crustal blocks. The Archean inherited ages open a window for further investigation of the interaction between the Archean Kénéma-Man and the Paleoproterozoic Baoulé-Mossi domains.

1 Introduction

Radiometric ages obtained from igneous and metamorphic rocks across the West African Craton are mainly concentrated between ca. 2300 and 2000 Ma. This period falls outside the main peaks of global magmatic activity preserved at ca. 2900-2600, 1900-1600 and 1200-900 Ma (Cawood et al., 2009 and references therein; Condie, 1998, 2009). It is possible that the complete magmatic record of the West African Craton is either under-represented or under-sampled in the current geochronological databases. The southern West African Craton, known as the Leo-Man Rise, comprises the Archean Kénéma-Man and the Paleoproterozoic Baoulé-Mossi domains (Figure 1). Despite the wealth of studies aimed at deciphering the large metallogenic endowment of the Leo-Man rise and in particular of the Baoulé-Mossi domain (e.g. Béziat et al., 2000; Feybesse et al., 2006a; Milési et al., 1991, 1992; Oberthür et al., 1998), the southern West African Craton remains one of the least understood and controversial lithospheric blocks on Earth. One of those controversies is directly related to the age of emplacement of the felsic igneous suites, and the apparent lack of involvement of older Archean crust in a region that is regarded to be the result of juvenile magmatic activity (Abouchami et al., 1990; Boher et al., 1992).

Multiple studies on the geochronological evolution of the southern West African Craton have been carried out across the Baoulé-Mossi domain (e. g. Baratoux et al., 2011; Block et al., 2016a; de Kock et al., 2011, 2012; Egal et al., 2002; Feybesse et al., 2006a, 2006b, 2006c;

Gueye et al., 2007; Tshibubudze et al., 2013, 2015). Nonetheless, most of these studies are the result of mine-scale to belt-scale mapping projects, in many cases restricted to small regions or particular countries, thus failing to attempt large-scale correlations across the Baoulé-Mossi domain. According to these studies, the emplacement ages of felsic intrusions from across the domain are mainly associated with the Eburnean Orogeny (ca. 2200-1800 Ma, Liégeois et al., 1991) and represent approximately half of the total rock exposures across the domain (Boher et al., 1992; Roddaz et al., 2007).

Felsic intrusions from across the Baoulé-Mossi domain were described by Bessoles (1977) and originally divided into 3 main types: Belt or Dixcove, Sedimentary-Basin or Winneba and Basin or Cape Coast suites (e.g. Abouchami et al., 1990; Boher et al., 1992; Davis et al., 1994; Hirdes et al., 1992, 1996; Taylor et al., 1992). de Kock et al. (2011), (2012) further summarize the magmatic activity into 4 major age clusters or peaks at: ca. 2210-2190, 2185-2150, 2115-2100 and 2090-2070 Ma. Despite this apparent periodicity, published ages for these clusters tend to overlap within uncertainty, suggesting a continuous period of magmatic activity between ca. 2210 and 2050 Ma (de Kock et al., 2011, 2012).

The present study is a comprehensive evaluation of the chronological evolution of the Paleoproterozoic Baoulé-Mossi domain of the southern portion of the West African Craton, aimed at establishing regional-scale correlations and shedding new light on the evolution of the region. The study area extends over Burkina Faso, southern Mali, eastern Guinea and parts of Ghana (Figure 1). A total of seventy-five new ion microprobe (SHRIMP II) and nine LA-ICP-MS U-Pb zircon ages are presented in this study and cover an area of over 250 000 km^2. The new data establish that the magmatic activity across the Baoulé-Mossi domain was continuous for at least 150 million years (Myrs), and migrated westward at a rate of 35 km/Myrs.

2 Geological Setting

The West African Craton is composed of three major provinces: the Reguibat Rise to the north, the Kédougou-Kéniéba and Kayes Inliers to the west and the Leo-Man rise to the south (Abouchami et al., 1990; Bessoles, 1977; Boher et al., 1992) which circumscribe the younger Taoudenni Basin (Figure 1). The Leo-Man Rise, covering Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Liberia, Mali, Niger, Senegal, Sierra Leone and Togo is geologically divided into the Archean Kénéma-Man and the Paleoproterozoic Baoulé-Mossi domains (Figure 1). The Archean portion of the Leo-Man Rise is composed of highly metamorphosed, amphibolite to granulite facies, gneisses formed between ca. 3600 and 2600 Ma (Milési et al., 1992; Rollinson, 2016) and believed to be largely the result of the Leonian (ca. 3200-3000 Ma) and/or Liberian (ca. 2800-2700 Ma) orogenic cycles (Egal et al., 2002). Recently De Waele et al. (2015) refined the timing of crust formation to a pulse of magmatic activity at ca. 3400 Ma, which was followed by semi-continuous magmatic activity between ca. 3000 and 2600 Ma.

The Paleoproterozoic counterpart is divided into two main phases, the Eoeburnean or Tangaean (ca. 2266 and 2150 Ma) and the Eburnean (ca. 2130 and 1980 Ma) phases (Baratoux et al., 2011, 2015; Block et al., 2015; de Kock et al., 2012; Feybesse et al., 2006; Hein 2010; Perrouty et al., 2012; Vidal et al., 1996). The Paleoproterozoic crust comprises narrow sedimentary basins and linear to arcuate belts comprising volcanic and volcaniclastic rocks intruded by multiple generations of granitic rocks (Abouchami et al., 1990; Boher et al., 1992; Taylor et al., 1992). The Eoeburnean phase is dominated by mafic and felsic volcanism, granitic emplacement and folding as the result of a collisional event and crustal thickening (Baratoux et al., 2015; Lambert-Smith et al., 2016; Tshibubudze et al., 2015), while the Eburnean phase is characterized by plutonic activity. The Eoeburnean and Eburnean terminology and characteristics are not uniform across the entire Paleoproterozoic domain as summarized by Lambert-Smith et al. (2016). The stratigraphic sequence of the Baoulé-Mossi domain is defined in Vidal et al. (1996) and later refined by Béziat et al. (2000), de Kock et al., (2009, 2011), Baratoux et al. (2011), and Ganne et al. (2014) (Figure 2). Recent studies by Pitra et al. (2010), Baratoux et al. (2011), Ganne et al. (2014) and Block et al. (2015) have reiterated that the lithostratigraphic sequence has been generally affected by greenschist facies metamorphism, but also highlight regional amphibolite facies and locally granulite facies metamorphism.

2.1 The Birimian terranes

The term "Birimian terranes" after the type locality defined from the Birim River Valley in Ghana (Kitson, 1918) is applied to the Paleoproterozoic domain of the southern West African Craton. The Birimian stratigraphy (*sensu lato*) is defined, bottom to top, by the presence of: 1) a thick sequence of locally pillowed basalts and gabbros of tholeiitic affinity (Hirdes et al., 1996; Leube et al., 1990), interlayered with immature sedimentary rocks and carbonates; 2) a volcano-sedimentary sequence mainly dominated by turbidites, mudstones and carbonates, interbedded with calc-alkaline volcanic and volcaniclastic rocks (Kesse, 1985; Olson et al., 1992); and 3) a coarse, clastic sedimentary sequence that was originally defined by Junner (1940), (1954) and later by Trashliev (1974) as a series of turbidites (Attoh, 1982; Béziat et al., 2000, 2008; Pouclet et al., 1996; Vidal et al., 1996).

Regionally, across Burkina Faso, the Birimian terranes comprise a series of basaltic to basaltic andesitic belts, from east to west, the NNW-striking Bouroum Belt, the NW-striking Goren Belt, and the N-S striking Boromo, Hounde and Banfora belts (Figure 1). All belts are intruded by N-S trending granitic bodies (Hein, 2010; Metelka et al., 2011). Additionally, Baratoux et al. (2011) and Castaing et al. (2003) summarized several NNW to NE-trending shear zones, defined as the Greenville-Ferkessedougou-Bobo Dioulasso, the Bossie, the West Batie and the Boromo-Poura shear zones (Figure 1).

Further to the west across southern Mali, the Birimian is composed of three N-S trending volcano-sedimentary belts and two regional shear zones. These belts from east to west are: 1) the Bagoe Belt, considered to be the NW extension of the Diaoulla-Boundiali Belt of Côte d'Ivoire (Traoré et al., 2016; Turner, 1995) near the Burkina Faso-Mali border; 2) the Morila Belt, just east of the large Bougouni granitic batholith (Hammond et al., 2011; Parra-Avila et al., 2016); and 3) the Yanfolila Belt, which sits between the town of Bougouni and the Mali-Guinea border. Major shear zones in the region are the Siekeroli and Bannifin shear zones (Figure 1) (Feybesse et al., 2006b, 2006c; Liégeois et al., 1991; McFarlane et al., 2011).

2.2 Geochronology and geochemical overview of the Paleoproterozoic Baoulé-Mossi domain felsic intrusions

Felsic intrusions in Burkina Faso are divided according to their host volcanic belts. Across the NE-E portion of the country, authors such as Castaing et al. (2003), Hein et al. (2004), (2010), Naba et al. (2004), Tshibubudze et al. (2009), (2013), (2015) and Vegas et al. (2008) described the intrusions as NE-SW-trending, medium to coarse-grained equigranular granodiorites, tonalites, quartz-diorites, quartz-monzodiorites and granites. Zircon U-Pb ages indicate that the intrusions are as old as ca. 2260 Ma (Tshibubudze et al., 2015).

Metelka et al. (2011) subdivided the felsic intrusions across Burkina Faso into three types: 1) medium to coarse grained, amphibole and biotite rich, with minor occurrences of K-feldspar tonalites, trondhjemites and granodiorites, emplaced between ca. 2150 and 2130 Ma; 2) K-feldspar and biotite rich granodiorites and granites, rarely containing muscovite or amphibole, and granodiorites with ages between ca. 2110 and 2100 Ma; and 3) K-feldspar rich potassic granites, which occasionally bear muscovite (ca. 2110-2090 Ma, Eburnean).

Baratoux et al. (2011) suggested that volcanic activity across western Burkina Faso occurred between ca. 2190 and 2160 Ma (Eoeburnean). Additionally, by combining field observations and airborne geophysical data Baratoux et al. (2011), Block et al. (2015), and Metelka et al. (2011) determined that the granitic intrusions in northern Ghana and western Burkina Faso can be grouped into four main magmatic episodes: granite, granodiorite and gabbroid emplaced between 2195and 2160 Ma (Pre –ME1), ME1 composed mainly of tonalite, trondhjemite, granodiorite (TTG) emplaced at ca. 2160-2120 Ma; ME2, dominated by granodiorites and granites (ca. 2120-2110 Ma, Eburnean); and ME3 represented by granites (2110-2090 Ma, Eburnean).

Farther to the west across southern Mali, felsic intrusions are far less studied, and no large-scale correlations have been made. Most studies across southern Mali are at the local/mine-scale. Liégeois et al. (1991) recognized three main types of N-S striking felsic intrusions around the Bannifin shear zone: 1) plagioclase, microcline, quartz, hornblende and biotite rich, equigranular, fine-grained (occasionally aplitic) quartz-diorites, quartz-monzodiorites and granodiorites (ca. 2075 Ma, Eburnean), locally known as the Sadiola type; 2) foliated homogenous potassic pink leucogranites known as the Massigui type; and 3) fine to medium grained granitic intrusions containing biotite and variable amounts of K-feldspar, locally known as the Doubalakoro type.

In a study around the Morila gold mine, McFarlane et al. (2011) identified gold-bearing granodiorites as well as foliated porphyritic intrusive bodies and granites with pegmatitic textures. Granodiorite bodies are described as being biotite rich with plagioclase phenocrysts, similar to the Sadiola type. The porphyritic intrusions are composed of very fine grained plagioclase, quartz, actinolite and biotite. A second generation of intrusions is described as quartz diorites to biotite leucogranites similar to the Doubalakoro pluton of Liégeois et al. (1991). Finally, the third generation described by McFarlane et al. (2011) consists of leucogranites and two mica (muscovite/biotite) rich granites and pegmatites, with U-Pb zircon ages ranging between ca. 2130 and 2090 Ma (Eburnean). In addition to the types described by

Liégeois et al. (1991) and McFarlane et al. (2011), an older generation has been documented by Feybesse et al. (2006b), (2006c) and references therein. This older intrusion is represented by a monzonitic orthogneiss that yielded a zircon U-Pb age of 2150 ± 15 Ma, with an inherited zircon population at 2174 ± 8 Ma (Eoeburnean) (Feybesse et al., 2006b, 2006c).

In general, intrusions across the Paleoproterozoic domain of the southern West African Craton have been mainly described as TTG-like (Doumbia et al., 1998; Vidal et al., 2009, and references therein), based on normative Anorthite-Albite-Orthoclase discrimination diagrams after Barker (1979) and O'connor (1965). The intrusions have historically been divided into three main groups: 1) amphibole bearing granitic rocks, with or without biotite, usually foliated; 2) biotite bearing granitic rocks without amphibole; and 3) potassic alkaline plutons (Castaing et al., 2003; Doumbia et al., 1998; Egal et al., 2002; Gasquet et al., 2003; Hirdes et al., 1992, 1996; Liégeois et al., 1991; Lompo, 2009; Naba et al., 2004; Oberthür et al., 1998; Tapsoba et al., 2013; Vegas et al., 2008). Supplementary Material A summarizes the emplacement ages reported for these intrusions.

The geochemistry of felsic intrusions across Burkina Faso, Mali and Ghana, are extensively documented and broadly summarized as calc-alkaline/magnesian with arc-like trace element signatures, including negative Nb, Ta, P, Ti as well as REE fractionation and Eu anomalies (e.g. Baratoux et al., 2011; Block et al., 2016a; Castaing et al., 2003; Egal et al., 2002; Eglinger et al., 2017; Feybesse et al., 2006a, 2006b, 2006c; Gasquet et al., 2003; Hein et al., 2004, 2010; Lambert-Smith et al., 2016; McFarlane et al., 2011; Metelka et al., 2011; Naba et al., 2004; Peterssen et al., 2016, Tapsoba et al., 2013 and Vegas et al., 2008).

3 Samples and Analytical Methods

To compare the magmatic activity of the Paleoproterozoic Baoulé-Mossi domain, where precise ages are scarce, with the age peaks recognized in the global magmatic record an integrated geochronological dataset on igneous rocks from southern Mali, was established. Additional samples from Burkina Faso and some from eastern Guinea and Ghana provide ages from the whole Paleoproterozoic domain. Samples were collected over 3 field seasons and were carefully selected to give the most representative and comprehensive overview of the characteristics of the different plutons across the region (Figure 3). Each sample was approximately 3-6 kg in weight.

In Burkina Faso, granitic intrusions were sampled from east to west: 1) across the Po-Tenkodogo-Yamba region and the Goren Belt; 2) around the Inata-Belahouro gold district, Bouroum Belt; 3) in the surroundings of the Perkoa zinc mine, Boromo Belt; 4) in the Gaoua region, Hounde Belt; and 5) adjacent to the Banfora Belt. In Mali, sampling focused: 1) across the Syama Mine, Bagoe Belt; 2) on granitic intrusions around the Morila mine, Morila Belt; 3) on granitic outcrops of the Bougouni region; and 4) across the Kalana and Komana regions of the Yanfolila Belt. In Guinea, samples were obtained from granitic intrusions outcropping in the Siguiri Basin area. Finally, in Ghana samples were obtained from the Koudougou-Tumu granitic domain, northern Ghana, and across the Ashanti Belt-Kumasi Basin region of southern Ghana (Table 1, Figure 1 and larger insets with the sample points). In addition to surface samples, a series of felsic porphyries were collected from drill cores provided by exploration and mining operators, mainly across the Yanfolila Belt (Mali) and the Siguiri Basin (Guinea).

3.1 Rock description and petrology

Rock classification was made based on 3 parameters: 1) hand specimen observations; 2) CIPW norm; and 3) modal composition determined from microscopic evaluation of thin sections, characterized after Streckeisen (1976) (Tables 2 and 3).

3.2 Zircon morphology and U-Pb dating

Zircon concentrates were obtained following the standard procedures described in Claoué-Long et al. (1995). Sample processing to obtain zircon concentrates, zircon mount procedures and zircon imaging, which include the use of backscattered electron (BSE) and cathodoluminescence (CL) detectors, are described in Appendix A1. Detailed information about U-Pb isotope analysis of zircon by SHRIMP (Appendix A2) and LA-ICP-MS (Appendix A3), the criteria for rejection of analyses and data reduction are explained in Appendix A2.

4 Results

4.1 Rock description and Petrology overview

The petrological characteristics of the igneous rock samples are summarized in Table 2. Macroscopic and microscopic observations reveal that 48% of the samples are represented by granites while the rest are represented by granodiorites, monzodiorites, diorites, aplites and syenites. Additionally, two gabbros are identified. The drill core samples are classified as porphyries (Tables 1 and 2).

Based on mineralogy, 3 main groups of intrusions were identified: 1) biotite bearing, characterized by plagioclase, alkali feldspar, quartz, with or without hornblende, titanite, apatite, zircon and variable amounts of sulfide and oxide phases (Figure 4-A, C and E); 2) two mica intrusions, rich in plagioclase, alkali feldspar, muscovite, biotite, quartz, and zircon as well as variable amounts of sulfides (Figure 4-B and G); and 3) porphyries, mainly from drill core samples, consisting of altered to very altered fine-grained and recrystallized matrix with abundant calcite (Figure 4-H). Other minerals within the matrix include biotite, traces of muscovite, epidote and chlorite. Overall, the biotite in the single mica intrusions is greenish to (primarily) reddish-brown. Biotite in the two mica intrusions is mainly greenish and occasionally reddish-brown. Hornblende appears to be only present in a limited number of single mica samples. Titanite is mainly euhedral, bladed and light brown in color, but is also present as wedge-shaped grains that are darker brown in color. Zircon forms euhedral, elongated grains with visible oscillatory zoning, characteristic of an igneous origin.

In the case of the porphyry samples, original matrix textures are not easily identifiable. Relict phenocrysts are for the most part plagioclase. Deformation and mineral alignment is evident in some samples. Phenocryst grain boundaries appear sharp and unaltered in some samples while in others they appear deformed, with signs of recrystallization.

4.2 Zircon morphology

The majority of zircon grains are clear to slightly translucent and pale reddish-brown, while a small percentage are more intense reddish-brown. Most crystals are elongated, with either sharp or in some cases slightly rounded dipryramidal crystal form, and between 25 to 80 µm wide and 120 to 300 µm in length. Fragmented or broken zircons are probably the result of the mineral separation process. Most zircons show clear oscillatory zoning of variable intricacy, whereas others have either faint or broad zoning. Additional features evident in CL images include the recognition of high U concentration, which is identified due to metamict features, and distinct central regions with very dark brown coloration, possibly reflecting the presence of xenocrystic cores (Figure 5).

4.3 Zircon U-Pb dating

A total of 84 samples were dated by zircon U-Pb method, 27 samples from Burkina Faso, 50 from Mali, 5 from Guinea and 2 from Ghana (Figures 6 and 7, Table 3). Table 3 summarizes the $^{207}Pb/^{206}Pb$ age results (weighted mean ages are at 95% confidence limit). Figures 8 and 9 shows U-Pb Concordia plots and weighted mean $^{207}Pb/^{206}Pb$ ages for the 9 belts and 2 large batholiths studied. Supplementary Materials B (SHRIMP) C (LA-ICP-MS) contains the full set of (U-Th)-Pb isotope data.

Zircons from 58 samples yielded a single age population, while the remaining 26 samples contain zircon with older cores, which are interpreted as inherited components. The number of inherited grains is variable between samples and ranges from 1 or 2 analyses to 10 (Table 3). Across Burkina Faso, the Goren Belt/Po-Tenkodogo-Yamba regions, yield ages between ca. 2270 and 2120 Ma. For the Belahouro region the ages are between ca. 2180 and 2120 Ma and in the Boromo-Hounde belts the range is between ca. 2180 and 2110 Ma, while the Banfora region have ages between ca. 2150 and 2110 Ma (Figures 6 and 7).

In southern Mali, the felsic intrusion from the Syama mine (Bagoe Belt) is dated at ca. 2150 Ma. Farther to the west, the Morila Belt granites and granodiorites have inferred emplacement ages between 2140 to 2080 Ma. Across the Bougouni domain, the emplacement occurred between ca. 2100 and 2080 Ma while the Yanfolila Belt, was intruded between ca. 2220 and 2070 Ma (Table 3, Figures 6, 7 and 9).

The rocks analyzed are mainly granites and granodiorites with the bulk dated between ca. 2140 and 2080 Ma. The other dated intrusions are mainly porphyries, diorites and tonalites (Figure 6). Three of the 9 diorites have inherited grains of up to ca. 3500 Ma. A total of 12 granites have inherited zircon cores up to ca. 2250 Ma. The porphyry intrusions shows significant inheritance of material up to ca. 2500 Ma old. The granitic intrusions with Archean inheritance are mainly biotite bearing, characterized by plagioclase, alkali feldspar, quartz, with or without hornblende and muscovite. Assimilation of older crust during the generation of the 2 mica (biotite and muscovite) and 1 mica (mainly biotite) intrusions, as illustrated by inherited zircon, is also evident.

5 Discussion

The new data presented here constitute a comprehensive and spatially representative geochronological dataset from the Paleoproterozoic Baoulé-Mossi domain of the West African

Craton. Together with previously reported ages, broad U-Pb age and inheritance patterns can be visualized across the craton. The implications of these new data for tectonic evolution are explored in the following sections.

5.1 Magmatic activity from the Goren/Po-Tenkodogo-Yamba to the Banfora Belt

A granodiorite from the Goren/Po-Tenkodogo-Yamba region (BF8) with an apparent age of 2265 ± 17 Ma is similar to that obtained by Tshibubudze et al. (2013), (2015) for granites across the Oudalan-Gorouol Belt (ca. 2265 Ma) expanding the known occurrences of older intrusives presented in compiled data, by e.g. Baratoux et al. (2011), de Kock et al. (2011), (2012), Feybesse et al. (2006b), (2006c), McFarlane et al. (2011), Tapsoba et al. (2013) and Tshibubudze et al. (2015).

The youngest ages across the easternmost portion of the study area in Burkina Faso are ~2105 Ma (BF12-05), 2115 Ma (HO640C) and 2120 Ma (BF1), belonging to the Eburnean phase, which are mainly concentrated along the Banfora Belt region, with minor occurrences in the Boromo-Hounde and Belahouro belts. These young granite ages make it clear that felsic magmatic activity across the eastern portion of the Paleoproterozoic Baoulé-Mossi domain occurred over a period of about 160 Myrs. During this period, magmatic activity was minor between ca. 2275 and 2190 Ma, after which it increased to peak between 2140-2130 Ma. Magmatic activity then waned, with the last bodies emplaced at ca. 2105 Ma (Figures 6, 7, and 9). After ca. 2105 Ma the magmatic activity appears to be concentrated in the western portion of the Baoulé-Mossi across southern Mali.

5.2 Magmatic activity from the Banfora Belt to the Siguiri Basin

West of the Banfora Belt and into southern Mali and eastern Guinea, this study clearly lengthens the magmatic evolution of the Baoulé-Mossi domain. Previous studies that evaluated the magmatic activity indicated a period of 30 Myrs between ca. 2100 and 2070 Ma, which was associated with the Eburnean orogenesis (Liégeois et al., 1991). Conversely, Doumbia et al. (1998), Hirdes and Davis (2002), and Hirdes et al. (1996) indicated that the granitic intruded between ca. 2150 and 2070, a period of 80 Myrs. The Porphyries from the Yanfolila Belt, however revealed intrusions at 2159 ± 11 Ma (MWAXI-135), 2174 ± 15 Ma (MWAXI-130) and 2216 ± 15 Ma (MWAXI-134) extending the range of magmatism across the region. The felsic magmatic activity progressively increased during the Eburnean phase between ca. 2100 Ma and 2070 Ma, peaking around ca. 2090 Ma and abruptly declining after ca. 2070 Ma (Figures 6, 7 and 9). Overall the range of magmatic activity lasted about 150 Myrs, mostly concentrated between ca. 2100 and 2070 Ma. These findings may suggest an accretionary evolution for the southern West African Craton (section 6).

5.3 Broad age patterns across the Baoulé-Mossi domain

The early and punctuated magmatic activity recorded in the Yanfolila Belt contrasts with the rest of southern Mali, where only a limited number of samples are older than ca. 2110 Ma. Volcanism in the belt has been recognized as early as ca. 2212 Ma by Lahondère et al. (2002) whom associated this early activity with felsic to intermediate volcanism resulting from subduction or underplating. Early volcanism is present in the east of the Banfora Belt, as reported by Hein (2010) and Tshibubudze et al. (2013), (2015). Since these older ages (> ca. 2250 Ma in Burkina Faso and > ca. 2200 Ma in southern Mali) are not more common, either the overall volume of magmatism was relatively low during this period, or intrusions of this age are buried or have been eroded away. Alternatively, a more mafic style of magmatism may have resulted in less zircon crystallization.

Integration of the new and published data shows that for the southern West African Craton the emplacement ages fall into an “early” period at 2260-2130 Ma, which is dominated by pluton emplacement (Figure 11-A), followed diachronously by a “late” period (2130-2050 Ma). The boundary between the early and late periods was chosen after considering peak metamorphism in the region, deformation history, and spatial distribution of the ages across the study area and identifiable age peaks (Figures 2, 6, 7 and 11). While the probability of occurrence of ages shown in figure 10 suggests a boundary can be placed around ca. 2110 Ma, the spatial distribution is more in agreement with a boundary ca. 2140-2130 Ma. Additionally, the peak metamorphism identified by Block et al. (2015) between ca. 2140-2130 Ma, roughly coincides with the peak of magmatism in the eastern portion of the study area. The early period, which is comparable to the Eoeburnean phase, is dominated by a major peak at ca. 2135 Ma and a secondary peak at ca. 2170 Ma. The late period coincides with the Eburnean phase of de Kock et al, (2011) and can be further subdivided into two age brackets, between ca. 2130-2090 Ma (Figure 11-B) dominated by craton wide magmatic activity, and 2090-2050 Ma (Figure 11-C) where magmatic activity was predominantly concentrated in the western portion of the craton. As observed in figures 2 and 11 emplacement and deformation events did not occurred synchronously across the study area and it is clear that diachronism between east and west presents difficulties in the definition of the Eoeburnean and Eburnean phases across the study area as summarized in Lambert-Smith et al. (2016).

Additionally, when all magmatic, metamorphic and detrital zircon ages are plotted as a function of longitude for the whole southern West African Craton (Figure 12-A), it is possible to define the onset and cessation of magmatic activity as a function of distance across the southern West African Craton. This reveals an apparent offset of 50 Myrs in the beginning and end of magmatism between the eastern and western part of the Baoulé-Mossi domain (Figure 12-B). Such patterns indicate that magmatic activity progressively retreated from east to west across the southern West African Craton at a rate of approximately 35 km/Myr (Section 6). This inference is strengthened by the fact that 95 % of the plotted ages lie above the dashed bottom arrow in Figure 12-B, which shows the diachronism in the onset and cessation of magmatism.

5. 4 Zircon inheritance

The majority of the inherited zircons are within 50 Myrs or less of the crystallization ages of the individual intrusions, and mostly occur across southern Mali and to a lesser extent in the easternmost portion of Burkina Faso, across the Goren/Po-Tenkodogo-Yamba and Belahouro belts. Inheritance is mainly present in samples younger than ca. 2130 Ma. Only a limited number of samples have inherited cores/grains (30 out 90 samples), of which a half (15 samples) have inherited material older than 2200 Ma. The previous findings are in agreement with studies along the southern margin of the Bole-Nangodi Belt of northern Ghana, where de Kock et al (2011) identified Eoeburnean inheritance in intrusions up to 2130 Ma.

Only 4 samples (KADD119-M, KL000274, ML12-078 in Mali, and BF9 in Burkina Faso) assimilated Archean crust, as indicated by inherited zircons with ages between ca. 3700 and 2500 Ma. Evaluation of rejected discordant analyses (criteria explained in Appendix A) does not reveal age groups different from the inferred crystallization ages, or from the reported inherited ages (Table 3).

With the exception of de Kock, (2011) and Lambert-Smith et al. (2016) who identified inherited Archean zircons in northern Ghana and in the Kédougou-Kéniéba Inlier of Mali, respectively early studies failed to identify Archean inheritance. The absence of Archean crust has been used to argue that the Baoulé-Mossi domain was mostly the result of juvenile magmatic activity (Abouchami et al., 1990; Boher et al., 1992; Tapsoba et al., 2013). The present study identified 2 zircon grains with ages between ca. 3600 and 3500 Ma, 1 grain at ca. 2880 Ma and 3 grains that yield ages between ca. 2600-2500 Ma; these are from the Goren/Po-

Tenkodogo-Yamba region and Belahouro Belts in Burkina Faso and in the Yanfolila Belt in southwestern Mali (Table 3).

5.4.1 Possible origin of the zircon inheritance

Two scenarios are envisaged to explain the zircon inheritance found in some samples: 1) assimilation of older crust by ascending magmas (contamination of ascending magmas by older basement rocks); and 2) assimilation from a sedimentary source where they were detrital grains. Both scenarios could potentially be the result of Eburnean orogenesis. According to Baratoux et al. (2011), Tshibubudze et al. (2013) and (2015) eastern Burkina Faso was subject to an early compressional event (2200-2160 Ma) that led to significant shortening and crustal thickening. Liégeois et al. (1991) also identified deformation events across southern Mali that resulted in intense folding and thickening and, plausibly, subsequent uplift. Recently, Block et al. (2015), (2016a), (2016b) described the implications of compressional deformation across northern Ghana and southwest Burkina Faso. These compressional events resulted in significant crustal thickening. Crustal thickening provides a way to underthrust and uplift sedimentary rocks, and allows greater interaction between the older basement rocks and ascending magmas, facilitating the entrainment of older zircons.

The interleaving of Archean-Paleoproterozoic crust appears, to be limited and with the exception of western Côte d'Ivoire, surface expressions indicate a relatively sharp, well constrained Archean-Paleoproterozoic geological boundary (Eglinger et al., 2017), although this may not be the case at depth. In addition, within the study area, there is no geochronological or field evidence for the existence of large Archean exposures, arguing against the Paleoproterozoic Baoulé-Mossi domain having underthrust the Archean Kénéma-Man domain. If in contrast, the Archean block was overridden by, or resurfaced by, the Paleoproterozoic assemblage, it is likely that the juvenile magmas would have interacted with Archean crustal fragments during their ascent, potentially entraining the older zircons. This hypothesis is at odds with the majority of published isotope Nd and Hf isotope data that advocates a predominately juvenile origin with limited amount of reworked crust (e.g. Abati et al., 2012; Abouchami et al., 1990; Boher et al., 1992; Petersson et al., 2016; Tapsoba et al., 2013; Taylor et al., 1992).

Alternatively, if the inherited ages are the result of reworking sedimentary rocks it is necessary to account for long distance transport of detritus now represented by the inherited components. The present geological configuration indicates that the distance between the Banfora and Yanfolila belts is over 300 km, whereas the distance from the known Archean Kénéma-Man domain and the Yanfolila Belt is over 80 km. It is expected that these distances were greater at the time of emplacement at ca. 2200-2000 Ma. The uplifted units following crustal thickening would have been eroded more easily, thus providing a source for the inherited zircon grains. This scenario provides a possible source for the Paleoproterozoic inheritance found across the western portion of the study area, as zircons from the early magmatic episode (ca. 2300-2130 Ma) are incorporated into magmatic intrusions emplaced after ca. 2130 Ma. Conversely, in the case of Archean inherited ages from across Burkina Faso a plausible source of transported grains would be the Archean basement identified within the Nigerian Shield, as reported by Bruguier et al. (1994) and Kröner et al. (2001) or previously unrecognized Archean slivers. The most likely source of inherited grains in the Mali samples is the Archean Kénéma-Man domain. We note that incorporation of older zircon cores from the reworking of sedimentary rocks is a testable hypothesis – in this case, the emplacement-aged zircons of the host granite should have high $\delta^{18}O$ values (e.g. Hawkesworth and Kemp, 2006; Kemp et al., 2007, 2009; Valley, 2003; Valley et al., 1994).

6 Tectonic implications and accretionary model

The crustal evolutionary patterns of the southern West African Craton, and in particular of the Baoulé-Mossi domain, reflect a complex assemblage (puzzle) that requires understanding of the spatial and temporal distribution of emplacement ages and the presence of inherited zircon grains. During the Phanerozoic, migrating magmatic fronts and abrupt cessations of magmatic activity, as inferred here, have been associated with arc type systems, such as the Andes in central Chile (Hildreth and Moorbath, 1988) and South China, where flat slab subduction has been proposed (Li and Li, 2007). It is possible that similar accretionary processes shaped the crustal evolution of the southern West African Craton

An accretionary process may have involved at least two crustal blocks that join to form the Baoulé-Mossi domain. During the Eoeburnean magmatic phase the magmatic activity was mainly concentrated in the easternmost block of the study area (minor peak at ca. 2170 Ma, figure 10). As the magmatic activity migrated westward a large pulse of magmatism is identified at around ca. 2135 Ma, potentially heralding the docking of the two blocks at ca. 2130 Ma. After ca. 2130 Ma the magmatic activity appears concentrated in the westernmost region with peak magmatism at ca. 2090 Ma. The inherited age pattern is the result of the younger magmas sampling material derived from the easternmost portion suggest the westward migration of the magmatic front (Figure 13). Recently, Block et al. (2016a) proposed a collision model between blocks in Ghana and Burkina Faso/Côte d'Ivoire. We suggest that the Paleoproterozoic Baoulé-Mossi domain was the result of the accretion of at least two crustal blocks that were subsequently amalgamated with the Archean Kénéma-Man domain (Figure 13).

The boundary between these inferred crustal blocks is based on the distribution of intrusion emplacement ages and inherited zircons. East of the Banfora-Bagoe belts, intrusion ages are predominantly older than ca. 2130 Ma, mostly free of inheritance, while to the west the ages are predominantly younger than ca. 2130 Ma and commonly contain an inherited component. Multiple crustal blocks explain the occurrences of inherited ages between ca. 2250 and 2150 Ma across Southern Mali, due to potential crustal thickening and subsequent underthrusting or uplift and erosion of older crust (section 5.4.1). Certainly, across southern Mali this study and previous studies (e.g. Feybesse et al. (2006b), (2006c)) have identified ages between ca. 2215 and 2150 Ma, but the geographical distribution and number of identified intrusions within that range does not account for the relatively widespread inheritance across southern Mali. Subsequently, the Paleoproterozoic crustal blocks of the Baoulé-Mossi domain, proposed here were accreted into the Archean Kénéma-Man domain.

7 Conclusions

The new data presented in this study support observations that the Paleoproterozoic portion of the southern West African Craton developed during an accretion process, as follows:

- Evaluation of all zircon ages (magmatic, metamorphic and detrital) plotted as a function of longitude supports the notion that the Paleoproterozoic Baoulé-Mossi domain underwent a diachronous evolution reflected by a westward migration of the magmatic front. It also highlights an abrupt cessation and retreat of activity across the southern West African Craton that started around ca. 2100 Ma at the eastern end of the craton and ended at ca. 2050 Ma at the westernmost portion. This retreat is represented by a westward migration of the magmatic front of approximately 35 km/Myr and is analogous to that shown by Phanerozoic subduction- accretion systems as described by e.g. Li and Li (2007) and Hildreth and Moorbath (1988).
- The offset of magmatism and distribution of inherited zircons indicates that the Paleoproterozoic domain part of this study was composed of at least two crustal blocks with the boundary probably located between the Banfora and Bagoe belts.
- An accretionary process might have started as early as ca. 2175 Ma. At this time a minor

peak of magmatic activity is identified east of the Banfora Belt.

- Early peak metamorphism identified at ca. 2130 Ma (Block et al., 2015) is taken as an indication of the timing at which the two blocks were docked and it coincides with peak magmatism in the eastern portion of the study area. Intrusions younger than ca. 2130 Ma generally contain inherited grains with ages up to 2250 Ma. This suggests that the crust was thicker after that time, allowing for incorporation of older components, which is also consistent with an accretionary model. Additionally the distribution of inherited ages up to ca. 2250 Ma indicates that the ca. 2130 Ma magmas interacted with, or sampled sediments derived from, previously emplaced intrusions with ages between ca. 2250 and 2150 Ma.

These observations are consistent with an arc type environment, as suggested by e.g. Ama Salah et al. (1996), Béziat et al. (2000), Sylvester and Attoh (1992), Abati et al. (2012), Block et al. (2015) and (2016b), Lambert-Smith et al. (2016), Petersson et al. (2016) and Tapsoba et al. (2013).

This study identified Archean zircon inheritance, particularly in the <2130 Ma intrusions. These occurrences could imply a greater involvement of Archean crust in the Paleoproterozoic granitic magmas than previously proposed. Recent studies, Abati et al. (2012), Begg et al. (2009) and Petersson et al. (2016), have also advocated a greater role of Archean crust, and future isotope studies are required to evaluate this further. Ultimately, however, the distribution and scarcity of Archean inheritance points toward a predominately juvenile crustal growth during the Paleoproterozoic across the Baoulé-Mossi domain, as long argued by Nd and Hf isotope studies (e.g. Abati et al., 2012; Abouchami et al., 1990; Boher et al., 1992; Tapsoba et al., 2013; Taylor et al., 1992).

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9 Tables, Figures and Supplementary Materials

Table 1 *Sample information, location, rock type and basic field description as part of the present study.*

Table 2 *Summary of main mineralogical characteristics by volcanic belt or geologic region of interest.*

Table 3 *Summary of interpreted crystallization ages and identified inherited ages.*

Figure 1 *A) Simplified geological map of the West African craton after Boher et al. (1992) Sketch shows the extension of the Leo-Man rise in the southern portion of the craton, defined by the Archean Kénéma-Man and Paleoproterozoic Baoulé-Mossi domain. Boxed area shown in detail in insert B; B) Simplified geological map, after Lebrun et al. (2016) of the study areas delineated in insert A. Zone 1 covers Burkina Faso, Mali northern Ghana and eastern Guinea, while zone 2 covers a portion of the Ashanti belt in southern Ghana. Map includes major structures and samples collected for geochronological work.*

Figure 2 *Simplified lithostratigraphic, deformation, geochronological chart highlighting geologic areas of interest for the present study, showing the timing of emplacement of the studied felsic intrusions. Modified after Baratoux et al. (2011), Block et al. (2015), (2016b), Lebrun et al. (2016), Miller et al. (2013), Perrouty et al. (2012), (2015), Miller et al. (2013) and Tshibubudze et al. (2015).*

Figure 3 *A) Characteristic rock exposure found across southern Mali and Burkina Faso; B) Granitic intrusion mostly composed of a fine grained quartz matrix, mineral assemblage includes biotite, quartz, and plagioclase phenocrysts of 2 mm by 4 to 5 mm (ML12-080); C) Least deformed portion of the Diallo Granite, which is quartz-feldspar-biotite rich (SU-021); and D) A granite, of equigranular texture, fine to medium grained. K-feldspar dominated, quartz and some plagioclase, black minerals are mostly biotite (ML12-105). All images refer to exposures in southern Mali.*

Figure 4 *Thin section images in XPL of characteristic samples showing mineral composition of rock samples identified across the study area; A) Major minerals, K-feldspar, quartz, plagioclase, biotite, small amounts of hornblende. Chlorite, sericitic alteration and traces of sulphides, other minerals include zircons, titanite and some hematite (ML12-068); B) Quartz, plagioclase, small amounts of K-feldspar, traces of pyrite and chalcopyrite, biotite and hornblende (SU_002); C) Angular K-feldspar crystals, minor amounts of plagioclase, relatively large amounts of brownish red biotite and some hornblende, chlorite and quartz (SU_001); D) Sericitic alteration, primary structures relatively easy to identify, mainly composed of large plagioclase crystals within a quartz matrix and traces of biotite, titanite, zircon, epidote and chlorite (BE5); E) Plagioclase, K-feldspar, quartz. Biotite is common, small amounts of sericitic alteration, most feldspar crystals appear intact (ML12-104); F) Plagioclase rich, original textures hard to identify due to pervasive sericitic alteration from the center of the crystals outwards, amphibole (hornblende) in some cases visible alteration into chlorite, minor amounts of quartz and small amounts of biotite, visible apatite/zircons, and additionally extensive occurrence of opaque minerals, majority of which appear to be pyrite (BNF150559); G) Quartz, plagioclase, biotite and muscovite. Quartz matrix is fine grained when compared to the plagioclase crystals. Accessory minerals include titanite, zircon, chlorite, ilmenite, signs of alteration some sericite visible (SU_007); and H) Quartz content between 5 to 15%, sample is plagioclase dominated, k-feldspar is not visible as samples is strongly altered and it is difficult to identify minerals and textures. Biotite and hornblende are also present. Alteration products are chlorite, epidote, and maybe actinolite (ML12-086).*

Figure 5 *Selected zircon images showing the different morphological characteristics of zircon. A and B) Granites from the Belahouro Belt; C) Granodiorite from the Boromo-Hounde belts; D and E) Represent zircons from a* *diorite and a granite from the Banfora Belt; F) Zircon obtain from a granite of the Morila Belt; G, H, I and J) Zircons representing a porphyry, two granites and a syenite representative of the Yanfolila Belt; and K, L and M) Zircons from a granite, a dacite and a diorite from the Siguiri Basin. Notice that the zircons from granites and granodiorites are mostly elongated and tabular, while the zircons from diorites are slightly more rounded and display a faint zoning instead of the well-defined oscillatory zoning of zircons from the granites. Scale bar in all images represents 100 µm.*

Figure 6 *A) Histogram showing new interpreted U-Pb crystallization ages distributed by belts and regions of geologic interest as described in the regional geology section; and B) Histogram showing the age distribution of the studied samples base on identified rock types.*

Figure 7 *Age distribution by longitude color coded by volcanic belts and regions of geologic interest. A) Shows all ages while B) focuses on the age range between 2400 and 2000 Ma. Solid symbols represent U-Pb ages interpreted as crystallization ages; open symbols represent individual U-Pb analyses interpreted to represent inherited ages.*

Figure 8 *Left Weight mean average age; right Concordia age plots. Black symbols are accepted analyses while red symbols represent rejected analyses. From top to bottom samples: across Burkina Faso, BF1 (Goren/Po-Tenkodogo-Yamba), BE5 (Belahouro Belt), HO629 (Boromo-Hounde belts). BNF 150559 (Banfora Belt) and from Mali ML12-086 (Bagoe Belt).*

Figure 9 *Weight mean average age; right Concordia age plots. Black symbols are accepted analyses while red symbols represent rejected analyses. Samples from across Mali: ML12-105 (Morila Belt), ML12-107 Bougouni region, MWAXI-126 (Yanfolila Belt), and from Guinea, KL000565 (Siguiri Basin).*

Figure 10 *Relative probability density diagrams, top A) this study ages east of the Bagoe Belt dominated by ages older than 2130 Ma Main peak ca. 2135 Ma, secondary peak at 2175 Ma; Bottom B) ages west of the Bagoe Belt dominated by ages between ca. 2100 and 2070 with a major peak at ca. 2095 Ma. 2130 Ma boundary after peak metamorphism exhumation of high-grade rocks identified by Block et al. (2015).*

Figure 11 *Zircon and monazite U-Pb age distribution across the southern West African Craton for the period between 2250 and 2050 Ma. A) Ages between 2300 and 2130 Ma, showing a marked concentration of ages in the eastern craton, and no recorded ages within the Archaean host rocks; B) Ages between 2130 and 2090 Ma, showing a uniform coverage of ages across craton for this age bracket, and several ages recorded within the Archaean host rocks; and C) Ages for the period 2090-2050 Ma, clearly showing that most ages are concentrated* *west of the Banfora-Bagoe belts in the westernmost portion of the study area. (520 ages from bibliography, Supplementary Material A).*

Figure 12 *Longitudinal variations in magmatic activity. A) Zircon and monazite U-Pb age distribution as a function of longitude (520 ages from bibliography, Supplementary Material A, Table 1, WAXI II compilation and this work). Notice this compilation only includes interpreted crystallization ages and metamorphic ages. Other not specified refers to ages from which the reference does not clarifies specify source rock type or if it is a crystallization or metamorphic age. The sharp cessation of magmatism across the craton is clearly defined, with subsequent reworking limited to the margins of the craton, dashed line; B) zircon and monazite U-Pb age distribution as a function of longitude for the age bracket 2300-2000 Ma (455 ages) (Table 1, WAXI II age compilation and this work). The progressive cessation of the magmatic activity from east to west during this period in the southern West African Craton equates to a migration of approximately 35 km/Myr. Over 95% of all ages plot above the offset of magmatism line "magmatic front" (dashed bottom arrow).*

Figure 13 *Schematic cartoon showing the proposed boundaries and crustal blocks. Top, shows the Archean Kénéma-Man and the Baoulé-Mossi domain. The Baoulé-Mossi domain, which is divided into two blocks during the period 2160-2130 Ma. During the mentioned period the assemblage blocks are affected by compressional forces, first N-S (D1) as mentioned described by Baratoux et al. (2011), Block et al. (2016a), and Perrouty et al. (2012) the followed by a E-W compression (D2) (Baratoux et al., 2011; Block et al., 2016a; Perrouty et al., 2012). Density of the dot pattern indicates distribution of magmatic activity. Greater density = greater magmatism, and less density = less magmatism; and Bottom shows the amalgamation of the Paleoproterozoic blocks under a D2 compressions for the period 2130-2110 Ma. Notice the occurrence of inherited grains. Inheritance is mainly concentrated in the eastern portion of the Baoulé-Mossi and predominately represented by ages between ca. 2500 and 2125 Ma which are common crystallization ages across the easternmost portion of the study area, indicating that the western block is contaminated by crustal material derived from the eastern block.*

Supplementary Material A. *Summary of published ages. The ages include emplacement and metamorphic events as well as multiple dating methods. Blank spaces indicate a lack of available information in the data source.*

Supplementary Material B. *Raw SHRIMP U-Pb data.*

Supplementary Material C. *Raw LA-ICP-MS data.*

10 Appendix A – Sample Preparation and Analytical Methods.

A.1 Zircon mount preparation

The epoxy mounts are discs of 5 mm thick by 25 mm diameter. Three to four samples were placed in each mount. Chips of the primary zircon standards BR266 (559 Ma, 903 U ppm; Stern (2001)) or M257 (561.3 Ma and 840 ppm; Nasdala et al. (2008)), were used for U/Pb calibration. Accuracy and reproducibility was monitored by including the secondary zircon standards OGC1 (3465 Ma; Stern et al. (2009)), and Temora2 (416.8 Ma; Black et al. (2004)). In addition chips of the silicate glass NIST 610 were included in the mounts for instrument set-up purposes. The mounts were polished with diamond film polishing mats as fine as 0.5 µm. Subsequently, the epoxy discs were cleaned using ethanol and petroleum spirits, a soap solution, and rinsed with deionized water in an ultrasonic bath. Mounts were oven dried (1 hour at 60ºC) and the analytical surface was coated with a 40 µm gold layer. Detailed mounting procedures and preparation can be reviewed in Claoué-Long et al. (1995).

Mounts were imaged using the backscattered electron and cathodoluminescence detectors of a JEOL 6400 Scanning Electron Microscope (SEM) or a VEGA 3 Tescan SEM at the Centre for Microscopy, Characterization and Analysis (CMCA), University of Western Australia (UWA). The acquired images allowed the identification of internal structures. Grains showing a large number of cracks or obvious radiation damage were not analyzed.

A.2 Sensitive High Resolution Ion Micro Probe (SHRIMP) dating

Zircon mounts were analyzed by means of Sensitive High Resolution Ion Micro Probe (SHRIMP II) at the John de Laeter (JDL) Centre for Isotope Research of Curtin University, Perth, Australia. Details of instrument operating conditions are described in De Laeter and Kennedy (1998) and Kennedy and De Laeter (1994) while analytical conditions are described in detail in Claoué-Long et al. (1995), Compston et al. (1984), and Williams (1988). The analytical procedure usually includes the use of a 25-30 µm diameter elliptical spot due to a mass-filtered $(O_2)^-$ primary beam between 2.0 and 2.5 nA. Each dataset included six scans through the mass range of $^{196}Zr_2O^+$ (2 seconds), $^{204}Pb^+$ (10 seconds), background (204.1) (10 seconds), $^{206}Pb^+$ (20 seconds), $^{207}Pb^+$ (30 seconds), $^{208}Pb^+$ (10 seconds), $^{238}U^+$ (5 seconds), $^{248}ThO^+$ (5 seconds), and $^{254}UO^+$ (2 seconds) (Nasdala et al., 2008). The data from each sample were reduced using the excel-based add-in program SQUID version 2.2 (Ludwig, 2003). Data reduction procedures were after Wingate and Kirkland (2014).

Zircon is a very resilient, refractory mineral that can survive partial melting and high grade regional metamorphism without losing its isotopic information (Mezger and Krogstad, 1997 references therein; Scherer et al., 2007). However, low grade metamorphism, fluid circulation and in some instances weathering can affect the U-Pb systematics, which results in discordant U-Pb ages. These discordant ages are for the most part due to Pb-loss (Mezger and Krogstad, 1997 references therein). In order to minimize the difficulties associated with potentially disturbed U-Pb systematics, for the purpose of this study U-Pb ages were only calculated from concordant to near concordant grains (discordance between -5% and +10%). Additionally, analyses that comprise more than 1% of non-radiogenic ^{206}Pb (i.e., from common lead) and yield U concentrations over a 1000 ppm were also rejected.

A.3 LA-ICP-MS Zircon dating

Laser ablation U-Pb zircon dating was carried out at the GEMOC/CCFS Centre. The method used an Agilent 7700 quadrupole Inducted Coupled Plasma Mass Spectrometer (ICP-MS) attached to a New Wave/Merchantek UP-213 laser ablation system (λ=213 nm). Beam diameter was set at 30 or 40µm, based on zircon size. Beam repetition was set at 5 Hz rate and energy around 0.06 µJ and 8 J/cm2. He was used as transport media, as it increases sample transport efficiency during the ablation process. Using He provides a more stable signal, and therefore a more reproducible Pb/U fractionation. Additional description and details are founded in Belousova et al. (2010) and Jackson et al. (2004).

U-Pb data was determined by analyzing twelve unknown samples for every two analyses of the GEMOC GJ-1 zircon standard (Elhlou et al., 2006). GJ-1, TIMS $^{207}Pb/^{206}Pb$ age of 608.5 Ma (Jackson et al., 2004). Zircon standards 91500 (U-Pb age 1065 Ma, Wiedenbeck et al., 1995) and Mud Tank (U-Pb age 732 Ma, Black and Gulson, 1978) were analyzed as secondary control standards for reproducibility and instrument accuracy. U-Pb ages were calculated from the raw signal data using the GLITTER software program after Griffin et al. (2008). Further details on integrated ration, fractionation, time resolved intervals, and instrumental mass bias and calibrating procedures are provided in Griffin et al. (2008) and Jackson et al. (2004). Information on common-Pb correction procedures are provided in Andersen (2002). Analyses reported in this study were corrected assuming recent Pb-loss and a common-Pb composition similar to present day average orogenic Pb as given by the second-stage growth curve of Stacey and Kramers (1975) for $^{238}U/^{204}Pb = 9.74$. No correction has been applied to analyses that are concordant within 2σ analytical error in $^{206}Pb/^{238}U$ and $^{207}Pb/^{235}U$, or which have less than 0.2% common-Pb. All described procedures are after Andersen et al. (2004), Belousova et al. (2010), Griffin et al. (2008) and Jackson et al. (2004).

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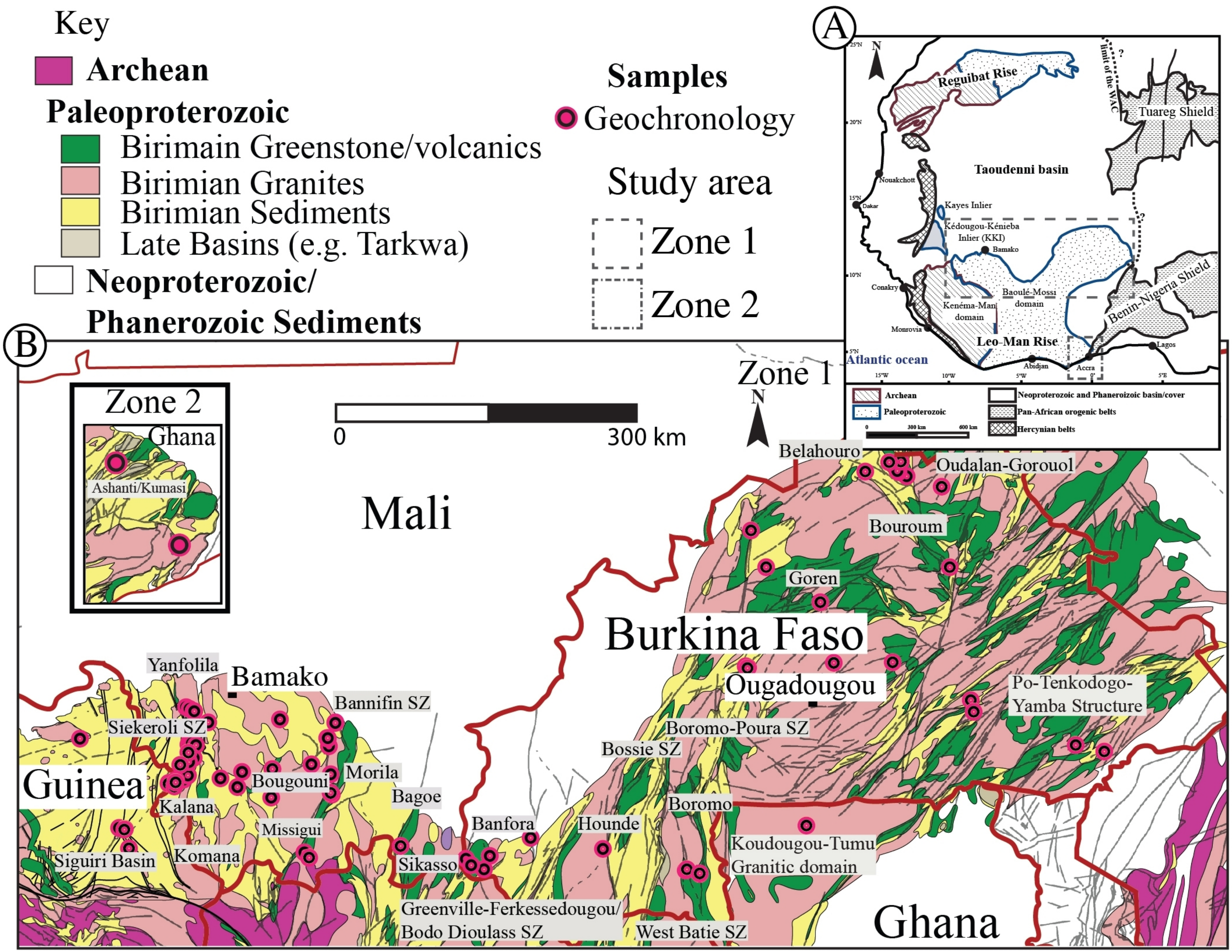
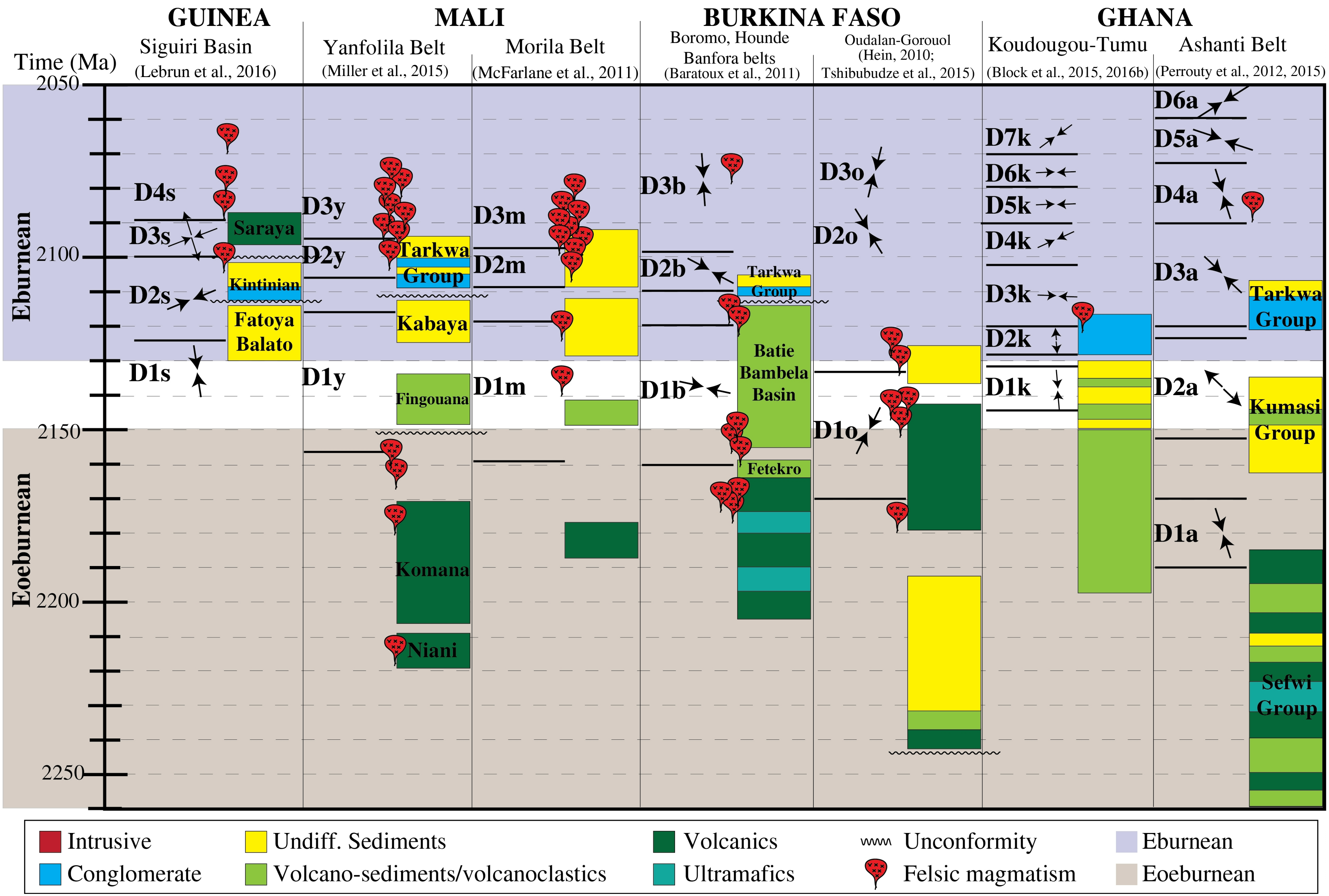
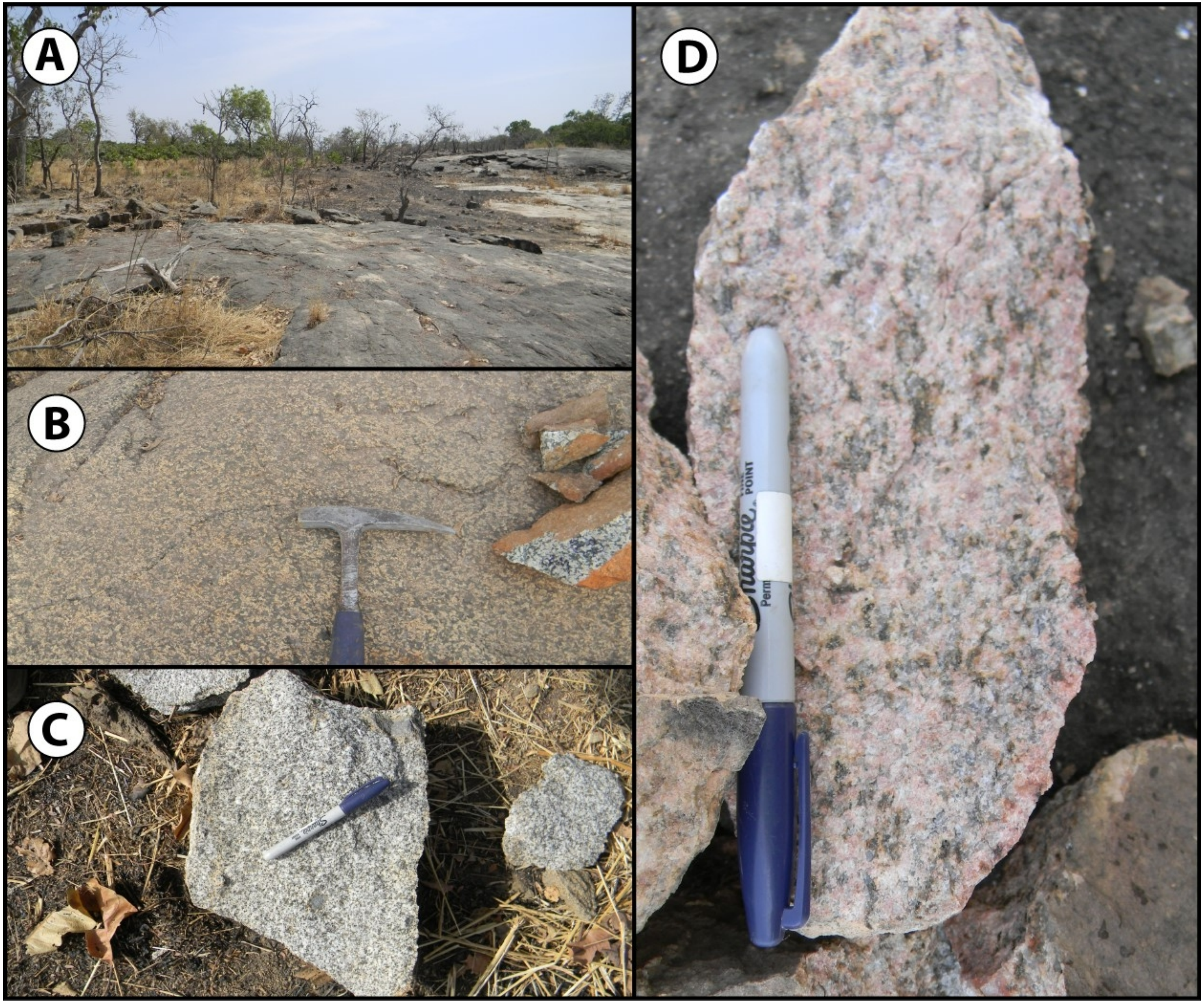
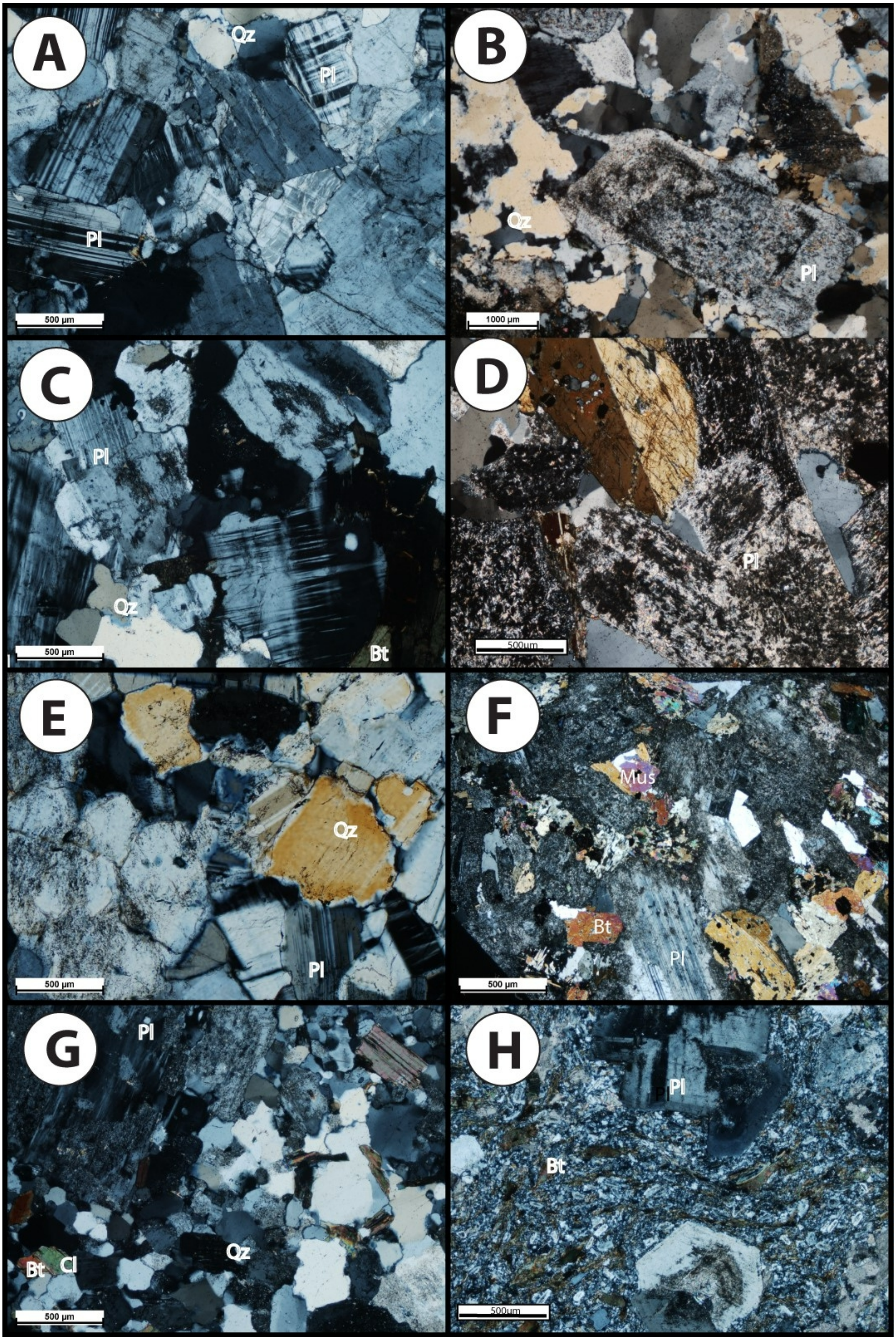
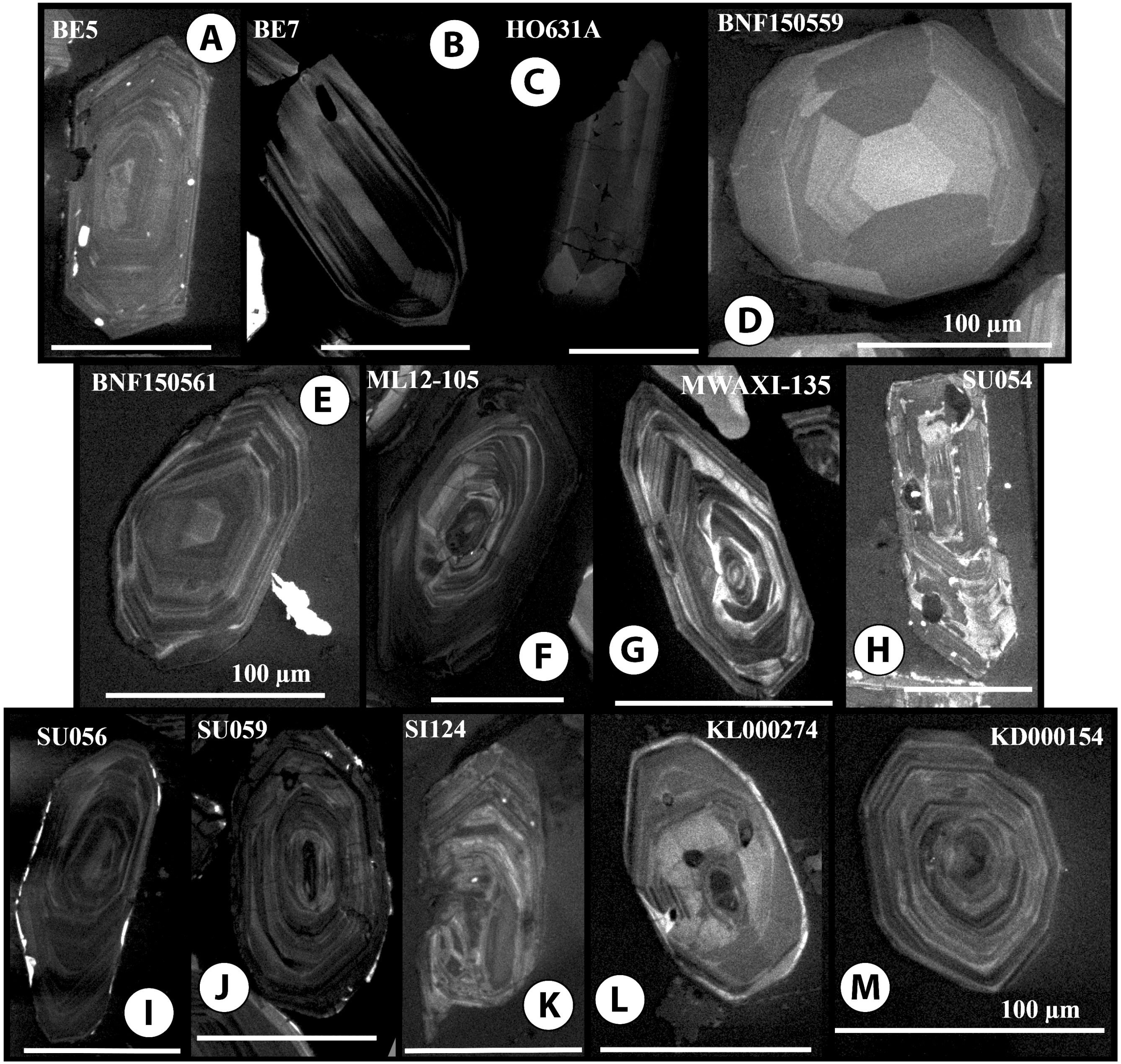
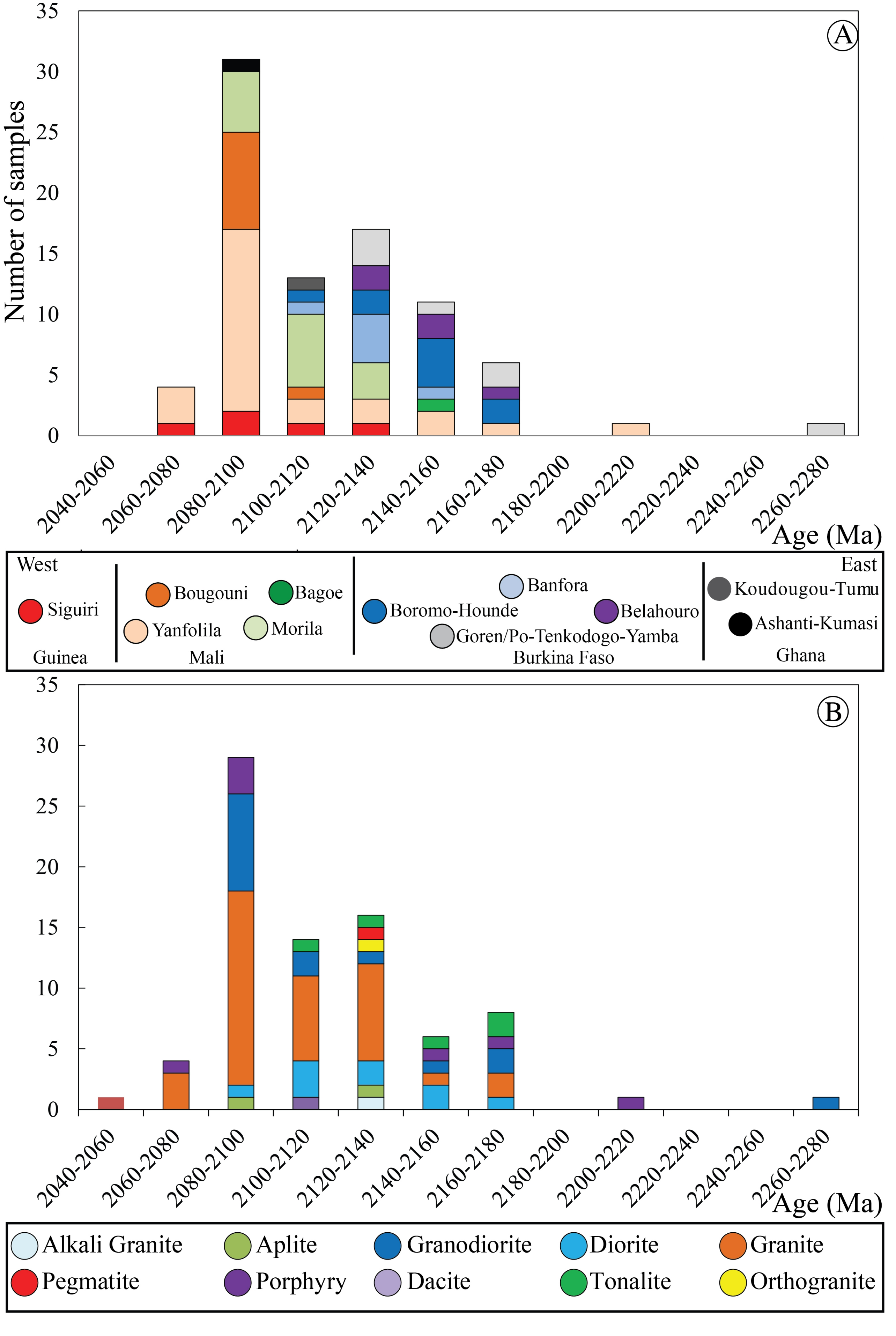

Key
Archean
Paleoproterozoic
Birimain Greenstone/volcanics
Birimian Granites
Birimian Sediments
Late Basins (e.g. Tarkwa)
Neoproterozoic/
Phanerozoic Sediments
Samples
Geochronology
Study area
Zone 1
Zone 2
A
Reguibat Rise
Tuareg Shield
limit of the WAC
Taoudenni basin
Nouakchott
Dakar
Kayes Inlier
Kédougou-Kéniéba Inlier (KKI)
Bamako
Conakry
Baoulé-Mossi domain
Kenéma-Man domain
Benin-Nigeria Shield
Monrovia
Leo-Man Rise
Atlantic ocean
Abidjan
Accra
Lagos
Archean
Paleoproterozoic
Neoproterozoic and Phanerozoic basin/cover
Pan-African orogenic belts
Hercynian belts
B
Zone 2
Ghana
Ashanti/Kumasi
0
300 km
Zone 1
N
Mali
Belahouro
Oudalan-Gorouol
Bouroum
Goren
Burkina Faso
Ougadougou
Po-Tenkodogo-Yamba Structure
Yanfolila
Bamako
Bannifin SZ
Siekeroli SZ
Boromo-Poura SZ
Bossie SZ
Guinea
Kalana
Bougouni
Morila
Bagoe
Missigui
Banfora
Hounde
Boromo
Siguiri Basin
Komana
Sikasso
Koudougou-Tumu Granitic domain
Greenville-Ferkessedougou/
Bodo Dioulass SZ
West Batie SZ
Ghana


GUINEA
MALI
BURKINA FASO
GHANA
Time (Ma)
Siguiri Basin
(Lebrun et al., 2016)
Yanfolila Belt
(Miller et al., 2015)
Morila Belt
(McFarlane et al., 2011)
Boromo, Hounde
Banfora belts
(Baratoux et al., 2011)
Oudalan-Gorouol
(Hein, 2010;
Tshibubudze et al., 2015)
Koudougou-Tumu
(Block et al., 2015, 2016b)
Ashanti Belt
(Perrouty et al., 2012, 2015)
2050
2100
2150
2200
2250
Eburnean
Eoeburnean
D4s
D3s
D2s
D1s
Saraya
Kintinian
Fatoya
Balato
D3y
D2y
D1y
Tarkwa
Group
Kabaya
Fingouana
Komana
Niani
D3m
D2m
D1m
D3b
D2b
D1b
Tarkwa
Group
Batie
Bambela
Basin
Fetekro
D3o
D2o
D1o
D7k
D6k
D5k
D4k
D3k
D2k
D1k
D6a
D5a
D4a
D3a
D2a
D1a
Tarkwa
Group
Kumasi
Group
Sefwi
Group
Intrusive
Conglomerate
Undiff. Sediments
Volcano-sediments/volcanoclastics
Volcanics
Ultramafics
Unconformity
Felsic magmatism
Eburnean
Eoeburnean

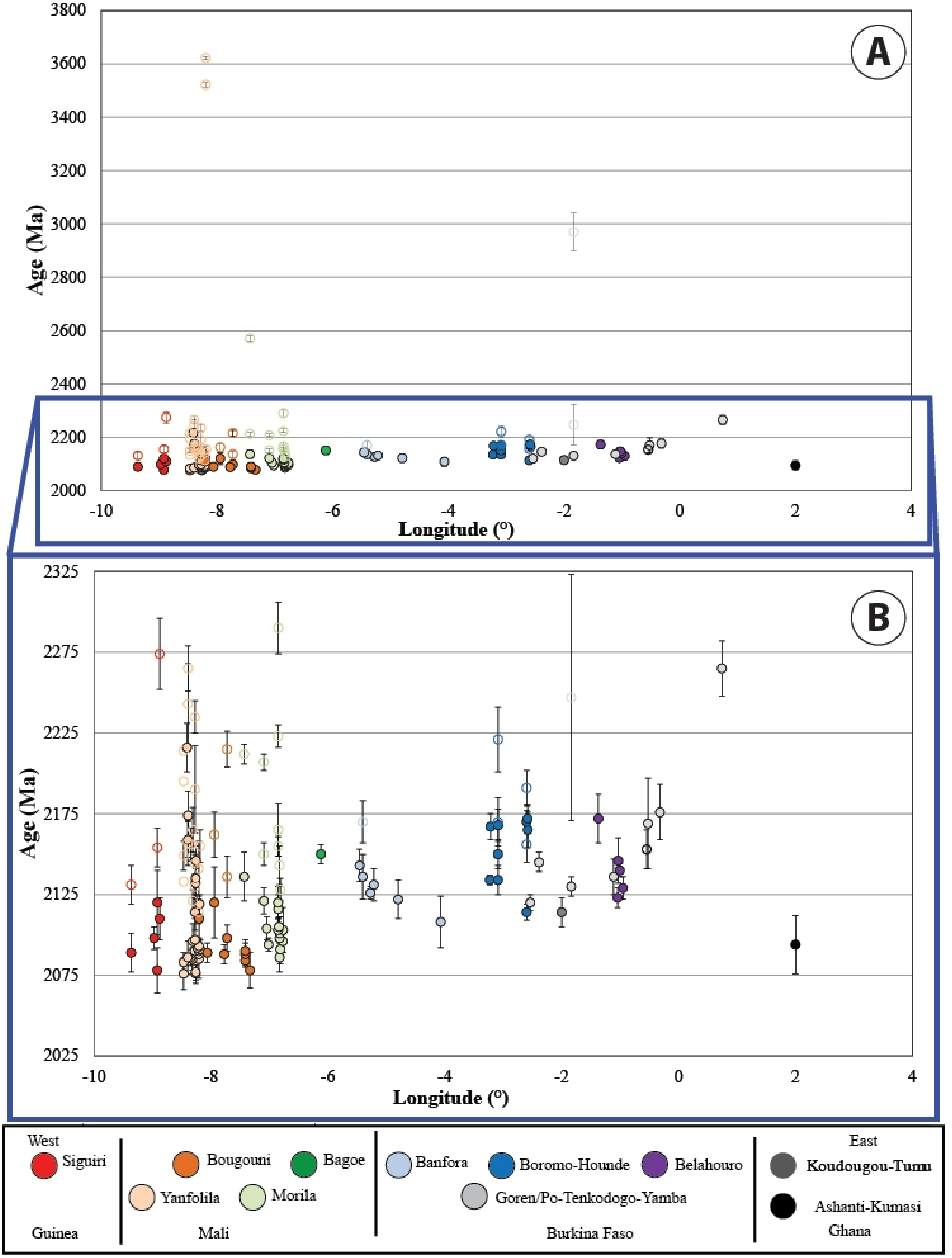

A
B
C
D

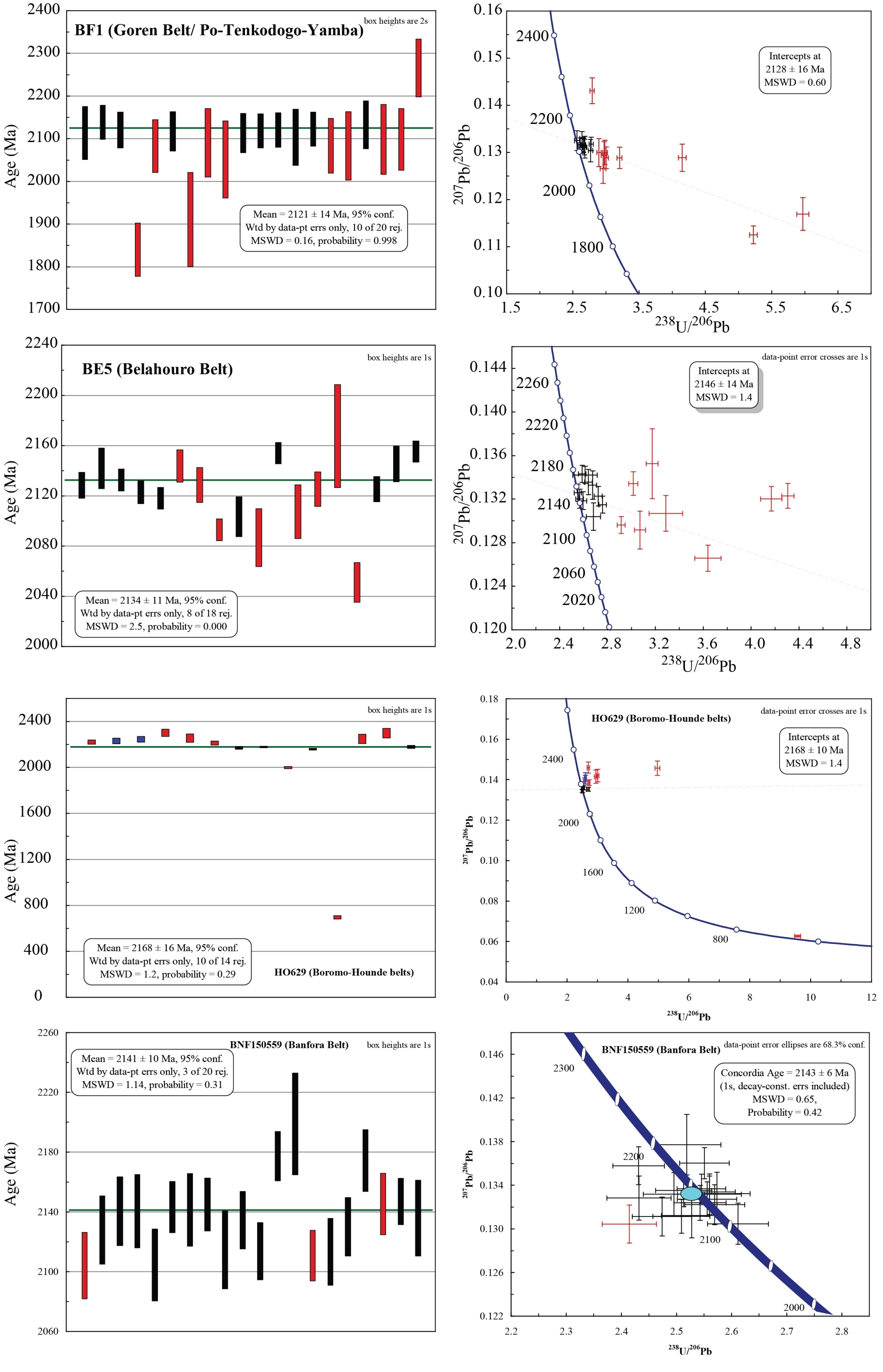

A
Qz
Pl
Pl
500 µm
B
Qz
Pl
1000 µm
C
Pl
Qz
Bt
500 µm
D
Pl
500µm
E
Qz
Pl
500 µm
F
Mus
Bt
Pl
500 µm
G
Pl
Qz
Bt
Cl
500 µm
H
Pl
Bt
500µm

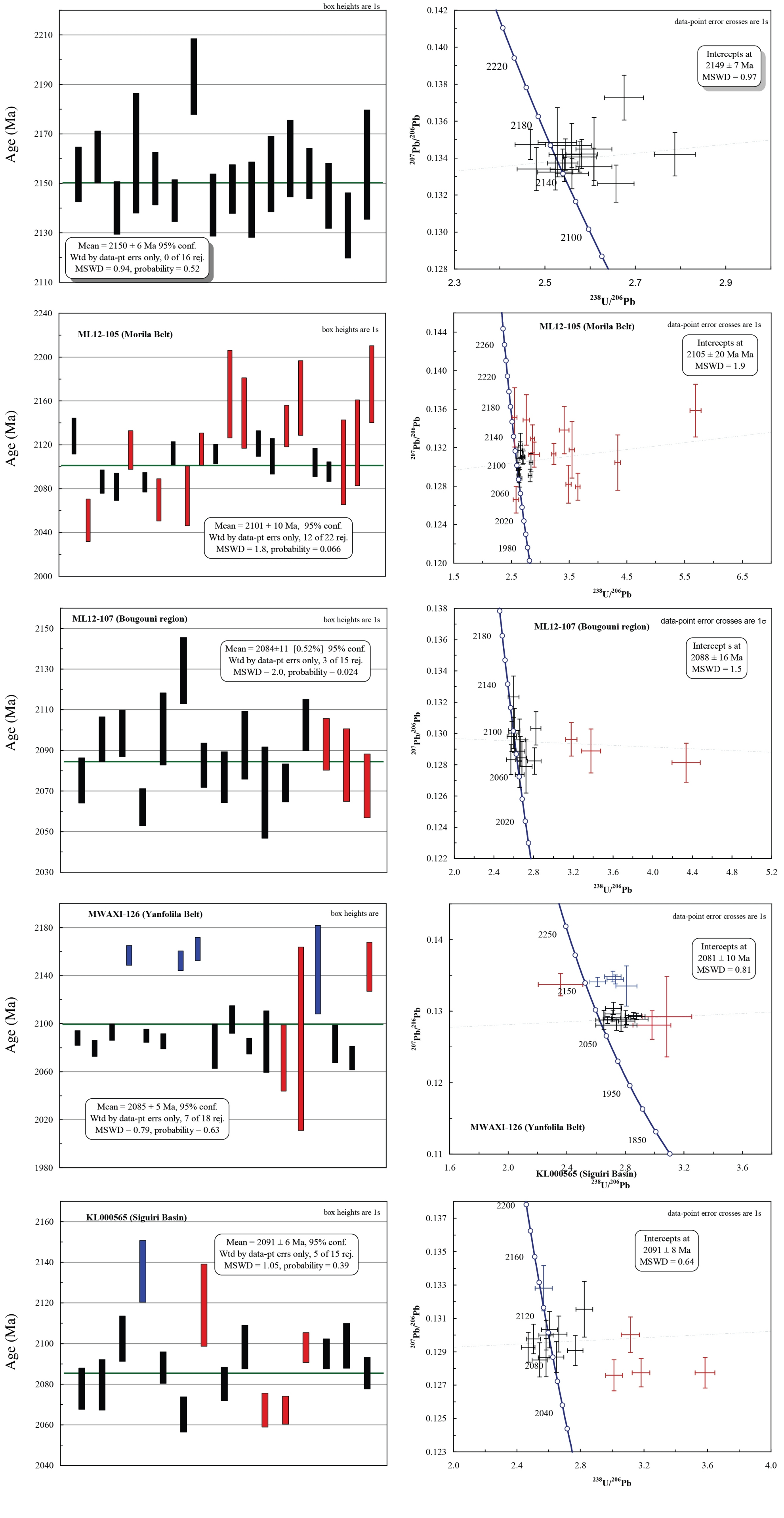

BE5
A
BE7
B
HO631A
C
BNF150559
D
100 µm
BNF150561
E
100 µm
ML12-105
F
MWAXI-135
G
SU054
H
SU056
I
SU059
J
SI124
K
KL000274
L
KD000154
M
100 µm



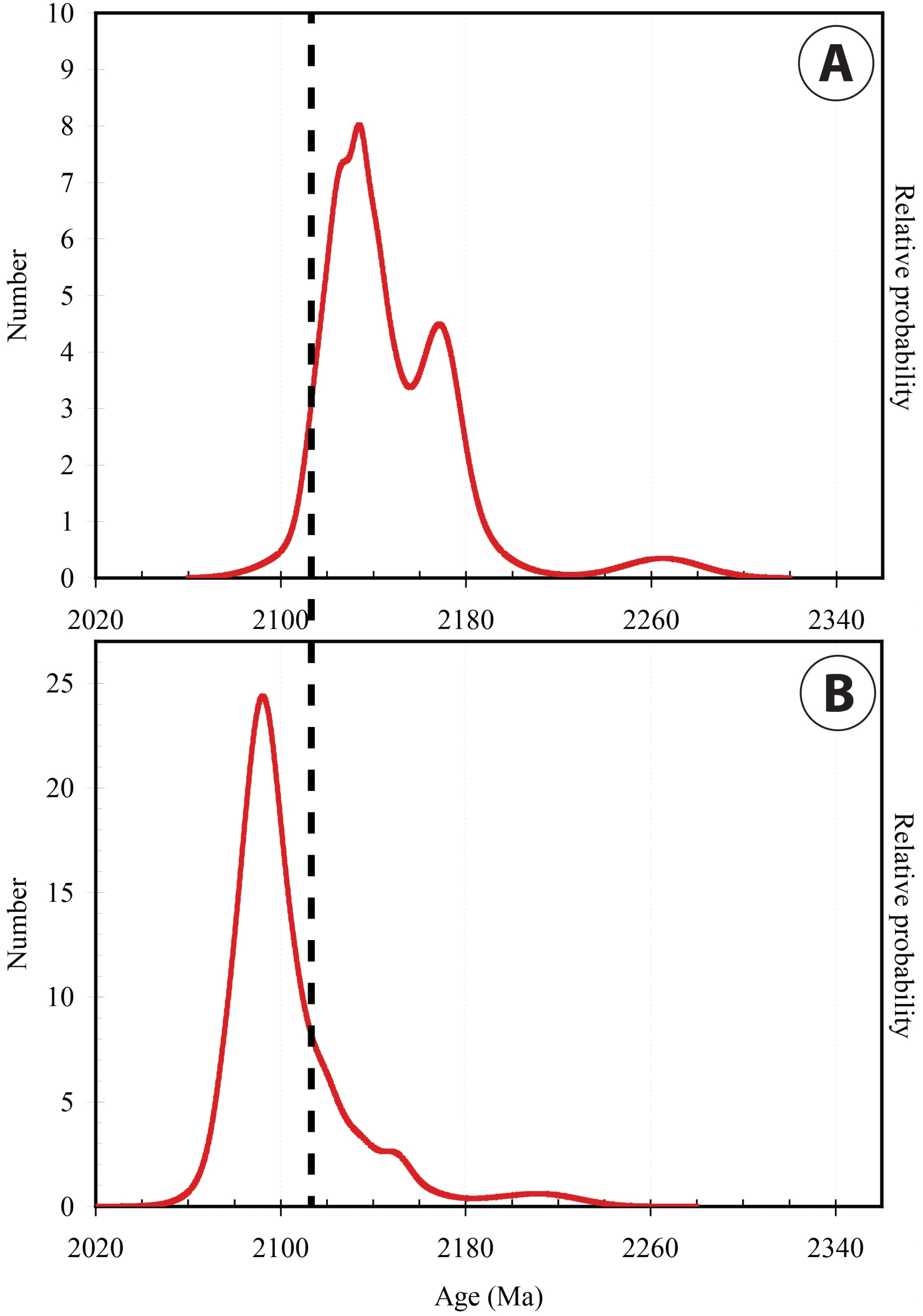
A
Number of samples
Age (Ma)
2040-2060
2060-2080
2080-2100
2100-2120
2120-2140
2140-2160
2160-2180
2180-2200
2200-2220
2220-2240
2240-2260
2260-2280
West
Siguiri
Guinea
Bougouni
Bagoe
Yanfolila
Morila
Mali
Banfora
Boromo-Hounde
Belahouro
Goren/Po-Tenkodogo-Yamba
Burkina Faso
East
Koudougou-Tumu
Ashanti-Kumasi
Ghana
B
Alkali Granite
Aplite
Granodiorite
Diorite
Granite
Pegmatite
Porphyry
Dacite
Tonalite
Orthogranite


A
Age (Ma)
3800
3600
3400
3200
3000
2800
2600
2400
2200
2000
-10
-8
-6
-4
-2
0
2
4
Longitude (°)
B
Age (Ma)
2325
2275
2225
2175
2125
2075
2025
-10
-8
-6
-4
-2
0
2
4
Longitude (°)
West
Siguiri
Guinea
Bougouni
Bagoe
Yanfolila
Morila
Mali
Banfora
Boromo-Hounde
Belahouro
Goren/Po-Tenkodogo-Yamba
Burkina Faso
East
Koudougou-Tuma
Ashanti-Kumasi
Ghana


BF1 (Goren Belt/ Po-Tenkodogo-Yamba)
box heights are 2s
Age (Ma)
Mean = 2121 ± 14 Ma, 95% conf.
Wtd by data-pt errs only, 10 of 20 rej.
MSWD = 0.16, probability = 0.998
Intercepts at
2128 ± 16 Ma
MSWD = 0.60
$^{207}Pb/^{206}Pb$
$^{238}U/^{206}Pb$
BE5 (Belahouro Belt)
box heights are 1s
Mean = 2134 ± 11 Ma, 95% conf.
Wtd by data-pt errs only, 8 of 18 rej.
MSWD = 2.5, probability = 0.000
data-point error crosses are 1s
Intercepts at
2146 ± 14 Ma
MSWD = 1.4
HO629 (Boromo-Hounde belts)
Mean = 2168 ± 16 Ma, 95% conf.
Wtd by data-pt errs only, 10 of 14 rej.
MSWD = 1.2, probability = 0.29
Intercepts at
2168 ± 10 Ma
MSWD = 1.4
BNF150559 (Banfora Belt)
Mean = 2141 ± 10 Ma, 95% conf.
Wtd by data-pt errs only, 3 of 20 rej.
MSWD = 1.14, probability = 0.31
data-point error ellipses are 68.3% conf.
Concordia Age = 2143 ± 6 Ma
(1s, decay-const. errs included)
MSWD = 0.65,
Probability = 0.42

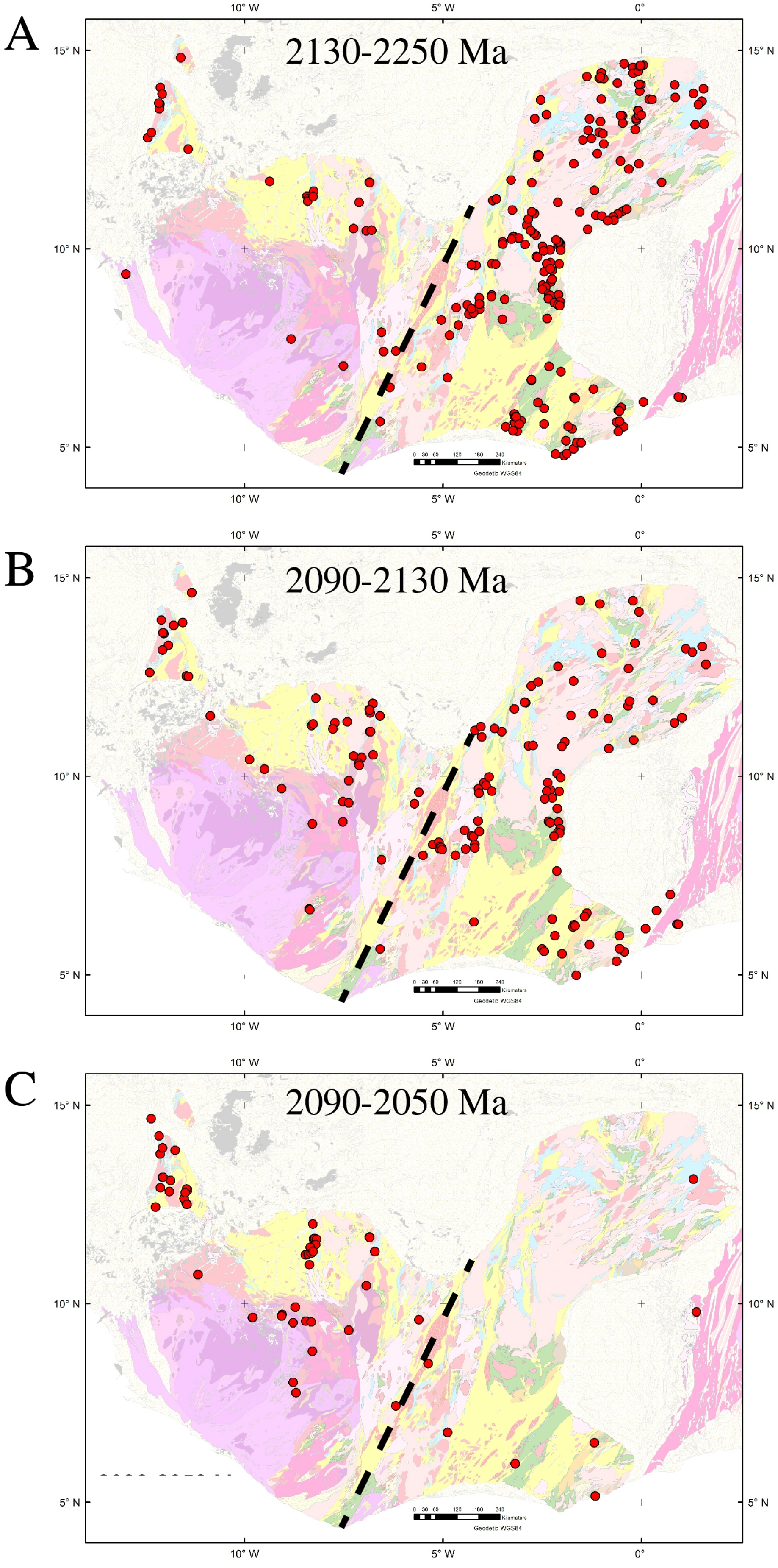


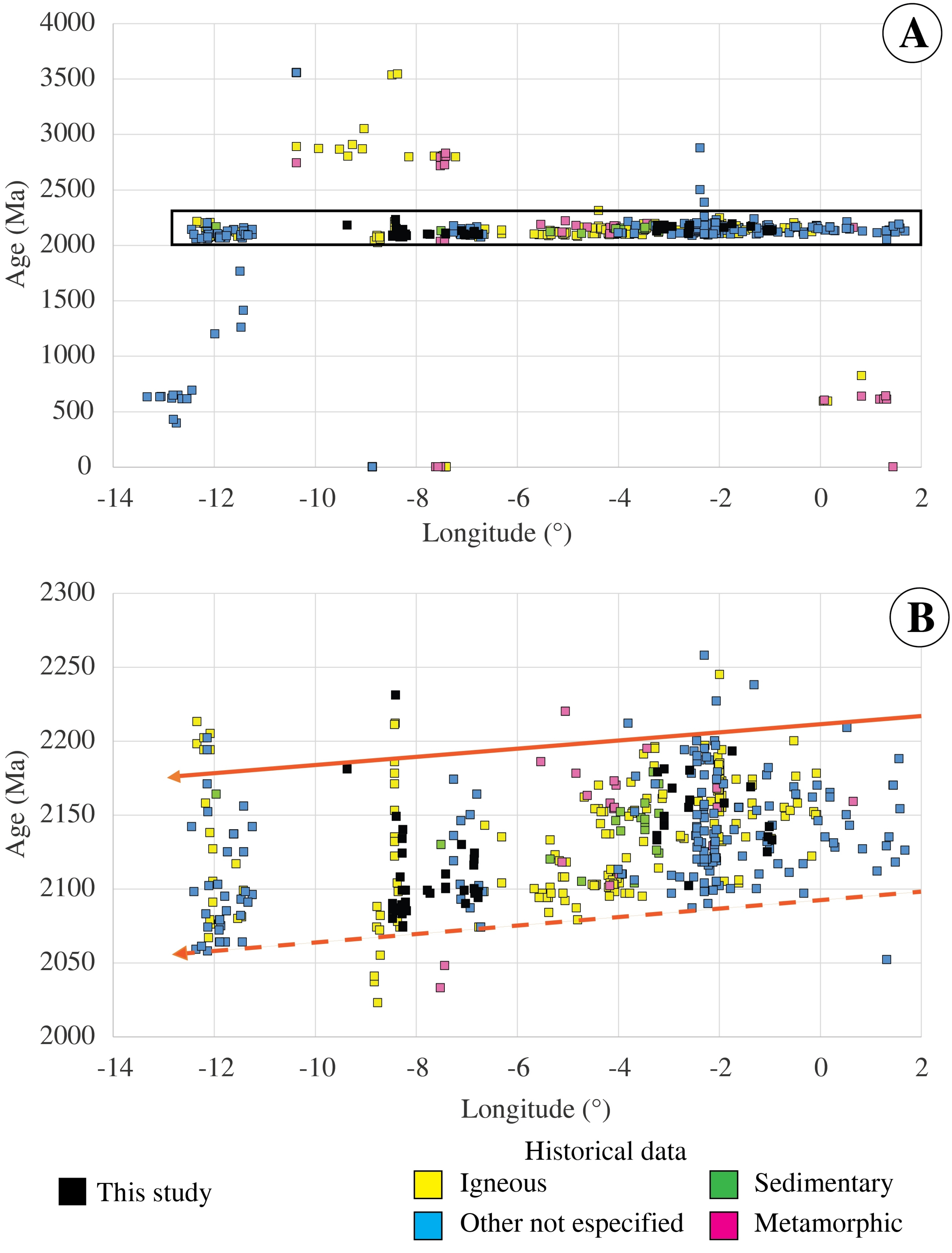
box heights are 1s
Age (Ma)
Mean = 2150 ± 6 Ma 95% conf.
Wtd by data-pt errs only, 0 of 16 rej.
MSWD = 0.94, probability = 0.52
data-point error crosses are 1s
Intercepts at
2149 ± 7 Ma
MSWD = 0.97
207Pb/206Pb
238U/206Pb
ML12-105 (Morila Belt)
Mean = 2101 ± 10 Ma, 95% conf.
Wtd by data-pt errs only, 12 of 22 rej.
MSWD = 1.8, probability = 0.066
Intercepts at
2105 ± 20 Ma Ma
MSWD = 1.9
ML12-107 (Bougouni region)
Mean = 2084±11 [0.52%] 95% conf.
Wtd by data-pt errs only, 3 of 15 rej.
MSWD = 2.0, probability = 0.024
data-point error crosses are 1σ
Intercept s at
2088 ± 16 Ma
MSWD = 1.5
MWAXI-126 (Yanfolila Belt)
box heights are
Mean = 2085 ± 5 Ma, 95% conf.
Wtd by data-pt errs only, 7 of 18 rej.
MSWD = 0.79, probability = 0.63
Intercepts at
2081 ± 10 Ma
MSWD = 0.81
KL000565 (Siguiri Basin)
Mean = 2091 ± 6 Ma, 95% conf.
Wtd by data-pt errs only, 5 of 15 rej.
MSWD = 1.05, probability = 0.39
Intercepts at
2091 ± 8 Ma
MSWD = 0.64

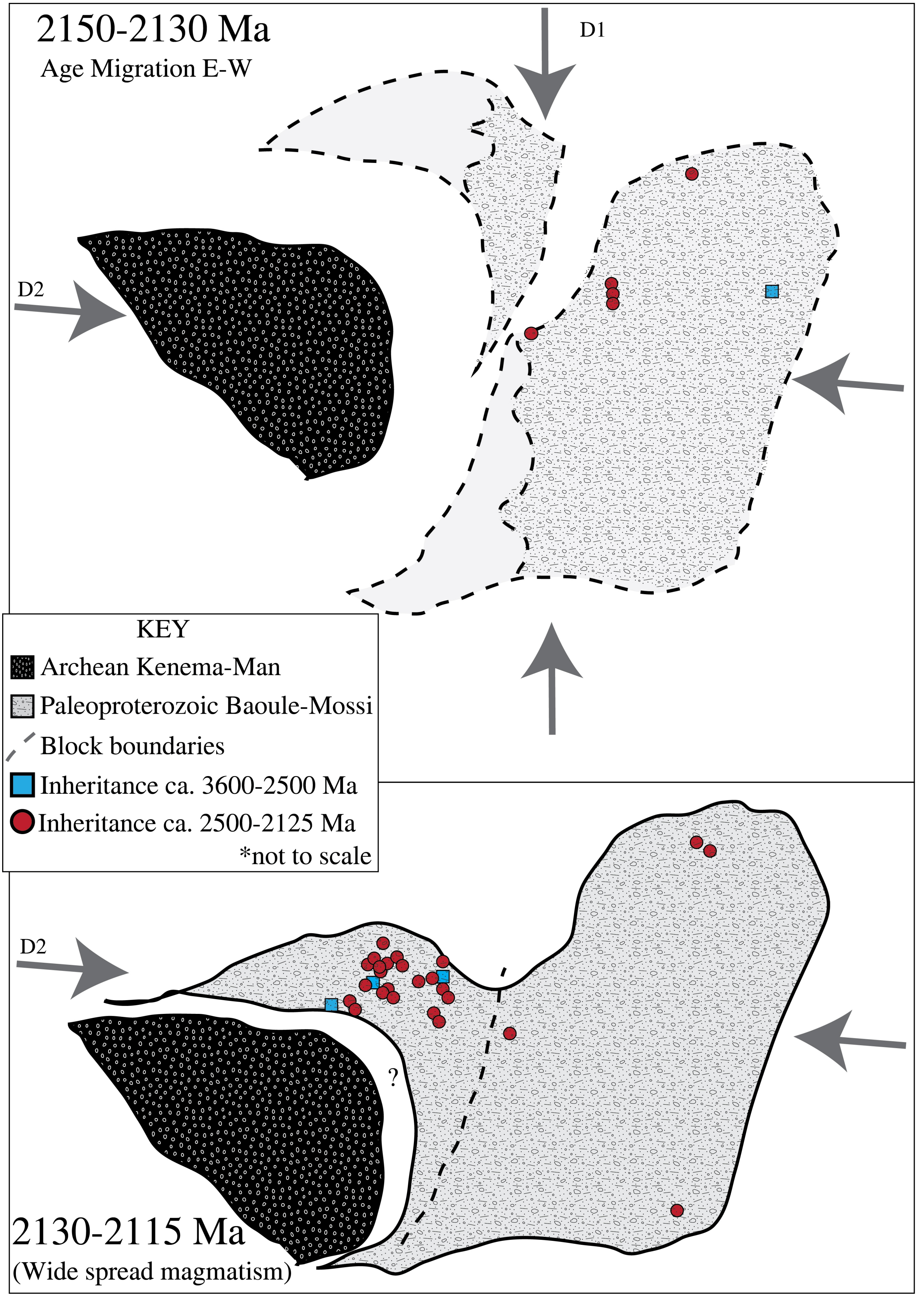


A
B
Number
Relative probability
0
1
2
3
4
5
6
7
8
9
10
5
10
15
20
25
2020
2100
2180
2260
2340
Age (Ma)

Zircon Ages Distribution




A
B
Age (Ma)
Longitude (°)
4000
3500
3000
2500
2000
1500
1000
500
0
2300
2250
2200
2150
2100
2050
2000
-14
-12
-10
-8
-6
-4
-2
0
2
This study
Historical data
Igneous
Sedimentary
Other not especified
Metamorphic



2150-2130 Ma
Age Migration E-W
D1
D2
KEY
Archean Kenema-Man
Paleoproterozoic Baoule-Mossi
Block boundaries
Inheritance ca. 3600-2500 Ma
Inheritance ca. 2500-2125 Ma
*not to scale
D2
?
2130-2115 Ma
(Wide spread magmatism)

SAMPLE	Lat	Long	Rock type
BE2	14.2875743	-0.951721163	Alkali Granite
BE3A	14.43560775	-1.006964971	Gabbro
BE5	14.33001685	-1.032425683	Granite
BE6	14.34137763	-1.044571053	Granite
BE7	14.43255296	-1.129127061	Granite
BE13	14.34197	-1.370551545	Granodiorite
HO253	10.31665	-3.21925255	Granite
HO254	10.31609019	-3.221127	Granite
HO257	10.30121734	-3.23070374	Granite
HO479A	12.35270146	-2.58412633	Gabbro
HO480	12.35803386	-2.58100659	Granodiorite
HO629	10.27159	-3.088572658	Tonalite
HO631A	10.26827034	-3.089174449	Granodiorite
HO631B	10.26827034	-3.089174449	Aplite
HO640A	12.37363901	-2.599927036	Diorite
HO640C	12.37363901	-2.599927036	Diorite
BF12-01	10.6494	-4.7971	Granite
BF12-04	10.7058	-4.3535	Syenogranite
BF12-05	10.53	-4.0682	Granite
BNF150559	10.44257378	-5.456932949	Diorite
BNF150561	10.47148353	-5.215988762	Granite
BNF150562	10.33388867	-5.275614224	Diorite
BNF150563	10.37617658	-5.404149353	Granite
BNF150564	10.36121027	-5.404318071	Monzogranite
BNF150565	10.33302388	-5.275215532	Monzogranite
ML12-086	10.57669277	-6.119712499	Diorite
SU_001	11.8375738	-6.76848865	Granite "Missigui"
SU_002	11.83296936	-6.76769245	Granite
SU_003	11.5957831	-6.83742302	Felsic intrusive
SU_004	11.68287648	-6.85295267	Granodiorite
SU_006	11.67487828	-6.852307165	Tonalite
SU_007	11.67930407	-6.849540564	Granodiorite
SU_012	11.41514981	-7.017465652	Granite
ML12-068	10.47100483	-7.047098	Granite
ML12-070	10.52080895	-7.09607438	Orthogranite
ML12-078	11.08404302	-7.43209708	Pegmatite
ML12-079A	11.12371556	-6.82612153	Gneiss
ML12-079B	11.12371556	-6.82612153	Granite
ML12-080	11.10897637	-6.81390868	Gneiss
ML12-082	11.22255518	-6.79942265	Granite

ML12-083B	11.31124024	-6.71976004	Granodiorite
ML12-084	11.32736923	-6.73064603	Granodiorite
ML12-083	11.39186893	-6.681166287	Granite
ML12-105	11.31350348	-6.825446155	Granite
ML12-107	11.87412148	-7.33345408	Granite
ML12-125	11.96698346	-8.20531156	Granodiorite
ML12-150	11.85183162	-8.06251897	Granodiorite
ML12-187	11.27952591	-7.9443483	Granite
SU_015	11.37351992	-7.412245005	Granite
SU_016	11.373538	-7.412244905	Granite
SU_034	11.37379642	-7.41177952	Aplite
SU_037	11.3482295	-7.72442551	Granite "Bougouni"
DS-014	11.23657676	-8.466991626	Porphyry
KADD119A-M	10.7921	-8.19763	Diorite
KADD119A	10.7921	-8.19763	Diorite
ML12-066	11.19229266	-7.77283033	Granodiorite
ML12-113	12.007218	-8.28057979	Granodiorite
ML12-114	11.9918252	-8.24927883	Granodiorite
ML12-116	11.96591369	-8.20923831	Granodiorite
ML12-117	11.9662435	-8.20652098	Granodiorite
ML12-118	11.9662435	-8.20652098	Granite
ML12-153	11.65719506	-8.25081398	Diorite
ML12-161	11.42031503	-8.41546666	Diorite
ML12-165	11.42234001	-8.41488923	Diorite
ML12-166	11.41429296	-8.42674208	Diorite?
ML12-167	11.41399633	-8.4277692	Granite
ML12-168	11.41277014	-8.42873638	
ML12-170	11.50162468	-8.41047247	
ML12-177	11.54659871	-8.26385253	Granodiorite
ML12-178	11.54894573	-8.26451277	Diorite
SU_019	11.31540035	-8.27508713	Granite
SU_020	11.31543798	-8.27519953	Granite
SU_021	11.27172245	-8.32079968	Granite "Diallo"
SU_022	11.27521033	-8.31370968	Granite "Money"
SU_023	11.31563521	-8.27516777	Granite "Siekerole"
SU_029	11.31551929	-8.27492268	Granite "Siekerole"
SU_051	11.62984576	-8.26297109	Granite
SU_052	11.62905493	-8.261747	Granite
SU_053	11.6293177	-8.26129119	Granite
SU_054	11.64054926	-8.23177935	Granite
SU_056	11.62224063	-8.18712585	Granite
SU_057	11.48782862	-8.21077815	Granite

SU_059	11.45287906	-8.25837747	Syenite
MWAXI-126/DS-001	11.42209093	-8.347029861	Porphyry
MWAXI-127/DS-002	11.42655656	-8.34578184	Porphyry
MWAXI-128/DS-003	11.42655258	-8.345766655	Porphyry
MWAXI-129/DS-004	11.23765946	-8.466627555	Porphyry
MWAXI-130/DS-005	11.26638033	-8.393047578	Porphyry
MWAXI-131/DS-006	11.23053507	-8.466330319	Porphyry
MWAXI-132/DS-007	11.23053625	-8.466345622	Porphyry
MWAXI-133/DS-008	11.23053663	-8.466350257	Porphyry
MWAXI-134/DS009	11.20142263	-8.408768109	Porphyry
MWAXI-135/DS-010	11.26685152	-8.395215777	Porphyry
MWAXI-136/8DS-011	11.27042155	-8.395437157	Porphyry
MWAXI-137/DS-012	11.27039454	-8.39521619	Porphyry
MWAXI-138/DS-013	11.24521424	-8.395821054	Porphyry
SI-124	11.69892867	-9.366777442	Granite
KD000154	10.57691572	-8.877497566	Diorite
KL000274	10.77452268	-8.917751799	Dacite
KL000565	10.78728611	-8.972577086	Granodiorite
KL000630	10.77046183	-8.919851767	Granite
BF1	13.75246	-2.53802	Granite
BF2	13.38028	-2.38712	Tonalite
BF3	13.01286	-1.83645	Granite
BF4	12.4004	-1.70917	Granite
BF5	12.39939	-1.11051	Tonalite
BF6	12.01079	-0.31836	Tonalite
BF7	11.89121	-0.29407	Granite
BF8	11.54592	0.73965	Granodiorite
BF9	11.47774	1.0282	Quatrz Diorite
BF10	14.17631	-0.6011	Diorite
BF11	14.66517	-0.43407	Granite
BF12	13.35991	-0.52269	Granite
NG1	10.75	-2.000001	Granite
SG5	6.494627	-1.182057	Granite
SG6	5.655136	-0.547377	Granite

Field description
Post tectonic granite
Fine-grained gabbro/basalt
Magnetic-textured granite, coarse-grained and aplite phases
non-magnetic textured granite
Souma Diorite
Granodiorite
Sheared granite
Granite
Granite
Gabbro
Granodiorite, biotite-amphibole bearing
Foliated tonalite
Granodiorite
Aplite
Diorite, amphibole-bearing
Diorite, amphibole bearing, leucocratic
Granite with biotite ± amphibole
Syenogranite, medium-grained, quartz, K-fsp, plagioclase, biotite and amphibole
Banded granitoid: Lighter layers, quartzofeldspathic minerals and darker layers, ferromagnesian minerals
Mg equigranular diorite
Granitoid hanging wall Samavogo
Hbl diorite
Og lineated granitoid
Monzonite
Mg granitoid
Syenite/Syenogranite, highly magnetic, intrusive, no obvious foliation
Pink 'Massigui' Granite, magnetic, Morila area
Qtz-Fspar Dyke in Massigui granite, flattened sediment xenoliths (054 strike).
Qtz-Fspar-Bt, equigranular intrusive, little deformation
Granodiorite, Morila pit/West side
Tonalite, coarse- grained, Morila pit/south end
Granodiorite, Morila pit/centre
White/Grey 'Doubalakoro' Granite, Non-magnetic
Granite
Orthogranite, sediment and mafic xenoliths, 2-10mm plagioclase, ghost clasts, slightly banded
Pegmatite, massive feldspar, 040 fabric and 080 strike
Gneiss
Equigranular
Gneissic-granitoid
Gneissic-granitoid

Granodiorite
Diorite-granodiorite
Gneissic granitoid
K-feldspar rich granite
K-feldspar rich granite
Granodiorite
Granodiorite, stacked qtz vein array
Granite, Plag-qtz-bt, equigranular
3 Phase Granite, felsic phase
3 Phase Granite, more mafic phase.
Aplite dyke, aplite has fractionated into pegmatite on the margins
Granite, mafic phase, weak foliation 005-030, C-prime development (discrete shears) 040-055
Fine-grained porphyry intrusive
Diorite main body
Diorite east body
Granodiorite, mafic xenoliths, magmatic texture, sedimentary xenoliths
Granodiorite
Granodiorite
Granodiorite
Granodiorite
Feldspathic Intrusive
Qtz-Diorite Selingue Dam Quarry
Fine-grained intermediate intrusive
Porphyry intrusive within granodiorite-diorite
Felsic Intrusive? Feldspar rich, contains small bt rich xenoliths
Fine-grained intermediate intrusive
Dacite?
Felsic Intrusive? Feldspar rich, contains small bt rich xenoliths.
Granodiorite-diorite, magnetic and magmatic banding indicates 060 strike
Porphyry intrusive within granodiorite-diorite
Siekerole Granite, 64/048NW
Siekerole Granite, not oriented, Qtz-Fspar-Musc
Diallo granite, slightly deformed portion of the granite
Granite
Siekerole granite, not -oriented, sinistral shear, with qtz and offset.
Siekerole granite, sinistral shear, with qtz vein
Magnetic 2 feldspar granite, coarse-grained, variably deformed, xXenoliths of Qtz-bt schist common <10cm
Magnetic 2 feldspar granite, coarse-grained, variably deformed, C-Prime developed
Magnetic 2 feldspar granite, coarse-grained, variably deformed, sinistral movement sense
Granite, Qtz-Bt-Musc, strongly foliated
Granite, massive texture, cut by pegmatite dykes, xenoliths common, deformed and aligned
Granite, deformed

Syenite, occasional pegmatite dykes 70/343W
Diorite
Diorite
Diorite
Diorite
Diorite
Diorite
Diorite
Diorite
Diorite
Diorite
Diorite
Diorite
Diorite
monzogranite
Altered diorite
Altered dacite microporphyry
Granodiorite
Altered dacite porphyry
Megacrystic granite, megacrysts are K-feldspars
Coarse-grained tonalite locally affected by small scale (~ cm) shear bands
Leucocratic and fine-grained granite
Leucocratic and fine-grained granite
Tonalite slightly leucocratic and strongly foliated
Coarse-grained tonalite, dark minerals are biotite and hornblendes
Equigranular medium-grained granite with mesocratic color
Granodiorite roughly foliated and locally folded
Mesocratic to melanocratic quartz-diorite with phenocrysts of hornblendes
Quartz rich microdiorite
Pink-colored and medium to fine-grained granite
Leucocratic and fine-grained granite locally affected by small shear bands
quartz-plagioclase-hornblende -biotite granite
quartz -biotite -feldspar granite
quartz -biotite -plagioclase granitic rock with pegmatite veins

Region
The Belahouro Belt (BE)
The Boromo-Hounde Belts (HO)
Banfora
Syama
Morila
Bougouni
Yanfolila
Siguiri Basin

Mineralogical Characteristics Summary
Granites and granodiorites, light colored, medium to coarse grained. Main minerals composed of K-feldspar and plagioclase (between 30 well as quartz (>25%) and biotite (10 to 15%). Accessory minerals hornblende, magnetite, titanite, zircon, and chlorite. Sample alteration established to be between 3 and 5.
Granites and granodiorites to diorites fine to medium grained, occasionally porphyritic texture defined by large (approximately 4 to 6 mm xenocrysts. biotite and hornblende rich, sulphides are common as well as oxides (i.e. ilmenite). alteration was deemed to be between 5 to grains show sericitic alteration difficulty mineral identification. Muscovite is present as an alteration product. Micas are partially chloriti epidotize. Other accessory minerals are zircons and titanites, which for most part are flattened wedge-shaped.
Surface samples are mixture of granites and quartz syenites, while drill core samples are granites and granodiorites (if Quartz >20%) and to diorites (if Quartz<15%). Samples are feldspars rich, either plagioclase or K-feldspar, and quartz as well as biotite. a limited amount o contain hornblende. Muscovite is present as a primary mineral (magmatic) in all hornblende-free samples. This magmatic muscovite is n with sericitic alteration, it does not appear to be deformed. Muscovite is found in close spatial association with feldspar and in some case quartz matrix. Muscovite also occurs as an alteration product and it mostly occurs within sericitic altered feldspar grains. Sericitic alterati
Sample is extremely altered (9 on the alteration scale used in the study). Originally the sample was probably plagioclase dominated, with amounts of quartz and some biotite and minor amounts of hornblende. Other minerals include chlorite, epidote, and secondary muscovite limited number of feldspar grains that can be identified, the sample is likely to be a monzodiorite or a diorite.
Mostly granites, granodiorites and a diorites. Medium to coarse grained; feldspar composition ranges between K-feldspar and plagioclase amounts of quartz. Most samples are mica rich, mostly biotite, with some samples also containing muscovite as a primary mineral, or as alteration. The biotite in most cases is reddish-brown and in a few cases green. Additionally, samples contain ilmenite, apatite, titanite, zi occasionally hornblende and some opaques (mostly sulphides). Samples are not as altered and rank between 3 and 5 in the alteration scal samples are deformed and show some mineral alignment.
Samples are granites and granodiorites depending on their K-feldspar to plagioclase ratios, whereas quartz is usually above 30%. Grain s some samples are aplitic, whereas others are more medium to coarse grained. Fine grained samples occur in dykes. Medium to coarse gra are from intrusive bodies. Samples show variable amounts of biotite and hornblende. Other minerals are zircon, titanite as well as chlorit epidote. Alteration ranges between 4 and 6.
Samples are granites, to granodiorites to diorites. Alteration rank between 4 and 7. Mineral composition includes plagioclase, K-feldspar, primary (magmatic) and secondary (resulting from alteration) muscovite, some biotite and minor amounts of hornblende. The most alter secondary chlorite and in some cases epidote. Additional minerals include titanite, zircon, apatite and some opaques (sulfides).
Surface samples can be classified as a granodiorite containing plagioclase, K-feldspar, quartz and hornblende and some biotite with a rel degree of alteration (alteration scale value of 2) and minor amounts of chlorite. Drill core samples are very fine grained matrix and large xenocrysts alteration of drill core was rank to be between 7 to 9.

Regio	Sample ID	Lat	Lon	Country	Protholith	$^{207}Pb/^{206}Pb$ Intercept age (Ma)	± 1σ
Banfora	BF12-05	10.530	-4.068	Burkina Faso	Granite	2115	23
Banfora	BF12-01	10.649	-4.797	Burkina Faso	Granite	2122	36
Banfora	BNF150562	10.334	-5.276	Burkina Faso	Diorite	2123	7
Banfora	BNF150561	10.471	-5.216	Burkina Faso	Granite	2150	33
Banfora	BNF150563	10.376	-5.404	Burkina Faso	Granite	-	-
Banfora	BNF150559	10.443	-5.457	Burkina Faso	Diorite	2143	5
Belahouro	BE6	14.341	-1.045	Burkina Faso	Granite	2125	5
Belahouro	BE2	14.288	-0.952	Burkina Faso	Alkali Grani	2140	10
Belahouro	BE3A	14.436	-1.007	Burkina Faso	Gabbro	2142	6
Belahouro	BE5	14.330	-1.032	Burkina Faso	Granite	2146	14
Belahouro	BE13	14.342	-1.371	Burkina Faso	Granodiorite	2794	2300
Belahouro	*BF11*	*14.665*	*-0.434*	*Burkina Faso*	*Granite*		
Belahouro	BE7	14.433	-1.129	Burkina Faso	Granite	-	-
Belahouro	*BF10*	*14.176*	*-0.601*	*Burkina Faso*	*Granite*		
Boromo-Hound	H0640C	12.374	-2.600	Burkina Faso	Diorite	2074	28
Boromo-Hound	H0257	10.301	-3.231	Burkina Faso	Granite	2136	4
Boromo-Hound	H0631B	10.268	-3.089	Burkina Faso	Aplite	2134	9
Boromo-Hound	H0631A	10.268	-3.089	Burkina Faso	Granodiorite	2149	12
Boromo-Hound	H0480	12.358	-2.581	Burkina Faso	Granodiorite	2166	10
Boromo-Hound	H0253	10.317	-3.219	Burkina Faso	Granite	2167	8
Boromo-Hound	H0629	10.272	-3.089	Burkina Faso	Tonalite	2168	10
Boromo-Hound	H0640A	12.374	-2.600	Burkina Faso	Diorite	2156	9
Boromo-Hound	H0479A	12.353	-2.584	Burkina Faso	Gabbro	2170	9
Goren/Po-Ten	*BF4*	*12.400*	*-1.709*	*Burkina Faso*	*Granite*		
Goren/Po-Ten	*BF1*	*13.752*	*-2.538*	*Burkina Faso*	*Granite*	*2121*	*7*
Goren/Po-Ten	*BF7*	*11.891*	*-0.294*	*Burkina Faso*	*Granite*		
Goren/Po-Ten	*BF9*	*11.478*	*1.028*	*Burkina Faso*	*Quatrz Diorite*		
Goren/Po-Ten	*BF3*	*13.013*	*-1.836*	*Burkina Faso*	*Granite*		
Goren/Po-Ten	*BF5*	*12.399*	*-1.111*	*Burkina Faso*	*Tonalite*	*2136*	*11*
Goren/Po-Ten	*BF2*	*13.380*	*-2.387*	*Burkina Faso*	*Tonalite*	*2145*	*11*
Goren/Po-Ten	*BF12*	*13.360*	*-0.523*	*Burkina Faso*	*Granite*		
Goren/Po-Ten	*BF6*	*12.011*	*-0.318*	*Burkina Faso*	*Tonalite*	*2176*	*17*
Goren/Po-Ten	*BF8*	*11.546*	*0.740*	*Burkina Faso*	*Granodiorite*	*2271*	*22*
Ashanti-Kuma	*SG5*	*6.495*	*-1.182*	*Ghana*	*Granite*	*-*	*-*
Ashanti-Kuma	*SG6*	*5.655*	*-0.547*	*Ghana*	*Granite*	*2087*	*19*
Koudougou-Tu	*NG1*	*10.750*	*-2.000*	*Ghana*	*Granite*	*2114*	*9*
Siguiri	KL000630	10.770	-8.920	Guinea	Granite	2066	19
Siguiri	SI-124	11.699	-9.367	Guinea	Granite	2078	19
Siguiri	KL000565	10.787	-8.973	Guinea	Granodiorite	2098	7
Siguiri	KD000154	10.577	-8.877	Guinea	Diorite	-	-
Siguiri	KL000274	10.775	-8.918	Guinea	Dacite	2133	20
Bougouni	ML12-107	11.874	-7.333	Mali	Granite	2088	16
Bougouni	ML12-150	11.852	-8.063	Mali	Granodiorite	2067	11
Bougouni	SU_037	11.348	-7.724	Mali	Granite "Boug	2095	11
Bougouni	ML12-125	11.967	-8.205	Mali	Granodiorite	2077	10
Bougouni	ML12-187	11.280	-7.944	Mali	Granite	2089	63

Bougouni	SU_015	11.374	-7.412	Mali	Granite	2102	5
Bougouni	SU_034	11.374	-7.412	Mali	Aplite	2109	13
Bougouni	ML12-066	11.192	-7.773	Mali	Granodiorite	2099	8
Bougouni	SU_016	11.374	-7.412	Mali	Granite	2100	11
Morila	ML12-079B	11.124	-6.826	Mali	Granite	2086	9
Morila	ML12-080	11.109	-6.814	Mali	Gneiss	2101	13
Morila	SU_012	11.415	-7.017	Mali	Granite	2089	6
Morila	SU_001	11.838	-6.768	Mali	Granite "Mis	2096	7
Morila	ML12-079A	11.124	-6.826	Mali	Gneiss	2089	8
Morila	ML12-105	11.314	-6.825	Mali	Granite	2105	20
Morila	SU_002	11.833	-6.768	Mali	Granite	2104	35
Morila	SU_006	11.675	-6.852	Mali	Tonalite	2100	5
Morila	ML12-068	10.471	-7.047	Mali	Granite	2084	13
Morila	SU_003	11.596	-6.837	Mali	Felsic intru	2092	10
Morila	SU_007	11.679	-6.850	Mali	Granodiorite	2116	20
Morila	SU_004	11.683	-6.853	Mali	Granodiorite	2120	10
Morila	ML12-070	10.521	-7.096	Mali	Orthogranite	2121	9
Morila	ML12-078	11.084	-7.432	Mali	Pegmatite	2136	15
Syama	ML12-086	10.577	-6.120	Mali	Diorite	2149	7
Yanfolila	MWAXI-132/DS-	11.231	-8.466	Mali	Porphyry	2071	13
Yanfolila	SU_052	11.629	-8.262	Mali	Granite	2078	7
Yanfolila	SU_051	11.630	-8.263	Mali	Granite	2075	5
Yanfolila	DS-014	11.237	-8.467	Mali	Porphyry	2090	30
Yanfolila	ML12-114	11.992	-8.249	Mali	Granodiorite	2077	8
Yanfolila	ML12-118	11.966	-8.207	Mali	Granite	2085	12
Yanfolila	SU_021	11.272	-8.321	Mali	Granite "Dia	2082	10
Yanfolila	MWAXI-126/DS-	11.422	-8.347	Mali	Porphyry	2081	10
Yanfolila	MWAXI-138/DS-	11.245	-8.396	Mali	Porphyry	2097	20
Yanfolila	ML12-153	11.657	-8.251	Mali	Diorite	2067	11
Yanfolila	SU_057	11.488	-8.211	Mali	Granite	2092	8
Yanfolila	ML12-113	12.007	-8.281	Mali	Granodiorite	2083 -	
Yanfolila	ML12-116	11.966	-8.209	Mali	Granodiorite	2083	8
Yanfolila	SU_056	11.622	-8.187	Mali	Granite	2087	5
Yanfolila	SU_054	11.641	-8.232	Mali	Granite	2088	8
Yanfolila	ML12-117	11.966	-8.207	Mali	Granodiorite	2099	11
Yanfolila	SU_023	11.275	-8.314	Mali	Granite "Siel	2077	19
Yanfolila	SU_022	11.316	-8.275	Mali	Granite "Mon	2097	13
Yanfolila	SU_029	11.316	-8.275	Mali	Granite "Siel	2166	72
Yanfolila	KADD119A-M	10.792	-8.198	Mali	Diorite	2138	18
Yanfolila	ML12-178	11.549	-8.265	Mali	Diorite	2129	12
Yanfolila	ML12-177	11.547	-8.264	Mali	Granodiorite	2132	10
Yanfolila	SU_059	11.453	-8.258	Mali	Syenite	2141	10
Yanfolila	MWAXI-135/DS-	11.267	-8.395	Mali	Porphyry	2137	16
Yanfolila	MWAXI-130/DS-	11.266	-8.393	Mali	Porphyry	2195	22
Yanfolila	MWAXI-134/DS(	11.201	-8.409	Mali	Porphyry	2323	130
Yanfolila	MWAXI-131/DS-	11.231	-8.466	Mali	Porphyry –	–	
Yanfolila	SU_019	11.315	-8.275	Mali	Granite –	–	
Yanfolila	SU_020	11.315	-8.275	Mali	Granite –	–	

* Age used throughout the manuscript

$^{207}Pb/^{206}Pb$ Weight Mean Avg age (Ma)	± 1σ	Interpreted Crstalyzation age (Ma)*	± 1σ	Inherited ages (Ma)	± 1σ	Inherited ages (Ma)	± 1σ
2108	16	2108	16	– –	–	–	
2122	12	2122	12	– –	–	–	
2126	4	2126	4	– –	–	–	
2131	10	2131	10	– –	–	–	
2136	14	2136	14	2170	13		
2141	10	2143	10	– –	–	–	
2123	6	2123	6	– –	–	–	
2129	7	2129	7	– –	–	–	
2140	4	2140	4	– –	–	–	
2134	11	2146	14	– –	–	–	
2172	15	2172	15	– –	–	–	
				2270	*28*		
–	–	–	–	– –	–	–	
2114	5	2114	5	2156	11	2191	11
2134	3	2134	3	– –	–	–	
2138	5	2134	9	2170	15		
2150	9	2150	9	– –	–	–	
2165	11	2165	11	– –	–	–	
2176	7	2167	8	– –	–	–	
2168	16	2168	10	2221	20		
2170	7	2170	7	– –	–	–	
2172	8	2172	8	– –	–	–	
2130	*30*	*2130*	*30*				
2128	*16*	*2121*	*7*				
				2503	*33*		
2131	*19*	*2130*	*6*				
2136	*10*	*2136*	*11*				
2146	*9*	*2145*	*6*				
		2169	*28*				
2177	*9*	*2176*	*17*				
2265	*17*	*2265*	*17*				
–	–		–				
2094	*18*	*2094*	*18*	*2153*	*14*		
2111	*12*	*2114*	*9*				
2078	14	2078	14	2131	12		
2089	12	2089	12	– –	–	–	
2096	10	2098	7	– –	–	–	
2110	13	2110	13	2154	12	2274	22
2120	20	2120	20	2878	9		
2084	11	2084	11	– –	–	–	
2088	6	2088	6	– –	–	–	
2088	8	2088	8	2136	13	2215	11
2090	12	2090	12	– –	–	–	
2090	22	2090	22	2162	14		

2098	4	2098	4	–	–	–	–
2098	7	2098	7	–	–	–	–
2099	6	2099	6	–	–	–	–
2102	7	2102	7	–	–	–	–
2087	8	2086	9	2143	12		
2091	9	2091	9	2128	7		
2094	4	2094	4	–	–	–	–
2102	11	2096	7	–	–	–	–
2098	6	2098	6	–	–	–	–
2101	10	2101	10	–	–	–	–
2103	14	2103	14	–	–	–	–
2103	7	2103	7	–	–	–	–
2104	7	2104	7	–	–	–	–
2105	6	2105	6	–	–	–	–
2116	9	2116	9	2165	16	2290	16
2115	10	2120	10	2155	6	2223	7
2121	8	2121	8	2150	7	2207	5
2122	12	2136	15	2212	6	2571	10
2150	6	2150	6	–	–	–	–
2076	10	2076	10	2133		2195	
2076	6	2076	6	–	–	–	–
2077	5	2077	5	–	–	–	–
2083	6	2083	6	2149	9	2214	
2084	7	2084	7	–	–	–	–
2098	9	2085	12	–	–	–	–
2085	7	2085	7				
2086	5	2086	5	2156	10		
2086	10	2086	10	2157	14		
2088	6	2088	6	–	–	–	–
2088	5	2088	5	2114	7	2141	17
2090	6	2090	6	–	–	–	–
2090	6	2090	6	–	–	–	–
2091	6	2091	6	2155	10		
2092	4	2092	4	–	–	–	–
2093	5	2093	5	–	–	–	–
2096	11	2096	11	2121	7	2165	14
2097	13	2097	13	2130	7	2190	27
2114	11	2114	11	2144	6	2235	10
2119	6	2119	6	3522	8	3622	6
2132	10	2132	10	–	–	–	–
2135	6	2135	6	–	–	–	–
2146	9	2146	9	–	–	–	–
2159	11	2159	11	2243	25		
2191	21	2174	15	2265	14		
2216	15	2216	15	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–

Comments
Crystallization age obtain from four analyses
No intercept age, inherited age obtain from two analyses
Concordia Age
Basalt unit.
discordia age not relaible, no lower intercept , but grains not concordant enough to generate a concordia plot
No reliable age only 2 analyses at 2169 ± 41 Ma, inheretance from 3 analyses
No reliabel age was obtained
No reliable age, just two analyses at 2157 ± 29 Ma
discordia plot age is not reliable, no lower intercept. Two analyses yield inherited ages of 2156 ±11 and 219
Inherited age determined as weight mean average of two analyses
Crystallization age obtain from four analyses/ Inherited age obtain from four analyses
discordia plot age is not reliable, no lower intercept
No reliable intercept age/ age from only 4 analyses
No reliable age, only 3 analyses weight mean average of 2122 ± 36 Ma
No reliable ageonly 3 analyses weight mean average of 2130 ± 22 Ma, inhereted age from 2 analyses
Intercept age not reliable
Not enough analyses to determine a relaible age base on the rejection criteria
Inheratence from two analyses
Inherited age obtain from 1 analysis
No intercept age, inherited age obtain from four analyses another grain yield an age of 2274 ± 22 Ma
Inherited age obtain from 1 analysis
discordia plot no lower intercept
An additional inherited grain was recorded at 2215 ± 11 Ma
Crystallization age obtain from five analyses
Crystallization age obtain from five analyses

Inherited grain if included as part of the main population does not generate a discordia plot solution
Inherited age is from 1 grain, 2 analyses yield large errors that could affect interpreted crystallization age

Only 5 analyses were accepted for age calculation

discordia plot no lower intercept
Discordia plot no lower intercept
Inherited age represented by two grains between 2165 and 2290 Ma
Inherited age compose of two analyses. 1 additional analysis yield an inherited age of 2223 ± 7 Ma
1 analysis yield an age of 2207 ± 5 Ma
4 populations of inherited ages (5 analyses) up to 2571 Ma

Porphyritic sample either felsic volcanic or shallow intrusion/ 3 inherited grains ranging from 2133 to 2195 M

Crystallization age obtain from four analyses/Aditionally 2 other analyses yield ages between 2184 and 2214 Ma
No lower intercept in discordia plot

Inherited grains, three analyses between 2150 and 2190 Ma
Porphyritic sample either felsic volcanic or shallow intrusion?Inherited population 5 analyses
Porphyritic sample either felsic volcanic or shallow intrusion/ Inherited population 3 analyses

Inherited population composed of three analyses ranging between 2114 and 2141 Ma

Inherired age 1 analysis

Two inherited population, one with five analyses, the second one with 3 analyses at 2165 ± 14 Ma
Crystallization age obtain from four analyses/ Inherited age from 8 analyses, 3 older grains between 2170 and
Discordia plot not reliable, no lower intercept. Inherited analyses range between 2144 and 2235 Ma (6 total)
2 grains at 3522 ± 8 and 3622 ± 6 Ma

Porphyritic sample either felsic volcanic or shallow intrusion, Discordia plot no lower intercept/. Inherited
Porphyritic, either felsic volcanic or shallow intrusion/Relatively large errors for each analysis, Discordia
Porphyritic sample either felsic volcanic or shallow intrusion/ Discordia plot no lower intercept
No reliable age was determined/ Accepted analyses did not form a group of at least 4 near concordat grains
No reliable age was established
All but one analyses were rejected no age determined

REFEREN(	lat	long	COUNTRY	AGE (Ma)	Technique	Lithology	Process Da	Mineral Dat
Petersson (	7.700556	2.187778	ASgh0022a	2093		granite		
Petersson (	5.5442	0.8300	ASGH003a	2125		two mica granodiorite		
Petersson (	4.9525	2.1369	asgh007a	2173		granite		
Petersson (	7.7006	2.1878	asgh022c	2092		pegmatite		
BF 1M Map	11.7810	-2.9460	Burkina Fas	2109	Other	andesite/diorite		Zircon
BF 1M Map	11.7810	-2.9460	Burkina Fas	2097	Other	andesite/diorite		Zircon
BF 1M Map	11.7840	-2.9440	Burkina Fas	1992	K-Ar	andesite/diorite		
BF 1M Map	12.1430	-0.0610	Burkina Fas	2170	Other	andesite/diorite		Zircon
BF 1M Map	12.1430	-0.0610	Burkina Fas	1967	K-Ar	andesite/diorite		
BF 1M Map	12.1440	-1.7040	Burkina Fas	2140	Other	andesite/diorite		Zircon
BF 1M Map	12.2130	-0.5230	Burkina Fas	2169	Other	andesite/diorite		Zircon
BF 1M Map	12.6410	-0.9490	Burkina Fas	2143	Other	andesite/diorite		Zircon
BF 1M Map	12.9930	-0.8180	Burkina Fas	2027	K-Ar	andesite/diorite		
BF 1M Map	13.0990	-0.9970	Burkina Fas	2134	K-Ar	andesite/diorite		
BF 1M Map	13.0990	-0.9970	Burkina Fas	2127	Other	andesite/diorite		Zircon
BF 1M Map	13.0990	-0.9970	Burkina Fas	2118	K-Ar	andesite/diorite		
BF 1M Map	11.0810	0.5830	Burkina Fas	2143	K-Ar	granite/leucogranite/m(		Zircon
BF 1M Map	11.1680	-2.0790	Burkina Fas	2132	Other	granite/leucogranite/m(		Zircon
BF 1M Map	11.2780	-3.9990	Burkina Fas	2113	Other	granite/leucogranite/m(		Zircon
BF 1M Map	11.3970	0.0960	Burkina Fas	2135	Other	granite/leucogranite/m(		Monazite
BF 1M Map	11.4740	-1.1840	Burkina Fas	2136	Other	granite/leucogranite/m(		Zircon
BF 1M Map	11.5760	-1.2080	Burkina Fas	2110	Other	granite/leucogranite/m(		Zircon
BF 1M Map	11.6760	0.5150	Burkina Fas	2150		granite/leucogranite/m(		Zircon
BF 1M Map	11.7720	-0.3370	Burkina Fas	2117	Other	granite/leucogranite/m(		Zircon
BF 1M Map	11.8090	-1.2610	Burkina Fas	2100	Other	granite/leucogranite/m(		Monazite
BF 1M Map	12.2490	-0.6110	Burkina Fas	2111	Other	granite/leucogranite/m(		Monazite
BF 1M Map	12.3090	-2.7820	Burkina Fas	2108	Other	granite/leucogranite/m(		Zircon
BF 1M Map	12.3170	-0.4400	Burkina Fas	2048	K/Ar	granite/leucogranite/monzonite		
BF 1M Map	12.3320	-0.9840	Burkina Fas	1889	K/Ar	granite/leucogranite/monzonite		
BF 1M Map	12.7140	-0.3240	Burkina Fas	2097	Other	granite/leucogranite/m(		Zircon
BF 1M Map	12.7690	-2.1150	Burkina Fas	2099	Other	granite/leucogranite/m(		Zircon
BF 1M Map	13.0650	-0.1700	Burkina Fas	1988	K-Ar	granite/leucogranite/monzonite		
BF 1M Map	13.7670	0.1960	Burkina Fas	2165	Other	granite/leucogranite/m(		Zircon
BF 1M Map	13.7670	0.1960	Burkina Fas	2162	Other	granite/leucogranite/m(		Zircon
BF 1M Map	13.9770	-0.0400	Burkina Fas	2146	Other	granite/leucogranite/m(		Zircon
BF 1M Map	14.3010	-1.0540	Burkina Fas	2132	Other	granite/leucogranite/m(		Zircon
BF 1M Map	11.4500	-0.8340	Burkina Fas	2117	Other	granulite/migmatite/gne		Zircon
BF 1M Map	13.3760	0.6530	Burkina Fas	2159	Other	granulite/m	Metamorph	Monazite
BF 1M Map	13.2040	-0.1730	Burkina Fas	1814	K-Ar	mafic dyke		
BF 1M Map	11.0410	-3.2640	Burkina Fas	2171	K-Ar	rhyolite/felsic flow		Zircon
BF 1M Map	11.3460	0.8370	Burkina Fas	2127	Other	rhyolite/felsic flow		Zircon
BF 1M Map	11.2600	-3.6780	Burkina Fas	2106	Other	tonalite-trondhjemite-g		Zircon
BF 1M Map	11.2820	0.6520	Burkina Fas	2106	K-Ar	tonalite-trondhjemite-granodiorite		
BF 1M Map	11.5150	0.5320	Burkina Fas	2209	Other	tonalite-trondhjemite-g		Monazite
BF 1M Map	11.5280	-1.7760	Burkina Fas	2100	Other	tonalite-trondhjemite-g		Zircon
BF 1M Map	11.9150	0.2950	Burkina Fas	2128	Other	tonalite-trondhjemite-g		Zircon
BF 1M Map	12.7800	-1.2580	Burkina Fas	2153	Other	tonalite-trondhjemite-g		Zircon
BF 1M Map	13.0070	-0.1540	Burkina Fas	2162	Other	tonalite-trondhjemite-g		Zircon
BF 1M Map	13.0720	-0.1720	Burkina Fas	2009	K-Ar	tonalite-trondhjemite-granodiorite		
BF 1M Map	13.2070	-1.0290	Burkina Fas	2182	Other	tonalite-trondhjemite-g		Zircon
BF 1M Map	13.2760	-2.6900	Burkina Fas	2194	Other	tonalite-trondhjemite-g		Zircon

BF 1M Map	13.2960	0.8380	Burkina Fas	1591	K-Ar	tonalite-trondhjemite-granodiorite		
BF 1M Map	13.3610	-0.4800	Burkina Fas	2164	Other	tonalite-trondhjemite-g		Zircon
BF 1M Map	13.7650	0.2690	Burkina Fas	2131	Other	tonalite-trondhjemite-g		Zircon
BF 1M Map	13.7740	-1.0070	Burkina Fas	2156	Other	tonalite-trondhjemite-g		Zircon
BF 1M Map	14.4280	-1.5400	Burkina Fas	2122	Other	tonalite-trondhjemite-g		Zircon
BF 1M Map	11.0410	-3.8040	Burkina Fas	2212	K-Ar	volcanics		Zircon
BF 1M Map	11.2560	-3.6530	Burkina Fas	2176	Other	volcanics		Zircon
BF 1M Map	12.9370	-1.0590	Burkina Fas	2177	Other	volcanics		Zircon
BF 1M Map	13.2730	-1.3060	Burkina Fas	2238	Other	volcanics		Zircon
BF 1M Map	12.9710	-2.4640	Burkina Fas	2136	Other	volcanics		Monazite
Castaing et	13.2067	-1.0291	Burkina Fas	2182	Pb-Pb (eva	Granite	Crystallizat	Zircon
Castaing et	12.1427	-0.0610	Burkina Fas	2170	Pb-Pb (eva	Quartz dior	Crystallizat	Zircon
Castaing et	12.2130	-0.5232	Burkina Fas	2169	Pb-Pb (eva	Quartz dior	Crystallizat	Zircon
Castaing et	13.7670	0.1960	Burkina Fas	2165	Pb-Pb (eva	Granite	Crystallizat	Zircon
Castaing et	13.3610	-0.4800	Burkina Fas	2164	Pb-Pb (eva	Tonalite	Crystallizat	Zircon
Castaing et	13.0070	-0.1540	Burkina Fas	2162	Pb-Pb (eva	Tonalite	Crystallizat	Zircon
Castaing et	13.7670	0.1960	Burkina Fas	2162	Pb-Pb (eva	Tonalite	Crystallizat	Zircon
Castaing et	13.7740	-1.0070	Burkina Fas	2156	Pb-Pb (eva	Tonalite	Crystallizat	Zircon
Castaing et	12.7804	-1.2581	Burkina Fas	2153	Pb-Pb (eva	Trondhjeim	Crystallizat	Zircon
Castaing et	11.0814	0.5829	Burkina Fas	2143	Pb-Pb (eva	Bt hbl grani	Crystallizat	Zircon
Castaing et	12.6410	-0.9487	Burkina Fas	2143	Pb-Pb (eva	Quartz dior	Crystallizat	Zircon
Castaing et	12.1440	-1.7042	Burkina Fas	2140	Pb-Pb (eva	Tonalite	Crystallizat	Zircon
Castaing et	11.4743	-1.1843	Burkina Fas	2136	Pb-Pb (eva	Granite	Crystallizat	Zircon
Castaing et	11.1684	-2.0786	Burkina Fas	2132	Pb-Pb (eva	Granite	Crystallizat	Zircon
Castaing et	14.3009	-1.0540	Burkina Fas	2132	Pb-Pb (eva	Granite	Crystallizat	Zircon
Castaing et	13.7650	0.2690	Burkina Fas	2131	Pb-Pb (eva	Granodiorit	Crystallizat	Zircon
Castaing et	11.9148	0.2947	Burkina Fas	2128	Pb-Pb (eva	Bt hbl tonal	Crystallizat	Zircon
Castaing et	13.0990	-0.9970	Burkina Fas	2127	Pb-Pb (eva	Quartz dior	Crystallizat	Zircon
Castaing et	14.4284	-1.5400	Burkina Fas	2122	Pb-Pb (eva	Granodiorit	Crystallizat	Zircon
Castaing et	11.4495	-0.8337	Burkina Fas	2117	Pb-Pb (eva	Granite	Crystallizat	Zircon
Castaing et	11.7719	-0.3368	Burkina Fas	2117	Pb-Pb (eva	Leucograni	Crystallizat	Zircon
Castaing et	11.5758	-1.2083	Burkina Fas	2110	Pb-Pb (eva	Granite	Crystallizat	Zircon
Castaing et	11.5281	-1.7764	Burkina Fas	2100	Pb-Pb (eva	Granodiorit	Crystallizat	Zircon
Castaing et	12.7690	-2.1150	Burkina Fas	2099	Pb-Pb (eva	Granite	Crystallizat	Zircon
Castaing et	12.7142	-0.3242	Burkina Fas	2097	Pb-Pb (evaporation)		Crystallizat	Zircon
Castaing et	13.2726	-1.3063	Burkina Fas	2238	Pb-Pb Zr e	Rhyolite	Crystallizat	Zircon
Castaing et	12.9371	-1.0592	Burkina Fas	2177	Pb-Pb Zr e	Dacite tuff	Crystallizat	Zircon
Castaing et	11.3456	0.8366	Burkina Fas	2127	Pb-Pb Zr e	Rhyolite	Crystallizat	Zircon
Fontaine et al., 2017			Burkina Fas	2140	U-Pb	Diorite	Emplaceme	Zircon
Tapsoba et	13.3550	-0.0650	Burkina Fas	2150	U-Pb	biotite gran	Crystallizat	zircon
Tapsoba et	12.7420	-1.4740	Burkina Fas	2135	U-Pb	granodiorite	Crystallizat	zircon
Tapsoba et	12.9020	-0.9690	Burkina Fas	2134	U-Pb	granodiorite	Crystallizat	zircon
Tapsoba et	12.9550	-1.3480	Burkina Fas	2158	U-Pb	granodiorite	Crystallizat	zircon
Tapsoba et	13.3550	-0.1630	Burkina Fas	2122	U-Pb	granodiorite	Crystallizat	zircon
Tapsoba et	13.4820	-0.0750	Burkina Fas	2178	U-Pb	granodiorite	Crystallizat	zircon
Tapsoba et	13.2430	-0.1230	Burkina Fas	2152	U-Pb	quartz diori	Crystallizat	zircon
Tapsoba et	13.3530	-0.4780	Burkina Fas	2176	U-Pb	quartz diori	Crystallizat	zircon
Tapsoba et	13.4870	-0.0880	Burkina Fas	2150	U-Pb	quartz diori	Crystallizat	zircon
Tshibubudz	14.4072	-0.1427	Burkina Fas	2255	U-Pb	Granite	Crystallizat	Zircon
Tshibubudz	14.5283	-0.1076	Burkina Fas	2253	U-Pb	Granodiorit	Crystallizat	Zircon
Tshibubudz	14.6238	-0.0106	Burkina Fas	2152	U-Pb	granite	Emplaceme	Zircon
Tshibubudz	14.5668	-0.2118	Burkina Fas	2202	U-Pb	Granite	Emplaceme	zircon

Carte Geol	5.7700	-3.1580	Cote d'Ivoir	2136	U-Pb	granite/leucogranite/monzonite		
Carte Geol	5.7660	-3.1850	Cote d'Ivoir	2148	Pb-Pb	granite/leucogranite/monzonite		
Carte Geol	5.8400	-3.2030	Cote d'Ivoir	2162	U-Pb	granite/leucogranite/monzonite		
Carte Geol	5.9660	-3.1810	Cote d'Ivoir	2081	U-Pb	granite/leucogranite/monzonite		
Carte Geol	5.6220	-3.2010	Cote d'Ivoir	2165	U-Pb	rhyolite/felsic flow		
Carte Geol	5.6720	-3.0320	Cote d'Ivoir	2180	U-Pb	volcanics		
Cocherie et	7.3120	-7.4050	Cote d'Ivoir	2801	U-Pb	granite/leuc	Metamorph	Monazite
Cocherie et	7.0510	-7.5180	Cote d'Ivoir	2033	U-Pb	granulite/m	Metamorph	Monazite
Cocherie et	7.0510	-7.5180	Cote d'Ivoir	2714	U-Pb	granulite/m	Metamorph	Monazite
Cocherie et	7.0510	-7.5180	Cote d'Ivoir	2794	U-Pb	granulite/m	Metamorph	Monazite
Cocherie et	7.2770	-7.4320	Cote d'Ivoir	2048	U-Pb	granulite/m	Metamorph	Monazite
Cocherie et	7.2770	-7.4320	Cote d'Ivoir	2725	U-Pb	granulite/m	Metamorph	Monazite
Cocherie et	7.2770	-7.4320	Cote d'Ivoir	2803	U-Pb	granulite/m	Metamorph	Monazite
Doumbia et	8.3290	-5.1040	Cote d'Ivoir	2108	Pb-Pb	andesite/di	Igneous	zircon
Doumbia et	8.2240	-5.0850	Cote d'Ivoir	2108	Pb-Pb	andesite/di	Igneous	zircon
Doumbia et	8.3370	-5.1030	Cote d'Ivoir	2108	Pb-Pb	andesite/di	Igneous	Zircon
Doumbia et	8.4890	-5.3730	Cote d'Ivoir	2084	Pb-Pb	granite/leuc	Igneous	zircon
Doumbia et	8.0090	-5.5020	Cote d'Ivoir	2097	Pb-Pb	granite/leuc	Igneous	Zircon
Doumbia et	8.4930	-5.3780	Cote d'Ivoir	2094	Pb-Pb	granite/leuc	Igneous	Monazite
Doumbia et	8.1980	-5.0480	Cote d'Ivoir	2092	Pb-Pb	tonalite-tror	Igneous	zircon
Doumbia et	8.1770	-5.0890	Cote d'Ivoir	2097	Pb-Pb	tonalite-tror	Igneous	Zircon
Doumbia et	8.2050	-5.0450	Cote d'Ivoir	2220	Pb-Pb	tonalite-tror	Igneous	Zircon
Doumbia et	8.2290	-5.0790	Cote d'Ivoir	2108	Pb-Pb	volcanics	Igneous	Zircon
Doumbia et	8.2780	-5.2500	Cote d'Ivoir	2123	Pb-Pb	volcanics	Igneous	Zircon
Gasquet et	8.5860	-4.3850	Cote d'Ivoir	2312	Pb-Pb	granulite/m	Igneous	Zircon
Gasquet et	8.5860	-4.3850	Cote d'Ivoir	2154	Pb-Pb	granulite/m	Igneous	Zircon
Gasquet et	8.5190	-4.6690	Cote d'Ivoir	2162	U-Pb	granite/leuc	Igneous	Zircon
Gasquet et	8.1530	-5.0230	Cote d'Ivoir	2118	U-Pb	tonalite-tror	Igneous	Zircon
Gasquet et	8.1690	-4.4290	Cote d'Ivoir	2103	U-Pb	tonalite-tror	Igneous	Zircon
Gasquet et	8.5860	-4.3850	Cote d'Ivoir	2170	U-Pb	tonalite-tror	Igneous	Zircon
Gasquet et	8.6390	-4.4520	Cote d'Ivoir	2102	U-Pb	tonalite-tror	Igneous	Zircon
Hirdes et al	9.6260	-3.7710	Cote d'Ivoir	2096	U-Pb	tonalite-trondhjemite-g		Titanite/ fel
Hirdes et al	9.7760	-3.9270	Cote d'Ivoir	2110	U-Pb	tonalite-trondhjemite-g		Zircon
Hirdes et al	9.7760	-3.9270	Cote d'Ivoir	2111	U-Pb	tonalite-trondhjemite-g		Titanite/ fel
Hirdes et al	9.6190	-3.6710	Cote d'Ivoir	2152	U-Pb	tonalite-trondhjemite-g		Zircon
Hirdes et al	9.5750	-4.0940	Cote d'Ivoir	2103	U-Pb	andesite/di	Igneous	Zircon/Titar
Hirdes et al	9.8350	-3.9710	Cote d'Ivoir	2104	U-Pb	andesite/di	Igneous	Zircon
Hirdes et al	9.6860	-4.1050	Cote d'Ivoir	2104	U-Pb	rhyolite/fels	Igneous	Zircon
Hirdes et al	9.5820	-4.1610	Cote d'Ivoir	2137	U-Pb	tonalite-tror	Igneous	Zircon
Hirdes et al	9.5980	-4.2830	Cote d'Ivoir	2100	U-Pb	tonalite-tror	Metamorph	Titanite/Spl
Hirdes et al	9.5980	-4.2830	Cote d'Ivoir	2152	U-Pb	tonalite-tror	Igneous	Zircon
Hirdes et al	9.6120	-3.6690	Cote d'Ivoir	2153	U-Pb	tonalite-tror	Igneous	Zircon/Titar
Hirdes et al	9.6230	-3.7700	Cote d'Ivoir	2097	U-Pb	tonalite-tror	Igneous	Zircon/Titar
Hirdes et al	9.7720	-3.9160	Cote d'Ivoir	2110	U-Pb	tonalite-tror	Igneous	Zircon/Titar
Kone et al.,	8.9000	-7.4000	Cote d'Ivoir	2000	Rb-Sr	granite/leuc	Igneous	Whole Rocl
Kouamelan	6.9100	-7.4620	Cote d'Ivoir	2808	Pb-Pb	granulite/m	Igneous	Zircon
Kouamelan	7.0510	-7.5150	Cote d'Ivoir	0	Pb-Pb	granulite/m	Metamorph	Zircon
Kouamelan	7.0510	-7.5150	Cote d'Ivoir	2053	Sm-Nd	granulite/m	Metamorph	Whole Rocl
Kouamelan	7.2460	-7.2200	Cote d'Ivoir	2031	Sm-Nd	granulite/m	Metamorph	Whole Rocl
Kouamelan	7.2540	-7.2200	Cote d'Ivoir	2064	Pb-Pb	granulite/m	Igneous	Titanite/Spl
Kouamelan	7.2540	-7.2200	Cote d'Ivoir	2797	Pb-Pb	granulite/m	Igneous	Zircon
Kouamelan	7.2860	-7.4320	Cote d'Ivoir	0	Pb-Pb	granulite/m	Other	Zircon

Kouamelan	7.2860	-7.4320	Cote d'Ivoir	2203	Sm-Nd	granulite/m	Metamorph	Whole Rocl
Kouamelan	7.3140	-7.4120	Cote d'Ivoir	0	Pb-Pb	granulite/m	Other	Zircon
Kouamelan	7.3140	-7.4120	Cote d'Ivoir	2246	Sm-Nd	granulite/m	Metamorph	Whole Rocl
Kouamelan	7.3140	-7.4120	Cote d'Ivoir	2830	Pb-Pb	granulite/m	Metamorph	Monazite
Kouamelan	7.4450	-7.6080	Cote d'Ivoir	0	Pb-Pb	granulite/m	Metamorph	Zircon
Kouamelan	7.4450	-7.6080	Cote d'Ivoir	0	Pb-Pb	granulite/m	Metamorph	Zircon
Kouamelan	7.4450	-7.6080	Cote d'Ivoir	2741	Sm-Nd	granulite/m	Metamorph	Whole Rocl
Kouamelan	7.4640	-7.3980	Cote d'Ivoir	0	Pb-Pb	granulite/m	Igneous	Zircon
Kouamelan	7.7840	-7.5680	Cote d'Ivoir	0	Pb-Pb	granulite/m	Metamorph	Zircon
Kouamelan	6.6370	-8.3560	Cote d'Ivoir	2098	Pb-Pb	tonalite-tror	Igneous	Zircon
Kouamelan	6.6530	-8.3720	Cote d'Ivoir	2104	Pb-Pb	tonalite-tror	Igneous	Zircon
L�dtke et a	8.7271	-4.0851	Cote d'Ivoir	2090	Pb-Pb (diss	Granodiorit	Metamorph	Titanite
L�dtke et a	8.6485	-4.1572	Cote d'Ivoir	2158	Pb-Pb (diss	rhyolite	Igneous	Zircon
L�dtke et al., 1999			Cote d'Ivoir	2160	Pb-Pb (diss	volcanoclas	Igneous	Zircon
L�dtke et a	8.5896	-4.0419	Cote d'Ivoir	2170	Pb-Pb (diss	Felsic tuf	Igneous	Zircon
Toure et al.	7.8000	-3.1000	Cote d'Ivoir	2166	Rb-Sr	tonalite-tror	Igneous	Whole Rocl
Vidal et al.,	8.1860	-5.5650	Cote d'Ivoir	2094	Pb-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	8.3800	-5.1590	Cote d'Ivoir	2119	Pb-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	8.4250	-5.0540	Cote d'Ivoir	2108	Pb-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	8.2820	-4.1960	Cote d'Ivoir	2109	U-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	8.8450	-4.1440	Cote d'Ivoir	2113	U-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	8.8840	-4.0650	Cote d'Ivoir	2098	U-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	9.7100	-4.1570	Cote d'Ivoir	2104	U-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	9.5790	-3.8620	Cote d'Ivoir	2097	Pb-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	9.5590	-3.7050	Cote d'Ivoir	2152	U-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	9.4870	-4.0750	Cote d'Ivoir	2103	U-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	8.1200	-2.8180	Cote d'Ivoir	2166	Rb-Sr	granite/leuc	Igneous	Whole Rocl
Vidal et al.,	6.3590	-4.1710	Cote d'Ivoir	2095	Pb-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	5.5800	-3.1150	Cote d'Ivoir	2164	Pb-Pb	granite/leuc	Igneous	Zircon
Vidal et al.,	5.8150	-6.3050	Cote d'Ivoir	2104	Pb-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	5.8150	-6.3050	Cote d'Ivoir	2135	Pb-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	7.5570	-6.6390	Cote d'Ivoir	2143	Pb-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	8.0290	-5.4210	Cote d'Ivoir	2094	Pb-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	8.1080	-5.3290	Cote d'Ivoir	2097	Pb-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	9.3290	-5.6630	Cote d'Ivoir	2100	Pb-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	8.2100	-4.5110	Cote d'Ivoir	2103	U-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	8.2360	-4.4720	Cote d'Ivoir	2102	U-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	8.3870	-4.4580	Cote d'Ivoir	2154	U-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	8.3540	-4.3470	Cote d'Ivoir	2144	U-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	9.4800	-4.3340	Cote d'Ivoir	2152	U-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	8.9760	-4.1110	Cote d'Ivoir	2106	U-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	9.6310	-4.2420	Cote d'Ivoir	2137	U-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	8.8840	-3.7210	Cote d'Ivoir	2151	Pb-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	8.8120	-3.7860	Cote d'Ivoir	2149	Pb-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	8.3280	-3.4330	Cote d'Ivoir	2154	Pb-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	6.7560	-4.7980	Cote d'Ivoir	2079	Pb-Pb	tonalite-tror	Igneous	Zircon
Vidal et al.,	6.6600	-4.7820	Cote d'Ivoir	2186	Rb-Sr	tonalite-tror	Igneous	Whole Rocl
Vidal et al.,	6.6250	-4.8260	Cote d'Ivoir	2087	Pb-Pb	tonalite-tror	Igneous	Zircon
Adadey et a	5.5870	-2.4470	Ghana	2142	U-Pb	andesite/diorite		Zircon
Adadey et a	5.5870	-2.4470	Ghana	2200	U-Pb	andesite/diorite		Zircon
Adadey et a	5.6720	-2.2200	Ghana	2090	U-Pb	granite/leucogranite/m		Zircon
Adadey et a	5.6520	-2.5010	Ghana	2108	U-Pb	granite/leucogranite/m		Zircon

Adadey et a	5.9820	-2.1790	Ghana	2112	U-Pb	granite/leucogranite/m		Zircon
Adadey et a	5.9800	-2.4450	Ghana	2136	U-Pb	tonalite-trondhjemite-g		Zircon
Agyei & Ma	5.9000	0.0000	Ghana	587	K-Ar	granulite/m	Igneous	Amphibole/
Agyei & Ma	5.9000	0.0300	Ghana	607	K-Ar	granulite/m	Igneous	Amphibole/
Agyei et al.	5.1200	-1.4200	Ghana	1680	Rb-Sr	granite/leuc	Igneous	Whole Rock
Agyei et al.	5.6500	-0.0200	Ghana	644	K-Ar	granite/leuc	Metamorph	Other
Agyei et al.	5.8300	-0.3000	Ghana	1944	K-Ar	granite/leuc	Igneous	Mica/Phlog
Agyei et al.	5.1700	-1.3000	Ghana	1889	K-Ar	granulite/m	Igneous	Mica/Phlog
Agyei et al.	5.2000	-1.3400	Ghana	1863	K-Ar	granulite/m	Igneous	Mica/Phlog
Agyei et al.	5.2000	-1.3400	Ghana	1876	K-Ar	granulite/m	Igneous	Mica/Phlog
Agyei et al.	5.2000	-1.3400	Ghana	1879	K-Ar	granulite/m	Igneous	Mica/Phlog
Agyei et al.	5.2000	-1.3400	Ghana	1880	K-Ar	granulite/m	Igneous	Mica/Phlog
Agyei et al.	5.2000	-1.3400	Ghana	1942	K-Ar	granulite/m	Igneous	Mica/Phlog
Agyei et al.	5.2000	-1.3400	Ghana	1974	Rb-Sr	granulite/m	Igneous	Whole Rock
Agyei et al.	5.6300	-0.0500	Ghana	2841	Rb-Sr	granulite/m	Other	Whole Rock
Agyei et al.	5.8500	-0.4000	Ghana	1787	K-Ar	granulite/m	Igneous	Mica/Phlog
Agyei et al.	6.2700	0.5200	Ghana	542	K-Ar	granulite/m	Metamorph	Mica/Phlog
Agyei et al.	6.2800	0.9000	Ghana	508	Rb-Sr	granulite/m	Metamorph	Whole Rock
Agyei et al.	6.5800	0.3800	Ghana	2034	K-Ar	granulite/m	Igneous	Mica/Phlog
Agyei et al.	6.5800	0.3800	Ghana	2176	Rb-Sr	granulite/m	Igneous	Whole Rock
Agyei et al.	6.0000	-0.3000	Ghana	2051	Rb-Sr		Igneous	Whole Rock
Agyei et al.	6.2300	0.5200	Ghana	586	Rb-Sr		Metamorph	Whole Rock
Amponsah,	6.6850	-2.7690	Ghana	2135	U-Pb	granite	Igneous	Zircon
Amponsah,	6.7060	-2.7670	Ghana	2136	U-Pb	granite	Igneous	Zircon
Attoh et al.,	6.4930	0.4930	Ghana	566	Ar-Ar	granulite/m	Igneous	Amphibole/
Attoh et al.,	6.7470	0.0550	Ghana	579	Ar-Ar	granulite/m	Other	Mica/Phlog
Attoh et al.,	4.8300	-2.1600	Ghana	2159	U-Pb	granite/leuc	Igneous	Zircon
Attoh et al.,	6.1780	0.1470	Ghana	594	U-Pb	granite/leuc	Igneous	Zircon
Block et al.	8.9289	-2.4320	Ghana	2138	U-Pb	paragneiss	Metamorph	Monazite
Block et al.	9.3733	2--3180	Ghana	2127	U-Pb	paragneiss	Metamorph	Monazite
Block et al.	8.9090	-2.0391	Ghana	2130	U-Pb	paragneiss	Metamorph	Monazite
Block et al.	10.8538	-0.1703	Ghana	2269	U-Pb			Zircon
Block et al.	9.9744	-2.3092	Ghana	2240	U-Pb			Zircon
Block et al.	10.8783	-0.5922	Ghana	2233	U-Pb			Zircon
Block et al.	10.0955	-2.0369	Ghana	2222	U-Pb			Zircon
Block et al.	10.8017	-0.7087	Ghana	2195	U-Pb			Zircon
Block et al.	10.4013	-1.3319	Ghana	2211	U-Pb	Granite	Crystallizat	Zircon
Block et al.	9.9744	-2.3092	Ghana	2190	U-Pb	Granodiorit	Crystallizat	Zircon
Block et al.	9.5075	-2.4655	Ghana	2181	U-Pb	Granodiorit	Crystallizat	Zircon
Block et al.	10.8538	-0.1703	Ghana	2153	U-Pb	Granodiorit	Crystallizat	Zircon
Block et al.	10.8302	-1.0719	Ghana	2148	U-Pb	Granodiorit	Crystallizat	Zircon
Block et al.	10.8048	-0.8846	Ghana	2143	U-Pb	Trondhjemi	Crystallizat	Zircon
Block et al.	8.5818	-2.2238	Ghana	2143	U-Pb	Trondhjemi	Crystallizat	Zircon
Block et al.	10.0939	-2.0927	Ghana	2140	U-Pb	Granodiorit	Crystallizat	Zircon
Block et al.	10.0873	-2.0363	Ghana	2138	U-Pb	Granite	Crystallizat	Zircon
Block et al.	10.8226	-0.9413	Ghana	2135	U-Pb	Granite	Crystallizat	Zircon
Block et al.	9.9692	-2.1148	Ghana	2133	U-Pb	Granite	Crystallizat	Zircon
Block et al.	9.1692	-2.2817	Ghana	2197	U-Pb	Rhyolite	Crystallizat	Zircon
Block et al.	10.0961	-2.0409	Ghana	2168	U-Pb	Epiclastite	Crystallizat	Zircon
Block et al.	10.1143	-2.0333	Ghana	2166	U-Pb	Volcanosec	Crystallizat	Zircon
Block et al.	10.8017	-0.7087	Ghana	2155	U-Pb	Andesite	Crystallizat	Zircon
Block et al.	10.0955	-2.0369	Ghana	2155	U-Pb	Tuff	Crystallizat	Zircon

Block et al.	10.8783	-0.5922	Ghana	2153	U-Pb	Andesite	Crystallizat	Zircon
Block et al.	10.7230	-0.6882	Ghana	2149	U-Pb	Dacite	Crystallizat	Zircon
Block et al.	10.8878	-2.6951	Ghana	2134	U-Pb	Dacite	Crystallizat	Zircon
Block et al.	9.8231	-2.6960	Ghana	2136	U-Pb	paragneiss	Metamorph	Monazite
Block et al.	9.8346	-2.6865	Ghana	2134	U-Pb	paragneiss	Metamorph	Monazite
Block et al.	9.8135	-2.6371	Ghana	2130	U-Pb	paragneiss	Metamorph	Monazite
Chalokwu e	5.3160	-0.6830	Ghana	1390	K-Ar	granite/leuc	Metamorph	Whole Rocl
Chalokwu e	5.3160	-0.6830	Ghana	1907	K-Ar	granite/leuc	Igneous	Mica/Phlog
Chalokwu e	5.3160	-0.6830	Ghana	1909	K-Ar	granite/leuc	Igneous	Mica/Phlog
Chalokwu e	5.3160	-0.6830	Ghana	1965	K-Ar	granite/leuc	Igneous	Mica/Phlog
Chalokwu e	5.3160	-0.6830	Ghana	2019	K-Ar	granite/leuc	Igneous	Mica/Phlog
Chalokwu e	5.3140	-0.7210	Ghana	2019	K-Ar	granite/leuc	Igneous	Mica/Phlog
Davis et al.	5.1460	-1.3470	Ghana	2090	U-Pb	granite/leuc	Igneous	Monzonite
de Kock et	8.8470	-2.0910	Ghana	2126	U-Pb	granite/leucogranite/m		Zircon
de Kock et	8.8470	-2.0910	Ghana	2130	U-Pb	granite/leucogranite/m		Zircon
de Kock et	8.5900	-2.1040	Ghana	2137	U-Pb	granite/leucogranite/m		Zircon
de Kock et	8.5900	-2.1040	Ghana	2151	U-Pb	granite/leucogranite/m		Zircon
de Kock et	8.6740	-2.0490	Ghana	2174	U-Pb	granite/leucogranite/m		Zircon
de Kock et	8.6420	-2.1950	Ghana	2187	U-Pb	granite/leucogranite/m		Zircon
de Kock et	8.9840	-2.4970	Ghana	2193	U-Pb	granite/leucogranite/m		Zircon
de Kock et	8.8470	-2.0910	Ghana	2200	U-Pb	granite/leucogranite/m		Zircon
de Kock et	8.5650	-2.0580	Ghana	2227	U-Pb	tonalite-trondhjemite-g		Zircon
de Kock et	8.5650	-2.0580	Ghana	2105	U-Pb	tonalite-trondhjemite-g		Zircon
de Kock et	8.5650	-2.0580	Ghana	2121	U-Pb	tonalite-trondhjemite-g		Zircon
de Kock et	8.5650	-2.0580	Ghana	2140	U-Pb	tonalite-trondhjemite-g		Zircon
de Kock et	8.8290	-2.2990	Ghana	2125	U-Pb	volcanics		Zircon
de Kock et	8.7450	-2.3450	Ghana	2131	U-Pb	volcanics		Zircon
de Kock et	8.8290	-2.2990	Ghana	2156	U-Pb	volcanics		Zircon
de Kock et	8.7450	-2.3450	Ghana	2165	U-Pb	volcanics		Zircon
de Kock et	8.5900	-2.1040	Ghana	2122	U-Pb	granite/leucogranite/m		Zircon
Duodu et al	10.5980	-2.8880	Ghana	2139	U-Pb			Zircon
Duodu et al	5.3950	-0.5810	Ghana	2165	U-Pb			Zircon
Duodu et al	5.1130	-1.5130	Ghana	2187	U-Pb			Zircon
Duodu et al	5.1190	-1.6300	Ghana	2187	U-Pb			Zircon
Duodu et al	6.4790	-1.3990	Ghana	1	U-Pb			Zircon
Duodu et al	5.4850	-0.9700	Ghana	2080	U-Pb			Zircon
Duodu et al	5.1540	-1.1610	Ghana	2072	U-Pb			Zircon
Duodu et al	9.2320	-2.2510	Ghana	2196	U-Pb			Zircon
Duodu et al	5.5000	-2.9890	Ghana	2182	U-Pb			Zircon
Duodu et al	5.4320	-2.7750	Ghana	2159	U-Pb			Zircon
Duodu et al	5.3350	-0.6240	Ghana	2113	U-Pb			Zircon
Duodu et al	5.7550	-1.3070	Ghana	2102	U-Pb			Zircon
Duodu et al	7.0680	-2.6550	Ghana	2088	U-Pb			Zircon
Duodu et al	7.6120	-2.1300	Ghana	2092	U-Pb			Zircon
Duodu et al	5.5760	-0.4250	Ghana	2106	U-Pb			Zircon
Duodu et al	10.8640	-1.9310	Ghana	2112	U-Pb			Zircon
Duodu et al	10.7660	-2.8450	Ghana	2104	U-Pb			Zircon
Duodu et al	6.4680	-1.2040	Ghana	2097	U-Pb			Zircon
Duodu et al	10.6970	-0.8190	Ghana	2095	U-Pb			Zircon
Duodu et al	10.8470	-1.1420	Ghana	2156	U-Pb			Zircon
Duodu et al	8.2470	-2.3710	Ghana	2145	U-Pb			Zircon
Duodu et al	10.9320	-1.5490	Ghana	2162	U-Pb			Zircon

Duodu et al	10.7110	-0.8450	Ghana	2151	U-Pb			Zircon
Duodu et al	4.7920	-1.9480	Ghana	2172	U-Pb			Zircon
Duodu et al	10.9410	-0.4800	Ghana	2168	U-Pb			Zircon
Duodu et al	9.0840	-2.4890	Ghana	2195	U-Pb			Zircon
Duodu et al	10.9160	-0.1940	Ghana	2128	U-Pb			Zircon
Duodu et al	10.7730	-2.7310	Ghana	2124	U-Pb			Zircon
Duodu et al	8.4870	-2.2000	Ghana	2125	U-Pb			Zircon
Duodu et al	9.8370	-2.3600	Ghana	2120	U-Pb			Zircon
Duodu et al	10.8260	-0.9970	Ghana	2134	U-Pb			Zircon
Duodu et al	10.9990	-0.3700	Ghana	2134	U-Pb			Zircon
Duodu et al	9.9690	-2.0340	Ghana	2118	U-Pb			Zircon
Duodu et al	5.6380	-0.6210	Ghana	2132	U-Pb			Zircon
Feybesse e	5.4030	-3.1280	Ghana	2161	Pb-Pb	andesite/di	Igneous	Zircon
Feybesse e	5.5830	-3.4260	Ghana	2161	Pb-Pb	granite/leuc	Igneous	Zircon
Feybesse e	7.0930	-2.4100	Ghana	2159	Pb-Pb	granite/leuc	Igneous	Zircon
Feybesse e	5.5170	-0.4450	Ghana	2158	Pb-Pb	granulite/m	Igneous	Zircon
Feybesse e	5.9800	-0.5230	Ghana	2200	Pb-Pb	tonalite-tror	Igneous	Zircon
Hirdes and	6.9050	-2.0250	Ghana	2189	U-Pb	rhyolite/fels	Igneous	Zircon
Hirdes and	6.9080	-2.0310	Ghana	2179	Other	granite/leucogranite/m		Zircon
Hirdes et al	7.0950	-2.5360	Ghana	2087	U-Pb	granite/leucogranite/m		Zircon
Hirdes et al	6.4870	-2.2160	Ghana	2116	U-Pb	granite/leucogranite/m		Zircon
Hirdes et al	4.8340	-1.9090	Ghana	2171	U-Pb	granite/leucogranite/m		Zircon
Hirdes et al	6.1300	-2.5520	Ghana	2178	U-Pb	granite/leucogranite/m		Zircon
Oberth�r e	6.2850	-1.6610	Ghana	2144	U-Pb	granite/leuc	Igneous	Zircon
Oberth�r e	5.9160	-1.9020	Ghana	2086	U-Pb	granite/leuc	Igneous	rutile-galen
Oberth�r e	5.9160	-1.9020	Ghana	2105	U-Pb	granite/leuc	Igneous	Monazite
Oberth�r e	6.2630	-1.6070	Ghana	2098	U-Pb	granite/leuc	Metamorph	Rutile-galer
Oberth�r e	6.2630	-1.6070	Ghana	2104	U-Pb	granite/leuc	Igneous	Monazite
Oberth�r e	6.2630	-1.6070	Ghana	2105	U-Pb	granite/leuc	Igneous	Titanite/Spl
Oberth�r e	6.2630	-1.6070	Ghana	2106	U-Pb	granite/leuc	Igneous	Zircon
Oberth�r e	6.2630	-1.6070	Ghana	2106	U-Pb	granite/leuc	Igneous	Monazite
Oberth�r e	6.4770	-1.1330	Ghana	2097	U-Pb	granite/leuc	Igneous	Titanite/Spl
Oberth�r e	4.9560	-1.6630	Ghana	2092	U-Pb	tonalite-tror	Metamorph	Titanite/Spl
Oberth�r e	4.9560	-1.6630	Ghana	2174	U-Pb	tonalite-tror	Igneous	Zircon
Parra-Avila	5.4776	-1.7147	Ghana	2191	U-Pb	Granodiorit	Emplaceme	Zircon
Parra-Avila	5.1970	-1.8989	Ghana	2157	U-Pb	Granodiorit	Emplaceme	Zircon
Siegfried et	9.1840	-2.1190	Ghana	2118	Other	granite/leucogranite/m		Zircon
Siegfried et	9.4330	-2.4350	Ghana	2120	Other	granite/leucogranite/m		Zircon
Siegfried et	9.4570	-2.2460	Ghana	2120	Other	granite/leucogranite/m		Zircon
Siegfried et	9.4330	-2.4350	Ghana	2128	Other	granite/leucogranite/m		Zircon
Siegfried et	9.4330	-2.4350	Ghana	2141	Other	granite/leucogranite/m		Zircon
Siegfried et	9.4330	-2.4350	Ghana	2150	Other	granite/leucogranite/m		Zircon
Siegfried et	9.4330	-2.4350	Ghana	2186	Other	granite/leucogranite/m		Zircon
Siegfried et	9.4570	-2.2460	Ghana	2189	Other	granite/leucogranite/m		Zircon
Siegfried et	9.4330	-2.4350	Ghana	2190	Other	granite/leucogranite/m		Zircon
Siegfried et	9.6570	-2.2930	Ghana	2195	Other	granite/leucogranite/m		Zircon
Siegfried et	9.6570	-2.2930	Ghana	2258	Other	granite/leucogranite/m		Zircon
Siegfried et	9.6570	-2.2930	Ghana	2386	Other	granite/leucogranite/m		Zircon
Siegfried et	9.0370	-2.4110	Ghana	2132	Other	tonalite-trondhjemite-g		Zircon
Taylor et al	4.8000	-2.2500	Ghana	2102	Pb-Pb	granite/leuc	Igneous	Whole Roc
Taylor et al	5.1500	-1.3000	Ghana	2216	Rb-Sr	granite/leuc	Igneous	Whole Roc
Taylor et al	5.4500	-0.7000	Ghana	2024	Rb-Sr	granite/leuc	Igneous	Whole Roc

Taylor et al	6.7000	-1.8000	Ghana	2127	Rb-Sr	granite/leuc	Igneous	Whole Rocl
Taylor et al	10.8000	-2.3500	Ghana	2086	Rb-Sr	granite/leuc	Igneous	Whole Rocl
Thomas et	9.6570	-2.2930	Ghana	2098	Other	granite/leucogranite/m		Zircon
Thomas et	9.6570	-2.2930	Ghana	2104	Other	granite/leucogranite/m		Zircon
Thomas et	9.6570	-2.2930	Ghana	2118	Other	granite/leucogranite/m		Zircon
Thomas et	9.6570	-2.2930	Ghana	2120	Other	granite/leucogranite/m		Zircon
Thomas et	9.6190	-2.0710	Ghana	2121	Other	granite/leucogranite/m		Zircon
Thomas et	9.6570	-2.2930	Ghana	2139	Other	granite/leucogranite/m		Zircon
Thomas et	9.9740	-2.3030	Ghana	2150	Other	granite/leucogranite/m		Zircon
Thomas et	9.6570	-2.2930	Ghana	2157	Other	granite/leucogranite/m		Zircon
Thomas et	9.6570	-2.2930	Ghana	2148	Other	granite/leucogranite/m		Zircon
Thomas et	9.6570	-2.2930	Ghana	2177	Other	granite/leucogranite/m		Zircon
Thomas et	9.6260	-2.3800	Ghana	2187	Other	granite/leucogranite/m		Zircon
Thomas et	9.6190	-2.0710	Ghana	2197	Other	granite/leucogranite/m		Zircon
Thomas et	9.6260	-2.3800	Ghana	2499	Other	granite/leucogranite/m		Zircon
Thomas et	9.6260	-2.3800	Ghana	2876	Other	granite/leucogranite/m		Zircon
Egal et al..	9.5400	-8.3200	Guinea	2074	Pb-Pb	andesite/di	Igneous	Zircon
Egal et al..	9.5200	-8.7770	Guinea	2074	Pb-Pb	granite/leuc	Igneous	Zircon
Egal et al..	10.9800	-8.3660	Guinea	2078	Pb-Pb	granite/leuc	Igneous	Zircon
Egal et al..	8.8000	-8.2940	Guinea	2087	Pb-Pb	tonalite-tror	Igneous	Zircon
Egal et al..	9.5600	-8.4570	Guinea	2081	Pb-Pb	tonalite-tror	Igneous	Zircon
Egal et al..	9.9100	-8.7200	Guinea	2072	Pb-Pb	tonalite-tror	Igneous	Zircon
Eglinger et al., 2017			Guinea	2087	U-Pb	Bt monzogr	Emplaceme	Zircon
Eglinger et al., 2017			Guinea	2082	U-Pb	Bt monzogr	Emplaceme	Zircon
Eglinger et al., 2017			Guinea	2082	U-Pb	Bt monzogr	Emplaceme	Zircon
Eglinger et al., 2017			Guinea	2098	U-Pb	Bt monzogr	Emplaceme	Zircon
Eglinger et al., 2017			Guinea	2096	U-Pb	Qtz monzo	Emplaceme	Zircon
Eglinger et al., 2017			Guinea	2093	U-Pb	Qtz monzo	Emplaceme	Zircon
Lahond�re	11.3240	-8.4250	Guinea	2122	Pb-Pb	volcanics	Igneous	Zircon
Lahond�re	11.3240	-8.4250	Guinea	2132	Pb-Pb	volcanics	Igneous	Zircon
Lahond�re	11.3240	-8.4250	Guinea	2135	Pb-Pb	volcanics	Igneous	Zircon
Lahond�re	11.3240	-8.4250	Guinea	2153	Pb-Pb	volcanics	Igneous	Zircon
Lahond�re	11.3240	-8.4250	Guinea	2171	Pb-Pb	volcanics	Igneous	Zircon
Lahond�re	11.3240	-8.4250	Guinea	2178	Pb-Pb	volcanics	Igneous	Zircon
Lahond�re	11.3240	-8.4250	Guinea	2186	Pb-Pb	volcanics	Igneous	Zircon
Lahond�re	11.3240	-8.4250	Guinea	2211	Pb-Pb	volcanics	Igneous	Zircon
Lahond�re	11.3350	-8.4120	Guinea	2212	Pb-Pb	volcanics	Igneous	Zircon
Thieblemor	7.9180	-8.1450	Guinea	2797	U-Pb	granite/leuc	Igneous	Zircon
Thieblemor	7.8760	-8.3660	Guinea	3542	U-Pb	granulite/m	Igneous	Zircon
Thieblemor	7.6360	-8.7600	Guinea	2023	U-Pb	granite/leuc	Igneous	Zircon
Thieblemor	7.7550	-8.7060	Guinea	2055	U-Pb	granite/leuc	Igneous	Zircon
Thieblemor	7.7550	-8.7060	Guinea	2082	U-Pb	granite/leuc	Igneous	Zircon
Thieblemor	7.9180	-8.1450	Guinea	2797	U-Pb	granite/leuc	Igneous	Zircon
Thieblemor	8.3910	-9.3530	Guinea	2803	U-Pb	granite/leuc	Igneous	Zircon
Thieblemor	8.5320	-9.9270	Guinea	2870	U-Pb	granite/leuc	Igneous	Zircon
Thieblemor	8.9010	-9.2580	Guinea	2907	U-Pb	granite/leuc	Igneous	Zircon
Thieblemor	7.7290	-8.8290	Guinea	2037	U-Pb	granulite/m	Igneous	Zircon
Thieblemor	7.7300	-8.8290	Guinea	2041	U-Pb	granulite/m	Igneous	Zircon
Thieblemor	7.8760	-8.3660	Guinea	3542	U-Pb	granulite/m	Igneous	Zircon
Thieblemor	8.0360	-9.0300	Guinea	3050	U-Pb	granulite/m	Igneous	Zircon
Thieblemor	8.6080	-9.5170	Guinea	2864	U-Pb	granulite/m	Igneous	Zircon
Thieblemor	8.8920	-9.0620	Guinea	2868	U-Pb	volcanics	Igneous	Zircon

Anonym - A	11.0980	-7.5940	Mali	1337	Rb-Sr	granite/leuc	Other	Other
Anonym - A	11.8570	-7.6040	Mali	1312	Rb-Sr	granite/leucogranite/m		Other
Anonym - A	11.8570	-7.6040	Mali	2299	Rb-Sr	granite/leucogranite/m		Other
Anonym - A	11.3480	-7.7250	Mali	2487	Rb-Sr	granite/leucogranite/m		Other
Anonym - A	11.8540	-7.8950	Mali	2246	Rb-Sr	granite/leucogranite/m		Other
Anonym - A	11.6190	-8.1880	Mali	1911	Rb-Sr	granite/leucogranite/m		Other
Anonym - A	11.0980	-7.5940	Mali	1337	Rb-Sr	granite/leucogranite/m		Other
Anonym - A	11.8570	-7.6040	Mali	1312	Rb-Sr	granite/leucogranite/m		Other
Anonym - A	11.8570	-7.6040	Mali	2299	Rb-Sr	granite/leucogranite/m		Other
Anonym - A	11.3480	-7.7250	Mali	2487	Rb-Sr	granite/leucogranite/m		Other
Anonym - A	11.6190	-8.1880	Mali	1911	Rb-Sr	granite/leucogranite/m		Other
Bertrand et	19.5000	2.5000	Mali	610	Other	tonalite-tror	Igneous	
Bertrand et	19.8000	1.7000	Mali	580	Other	tonalite-tror	Igneous	
Caby et al.,	19.4600	2.2700	Mali	600	U-Pb	andesite/di	Igneous	Zircon
Caby et al.,	19.7000	2.4100	Mali	581	U-Pb	granite/leuc	Igneous	Zircon
Caby et al.,	20.2300	0.7700	Mali	726	U-Pb	andesite/di	Igneous	Zircon
Caby et al.,	20.3700	0.7300	Mali	710	U-Pb	granulite/m	Igneous	Zircon
Caby et al.,	19.6900	0.9100	Mali	635	U-Pb	tonalite-tror	Igneous	Zircon
Guerrot C.,	14.8180	-11.6100	Mali	2137	U-Pb	granite/leuc	Other	Zircon
Guerrot C.,	11.1710	-7.1150	Mali	2146	U-Pb	granite/leuc	Metamorph	Zircon
Guerrot C.,	13.8030	-11.7860	Mali	2095	U-Pb	granite/leuc	Metamorph	Zircon
Guerrot C.,	10.5380	-6.7590	Mali	2102	U-Pb	granite/leucogranite/m		Zircon
Guerrot C.,	10.4550	-6.9310	Mali	2087	U-Pb	granite/leucogranite/m		Zircon
Guerrot C.,	10.3220	-7.1250	Mali	2103	U-Pb	granite/leucogranite/m		Zircon
Guerrot C.,	10.2730	-7.1130	Mali	2093	U-Pb	granite/leucogranite/m		Zircon
Guerrot C.,	13.9240	-11.7770	Mali	2064	U-Pb	granite/leuc	Metamorph	Monazite
Guerrot C.,	14.8180	-11.6100	Mali	2137	U-Pb	granite/leucogranite/m		Zircon
Guerrot C.,	11.1710	-7.1150	Mali	2146	U-Pb	granite/leucogranite/m		Zircon
Guerrot C.,	13.8030	-11.7860	Mali	2095	U-Pb	granite/leucogranite/m		Zircon
Guerrot C.,	10.5380	-6.7590	Mali	2102	U-Pb	granite/leucogranite/m		Zircon
Guerrot C.,	10.4550	-6.9310	Mali	2087	U-Pb	granite/leucogranite/m		Zircon
Guerrot C.,	10.3220	-7.1250	Mali	2103	U-Pb	granite/leucogranite/m		Zircon
Guerrot C.,	10.2730	-7.1130	Mali	2093	U-Pb	granite/leucogranite/m		Zircon
Guerrot C.,	13.9240	-11.7770	Mali	2064	U-Pb	granite/leucogranite/m		Monazite
Guerrot C.,	10.4670	-6.7980	Mali	2164	U-Pb	granulite/migmatite/gn		Zircon
Guerrot C.,	10.4670	-6.7980	Mali	2164	U-Pb	granulite/migmatite/gn		Zircon
Guerrot C.,	14.6260	-11.3300	Mali	2091	U-Pb	tonalite-trondhjemite-g		Zircon
Guerrot C.,	14.6260	-11.3300	Mali	2091	U-Pb	tonalite-trondhjemite-g		Zircon
Lambert-Smith et al., 2016			Mali	2118	U-Pb	plutonic	Emplaceme	Zircon
Lambert-Smith et al., 2016			Mali	2105	U-Pb	plutonic	Emplaceme	Zircon
Lambert-Smith et al., 2016			Mali	2113	U-Pb	plutonic	Emplaceme	Zircon
Lambert-Smith et al., 2016			Mali	2089	U-Pb	plutonic	Emplaceme	Zircon
Lambert-Smith et al., 2016			Mali	3000	U-Pb	plutonic	Inherited	Zircon
Lambert-Smith et al., 2016			Mali	3380	U-Pb	plutonic	Inherited	Zircon
Li�geois e	11.7440	-6.5730	Mali	1992	Rb-Sr	andesite/diorite		Whole Rock
Li�geois e	11.3130	-6.7150	Mali	1975	Rb-Sr	granite/leucogranite/m		Whole Rock
Li�geois e	11.8420	-6.7970	Mali	2091	Rb-Sr	granite/leucogranite/m		Whole Rock
Li�geois e	11.3430	-6.5490	Mali	1974	Rb-Sr	granite/leucogranite/m		Whole Rock
Li�geois e	11.3130	-6.7150	Mali	2074	U-Pb	tonalite-trondhjemite-g		Zircon
Li�geois e	11.5550	-6.6820	Mali	2073	Rb-Sr	volcanics		Whole Rock
Li�geois e	11.5550	-6.6820	Mali	2098	U-Pb	volcanics		Zircon
Li�geois e	11.0700	-6.6500	Mali	1974	Rb-Sr	granite/leuc	Other	Whole Rock

Li�geois e	11.0700	-6.6500	Mali	2082	Other	granite/leuc	Igneous	
Li�geois e	11.3800	-6.7600	Mali	2091	Rb-Sr	granite/leuc	Igneous	Whole Roc
Li�geois e	11.4500	-6.9000	Mali	2091	Rb-Sr	granite/leuc	Igneous	Whole Roc
Li�geois e	11.1300	-6.7600	Mali	1975	Rb-Sr	tonalite-tror	Other	Whole Roc
Li�geois e	11.1300	-6.7600	Mali	2074	U-Pb	tonalite-tror	Igneous	Zircon
Li�geois e	11.3800	-6.6500	Mali	2098	U-Pb	volcanics	Igneous	Zircon
Li�geois e	11.7440	-6.5730	Mali	1992	Rb-Sr	andesite/di	Metamorph	Whole Roc
Li�geois e	11.3130	-6.7150	Mali	1975	Rb-Sr	granite/leuc	Metamorph	Whole Roc
Li�geois e	11.8420	-6.7970	Mali	2091	Rb-Sr	granite/leuc	Metamorph	Whole Roc
Li�geois e	11.3430	-6.5490	Mali	1974	Rb-Sr	granite/leuc	Metamorph	Whole Roc
Li�geois e	11.3130	-6.7150	Mali	2074	U-Pb	tonalite-tror	Metamorph	Zircon
Li�geois e	11.5550	-6.6820	Mali	2073	Rb-Sr	volcanics	Metamorph	Whole Roc
Li�geois e	11.5550	-6.6820	Mali	2098	U-Pb	volcanics	Metamorph	Zircon
Li�geois J	14.7680	-11.6290	Mali	1951	Rb-Sr	granite/leucogranite/m		Whole Roc
Li�geois J	13.7050	-11.6930	Mali	1972	Rb-Sr	granite/leucogranite/m		Whole Roc
Li�geois J	14.7680	-11.6290	Mali	1951	Rb-Sr	granite/leucogranite/m		Whole Roc
Li�geois J	13.7050	-11.6930	Mali	1972	Rb-Sr	granite/leucogranite/m		Whole Roc
Li�geois J	15.1590	-11.7580	Mali	2094	U-Pb	tonalite-trondhjemite-g		Other
Li�geois J	15.0160	-11.6570	Mali	1940	Rb-Sr	tonalite-trondhjemite-g		Whole Roc
Li�geois J	13.8630	-11.7520	Mali	1928	Rb-Sr	tonalite-trondhjemite-g		Whole Roc
Li�geois J	13.8630	-11.7520	Mali	2085	U-Pb	tonalite-trondhjemite-g		Zircon
Li�geois J	15.0160	-11.6570	Mali	1940	Rb-Sr	tonalite-trondhjemite-g		Whole Roc
Li�geois J	13.8630	-11.7520	Mali	1928	Rb-Sr	tonalite-trondhjemite-g		Whole Roc
Li�geois J	13.8630	-11.7520	Mali	2085	U-Pb	tonalite-trondhjemite-g		Zircon
Li�geois J	15.1590	-11.7580	Mali	2094	U-Pb	volcanics		Other
Li�geois, '	10.5090	-7.2540	Mali	2136	U-Pb	granite/leucogranite/m		Zircon
Li�geois, '	10.5090	-7.2540	Mali	2119	U-Pb	granite/leucogranite/m		Zircon
Li�geois, '	10.5090	-7.2540	Mali	2174	U-Pb	granite/leucogranite/m		Zircon
Li�geois, '	10.4550	-6.9310	Mali	2150	U-Pb	granulite/migmatite/gn		Zircon
Li�geois, '	10.5090	-7.2540	Mali	2136	U-Pb	granite/leucogranite/m		Zircon
Li�geois, '	10.5090	-7.2540	Mali	2119	U-Pb	granite/leucogranite/m		Zircon
Li�geois, '	10.5090	-7.2540	Mali	2174	U-Pb	granite/leucogranite/m		Zircon
Li�geois, '	10.4550	-6.9310	Mali	2150	U-Pb	granulite/migmatite/gn		Zircon
Masurel et al., 2017a			Mali	2108	U-Pb	porphyry	Emplacem	Zircon
Masurel et al., 2017a			Mali	2200	U-Pb	porphyry	Inherited	Zircon
Masurel et al., 2017a			Mali	2114	U-Pb	diorite	Emplacem	Zircon
Masurel et al., 2017a			Mali	2162	U-Pb	Diorite	Inherited	Zircon
Masurel et	13.8462	11.7914	Mali	2147	U-Pb	Microdiorite	Emplacem	Zircon
Masurel et	13.8455	11.7904	Mali	2142	U-Pb	granodiorite	Emplacem	Zircon
Masurel et	13.8629	11.7056	Mali	2118	U-Pb	andesite	Emplacem	Zircon
Masurel et	13.8629	11.7056	Mali	2249	U-Pb	andesite	Inherited	Zircon
Masurel et	14.0002	11.7352	Mali	2089	U-Pb	Diorite	Emplacem	Zircon
Masurel et	13.9740	11.7446	Mali	2083	U-Pb	granodiorite	Emplacem	Zircon
Masurel et	13.9740	11.7446	Mali	2145	U-Pb	granodiorite	Inherited	Zircon
Masurel et	13.9516	11.7283	Mali	2091	U-Pb	monzonite	Emplacem	Zircon
Masurel et	13.9516	11.7283	Mali	2142	U-Pb	monzonite	Inherited	Zircon
Masurel et	13.9516	11.7283	Mali	2090	U-Pb	granodiorite	Emplacem	Zircon
Masurel et	13.9516	11.7283	Mali	2188	U-Pb	granodiorite	Inherited	Zircon
Masurel et	13.8775	11.7858	Mali	2081	U-Pb	monzonite	Emplacem	Zircon
Masurel et	13.8051	11.6636	Mali	2074	U-Pb	monzogran	Emplacem	Zircon
Masurel et	13.8051	11.6636	Mali	2132	U-Pb	monzongra	Inherited	Zircon
Masurel et	13.9198	11.7651	Mali	2071	U-Pb	granite	Emplacem	Zircon

Masurel et	13.9198	11.7651	Mali	2120	U-Pb	granite	Inherited	Zircon
Masurel et	13.8678	11.7504	Mali	2066	U-Pb	granite	Emplaceme	Zircon
Masurel et	13.8678	11.7504	Mali	2131	U-Pb	granite	Inherited	Zircon
Masurel et al., 2017b			Mali	2083	U-Pb	quartz-felds	Emplaceme	Zircon
Masurel et al., 2017b			Mali	2134	U-Pb	quartz-felds	Inherited	Zircon
Petersson e	5.9028	0.3417	Mali	2126		tonalite-trondhjemite-granodiorite		
Petersson e	5.9858	0.6069	Mali	2174		granite		
Petersson e	5.4847	0.5700	Mali	2139		granite		
Petersson e	5.7056	0.5397	Mali	2229		granodiorite		

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Spot	204Pb/206l	�%	207Pb/206l	�%	208Pb/206l	�%	206Pb/238l	�%
SAMPLE B	2129 � 7 Ma							
BE2-1.1	0.000018	58	0.13236	0.43	0.12	0.75	0.691	1.7
BE2-2.1	0.000026	45	0.13294	0.4	0.231	0.52	0.798	1.1
BE2-4.1	0.000033	45	0.13268	0.45	0.117	0.79	0.702	1.1
BE2-5.1	0.000031	45	0.13335	0.44	0.127	0.74	0.666	1.5
BE2-6.1	0.000013	71	0.13313	0.45	0.167	1.06	0.723	1.1
BE2-9.1	0.000032	45	0.13323	0.44	0.117	0.78	0.746	1.1
BE2-10.1	0.000085	32	0.13327	0.51	0.154	0.79	0.666	1
BE2-11.1	0.000062	33	0.13324	0.46	0.153	0.72	0.705	1.3
BE2-13.1	0.00003	50	0.13317	0.48	0.135	0.8	0.718	0.4
BE2-15.1	0.000083	29	0.13078	0.47	0.153	0.72	0.668	1.2
BE2-16.1	0.000083	28	0.13266	0.44	0.133	0.74	0.669	1.2
BE2-17.1	0.000022	58	0.13283	0.48	0.152	0.74	0.694	0.9
BE2-18.1	0.000035	50	0.13312	0.52	0.138	0.84	0.705	1.6
Rejected								
BE2-3.1	0.000211	19	0.13334	0.48	0.133	0.8	0.621	1.3
BE2-7.1	0.000318	17	0.13228	0.49	0.167	0.73	0.587	0.7
BE2-8.1	0.000006	100	0.13142	0.44	0.168	1.69	0.606	1.7
BE2-12.1	0.000171	20	0.12837	0.42	0.203	1.41	0.503	1.7
BE2-14.1	0.000191	22	0.12924	0.55	0.143	0.87	0.61	1.7
SAMPLE B	2140 � 4 Ma							
BE3A-2	0.000123	22	0.1351	0.42	0.196	1.9	0.959	1
BE3A-4	0.000041	29	0.1333	0.65	0.202	0.45	1.079	1.2
BE3A-5	0.000062	38	0.1355	0.52	0.164	0.79	1.016	0.5
BE3A-6	0.000033	71	0.1349	0.72	0.09	2.83	0.927	1.2
BE3A-7	0.000058	28	0.1334	0.37	0.123	1.26	1.051	1.4
BE3A-8	0.000019	58	0.1325	0.44	0.15	1.07	0.95	0.8
BE3A-9	0.000108	28	0.1349	0.5	0.117	0.89	1.041	0.9
BE3A-10	0.000018	50	0.1336	0.37	0.185	0.53	1.089	1
BE3A-11	0.000056	38	0.1337	0.5	0.134	0.82	0.974	1.2
BE3A-12	0.000083	24	0.1346	0.38	0.186	0.54	1.022	0.7
BE3A-13	0.000017	50	0.1331	0.36	0.135	1.13	0.968	1.2
BE3A-14	0.000096	45	0.1335	0.77	0.141	1.25	0.877	0.7
BE3A-15	0.00009	32	0.1335	0.56	0.184	0.75	0.984	1.6
BE3A-16	0.000034	38	0.1336	0.39	0.122	1.26	0.999	0.9
BE3A-17	0.000028	50	0.1338	0.46	0.165	1.36	0.994	1.3
BE3A-18	0.000066	33	0.1341	0.47	0.133	0.79	0.979	1.4
Rejected								
BE3A-1	0.000547	53	0.1522	4.34	0.136	12	0.968	2.6
BE3A-3	0.00004	50	0.1305	0.56	0.138	1.77	0.767	2.5
SAMPLE B	2146 � 14 Ma							
BE5r-9	0.000105	22	0.1318	0.87	0.116	1.34	0.928	3.3
BE5r-5	0.000147	19	0.1334	0.4	0.185	0.56	0.918	1.9
BE5r-4	0.000058	35	0.1326	0.47	0.149	1.31	0.98	1.3
BE5r-16	0.000103	28	0.1334	0.49	0.148	0.78	0.995	0.8
BE5r-1	0.000167	21	0.1345	0.47	0.296	1.51	0.943	2.3
BE5r-3	0.000093	26	0.1338	0.44	0.114	1.38	1	1.4
BE5r-2	0.000165	23	0.1355	0.83	0.134	0.94	0.915	1.5
BE5r-17	0.000116	24	0.1351	0.75	0.091	2.03	1.004	2.2
BE5r-11	0.000132	20	0.136	0.41	0.175	0.6	1.092	2.4
BE5r-18	0.000076	28	0.1353	0.43	0.1	0.82	0.996	1.3

Rejected								
BE5r-6	0.000284	18	0.1372	0.52	0.213	1.26	0.834	1.4
BE5r-7	0.000453	14	0.1383	0.47	0.146	0.75	0.63	1.4
BE5r-8	0.00014	19	0.1315	0.4	0.172	0.59	0.859	1.9
BE5r-10	0.000236	17	0.1323	1.2	0.278	1.28	0.844	2
BE5r-12	0.000266	16	0.1342	1.1	0.273	1.33	0.828	1.4
BE5r-13	0.000512	12	0.1388	0.47	0.28	0.51	0.701	1.1
BE5r-14	0.000376	23	0.1402	2.1	0.154	3.12	0.74	4.2
BE5r-15	0.000215	16	0.1294	0.79	0.297	1.97	0.748	3.3
SAMPLE B	2123 � 6 Ma							
BE6-1.1	0.000042	38	0.13227	0.43	0.12	0.75	0.742	1.1
BE6-2.1	0.000014	71	0.13328	0.78	0.135	1.23	0.72	1
BE6-3.1	0	---	0.13243	0.42	0.133	0.7	0.735	1
BE6-4.1	0.00008	27	0.13214	0.42	0.124	0.72	0.738	1.2
BE6-5.1	0.000039	45	0.13291	0.49	0.133	1.94	0.742	1.2
BE6-7.1	0.000046	50	0.13201	0.6	0.14	0.96	0.743	0.8
BE6-8.1	0.00004	41	0.13307	0.46	0.152	0.71	0.765	2
BE6-9.1	0.000173	19	0.13453	0.44	0.161	0.68	0.65	1.1
BE6-11.1	0.000115	26	0.13301	0.49	0.131	0.82	0.733	1.3
BE6-12.1	0	9999	0.13141	0.5	0.095	0.96	0.725	1
BE6-13.1	0.00003	45	0.13288	0.43	0.124	0.73	0.687	1.1
BE6-14.1	0.000532	19	0.13933	0.75	0.137	1.25	0.665	0.6
BE6-15.1	0.000135	21	0.13156	0.42	0.1	0.8	0.648	1.4
BE6-16.1	0.000033	45	0.13227	0.45	0.131	0.75	0.743	1.9
BE6-17.1	0.000047	38	0.13325	0.45	0.111	0.82	0.716	1.3
BE6-18.1	-0.000012	71	0.13153	0.43	0.133	0.7	0.765	1.1
Rejected								
BE6-6.1	0.000498	14	0.14053	0.49	0.156	0.77	0.563	0.7
BE6-10.1	0.000066	35	0.13334	1.1	0.134	0.84	0.595	1.1
BE7	No Age							
BE7R-18	0.000022	100	0.1338	0.74	0.173	1.2	0.786	3.5
BE7R-7	-0.000053	50	0.1343	0.57	0.132	1.1	0.821	3.3
BE7R-12	0.000005	100	0.1317	0.37	0.156	0.6	0.823	3.5
BE7R-3	-0.000012	100	0.1313	0.56	0.134	1	0.782	4.8
Rejected								
BE7R-2	0.00006	58	0.1318	0.71	0.139	1.3	0.929	2.7
BE7R-15	0.000016	100	0.1335	0.62	0.132	1.2	0.906	2
BE7R-10	0	100	0.1313	0.7	0.174	1.2	0.897	3.7
BE7R-20	0.000027	50	0.1286	0.41	0.106	2.7	0.845	2.3
BE7R-6	0.000019	100	0.1328	0.69	0.141	1.3	0.853	3
BE7R-5	0.000027	50	0.1317	0.45	0.145	0.7	0.993	2.3
BE7R-19	0	100	0.1273	0.63	0.112	4.7	0.797	3.7
BE7R-14	0.00003	45	0.1331	0.38	0.139	1.4	0.929	2.8
BE7R-8	0.000022	71	0.1324	0.53	0.141	1.7	0.855	5.2
BE7R-9	-0.000011	100	0.1331	0.52	0.229	0.7	0.986	4
BE7R-11	-0.000043	71	0.1327	0.73	0.138	1.5	0.857	2.4
BE7R-17	-0.000031	58	0.1328	0.51	0.267	0.7	0.939	3.2
BE7R-1	-0.000014	100	0.1336	0.59	0.165	1	0.992	2.5
BE7R-4	-0.000014	100	0.133	0.58	0.179	0.9	0.879	3.8
BE7R-16	0.000021	58	0.1278	0.42	0.175	0.7	0.685	3.4
BE7R-13	0.000076	45	0.1332	0.62	0.161	1.8	0.892	3.8
SAMPLE B	2172 � 15 Ma							

BE13-1	0.000087		50	0.1364	0.81	0.099	3.1	1.09	0.8
BE13-5	0	---		0.1379	1.02	0.083	2.1	1.2	2.4
BE13-5.C	-0.000246		50	0.1292	1.41	0.06	3.4	1.31	3.9
BE13-6	-0.000122		71	0.1343	1.37	0.113	2.5	1.8	1.7
BE13-7	0	---		0.1361	0.96	0.087	2	2.13	1.3
BE13-11	-0.000088		71	0.1374	1.15	0.073	2.6	1.38	4.3
BE13-13	0.000019		100	0.1358	0.77	0.087	1.6	0.88	3.7
BE13-15	0.000088		50	0.1354	0.83	0.066	3.6	0.95	3.9
BE13-16	0.000077		50	0.1353	0.77	0.113	1.4	1.23	2.7
Rejected									
BE13-2	-0.000038		71	0.1361	0.77	0.087	1.6	1	0.7
BE13-3	0.000048		71	0.1333	2.39	0.09	1.7	1.4	1.7
BE13-3.C	-0.000042		71	0.1398	1.48	0.189	2	0.78	3.3
BE13-4	-0.00004		71	0.1349	1.4	0.097	3.2	0.88	5.2
BE13-8	0	---		0.1346	0.87	0.085	1.8	0.58	5.2
BE13-9	-0.000139		50	0.133	1.11	0.112	2	0.49	7.4
BE13-10	0.000296		32	0.1385	0.97	0.138	3.9	0.52	3.4
BE13-12	-0.000045		71	0.1354	0.84	0.111	1.5	0.89	5
BE13-14	0.000055		71	0.1397	0.92	0.078	2	0.88	3.8
BE13-17	0.000072		71	0.1363	1.04	0.073	2.4	1.28	4.6
BE13-18	0.000061		33	0.1315	0.47	0.143	0.7	0.82	4
SAMPLE B 2122 � 12 Ma									
BF121-3	0.000074		30	0.13111	0.47	0.302	4.2	0.833	2.6
BF121-4	-0.00001		100	0.13125	0.57	0.211	0.8	0.726	4.2
BF121-5	-0.000009		100	0.13177	0.53	0.24	0.7	0.772	2.8
BF121-6	0	---		0.13141	0.58	0.302	1.2	0.782	3.9
BF121-7	-0.000038		58	0.13123	0.63	0.212	0.8	0.758	1.1
BF121-8	0.000112		32	0.13182	0.59	0.213	0.8	0.756	3.8
BF121-9	0.000373		21	0.13576	0.58	0.282	1.1	0.748	3.8
BF121-10	-0.000066		33	0.13166	0.48	0.32	1.6	0.779	3.6
BF121-12	-0.000035		71	0.13248	0.74	0.214	1	0.596	1.7
BF121-1	-0.000223		29	0.13274	0.76	0.228	1	0.804	3.1
BF121-2	-0.000155		27	0.13189	0.6	0.206	1.3	0.662	4
Rejected									
BF121-11	0.000018		100	0.13215	0.75	0.273	0.9	0.528	2
SAMPLE B 2108 � 16Ma									
BF125-2	0.000183		18	0.13329	0.35	0.117	0.6	0.772	4.5
BF125-3	0.000132		33	0.13073	0.68	0.161	1	0.879	3.4
BF125-15	0.000118		18	0.13208	0.35	0.039	4.8	0.796	3.3
BF125-17	0.000112		21	0.13278	0.31	0.14	0.5	0.845	4.2
Rejected									
BF125-1	0.000029		24	0.13092	0.51	0.146	0.8	0.808	3.5
BF125-4	0.000032		23	0.12938	0.23	0.14	0.4	0.783	3.2
BF125-5	0.000063		100	0.06179	2	0.234	1.8	0.195	4.9
BF125-6	0.000661		18	0.14532	0.61	0.143	2.4	0.708	2.7
BF125-7	0.00036		28	0.13591	0.75	0.2	1.3	0.667	4.8
BF125-11	0.000092		27	0.12004	0.47	0.135	0.7	0.336	5.6
BF125-16	0.000182		25	0.13023	0.44	0.058	1.1	0.725	3.3
SAMPLE B 2143 � 10Ma									
BNF59-10	0.000117		58	0.13376	1.1	0.133	1.8	0.825	1.8
BNF59-5	0.000048		100	0.13382	1.2	0.134	2	0.835	1.9
BNF59-6	0.000054		100	0.13388	1.3	0.142	4.7	0.679	2.1

BNF59-7	0.000182	45	0.13287	1.1	0.143	1.7	0.928	2.7
BNF59-4	-0.000077	58	0.13238	0.9	0.12	1.6	0.838	3.8
BNF59-3	-0.000053	100	0.13255	1.3	0.13	2.2	0.84	2.6
BNF59-16	0	---	0.13352	1	0.153	2.7	0.907	2.6
BNF59-13	0.000142	58	0.1331	1.2	0.114	2.2	0.713	1
BNF59-11	0	---	0.13273	1.1	0.156	1.7	0.857	2.9
BNF59-12	0	---	0.13116	1.1	0.137	1.8	0.832	2.1
BNF59-15	-0.00011	45	0.13459	0.8	0.175	2.9	0.846	2.6
BNF59-17	-0.000328	45	0.13344	1.4	0.122	2.5	0.723	2.6
BNF59-18	0.000045	100	0.13173	1.2	0.152	1.9	0.783	1
BNF59-19	-0.000118	50	0.13084	1	0.105	2	0.751	1.8
BNF59-20	-0.000133	50	0.13405	1	0.183	1.5	0.704	2.6
BNF59-8	-0.000044	71	0.13309	0.8	0.184	1.2	0.772	2
BNF59-21	-0.000142	58	0.13097	1.2	0.158	1.9	0.795	2.9
Rejected								
BNF59-9	0	---	0.13044	1.3	0.112	2.3	0.504	2.4
BNF59-1	0.000108	45	0.13237	0.8	0.184	1.2	0.792	2.3
BNF59-2	0	---	0.13355	1.2	0.131	2	0.728	1.7
SAMPLE B	2131 � 10 Ma							
BNF60-2	0.000135	24	0.1349	0.48	0.201	0.7	0.805	0.42
BNF60-4	0.000027	58	0.132	0.53	0.137	1.7	0.79	0.45
BNF60-7	0.000052	58	0.1327	0.73	0.108	1.3	0.725	2.2
BNF60-8	0.000237	20	0.1336	0.54	0.156	1.5	0.739	1.81
BNF60-10	0.00004	50	0.1322	0.56	0.157	0.9	0.695	2.45
BNF60-12	0.000065	50	0.1327	0.71	0.149	1.1	0.828	0.68
BNF60-14	0.000174	32	0.1341	0.73	0.125	1.3	0.734	0.61
BNF60-17	0.000091	32	0.133	0.53	0.152	0.8	0.813	0.51
BNF60-18	0.000255	19	0.1338	0.54	0.125	1.8	0.67	1.96
BNF60-19	0.000058	45	0.1316	0.6	0.116	1.1	0.705	1.51
BNF60-1	0	---	0.1337	0.4	0.3	0.5	0.863	0.73
BNF60-3	-0.000016	100	0.134	0.7	0.145	1.1	0.714	0.57
BNF60-11	0.000013	100	0.1339	0.63	0.118	2.1	0.771	2.07
BNF60-13	0.000067	45	0.1351	0.64	0.169	1	0.765	0.54
Rejected								
BNF60-16	0.000261	13	0.134	0.34	0.285	0.4	0.494	2.3
BNF60-15	0.000369	19	0.1355	0.65	0.111	1.2	0.622	0.51
BNF60-9	0.00101	14	0.1448	0.7	0.153	1.1	0.706	0.59
BNF60-5	0.000226	25	0.1353	0.7	0.173	1	0.485	0.5
BNF60-6	-0.000077	58	0.1327	0.89	0.152	1.4	0.561	1.13
SAMPLE B	2126 � 4Ma							
BNF62-1	0.000107	32	0.13337	0.58	0.194	1.79	0.86	4.5
BNF62-2	-0.000005	100	0.13281	0.39	0.169	0.58	0.874	3.2
BNF62-3	0.000021	45	0.13173	0.36	0.203	1.56	0.781	2.8
BNF62-4	0.000105	28	0.13365	0.5	0.109	1.01	0.979	2.9
BNF62-6	0.000019	58	0.13255	0.45	0.138	1.47	0.756	4.1
BNF62-7	0.000006	100	0.13205	0.44	0.151	1.18	0.845	3.7
BNF62-8	0.000124	23	0.13336	0.45	0.152	0.71	0.763	3.3
BNF62-10	0.000013	58	0.13188	0.37	0.135	0.61	0.818	3.6
BNF62-11	0.000003	100	0.13247	0.52	0.179	0.46	0.976	3.8
BNF62-12	-0.00001	100	0.13243	0.97	0.145	1.81	0.668	3.3
BNF62-13	0.000039	38	0.13225	0.41	0.189	1.33	0.78	3.9
BNF62-14	0.000012	71	0.13258	0.43	0.215	0.56	0.775	2.7

BNF62-15	0.000126		29	0.13646	0.56	0.174	0.88	0.95	3
BNF62-16	0	---		0.13273	0.54	0.146	0.86	0.809	4.3
BNF62-17	0.000316		12	0.13288	0.83	0.149	0.54	0.596	4.5
BNF62-18	-0.000005		100	0.13164	0.41	0.222	1.4	0.852	4.9
BNF62-19	0.000181		19	0.13463	0.44	0.167	1.22	0.819	4
BNF62-20	0.000103		24	0.1333	0.44	0.187	1.2	0.841	4
BNF62-22	0.000066		30	0.1325	0.44	0.228	0.56	0.844	3.8
BNF62-23	0.000038		28	0.13203	0.59	0.093	0.6	0.813	3
BNF62-24	0.000018		50	0.13217	0.65	0.164	0.89	0.666	2.5
Rejected									
BNF62-5	0.000063		27	0.13239	0.37	0.197	0.52	0.937	3.6
BNF62-21	0.000329		15	0.13368	0.42	0.119	0.73	0.594	5.4
SAMPLE B	2136 � 14Ma								
BNF63-4	0.000052		38	0.13229	0.75	0.206	0.66	0.598	4.1
BNF63-2	0.000009		45	0.1326	0.37	0.169	0.35	0.725	2.8
BNF63-8	0.00005		16	0.13326	0.17	0.152	0.27	0.866	3.1
BNF63-3	0.000056		18	0.13458	0.27	0.122	0.42	0.508	2.9
Inherited									
BNF63-6	0.000064		41	0.13604	0.57	0.135	0.95	0.838	2.5
BNF63-10	0.00008		26	0.13666	0.4	0.151	0.72	0.887	3.3
Rejected									
BNF63-11	-0.000012		100	0.0496	0.95	0.127	1.04	0.032	5.5
BNF63-9	0.000027		26	0.11363	0.44	0.131	0.4	0.782	3.9
BNF63-5	0.000776		16	0.1434	0.43	0.196	0.62	0.765	4.3
BNF63-1	0.000236		33	0.13998	0.88	0.056	2.28	0.642	2.7
BNF63-7	0.000049		50	0.13777	0.61	0.129	1.05	0.607	3.8
SAMPLE H	2167 � 8Ma								
H253R-10	0.000023		50	0.13649	0.42	0.084	0.88	0.878	1.7
H253C-11	0.000056		22	0.13613	0.29	0.077	0.62	0.858	2.6
H253R-12	0.000021		30	0.13652	0.24	0.144	1.64	0.874	2.5
H253R-3	0.000057		22	0.13683	0.29	0.082	0.6	0.813	2.5
H253R-8	0.000021		28	0.13601	0.23	0.162	0.34	0.956	2.9
H253R-9	0.000034		30	0.13734	0.31	0.087	0.63	0.859	3.7
Rejected									
H253R-1	0.000119		16	0.13293	0.26	0.208	1.85	0.684	2.8
H253R-2	0.000056		20	0.13632	0.21	0.191	0.53	0.932	2.2
H253R-4	0.000074		17	0.13652	0.24	0.226	0.3	0.748	2.8
H253R-5	0.000115		14	0.13467	0.24	0.121	0.42	0.743	2.6
H253R-6	0.000002		71	0.13676	0.17	0.207	0.54	0.948	3.6
H253R-7	0.000044		21	0.13545	0.24	0.223	0.32	0.917	4
H253R-11	0.000069		17	0.13559	0.22	0.257	0.74	0.791	3.8
H253C-1	0.000014		58	0.13607	0.38	0.064	2.79	0.932	3.7
H253C-2	0.000617		11	0.14482	1.01	0.176	1.6	0.814	2.4
H253C-4	0.000127		16	0.1373	0.27	0.093	1.2	0.707	2.4
SAMPLE H	2134 � 3Ma								
HO257-1	0.000125		18	0.1341	0.49	0.055	2.99	0.577	0.8
HO257-2	0.00002		38	0.1325	0.27	0.044	0.86	0.636	1.9
HO257-3	0.00021		17	0.1347	0.36	0.041	1.19	0.586	2
HO257-4	0.000049		25	0.1333	0.27	0.073	0.69	0.646	1.5
HO257-5	0.000019		50	0.1327	0.35	0.051	1.03	0.631	1.3
HO257-6	0.000064		19	0.1338	0.2	0.063	1.91	0.702	1.2
HO257-7	-0.000005		100	0.1327	0.34	0.045	1.07	0.608	1.9

HO257-8	0.000022	32	0.1327	0.23	0.074	0.57	0.628	1.4
HO257-9	-0.000013	41	0.1329	0.24	0.144	5.62	0.64	3
HO257-10	0.000012	58	0.1323	0.31	0.061	1.6	0.655	1.3
HO257-11	0.000015	45	0.132	0.27	0.057	0.75	0.692	1.5
HO257-12	0.000008	71	0.1335	0.31	0.05	0.92	0.628	2.4
HO257-13	0.000237	14	0.1357	0.32	0.091	1.15	0.636	2
HO257-14	0.000133	20	0.1341	0.33	0.067	0.85	0.617	2
HO257-16	0.000063	18	0.1338	0.23	0.078	0.55	0.631	2.1
HO257-17	0.000079	20	0.134	0.24	0.099	0.98	0.672	1.7
HO257-18	0.00004	32	0.1335	0.32	0.043	1.03	0.647	2
HO257-20	0.00002	45	0.134	0.32	0.066	0.82	0.633	0.8
Rejected								
HO257-15	0.000364	21	0.1407	0.57	0.139	1.02	0.549	2.2
HO257-19	0.000004	58	0.1325	0.18	0.087	0.42	0.675	3.1
SAMPLE H2172 � 8Ma								
H479A-2	0.000014	100	0.13432	0.65	0.068	1.49	0.998	2.9
H479A-3	0.000018	58	0.13516	0.43	0.11	1.35	0.923	3.8
H479A-4	0.000006	100	0.13476	0.41	0.071	0.93	0.974	4.1
H479A-5	-0.000041	58	0.13507	0.64	0.082	1.36	0.971	4.1
H479A-6	0.000038	58	0.13561	0.62	0.073	1.38	1.087	3.8
H479A-7	0.000068	45	0.13742	1.01	0.07	1.48	0.918	3.4
H479A-8	0.000009	100	0.13702	0.52	0.081	1.11	1.03	3.6
H479A-9	0.000024	58	0.13689	0.49	0.067	1.14	0.936	4.3
H479A-10	0	---	0.13546	1.18	0.093	0.57	0.878	6.1
H479A-12	0.000056	45	0.13643	0.58	0.074	1.29	1.075	3.8
H479A-14	0.00006	50	0.13815	0.67	0.067	2.56	0.996	2.6
H479A-15	0.000025	45	0.136	0.4	0.105	0.74	0.939	4.7
Rejected								
H479A-1	-0.000004	100	0.07064	0.81	0.064	2.43	0.368	4.9
H479A-11	0.000094	26	0.13651	0.44	0.088	0.9	0.804	4.8
H479A-13	0.000043	30	0.13673	0.34	0.076	0.75	0.936	4.3
H479A-16	0.000003	58	0.13503	0.31	0.083	0.63	1.031	3.2
SAMPLE H2165 � 11Ma								
HO480-1	0.000029	100	0.1365	0.95	0.155	2.1	0.864	0.8
HO480-2	0.000061	58	0.1346	0.79	0.212	3	0.844	2.9
HO480-3	0.00043	25	0.1353	1.01	0.1	2.4	0.743	2.6
HO480-4	0.000038	100	0.1333	1.08	0.136	2.5	0.83	1.6
HO480-5	-0.000031	100	0.1373	0.96	0.104	2.6	0.806	0.8
HO480-6	0.000118	41	0.1353	0.78	0.131	1.8	0.837	2.7
HO480-7	0.000061	35	0.1383	0.48	0.17	1	0.796	0.4
HO480-8	0.000174	35	0.136	0.81	0.191	2.7	0.899	1.7
HO480-9	0.000097	50	0.1347	1.48	0.08	2.6	0.793	0.7
HO480-10	0.000169	33	0.136	0.76	0.178	1.5	0.766	1
HO480-11	0.000399	33	0.1399	1.16	0.138	2.7	0.787	2.1
HO480-12	0.000384	22	0.1402	0.85	0.24	6.2	0.761	1.6
HO480-13	0.000021	71	0.1359	0.56	0.257	1	0.733	1.8
HO480-14	0.000085	58	0.1363	0.93	0.145	2.1	0.755	1.6
HO480-15	0.000084	71	0.1355	1.14	0.164	2.4	0.922	3
HO480-16	0.000043	71	0.1353	0.81	0.164	1.7	0.812	0.7
HO480-17	0.000028	100	0.1355	0.93	0.139	2.1	0.835	2.2
HO480-18	0.00002	100	0.1342	0.79	0.159	1.7	0.812	2.8
SAMPLE H2168 � 10Ma								

H629-10	0.00004	45	0.1349	0.44	0.273	0.6	0.959	1.4
H629-7	-0.000043	58	0.1347	0.6	0.165	1.01	0.96	1.9
H629-8	0.000068	29	0.1368	0.37	0.119	0.74	0.947	0.4
H629-14	0.000019	100	0.1362	0.67	0.072	1.69	0.999	0.7
Inherited								
H629-6	0.000276	19	0.1422	0.81	0.682	0.45	0.813	1.1
H629-1	0.000248	24	0.1426	0.9	0.502	1.69	0.899	1.9
H629-2	0.000459	14	0.146	1.31	0.232	3.07	0.906	2.3
H629-3	0.000471	15	0.1474	1.22	0.299	2.03	0.838	1.9
Rejected								
H629-11	-0.000018	71	0.0624	0.65	0.076	1.14	0.263	1.3
H629-9	0.000018	35	0.123	0.43	0.069	0.59	0.987	1.8
H629-12	0.000919	12	0.1535	1.88	0.091	6.59	0.614	1.7
H629-5	0.000401	41	0.1472	1.46	0.564	1.34	0.732	1.9
H629-13	0.001118	20	0.1601	1.25	0.607	1.29	0.455	4.5
H629-4	0.001034	14	0.1593	1.24	0.572	2.16	0.788	3.4
SAMPLE H	2150 � 9Ma							
HO631A-1	0.000288	18	0.135	0.53	0.159	1.1	0.797	2
HO631A-2	0.000315	18	0.1358	0.51	0.135	1.2	0.85	1.1
HO631A-4	0.000096	25	0.1337	0.43	0.141	1	0.779	1.9
HO631A-7	0.000037	50	0.1331	0.53	0.104	1.4	0.898	2.8
HO631A-1	0.000139	26	0.1352	0.53	0.136	1.2	0.761	1.8
HO631A-6	0.000073	38	0.1344	0.57	0.111	2.3	0.861	2.6
HO631A-1(	0.00006	41	0.1343	0.98	0.141	1.3	0.737	2
HO631A-9	0.000019	71	0.1344	0.54	0.081	1.6	0.826	1.9
HO631A-3	0	---	0.1342	0.57	0.102	1.5	0.794	1.3
HO631A-1	0.000009	100	0.1343	0.52	0.084	1.5	0.754	1.8
HO631A-8	0.000029	50	0.1346	0.47	0.095	1.3	0.912	1.9
HO631A-1	0.000156	21	0.1369	0.46	0.168	1	0.887	1.4
HO631A-1	0.000104	26	0.1363	0.46	0.107	1.2	0.813	2.8
HO631A-1	-0.000019	71	0.1348	0.54	0.098	1.5	0.866	1.9
HO631A-1	-0.000006	100	0.1353	0.43	0.179	0.9	0.83	1.7
Rejected								
HO631A-1	0.000703	18	0.1423	0.52	0.164	4	0.505	2
HO631A-5	0.001676	7	0.1568	0.85	0.218	2.1	0.151	1.3
HO631A-1	0.000238	20	0.1382	0.55	0.15	2.5	0.504	2.8
SAMPLE H	2134 � 9Ma							
631B-3	0.000196	9	0.1358	0.38	0.221	0.3	1.024	0.6
631B-7	0.000056	33	0.1337	0.39	0.144	0.71	0.945	1.9
631B-8	0.00002	38	0.1337	0.26	0.108	1.15	0.932	1.2
631B-17	0.000023	33	0.1341	0.94	0.189	1.13	1.188	0.3
631B-19	0.000033	28	0.1342	0.4	0.14	0.75	1.063	1.5
631B-21	0.000009	33	0.1327	0.15	0.293	0.41	1.081	0.8
631B-22	-0.000002	100	0.1329	0.22	0.126	0.42	1.021	1.3
631B-23	0.000068	19	0.1343	0.24	0.12	0.47	1.045	0.5
Inherited								
631B-1	0.000356	12	0.1398	0.33	0.138	0.62	0.846	3.8
631B-10	0.000254	26	0.1394	0.35	0.253	0.89	0.91	1.3
Rejected								
631B-2	0.002863	5	0.1855	1.98	0.233	3.91	0.692	0.4
631B-4	0.004477	4	0.2085	0.97	0.295	0.53	0.714	2.9
631B-5	0.000382	15	0.139	0.4	0.259	0.8	1.07	1.2

631B-6	0.000915	5	0.1488	0.22	0.216	0.38	1.112	2.4
631B-9	0.001523	18	0.173	2.06	0.296	3.62	0.867	3.4
631B-11	0.001974	12	0.1918	3.96	0.213	9.18	0.943	1.3
631B-12	0.001035	19	0.1583	1.23	0.155	2.26	0.98	0.4
631B-13	0.000007	41	0.1331	0.17	0.319	0.21	0.899	1.5
631B-14	0.001769	8	0.1616	1.58	0.182	3.41	0.655	5
631B-15	0.001042	9	0.1694	0.38	0.197	0.65	0.975	1.9
631B-16	0.001954	7	0.1293	0.46	0.325	0.57	0.286	1.8
631B-18	0.000081	14	0.1356	0.32	0.296	0.39	1.167	1
631B-20	0.006276	9	0.2553	5.24	0.399	8.51	0.811	1.3
631B-24	0.000016	24	0.1328	0.3	0.32	0.45	0.932	0.4
SAMPLE H 2170 � 7Ma								
640A-1	-0.000013	100	0.1365	1.27	0.106	2.05	0.996	1.7
640A-2	-0.000022	71	0.1357	0.52	0.132	0.99	0.964	1.3
640A-3	0.000044	50	0.1352	0.52	0.099	1.12	1.042	2
640A-4	0.000033	58	0.1367	0.51	0.123	1.81	0.989	2.1
640A-5	-0.000006	100	0.1364	0.4	0.108	0.82	0.893	2.5
640A-6	-0.000016	100	0.134	0.63	0.103	1.33	1.025	1.3
640A-7	0.000019	32	0.1353	0.22	0.048	1.75	1.064	0.6
640A-8	-0.000034	71	0.1359	0.65	0.082	1.53	1.025	2.2
640A-9	0.000033	41	0.1357	0.37	0.095	0.81	0.892	1.3
640A-10	0.000013	100	0.1367	0.55	0.101	1.19	0.857	0.6
640A-11	0.000025	50	0.1341	0.39	0.102	0.83	0.929	1.2
640A-12	0	---	0.1366	0.6	0.096	1.32	1.01	1.7
640A-13	-0.000041	100	0.1342	1	0.082	2.38	1.029	1.1
640A-14	0.000045	100	0.1373	1.05	0.095	2.31	0.856	1.1
640A-16	0.000087	41	0.1386	0.95	0.079	1.43	1.058	1.8
640A-19	0.000127	45	0.1342	0.87	0.088	3.13	0.986	0.9
640A-20	-0.00007	41	0.1361	1.29	0.117	1.09	0.9	1.6
640A-15	-0.000052	71	0.1387	0.79	0.089	1.81	1.05	2.1
640A-18	0.000046	71	0.1399	1.65	0.078	1.83	0.945	2.4
640A-17	0.000013	24	0.1326	0.33	0.266	0.83	1.147	0.9
SAMPLE H 2114 � 5Ma								
640C-1	0.000084	21	0.1322	0.31	0.153	0.54	0.946	0.5
640C-2	0.000042	22	0.1313	0.24	0.153	0.81	0.998	2.1
640C-3	0.000015	38	0.1311	0.23	0.123	0.74	0.937	0.7
640C-4	0.000047	26	0.1324	0.28	0.169	0.46	0.899	1.1
640C-8	0.000016	41	0.1315	0.26	0.229	0.75	0.976	1.5
640C-9	0.000014	58	0.1324	0.56	0.137	0.61	0.94	1.4
640C-10	0.000015	45	0.1313	0.27	0.14	0.49	0.881	0.6
640C-11	0.000003	71	0.1293	0.96	0.165	0.77	1.035	1.1
640C-12	0.000005	58	0.1299	0.35	0.141	0.37	1.028	1.7
640C-13	0.00001	50	0.1316	0.47	0.126	1.13	1.206	1.2
640C-14	-0.000013	58	0.1319	0.36	0.129	0.62	0.895	1.3
640C-15	0.000002	100	0.1317	0.23	0.143	0.41	0.893	1.6
Inherited								
640C-5	0.00005	35	0.1347	0.4	0.072	3.14	0.93	1.9
640C-6	0.000089	35	0.1356	0.52	0.138	0.96	0.892	0.6
640C-7	0.000095	21	0.1383	0.61	0.101	1.52	0.925	2.5
SAMPLE D 2083� 6Ma								
DS014-2	0.000012	50	0.1289	0.31	0.027	1.09	0.685	0.47
DS014-13	-0.000004	100	0.1287	0.6	0.164	1.78	0.711	1

DS014-1	-0.000009	71	0.1288	0.39	0.163	0.57	0.706	0.31
DS014-3	0.000115	32	0.1312	0.6	0.148	0.94	0.376	1.08
Inherited								
DS014-15	0	---	0.1337	0.4	0.105	0.74	0.684	0.69
DS014-14	0.000084	24	0.1351	0.38	0.206	2.59	0.702	1.75
DS014-12	0.000113	24	0.1355	0.44	0.266	0.53	0.711	1.2
DS014-11	-0.000014	100	0.1364	0.65	0.217	0.87	0.418	0.83
DS014-10	0.000351	17	0.1435	0.82	0.171	0.74	0.768	0.96
Rejected								
DS014-9	0.000117	25	0.1331	0.48	0.162	1.41	0.641	2.22
DS014-7	0.000057	26	0.1334	0.34	0.277	0.41	0.713	0.28
DS014-6	0.000218	18	0.1361	0.94	0.221	0.61	0.607	0.39
DS014-5	0.000329	21	0.1376	0.54	0.208	0.74	0.64	1.28
DS014-4	0.00034	16	0.1393	0.8	0.257	0.54	0.679	0.36
SAMPLE K 2119 � 6Ma								
119M-5	0.000147	28	0.1324	0.6	0.084	2.05	1.34	0.64
119M-22	0.000121	23	0.1321	0.45	0.075	2.39	1.21	0.71
119M-2	0.000304	18	0.1345	0.74	0.189	0.62	1.36	0.84
119M-12	0.00015	28	0.1326	0.6	0.186	1.35	1.37	0.64
119M-10	0.00011	28	0.1321	0.51	0.068	1.16	1.3	0.95
119M-28	0.000116	19	0.1324	0.37	0.079	0.78	1.17	1.42
119M-32	0.000054	33	0.1319	0.43	0.073	2.1	1.09	0.46
119M-11	0.000101	23	0.1326	0.4	0.327	0.45	1.38	0.43
119M-13	0.000117	24	0.1331	0.45	0.065	1.05	1.25	0.46
119M-4	0.000141	20	0.1334	0.36	0.228	0.47	1.4	0.39
119M-26	0.000349	19	0.1366	0.52	0.223	0.69	1.26	1.5
119M-3	0.000091	28	0.1333	0.9	0.111	1.38	1.35	0.82
119M-21	0.000016	58	0.1324	0.41	0.08	0.85	1.35	0.43
119M--33	0.000084	33	0.1333	0.54	0.084	1.11	1.15	0.53
119M-27	0.000197	19	0.1353	0.38	0.277	0.5	1.23	0.39
119M-18	0.00002	71	0.133	0.55	0.118	0.96	1.36	0.58
119M-16	0.000339	25	0.1374	0.81	0.316	0.92	1.33	0.86
Inherited								
119M-20	0.000284	25	0.1384	0.74	0.547	0.67	1.41	0.81
119M-25	0.000159	23	0.3118	0.47	0.117	0.7	2.34	0.54
119M-14	0.000124	27	0.3322	0.37	0.13	0.88	2.69	0.75
Rejected								
119M-24	0.007365	5	0.2234	2.68	0.571	1.63	1	2.37
119M-17	0.000301	21	0.1329	0.87	0.09	1.79	1.23	0.9
119M-15	0.000366	22	0.1348	0.75	0.178	1.09	1.37	0.8
119M-1	0.000154	19	0.1321	0.42	0.077	2.46	1.2	0.85
119M-19	0.000232	20	0.1335	0.9	0.084	1.08	1.28	0.54
119M-6	0.000128	23	0.1328	0.51	0.197	0.64	1.21	0.46
119M-30	0.002971	8	0.1726	1.13	0.226	1.94	1.19	1.38
119M-7	0.000695	15	0.143	0.67	0.226	0.9	1.19	0.63
119M-29	-0.000187	35	0.1325	0.84	0.138	1.37	1.26	0.86
119M-31	0.001942	15	0.1607	2.31	0.214	4.36	1.34	0.95
119M-9	-0.000081	45	0.1345	0.71	0.22	0.94	1.3	0.74
119M-34	0.001538	8	0.1557	0.47	0.259	1.49	1.24	0.84
119M-35	0.00955	3	0.262	0.4	0.517	0.47	1.48	0.57
119M-8	0.000063	38	0.1408	0.51	0.208	0.71	1.45	0.59
119M-23	0.000238	19	0.1501	0.41	0.063	1.01	1.11	0.42

ML12-066	2099 � 6Ma							
12-66-4	0.000004	100	0.1292	0.38	0.202	1.97	0.564	3.3
12-66-1	0.000047	45	0.1301	0.54	0.116	0.95	0.633	2.6
12-66-10	0.000026	45	0.13	0.4	0.179	0.58	0.488	1.7
12-66-6	0.000041	28	0.1303	0.32	0.131	0.52	0.652	1.7
12-66-7	0	---	0.1297	0.44	0.102	1.49	0.606	1.4
12-66-3	0.00001	71	0.1299	0.41	0.108	0.74	0.63	2
12-66-8	0.000008	100	0.13	0.57	0.145	0.9	0.454	12.8
12-66-2	0.000025	45	0.1303	0.4	0.133	0.73	0.626	2.2
12-66-14	0.000048	30	0.1317	0.38	0.121	1.08	0.604	4.4
12-66-12	0.000143	28	0.1331	0.59	0.162	0.89	0.573	1.9
12-66-13	0.000133	18	0.133	0.37	0.125	1.5	0.597	1.7
12-66-5	-0.00003	50	0.1314	0.92	0.15	0.76	0.542	2.9
Rejected								
12-66-9	-0.000008	100	0.1289	0.52	0.105	0.96	0.39	10.1
12-66-11	0.000167	19	0.1315	1.38	0.11	2.69	0.454	2.3
SAMPLE M	2014 � 7Ma							
12-68-12	0.000068	41	0.1292	1.64	0.289	0.69	0.706	1.1
12-68-9	0.000042	45	0.1297	0.52	0.155	0.79	0.687	1.1
12-68-22	-0.000008	100	0.1296	0.52	0.279	0.6	0.705	1.8
12-68-5	0.000093	27	0.1312	0.46	0.23	0.59	0.628	1.9
12-68-6	0.000026	58	0.1304	0.52	0.343	0.56	0.701	2.1
12-68-21	0.000088	30	0.1313	0.5	0.218	0.66	0.695	1.9
12-68-16	0.00003	27	0.1305	0.26	0.164	0.39	0.687	1.3
12-68-4	0.000044	50	0.1309	0.59	0.208	0.79	0.633	2.2
12-68-25	-0.000008	71	0.1304	0.36	0.223	0.47	0.685	1.8
12-68-1	0.000084	24	0.132	1.08	0.241	0.49	0.594	1.6
12-68-17	0.00012	29	0.1328	0.56	0.256	0.68	0.633	1.6
12-68-7	0.000145	22	0.134	0.37	0.334	0.41	0.632	1.8
12-68-11	0.000183	45	0.1352	1.07	0.377	1.12	0.654	2.3
12-68-14	0.00045	17	0.1395	0.54	0.315	0.62	0.644	2.7
Rejected								
12-68-10	0.000165	21	0.1352	0.48	0.217	0.64	0.566	2.6
12-68-2	0.000091	30	0.1295	0.56	0.253	1.57	0.523	1.8
12-68-15	0.000214	22	0.1334	0.58	0.269	1.47	0.619	2.7
12-68-3	0.000157	20	0.1336	0.45	0.274	1.65	0.6	2.3
12-68-8	0.00022	13	0.135	0.32	0.259	0.43	0.661	2.3
12-68-13	0.000296	20	0.1378	0.62	0.299	1.2	0.653	2
12-68-26	0.000426	18	0.1396	0.63	0.526	0.59	0.548	2.2
SAMPLE M	2121 � 8Ma							
12-70-7	-0.00001	71	0.1302	0.4	0.101	0.75	0.639	2.5
12-70-6	-0.000017	100	0.1317	1.35	0.253	0.91	0.655	1.9
12-70-10	0	---	0.1313	0.35	0.126	0.99	0.618	1.8
12-70-4	0.000047	45	0.1325	0.54	0.152	0.84	0.648	2.7
12-70-26	0.000081	24	0.1335	0.38	0.058	3.12	0.781	1.6
12-70-8	0.000016	50	0.1317	0.39	0.137	0.96	0.602	1.6
12-70-13	0.000015	41	0.1319	0.28	0.08	0.58	0.639	1.6
Inherited								
12-70-25	0.000038	50	0.1333	0.54	0.111	2.23	0.73	0.5
12-70-9	0.000034	29	0.134	0.3	0.087	0.61	0.636	2.8
12-70-1	-0.000026	100	0.1342	0.9	0.3	1.04	0.658	3.1
12-70-23	0.000026	41	0.1348	0.36	0.179	2.06	0.709	1.5

12-70-28	0.000008	100	0.1339	0.51	0.156	1.91	0.686	1.9
12-70-24	0.000008	71	0.1348	0.34	0.201	0.47	0.716	1.3
12-70-16	0	---	0.1336	0.4	0.279	0.52	0.694	2.1
12-70-3	0.000006	100	0.1343	0.82	0.213	1.24	0.656	1.4
12-70-17	0.000017	71	0.1346	0.57	0.196	2.99	0.634	3.8
12-70-21	0.000027	45	0.1334	0.41	0.124	1.69	0.591	3
12-70-15	0.000043	25	0.1389	0.29	0.249	1.17	0.669	2.9
Rejected								
12-70-19	0.000194	18	0.1381	0.98	0.11	0.81	0.61	2.2
12-70-14	0.000065	20	0.1344	0.26	0.12	1.96	0.815	2.9
12-70-11	0.00003	24	0.1359	0.43	0.117	5.42	0.646	1.5
12-70-22	0.000161	7	0.1299	2.44	0.037	2.95	0.658	1.8
12-70-2	0.000015	71	0.1343	0.49	0.203	0.67	0.593	0.8
12-70-29	0.000142	14	0.1341	0.43	0.092	0.53	0.626	1.7
12-70-20	0.000085	38	0.1305	0.62	0.116	13	0.418	55.6
12-70-18	0.000141	29	0.1378	0.6	0.17	1.71	0.484	1
12-70-5	0.000165	20	0.1373	0.39	0.181	1.07	0.508	2.9
12-70-12	0.000175	8	0.128	0.19	0.059	1.96	0.389	3.6
12-70-27	0.000929	9	0.1553	0.46	0.197	0.73	0.695	0.7
12-70-14�	0.000009	100	0.0586	0.75	0.086	1.08	0.143	5.1
SAMPLE M	2136 � 15Ma							
12-78-19	----	---	0.131	0.49	0.262	1.2	0.63	2
12-78-20	-0.000017	71	0.1309	0.51	0.16	0.86	0.572	1.9
12-78-11	0.000029	29	0.1318	0.27	0.072	0.6	0.634	2.3
12-78-8	0.00006	24	0.1329	0.32	0.304	0.6	0.72	2.1
Inherited								
12-78-4	0.000063	23	0.1337	0.32	0.137	2.25	0.697	1
12-78-17	0.000023	35	0.1338	0.3	0.18	0.44	0.632	3.4
12-78-13	0.000041	30	0.1345	0.34	0.189	0.48	0.736	2.5
12-78-7	0.000095	20	0.14	0.27	0.207	0.9	0.763	0.9
12-78-3	0.000006	100	0.1486	0.42	0.094	1.69	0.807	2.2
12-78-10	----	---	0.1712	2.52	0.153	1.75	0.922	1.7
12-78-9	0.000007	71	0.1714	0.62	0.224	0.97	0.721	2.6
Rejected								
12-78-14	-0.000005	100	0.1287	0.67	0.171	0.56	0.573	2.4
12-78-12	0.0001	20	0.1336	0.3	0.07	1.99	0.551	3.3
12-78-16	-0.000046	58	0.1318	0.77	0.182	0.99	0.624	2.5
12-78-5	0.000033	29	0.1337	0.3	0.211	0.4	0.66	1.8
12-78-1	0.00039	24	0.1395	1.36	0.181	4.84	0.374	3.1
12-78-2	0.000097	22	0.1357	0.31	0.054	0.8	0.645	2.8
12-78-6	0.00014	19	0.1365	0.34	0.13	0.58	0.674	2.1
12-78-15	0.00012	50	0.139	0.94	0.184	1.36	0.223	2.3
12-78-18	0.000005	71	0.2084	0.4	0.006	3.39	0.877	2.8
SAMPLE M	2098 � 6Ma							
ML79A-1	0.000064	45	0.129	0.64	0.175	0.92	0.92	2.7
ML79A-14	0.000024	100	0.1288	0.87	0.139	1.4	0.84	1.6
ML79A-15	0.000376	32	0.1336	1.1	0.307	1.24	0.86	1.1
ML79A-3	0.000016	100	0.1289	0.79	0.253	0.88	0.9	2.5
ML79A-6	0.00002	100	0.1292	0.8	0.138	1.29	0.78	2.6
ML79A-9	-0.000047	58	0.1287	0.71	0.218	0.92	0.8	1.7
ML79A-12	0.000017	100	0.1296	1.16	0.132	1.24	0.86	2.9
ML79A-10	-0.000008	100	0.1294	0.79	0.16	1.46	0.6	2.4

ML79A-5	0.000027	58	0.1306	0.54	0.234	0.68	0.72	2
ML79A-4	0	---	0.1303	0.49	0.124	0.83	0.89	3
ML79A-7	0.000452	15	0.1363	0.5	0.236	0.65	0.99	2.4
ML79A-19	0	---	0.1305	1.57	0.226	1.09	0.91	1.6
ML79A-20	0	---	0.1305	0.63	0.126	1.92	0.75	3.2
ML79A-2	0.000022	71	0.1309	0.59	0.134	0.96	0.79	1.2
ML79A-16	0	---	0.1308	0.81	0.132	1.35	0.88	2.7
ML79A-13	0.00001	100	0.1309	0.57	0.131	0.94	0.85	2.9
ML79A-11	-0.000073	50	0.1313	0.76	0.19	1.65	0.76	2.8
Rejected								
ML79A-18	0	100	0.1334	2.18	0.197	1.69	0.76	2.1
ML79A-17	0.000275	19	0.1188	1.99	0.11	3.09	0.31	2.2
SAMPLE M 2086 � 9Ma								
ML79B-5	0.000127	50	0.1286	1	0.116	1.8	0.617	1.6
ML79B-22	-0.000069	45	0.1261	1.58	0.17	1.1	0.573	2.9
ML79B-8	0.000045	58	0.1288	0.69	0.297	0.8	0.572	2
ML79B-1	0.000184	22	0.1306	0.54	0.141	0.9	0.466	0.4
ML79B-14	0.000013	100	0.1284	0.65	0.151	1	0.574	2.1
ML79B-9	0.000516	18	0.1355	0.71	0.248	0.9	0.536	1.2
ML79B-12	0.000172	30	0.1311	0.7	0.184	1.6	0.552	1.6
ML79B-20	0.000094	28	0.1302	0.78	0.234	1.5	0.598	2.9
ML79B-2	0.000079	41	0.1301	0.65	0.145	1	0.557	1.7
ML79B-7	0.000033	71	0.1295	1.4	0.192	1	0.612	2
ML79B-10	0.000033	71	0.1304	1.29	0.135	1.2	0.604	1.5
ML79B-4	0.000197	35	0.1327	0.87	0.201	1.2	0.599	1.4
ML79B-6	0	100	0.1306	0.77	0.173	1.1	0.556	0.9
ML79B-11	0.000057	58	0.1316	0.77	0.192	1.1	0.528	2.3
ML79B-21	0	---	0.1312	1.08	0.146	1.1	0.599	2
ML79B-3	0.000086	41	0.1324	1.35	0.252	1.4	0.588	2.4
ML79B-25	0.000054	58	0.1326	1.92	0.201	2.1	0.54	2.5
ML79B-24	0.000125	30	0.1337	2.33	0.287	1.9	0.588	4.1
Inherited								
ML79B-19	-0.000063	45	0.1325	0.63	0.123	1.1	0.573	1.8
Rejected								
ML79B-23	0.000171	28	0.1257	3.22	0.323	3.3	0.598	1.2
ML79B-18	0	---	0.1283	0.82	0.15	1.3	0.635	3.1
ML79B-17	0.001278	10	0.1459	0.6	0.192	1.7	0.587	2.4
ML79B-15	0.000414	17	0.1348	0.54	0.198	1.3	0.533	2
ML79B-13	0.000681	15	0.1399	0.62	0.184	2	0.461	1.2
ML79B-16	0.00413	6	0.1872	0.65	0.469	2.8	0.729	3.7
SAMPLE M 2091 � 9Ma								
ML080-2	0.000039	30	0.1292	0.74	0.258	0.6	0.843	2.3
ML080-4	0.000021	38	0.129	0.31	0.254	0.4	0.92	1.4
ML080-16	0.000007	71	0.129	0.33	0.376	0.3	0.791	2.3
ML080-13	0.000043	33	0.1299	0.39	0.455	3.4	0.828	2
ML080-10	-0.000008	71	0.1294	0.36	0.237	0.7	0.839	2.1
ML080-19	0.000132	18	0.1314	1.19	0.244	1.2	0.828	2.2
ML080-15	0.000284	13	0.1336	0.86	0.283	1	0.901	2.1
Inherited								
ML080-5	-0.000011	50	0.1304	0.29	0.173	0.7	0.84	2.2
ML080-6	0.000075	24	0.1332	0.37	0.249	1	0.759	2.2
Rejected								

ML080-17	0.000699	9	0.1259	0.75	0.277	0.5	0.433	2.6
ML080-11	0.000035	38	0.127	0.4	0.236	1.5	0.768	1.3
ML080-3	0.000018	50	0.1275	4.15	0.309	5.4	0.692	4
ML080-8	0.000099	18	0.1299	0.62	0.37	0.4	0.823	2
ML080-14	0.00005	26	0.13	0.32	0.276	1.4	0.837	1.7
ML080-12	0.000057	30	0.1305	0.4	0.313	0.5	0.736	2.1
ML080-1	0.000221	20	0.133	0.82	0.278	0.6	0.446	0.9
ML080-18	0.000479	18	0.1365	1.54	0.238	2.5	0.802	4.1
ML080-7	0.000104	23	0.1319	0.68	0.112	1.2	0.657	2.7
ML080-20	0.003867	6	0.1836	0.66	0.481	1	1.057	1.4
SAMPLE M	2150 � 6Ma							
ML086-15	-0.000048	58	0.132	0.71	0.245	0.89	0.97	3.4
ML086-3	0	---	0.1332	0.61	0.25	0.76	1.07	2.7
ML086-8	0.00003	71	0.1336	0.69	0.232	0.88	1.05	1.7
ML086-6	0.000021	58	0.1337	0.47	0.291	0.55	0.94	4
ML086-10	0.000023	100	0.1337	0.84	0.184	1.2	0.94	0.8
ML086-14	0.000032	71	0.134	0.72	0.163	1.08	0.95	2.3
ML086-9	0.00001	100	0.1339	0.55	0.131	0.93	0.92	2.5
ML086-5	0	---	0.1341	0.61	0.242	0.78	0.96	2.6
ML086-1	-0.000035	58	0.1337	0.6	0.25	0.75	1.03	2
ML086-11	-0.000023	100	0.1339	0.85	0.213	1.13	0.8	2.3
ML086-13	0.000021	71	0.1345	0.57	0.19	0.8	0.95	3.2
ML086-16	0.00008	45	0.1355	1.21	0.129	1.19	0.97	4.2
ML086-12	-0.000045	71	0.1341	0.84	0.189	1.2	0.91	2.3
ML086-2	-0.000042	50	0.1342	0.57	0.252	1.12	1.05	2.8
ML086-4	-0.000057	58	0.1341	1.36	0.211	1.04	1.15	3.4
ML086-7	-0.000099	45	0.136	0.78	0.209	1.07	0.94	3.3
SAMPLE M	2101 � 10Ma							
ML105-4	0.000053	50	0.1295	0.64	0.298	0.81	0.836	2.4
ML105-6	0.000099	24	0.1304	0.43	0.23	0.64	0.791	2.1
ML105-3	0.00005	45	0.1298	0.56	0.235	0.78	0.87	1.2
ML105-19	-0.00005	38	0.1292	0.48	0.269	0.62	0.813	2.1
ML105-18	0.000404	14	0.1358	0.43	0.309	0.54	0.769	2.7
ML105-15	0.000323	22	0.1351	0.57	0.294	0.73	0.746	2.7
ML105-11	0.000015	71	0.1312	0.49	0.289	0.63	0.826	2.4
ML105-8	0.000087	32	0.1322	0.52	0.255	0.71	0.806	1.7
ML105-14	0	---	0.1317	0.66	0.212	0.98	0.798	2.9
ML105-1	-0.000155	35	0.1302	0.78	0.188	1.21	0.829	1.9
Rejected								
ML105-2	-0.000028	100	0.1262	1.06	0.22	1.35	0.844	2.7
ML105-7	0.000804	9	0.1386	0.75	0.321	0.48	0.733	2.1
ML105-9	0.000769	17	0.1384	0.72	0.247	1.98	0.534	1.6
ML105-20	0.003086	5	0.1712	0.98	0.293	1.16	0.519	1.9
ML105-5	0.000367	21	0.1361	0.57	0.218	2.22	0.748	3.2
ML105-10	0.000524	13	0.1382	0.46	0.313	0.58	0.685	2.3
ML105-21	0.003042	7	0.1718	0.55	0.422	1.1	0.728	2.2
ML105-16	0.000304	33	0.1369	0.44	0.317	0.55	0.781	1.9
ML105-13	0.002127	6	0.1617	1.01	0.302	1.37	0.658	2.5
ML105-17	0.000808	12	0.1455	1.58	0.336	1.1	0.804	2.6
ML105-12	0.001011	17	0.1484	1.35	0.342	0.97	0.838	2
ML105-22	0.002573	5	0.1695	1.2	0.377	1.45	0.452	4.1
SAMPLE M	2084 � 11Ma							

ML107-11	0.000084	28	0.1285	0.45	0.085	0.93	1.015	0.7
ML107-2	0.000109	58	0.1293	1.08	0.185	1.53	0.854	0.9
ML107-7	0.000032	50	0.1287	0.5	0.125	0.85	0.901	0.7
ML107-5	0.000077	35	0.1293	0.56	0.112	0.99	0.94	1.3
ML107-1	0.000062	45	0.1293	0.65	0.095	1.37	0.863	1.3
ML107-15	0.000042	50	0.1294	0.58	0.09	1.14	0.85	0.9
ML107-13	0.000026	100	0.1299	0.91	0.256	1.11	0.865	1.9
ML107-14	0.000033	58	0.1302	0.59	0.165	0.88	1.045	0.6
ML107-4	0.000012	100	0.1302	0.63	0.09	2.25	0.989	1.2
ML107-8	0.000077	58	0.1312	0.9	0.195	1.25	0.981	2.4
ML107-10	-0.000056	50	0.1296	0.67	0.128	1.11	0.834	1.3
Inherited								
ML107-3	-0.000048	71	0.1317	0.87	0.221	1.14	0.996	0.8
Rejected								
ML107-9	0.00017	30	0.1304	0.7	0.108	1.27	0.66	1.7
ML107-6	0.000029	100	0.1293	0.97	0.218	3.13	0.68	5
ML107-12	-0.000068	45	0.1287	0.66	0.141	1.06	0.851	1.4
SAMPLE M	2090 � 6Ma							
ML113-1	0.000257	14	0.1321	0.35	0.071	0.8	0.58	1.6
ML113-11	0.000035	26	0.1293	0.27	0.075	0.9	0.683	1.7
ML113-4	0.000078	24	0.1301	0.38	0.127	1.7	0.639	1.4
ML113-2	0.000088	21	0.1303	0.29	0.058	0.7	0.669	1.7
ML113-13	-0.000015	58	0.1289	0.84	0.123	1.2	0.69	0.8
ML113-10	0.000098	25	0.1305	0.86	0.055	1.9	0.633	2.6
ML113-12	0.000011	58	0.1294	0.35	0.053	0.9	0.684	1.1
ML113-8	0.000012	45	0.1294	0.28	0.082	0.6	0.674	2.1
ML113-6	0.000003	100	0.1296	0.33	0.07	0.7	0.631	2.4
ML113-7	-0.000002	100	0.1296	0.27	0.079	0.6	0.68	1.1
ML113-15	0.000121	23	0.1325	0.45	0.104	0.8	0.595	1.7
ML113-5	-0.000031	50	0.1317	0.49	0.174	0.7	0.559	1.9
Rejected								
ML113-9	0.000122	19	0.13	0.49	0.061	0.8	0.875	2.5
ML113-3	0.00011	10	0.1306	0.76	0.215	1.5	0.699	1.3
ML113-14	0.000097	15	0.1307	0.46	0.105	1.3	0.646	1.2
SAMPLE M	2084 � 7Ma							
ML114-2	0.000125	27	0.1287	0.58	0.148	0.9	0.97	3.6
ML114-5	0.000037	45	0.1279	0.52	0.156	0.8	0.88	2.3
ML114-1	0.000113	35	0.1296	0.72	0.111	1.2	0.91	1.4
ML114-11	0.0002	24	0.1308	0.64	0.118	1.1	1.17	3.4
ML114-7	0.000038	50	0.1292	0.59	0.143	0.9	1.08	3.1
ML114-12	0.000021	71	0.1291	0.64	0.165	0.9	0.97	3.8
ML114-6	0.000031	41	0.1295	0.44	0.09	0.8	0.96	1.6
ML114-14	0.000022	45	0.1296	0.4	0.205	0.5	1.18	1.8
ML114-8	0	100	0.1294	0.43	0.108	0.7	0.82	2.7
ML114-3	0.000046	41	0.1302	0.53	0.169	0.8	1.06	1.9
ML114-9	0.000172	29	0.1319	0.73	0.181	1	0.91	3.2
ML114-16	0.000098	26	0.131	0.84	0.158	1.4	0.96	2.1
ML114-4	0.000013	100	0.13	0.7	0.113	1.2	0.73	1.9
ML114-13	-0.000019	71	0.1299	0.59	0.097	1.1	0.95	2
Rejected								
ML114-15	0.000315	19	0.1348	0.64	0.153	1.8	0.89	2.6
ML114-10	0.000129	29	0.1329	0.62	0.123	1.1	0.87	3.1

SAMPLE M 2090 � 6Ma								
ML116-8	0.000066	30	0.1288	0.91	0.063	2.8	1.01	4.6
ML116-12	0.000161	19	0.1302	0.4	0.077	0.8	1.02	2
ML116-10	0.000033	50	0.129	0.55	0.066	1.2	1.13	2.1
ML116-20	0.000043	50	0.1294	0.63	0.072	1.3	0.9	2.1
ML116-3	0.000323	13	0.1333	0.41	0.114	0.7	1.1	2.4
ML116-11	0.000157	20	0.1311	0.49	0.094	0.9	0.97	1.2
ML116-16	0.000575	10	0.1368	0.44	0.094	2.2	0.95	1
ML116-19	0.000044	22	0.1298	0.28	0.048	0.7	1.2	2.4
ML116-6	0.000045	33	0.1301	0.72	0.044	1.1	0.8	3
ML116-1	0.00006	38	0.1304	0.57	0.086	1.1	1.1	3.6
ML116-9	0.000516	14	0.1368	0.56	0.094	1.1	1.27	0.6
ML116-18	0.000031	71	0.1305	0.76	0.156	1.1	1.06	1.4
ML116-21	0.000101	27	0.1315	0.51	0.064	1.9	0.97	2
ML116-4	0.00009	33	0.1313	0.6	0.072	1.3	0.83	1.6
ML116-7	0.000086	28	0.132	0.49	0.085	1.8	0.99	2.4
ML116-2	0.000007	100	0.1309	0.5	0.062	1.1	1.06	2.1
Rejected								
ML116-15	0.000084	27	0.1208	0.49	0.097	2.1	0.32	5.3
ML116-17	0.000388	23	0.1331	0.86	0.154	1.3	0.58	1.2
ML116-14	0.000108	13	0.1302	0.25	0.063	0.5	1.48	5.8
ML116-5	0.000263	10	0.1328	0.63	0.055	1.3	1	2.5
ML116-13	0.002122	7	0.1605	1.38	0.181	2	0.92	1.8
SAMPLE M 2093 � 5Ma								
ML117-4	0.000504	16	0.134	1.17	0.096	1.4	0.627	5
ML117-12	0.000119	20	0.13	0.61	0.103	0.8	0.818	3.2
ML117-10	0.000009	100	0.1288	0.54	0.087	1.2	0.738	5.3
ML117-6	0.000045	41	0.1297	0.49	0.089	1.1	0.889	4.4
ML117-11	0.000209	20	0.132	0.93	0.075	1.3	0.681	3.8
ML117-17	0.000036	33	0.1298	0.36	0.066	0.9	0.763	3.6
ML117-15	0.000018	50	0.1298	0.69	0.064	1	0.798	1.7
ML117-2	-0.000007	71	0.1295	0.34	0.071	0.8	0.752	4.1
ML117-14	0.000059	33	0.1305	0.46	0.093	1	0.689	2.8
ML117-8	-0.000027	71	0.1294	0.65	0.079	3.1	0.712	4.3
ML117-13	0.000007	50	0.13	0.24	0.051	1.3	0.765	3.5
ML117-7	0	---	0.1299	0.74	0.083	1.1	0.84	0.5
ML117-3	0.000153	12	0.1321	0.58	0.074	1	0.797	3.6
Rejected								
ML117-16	0.000225	20	0.1337	0.83	0.124	3.5	0.322	3.3
ML117-1	0.000021	58	0.1311	0.77	0.095	1	0.7	5.7
ML117-9	0.000193	20	0.1339	0.43	0.102	1.8	0.827	4.3
ML117-5	0.000384	15	0.139	0.49	0.218	2	0.757	6.5
SAMPLE M 2085 � 12Ma								
ML118-3	-0.000008	100	0.1302	0.51	0.135	1.6	0.734	2.8
ML118-11	0.000029	35	0.1296	0.34	0.081	1.4	0.68	4.2
ML118-2	0.00004	32	0.1305	0.35	0.101	0.7	0.804	2.8
ML118-9	0.000065	21	0.1302	0.3	0.107	0.6	0.774	5.1
ML118-12	-0.000004	100	0.1302	0.35	0.071	0.9	0.734	3.7
ML118-4	0.000442	9	0.1369	0.31	0.104	0.6	0.743	3.5
ML118-10	0.000013	71	0.1311	0.45	0.067	1.2	0.709	4.5
Rejected								
ML118-8	0.000681	8	0.1412	0.39	0.1	2.5	0.645	3

ML118-6	0.000054	24	0.1303	0.31	0.079	0.7	0.623	2.6
ML118-7	0.000608	15	0.141	0.56	0.098	1.4	0.645	5.2
ML118-1	0.00013	19	0.1326	0.35	0.094	1.4	0.598	3.2
ML118-5	0.000464	16	0.1358	0.56	0.101	3.2	0.541	8.7
SAMPLE M	2090 � 12Ma							
ML125-2	0.000018	58	0.1286	0.44	0.084	0.91	1.006	0.4
ML125-4	0.000021	32	0.1294	0.26	0.049	0.69	0.979	1.2
ML125-1	0.000011	38	0.1296	0.22	0.05	0.57	0.987	2.3
ML125-5	0.000121	16	0.1321	0.28	0.075	0.6	1.032	1.3
ML125-3	0.000202	38	0.1341	1.06	0.106	3.3	0.925	0.5
Rejected								
ML125-6	0.000468	36	0.1371	1.62	0.102	4.86	0.675	3.2
SAMPLE M	2088 � 6Ma							
ML150-5	-0.000015	100	0.1277	0.7	0.135	1.15	0.884	1.8
ML150-12	-0.000011	100	0.1284	0.6	0.15	1.42	0.945	0.6
ML150-19	0.000009	100	0.1288	0.53	0.168	0.78	0.938	1.2
ML150-15	0.000045	38	0.1296	0.45	0.164	0.67	0.934	0.4
ML150-20	0.000036	50	0.1296	0.53	0.131	0.89	0.965	1.8
ML150-17	0	100	0.1293	0.49	0.132	0.81	0.956	1.5
ML150-18	0.000023	71	0.13	0.6	0.158	0.91	0.966	0.5
ML150-11	-0.00001	100	0.1296	0.56	0.154	0.87	0.93	0.5
ML150-16	-0.000012	100	0.1297	0.62	0.138	1	0.952	1.2
ML150-14	0.000031	41	0.1305	0.4	0.166	0.6	0.962	0.8
ML150-6	-0.000094	38	0.1289	0.65	0.144	1.03	0.9	1.1
ML150-4	0.000011	100	0.1305	0.6	0.13	1	0.873	1.2
ML150-9	0	---	0.1304	0.55	0.134	0.91	1.065	1.5
ML150-8	0	---	0.1306	0.63	0.126	1.16	0.853	1.5
Rejected								
ML150-10	0.000048	50	0.1289	0.62	0.146	0.96	0.897	0.9
ML150-7	0.000053	50	0.1292	0.65	0.142	1.03	0.93	0.6
ML150-1	0.000103	38	0.13	0.68	0.146	1.07	0.901	1
ML150-3	0.000076	45	0.1297	0.69	0.143	1.1	0.883	0.6
ML150-2	0.000043	50	0.1299	0.59	0.13	0.97	0.897	0.5
ML150-13	0.000049	50	0.1303	0.63	0.148	0.98	0.91	0.6
SAMPLE M	2092 � 5Ma							
ML153-11	0.000035	71	0.1271	0.75	0.121	1.28	0.876	0.7
ML153-6	0.000154	45	0.1295	0.99	0.072	2.18	0.98	1.6
ML153-14	0.000067	58	0.1289	0.84	0.086	2.9	0.936	0.8
ML153-7	0.000009	100	0.1284	0.54	0.135	0.89	0.937	0.5
ML153-10	0.000031	50	0.1289	0.5	0.134	0.81	0.845	2.5
ML153-8	0.000019	71	0.1289	0.86	0.154	0.84	0.998	2.6
ML153-12	0.000157	41	0.1307	0.91	0.107	1.66	0.855	2.4
ML153-9	0.000006	100	0.1287	0.45	0.132	0.74	0.843	2
ML153-3	0	---	0.1289	0.63	0.112	1.12	1.083	1.5
ML153-13	0.000012	71	0.1291	0.43	0.093	0.84	0.983	1.1
ML153-5	-0.000015	100	0.1288	1.23	0.13	1.15	0.962	0.6
ML153-20	-0.000023	71	0.1292	0.6	0.129	0.99	0.932	1.3
ML153-15	-0.000009	100	0.1295	0.53	0.141	0.85	0.994	0.8
ML153-19	0.000011	100	0.1299	0.58	0.135	0.95	0.948	0.6
ML153-16	0.000011	71	0.1299	0.42	0.179	0.6	1.042	2.8
ML153-18	0.000005	100	0.13	0.4	0.137	0.65	0.927	0.7
ML153-4	0.000043	58	0.1306	0.67	0.114	1.19	1.048	1.2

ML153-2	0.000022	71	0.1303	0.59	0.132	0.98	0.961	0.5
ML153-17	-0.000021	71	0.1301	0.58	0.136	0.95	0.905	0.5
ML153-1	0	---	0.1307	0.69	0.139	1.11	0.839	1.7
SAMPLE M 2135 � 6Ma								
ML177-7	0	---	0.1317	0.56	0.145	0.9	0.839	1
ML177-2	0.00003	71	0.1323	0.68	0.228	1.44	0.886	0.7
ML177-10	0.000089	50	0.1332	0.83	0.142	1.33	1.019	1.4
ML177-8	0.00009	41	0.1335	0.68	0.146	1.08	1.019	1.8
ML177-4	0.000016	50	0.1328	0.41	0.056	9.92	0.929	1.3
ML177-13	0.000197	20	0.1352	0.51	0.212	1.92	0.912	3.5
ML177-1	0.000125	28	0.1343	0.54	0.167	0.81	0.99	0.5
ML177-15	0.000161	28	0.1348	0.62	0.162	0.94	0.935	2.4
ML177-12	-0.000042	71	0.1322	0.82	0.145	1.29	0.939	1.4
ML177-9	0.000088	50	0.1339	0.82	0.179	1.2	0.967	0.8
ML177-5	0.00001	100	0.1332	0.57	0.201	0.78	0.931	2.2
ML177-14	-0.000038	58	0.1329	0.63	0.148	1	0.931	1.4
ML177-16	0.000012	100	0.1339	0.61	0.141	0.99	0.957	1.7
ML177-11	-0.000018	100	0.1344	0.75	0.146	1.2	0.925	1.2
Rejected								
ML177-6	0.000127	27	0.1349	0.99	0.193	4.72	0.847	1.1
ML177-3	0.000065	45	0.1342	0.63	0.151	0.98	0.921	2.1
SAMPLE M 2132 � 10Ma								
M178-1	-0.000063	58	0.1319	0.82	0.129	1.4	0.853	2.9
M178-2	0.000255	30	0.1386	0.83	0.11	1.5	0.922	2.2
M178-3	-0.000027	100	0.1338	0.91	0.121	1.6	0.782	2
M178-4	0.000125	50	0.1328	0.99	0.119	1.7	0.783	1.7
M178-5	0.000411	18	0.1378	0.63	0.193	1.5	0.713	1.8
M178-6	0.000176	41	0.1323	0.96	0.15	3.5	0.775	1.5
M178-7	0.000044	71	0.1298	0.84	0.15	1.3	0.812	1.1
M178-8	0.00006	71	0.1339	0.96	0.163	1.5	0.924	3.8
M178-9	-0.000021	100	0.1326	0.8	0.159	1.2	0.886	2.7
M178-10	0.000182	19	0.1375	0.76	0.19	0.7	0.783	3.4
M178-12	-0.000107	35	0.1319	0.65	0.2	1.5	0.813	2.4
M178-13	0.000034	58	0.1336	0.6	0.233	1.2	0.74	2.5
M178-14	0.000524	20	0.1383	0.72	0.219	1	0.705	3.7
M178-15	0.000057	50	0.1338	0.66	0.225	0.9	0.784	2.8
M178-16	-0.000083	58	0.1299	0.94	0.149	1.5	0.843	2.2
M178-17	0.000102	30	0.1322	0.54	0.249	0.7	0.821	2.8
M178-18	-0.000048	58	0.1312	0.71	0.15	1.1	0.746	1.4
M178-19	-0.00004	71	0.1321	0.8	0.204	1.1	0.753	2.3
Rejected								
M178-11	0.003218	9	0.172	0.82	0.316	1.7	0.875	2.2
SAMPLE M 2090 � 22Ma								
ML187-3	0	---	0.1269	2.39	0.32	1.42	0.766	2.5
ML187-14	0.000641	10	0.1359	0.41	0.082	0.96	0.721	2.8
ML187-2	0	---	0.1291	0.51	0.343	1.09	0.708	3.1
ML187-4	0.000085	22	0.1304	0.57	0.018	1.96	0.82	2.8
ML187-6	0.000605	8	0.139	0.32	0.125	0.61	0.777	1.7
Inherited								
ML187-12	0.000207	17	0.1371	0.37	0.062	2.09	0.812	1.8
ML187-11	-0.000146	45	0.1332	0.95	0.208	2.21	0.858	2.4
ML187-10	0.00007	45	0.1365	0.65	0.127	1.24	0.794	1.7

Rejected								
ML187-13	0.001807	19	0.1492	2.59	0.234	6.89	0.661	3.8
ML187-5	0.002536	5	0.1594	0.37	0.828	0.83	0.621	2.5
ML187-7	0.000863	10	0.1404	0.5	0.091	1.1	0.902	1.5
ML187-9	0.00014	20	0.1335	0.73	0.184	0.56	1.178	0.4
ML187-1	0.000735	13	0.1415	0.52	0.291	0.69	0.81	1.5
ML187-8	0.000302	17	0.1361	0.46	0.211	0.62	0.751	3.2
ML187-15	0.000939	21	0.1476	1.06	0.221	4.38	0.616	1.6
ML187-16	0.000263	21	0.1336	0.6	0.138	1.09	0.702	2.8
SAMPLE MWAXI-126/DS-001			2086 � 5Ma					
W126-18	0.000176	19	0.1304	0.44	0.144	0.69	0.7	1.29
W126-2	0	---	0.1286	0.38	0.128	0.63	0.743	0.31
W126-11	0.000053	25	0.1295	0.34	0.178	0.47	0.828	0.29
W126-9	0.000112	28	0.1302	0.99	0.109	0.94	0.797	0.44
W126-16	0.000126	21	0.1306	0.83	0.153	0.65	0.77	2.08
W126-12	0.000092	24	0.1303	1.42	0.176	2.04	0.508	0.91
W126-6	0.000054	25	0.1298	0.33	0.192	0.72	0.753	0.27
W126-1	0.000113	17	0.1307	0.29	0.245	0.36	0.673	1.13
W126-5	0.000145	13	0.1313	0.25	0.23	0.32	0.731	0.21
W126-3	0.000014	58	0.1298	0.38	0.138	1	0.767	0.54
W126-10	0.000111	29	0.1319	0.55	0.237	0.37	0.706	0.46
Inherited								
W126-15	0.000152	21	0.1355	2.05	0.267	1.5	0.752	2.24
W126-19	0.000397	22	0.1389	0.76	0.092	1.68	0.841	2.88
W126-7	0.000067	30	0.135	0.43	0.144	0.69	0.626	0.6
W126-4	0.000055	33	0.1352	0.43	0.184	0.62	0.73	0.67
W126-8	0.000073	33	0.1358	0.5	0.301	0.58	0.656	0.45
Rejected								
W126-13	0.000332	21	0.1325	1.34	0.173	2.87	0.806	0.31
W126-14	0.000058	23	0.13	4.31	0.286	3.83	0.774	2.99
SAMPLE MWAXI-130/DS-005			2174 � 15Ma					
MW130-23	0.000351	41	0.137	1.3	0.12	2.4	0.599	2.5
MW130-9	0.00006	100	0.1349	1.4	0.206	1.8	0.616	1.9
MW130-12	0.000081	100	0.1354	1.6	0.181	2.3	0.625	2
MW130-14	0.00025	50	0.1383	1.4	0.141	2.2	0.618	2
MW130-19	0.000212	23	0.1378	0.6	0.064	3	0.556	1.6
MW130-1	0.000136	71	0.1387	1.4	0.203	3.3	0.607	2.2
MW130-20	-0.000038	100	0.1367	1.1	0.154	1.7	0.582	1.4
MW130-21	0.000062	71	0.1387	1	0.145	1.6	0.564	1.9
MW130-17	0.000058	50	0.1403	0.7	0.23	1.8	0.585	2.7
MW130-10	0	---	0.14	1.1	0.225	1.5	0.605	1.8
Inherited								
MW130-6	0.000063	100	0.142	1.4	0.172	2.1	0.607	1.1
MW130-22	0.000091	71	0.1425	1.2	0.13	3.4	0.623	2.9
MW130-15	0.000086	100	0.1428	1.6	0.178	2.4	0.57	1.3
MW130-2	0.000119	71	0.1438	1.3	0.18	2	0.65	1.1
MW130-16	0.000058	100	0.1436	1.3	0.1	2.6	0.558	2.5
MW130-5	0.000076	71	0.1438	1.1	0.221	1.4	0.527	3.4
MW130-18	-0.000266	41	0.1395	1.2	0.115	2.1	0.636	2.7
MW130-25	0.00014	71	0.1449	1.4	0.136	2.5	0.567	1.1
MW130-4	-0.000052	100	0.1434	1.2	0.156	4	0.607	2.2
MW130-8	-0.000211	71	0.1416	1.8	0.166	2.7	0.529	2.7

MW130-15	-0.000209	45	0.1417	1.1	0.221	1.5	0.593	2.5
MW130-11	0.000339	32	0.1503	1	0.194	1.4	0.615	0.8
Rejected								
MW130-3	0.000756	41	0.1366	2	0.123	3.4	0.678	1.6
MW130-7	0.000298	50	0.1354	1.5	0.215	2	0.761	1.3
MW130-24	0.000959	19	0.1526	1	0.172	2.6	0.592	3.7
SAMPLE MWAXI-132/DS-007		2076 � 10Ma						
MW132-10	0.000113	41	0.1287	0.77	0.099	2	1.06	0.8
MW132-8	0.000007	100	0.1279	0.46	0.1	1.2	0.968	0.4
MW132-1	0.000024	58	0.1291	0.51	0.214	0.9	1.128	1.8
MW132-4	0.000033	100	0.1298	1.03	0.105	2.7	1.109	1.8
MW132-3	0	---	0.1295	1.08	0.099	2.9	1.038	2.2
Inherited								
MW132-13	0.000078	50	0.1328	1.56	0.119	1.9	1.007	1.4
MW132-7	0.000012	71	0.1328	0.43	0.125	1	1.095	2.7
MW132-15	0.000019	71	0.1348	0.54	0.217	1	1.186	2
MW132-14	0.000044	50	0.138	1.57	0.123	2.6	1.016	0.6
Rejected								
MW132-11	-0.000006	100	0.0858	0.53	0.147	1.5	0.656	1.3
MW132-5	0.000037	38	0.0786	0.51	0.143	0.9	0.541	2
MW132-2	0.000013	100	0.0906	0.73	0.173	2.6	0.635	2.1
MW132-17	0.000138	20	0.1304	0.43	0.254	0.7	0.621	1.9
MW132-9	0.000013	58	0.1296	0.37	0.155	0.8	1.097	2.2
MW132-6	0.000029	45	0.1327	0.42	0.163	2.5	1.042	2.9
MW132-12	0.000087	22	0.1359	0.36	0.213	0.7	0.995	2.3
MW132-16	-0.000012	100	0.1388	0.61	0.137	1.4	0.932	2.3
MW132-18	0.000089	45	0.1426	2.21	0.037	3.6	0.935	4.6
MAWXI-13	No Age							
MW131-11	0.000006	100	0.1287	0.44	0.221	0.8	1.1	2.4
MW131-8	0.000057	58	0.1326	0.77	0.258	1.3	1.047	1.4
MW131-9	0.000016	100	0.1325	0.69	0.133	2.8	0.982	1.6
MW131-5	-0.000012	100	0.1323	1.25	0.182	2.6	1.045	2.9
MW131-6	0.000007	100	0.1355	0.47	0.069	1.5	1.103	0.5
MW131-2	0.000014	100	0.1393	0.64	0.191	1.3	1.076	1.4
MW131-7	0.000021	100	0.1398	0.79	0.174	2.6	1.123	0.8
Rejected								
MW131-3	0.000115	58	0.1274	2.19	0.098	2.9	0.976	1
MW131-10	0.000042	45	0.1308	0.52	0.254	1.5	0.597	4.7
MW131-4	0.000021	50	0.1319	0.4	0.171	0.8	1.007	3.2
MW131-1	0.000052	33	0.1327	0.43	0.238	0.7	0.964	1.2
MW131-13	0.000029	71	0.1328	1.08	0.132	1.5	0.65	0.6
MW131-12	0.000009	100	0.1342	1.03	0.226	1	0.6	1.9
SAMPLE MWAXI-134/DS009		2216� 15Ma						
MW134-13	0.000659	13	0.1442	0.5	0.162	0.8	0.705	0.4
MW134-15	0.000298	50	0.1406	1.49	0.145	2.4	0.692	2.5
MW134-10	0.000143	58	0.1387	1.2	0.154	1.9	0.779	1
MW134-17	0.000279	35	0.1413	1.01	0.165	2.7	0.735	2.2
MW134-1	0.000089	45	0.1389	0.73	0.159	1.1	0.696	1
MW134-20	0.000082	71	0.1388	1.11	0.108	2.1	0.742	2
MW134-16	0.000326	38	0.1425	1.17	0.113	2.1	0.684	1.6
MW134-22	0.000036	71	0.1397	0.81	0.193	1.2	0.678	2.5
MW134-11	-0.000021	100	0.1395	0.79	0.152	1.3	0.701	1.8

MW134-8	-0.000051	71	0.1396	0.87	0.138	1.5	0.761	2.7
MW134-9	-0.000103	58	0.1396	1.02	0.136	2.8	0.721	1.5
MW134-4	0.000016	100	0.1417	0.68	0.214	1.7	0.769	1.9
Rejected								
MW134-21	0.000042	71	0.1342	1.31	0.072	1.8	0.625	2.6
MW134-7	0.000499	21	0.1423	0.68	0.112	2.1	0.503	2.2
MW134-2	0.000896	20	0.1483	0.87	0.21	1.2	0.732	0.8
MW134-19	0.000257	32	0.1415	0.87	0.154	1.4	0.639	2
MW134-3	0.000823	16	0.1493	0.69	0.127	1.2	0.596	2.5
MW134-12	0.001025	18	0.1523	0.88	0.232	1.2	0.701	1.2
MW134-6	0.000169	58	0.1413	1.3	0.118	2.4	0.71	2
MW134-5	0.000092	41	0.1413	0.67	0.13	1.2	0.622	2.5
MW134-14	-0.000048	71	0.1399	0.85	0.111	1.6	0.659	2
MW134-18	0.001047	9	0.157	0.45	0.202	0.7	0.526	1.8
SAMPLE MWAXI-135/DS-010		2159 � 11Ma						
MW135-6	0.000042	58	0.1338	0.66	0.097	1.3	0.587	1.38
MW135-10	0.000047	58	0.134	0.69	0.107	1.3	0.559	0.91
MW135-1	0.000071	58	0.1346	0.85	0.133	4.5	0.605	1.25
MW135-9	-0.000011	100	0.1336	0.57	0.198	1.3	0.554	0.99
MW135-14	0.00013	35	0.1354	0.7	0.128	1.2	0.518	0.52
MW135-5	0.000314	18	0.1387	0.94	0.201	0.8	0.574	0.44
MW135-8	0.0001	50	0.1367	0.87	0.111	1.6	0.514	0.64
MW135-7	-0.000021	71	0.1355	0.56	0.155	0.9	0.61	0.44
MW135-2	-0.000017	100	0.1358	0.72	0.136	1.2	0.595	0.56
MW135-13	0.000042	71	0.137	0.8	0.113	2.3	0.588	0.62
MW135-3	-0.000033	100	0.1397	0.99	0.211	1.4	0.574	0.77
MW135-4	-0.000083	58	0.1412	0.9	0.107	1.7	0.672	1.39
Rejected								
MW135-12	0.000214	33	0.1339	0.86	0.143	1.4	0.473	0.61
MW135-11	0.001459	112	0.1638	15	0.132	39	0.629	6.36
SAMPLE MWAXI-138/DS-013		2086 � 10Ma						
MW138-12	0.000071	45	0.1277	0.67	0.107	1.2	0.55	1.42
MW138-14	0.000055	45	0.1277	0.6	0.124	1	0.585	0.44
MW138-11	0.000066	30	0.129	0.48	0.146	0.7	0.554	0.32
MW138-25	-0.000012	100	0.1284	1.09	0.097	1.2	0.508	0.96
MW138-15	0.000058	35	0.1294	0.48	0.128	1.3	0.582	1.41
MW138-21	0.000152	16	0.1309	0.34	0.179	0.5	0.569	0.46
MW138-7	-0.000009	100	0.1293	0.85	0.09	1.1	0.568	0.91
MW138-4	0.000031	50	0.1299	0.89	0.119	0.9	0.543	0.36
MW138-16	0	---	0.1296	0.55	0.109	1	0.588	0.42
MW138-13	0.000007	100	0.1298	0.48	0.155	0.8	0.579	0.77
MW138-8	0.000006	100	0.1299	0.44	0.13	0.7	0.554	0.33
Inherited								
MW138-24	0.000272	14	0.1346	0.36	0.167	0.9	0.595	1.67
MW138-23	0.000087	41	0.1351	0.66	0.329	0.7	0.564	0.56
MW138-20	0	100	0.1346	0.6	0.182	2	0.584	0.46
MW138-3	-0.000075	58	0.1341	0.88	0.198	1.2	0.506	0.72
Rejected								
MW138-18	0.0004	18	0.1327	0.63	0.142	1.6	0.539	0.47
MW138-5	0.000411	14	0.1335	0.47	0.128	0.8	0.574	0.99
MW138-1	0.00011	22	0.1304	0.4	0.126	1.1	0.528	0.83
MW138-9	0.000111	24	0.131	0.45	0.132	0.8	0.564	1.73

MW138-22	0.000274	21	0.1344	0.48	0.146	1.2	0.54	0.36
MW138-6	0.001694	8	0.1533	0.47	0.277	0.6	0.506	1.15
MW138-10	0.000158	38	0.1341	1.35	0.307	2	0.552	0.63
MW138-2	0.000568	20	0.1396	1.1	0.073	4.2	0.522	0.46
MW138-17	0.000257	24	0.1374	0.68	0.135	1.1	0.48	0.49
MW138-19	-0.000034	100	0.1353	1.97	0.145	6.6	0.195	33
SAMPLE S	2096 � 7Ma							
SU001-2	0.000133	18	0.1317	0.56	0.111	0.59	1.08	1.3
SU001-4	0.000035	45	0.1296	0.51	0.093	0.93	0.97	1.3
SU001-5	0.000098	30	0.1316	0.57	0.112	0.97	1.04	0.5
SU001-7	0.000006	100	0.1303	0.48	0.154	0.7	0.92	1.7
SU001-11	0.000016	58	0.129	0.45	0.095	0.82	0.97	1.1
SU001-14	0.000433	15	0.1353	0.52	0.121	1.44	0.89	1.1
SU001-15	0.000118	20	0.1322	0.35	0.094	0.65	0.9	2.5
SU001-20	0.000414	10	0.1366	0.58	0.115	1.19	1.03	1.3
SU001-21	0.000386	12	0.1371	0.39	0.108	1.2	0.96	2.7
SU001-22	0.000285	15	0.1359	0.41	0.153	0.61	0.95	2.8
Rejected								
SU001-1	0.002222	5	0.167	1.43	0.245	2.28	0.73	2.1
SU001-3	0.000283	10	0.1343	0.3	0.141	0.47	0.85	1.9
SU001-6	0.001173	11	0.146	0.61	0.221	1.33	1.03	2.2
SU001-8	0.001501	12	0.1509	0.96	0.194	2.33	0.86	1
SU001-9	0.002422	19	0.1667	2.64	0.213	6.46	1.07	1.1
SU001-10	0.008327	4	0.2478	1.32	0.545	1.8	0.63	3.1
SU001-12	0.000695	8	0.14	0.68	0.184	0.52	1.04	1.3
SU001-13	0.000752	7	0.1414	0.33	0.115	0.95	0.97	1.4
SU001-16	0.000778	7	0.1381	0.36	0.123	1.25	0.75	1.7
SU001-17	0.000063	22	0.1304	0.33	0.084	0.64	0.86	1.5
SU001-18	0.003807	6	0.1737	1.41	0.298	4.22	0.47	0.9
SU001-19	0.000733	7	0.1412	0.35	0.143	1.33	0.8	2.4
SU_002	2103 � 14 Ma							
SU002-2	0.000245	18	0.1357	0.47	0.114	0.8	0.97	2.6
SU002-5	0.000011	45	0.1302	0.57	0.046	0.74	1.02	1.5
SU002-6	0.000055	20	0.131	0.28	0.04	0.78	1.08	1.4
SU002-8	0.000009	100	0.1316	0.56	0.219	0.71	1.04	2
SU002-10	0.000202	9	0.1325	0.23	0.063	0.51	0.96	1.9
Rejected								
SU002-1	0.000093	20	0.1223	0.37	0.218	0.47	0.51	3.2
SU002-3	0.000176	13	0.1296	0.31	0.033	1.48	0.74	1.8
SU002-4	0.00023	20	0.1326	0.48	0.196	0.64	0.97	1.3
SU002-7	0.000098	19	0.1263	0.36	0.18	0.49	0.58	1.6
SU002-9	0.000727	17	0.1316	0.65	0.149	1.13	0.49	2
SU002-11	0.000366	10	0.1316	0.33	0.06	0.76	0.72	1.6
SU002-12	0.000535	13	0.1342	0.32	0.068	0.68	0.63	1.9
SU002-13	0.003455	9	0.1686	1.8	0.223	4.68	0.29	1.2
SAMPLE S	2105 � 6Ma							
SU003-1	0.000037	33	0.1313	0.39	0.143	0.6	1.17	2
SU003-2	0.000031	38	0.1304	0.41	0.134	1.06	1.11	1.2
SU003-3	0.000495	11	0.1393	0.42	0.16	0.62	1.14	1.5
SU003-5	-0.000018	45	0.1311	0.36	0.126	0.96	1.12	1.4
SU003-4	0.000118	20	0.1315	0.41	0.102	0.73	0.96	1.2
SU003-7	0.000437	12	0.1369	0.41	0.144	1.38	1.14	2

SU003-9	0.000431	10	0.1365	0.35	0.177	0.5	0.99	1.7
SU003-10	-0.000004	100	0.1304	0.37	0.107	0.64	1.07	2.1
SU003-11	0.000144	23	0.1326	0.52	0.131	0.83	0.99	3
SU003-12	0.000041	29	0.131	0.35	0.126	0.57	0.97	1.3
SU003-13	0.000025	38	0.1303	0.65	0.14	0.56	0.92	1.9
SU003-14	0.000073	22	0.1315	0.56	0.147	0.54	1.04	1.7
SU003-15	0.000028	33	0.1299	0.34	0.152	0.5	1.06	1
Rejected								
SU003-6	0.000752	9	0.1458	0.45	0.181	0.64	0.9	0.4
SU003-8	0.002008	5	0.1649	0.37	0.234	0.5	1.11	1.4
SAMPLE S 2120 � 10Ma								
SU004-1	0.000119	23	0.1327	0.4	0.052	1.18	0.59	3.1
SU004-3	0.00002	38	0.13	0.62	0.062	1.13	0.61	1.9
SU004-6	0.000015	71	0.1314	0.43	0.289	1.12	0.57	2.8
SU004-7	0.000102	24	0.1332	0.37	0.181	0.94	0.65	1.9
SU004-8	0.000041	58	0.1321	0.58	0.154	1.02	0.65	1.9
SU004-9	0.000078	30	0.1334	0.68	0.212	1.27	0.53	2.3
SU004-11	0.000039	41	0.1305	0.41	0.043	1.31	0.59	2.6
SU004-12	0.000026	50	0.1326	0.4	0.134	0.74	0.5	1.3
Inherited								
SU004-2	0.000023	41	0.1342	0.31	0.156	0.54	0.68	2.3
SU004-4	0.000008	41	0.1346	0.2	0.191	0.29	0.77	2.3
SU004-5	0.000122	21	0.1412	0.29	0.201	0.46	0.63	3
Rejected								
SU004-10	0.000156	19	0.1338	0.73	0.113	1.36	0.51	3.6
SAMPLE S 2103 � 7Ma								
SU006-1	0	---	0.1304	0.51	0.107	1.5	0.802	2.9
SU006-2	0.000053	41	0.131	0.51	0.121	1.3	0.719	2.6
SU006-3	-0.000008	100	0.1293	0.92	0.113	1.3	0.792	2.3
SU006-4	0.000085	27	0.1312	0.42	0.132	1	0.645	3.4
SU006-5	0	100	0.1301	0.7	0.103	1.9	0.685	2.4
SU006-6	0.000108	21	0.1328	0.38	0.137	0.9	0.674	3.8
SU006-7	0.000008	100	0.1298	0.5	0.132	1.2	0.792	2.7
SU006-8	0.000074	32	0.1315	0.47	0.19	0.9	0.744	2
SU006-9	0.000061	45	0.1303	0.6	0.12	1.5	0.718	1.8
SU006-10	-0.000025	71	0.1317	0.61	0.127	1.5	0.696	2.4
SU006-11.'	0.00053	12	0.139	0.96	0.193	1.9	0.706	2.6
SU006-12	0.000076	32	0.1314	0.47	0.135	1.1	0.697	2.2
SU006-12.'	0.000011	100	0.13	0.63	0.114	1.6	0.727	2.2
SU006-13	-0.000022	71	0.1292	0.57	0.108	1.5	0.761	1.3
SU006-13.'	0.000188	26	0.13	0.62	0.17	1.3	0.683	4.2
SU006-14	-0.000023	58	0.131	0.48	0.09	1.4	0.775	2.3
Inherited								
SU006-11	0.00093	11	0.1444	0.52	0.159	2.8	0.644	3.4
SU006-14.'	0.000974	22	0.1471	1.05	0.123	3.9	0.704	2.4
SAMPLE S 2116 � 9Ma								
SU007-5	0.000024	71	0.1293	0.83	0.003	6.56	0.813	1.4
SU007-8	0.000138	30	0.1316	0.84	0.136	1.02	0.697	3.2
SU007-8.1	0.000039	33	0.1317	0.49	0.291	1.35	0.794	2.4
SU007-9	0.000011	45	0.1303	0.35	0.094	0.5	0.873	1.9
SU007-10	-0.000002	100	0.1307	0.62	0.058	0.67	0.801	2.2
SU007-13	0.000164	19	0.1331	0.58	0.072	1.06	0.709	3.9

SU007-16	0.00003	50	0.129	0.65	0.161	0.72	0.756	3.1
Inherited								
SU007-1	0.000148	18	0.1347	0.51	0.166	1.54	0.805	2.4
SU007-3	0.000127	20	0.1338	0.53	0.115	1.14	0.841	2.7
SU007-3.1	-0.000059	50	0.1343	0.9	0.146	1.06	0.778	2.4
SU007-4.1	-0.000026	58	0.1327	0.7	0.145	0.81	0.771	2.7
SU007-7	0.000146	18	0.1337	0.46	0.044	3.47	0.767	3.8
SU007-12.'	0.000208	14	0.1346	0.41	0.028	2.24	0.879	1.1
SU007-14	-0.000023	71	0.1317	0.81	0.138	0.97	0.758	3.2
SU007-15	0.000009	71	0.1325	0.54	0.211	0.75	0.85	1
SU007-13.'	0.000009	71	0.1326	0.51	0.17	0.62	0.755	3.8
SU007-18.'	0.000287	20	0.1489	0.76	0.076	1.3	0.84	2.5
Rejected								
SU007-2	0.000134	21	0.1301	0.59	0.079	0.93	0.552	3.5
SU007-4	0.000255	26	0.1293	1.55	0.099	11	0.523	5.4
SU007-6	0.000009	41	0.1283	0.3	0.107	0.44	0.787	5
SU007-11	0.000622	8	0.1176	7.7	0.185	11	0.562	8.1
SU007-15.I	0.000017	58	0.1305	0.57	0.091	1.76	0.655	5.1
SU007-17	0.000028	41	0.1307	0.52	0.057	0.96	0.592	3.9
SU007-17.'	0.000218	24	0.1345	0.81	0.225	1.57	0.789	2.9
SU007-18	0.000013	100	0.1313	0.85	0.143	0.99	0.775	2.6
SU007-19	0.00013	26	0.134	0.69	0.133	0.86	0.698	3.7
SU007-20	0.000019	71	0.1285	0.82	0.121	0.94	0.705	3.5
SAMPLE S 2094 � 4Ma								
SU012-2	0.00003	71	0.1303	0.76	0.43	1.07	0.745	2
SU012-5	0.000015	100	0.1294	0.7	0.064	2.81	0.754	2.5
SU012-6	0.000214	22	0.1321	0.57	0.048	1.53	0.647	2.3
SU012-7	0.000069	26	0.1304	0.38	0.102	0.71	0.727	2.5
SU012-8	0.000044	71	0.1289	0.83	0.375	0.86	0.681	2.9
SU012-9	0.000107	17	0.1316	0.3	0.222	0.61	0.68	3.4
SU012-10	0.000097	19	0.1311	0.33	0.199	0.45	0.712	3.2
SU012-11	0.000024	50	0.1296	0.43	0.222	0.56	0.756	1.8
SU012-12	0 ---		0.1298	0.57	0.175	0.82	0.745	2.6
SU012-13	0.000016	100	0.1297	0.71	0.024	2.66	0.7	2.7
SU012-15	-0.000066	50	0.13	0.72	0.089	1.44	0.717	2.5
SU012-16	-0.000003	100	0.1294	0.31	0.133	0.83	0.689	2.5
SU012-17	-0.000004	100	0.1297	0.34	0.116	0.6	0.726	3.3
SU012-18	0.000107	17	0.1315	0.29	0.125	0.86	0.683	3.6
SU012-19	0.000055	35	0.1311	0.47	0.422	0.46	0.697	3.2
SU012-20	0.000017	71	0.1289	0.53	0.187	1.62	0.711	1.9
Rejected								
SU012-1	0.001578	11	0.1781	1.42	0.27	3.65	0.712	2.8
SU012-3	0.000536	26	0.1423	2.15	0.507	1.05	0.669	2.8
SU012-4	0.00141	15	0.1617	2.25	0.375	3.39	0.735	0.8
SU012-14	0 ---		0.1339	0.89	0.256	1.11	0.565	1.5
SAMPLE S 2098 � 4Ma								
SU015-1	0.000017	35	0.1303	0.25	0.138	0.6	0.799	3.7
SU015-2	0.000114	19	0.1316	0.31	0.162	0.8	0.804	3.8
SU015-2.1	0.000291	11	0.1339	0.3	0.175	1.1	0.769	2.6
SU015-3	-0.00001	58	0.1297	0.31	0.139	0.7	0.755	2
SU015-5	0.000041	28	0.1299	0.31	0.045	3.9	0.773	1.7
SU015-6	0.000077	18	0.1304	0.24	0.125	0.6	0.789	2.4

SU015-7	0.000111	19	0.1309	0.53	0.145	0.8	0.737	2.8
SU015-8	0.000055	20	0.1309	0.23	0.156	0.5	0.814	3.3
SU015-10	0.00009	21	0.1303	0.3	0.121	0.7	0.87	3.5
SU015-10.'	-0.000008	71	0.1297	0.36	0.128	0.9	0.736	2.7
SU015-11	0.000166	21	0.1326	0.47	0.16	1	0.742	3.3
SU015-11.'	0.000015	58	0.1305	0.39	0.202	0.8	0.74	2.1
SU015-13	0.00009	27	0.1319	0.44	0.15	1.8	0.658	3.1
SU015-14	0.000136	23	0.132	0.46	0.133	1.1	0.745	2.5
SU015-15	0.00008	29	0.1308	0.44	0.142	1	0.75	1.3
SU015-17	0.000021	50	0.1305	0.4	0.153	0.9	0.813	1.9
SU015-18	0.000014	71	0.1304	0.46	0.161	1	0.813	2.9
SU015-19	-0.000019	58	0.1316	0.43	0.153	1	0.79	2.5
SU015-20	0.000033	32	0.1305	0.31	0.154	0.7	0.715	3.4
SU015-21	0.000205	21	0.1331	0.42	0.135	1.8	0.756	3
SU015-22	0.000584	8	0.1385	0.76	0.18	0.7	0.784	3.2
Rejected								
SU015-4	0.000844	7	0.144	0.33	0.199	0.7	0.737	1.8
SU015-8.1	0.00069	14	0.1386	0.83	0.223	1.2	0.795	3.7
SU015-9	0.000492	9	0.1372	0.27	0.136	0.7	0.683	2.9
SU015-12	0.001877	5	0.1575	1.23	0.257	2.6	0.792	3.4
SU015-16	0.000382	5	0.1369	0.37	0.141	0.4	0.888	1.3
SU015-3.1	0.000531	14	0.1406	1.05	0.195	4	0.69	2.6
SU015-4.1	0.000349	25	0.1362	1.08	0.201	1.8	0.699	3.7
SAMPLE S	2102 � 7Ma							
SU016-1	0.000228	21	0.1331	0.45	0.171	1.12	0.789	1.2
SU016-2	0.000085	38	0.1305	0.62	0.15	0.96	0.782	1
SU016-3	0.000034	71	0.1308	0.74	0.139	1.2	0.783	1.6
SU016-4	0.000306	38	0.1351	0.92	0.165	1.76	0.9	2.3
SU016-5	-0.000018	100	0.1321	0.75	0.164	1.89	0.923	1.6
SU016-6	0.00017	26	0.1343	0.59	0.184	0.85	0.87	2.2
SU016-7	0.000337	18	0.1355	0.58	0.161	0.89	0.825	2.8
SU016-8	-0.000015	95	0.1305	0.64	0.149	1	0.784	1.2
SU016-9	0.000296	18	0.133	0.56	0.178	0.81	0.788	2.2
SU016-10	0.000678	12	0.1424	0.45	0.208	1.06	0.778	2
SU016-11	0.000376	16	0.134	0.44	0.21	1.41	0.797	1.5
SU016-12	0.000163	17	0.131	0.34	0.067	1.27	0.869	0.3
SU016-13	0.00001	100	0.1305	0.56	0.2	0.77	0.826	1.7
SU016-14	0	---	0.1314	0.57	0.203	0.78	0.82	1.4
SU016-16	0.000254	18	0.134	0.8	0.072	1.14	0.722	1.7
SU016-17	-0.000016	71	0.1311	0.88	0.176	0.81	0.793	1.1
SU016-18	0.000478	16	0.1383	1.32	0.23	0.72	0.843	1.9
SU016-19	0	---	0.1298	0.37	0.032	2.12	0.976	0.7
SU016-20	0.000222	22	0.1313	0.58	0.16	0.87	0.768	1.4
SU016-21	0.000141	29	0.1314	0.94	0.152	0.94	0.837	1.8
SU016-22	0.00005	45	0.1314	0.56	0.139	0.91	0.869	1.3
Rejected								
SU016-15	0.000132	20	0.1291	0.41	0.063	12	0.735	2.5
SU019	No Age							
SU019-14	-0.000079	45	0.1289	0.71	0.155	1.09	0.836	2
SU019-9	0.000209	21	0.1336	0.54	0.195	1.61	0.898	2.8
SU019-12	0.000271	13	0.1352	0.34	0.178	0.49	1.094	1.6
SU019-13	0.00002	71	0.1341	0.55	0.167	0.83	0.884	1.7

SU019-4	0.000067	71	0.1367	1.01	0.122	1.77	1.041	1.6
SU019-10	-0.000071	58	0.1354	0.85	0.175	1.26	0.901	1.9
Rejected								
SU019-5	0.000093	32	0.1296	0.54	0.123	0.92	0.731	0.5
SU019-1	0.000617	20	0.1373	0.73	0.189	1.76	0.377	2.3
SU019-6	0.00019	17	0.1323	1.04	0.045	0.99	0.992	2.3
SU019-8	0.001244	9	0.1468	1.12	0.279	0.98	0.795	4.1
SU019-2	0.000926	11	0.1446	1.15	0.161	0.86	0.508	2
SU019-11	0.000005	150	0.1334	1.14	0.104	1.11	0.793	1.9
SU019-7	0.001164	18	0.1487	1.07	0.25	1.26	0.745	1.7
SU019-3	0.000566	19	0.142	0.77	0.149	1.25	0.315	1.6
SU_020	No Age							
SU020-17	0.000196	15	0.1343	0.88	0.14	0.3	0.87	4
Rejected								
SU020-15	0.001829	6	0.1212	1.02	0.09	1.7	0.12	6.6
SU020-13	0.001342	5	0.1153	4.95	0.07	6.3	0.17	5.3
SU020-5	0.00181	8	0.128	2.04	0.08	4.3	0.22	4.7
SU020-1	0.000085	14	0.1047	3.59	0.01	8.3	0.36	4.7
SU020-22	0.004909	2	0.1831	1.41	0.2	2.2	0.24	5.2
SU020-9	0.000432	3	0.13	0.46	0.04	0.9	1.61	3.5
SU020-11	0.000588	10	0.1335	0.55	0.08	2.4	0.58	4.1
SU020-21	0.000095	9	0.1287	0.8	0.01	2.2	0.96	5.8
SU020-7	0.001905	5	0.1527	0.57	0.09	3.3	0.24	7.6
SU020-18	0.000197	7	0.1301	1.2	0.01	4.3	0.73	2.2
SU020-19	0.000665	5	0.137	4.15	0.05	5.9	0.75	8.7
SU020-12	0.002357	14	0.1606	14	0.16	26.9	0.26	16.4
SU020-10	0.000256	13	0.1343	0.55	0.25	1.5	0.61	3.2
SU020-4	0.000261	17	0.135	0.41	0.11	0.7	0.86	2
SU020-16	0.000838	15	0.1444	0.63	0.13	1.1	0.28	5.6
SU020-14	0.000455	14	0.1395	1.07	0.15	2	0.61	1.6
SU020-20	0.000827	11	0.145	0.52	0.15	0.8	0.34	1.5
SAMPLE S	2085� 7Ma							
SU021-2	0.000287	15	0.1327	0.44	0.104	1.26	0.599	1.25
SU021-3	0.000172	35	0.1292	0.82	0.391	0.84	0.666	0.66
SU021-4	0.00018	38	0.129	0.9	0.257	1.09	0.583	0.68
SU021-6	0.000413	14	0.1346	0.45	0.301	0.52	0.449	0.32
SU021-7	0	---	0.1291	0.24	0.18	0.59	0.64	0.19
SU021-109	0.000342	15	0.1348	0.43	0.159	0.66	0.596	0.75
SU021-12	0.000014	38	0.1288	0.25	0.169	0.37	0.597	0.19
SU021-14	0.000025	100	0.129	0.9	0.269	1.06	0.623	0.69
SU021-18	0.000041	58	0.1296	0.66	0.267	0.79	0.623	0.51
SU021-16	0.000565	12	0.1385	0.47	0.16	0.72	0.65	0.38
SU021-19	0.00042	25	0.137	0.42	0.158	1.05	0.746	0.68
Inherited								
SU021-5	0.000093	24	0.1351	0.4	0.098	0.77	0.669	0.8
SU021-11	0.000024	35	0.1346	0.3	0.149	0.78	0.625	0.24
SU021-13	0.000268	19	0.1409	0.45	0.109	0.84	0.694	0.37
Rejected								
SU021-1	0.000736	17	0.1368	0.75	0.241	0.96	0.681	0.61
SU021-8	0.00073	9	0.1355	0.39	0.214	0.53	0.458	0.44
SU021-9	0.001025	4	0.1449	0.44	0.159	0.87	1.281	1.56
SU021-15	0.000088	10	0.1317	0.15	0.065	0.35	1.05	0.74

SU021-17	0.000303	12	0.134	0.35	0.189	0.5	0.734	0.96
SAMPLE S 2097� 13Ma								
SU022-15	0.000026	71	0.1305	0.64	0.206	0.86	0.647	1.6
SU022-4	0.00004	41	0.1302	0.93	0.129	1.6	0.645	2.4
Inherited								
SU022-8	0.000032	35	0.1332	0.35	0.095	0.69	0.699	1.6
SU022-19	0.000029	33	0.1323	0.32	0.142	0.51	0.754	2.9
SU022-16	0.00004	41	0.1317	0.45	0.177	0.66	0.667	1.9
SU022-12	0.000056	27	0.132	0.35	0.195	0.49	0.703	1.9
SU022-6	0.000011	100	0.1319	0.59	0.178	1.43	0.63	2.3
SU022-1	0.000021	100	0.1347	0.81	0.107	1.52	0.706	2.1
SU022-3	0.000032	50	0.1341	0.5	0.248	0.62	0.704	2.6
SU022-5	0.000067	41	0.1346	0.59	0.135	0.97	0.668	1.2
SU022-7	0.00003	71	0.1359	0.68	0.166	1.03	0.689	2.6
SU022-10	0.000192	26	0.1395	1.42	0.167	1.63	0.599	4.2
SU022-11	0.00004	29	0.1356	0.32	0.127	0.54	0.779	2.7
Rejected								
SU022-2	0.000047	27	0.1341	0.77	0.185	1.74	0.825	3.2
SU022-14	0.000258	19	0.1325	0.86	0.161	0.75	0.403	2.8
SU022-17	0.000257	25	0.1401	0.69	0.209	0.95	0.551	3.2
SAMPLE S 2096� 11Ma								
SU023-4.1	0.000003	100	0.1279	0.3	0.094	0.9	0.673	4.8
SU023-12	0.000023	50	0.1292	0.45	0.126	1	0.624	4.6
SU023-2	0.000007	100	0.1291	0.46	0.072	1.5	0.65	4.9
SU023-6.1	0.00003	45	0.1304	0.41	0.215	0.8	0.653	4.8
SU023-23	0.000035	35	0.1307	0.35	0.088	2.7	0.72	2.9
SU023-2.1	0.000003	100	0.1303	0.28	0.065	6.3	0.66	4.9
Inherited								
SU023-19.'	0.000008	58	0.1315	0.28	0.169	1.1	0.695	4.3
SU023-14	0.000057	32	0.1327	0.4	0.089	1.2	0.689	3.5
SU023-11	0.000063	58	0.1328	0.76	0.213	1.5	0.691	4
SU023-1	-0.000078	58	0.1314	0.86	0.157	1.9	0.675	4.7
SU023-13.'	0.000404	15	0.138	0.43	0.199	1.5	0.68	5.1
SU023-9	0.000163	33	0.1368	0.71	0.221	3.5	0.659	5.4
SU023-17	0.000432	18	0.1404	0.54	0.243	1	0.695	4.3
SU023-10.'	0.000316	15	0.1395	0.25	0.23	1.1	0.668	5.2
Rejected								
SU023-13	0.000538	9	0.1222	1.89	0.057	4.5	0.364	7.8
SU023-21	0.000111	20	0.1197	2.43	0.017	5.6	0.34	9.6
SU023-7	0.000731	13	0.1368	0.81	0.051	6.6	0.555	6.1
SU023-16	0.002426	6	0.1603	2.7	0.159	4.8	0.544	3.5
SU023-4	-0.00001	71	0.1283	0.39	0.069	1.3	0.608	5.2
SU023-6	0.000097	21	0.1302	0.85	0.04	4.9	0.666	4.1
SU023-5	0.000063	22	0.1308	1.14	0.029	4.5	0.625	4.9
SU023-24	0.000531	9	0.1386	0.32	0.071	2.8	0.633	3.9
SU023-23.'	0.000188	18	0.1342	0.42	0.217	0.8	0.606	4.1
SU023-8	0.001727	6	0.1549	0.92	0.219	0.8	0.348	7.3
SU023-25	0.000947	10	0.1452	0.46	0.111	1.3	0.536	4.3
SU023-20	0.001772	4	0.1561	0.55	0.162	1.6	0.409	9.2
SU023-15	0.002816	4	0.1699	0.18	0.176	0.4	0.669	5.5
SU023-12.'	0.000891	3	0.1457	0.41	0.102	1.7	0.619	6.7
SU023-18	0.001412	6	0.1527	2.31	0.192	3.4	0.33	5.1

SU023-3	0.000629	11	0.1431	1.11	0.136	1.8	0.65	5.9
SU023-7.1	0.000689	14	0.1446	0.54	0.274	1	0.689	3.4
SU023-19	0.003494	3	0.1836	0.25	0.214	0.6	0.501	4.7
SAMPLE S 2114� 11Ma								
SU029-10	0.000022	71	0.13	0.57	0.285	0.67	0.622	3.3
SU029-15	0.000063	24	0.1309	0.63	0.475	0.53	0.694	2.2
SU029-16	0.000143	35	0.1321	0.73	0.144	1.17	0.556	2.8
SU029-17	0.00014	33	0.1325	0.69	0.191	0.97	0.635	2.7
SU029-23	0.000058	50	0.1314	1.3	0.146	1.07	0.553	3.6
SU029-2	0	---	0.1314	1.01	0.114	0.96	0.62	2.8
SU029-13	-0.000028	41	0.1313	0.37	0.263	0.45	0.635	1.4
SU029-22	0.000067	38	0.1333	0.54	0.21	0.73	0.593	2.8
SU029-11	0.000313	18	0.137	0.53	0.153	0.85	0.614	3.2
Inherited								
SU029-3	0.000044	26	0.1341	0.3	0.181	0.98	0.651	3.1
SU029-20	0.000097	19	0.1348	0.29	0.167	0.45	0.621	2.8
SU029-7	0.0001	20	0.1363	0.47	0.236	0.85	0.66	0.8
SU029-6	0.000165	20	0.1377	0.37	0.207	0.51	0.621	2.9
SU029-1	0.000189	19	0.1398	1.01	0.1	0.78	0.601	3.9
SU029-19	-0.00009	58	0.1365	0.93	0.172	1.41	0.642	3.3
SU029-14	0.00004	50	0.1411	0.53	0.14	0.9	0.623	3.7
Rejected								
SU029-9	0.000198	25	0.1325	0.61	0.16	1.51	0.52	2.4
SU029-4	0.000039	45	0.1306	0.48	0.188	1.17	0.548	2.5
SU029-21	0.000357	15	0.1348	1.01	0.189	1.37	0.337	2.6
SU029-18	0.000222	21	0.1334	0.53	0.279	0.64	0.458	2.7
SU029-8	0.000711	24	0.1409	1.74	0.234	3.09	0.332	5.4
SU029-12	0.000138	32	0.1351	0.7	0.119	2.55	0.453	3.1
SU029-24	0.000169	38	0.1391	0.84	0.072	5.28	0.38	3.4
SU029-5	-0.000029	71	0.1375	0.64	0.119	1.16	0.48	4.3
SAMPLE S 2098� 7Ma								
SU034-1	0.000018	41	0.1309	0.41	0.338	0.32	0.789	2.8
SU034-1.1	0.000013	58	0.1315	0.49	0.257	0.44	0.784	2.4
SU034-2	-0.000017	50	0.1301	0.48	0.217	0.89	0.777	2.9
SU034-4	0.00006	32	0.131	1.24	0.132	0.71	0.737	4
SU034-5	0.00001	71	0.13	0.54	0.249	0.49	0.773	2.9
SU034-8	0.000093	26	0.1306	0.59	0.14	0.7	0.796	0.9
SU034-9	0.000226	17	0.1331	1.23	0.198	0.57	0.789	2.6
SU034-10	0.000017	50	0.1298	0.5	0.242	0.45	0.773	2.7
SU034-12	0.000003	100	0.13	0.59	0.176	0.4	0.786	2.6
SU034-13	0.00002	58	0.1298	0.62	0.241	0.56	0.804	1.8
SU034-15.1	0.000145	18	0.133	0.51	0.217	0.84	0.738	3.7
SU034-17	0.000029	35	0.1291	0.45	0.141	0.53	0.7	3.5
SU034-18	-0.000027	100	0.1303	1.24	0.254	1.11	0.813	3.2
SU034-20.1	0.000034	41	0.1291	0.57	0.144	0.66	0.76	2.5
Rejected								
SU034-3	0.01381	3	0.4023	1.14	1.016	0.92	0.325	1.2
SU034-6	0.001004	9	0.1481	0.58	0.328	0.49	0.735	1.5
SU034-7	0.017811	1	0.4179	0.25	1.306	0.82	1.315	3
SU034-11	0.000884	10	0.1347	1.63	0.166	2.04	0.547	4.1
SU034-14	0.001845	5	0.1625	1.04	0.365	1.26	0.533	4.7
SU034-15	0.000185	19	0.1321	0.54	0.225	1.2	0.62	4.5

SU034-16	0.003997	5	0.2012	1.31	0.481	0.94	0.553	3.1
SU034-19.·	0.000295	21	0.1381	0.79	0.284	0.63	0.686	2.2
SU034-19	0.001641	8	0.1538	0.81	0.322	1.1	0.577	1.6
SAMPLE S 2088� 8Ma								
SU037-15	0.000031	35	0.1286	0.35	0.03	1.2	0.523	1.8
SU037-18	0.000104	24	0.1296	0.44	0.108	1.3	0.508	2.5
SU037-12	-0.000016	50	0.1291	0.36	0.208	1.2	0.574	1.9
SU037-7	0.000032	38	0.1298	0.38	0.078	0.8	0.52	1.6
SU037-17	0	---	0.1294	0.71	0.131	1.2	0.556	1.6
SU037-26	0.000139	18	0.1313	0.7	0.04	1.1	0.579	2.7
SU037-14	0.00003	35	0.1301	0.58	0.038	1	0.52	2.1
SU037-4	0.000097	23	0.1312	0.41	0.159	1.7	0.534	2.4
SU037-29	-0.000011	71	0.1301	0.42	0.085	0.8	0.523	1.8
Inherited								
SU037-25	0.000224	14	0.1344	0.33	0.209	2.6	0.497	3.2
SU037-1	0.000107	26	0.1332	0.47	0.238	0.6	0.552	2.7
SU037-27	0.000038	50	0.1328	0.54	0.393	0.6	0.579	1.9
SU037-10	0.000103	30	0.1339	0.54	0.245	0.7	0.574	1.6
SU037-22	0.000009	71	0.1334	0.37	0.184	0.5	0.606	1.8
SU037-8	0.000232	19	0.142	0.43	0.194	1	0.606	2.1
Rejected								
SU037-24	0.000072	25	0.123	0.39	0.205	3.9	0.447	2.8
SU037-2	0.00007	24	0.1259	0.83	0.161	1	0.431	2.9
SU037-5	0.000081	24	0.127	3.56	0.202	8.3	0.466	5.9
SU037-30	0.00043	11	0.1316	0.98	0.249	5.8	0.375	3.9
SU037-20	0.000128	21	0.1282	0.43	0.102	3.5	0.469	5.6
SU037-28	0.000265	14	0.1303	0.36	0.218	0.5	0.425	4.2
SU037-3	0.00009	20	0.1288	0.34	0.27	0.9	0.494	4.3
SU037-11	0.00002	50	0.1284	0.66	0.211	1.2	0.473	2.9
SU037-9	0.00006	29	0.1289	0.44	0.172	1.8	0.483	2.3
SU037-13	0.00014	21	0.1306	0.57	0.265	1.1	0.474	2.3
SU037-6	0.000122	16	0.1306	0.3	0.049	1.6	0.501	3.2
SU037-16	0.00011	21	0.1307	0.4	0.147	2.5	0.559	0.8
SU037-23	0.000411	14	0.1352	0.46	0.033	1.5	0.454	2.1
SU037-19	0.000191	26	0.134	0.63	0.206	0.9	0.475	2.1
SU037-21	0.000158	21	0.1347	1.37	0.161	3.1	0.495	2
SAMPLE S 2077� 5Ma								
SU051-1	0.000034	33	0.1284	0.38	0.138	0.58	0.92	3.4
SU051-2	0.000038	50	0.1283	0.6	0.158	0.87	0.766	1.7
SU051-3	0.000543	12	0.1372	0.47	0.202	0.63	0.7	1.6
SU051-4	0.000035	29	0.1283	0.33	0.135	0.51	0.773	2.7
SU051-5	0.000076	20	0.13	0.33	0.155	0.49	0.755	1.8
SU051-6	0.000114	18	0.1299	0.38	0.134	0.59	0.787	3.3
SU051-7	-0.000008	71	0.1284	0.39	0.138	0.99	0.822	2.3
SU051-8	0.000046	41	0.1295	0.53	0.168	0.76	0.822	3.3
SU051-9	0.000147	16	0.1313	0.34	0.157	0.49	0.733	2.5
SU051-10.·	-0.000005	71	0.1278	0.31	0.195	0.73	0.769	2.7
SU051-11.·	-0.000006	71	0.1287	0.34	0.219	0.43	0.823	3
SU051-13	-0.000013	71	0.1292	0.49	0.197	0.65	0.837	2.7
SU051-14	-0.000006	100	0.1278	0.47	0.171	0.66	0.816	2.6
Rejected								
SU051-12	0.000944	6	0.144	0.34	0.203	0.51	0.74	1.6

SU051-8.1	0.000792	8	0.1422	0.71	0.194	1.98	0.587	4.5
SU051-9.1	0.000277	13	0.1344	0.39	0.188	0.53	0.722	2.2
SU051-10	0.000029	41	0.1286	0.42	0.148	0.64	0.767	1.7
SU051-11	0.001141	6	0.1547	1.15	0.231	2.29	0.69	1.8
SU051-12.·	0.001766	19	0.1534	2.25	0.336	3.39	0.621	4.6
SU051-13.·	0.000873	9	0.1407	0.45	0.333	0.5	0.622	1.4
SU051-14.·	0.001113	12	0.1503	0.89	0.233	1.96	0.89	3
SAMPLE S	2076� 6Ma							
SU052-2.1	0.000154	18	0.1299	0.36	0.258	0.43	0.77	2.1
SU052-3	0.000024	38	0.1277	0.36	0.15	0.53	0.772	2.5
SU052-4	0	100	0.1277	0.59	0.161	0.85	0.836	3.5
SU052-5	0	---	0.1286	0.42	0.165	0.6	0.807	1.4
SU052-6	0.000002	100	0.1287	0.29	0.157	0.66	0.84	3.2
SU052-8	0.000158	18	0.1299	0.39	0.202	0.51	0.795	1.9
SU052-13	0.000066	23	0.1293	0.36	0.163	0.51	0.878	2
SU052-14	0.000007	100	0.1291	0.5	0.159	0.73	0.797	4.3
SU052-16	0.000198	13	0.1319	0.33	0.17	0.47	0.774	2.2
SU052-18.·	0.000237	13	0.1319	0.33	0.261	0.44	0.73	2.8
Rejected								
SU052-1.1	0.000476	15	0.136	0.86	0.403	2.41	0.594	6.6
SU052-1	0.00003	45	0.1272	0.47	0.211	0.6	0.748	2.5
SU052-2	0.000483	21	0.1337	0.42	0.166	1.21	0.483	0.8
SU052-7	0.000421	12	0.1352	0.44	0.247	0.54	0.565	1.3
SU052-9	0.005167	3	0.2208	0.39	0.461	0.44	0.545	1.7
SU052-10	0.001111	10	0.1499	0.59	0.241	0.71	0.656	3.7
SU052-11	0.00012	19	0.129	0.33	0.186	0.45	0.767	2.1
SU052-12	0.003601	3	0.1867	1.16	0.444	1.54	0.722	3.5
SU052-15	0.001873	10	0.1597	1.58	0.253	2.79	0.844	1.8
SU052-15.·	0.001684	6	0.1535	1.39	0.258	2.21	0.655	0.8
SU052-16.·	0.000552	22	0.1408	1.39	0.281	2.63	0.735	2.9
SU052-17	0.00134	4	0.1499	0.29	0.261	0.85	0.712	3
SU052-17.·	0.00251	14	0.167	2.24	0.377	3.1	0.54	1.2
SU052-18	0.001278	92	0.1632	10	0.296	19	0.738	5.4
SU052-19.·	0.000026	18	0.1277	0.26	0.307	0.47	0.902	4
SU052-20.·	0.001699	10	0.1587	1.29	0.323	1.54	0.77	2
SAMPLE S	2092� 4Ma							
SU054-1	-0.000012	71	0.1302	0.44	0.13	0.74	0.646	0.35
SU054-2	0.000326	14	0.1342	0.41	0.084	0.84	0.679	0.33
SU054-4	0.000134	21	0.1315	0.44	0.072	0.97	0.721	0.36
SU054-6	0.000022	35	0.1295	0.29	0.075	1.58	0.756	0.27
SU054-7	0.000064	22	0.1306	0.32	0.255	0.39	0.707	0.84
SU054-8	-0.000031	58	0.1284	0.57	0.102	1.06	0.652	0.45
SU054-9	0.000104	20	0.1298	0.36	0.097	0.68	0.66	0.31
SU054-10	0.000006	100	0.1302	0.43	0.102	0.81	0.628	0.37
SU054-11	0.000052	38	0.1295	0.49	0.108	0.88	0.68	1.09
SU054-12	0.000154	20	0.132	0.44	0.073	0.97	0.61	0.34
SU054-15	0.000155	18	0.1322	0.37	0.085	0.75	0.72	0.82
SU054-17	0.000046	27	0.1305	0.36	0.108	0.64	0.624	0.28
Rejected								
SU054-3	0.000332	17	0.1331	0.49	0.116	0.87	0.609	0.42
SU054-5	0.000458	10	0.136	0.34	0.102	0.64	0.638	1.06
SU054-13	0.000391	14	0.135	0.48	0.109	0.88	0.621	0.38

SU054-14	0.001006	10	0.1309	1	0.206	3.55	0.427	0.59
SU054-16	0.000726	15	0.144	0.61	0.163	2.17	0.431	2.65
SAMPLE S 2091� 6Ma								
SU056-1	0.000145	21	0.1321	0.44	0.096	1.74	0.701	1.4
SU056-2	0.000044	35	0.132	0.41	0.094	0.8	0.777	1.3
SU056-3	0.00003	50	0.1304	0.49	0.066	1.13	0.786	0.9
SU056-4	0.000214	14	0.1328	0.33	0.08	1.38	0.76	1.5
SU056-5	0.000012	71	0.1289	0.44	0.077	1.04	0.792	0.6
SU056-6	0.00022	16	0.1329	0.75	0.098	1.22	0.755	0.7
SU056-7	0.000107	21	0.1309	0.38	0.081	0.79	0.729	0.9
SU056-9	0.000018	45	0.1289	0.33	0.119	0.58	0.773	0.9
SU056-10	0.000065	28	0.13	0.4	0.077	0.84	0.794	0.7
SU056-11	0.000102	26	0.1301	0.46	0.087	1.47	0.742	1
SU056-12	0	---	0.1291	0.36	0.071	0.81	0.677	2.5
SU056-13	0.000036	30	0.1293	0.32	0.081	0.67	0.719	1
SU056-16	0.000036	45	0.1304	0.47	0.068	1.08	0.705	1
SU056-17	0.000001	300	0.1304	0.4	0.068	0.9	0.746	1
SU056-18	0.000029	41	0.1297	0.39	0.068	0.88	0.743	0.6
Inherited								
SU056-15	0.000377	11	0.1392	0.36	0.127	1.2	0.703	1.2
Rejected								
SU056-8	0.000741	9	0.1393	0.4	0.101	1.31	0.639	0.9
SU056-14	0.000686	17	0.1399	0.73	0.133	3.14	0.705	1.6
SAMPLE S 2088� 5Ma								
SU057-1	0.00008	28	0.1291	0.43	0.103	0.82	0.548	3.2
SU057-2	0.000036	38	0.1296	0.76	0.095	0.78	0.585	4.3
SU057-3	0.000014	71	0.1298	0.45	0.091	4.44	0.603	2.1
SU057-4	0.000025	38	0.1298	0.33	0.083	1.33	0.561	4.1
SU057-5	0.000002	100	0.1302	0.5	0.071	0.59	0.619	3.5
SU057-7	0.00003	38	0.1296	0.36	0.071	0.81	0.582	3.6
SU057-8	0.000021	45	0.1296	0.35	0.102	0.67	0.615	2.2
SU057-9	0.000008	71	0.1294	0.36	0.067	1.36	0.579	3.4
SU-057-10	0.000065	32	0.1306	0.45	0.115	1.31	0.599	2.8
SU057-12	-0.000018	50	0.1278	0.67	0.103	0.69	0.564	2.4
Inherited								
SU057-5.1	0.000316	16	0.1374	0.8	0.121	3.65	0.677	2.7
SU057-6	0.000128	19	0.1329	0.33	0.164	1.19	0.624	3.1
SU057-11	0.00043	8	0.1376	0.59	0.126	1.94	0.681	1.4
SAMPLE S 2146� 9Ma								
SU059-9	0.000111	41	0.1331	0.78	0.069	1.73	0.658	0.7
SU059-19	0.000102	45	0.1335	0.81	0.138	1.32	0.809	1.4
SU059-14	0.000037	58	0.1331	0.64	0.167	0.95	0.763	1.4
SU059-15	0.00005	30	0.1338	0.41	0.434	0.47	0.786	1.5
SU059-20	-0.000099	45	0.1319	0.81	0.223	1.05	0.784	1.4
SU059-5	0.000362	15	0.1382	0.49	0.23	0.65	0.696	1.2
SU059-13	0.000082	33	0.1346	0.56	0.269	1.11	0.721	0.6
SU059-8	0.000392	17	0.1387	0.55	0.134	0.91	0.658	1.3
SU059-4	0.000174	24	0.1362	0.56	0.193	0.79	0.713	2.3
SU059-10	0.000413	13	0.1397	0.45	0.158	0.7	0.785	1.4
SU059-21	0.000008	100	0.135	0.52	0.15	1.62	0.703	1.8
SU059-7	-0.000104	41	0.1337	0.75	0.278	0.89	0.792	1.8
SU059-6	0.000027	71	0.1354	0.66	0.316	0.75	0.686	1.8

SU059-3	0.000627	20	0.1436	0.41	0.137	2.27	0.801	0.9
Rejected								
SU059-1.1	0.000051	50	0.1313	0.65	0.389	0.68	0.847	1.1
SU059-16	0.000484	13	0.1378	0.51	0.239	0.66	0.708	1.3
SU059-12	0.000526	18	0.1426	0.66	0.116	1.19	0.687	1.6
SU059-1	0.001096	9	0.1503	0.53	0.2	0.77	0.584	1.8
SU059-2	0.000911	11	0.1484	0.52	0.299	1.37	0.694	1.7
SU059-18	0.000629	14	0.1462	0.58	0.127	1	0.561	1.1
SU059-11	0.000865	13	0.1534	1.05	0.242	0.81	0.634	1.1
SU059-17	0.003336	5	0.186	0.46	0.25	0.66	0.601	2.1
SAMPLE K 2110� 13Ma								
KD154-9	0.000119	41	0.1293	0.83	0.246	2.5	1.016	0.9
KD154-18	0.000025	100	0.1287	0.93	0.24	1.2	1.082	2.6
KD154-19	0.000045	71	0.1305	0.88	0.205	1.2	1.024	2.1
KD154-21	0.000115	30	0.1315	0.62	0.351	0.7	1.023	2.2
KD154-14	0.000155	24	0.1331	0.59	0.22	0.8	1.074	1.5
KD154-20	-0.000038	71	0.1306	0.82	0.209	1.1	1.033	1.6
KD154-4	0.000184	17	0.1338	0.43	0.231	0.6	0.956	1.9
KD154-5	0	---	0.1318	1.09	0.144	2.7	0.995	1.2
KD154-1	0.000039	71	0.1324	0.8	0.236	1	0.927	1.9
KD154-22	0.000042	50	0.133	0.62	0.263	1.2	1.062	0.7
KD154-8	0.000488	23	0.1399	0.91	0.256	1.2	0.857	2.1
KD154-2	0.000266	16	0.137	0.5	0.252	1.4	0.941	2.5
Inherited								
KD154-13	0.000406	19	0.1392	1.22	0.216	1.9	1.098	1.9
KD154-11	-0.000012	100	0.1339	0.65	0.112	1.1	1.048	2.3
KD154-17	0.000156	41	0.137	0.93	0.17	6.6	1.076	2.6
KD154-23	0.000033	71	0.1359	0.74	0.102	1.4	0.982	3.8
KD154-7	0.000488	21	0.1502	0.81	0.182	2.7	1.077	1.9
Rejected								
KD154-16	0.002003	9	0.25	0.94	0.267	0.9	1.16	3.6
KD154-12	0.000772	11	0.1427	0.56	0.376	1.1	1.036	2.1
KD154-3	0.001152	7	0.148	0.42	0.233	1.6	0.999	2.7
KD154-15	0.000631	13	0.1458	1.39	0.147	1.9	0.923	3.4
KD154-10	0.001226	15	0.155	0.55	0.25	0.7	1.049	1.1
KD154-6	0.001868	7	0.1665	0.92	0.266	1.8	0.952	3.2
SAMPLE K 2098� 7Ma								
KL565-13	0.000004	100	0.1299	0.6	0.062	1.26	1.077	2.2
KL565-2	0.000198	20	0.1316	0.51	0.095	0.99	0.964	2.4
KL565-3	0.000011	100	0.1302	0.58	0.12	1	0.987	2.1
KL565-12	0.000004	100	0.1304	0.35	0.112	0.62	0.959	2.1
KL565-8	0.000023	45	0.1296	0.38	0.133	0.63	0.865	1.5
KL565-14	0.000046	45	0.1306	0.54	0.113	1.95	0.93	2.3
KL565-15	0.000041	30	0.1297	0.34	0.159	1.76	0.937	3.5
Rejected								
KL565-5	0.000052	27	0.1299	0.34	0.15	0.53	1.049	1.3
KL565-1	-0.000024	58	0.1277	0.51	0.104	2.19	0.948	2.4
KL565-4	0.000087	45	0.1339	0.73	0.193	1.03	1.004	2
KL565-7	0.000362	17	0.1362	0.5	0.162	0.77	0.944	3.3
KL565-6	0	---	0.1275	0.43	0.09	0.85	0.906	1.7
KL565-11	0.000059	20	0.1285	0.51	0.131	1.45	0.947	2.3
KL565-9	0.000019	71	0.1305	0.55	0.09	1.09	0.751	2.2

KL565-10	0.000037	35	0.1282	0.39	0.12	0.66	0.79	2.4
SAMPLE K 2078� 14Ma								
KL630-15	0.000037	58	0.1261	0.68	0.071	1.4	0.81	2.2
KL630-9	0.000131	41	0.1288	0.87	0.148	2.5	0.86	2.8
KL630-16	0.00004	71	0.1281	1.8	0.097	1.6	0.96	2
KL630-13	0.000021	100	0.128	0.86	0.091	1.6	0.82	0.8
KL630-7	0.000157	38	0.1299	0.88	0.068	3.8	0.86	1.8
KL630-14	0.000059	58	0.1293	0.83	0.08	1.7	0.97	0.9
KL630-5	0.000143	41	0.1307	0.9	0.076	1.9	0.83	1.5
KL630-2	0.000073	30	0.13	0.52	0.062	1.1	0.92	2.2
KL630-12	0.000101	45	0.1305	0.84	0.09	1.6	0.89	1.4
KL630-11	0.000029	58	0.1305	0.6	0.117	1	0.95	2.1
KL630-6	0.000104	45	0.1319	0.84	0.097	1.6	0.94	1.9
Inherited								
KL630-10	0.000024	71	0.1328	0.67	0.083	1.3	0.93	1.6
Rejected								
KL630-1	0.000127	50	0.1277	1.04	0.083	2.1	0.97	1
KL630-17	0.000296	20	0.1308	0.66	0.069	1.4	0.7	1.9
KL630-4	0.000356	20	0.1324	0.64	0.145	1.6	0.82	3.2
KL630-8	-0.000018	100	0.1327	0.78	0.086	1.5	0.74	2
KL630-3	0.000098	45	0.1387	1.27	0.301	1	0.89	1.7
SAMPLE K 2120 � 20Ma								
KL274-12	0.000106	45	0.1276	1.47	0.086	1.7	0.97	2.7
KL274-2	0.000278	30	0.1315	1.5	0.065	2.1	1	2.1
KL274-1	0.000558	18	0.1381	1.45	0.095	3.1	1.04	3.3
KL274-8	0.000084	41	0.1322	0.71	0.189	1	1.06	3
KL274-5	0.000019	100	0.1321	0.82	0.177	1.8	1.06	2.8
KL274-7	-0.000038	100	0.1326	1.12	0.076	2.5	1.08	2.4
KL274-15	0.00006	58	0.1341	0.83	0.085	1.7	0.86	1.9
KL274-6	0.000072	58	0.1348	0.9	0.239	1.1	1.01	2.3
KL274-10	0.000119	32	0.1368	0.66	0.138	1.1	1	2.2
Inherited								
KL274-18	0.000022	71	0.2068	0.55	0.14	1	1.44	2.3
Rejected								
KL274-17	0.000376	18	0.1334	0.68	0.096	1.3	0.98	1.8
KL274-13	0.003279	7	0.1804	0.67	0.209	2	0.81	2.5
KL274-16	0.002034	14	0.1687	2.56	0.164	1.1	0.72	3.8
KL274-14	0.002414	14	0.1791	2.25	0.27	3.7	1.08	1.6
KL274-4	0.010831	8	0.2883	3.9	0.505	5.1	1.2	3.3
KL274-11	0.002307	12	0.1791	2.12	0.218	4	0.99	1.1
KL274-3	0.006375	5	0.2391	1.7	0.372	1.5	0.43	1.3
SI-124	2089 � 12 Ma							
SI124-6	0.000076	50	0.1319	0.78	0.12	1.3	0.76	2.8
SI124-24	-0.000073	45	0.1284	1.13	0.05	4.3	0.81	2.6
SI124-27	-0.000041	32	0.1291	1.04	0.26	2	0.75	3.3
SI124-30	0.000038	50	0.1292	0.55	0.26	0.7	0.77	1.4
SI124-32	0.00001	100	0.1293	0.57	0.16	0.9	0.76	3.1
Rejected								
SI124-1	0.000502	7	0.1375	1.13	0.07	2.9	0.65	4
SI124-2	0.001589	4	0.1344	0.29	0.96	0.9	0.29	3.8
SI124-3	0.000097	18	0.1181	0.33	0.3	0.4	0.39	4.8

SI124-4	0.005356	4	0.1594	1.11	0.6	1	0.16	5.3
SI124-5	0.008797	2	0.2234	1.31	0.54	2.4	0.27	4.4
SI124-7	0.001325	6	0.1324	0.43	0.38	0.4	0.28	5.1
SI124-8	0.000603	9	0.1307	0.21	0.42	0.5	0.57	4.6
SI124-9	0.000744	10	0.1001	0.95	0.54	0.5	0.15	4.5
SI124-10	0.000128	19	0.1256	0.55	0.39	0.8	0.54	4.3
SI124-11	0.000279	10	0.1243	0.27	0.34	0.3	0.44	4.3
SI124-14	0.001223	4	0.1317	1.4	0.28	1.5	0.37	5.4
SI124-15	0.004857	4	0.1732	0.45	0.7	1.8	0.21	5.1
SI124-16	0.012091	2	0.2648	2.05	0.72	1.7	0.32	2.7
SI124-17	0.00063	8	0.1265	0.59	0.23	0.5	0.31	3.8
SI124-18	0.002317	5	0.1271	1.06	0.56	2.6	0.17	4
SI124-19	0.000659	12	0.0955	0.62	0.36	0.5	0.09	5.3
SI124-20	0.000234	12	0.1297	1.28	0.44	1.7	0.59	3.2
SI124-21	0.00079	9	0.1303	1.04	0.31	5	0.44	2.3
SI124-22	0.025403	1	0.4587	1.26	1.12	1.6	0.3	4.2
SI124-23	0.0004	13	0.1018	1.39	0.34	0.9	0.2	5.9
SI124-13	0.000592	9	0.1108	0.41	0.36	0.4	0.22	2.3
SI124-25	0.000209	11	0.1261	0.96	0.4	1.3	0.5	3.2
SI124-26	0.000612	8	0.1048	1.37	0.21	2.7	0.21	4.9
SI124-28	0.004359	3	0.1549	0.33	0.73	1.6	0.23	4.1
SI124-29	0.000543	7	0.1174	0.55	0.4	1.6	0.26	4.7
SI124-31	0.001838	6	0.1036	1.23	0.61	1.1	0.11	3.6
SI124-33	0.0246	1	0.4414	0.94	2.03	0.1	0.61	5.6
SI124-34	0.000812	8	0.1315	0.43	0.38	2.6	0.48	2.8
SI124-35	0.003918	3	0.1617	0.29	0.5	0.3	0.25	2.4
SI124-36	0.000706	7	0.1226	0.77	0.37	0.6	0.29	4.3

Errors are 1-sigma; Pbc and Pb* indicate the common and radiogenic portions, respectively.

(1) Common Pb corrected using measured 204Pb.

%206Pbc	ppmU	ppmTh	4-corrppm2	232Th/238l	�%	(1)206Pb/238UAge		(1)207Pb/2
0.03	248	105	81	0.437	0.27	2084	�26	2126
0.04	237	191	78	0.833	0.22	2088	�26	2133
0.05	221	93	73	0.433	0.28	2087	�26	2128
0.05	264	119	85	0.467	0.41	2059	�25	2137
0.02	231	134	77	0.597	0.26	2106	�26	2137
0.05	202	85	67	0.434	0.28	2113	�26	2136
0.13	171	89	55	0.538	0.32	2053	�26	2127
0.09	198	105	65	0.547	0.27	2081	�26	2130
0.04	179	85	59	0.492	0.29	2097	�27	2135
0.12	215	114	64	0.548	0.26	1928	�24	2094
0.12	237	105	76	0.456	0.27	2048	�25	2119
0.03	199	106	68	0.553	0.48	2153	�27	2132
0.05	164	80	55	0.504	0.31	2122	�27	2134
0.32	217	88	64	0.419	0.28	1893	�24	2105
0.48	264	127	71	0.498	0.49	1755	�22	2072
0.01	280	146	80	0.538	0.77	1854	�23	2116
0.26	343	217	78	0.654	0.57	1510	�21	2044
0.29	181	90	51	0.513	0.3	1840	�24	2053
0.18	239	153	81	0.66	1.34	2148	�21	2144
0.06	371	267	126	0.74	0.39	2154	�27	2135
0.09	153	88	53	0.6	0.59	2178	�23	2160
0.05	96	29	32	0.31	2.67	2106	�26	2157
0.09	310	133	105	0.44	0.47	2134	�20	2133
0.03	238	125	77	0.54	0.3	2065	�20	2128
0.16	170	69	57	0.42	0.4	2133	�22	2145
0.03	298	197	101	0.68	0.25	2146	�20	2143
0.08	181	86	61	0.49	0.36	2150	�22	2137
0.12	306	201	104	0.68	0.25	2148	�20	2145
0.02	357	170	116	0.49	0.26	2072	�26	2136
0.14	81	40	26	0.51	0.53	2070	�26	2127
0.13	164	106	55	0.67	0.34	2135	�22	2129
0.05	290	122	98	0.43	0.47	2144	�20	2140
0.04	210	121	71	0.6	0.32	2132	�21	2143
0.1	206	94	70	0.47	0.35	2146	�22	2141
0.8	149	50	51	0.34	0.83	2165	�24	2290
0.06	167	80	47	0.49	0.36	1834	�19	2097
0.16	268	105	86	0.4	1.12	2043	�38	2103
0.22	297	176	92	0.61	0.26	1994	�19	2118
0.09	203	102	67	0.52	0.34	2102	�21	2123
0.15	170	86	57	0.52	0.55	2122	�22	2125
0.25	218	222	69	1.05	0.26	2017	�20	2128
0.14	234	93	79	0.41	0.34	2132	�21	2132
0.24	188	82	60	0.45	0.84	2048	�21	2142
0.17	196	68	64	0.36	1.31	2070	�21	2145
0.2	210	124	69	0.61	1.29	2090	�69	2154
0.11	229	77	76	0.35	0.36	2106	�21	2155

	0.42	175	114	50	0.67	0.32	1847	�20	2144
	0.67	287	91	57	0.33	0.57	1346	�14	2129
	0.21	307	180	91	0.6	0.25	1902	�18	2093
	0.35	286	276	80	1	0.78	1817	�23	2087
	0.4	242	235	63	1	1.48	1712	�64	2107
	0.76	297	211	61	0.74	1.05	1386	�27	2125
	0.56	295	127	80	0.44	1.72	1766	�24	2167
	0.32	318	294	75	0.96	1.74	1565	�42	2051
	0.06	204	87	69	0.44	0.27	2139	�26	2121
	0.02	168	79	56	0.485	0.29	2127	�27	2139
--		214	101	72	0.49	0.4	2138	�26	2130
	0.12	211	92	70	0.449	0.26	2103	�26	2112
	0.06	147	69	50	0.481	0.53	2144	�27	2130
	0.07	105	52	36	0.512	0.36	2167	�29	2117
	0.06	174	94	58	0.559	0.27	2105	�26	2132
	0.26	207	114	63	0.572	0.25	1961	�24	2128
	0.17	157	70	51	0.461	0.3	2078	�33	2118
	0	153	51	52	0.345	0.33	2139	�27	2117
	0.04	214	95	69	0.46	0.26	2052	�25	2131
	0.79	74	32	24	0.443	0.46	2049	�30	2129
	0.2	240	76	71	0.328	0.27	1911	�24	2095
	0.05	181	84	61	0.48	0.28	2139	�27	2123
	0.07	183	71	62	0.401	0.29	2131	�26	2133
--		201	95	68	0.486	0.26	2132	�26	2121
	0.74	184	116	51	0.651	0.25	1809	�23	2151
	0.1	179	96	53	0.554	0.27	1908	�24	2131
	0.03	51	31	18	0.62	0.44	2202	�42	2144
--		90	42	32	0.48	0.38	2218	�40	2164
	0.01	222	124	75	0.58	0.22	2145	�37	2120
--		116	53	39	0.47	0.36	2137	�38	2118
	0.09	52	26	19	0.51	0.47	2305	�44	2111
	0.02	67	30	25	0.47	0.43	2327	�43	2142
	0	56	34	21	0.63	0.44	2294	�44	2116
	0.04	145	66	52	0.47	0.27	2240	�49	2074
	0.03	59	29	22	0.51	0.46	2291	�43	2132
	0.04	133	69	48	0.53	0.27	2261	�39	2116
	0	72	35	25	0.51	0.68	2203	�48	2061
	0.04	170	84	62	0.51	0.26	2277	�39	2134
	0.03	109	52	39	0.49	0.63	2269	�45	2126
--		90	73	33	0.84	0.64	2282	�41	2141
--		51	26	19	0.52	0.48	2273	�44	2142
--		95	88	34	0.96	0.28	2267	�40	2141
--		68	40	24	0.61	0.97	2261	�41	2148
--		80	51	29	0.67	0.35	2243	�41	2140
	0.03	195	145	56	0.77	0.46	1870	�33	2064
	0.11	70	44	25	0.64	0.38	2230	�41	2128

0.13	107	35	34	0.34	1.63	2010	�44	2168
--	71	21	23	0.31	0.83	2019	�49	2201
--	40	8	13	0.22	1.28	2041	�59	2130
--	59	25	19	0.44	1.12	2065	�66	2176
--	162	54	54	0.34	0.88	2119	�55	2179
--	54	14	18	0.27	1.03	2086	�55	2209
0.03	171	53	54	0.32	0.56	2011	�42	2171
0.13	124	27	39	0.23	0.69	2002	�43	2155
0.11	122	49	40	0.41	1.27	2069	�45	2155
--	133	34	38	0.27	1.35	1861	�40	2185
0.07	101	33	31	0.33	1.35	1964	�87	2133
--	279	130	44	0.48	2.02	1078	�49	
--	144	48	43	0.35	0.87	1933	�41	2169
--	482	136	127	0.29	0.55	1726	�36	2159
--	287	102	71	0.37	0.62	1623	�59	2162
0.44	190	91	37	0.49	1.48	1315	�29	2159
--	129	50	40	0.4	1.46	1971	�42	2177
0.08	104	27	33	0.27	0.71	1998	�57	2214
0.11	87	21	27	0.25	0.91	1971	�49	2169
0.09	438	224	120	0.53	0.27	1787	�34	2107
0.11	246	258	82	1.08	4.13	2107	�22	2100
--	189	141	63	0.77	0.31	2108	�23	2117
--	214	179	71	0.86	0.28	2118	�23	2123
--	184	194	61	1.09	1.02	2119	�36	2117
--	145	108	50	0.77	0.34	2168	�25	2121
0.17	161	121	52	0.77	0.32	2067	�24	2103
0.56	174	162	57	0.96	0.3	2098	�24	2109
--	273	310	91	1.17	1.03	2121	�32	2132
--	169	126	59	0.77	0.38	2188	�26	2137
--	99	78	34	0.82	0.42	2155	�28	2172
--	214	151	72	0.73	0.35	2132	�30	2150
0.03	213	203	76	0.99	0.89	2252	�27	2124
0.27	462	166	151	0.37	0.5	2071	�20	2110
0.2	114	65	37	0.59	0.4	2060	�26	2084
0.18	464	59	145	0.13	4.66	2000	�19	2105
0.17	581	277	188	0.49	0.52	2062	�19	2116
0.04	1031	518	327	0.52	0.32	2025	�22	2105
0.05	1123	552	324	0.51	0.32	1869	�18	2084
0.11	124	91	9	0.76	0.37	538	�8	635
0.98	154	48	43	0.32	0.41	1795	�21	2185
0.54	391	203	102	0.54	2.01	1708	�33	2114
0.14	619	120	84	0.2	0.71	948	�10	1938
0.27	310	66	82	0.22	0.77	1726	�18	2068
0.17	54	25.1	17.9	0.483	0.68	2119	�37	2128
0.07	44	19.4	14.6	0.46	0.77	2126	�40	2140
0.08	54	27.1	18.7	0.517	0.75	2172	�40	2140

	0.27	56	27.6	18.3	0.512	0.66	2090	�37		2104
--		95	40.6	31.9	0.441	0.57	2126	�32		2143
--		42	19	14	0.47	0.8	2116	�41		2141
--		63	32.2	21.5	0.528	0.62	2160	�36		2145
	0.21	53	21	18.1	0.407	0.77	2149	�39		2114
	0	55	29.1	18.6	0.544	1.16	2129	�37		2134
--		61	29	20.8	0.494	0.67	2162	�37		2114
--		101	62	34	0.635	0.48	2132	�31		2177
--		38	16.2	12.9	0.444	0.88	2155	�44		2199
	0.07	52	27	18.1	0.537	0.71	2188	�39		2113
--		82	29	27.8	0.364	0.63	2138	�33		2130
--		78	48.3	27.6	0.638	0.57	2221	�35		2174
--		106	65.4	35.7	0.638	0.47	2136	�30		2147
--		49	26.5	17.3	0.56	0.72	2220	�44		2136
	0	109	42.9	38.8	0.407	0.73	2234	�37		2104
	0.16			0			0		0	2111
	0			0			0		0	2145
	0.2	294	194	90	0.683	0.27	1973	�26		2139
	0.04	230	108	73	0.483	0.53	2038	�27		2120
	0.08	149	57	47	0.393	0.46	2004	�29		2125
	0.35	268	139	83	0.536	0.69	1996	�26		2105
	0.06	281	155	89	0.57	0.32	2029	�27		2120
	0.1	138	75	43	0.563	0.42	2010	�30		2122
	0.26	149	60	46	0.415	0.46	1990	�29		2122
	0.14	187	94	63	0.519	0.32	2147	�38		2122
	0.38	211	84	65	0.412	0.51	1992	�31		2105
	0.09	159	63	53	0.41	0.38	2117	�28		2110
	0	440	460	143	1.081	0.95	2071	�26		2147
--		135	67	43	0.511	0.41	2029	�29		2153
	0.02	186	73	61	0.407	0.4	2082	�29		2148
	0.1	173	101	57	0.604	0.62	2081	�29		2154
				0.00451						
	0.39	962	965	274	1.036	0.32	1845	�25		
	0.55	145	49	39	0.347	0.65	1756	�24		2107
	1.51	165	62	53	0.386	0.46	2056	�30		2118
	0.34	282	150	81	0.552	0.34	1863	�25		2129
--		172	89	51	0.532	0.87	1915	�29		2147
	0.16	80	53	26	0.69	1.41	2081	�23		2124
--		163	96	53	0.6	0.24	2072	�20		2136
	0.03	217	150	73	0.72	0.55	2130	�27		2117
	0.16	94	35	31	0.38	1.22	2080	�34		2128
	0.03	153	73	49	0.49	0.94	2038	�27		2129
	0.01	135	69	43	0.53	0.47	2020	�20		2124
	0.19	135	69	43	0.53	0.42	2033	�25		2121
	0.02	201	94	68	0.48	0.24	2124	�23		2121
	0	236	147	76	0.64	0.21	2056	�18		2130
--		110	54	35	0.51	0.32	2021	�34		2132
	0.06	158	102	50	0.66	0.61	2032	�19		2121
	0.02	140	105	46	0.77	0.73	2074	�33		2130

	0.19	74	42	24	0.59	0.35	2051	�23		2162
--		100	50	32	0.52	0.33	2032	�21		2134
	0.47	547	178	164	0.34	1.15	1929	�39		2080
--		145	111	47	0.79	1.52	2065	�24		2121
	0.27	150	78	46	0.53	0.27	1965	�19		2128
	0.15	139	84	43	0.62	0.75	1993	�19		2124
	0.1	151	119	50	0.81	0.24	2096	�27		2120
	0.06	309	98	98	0.33	0.36	2026	�32		2119
	0.03	214	119	68	0.58	0.22	2043	�23		2124
	0.09	173	112	52	0.67	0.97	1923	�18		2119
	0.49	297	76	75	0.26	0.31	1672	�21		2089
	0.08	262	192	88	0.76	0.25	2130	�20		2120
	0.01	557	318	181	0.59	0.13	2073	�23		2131
	0.07	877	465	282	0.55	0.11	2053	�21		2133
	0.08	832	344	274	0.43	0.14	2094	�19		2149
	0.09	83	39	28	0.49	0.37	2136	�23		2167
	0.12	152	79	52	0.54	0.48	2150	�20		2172
--		2573	1025	37	0.41	0.08	108	�1		184
	0.04	521	233	150	0.46	0.56	1860	�18		1852
	1.15	143	72	44	0.52	0.48	1971	�25		2141
	0.35	46	6	14	0.13	1.7	1926	�48		2188
	0.07	90	27	19	0.31	0.59	1437	�21		2191
	0.03	200	62	68	0.321	0.81	2160	�16		2179
	0.08	465	127	154	0.282	0.89	2105	�12		2169
	0.03	642	326	213	0.525	0.82	2104	�11		2180
	0.08	473	135	153	0.294	0.38	2059	�12		2178
	0.03	748	419	246	0.579	0.16	2087	�11		2173
	0.05	426	128	138	0.309	0.55	2062	�13		2188
	0.18	769	619	155	0.831	0.4	1356	�19		2116
	0.08	807	542	235	0.693	0.47	1881	�13		2172
	0.11	829	643	217	0.801	0.45	1711	�12		2171
	0.17	867	360	192	0.429	0.35	1481	�11		2140
	0	1221	877	408	0.742	0.39	2119	�13		2186
	0.06	638	503	179	0.815	0.42	1825	�10		2162
	0.1	888	776	242	0.903	0.57	1779	�15		2160
	0.02			0			0		0	2175
	0.91	511	423	158	0.855	4	1982	�11		2187
	0.19	635	172	170	0.28	3.18	1752	�50		2172
	0.19	347	59	109	0.175	0.76	2001	�31		2131
	0.03	458	67	152	0.152	0.28	2102	�21		2128
	0.31	277	31	88	0.117	1.04	2027	�21		2124
	0.07	423	103	139	0.25	0.24	2092	�21		2134
	0.03	278	49	92	0.181	0.34	2103	�22		2131
	0.1	707	146	240	0.213	1.23	2151	�21		2138
--		313	49	103	0.161	0.34	2081	�21		2135

	0.03	667	167	223	0.259	0.2	2119	�20	2131
--		623	301	205	0.498	5.51	2093	�25	2140
	0.02	359	75	119	0.215	0.69	2100	�21	2127
	0.02	442	87	144	0.202	0.53	2074	�21	2122
	0.01	378	65	123	0.177	0.71	2065	�21	2143
	0.35	322	92	101	0.294	0.4	2010	�24	2132
	0.2	345	73	112	0.219	0.82	2060	�21	2130
	0.09	700	186	222	0.275	0.19	2029	�20	2137
	0.12	604	202	200	0.346	1.25	2099	�20	2137
	0.06	340	48	110	0.147	0.33	2064	�21	2137
	0.03	385	87	128	0.233	1.08	2109	�21	2148
	0.54	137	55	40	0.413	0.38	1866	�22	2177
	0.01	1166	351	385	0.311	0.55	2098	�20	2131
	0.02	89	22	31	0.251	0.92	2175	�23	2153
	0.03	215	82	67	0.395	0.3	1998	�16	2163
	0.01	238	60	81	0.262	1.05	2158	�16	2160
--		90	26	29	0.296	1.3	2076	�22	2172
	0.06	85	22	29	0.271	0.52	2162	�22	2166
	0.1	90	21	31	0.247	0.54	2184	�23	2184
	0.01	129	36	44	0.288	0.42	2146	�19	2188
	0.04	155	36	50	0.242	0.82	2048	�17	2184
	0	532	175	170	0.34	0.71	2042	�30	2170
	0.08	96	25	32	0.266	0.77	2133	�21	2173
	0.09	73	17	24	0.238	0.58	2102	�23	2194
	0.04	254	94	82	0.381	0.49	2053	�15	2173
--		743	148	97	0.206	2.74	913	�5	949
	0.14	239	71	66	0.308	0.31	1806	�13	2168
	0.06	347	91	104	0.272	1.05	1927	�13	2179
	0	1159	338	376	0.302	0.8	2067	�13	2164
	0.04	47	24	16	0.53	0.81	2209	�30	2178
	0.09	72	54	25	0.78	0.58	2195	�25	2149
	0.64	60	22	20	0.37	0.84	2112	�27	2093
	0.06	39	18	13	0.48	0.93	2114	�32	2136
--		46	17	16	0.37	0.92	2193	�30	2198
	0.18	72	33	25	0.47	1.16	2179	�25	2148
	0.09	185	109	63	0.61	0.38	2136	�16	2196
	0.26	61	42	21	0.71	0.63	2164	�26	2147
	0.14	60	16	21	0.28	0.92	2208	�27	2143
	0.25	79	50	27	0.65	0.58	2160	�24	2149
	0.59	34	17	12	0.52	0.96	2119	�34	2160
	0.57	80	55	27	0.72	0.56	2164	�24	2167
	0.03	162	143	55	0.91	0.42	2146	�18	2172
	0.13	57	29	20	0.52	0.76	2162	�28	2166
	0.12	32	17	11	0.56	0.96	2167	�36	2157
	0.06	71	40	25	0.57	0.66	2237	�26	2160
	0.04	51	24	18	0.49	0.81	2246	�30	2165
	0.03	76	41	26	0.55	0.64	2188	�25	2150

	0.06	123	116	42	0.98	0.57	2168	�23	2156
--		72	40	23	0.57	0.43	2038	�27	2168
	0.1	170	66	58	0.4	0.3	2167	�21	2176
	0.03	53	14	18	0.26	0.63	2146	�29	2177
	0.41	119	307	37	2.67	0.26	2018	�22	2209
	0.37	76	159	25	2.17	1.2	2116	�26	2219
	0.67	158	131	52	0.85	1.46	2096	�22	2228
	0.69	125	116	41	0.96	0.93	2098	�22	2244
--		416	95	37	0.24	0.62	641	�6	696
	0.03	443	101	138	0.23	0.42	1988	�20	1997
	1.35	104	19	30	0.19	0.84	1885	�26	2246
	0.59	99	231	28	2.4	2.03	1849	�22	2252
	1.63	191	582	33	3.15	0.75	1182	�16	2296
	1.5	90	174	29	1.98	0.32	2032	�24	2299
	0.43	163	87	54	0.55	0.43	2091	�17	2114
	0.47	161	75	55	0.48	0.44	2142	�18	2120
	0.14	258	128	86	0.51	0.35	2117	�15	2131
	0.05	148	53	49	0.37	0.51	2104	�18	2133
	0.21	171	85	57	0.51	0.44	2100	�17	2143
	0.11	136	52	46	0.4	0.53	2126	�19	2144
	0.09	162	80	52	0.51	0.45	2061	�17	2145
	0.03	157	44	53	0.29	0.57	2150	�18	2153
	0	148	54	51	0.38	0.53	2160	�19	2153
	0.01	177	53	61	0.31	0.52	2181	�17	2154
	0.04	182	66	62	0.37	0.46	2139	�17	2154
	0.23	184	106	61	0.59	0.42	2105	�16	2162
	0.15	212	76	69	0.37	0.44	2069	�16	2163
--		144	51	48	0.37	0.53	2123	�18	2165
--		235	147	78	0.65	0.33	2100	�15	2169
	1.05	316	87	68	0.28	1.33	1445	�33	2139
	2.49	1013	122	42	0.12	1.37	306	�14	
	0.35	240	110	59	0.47	2.1	1621	�47	2165
	0.29	728	548	246	0.78	0.38	2141	�22	2141
	0.08	179	89	58	0.52	0.29	2072	�21	2138
	0.03	405	150	133	0.38	1.03	2087	�23	2144
	0.03	500	326	168	0.67	0.46	2134	�19	2148
	0.05	371	180	123	0.5	0.19	2106	�19	2148
	0.01	994	1037	335	1.08	0.1	2134	�17	2132
--		502	226	166	0.47	0.17	2102	�18	2137
	0.1	392	160	134	0.42	0.19	2156	�19	2144
	0.53	263	112	84	0.44	0.76	2049	�19	2166
	0.38	297	239	96	0.83	0.2	2068	�19	2178
	4.14	204	75	52	0.38	2.1	1676	�27	2331
	6.45	227	60	60	0.27	0.67	1733	�17	2360
	0.57	663	562	197	0.88	0.13	1919	�16	2151

1.35	484	295	152	0.63	0.57	2003	�17	2188
2.19	466	307	140	0.68	0.43	1929	�26	2386
2.77	61	14	20	0.24	0.68	2058	�29	2530
1.51	196	63	64	0.33	0.34	2073	�22	2287
0.01	1365	1502	424	1.14	0.1	1988	�19	2139
2.61	779	115	134	0.15	2.3	1180	�22	2209
1.49	188	71	60	0.39	0.33	2041	�21	2415
3.09	564	385	43	0.7	0.38	554	�7	1669
0.12	1063	1113	316	1.08	0.19	1913	�19	2158
8.66	95	18	24	0.2	0.52	1642	�23	2635
0.02	1176	1305	382	1.15	0.09	2068	�17	2133
--	74	27	24	0.38	0.46	2089	�27	2186
--	91	42	30	0.48	0.4	2118	�24	2177
0.07	89	31	31	0.35	0.77	2172	�25	2159
0.05	91	39	31	0.45	0.4	2132	�24	2181
--	174	64	57	0.38	0.31	2087	�21	2183
--	62	22	21	0.36	0.53	2141	�28	2154
0.03	454	76	155	0.17	0.24	2157	�18	2164
--	55	16	19	0.3	0.58	2141	�28	2181
0.05	187	60	63	0.33	0.31	2127	�21	2168
0.02	86	29	29	0.36	0.45	2140	�25	2184
0.04	163	57	55	0.36	0.32	2143	�21	2148
0	64	22	21	0.35	0.51	2111	�27	2185
--	23	6	8	0.28	0.93	2176	�41	2160
0.07	26	8	9	0.33	0.87	2101	�38	2186
0.13	68	19	23	0.29	0.54	2110	�27	2196
0.19	40	13	14	0.32	0.69	2182	�62	2132
--	95	38	32	0.41	0.42	2129	�24	2189
--	37	11	12	0.3	0.71	2092	�32	2219
0.07	47	12	16	0.27	0.69	2166	�31	2219
0.02	1114	348	421	0.32	0.13	2349	�21	2130
0.12	258	131	82	0.52	0.22	2034	�19	2112
0.06	475	253	153	0.55	0.16	2053	�37	2108
0.02	478	206	154	0.45	0.17	2057	�18	2110
0.07	340	194	108	0.59	0.19	2029	�21	2122
0.02	378	303	121	0.83	0.17	2043	�26	2115
0.02	227	109	73	0.5	0.25	2052	�19	2127
0.02	372	181	119	0.5	0.19	2040	�18	2113
0	732	430	239	0.61	0.13	2076	�21	2088
0.01	591	296	191	0.52	0.48	2062	�20	2096
0.01	406	182	130	0.46	0.2	2042	�18	2117
--	222	101	72	0.47	0.24	2067	�19	2126
0	468	232	151	0.51	0.16	2058	�18	2120
0.07	165	44	53	0.28	0.94	2055	�45	2151
0.13	96	45	32	0.48	0.39	2096	�24	2156
0.14	253	83	83	0.34	0.27	2084	�20	2191
0.02	343	33	105	0.1	0.33	1970	�34	2081
--	277	163	88	0.61	0.54	2040	�35	2082

--	217	124	68	0.59	0.22	2009	�35	2084
0.17	296	150	94	0.53	0.31	2032	�36	2093
--	225	83	73	0.38	0.26	2068	�36	2147
0.12	246	187	86	0.78	1.31	2194	�76	2151
0.17	155	141	49	0.94	0.44	2027	�35	2152
--	224	167	81	0.77	0.33	2261	�40	2184
0.52	112	61	36	0.56	0.3	2073	�37	2214
0.17	161	78	48	0.5	0.28	1914	�34	2119
0.08	276	263	83	0.98	0.18	1931	�33	2134
0.32	166	120	48	0.74	0.24	1881	�33	2141
0.49	115	78	33	0.7	0.29	1863	�34	2142
0.5	156	127	47	0.84	0.88	1925	�34	2162
0.22	150	41	45	0.28	0.48	1918	�32	2104
0.18	310	79	98	0.26	0.36	2023	�31	2105
0.45	270	171	84	0.65	0.28	1991	�31	2105
0.22	148	96	46	0.67	0.38	2009	�34	2106
0.16	211	47	65	0.23	0.45	1985	�31	2107
0.17	394	101	121	0.26	0.33	1964	�29	2110
0.08	273	74	85	0.28	0.33	1996	�30	2114
0.15	317	372	102	1.21	0.38	2044	�31	2115
0.18	301	64	91	0.22	0.39	1949	�30	2119
0.21	393	297	126	0.78	0.22	2042	�30	2119
0.52	188	141	59	0.78	0.31	2004	�32	2125
0.14	244	94	78	0.4	0.34	2035	�32	2126
0.02	359	98	113	0.28	0.33	2012	�30	2127
0.13	156	44	51	0.29	0.42	2093	�33	2127
0.29	360	346	119	1	0.77	2108	�31	2134
0.03	216	86	66	0.41	0.39	1973	�32	2135
0.5	96	100	29	1.08	0.45	1975	�37	2137
0.42	104	196	33	1.94	0.38	2024	�37	2160
0.18	173	72	99	0.43	0.38	3288	�48	3522
0.14	110	54	67	0.51	0.49	3447	�56	3622
11.12	718	1039	141	1.49	0.73	1329	�26	2037
0.45	257	100	70	0.4	0.35	1787	�29	2084
0.55	103	55	30	0.55	0.49	1857	�34	2098
0.23	347	104	100	0.31	0.88	1862	�28	2099
0.35	241	70	69	0.3	0.41	1856	�30	2104
0.19	298	186	86	0.65	0.28	1876	�29	2113
4.42	361	139	106	0.4	0.44	1893	�29	2146
1.03	168	108	49	0.66	0.72	1885	�32	2149
--	69	32	23	0.48	0.56	2096	�39	2163
2.88	159	78	53	0.51	0.35	2118	�34	2167
--	112	80	33	0.73	0.42	1893	�34	2172
2.28	162	114	56	0.73	0.31	2185	�34	2172
14.11	138	81	52	0.61	0.37	2348	�39	2193
0.09	190	139	65	0.76	0.33	2158	�34	2227
0.35	380	141	106	0.38	0.32	1818	�28	2312

0.01	385	254	116	0.68	1.53	1942 �30	2087
0.07	139	57	45	0.43	0.33	2056 �30	2091
0.04	591	379	188	0.66	0.2	2033 �28	2093
0.06	371	167	118	0.47	0.19	2034 �27	2094
--	224	78	73	0.36	0.28	2065 �29	2094
0.02	253	95	81	0.39	0.95	2049 �28	2095
0.01	400	206	131	0.53	0.58	2076 �29	2096
0.04	276	132	89	0.49	0.99	2058 �28	2098
0.07	374	144	115	0.4	0.23	1965 �27	2112
0.21	206	111	71	0.55	0.95	2163 �31	2115
0.2	415	174	130	0.43	0.85	2008 �28	2115
--	209	104	65	0.52	0.42	1984 �28	2122
--	436	166	114	0.39	0.6	1707 �38	2085
0.25	412	119	93	0.3	0.25	1508 �40	2088
0.1	121	126	39	1.08	0.3	2054 �31	2075
0.06	169	95	54	0.58	0.29	2047 �29	2087
--	150	152	49	1.05	0.26	2060 �30	2094
0.14	232	191	74	0.85	0.23	2029 �28	2098
0.04	168	206	54	1.27	0.25	2065 �30	2099
0.13	169	128	54	0.78	0.26	2032 �29	2099
0.04	626	364	197	0.6	0.27	2015 �27	2100
0.07	145	129	47	0.92	0.69	2047 �30	2103
--	312	249	101	0.83	0.33	2071 �28	2105
0.13	339	284	101	0.86	0.53	1924 �29	2109
0.18	129	114	42	0.91	0.31	2063 �30	2114
0.22	344	372	108	1.12	0.18	1999 �27	2125
0.27	42	64	13	1.57	0.49	2030 �37	2135
0.67	149	153	47	1.06	0.27	2009 �29	2145
0.24	239	258	67	1.12	0.91	1833 �26	2139
0.14	219	186	60	0.88	0.38	1796 �32	2074
0.32	139	141	41	1.05	0.49	1898 �28	2105
0.23	275	278	82	1.04	0.78	1925 �35	2118
0.33	465	422	133	0.94	0.65	1856 �25	2127
0.44	131	152	39	1.2	0.29	1910 �29	2150
0.63	123	180	32	1.51	0.3	1724 �26	2152
--	263	97	87	0.38	0.44	2110 �29	2103
--	73	64	25	0.9	0.38	2136 �45	2123
--	354	151	117	0.44	0.61	2094 �28	2116
0.07	135	73	45	0.56	0.31	2133 �31	2124
0.12	287	66	100	0.24	2.4	2192 �30	2130
0.02	350	165	115	0.49	0.2	2082 �28	2118
0.02	471	136	160	0.3	0.99	2147 �28	2120
0.06	164	65	56	0.41	1.16	2157 �32	2136
0.05	461	147	158	0.33	0.2	2164 �29	2146
--	51	52	17	1.07	0.45	2169 �37	2158
0.04	348	226	117	0.67	1.31	2133 �31	2158

0.01	173	97	57	0.58	1.08	2101	�30	2148
0.01	380	270	127	0.73	0.21	2112	�28	2160
--	229	224	75	1.01	0.22	2092	�29	2146
0.01	206	148	66	0.74	0.23	2041	�28	2153
0.02	169	108	53	0.66	0.52	2022	�29	2156
0.04	357	149	109	0.43	0.49	1968	�27	2139
0.06	458	402	150	0.91	0.47	2085	�32	2207
0.29	313	104	95	0.34	0.28	1952	�27	2172
0.1	539	381	217	0.73	2.01	2482	�32	2145
0.04	767	388	280	0.52	5.49	2286	�32	2170
0.24	2024	214	570	0.11	0.17	1828	�41	2067
0.02	171	109	48	0.66	1.05	1836	�26	2152
0.21	710	290	193	0.42	0.7	1770	�30	2128
0.13	248	91	59	0.38	0.37	1566	�475	2090
0.21	202	80	46	0.41	0.8	1525	�23	2176
0.24	295	135	66	0.47	0.2	1498	�23	2166
0.26	2725	234	475	0.09	0.14	1192	�21	2038
1.36	829	214	120	0.27	1.69	1008	�28	2267
0.02	843	237	63	0.29	0.17	541	�11	549
--	161	143	51	0.92	0.41	2032	�29	2112
--	159	89	48	0.58	0.51	1936	�31	2113
0.04	563	112	169	0.21	0.21	1932	�26	2118
0.09	326	327	102	1.03	0.29	1997	�27	2126
0.09	329	155	110	0.49	1.09	2114	�28	2136
0.03	425	246	129	0.6	1.43	1950	�42	2145
0.06	300	196	102	0.68	0.19	2146	�29	2150
0.14	417	288	141	0.71	0.64	2142	�31	2212
0.01	161	54	58	0.35	0.82	2274	�32	2329
--	308	171	131	0.58	0.2	2586	�40	2570
0.01	334	270	126	0.84	0.18	2346	�31	2571
--	291	154	83	0.55	3.05	1850	�72	2081
0.15	526	65	125	0.13	1.01	1572	�26	2128
--	76	44	22	0.6	0.38	1884	�29	2130
0.05	403	275	117	0.71	0.97	1871	�32	2142
0.59	364	87	61	0.25	4.33	1147	�19	2155
0.14	389	44	116	0.12	0.52	1926	�29	2157
0.21	363	159	111	0.45	0.45	1961	�32	2159
0.17	118	21	13	0.18	0.46	803	�18	2196
0.01	385	8	167	0.02	0.69	2638	�34	2893
0.1	167	106	56	0.66	0.44	2124	�25	2073
0.04	99	49	33	0.51	0.65	2110	�30	2077
0.56	56	62	19	1.14	0.66	2109	�36	2080
0.02	144	128	46	0.92	0.45	2057	�26	2080
0.03	128	62	41	0.5	0.58	2051	�27	2084
--	158	117	50	0.76	0.76	2027	�25	2089
0.03	137	63	44	0.48	0.56	2053	�27	2089
--	547	310	184	0.58	0.53	2126	�37	2091

0.04	313	266	103	0.88	0.32	2084	�22	2101
0	310	137	98	0.46	0.38	2015	�21	2102
0.68	239	179	76	0.77	0.34	2027	�22	2102
--	96	75	32	0.8	0.55	2081	�30	2104
0	203	87	66	0.44	0.82	2056	�24	2105
0.03	225	105	73	0.48	0.43	2070	�23	2106
--	112	52	36	0.48	0.62	2063	�29	2108
0.02	230	105	74	0.47	0.43	2044	�23	2108
--	151	100	47	0.68	0.49	1992	�26	2128
0	69	45	18	0.68	0.76	1716	�31	2144
0.42	752	103	71	0.14	2.33	675	�30	1882
0.19	64	26	21	0.43	0.6	2121	�30	2056
--	145	90	50	0.64	0.39	2168	�71	2057
0.07	156	156	49	1.03	0.32	2007	�22	2073
0.28	261	115	79	0.46	0.29	1955	�18	2074
0.02	156	85	52	0.57	0.63	2125	�23	2074
0.77	160	129	49	0.83	0.35	1974	�22	2080
0.26	143	91	48	0.66	0.37	2125	�23	2082
0.14	264	208	86	0.81	1.02	2070	�38	2084
0.12	171	88	55	0.53	0.35	2059	�22	2085
0.05	128	86	42	0.7	0.38	2096	�24	2085
0.05	134	64	44	0.49	0.41	2102	�24	2098
0.3	82	57	26	0.72	0.45	2018	�26	2099
0	116	71	38	0.63	0.41	2091	�24	2106
0.08	124	79	38	0.65	0.39	1970	�23	2109
--	127	66	42	0.53	0.39	2107	�23	2114
0.13	154	131	49	0.88	0.33	2022	�22	2115
0.08	94	60	30	0.66	0.39	2036	�49	2123
0.19	148	153	50	1.07	0.78	2123	�60	2126
--	153	66	54	0.45	1.12	2196	�65	2143
			0.29%					
0.26	133	157	43	1.22	0.61	2049	�77	2006
0	95	52	33	0.57	0.46	2210	�69	2075
1.91	159	111	49	0.72	1.21	1968	�21	2085
0.62	222	139	64	0.65	0.28	1875	�18	2089
1.02	189	100	57	0.55	0.33	1937	�20	2110
6.15	117	92	39	0.81	1.73	2134	�40	2137
0.06	557	505	169	0.94	0.43	1950	�19	2080
0.03	577	527	185	0.94	0.21	2040	�19	2080
0.01	553	729	176	1.36	0.51	2037	�24	2083
0.06	435	669	144	1.59	1.16	2100	�21	2089
--	467	388	150	0.86	0.56	2046	�20	2092
0.2	553	444	168	0.83	0.44	1954	�49	2094
0.43	631	587	205	0.96	0.23	2070	�20	2096
--	760	464	248	0.63	0.43	2074	�19	2106
0.11	478	390	149	0.84	0.85	1995	�19	2128

1.07	857	774	125	0.93	0.59	1011	�12	1904
0.05	431	332	115	0.8	0.57	1742	�25	2050
0.03	520	587	130	1.17	0.93	1649	�52	2061
0.15	643	820	183	1.32	0.46	1844	�17	2079
0.07	616	622	177	1.04	0.72	1865	�18	2089
0.08	438	435	125	1.03	0.25	1846	�23	2094
0.33	444	357	71	0.83	1	1101	�39	2099
0.72	630	430	179	0.71	1.16	1839	�67	2100
0.16	491	148	122	0.31	0.59	1642	�17	2105
5.76	423	356	159	0.87	2.35	2337	�33	2135

--	131	112	42	0.88	0.46	2059	�27	2133
0	144	129	48	0.93	0.41	2126	�26	2140
0.05	122	102	42	0.86	0.47	2152	�28	2141
0.03	285	300	96	1.09	0.29	2138	�22	2143
0.03	90	56	31	0.64	0.6	2183	�31	2143
0.05	131	76	43	0.6	0.52	2092	�27	2145
0.01	209	98	71	0.48	0.44	2141	�24	2148
0	161	141	54	0.9	0.4	2114	�25	2152
--	146	130	49	0.92	0.4	2137	�26	2154
--	109	78	34	0.74	0.55	1976	�28	2154
0.03	206	149	69	0.74	0.39	2111	�24	2154
0.12	133	59	44	0.46	0.57	2092	�27	2157
--	94	61	32	0.67	0.59	2126	�31	2160
--	162	146	56	0.93	0.38	2193	�26	2161
--	83	64	28	0.8	0.87	2149	�31	2162
--	105	79	34	0.78	0.53	2047	�28	2193

0.08	134	139	43	1.07	0.37	2067	�24	2082
0.15	297	221	90	0.77	0.26	1955	�19	2086
0.07	170	138	55	0.84	0.35	2077	�23	2086
--	221	205	72	0.96	0.83	2085	�21	2096
0.6	282	279	85	1.02	0.25	1946	�19	2104
0.48	171	158	56	0.95	0.59	2089	�22	2109
0.02	214	216	68	1.04	0.5	2028	�21	2111
0.13	189	164	60	0.9	0.31	2034	�21	2112
--	119	88	39	0.77	0.73	2063	�24	2121
--	91	61	29	0.69	0.51	2058	�27	2128

--	61	48	20	0.8	0.59	2113	�31	2051
1.21	388	399	91	1.06	0.45	1561	�15	2070
1.15	150	96	37	0.66	0.41	1625	�19	2073
4.61	314	133	62	0.44	0.3	1336	�14	2104
0.55	184	122	55	0.68	0.76	1914	�53	2115
0.78	264	221	70	0.87	1.21	1737	�17	2116
4.54	150	148	36	1.02	0.33	1601	�19	2122
0.45	261	256	78	1.01	0.25	1930	�19	2137
3.16	264	169	66	0.66	0.73	1656	�36	2149
1.2	218	221	68	1.04	1.18	1994	�34	2162
1.5	91	97	31	1.09	0.48	2130	�29	2166
3.81	508	345	77	0.7	1.45	1044	�16	2175

0.13	222	63	71	0.292	1.42	2048 �21	2062
0.16	45	29	14	0.667	0.73	2008 �34	2069
0.05	191	78	58	0.421	0.4	1955 �36	2074
0.12	153	61	51	0.411	0.74	2108 �24	2075
0.09	131	44	42	0.348	1.86	2033 �24	2077
0.06	162	49	52	0.314	0.51	2044 �23	2083
0.04	61	53	20	0.894	0.58	2048 �31	2092
0.05	123	68	41	0.57	0.74	2102 �25	2095
0.02	111	32	37	0.296	1.6	2090 �26	2098
0.11	60	40	20	0.682	0.64	2085 �32	2100
--	119	48	36	0.42	0.52	1946 �24	2102
--	60	46	20	0.792	0.59	2090 �32	2129
0.26	146	37	29	0.259	0.56	1331 �37	2072
0.04	71	43	18	0.625	4.9	1664 �38	2083
--	121	50	32	0.427	1.4	1755 �22	2093
0.39	539	110	173	0.21	0.26	2045 �17	2081
0.05	778	202	259	0.27	0.19	2112 �17	2082
0.12	391	165	129	0.43	0.68	2086 �18	2085
0.13	685	135	224	0.2	0.23	2078 �17	2086
--	353	159	115	0.46	0.58	2075 �18	2086
0.15	303	55	98	0.19	1	2066 �19	2087
0.02	470	90	154	0.2	0.28	2088 �18	2088
0.02	725	212	239	0.3	0.19	2092 �21	2088
0.01	594	145	191	0.25	0.23	2047 �17	2091
--	739	209	242	0.29	0.19	2080 �17	2093
0.18	315	100	102	0.33	0.88	2061 �19	2110
--	264	159	85	0.62	0.26	2055 �19	2126
0.18	419	76	167	0.19	0.28	2457 �20	2076
0.16	1844	1479	590	0.83	0.38	2041 �27	2086
0.15	991	386	288	0.4	0.58	1878 �15	2090
0.19	207	103	67	0.52	0.64	2051 �25	2057
0.06	281	153	91	0.56	0.29	2058 �24	2062
0.17	148	57	48	0.4	0.45	2072 �28	2072
0.3	150	59	47	0.41	0.42	1990 �26	2073
0.06	194	98	63	0.52	0.36	2059 �26	2080
0.03	183	104	59	0.59	0.36	2065 �26	2082
0.05	372	115	118	0.32	0.3	2023 �23	2086
0.03	384	283	119	0.76	0.22	1987 �22	2088
0	439	166	131	0.39	0.67	1925 �21	2089
0.07	227	134	74	0.61	0.31	2069 �25	2092
0.26	149	90	47	0.63	0.4	2004 �27	2093
0.15	276	139	83	0.52	1.29	1938 �23	2094
0.02	177	66	56	0.38	0.91	2016 �26	2095
--	212	70	68	0.34	0.39	2041 �25	2100
0.47	176	77	50	0.45	0.38	1852 �24	2107
0.19	197	66	52	0.35	1.1	1733 �22	2114

0.1	345	66	108	0.2	1.22	1995	�41	2070
0.24	436	103	138	0.24	0.31	2017	�22	2072
0.05	223	52	72	0.24	0.43	2068	�26	2078
0.06	225	55	74	0.26	0.46	2087	�26	2082
0.48	406	148	131	0.38	0.28	2051	�23	2085
0.23	297	77	89	0.27	0.35	1928	�23	2085
0.86	349	84	114	0.25	0.34	2076	�24	2087
0.07	836	139	263	0.17	0.42	2010	�26	2087
0.07	498	69	150	0.14	0.37	1944	�21	2091
0.09	213	62	66	0.3	1.15	1974	�25	2093
0.77	411	109	130	0.27	0.44	2016	�26	2098
0.05	146	79	45	0.56	0.45	1996	�28	2099
0.15	277	59	91	0.22	0.41	2081	�24	2100
0.13	230	55	71	0.25	0.43	1988	�24	2100
0.13	335	83	100	0.26	0.36	1923	�29	2109
0.01	273	57	86	0.22	0.41	2011	�24	2109
0.13	949	79	73	0.09	0.81	554	�6	1951
0.58	174	62	43	0.37	1.02	1624	�30	2071
0.16	919	160	355	0.18	1.85	2394	�70	2081
0.39	952	131	268	0.14	0.27	1829	�22	2088
3.16	219	49	71	0.23	0.43	2059	�25	2133
0.76	355	93	83	0.271	0.32	1558	�20	2061
0.18	248	84	76	0.352	0.35	1965	�31	2076
0.01	137	41	42	0.307	0.45	1962	�27	2079
0.07	151	47	46	0.321	0.82	1964	�27	2085
0.31	145	32	43	0.23	0.48	1908	�44	2087
0.05	287	64	91	0.23	0.34	2019	�26	2089
0.03	260	56	82	0.221	0.37	2020	�43	2092
--	354	86	110	0.251	0.6	1995	�26	2092
0.09	231	73	74	0.325	0.37	2054	�33	2093
--	100	27	32	0.276	0.57	2061	�30	2094
0.01	694	121	220	0.179	0.5	2021	�25	2097
--	148	41	48	0.285	0.43	2050	�32	2097
0.23	627	151	213	0.248	0.45	2147	�28	2099
0.34	423	41	52	0.099	0.79	857	�22	2108
0.03	181	58	54	0.331	2.95	1908	�42	2109
0.29	188	59	57	0.325	0.37	1962	�26	2116
0.57	171	109	48	0.658	1.7	1824	�29	2150
--	134	62	44	0.482	0.36	2079	�28	2102
0.04	356	99	113	0.286	0.55	2027	�38	2087
0.06	252	87	80	0.358	0.81	2022	�33	2098
0.1	440	161	137	0.377	0.5	1997	�27	2089
--	329	80	101	0.252	1.09	1975	�25	2101
0.66	349	142	106	0.421	3.6	1943	�24	2112
0.02	196	41	59	0.214	0.43	1926	�30	2110
1.01	313	61	98	0.203	0.34	1997	�25	2128

0.08	428	107	125	0.258	0.26	1889 �24	2093
0.9	370	82	102	0.229	1.56	1794 �25	2138
0.19	320	106	82	0.341	2.15	1693 �31	2110
0.69	391	129	87	0.34	6.27	1482 �63	2093
0.03	230	65	76	0.291	0.43	2088 �22	2076
0.03	658	112	207	0.176	1.15	2013 �18	2086
0.02	952	164	306	0.178	1.05	2051 �18	2090
0.18	579	140	181	0.25	0.28	1999 �18	2104
0.3	503	159	152	0.327	0.48	1946 �19	2118
0.7	353	91	83	0.268	1.78	1555 �22	2111
--	107	49	35	0.477	0.54	2100 �26	2069
--	136	67	45	0.511	1.96	2088 �25	2079
0.01	174	100	56	0.594	0.38	2053 �33	2080
0.07	243	134	81	0.569	0.33	2102 �22	2085
0.05	168	74	54	0.458	0.42	2052 �23	2087
0	213	95	69	0.462	0.39	2060 �22	2089
0.03	134	71	44	0.548	0.45	2075 �25	2093
--	158	82	52	0.538	0.42	2085 �24	2094
--	128	62	42	0.499	0.48	2062 �25	2095
0.05	305	174	99	0.59	0.3	2060 �20	2099
--	122	60	40	0.502	0.49	2075 �25	2100
0.02	143	63	47	0.453	0.47	2075 �24	2103
--	142	65	46	0.472	0.45	2052 �24	2103
0	132	55	43	0.426	0.49	2063 �24	2106
0.07	127	63	43	0.509	1.23	2143 �25	2074
0.08	121	59	40	0.499	0.5	2079 �25	2077
0.15	106	52	34	0.505	0.52	2041 �26	2079
0.11	111	54	37	0.497	0.53	2089 �26	2081
0.06	147	64	47	0.447	0.46	2051 �24	2089
0.07	127	64	42	0.525	1	2106 �25	2093
0.05	96	39	31	0.421	0.6	2062 �27	2052
0.23	49	13	16	0.263	0.98	2022 �34	2064
0.1	69	20	22	0.3	0.78	2041 �30	2071
0.01	169	76	55	0.468	0.43	2065 �23	2074
0.05	216	96	69	0.46	0.73	2037 �29	2078
0.03	149	79	48	0.55	0.41	2038 �23	2079
0.24	63	22	21	0.364	0.77	2086 �31	2080
0.01	254	111	81	0.452	1.03	2024 �21	2080
--	116	45	37	0.4	0.54	2050 �26	2083
0.02	236	74	75	0.322	0.97	2036 �21	2083
--	99	43	32	0.447	0.56	2085 �27	2085
--	138	62	44	0.461	0.47	2025 �24	2091
--	160	76	52	0.487	0.42	2072 �23	2093
0.02	142	65	45	0.472	0.45	2026 �24	2095
0.02	265	165	84	0.643	0.58	2018 �25	2095
0.01	303	141	97	0.478	0.35	2046 �20	2098
0.06	99	38	31	0.398	0.58	2024 �26	2098

	0.03	143	63	46	0.457	0.47	2051	�24	2098
--		147	68	47	0.48	0.45	2040	�24	2103
	0	120	54	37	0.468	0.52	1984	�25	2108
	0	167	83	56	0.511	0.42	2110	�24	2121
	0.04	104	82	34	0.812	0.45	2086	�26	2124
	0.13	65	31	21	0.498	0.66	2083	�31	2126
	0.13	88	44	30	0.513	0.84	2133	�28	2129
	0.02	348	71	116	0.211	7.74	2107	�20	2132
	0.29	195	128	60	0.678	0.88	1988	�22	2133
	0.19	130	76	41	0.601	0.75	2023	�35	2134
	0.24	128	70	42	0.566	0.46	2086	�25	2134
--		72	36	23	0.507	0.63	2053	�29	2134
	0.13	71	44	23	0.651	0.59	2072	�30	2134
	0.02	151	97	50	0.663	1.5	2082	�24	2139
--		122	60	41	0.51	0.92	2114	�26	2143
	0.02	127	61	42	0.494	0.48	2101	�25	2148
--		80	39	26	0.502	0.59	2073	�28	2160
	0.19	171	109	52	0.654	6.29	1944	�30	2141
	0.1	116	52	34	0.461	0.49	1883	�23	2143
--		99	45	33	0.47	0.51	2120	�25	2135
	0.38	81	28	27	0.36	0.59	2125	�27	2167
--		80	32	27	0.41	0.59	2120	�27	2153
	0.19	70	26	22	0.38	0.64	1986	�27	2114
	0.61	180	102	54	0.59	0.36	1940	�18	2130
	0.26	78	38	23	0.5	2.97	1931	�26	2098
	0.07	96	50	33	0.54	0.5	2169	�26	2087
	0.09	65	38	22	0.59	0.59	2165	�31	2140
--		96	54	33	0.58	0.48	2146	�25	2137
	0.27	349	219	111	0.65	0.46	2025	�24	2166
--		168	119	56	0.73	1.19	2104	�20	2143
	0.05	216	169	67	0.81	0.31	2000	�18	2140
	0.78	152	106	49	0.72	0.39	2065	�21	2116
	0.08	167	125	54	0.78	0.36	2074	�20	2139
--		80	42	26	0.55	0.56	2097	�28	2112
	0.15	246	218	82	0.92	0.29	2116	�18	2110
--		156	82	51	0.54	0.41	2094	�21	2123
--		124	89	42	0.74	0.43	2147	�24	2133
	4.82	96	65	32	0.69	0.47	2093	�27	2092
	0	47	53	15	1.17	0.64	2035	�35	2055
	0.96	429	82	133	0.2	0.43	1985	�52	2063
--		252	317	73	1.3	1.2	1870	�26	2086
	0.13	454	25	145	0.06	0.67	2034	�19	2088
	0.9	495	139	152	0.29	0.28	1968	�18	2112
	0.31	363	54	118	0.15	0.43	2064	�26	2156
--		54	39	18	0.74	0.62	2068	�32	2166
	0.1	119	49	40	0.43	0.51	2149	�25	2172

	2.73	244	154	54	0.65	0.29	1472	�49	2032
	3.83	1556	385	374	0.26	1.65	1589	�18	2040
	1.29	478	43	158	0.09	1.25	2102	�19	2084
	0.21	309	422	138	1.41	3.71	2704	�41	2120
	1.1	185	219	57	1.22	0.67	1991	�21	2122
	0.45	360	246	106	0.71	0.55	1894	�18	2126
	1.39	178	187	47	1.09	1.16	1735	�20	2168
	0.39	181	68	52	0.39	0.44	1857	�20	2099
	0.26	216	104	68	0.5	1.26	2007	�88	2071
	0	212	93	65	0.45	0.23	1963	�34	2079
	0.08	287	185	92	0.67	0.49	2045	�38	2081
	0.17	115	45	37	0.4	0.35	2061	�37	2081
	0.19	203	110	62	0.56	2.67	1967	�93	2083
	0.14	436	256	135	0.61	1.87	1987	�41	2085
	0.08	330	226	105	0.71	0.32	2022	�35	2085
	0.17	434	368	130	0.88	0.15	1923	�33	2088
	0.22	496	397	149	0.83	0.24	1936	�33	2090
	0.02	216	107	68	0.51	0.23	2021	�35	2093
	0.17	488	389	154	0.82	0.27	2019	�35	2103
	0.23	173	158	53	0.94	1.13	1964	�44	2145
	0.59	57	18	21	0.33	0.59	2279	�124	2147
	0.1	254	127	84	0.51	0.25	2090	�36	2152
	0.08	167	105	52	0.65	0.25	2011	�35	2157
	0.11	138	140	44	1.05	0.44	2021	�36	2162
	0.5	266	161	77	0.62	0.34	1864	�70	2071
	0.09	427	421	119	1.02	3.3	1811	�87	2087
	0.52	38	16	13.4	0.43	0.82	2202	�45	2130
	0.09	41	30	14.8	0.76	0.73	2236	�46	2153
	0.12	26	16	9.3	0.62	1.58	2230	�51	2155
	0.37	34	16	12	0.5	0.82	2236	�47	2164
	0.31	214	43	72.7	0.21	1.06	2147	�31	2165
	0.2	31	21	10.6	0.71	0.77	2158	�46	2189
--		59	31	20.8	0.54	0.62	2224	�40	2192
	0.09	75	38	26.7	0.53	0.55	2244	�38	2201
	0.08	163	129	56.7	0.81	0.8	2186	�40	2221
	0	57	44	19.4	0.8	0.59	2163	�40	2227
	0.09	36	22	12.5	0.64	0.77	2196	�46	2242
	0.13	49	22	17.4	0.46	0.72	2236	�42	2244
	0.13	28	18	10.6	0.66	0.89	2319	�53	2248
	0.17	34	22	11.8	0.66	0.75	2183	�46	2255
	0.08	43	15	15.2	0.35	0.85	2242	�45	2262
	0.11	73	56	24.5	0.8	0.54	2131	�37	2262
--		47	18	16.3	0.39	1.62	2202	�42	2263
	0.2	32	15	11.1	0.48	0.86	2197	�47	2265
--		44	24	15.5	0.56	0.72	2217	�44	2277
--		31	19	11.2	0.63	0.97	2236	�54	2280

--	55	42	19.8	0.79	0.6	2254 �41	2281
0.49	65	34	22.7	0.54	0.59	2190 �38	2299
1.14	15	7	5.3	0.45	1.23	2220 �62	2051
0.44	25	19	8.8	0.79	1.46	2250 �53	2118
1.41	65	29	22.6	0.47	0.99	2190 �39	2229
0.17	92	31	29	0.35	0.83	2034 �29	2059
0.01	255	86	82	0.35	0.48	2056 �21	2068
0.04	216	158	69	0.76	0.41	2046 �23	2082
0.05	50	18	17	0.37	1.11	2110 �37	2089
--	57	19	18	0.35	1.15	1995 �36	2091
0.12	99	42	31	0.44	0.77	2032 �29	2121
0.02	282	124	89	0.45	0.66	2008 �21	2133
0.03	163	124	53	0.78	0.45	2075 �24	2158
0.07	140	60	44	0.45	0.57	2011 �38	2195
--	391	186	77	0.49	0.33	1327 �13	1335
0.06	609	285	97	0.48	0.28	1098 �14	1149
0.02	246	139	44	0.58	0.69	1218 �21	1434
0.21	552	501	81	0.94	0.23	1016 �23	2079
0.02	375	195	110	0.54	0.75	1900 �18	2091
0.04	286	154	86	0.55	0.38	1934 �20	2129
0.13	369	277	106	0.78	0.66	1856 �29	2161
--	156	66	48	0.44	0.58	1962 �23	2214
0.13	128	15	39	0.12	1.22	1972 �27	2244
0.01	263	201	84	0.79	0.35	2037 �21	2079
0.08	91	74	28	0.84	0.59	1972 �28	2123
0.02	109	50	36	0.48	0.66	2085 �27	2129
--	140	82	44	0.61	3.01	1995 �60	2131
0.01	209	52	69	0.26	0.66	2103 �24	2169
0.02	118	88	38	0.77	1.07	2043 �26	2216
0.03	76	45	26	0.62	0.72	2152 �32	2221
0.17	49	16	15	0.33	1.18	2024 �36	2042
0.06	370	316	58	0.88	1.48	1082 �23	2101
0.03	345	214	93	0.64	0.6	1758 �18	2119
0.08	316	255	92	0.83	0.32	1879 �19	2125
0.04	297	146	79	0.51	0.52	1729 �30	2130
0.01	533	436	150	0.85	0.35	1827 �19	2152
0.98	215	94	67	0.453	0.32	2002 �28	2171
0.44	27	14	9	0.526	0.9	2026 �47	2186
0.21	37	20	12	0.565	1.25	2087 �43	2188
0.41	51	30	17	0.602	1.15	2073 �38	2198
0.13	92	52	31	0.582	0.43	2105 �32	2199
0.12	44	18	14	0.414	0.73	2081 �40	2199
0.48	46	18	15	0.398	0.78	2102 �57	2205
0.05	98	66	33	0.697	0.41	2152 �34	2218
--	99	55	33	0.573	0.47	2115 �33	2224

--	72	35	24	0.51	0.55	2089	�35	2231
--	54	25	18	0.486	0.64	2157	�39	2239
0.02	112	87	37	0.802	0.72	2108	�32	2246
0.06	90	27	26	0.314	0.53	1857	�44	2146
0.74	170	59	38	0.358	0.39	1489	�22	2174
1.32	71	39	20	0.571	0.52	1798	�31	2184
0.38	84	45	22	0.552	0.55	1748	�29	2204
1.21	129	45	37	0.359	0.8	1842	�28	2209
1.51	75	48	25	0.658	0.53	2085	�36	2213
0.25	39	16	12	0.435	0.82	1922	�40	2216
0.13	144	67	45	0.48	0.4	2018	�30	2228
--	89	34	27	0.392	0.54	1933	�32	2234
1.53	372	173	82	0.48	0.25	1478	�21	2269
0.06	118	41	40	0.356	0.42	2143	�29	2142
0.07	111	42	37	0.388	0.43	2119	�29	2143
0.11	69	32	22	0.485	1.47	2065	�31	2147
--	168	118	55	0.728	0.65	2095	�35	2147
0.19	114	50	37	0.456	0.41	2083	�28	2147
0.47	146	97	47	0.689	1.01	2063	�26	2159
0.15	79	30	26	0.391	0.9	2096	�42	2169
--	152	82	50	0.56	0.32	2110	�27	2174
--	93	44	29	0.491	0.42	2021	�28	2178
0.06	79	31	26	0.404	0.5	2072	�30	2182
--	54	38	19	0.723	0.55	2220	�36	2229
--	51	19	18	0.393	0.61	2260	�36	2256
0.32	86	40	26	0.481	0.47	1914	�28	2113
2.12	23	7	8	0.302	1.84	2228	�144	2288
0.11	123	45	38	0.376	0.4	1962	�26	2054
0.08	147	64	45	0.446	0.6	1981	�26	2056
0.1	269	135	81	0.517	0.47	1940	�29	2073
--	152	51	49	0.346	0.38	2036	�26	2079
0.09	226	99	68	0.45	0.95	1939	�24	2080
0.23	473	290	155	0.633	0.2	2085	�24	2083
--	170	54	53	0.325	0.87	1989	�25	2091
0.05	196	81	61	0.425	0.29	1981	�28	2092
--	186	70	61	0.39	0.58	2079	�26	2092
0.01	221	122	67	0.569	0.67	1936	�24	2095
0.01	260	116	80	0.46	0.25	1965	�24	2095
0.41	397	210	131	0.547	0.2	2101	�24	2111
0.13	114	132	39	1.196	0.32	2174	�29	2150
0	130	82	43	0.649	0.76	2106	�27	2159
--	66	44	21	0.689	0.45	1994	�30	2165
0.6	139	63	38	0.469	0.62	1774	�24	2063
0.62	207	86	59	0.431	0.27	1846	�23	2072
0.16	296	127	86	0.445	0.23	1888	�23	2083
0.17	259	115	76	0.458	0.25	1883	�23	2091

	0.41	232	102	69	0.455	0.28	1925	�24	2109
	2.53	213	176	55	0.853	0.23	1694	�21	2111
	0.24	74	81	24	1.137	2.11	2086	�102	2125
	0.85	319	73	87	0.235	2.63	1774	�26	2126
	0.38	123	47	34	0.396	0.39	1805	�34	2151
--		459	246	129	0.554	1.91	1830	�35	2174
	0.2	314	117	104	0.38	0.23	2101	�27	2097
	0.05	167	54	55	0.33	0.34	2094	�29	2087
	0.15	119	45	39	0.39	0.37	2079	�30	2101
	0.01	203	105	67	0.54	0.28	2109	�28	2101
	0.02	222	73	73	0.34	0.3	2079	�28	2081
	0.65	172	57	56	0.34	0.35	2062	�28	2092
	0.18	388	112	118	0.3	0.24	1960	�25	2106
	0.62	313	104	110	0.34	0.25	2209	�28	2113
	0.58	264	75	82	0.3	0.28	1982	�26	2125
	0.42	252	118	76	0.48	0.24	1948	�26	2127
	3.28	264	145	66	0.57	0.24	1639	�26	2203
	0.42	502	244	144	0.5	0.54	1860	�24	2105
	1.75	94	56	30	0.61	0.36	2016	�30	2105
	2.24	259	102	80	0.41	0.44	1984	�27	2113
	3.59	346	117	113	0.35	0.23	2081	�33	2164
	12.26	540	140	87	0.27	0.21	1111	�16	2219
	1.04	283	141	90	0.51	0.23	2024	�26	2110
	1.12	377	106	118	0.29	0.24	1996	�26	2118
	1.17	422	128	105	0.31	0.22	1641	�21	2069
	0.09	468	133	127	0.29	0.22	1771	�27	2092
	5.77	698	162	94	0.24	0.19	938	�23	2000
	1.09	412	135	94	0.34	0.21	1517	�24	2119
	0.36	204	68	61	0.35	0.53	1938	�26	2131
	0.02	533	83	175	0.16	0.26	2085	�26	2098
	0.08	475	62	153	0.14	0.28	2050	�26	2102
	0.01	131	100	43	0.78	0.3	2083	�29	2118
	0.3	834	155	255	0.19	0.33	1960	�24	2096
	0.14	640	441	98	0.71	0.37	1059	�19	1972
	0.26	639	57	141	0.09	2.21	1477	�20	2061
	0.34	185	107	53	0.6	0.26	1860	�25	2091
	0.15	536	318	98	0.61	0.15	1248	�17	2029
	1.1	459	217	61	0.49	0.37	922	�17	1984
	0.55	553	78	119	0.15	0.26	1437	�19	2054
	0.8	625	81	150	0.13	0.52	1584	�22	2059
	5.24	622	114	60	0.19	0.34	685	�13	1994
	0.06	329	161	104	0.51	0.24	2017	�27	2109
	0.05	328	150	107	0.47	0.4	2071	�31	2097
	0.74	281	127	89	0.47	0.27	2024	�27	2136
--		427	186	137	0.45	0.23	2045	�27	2116
	0.18	380	126	120	0.34	0.28	2017	�27	2097
	0.65	298	128	97	0.44	0.5	2076	�28	2113

	0.64	418	224	128	0.55	0.21	1969	�26	2109
--		356	132	115	0.38	0.55	2059	�27	2104
	0.21	187	81	61	0.45	0.36	2057	�29	2107
	0.06	367	162	117	0.46	0.22	2035	�26	2104
	0.04	383	183	123	0.49	0.63	2041	�26	2098
	0.11	347	172	112	0.51	0.21	2053	�26	2105
	0.04	376	202	123	0.56	0.22	2084	�27	2092
	1.11	290	141	78	0.5	0.56	1752	�24	2176
	2.96	292	117	96	0.41	0.73	2088	�28	2212
	0.18	241	37	76	0.16	0.39	2017	�21	2113
	0.03	509	112	151	0.23	0.83	1907	�18	2095
	0.02	196	196	65	1.03	0.51	2100	�22	2114
	0.15	235	144	78	0.63	0.24	2113	�21	2123
	0.06	97	50	32	0.54	0.4	2118	�25	2119
	0.12	247	179	83	0.75	0.59	2124	�22	2130
	0.06	204	29	66	0.14	0.42	2049	�21	2098
	0.04	224	102	69	0.47	0.26	1972	�20	2128
	0.03	341	187	112	0.57	0.36	2087	�20	2150
	0.01	814	530	274	0.67	0.53	2129	�24	2157
	0.18	382	265	131	0.72	1.44	2162	�21	2223
	0.23	405	134	110	0.34	1.03	1768	�27	2122
	0	141	54	46	0.394	0.43	2082	�28	2104
	0.08	148	59	49	0.416	0.41	2109	�28	2102
--		142	56	47	0.406	0.41	2085	�28	2090
	0.13	216	95	68	0.453	0.32	2014	�32	2099
	0	74	26	24	0.362	0.57	2056	�31	2100
	0.16	271	122	81	0.464	0.31	1931	�25	2117
	0.01	141	64	47	0.467	0.39	2105	�29	2094
	0.11	164	104	54	0.652	0.32	2081	�28	2105
	0.09	98	40	32	0.418	0.48	2099	�30	2091
--		101	42	33	0.433	0.48	2086	�30	2126
	0.79	205	124	67	0.624	1.65	2073	�27	2125
	0.11	169	76	55	0.464	0.36	2082	�28	2104
	0.02	131	51	44	0.399	0.51	2144	�31	2095
--		120	45	41	0.382	0.48	2175	�30	2090
	0.28	111	64	36	0.596	0.43	2059	�29	2065
--		174	54	57	0.323	0.42	2086	�28	2115
	1.39	136	56	44	0.423	3.06	2046	�28	2127
	1.45	220	46	69	0.217	1.74	2013	�27	2155
	0.04	106	1	34	0.01	3.44	2066	�19	2084
	0.21	121	53	37	0.45	0.52	1942	�18	2095
	0.06	333	335	111	1.04	0.95	2112	�14	2114
	0.02	544	178	170	0.34	1.35	1997	�11	2101
--		561	112	181	0.21	0.33	2059	�12	2108
	0.24	268	66	80	0.26	0.45	1930	�13	2110

	0.05	192	109	61	0.58	0.37	2033	�25		2079
	0.22	269	147	84	0.56	1.27	1995	�13		2135
	0.19	244	96	80	0.41	0.71	2087	�14		2126
--		90	45	30	0.52	0.56	2105	�21		2165
--		152	78	48	0.53	0.42	2038	�16		2138
	0.22	378	43	115	0.12	2.69	1959	�19		2122
	0.31	394	26	126	0.07	2.9	2044	�12		2122
--		123	59	40	0.5	0.5	2056	�18		2125
	0.01	282	232	87	0.85	0.26	1971	�13		2130
	0.01	301	179	96	0.61	0.9	2030	�13		2131
	0.42	106	23	38	0.22	0.73	2232	�20		2290
	0.2	321	92	70	0.3	0.38	1465	�10		2075
	0.38	541	157	103	0.3	0.47	1294	�17		2041
	0.01	1001	376	269	0.39	0.75	1754	�25		2073
	0.97	695	455	140	0.68	2.14	1357	�112		1786
	0.03	318	96	94	0.31	0.4	1904	�13		2102
	0.04	376	71	98	0.2	0.42	1711	�16		2103
	0.32	98	77	36	0.81	0.78	2274	�35		2119
	0.02			0			0		0	2113
	0.19	175	73	51	0.43	0.43	1873	�15		2129
	0.03	157	65	45	0.43	2.11	1837	�15		2074
	0.04	86	129	28	1.55	0.32	2068	�30		2097
	0.02	84	19	27	0.24	0.53	2070	�30		2086
	0.32	145	18	46	0.13	1.4	2011	�27		2088
	0.1	294	106	95	0.37	0.25	2069	�26		2092
	0.07	67	89	22	1.36	0.39	2088	�32		2075
	0.16	537	409	169	0.79	0.15	2014	�24		2101
	0.14	423	278	137	0.68	0.85	2062	�25		2096
	0.04	221	174	73	0.81	0.23	2087	�27		2088
--		131	82	44	0.64	0.32	2104	�29		2095
	0.02	89	7	29	0.08	0.82	2079	�30		2091
--		83	26	27	0.32	0.49	2083	�31		2110
--		483	230	158	0.49	0.72	2077	�25		2091
--		383	161	123	0.43	0.21	2040	�25		2094
	0.16	538	221	173	0.42	0.42	2051	�25		2100
	0.08	210	309	68	1.52	0.53	2072	�27		2103
	0.03	161	108	53	0.69	0.28	2077	�28		2080
	2.25	318	172	94	0.56	2.34	1900	�27		2435
	0.79	216	342	68	1.63	0.76	2018	�26		2168
	2.06	44	41	14	0.98	0.49	2036	�35		2269
--		65	46	19	0.73	0.45	1891	�30		2150
	0.02	567	271	182	0.494	0.19	2046	�25		2099
	0.17	404	218	128	0.558	0.28	2023	�26		2099
	0.43	369	204	126	0.572	0.23	2154	�30		2099
--		379	181	124	0.493	0.38	2074	�32		2095
	0.06	363	55	120	0.156	2.56	2096	�40		2089
	0.12	578	249	187	0.445	0.19	2058	�25		2089

0.17	318	155	99	0.502	0.25	1994	�29	2090
0.08	687	374	218	0.562	0.39	2028	�25	2101
0.13	440	175	133	0.411	0.69	1938	�35	2086
--	324	142	104	0.454	0.43	2045	�26	2095
0.25	165	85	54	0.535	0.6	2088	�34	2104
0.02	250	172	82	0.712	0.26	2085	�27	2102
0.13	216	103	70	0.494	0.32	2072	�27	2108
0.2	170	74	57	0.451	0.36	2126	�33	2101
0.12	173	80	56	0.478	0.34	2049	�27	2094
0.03	216	114	73	0.546	1.68	2133	�27	2101
0.02	168	94	55	0.574	0.34	2072	�28	2101
--	206	99	67	0.499	0.33	2077	�27	2123
0.05	359	190	112	0.548	0.22	2001	�32	2099
0.31	199	84	65	0.438	0.71	2089	�28	2103
0.87	346	182	107	0.544	0.23	1985	�25	2109
1.26	289	136	97	0.488	0.68	2123	�27	2137
1.03	312	214	101	0.71	0.23	2060	�26	2091
0.74	528	214	148	0.42	0.53	1819	�25	2108
2.79	358	174	113	0.502	0.81	2014	�26	2136
0.57	1230	650	440	0.546	0.13	2243	�27	2123
0.79	159	90	52	0.585	2.27	2096	�28	2147
0.52	314	193	104	0.635	1.23	2096	�30	2119
0.34	319	173	101	0.558	0.7	2017	�15	2099
0.13	182	96	59	0.544	0.38	2081	�19	2090
0.05	137	65	43	0.492	0.46	2012	�21	2103
0.46	190	100	60	0.545	0.36	2016	�19	2113
--	113	66	36	0.598	0.46	2014	�23	2129
0.25	195	121	61	0.64	0.36	2008	�19	2125
0.5	138	72	46	0.536	0.37	2090	�19	2112
--	125	66	42	0.543	0.4	2119	�20	2107
0.44	162	89	52	0.57	0.34	2050	�18	2086
1.01	241	141	77	0.603	0.84	2046	�16	2145
0.56	259	147	84	0.586	0.27	2069	�15	2085
0.24	431	95	139	0.228	0.28	2051	�13	2082
0.02	175	120	56	0.708	0.32	2038	�18	2104
--	177	125	58	0.727	0.33	2075	�18	2117
0.38	242	53	79	0.224	0.68	2074	�16	2107
--	242	148	79	0.63	0.3	2075	�17	2116
0.71	187	134	60	0.739	0.32	2054	�18	2125
--	367	44	122	0.123	0.41	2101	�14	2095
0.33	193	102	60	0.548	0.35	1984	�26	2076
0.21	171	87	54	0.527	0.38	2015	�28	2091
0.08	186	92	60	0.509	0.36	2068	�18	2108
0.2	392	119	112	0.313	1.2	1859	�38	2062
--	174	90	53	0.535	0.43	1969	�39	2097
0.31	249	165	81	0.682	0.33	2058	�28	2110
0.4	517	472	182	0.943	0.23	2211	�26	2120
0.03	246	144	79	0.604	0.34	2042	�18	2149

	0.1	61	27	21	0.448	0.72	2171	�34	2175
--		107	66	35	0.633	0.52	2089	�48	2181
	0.14	291	98	76	0.347	0.35	1703	�20	2076
	0.92	268	72	32	0.277	0.36	846	�12	2086
	0.28	503	60	185	0.122	0.73	2296	�31	2094
	1.86	310	218	83	0.727	0.52	1741	�14	2103
	1.38	365	75	57	0.212	1.11	1073	�20	2130
	0.01	252	82	71	0.335	0.66	1824	�26	2142
	1.73	84	44	19	0.537	0.56	1483	�21	2143
	0.84	342	48	46	0.144	0.49	936	�8	2159
	0.29	1132	790	353	0.72	0.65	1996	�19	2121
	2.94	1937	9	74	0	3.25	282	�10	1546
	2.15	3040	8	147	0	1.64	354	�5	1563
	2.86	1456	11	93	0.01	0.68	463	�10	1682
	0.13	2622	6	279	0	0.91	753	�23	1688
	7.53	3654	52	264	0.01	2.9	520	�6	1913
	0.65	2029	3	1016	0	1.24	2961	�27	2019
	0.89	960	145	218	0.16	2.23	1511	�27	2038
	0.14	1890	14	721	0.01	1.25	2367	�57	2064
	2.86	1028	15	84	0.02	3.8	584	�25	2064
	0.3	1720	34	434	0.02	4.29	1661	�50	2064
	1	1121	64	290	0.06	3.01	1695	�64	2073
	3.53	3124	6	239	0	0.99	550	�67	2091
	0.38	443	348	91	0.81	0.38	1383	�12	2110
	0.39	200	66	57	0.34	0.28	1860	�22	2119
	1.25	263	27	22	0.11	2.2	587	�18	2142
	0.68	204	72	50	0.37	1.81	1620	�32	2145
	1.23	341	55	38	0.17	3.68	787	�18	2153
	0.43	208	60	65	0.3	0.78	2012	�22	2083
	0.26	51	70	16	1.41	0.39	2010	�29	2055
	0.27	49	44	15	0.93	0.44	2011	�29	2052
	0.62	369	398	117	1.11	0.21	2032	�22	2086
--		635	402	203	0.65	0.13	2038	�21	2086
	0.51	217	94	67	0.45	0.25	1982	�27	2102
	0.02	658	389	211	0.61	0.14	2046	�21	2079
	0.04	51	48	16	0.98	0.93	2018	�29	2080
	0.06	94	88	30	0.97	0.32	2015	�25	2085
	0.84	163	77	50	0.49	0.54	1974	�23	2112
	0.63	181	78	62	0.45	0.27	2167	�24	2118
	0.14	208	66	70	0.33	0.27	2123	�23	2150
	0.04	421	220	140	0.54	0.18	2115	�22	2154
	0.4	163	53	57	0.34	1.73	2202	�25	2195
	1.11	58	42	19	0.76	0.41	2050	�28	2058
	1.1	315	216	70	0.71	0.18	1474	�16	2040
	1.53	1317	780	710	0.61	0.24	3140	�32	2117
	0.13	1114	234	493	0.22	0.52	2679	�26	2105

	0.45	259	181	94	0.72	0.37	2274	�24		2097
	0.04	122	89	41	0.76	0.58	2123	�30		2100
	0.06	236	103	71	0.45	0.27	1947	�25		2094
	0.05	363	121	127	0.34	0.24	2199	�27		2135
	0.04	438	209	140	0.49	0.19	2043	�25		2124
	0.06	230	137	77	0.62	0.25	2133	�27		2114
	0.08	361	232	111	0.66	0.41	1968	�24		2116
	0.02	168	105	58	0.64	0.32	2174	�29		2121
	0.03	69	26	24	0.39	0.53	2210	�34		2157
	0.05	180	158	63	0.9	0.43	2209	�29		2147
	0.1	132	59	45	0.46	0.36	2175	�30		2147
	0.04	100	58	35	0.6	0.39	2186	�31		2170
	0.28	138	71	43	0.53	2.54	2000	�37		2190
	0.06	406	178	132	0.45	0.2	2070	�25		2166
	0.07	365	263	133	0.75	0.58	2284	�33		2145
	0.39	524	228	183	0.45	0.59	2202	�27		2085
	0.38	127	73	32	0.59	0.9	1673	�24		2186
	0	418	134	133	0.33	0.6	2033	�27		2068
	0.03	231	102	72	0.45	0.49	1992	�37		2084
	0.01	200	50	64	0.26	0.35	2034	�24		2084
	0.04	232	171	74	0.76	0.48	2029	�27		2098
	0.05	252	73	76	0.3	1.52	1946	�22		2101
	0	531	108	165	0.21	6.66	1987	�22		2102
	0.01	449	260	137	0.6	1.53	1961	�16		2116
	0.09	223	64	71	0.3	0.56	2032	�15		2124
	0.09	59	42	19	0.73	1.02	2052	�56		2125
--		53	29	17	0.56	0.54	2056	�26		2131
	0.6	182	115	60	0.65	0.81	2100	�33		2134
	0.24	76	54	25	0.74	2.06	2070	�36		2160
	0.64	108	79	36	0.76	0.63	2132	�45		2160
	0.47	566	421	180	0.77	0.97	2033	�34		2168
	0.83	768	16	105	0.02	1.63	951	�22		1879
	0.17	560	6	72	0.01	2.72	901	�53		1930
	1.1			0			0		0	2058
	3.64	1161	432	242	0.38	2.8	1403	�80		2073
--				0			0		0	2077
	0.15			0			0		0	2083
	0.09	460	37	118	0.08	4.54	1678	�29		2097
	0.79	378	55	112	0.15	0.53	1918	�22		2120
	0.28	237	161	68	0.7	0.59	1868	�27		2122
	2.57	437	322	64	0.76	0.36	1009	�17		2127
	1.41	167	46	40	0.28	1.1	1571	�24		2135
	2.64	610	101	100	0.17	1.39	1125	�58		2136
	4.19	837	164	195	0.2	0.87	1546	�34		2137
	1.32	1834	338	459	0.19	1.27	1649	�18		2151
	2.1	636	171	99	0.28	4.04	1073	�36		2153

	0.93	188	68	54	0.38	0.32	1854	�19	2162
	1.02	114	87	37	0.79	1.55	2063	�18	2172
	5.15	586	23	112	0.04	0.4	1295	�25	2203
	0.03	156	157	49	1.04	0.55	2004	�26	2094
	0.09	372	592	119	1.64	0.76	2046	�27	2099
	0.21	98	50	30	0.53	0.42	1988	�28	2101
	0.21	98	64	32	0.68	0.61	2061	�29	2106
	0.09	122	61	39	0.51	0.38	2023	�61	2107
	0	193	78	60	0.42	0.34	1999	�43	2116
--		346	300	108	0.9	0.22	2004	�24	2121
	0.1	168	122	56	0.75	0.72	2099	�27	2130
	0.47	183	85	59	0.48	0.7	2051	�26	2136
	0.07	599	374	193	0.64	0.36	2055	�24	2144
	0.14	650	395	199	0.63	0.71	1963	�23	2145
	0.15	660	532	205	0.83	0.17	1993	�28	2164
	0.24	371	256	117	0.71	0.57	2020	�34	2171
	0.28	370	110	121	0.31	0.31	2078	�48	2194
--		48	29	16	0.62	0.55	2134	�35	2198
	0.06	160	73	53	0.47	0.93	2116	�28	2235
	0.3	160	76	42	0.49	0.34	1707	�23	2096
	0.06	262	150	71	0.59	0.26	1762	�27	2099
	0.53	448	232	79	0.53	0.31	1207	�19	2100
	0.33	213	154	53	0.75	0.67	1649	�30	2105
	1.06	588	295	81	0.52	0.78	960	�39	2119
	0.21	172	49	43	0.29	0.44	1648	�27	2141
	0.25	106	22	25	0.21	1.56	1542	�22	2188
--		164	57	43	0.36	0.81	1704	�23	2201
	0.03	496	584	160	1.22	0.35	2059	�12	2107
	0.02	327	292	106	0.92	0.25	2056	�13	2115
--		355	271	113	0.79	0.25	2039	�32	2103
	0.09	235	105	71	0.46	0.36	1939	�14	2101
	0.02	277	239	88	0.89	0.27	2023	�14	2096
	0.14	216	105	64	0.5	0.36	1916	�14	2089
	0.34	231	146	72	0.66	0.6	2007	�14	2100
	0.03	325	267	104	0.85	0.79	2035	�13	2092
	0	556	338	175	0.63	0.82	2016	�17	2097
	0.03	204	164	66	0.83	0.54	2045	�28	2091
	0.22	303	220	93	0.75	0.76	1967	�18	2112
	0.04	453	224	137	0.51	0.47	1942	�12	2081
--		50	44	16	0.92	0.63	2093	�27	2107
	0.05	254	127	81	0.52	0.34	2030	�14	2079
	17.27	312	58	24	0.19	0.43	552	�5	3192
	1.49	218	205	64	0.97	0.29	1907	�14	2163
	23.58	255	349	84	1.41	0.65	2094	�16	2897
	1.34	901	434	163	0.5	0.53	1233	�12	1998
	2.72	448	409	95	0.94	0.63	1424	�9	2208
	0.28	356	323	86	0.94	1.31	1602	�11	2094

	5.77	207	151	45	0.75	0.33	1460	�12		2345
	0.44	169	149	49	0.91	0.78	1869	�15		2155
	2.45			0			0		0	2128
	0.05	447	47	143	0.11	0.33	2038	�18		2073
	0.16	279	104	84	0.39	1.73	1940	�22		2074
--		384	277	124	0.75	0.8	2052	�18		2088
	0.05	378	100	122	0.27	1.34	2061	�21		2090
	0	103	48	34	0.48	0.4	2090	�23		2090
	0.21	326	38	106	0.12	0.36	2070	�19		2091
	0.04	463	64	147	0.14	0.29	2028	�18		2093
	0.15	310	165	96	0.55	2.16	1989	�18		2096
--		288	85	93	0.3	0.27	2060	�19		2101
	0.33	465	323	142	0.72	2.82	1957	�17		2117
	0.16	226	187	75	0.85	0.24	2109	�20		2122
	0.06	165	228	54	1.43	0.25	2098	�21		2129
	0.15	164	142	55	0.89	0.27	2125	�21		2132
	0.01	310	197	101	0.65	0.57	2070	�18		2141
	0.34	230	143	75	0.64	0.87	2083	�20		2215
	0.11	405	408	87	1.04	1.1	1439	�13		1987
	0.11	510	345	119	0.7	0.61	1550	�14		2028
	0.12	389	337	104	0.89	2.02	1745	�80		2042
	0.65	448	448	93	1.03	3.84	1394	�15		2042
	0.19	322	147	79	0.47	7.64	1620	�72		2050
	0.4	479	428	114	0.92	0.46	1572	�23		2053
	0.14	501	451	133	0.93	0.15	1738	�24		2065
	0.03	385	338	100	0.91	0.88	1697	�26		2072
	0.09	361	287	95	0.82	1.36	1726	�16		2073
	0.21	506	510	122	1.04	0.57	1592	�23		2080
	0.18	630	99	182	0.16	0.81	1866	�20		2084
	0.16	324	193	95	0.61	0.42	1886	�17		2088
	0.61	273	16	76	0.06	5.27	1806	�17		2095
	0.28	145	116	43	0.83	0.3	1895	�20		2118
	0.24	353	247	94	0.72	0.21	1746	�24		2132
	0.05	297	142	95	0.494	0.22	2047	�13		2070
	0.06	131	72	42	0.562	0.29	2029	�16		2068
	0.81	215	112	65	0.537	0.23	1951	�18		2098
	0.05	439	204	142	0.481	0.17	2060	�15		2069
	0.11	437	224	142	0.529	0.17	2072	�12		2084
	0.17	335	145	100	0.446	0.72	1930	�21		2076
--		301	146	98	0.499	0.2	2069	�13		2078
	0.07	163	92	52	0.583	0.27	2041	�15		2083
	0.22	461	229	145	0.512	0.17	2010	�11		2089
--		535	363	173	0.701	0.34	2062	�14		2069
--		408	314	134	0.793	0.15	2088	�12		2081
--		189	129	60	0.707	0.23	2043	�15		2089
--		206	122	68	0.611	0.23	2087	�14		2069
	1.41			0			0		0	2118

1.18	409	190	91	0.478	1.65	1481	�28		2121
0.41	341	178	89	0.539	0.37	1715	�11		2108
0.04			0			0		0	2074
1.68	332	162	90	0.504	0.3	1762	�11		2225
2.64	382	258	89	0.698	1.82	1541	�43		2099
1.31	261	176	50	0.695	0.2	1306	�9		2087
1.65	202	113	62	0.577	0.24	1965	�14		2173
0.23	361	289	108	0.826	0.59	1934	�11		2069
0.04	388	191	115	0.509	0.18	1913	�19		2063
0	137	77	45	0.58	0.3	2093	�17		2067
0	252	142	82	0.583	0.21	2077	�20		2078
0	562	305	181	0.56	0.38	2055	�11		2080
0.24	297	194	94	0.676	0.36	2024	�12		2068
0.1	324	181	107	0.577	0.18	2089	�13		2076
0.01	201	112	63	0.574	0.52	2007	�14		2085
0.3	412	210	124	0.528	0.29	1942	�17		2088
0.36	448	373	143	0.861	1.12	2037	�21		2081
0.71	480	446	97	0.96	2.91	1356	�61		2094
0.04			0			0		0	2054
0.73			0			0		0	2061
0.63	299	164	65	0.567	0.46	1462	�18		2093
7.4	377	166	58	0.456	0.59	1056	�12		2403
1.64	573	290	128	0.523	0.63	1492	�9		2168
0.18	430	243	120	0.583	0.45	1811	�13		2063
5.29	427	235	117	0.57	0.16	1780	�11		2225
2.77	445	218	138	0.506	0.16	1990	�12		2166
2.51	285	139	75	0.505	1.29	1716	�11		2116
0.82	301	215	85	0.738	0.99	1839	�12		2145
2	566	320	140	0.584	0.14	1634	�9		2128
3.73	464	262	83	0.584	2.88	1214	�19		2152
1.86	231	110	62	0.49	10	1761	�114		2308
0.04	2584	2862	755	1.144	1.17	1887	�12		2062
2.51	260	189	83	0.751	0.78	2034	�14		2183
--	200	90	62	0.46	0.26	1985	�22		2103
0.49	219	50	72	0.24	0.31	2082	�23		2097
0.2	185	44	60	0.24	0.63	2068	�23		2094
0.03	384	102	124	0.27	1.09	2050	�22		2087
0.1	352	318	114	0.93	0.16	2061	�22		2094
--	127	44	41	0.36	0.37	2044	�25		2081
0.16	307	97	98	0.33	0.24	2029	�22		2077
0.01	225	81	72	0.37	0.54	2044	�23		2100
0.08	161	61	50	0.39	0.31	1987	�23		2081
0.23	221	49	67	0.23	0.32	1958	�22		2098
0.23	255	68	79	0.28	0.88	1981	�22		2100
0.07	413	152	132	0.38	0.22	2039	�22		2096
0.5	169	60	49	0.37	0.96	1885	�22		2080
0.69	328	76	97	0.24	0.25	1900	�20		2098
0.59	170	47	50	0.29	0.33	1898	�22		2096

1.54	244	77	27	0.33	0.23	792	�22	1916
1.08	219	77	68	0.36	1.92	1984	�47	2158
0.22	249	76	77	0.32	0.3	1979	�22	2101
0.06	268	85	87	0.33	0.29	2064	�22	2117
0.05	193	44	64	0.24	0.39	2100	�24	2099
0.32	437	107	136	0.25	0.25	1989	�21	2097
0.02	236	64	79	0.28	0.7	2112	�23	2081
0.33	310	90	99	0.3	0.27	2045	�22	2098
0.16	353	93	115	0.27	0.28	2068	�22	2092
0.03	424	179	140	0.44	0.21	2094	�22	2080
0.1	293	78	96	0.28	0.3	2076	�22	2086
0.15	223	67	71	0.31	0.32	2036	�23	2081
--	446	113	140	0.26	0.58	2004	�21	2085
0.05	498	142	163	0.29	0.23	2079	�21	2082
0.05	226	53	71	0.24	0.36	2015	�23	2097
0	299	71	96	0.25	0.3	2056	�22	2104
0.04	331	78	109	0.24	0.3	2086	�22	2089
0.56	379	132	116	0.36	0.24	1964	�21	2155
1.11	333	76	85	0.24	0.29	1676	�18	2091
1.02	293	84	92	0.29	0.78	2005	�22	2110
0.12	275	87	86	0.33	0.28	2009	�28	2072
0.05	319	105	103	0.34	0.98	2054	�25	2086
0.02	232	71	77	0.32	3.27	2114	�26	2093
0.04	482	132	152	0.28	0.42	2022	�28	2091
0	724	174	240	0.25	0.19	2104	�33	2100
0.04	395	96	132	0.25	0.6	2118	�52	2087
0.03	363	129	120	0.37	0.23	2093	�25	2089
0.01	425	95	139	0.23	0.27	2081	�27	2088
0.1	239	81	75	0.35	0.5	2014	�32	2095
--	366	129	115	0.36	0.88	2012	�41	2071
0.47	203	73	67	0.37	4.35	2097	�34	2141
0.19	424	174	135	0.42	1.71	2028	�28	2114
0.64	709	135	224	0.2	4.32	2018	�23	2124
0.17	89	25	28	0.29	0.67	2026	�31	2119
0.15	69	34	23	0.51	0.64	2099	�34	2127
0.06	129	73	41	0.58	0.56	2024	�30	2133
0.08	311	469	101	1.56	0.44	2071	�27	2140
--	73	57	25	0.81	0.58	2149	�34	2140
0.54	208	149	65	0.74	0.47	2003	�27	2144
0.12	193	173	62	0.93	0.51	2052	�29	2144
0.58	176	73	54	0.43	0.51	1983	�27	2145
0.26	168	108	55	0.66	0.46	2061	�28	2149
0.61	233	120	79	0.53	0.47	2149	�28	2155
0.01	198	102	64	0.53	0.5	2067	�28	2163
--	82	80	28	1.02	0.52	2140	�32	2164
0.04	117	121	36	1.07	0.49	1998	�29	2165

0.93	343	133	114	0.4	0.53	2109	�29	2169
0.08	115	158	41	1.42	0.51	2241	�33	2107
0.72	192	153	56	0.82	0.47	1885	�26	2118
0.78	135	43	39	0.33	0.64	1880	�29	2173
1.62	216	101	50	0.48	0.5	1544	�22	2176
1.35	207	186	66	0.93	0.52	2044	�29	2184
0.93	190	62	53	0.34	0.55	1806	�26	2202
1.27	143	96	42	0.69	0.48	1891	�27	2254
4.88	221	91	63	0.42	0.53	1843	�26	2261
0.18	102	90	34	0.91	0.8	2115	�38	2067
0.04	79	64	26	0.84	0.87	2104	�41	2075
0.07	88	63	29	0.74	0.85	2071	�39	2097
0.17	200	244	64	1.26	0.76	2055	�34	2098
0.23	215	162	70	0.78	0.74	2072	�33	2112
--	103	78	34	0.78	0.83	2092	�38	2113
0.27	345	268	113	0.8	0.6	2078	�27	2116
--	56	26	19	0.48	0.97	2132	�44	2121
0.06	84	65	28	0.8	0.7	2131	�34	2123
0.06	188	169	63	0.93	0.76	2134	�35	2131
0.73	89	74	27	0.86	0.82	1962	�37	2144
0.39	296	245	95	0.86	0.6	2047	�27	2145
0.6	163	113	55	0.71	0.77	2136	�36	2149
--	174	68	61	0.4	0.81	2190	�36	2151
0.23	74	44	25	0.61	5.43	2180	�42	2163
0.05	120	43	42	0.37	0.83	2195	�37	2169
0.71	88	52	33	0.62	1.63	2324	�42	2274
2.58	119	96	43	0.83	2.87	2246	�38	3032
1.15	229	279	74	1.26	0.72	2068	�33	2132
1.71	341	210	113	0.64	0.6	2094	�27	2136
0.93	249	91	72	0.38	0.77	1881	�30	2197
1.8	209	150	68	0.74	0.74	2061	�33	2215
2.73	227	143	70	0.65	0.73	1973	�31	2255
0.01	486	108	168	0.23	0.29	2178	�24	2096
0.3	232	75	78	0.33	0.84	2129	�26	2084
0.02	170	70	57	0.43	0.39	2124	�27	2099
0.01	462	164	154	0.37	0.27	2120	�23	2103
0.03	440	204	142	0.48	0.24	2063	�23	2088
0.07	221	85	72	0.4	0.36	2069	�25	2098
0.06	536	312	167	0.6	0.63	1998	�22	2087
0.08	458	235	161	0.53	0.43	2210	�24	2087
--	232	83	80	0.37	0.67	2181	�26	2071
0.13	99	65	33	0.68	1.25	2135	�31	2134
0.54	232	109	71	0.49	0.32	1962	�24	2117
0	340	112	98	0.34	0.29	1868	�25	2063
0.09	776	360	214	0.48	0.17	1798	�19	2067
0.03	247	66	69	0.28	0.38	1806	�22	2101

0.06	497	220	120	0.46	0.4	1600	�18	2067
0.06	192	49	62	0.262	0.84	2056	�34	2038
0.2	105	48	32	0.471	0.86	1973	�36	2057
0.06	102	34	33	0.343	0.9	2090	�38	2065
0.03	109	33	36	0.313	0.9	2102	�38	2067
0.24	96	23	32	0.247	0.95	2106	�38	2068
0.09	98	28	33	0.293	0.92	2135	�39	2077
0.21	97	24	32	0.258	0.95	2109	�38	2082
0.11	332	67	112	0.208	0.78	2137	�33	2085
0.15	104	31	34	0.308	0.9	2049	�37	2086
0.04	211	87	73	0.425	0.78	2193	�35	2100
0.16	97	32	32	0.337	0.9	2072	�38	2105
0.04	170	49	56	0.299	0.83	2100	�35	2131
0.19	65	18	22	0.29	1.02	2151	�43	2043
0.45	225	39	59	0.179	0.84	1722	�29	2056
0.53	196	76	53	0.402	2.98	1757	�29	2067
--	153	38	43	0.256	0.88	1830	�32	2138
0.14	103	112	31	1.124	0.78	1956	�35	2195
0.16	96	26	31	0.281	0.93	2053	�38	2046
0.42	79	16	26	0.21	1.03	2079	�40	2068
0.83	137	37	44	0.279	0.88	2048	�36	2107
0.13	132	88	42	0.69	0.79	2040	�35	2113
0.03	97	60	32	0.639	0.84	2074	�38	2123
--	48	11	16	0.24	1.14	2056	�44	2139
0.09	111	31	37	0.286	0.9	2125	�37	2141
0.11	78	66	27	0.874	0.85	2186	�42	2149
0.18	165	80	56	0.503	0.79	2143	�36	2168
0.03	128	65	64	0.524	0.83	2952	�49	2878
0.56	181	58	51	0.33	0.96	1832	�33	2077
4.84	170	45	53	0.271	0.88	2000	�36	2197
2.97	189	36	45	0.197	0.91	1569	�46	2256
3.5	152	79	49	0.538	0.79	2060	�36	2323
15.68	242	81	78	0.345	0.78	2047	�41	2336
3.33	65	24	17	0.38	0.94	1675	�36	2340
9.08	354	80	73	0.233	0.84	1390	�25	2437
0.11	66	26	21	0.4	0.5	2020	�24	2109
--	87	15	28	0.18	2.26	2013	�22	2089
--	322	287	100	0.92	0.93	1990	�44	2094
0.06	135	121	44	0.92	0.9	2070	�29	2080
0.02	129	72	42	0.57	0.58	2052	�19	2087
0.75	665	176	166	0.27	2.3	1641	�25	2110
2.46	1731	1885	152	1.12	0.26	627	�10	1847
0.15	996	968	140	1	0.47	978	�18	1907

8.86	1019	1350	41	1.37	0.41	298	�5	1294
13.92	1078	797	82	0.76	1.2	544	�9	1676
2.04	964	867	90	0.93	0.68	665	�10	1873
0.92	1368	1696	270	1.28	0.22	1333	�15	1995
1.21	1154	2226	58	1.99	0.84	368	�5	1419
0.19	601	775	133	1.33	0.34	1478	�12	2013
0.42	1209	1316	187	1.12	0.45	1067	�10	1965
1.88	2279	2171	244	0.98	1.02	758	�12	1884
7.61	779	1261	49	1.67	1.03	458	�11	1750
19.35	780	1010	63	1.34	1.27	576	�22	1587
0.96	958	600	109	0.65	1.36	805	�12	1926
3.73	1976	2597	98	1.36	0.47	363	�7	1527
1.08	2112	1217	59	0.6	0.92	207	�5	1344
0.35	641	920	142	1.48	0.92	1474	�40	2052
1.2	510	354	67	0.72	3.05	920	�53	1953
39.14	819	644	50	0.81	2.31	443	�12	1913
0.64	1218	1390	68	1.18	1.44	405	�9	1553
0.94	976	804	72	0.85	0.29	531	�5	1673
0.32	1006	1474	183	1.51	0.8	1240	�21	2004
0.98	1628	815	100	0.52	0.6	444	�8	1554
7.03	1532	1720	94	1.16	0.86	444	�7	1519
0.85	1984	2230	184	1.16	3.31	662	�13	1799
3.09	1931	2947	67	1.58	0.08	255	�3	1136
38.83	1266	2074	141	1.69	0.35	786	�15	1719
1.24	413	434	71	1.09	0.94	1182	�9	1966
6.12	1750	2422	136	1.43	0.27	557	�8	1772
1.09	1496	2293	151	1.58	0.09	715	�11	1849

:06PbAge	(1)208Pb/232ThAge		%Dis-cor-d	7corr208Pb	�%	Total238U/	�%	Total207Pb
�8	2000	�32	2	0.096	5.7	2.62	1.4	0.13236
�7	2031	�30	2	0.101	3.1	2.613	1.4	0.13294
�8	1972	�33	2	0.094	6	2.615	1.5	0.13268
�8	1960	�32	4	0.088	5.5	2.657	1.4	0.13335
�8	2067	�36	2	0.103	4.4	2.588	1.5	0.13313
�8	1988	�33	1	0.099	6	2.577	1.5	0.13323
�10	2026	�35	4	0.094	4.8	2.663	1.5	0.13327
�9	2021	�33	3	0.097	4.7	2.622	1.5	0.13324
�9	2018	�34	2	0.098	5.3	2.6	1.5	0.13317
�9	1846	�31	9	0.074	4.5	2.865	1.5	0.13078
�9	2058	�34	4	0.094	5.2	2.671	1.4	0.13266
�9	2078	�34	-1	0.112	4.7	2.521	1.5	0.13283
�10	2030	�35	1	0.104	5.3	2.564	1.5	0.13312
�11	1976	�38	12	0.068	5.9	2.921	1.5	0.13334
�13	1894	�37	17	0.061	4.4	3.182	1.5	0.13228
�8	2002	�45	14	0.072	4.4	3.001	1.4	0.13142
�10	1554	�34	29	0.045	3.7	3.778	1.6	0.12837
�13	1711	�34	12	0.062	5.1	3.018	1.5	0.12924
�9	2199	�55	0	0.115	3.8	2.524	1.1	0.1351
�12	2055	�31	-1	0.109	3.8	2.519	1.4	0.1333
�10	2091	�33	-1	0.112	4	2.486	1.2	0.1355
�13	2127	�86	3	0.096	9.6	2.586	1.4	0.1349
�7	2054	�35	0	0.107	4.5	2.547	1.1	0.1334
�8	2011	�31	3	0.095	3.8	2.647	1.1	0.1325
�10	2047	�35	1	0.104	5.4	2.546	1.2	0.1349
�7	2058	�25	0	0.108	3	2.531	1.1	0.1336
�9	2045	�31	-1	0.109	4.5	2.524	1.2	0.1337
�7	2049	�25	0	0.107	3	2.525	1.1	0.1346
�6	1998	�36	4	0.093	5.3	2.637	1.5	0.1331
�16	1977	�43	3	0.093	5.6	2.637	1.5	0.1335
�11	2042	�31	0	0.107	3.5	2.544	1.2	0.1335
�7	2106	�36	0	0.111	4.5	2.532	1.1	0.1336
�8	2073	�36	1	0.106	3.8	2.55	1.2	0.1338
�9	2092	�31	0	0.11	4.5	2.529	1.2	0.1341
�91	2612	�363	6	0.102	28.1	2.485	1.2	0.1522
�10	1766	�38	14	0.057	5.1	3.038	1.2	0.1305
�16	2002	�55	3	0.092	9.4	2.678	2.2	0.1318
�9	2059	�27	7	0.091	2.9	2.752	1.1	0.1334
�9	2095	�37	1	0.106	4.1	2.592	1.2	0.1326
�10	2070	�33	0	0.107	4.1	2.562	1.2	0.1334
�10	1959	�37	6	0.093	2.6	2.715	1.2	0.1345
�9	2035	�38	0	0.106	5.1	2.548	1.1	0.1338
�16	2043	�39	5	0.089	5.5	2.667	1.2	0.1355
�14	1781	�50	4	0.074	8.3	2.636	1.2	0.1351
�9	2060	�82	3	0.098	11.1	2.607	3.9	0.136
�8	2079	�32	3	0.096	6	2.585	1.1	0.1353

�13	1942	�37	16	0.072	3.3	3.002	1.2	0.1372
�14	1806	�38	41	0.007	23.5	4.278	1.1	0.1383
�9	1835	�24	11	0.073	3.1	2.908	1.1	0.1315
�23	1710	�35	15	0.071	3.5	3.06	1.5	0.1323
�21	1561	�71	21	0.058	7.2	3.274	4.3	0.1342
�14	1671	�41	39	0.048	3.3	4.136	2.1	0.1388
�41	1939	�82	21	0.046	15.1	3.155	1.5	0.1402
�16	1619	�62	27	0.06	5	3.628	3	0.1294
�8	2034	�33	-1	0.11	5.6	2.539	1.4	0.13227
�14	2074	�39	1	0.106	5.7	2.558	1.5	0.13328
�7	2049	�32	0	0.108	5.1	2.543	1.4	0.13243
�8	2005	�33	1	0.102	5.5	2.589	1.4	0.13214
�9	2078	�50	-1	0.111	5.7	2.534	1.5	0.13291
�11	2079	�39	-3	0.118	5.5	2.502	1.6	0.13201
�9	2002	�32	2	0.1	4.7	2.589	1.5	0.13307
�10	1866	�32	9	0.075	4.5	2.805	1.4	0.13453
�10	2016	�42	2	0.097	6.8	2.625	1.8	0.13301
�9	2071	�36	-1	0.114	7.1	2.541	1.5	0.13141
�8	1926	�31	4	0.085	5.7	2.667	1.4	0.13288
�23	1947	�68	4	0.086	7.4	2.651	1.7	0.13933
�9	1932	�36	10	0.061	8.1	2.891	1.4	0.13156
�8	2047	�33	-1	0.11	5.3	2.54	1.5	0.13227
�9	2064	�35	0	0.107	6.3	2.551	1.5	0.13325
�8	2068	�32	-1	0.11	5	2.552	1.4	0.13153
�15	1363	�31	18	0.037	6	3.064	1.5	0.14053
�20	1595	�28	12	0.054	7.3	2.901	1.5	0.13334
�14	2157	�54	-3	0.122	7	2.46	2.3	0.1338
�11	2184	�52	-3	0.126	8	2.44	2.1	0.1343
�7	2045	�41	-1	0.111	6	2.53	2	0.1317
�10	2135	�49	-1	0.115	7	2.54	2.1	0.1313
�14	2197	�58	-11	0.158	8	2.32	2.3	0.1318
�11	2320	�56	-10	0.168	8	2.3	2.2	0.1335
�12	2258	�55	-10	0.15	7	2.34	2.3	0.1313
�8	1778	�65	-9	0.128	11	2.41	2.6	0.1286
�13	2260	�57	-9	0.154	8	2.34	2.2	0.1328
�8	2174	�46	-8	0.143	7	2.38	2	0.1317
�11	1752	�90	-8	0.118	11	2.45	2.6	0.1273
�7	2195	�51	-8	0.146	7	2.36	2	0.1331
�10	2297	�66	-8	0.152	8	2.37	2.4	0.1324
�9	2223	�49	-8	0.135	5	2.36	2.1	0.1331
�14	2181	�59	-7	0.142	8	2.37	2.3	0.1327
�9	2248	�48	-7	0.132	5	2.37	2.1	0.1328
�11	2193	�54	-6	0.135	7	2.38	2.2	0.1336
�10	2151	�49	-6	0.129	6	2.4	2.2	0.133
�8	1486	�31	11	0.06	5	2.97	2	0.1278
�12	1963	�55	-6	0.118	7	2.42	2.2	0.1332

�16	1984	�86	8	0.066	16	2.73	2.5	0.1364
�18	1934	�67	10	0.052	25	2.72	2.8	0.1379
�32	2235	�168	5	0.083	29	2.69	3.3	0.1292
�28	1915	�96	6	0.078	17	2.65	3.7	0.1343
�17	1909	�68	3	0.083	19	2.57	3.1	0.1361
�22	2084	�100	7	0.068	28	2.62	3.1	0.1374
�14	1918	�56	9	0.059	18	2.73	2.4	0.1358
�16	1939	�94	8	0.048	32	2.74	2.5	0.1354
�15	1950	�63	5	0.084	12	2.64	2.5	0.1353
�14	2122	�68	17	0.028	33	2.99	2.5	0.1361
�42	1825	�100	9	0.056	37	2.8	5.1	0.1333
�26	1404	�78	#DIV/0!	0.009	30	5.5	5	0.1398
�25	1910	�77	13	0.049	20	2.86	2.4	0.1349
�15	1735	�51	23	0.004	161	3.26	2.4	0.1346
�22	1749	�84	28	0.016	45	3.5	4.1	0.133
�24	1154	�61	43	-0.001	-310	4.4	2.4	0.1385
�16	1926	�63	11	0.06	13	2.8	2.5	0.1354
�17	2000	�82	11	0.039	42	2.75	3.3	0.1397
�20	1904	�83	11	0.039	38	2.79	2.9	0.1363
�9	1654	�38	17	0.048	8	3.13	2.2	0.1315
�9	2051	�117	0	0.107	6.3	2.583	1.2	0.13111
�10	2039	�30	0	0.105	3.2	2.586	1.3	0.13125
�9	2076	�29	0	0.108	2.8	2.572	1.3	0.13177
�10	2074	�50	0	0.108	3.9	2.569	2	0.13141
�12	2120	�34	-3	0.116	3.5	2.503	1.4	0.13123
�12	1969	�32	2	0.098	3.2	2.642	1.3	0.13182
�18	2078	�40	1	0.107	2.8	2.585	1.3	0.13576
�9	2052	�51	1	0.106	3.6	2.569	1.8	0.13166
�14	2156	�37	-3	0.119	3.7	2.476	1.4	0.13248
�17	2177	�44	1	0.112	3.8	2.528	1.5	0.13274
�12	2169	�46	1	0.111	4.2	2.557	1.7	0.13189
�13	2206	�40	-7	0.129	3.3	2.392	1.4	0.13215
�9	2174	�36	2	0.105	4.7			
�15	1929	�38	1	0.097	4.6			
�7	1893	�129	6	0.036	34.3			
�7	2006	�28	3	0.095	3.8			
�9	1983	�29	4	0.091	4.2			
�4	1774	�21	12	0.064	3.7			
�54	528	�13	16	0.026	2.8			
�23	2328	�96	20	0.045	11			
�22	2050	�73	22	0.065	6			
�10	1993	�31	55	0.007	21.1			
�11	1415	�48	19	-0.015	-30.6			
�23	1995	�64	0	0.102	8.3	2.565	2.1	0.13376
�23	2153	�68	1	0.11	8.9	2.558	2.2	0.13382
�25	2083	�107	-2	0.115	9.4	2.493	2.2	0.13388

�24	1979	�65	1	0.1	7.6	2.604	2.1	0.13287
�17	2078	�54	1	0.105	7.6	2.563	1.8	0.13238
�24	2089	�71	1	0.104	9.4	2.575	2.3	0.13255
�18	2205	�71	-1	0.118	7.2	2.513	2	0.13352
�26	2036	�79	-2	0.114	9.8	2.522	2.1	0.1331
�19	2153	�59	0	0.111	7.1	2.556	2.1	0.13273
�19	2113	�55	-3	0.12	7.5	2.509	2	0.13116
�16	2118	�71	2	0.104	5.8	2.555	1.7	0.13459
�34	2266	�112	2	0.109	10.6	2.531	2.4	0.13344
�22	2166	�64	-4	0.127	7.4	2.472	2.1	0.13173
�20	2244	�70	0	0.119	8.5	2.547	1.8	0.13084
�21	2302	�59	-3	0.128	5.7	2.436	1.9	0.13405
�15	2189	�45	1	0.113	4.9	2.547	1.7	0.13309
�25	2278	�76	-5	0.135	7.8	2.437	2.4	0.13097
�22	2189	�64	-7	0.148	8.7	2.415	2	0.13044
�17							1.1	0.13237
�21							1.1	0.13355
�10	1985	�33	9	0.085	3.7	2.787	1.5	0.1349
�10	2008	�45	4	0.091	5.7	2.688	1.5	0.132
�14	1902	�44	7	0.074	8.6	2.741	1.7	0.1327
�13	1927	�46	6	0.084	5.1	2.746	1.5	0.1336
�10	1945	�34	5	0.088	4.8	2.702	1.5	0.1322
�14	1842	�39	6	0.08	5.8	2.731	1.7	0.1327
�16	1990	�51	7	0.079	7.6	2.758	1.7	0.1341
�11	2169	�49	-1	0.118	6.6	2.527	2.1	0.133
�13	1979	�56	6	0.082	7.6	2.752	1.8	0.1338
�12	2070	�41	0	0.11	6.5	2.57	1.6	0.1316
�7	2020	�34	4	0.099	2.7	2.639	1.5	0.1337
�12	2025	�40	7	0.086	6	2.703	1.7	0.134
�11	2107	�53	4	0.096	7.3	2.623	1.6	0.1339
�12	2016	�40	4	0.094	5.1	2.622	1.6	0.1351
�9	1718	�28		0.072	2.6	3.007	1.6	0.134
�17	1721	�54	19	0.03	14.1	3.176	1.6	0.1355
�28	2228	�97	3	0.103	7.1	2.621	1.7	0.1448
�16	1936	�41	14	0.068	4.9	2.974	1.6	0.1353
�17	1936	�48	12	0.069	6.5	2.894	1.8	0.1327
�12	2021	�52	2	0.0998	4.1	2.62	1.3	0.13337
�7	2039	�25	4	0.097	3.3	2.638	1.1	0.13281
�7	2125	�45	-1	0.1124	3.9	2.553	1.5	0.13173
�10	2030	�52	3	0.0947	8.8	2.622	1.9	0.13365
�8	2010	�45	5	0.0892	5.6	2.689	1.5	0.13255
�8	2011	�33	6	0.0889	3.8	2.716	1.1	0.13205
�9	2005	�34	5	0.0907	4.6	2.692	1.4	0.13336
�7	2079	�29	0	0.1089	4.5	2.562	1.3	0.13188
�9	2004	�22	4	0.0945	3	2.662	1	0.13247
�17	2027	�52	6	0.0877	7.3	2.717	2	0.13243
�8	2009	�35	5	0.0935	3.2	2.697	1.1	0.13225
�8	2032	�41	3	0.0994	4.3	2.635	1.9	0.13258

�12	2074	�35	6	0.0921	4.1	2.665	1.3	0.13646
�9	2003	�29	6	0.0879	4.3	2.699	1.2	0.13273
�17	2719	�71	8	0.1119	7.9	2.853	2.3	0.13288
�7	2034	�48	3	0.0999	3.6	2.649	1.4	0.13164
�10	2069	�36	9	0.0848	3.6	2.798	1.1	0.13463
�9	2061	�37	7	0.0909	3.3	2.755	1.1	0.1333
�8	2051	�32	1	0.1043	3.3	2.6	1.5	0.1325
�10	1989	�38	5	0.0805	10	2.707	1.8	0.13203
�12	2035	�31	4	0.0943	4.1	2.682	1.3	0.13217
�7	1961	�29	11	0.0808	2.8	2.874	1.1	0.13239
�12	2314	�50	23	0.0381	10.2	3.36	1.4	0.13368
�14	2024	�26	-1	0.1066	3.1			
�7	2084	�26	3	0.1001	3.6			
�3	1982	�24	4	0.0909	3.7			
�5	2072	�24	3	0.0965	4.3			
�11	2068	�35	2	0.1018	5.1			
�8	2096	�30	1	0.1054	3.9			
�24	105	�2	42	0.005	1.8			
�8	1819	�23	0	0.0952	3			
�23	2240	�64	9	0.0924	4.2			
�21	2437	�160	14	-0.0201	-126.1			
�11	1958	�40	38	0.0024	114.7			
�8	1984	�29	1	0.097	5.6			
�5	1979	�26	3	0.082	5.2			
�4	2026	�38	4	0.092	2.9			
�5	1980	�21	6	0.068	5.3			
�4	2051	�15	5	0.094	2			
�6	2004	�22	7	0.069	5.3			
�6	1130	�27	40	0.024	4.3			
�4	1790	�18	15	0.064	2.1			
�5	1646	�16	24	0.052	1.7			
�5	1374	�15	34	0.005	20.2			
�3	2079	�19	4	0.1	1.9			
�4	1723	�14	18	0.062	1.5			
�4	1740	�23	20	0.064	1.9			
�7								
�22	1287	�57	11	0.047	6.2			
�6	1906	�86	22	0.009	90.6			
�10	2030	�75	7	0.047	29	2.743	1.8	0.1341
�5	2112	�32	1	0.095	13	2.593	1.2	0.1325
�9	2028	�79	5	0.038	38	2.699	1.2	0.1347
�5	2083	�30	2	0.094	8	2.607	1.2	0.1333
�6	2056	�34	2	0.093	12	2.591	1.2	0.1327
�4	2165	�54	-1	0.119	8	2.522	1.1	0.1338
�6	2071	�33	3	0.079	15	2.625	1.2	0.1327

�4	2120	�27	1	0.106	7	2.569	1.1	0.1327
�4	2135	�162	3	0.103	9	2.607	1.4	0.1329
�6	2073	�42	1	0.097	10	2.596	1.2	0.1323
�5	2034	�30	3	0.086	10	2.634	1.2	0.132
�5	2033	�33	4	0.068	15	2.648	1.2	0.1335
�8	1989	�44	7	0.07	9	2.723	1.4	0.1357
�7	2051	�43	4	0.08	10	2.651	1.2	0.1341
�4	1964	�26	6	0.07	8	2.7	1.1	0.1338
�5	2053	�40	2	0.097	6	2.596	1.1	0.134
�6	2036	�37	4	0.064	19	2.648	1.2	0.1335
�6	2085	�37	2	0.093	9	2.583	1.2	0.134
�16	1994	�51	16	0.052	7	2.964	1.4	0.1407
�3	2055	�26	2	0.098	6	2.599	1.1	0.1325
�12	2085	�45	-1	0.117	8.9	2.49	1.2	0.13432
�8	1943	�31	9	0.068	5.2	2.75	0.9	0.13516
�7	2064	�33	0	0.107	6.2	2.51	0.9	0.13476
�12	2062	�48	5	0.079	9	2.63	1.2	0.13507
�11	2018	�42	0	0.104	8.8	2.51	1.2	0.13561
�18	2112	�51	0	0.11	10.8	2.48	1.2	0.13742
�9	2133	�33	2	0.097	7.3	2.53	1	0.13702
�9	1979	�35	7	0.055	11.7	2.67	1	0.13689
�21	1959	�36	7	0.07	12.6	2.68	1.7	0.13546
�11	2057	�44	2	0.093	9	2.55	1.2	0.13643
�13	2033	�64	5	0.071	13.8	2.59	1.3	0.13815
�7	1965	�24	6	0.075	4.8	2.67	0.9	0.136
�17	944	�34	4	0.045	4.5	6.57	0.6	0.07064
�9	1721	�27	19	0.015	20.1	3.09	0.8	0.13651
�6	1852	�29	13	0.028	12.5	2.87	0.8	0.13673
�5	2000	�24	5	0.076	5.1	2.64	0.7	0.13503
�17	2277	�61	-2	0.125	6.2	2.445	1.6	0.1365
�15	2087	�68	-3	0.115	4.7	2.463	1.4	0.1346
�27	1746	�88	-1	0.095	8.9	2.563	1.5	0.1353
�20	2084	�66	1	0.105	7.4	2.575	1.8	0.1333
�17	2191	�69	0	0.113	9	2.47	1.6	0.1373
�16	2084	�57	-2	0.115	5.8	2.482	1.3	0.1353
�9	2088	�29	3	0.1	3.1	2.543	0.9	0.1383
�18	1999	�63	-1	0.106	5	2.501	1.4	0.136
�27	2130	�77	-4	0.135	10.8	2.444	1.4	0.1347
�17	2049	�46	-1	0.108	4.3	2.506	1.3	0.136
�31	1810	�87	2	0.087	8.9	2.554	1.9	0.1399
�21	2411	�147	0	0.126	7	2.492	1.3	0.1402
�10	2132	�29	1	0.109	2.4	2.53	1	0.1359
�18	2094	�58	0	0.108	6.2	2.506	1.5	0.1363
�22	2210	�73	-1	0.117	7	2.5	1.9	0.1355
�15	2246	�50	-4	0.132	4.9	2.409	1.4	0.1353
�17	2266	�61	-4	0.136	6.4	2.398	1.6	0.1355
�14	2213	�48	-2	0.122	4.8	2.474	1.3	0.1342

�8	2134	�30	-1	0.113	2.6			
�11	2068	�39	7	0.089	4.9			
�7	2201	�32	0	0.113	4.9			
�12	2057	�50	2	0.096	11.9			
�17	1796	�24	10	0.087	1.6			
�19	1715	�42	5	0.084	2.9			
�26	1885	�68	7	0.084	5.5			
�25	2185	�56	8	0.1	3.9			
�15	680	�12	8	0.032	2.3			
�8	2034	�27	0	0.103	6.8			
�40	2100	�188	19	-0.028	-74.9			
�37	1494	�43	21	0.065	3.2			
�42	734	�18	53	0.026	2.6			
�32	1960	�51	14	0.09	3.1			
�13	2014	�38	1	0.101	3.5			
�14	1957	�41	-1	0.106	4	2.525	1	0.1358
�9	2007	�28	1	0.102	3.2	2.569	0.8	0.1337
�10	2048	�37	2	0.1	5.2	2.59	1	0.1331
�11	1911	�34	2	0.092	4	2.592	1	0.1352
�11	2068	�53	1	0.103	5.4	2.557	1	0.1344
�18	1994	�33	5	0.089	4.8	2.653	1	0.1343
�10	2102	�41	0	0.109	6.5	2.526	1	0.1344
�10	2079	�37	0	0.11	5.3	2.512	1	0.1342
�9	2088	�37	-1	0.117	5.7	2.484	0.9	0.1343
�9	1904	�32	1	0.095	5.2	2.54	0.9	0.1346
�10	2036	�30	3	0.097	3.1	2.583	0.9	0.1369
�9	2042	�35	5	0.084	5	2.638	0.9	0.1363
�10	2021	�37	2	0.095	5.7	2.565	1	0.1348
�8	2051	�24	4	0.097	2.7	2.597	0.8	0.1353
�24	2378	�130	36	0.025	24.1	3.939	2.5	0.1423
�26	1264	�73	#DIV/0!	-0.014	-18.7	20.051	4.8	0.1568
�13	1660	�76	28	0.027	16.1	3.485	3.2	0.1382
�7	2087	�26	0	0.109	2.8			
�8	2006	�28	4	0.093	4			
�5	2059	�40	3	0.094	6			
�16	2104	�32	1	0.108	3.6			
�7	2050	�26	2	0.099	3.8			
�3	2048	�20	0	0.107	1.8			
�4	2011	�21	2	0.098	3.7			
�5	2135	�24	-1	0.114	4			
�10	2063	�37	6	0.085	4.5			
�13	2133	�34	6	0.1	2.4			
�49	2130	�120	32	0.012	90.6			
�35	3237	�123	30	0.031	24.1			
�12	1891	�27	12	0.079	2.1			

�9	2078	�29	10	0.085	2.7
�56	2429	�125	22	0.075	9.3
�84	4296	�421	22	0.051	87.7
�38	2617	�150	11	0.081	11
�3	1952	�21	8	0.091	1.8
�41	3071	�177	51	-0.038	-35.2
�15	2950	�65	18	0.071	6.2
�36	668	�16	70	0.02	2
�6	1813	�21	13	0.078	1.9
�155	5327	�630	43	-0.003	-2473
�5	2022	�20	4	0.1	1.6

�22	2077	�52	5	0.086	9.8	2.613	1.5	0.1365
�9	2068	�35	3	0.096	5.3	2.572	1.4	0.1357
�10	2109	�42	-1	0.113	6.9	2.495	1.4	0.1352
�9	2067	�46	3	0.097	6	2.55	1.3	0.1367
�7	2085	�29	5	0.086	5.8	2.617	1.2	0.1364
�11	2139	�44	1	0.108	7.5	2.54	1.5	0.134
�4	2089	�41	0	0.105	10.1	2.515	1	0.1353
�12	2101	�49	2	0.097	10.1	2.54	1.6	0.1359
�7	2136	�31	2	0.1	6.2	2.556	1.1	0.1357
�10	2142	�39	2	0.1	7.3	2.539	1.4	0.1367
�7	2110	�31	0	0.109	5.6	2.535	1.2	0.1341
�10	2066	�40	4	0.088	8.6	2.581	1.5	0.1366
�19	2299	�82	-1	0.126	13.2	2.492	2.2	0.1342
�20	2114	�73	5	0.087	13.5	2.594	2.1	0.1373
�18	1982	�50	5	0.076	13.2	2.579	1.5	0.1386
�18	2021	�100	-3	0.12	17.8	2.477	3.4	0.1342
�23	2156	�40	3	0.099	7.7	2.559	1.3	0.1361
�15	2181	�62	7	0.076	13.2	2.61	1.8	0.1387
�29	2161	�61	3	0.093	16.8	2.503	1.7	0.1399
�6	6235	�72	-12	0.444	2.5	2.274	1.1	0.1326

�6	2046	�25	4	0.094	3.3
�5	1994	�43	3	0.095	6.2
�4	1993	�24	3	0.094	3.8
�5	2025	�26	5	0.093	3.4
�5	1976	�31	4	0.095	3.1
�10	1993	�25	4	0.091	4.1
�5	1985	�22	4	0.091	3.4
�17	1985	�27	1	0.102	4
�6	1969	�24	2	0.097	3.7
�8	1953	�29	4	0.088	4.2
�6	2014	�25	3	0.094	4
�4	2021	�21	3	0.095	3.2

�8	1841	�75	5	0.066	20.6
�11	2060	�36	3	0.096	5
�11	2115	�41	6	0.082	7.1

�6	1870	�43	6	0.0129	188.7
�11	1928	�50	2	0.0945	5.8

�7	1944	�39	4	0.0911	5.4			
�13	1958	�46	3	0.0923	6.6			
�7	2006	�41	4	0.0865	9.4			
�8	2021	�97	-2	0.1107	10.8			
�9	1977	�41	7	0.092	3.9			
�12	2267	�49	-4	0.1296	5.4			
�18	2064	�50	7	0.0855	7.2			
�10	2114	�52	11	0.081	6.1			
�7	1885	�37	11	0.0828	3.4			
�18	1883	�40	14	0.0737	4.8			
�15	1832	�44	15	0.0681	4.9			
�17	1962	�45	13	0.0815	4.2			
�13	1882	�61	10	0.051	16	2.88	1.9	0.1324
�9	1926	�60	5	0.075	12.9	2.71	1.8	0.1321
�17	1921	�40	6	0.086	4.8	2.75	1.8	0.1345
�13	1912	�46	5	0.088	5.2	2.73	1.9	0.1326
�11	1957	�51	7	0.061	17.3	2.77	1.8	0.1321
�8	1948	�40	8	0.06	13.2	2.8	1.7	0.1324
�8	1793	�49	6	0.06	13.9	2.75	1.7	0.1319
�8	1921	�34	4	0.095	2.9	2.68	1.8	0.1326
�9	1898	�47	9	0.041	23.3	2.83	1.8	0.1331
�8	2055	�36	4	0.099	3.7	2.68	1.7	0.1334
�15	1918	�42	7	0.087	4.2	2.73	1.8	0.1366
�17	1945	�45	5	0.082	8.9	2.69	1.8	0.1333
�7	1979	�38	6	0.07	12	2.73	1.7	0.1324
�11	2057	�49	2	0.097	10.8	2.6	1.8	0.1333
�9	2025	�39	1	0.103	3.4	2.58	1.7	0.1353
�10	1959	�41	9	0.072	8.3	2.79	1.9	0.133
�21	1947	�48	9	0.09	3.8	2.77	2.2	0.1374
�18	1969	�43	7	0.097	2.8	2.7	2.1	0.1384
�8	3251	�68	8	-0.184	-26.1	1.5	1.9	0.3118
�6	3267	�74	6	-0.141	-47.1	1.41	2.1	0.3322
�119	1071	�49	38	0.038	8.1	3.88	2.1	0.2234
�20	1249	�46	16	0.019	24.1	3.12	1.8	0.1329
�20	1935	�55	13	0.072	6.1	2.98	2.1	0.1348
�9	1515	�50	13	0.027	21.7	2.98	1.7	0.1321
�18	1625	�47	14	0.03	23.3	2.99	1.8	0.1335
�10	1939	�37	13	0.076	4.2	2.96	1.8	0.1328
�50	2128	�144	14	0.067	11	2.8	1.7	0.1726
�22	2011	�55	14	0.077	4.7	2.91	1.9	0.143
�18	2188	�64	4	0.102	7.9	2.61	2.2	0.1325
�71	2208	�174	3	0.107	11.4	2.5	1.8	0.1607
�14	1993	�45	15	0.077	4.6	2.93	2	0.1345
�23	2232	�67	-1	0.119	4.8	2.42	1.8	0.1557
�59	2974	�160	-8	0.19	5.3	1.95	1.9	0.262
�10	2073	�41	4	0.099	4.9	2.51	1.9	0.1408
�10	926	�31	24	-0.04	-10.3	3.06	1.7	0.1501

�7	2001	�58	8	0.089	4.6	2.84	1.8	0.1292
�10	1951	�38	2	0.094	6.7	2.66	1.7	0.1301
�7	1924	�31	3	0.092	4	2.7	1.6	0.13
�6	1986	�32	3	0.093	5.4	2.69	1.6	0.1303
�8	2047	�43	2	0.1	7.2	2.65	1.6	0.1297
�7	1991	�38	3	0.094	6.8	2.67	1.6	0.1299
�10	1995	�38	1	0.101	5.3	2.63	1.7	0.13
�7	1931	�37	2	0.094	5.6	2.66	1.6	0.1303
�7	2044	�38	8	0.079	6.4	2.8	1.6	0.1317
�13	2165	�47	-3	0.121	5.3	2.5	1.7	0.1331
�8	1952	�46	6	0.082	6.5	2.73	1.6	0.133
�16	2028	�36	8	0.085	5.7	2.78	1.6	0.1314
�9	1580	�43	21	0.029	16.4	3.3	2.6	0.1289
�25	1783	�71	31	0.008	84.5	3.78	3	0.1315
�29	1923	�35	1	0.098	3.8	2.66	1.7	0.1292
�10	1908	�35	2	0.093	5	2.67	1.7	0.1297
�9	1932	�33	2	0.098	3.1	2.66	1.7	0.1296
�9	1903	�32	4	0.092	3.4	2.7	1.6	0.1312
�10	1962	�34	2	0.1	2.7	2.65	1.7	0.1304
�10	1963	�35	4	0.095	3.7	2.69	1.7	0.1313
�5	1920	�30	5	0.088	4.2	2.72	1.5	0.1305
�11	1626	�32	3	0.079	4.1	2.67	1.7	0.1309
�6	1969	�32	2	0.099	3.4	2.64	1.6	0.1304
�19	1849	�34	10	0.08	3.9	2.87	1.7	0.132
�12	2004	�36	3	0.099	3.4	2.65	1.7	0.1328
�9	2060	�33	7	0.098	2.5	2.74	1.6	0.134
�24	1699	�42	6	0.082	3.6	2.7	2.1	0.1352
�16	1993	�38	7	0.093	3	2.72	1.7	0.1395
�10	1224	�24	16	0.045	3.7	3.03	1.6	0.1352
�11	1774	�45	15	0.072	3.9	3.11	2	0.1295
�13	1662	�38	11	0.072	3.4	2.91	1.7	0.1334
�10	1739	�47	11	0.077	4.1	2.87	2.1	0.1336
�8	1741	�30	15	0.071	2.9	2.99	1.6	0.135
�15	1622	�35	13	0.069	3.2	2.89	1.7	0.1378
�17	2009	�37	23	0.088	2.1	3.24	1.7	0.1396
�7	1990	�35	0	0.105	7			
�24	2115	�54	-1	0.112	5.5			
�6	2103	�39	1	0.105	5.8			
�10	2023	�38	-1	0.107	5.4			
�8	1838	�78	-3	0.122	12			
�7	2048	�36	2	0.1	5.4			
�5	2019	�37	-1	0.113	8.4			
�10	2040	�60	-1	0.111	7.7			
�6	2013	�33	-1	0.11	8.1			
�16	2165	�47	-1	0.114	4			
�7	2008	�57	1	0.101	5.3			

�9	1996	�53	3	0.097	5.7
�6	2035	�32	3	0.1	3.9
�7	2030	�33	3	0.101	3
�14	2050	�40	6	0.094	4.2
�10	2086	�69	7	0.092	5.2
�7	1964	�45	9	0.072	6.8
�5	2004	�42	6	0.092	3.9

�18	2044	�42	12	0.058	11.6
�5	1484	�46	-19	0.144	6.9
�8	1832	�138	-6	0.12	10.3
�44	1812	�72	13	-0.045	-78.4
�9	1955	�38	17	0.07	4
�8	1283	�28	19	0.015	25.2
�12	1608	�565	28	0.018	298.4
�13	2067	�52	34	0.035	7.8
�9	1880	�38	34	0.035	5.6
�4	2307	�64	45	-0.152	-5.5
�15	2044	�76	60	-0.007	-29.1
�17	515	�12	1	0.026	2.8

�9	2027	�40	4	0.098	3.3
�9	1877	�38	10	0.075	5.4
�5	2313	�37	10	0.056	15.1
�6	2039	�33	7	0.096	2.7

�6	2058	�58	1	0.103	6
�5	2041	�57	10	0.082	6.5
�6	2105	�33	0	0.109	4.1
�6	2158	�42	4	0.103	4.4
�7	2184	�52	3	0.096	11.3
�42	2488	�60	-1	0.136	14.2
�10	2242	�40	10	0.081	6

�12	1991	�103	13	0.076	11.6
�6	2706	�78	29	-0.063	-13.9
�14	2007	�41	13	0.076	4.9
�5	1931	�41	15	0.074	4.2
�29	2533	�167	51	0.019	38.2
�7	2865	�66	12	0.007	222.1
�8	1903	�39	11	0.066	7.7
�19	2509	�72	67	0.001	307.2
�6	2529	�103	11	#VALUE!	#VALUE!

�12	1973	�34	-3	0.1095	4	2.56	1.4	0.129
�16	2033	�46	-2	0.1115	5.9	2.582	1.7	0.1288
�30	1925	�52	-2	0.1022	4.1	2.57	2	0.1336
�14	1980	�34	1	0.1008	3.2	2.661	1.5	0.1289
�15	1981	�41	2	0.0976	5.6	2.669	1.6	0.1292
�13	2037	�37	3	0.0996	3.5	2.708	1.4	0.1287
�21	1993	�40	2	0.0974	6.4	2.665	1.5	0.1296
�14	2055	�50	-2	0.1125	6.2	2.559	2	0.1294

�10	1955	�27	1	0.0999	2.8	2.619	1.2	0.1306
�9	1930	�28	5	0.085	4.8	2.726	1.2	0.1303
�15	2036	�35	4	0.0981	2.9	2.688	1.3	0.1363
�28	2062	�41	1	0.1049	4.7	2.625	1.7	0.1305
�11	2047	�48	3	0.0974	5.6	2.662	1.3	0.1305
�11	2013	�33	2	0.0983	4.8	2.641	1.3	0.1309
�14	1979	�41	2	0.095	6.2	2.651	1.6	0.1308
�10	1996	�32	4	0.0924	4.9	2.68	1.3	0.1309
�15	1959	�44	7	0.0862	4.3	2.766	1.5	0.1313
�38	1704	�45	23	0.0526	8.4	3.279	2.1	0.1334
�39	1529	�94	67	-0.0251	-24.3	9.019	4.8	0.1188
�21	1959	�59	-4	0.115	7	2.561	1.7	0.1286
�28	2068	�80	-6	0.124	10.8	2.504	3.8	0.1261
�13	2016	�30	4	0.1	2.4	2.736	1.3	0.1288
�12	2014	�34	7	0.086	4	2.815	1.1	0.1306
�12	2003	�34	-3	0.112	4.2	2.561	1.3	0.1284
�21	1928	�39	6	0.09	2.9	2.77	1.3	0.1355
�16	2032	�45	-2	0.112	3.9	2.554	1.3	0.1311
�15	2063	�56	1	0.106	4.9	2.637	2.2	0.1302
�13	1935	�33	1	0.096	4.3	2.655	1.2	0.1301
�25	2019	�34	-1	0.106	4.4	2.601	1.3	0.1295
�23	2012	�37	0	0.105	5.9	2.593	1.3	0.1304
�20	1929	�43	5	0.091	4.1	2.713	1.5	0.1327
�14	2013	�35	1	0.103	4.2	2.61	1.4	0.1306
�15	2002	�35	8	0.088	3.8	2.795	1.3	0.1316
�19	2026	�33	0	0.104	5.1	2.587	1.3	0.1312
�25	2018	�38	5	0.097	3.6	2.71	1.3	0.1324
�34	2153	�72	5	0.102	8	2.69	2.8	0.1326
�42	1990	�75	0	0.103	7.3	2.56	3.3	0.1337
�12	2174	�80	-3	0.126	13.1	2.466	3.5	0.1325
�59	1881	�99	-2	0.1	8.6	2.666	4.4	0.1257
�15	2074	�78	-8	0.132	11.4	2.446	3.7	0.1283
�27	1457	�55	7	0.063	4.6	2.748	1.2	0.1459
�16	1857	�39	12	0.074	3.3	2.944	1.1	0.1348
�22	2006	�62	9	0.081	4.4	2.823	1.2	0.1399
�51	3131	�139	0	0.167	5.1	2.392	2.2	0.1872
�13	1865	�24	7	0.087	2.4	2.83	1.1	0.1292
�6	1925	�22	2	0.096	2.1	2.69	1.1	0.129
�6	1976	�29	3	0.1	2.1	2.69	1.4	0.129
�7	2110	�76	-1	0.111	3.9	2.59	1.1	0.1299
�6	1989	�28	3	0.099	2.5	2.68	1.1	0.1294
�22	1972	�60	8	0.09	5.9	2.82	2.9	0.1314
�17	2074	�31	1	0.106	2.6	2.63	1.1	0.1336
�5	2010	�26	2	0.1	3	2.64	1.1	0.1304
�7	2034	�34	7	0.094	2.6	2.75	1.1	0.1332

�20	916	�15	51	0.026	2.4	5.83	1.3	0.1259
�8	1771	�39	17	0.07	3.3	3.22	1.6	0.127
�73	1498	�95	23	0.059	9.7	3.43	3.6	0.1275
�12	1783	�21	13	0.081	1.7	3.01	1.1	0.1299
�6	1707	�32	12	0.074	2.4	2.98	1.1	0.13
�8	1937	�28	14	0.085	2.2	3.01	1.4	0.1305
�17	1191	�47	52	0.03	5.2	5.35	3.8	0.133
�33	2003	�99	14	0.08	9.1	3.01	4.2	0.1365
�13	1945	�35	25	0.025	13.1	3.44	1.1	0.1319
�43	3431	�118	-11	0.213	4.1	2.16	1.6	0.1836

�13	2017	�36	4	0.0979	3.4	2.659	1.5	0.132
�11	2024	�32	1	0.104	3.2	2.559	1.4	0.1332
�13	2050	�36	-1	0.108	3.7	2.522	1.5	0.1336
�8	2017	�27	0	0.1045	2.4	2.542	1.2	0.1337
�15	2198	�46	-2	0.121	5	2.48	1.7	0.1337
�13	1989	�38	3	0.0956	4.9	2.607	1.5	0.134
�10	2055	�33	0	0.1056	5.1	2.539	1.3	0.1339
�11	2006	�32	2	0.1005	3.2	2.577	1.4	0.1341
�11	2071	�33	1	0.1061	3.1	2.546	1.4	0.1337
�15	1984	�40	10	0.0848	4.2	2.788	1.6	0.1339
�10	1898	�30	2	0.0932	3.7	2.581	1.3	0.1345
�22	2026	�43	4	0.0928	7.4	2.605	1.5	0.1355
�16	2136	�45	2	0.1068	4.9	2.561	1.7	0.1341
�11	2110	�37	-2	0.1135	3.2	2.469	1.4	0.1342
�24	2034	�43	1	0.1043	5	2.53	1.7	0.1341
�15	1957	�40	8	0.0859	4.3	2.679	1.6	0.136

�12	2011	�32	1	0.103	2.6	2.64	1.4	0.1295
�9	2003	�26	7	0.092	2.4	2.82	1.1	0.1304
�11	2028	�30	1	0.105	2.9	2.63	1.3	0.1298
�9	2065	�31	1	0.107	2.5	2.62	1.2	0.1292
�13	1972	�27	9	0.091	2	2.82	1.1	0.1358
�16	2187	�37	1	0.112	2.5	2.6	1.3	0.1351
�9	1968	�27	5	0.096	2.3	2.7	1.2	0.1312
�10	2000	�28	4	0.097	2.6	2.69	1.2	0.1322
�12	2012	�35	3	0.098	3.5	2.65	1.4	0.1317
�16	2024	�43	4	0.097	4.2	2.66	1.5	0.1302

�19	2042	�45	-4	0.113	4.3	2.58	1.7	0.1262
�19	1495	�22	28	0.055	2.1	3.61	1.1	0.1386
�27	1865	�56	24	0.063	3.8	3.45	1.3	0.1384
�39	1977	�65	40	0.041	7.2	4.14	1.1	0.1712
�17	2005	�80	11	0.083	7.3	2.88	3.2	0.1361
�15	2038	�37	20	0.081	2.2	3.21	1.1	0.1382
�39	1772	�47	28	0.067	2.4	3.39	1.3	0.1718
�19	2034	�33	11	0.091	2	2.85	1.1	0.1369
�32	2005	�67	26	0.065	5.6	3.31	2.4	0.1617
�34	2075	�55	9	0.095	4.4	2.72	2	0.1455
�40	2139	�56	2	0.109	3.6	2.52	1.6	0.1484
�35	1461	�43	56	0.036	5.3	5.47	1.7	0.1695

�9	2014	�44	1	0.1008	6.7	2.671	1.2	0.1285
�22	1917	�52	3	0.0923	5.5	2.732	2	0.1293
�9	2008	�45	7	0.0837	7.7	2.822	2.1	0.1287
�11	1975	�38	-2	0.1098	5.5	2.582	1.3	0.1293
�13	1919	�53	2	0.0895	7.4	2.694	1.4	0.1293
�11	2020	�38	2	0.095	7.1	2.679	1.3	0.1294
�17	2052	�43	2	0.1027	3.8	2.673	1.8	0.1299
�11	2130	�38	0	0.1121	4.2	2.593	1.4	0.1302
�11	2222	�66	0	0.1138	7.9	2.611	1.4	0.1302
�18	2069	�48	1	0.1058	4.9	2.616	1.8	0.1312
�13	2097	�40	9	0.082	5.6	2.84	1.4	0.1296
�16	2067	�44	2	0.1034	4.4	2.613	1.8	0.1317
�16	1754	�64	40	-0.0086	-49.1	4.35	3.1	0.1304
�18	1968	�120	23	0.0673	8	3.395	2.6	0.1293
�13	2012	�45	18	0.0585	5.7	3.2	1.4	0.1287
�9	2099	�47	2	0.095	7.5	2.669	1	0.1321
�5	2043	�27	-2	0.116	5.3	2.578	0.9	0.1293
�8	2097	�43	0	0.109	4.1	2.614	1	0.1301
�6	1990	�32	0	0.1	7.7	2.626	1	0.1303
�15	1942	�31	1	0.099	4.7	2.634	1	0.1289
�16	1998	�56	1	0.095	12	2.643	1.1	0.1305
�6	1980	�27	0	0.103	8.2	2.614	1	0.1294
�5	1998	�25	0	0.105	6	2.608	1.2	0.1294
�6	1999	�24	2	0.09	6.6	2.675	1	0.1296
�5	1977	�21	1	0.099	5.3	2.626	0.9	0.1296
�9	2181	�39	3	0.102	5.3	2.649	1.1	0.1325
�9	2026	�26	4	0.096	3.2	2.665	1.1	0.1317
�10	2649	�47	-22	0.424	5.3	2.151	1	0.13
�14	1834	�39	3	0.091	4	2.681	1.6	0.1306
�9	1658	�28	12	0.05	5.7	2.952	0.9	0.1307
�12	2003	�37	0	0.103	4.6	2.664	1.4	0.1287
�10	1998	�31	0	0.103	4	2.658	1.4	0.1279
�15	1952	�45	0	0.101	6.7	2.634	1.6	0.1296
�14	1913	�44	5	0.084	6.6	2.757	1.5	0.1308
�11	1970	�34	1	0.099	4.8	2.656	1.5	0.1292
�12	2026	�35	1	0.103	4.3	2.647	1.5	0.1291
�8	1974	�31	4	0.087	7	2.712	1.3	0.1295
�7	1873	�26	6	0.087	3	2.768	1.3	0.1296
�8	1853	�29	9	0.066	6	2.874	1.3	0.1294
�10	2001	�32	1	0.101	4	2.64	1.4	0.1302
�16	1959	�40	5	0.091	4.5	2.735	1.6	0.1319
�16	2005	�46	9	0.083	5	2.848	1.4	0.131
�12	2071	�42	4	0.092	6.6	2.723	1.5	0.13
�11	2032	�37	3	0.092	7.2	2.686	1.4	0.1299
�16	2024	�53	14	0.068	5.8	2.99	1.5	0.1348
�13	2030	�46	21	0.043	8.8	3.235	1.4	0.1329

�17	2130	�82	4	0.082	20.9	2.755	2.4	0.1288
�9	2055	�42	3	0.089	8.5	2.715	1.3	0.1302
�10	1960	�39	1	0.098	9.9	2.643	1.4	0.129
�12	2034	�44	0	0.107	9.3	2.615	1.5	0.1294
�11	1980	�39	2	0.096	5.7	2.656	1.3	0.1333
�10	2222	�44	9	0.074	8.3	2.861	1.3	0.1311
�14	2189	�79	1	0.111	8.2	2.61	1.3	0.1368
�5	1895	�34	4	0.063	18.9	2.731	1.5	0.1298
�13	2013	�41	8	0.03	39.9	2.839	1.3	0.1301
�11	1949	�44	7	0.071	9.3	2.789	1.4	0.1304
�17	1965	�71	5	0.078	10.2	2.703	1.5	0.1368
�14	1947	�39	6	0.087	5.3	2.754	1.6	0.1305
�10	2034	�54	1	0.099	10.7	2.62	1.4	0.1315
�12	1950	�46	6	0.066	12.3	2.764	1.4	0.1313
�10	2126	�55	10	0.059	13.3	2.874	1.7	0.132
�9	2012	�36	5	0.068	13.3	2.732	1.4	0.1309

�10	1877	�47	75	-0.059	-6.5	11.125	1.2	0.1208
�23	2110	�69	24	0.05	8.7	3.471	2.1	0.1331
�5	2807	�107	-18	0.37	18	2.22	3.5	0.1302
�12	2042	�53	14	-0.01	-104.1	3.037	1.4	0.1328
�39	3333	�158	4	0.152	9.9	2.574	1.4	0.1605

�27	1544	�62	27	-0.005	-100	3.63	1.5	0.134
�12	1931	�40	6	0.077	9	2.8	1.8	0.13
�10	1933	�38	7	0.072	9	2.81	1.6	0.1288
�9	1881	�40	7	0.069	9	2.81	1.6	0.1297
�18	1970	�69	10	0.048	28	2.89	2.6	0.132
�7	1981	�36	4	0.079	11	2.72	1.5	0.1298
�12	2019	�52	4	0.079	20	2.72	2.5	0.1298
�6	1972	�34	5	0.073	11	2.76	1.5	0.1295
�9	2018	�44	2	0.095	9	2.66	1.9	0.1305
�12	2088	�73	2	0.099	10	2.66	1.7	0.1294
�4	1988	�38	4	0.07	16	2.72	1.4	0.13
�13	2102	�44	3	0.096	11	2.67	1.8	0.1299
�11	2093	�42	-3	0.127	9	2.52	1.5	0.1321

�17	3120	�138	63	-0.061	-16	7.01	2.8	0.1337
�14	1885	�73	11	0.055	16	2.9	2.5	0.1311
�10	2003	�54	8	0.069	9	2.8	1.5	0.1339
�14	1970	�62	17	0.071	5	3.04	1.8	0.139

�9	2051	�44	1	0.103	6	2.63	1.6	0.1302
�6	1977	�51	3	0.086	12	2.71	2.2	0.1296
�7	1970	�42	4	0.085	9	2.71	1.9	0.1305
�6	1948	�33	5	0.082	7	2.75	1.6	0.1302
�6	1949	�38	7	0.063	12	2.79	1.5	0.1302
�9	1455	�59	9	0.045	10	2.82	1.5	0.1369
�8	2067	�44	10	0.046	21	2.87	1.8	0.1311

�12	2616	�94	7	0.088	12	2.73	1.5	0.1412

�6	1955	�32	11	0.048	12	2.93	1.4	0.1303
�19	2087	�96	18	0.016	42	3.09	1.6	0.141
�8	1533	�51	22	0.012	35	3.32	2.1	0.1326
�17	1267	�110	33	-0.011	-60	3.84	4.8	0.1358
�8	2092	�32	-1	0.1127	6.3	2.613	1.2	0.1286
�5	1937	�33	4	0.0678	12	2.727	1	0.1294
�4	2007	�30	2	0.0859	9.8	2.669	1	0.1296
�6	1974	�30	6	0.0695	8.1	2.746	1.1	0.1321
�23	2056	�87	9	0.0684	9.6	2.829	1.1	0.1341
�43	1712	�143	30	-0.0074	-115	3.639	1.6	0.1371
�13	2099	�39	-2	0.1151	5.1	2.598	1.5	0.1277
�11	2149	�57	-1	0.1138	4.9	2.615	1.4	0.1284
�10	2032	�40	1	0.1021	5.1	2.666	1.9	0.1288
�9	2108	�29	-1	0.1127	3.5	2.592	1.2	0.1296
�10	2037	�33	2	0.0997	4.7	2.667	1.3	0.1296
�9	2071	�30	2	0.1026	4.4	2.656	1.3	0.1293
�11	2086	�35	1	0.1058	4.3	2.633	1.4	0.13
�10	2098	�33	0	0.1079	4.2	2.619	1.3	0.1296
�11	2017	�35	2	0.0994	4.9	2.653	1.4	0.1297
�7	2027	�26	2	0.1	3.3	2.654	1.2	0.1305
�13	2132	�41	1	0.107	4.8	2.637	1.4	0.1289
�11	2077	�35	2	0.1029	5.1	2.633	1.4	0.1305
�10	2043	�33	3	0.0973	4.9	2.667	1.4	0.1304
�11	2132	�38	2	0.1028	5.4	2.651	1.4	0.1306
�12	2149	�44	-4	0.1246	4.7	2.534	1.4	0.1289
�12	2054	�38	0	0.1072	4.9	2.626	1.4	0.1292
�14	2026	�41	2	0.0993	4.9	2.68	1.5	0.13
�14	2081	�41	0	0.1098	5	2.61	1.5	0.1297
�11	2061	�36	2	0.1002	5	2.668	1.3	0.1299
�12	2065	�41	-1	0.1098	4.7	2.586	1.4	0.1303
�14	2057	�43	-1	0.1091	5.9	2.651	1.5	0.1271
�22	1810	�82	2	0.0811	14.4	2.708	1.9	0.1295
�17	2002	�72	2	0.096	9.9	2.682	1.7	0.1289
�10	2087	�33	1	0.1072	4.5	2.648	1.3	0.1284
�9	2066	�40	2	0.1004	5.7	2.69	1.7	0.1289
�15	2002	�31	2	0.098	4.5	2.688	1.3	0.1289
�20	2044	�65	0	0.108	8.2	2.611	1.7	0.1307
�8	2066	�34	3	0.0977	4.3	2.711	1.2	0.1287
�11	2014	�37	2	0.0979	6.1	2.671	1.5	0.1289
�8	2043	�35	3	0.0943	6.1	2.692	1.2	0.1291
�22	2129	�41	0	0.1111	6.3	2.62	1.5	0.1288
�11	2006	�34	4	0.0928	5.1	2.711	1.4	0.1292
�9	2105	�33	1	0.106	4.4	2.638	1.3	0.1295
�10	2028	�33	4	0.0939	4.9	2.707	1.4	0.1299
�8	1963	�32	4	0.0925	3.8	2.72	1.5	0.1299
�7	2048	�27	3	0.0977	4	2.677	1.2	0.13
�13	2009	�41	4	0.0895	6.6	2.71	1.5	0.1306

�11	2069	�35	3	0.0992	5.1	2.668	1.4	0.1303
�11	2040	�34	3	0.0955	4.8	2.687	1.3	0.1301
�12	2051	�37	7	0.0866	5.3	2.774	1.4	0.1307
�10	2104	�33	1	0.1079	4.5	2.582	1.3	0.1317
�13	2056	�42	2	0.103	3.7	2.616	1.5	0.1323
�17	2050	�49	2	0.0993	6.4	2.618	1.7	0.1332
�14	2092	�44	0	0.1098	5.4	2.546	1.5	0.1335
�7	1944	�234	1	0.0904	16.1	2.586	1.1	0.1328
�11	2101	�51	8	0.0928	3.7	2.761	1.3	0.1352
�11	1932	�45	6	0.0854	6	2.707	2	0.1343
�13	2038	�39	3	0.0987	4.6	2.611	1.4	0.1348
�15	2075	�45	4	0.0947	5.9	2.668	1.7	0.1322
�16	1979	�44	3	0.0947	5.1	2.634	1.7	0.1339
�10	2211	�45	3	0.108	3.8	2.623	1.3	0.1332
�12	2166	�42	2	0.108	5	2.578	1.4	0.1329
�11	2101	�36	3	0.101	5.1	2.595	1.4	0.1339
�13	2126	�43	5	0.0961	5.8	2.636	1.6	0.1344
�19	1961	�151	11	0.0797	9.4	2.836	1.8	0.1349
�12	2103	�38	14	0.0709	5.3	2.945	1.4	0.1342
�16	2069	�44	1	0.105	5.7	2.57	1.4	0.1319
�20	2133	�69	2	0.1006	8.1	2.551	1.5	0.1386
�17	2203	�50	2	0.1079	6.8	2.569	1.5	0.1338
�21	2116	�61	7	0.0841	8	2.767	1.6	0.1328
�17	2065	�46	10	0.0837	3.6	2.831	1.1	0.1378
�21	1942	�95	9	0.0768	7.4	2.856	1.5	0.1323
�16	2117	�42	-5	0.1249	4.9	2.499	1.4	0.1298
�18	2070	�49	-1	0.1119	5.7	2.504	1.7	0.1339
�14	2095	�39	0	0.1106	4.7	2.533	1.4	0.1326
�15	2012	�33	8	0.0868	4.1	2.702	1.4	0.1375
�13	2059	�46	2	0.1025	3.5	2.595	1.1	0.1319
�11	2005	�32	8	0.0906	2.7	2.748	1	0.1336
�23	2034	�47	3	0.0999	3.3	2.627	1.2	0.1383
�13	2090	�30	4	0.1018	2.9	2.633	1.1	0.1338
�18	2048	�48	1	0.1043	5.5	2.604	1.6	0.1299
�11	2003	�25	0	0.1048	2.3	2.57	1	0.1322
�13	2066	�35	2	0.1029	4.2	2.608	1.2	0.1312
�15	2093	�36	-1	0.111	3.6	2.531	1.3	0.1321
�58	2273	�114	0	0.1191	4.2	2.482	1.4	0.172
�42	1960	�47	1	0.1	4.5			
�14	2105	�99	4	0.08	24.8			
�9	1720	�38	12	0.078	2.8			
�11	1949	�92	3	0.022	139.1			
�11	2470	�47	8	0.092	5			
�9	2539	�82	5	0.083	17.2			
�20	2078	�61	5	0.097	5.1			
�13	2190	�44	1	0.109	5.9			

�88	1357	�138	31	0.034	19.6			
�24	12346	�213	25	0.759	2.3			
�18	4656	�218	-1	0.276	7.6			
�14	1298	�53	-34	0.152	8.7			
�19	1549	�29	7	0.071	2.5			
�12	1880	�29	13	0.075	2.8			
�40	1071	�62	23	0.031	8.1			
�15	2120	�46	13	0.07	5.5			
�10	1953	�100	4	0.0913	16.1	2.731	5.1	0.1304
�7	1934	�39	6	0.0814	7	2.809	2	0.1286
�7	1899	�42	2	0.0941	5.5	2.676	2.2	0.1295
�18	1915	�46	1	0.0953	9.3	2.649	2.1	0.1302
�16	1836	�108	6	0.0796	16.5	2.797	5.5	0.1306
�26	1986	�70	5	0.0908	7.5	2.767	2.4	0.1303
�6	1914	�39	4	0.0922	4.7	2.711	2	0.1298
�6	1853	�36	9	0.0827	3.6	2.872	2	0.1307
�6	1846	�36	9	0.0822	3.8	2.849	2	0.1313
�7	1910	�41	4	0.0879	6.6	2.715	2	0.1298
�11	2005	�41	5	0.0961	4.2	2.714	2	0.1319
�37	1919	�59	10	0.085	6.2	2.801	2.6	0.1355
�20	1986	�146	-7	0.1484	34.5	2.344	6.5	0.1389
�8	2032	�43	3	0.0951	6.9	2.608	2	0.135
�8	1966	�41	8	0.0843	5.4	2.729	2	0.1352
�10	2018	�42	8	0.094	3.6	2.712	2.1	0.1358
�28	1690	�88	12	0.0654	12.4	2.967	4.3	0.1325
�76	1751	�125	15	0.0736	12	3.081	5.5	0.13
�35	1959	�107	-4	0.118	11			
�26	2136	�67	-5	0.123	7			
�31	2279	�90	-4	0.132	9			
�33	2116	�95	-4	0.125	10			
�13	2086	�92	1	0.1	15			
�30	2132	�91	2	0.107	8			
�20	2250	�62	-2	0.124	8			
�18	2148	�57	-2	0.121	8			
�12	2167	�61	2	0.109	6			
�19	2148	�55	3	0.104	6			
�26	2078	�70	2	0.101	9			
�23	2173	�93	0	0.112	11			
�31	2209	�85	-4	0.128	10			
�27	2079	�72	4	0.097	9			
�24	2203	�86	1	0.109	15			
�20	2072	�53	7	0.092	6			
�26	2458	�106	3	0.113	11			
�29	2129	�90	4	0.097	12			
�23	2210	�100	3	0.104	10			
�38	2176	�104	2	0.106	11			

�24	2302	�66	1	0.117	6			
�24	2609	�80	6	0.117	7			
�69	1720	�200	-10	0.127	15			
�38	2078	�89	-7	0.126	8			
�35	2326	�124	2	0.114	9			
�16	1940	�60	1	0.095	8.1			
�8	2079	�35	1	0.105	5.4			
�9	2021	�32	2	0.101	3.1			
�19	2099	�74	-1	0.115	9.6			
�19	1984	�70	5	0.082	11.4			
�28	1919	�53	5	0.083	9.3			
�8	1932	�32	7	0.078	4.9			
�10	2013	�34	4	0.096	3.4			
�28	1924	�65	10	0.066	13			
�10	1345	�25	1	0.068	2.3			
�11	1068	�18	5	0.052	2.2			
�15	1207	�39	17	0.052	3.8			
�9	899	�23	55	0.02	3.5			
�7	1902	�29	11	0.074	3.5			
�8	1973	�52	11	0.077	4.4			
�7	1748	�35	16	0.064	4			
�11	2120	�42	13	0.067	6.4			
�39	1912	�105	14	-0.074	-42.8			
�8	2002	�28	2	0.1	2.7			
�15	2098	�44	8	0.096	3.5			
�12	2036	�63	2	0.098	6.3			
�22	2093	�106	7	0.092	10.2			
�8	1983	�41	4	0.08	11			
�11	1782	�38	9	0.073	4.5			
�14	2114	�64	4	0.099	6.2			
�41	2015	�86	1	0.101	13.3			
�10	1031	�31	53	0.023	4.3			
�7	1614	�24	19	0.05	3.4			
�8	1850	�25	13	0.076	2.4			
�19	1544	�39	21	0.034	11.2			
�18	1698	�25	17	0.063	3.5			
�17	2167	�57	9	0.083	6	2.72	1.6	0.1442
�37	1835	�93	9	0.07	12	2.7	2.7	0.1406
�25	1941	�71	5	0.085	9	2.61	2.4	0.1387
�24	1892	�77	7	0.08	8	2.63	2.1	0.1413
�14	1992	�44	5	0.089	6	2.59	1.8	0.1389
�22	1874	�65	6	0.072	13	2.62	2.2	0.1388
�29	1912	�104	5	0.076	18	2.58	3.2	0.1425
�15	2093	�45	4	0.1	6	2.52	1.9	0.1397
�14	1995	�44	6	0.086	7	2.58	1.9	0.1395

�16	2016	�51	7	0.08	8	2.61	2	0.1396
�20	2173	�79	4	0.097	9	2.52	2.1	0.1396
�12	1980	�49	7	0.087	5	2.58	1.8	0.1417
�24	1460	�51	15	0.013	72	2.99	2.7	0.1342
�22	1357	�61	35	-0.014	-24	3.82	1.7	0.1423
�34	1968	�78	20	0.06	6	3.07	2	0.1483
�21	1593	�48	24	0.033	10	3.2	1.9	0.1415
�25	1773	�86	19	0.023	22	2.99	1.7	0.1493
�35	2219	�84	7	0.099	6	2.58	2	0.1523
�28	1730	�76	15	0.04	19	2.87	2.4	0.1413
�13	1876	�42	11	0.061	9	2.72	1.7	0.1413
�16	1941	�50	16	0.043	14	2.86	1.9	0.1399
�17	1755	�43	39	0.018	10	3.82	1.6	0.157
�12	2036	�43	0	0.106	8	2.53	1.6	0.1338
�13	2041	�44	1	0.101	7.6	2.57	1.6	0.134
�17	1950	�96	4	0.087	8.5	2.65	1.8	0.1346
�10	2013	�47	3	0.098	5.1	2.6	2	0.1336
�15	1992	�46	4	0.091	6.7	2.62	1.6	0.1354
�20	2013	�43	5	0.093	4.6	2.64	1.5	0.1387
�17	2035	�65	4	0.089	11.5	2.6	2.3	0.1367
�10	2071	�35	3	0.097	5	2.58	1.5	0.1355
�13	1971	�40	8	0.076	6.7	2.72	1.6	0.1358
�15	2014	�59	6	0.081	9	2.64	1.7	0.137
�18	2302	�53	0	0.119	5.5	2.43	1.9	0.1397
�17	2236	�64	0	0.118	9.9	2.38	1.9	0.1412
�20	1884	�52	11	0.068	6.8	2.88	1.7	0.1339
�399	2201	�1640	3	0.094	143.6	2.37	7.3	0.1638
�13	1905	�41	5	0.081	7.1	2.81	1.6	0.1277
�11	1904	�37	4	0.086	5.6	2.78	1.5	0.1277
�9	1884	�35	7	0.079	5.3	2.84	1.7	0.129
�19	2006	�38	2	0.094	8.3	2.69	1.5	0.1284
�9	1896	�40	8	0.076	5.5	2.85	1.4	0.1294
�8	2018	�30	0	0.105	3.6	2.61	1.4	0.1309
�15	1940	�38	6	0.077	9	2.77	1.5	0.1293
�16	1930	�36	6	0.08	7.3	2.78	1.7	0.1299
�10	2049	�36	1	0.104	6.2	2.63	1.5	0.1296
�9	1840	�31	9	0.075	4.4	2.86	1.4	0.1298
�8	1938	�30	7	0.079	5.1	2.81	1.4	0.1299
�9	2139	�37	1	0.11	4.1	2.58	1.4	0.1346
�13	2102	�36	-1	0.112	2.9	2.49	1.6	0.1351
�10	2085	�52	3	0.101	4.7	2.59	1.5	0.1346
�17	2027	�44	9	0.086	4.7	2.76	1.7	0.1341
�18	1691	�49	16	0.051	6.5	3.14	1.5	0.1327
�14	1700	�40	13	0.054	6.4	3	1.4	0.1335
�8	1806	�33	11	0.064	5.5	2.93	1.4	0.1304
�9	1830	�31	11	0.064	5.4	2.94	1.4	0.131

�13	2021	�46	10	0.076	5.2	2.86	1.4	0.1344
�25	1535	�38	22	0.052	3	3.24	1.4	0.1533
�26	1953	�121	2	0.098	10.6	2.61	5.7	0.1341
�29	1426	�125	19	-0.017	-53.8	3.13	1.7	0.1396
�16	1990	�57	18	0.048	10.6	3.08	2.2	0.1374
�35	1680	�117	18	0.046	15.1	3.05	2.2	0.1353

�11	2063	�36	0	0.108	6.4	2.59	1.5	0.1317
�9	2015	�38	0	0.107	7.7	2.6	1.6	0.1296
�11	2042	�42	1	0.101	7.1	2.62	1.7	0.1316
�8	2129	�35	0	0.112	4.7	2.58	1.6	0.1303
�8	2048	�35	0	0.106	7.1	2.63	1.6	0.129
�15	2259	�65	2	0.111	7	2.64	1.6	0.1353
�8	2069	�37	8	0.071	8.6	2.81	1.5	0.1322
�13	2292	�53	-5	0.148	6.7	2.43	1.5	0.1366
�11	2222	�54	8	0.079	8.6	2.76	1.5	0.1371
�10	2016	�37	10	0.078	5.1	2.82	1.5	0.1359

�37	1723	�63	29	0.037	12.3	3.34	1.8	0.167
�7	1707	�29	13	0.056	5.3	2.98	1.5	0.1343
�26	2108	�65	5	0.098	4.7	2.68	1.7	0.146
�37	2450	�118	7	0.104	6.6	2.71	1.5	0.1509
�102	2771	�367	4	0.126	15.9	2.53	1.7	0.1667
�73	3801	�163	54	0.094	9.9	4.67	1.5	0.2478
�16	2211	�42	5	0.102	4.7	2.68	1.5	0.14
�11	2165	�55	7	0.08	8.6	2.72	1.5	0.1414
�13	1729	�48	23	0.021	15.9	3.41	1.5	0.1381
�6	1713	�32	18	0.023	20.5	3.16	1.7	0.1304
�63	2193	�149	57	0.028	31.2	6.02	2.6	0.1737
�11	1804	�47	32	0.015	19.3	3.73	1.8	0.1412

�11	2063	�46	10	0.067	8.2
�10	2073	�34	1	0.101	15
�5	2015	�38	3	0.073	21.5
�10	2041	�36	2	0.102	3.8
�5	2009	�37	8	0.052	17.2

�8	1062	�22	50	0.024	3
�7	1496	�61	32	-0.188	-5.4
�12	2036	�37	13	0.08	3.8
�7	1208	�19	42	0.022	3.6
�27	779	�31	57	-0.002	-41.3
�9	1592	�49	33	-0.084	-5.5
�14	1995	�97	26	-0.064	-10.4
�80	1263	�146	69	-0.025	-35.9

�7	1976	�32	5	0.088	5.1	2.72	1.6	0.1313
�7	2049	�41	1	0.102	5.9	2.64	1.7	0.1304
�12	2173	�44	6	0.094	5.3	2.69	1.6	0.1393
�7	2019	�35	4	0.092	5.6	2.68	1.5	0.1311
�8	2022	�37	4	0.087	7.3	2.72	1.5	0.1315
�12	2128	�51	2	0.104	5.7	2.61	1.6	0.1369

�10	2032	�35	8	0.087	4.2	2.78	1.5	0.1365
�7	2020	�33	3	0.095	6.5	2.66	1.5	0.1304
�11	2038	�40	3	0.097	6	2.65	1.6	0.1326
�7	1959	�31	4	0.089	5.5	2.69	1.5	0.131
�12	2015	�33	3	0.095	5.2	2.68	1.5	0.1303
�10	2045	�32	3	0.098	4.9	2.66	1.5	0.1315
�6	1996	�31	0	0.102	4.5	2.62	1.5	0.1299
�14	1881	�42	22	0.047	5.7	3.17	1.6	0.1458
�18	2961	�75	7	0.131	4.8	2.54	1.5	0.1649
�9	2103	�53	5	0.062	17.1	2.72	1.2	0.1327
�11	1809	�32	10	0.036	17.3	2.9	1.1	0.13
�8	2067	�34	1	0.106	2.5	2.6	1.2	0.1314
�8	2080	�32	1	0.107	3.3	2.57	1.2	0.1332
�11	2117	�37	0	0.11	4.6	2.57	1.4	0.1321
�13	2102	�38	0	0.109	3.4	2.56	1.2	0.1334
�8	2064	�44	3	0.079	15.8	2.67	1.2	0.1305
�7	1946	�27	8	0.076	4.4	2.79	1.2	0.1326
�6	2013	�25	3	0.095	3.6	2.62	1.1	0.1342
�3	2124	�29	2	0.107	3.4	2.56	1.3	0.1346
�7	2109	�39	3	0.102	3.4	2.5	1.1	0.1412
�14	1911	�47	19	0.037	12.7	3.16	1.7	0.1338
�9	2000	�42	1	0.0992	6.9	2.623	1.6	0.1304
�10	2128	�44	0	0.1125	6.1	2.581	1.6	0.131
�16	2052	�41	0	0.1057	6.9	2.62	1.6	0.1293
�9	2005	�42	5	0.0893	6.6	2.724	1.8	0.1312
�12	2056	�51	2	0.097	8.2	2.662	1.7	0.1301
�8	1931	�34	10	0.0713	5.4	2.859	1.5	0.1328
�9	2085	�40	-1	0.1108	5.6	2.589	1.6	0.1298
�9	2103	�38	1	0.1064	4	2.622	1.5	0.1315
�12	2084	�48	0	0.1102	6.5	2.596	1.7	0.1303
�11	2165	�48	2	0.1051	6.4	2.618	1.7	0.1317
�21	2058	�62	3	0.1001	5.3	2.616	1.5	0.139
�9	2087	�41	1	0.1048	5.5	2.62	1.5	0.1314
�11	2142	�49	-3	0.123	6.9	2.535	1.7	0.13
�10	2195	�48	-5	0.136	6.7	2.493	1.6	0.1292
�14	1991	�45	0	0.1028	4.8	2.649	1.7	0.13
�9	2053	�42	2	0.0991	8.1	2.618	1.6	0.131
�21	2180	�109	4	0.098	7.3	2.641	1.6	0.1444
�43	2871	�254	8	0.0999	13.5	2.689	1.5	0.1471
�15	1936	�483	1	-0.068	-326.2			
�17	1989	�36	8	0.079	4.9			
�9	2081	�36	0	0.108	2.2			
�6	1945	�30	6	0.077	4			
�11	2037	�19	3	0.086	7.6			
�12	1763	�36	10	0.04	11.6			

�12	1954	�32	3	0.095	4.4			
�10	1997	�42	8	0.084	3.3			
�10	1996	�33	2	0.095	4.1			
�16	2109	�36	3	0.1	4.8			
�12	1970	�25	5	0.087	3.8			
�9	2233	�109	9	0.013	96.9			
�9	2194	�126	4	0.018	97.7			
�14	2022	�30	4	0.094	4.4			
�10	1725	�18	9	0.075	2.2			
�9	1977	�25	6	0.089	2.7			
�16	2380	�78	3	0.096	12.4			
�12	1262	�22	33	-0.02	-10.9			
�31	1312	�147	40	-0.014	-68.6			
�5	1673	�30	18	0.039	8.6			
�153	1126	�163	27	0.036	31.4			
�10	1941	�37	11	0.056	6.9			
�9	1682	�27	21	-0.024	-19.7			
�17	2188	�55	-9	0.135	5			
�15								
�14	1930	�29	14	0.06	5			
�15	1784	�43	13	0.057	5.9			
�14	2008	�39	2	0.103	2.7	2.64	1.7	0.1303
�13	1959	�64	1	0.096	12.6	2.64	1.7	0.1294
�13	2181	�98	4	0.068	25	2.72	1.6	0.1321
�7	1942	�32	1	0.096	6.5	2.64	1.5	0.1304
�16	2023	�40	-1	0.106	3	2.61	1.8	0.1289
�6	1960	�29	5	0.093	3	2.72	1.4	0.1316
�7	2088	�35	2	0.105	3.5	2.65	1.4	0.1311
�8	2011	�31	0	0.105	3.3	2.61	1.5	0.1296
�10	2014	�35	0	0.106	4.4	2.59	1.6	0.1298
�13	2147	�81	1	0.1	35.1	2.63	1.7	0.1297
�14	2077	�52	1	0.101	9.1	2.62	1.7	0.13
�6	1986	�34	1	0.101	4.8	2.63	1.4	0.1294
�6	1919	�29	3	0.089	5.6	2.69	1.4	0.1297
�6	2062	�35	3	0.098	5.3	2.66	1.4	0.1315
�9	2012	�32	2	0.103	2.3	2.64	1.5	0.1311
�10	1962	�42	0	0.102	4.2	2.63	1.6	0.1289
�37	2574	�130	25	0.063	11.2	2.85	1.6	0.1781
�46	2123	�44	8	0.103	3	2.7	1.5	0.1423
�56	2401	�103	12	0.106	6.2	2.64	2	0.1617
�16	2282	�47	14	0.095	3.8	2.93	1.8	0.1339
�5	1998	�30	3	0.095	4.6	2.677	1.4	0.1303
�7	2009	�34	4	0.0935	4.3	2.708	1.5	0.1316
�8	2198	�44	-3	0.1239	4.7	2.51	1.7	0.1339
�5	2057	�39	1	0.1035	5.7	2.635	1.8	0.1297
�6	2072	�103	0	0.1116	21.2	2.601	2.2	0.1299
�5	1990	�30	2	0.0977	5.1	2.655	1.4	0.1304

�10	1966	�36	5	0.0874	5.5	2.754	1.7	0.1309
�4	1952	�29	4	0.0909	4.1	2.703	1.4	0.1309
�6	1938	�44	8	0.0747	8.1	2.848	2.1	0.1303
�6	2032	�34	3	0.0967	5.2	2.679	1.5	0.1297
�10	2124	�48	1	0.1082	5.7	2.608	1.9	0.1326
�7	2079	�34	1	0.1062	3.6	2.618	1.5	0.1305
�9	2165	�50	2	0.1067	5.1	2.635	1.5	0.1319
�10	2143	�47	-1	0.117	6.5	2.554	1.8	0.132
�9	2097	�39	3	0.1014	5.1	2.67	1.5	0.1308
�7	2094	�49	-2	0.1146	4.9	2.549	1.5	0.1305
�8	2043	�37	2	0.1022	4.6	2.637	1.6	0.1304
�8	2239	�39	3	0.1092	4.8	2.631	1.5	0.1316
�6	1959	�38	5	0.0878	5.4	2.747	1.9	0.1305
�11	2141	�56	1	0.1089	5.8	2.606	1.6	0.1331
�17	2057	�38	7	0.0895	4.7	2.749	1.5	0.1385
�13	2603	�53	1	0.1348	4.2	2.532	1.5	0.144
�24	2049	�50	2	0.1031	4	2.628	1.5	0.1386
�9	1793	�38	16	0.0493	7.1	3.045	1.6	0.1372
�30	2725	�88	7	0.1248	5.8	2.651	1.5	0.1575
�8	1889	�28	-7	0.1212	5.1	2.389	1.4	0.1369
�23	2240	�108	3	0.1095	6.8	2.582	1.6	0.1406
�25	2194	�66	1	0.1114	5.2	2.589	1.6	0.1362
�12	2067	�37	5	0.096	2.9	2.712	0.9	0.1331
�12	1976	�32	1	0.101	3.8	2.622	1.1	0.1305
�14	1977	�36	5	0.088	4.8	2.729	1.2	0.1308
�27	2005	�64	5	0.09	4.5	2.711	1.1	0.1351
�13	1941	�44	6	0.085	4.7	2.727	1.3	0.1321
�13	1966	�31	6	0.088	3.3	2.73	1.1	0.1343
�15	2060	�40	1	0.104	3.7	2.598	1.1	0.1355
�12	2056	�31	-1	0.109	3.9	2.57	1.1	0.1305
�14	2127	�35	2	0.106	3.1	2.659	1	0.133
�16	2212	�46	5	0.102	2.8	2.65	0.9	0.1424
�14	2438	�46	1	0.126	2.6	2.628	0.9	0.134
�8	1953	�40	2	0.09	6	2.663	0.7	0.131
�10	2018	�26	4	0.097	2.7	2.689	1	0.1305
�10	2040	�26	2	0.101	2.8	2.634	1	0.1314
�17	2074	�59	2	0.095	8.9	2.625	0.9	0.134
�16	2043	�25	2	0.101	3.3	2.634	0.9	0.1311
�28	2090	�36	4	0.101	3.7	2.646	1	0.1383
�7	1912	�42	0	0.103	11.2	2.596	0.8	0.1298
�14	1938	�39	5	0.088	4.6	2.765	1.5	0.1313
�18	1979	�40	4	0.091	5.6	2.719	1.6	0.1314
�11	1957	�29	2	0.095	3.9	2.642	1	0.1314
�9	1235	�148	11	0.021	44.6	2.985	2.4	0.1291
�14	2016	�52	7	0.087	6.8			
�13	1993	�46	3	0.097	4.4			
�9	1435	�23	-5	0.083	3.9			
�10	1973	�26	6	0.088	3.4			

�19	2054	�59	0	0.106	8.5
�16	2055	�61	5	0.094	7.9
�11	2006	�36	20	0.046	7.1
�27	1657	�55	63	0.007	29.9
�20	2550	�87	-11	0.319	11.9
�30	1972	�41	20	0.074	3.4
�29	2147	�76	54	-0.013	-31.7
�20	1958	�39	17	0.041	14.8
�43	1973	�77	34	0.05	5.5
�23	2690	�83	61	-0.034	-11.6
�17	1342	�20	7	0.055	4.9
�39	3795	�646	84	-0.795	-7.6
�114	6754	�844	79	#VALUE!	#VALUE!
�61	3805	�875	75	-0.919	-16.9
�67	2493	�463	59	#VALUE!	#VALUE!
�48	3673	�377	76	-0.639	-9.7
�9	42784	�524	-59	#VALUE!	#VALUE!
�15	1925	�95	29	-0.045	-17.9
�14	3171	�315	-18	4.933	22.6
�21	3175	�397	75	-0.869	-10.2
�22	2110	�187	22	-0.925	-23.2
�79	2529	�214	21	-0.214	-48.2
�327	30157	�5218	77	#VALUE!	#VALUE!
�12	1391	�25	38	0.038	2.9
�11	1906	�40	14	0.048	8.6
�25	1749	�99	76	-0.072	-5.9
�23	1986	�74	28	0.031	16.1
�19	1869	�92	67	-0.036	-7.5
�11	2222	�54	4	0.097	6.6
�19	1926	�36	3	0.097	2.6
�21	1905	�41	2	0.095	3.6
�13	1852	�28	3	0.092	2.3
�4	1974	�25	3	0.097	3
�12	2272	�45	7	0.098	4.9
�5	1981	�24	2	0.098	3.2
�16	1927	�41	3	0.095	3.6
�12	1930	�32	4	0.095	2.9
�15	2010	�45	8	0.083	4.6
�20	2449	�71	-3	0.139	4.4
�8	2148	�35	1	0.105	6.6
�6	2050	�29	2	0.1	4
�12	2310	�64	0	0.123	7
�28	2075	�55	0	0.107	3.7
�15	1356	�24	31	0.037	2.8
�11	2445	�45	-61	#VALUE!	#VALUE!
�3	2786	�37	-33	0.671	6.5

�9	2015	�31	-10	0.132	3.6
�12	2034	�38	-1	0.109	4.1
�17	1927	�41	8	0.076	6.6
�7	2113	�34	-4	0.129	6.8
�6	2045	�30	4	0.093	4.7
�9	2138	�34	-1	0.114	4.1
�7	2001	�30	8	0.087	3.4
�10	2127	�44	-3	0.119	4.6
�15	2140	�51	-3	0.126	8.4
�9	2144	�35	-3	0.119	3.5
�11	2224	�43	-2	0.122	5.9
�12	2142	�42	-1	0.114	5.4
�27	2129	�78	10	0.082	8.7
�6	2027	�30	5	0.087	5.6
�14	2008	�48	-8	0.125	5.3
�18	2607	�51	-7	0.163	4.9
�16	1945	�44	27	0.054	4.6
�5	2013	�36	2	0.096	7
�8	1923	�45	5	0.084	7.8
�8	1996	�40	3	0.088	9.1
�8	2002	�35	4	0.097	3.5
�7	1969	�64	9	0.064	8.7
�5	2130	�187	6	0.069	15
�5	1928	�39	8	0.081	3.3
�8	2082	�34	5	0.083	5.6
�15	2072	�73	4	0.1	7.5
�17	2046	�52	4	0.095	5.2
�13	2111	�55	2	0.106	5.1
�16	2120	�94	5	0.1	6.3
�16	2262	�63	2	0.115	5.6
�9	2041	�49	7	0.092	4.5
�38	4959	�311	53	-0.534	-12.7
�44	3524	�346	57		
�23					
�67	972	�102	36	-0.017	-65.4
�7			100		
�16			100		
�20	1865	�123	23	-0.17	-15.6
�10	2321	�94	11	0.026	40.4
�10	1941	�37	14	0.077	3.6
�27	723	�22	57	0.003	33.4
�19	1509	�72	30	-0.018	-22.1
�18	2206	�138	51	-0.045	-17.1
�20	2101	�108	31	-0.025	-23.6
�9	2118	�57	26	-0.028	-20
�49	1845	�118	54	-0.003	-277.9

�24	1971	�58	16	0.048	11
�19	2314	�54	6	0.109	2.9
�19	8704	�306	45	-0.226	-7.9

�10	1920	�32	5	0.093	3
�12	2061	�36	3	0.105	2
�16	1832	�42	6	0.078	6
�15	1993	�41	3	0.098	4
�23	1995	�71	5	0.091	12
�18	1913	�49	6	0.077	11
�7	2061	�29	6	0.097	3
�10	2043	�36	2	0.103	4
�14	2142	�47	5	0.097	5

�6	2012	�33	5	0.093	4
�6	1791	�28	10	0.071	4
�9	1947	�35	9	0.085	4
�9	2006	�42	8	0.087	5
�19	2217	�66	6	0.083	17
�18	2128	�53	3	0.101	6
�10	2182	�43	6	0.091	6

�14	1825	�42	21	0.051	5
�9	1905	�39	18	0.065	4
�21	1334	�32	46	0.018	9
�13	2041	�45	25	0.075	3
�45	1282	�76	59	0.018	16
�15	2172	�71	26	0.026	20
�18	1633	�104	33	-0.057	-17
�12	1948	�40	26	0.023	16

�7	2008	�16	3	0.101	1.3
�9	2008	�18	3	0.099	1.7
�9	1969	�39	4	0.096	4.1
�22	1914	�23	9	0.074	5.7
�10	1977	�18	4	0.096	1.8
�11	1823	�23	10	0.07	3.6
�23	2041	�27	5	0.095	3.6
�9	2026	�23	3	0.1	1.9
�10	1981	�25	5	0.093	3
�11	2074	�35	3	0.104	3.4
�10	1946	�30	8	0.087	2.7
�8	1859	�18	8	0.077	2.7
�22	2042	�39	1	0.105	3.7
�10	1975	�22	3	0.095	3

�48	5620	�129	86	0.101	7.7
�19	2022	�28	14	0.086	1.8
�31	4599	�71	32	0.193	1.9
�36	1137	�36	42	0.012	23.1
�27	1578	�29	39	0.047	3.3
�11	1294	�25	26	0.041	2.8

�45	2352	�53	42	0.071	4			
�18	1952	�29	15	0.08	2.3			
�29	#DIV/0!	#DIV/0!	100	#VALUE!	#VALUE!			
�6	1900	�37	2	0.072	19			
�9	1828	�46	7	0.07	6.4			
�6	2010	�34	2	0.101	2.7			
�7	2029	�39	2	0.097	7.2			
�12	2016	�34	0	0.105	5			
�13	2088	�59	1	0.095	16.5			
�10	1852	�31	4	0.059	19.3			
�8	1974	�56	6	0.088	4.2			
�7	2034	�27	2	0.095	5.9			
�8	1928	�74	9	0.083	4.5			
�10	2048	�26	1	0.105	2.5			
�10	2023	�26	2	0.103	1.9			
�11	2038	�28	0	0.105	2.7			
�7	2039	�25	4	0.097	2.9			
�11	2123	�39	7	0.093	3.4			
�8	962	�39	31	0.028	5.3			
�15	1208	�19	26	0.031	4.6			
�64	1357	�132	17	0.051	16.3			
�20	1084	�75	35	0.032	8.9			
�9	1167	�112	24	0.015	44.7			
�10	1230	�23	26	0.039	3.1			
�7	1723	�30	18	0.069	2.6			
�12	1366	�31	21	0.048	4			
�8	1243	�31	19	0.04	3.9			
�12	1370	�28	26	0.048	3			
�6	1802	�45	12	0.004	178			
�8	1548	�42	11	0.057	4.4			
�13	1912	�223	16	-0.197	-10.8			
�14	1608	�27	12	0.064	3.2			
�25	1312	�45	21	0.036	8.8			
�7	1993	�19	1	0.1	2.6	2.67	0.72	0.1284
�11	1988	�26	2	0.098	3.1	2.7	0.92	0.1283
�15	2315	�39	8	0.101	2.8	2.81	1.06	0.1372
�6	2018	�20	0	0.103	2.8	2.65	0.84	0.1283
�6	2097	�18	1	0.107	2.1	2.64	0.66	0.13
�8	1961	�31	8	0.078	4.5	2.86	1.26	0.1299
�7	2015	�24	0	0.103	2.7	2.64	0.72	0.1284
�10	2040	�24	2	0.1	2.8	2.68	0.87	0.1295
�7	2084	�20	4	0.096	2.2	2.73	0.66	0.1313
�5	2021	�22	0	0.104	2.1	2.65	0.82	0.1278
�6	2032	�16	0	0.107	1.6	2.61	0.67	0.1287
�9	2004	�21	3	0.099	2.2	2.68	0.83	0.1292
�8	2053	�21	-1	0.109	2.4	2.62	0.8	0.1278
�13	#DIV/0!	#DIV/0!	100	#VALUE!		#DIV/0!	0.5	0.144

�18	1763	�61	34	0.034	8.6	3.83	2.14	0.1422
�10	1951	�22	21	0.061	2.2	3.27	0.7	0.1344
�8	#DIV/0!	#DIV/0!	100	#VALUE!		#DIV/0!	0.5	0.1286
�25	2318	�60	24	0.065	6.2	3.13	0.69	0.1547
�78	2092	�130	30	0.073	8.1	3.61	3.08	0.1534
�16	1907	�23	41	0.061	1.4	4.4	0.72	0.1407
�29	2328	�71	11	0.094	3.9	2.76	0.81	0.1503

�8	2063	�21	8	0.096	1.5
�6	1949	�24	8	0.081	3.4
�10	2048	�25	-1	0.11	3
�7	2062	�25	0	0.107	3.2
�5	2018	�19	1	0.101	2
�9	2064	�21	2	0.102	1.9
�7	2051	�18	-1	0.109	2.1
�9	1943	�23	4	0.09	2.8
�7	2084	�25	8	0.088	2.9
�8	2100	�35	2	0.105	2.5

�21	1835	�111	39	0.067	6.9
�9	#DIV/0!	#DIV/0!	100	#VALUE!	
�20	#DIV/0!	#DIV/0!	100	#VALUE!	
�12	2025	�33	34	0.06	2.5
�26	2300	�51	61	0.041	3.2
�22	1977	�41	35	0.046	3.2
�7	1948	�21	14	0.075	2.2
�34	3499	�66	23	0.14	3.4
�47	2623	�110	9	0.111	6.2
�34	2366	�70	22	0.08	5.9
�33	2254	�70	16	0.091	4.2
�12	2076	�28	26	0.065	1.9
�81	2057	�121	48	0.058	8.8
�267	3078	�793	27	0.095	44.1
�5	1763	�25	10	0.081	1.7
�40	2543	�71	8	0.118	3.5

�8	1950	�29	7	0.082	4.8	2.774	1.3	0.1302
�11	2248	�56	1	0.112	8	2.61	1.3	0.1342
�9	2019	�44	1	0.096	9	2.638	1.3	0.1315
�5	1951	�43	2	0.09	7.7	2.671	1.2	0.1295
�6	1973	�25	2	0.1	2.4	2.652	1.2	0.1306
�11	2077	�37	2	0.1	6.3	2.681	1.4	0.1284
�7	2044	�32	3	0.095	6	2.7	1.3	0.1298
�8	1955	�30	3	0.089	6	2.681	1.3	0.1302
�9	1901	�32	5	0.08	6	2.768	1.3	0.1295
�10	2012	�44	8	0.059	12.1	2.811	1.3	0.132
�8	1992	�40	7	0.071	8.5	2.773	1.3	0.1322
�7	2009	�28	3	0.092	5.4	2.686	1.2	0.1305

�14	1862	�47	11	0.061	7	2.93	1.3	0.1331
�10	2369	�51	11	0.067	8.5	2.897	1.2	0.136
�13	2202	�54	11	0.067	8	2.904	1.3	0.135

�29	1355	�66	62	0.017	16.4	7.528	3	0.1309
�22	2618	�118	9	0.101	10.3	2.744	2.7	0.144
�10	1992	�47	7	0.074	8	2.776	1.3	0.1321
�8	2052	�32	3	0.093	7	2.648	1.3	0.132
�9	2013	�38	0	0.105	9	2.596	1.3	0.1304
�8	1988	�45	6	0.07	9	2.758	1.2	0.1328
�8	2047	�36	-2	0.116	7	2.579	1.3	0.1289
�15	2144	�46	3	0.098	7	2.67	1.3	0.1329
�8	2064	�35	1	0.1	7	2.64	1.2	0.1309
�6	2001	�26	-1	0.107	5	2.605	1.2	0.1289
�8	1992	�33	1	0.1	7	2.63	1.3	0.13
�10	1932	�42	3	0.089	7	2.688	1.3	0.1301
�6	1906	�29	5	0.075	9	2.743	1.2	0.1291
�6	1977	�28	0	0.102	7	2.625	1.2	0.1293
�9	1953	�36	5	0.074	10	2.724	1.3	0.1304
�7	1983	�30	3	0.087	9	2.662	1.3	0.1304
�7	2035	�32	0	0.105	8	2.616	1.3	0.1297
�10	2168	�45	10	0.073	6	2.792	1.2	0.1392
�14	1843	�63	23	0.002	173	3.33	1.2	0.1393
�25	2588	�123	6	0.109	7	2.712	1.3	0.1399
�9	2147	�41	4	0.097	7	2.73	1.6	0.1291
�14	1987	�37	2	0.095	7	2.66	1.4	0.1296
�8	2131	�115	-1	0.117	9	2.58	1.4	0.1298
�6	2045	�43	4	0.087	9	2.71	1.6	0.1298
�9	2103	�38	0	0.111	11	2.59	1.8	0.1302
�7	2098	�62	-2	0.12	17	2.57	2.9	0.1296
�6	2034	�31	0	0.107	6	2.61	1.4	0.1296
�6	2117	�42	0	0.108	10	2.62	1.5	0.1294
�9	2269	�51	4	0.101	8	2.72	1.8	0.1306
�12	1998	�51	3	0.091	10	2.73	2.4	0.1278
�17	2205	�129	2	0.105	10	2.59	1.9	0.1374
�7	2640	�67	5	0.123	5	2.7	1.6	0.1329
�12	3841	�176	6	0.166	8	2.7	1.3	0.1376
�16	1600	�54	5	0.057	16	2.703	1.8	0.1331
�16	1957	�50	2	0.097	7	2.595	1.9	0.1335
�12	2015	�40	6	0.09	5	2.709	1.7	0.1331
�8	2019	�32	4	0.101	2	2.637	1.5	0.1338
�16	2131	�47	0	0.112	5	2.531	1.9	0.1319
�13	2069	�38	8	0.093	4	2.73	1.6	0.1382
�11	2071	�41	5	0.1	3	2.665	1.7	0.1346
�15	1955	�50	9	0.072	7	2.76	1.6	0.1387
�12	2051	�38	5	0.095	4	2.647	1.6	0.1362
�12	2068	�43	0	0.107	5	2.511	1.6	0.1397
�9	2049	�46	5	0.091	6	2.645	1.6	0.135
�15	2088	�42	1	0.107	4	2.544	1.8	0.1337
�12	2056	�38	9	0.095	3	2.751	1.7	0.1354

�22	2165	�95	3	0.099	7	2.56	1.6	0.1436
�12	2177	�40	-8	0.124	3	2.404	1.7	0.1313
�15	1789	�35	13	0.073	3	2.924	1.6	0.1378
�20	1950	�73	16	0.04	15	2.931	1.8	0.1426
�21	1784	�49	33	0.031	7	3.635	1.6	0.1503
�19	2090	�50	7	0.096	4	2.645	1.7	0.1484
�18	1949	�64	21	0.026	17	3.064	1.6	0.1462
�27	2035	�51	19	0.068	5	2.896	1.6	0.1534
�31	2147	�96	21	0.045	9	2.874	1.6	0.186
�17	1995	�66	-3	0.108	5.1			
�17	2122	�55	-2	0.114	5			
�17	2018	�52	1	0.102	5.5			
�13	1988	�42	2	0.1	3.2			
�12	2013	�43	2	0.1	4.3			
�15	1985	�49	1	0.101	5.2			
�9	2051	�35	2	0.103	3.4			
�19	2241	�80	-1	0.119	8.7			
�15	2197	�48	0	0.116	4.3			
�12	2125	�49	0	0.111	4.2			
�26	1910	�56	10	0.083	4.7			
�12	2047	�43	5	0.097	3.5			
�26	2144	�64	1	0.11	5.8			
�11	2157	�50	-2	0.122	8.4			
�20	2089	�177	-1	0.112	11.1			
�14	2099	�53	-1	0.116	9.7			
�22	2238	�93	-3	0.127	8.2			
�22	1994	�87	31	-0.027	-19.7			
�19	2040	�47	4	0.102	3.2			
�16	2262	�57	2	0.113	4.1			
�29	2176	�75	17	0.055	13.4			
�33	2066	�74	8	0.09	4.7			
�29	2193	�72	14	0.08	5.9			
�11	2079	�36	-5	0.143	8.2			
�12	1990	�47	-2	0.116	6.9			
�10	2100	�37	-1	0.115	5.8			
�6	2271	�31	-1	0.123	5.1			
�7	1993	�28	1	0.099	4.4			
�10	2030	�49	2	0.099	6.3			
�6	1837	�40	5	0.084	4			
�7	2185	�31	-7	0.137	4			
�9	2172	�56	-6	0.142	6.1			
�15	2100	�49	0	0.11	4.8			
�14	2112	�43	8	0.086	4.6			
�8	1727	�30	11	0.051	9.4			
�9	1680	�31	15	0.052	5.1			
�10	2008	�36	16	0.038	12.9			

�7	1426	�21	25	0.024	7.3			
�13	1922	�50	-1	0.105	11	2.661	1.9	0.1261
�18	2102	�72	5	0.096	7	2.788	2.1	0.1288
�32	2055	�58	-1	0.113	12	2.61	2.1	0.1281
�16	2126	�59	-2	0.12	10	2.594	2.1	0.128
�19	1880	�100	-2	0.111	14	2.581	2.1	0.1299
�16	2005	�62	-3	0.122	11	2.545	2.1	0.1293
�19	2056	�81	-2	0.116	13	2.578	2.1	0.1307
�10	2159	�53	-3	0.135	12	2.542	1.8	0.13
�17	2014	�64	2	0.095	12	2.668	2.1	0.1305
�11	2126	�47	-5	0.133	7	2.467	1.9	0.1305
�17	2023	�63	2	0.097	11	2.634	2.1	0.1319
�12	2034	�50	2	0.097	11	2.596	1.9	0.1328
�22	2065	�85	-6	0.142	12	2.519	2.4	0.1277
�16	1940	�80	18	-0.002	-361	3.25	1.9	0.1308
�18	1997	�82	17	0.059	8	3.175	1.9	0.1324
�14	2136	�56	16	0.034	23	3.047	2	0.1327
�23	1818	�42	13	0.078	4	2.816	2	0.1387
�28	2107	�70	0	0.112	13			
�31	1932	�114	-1	0.105	19			
�33	1979	�113	3	0.085	16			
�14	1938	�46	4	0.092	5			
�15	2019	�57	3	0.098	6			
�21	2313	�89	5	0.092	18			
�16	2175	�65	1	0.108	12			
�17	2096	�54	-2	0.114	5			
�13	2019	�49	1	0.1	7			
�9	2907	�67	-3	0.203	19			
�18	1616	�60	14	0.036	17			
�45	2575	�224	10	0.077	15			
�71	2586	�266	34	-0.035	-54			
�71	2574	�180	13	0.092	12			
�212	3236	�657	14	0.099	52			
�62	2156	�171	32	0.012	90			
�68	3298	�226	48	-0.012	-114			
�15	2086	�45	5	0.091	6.2			
�21	2130	�110	4	0.077	17.6			
�18	1971	�63	6	0.094	5.3			
�10	2056	�39	1	0.106	3.3			
�10	2014	�29	2	0.1	3.4			
�22	1112	�51	25	-0.031	-21.3			
�15	1635	�30	69	0.072	1.9			
�7	947	�19	52	0.029	2.3			

�87	307	�9	79	0.013	2.6
�85	605	�27	70	0.018	9.7
�20	782	�15	68	0.024	1.9
�12	1397	�20	37	0.054	1.5
�31	309	�5	76	0.013	1.7
�11	1463	�18	30	0.059	1.5
�7	1032	�12	49	0.034	1.3
�31	615	�15	63	0.015	5.2
�54	507	�18	76	0.02	3.5
�153	494	�26	66	0.018	8.9
�15	859	�19	62	0.016	3.5
�41	426	�14	78	0.017	3.6
�28	374	�11	86	0.014	2.9
�24	1449	�50	31	0.058	4.1
�25	1192	�99	57	0.034	10.3
�194	660	�45	79	0.02	15.5
�31	358	�10	76	0.012	3.3
�16	685	�9	71	0.023	1.3
�18	1082	�25	42	0.04	2.8
�31	524	�18	74	0.012	6.4
�42	751	�19	73	0.032	2.5
�14	714	�30	66	0.025	4.4
�54	290	�5	79	0.013	1.7
�144	2739	�55	58	0.137	2.3
�16	1290	�37	44	0.046	3.3
�29	489	�9	71	0.017	1.7
�18	517	�9	65	0.017	2.1

�%	(1)238U/20	�%	(1)207Pb*/2	�%	(1)207Pb*/2	�%	(1)206Pb*/2	�%
0.43	2.62	1.4	0.13213	0.45	6.95	1.5	0.382	1.4
0.4	2.614	1.4	0.1326	0.42	6.99	1.5	0.383	1.4
0.45	2.616	1.5	0.13225	0.47	6.97	1.5	0.382	1.5
0.44	2.658	1.4	0.13295	0.46	6.9	1.5	0.376	1.4
0.45	2.588	1.5	0.13296	0.46	7.08	1.5	0.386	1.5
0.44	2.578	1.5	0.13282	0.47	7.1	1.5	0.388	1.5
0.51	2.666	1.5	0.13215	0.58	6.83	1.6	0.375	1.5
0.46	2.624	1.5	0.13243	0.51	6.96	1.5	0.381	1.5
0.48	2.601	1.5	0.13277	0.51	7.04	1.6	0.385	1.5
0.47	2.869	1.5	0.12969	0.53	6.23	1.5	0.349	1.5
0.44	2.674	1.4	0.13157	0.5	6.78	1.5	0.374	1.4
0.48	2.522	1.5	0.13254	0.49	7.25	1.6	0.397	1.5
0.52	2.565	1.5	0.13266	0.55	7.13	1.6	0.39	1.5
0.48	2.93	1.5	0.13055	0.64	6.14	1.6	0.341	1.5
0.49	3.197	1.5	0.12807	0.75	5.52	1.6	0.313	1.5
0.44	3.001	1.4	0.13134	0.44	6.03	1.5	0.333	1.4
0.42	3.788	1.6	0.1261	0.56	4.59	1.7	0.264	1.6
0.55	3.027	1.5	0.12671	0.72	5.77	1.7	0.33	1.5
0.42	2.529	1.1	0.1335	0.5	7.28	1.2	0.395	1.1
0.65	2.521	1.4	0.1328	0.66	7.26	1.6	0.397	1.4
0.52	2.488	1.2	0.1347	0.57	7.46	1.4	0.402	1.2
0.72	2.588	1.4	0.1345	0.76	7.17	1.6	0.386	1.4
0.37	2.549	1.1	0.1326	0.41	7.18	1.2	0.392	1.1
0.44	2.648	1.1	0.1323	0.46	6.89	1.2	0.378	1.1
0.5	2.55	1.2	0.1335	0.59	7.22	1.4	0.392	1.2
0.37	2.532	1.1	0.1334	0.38	7.26	1.2	0.395	1.1
0.5	2.526	1.2	0.1329	0.54	7.26	1.3	0.396	1.2
0.38	2.528	1.1	0.1335	0.43	7.28	1.2	0.396	1.1
0.36	2.638	1.5	0.1329	0.37	6.95	1.5	0.379	1.5
0.77	2.641	1.5	0.1322	0.89	6.9	1.7	0.379	1.5
0.56	2.548	1.2	0.1323	0.63	7.16	1.4	0.393	1.2
0.39	2.534	1.1	0.1332	0.41	7.25	1.2	0.395	1.1
0.46	2.551	1.2	0.1334	0.48	7.21	1.3	0.392	1.2
0.47	2.531	1.2	0.1332	0.52	7.26	1.3	0.395	1.2
4.34	2.505	1.3	0.1452	5.28	7.99	5.4	0.399	1.3
0.56	3.039	1.2	0.13	0.59	5.9	1.3	0.329	1.2
0.87	2.682	2.2	0.1304	0.91	6.7	2.4	0.373	2.2
0.4	2.758	1.1	0.1315	0.49	6.57	1.2	0.363	1.1
0.47	2.594	1.2	0.1319	0.52	7.01	1.3	0.385	1.2
0.49	2.566	1.2	0.132	0.58	7.09	1.3	0.39	1.2
0.47	2.722	1.2	0.1323	0.59	6.7	1.3	0.367	1.2
0.44	2.551	1.1	0.1326	0.5	7.17	1.3	0.392	1.1
0.83	2.674	1.2	0.1333	0.92	6.87	1.5	0.374	1.2
0.75	2.641	1.2	0.1336	0.81	6.97	1.4	0.379	1.2
0.41	2.612	3.9	0.1342	0.49	7.09	3.9	0.383	3.9
0.43	2.588	1.1	0.1343	0.48	7.16	1.2	0.386	1.1

0.52	3.015	1.2	0.1334	0.74	6.1	1.4	0.332	1.2
0.47	4.307	1.1	0.1323	0.8	4.24	1.4	0.232	1.1
0.4	2.914	1.1	0.1296	0.49	6.13	1.2	0.343	1.1
1.2	3.071	1.5	0.1292	1.3	5.8	2	0.326	1.5
1.1	3.287	4.3	0.1307	1.21	5.48	4.4	0.304	4.3
0.47	4.168	2.1	0.132	0.78	4.37	2.3	0.24	2.1
2.1	3.173	1.5	0.1353	2.35	5.88	2.8	0.315	1.5
0.79	3.639	3	0.1266	0.89	4.8	3.1	0.275	3
0.43	2.541	1.4	0.13172	0.46	7.15	1.5	0.394	1.4
0.78	2.559	1.5	0.13309	0.79	7.17	1.7	0.391	1.5
0.42	2.543	1.4	0.13243	0.42	7.18	1.5	0.393	1.4
0.42	2.592	1.4	0.13108	0.48	6.97	1.5	0.386	1.4
0.49	2.535	1.5	0.13239	0.53	7.2	1.6	0.394	1.5
0.6	2.503	1.6	0.13141	0.64	7.24	1.7	0.399	1.6
0.46	2.59	1.5	0.13254	0.49	7.06	1.5	0.386	1.5
0.44	2.812	1.4	0.13225	0.56	6.48	1.5	0.356	1.4
0.49	2.63	1.8	0.13151	0.57	6.9	1.9	0.38	1.8
0.5	2.541	1.5	0.13141	0.5	7.13	1.6	0.394	1.5
0.43	2.668	1.4	0.13249	0.45	6.85	1.5	0.375	1.4
0.75	2.673	1.7	0.13232	1.29	6.83	2.1	0.374	1.7
0.42	2.897	1.4	0.12978	0.51	6.18	1.5	0.345	1.4
0.45	2.542	1.5	0.13183	0.48	7.15	1.5	0.393	1.5
0.45	2.552	1.5	0.13264	0.49	7.17	1.5	0.392	1.5
0.43	2.552	1.4	0.13169	0.43	7.12	1.5	0.392	1.4
0.49	3.087	1.5	0.134	0.85	5.99	1.7	0.324	1.5
1.1	2.903	1.5	0.13246	1.13	6.29	1.9	0.344	1.5
0.74	2.46	2.3	0.1335	0.78	7.49	2.4	0.407	2.3
0.57	2.44	2.1	0.135	0.62	7.64	2.2	0.411	2.1
0.37	2.53	2	0.1316	0.37	7.17	2	0.395	2
0.56	2.54	2.1	0.1315	0.57	7.13	2.2	0.393	2.1
0.71	2.33	2.3	0.131	0.79	7.77	2.4	0.43	2.3
0.62	2.3	2.2	0.1333	0.65	7.99	2.3	0.435	2.2
0.7	2.34	2.3	0.1313	0.7	7.74	2.4	0.428	2.3
0.41	2.41	2.6	0.1283	0.44	7.35	2.6	0.415	2.6
0.69	2.34	2.2	0.1326	0.72	7.8	2.3	0.427	2.2
0.45	2.38	2	0.1313	0.47	7.61	2.1	0.42	2
0.63	2.45	2.6	0.1273	0.63	7.15	2.7	0.407	2.6
0.38	2.36	2	0.1327	0.41	7.75	2.1	0.424	2
0.53	2.37	2.4	0.1321	0.55	7.68	2.4	0.422	2.4
0.52	2.35	2.1	0.1332	0.53	7.8	2.2	0.425	2.1
0.73	2.36	2.3	0.1333	0.79	7.77	2.4	0.423	2.3
0.51	2.37	2.1	0.1332	0.53	7.74	2.2	0.422	2.1
0.59	2.38	2.2	0.1338	0.6	7.75	2.3	0.42	2.2
0.58	2.4	2.2	0.1331	0.6	7.64	2.2	0.416	2.2
0.42	2.97	2	0.1275	0.44	5.92	2.1	0.337	2
0.62	2.42	2.2	0.1322	0.71	7.53	2.3	0.413	2.2

0.81	2.73	2.5	0.1353	0.92	6.82	2.7	0.366	2.5
1.02	2.72	2.8	0.1379	1.02	6.99	3	0.368	2.8
1.41	2.68	3.4	0.1324	1.84	6.8	3.8	0.373	3.4
1.37	2.65	3.7	0.1359	1.59	7.08	4	0.378	3.7
0.96	2.57	3.1	0.1361	0.96	7.31	3.2	0.389	3.1
1.15	2.62	3.1	0.1386	1.28	7.3	3.4	0.382	3.1
0.77	2.73	2.4	0.1355	0.8	6.84	2.6	0.366	2.4
0.83	2.75	2.5	0.1343	0.94	6.74	2.7	0.364	2.5
0.77	2.64	2.5	0.1343	0.86	7.01	2.7	0.378	2.5
0.77	2.99	2.5	0.1366	0.81	6.31	2.6	0.335	2.5
2.39	2.81	5.1	0.1326	2.42	6.52	5.7	0.356	5.1
1.48	5.5	5	0.1403	1.5	3.52	5.2	0.182	5
1.4	2.86	2.4	0.1354	1.42	6.53	2.8	0.35	2.4
0.87	3.26	2.4	0.1346	0.87	5.7	2.5	0.307	2.4
1.11	3.49	4.1	0.1349	1.29	5.32	4.3	0.286	4.1
0.97	4.42	2.4	0.1346	1.36	4.2	2.8	0.226	2.4
0.84	2.8	2.5	0.136	0.9	6.71	2.6	0.358	2.5
0.92	2.75	3.3	0.1389	0.99	6.96	3.4	0.363	3.3
1.04	2.8	2.9	0.1354	1.16	6.68	3.1	0.358	2.9
0.47	3.13	2.2	0.1307	0.51	5.76	2.3	0.319	2.2
0.47	2.59	1.2	0.1301	0.53	6.94	1.3	0.387	1.2
0.57	2.59	1.3	0.1314	0.58	7.01	1.4	0.387	1.3
0.53	2.57	1.3	0.1319	0.54	7.07	1.4	0.389	1.3
0.58	2.57	2	0.1314	0.58	7.05	2.1	0.389	2
0.63	2.5	1.4	0.1317	0.67	7.26	1.5	0.4	1.4
0.59	2.65	1.3	0.1303	0.7	6.79	1.5	0.378	1.3
0.58	2.6	1.3	0.1308	1.01	6.94	1.7	0.385	1.3
0.48	2.57	1.8	0.1325	0.52	7.12	1.9	0.39	1.8
0.74	2.47	1.4	0.1329	0.78	7.41	1.6	0.404	1.4
0.76	2.52	1.6	0.1357	0.97	7.42	1.8	0.397	1.6
0.6	2.55	1.7	0.1339	0.71	7.24	1.8	0.392	1.7
0.75	2.39	1.4	0.1319	0.77	7.6	1.6	0.418	1.4
	2.64	1.1	0.1309	0.5	6.84	1.2	0.379	1.1
	2.66	1.5	0.129	0.83	6.7	1.7	0.377	1.5
	2.75	1.1	0.1305	0.42	6.55	1.2	0.364	1.1
	2.65	1.1	0.1313	0.4	6.83	1.2	0.377	1.1
	2.71	1.3	0.1305	0.52	6.64	1.4	0.369	1.3
	2.97	1.1	0.129	0.25	5.98	1.2	0.336	1.1
	11.48	1.5	0.0609	2.52	0.73	2.9	0.087	1.5
	3.12	1.4	0.1367	1.32	6.05	1.9	0.321	1.4
	3.3	2.2	0.1312	1.27	5.49	2.6	0.303	2.2
	6.31	1.1	0.1188	0.55	2.6	1.2	0.158	1.1
	3.26	1.2	0.1278	0.65	5.41	1.3	0.307	1.2
1.1	2.569	2.1	0.1322	1.3	7.1	2.4	0.3892	2.1
1.2	2.56	2.2	0.1332	1.3	7.17	2.6	0.3907	2.2
1.3	2.495	2.2	0.1332	1.4	7.36	2.6	0.4007	2.2

1.1	2.612	2.1	0.1305	1.4	6.89	2.5	0.3829	2.1
0.9	2.56	1.8	0.1334	1	7.19	2	0.3907	1.8
1.3	2.573	2.3	0.1332	1.4	7.14	2.7	0.3886	2.3
1	2.513	2	0.1335	1	7.33	2.2	0.3979	2
1.2	2.528	2.1	0.1312	1.5	7.16	2.6	0.3956	2.1
1.1	2.556	2.1	0.1327	1.1	7.16	2.3	0.3913	2.1
1.1	2.509	2	0.1312	1.1	7.21	2.3	0.3986	2
0.8	2.551	1.7	0.136	0.9	7.35	1.9	0.3921	1.7
1.4	2.519	2.4	0.1377	2	7.54	3.1	0.397	2.4
1.2	2.474	2.1	0.1311	1.3	7.31	2.5	0.4042	2.1
1	2.543	1.8	0.1324	1.1	7.18	2.1	0.3933	1.8
1	2.431	1.9	0.1358	1.2	7.7	2.2	0.4113	1.9
0.8	2.545	1.7	0.1337	0.9	7.24	1.9	0.3929	1.7
1.2	2.432	2.4	0.1328	1.4	7.53	2.8	0.4112	2.4
1.3	2.415	2	0.1304	1.3	7.45	2.3	0.4142	2
0.8		1.1	0.131	1	0	1.4	0	1.1
1.2		1.1	0.1335	1.2	0	1.6	0	1.1
0.48	2.79	1.5	0.1331	0.58	6.57	1.6	0.358	1.5
0.53	2.69	1.5	0.1316	0.55	6.75	1.6	0.372	1.5
0.73	2.74	1.7	0.132	0.79	6.64	1.9	0.365	1.7
0.54	2.76	1.5	0.1305	0.73	6.53	1.7	0.363	1.5
0.56	2.7	1.5	0.1317	0.6	6.71	1.7	0.37	1.5
0.71	2.73	1.7	0.1318	0.78	6.65	1.9	0.366	1.7
0.73	2.77	1.7	0.1318	0.93	6.57	1.9	0.362	1.7
0.53	2.53	2.1	0.1318	0.61	7.18	2.2	0.395	2.1
0.54	2.76	1.8	0.1305	0.75	6.51	2	0.362	1.8
0.6	2.57	1.6	0.1309	0.66	7.02	1.7	0.389	1.6
0.4	2.64	1.5	0.1337	0.4	6.98	1.5	0.379	1.5
0.7	2.7	1.7	0.1342	0.71	6.84	1.8	0.37	1.7
0.63	2.62	1.6	0.1337	0.64	7.03	1.7	0.381	1.6
0.64	2.63	1.6	0.1342	0.71	7.05	1.8	0.381	1.6
0.34	3.02	1.6	0.1305	0.5	5.96	1.7	0.331	1.6
0.65	3.19	1.6	0.1307	0.99	5.64	1.9	0.313	1.6
0.7	2.66	1.7	0.1315	1.63	6.81	2.4	0.376	1.7
0.7	2.98	1.6	0.1323	0.92	6.11	1.8	0.335	1.6
0.89	2.89	1.8	0.1337	0.99	6.38	2	0.346	1.8
0.58	2.624	1.3	0.13196	0.68	6.93	1.5	0.381	1.3
0.39	2.638	1.1	0.13287	0.39	6.95	1.2	0.379	1.1
0.36	2.554	1.5	0.13145	0.37	7.1	1.5	0.392	1.5
0.5	2.626	1.9	0.13227	0.58	6.95	2	0.381	1.9
0.45	2.69	1.5	0.1323	0.46	6.78	1.6	0.372	1.5
0.44	2.717	1.1	0.13197	0.45	6.7	1.2	0.368	1.1
0.45	2.697	1.4	0.13172	0.54	6.73	1.5	0.371	1.4
0.37	2.562	1.3	0.1317	0.38	7.09	1.3	0.39	1.3
0.52	2.662	1	0.13243	0.52	6.86	1.2	0.376	1
0.97	2.717	2	0.13256	0.98	6.73	2.2	0.368	2
0.41	2.699	1.1	0.13175	0.44	6.73	1.2	0.371	1.1
0.43	2.636	1.9	0.13242	0.44	6.93	1.9	0.379	1.9

0.56	2.67	1.3	0.13481	0.67	6.96	1.5	0.375	1.3
0.54	2.699	1.2	0.13273	0.54	6.78	1.3	0.37	1.2
0.83	2.867	2.3	0.12869	0.94	6.19	2.5	0.349	2.3
0.41	2.649	1.4	0.13171	0.42	6.86	1.4	0.378	1.4
0.44	2.806	1.1	0.13224	0.56	6.5	1.3	0.356	1.1
0.44	2.76	1.1	0.13194	0.51	6.59	1.2	0.362	1.1
0.44	2.602	1.5	0.13163	0.48	6.97	1.6	0.384	1.5
0.59	2.708	1.8	0.13154	0.6	6.7	1.9	0.369	1.8
0.65	2.682	1.3	0.13193	0.66	6.78	1.4	0.373	1.3
0.37	2.877	1.1	0.13156	0.41	6.31	1.2	0.348	1.1
0.42	3.377	1.4	0.12934	0.67	5.28	1.6	0.296	1.4
	2.553	1.1	0.13161	0.78	7.11	1.4	0.392	1.1
	2.637	1.3	0.13249	0.38	6.93	1.3	0.379	1.3
	2.666	1.2	0.1326	0.19	6.86	1.2	0.375	1.2
	2.606	1.1	0.13384	0.29	7.08	1.1	0.384	1.1
	2.546	1.3	0.1352	0.63	7.32	1.4	0.393	1.3
	2.526	1.1	0.13562	0.45	7.4	1.2	0.396	1.1
	59.399	1.1	0.04977	1.01	0.12	1.5	0.017	1.1
	2.99	1.1	0.11326	0.45	5.22	1.2	0.334	1.1
	2.796	1.5	0.1332	1.31	6.57	2	0.358	1.5
	2.872	2.9	0.1369	1.18	6.57	3.1	0.348	2.9
	4.004	1.7	0.13713	0.66	4.72	1.8	0.25	1.7
	2.51	0.9	0.13618	0.44	7.47	1	0.398	0.9
	2.59	0.7	0.13539	0.31	7.21	0.8	0.386	0.7
	2.59	0.6	0.13624	0.25	7.25	0.7	0.386	0.6
	2.66	0.7	0.13609	0.31	7.06	0.7	0.376	0.7
	2.62	0.6	0.13573	0.23	7.16	0.7	0.382	0.6
	2.65	0.7	0.1369	0.32	7.11	0.8	0.377	0.7
	4.27	1.5	0.13136	0.32	4.24	1.6	0.234	1.5
	2.95	0.8	0.13559	0.24	6.33	0.8	0.339	0.8
	3.29	0.8	0.13555	0.27	5.68	0.8	0.304	0.8
	3.87	0.8	0.13316	0.29	4.74	0.9	0.258	0.8
	2.57	0.7	0.13673	0.17	7.34	0.7	0.389	0.7
	3.06	0.6	0.13488	0.26	6.09	0.7	0.327	0.6
	3.15	1	0.13468	0.25	5.9	1	0.318	1
		0.5	0.13588	0.39	0	0.6	0	0.5
	2.78	0.7	0.13676	1.25	6.79	1.4	0.36	0.7
	3.2	3.2	0.13564	0.34	5.84	3.2	0.312	3.2
0.49	2.748	1.8	0.13247	0.55	6.65	1.9	0.3639	1.8
0.27	2.594	1.2	0.13221	0.28	7.03	1.2	0.3856	1.2
0.36	2.707	1.2	0.13193	0.51	6.72	1.3	0.3694	1.2
0.27	2.608	1.2	0.13268	0.3	7.01	1.2	0.3834	1.2
0.35	2.592	1.2	0.13248	0.36	7.05	1.3	0.3858	1.2
0.2	2.525	1.1	0.13297	0.24	7.26	1.2	0.3961	1.1
0.34	2.624	1.2	0.13274	0.35	6.97	1.3	0.381	1.2

0.23	2.57	1.1	0.13245	0.24	7.11	1.2	0.3891	1.1
0.24	2.607	1.4	0.13312	0.24	7.04	1.4	0.3836	1.4
0.31	2.596	1.2	0.13216	0.32	7.02	1.2	0.3852	1.2
0.27	2.635	1.2	0.1318	0.28	6.9	1.2	0.3795	1.2
0.31	2.648	1.2	0.13338	0.31	6.94	1.2	0.3776	1.2
0.32	2.733	1.4	0.13256	0.47	6.69	1.5	0.3659	1.4
0.33	2.656	1.2	0.13239	0.42	6.87	1.3	0.3765	1.2
0.23	2.703	1.1	0.13296	0.26	6.78	1.2	0.37	1.1
0.24	2.599	1.1	0.13294	0.28	7.05	1.2	0.3848	1.1
0.32	2.65	1.2	0.13293	0.34	6.92	1.2	0.3774	1.2
0.32	2.584	1.2	0.13377	0.33	7.14	1.2	0.387	1.2
0.57	2.98	1.4	0.13597	0.94	6.29	1.7	0.3356	1.4
0.18	2.599	1.1	0.1325	0.18	7.03	1.1	0.3848	1.1
0.65	2.49	1.2	0.13414	0.67	7.42	1.4	0.401	1.2
0.43	2.75	0.9	0.13493	0.44	6.76	1	0.363	0.9
0.41	2.51	0.9	0.13469	0.42	7.39	1	0.398	0.9
0.64	2.63	1.2	0.1356	0.68	7.1	1.4	0.38	1.2
0.62	2.51	1.2	0.13512	0.66	7.43	1.4	0.399	1.2
1.01	2.48	1.2	0.13652	1.06	7.59	1.6	0.403	1.2
0.52	2.53	1	0.13691	0.53	7.45	1.2	0.395	1
0.49	2.67	1	0.13658	0.51	7.04	1.1	0.374	1
1.18	2.68	1.7	0.13546	1.18	6.96	2.1	0.373	1.7
0.58	2.55	1.2	0.1357	0.63	7.34	1.3	0.392	1.2
0.67	2.59	1.3	0.13737	0.74	7.3	1.5	0.385	1.3
0.4	2.67	0.9	0.13567	0.41	7.01	1	0.375	0.9
0.81	6.57	0.6	0.0707	0.82	1.48	1	0.152	0.6
0.44	3.09	0.8	0.13528	0.5	6.03	1	0.323	0.8
0.34	2.87	0.8	0.13617	0.37	6.54	0.8	0.348	0.8
0.31	2.64	0.7	0.13499	0.31	7.04	0.8	0.378	0.7
0.95	2.446	1.6	0.1361	0.99	7.67	1.9	0.409	1.6
0.79	2.466	1.4	0.1338	0.87	7.48	1.6	0.406	1.4
1.01	2.58	1.5	0.1296	1.53	6.93	2.1	0.388	1.5
1.08	2.577	1.8	0.1328	1.15	7.11	2.1	0.388	1.8
0.96	2.468	1.6	0.1377	1	7.69	1.9	0.405	1.6
0.78	2.487	1.3	0.1338	0.92	7.42	1.6	0.402	1.3
0.48	2.545	0.9	0.1375	0.52	7.45	1	0.393	0.9
0.81	2.507	1.4	0.1337	1.03	7.35	1.8	0.399	1.4
1.48	2.448	1.5	0.1334	1.57	7.51	2.1	0.409	1.5
0.76	2.512	1.3	0.1338	0.95	7.34	1.6	0.398	1.3
1.16	2.569	1.9	0.1347	1.78	7.23	2.6	0.389	1.9
0.85	2.507	1.3	0.1352	1.22	7.44	1.8	0.399	1.3
0.56	2.531	1	0.1356	0.58	7.39	1.1	0.395	1
0.93	2.509	1.5	0.1352	1.05	7.43	1.8	0.398	1.5
1.14	2.503	1.9	0.1344	1.29	7.41	2.3	0.4	1.9
0.81	2.411	1.4	0.1347	0.86	7.7	1.6	0.415	1.4
0.93	2.399	1.6	0.1351	0.97	7.77	1.8	0.417	1.6
0.79	2.475	1.3	0.1339	0.82	7.46	1.6	0.404	1.3

	2.501	1.2	0.1344	0.48	7.41	1.3	0.4	1.2
	2.69	1.6	0.1353	0.64	6.94	1.7	0.372	1.6
	2.503	1.1	0.1359	0.42	7.49	1.2	0.4	1.1
	2.531	1.6	0.136	0.69	7.41	1.7	0.395	1.6
	2.721	1.3	0.1386	0.97	7.02	1.6	0.368	1.3
	2.574	1.4	0.1393	1.09	7.46	1.8	0.388	1.4
	2.603	1.2	0.1401	1.5	7.42	2	0.384	1.2
	2.599	1.2	0.1413	1.45	7.5	1.9	0.385	1.2
	9.572	1	0.0626	0.71	0.9	1.2	0.104	1
	2.768	1.2	0.1227	0.44	6.12	1.3	0.361	1.2
	2.945	1.6	0.1415	2.31	6.63	2.8	0.34	1.6
	3.01	1.3	0.142	2.15	6.51	2.5	0.332	1.3
	4.969	1.5	0.1457	2.42	4.04	2.9	0.201	1.5
	2.699	1.4	0.146	1.86	7.46	2.3	0.37	1.4
	2.61	1	0.1312	0.76	6.93	1.2	0.383	1
0.51	2.537	1	0.1316	0.77	7.15	1.2	0.394	1
0.43	2.573	0.8	0.1325	0.5	7.1	1	0.389	0.8
0.53	2.591	1	0.1326	0.57	7.06	1.2	0.386	1
0.53	2.597	1	0.1334	0.65	7.08	1.2	0.385	1
0.57	2.56	1	0.1335	0.63	7.19	1.2	0.391	1
0.98	2.655	1	0.1336	1.02	6.94	1.4	0.377	1
0.54	2.526	1	0.1342	0.56	7.32	1.1	0.396	1
0.57	2.512	1	0.1342	0.57	7.36	1.2	0.398	1
0.52	2.484	0.9	0.1342	0.52	7.45	1.1	0.403	0.9
0.47	2.541	0.9	0.1343	0.5	7.28	1	0.394	0.9
0.46	2.589	0.9	0.1348	0.57	7.18	1.1	0.386	0.9
0.46	2.642	0.9	0.1349	0.53	7.04	1	0.378	0.9
0.54	2.564	1	0.1351	0.56	7.26	1.2	0.39	1
0.43	2.597	0.8	0.1354	0.43	7.19	0.9	0.385	0.8
0.52	3.98	2.5	0.1331	1.36	4.61	2.9	0.251	2.5
0.85	20.562	4.8	0.1348	1.52	0.9	5.1	0.049	4.8
0.55	3.497	3.2	0.135	0.74	5.32	3.3	0.286	3.2
	2.539	1.2	0.1332	0.42	7.23	1.3	0.394	1.2
	2.638	1.2	0.133	0.44	6.95	1.2	0.379	1.2
	2.615	1.3	0.1335	0.28	7.04	1.3	0.382	1.3
	2.548	1	0.1338	0.94	7.24	1.4	0.392	1
	2.588	1	0.1338	0.41	7.13	1.1	0.386	1
	2.549	1	0.1325	0.16	7.17	1	0.392	1
	2.595	1	0.1329	0.22	7.06	1	0.385	1
	2.517	1	0.1334	0.27	7.31	1.1	0.397	1
	2.672	1.1	0.1351	0.55	6.97	1.2	0.374	1.1
	2.644	1.1	0.1361	0.73	7.1	1.3	0.378	1.1
	3.367	1.8	0.1487	2.87	6.09	3.4	0.297	1.8
	3.241	1.1	0.1512	2.05	6.43	2.3	0.309	1.1
	2.884	1	0.134	0.69	6.4	1.2	0.347	1

	2.744	1	0.1369	0.5	6.88	1.1	0.364	1
	2.867	1.6	0.1536	3.3	7.38	3.6	0.349	1.6
	2.658	1.7	0.1672	5.03	8.67	5.3	0.376	1.7
	2.636	1.2	0.1449	2.22	7.58	2.5	0.379	1.2
	2.768	1.1	0.1331	0.17	6.63	1.1	0.361	1.1
	4.978	2.1	0.1385	2.37	3.84	3.2	0.201	2.1
	2.685	1.2	0.1562	0.86	8.02	1.5	0.372	1.2
	11.147	1.4	0.1025	1.97	1.27	2.4	0.09	1.4
	2.894	1.1	0.1345	0.34	6.41	1.2	0.346	1.1
	3.447	1.6	0.1781	9.32	7.12	9.5	0.29	1.6
	2.644	0.9	0.1326	0.31	6.91	1	0.378	0.9
1.27	2.613	1.5	0.1367	1.27	7.21	2	0.383	1.5
0.52	2.571	1.4	0.136	0.54	7.3	1.5	0.389	1.4
0.52	2.497	1.4	0.1346	0.56	7.43	1.5	0.401	1.4
0.51	2.551	1.3	0.1363	0.54	7.37	1.5	0.392	1.3
0.4	2.616	1.2	0.1365	0.4	7.19	1.2	0.382	1.2
0.63	2.539	1.5	0.1342	0.65	7.29	1.7	0.394	1.5
0.22	2.516	1	0.135	0.23	7.4	1	0.397	1
0.65	2.538	1.6	0.1363	0.69	7.41	1.7	0.394	1.6
0.37	2.558	1.1	0.1353	0.39	7.29	1.2	0.391	1.1
0.55	2.539	1.4	0.1366	0.57	7.41	1.5	0.394	1.4
0.39	2.536	1.2	0.1338	0.41	7.27	1.2	0.394	1.2
0.6	2.581	1.5	0.1366	0.6	7.3	1.6	0.387	1.5
1	2.491	2.2	0.1347	1.08	7.46	2.5	0.402	2.2
1.05	2.595	2.1	0.1367	1.14	7.26	2.4	0.385	2.1
0.95	2.582	1.5	0.1375	1.02	7.34	1.8	0.387	1.5
0.87	2.482	3.4	0.1326	1.05	7.36	3.5	0.403	3.4
1.29	2.556	1.3	0.137	1.31	7.39	1.9	0.391	1.3
0.79	2.608	1.8	0.1394	0.85	7.37	2	0.383	1.8
1.65	2.505	1.7	0.1393	1.69	7.67	2.4	0.399	1.7
0.33	2.274	1.1	0.1324	0.33	8.03	1.1	0.44	1.1
	2.696	1.1	0.1311	0.36	6.7	1.1	0.371	1.1
	2.666	2.1	0.1308	0.26	6.76	2.1	0.375	2.1
	2.66	1	0.1309	0.24	6.78	1	0.376	1
	2.704	1.2	0.1318	0.3	6.72	1.3	0.37	1.2
	2.682	1.5	0.1313	0.27	6.75	1.5	0.373	1.5
	2.667	1.1	0.1322	0.57	6.83	1.2	0.375	1.1
	2.687	1	0.1311	0.28	6.73	1.1	0.372	1
	2.632	1.2	0.1293	0.96	6.77	1.5	0.38	1.2
	2.652	1.1	0.1298	0.36	6.75	1.2	0.377	1.1
	2.683	1	0.1314	0.48	6.75	1.1	0.373	1
	2.646	1.1	0.1321	0.37	6.88	1.1	0.378	1.1
	2.658	1	0.1316	0.23	6.83	1	0.376	1
	2.664	2.6	0.134	0.44	6.94	2.6	0.375	2.6
	2.603	1.3	0.1344	0.61	7.12	1.5	0.384	1.3
	2.621	1.1	0.1371	0.65	7.21	1.3	0.382	1.1
	2.797	2	0.1287	0.31	6.35	2	0.357	2
	2.686	2	0.1288	0.6	6.61	2.1	0.372	2

	2.735	2	0.1289	0.39	6.5	2	0.366	2
	2.698	2.1	0.1296	0.72	6.62	2.2	0.371	2.1
	2.645	2	0.1337	0.4	6.97	2.1	0.378	2
	2.466	4.1	0.134	0.43	7.49	4.1	0.405	4.1
	2.706	2	0.1341	0.51	6.83	2.1	0.37	2
	2.38	2.1	0.1366	0.66	7.91	2.2	0.42	2.1
	2.636	2.1	0.139	1.01	7.27	2.3	0.379	2.1
	2.893	2.1	0.1316	0.57	6.27	2.1	0.346	2.1
	2.863	2	0.1327	0.37	6.39	2	0.349	2
	2.951	2	0.1332	1.04	6.23	2.3	0.339	2
	2.984	2.1	0.1333	0.88	6.16	2.3	0.335	2.1
	2.874	2	0.1348	0.98	6.47	2.3	0.348	2
0.6	2.89	1.9	0.1304	0.74	6.23	2.1	0.347	1.9
0.45	2.71	1.8	0.1305	0.53	6.63	1.8	0.369	1.8
0.74	2.76	1.8	0.1305	0.95	6.51	2	0.362	1.8
0.6	2.73	1.9	0.1306	0.74	6.58	2.1	0.366	1.9
0.51	2.77	1.8	0.1307	0.6	6.5	1.9	0.361	1.8
0.37	2.81	1.7	0.1309	0.44	6.43	1.8	0.356	1.7
0.43	2.76	1.7	0.1312	0.47	6.57	1.8	0.363	1.7
0.4	2.68	1.8	0.1313	0.47	6.75	1.8	0.373	1.8
0.45	2.83	1.8	0.1316	0.53	6.4	1.9	0.353	1.8
0.36	2.68	1.7	0.1316	0.47	6.76	1.8	0.373	1.7
0.52	2.74	1.8	0.132	0.86	6.64	2	0.365	1.8
0.9	2.69	1.8	0.1321	0.95	6.76	2	0.371	1.8
0.41	2.73	1.7	0.1322	0.42	6.68	1.8	0.366	1.7
0.54	2.61	1.8	0.1322	0.61	6.99	1.9	0.384	1.8
0.38	2.59	1.7	0.1327	0.53	7.08	1.8	0.387	1.7
0.55	2.79	1.9	0.1328	0.57	6.56	2	0.358	1.9
0.81	2.79	2.2	0.1329	1.2	6.57	2.5	0.359	2.2
0.74	2.71	2.1	0.1347	1.04	6.85	2.4	0.369	2.1
0.47	1.5	1.9	0.3103	0.49	28.46	1.9	0.665	1.9
0.37	1.41	2.1	0.331	0.38	32.27	2.1	0.707	2.1
2.68	4.37	2.2	0.1256	6.73	3.97	7.1	0.229	2.2
0.87	3.13	1.8	0.1289	1.11	5.68	2.1	0.319	1.8
0.75	3	2.1	0.13	1.14	5.98	2.4	0.334	2.1
0.42	2.99	1.7	0.1301	0.52	6.01	1.8	0.335	1.7
0.9	3	1.8	0.1304	1.03	6	2.1	0.334	1.8
0.51	2.96	1.8	0.1311	0.6	6.1	1.9	0.338	1.8
1.13	2.93	1.7	0.1336	2.88	6.29	3.4	0.341	1.7
0.67	2.94	1.9	0.1339	1.27	6.27	2.3	0.34	1.9
0.84	2.6	2.2	0.1349	1.03	7.15	2.4	0.384	2.2
2.31	2.57	1.9	0.1352	4.05	7.25	4.5	0.389	1.9
0.71	2.93	2	0.1356	0.78	6.38	2.2	0.341	2
0.47	2.48	1.8	0.1356	1.34	7.54	2.3	0.403	1.8
0.4	2.28	2	0.1373	3.41	8.32	3.9	0.439	2
0.51	2.52	1.9	0.14	0.56	7.68	2	0.398	1.9
0.41	3.07	1.7	0.147	0.57	6.61	1.8	0.326	1.7

0.38	2.84	1.8	0.1292	0.38	6.26	1.8	0.352	1.8
0.54	2.66	1.7	0.1295	0.59	6.71	1.8	0.376	1.7
0.4	2.7	1.6	0.1296	0.42	6.63	1.6	0.371	1.6
0.32	2.7	1.6	0.1297	0.34	6.64	1.6	0.371	1.6
0.44	2.65	1.6	0.1297	0.44	6.75	1.7	0.378	1.6
0.41	2.67	1.6	0.1298	0.41	6.69	1.7	0.374	1.6
0.57	2.63	1.7	0.1299	0.57	6.8	1.7	0.38	1.7
0.4	2.66	1.6	0.13	0.42	6.74	1.6	0.376	1.6
0.38	2.81	1.6	0.1311	0.41	6.44	1.6	0.356	1.6
0.59	2.51	1.7	0.1313	0.72	7.21	1.8	0.399	1.7
0.37	2.74	1.6	0.1313	0.44	6.61	1.7	0.365	1.6
0.92	2.77	1.6	0.1318	0.93	6.55	1.9	0.36	1.6
0.52	3.3	2.6	0.129	0.53	5.39	2.6	0.303	2.6
1.38	3.79	3	0.1292	1.45	4.7	3.3	0.264	3
1.64	2.66	1.7	0.1283	1.68	6.64	2.4	0.375	1.7
0.52	2.68	1.7	0.1292	0.55	6.66	1.8	0.374	1.7
0.52	2.66	1.7	0.1297	0.52	6.73	1.8	0.376	1.7
0.46	2.7	1.6	0.13	0.53	6.63	1.7	0.37	1.6
0.52	2.65	1.7	0.1301	0.55	6.77	1.8	0.378	1.7
0.5	2.7	1.7	0.1301	0.57	6.65	1.8	0.371	1.7
0.26	2.73	1.5	0.1302	0.27	6.59	1.6	0.367	1.5
0.59	2.68	1.7	0.1303	0.63	6.72	1.8	0.374	1.7
0.36	2.64	1.6	0.1306	0.37	6.82	1.6	0.379	1.6
1.08	2.87	1.7	0.1309	1.11	6.28	2.1	0.348	1.7
0.56	2.65	1.7	0.1312	0.66	6.82	1.8	0.377	1.7
0.37	2.75	1.6	0.132	0.49	6.62	1.7	0.364	1.6
1.07	2.7	2.1	0.1328	1.36	6.77	2.5	0.37	2.1
0.54	2.73	1.7	0.1336	0.94	6.73	1.9	0.366	1.7
0.48	3.04	1.6	0.1331	0.6	6.03	1.7	0.329	1.6
0.56	3.11	2	0.1283	0.64	5.68	2.1	0.321	2
0.58	2.92	1.7	0.1305	0.77	6.16	1.9	0.342	1.7
0.45	2.87	2.1	0.1315	0.55	6.31	2.2	0.348	2.1
0.32	3	1.6	0.1322	0.44	6.08	1.6	0.334	1.6
0.62	2.9	1.7	0.1339	0.87	6.37	1.9	0.345	1.7
0.63	3.26	1.7	0.1341	1	5.67	2	0.307	1.7
	2.58	1.6	0.1303	0.4	6.96	1.6	0.387	1.6
	2.55	2.5	0.1319	1.35	7.14	2.8	0.393	2.5
	2.61	1.6	0.1313	0.35	6.95	1.6	0.384	1.6
	2.55	1.7	0.1319	0.58	7.13	1.8	0.392	1.7
	2.47	1.6	0.1324	0.43	7.39	1.7	0.405	1.6
	2.62	1.6	0.1315	0.39	6.91	1.6	0.381	1.6
	2.53	1.5	0.1317	0.28	7.18	1.6	0.395	1.5
	2.52	1.7	0.1328	0.57	7.28	1.8	0.397	1.7
	2.51	1.6	0.1336	0.32	7.35	1.6	0.399	1.6
	2.5	2	0.1345	0.93	7.42	2.2	0.4	2
	2.55	1.7	0.1345	0.38	7.27	1.8	0.392	1.7

	2.6	1.7	0.1338	0.52	7.1	1.8	0.385	1.7
	2.58	1.6	0.1347	0.35	7.2	1.6	0.388	1.6
	2.61	1.6	0.1336	0.4	7.06	1.7	0.383	1.6
	2.69	1.6	0.1342	0.82	6.89	1.8	0.372	1.6
	2.71	1.7	0.1344	0.58	6.83	1.8	0.368	1.7
	2.8	1.6	0.1331	0.43	6.55	1.7	0.357	1.6
	2.62	1.8	0.1383	0.31	7.28	1.8	0.382	1.8
	2.83	1.6	0.1356	1.06	6.61	1.9	0.354	1.6
	2.13	1.5	0.1335	0.29	8.65	1.6	0.47	1.5
	2.35	1.7	0.1355	0.44	7.95	1.7	0.426	1.7
	3.05	2.6	0.1278	2.49	5.77	3.6	0.328	2.6
	3.04	1.6	0.1341	0.5	6.09	1.7	0.329	1.6
	3.17	1.9	0.1323	0.48	5.76	2	0.316	1.9
	3.64	34.2	0.1294	0.71	4.9	34.2	0.275	34.2
	3.75	1.7	0.1359	0.73	5	1.8	0.267	1.7
	3.82	1.7	0.1351	0.51	4.88	1.8	0.262	1.7
	4.93	2	0.1257	0.25	3.52	2	0.203	2
	5.91	3	0.1433	0.88	3.34	3.1	0.169	3
	11.41	2	0.0585	0.79	0.71	2.2	0.088	2
	2.7	1.6	0.131	0.49	6.69	1.7	0.37	1.6
	2.85	1.8	0.1311	0.53	6.33	1.9	0.35	1.8
	2.86	1.5	0.1315	0.29	6.33	1.6	0.349	1.5
	2.75	1.6	0.1321	0.36	6.61	1.6	0.363	1.6
	2.58	1.6	0.1329	0.35	7.11	1.6	0.388	1.6
	2.83	2.5	0.1335	0.31	6.5	2.5	0.353	2.5
	2.53	1.6	0.1339	0.36	7.3	1.6	0.395	1.6
	2.54	1.7	0.1388	0.33	7.54	1.7	0.394	1.7
	2.36	1.6	0.1485	0.42	8.66	1.7	0.423	1.6
	2.03	1.9	0.1712	2.52	11.65	3.1	0.493	1.9
	2.28	1.6	0.1713	0.63	10.37	1.7	0.439	1.6
	3.01	4.5	0.1287	0.67	5.9	4.5	0.332	4.5
	3.62	1.9	0.1323	0.37	5.04	1.9	0.276	1.9
	2.95	1.8	0.1324	0.81	6.2	2	0.339	1.8
	2.97	2	0.1333	0.31	6.19	2	0.337	2
	5.14	1.8	0.1343	1.69	3.61	2.5	0.195	1.8
	2.87	1.7	0.1345	0.38	6.46	1.8	0.348	1.7
	2.81	1.9	0.1346	0.44	6.6	1.9	0.356	1.9
	7.54	2.4	0.1375	1.1	2.51	2.7	0.133	2.4
	1.98	1.6	0.2084	0.4	14.52	1.6	0.506	1.6
0.64	2.563	1.4	0.1281	0.71	6.89	1.6	0.39	1.4
0.87	2.583	1.7	0.1285	0.91	6.86	1.9	0.387	1.7
1.1	2.584	2	0.1287	1.68	6.86	2.6	0.387	2
0.79	2.661	1.5	0.1287	0.81	6.67	1.7	0.376	1.5
0.8	2.67	1.6	0.1289	0.83	6.66	1.8	0.375	1.6
0.71	2.706	1.4	0.1293	0.75	6.59	1.6	0.37	1.4
1.16	2.666	1.5	0.1294	1.17	6.69	1.9	0.375	1.5
0.79	2.559	2	0.1295	0.8	6.98	2.2	0.391	2

0.54	2.62	1.2	0.1302	0.56	6.85	1.4	0.382	1.2
0.49	2.726	1.2	0.1303	0.49	6.59	1.3	0.367	1.2
0.5	2.707	1.3	0.1303	0.86	6.64	1.5	0.369	1.3
1.57	2.625	1.7	0.1305	1.57	6.85	2.3	0.381	1.7
0.63	2.662	1.3	0.1305	0.63	6.76	1.5	0.376	1.3
0.59	2.642	1.3	0.1306	0.61	6.82	1.4	0.379	1.3
0.81	2.651	1.6	0.1308	0.81	6.8	1.8	0.377	1.6
0.57	2.681	1.3	0.1308	0.58	6.73	1.4	0.373	1.3
0.76	2.763	1.5	0.1323	0.84	6.6	1.7	0.362	1.5
2.18	3.279	2.1	0.1334	2.18	5.61	3	0.305	2.1
1.99	9.058	4.8	0.1151	2.14	1.75	5.2	0.11	4.8
1	2.566	1.7	0.12692	1.22	6.82	2.1	0.3897	1.7
1.58	2.501	3.8	0.12698	1.6	7	4.2	0.3998	3.8
0.69	2.738	1.3	0.12817	0.74	6.46	1.5	0.3653	1.3
0.54	2.823	1.1	0.12821	0.7	6.26	1.3	0.3542	1.1
0.65	2.561	1.3	0.12827	0.66	6.9	1.5	0.3904	1.3
0.71	2.791	1.3	0.12867	1.21	6.36	1.8	0.3582	1.3
0.7	2.56	1.3	0.1288	0.89	6.94	1.6	0.3906	1.3
0.78	2.641	2.2	0.12898	0.83	6.73	2.3	0.3786	2.2
0.65	2.658	1.2	0.12901	0.73	6.69	1.4	0.3763	1.2
1.4	2.602	1.3	0.12906	1.42	6.84	1.9	0.3843	1.3
1.29	2.594	1.3	0.13002	1.31	6.91	1.9	0.3855	1.3
0.87	2.721	1.5	0.13009	1.14	6.59	1.9	0.3675	1.5
0.77	2.61	1.4	0.13062	0.77	6.9	1.6	0.3831	1.4
0.77	2.798	1.3	0.13081	0.84	6.45	1.6	0.3574	1.3
1.08	2.587	1.3	0.13121	1.08	6.99	1.7	0.3866	1.3
1.35	2.714	1.3	0.13124	1.41	6.67	1.9	0.3685	1.3
1.92	2.692	2.8	0.13185	1.96	6.75	3.4	0.3715	2.8
2.33	2.565	3.3	0.13207	2.39	7.1	4.1	0.3899	3.3
0.63	2.464	3.5	0.13336	0.68	7.46	3.5	0.4059	3.5
3.22	2.672	4.4	0.12343	3.32	6.37	5.5	0.3742	4.4
0.82	2.446	3.7	0.12829	0.82	7.23	3.8	0.4088	3.7
0.6	2.802	1.2	0.12902	1.53	6.35	2	0.3569	1.2
0.54	2.962	1.1	0.1293	0.92	6.02	1.5	0.3376	1.1
0.62	2.852	1.2	0.13087	1.26	6.33	1.7	0.3506	1.2
0.65	2.548	2.2	0.13291	2.89	7.19	3.6	0.3924	2.2
0.74	2.83	1.1	0.1286	0.75	6.27	1.3	0.353	1.1
0.31	2.69	1.1	0.1287	0.32	6.61	1.1	0.372	1.1
0.33	2.69	1.4	0.1289	0.34	6.6	1.4	0.372	1.4
0.39	2.6	1.1	0.1293	0.41	6.87	1.2	0.385	1.1
0.36	2.68	1.1	0.1295	0.37	6.67	1.2	0.374	1.1
1.19	2.82	2.9	0.1297	1.23	6.33	3.1	0.354	2.9
0.86	2.64	1.1	0.1298	0.97	6.78	1.5	0.379	1.1
0.29	2.64	1.1	0.1306	0.29	6.83	1.1	0.379	1.1
0.37	2.76	1.1	0.1323	0.41	6.61	1.2	0.363	1.1

0.75	5.89	1.3	0.1166	1.11	2.73	1.7	0.17	1.3
0.4	3.22	1.6	0.1265	0.43	5.41	1.7	0.31	1.6
4.15	3.43	3.6	0.1273	4.16	5.11	5.5	0.291	3.6
0.62	3.02	1.1	0.1286	0.66	5.87	1.3	0.331	1.1
0.32	2.98	1.1	0.1294	0.35	5.98	1.1	0.335	1.1
0.4	3.02	1.4	0.1297	0.44	5.93	1.5	0.332	1.4
0.82	5.37	3.8	0.1301	0.95	3.34	4	0.186	3.8
1.54	3.03	4.2	0.1302	1.86	5.92	4.6	0.33	4.2
0.68	3.45	1.1	0.1306	0.73	5.22	1.4	0.29	1.1
0.66	2.29	1.7	0.1328	2.46	8	3	0.437	1.7
0.71	2.657	1.5	0.1326	0.75	6.88	1.7	0.376	1.5
0.61	2.559	1.4	0.1332	0.61	7.17	1.6	0.391	1.4
0.69	2.523	1.5	0.1332	0.72	7.28	1.7	0.396	1.5
0.47	2.543	1.2	0.1334	0.48	7.23	1.3	0.393	1.2
0.84	2.481	1.7	0.1334	0.87	7.42	1.9	0.403	1.7
0.72	2.608	1.5	0.1335	0.75	7.06	1.7	0.383	1.5
0.55	2.539	1.3	0.1337	0.56	7.26	1.4	0.394	1.3
0.61	2.577	1.4	0.1341	0.61	7.17	1.5	0.388	1.4
0.6	2.545	1.4	0.1342	0.63	7.27	1.5	0.393	1.4
0.85	2.787	1.6	0.1342	0.88	6.64	1.8	0.359	1.6
0.57	2.581	1.3	0.1342	0.59	7.17	1.5	0.387	1.3
1.21	2.608	1.5	0.1345	1.27	7.11	2	0.383	1.5
0.84	2.559	1.7	0.1347	0.89	7.26	1.9	0.391	1.7
0.57	2.468	1.4	0.1347	0.6	7.53	1.5	0.405	1.4
1.36	2.527	1.7	0.1349	1.39	7.36	2.2	0.396	1.7
0.78	2.675	1.6	0.1373	0.88	7.08	1.8	0.374	1.6
0.64	2.65	1.4	0.1288	0.7	6.71	1.5	0.378	1.4
0.43	2.82	1.1	0.1291	0.5	6.31	1.2	0.354	1.1
0.56	2.63	1.3	0.1292	0.61	6.77	1.4	0.38	1.3
0.48	2.62	1.2	0.1298	0.51	6.84	1.3	0.382	1.2
0.43	2.84	1.1	0.1304	0.73	6.34	1.3	0.352	1.1
0.57	2.61	1.3	0.1309	0.93	6.9	1.6	0.383	1.3
0.49	2.7	1.2	0.131	0.5	6.68	1.3	0.37	1.2
0.52	2.7	1.2	0.1311	0.6	6.7	1.4	0.371	1.2
0.66	2.65	1.4	0.1317	0.66	6.85	1.5	0.377	1.4
0.78	2.66	1.5	0.1322	0.94	6.86	1.8	0.376	1.5
1.06	2.58	1.7	0.1266	1.1	6.77	2.1	0.388	1.7
0.75	3.65	1.1	0.1279	1.09	4.83	1.5	0.274	1.1
0.72	3.49	1.3	0.1282	1.54	5.07	2	0.287	1.3
0.98	4.34	1.1	0.1305	2.2	4.14	2.5	0.23	1.1
0.57	2.89	3.2	0.1313	0.99	6.26	3.3	0.346	3.2
0.46	3.23	1.1	0.1313	0.83	5.6	1.4	0.309	1.1
0.55	3.55	1.3	0.1318	2.22	5.12	2.6	0.282	1.3
0.44	2.87	1.1	0.1329	1.09	6.4	1.6	0.349	1.1
1.01	3.42	2.4	0.1338	1.83	5.4	3.1	0.293	2.4
1.58	2.76	2	0.1349	1.95	6.74	2.8	0.363	2
1.35	2.55	1.6	0.1351	2.29	7.3	2.8	0.392	1.6
1.2	5.69	1.7	0.1359	2.01	3.29	2.6	0.176	1.7

0.45	2.674	1.2	0.1274	0.52	6.57	1.3	0.3739	1.2
1.08	2.737	2	0.1279	1.27	6.44	2.3	0.3654	2
0.5	2.823	2.1	0.1282	0.53	6.26	2.2	0.3542	2.1
0.56	2.585	1.3	0.1283	0.63	6.84	1.5	0.3869	1.3
0.65	2.697	1.4	0.1284	0.71	6.57	1.6	0.3708	1.4
0.58	2.68	1.3	0.1289	0.62	6.63	1.5	0.3731	1.3
0.91	2.674	1.8	0.1296	0.95	6.68	2	0.374	1.8
0.59	2.594	1.4	0.1298	0.63	6.9	1.5	0.3855	1.4
0.63	2.611	1.4	0.13	0.65	6.87	1.6	0.383	1.4
0.9	2.619	1.8	0.1302	1.01	6.85	2.1	0.3818	1.8
0.67	2.838	1.4	0.1303	0.72	6.33	1.6	0.3524	1.4
0.87	2.611	1.8	0.1323	0.93	6.99	2	0.383	1.8
0.7	4.361	3.1	0.1281	0.89	4.05	3.2	0.2293	3.1
0.97	3.396	2.6	0.1289	1.02	5.23	2.8	0.2944	2.6
0.66	3.196	1.4	0.1296	0.73	5.59	1.6	0.3128	1.4
0.35	2.679	1	0.12872	0.51	6.62	1.1	0.3732	1
0.27	2.58	0.9	0.1288	0.29	6.88	1	0.3877	0.9
0.38	2.617	1	0.12908	0.43	6.8	1.1	0.3821	1
0.29	2.629	1	0.1291	0.35	6.77	1	0.3803	1
0.84	2.633	1	0.12914	0.84	6.76	1.3	0.3798	1
0.86	2.647	1.1	0.12918	0.9	6.73	1.4	0.3778	1.1
0.35	2.614	1	0.12925	0.35	6.82	1.1	0.3825	1
0.28	2.609	1.2	0.12926	0.28	6.83	1.2	0.3834	1.2
0.33	2.675	1	0.12951	0.33	6.68	1	0.3738	1
0.27	2.626	0.9	0.12966	0.27	6.81	1	0.3809	0.9
0.45	2.654	1.1	0.13087	0.54	6.8	1.2	0.3768	1.1
0.49	2.664	1.1	0.13212	0.51	6.84	1.2	0.3754	1.1
0.49	2.155	1	0.12841	0.55	8.22	1.1	0.464	1
0.76	2.685	1.6	0.12915	0.78	6.63	1.7	0.3724	1.6
0.46	2.956	0.9	0.12943	0.49	6.04	1.1	0.3383	0.9
0.58	2.669	1.4	0.12703	0.68	6.56	1.6	0.375	1.4
0.52	2.659	1.4	0.12737	0.55	6.6	1.5	0.376	1.4
0.72	2.638	1.6	0.1281	0.84	6.69	1.8	0.379	1.6
0.64	2.765	1.5	0.12816	0.81	6.39	1.7	0.362	1.5
0.59	2.658	1.5	0.12867	0.62	6.67	1.6	0.376	1.5
0.64	2.648	1.5	0.12882	0.66	6.71	1.6	0.378	1.5
0.44	2.713	1.3	0.12911	0.46	6.56	1.4	0.369	1.3
0.4	2.769	1.3	0.1293	0.41	6.44	1.4	0.361	1.3
0.43	2.874	1.3	0.12937	0.43	6.21	1.4	0.348	1.3
0.53	2.642	1.4	0.12957	0.57	6.76	1.5	0.378	1.4
0.73	2.742	1.6	0.12965	0.9	6.52	1.8	0.365	1.6
0.84	2.852	1.4	0.12967	0.89	6.27	1.6	0.351	1.4
0.7	2.723	1.5	0.12979	0.71	6.57	1.6	0.367	1.5
0.59	2.685	1.4	0.13013	0.61	6.68	1.6	0.372	1.4
0.64	3.004	1.5	0.13066	0.9	6	1.7	0.333	1.5
0.62	3.241	1.4	0.1312	0.74	5.58	1.6	0.309	1.4

0.91	2.757	2.4	0.12793	0.94	6.4	2.6	0.363	2.4
0.4	2.722	1.3	0.1281	0.52	6.49	1.4	0.367	1.3
0.55	2.644	1.4	0.12856	0.58	6.7	1.6	0.378	1.4
0.63	2.616	1.5	0.12884	0.67	6.79	1.6	0.382	1.5
0.41	2.669	1.3	0.12904	0.6	6.67	1.4	0.375	1.3
0.49	2.868	1.4	0.12906	0.59	6.21	1.5	0.349	1.4
0.44	2.633	1.3	0.12918	0.78	6.77	1.5	0.38	1.3
0.28	2.733	1.5	0.1292	0.3	6.52	1.6	0.366	1.5
0.72	2.841	1.3	0.12952	0.74	6.29	1.5	0.352	1.3
0.57	2.791	1.4	0.12963	0.62	6.4	1.6	0.358	1.4
0.56	2.724	1.5	0.13001	0.94	6.58	1.8	0.367	1.5
0.76	2.755	1.6	0.13009	0.79	6.51	1.8	0.363	1.6
0.51	2.624	1.4	0.13015	0.59	6.84	1.5	0.381	1.4
0.6	2.768	1.4	0.13016	0.68	6.48	1.6	0.361	1.4
0.49	2.878	1.7	0.13083	0.55	6.27	1.8	0.348	1.7
0.5	2.732	1.4	0.13085	0.51	6.6	1.5	0.366	1.4
0.49	11.139	1.2	0.11965	0.56	1.48	1.3	0.09	1.2
0.86	3.491	2.1	0.12801	1.29	5.06	2.5	0.286	2.1
0.25	2.224	3.5	0.12877	0.29	7.98	3.5	0.45	3.5
0.63	3.049	1.4	0.12928	0.71	5.85	1.5	0.328	1.4
1.38	2.658	1.4	0.13263	2.24	6.88	2.7	0.376	1.4
1.17	3.66	1.5	0.12728	1.5	4.8	2.1	0.273	1.5
0.61	2.81	1.8	0.12841	0.67	6.31	2	0.356	1.8
0.54	2.81	1.6	0.12864	0.55	6.31	1.7	0.356	1.6
0.49	2.81	1.6	0.12906	0.53	6.34	1.7	0.356	1.6
0.93	2.9	2.6	0.12919	1.05	6.14	2.8	0.344	2.6
0.36	2.72	1.5	0.12932	0.38	6.56	1.5	0.368	1.5
0.69	2.72	2.5	0.12955	0.69	6.57	2.6	0.368	2.5
0.34	2.76	1.5	0.12956	0.34	6.48	1.5	0.363	1.5
0.46	2.67	1.9	0.12967	0.5	6.71	1.9	0.375	1.9
0.65	2.65	1.7	0.12974	0.68	6.74	1.8	0.377	1.7
0.24	2.72	1.4	0.12991	0.25	6.6	1.5	0.368	1.4
0.74	2.67	1.8	0.12994	0.74	6.71	2	0.374	1.8
0.58	2.53	1.5	0.13011	0.62	7.09	1.7	0.395	1.5
0.83	7.03	2.8	0.13073	0.96	2.56	2.9	0.142	2.8
0.77	2.9	2.5	0.13081	0.78	6.21	2.7	0.344	2.5
0.43	2.81	1.5	0.13133	0.59	6.44	1.7	0.356	1.5
0.49	3.06	1.8	0.13392	0.78	6.04	2	0.327	1.8
0.51	2.63	1.6	0.1303	0.52	6.84	1.7	0.381	1.6
0.34	2.71	2.2	0.12919	0.36	6.58	2.2	0.37	2.2
0.35	2.71	1.9	0.12999	0.38	6.6	2	0.368	1.9
0.3	2.75	1.6	0.12936	0.33	6.48	1.6	0.363	1.6
0.35	2.79	1.5	0.13025	0.36	6.44	1.5	0.359	1.5
0.31	2.84	1.5	0.13107	0.51	6.36	1.5	0.352	1.5
0.45	2.87	1.8	0.13089	0.46	6.29	1.9	0.348	1.8
0.39	2.75	1.5	0.13221	0.69	6.62	1.6	0.363	1.5

0.31	2.94	1.4	0.12962	0.34	6.09	1.5	0.341	1.4
0.56	3.12	1.6	0.13303	1.08	5.89	1.9	0.321	1.6
0.35	3.33	2.1	0.13088	0.44	5.42	2.1	0.3	2.1
0.56	3.87	4.8	0.12966	0.96	4.62	4.9	0.259	4.8
0.44	2.614	1.2	0.1284	0.46	6.77	1.3	0.3825	1.2
0.26	2.728	1	0.1292	0.27	6.53	1.1	0.3666	1
0.22	2.67	1	0.1294	0.22	6.68	1	0.3745	1
0.28	2.751	1.1	0.1305	0.35	6.54	1.1	0.3635	1.1
1.06	2.837	1.1	0.1315	1.34	6.39	1.7	0.3524	1.1
1.62	3.665	1.6	0.1309	2.43	4.93	2.9	0.2729	1.6
0.7	2.597	1.5	0.1279	0.72	6.79	1.6	0.3851	1.5
0.6	2.614	1.4	0.1286	0.61	6.78	1.5	0.3825	1.4
0.53	2.666	1.9	0.1287	0.54	6.65	1.9	0.375	1.9
0.45	2.593	1.2	0.129	0.48	6.86	1.3	0.3856	1.2
0.53	2.669	1.3	0.1292	0.57	6.67	1.4	0.3747	1.3
0.49	2.656	1.3	0.1293	0.49	6.71	1.3	0.3765	1.3
0.6	2.634	1.4	0.1297	0.62	6.79	1.5	0.3797	1.4
0.56	2.619	1.3	0.1297	0.57	6.83	1.4	0.3819	1.3
0.62	2.652	1.4	0.1298	0.63	6.75	1.5	0.377	1.4
0.4	2.656	1.2	0.1301	0.42	6.75	1.2	0.3766	1.2
0.65	2.633	1.4	0.1301	0.74	6.81	1.6	0.3798	1.4
0.6	2.633	1.4	0.1304	0.61	6.83	1.5	0.3798	1.4
0.55	2.667	1.4	0.1304	0.55	6.74	1.5	0.3749	1.4
0.63	2.651	1.4	0.1306	0.63	6.79	1.5	0.3772	1.4
0.62	2.536	1.4	0.1283	0.67	6.97	1.6	0.3943	1.4
0.65	2.628	1.4	0.1285	0.71	6.74	1.6	0.3805	1.4
0.68	2.684	1.5	0.1286	0.8	6.61	1.7	0.3725	1.5
0.69	2.613	1.5	0.1287	0.78	6.79	1.7	0.3827	1.5
0.59	2.67	1.3	0.1294	0.63	6.68	1.5	0.3746	1.3
0.63	2.588	1.4	0.1296	0.68	6.91	1.6	0.3864	1.4
0.75	2.653	1.5	0.1267	0.8	6.58	1.7	0.377	1.5
0.99	2.714	1.9	0.1275	1.24	6.48	2.3	0.3684	1.9
0.84	2.685	1.7	0.128	0.94	6.57	1.9	0.3725	1.7
0.54	2.648	1.3	0.1283	0.55	6.68	1.4	0.3776	1.3
0.5	2.691	1.7	0.1285	0.52	6.58	1.8	0.3716	1.7
0.86	2.689	1.3	0.1286	0.87	6.6	1.6	0.3719	1.3
0.91	2.617	1.8	0.1286	1.14	6.78	2.1	0.3821	1.8
0.45	2.712	1.2	0.1287	0.45	6.54	1.3	0.3688	1.2
0.63	2.671	1.5	0.1289	0.63	6.66	1.6	0.3744	1.5
0.43	2.693	1.2	0.1289	0.44	6.6	1.3	0.3713	1.2
1.23	2.619	1.5	0.129	1.24	6.79	1.9	0.3818	1.5
0.6	2.71	1.4	0.1295	0.62	6.59	1.5	0.369	1.4
0.53	2.638	1.3	0.1297	0.54	6.78	1.4	0.3791	1.3
0.58	2.708	1.4	0.1298	0.59	6.61	1.5	0.3693	1.4
0.42	2.721	1.5	0.1298	0.43	6.58	1.5	0.3676	1.5
0.4	2.677	1.2	0.13	0.41	6.69	1.2	0.3736	1.2
0.67	2.711	1.5	0.13	0.72	6.61	1.7	0.3688	1.5

0.59	2.669	1.4	0.13	0.61	6.72	1.5	0.3747	1.4
0.58	2.686	1.3	0.1304	0.6	6.69	1.5	0.3723	1.3
0.69	2.774	1.4	0.1307	0.69	6.5	1.6	0.3605	1.4
0.56	2.582	1.3	0.1317	0.56	7.03	1.4	0.3873	1.3
0.68	2.618	1.5	0.1319	0.72	6.95	1.6	0.382	1.5
0.83	2.622	1.7	0.1321	0.95	6.95	2	0.3814	1.7
0.68	2.55	1.5	0.1323	0.78	7.16	1.7	0.3922	1.5
0.41	2.586	1.1	0.1326	0.42	7.07	1.2	0.3867	1.1
0.51	2.769	1.3	0.1327	0.65	6.61	1.4	0.3612	1.3
0.54	2.712	2	0.1327	0.65	6.75	2.1	0.3687	2
0.62	2.617	1.4	0.1327	0.77	6.99	1.6	0.3821	1.4
0.82	2.666	1.7	0.1327	0.87	6.86	1.9	0.3751	1.7
0.82	2.638	1.7	0.1327	0.94	6.94	1.9	0.3791	1.7
0.57	2.624	1.3	0.1331	0.58	6.99	1.5	0.3812	1.3
0.63	2.577	1.4	0.1334	0.67	7.14	1.6	0.3881	1.4
0.61	2.596	1.4	0.1338	0.62	7.11	1.5	0.3853	1.4
0.75	2.636	1.6	0.1347	0.77	7.04	1.8	0.3794	1.6
0.99	2.841	1.8	0.1332	1.06	6.46	2.1	0.352	1.8
0.63	2.948	1.4	0.1333	0.7	6.24	1.6	0.3392	1.4
0.82	2.568	1.4	0.1328	0.89	7.13	1.7	0.3894	1.4
0.83	2.56	1.5	0.1352	1.14	7.28	1.9	0.3906	1.5
0.91	2.568	1.5	0.1342	0.95	7.2	1.8	0.3895	1.5
0.99	2.772	1.6	0.1312	1.18	6.53	2	0.3607	1.6
0.63	2.849	1.1	0.1324	0.99	6.41	1.5	0.351	1.1
0.96	2.864	1.5	0.13	1.22	6.26	2	0.3492	1.5
0.84	2.5	1.4	0.1292	0.91	7.13	1.7	0.3999	1.4
0.96	2.506	1.7	0.1331	1.06	7.33	2	0.3991	1.7
0.8	2.532	1.4	0.1329	0.82	7.24	1.6	0.395	1.4
0.76	2.71	1.4	0.1352	0.85	6.88	1.6	0.3691	1.4
0.65	2.591	1.1	0.1334	0.74	7.1	1.4	0.386	1.1
0.6	2.749	1	0.1332	0.63	6.68	1.2	0.3637	1
0.72	2.648	1.2	0.1314	1.32	6.84	1.8	0.3777	1.2
0.66	2.635	1.1	0.1331	0.72	6.96	1.3	0.3795	1.1
0.94	2.601	1.6	0.131	1.05	6.95	1.9	0.3845	1.6
0.54	2.574	1	0.1309	0.63	7.01	1.2	0.3884	1
0.71	2.606	1.2	0.1319	0.76	6.98	1.4	0.3837	1.2
0.8	2.53	1.3	0.1326	0.84	7.23	1.6	0.3953	1.3
0.82	2.608	1.5	0.1295	3.27	6.85	3.6	0.3835	1.5
	2.69	2	0.1269	2.39	6.49	3.1	0.371	2
	2.77	3.1	0.1274	0.81	6.34	3.2	0.361	3.1
	2.97	1.6	0.1291	0.51	5.99	1.7	0.337	1.6
	2.7	1.1	0.1293	0.61	6.61	1.2	0.371	1.1
	2.8	1	0.1311	0.6	6.45	1.2	0.357	1
	2.65	1.4	0.1344	0.52	6.99	1.5	0.377	1.4
	2.64	1.8	0.1352	1.13	7.05	2.1	0.378	1.8
	2.53	1.4	0.1356	0.72	7.4	1.6	0.396	1.4

	3.9	3.7	0.1252	4.95	4.43	6.2	0.256	3.7
	3.58	1.3	0.1258	1.36	4.85	1.9	0.279	1.3
	2.59	1	0.129	1.05	6.85	1.5	0.385	1
	1.92	1.8	0.1317	0.79	9.46	2	0.521	1.8
	2.76	1.2	0.1318	1.09	6.58	1.7	0.362	1.2
	2.93	1.1	0.1321	0.69	6.22	1.3	0.342	1.1
	3.24	1.3	0.1353	2.27	5.76	2.6	0.309	1.3
	3	1.3	0.1301	0.83	5.99	1.5	0.334	1.3
0.44	2.738	5.1	0.128	0.56	6.45	5.1	0.365	5.1
0.38	2.809	2	0.1286	0.38	6.31	2	0.356	2
0.34	2.678	2.2	0.1288	0.37	6.63	2.2	0.373	2.2
0.99	2.654	2.1	0.1288	1.05	6.69	2.3	0.377	2.1
0.83	2.802	5.5	0.1289	0.89	6.34	5.5	0.357	5.5
1.42	2.77	2.4	0.129	1.46	6.42	2.8	0.361	2.4
0.33	2.714	2	0.1291	0.36	6.56	2	0.369	2
0.29	2.877	2	0.1293	0.35	6.19	2	0.348	2
0.25	2.855	2	0.1294	0.32	6.25	2	0.35	2
0.38	2.715	2	0.1296	0.39	6.58	2.1	0.368	2
0.55	2.719	2	0.1304	0.65	6.61	2.1	0.368	2
2.05	2.807	2.6	0.1335	2.11	6.56	3.3	0.356	2.6
0.76	2.358	6.5	0.1337	1.17	7.82	6.6	0.424	6.5
0.43	2.611	2	0.1341	0.48	7.08	2.1	0.383	2
0.43	2.731	2	0.1344	0.47	6.79	2.1	0.366	2
0.5	2.715	2.1	0.1348	0.56	6.85	2.1	0.368	2.1
1.34	2.982	4.3	0.1281	1.57	5.92	4.6	0.335	4.3
4.31	3.083	5.5	0.1292	4.34	5.78	7	0.324	5.5
	2.457	2.4	0.1324	2	7.43	3.1	0.4071	2.4
	2.412	2.4	0.1342	1.5	7.67	2.9	0.4145	2.4
	2.42	2.7	0.1343	1.8	7.65	3.2	0.4132	2.7
	2.412	2.5	0.135	1.9	7.72	3.1	0.4145	2.5
	2.53	1.7	0.1351	0.8	7.36	1.9	0.3952	1.7
	2.515	2.5	0.1369	1.7	7.51	3.1	0.3976	2.5
	2.427	2.1	0.1372	1.1	7.79	2.4	0.4121	2.1
	2.402	2	0.1379	1.1	7.92	2.3	0.4164	2
	2.478	2.1	0.1395	0.7	7.76	2.3	0.4036	2.1
	2.508	2.2	0.14	1.1	7.7	2.4	0.3987	2.2
	2.464	2.5	0.1412	1.5	7.9	2.9	0.4059	2.5
	2.412	2.2	0.1414	1.3	8.08	2.6	0.4145	2.2
	2.309	2.7	0.1417	1.8	8.46	3.3	0.433	2.7
	2.481	2.5	0.1422	1.5	7.91	2.9	0.4031	2.5
	2.404	2.4	0.1428	1.4	8.19	2.7	0.4159	2.4
	2.552	2.1	0.1428	1.2	7.72	2.4	0.3918	2.1
	2.456	2.3	0.143	1.5	8.03	2.7	0.4072	2.3
	2.462	2.5	0.1431	1.7	8.01	3	0.4061	2.5
	2.436	2.3	0.1441	1.3	8.15	2.7	0.4105	2.3
	2.412	2.9	0.1444	2.2	8.25	3.6	0.4146	2.9

	2.389	2.2	0.1444	1.4	8.34	2.6	0.4186	2.2
	2.472	2.1	0.1459	1.4	8.14	2.5	0.4045	2.1
	2.432	3.3	0.1266	3.9	7.18	5.1	0.4112	3.3
	2.394	2.8	0.1315	2.2	7.57	3.5	0.4177	2.8
	2.471	2.1	0.1401	2	7.82	2.9	0.4046	2.1
	2.7	1.6	0.1272	0.92	6.5	1.9	0.371	1.6
	2.66	1.2	0.1278	0.47	6.62	1.3	0.376	1.2
	2.68	1.3	0.1288	0.53	6.63	1.4	0.374	1.3
	2.58	2.1	0.1293	1.09	6.91	2.3	0.387	2.1
	2.76	2.1	0.1295	1.08	6.47	2.4	0.363	2.1
	2.7	1.7	0.1317	1.62	6.73	2.3	0.371	1.7
	2.74	1.2	0.1326	0.44	6.68	1.3	0.365	1.2
	2.63	1.4	0.1345	0.56	7.05	1.5	0.38	1.4
	2.73	2.2	0.1374	1.59	6.94	2.7	0.366	2.2
	4.37	1.1	0.0859	0.54	2.71	1.2	0.229	1.1
	5.39	1.4	0.0781	0.58	2	1.5	0.186	1.4
	4.81	1.9	0.0904	0.76	2.59	2	0.208	1.9
	5.86	2.4	0.1286	0.52	3.03	2.5	0.171	2.4
	2.92	1.1	0.1295	0.38	6.12	1.2	0.343	1.1
	2.86	1.2	0.1323	0.45	6.38	1.3	0.35	1.2
	3	1.8	0.1348	0.41	6.2	1.9	0.334	1.8
	2.81	1.4	0.1389	0.62	6.81	1.5	0.356	1.4
	2.79	1.6	0.1414	2.26	6.98	2.8	0.358	1.6
		1.2	0.1286	0.45	6.59	1.3	0.372	1.2
	2.79	1.6	0.1319	0.84	6.51	1.8	0.358	1.6
	2.62	1.5	0.1323	0.71	6.97	1.7	0.382	1.5
	2.76	3.5	0.1324	1.25	6.62	3.7	0.363	3.5
	2.59	1.3	0.1354	0.48	7.2	1.4	0.386	1.3
	2.68	1.5	0.1391	0.66	7.15	1.6	0.373	1.5
	2.52	1.7	0.1395	0.82	7.62	1.9	0.396	1.7
	2.71	2.1	0.1259	2.33	6.4	3.1	0.369	2.1
	5.47	2.3	0.1302	0.55	3.28	2.3	0.183	2.3
	3.19	1.1	0.1316	0.41	5.69	1.2	0.313	1.1
	2.96	1.2	0.132	0.46	6.16	1.2	0.338	1.2
	3.25	2	0.1324	1.1	5.62	2.3	0.308	2
	3.05	1.2	0.1341	1.04	6.06	1.6	0.328	1.2
0.5	2.75	1.6	0.1356	1	6.81	1.9	0.364	1.6
1.49	2.71	2.7	0.1367	2.1	6.96	3.4	0.369	2.7
1.2	2.62	2.4	0.1369	1.5	7.21	2.8	0.382	2.4
1.01	2.64	2.1	0.1377	1.4	7.2	2.6	0.379	2.1
0.73	2.59	1.8	0.1377	0.8	7.34	2	0.386	1.8
1.11	2.62	2.2	0.1378	1.3	7.24	2.6	0.381	2.2
1.17	2.59	3.2	0.1382	1.7	7.35	3.6	0.385	3.2
0.81	2.52	1.9	0.1393	0.8	7.61	2.1	0.396	1.9
0.79	2.58	1.9	0.1398	0.8	7.48	2	0.388	1.9

0.87	2.61	2	0.1403	0.9	7.4	2.2	0.383	2
1.02	2.52	2.1	0.141	1.2	7.72	2.4	0.397	2.1
0.68	2.58	1.8	0.1415	0.7	7.55	1.9	0.387	1.8
1.31	2.99	2.7	0.1336	1.4	6.15	3	0.334	2.7
0.68	3.85	1.7	0.1358	1.2	4.86	2.1	0.26	1.7
0.87	3.11	2	0.1366	2	6.06	2.8	0.322	2
0.87	3.21	1.9	0.1381	1.2	5.93	2.3	0.311	1.9
0.69	3.02	1.8	0.1386	1.4	6.32	2.3	0.331	1.8
0.88	2.62	2	0.1389	2	7.31	2.8	0.382	2
1.3	2.88	2.4	0.1391	1.6	6.66	2.9	0.347	2.4
0.67	2.72	1.7	0.1401	0.8	7.1	1.9	0.368	1.7
0.85	2.86	1.9	0.1405	0.9	6.78	2.1	0.35	1.9
0.45	3.88	1.6	0.1434	1	5.09	1.8	0.258	1.6
0.66	2.54	1.6	0.1333	0.7	7.25	1.7	0.394	1.6
0.69	2.57	1.6	0.1334	0.74	7.16	1.8	0.389	1.6
0.85	2.65	1.8	0.1337	0.95	6.96	2	0.378	1.8
0.57	2.6	2	0.1337	0.58	7.08	2.1	0.384	2
0.7	2.62	1.6	0.1337	0.84	7.03	1.8	0.381	1.6
0.94	2.65	1.5	0.1346	1.13	7	1.9	0.377	1.5
0.87	2.6	2.3	0.1354	1	7.17	2.5	0.384	2.3
0.56	2.58	1.5	0.1358	0.58	7.25	1.6	0.387	1.5
0.72	2.72	1.6	0.1361	0.74	6.91	1.8	0.368	1.6
0.8	2.64	1.7	0.1364	0.85	7.13	1.9	0.379	1.7
0.99	2.43	1.9	0.1401	1.03	7.94	2.2	0.411	1.9
0.9	2.38	1.9	0.1423	1	8.24	2.1	0.42	1.9
0.86	2.89	1.7	0.1311	1.14	6.25	2	0.346	1.7
15	2.42	7.7	0.145	23	8.25	24.5	0.413	7.7
0.67	2.81	1.6	0.1268	0.76	6.22	1.7	0.356	1.6
0.6	2.78	1.5	0.1269	0.65	6.3	1.6	0.36	1.5
0.48	2.85	1.7	0.1281	0.53	6.21	1.8	0.351	1.7
1.09	2.69	1.5	0.1286	1.1	6.58	1.9	0.371	1.5
0.48	2.85	1.4	0.1287	0.53	6.23	1.5	0.351	1.4
0.34	2.62	1.4	0.1289	0.43	6.79	1.4	0.382	1.4
0.85	2.77	1.5	0.1295	0.86	6.45	1.7	0.361	1.5
0.89	2.78	1.7	0.1295	0.91	6.43	1.9	0.36	1.7
0.55	2.63	1.5	0.1296	0.55	6.8	1.6	0.381	1.5
0.48	2.86	1.4	0.1297	0.49	6.27	1.5	0.35	1.4
0.44	2.81	1.4	0.1298	0.44	6.38	1.5	0.356	1.4
0.36	2.59	1.4	0.131	0.53	6.96	1.5	0.385	1.4
0.66	2.49	1.6	0.134	0.76	7.41	1.7	0.401	1.6
0.6	2.59	1.5	0.1346	0.6	7.17	1.6	0.386	1.5
0.88	2.76	1.7	0.1351	0.97	6.75	2	0.362	1.7
0.63	3.16	1.5	0.1275	1	5.57	1.8	0.317	1.5
0.47	3.02	1.4	0.1281	0.78	5.86	1.6	0.332	1.4
0.4	2.94	1.4	0.1289	0.48	6.05	1.5	0.34	1.4
0.45	2.95	1.4	0.1295	0.53	6.06	1.5	0.339	1.4

0.48	2.87	1.4	0.1308	0.76	6.28	1.6	0.348	1.4
0.47	3.33	1.4	0.131	1.43	5.43	2	0.301	1.4
1.35	2.62	5.7	0.132	1.5	6.95	5.9	0.382	5.7
1.1	3.16	1.7	0.1321	1.65	5.77	2.3	0.317	1.7
0.68	3.1	2.2	0.134	0.93	5.97	2.4	0.323	2.2
1.97	3.05	2.2	0.1358	1.99	6.15	3	0.328	2.2
0.56	2.6	1.5	0.1299	0.62	6.9	1.6	0.385	1.5
0.51	2.61	1.6	0.1292	0.53	6.83	1.7	0.384	1.6
0.57	2.63	1.7	0.1303	0.65	6.84	1.8	0.381	1.7
0.48	2.58	1.6	0.1302	0.48	6.95	1.6	0.387	1.6
0.45	2.63	1.6	0.1288	0.46	6.76	1.6	0.381	1.6
0.52	2.65	1.6	0.1296	0.86	6.73	1.8	0.377	1.6
0.35	2.81	1.5	0.1306	0.43	6.4	1.6	0.355	1.5
0.58	2.45	1.5	0.1311	0.74	7.39	1.7	0.409	1.5
0.39	2.78	1.5	0.132	0.61	6.55	1.6	0.36	1.5
0.41	2.83	1.5	0.1321	0.6	6.43	1.6	0.353	1.5
1.43	3.45	1.8	0.138	2.14	5.51	2.8	0.29	1.8
0.3	2.99	1.5	0.1305	0.42	6.02	1.5	0.334	1.5
0.61	2.72	1.7	0.1305	1.45	6.61	2.3	0.367	1.7
0.96	2.77	1.6	0.1311	2.12	6.52	2.6	0.36	1.6
2.64	2.63	1.8	0.135	5.82	7.09	6.1	0.381	1.8
1.32	5.32	1.6	0.1393	4.22	3.61	4.5	0.188	1.6
0.68	2.71	1.5	0.1309	0.93	6.66	1.8	0.369	1.5
0.33	2.76	1.5	0.1315	0.64	6.58	1.6	0.363	1.5
0.36	3.45	1.5	0.1278	0.72	5.11	1.6	0.29	1.5
0.33	3.16	1.7	0.1295	0.36	5.65	1.8	0.316	1.7
1.41	6.39	2.7	0.123	3.53	2.66	4.4	0.157	2.7
0.35	3.77	1.8	0.1315	0.65	4.81	1.9	0.265	1.8
	2.85	1.6	0.1325	0.65	6.4	1.7	0.351	1.6
	2.62	1.5	0.13	0.57	6.85	1.6	0.382	1.5
	2.67	1.5	0.1303	0.31	6.72	1.5	0.374	1.5
	2.62	1.7	0.1315	0.56	6.91	1.7	0.381	1.7
	2.81	1.4	0.1299	0.3	6.36	1.5	0.355	1.4
	5.6	2	0.1211	0.43	2.98	2	0.179	2
	3.88	1.5	0.1273	0.4	4.52	1.6	0.257	1.5
	2.99	1.6	0.1295	0.69	5.97	1.7	0.334	1.6
	4.68	1.5	0.125	0.41	3.68	1.5	0.214	1.5
	6.5	2	0.1219	1.52	2.58	2.5	0.154	2
	4	1.5	0.1268	0.53	4.37	1.6	0.25	1.5
	3.59	1.6	0.1271	0.79	4.88	1.7	0.278	1.6
	8.92	2	0.1226	4.5	1.89	4.9	0.112	2
0.39	2.72	1.6	0.1308	0.41	6.63	1.6	0.367	1.6
0.41	2.64	1.7	0.1299	0.43	6.79	1.8	0.379	1.7
0.42	2.71	1.6	0.1328	0.69	6.76	1.7	0.369	1.6
0.36	2.68	1.5	0.1313	0.37	6.76	1.6	0.373	1.5
0.41	2.72	1.5	0.1299	0.48	6.58	1.6	0.367	1.5
0.41	2.63	1.6	0.1311	0.68	6.87	1.7	0.38	1.6

0.35	2.8	1.5	0.1308	0.56	6.44	1.6	0.357	1.5
0.37	2.66	1.5	0.1304	0.37	6.77	1.6	0.376	1.5
0.52	2.66	1.6	0.1307	0.63	6.77	1.7	0.376	1.6
0.35	2.69	1.5	0.1305	0.37	6.68	1.5	0.371	1.5
0.65	2.68	1.5	0.13	0.66	6.68	1.6	0.373	1.5
0.56	2.67	1.5	0.1305	0.59	6.75	1.6	0.375	1.5
0.34	2.62	1.5	0.1296	0.35	6.82	1.5	0.382	1.5
0.45	3.2	1.6	0.136	0.83	5.85	1.8	0.312	1.6
0.37	2.61	1.6	0.1387	1.06	7.32	1.9	0.382	1.6
0.4	2.72	1.2	0.1311	0.49	6.64	1.3	0.367	1.2
0.62	2.91	1.1	0.1298	0.63	6.16	1.3	0.344	1.1
0.43	2.6	1.2	0.1312	0.45	6.97	1.3	0.385	1.2
0.37	2.58	1.2	0.1318	0.45	7.05	1.3	0.388	1.2
0.58	2.57	1.4	0.1316	0.63	7.06	1.5	0.389	1.4
0.68	2.56	1.2	0.1324	0.73	7.13	1.4	0.39	1.2
0.41	2.67	1.2	0.13	0.44	6.7	1.3	0.374	1.2
0.4	2.79	1.2	0.1322	0.42	6.53	1.2	0.358	1.2
0.31	2.62	1.1	0.1339	0.32	7.06	1.2	0.382	1.1
0.2	2.56	1.3	0.1344	0.2	7.25	1.3	0.391	1.3
0.29	2.51	1.1	0.1396	0.38	7.67	1.2	0.399	1.1
0.73	3.17	1.7	0.1318	0.8	5.73	1.9	0.316	1.7
0.51	2.623	1.6	0.13045	0.51	6.86	1.7	0.3813	1.6
0.51	2.583	1.6	0.13033	0.56	6.96	1.7	0.3871	1.6
0.92	2.619	1.6	0.12942	0.92	6.81	1.8	0.3818	1.6
0.42	2.728	1.8	0.13008	0.49	6.58	1.9	0.3666	1.8
0.7	2.662	1.7	0.13012	0.7	6.74	1.9	0.3756	1.7
0.38	2.863	1.5	0.13143	0.45	6.33	1.5	0.3493	1.5
0.5	2.589	1.6	0.12971	0.51	6.91	1.7	0.3863	1.6
0.47	2.625	1.6	0.13055	0.53	6.86	1.6	0.3809	1.6
0.6	2.599	1.7	0.12948	0.67	6.87	1.8	0.3848	1.7
0.61	2.617	1.7	0.13208	0.64	6.96	1.8	0.3822	1.7
0.96	2.637	1.5	0.13199	1.19	6.9	1.9	0.3793	1.5
0.47	2.623	1.5	0.13042	0.54	6.86	1.6	0.3812	1.5
0.63	2.535	1.7	0.12981	0.65	7.06	1.8	0.3945	1.7
0.57	2.492	1.6	0.12944	0.59	7.16	1.7	0.4013	1.6
0.62	2.657	1.7	0.12756	0.81	6.62	1.8	0.3764	1.7
0.48	2.617	1.6	0.13128	0.49	6.92	1.6	0.3821	1.6
0.52	2.678	1.6	0.13214	1.2	6.8	2	0.3735	1.6
1.05	2.728	1.6	0.13433	2.44	6.79	2.9	0.3666	1.6
	2.65	1.08	0.129	0.85	6.72	1.4	0.378	1.08
	2.85	1.06	0.1297	0.95	6.29	1.4	0.351	1.06
	2.58	0.76	0.1312	0.51	7.01	0.9	0.388	0.76
	2.75	0.65	0.1302	0.36	6.52	0.7	0.363	0.65
	2.66	0.65	0.1308	0.62	6.78	0.9	0.376	0.65
	2.86	0.81	0.1309	0.67	6.3	1	0.349	0.81

	2.7	1.46	0.1286	0.67	6.58	1.6	0.371	1.46
	2.76	0.77	0.1328	0.58	6.64	1	0.363	0.77
	2.62	0.8	0.1321	0.59	6.96	1	0.382	0.8
	2.59	1.16	0.1351	0.94	7.19	1.5	0.386	1.16
	2.69	0.94	0.133	0.71	6.82	1.2	0.372	0.94
	2.82	1.13	0.1318	0.54	6.45	1.3	0.355	1.13
	2.68	0.7	0.1318	0.5	6.78	0.9	0.373	0.7
	2.66	1.05	0.132	0.82	6.84	1.3	0.376	1.05
	2.8	0.77	0.1324	0.55	6.53	0.9	0.358	0.77
	2.7	0.76	0.1325	0.52	6.76	0.9	0.37	0.76
	2.42	1.08	0.1452	0.94	8.28	1.4	0.414	1.08
	3.92	0.75	0.1283	0.67	4.52	1	0.255	0.75
	4.5	1.44	0.1259	1.75	3.86	2.3	0.222	1.44
	3.2	1.62	0.1282	0.3	5.53	1.6	0.313	1.62
	4.27	9.17	0.1092	8.4	3.53	12.4	0.234	9.17
	2.91	0.81	0.1303	0.58	6.17	1	0.344	0.81
	3.29	1.06	0.1304	0.54	5.47	1.2	0.304	1.06
	2.36	1.84	0.1316	0.98	7.68	2.1	0.423	1.84
		0.5	0.1311	0.86	0	1	0	0.5
	2.97	0.91	0.1323	0.78	6.15	1.2	0.337	0.91
	3.03	0.95	0.1282	0.83	5.83	1.3	0.33	0.95
0.76	2.64	1.7	0.1299	0.79	6.77	1.9	0.378	1.7
0.7	2.64	1.7	0.1292	0.72	6.74	1.8	0.379	1.7
0.57	2.73	1.6	0.1293	0.75	6.52	1.7	0.366	1.6
0.38	2.64	1.5	0.1295	0.43	6.76	1.5	0.378	1.5
0.83	2.61	1.8	0.1283	0.9	6.77	2	0.382	1.8
0.3	2.73	1.4	0.1302	0.35	6.58	1.5	0.367	1.4
0.33	2.65	1.4	0.1299	0.38	6.75	1.5	0.377	1.4
0.43	2.62	1.5	0.1293	0.45	6.81	1.6	0.382	1.5
0.57	2.59	1.6	0.1298	0.57	6.91	1.7	0.386	1.6
0.71	2.63	1.7	0.1295	0.73	6.79	1.8	0.381	1.7
0.72	2.62	1.7	0.1309	0.79	6.88	1.9	0.381	1.7
0.31	2.63	1.4	0.1295	0.31	6.79	1.5	0.38	1.4
0.34	2.69	1.4	0.1297	0.35	6.66	1.5	0.372	1.4
0.29	2.67	1.4	0.1301	0.35	6.72	1.5	0.375	1.4
0.47	2.64	1.5	0.1304	0.51	6.82	1.6	0.379	1.5
0.53	2.63	1.6	0.1287	0.54	6.75	1.6	0.38	1.6
1.42	2.92	1.6	0.1581	2.19	7.47	2.7	0.343	1.6
2.15	2.72	1.5	0.1353	2.65	6.86	3	0.368	1.5
2.25	2.69	2	0.1434	3.28	7.35	3.8	0.371	2
0.89	2.93	1.8	0.1339	0.89	6.3	2	0.341	1.8
0.25	2.677	1.4	0.1301	0.26	6.7	1.4	0.3735	1.4
0.31	2.713	1.5	0.13009	0.38	6.61	1.5	0.3686	1.5
0.3	2.521	1.7	0.13008	0.46	7.12	1.7	0.3967	1.7
0.31	2.635	1.8	0.12978	0.31	6.79	1.8	0.3796	1.8
0.31	2.603	2.2	0.12937	0.33	6.85	2.2	0.3842	2.2
0.24	2.658	1.4	0.12936	0.29	6.71	1.4	0.3762	1.4

0.53	2.759	1.7	0.12938	0.58	6.47	1.8	0.3624	1.7
0.23	2.706	1.4	0.13021	0.25	6.64	1.4	0.3696	1.4
0.3	2.852	2.1	0.12909	0.35	6.24	2.1	0.3507	2.1
0.36	2.678	1.5	0.12978	0.36	6.68	1.5	0.3734	1.5
0.47	2.615	1.9	0.13046	0.6	6.88	2	0.3825	1.9
0.39	2.619	1.5	0.13032	0.4	6.86	1.5	0.3819	1.5
0.44	2.639	1.5	0.13076	0.5	6.83	1.6	0.379	1.5
0.46	2.559	1.8	0.13022	0.56	7.02	1.9	0.3908	1.8
0.44	2.673	1.5	0.12972	0.51	6.69	1.6	0.3741	1.5
0.4	2.55	1.5	0.1302	0.41	7.04	1.6	0.3922	1.5
0.46	2.637	1.6	0.1302	0.47	6.81	1.6	0.3792	1.6
0.43	2.63	1.5	0.13189	0.44	6.91	1.6	0.3802	1.5
0.31	2.748	1.9	0.13004	0.33	6.52	1.9	0.3639	1.9
0.42	2.614	1.6	0.13036	0.61	6.88	1.7	0.3826	1.6
0.76	2.773	1.5	0.13085	0.95	6.51	1.7	0.3606	1.5
0.33	2.564	1.5	0.1329	0.72	7.15	1.6	0.39	1.5
0.83	2.655	1.5	0.12949	1.36	6.72	2	0.3766	1.5
0.27	3.068	1.6	0.13073	0.52	5.88	1.7	0.326	1.6
1.23	2.727	1.5	0.13286	1.73	6.72	2.3	0.3666	1.5
0.37	2.402	1.4	0.1319	0.44	7.57	1.5	0.4163	1.4
1.05	2.602	1.6	0.13366	1.33	7.08	2.1	0.3843	1.6
1.08	2.602	1.6	0.13159	1.42	6.97	2.2	0.3843	1.6
0.45	2.722	0.9	0.1301	0.67	6.59	1.1	0.3674	0.9
0.62	2.625	1.1	0.1294	0.71	6.8	1.3	0.381	1.1
0.74	2.73	1.2	0.1304	0.78	6.58	1.5	0.3663	1.2
0.92	2.724	1.1	0.1311	1.52	6.64	1.9	0.3671	1.1
0.75	2.727	1.3	0.1324	0.77	6.69	1.5	0.3668	1.3
0.59	2.737	1.1	0.132	0.75	6.65	1.3	0.3654	1.1
0.58	2.611	1.1	0.1311	0.87	6.92	1.4	0.3829	1.1
0.64	2.57	1.1	0.1307	0.66	7.01	1.3	0.3891	1.1
0.56	2.671	1	0.1291	0.8	6.67	1.3	0.3745	1
0.45	2.677	0.9	0.1335	0.92	6.88	1.3	0.3736	0.9
0.44	2.643	0.9	0.1291	0.78	6.73	1.2	0.3783	0.9
0.34	2.669	0.7	0.1288	0.45	6.65	0.9	0.3747	0.7
0.56	2.69	1	0.1304	0.57	6.68	1.2	0.3718	1
0.57	2.634	1	0.1314	0.57	6.88	1.2	0.3797	1
0.8	2.635	0.9	0.1307	0.95	6.84	1.3	0.3794	0.9
0.88	2.633	0.9	0.1313	0.88	6.88	1.3	0.3798	0.9
1.32	2.664	1	0.132	1.6	6.83	1.9	0.3753	1
0.37	2.596	0.8	0.1298	0.37	6.89	0.9	0.3852	0.8
0.58	2.774	1.5	0.1284	0.77	6.38	1.7	0.3604	1.5
0.94	2.725	1.6	0.1295	1.05	6.55	1.9	0.367	1.6
0.56	2.644	1	0.1307	0.61	6.82	1.2	0.3782	1
0.41	2.991	2.4	0.1273	0.5	5.87	2.4	0.3344	2.4
	2.8	2.3	0.1299	0.79	6.4	2.4	0.3572	2.3
	2.659	1.6	0.1309	0.72	6.79	1.8	0.3761	1.6
	2.444	1.4	0.1316	0.51	7.43	1.5	0.4092	1.4
	2.684	1	0.1339	0.57	6.88	1.2	0.3726	1

2.497	1.9	0.1358	1.12	7.5	2.2	0.4004	1.9
2.612	2.7	0.1363	0.93	7.2	2.9	0.3828	2.7
3.308	1.3	0.1284	0.63	5.35	1.5	0.3023	1.3
7.13	1.5	0.1291	1.52	2.5	2.1	0.1402	1.5
2.338	1.6	0.1297	1.11	7.65	2	0.4278	1.6
3.225	0.9	0.1304	1.71	5.57	2	0.3101	0.9
5.524	2	0.1324	1.65	3.31	2.6	0.181	2
3.058	1.6	0.1333	1.14	6.01	2	0.3271	1.6
3.866	1.6	0.1334	2.47	4.76	2.9	0.2587	1.6
6.402	0.9	0.1346	1.33	2.9	1.6	0.1562	0.9
2.8	1.1	0.1317	0.95	6.6	1.5	0.36	1.1
22.4	3.4	0.0959	2.1	0.6	4	0.04	3.4
17.7	1.4	0.0968	6.1	0.8	6.3	0.06	1.4
13.4	2.3	0.1032	3.28	1.1	4	0.07	2.3
8.1	3.3	0.1035	3.64	1.8	4.9	0.12	3.3
11.9	1.3	0.1171	2.67	1.4	3	0.08	1.3
1.7	1.1	0.1243	0.51	10	1.2	0.58	1.1
3.8	2	0.1257	0.86	4.6	2.2	0.26	2
2.3	2.9	0.1275	0.81	7.8	3	0.44	2.9
10.5	4.4	0.1275	1.2	1.7	4.6	0.09	4.4
3.4	3.4	0.1275	1.24	5.2	3.6	0.29	3.4
3.3	4.3	0.1282	4.5	5.3	6.2	0.3	4.3
11.2	12.6	0.1295	19	1.6	22.5	0.09	12.6
4.2	1	0.1309	0.66	4.3	1.2	0.24	1
3	1.4	0.1316	0.6	6.1	1.5	0.33	1.4
10.5	3.3	0.1333	1.42	1.8	3.6	0.1	3.3
3.5	2.2	0.1336	1.29	5.3	2.6	0.29	2.2
7.7	2.4	0.1342	1.08	2.4	2.6	0.13	2.4
2.731	1.3	0.1289	0.64	6.51	1.4	0.366	1.3
2.733	1.7	0.1269	1.05	6.4	2	0.366	1.7
2.731	1.7	0.1266	1.17	6.39	2.1	0.366	1.7
2.699	1.3	0.1291	0.75	6.6	1.5	0.371	1.3
2.69	1.2	0.1291	0.24	6.62	1.2	0.372	1.2
2.779	1.6	0.1303	0.69	6.47	1.7	0.36	1.6
2.678	1.2	0.1286	0.26	6.62	1.2	0.373	1.2
2.721	1.7	0.1287	0.94	6.52	1.9	0.368	1.7
2.724	1.5	0.129	0.71	6.53	1.6	0.367	1.5
2.791	1.3	0.131	0.87	6.47	1.6	0.358	1.3
2.503	1.3	0.1315	1.15	7.24	1.8	0.399	1.3
2.563	1.3	0.1339	0.46	7.2	1.4	0.39	1.3
2.575	1.2	0.1343	0.32	7.19	1.3	0.388	1.2
2.455	1.3	0.1374	0.67	7.72	1.5	0.407	1.3
2.671	1.6	0.1271	1.58	6.56	2.3	0.374	1.6
3.893	1.2	0.1258	0.82	4.46	1.5	0.257	1.2
1.593	1.3	0.1314	0.65	11.37	1.5	0.628	1.3
1.941	1.2	0.1305	0.18	9.27	1.2	0.515	1.2

2.364	1.3	0.1299	0.53	7.58	1.4	0.423	1.3
2.56	1.6	0.1302	0.66	7	1.8	0.39	1.6
2.84	1.5	0.1297	0.95	6.31	1.8	0.353	1.5
2.46	1.4	0.1327	0.37	7.44	1.5	0.406	1.4
2.68	1.4	0.1319	0.33	6.78	1.5	0.373	1.4
2.55	1.5	0.1312	0.49	7.09	1.6	0.392	1.5
2.8	1.4	0.1313	0.39	6.46	1.5	0.357	1.4
2.49	1.6	0.1317	0.6	7.29	1.7	0.401	1.6
2.45	1.8	0.1345	0.84	7.58	2	0.409	1.8
2.45	1.5	0.1337	0.52	7.53	1.6	0.409	1.5
2.49	1.6	0.1337	0.65	7.4	1.7	0.401	1.6
2.48	1.7	0.1355	0.71	7.54	1.8	0.404	1.7
2.75	2.1	0.137	1.53	6.87	2.6	0.364	2.1
2.64	1.4	0.1351	0.34	7.06	1.5	0.379	1.4
2.35	1.7	0.1335	0.78	7.83	1.9	0.425	1.7
2.46	1.5	0.1291	1.02	7.24	1.8	0.407	1.5
3.37	1.6	0.1367	0.94	5.59	1.9	0.296	1.6
2.7	1.5	0.1278	0.31	6.5	1.6	0.371	1.5
2.76	2.2	0.1289	0.46	6.4	2.2	0.362	2.2
2.7	1.4	0.129	0.46	6.6	1.4	0.371	1.4
2.7	1.6	0.13	0.43	6.6	1.6	0.37	1.6
2.84	1.3	0.1302	0.37	6.3	1.3	0.352	1.3
2.77	1.3	0.1303	0.28	6.5	1.3	0.361	1.3
2.81	1	0.1313	0.28	6.4	1	0.356	1
2.7	0.9	0.1319	0.44	6.7	1	0.37	0.9
2.67	3.2	0.132	0.85	6.8	3.3	0.375	3.2
2.66	1.5	0.1325	0.96	6.9	1.8	0.376	1.5
2.6	1.9	0.1327	0.74	7	2	0.385	1.9
2.64	2.1	0.1347	0.9	7	2.2	0.379	2.1
2.55	2.5	0.1347	0.94	7.3	2.6	0.392	2.5
2.7	1.9	0.1353	0.53	6.9	2	0.371	1.9
6.29	2.5	0.115	2.11	2.5	3.3	0.159	2.5
6.67	6.3	0.1182	2.47	2.4	6.8	0.15	6.3
#DIV/0!	0.5	0.1271	1.32	0	1.4	0	0.5
4.11	6.3	0.1282	3.82	4.3	7.4	0.243	6.3
#DIV/0!	0.5	0.1285	0.39	0	0.6	0	0.5
#DIV/0!	0.5	0.1289	0.88	0	1	0	0.5
3.36	2	0.1299	1.16	5.3	2.3	0.297	2
2.89	1.3	0.1316	0.57	6.3	1.4	0.346	1.3
2.98	1.6	0.1318	0.55	6.1	1.7	0.336	1.6
5.9	1.9	0.1322	1.53	3.1	2.4	0.169	1.9
3.62	1.7	0.1327	1.1	5.1	2.1	0.276	1.7
5.25	5.6	0.1329	1.04	3.5	5.7	0.191	5.6
3.69	2.5	0.1329	1.13	5	2.7	0.271	2.5
3.43	1.2	0.134	0.53	5.4	1.3	0.291	1.2
5.52	3.6	0.1341	2.8	3.3	4.6	0.181	3.6

3	1.2	0.1348	1.38	6.2	1.8	0.333	1.2
2.65	1	0.1356	1.1	7.1	1.5	0.377	1
4.49	2.1	0.1381	1.07	4.2	2.4	0.223	2.1
2.74	1.5	0.1297	0.59	6.52	1.6	0.365	1.5
2.68	1.6	0.1301	0.65	6.7	1.7	0.373	1.6
2.77	1.6	0.1302	0.9	6.49	1.9	0.361	1.6
2.66	1.6	0.1306	0.84	6.78	1.8	0.377	1.6
2.71	3.5	0.1307	1.34	6.64	3.8	0.369	3.5
2.75	2.5	0.1314	1.01	6.58	2.7	0.363	2.5
2.74	1.4	0.1317	0.39	6.62	1.4	0.365	1.4
2.6	1.5	0.1324	0.6	7.03	1.6	0.385	1.5
2.67	1.5	0.1329	0.79	6.86	1.7	0.375	1.5
2.66	1.4	0.1335	0.32	6.91	1.4	0.376	1.4
2.81	1.3	0.1335	0.35	6.56	1.4	0.356	1.3
2.76	1.6	0.135	0.51	6.74	1.7	0.362	1.6
2.72	2	0.1355	0.49	6.88	2	0.368	2
2.63	2.7	0.1373	1.09	7.2	2.9	0.38	2.7
2.55	1.9	0.1377	1.04	7.45	2.2	0.392	1.9
2.57	1.6	0.1406	0.57	7.53	1.7	0.389	1.6
3.3	1.5	0.1298	0.8	5.43	1.7	0.303	1.5
3.18	1.7	0.1301	0.51	5.64	1.8	0.314	1.7
4.85	1.8	0.1301	1.19	3.7	2.1	0.206	1.8
3.43	2	0.1305	0.72	5.24	2.2	0.291	2
6.23	4.4	0.1316	2.56	2.91	5.1	0.161	4.4
3.43	1.9	0.1333	0.83	5.35	2.1	0.291	1.9
3.7	1.6	0.1369	1.05	5.1	1.9	0.27	1.6
3.3	1.5	0.1379	0.67	5.75	1.7	0.303	1.5
2.66	0.68	0.1306	0.41	6.78	0.8	0.376	0.68
2.66	0.76	0.1313	0.5	6.8	0.9	0.376	0.76
2.69	1.85	0.1304	0.49	6.69	1.9	0.372	1.85
2.85	0.82	0.1302	1.27	6.3	1.5	0.351	0.82
2.71	0.8	0.1299	0.55	6.6	1	0.369	0.8
2.89	0.84	0.1293	0.65	6.17	1.1	0.346	0.84
2.74	0.82	0.1301	1.33	6.55	1.6	0.365	0.82
2.69	0.76	0.1296	0.51	6.63	0.9	0.371	0.76
2.72	0.98	0.1299	0.59	6.58	1.1	0.367	0.98
2.68	1.61	0.1295	0.63	6.67	1.7	0.373	1.61
2.8	1.08	0.131	0.58	6.45	1.2	0.357	1.08
2.84	0.7	0.1287	0.47	6.24	0.8	0.352	0.7
2.61	1.53	0.1307	1.27	6.91	2	0.384	1.53
2.7	0.81	0.1286	0.59	6.56	1	0.37	0.81
11.18	1	0.2511	3.06	3.1	3.2	0.089	1
2.9	0.86	0.1349	1.07	6.41	1.4	0.344	0.86
2.61	0.89	0.2088	1.91	11.05	2.1	0.384	0.89
4.74	1.03	0.1229	2.04	3.57	2.3	0.211	1.03
4.04	0.7	0.1385	1.57	4.72	1.7	0.247	0.7
3.55	0.79	0.1297	0.65	5.04	1	0.282	0.79

	3.93	0.93	0.1499	2.62	5.25	2.8	0.254	0.93
	2.97	0.94	0.1343	1.02	6.23	1.4	0.336	0.94
	#DIV/0!	0.54	0.1322	1.65	0	1.7	0	0.54
	2.69	1	0.1282	0.37	6.57	1.1	0.372	1
	2.85	1.3	0.1282	0.52	6.21	1.4	0.351	1.3
	2.67	1	0.1293	0.37	6.68	1.1	0.375	1
	2.65	1.2	0.1294	0.4	6.72	1.3	0.377	1.2
	2.61	1.3	0.1294	0.71	6.83	1.5	0.383	1.3
	2.64	1	0.1295	0.76	6.76	1.3	0.379	1
	2.71	1	0.1297	0.59	6.61	1.2	0.37	1
	2.77	1	0.1299	0.47	6.47	1.1	0.362	1
	2.66	1.1	0.1303	0.43	6.76	1.1	0.377	1.1
	2.82	1	0.1314	0.46	6.43	1.1	0.355	1
	2.58	1.1	0.1318	0.55	7.03	1.2	0.387	1.1
	2.6	1.2	0.1323	0.58	7.02	1.3	0.385	1.2
	2.56	1.2	0.1325	0.62	7.13	1.3	0.39	1.2
	2.64	1	0.1332	0.38	6.96	1.1	0.379	1
	2.62	1.1	0.139	0.61	7.31	1.3	0.381	1.1
	4	1	0.1221	0.44	4.21	1.1	0.25	1
	3.68	1	0.125	0.86	4.68	1.3	0.272	1
	3.22	5.3	0.1259	3.6	5.4	6.4	0.311	5.3
	4.14	1.2	0.1259	1.15	4.19	1.6	0.241	1.2
	3.5	5.1	0.1265	0.52	4.98	5.1	0.286	5.1
	3.62	1.7	0.1268	0.54	4.83	1.8	0.276	1.7
	3.23	1.6	0.1276	0.39	5.44	1.6	0.31	1.6
	3.32	1.8	0.1281	0.67	5.32	1.9	0.301	1.8
	3.26	1.1	0.1281	0.48	5.43	1.2	0.307	1.1
	3.57	1.6	0.1287	0.66	4.97	1.8	0.28	1.6
	2.98	1.2	0.1289	0.37	5.97	1.3	0.336	1.2
	2.94	1	0.1293	0.47	6.06	1.1	0.34	1
	3.09	1.1	0.1298	0.76	5.79	1.3	0.323	1.1
	2.93	1.2	0.1315	0.81	6.19	1.5	0.342	1.2
	3.22	1.6	0.1326	1.44	5.69	2.1	0.311	1.6
0.38	2.68	0.72	0.1279	0.4	6.59	0.8	0.374	0.72
0.6	2.7	0.92	0.1278	0.63	6.52	1.1	0.37	0.92
0.47	2.83	1.06	0.13	0.84	6.34	1.4	0.353	1.06
0.33	2.66	0.84	0.1278	0.34	6.64	0.9	0.377	0.84
0.33	2.64	0.66	0.129	0.37	6.74	0.8	0.379	0.66
0.38	2.87	1.26	0.1284	0.44	6.18	1.3	0.349	1.26
0.39	2.64	0.72	0.1285	0.39	6.7	0.8	0.378	0.72
0.53	2.68	0.87	0.1289	0.57	6.62	1	0.373	0.87
0.34	2.73	0.66	0.1294	0.42	6.53	0.8	0.366	0.66
0.31	2.65	0.82	0.1279	0.31	6.64	0.9	0.377	0.82
0.34	2.61	0.67	0.1287	0.34	6.79	0.8	0.383	0.67
0.49	2.68	0.83	0.1293	0.5	6.65	1	0.373	0.83
0.47	2.62	0.8	0.1279	0.48	6.74	0.9	0.382	0.8
0.34	#DIV/0!	0.51	0.1315	0.72	0	0.9	0	0.51

0.71	3.87	2.14	0.1317	1	4.69	2.4	0.258	2.14
0.39	3.28	0.7	0.1307	0.54	5.49	0.9	0.305	0.7
0.42	#DIV/0!	0.5	0.1282	0.44	0	0.7	0	0.5
1.15	3.18	0.7	0.1398	1.46	6.06	1.6	0.314	0.7
2.25	3.7	3.12	0.1301	4.46	4.84	5.4	0.27	3.12
0.45	4.45	0.73	0.1292	0.93	4	1.2	0.225	0.73
0.89	2.81	0.84	0.1357	1.68	6.67	1.9	0.356	0.84

	2.86	0.69	0.1278	0.47	6.17	0.8	0.35	0.69
	2.9	1.15	0.1274	0.37	6.07	1.2	0.345	1.15
	2.61	0.93	0.1277	0.59	6.75	1.1	0.384	0.93
	2.63	1.12	0.1286	0.42	6.74	1.2	0.38	1.12
	2.66	0.63	0.1287	0.29	6.66	0.7	0.375	0.63
	2.71	0.71	0.1278	0.5	6.5	0.9	0.369	0.71
	2.61	0.7	0.1284	0.39	6.78	0.8	0.383	0.7
	2.74	0.82	0.129	0.51	6.5	1	0.365	0.82
	2.84	1.01	0.1293	0.43	6.27	1.1	0.352	1.01
	2.69	1.18	0.1288	0.47	6.6	1.3	0.372	1.18

	4.27	5.02	0.1297	1.18	4.19	5.2	0.234	5.02
	#DIV/0!	0.5	0.1268	0.49	0	0.7	0	0.5
	#DIV/0!	0.52	0.1273	1.14	0	1.3	0	0.52
	3.93	1.36	0.1297	0.7	4.55	1.5	0.255	1.36
	5.62	1.21	0.1551	1.54	3.81	2	0.178	1.21
	3.84	0.65	0.1353	1.27	4.86	1.4	0.26	0.65
	3.08	0.84	0.1274	0.41	5.7	0.9	0.324	0.84
	3.14	0.68	0.1398	1.96	6.13	2.1	0.318	0.68
	2.76	0.71	0.1351	2.67	6.74	2.8	0.362	0.71
	3.28	0.73	0.1314	1.93	5.53	2.1	0.305	0.73
	3.03	0.74	0.1336	1.9	6.08	2	0.33	0.74
	3.47	0.63	0.1322	0.69	5.26	0.9	0.289	0.63
	4.83	1.71	0.1341	4.63	3.83	4.9	0.207	1.71
	3.18	7.43	0.1467	16	6.35	17.3	0.314	7.43
	2.94	0.72	0.1274	0.27	5.97	0.8	0.34	0.72
	2.7	0.79	0.1364	2.31	6.98	2.4	0.371	0.79

0.44	2.774	1.3	0.1303	0.45	6.48	1.4	0.361	1.3
0.41	2.623	1.3	0.1299	0.62	6.83	1.4	0.381	1.3
0.44	2.643	1.3	0.1297	0.53	6.77	1.4	0.378	1.3
0.29	2.671	1.2	0.1292	0.3	6.67	1.3	0.374	1.2
0.32	2.654	1.2	0.1297	0.35	6.74	1.3	0.377	1.2
0.57	2.679	1.4	0.1288	0.6	6.63	1.5	0.373	1.4
0.36	2.704	1.3	0.1285	0.42	6.55	1.3	0.37	1.3
0.43	2.681	1.3	0.1301	0.44	6.69	1.4	0.373	1.3
0.49	2.771	1.3	0.1288	0.53	6.41	1.4	0.361	1.3
0.44	2.818	1.3	0.13	0.55	6.36	1.4	0.355	1.3
0.37	2.779	1.3	0.1302	0.47	6.46	1.3	0.36	1.3
0.36	2.688	1.2	0.1299	0.38	6.66	1.3	0.372	1.2

0.49	2.945	1.4	0.1287	0.77	6.02	1.6	0.34	1.4
0.34	2.917	1.2	0.13	0.58	6.14	1.4	0.343	1.2
0.48	2.922	1.3	0.1299	0.76	6.13	1.5	0.342	1.3

1	7.646	3	0.1173	1.64	2.12	3.4	0.131	3
0.61	2.774	2.7	0.1345	1.26	6.69	3	0.36	2.7
0.44	2.78	1.3	0.1302	0.54	6.45	1.4	0.359	1.3
0.41	2.65	1.3	0.1314	0.44	6.84	1.3	0.377	1.3
0.49	2.6	1.3	0.13	0.51	6.9	1.4	0.385	1.3
0.33	2.77	1.2	0.1299	0.45	6.47	1.3	0.361	1.2
0.44	2.58	1.3	0.1288	0.45	6.88	1.4	0.388	1.3
0.75	2.68	1.3	0.13	0.85	6.69	1.5	0.373	1.3
0.38	2.64	1.2	0.1295	0.44	6.75	1.3	0.378	1.2
0.33	2.61	1.2	0.1287	0.35	6.81	1.3	0.384	1.2
0.4	2.63	1.3	0.1291	0.44	6.76	1.3	0.38	1.3
0.46	2.69	1.3	0.1288	0.54	6.59	1.4	0.371	1.3
0.36	2.74	1.2	0.1291	0.36	6.49	1.3	0.365	1.2
0.32	2.63	1.2	0.1288	0.34	6.76	1.3	0.381	1.2
0.47	2.73	1.3	0.1299	0.5	6.57	1.4	0.367	1.3
0.4	2.66	1.3	0.1304	0.4	6.75	1.3	0.376	1.3
0.39	2.62	1.3	0.1293	0.41	6.81	1.3	0.382	1.3
0.36	2.81	1.2	0.1343	0.56	6.6	1.4	0.356	1.2
0.4	3.37	1.2	0.1295	0.82	5.3	1.5	0.297	1.2
0.73	2.74	1.3	0.1309	1.42	6.59	1.9	0.365	1.3
0.43	2.74	1.6	0.1281	0.49	6.46	1.7	0.366	1.6
0.76	2.67	1.4	0.1291	0.78	6.68	1.6	0.375	1.4
0.45	2.58	1.4	0.1296	0.47	6.93	1.5	0.388	1.4
0.33	2.71	1.6	0.1295	0.34	6.58	1.7	0.368	1.6
0.5	2.59	1.8	0.1301	0.5	6.93	1.9	0.386	1.8
0.36	2.57	2.9	0.1292	0.38	6.93	2.9	0.389	2.9
0.35	2.61	1.4	0.1293	0.37	6.84	1.4	0.384	1.4
0.36	2.62	1.5	0.1292	0.36	6.79	1.6	0.381	1.5
0.45	2.73	1.8	0.1298	0.5	6.56	1.9	0.367	1.8
0.67	2.73	2.4	0.1281	0.67	6.47	2.5	0.366	2.4
0.8	2.6	1.9	0.1333	0.96	7.06	2.1	0.384	1.9
0.33	2.7	1.6	0.1312	0.41	6.69	1.7	0.37	1.6
0.59	2.72	1.3	0.132	0.71	6.69	1.5	0.368	1.3
0.78	2.708	1.8	0.1316	0.91	6.7	2	0.369	1.8
0.81	2.599	1.9	0.1322	0.94	7.01	2.1	0.385	1.9
0.64	2.711	1.7	0.1327	0.68	6.75	1.9	0.369	1.7
0.41	2.639	1.5	0.1331	0.44	6.95	1.6	0.379	1.5
0.81	2.528	1.9	0.1332	0.91	7.27	2.1	0.396	1.9
0.49	2.745	1.6	0.1334	0.73	6.7	1.7	0.364	1.6
0.56	2.668	1.7	0.1335	0.62	6.9	1.8	0.375	1.7
0.55	2.776	1.6	0.1336	0.88	6.63	1.8	0.36	1.6
0.56	2.654	1.6	0.1339	0.7	6.96	1.7	0.377	1.6
0.45	2.527	1.6	0.1343	0.7	7.33	1.7	0.396	1.6
0.52	2.645	1.6	0.1349	0.53	7.03	1.7	0.378	1.6
0.75	2.54	1.8	0.135	0.84	7.33	2	0.394	1.8
0.66	2.752	1.7	0.1351	0.69	6.77	1.8	0.363	1.7

0.41	2.584	1.6	0.1354	1.28	7.23	2.1	0.387	1.6
0.65	2.406	1.7	0.1306	0.71	7.49	1.9	0.416	1.7
0.51	2.945	1.6	0.1315	0.85	6.16	1.8	0.34	1.6
0.66	2.954	1.8	0.1357	1.14	6.34	2.1	0.339	1.8
0.53	3.695	1.6	0.136	1.18	5.07	2	0.271	1.6
0.52	2.681	1.7	0.1365	1.1	7.02	2	0.373	1.7
0.58	3.093	1.6	0.138	1.03	6.15	1.9	0.323	1.6
1.05	2.933	1.6	0.1422	1.57	6.68	2.3	0.341	1.6
0.46	3.021	1.6	0.1428	1.77	6.52	2.4	0.331	1.6
	2.575	2.1	0.1277	0.98	6.84	2.3	0.388	2.1
	2.59	2.3	0.1283	0.97	6.83	2.5	0.386	2.3
	2.64	2.2	0.1299	0.94	6.79	2.4	0.379	2.2
	2.663	1.9	0.13	0.72	6.73	2.1	0.375	1.9
	2.638	1.9	0.131	0.71	6.85	2	0.379	1.9
	2.609	2.1	0.1311	0.86	6.93	2.3	0.383	2.1
	2.629	1.5	0.1314	0.54	6.89	1.6	0.38	1.5
	2.551	2.4	0.1318	1.09	7.12	2.7	0.392	2.4
	2.553	1.9	0.1319	0.85	7.12	2.1	0.392	1.9
	2.548	1.9	0.1325	0.66	7.17	2.1	0.392	1.9
	2.812	2.2	0.1335	1.47	6.55	2.6	0.356	2.2
	2.676	1.5	0.1335	0.66	6.88	1.7	0.374	1.5
	2.546	2	0.1338	1.49	7.25	2.5	0.393	2
	2.472	2	0.134	0.66	7.48	2.1	0.405	2
	2.485	2.3	0.1349	1.13	7.49	2.5	0.402	2.3
	2.465	2	0.1354	0.78	7.58	2.1	0.406	2
	2.304	2.1	0.1439	1.25	8.61	2.5	0.434	2.1
	2.399	2	0.2272	1.39	13.06	2.5	0.417	2
	2.644	1.9	0.1325	1.07	6.91	2.1	0.378	1.9
	2.605	1.5	0.1329	0.91	7.03	1.8	0.384	1.5
	2.952	1.9	0.1376	1.69	6.42	2.5	0.339	1.9
	2.654	1.9	0.139	1.9	7.22	2.7	0.377	1.9
	2.792	1.8	0.1422	1.68	7.02	2.5	0.358	1.8
	2.49	1.3	0.1299	0.6	7.2	1.4	0.402	1.3
	2.56	1.4	0.129	0.67	6.96	1.6	0.391	1.4
	2.56	1.5	0.1301	0.59	7	1.6	0.39	1.5
	2.57	1.3	0.1304	0.35	7	1.3	0.389	1.3
	2.65	1.3	0.1293	0.4	6.72	1.3	0.377	1.3
	2.64	1.4	0.13	0.58	6.78	1.5	0.378	1.4
	2.75	1.3	0.1292	0.37	6.47	1.3	0.363	1.3
	2.45	1.3	0.1292	0.37	7.28	1.3	0.409	1.3
	2.48	1.4	0.128	0.53	7.11	1.5	0.403	1.4
	2.55	1.7	0.1327	0.83	7.18	1.9	0.393	1.7
	2.81	1.4	0.1314	0.8	6.44	1.6	0.356	1.4
	2.97	1.6	0.1275	0.43	5.91	1.6	0.336	1.6
	3.11	1.2	0.1277	0.53	5.66	1.3	0.322	1.2
	3.09	1.4	0.1302	0.57	5.81	1.5	0.323	1.4

	3.55	1.3	0.1277	0.41	4.96	1.3	0.282	1.3
0.68	2.66	1.9	0.1256	0.72	6.51	2.1	0.376	1.9
0.87	2.79	2.1	0.127	1.04	6.27	2.4	0.358	2.1
1.8	2.61	2.1	0.1276	1.83	6.74	2.8	0.383	2.1
0.86	2.59	2.1	0.1278	0.89	6.79	2.3	0.385	2.1
0.88	2.59	2.1	0.1278	1.09	6.81	2.4	0.386	2.1
0.83	2.55	2.1	0.1285	0.91	6.96	2.3	0.393	2.1
0.9	2.58	2.1	0.1288	1.09	6.87	2.4	0.387	2.1
0.52	2.54	1.8	0.129	0.57	6.99	1.9	0.393	1.8
0.84	2.67	2.1	0.1291	0.96	6.66	2.3	0.374	2.1
0.6	2.47	1.9	0.1301	0.63	7.27	2	0.405	1.9
0.84	2.64	2.1	0.1305	0.98	6.82	2.3	0.379	2.1
0.67	2.6	1.9	0.1325	0.69	7.03	2.1	0.385	1.9
1.04	2.52	2.4	0.126	1.25	6.88	2.7	0.396	2.4
0.66	3.26	1.9	0.1269	0.92	5.36	2.1	0.306	1.9
0.64	3.19	1.9	0.1277	1	5.52	2.1	0.313	1.9
0.78	3.05	2	0.133	0.8	6.02	2.2	0.328	2
1.27	2.82	2	0.1374	1.34	6.72	2.5	0.355	2
	2.67	2.1	0.1262	1.57	6.53	2.7	0.375	2.1
	2.63	2.3	0.1278	1.78	6.71	2.9	0.381	2.3
	2.67	2.1	0.1307	1.86	6.74	2.8	0.374	2.1
	2.69	2	0.1311	0.79	6.73	2.2	0.372	2
	2.63	2.1	0.1319	0.84	6.9	2.3	0.38	2.1
	2.66	2.5	0.1331	1.18	6.89	2.8	0.376	2.5
	2.56	2.1	0.1333	0.9	7.18	2.3	0.391	2.1
	2.48	2.2	0.1338	0.99	7.45	2.5	0.404	2.2
	2.54	2	0.1353	0.76	7.35	2.1	0.394	2
	1.72	2.1	0.2065	0.55	16.54	2.1	0.581	2.1
	3.04	2.1	0.1284	1.01	5.82	2.3	0.329	2.1
	2.75	2.1	0.1376	2.61	6.9	3.3	0.364	2.1
	3.63	3.3	0.1423	4.13	5.41	5.3	0.276	3.3
	2.66	2	0.148	4.13	7.69	4.6	0.377	2
	2.68	2.4	0.1492	12	7.69	12.6	0.374	2.4
	3.37	2.4	0.1495	3.62	6.12	4.4	0.297	2.4
	4.16	2	0.1583	4	5.25	4.5	0.241	2
	2.7	1.4	0.1309	0.87	6.6	1.6	0.37	1.4
	2.7	1.3	0.1294	1.17	6.5	1.7	0.37	1.3
	2.8	2.5	0.1297	1.04	6.5	2.8	0.36	2.5
	2.6	1.6	0.1287	0.58	6.7	1.7	0.38	1.6
	2.7	1.1	0.1292	0.58	6.7	1.2	0.37	1.1
	3.5	1.7	0.1309	1.25	5.2	2.1	0.29	1.7
	9.8	1.7	0.113	0.85	1.6	1.9	0.1	1.7
	6.1	1.9	0.1167	0.39	2.6	2	0.16	1.9

21.1	1.8	0.0841	4.47	0.5	4.8	0.05	1.8
11.4	1.8	0.1028	4.59	1.2	4.9	0.09	1.8
9.2	1.5	0.1146	1.12	1.7	1.9	0.11	1.5
4.4	1.3	0.1226	0.66	3.9	1.4	0.23	1.3
17	1.3	0.0897	1.62	0.7	2.1	0.06	1.3
3.9	0.9	0.1239	0.62	4.4	1.1	0.26	0.9
5.6	1	0.1206	0.41	3	1.1	0.18	1
8	1.6	0.1152	1.74	2	2.4	0.12	1.6
13.6	2.5	0.107	2.96	1.1	3.9	0.07	2.5
10.7	3.9	0.098	8.18	1.3	9.1	0.09	3.9
7.5	1.6	0.118	0.86	2.2	1.8	0.13	1.6
17.2	2	0.095	2.17	0.8	3	0.06	2
30.7	2.6	0.0863	1.47	0.4	3	0.03	2.6
3.9	3.1	0.1266	1.35	4.5	3.3	0.26	3.1
6.5	6.2	0.1198	1.39	2.5	6.3	0.15	6.2
14.1	2.8	0.1172	11	1.1	11.2	0.07	2.8
15.4	2.3	0.0963	1.67	0.9	2.8	0.06	2.3
11.6	1	0.1027	0.87	1.2	1.3	0.09	1
4.7	1.9	0.1233	1.02	3.6	2.1	0.21	1.9
14	1.8	0.0963	1.67	0.9	2.5	0.07	1.8
14	1.5	0.0945	2.21	0.9	2.7	0.07	1.5
9.2	2.1	0.11	0.78	1.6	2.2	0.11	2.1
24.8	1.1	0.0776	2.71	0.4	2.9	0.04	1.1
7.7	2.1	0.1053	7.84	1.9	8.1	0.13	2.1
5	0.8	0.1206	0.89	3.3	1.2	0.2	0.8
11.1	1.5	0.1084	1.6	1.3	2.2	0.09	1.5
8.5	1.6	0.113	1.01	1.8	1.9	0.12	1.6

errcorr
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	R A T I O S							
Analysis N(	Pb207/Pb2	2s	Pb207/U23	2s	Pb206/U23	2s	Pb208/Th2	2s
SAMPLE: E		2121 � 7 Ma						Common-L
BF1-01	0.1311	0.0046	6.7437	0.1746	0.3731	0.0088	0.1060	0.0026
BF1-03	0.1330	0.0029	6.9539	0.1709	0.3793	0.0089	0.1082	0.0034
BF1-07	0.1316	0.0031	6.8269	0.1803	0.3762	0.0092	0.1101	0.0044
BF1-09	0.1315	0.0033	6.8697	0.2058	0.3791	0.0102	0.1099	0.0055
BF1-14R	0.1311	0.0033	6.7604	0.1779	0.3739	0.0085	0.1135	0.0057
BF1-15	0.1315	0.0030	6.8156	0.1791	0.3760	0.0094	0.1147	0.0041
BF1-16	0.1316	0.0029	6.9470	0.1790	0.3828	0.0095	0.1161	0.0040
BF1-17	0.1304	0.0047	6.4952	0.1733	0.3613	0.0089	0.1027	0.0026
BF1-18	0.1318	0.0029	6.5452	0.1595	0.3603	0.0084	0.0915	0.0031
BF1-21C	0.1325	0.0042	7.1350	0.2571	0.3905	0.0116	0.1230	0.0087
Rejected								
BF1-08R	0.1289	0.0045	5.5425	0.1415	0.3120	0.0073	0.0888	0.0022
BF1-08C	0.1125	0.0038	2.9693	0.0739	0.1914	0.0043	0.0552	0.0013
BF1-12	0.1294	0.0058	6.0071	0.2082	0.3367	0.0095	0.0958	0.0029
BF1-14C	0.1266	0.0063	5.9054	0.2330	0.3384	0.0101	0.0965	0.0030
BF1-11	0.1169	0.0069	2.7001	0.1370	0.1675	0.0052	0.0481	0.0021
BF1-19	0.1289	0.0046	5.9151	0.1620	0.3329	0.0075	0.0947	0.0023
BF1-20	0.1289	0.0058	4.2818	0.1499	0.2410	0.0068	0.0686	0.0021
BF1-21R	0.1300	0.0060	6.1937	0.2461	0.3456	0.0080	0.0983	0.0026
BF1-22	0.1300	0.0052	6.0052	0.1870	0.3351	0.0083	0.0953	0.0025
BF1-23	0.1431	0.0055	7.0691	0.2123	0.3583	0.0085	0.1009	0.0027
Session standards								
91500-128	0.0752	0.0019	1.7999	0.0515	0.1735	0.0043	0.0501	0.0019
91500-129	0.0755	0.0018	1.8395	0.0499	0.1767	0.0043	0.0511	0.0018
GJ-1	0.0602	0.0015	0.8065	0.0221	0.0972	0.0024	0.0306	0.0015
GJ-2	0.0601	0.0015	0.8126	0.0222	0.0981	0.0024	0.0310	0.0015
GJ-3	0.0601	0.0015	0.8169	0.0220	0.0987	0.0023	0.0309	0.0015
GJ-4	0.0602	0.0015	0.8096	0.0225	0.0976	0.0023	0.0309	0.0016
GJ-3	0.0600	0.0014	0.8171	0.0207	0.0987	0.0023	0.0308	0.0013
GJ-4	0.0602	0.0014	0.8092	0.0209	0.0975	0.0023	0.0310	0.0013
GJ-5	0.0601	0.0015	0.8104	0.0221	0.0979	0.0023	0.0311	0.0016
GJ-6	0.0602	0.0008	0.8088	0.0111	0.0975	0.0012	0.0304	0.0008
MT-92	0.0642	0.0015	1.0432	0.0274	0.1178	0.0028	0.0351	0.0010
MT-93	0.0639	0.0016	1.0618	0.0281	0.1205	0.0029	0.0365	0.0011
SAMPLE: BF2		2145 � 6 Ma						Common-L
BF2-01	0.1357	0.0053	7.0103	0.2024	0.3748	0.0098	0.1061	0.0029
BF2-02	0.1328	0.0030	7.2230	0.1910	0.3946	0.0099	0.1213	0.0047
BF2-05	0.1323	0.0030	7.0629	0.1866	0.3872	0.0098	0.1170	0.0043
BF2-07	0.1330	0.0033	7.1455	0.2113	0.3898	0.0106	0.1140	0.0052
BF2-10C	0.1337	0.0030	7.3583	0.1922	0.3993	0.0099	0.1206	0.0047
BF2-10R	0.1331	0.0040	6.8845	0.2401	0.3753	0.0110	0.1090	0.0072
BF2-12	0.1374	0.0069	7.3693	0.2993	0.3891	0.0116	0.1100	0.0035
BF2-15	0.1321	0.0039	7.1004	0.2414	0.3898	0.0112	0.1055	0.0067
BF2-16	0.1319	0.0043	7.1708	0.2619	0.3945	0.0117	0.1037	0.0075
BF2-19	0.1337	0.0046	7.2472	0.2748	0.3932	0.0117	0.1157	0.0092
BF2-20	0.1329	0.0049	7.0985	0.2892	0.3875	0.0125	0.1059	0.0087
BF2-21	0.1337	0.0033	7.2954	0.2203	0.3957	0.0110	0.1141	0.0055
BF2-23	0.1340	0.0042	7.2752	0.2636	0.3937	0.0119	0.1137	0.0079
BF2-26	0.1331	0.0033	7.3121	0.2072	0.3985	0.0103	0.1242	0.0059

BF2-27	0.1356	0.0059	6.9603	0.2341	0.3723	0.0103	0.1054	0.0031
BF2-29	0.1368	0.0051	6.9880	0.2064	0.3705	0.0083	0.1048	0.0026
BF2-40	0.1325	0.0044	7.1240	0.2640	0.3901	0.0114	0.1158	0.0093
BF2-42	0.1298	0.0048	6.6663	0.1896	0.3724	0.0089	0.1059	0.0027
BF2-43	0.1380	0.0056	7.3477	0.2273	0.3861	0.0103	0.1091	0.0031
BF2-45	0.1376	0.0050	7.2616	0.1991	0.3827	0.0093	0.1082	0.0028
BF2-44	0.1337	0.0040	6.9248	0.2414	0.3758	0.0111	0.1139	0.0073
BF2-47	0.1350	0.0031	7.4017	0.1971	0.3976	0.0101	0.1235	0.0048
BF2-48	0.1307	0.0065	6.6648	0.2644	0.3699	0.0111	0.1051	0.0033
BF2-50	0.1349	0.0043	7.1474	0.2296	0.3844	0.0091	0.1234	0.0094
BF2-54	0.1326	0.0043	7.0025	0.2549	0.3831	0.0114	0.1094	0.0079
BF2-56	0.1329	0.0053	6.9046	0.2152	0.3768	0.0092	0.1069	0.0028
Rejected								
BF2-32	0.1390	0.0072	7.3187	0.3090	0.3819	0.0114	0.1079	0.0036
BF2-37	0.1410	0.0078	7.4969	0.3413	0.3857	0.0120	0.1088	0.0037
BF2-39	0.1403	0.0073	6.9171	0.2927	0.3577	0.0108	0.1010	0.0033
BF2-55	0.1504	0.0079	7.5973	0.3291	0.3664	0.0110	0.1027	0.0037
Session standards								
91500-130	0.0750	0.0018	1.8269	0.0487	0.1766	0.0043	0.0512	0.0017
91500-131	0.0754	0.0019	1.8732	0.0508	0.1802	0.0044	0.0525	0.0019
91500-132	0.0745	0.0020	1.8343	0.0557	0.1787	0.0047	0.0529	0.0022
GJ-5	0.0601	0.0014	0.8090	0.0206	0.0977	0.0023	0.0311	0.0013
GJ-6	0.0602	0.0014	0.8089	0.0207	0.0975	0.0023	0.0303	0.0013
GJ-7	0.0601	0.0015	0.8282	0.0227	0.1000	0.0024	0.0316	0.0016
GJ-8	0.0601	0.0016	0.7987	0.0225	0.0964	0.0024	0.0302	0.0017
GJ-7	0.0601	0.0014	0.8276	0.0211	0.0999	0.0024	0.0315	0.0013
GJ-8	0.0601	0.0014	0.7977	0.0208	0.0962	0.0023	0.0301	0.0013
GJ-9	0.0600	0.0016	0.8013	0.0226	0.0969	0.0024	0.0308	0.0017
GJ-10	0.0603	0.0015	0.8240	0.0229	0.0992	0.0024	0.0310	0.0017
GJ-9	0.0600	0.0014	0.8020	0.0211	0.0970	0.0023	0.0309	0.0014
GJ-10	0.0603	0.0014	0.8230	0.0212	0.0990	0.0024	0.0310	0.0013
GJ-11	0.0600	0.0015	0.8077	0.0218	0.0977	0.0023	0.0302	0.0016
GJ-12	0.0603	0.0008	0.8114	0.0110	0.0976	0.0011	0.0312	0.0008
MT-94	0.0642	0.0016	1.0691	0.0284	0.1208	0.0029	0.0369	0.0012
MT-95	0.0634	0.0016	1.0633	0.0302	0.1216	0.0030	0.0373	0.0013
SAMPLE: BF3	2130 � 6 Ma							Common-L
BF3-01	0.1350	0.0031	6.9676	0.1684	0.3745	0.0084	0.1085	0.0042
BF3-03	0.1316	0.0031	6.5394	0.1750	0.3604	0.0090	0.1031	0.0043
BF3-05	0.1324	0.0052	6.8340	0.2002	0.3745	0.0098	0.1063	0.0029
BF3-07	0.1307	0.0046	6.5450	0.1805	0.3633	0.0079	0.1033	0.0024
BF3-12	0.1316	0.0031	6.7989	0.1716	0.3747	0.0086	0.1140	0.0048
BF3-15	0.1324	0.0030	6.6345	0.1831	0.3635	0.0095	0.1052	0.0042
Rejected								
BF3-04	0.1537	0.0077	8.1581	0.3281	0.3850	0.0114	0.1077	0.0038
BF3-02	0.1417	0.0060	6.9933	0.2240	0.3581	0.0098	0.1010	0.0029
BF3-08	0.1297	0.0049	5.9556	0.1734	0.3330	0.0080	0.0947	0.0024
BF3-11	0.1425	0.0051	6.0203	0.1621	0.3063	0.0072	0.0863	0.0021
BF3-16	0.1293	0.0056	4.6850	0.1556	0.2628	0.0074	0.0748	0.0022
BF3-17	0.1297	0.0055	5.9083	0.1923	0.3304	0.0091	0.0940	0.0028
BF3-18	0.1326	0.0031	6.2943	0.1604	0.3443	0.0080	0.0987	0.0042
BF3-20	0.1432	0.0062	6.7063	0.2292	0.3396	0.0090	0.0957	0.0027
BF3-21	0.1458	0.0061	7.2513	0.2315	0.3606	0.0098	0.1014	0.0029

BF3-23	0.1471	0.0076	7.3463	0.3071	0.3623	0.0111	0.1018	0.0033
BF3-22	0.2160	0.0119	14.6751	0.6550	0.4927	0.0160	0.1334	0.0048
BF3-25	0.2212	0.0094	11.4422	0.3752	0.3752	0.0101	0.1014	0.0033
BF3-14	0.1067	0.0035	4.4379	0.1666	0.3019	0.0092	0.0863	0.0065
BF3-24	0.4499	0.0112	70.1909	2.0307	1.1317	0.0298	0.5983	0.0301
Session standards								
91500-133	0.0752	0.0017	1.8453	0.0461	0.1781	0.0042	0.0519	0.0016
91500-134	0.0749	0.0018	1.8268	0.0480	0.1770	0.0043	0.0512	0.0017
GJ-1	0.0601	0.0013	0.8088	0.0198	0.0976	0.0023	0.0306	0.0012
GJ-2	0.0602	0.0013	0.8113	0.0197	0.0978	0.0023	0.0310	0.0012
GJ-3	0.0603	0.0015	0.8149	0.0211	0.0980	0.0023	0.0309	0.0015
GJ-4	0.0600	0.0015	0.8057	0.0210	0.0975	0.0023	0.0305	0.0015
GJ-5	0.0598	0.0014	0.8041	0.0206	0.0976	0.0023	0.0308	0.0013
GJ-6	0.0606	0.0014	0.8153	0.0206	0.0977	0.0023	0.0306	0.0013
GJ-7	0.0601	0.0015	0.8112	0.0224	0.0979	0.0023	0.0303	0.0017
GJ-8	0.0602	0.0008	0.8090	0.0113	0.0976	0.0012	0.0311	0.0009
MT-96	0.0638	0.0016	1.0339	0.0286	0.1176	0.0030	0.0354	0.0011
MT-97	0.0638	0.0016	1.0491	0.0289	0.1192	0.0030	0.0360	0.0012
SAMPLE: BF4	No Age							Common-L
BF4-20	0.1341	0.0041	6.6306	0.2410	0.3586	0.0110	0.0983	0.0067
BF4-23	0.1305	0.0075	6.2537	0.2954	0.3475	0.0115	0.0988	0.0034
BF4-28	0.1317	0.0063	6.7712	0.2535	0.3730	0.0111	0.1059	0.0033
BF4-31	0.1314	0.0048	6.3383	0.2610	0.3500	0.0111	0.1065	0.0092
Rejected								
BF4-01	0.1274	0.0051	5.0575	0.1620	0.2880	0.0068	0.0821	0.0022
BF4-02	0.1290	0.0061	6.0760	0.2215	0.3415	0.0101	0.0972	0.0030
BF4-07	0.1332	0.0078	4.8482	0.2340	0.2640	0.0088	0.0749	0.0026
BF4-15	0.1287	0.0067	5.4672	0.2325	0.3082	0.0093	0.0877	0.0029
BF4-06	0.1385	0.0063	1.3692	0.0475	0.0717	0.0021	0.0203	0.0008
BF4-09	0.1329	0.0066	1.9291	0.0765	0.1053	0.0032	0.0299	0.0011
BF4-08	0.0940	0.0089	2.3842	0.2097	0.1839	0.0062	0.0541	0.0032
BF4-10	0.1400	0.0087	5.3545	0.2794	0.2774	0.0093	0.0783	0.0029
BF4-12	0.1372	0.0105	4.1563	0.2800	0.2197	0.0078	0.0621	0.0028
BF4-14	0.1097	0.0100	2.6821	0.2264	0.1774	0.0063	0.0513	0.0028
BF4-19	0.1332	0.0037	5.6693	0.1928	0.3087	0.0093	0.0896	0.0052
BF4-25	0.1359	0.0068	4.7618	0.1913	0.2542	0.0075	0.0720	0.0026
BF4-29	0.1316	0.0062	5.6904	0.2125	0.3137	0.0091	0.0891	0.0028
BF4-30	0.1333	0.0050	5.7973	0.1754	0.3155	0.0071	0.0895	0.0022
BF4-33	0.1281	0.0075	5.2755	0.2573	0.2986	0.0097	0.0850	0.0030
BF4-41	0.1618	0.0066	4.4486	0.1357	0.1994	0.0054	0.0555	0.0017
BF4-54	0.1180	0.0078	3.3186	0.1915	0.2040	0.0066	0.0586	0.0029
BF4-59	0.1346	0.0063	5.7477	0.2078	0.3097	0.0092	0.0878	0.0028
BF4-61	0.1319	0.0077	4.8351	0.2327	0.2659	0.0088	0.0755	0.0027
BF4-62	0.1359	0.0059	5.2280	0.1746	0.2791	0.0079	0.0790	0.0025
BF4-56	0.1488	0.0061	1.7506	0.0781	0.0854	0.0028	0.1700	0.0162
SAMPLE: BF5	2136 � 11 Ma							Common-L
BF5-01	0.1337	0.0035	7.1475	0.2269	0.3879	0.0111	0.1230	0.0066
BF5-02	0.1339	0.0031	7.4025	0.1968	0.4009	0.0101	0.1199	0.0045
BF5-03	0.1333	0.0030	7.1803	0.1878	0.3907	0.0098	0.1146	0.0042
BF5-02R	0.1324	0.0030	7.2528	0.1891	0.3975	0.0099	0.1191	0.0044
BF5-05	0.1329	0.0037	7.0449	0.2262	0.3845	0.0106	0.0860	0.0052
BF5-07R	0.1307	0.0057	6.3922	0.2090	0.3548	0.0102	0.1008	0.0030

BF5-11	0.1336	0.0029	7.3067	0.1831	0.3966	0.0097	0.1167	0.0036
BF5-13	0.1323	0.0033	7.0522	0.2123	0.3865	0.0108	0.1177	0.0054
BF5-15	0.1321	0.0036	7.2262	0.2290	0.3968	0.0113	0.1147	0.0061
BF5-16	0.1320	0.0031	7.0460	0.1980	0.3871	0.0103	0.1117	0.0047
BF5-18	0.1325	0.0031	7.0931	0.1939	0.3883	0.0101	0.1108	0.0044
BF5-20	0.1317	0.0031	7.4108	0.2096	0.4080	0.0109	0.1193	0.0052
BF5-21	0.1332	0.0051	7.2597	0.3037	0.3953	0.0126	0.1148	0.0107
BF5-25	0.1323	0.0034	7.1962	0.2086	0.3946	0.0103	0.1129	0.0056
BF5-31	0.1361	0.0078	7.0446	0.4113	0.3754	0.0140	0.1184	0.0164
BF5-34	0.1331	0.0032	7.2996	0.2076	0.3979	0.0105	0.1114	0.0048
BF5-37	0.1336	0.0033	7.2214	0.2050	0.3921	0.0102	0.1102	0.0049
BF5-41	0.1330	0.0033	7.2826	0.2063	0.3973	0.0102	0.1121	0.0052
BF5-47	0.1334	0.0038	7.1643	0.2349	0.3897	0.0108	0.1083	0.0066
Rejected								
BF5-07C	0.1308	0.0052	6.2053	0.1863	0.3442	0.0088	0.0978	0.0026
BF5-14	0.1345	0.0065	6.5138	0.2430	0.3514	0.0107	0.0996	0.0032
Session standards								
91500-135	0.0752	0.0019	1.8552	0.0530	0.1791	0.0046	0.0532	0.0019
91500-136	0.0751	0.0017	1.8216	0.0477	0.1761	0.0043	0.0520	0.0017
91500-137	0.0755	0.0017	1.8739	0.0496	0.1799	0.0045	0.0542	0.0017
91500-138	0.0744	0.0017	1.8412	0.0498	0.1795	0.0045	0.0535	0.0018
91500-139	0.0747	0.0018	1.8600	0.0515	0.1805	0.0046	0.0524	0.0019
GJ-1	0.0602	0.0014	0.8124	0.0209	0.0979	0.0024	0.0310	0.0012
GJ-2	0.0605	0.0017	0.8048	0.0232	0.0965	0.0022	0.0308	0.0019
GJ-3	0.0597	0.0017	0.8356	0.0243	0.1015	0.0023	0.0310	0.0020
GJ-4	0.0602	0.0015	0.7913	0.0210	0.0954	0.0023	0.0304	0.0014
GJ-3	0.0598	0.0015	0.8318	0.0217	0.1010	0.0023	0.0309	0.0016
GJ-4	0.0602	0.0014	0.7899	0.0197	0.0952	0.0022	0.0305	0.0012
GJ-5	0.0601	0.0015	0.8224	0.0221	0.0992	0.0024	0.0308	0.0015
GJ-6	0.0601	0.0015	0.8049	0.0224	0.0972	0.0024	0.0309	0.0016
GJ-5	0.0602	0.0014	0.8209	0.0209	0.0990	0.0024	0.0308	0.0012
GJ-6	0.0600	0.0014	0.8037	0.0208	0.0971	0.0023	0.0309	0.0013
GJ-7	0.0602	0.0014	0.8208	0.0219	0.0988	0.0024	0.0308	0.0014
GJ-8	0.0601	0.0015	0.8081	0.0222	0.0976	0.0024	0.0308	0.0015
GJ-7	0.0602	0.0013	0.8201	0.0206	0.0989	0.0024	0.0309	0.0012
GJ-8	0.0601	0.0014	0.8068	0.0208	0.0974	0.0024	0.0308	0.0012
GJ-9	0.0605	0.0015	0.8190	0.0222	0.0982	0.0024	0.0303	0.0015
GJ-10	0.0598	0.0015	0.8086	0.0215	0.0981	0.0023	0.0314	0.0015
GJ-9	0.0605	0.0014	0.8178	0.0210	0.0981	0.0024	0.0304	0.0012
GJ-10	0.0597	0.0014	0.8081	0.0203	0.0981	0.0023	0.0315	0.0012
GJ-11	0.0602	0.0008	0.8101	0.0113	0.0976	0.0012	0.0307	0.0008
MT-98	0.0630	0.0022	1.0463	0.0371	0.1204	0.0031	0.0360	0.0018
MT-99	0.0639	0.0019	1.0590	0.0321	0.1201	0.0029	0.0372	0.0015
MT-100	0.0641	0.0016	1.0530	0.0308	0.1192	0.0031	0.0362	0.0012
MT-101	0.0637	0.0015	1.0526	0.0286	0.1198	0.0030	0.0366	0.0011
SAMPLE: BF6		2176 � 17						Common-L
BF6-01	0.1359	0.0031	7.2195	0.1696	0.3855	0.0084	0.1068	0.0037
BF6-03	0.1347	0.0030	7.3058	0.1744	0.3934	0.0090	0.1156	0.0038
BF6-05	0.1368	0.0030	7.1616	0.1683	0.3797	0.0085	0.1111	0.0038
BF6-06	0.1367	0.0031	7.4600	0.1810	0.3959	0.0090	0.1160	0.0042
BF6-07	0.1370	0.0032	7.5275	0.1831	0.3986	0.0089	0.1181	0.0046
BF6-08	0.1357	0.0033	7.0644	0.1700	0.3777	0.0080	0.1104	0.0047

BF6-09	0.1347	0.0032	7.1848	0.1810	0.3868	0.0090	0.1123	0.0046
BF6-10	0.1349	0.0031	6.9174	0.1672	0.3718	0.0083	0.1034	0.0040
BF6-11	0.1366	0.0035	7.4150	0.2011	0.3939	0.0094	0.1151	0.0054
BF6-12	0.1348	0.0031	7.2292	0.1653	0.3891	0.0082	0.1143	0.0041
BF6-13	0.1356	0.0031	7.2636	0.1781	0.3886	0.0090	0.1120	0.0039
BF6-14	0.1373	0.0030	7.2593	0.1715	0.3836	0.0088	0.1122	0.0035
BF6-15	0.1366	0.0044	7.1183	0.1671	0.3780	0.0083	0.1070	0.0025
BF6-16	0.1356	0.0030	7.3381	0.1774	0.3926	0.0091	0.1138	0.0037
BF6-17	0.1367	0.0033	6.8907	0.1932	0.3657	0.0095	0.0893	0.0038
BF6-18	0.1360	0.0030	7.2767	0.1789	0.3881	0.0091	0.1114	0.0038
BF6-19	0.1363	0.0031	7.3926	0.1921	0.3935	0.0096	0.1146	0.0044
BF6-20	0.1366	0.0031	7.4297	0.1912	0.3945	0.0095	0.1139	0.0044
BF6-21	0.1355	0.0034	7.4045	0.2055	0.3963	0.0099	0.1147	0.0054
Rejected								
BF6-04	0.1356	0.0044	6.6758	0.1589	0.3571	0.0077	0.1011	0.0023
Session standards								
91500-128	0.0749	0.0017	1.8323	0.0440	0.1775	0.0040	0.0536	0.0016
91500-129	0.0754	0.0017	1.8347	0.0457	0.1765	0.0041	0.0539	0.0016
GJ-271	0.0599	0.0013	0.8096	0.0192	0.0980	0.0022	0.0312	0.0012
GJ-272	0.0604	0.0013	0.8113	0.0193	0.0974	0.0022	0.0302	0.0011
GJ-273	0.0601	0.0014	0.8092	0.0202	0.0977	0.0022	0.0307	0.0014
GJ-274	0.0602	0.0014	0.8142	0.0203	0.0981	0.0022	0.0310	0.0014
GJ-273	0.0601	0.0013	0.8087	0.0191	0.0977	0.0022	0.0307	0.0011
GJ-274	0.0603	0.0013	0.8151	0.0191	0.0981	0.0022	0.0311	0.0011
GJ-275	0.0604	0.0014	0.8141	0.0203	0.0978	0.0022	0.0309	0.0014
GJ-276	0.0600	0.0009	0.8091	0.0114	0.0977	0.0010	0.0304	0.0010
MT-92	0.0638	0.0015	1.0579	0.0265	0.1204	0.0028	0.0375	0.0011
MT-93	0.0638	0.0015	1.0507	0.0257	0.1194	0.0026	0.0364	0.0011
SAMPLE: BF7	No Age							Common-L
BF7-48	0.1337	0.0049	6.7492	0.1857	0.3663	0.0091	0.1039	0.0027
BF7-36	0.1312	0.0050	6.5603	0.1908	0.3625	0.0089	0.1030	0.0027
BF7-42	0.1312	0.0033	7.1797	0.1835	0.3970	0.0088	0.1240	0.0058
Rejected								
BF7-44	0.1317	0.0052	6.1176	0.2039	0.3369	0.0073	0.0957	0.0023
BF7-15	0.1343	0.0030	6.5474	0.1674	0.3537	0.0086	0.1044	0.0040
BF7-29	0.1329	0.0049	6.9724	0.1977	0.3805	0.0088	0.1080	0.0028
BF7-46	0.1247	0.0047	2.0028	0.0575	0.1165	0.0028	0.0333	0.0009
BF7-47	0.1195	0.0053	3.3157	0.1131	0.2013	0.0057	0.0577	0.0018
BF7-49	0.1101	0.0049	2.2342	0.0806	0.1471	0.0039	0.0425	0.0015
BF7-50	0.1232	0.0052	3.4071	0.1121	0.2007	0.0052	0.0574	0.0018
BF7-56	0.1180	0.0049	3.1344	0.1046	0.1927	0.0046	0.0553	0.0016
BF7-03	0.0810	0.0044	1.5803	0.0783	0.1415	0.0031	0.0423	0.0020
BF7-10	0.0976	0.0039	1.5061	0.0500	0.1119	0.0025	0.0328	0.0013
BF7-11	0.0983	0.0057	2.0073	0.1083	0.1481	0.0033	0.0433	0.0022
BF7-12	0.0907	0.0034	1.4132	0.0412	0.1130	0.0027	0.0333	0.0009
BF7-13	0.1072	0.0055	3.0405	0.1414	0.2057	0.0046	0.0596	0.0025
BF7-19	0.1246	0.0046	3.4164	0.1032	0.1989	0.0042	0.0568	0.0018
BF7-21	0.1037	0.0044	2.0067	0.0651	0.1403	0.0039	0.0408	0.0014
BF7-34	0.1080	0.0053	2.3182	0.0890	0.1556	0.0046	0.0451	0.0016
BF7-40	0.1226	0.0053	4.7398	0.1652	0.2804	0.0070	0.0802	0.0024
Session standards								
91500-132	0.0746	0.0018	1.8733	0.0490	0.1822	0.0044	0.0543	0.0018

91500-130	0.0741	0.0017	1.8183	0.0447	0.1781	0.0041	0.0544	0.0016
91500-131	0.0750	0.0017	1.8348	0.0448	0.1775	0.0041	0.0538	0.0016
91500-131	0.0756	0.0017	1.8221	0.0460	0.1749	0.0041	0.0533	0.0016
GJ-281	0.0603	0.0014	0.8122	0.0207	0.0977	0.0023	0.0309	0.0013
GJ-282	0.0599	0.0014	0.8060	0.0205	0.0976	0.0023	0.0307	0.0013
GJ-283	0.0605	0.0015	0.8134	0.0217	0.0976	0.0023	0.0302	0.0015
GJ-284	0.0599	0.0015	0.8091	0.0217	0.0980	0.0023	0.0313	0.0016
GJ-275	0.0604	0.0013	0.8133	0.0192	0.0977	0.0022	0.0309	0.0011
GJ-276	0.0599	0.0013	0.8087	0.0195	0.0980	0.0022	0.0307	0.0011
GJ-277	0.0600	0.0014	0.8156	0.0207	0.0986	0.0023	0.0313	0.0014
GJ-278	0.0603	0.0015	0.8063	0.0208	0.0971	0.0022	0.0303	0.0014
GJ-277	0.0600	0.0013	0.8147	0.0196	0.0985	0.0022	0.0311	0.0012
GJ-278	0.0602	0.0013	0.8060	0.0194	0.0971	0.0022	0.0303	0.0012
GJ-279	0.0605	0.0015	0.8135	0.0217	0.0976	0.0023	0.0316	0.0015
GJ-280	0.0598	0.0007	0.8090	0.0108	0.0981	0.0012	0.0301	0.0008
MT-96	0.0637	0.0015	1.0575	0.0276	0.1205	0.0029	0.0358	0.0011
MT-94	0.0632	0.0015	1.0258	0.0262	0.1178	0.0028	0.0351	0.0011
MT-95	0.0636	0.0015	1.0442	0.0269	0.1191	0.0028	0.0360	0.0011
SAMPLE: BF8	2265 � 17 Ma							Common-L
BF8-05	0.1439	0.0034	8.1836	0.2096	0.4125	0.0097	0.1294	0.0060
BF8-15	0.1443	0.0034	8.1877	0.2173	0.4115	0.0102	0.1116	0.0047
BF8-16	0.1433	0.0054	7.7599	0.2209	0.3929	0.0096	0.1107	0.0028
BF8-24	0.1450	0.0053	8.0189	0.2844	0.4011	0.0091	0.1175	0.0107
BF8-25	0.1424	0.0056	7.9262	0.2292	0.4039	0.0106	0.1138	0.0031
BF8-30R	0.1421	0.0043	7.9016	0.2367	0.4034	0.0090	0.1277	0.0088
BF8-30C	0.1432	0.0032	8.7200	0.2135	0.4416	0.0102	0.1297	0.0048
BF8-31	0.1430	0.0037	8.2681	0.2315	0.4195	0.0103	0.1215	0.0066
BF8-36	0.1359	0.0061	7.0174	0.2436	0.3746	0.0106	0.1061	0.0032
Rejected								
BF8-01	0.1388	0.0050	6.7244	0.1788	0.3513	0.0084	0.0993	0.0025
BF8-02	0.1410	0.0034	6.6287	0.1944	0.3410	0.0093	0.0885	0.0039
BF8-04	0.1429	0.0061	6.5286	0.2096	0.3314	0.0092	0.0934	0.0028
BF8-08	0.1416	0.0058	7.1562	0.2202	0.3666	0.0100	0.1034	0.0029
BF8-10	0.1433	0.0063	5.8774	0.2021	0.2974	0.0082	0.0838	0.0025
BF8-12	0.1330	0.0049	5.8407	0.1627	0.3185	0.0076	0.0904	0.0023
BF8-19	0.0892	0.0065	0.9944	0.0687	0.0809	0.0019	0.0239	0.0015
BF8-23	0.1238	0.0045	3.0051	0.0844	0.1761	0.0041	0.0503	0.0014
BF8-21	0.1443	0.0035	7.3954	0.1932	0.3717	0.0088	0.1036	0.0047
BF8-28	0.1436	0.0035	7.4017	0.1947	0.3738	0.0088	0.0728	0.0038
BF8-33	0.1396	0.0037	7.0732	0.2205	0.3676	0.0102	0.0875	0.0050
Session standards								
91500-133	0.0753	0.0018	1.8908	0.0490	0.1821	0.0042	0.0543	0.0019
91500-134	0.0749	0.0018	1.8673	0.0481	0.1808	0.0041	0.0534	0.0019
GJ-283	0.0604	0.0014	0.8123	0.0202	0.0975	0.0023	0.0302	0.0012
GJ-284	0.0599	0.0013	0.8095	0.0200	0.0981	0.0023	0.0313	0.0012
GJ-287	0.0600	0.0015	0.8115	0.0217	0.0981	0.0023	0.0311	0.0015
GJ-288	0.0604	0.0015	0.8133	0.0223	0.0977	0.0023	0.0306	0.0016
GJ-287	0.0600	0.0014	0.8119	0.0205	0.0981	0.0023	0.0310	0.0012
GJ-288	0.0603	0.0014	0.8132	0.0209	0.0978	0.0023	0.0307	0.0013
GJ-289	0.0599	0.0015	0.8075	0.0216	0.0977	0.0023	0.0308	0.0016
GJ-290	0.0604	0.0008	0.8125	0.0110	0.0976	0.0012	0.0307	0.0008
MT-97	0.0640	0.0015	1.0711	0.0276	0.1215	0.0029	0.0364	0.0011

MT-98	0.0640	0.0015	1.0393	0.0273	0.1178	0.0028	0.0350	0.0011
SAMPLE: BF9		No Age						Common-L
BF9-01	0.1321	0.0031	7.1227	0.1802	0.3910	0.0091	0.1148	0.0043
BF9-02	0.1324	0.0031	7.1099	0.1884	0.3894	0.0096	0.1151	0.0046
BF9-14	0.1327	0.0031	7.1421	0.1724	0.3903	0.0086	0.1156	0.0046
Inherited								
BF9-08	0.1630	0.0059	9.7682	0.2730	0.4347	0.0101	0.1209	0.0030
BF9-09	0.1652	0.0039	10.6759	0.2599	0.4687	0.0103	0.1358	0.0057
Rejected								
BF9-03	0.1608	0.0053	5.3052	0.1377	0.2394	0.0049	0.0667	0.0015
BF9-06	0.1357	0.0050	2.0567	0.0618	0.1100	0.0024	0.0311	0.0015
BF9-07	0.1444	0.0036	3.7551	0.1138	0.1886	0.0052	0.0433	0.0022
BF9-12	0.5191	0.0236	4.2974	0.1699	0.0600	0.0020	0.1219	0.0106
BF9-13	0.1773	0.0083	5.3724	0.2111	0.2197	0.0056	0.0606	0.0027
Session standards								
91500-143	0.0752	0.0017	1.8317	0.0463	0.1767	0.0042	0.0528	0.0016
GJ-5	0.0602	0.0013	0.8145	0.0197	0.0981	0.0022	0.0306	0.0011
GJ-6	0.0600	0.0013	0.8038	0.0195	0.0973	0.0022	0.0309	0.0012
GJ-7	0.0604	0.0015	0.8180	0.0209	0.0982	0.0022	0.0309	0.0014
GJ-8	0.0599	0.0007	0.8025	0.0103	0.0972	0.0011	0.0306	0.0007
MT-104	0.0646	0.0015	1.0505	0.0267	0.1180	0.0027	0.0354	0.0010
SAMPLE: BF10		No Age						Common-L
BF10-07	0.1347	0.0034	7.3250	0.2062	0.3944	0.0100	0.1137	0.0056
BF10-21	0.1343	0.0029	7.1711	0.1753	0.3873	0.0091	0.1109	0.0037
Rejected								
BF10-01	0.2330	0.0135	5.5910	0.2663	0.1741	0.0057	0.0468	0.0018
BF10-02	0.1319	0.0055	5.1866	0.1666	0.2852	0.0076	0.0810	0.0024
BF10-06C	0.1252	0.0045	5.4974	0.1503	0.3186	0.0074	0.0909	0.0022
BF10-06R	0.1216	0.0055	5.1197	0.1809	0.3054	0.0085	0.0874	0.0026
BF10-08	0.1304	0.0050	5.5938	0.1709	0.3112	0.0074	0.0885	0.0023
BF10-11	0.1253	0.0046	4.7605	0.1270	0.2755	0.0068	0.0786	0.0020
BF10-12	0.1418	0.0064	3.3841	0.1183	0.1731	0.0049	0.0488	0.0018
BF10-13	0.1320	0.0032	5.8260	0.1430	0.3202	0.0069	0.0750	0.0032
BF10-15	0.1169	0.0052	4.8044	0.1644	0.2981	0.0085	0.0857	0.0026
BF10-17	0.1216	0.0070	5.5177	0.2678	0.3291	0.0103	0.0942	0.0032
BF10-18	0.1297	0.0067	3.4781	0.1442	0.1945	0.0059	0.0553	0.0019
BF10-20	0.1188	0.0040	4.5270	0.1115	0.2763	0.0064	0.0793	0.0019
BF10-23	0.1286	0.0083	4.7938	0.2665	0.2704	0.0090	0.0770	0.0029
BF10-24	0.1291	0.0048	4.4162	0.1320	0.2480	0.0056	0.0706	0.0018
BF10-25	0.1392	0.0054	5.5593	0.2338	0.2897	0.0091	0.0536	0.0050
BF10-26	0.1312	0.0030	4.5135	0.1109	0.2495	0.0056	0.0575	0.0024
BF10-27	0.1294	0.0069	4.0629	0.1768	0.2277	0.0071	0.0648	0.0022
BF10-28	0.1138	0.0029	5.0168	0.1511	0.3199	0.0087	0.0875	0.0042
BF10-29	0.1180	0.0048	5.3017	0.1602	0.3259	0.0087	0.0936	0.0026
BF10-30	0.1112	0.0038	4.5287	0.1197	0.2954	0.0066	0.0853	0.0020
BF10-32	0.1127	0.0032	5.0981	0.1639	0.3280	0.0089	0.0931	0.0058
BF10-33	0.1131	0.0027	4.9636	0.1274	0.3184	0.0073	0.0924	0.0041
BF10-34	0.1180	0.0047	4.9678	0.1504	0.3052	0.0078	0.0876	0.0024
SAMPLE: BF12		2169 � 18						Common-L
BF12-01Z	0.1348	0.0034	7.1326	0.1905	0.3840	0.0092	0.1102	0.0050
BF12-02Z	0.1303	0.0082	5.3999	0.2880	0.3006	0.0100	0.0854	0.0031
BF12-03Z	0.1338	0.0051	6.7721	0.1927	0.3671	0.0094	0.1041	0.0028

BF12-04Z	0.1313	0.0044	6.4198	0.1676	0.3547	0.0076	0.1008	0.0023
Session standards								
91500-140	0.0752	0.0019	1.8496	0.0532	0.1785	0.0046	0.0538	0.0021
91500-141	0.0749	0.0018	1.8391	0.0484	0.1781	0.0042	0.0526	0.0018
91500-142	0.0747	0.0018	1.8357	0.0487	0.1783	0.0043	0.0533	0.0018
GJ-1	0.0597	0.0013	0.8117	0.0200	0.0986	0.0023	0.0307	0.0012
GJ-2	0.0607	0.0014	0.8158	0.0205	0.0975	0.0023	0.0311	0.0013
GJ-3	0.0602	0.0015	0.8172	0.0215	0.0984	0.0022	0.0308	0.0016
GJ-4	0.0600	0.0016	0.8067	0.0222	0.0975	0.0023	0.0309	0.0017
GJ-1	0.0601	0.0013	0.8107	0.0195	0.0978	0.0022	0.0305	0.0012
GJ-2	0.0602	0.0013	0.8109	0.0194	0.0978	0.0022	0.0311	0.0012
GJ-3	0.0604	0.0014	0.8202	0.0211	0.0986	0.0023	0.0308	0.0014
GJ-4	0.0600	0.0015	0.8072	0.0214	0.0976	0.0023	0.0310	0.0015
GJ-3	0.0603	0.0013	0.8198	0.0199	0.0986	0.0023	0.0308	0.0012
GJ-4	0.0600	0.0014	0.8061	0.0200	0.0975	0.0023	0.0310	0.0012
GJ-5	0.0602	0.0014	0.8173	0.0208	0.0985	0.0023	0.0307	0.0014
GJ-6	0.0600	0.0007	0.8047	0.0104	0.0972	0.0011	0.0309	0.0007
MT-102	0.0637	0.0015	1.0361	0.0269	0.1181	0.0028	0.0359	0.0011
MT-103	0.0635	0.0015	1.0491	0.0266	0.1199	0.0028	0.0356	0.0010
MT-104	0.0641	0.0016	1.0537	0.0290	0.1193	0.0029	0.0363	0.0012
SAMPLE: BF11	No Age							Common-L
BF11-05	0.1351	0.0040	7.3848	0.2606	0.3966	0.0120	0.1229	0.0083
BF11-10C	0.1359	0.0051	6.8525	0.2074	0.3658	0.0083	0.1036	0.0026
Inherited								
BF11-02	0.1431	0.0035	7.7143	0.2308	0.3910	0.0109	0.1144	0.0053
BF11-04	0.1448	0.0038	7.3661	0.1894	0.3689	0.0079	0.0894	0.0046
BF11-08	0.1413	0.0057	7.7776	0.2379	0.3992	0.0106	0.1126	0.0031
Rejected								
BF11-03	0.1367	0.0031	6.4096	0.1647	0.3401	0.0083	0.0957	0.0036
BF11-06	0.1394	0.0064	6.3322	0.2247	0.3294	0.0096	0.0930	0.0030
BF11-07	0.1328	0.0057	4.9453	0.1602	0.2701	0.0076	0.0766	0.0023
BF11-11	0.1339	0.0056	5.2752	0.1701	0.2858	0.0078	0.0810	0.0023
BF11-12	0.1352	0.0044	5.3582	0.1994	0.2875	0.0087	0.0884	0.0070
Session standards								
91500-135	0.0746	0.0018	1.8502	0.0489	0.1799	0.0044	0.0548	0.0018
GJ-289	0.0599	0.0014	0.8074	0.0202	0.0977	0.0023	0.0308	0.0013
GJ-290	0.0604	0.0014	0.8133	0.0205	0.0976	0.0023	0.0306	0.0013
GJ-291	0.0599	0.0015	0.8047	0.0215	0.0975	0.0023	0.0307	0.0016
GJ-292	0.0604	0.0008	0.8157	0.0110	0.0980	0.0012	0.0309	0.0008
MT-99	0.0639	0.0016	1.0638	0.0288	0.1207	0.0029	0.0371	0.0012
	R A T I O S							
Analysis N(	Pb207/Pb2	1s	Pb207/U23	1s	Pb206/U23	1s	Pb208/Th2	1s
SAMPLE: NG1	2114 � 9 Ma							
NG-1-01	0.1314	0.0014	6.9241	0.0781	0.3822	0.0042	0.1138	0.0016
NG-1-08	0.1307	0.0017	6.7717	0.0906	0.3757	0.0045	0.1108	0.0021
NG-1-09	0.1301	0.0017	6.9488	0.0943	0.3873	0.0047	0.1146	0.0021
NG-1-10C	0.1342	0.0025	7.0939	0.1046	0.3835	0.0042	0.1087	0.0012
NG-1-10R	0.1310	0.0016	7.0380	0.0924	0.3897	0.0046	0.1135	0.0020
NG-1-11	0.1309	0.0016	6.7851	0.0846	0.3760	0.0042	0.1116	0.0023
NG-1-12	0.1302	0.0015	6.9574	0.0874	0.3877	0.0046	0.1112	0.0021
NG-1-14	0.1312	0.0016	6.8086	0.0851	0.3765	0.0043	0.1123	0.0020
NG-1-21	0.1305	0.0016	6.6969	0.0863	0.3722	0.0043	0.1070	0.0021

NG-1-30	0.1298	0.0018	6.7589	0.0934	0.3776	0.0043	0.1095	0.0026
NG-1-34	0.1322	0.0019	7.2512	0.1132	0.3980	0.0052	0.1159	0.0032
NG-1-41	0.1300	0.0021	6.8929	0.1097	0.3844	0.0048	0.1136	0.0034
NG-1-49C	0.1317	0.0015	7.1055	0.0839	0.3914	0.0044	0.1112	0.0019
Rejected								
NG-1-02	0.0860	0.0044	2.2732	0.1129	0.1917	0.0026	0.0569	0.0011
NG-1-05	0.1310	0.0015	6.5849	0.0789	0.3646	0.0042	0.1074	0.0016
NG-1-06	0.1196	0.0026	5.1312	0.0944	0.3112	0.0034	0.0892	0.0011
NG-1-17C	0.0657	0.0060	1.1642	0.1052	0.1285	0.0019	0.0393	0.0020
NG-1-17R	0.1113	0.0028	2.3766	0.0488	0.1549	0.0023	0.0448	0.0017
NG-1-19	0.1248	0.0042	6.2406	0.1911	0.3627	0.0049	0.1035	0.0013
NG-1-25	0.1210	0.0032	5.2699	0.1258	0.3159	0.0038	0.0905	0.0011
NG-1-26	0.1374	0.0023	4.0719	0.0646	0.2150	0.0025	0.1310	0.0041
NG-1-38	0.1405	0.0025	2.4954	0.0482	0.1288	0.0020	0.1163	0.0041
NG-1-46	0.1346	0.0020	6.9646	0.1121	0.3752	0.0052	0.1117	0.0026
NG-1-47	0.1313	0.0015	6.5962	0.0804	0.3645	0.0042	0.1030	0.0016
NG-1-48	0.1364	0.0016	6.9853	0.0927	0.3715	0.0046	0.1081	0.0019
NG-1-49R	0.1324	0.0031	4.7104	0.0903	0.2580	0.0034	0.0732	0.0012
NG-1-50	0.1322	0.0016	6.6931	0.0904	0.3673	0.0045	0.1053	0.0021
NG-1-54	0.1200	0.0040	4.8879	0.1515	0.2953	0.0038	0.0847	0.0011
NG-1-55	0.1330	0.0037	4.5668	0.1081	0.2491	0.0036	0.0707	0.0010
NG-1-56	0.0912	0.0051	2.7283	0.1478	0.2169	0.0030	0.0639	0.0011
NG-1-58	0.1200	0.0035	2.8920	0.0743	0.1748	0.0024	0.0501	0.0015
NG-1-60	0.1376	0.0022	4.7521	0.0842	0.2505	0.0036	0.1276	0.0044
NG-1-65	0.1316	0.0018	6.6118	0.1011	0.3643	0.0049	0.1056	0.0024
NG-1-66	0.1324	0.0016	6.6150	0.0892	0.3624	0.0046	0.1056	0.0019
NG-1-67	0.1209	0.0048	6.1814	0.2259	0.3708	0.0059	0.1062	0.0016
NG-1-69	0.1148	0.0036	2.0102	0.0565	0.1270	0.0017	0.0366	0.0009
Session standards								
91500-68	0.0750	0.0008	1.8081	0.0220	0.1748	0.0020	0.0528	0.0008
91500-69	0.0756	0.0009	1.8387	0.0228	0.1763	0.0021	0.0527	0.0008
91500-70	0.0759	0.0009	1.8139	0.0226	0.1734	0.0020	0.0510	0.0008
91500-71	0.0749	0.0009	1.8055	0.0231	0.1748	0.0021	0.0519	0.0008
91500-68	0.0750	0.0008	1.8081	0.0220	0.1748	0.0020	0.0528	0.0008
91500-69	0.0756	0.0009	1.8387	0.0228	0.1763	0.0021	0.0527	0.0008
91500-70	0.0759	0.0009	1.8139	0.0226	0.1734	0.0020	0.0510	0.0008
91500-71	0.0749	0.0009	1.8055	0.0231	0.1748	0.0021	0.0519	0.0008
MT-59	0.0648	0.0008	1.0366	0.0129	0.1161	0.0013	0.0353	0.0005
MT-60	0.0643	0.0007	1.0429	0.0127	0.1177	0.0013	0.0356	0.0005
MT-61	0.0638	0.0008	1.0395	0.0132	0.1182	0.0014	0.0357	0.0005
MT-62	0.0636	0.0008	1.0172	0.0131	0.1160	0.0014	0.0363	0.0005
MT-63	0.0651	0.0008	1.0685	0.0143	0.1191	0.0014	0.0378	0.0006
SAMPLE: SG5		No Age						
SG5-18	0.1317	0.0014	6.8681	0.0831	0.3783	0.0045	0.1190	0.0019
SG5-53	0.1235	0.0024	6.0176	0.0936	0.3534	0.0042	0.1010	0.0013
Rejected								
SG5-01	0.1209	0.0020	3.9223	0.0513	0.2353	0.0025	0.0674	0.0007
SG5-02	0.1156	0.0024	3.6405	0.0615	0.2284	0.0028	0.0657	0.0009
SG5-04	0.1152	0.0022	3.4674	0.0557	0.2184	0.0023	0.0629	0.0007
SG5-07	0.1201	0.0023	3.9593	0.0596	0.2391	0.0028	0.0685	0.0009
SG5-09	0.1215	0.0024	3.9524	0.0591	0.2360	0.0029	0.0676	0.0009
SG5-10	0.1256	0.0022	5.2433	0.0702	0.3027	0.0033	0.0864	0.0010

SG5-11	0.1188	0.0025	4.0011	0.0714	0.2443	0.0029	0.0701	0.0009
SG5-12	0.1253	0.0022	5.4967	0.0775	0.3182	0.0035	0.0908	0.0010
SG5-15	0.1213	0.0022	4.2523	0.0572	0.2543	0.0029	0.0728	0.0009
SG5-22	0.1144	0.0020	3.3363	0.0454	0.2116	0.0024	0.0609	0.0008
SG5-24	0.1265	0.0023	5.5971	0.0769	0.3208	0.0036	0.0915	0.0011
SG5-31	0.1209	0.0025	3.8906	0.0639	0.2334	0.0029	0.0669	0.0009
SG5-38	0.1190	0.0024	3.4321	0.0561	0.2091	0.0025	0.0600	0.0008
SG5-51	0.1236	0.0022	4.9576	0.0704	0.2908	0.0033	0.0831	0.0010
SG5-52	0.1177	0.0024	3.2602	0.0542	0.2009	0.0022	0.0577	0.0007
SG5-03	0.1307	0.0016	3.0982	0.0392	0.1719	0.0019	0.0417	0.0010
SG5-05	0.1263	0.0029	2.6856	0.0536	0.1542	0.0017	0.0440	0.0005
SG5-13	0.1222	0.0023	4.8093	0.0759	0.2854	0.0031	0.0816	0.0010
SG5-20	0.1069	0.0021	2.1894	0.0352	0.1485	0.0017	0.0431	0.0005
SG5-21	0.1398	0.0017	2.9218	0.0371	0.1516	0.0017	0.0413	0.0010
SG5-23	0.1496	0.0018	2.3965	0.0303	0.1162	0.0013	0.0284	0.0007
SG5-25	0.1171	0.0024	4.4236	0.0764	0.2741	0.0032	0.0788	0.0011
SG5-27	0.1007	0.0031	1.4505	0.0402	0.1045	0.0013	0.0305	0.0004
SG5-33	0.1048	0.0020	2.1474	0.0326	0.1486	0.0017	0.0432	0.0005
SG5-35	0.1114	0.0022	2.7330	0.0421	0.1779	0.0022	0.0514	0.0007
SG5-42	0.1337	0.0037	3.2042	0.0780	0.1738	0.0022	0.0493	0.0006
SG5-45	0.1124	0.0023	3.0214	0.0520	0.1949	0.0022	0.0562	0.0008
SG5-49	0.1045	0.0024	4.4592	0.0884	0.3095	0.0035	0.0900	0.0013
Session standards								
91500-81	0.0741	0.0009	1.8188	0.0224	0.1780	0.0020	0.0549	0.0009
91500-82	0.0745	0.0009	1.8135	0.0227	0.1765	0.0021	0.0541	0.0009
91500-83	0.0750	0.0009	1.8285	0.0228	0.1768	0.0020	0.0549	0.0009
MT-73	0.0641	0.0008	1.0384	0.0132	0.1175	0.0013	0.0365	0.0006
MT-74	0.0647	0.0008	1.0503	0.0136	0.1178	0.0014	0.0365	0.0006
MT-75	0.0640	0.0008	1.0463	0.0134	0.1185	0.0014	0.0366	0.0006
SAMPLE: SG6	2094 � 18 Ma							
SG6-02	0.1289	0.0016	6.7499	0.0839	0.3800	0.0043	0.1125	0.0021
SG6-06	0.1305	0.0015	6.7112	0.0879	0.3729	0.0045	0.1096	0.0021
SG6-10	0.1287	0.0014	6.7299	0.0820	0.3792	0.0044	0.1125	0.0021
SG6-13	0.1317	0.0027	6.5890	0.1062	0.3629	0.0045	0.1031	0.0013
SG6-18	0.1303	0.0016	6.9175	0.0945	0.3852	0.0047	0.1110	0.0025
Inherited								
SG6-07	0.1337	0.0015	6.5944	0.0813	0.3578	0.0042	0.0984	0.0018
SG6-21	0.1346	0.0016	7.2790	0.0967	0.3921	0.0049	0.1564	0.0028
Rejected								
SG6-01	0.1021	0.0019	1.8141	0.0269	0.1289	0.0015	0.0376	0.0010
SG6-04	0.1112	0.0013	2.5796	0.0302	0.1683	0.0018	0.0482	0.0010
SG6-11	0.1058	0.0019	2.1702	0.0296	0.1488	0.0017	0.0432	0.0007
SG6-14	0.0983	0.0012	1.0700	0.0134	0.0790	0.0009	0.1124	0.0028
SG6-23	0.1303	0.0016	1.3883	0.0182	0.0773	0.0009	0.2507	0.0057
SG6-25	0.0546	0.0035	0.2331	0.0147	0.0310	0.0005	0.0097	0.0002
SG6-28	0.1145	0.0023	4.9101	0.0788	0.3109	0.0035	0.0895	0.0017
SG6-33	0.1060	0.0015	1.2974	0.0185	0.0888	0.0011	0.1949	0.0056
SG6-36	0.0995	0.0020	2.2744	0.0362	0.1658	0.0020	0.0484	0.0007
SG6-38	0.1146	0.0021	3.3098	0.0479	0.2095	0.0023	0.0603	0.0009
SG6-47	0.1118	0.0013	0.8562	0.0115	0.0555	0.0007	0.2929	0.0062
SG6-57	0.1179	0.0021	3.4651	0.0456	0.2132	0.0025	0.0612	0.0008
SG6-61	0.0954	0.0022	1.3979	0.0275	0.1063	0.0012	0.0312	0.0008

Session standards

91500-84	0.0754	0.0009	1.8321	0.0235	0.1763	0.0021	0.0544	0.0009
91500-85	0.0744	0.0009	1.8147	0.0232	0.1770	0.0021	0.0548	0.0009
MT-76	0.0632	0.0008	1.0396	0.0138	0.1194	0.0014	0.0367	0.0006
MT-77	0.0632	0.0008	1.0327	0.0143	0.1186	0.0014	0.0362	0.0006

CONCENTRATIONS (ppm)			A G E S (M a)					
Th	U	Analysis N(	Pb207/Pb2	+/- 2 s	Pb207/U23	+/- 2 s	Pb206/U23	+/- 2 s
.ead Corrected								
257.6	1042.1	BF1-01	2113.0	62.0	2078.0	22.0	2044.0	42.0
204.8	829.5	BF1-03	2138.0	40.0	2106.0	22.0	2073.0	42.0
127.0	521.9	BF1-07	2120.0	42.0	2089.0	24.0	2058.0	42.0
708.5	3043.8	BF1-09	2117.0	46.0	2095.0	26.0	2072.0	48.0
121.5	451.6	BF1-14R	2113.0	46.0	2081.0	24.0	2048.0	40.0
132.0	536.1	BF1-15	2118.0	40.0	2088.0	24.0	2057.0	44.0
533.7	2138.2	BF1-16	2120.0	40.0	2105.0	22.0	2089.0	44.0
622.0	2568.7	BF1-17	2103.0	66.0	2045.0	24.0	1988.0	42.0
284.1	1383.2	BF1-18	2122.0	40.0	2052.0	22.0	1983.0	40.0
902.7	3462.7	BF1-21C	2132.0	56.0	2128.0	32.0	2125.0	54.0
511.3	2180.0	BF1-08R	2082.0	62.0	1907.0	22.0	1750.0	36.0
1767.3	11325.4	BF1-08C	1840.0	62.0	1400.0	18.0	1129.0	24.0
852.4	3545.5	BF1-12	2090.0	80.0	1977.0	30.0	1871.0	46.0
629.7	2783.2	BF1-14C	2051.0	90.0	1962.0	34.0	1879.0	48.0
286.7	1218.4	BF1-11	1910.0	110.0	1328.0	38.0	998.0	28.0
235.3	833.3	BF1-19	2083.0	64.0	1963.0	24.0	1852.0	36.0
220.9	1181.8	BF1-20	2083.0	80.0	1690.0	28.0	1392.0	36.0
246.5	711.4	BF1-21R	2098.0	82.0	2004.0	34.0	1914.0	38.0
347.5	1491.5	BF1-22	2098.0	72.0	1977.0	28.0	1863.0	40.0
385.6	1192.3	BF1-23	2265.0	68.0	2120.0	26.0	1974.0	40.0
59.5	546.8	91500-128	1075.0	52.0	1045.0	18.0	1032.0	24.0
58.0	512.4	91500-129	1083.0	50.0	1060.0	18.0	1049.0	24.0
20.5	307.4	GJ-1	610.0	56.0	600.0	12.0	598.0	14.0
21.0	310.6	GJ-2	607.0	54.0	604.0	12.0	603.0	14.0
18.8	264.8	GJ-3	605.0	56.0	606.0	12.0	607.0	14.0
19.6	277.2	GJ-4	610.0	56.0	602.0	12.0	600.0	14.0
20.6	294.7	GJ-3	605.0	50.0	606.0	12.0	607.0	14.0
21.4	308.5	GJ-4	611.0	52.0	602.0	12.0	600.0	14.0
19.1	276.7	GJ-5	606.0	56.0	603.0	12.0	602.0	14.0
18.8	280.0	GJ-6	611.0	28.0	602.0	6.0	599.0	7.0
205.7	2586.1	MT-92	750.0	52.0	725.0	14.0	718.0	16.0
199.0	2413.1	MT-93	739.0	52.0	735.0	14.0	733.0	16.0
.ead Corrected								
1538.2	5643.2	BF2-01	2173.0	70.0	2113.0	26.0	2052.0	46.0
677.2	2639.4	BF2-02	2135.0	40.0	2139.0	24.0	2144.0	46.0
568.7	2262.8	BF2-05	2129.0	40.0	2119.0	24.0	2110.0	46.0
632.7	2591.7	BF2-07	2138.0	44.0	2130.0	26.0	2122.0	50.0
1501.7	5747.4	BF2-10C	2147.0	40.0	2156.0	24.0	2166.0	46.0
591.5	2543.4	BF2-10R	2139.0	54.0	2097.0	30.0	2054.0	52.0
852.8	2981.4	BF2-12	2194.0	90.0	2157.0	36.0	2119.0	54.0
738.1	3284.0	BF2-15	2127.0	52.0	2124.0	30.0	2122.0	52.0
580.1	2613.0	BF2-16	2123.0	58.0	2133.0	32.0	2144.0	54.0
831.4	3380.5	BF2-19	2147.0	60.0	2142.0	34.0	2138.0	54.0
411.8	1791.2	BF2-20	2137.0	66.0	2124.0	36.0	2111.0	58.0
1024.0	4305.3	BF2-21	2147.0	44.0	2148.0	26.0	2149.0	50.0
540.2	2258.3	BF2-23	2152.0	56.0	2146.0	32.0	2140.0	56.0
526.4	1983.5	BF2-26	2139.0	44.0	2150.0	26.0	2162.0	48.0

702.2	2728.1	BF2-27	2172.0	78.0	2106.0	30.0	2040.0	48.0
1165.1	3449.5	BF2-29	2187.0	66.0	2110.0	26.0	2032.0	40.0
710.2	3041.3	BF2-40	2131.0	60.0	2127.0	32.0	2123.0	52.0
611.5	2205.2	BF2-42	2096.0	66.0	2068.0	26.0	2041.0	42.0
760.5	2794.4	BF2-43	2203.0	72.0	2155.0	28.0	2105.0	48.0
749.5	2475.7	BF2-45	2198.0	64.0	2144.0	24.0	2089.0	44.0
539.1	2401.6	BF2-44	2147.0	54.0	2102.0	30.0	2056.0	52.0
1026.7	3914.1	BF2-47	2165.0	40.0	2161.0	24.0	2158.0	46.0
545.6	2275.5	BF2-48	2107.0	90.0	2068.0	36.0	2029.0	52.0
1006.9	3549.1	BF2-50	2162.0	58.0	2130.0	28.0	2097.0	42.0
699.8	3121.6	BF2-54	2132.0	58.0	2112.0	32.0	2091.0	52.0
908.1	3295.2	BF2-56	2136.0	70.0	2099.0	28.0	2061.0	44.0
956.7	2929.0	BF2-32	2215.0	92.0	2151.0	38.0	2085.0	54.0
421.8	1365.0	BF2-37	2239.0	98.0	2173.0	40.0	2103.0	56.0
992.8	3763.5	BF2-39	2230.0	92.0	2101.0	38.0	1971.0	52.0
1372.1	3619.1	BF2-55	2350.0	92.0	2185.0	38.0	2012.0	52.0
54.7	474.3	91500-130	1070.0	50.0	1055.0	18.0	1048.0	24.0
53.1	454.3	91500-131	1079.0	52.0	1072.0	18.0	1068.0	24.0
58.5	533.1	91500-132	1054.0	56.0	1058.0	20.0	1060.0	26.0
20.6	294.5	GJ-5	606.0	52.0	602.0	12.0	601.0	14.0
20.3	298.0	GJ-6	610.0	52.0	602.0	12.0	600.0	14.0
19.4	273.7	GJ-7	607.0	56.0	613.0	12.0	614.0	14.0
19.7	293.8	GJ-8	607.0	58.0	596.0	12.0	593.0	14.0
19.8	281.6	GJ-7	607.0	50.0	612.0	12.0	614.0	14.0
20.2	302.2	GJ-8	608.0	52.0	596.0	12.0	592.0	14.0
20.3	294.3	GJ-9	602.0	58.0	598.0	12.0	596.0	14.0
19.7	281.9	GJ-10	613.0	56.0	610.0	12.0	610.0	14.0
21.2	315.4	GJ-9	602.0	52.0	598.0	12.0	597.0	14.0
20.5	302.2	GJ-10	614.0	52.0	610.0	12.0	609.0	14.0
19.1	276.3	GJ-11	602.0	56.0	601.0	12.0	601.0	14.0
19.2	266.1	GJ-12	614.0	29.0	603.0	6.0	600.0	7.0
200.3	2424.5	MT-94	748.0	52.0	738.0	14.0	735.0	16.0
183.6	2242.0	MT-95	723.0	56.0	735.0	14.0	740.0	18.0
.ead Corrected								
10154.6	41053.8	BF3-01	2163.0	40.0	2107.0	22.0	2050.0	40.0
5873.8	26819.7	BF3-03	2120.0	42.0	2051.0	24.0	1984.0	42.0
1019.4	4475.8	BF3-05	2130.0	70.0	2090.0	26.0	2050.0	46.0
683.0	2499.0	BF3-07	2107.0	64.0	2052.0	24.0	1998.0	38.0
578.5	2234.7	BF3-12	2119.0	42.0	2086.0	22.0	2052.0	40.0
951.6	4341.9	BF3-15	2130.0	42.0	2064.0	24.0	1999.0	46.0
141.0	386.1	BF3-04	2387.0	88.0	2249.0	36.0	2100.0	54.0
234.4	925.5	BF3-02	2247.0	74.0	2111.0	28.0	1973.0	46.0
7777.3	35008.0	BF3-08	2094.0	68.0	1969.0	26.0	1853.0	38.0
2674.9	12946.5	BF3-11	2258.0	64.0	1979.0	24.0	1723.0	36.0
5597.4	33224.1	BF3-16	2088.0	78.0	1765.0	28.0	1504.0	38.0
194.9	756.4	BF3-17	2094.0	76.0	1962.0	28.0	1840.0	44.0
2625.2	11698.5	BF3-18	2133.0	42.0	2018.0	22.0	1907.0	38.0
354.5	1440.1	BF3-20	2266.0	76.0	2073.0	30.0	1885.0	44.0
463.5	1972.7	BF3-21	2298.0	74.0	2143.0	28.0	1985.0	46.0

418.4	1817.3	BF3-23	2312.0	92.0	2154.0	38.0	1993.0	52.0
606.5	1570.0	BF3-22	2951.0	92.0	2794.0	42.0	2582.0	70.0
596.8	1823.3	BF3-25	2989.0	70.0	2560.0	30.0	2054.0	48.0
435.1	2560.6	BF3-14	1743.0	62.0	1719.0	32.0	1701.0	46.0
3594.4	2920.7	BF3-24	4085.0	38.0	4331.0	28.0	4879.0	90.0
73.9	646.9	91500-133	1073.0	46.0	1062.0	16.0	1057.0	22.0
72.1	625.9	91500-134	1065.0	48.0	1055.0	18.0	1050.0	24.0
21.9	320.6	GJ-1	607.0	50.0	602.0	12.0	601.0	14.0
22.0	317.1	GJ-2	610.0	50.0	603.0	12.0	601.0	14.0
18.2	261.7	GJ-3	614.0	54.0	605.0	12.0	603.0	14.0
18.0	260.5	GJ-4	602.0	54.0	600.0	12.0	600.0	14.0
21.6	309.8	GJ-5	595.0	52.0	599.0	12.0	600.0	14.0
20.5	292.1	GJ-6	623.0	52.0	605.0	12.0	601.0	14.0
18.4	274.8	GJ-7	608.0	56.0	603.0	12.0	602.0	14.0
19.5	283.3	GJ-8	609.0	29.0	602.0	6.0	600.0	7.0
228.4	3062.3	MT-96	734.0	54.0	721.0	14.0	717.0	18.0
221.0	2796.0	MT-97	736.0	52.0	728.0	14.0	726.0	18.0
.ead Corrected								
645.6	3453.7	BF4-20	2152.0	56.0	2063.0	32.0	1976.0	52.0
569.0	2774.2	BF4-23	2105.0	104.0	2012.0	42.0	1923.0	54.0
735.3	3224.2	BF4-28	2120.0	86.0	2082.0	34.0	2043.0	52.0
497.4	2449.0	BF4-31	2116.0	66.0	2024.0	36.0	1935.0	54.0
1211.0	4680.4	BF4-01	2062.0	72.0	1829.0	28.0	1632.0	34.0
946.0	4120.0	BF4-02	2085.0	84.0	1987.0	32.0	1894.0	48.0
545.9	3224.6	BF4-07	2140.0	104.0	1793.0	40.0	1510.0	44.0
725.2	3273.1	BF4-15	2080.0	94.0	1895.0	36.0	1732.0	46.0
794.0	10274.0	BF4-06	2208.0	80.0	876.0	20.0	447.0	12.0
407.3	3994.5	BF4-09	2136.0	90.0	1091.0	26.0	645.0	18.0
773.4	2382.0	BF4-08	1509.0	182.0	1238.0	62.0	1088.0	34.0
957.9	4422.3	BF4-10	2227.0	110.0	1878.0	44.0	1578.0	46.0
710.8	3022.7	BF4-12	2193.0	136.0	1665.0	56.0	1280.0	42.0
459.8	1777.2	BF4-14	1794.0	170.0	1324.0	62.0	1053.0	34.0
619.8	3614.7	BF4-19	2141.0	50.0	1927.0	30.0	1734.0	46.0
854.4	3435.2	BF4-25	2175.0	88.0	1778.0	34.0	1460.0	38.0
1902.7	7805.2	BF4-29	2119.0	84.0	1930.0	32.0	1759.0	44.0
839.1	3728.1	BF4-30	2142.0	68.0	1946.0	26.0	1768.0	36.0
323.0	1474.2	BF4-33	2072.0	106.0	1865.0	42.0	1685.0	48.0
1289.5	7816.5	BF4-41	2474.0	70.0	1721.0	26.0	1172.0	28.0
1103.5	3825.5	BF4-54	1926.0	122.0	1485.0	46.0	1196.0	36.0
1262.4	5573.8	BF4-59	2159.0	84.0	1939.0	32.0	1739.0	46.0
561.2	2967.9	BF4-61	2123.0	104.0	1791.0	40.0	1520.0	44.0
784.2	3212.2	BF4-62	2175.0	78.0	1857.0	28.0	1587.0	40.0
404.1	1256.9	BF4-56	2332.0	72.0	1027.0	28.0	528.0	16.0
.ead Corrected								
287.6	1154.8	BF5-01	2147.0	48.0	2130.0	28.0	2113.0	52.0
214.3	826.4	BF5-02	2150.0	40.0	2161.0	24.0	2173.0	46.0
353.1	1414.4	BF5-03	2142.0	40.0	2134.0	24.0	2126.0	46.0
229.4	877.7	BF5-02R	2129.0	40.0	2143.0	24.0	2157.0	46.0
310.4	1756.5	BF5-05	2137.0	50.0	2117.0	28.0	2097.0	50.0
286.1	1249.4	BF5-07R	2107.0	78.0	2031.0	28.0	1957.0	48.0

218.6	860.5	BF5-11	2146.0	38.0	2150.0	22.0	2153.0	44.0
210.5	897.6	BF5-13	2129.0	44.0	2118.0	26.0	2107.0	50.0
152.7	673.8	BF5-15	2126.0	48.0	2140.0	28.0	2154.0	52.0
279.5	1212.1	BF5-16	2125.0	42.0	2117.0	24.0	2109.0	48.0
357.1	1529.8	BF5-18	2131.0	42.0	2123.0	24.0	2115.0	46.0
377.9	1532.9	BF5-20	2121.0	42.0	2162.0	26.0	2206.0	50.0
359.2	1680.9	BF5-21	2141.0	68.0	2144.0	38.0	2147.0	58.0
154.7	644.8	BF5-25	2128.0	46.0	2136.0	26.0	2144.0	48.0
267.5	1196.3	BF5-31	2179.0	102.0	2117.0	52.0	2055.0	66.0
184.2	801.9	BF5-34	2139.0	44.0	2149.0	26.0	2159.0	48.0
202.2	883.6	BF5-37	2146.0	44.0	2139.0	26.0	2132.0	48.0
210.2	890.0	BF5-41	2137.0	44.0	2147.0	26.0	2157.0	46.0
365.2	1658.5	BF5-47	2143.0	52.0	2132.0	30.0	2121.0	50.0
331.0	1338.2	BF5-07C	2108.0	70.0	2005.0	26.0	1907.0	42.0
204.7	954.2	BF5-14	2157.0	86.0	2048.0	32.0	1941.0	52.0
77.1	701.7	91500-135	1073.0	50.0	1065.0	18.0	1062.0	26.0
74.6	656.7	91500-136	1070.0	48.0	1053.0	18.0	1045.0	24.0
68.2	570.9	91500-137	1083.0	48.0	1072.0	18.0	1066.0	24.0
73.6	647.1	91500-138	1052.0	48.0	1060.0	18.0	1064.0	24.0
73.3	661.1	91500-139	1062.0	50.0	1067.0	18.0	1070.0	26.0
21.1	317.9	GJ-1	610.0	50.0	604.0	12.0	602.0	14.0
19.6	281.2	GJ-2	622.0	62.0	600.0	14.0	594.0	14.0
18.7	258.6	GJ-3	594.0	64.0	617.0	14.0	623.0	14.0
20.6	302.3	GJ-4	610.0	54.0	592.0	12.0	587.0	14.0
18.7	257.5	GJ-3	595.0	56.0	615.0	12.0	620.0	14.0
20.7	301.0	GJ-4	610.0	50.0	591.0	12.0	586.0	14.0
19.3	286.1	GJ-5	608.0	54.0	609.0	12.0	610.0	14.0
21.3	315.3	GJ-6	606.0	56.0	600.0	12.0	598.0	14.0
19.3	278.7	GJ-5	609.0	50.0	609.0	12.0	608.0	14.0
21.2	307.1	GJ-6	605.0	50.0	599.0	12.0	597.0	14.0
19.0	275.4	GJ-7	612.0	52.0	608.0	12.0	607.0	14.0
20.5	298.7	GJ-8	606.0	54.0	601.0	12.0	600.0	14.0
19.8	293.3	GJ-7	610.0	50.0	608.0	12.0	608.0	14.0
21.4	318.1	GJ-8	608.0	50.0	601.0	12.0	599.0	14.0
19.5	283.9	GJ-9	622.0	54.0	607.0	12.0	604.0	14.0
19.4	264.7	GJ-10	595.0	54.0	602.0	12.0	603.0	14.0
20.3	301.7	GJ-9	620.0	50.0	607.0	12.0	603.0	14.0
20.1	281.3	GJ-10	593.0	50.0	601.0	12.0	603.0	14.0
19.6	287.0	GJ-11	610.0	29.0	602.0	6.0	600.0	7.0
105.6	1322.9	MT-98	709.0	74.0	727.0	18.0	733.0	18.0
90.0	1086.1	MT-99	739.0	62.0	733.0	16.0	731.0	16.0
119.3	1541.6	MT-100	744.0	56.0	730.0	16.0	726.0	18.0
124.0	1561.0	MT-101	732.0	52.0	730.0	14.0	730.0	18.0
.ead Corrected								
154.4	628.6	BF6-01	2175.0	40.0	2139.0	20.0	2102.0	40.0
242.9	969.1	BF6-03	2160.0	40.0	2150.0	22.0	2139.0	42.0
106.6	432.2	BF6-05	2187.0	40.0	2132.0	20.0	2075.0	40.0
174.2	683.9	BF6-06	2185.0	40.0	2168.0	22.0	2150.0	42.0
68.2	255.5	BF6-07	2189.0	42.0	2176.0	22.0	2163.0	42.0
152.4	569.9	BF6-08	2173.0	44.0	2120.0	22.0	2066.0	38.0

67.5	273.3	BF6-09	2160.0	42.0	2135.0	22.0	2108.0	42.0
191.7	816.9	BF6-10	2163.0	42.0	2101.0	22.0	2038.0	38.0
100.3	405.9	BF6-11	2184.0	46.0	2163.0	24.0	2141.0	44.0
58.5	215.7	BF6-12	2161.0	42.0	2140.0	20.0	2119.0	38.0
153.3	646.4	BF6-13	2172.0	40.0	2144.0	22.0	2116.0	42.0
73.6	305.3	BF6-14	2193.0	38.0	2144.0	22.0	2093.0	40.0
94.6	383.1	BF6-15	2184.0	58.0	2126.0	20.0	2067.0	38.0
92.3	382.5	BF6-16	2171.0	38.0	2153.0	22.0	2135.0	42.0
102.9	590.5	BF6-17	2186.0	44.0	2097.0	24.0	2009.0	44.0
178.0	764.4	BF6-18	2177.0	40.0	2146.0	22.0	2114.0	42.0
252.1	1088.8	BF6-19	2181.0	40.0	2160.0	24.0	2139.0	44.0
269.5	1157.6	BF6-20	2185.0	40.0	2165.0	24.0	2144.0	44.0
86.4	373.2	BF6-21	2171.0	44.0	2162.0	24.0	2152.0	46.0
167.8	674.8	BF6-04	2172.0	58.0	2069.0	22.0	1968.0	36.0
73.3	616.4	91500-128	1065.0	46.0	1057.0	16.0	1053.0	22.0
64.1	559.1	91500-129	1080.0	46.0	1058.0	16.0	1048.0	22.0
20.0	289.8	GJ-271	600.0	48.0	602.0	10.0	603.0	12.0
19.3	288.7	GJ-272	619.0	48.0	603.0	10.0	599.0	12.0
20.4	294.9	GJ-273	605.0	52.0	602.0	12.0	601.0	12.0
20.3	286.5	GJ-274	612.0	52.0	605.0	12.0	603.0	12.0
20.5	305.5	GJ-273	606.0	50.0	602.0	10.0	601.0	12.0
20.4	296.7	GJ-274	613.0	48.0	605.0	10.0	603.0	12.0
20.5	303.1	GJ-275	616.0	52.0	605.0	12.0	602.0	12.0
18.6	254.7	GJ-276	605.0	32.0	602.0	6.0	601.0	6.0
178.3	2174.1	MT-92	734.0	50.0	733.0	14.0	733.0	16.0
214.3	2568.2	MT-93	736.0	52.0	729.0	12.0	727.0	14.0
.ead Corrected								
1332.6	5721.4	BF7-48	2146.0	66.0	2079.0	24.0	2012.0	42.0
291.3	1067.2	BF7-36	2115.0	68.0	2054.0	26.0	1994.0	42.0
197.3	671.6	BF7-42	2114.0	46.0	2134.0	22.0	2155.0	40.0
1669.8	5732.8	BF7-44	2121.0	72.0	1993.0	30.0	1872.0	36.0
2090.8	9431.3	BF7-15	2155.0	40.0	2052.0	22.0	1952.0	40.0
2483.4	7218.3	BF7-29	2137.0	66.0	2108.0	26.0	2079.0	42.0
7211.6	76159.9	BF7-46	2024.0	68.0	1116.0	20.0	710.0	16.0
1598.9	10013.1	BF7-47	1948.0	80.0	1485.0	26.0	1182.0	30.0
1404.9	7943.6	BF7-49	1802.0	84.0	1192.0	26.0	885.0	22.0
1175.4	5638.3	BF7-50	2002.0	76.0	1506.0	26.0	1179.0	28.0
971.3	5085.0	BF7-56	1926.0	76.0	1441.0	26.0	1136.0	26.0
1698.3	5869.3	BF7-03	1221.0	110.0	962.0	30.0	853.0	18.0
2444.5	13185.7	BF7-10	1579.0	76.0	933.0	20.0	684.0	14.0
936.9	2807.8	BF7-11	1592.0	112.0	1118.0	36.0	890.0	18.0
5117.4	46432.2	BF7-12	1440.0	72.0	895.0	18.0	690.0	16.0
1300.3	3446.2	BF7-13	1753.0	96.0	1418.0	36.0	1206.0	24.0
644.3	2340.2	BF7-19	2023.0	66.0	1508.0	24.0	1169.0	22.0
1530.2	11292.2	BF7-21	1692.0	80.0	1118.0	22.0	847.0	22.0
1292.5	8478.3	BF7-34	1766.0	90.0	1218.0	28.0	932.0	26.0
301.2	1063.4	BF7-40	1995.0	78.0	1774.0	30.0	1593.0	36.0
60.3	501.8	91500-132	1057.0	48.0	1072.0	18.0	1079.0	24.0

68.4	573.7	91500-130	1043.0	46.0	1052.0	16.0	1057.0	22.0
70.2	589.5	91500-131	1068.0	46.0	1058.0	16.0	1053.0	22.0
69.8	587.8	91500-131	1083.0	48.0	1053.0	16.0	1039.0	22.0
18.3	267.8	GJ-281	615.0	50.0	604.0	12.0	601.0	14.0
19.5	287.8	GJ-282	601.0	50.0	600.0	12.0	600.0	14.0
20.8	303.9	GJ-283	620.0	54.0	604.0	12.0	600.0	14.0
21.4	300.5	GJ-284	599.0	54.0	602.0	12.0	603.0	14.0
20.8	303.6	GJ-275	617.0	50.0	604.0	10.0	601.0	12.0
21.5	320.3	GJ-276	599.0	50.0	602.0	10.0	603.0	14.0
18.6	261.9	GJ-277	605.0	54.0	606.0	12.0	606.0	14.0
19.0	274.2	GJ-278	613.0	54.0	600.0	12.0	597.0	14.0
21.2	298.5	GJ-277	604.0	50.0	605.0	10.0	605.0	14.0
21.6	312.6	GJ-278	612.0	50.0	600.0	10.0	597.0	12.0
19.3	279.4	GJ-279	621.0	54.0	604.0	12.0	600.0	14.0
17.8	269.4	GJ-280	597.0	27.0	602.0	6.0	603.0	7.0
228.4	2882.9	MT-96	730.0	52.0	733.0	14.0	733.0	16.0
187.4	2463.4	MT-94	714.0	50.0	717.0	14.0	718.0	16.0
128.5	1587.2	MT-95	728.0	52.0	726.0	14.0	725.0	16.0
.ead Corrected								
88.4	307.9	BF8-05	2275.0	42.0	2252.0	24.0	2226.0	44.0
515.7	2151.8	BF8-15	2280.0	42.0	2252.0	24.0	2222.0	46.0
243.5	945.6	BF8-16	2267.0	66.0	2204.0	26.0	2136.0	44.0
453.0	1474.6	BF8-24	2288.0	64.0	2233.0	32.0	2174.0	42.0
5055.3	20183.3	BF8-25	2256.0	68.0	2223.0	26.0	2187.0	48.0
240.2	747.1	BF8-30R	2253.0	54.0	2220.0	26.0	2185.0	42.0
331.6	1127.8	BF8-30C	2267.0	40.0	2309.0	22.0	2358.0	46.0
468.5	1787.3	BF8-31	2263.0	46.0	2261.0	26.0	2258.0	46.0
475.4	1941.2	BF8-36	2175.0	80.0	2114.0	30.0	2051.0	50.0
391.7	1616.2	BF8-01	2213.0	64.0	2076.0	24.0	1941.0	40.0
806.0	4620.7	BF8-02	2240.0	42.0	2063.0	26.0	1891.0	44.0
2459.2	10513.8	BF8-04	2263.0	74.0	2050.0	28.0	1845.0	44.0
338.6	1476.8	BF8-08	2246.0	72.0	2131.0	28.0	2014.0	48.0
779.5	3493.9	BF8-10	2268.0	78.0	1958.0	30.0	1678.0	40.0
497.9	2043.4	BF8-12	2138.0	66.0	1952.0	24.0	1782.0	38.0
847.4	3671.0	BF8-19	1408.0	142.0	701.0	34.0	501.0	12.0
748.9	4527.7	BF8-23	2011.0	66.0	1409.0	22.0	1046.0	22.0
1159.7	5072.3	BF8-21	2280.0	42.0	2160.0	24.0	2037.0	42.0
82.9	514.0	BF8-28	2271.0	44.0	2161.0	24.0	2047.0	42.0
389.2	2285.9	BF8-33	2222.0	48.0	2121.0	28.0	2018.0	48.0
62.6	508.0	91500-133	1077.0	50.0	1078.0	18.0	1078.0	24.0
62.8	503.2	91500-134	1066.0	50.0	1070.0	18.0	1072.0	22.0
19.8	293.6	GJ-283	619.0	50.0	604.0	12.0	600.0	14.0
20.3	290.3	GJ-284	599.0	50.0	602.0	12.0	603.0	14.0
19.9	284.3	GJ-287	603.0	54.0	603.0	12.0	603.0	14.0
20.0	291.8	GJ-288	616.0	56.0	604.0	12.0	601.0	14.0
21.1	299.7	GJ-287	604.0	50.0	604.0	12.0	603.0	14.0
21.1	307.6	GJ-288	615.0	52.0	604.0	12.0	601.0	14.0
19.2	280.5	GJ-289	601.0	54.0	601.0	12.0	601.0	14.0
18.5	272.2	GJ-290	617.0	28.0	604.0	6.0	601.0	7.0
223.1	2793.0	MT-97	740.0	50.0	739.0	14.0	739.0	16.0

152.2	1924.8	MT-98	742.0	52.0	724.0	14.0	718.0	16.0
.ead Corrected								
132.0	517.5	BF9-01	2126.0	42.0	2127.0	22.0	2128.0	42.0
396.6	1651.3	BF9-02	2130.0	42.0	2125.0	24.0	2120.0	44.0
444.5	1659.3	BF9-14	2134.0	42.0	2129.0	22.0	2124.0	40.0
1270.1	4203.0	BF9-08	2487.0	62.0	2413.0	26.0	2327.0	46.0
900.0	2869.7	BF9-09	2509.0	40.0	2495.0	22.0	2478.0	46.0
1240.8	6903.8	BF9-03	2464.0	58.0	1870.0	22.0	1383.0	26.0
1407.3	6980.2	BF9-06	2173.0	66.0	1135.0	20.0	672.0	14.0
1609.6	18619.0	BF9-07	2281.0	44.0	1583.0	24.0	1114.0	28.0
147.3	531.5	BF9-12	4296.0	68.0	1693.0	32.0	376.0	12.0
3895.0	12332.1	BF9-13	2628.0	80.0	1880.0	34.0	1280.0	30.0
58.9	506.9	91500-143	1074.0	48.0	1057.0	16.0	1049.0	22.0
20.4	298.2	GJ-5	611.0	50.0	605.0	12.0	603.0	14.0
20.7	300.0	GJ-6	602.0	50.0	599.0	10.0	598.0	14.0
19.5	279.7	GJ-7	619.0	54.0	607.0	12.0	604.0	14.0
19.4	282.1	GJ-8	600.0	27.0	598.0	6.0	598.0	7.0
183.3	2332.4	MT-104	760.0	50.0	729.0	14.0	719.0	16.0
.ead Corrected								
262.6	1112.8	BF10-07	2160.0	46.0	2152.0	26.0	2143.0	46.0
538.1	2239.3	BF10-21	2155.0	38.0	2133.0	22.0	2110.0	42.0
858.4	6753.9	BF10-01	3072.0	94.0	1915.0	42.0	1034.0	32.0
991.0	4394.9	BF10-02	2123.0	74.0	1850.0	28.0	1618.0	38.0
1637.3	7248.9	BF10-06C	2031.0	66.0	1900.0	24.0	1783.0	36.0
2193.3	10298.2	BF10-06R	1980.0	82.0	1839.0	30.0	1718.0	42.0
1095.8	4492.7	BF10-08	2103.0	70.0	1915.0	26.0	1747.0	36.0
2396.5	12935.3	BF10-11	2033.0	66.0	1778.0	22.0	1569.0	34.0
2118.4	11340.8	BF10-12	2249.0	80.0	1501.0	28.0	1029.0	26.0
458.4	2544.8	BF10-13	2124.0	44.0	1950.0	22.0	1791.0	34.0
1874.2	9864.1	BF10-15	1909.0	82.0	1786.0	28.0	1682.0	42.0
875.8	3554.9	BF10-17	1980.0	106.0	1903.0	42.0	1834.0	50.0
2129.7	13984.0	BF10-18	2094.0	92.0	1522.0	32.0	1145.0	32.0
696.7	3853.3	BF10-20	1939.0	62.0	1736.0	20.0	1573.0	32.0
585.4	2758.3	BF10-23	2079.0	116.0	1784.0	46.0	1543.0	46.0
1017.4	4794.3	BF10-24	2086.0	68.0	1715.0	24.0	1428.0	28.0
842.3	8206.1	BF10-25	2217.0	68.0	1910.0	36.0	1640.0	46.0
2239.4	17344.1	BF10-26	2114.0	42.0	1733.0	20.0	1436.0	28.0
838.3	4837.4	BF10-27	2090.0	96.0	1647.0	36.0	1322.0	38.0
411.2	2320.7	BF10-28	1860.0	48.0	1822.0	26.0	1789.0	42.0
3201.4	15865.1	BF10-29	1926.0	74.0	1869.0	26.0	1818.0	42.0
702.7	3225.2	BF10-30	1819.0	64.0	1736.0	22.0	1668.0	32.0
605.4	3163.7	BF10-32	1844.0	54.0	1836.0	28.0	1829.0	44.0
371.1	1805.6	BF10-33	1849.0	44.0	1813.0	22.0	1782.0	36.0
1249.4	5875.2	BF10-34	1927.0	72.0	1814.0	26.0	1717.0	38.0
.ead Corrected								
98.9	407.3	BF12-01Z	2161.0	44.0	2128.0	24.0	2095.0	42.0
927.6	4436.6	BF12-02Z	2102.0	112.0	1885.0	46.0	1694.0	50.0
358.5	1589.5	BF12-03Z	2148.0	68.0	2082.0	26.0	2016.0	44.0

204.7	760.0	BF12-04Z	2115.0	60.0	2035.0	22.0	1957.0	36.0
67.3	604.5	91500-140	1073.0	52.0	1063.0	18.0	1059.0	24.0
61.7	536.0	91500-141	1066.0	50.0	1060.0	18.0	1057.0	24.0
60.4	523.2	91500-142	1059.0	50.0	1058.0	18.0	1058.0	24.0
21.7	316.1	GJ-1	593.0	50.0	603.0	12.0	606.0	14.0
22.6	327.2	GJ-2	628.0	50.0	606.0	12.0	600.0	14.0
17.6	251.2	GJ-3	612.0	56.0	606.0	12.0	605.0	14.0
18.1	265.4	GJ-4	604.0	58.0	601.0	12.0	600.0	14.0
20.7	298.5	GJ-1	607.0	50.0	603.0	10.0	602.0	12.0
20.7	293.0	GJ-2	609.0	50.0	603.0	10.0	601.0	12.0
18.7	275.0	GJ-3	616.0	52.0	608.0	12.0	606.0	14.0
19.9	293.5	GJ-4	603.0	54.0	601.0	12.0	600.0	14.0
19.9	287.7	GJ-3	615.0	50.0	608.0	12.0	606.0	14.0
21.1	307.0	GJ-4	602.0	50.0	600.0	12.0	600.0	14.0
19.2	279.2	GJ-5	610.0	52.0	607.0	12.0	606.0	14.0
19.8	286.0	GJ-6	604.0	27.0	599.0	6.0	598.0	7.0
218.9	2790.0	MT-102	730.0	52.0	722.0	14.0	719.0	16.0
152.3	1926.6	MT-103	724.0	50.0	728.0	14.0	730.0	16.0
193.3	2479.7	MT-104	744.0	54.0	731.0	14.0	726.0	16.0
.ead Corrected								
1400.8	6295.8	BF11-05	2165.0	52.0	2159.0	32.0	2154.0	56.0
609.3	1989.1	BF11-10C	2175.0	68.0	2093.0	26.0	2010.0	40.0
402.9	1847.8	BF11-02	2265.0	42.0	2198.0	26.0	2127.0	50.0
589.2	2590.6	BF11-04	2286.0	46.0	2157.0	22.0	2024.0	38.0
609.8	2391.6	BF11-08	2243.0	72.0	2206.0	28.0	2165.0	48.0
705.2	3471.5	BF11-03	2186.0	40.0	2034.0	22.0	1887.0	40.0
1170.2	4850.1	BF11-06	2220.0	82.0	2023.0	32.0	1835.0	46.0
970.8	5466.0	BF11-07	2135.0	76.0	1810.0	28.0	1541.0	38.0
831.7	4481.7	BF11-11	2149.0	76.0	1865.0	28.0	1621.0	38.0
650.2	3987.5	BF11-12	2166.0	58.0	1878.0	32.0	1629.0	44.0
66.7	564.7	91500-135	1058.0	48.0	1063.0	18.0	1066.0	24.0
20.5	298.7	GJ-289	601.0	50.0	601.0	12.0	601.0	14.0
19.8	289.9	GJ-290	619.0	50.0	604.0	12.0	600.0	14.0
19.6	283.7	GJ-291	600.0	56.0	599.0	12.0	599.0	14.0
20.0	287.7	GJ-292	617.0	28.0	606.0	6.0	603.0	7.0
137.3	1699.9	MT-99	739.0	54.0	736.0	14.0	735.0	16.0
CONCENTRATIONS (ppm)			A G E S (M a)					
Th	U	Analysis N(	Pb207/Pb2	2 s	Pb207/U23	2 s	Pb206/U23	2 s
63.1	108.7	NG-1-01	2117.0	19.0	2102.0	10.0	2087.0	20.0
11.1	15.2	NG-1-08	2108.0	23.0	2082.0	12.0	2056.0	21.0
10.0	12.8	NG-1-09	2100.0	23.0	2105.0	12.0	2110.0	22.0
85.3	233.9	NG-1-10C	2153.0	33.0	2123.0	13.0	2093.0	19.0
20.4	15.5	NG-1-10R	2111.0	22.0	2116.0	12.0	2121.0	21.0
36.4	35.3	NG-1-11	2110.0	22.0	2084.0	11.0	2057.0	20.0
78.1	70.6	NG-1-12	2100.0	21.0	2106.0	11.0	2112.0	21.0
22.1	25.2	NG-1-14	2114.0	22.0	2087.0	11.0	2060.0	20.0
68.8	41.8	NG-1-21	2105.0	22.0	2072.0	11.0	2040.0	20.0

16.3	19.3	NG-1-30	2096.0	25.0	2080.0	12.0	2065.0	20.0
38.6	35.4	NG-1-34	2127.0	26.0	2143.0	14.0	2160.0	24.0
20.4	20.1	NG-1-41	2099.0	29.0	2098.0	14.0	2097.0	22.0
173.3	149.4	NG-1-49C	2120.0	20.0	2125.0	11.0	2129.0	20.0
21.9	42.0	NG-1-02	1339.0	102.0	1204.0	35.0	1130.0	14.0
34.3	29.4	NG-1-05	2111.0	20.0	2057.0	11.0	2004.0	20.0
94.8	238.8	NG-1-06	1950.0	39.0	1841.0	16.0	1747.0	17.0
13.4	60.8	NG-1-17C	797.0	199.0	784.0	49.0	779.0	11.0
41.2	590.9	NG-1-17R	1820.0	47.0	1236.0	15.0	929.0	13.0
54.6	44.3	NG-1-19	2026.0	61.0	2010.0	27.0	1995.0	23.0
144.6	181.3	NG-1-25	1971.0	49.0	1864.0	20.0	1770.0	18.0
29.0	45.6	NG-1-26	2194.0	30.0	1649.0	13.0	1255.0	13.0
47.0	110.4	NG-1-38	2234.0	31.0	1271.0	14.0	781.0	11.0
18.3	29.1	NG-1-46	2159.0	26.0	2107.0	14.0	2054.0	24.0
48.8	45.0	NG-1-47	2115.0	20.0	2059.0	11.0	2004.0	20.0
107.9	83.2	NG-1-48	2182.0	20.0	2110.0	12.0	2036.0	22.0
111.3	402.4	NG-1-49R	2130.0	42.0	1769.0	16.0	1479.0	17.0
68.0	48.4	NG-1-50	2127.0	22.0	2072.0	12.0	2017.0	21.0
166.3	198.5	NG-1-54	1957.0	61.0	1800.0	26.0	1668.0	19.0
202.4	404.8	NG-1-55	2138.0	50.0	1743.0	20.0	1434.0	18.0
22.9	38.6	NG-1-56	1452.0	109.0	1336.0	40.0	1265.0	16.0
23.8	143.1	NG-1-58	1957.0	53.0	1380.0	19.0	1038.0	13.0
73.7	85.5	NG-1-60	2197.0	29.0	1776.0	15.0	1441.0	18.0
36.6	39.3	NG-1-65	2120.0	24.0	2061.0	13.0	2003.0	23.0
63.4	53.4	NG-1-66	2130.0	21.0	2061.0	12.0	1994.0	22.0
89.3	85.0	NG-1-67	1970.0	73.0	2002.0	32.0	2033.0	28.0
158.7	694.2	NG-1-69	1876.0	57.0	1119.0	19.0	771.0	10.0
29.7	80.4	91500-68	1069.0	23.0	1048.0	8.0	1039.0	11.0
32.2	86.1	91500-69	1086.0	23.0	1059.0	8.0	1047.0	11.0
30.4	81.7	91500-70	1092.0	23.0	1050.0	8.0	1031.0	11.0
30.3	80.3	91500-71	1066.0	24.0	1047.0	8.0	1039.0	11.0
29.7	80.4	91500-68	1069.0	23.0	1048.0	8.0	1039.0	11.0
32.2	86.1	91500-69	1086.0	23.0	1059.0	8.0	1047.0	11.0
30.4	81.7	91500-70	1092.0	23.0	1050.0	8.0	1031.0	11.0
30.3	80.3	91500-71	1066.0	24.0	1047.0	8.0	1039.0	11.0
91.6	103.3	MT-59	767.0	25.0	722.0	6.0	708.0	8.0
127.8	119.1	MT-60	750.0	25.0	725.0	6.0	718.0	8.0
95.9	107.5	MT-61	735.0	25.0	724.0	7.0	720.0	8.0
78.6	98.5	MT-62	729.0	26.0	713.0	7.0	707.0	8.0
59.5	81.9	MT-63	777.0	27.0	738.0	7.0	725.0	8.0
186.5	695.9	SG5-18	2120.0	19.0	2095.0	11.0	2069.0	21.0
344.7	1209.3	SG5-53	2007.0	35.0	1978.0	14.0	1951.0	20.0
287.3	996.9	SG5-01	1969.0	31.0	1618.0	11.0	1362.0	13.0
209.5	688.2	SG5-02	1889.0	38.0	1558.0	13.0	1326.0	15.0
142.0	585.0	SG5-04	1882.0	35.0	1520.0	13.0	1273.0	12.0
117.3	548.9	SG5-07	1958.0	35.0	1626.0	12.0	1382.0	15.0
74.3	916.6	SG5-09	1978.0	35.0	1624.0	12.0	1366.0	15.0
124.6	514.8	SG5-10	2037.0	31.0	1860.0	11.0	1705.0	16.0

197.0	753.9	SG5-11	1938.0	39.0	1634.0	14.0	1409.0	15.0	
127.1	489.3	SG5-12	2033.0	32.0	1900.0	12.0	1781.0	17.0	
165.3	719.4	SG5-15	1975.0	32.0	1684.0	11.0	1460.0	15.0	
146.3	773.6	SG5-22	1870.0	33.0	1490.0	11.0	1237.0	13.0	
262.4	944.2	SG5-24	2050.0	32.0	1916.0	12.0	1794.0	18.0	
202.0	767.8	SG5-31	1969.0	38.0	1612.0	13.0	1353.0	15.0	
202.3	672.1	SG5-38	1942.0	37.0	1512.0	13.0	1224.0	14.0	
194.5	787.0	SG5-51	2009.0	33.0	1812.0	12.0	1646.0	16.0	
221.9	675.7	SG5-52	1921.0	37.0	1472.0	13.0	1180.0	12.0	
638.7	1252.4	SG5-03	2108.0	22.0	1432.0	10.0	1023.0	11.0	
329.8	783.3	SG5-05	2047.0	41.0	1324.0	15.0	925.0	9.0	
118.8	422.4	SG5-13	1989.0	35.0	1787.0	13.0	1618.0	15.0	
497.5	1429.1	SG5-20	1748.0	37.0	1178.0	11.0	892.0	9.0	
517.6	878.7	SG5-21	2224.0	22.0	1388.0	10.0	910.0	10.0	
1229.5	1185.1	SG5-23	2342.0	21.0	1242.0	9.0	709.0	8.0	
214.4	790.1	SG5-25	1912.0	38.0	1717.0	14.0	1561.0	16.0	
468.0	1375.0	SG5-27	1637.0	58.0	910.0	17.0	640.0	7.0	
303.4	1214.9	SG5-33	1710.0	36.0	1164.0	11.0	893.0	9.0	
250.7	1041.4	SG5-35	1823.0	37.0	1337.0	11.0	1055.0	12.0	
668.7	1080.7	SG5-42	2147.0	49.0	1458.0	19.0	1033.0	12.0	
163.2	584.0	SG5-45	1839.0	38.0	1413.0	13.0	1148.0	12.0	
178.1	675.8	SG5-49	1705.0	43.0	1723.0	16.0	1738.0	17.0	
33.2	90.4	91500-81	1045.0	24.0	1052.0	8.0	1056.0	11.0	
33.1	91.3	91500-82	1056.0	23.0	1050.0	8.0	1048.0	11.0	
29.6	81.6	91500-83	1069.0	24.0	1056.0	8.0	1050.0	11.0	
119.7	124.5	MT-73	745.0	26.0	723.0	7.0	716.0	8.0	
136.8	132.0	MT-74	763.0	26.0	729.0	7.0	718.0	8.0	
134.1	125.8	MT-75	743.0	26.0	727.0	7.0	722.0	8.0	
17.4	30.7	SG6-02	2082.0	44.0	2079.0	22.0	2076.0	40.0	
51.7	65.2	SG6-06	2105.0	42.0	2074.0	24.0	2043.0	42.0	
24.5	117.1	SG6-10	2081.0	40.0	2077.0	22.0	2072.0	40.0	
114.3	286.0	SG6-13	2121.0	72.0	2058.0	28.0	1996.0	42.0	
97.8	66.7	SG6-18	2101.0	44.0	2101.0	24.0	2101.0	44.0	
442.8	446.8	SG6-07	2147.0	40.0	2059.0	22.0	1972.0	40.0	
45.6	72.2	SG6-21	2159.0	42.0	2146.0	24.0	2133.0	46.0	
122.0	1755.8	SG6-01	1662.0	72.0	1051.0	20.0	782.0	18.0	
140.7	584.4	SG6-04	1819.0	42.0	1295.0	18.0	1003.0	20.0	
62.6	679.5	SG6-11	1728.0	68.0	1172.0	18.0	894.0	20.0	
156.3	1214.6	SG6-14	1592.0	48.0	739.0	14.0	490.0	10.0	
1243.6	5680.8	SG6-23	2102.0	44.0	884.0	16.0	480.0	10.0	
2045.3	6862.4	SG6-25	394.0	298.0	213.0	24.0	197.0	6.0	
162.5	1385.9	SG6-28	1873.0	72.0	1804.0	28.0	1745.0	34.0	
338.7	1548.1	SG6-33	1731.0	52.0	845.0	16.0	549.0	12.0	
183.1	889.6	SG6-36	1615.0	76.0	1204.0	22.0	989.0	22.0	
18.2	207.2	SG6-38	1873.0	66.0	1483.0	22.0	1226.0	24.0	
75.3	2131.1	SG6-47	1829.0	44.0	628.0	12.0	348.0	8.0	
51.4	560.3	SG6-57	1925.0	64.0	1519.0	20.0	1246.0	26.0	
79.9	791.5	SG6-61	1536.0	88.0	888.0	24.0	651.0	14.0	

31.4	86.9	91500-84	1079.0	48.0	1057.0	16.0	1047.0	22.0
35.4	98.0	91500-85	1052.0	48.0	1051.0	16.0	1051.0	24.0
146.1	133.4	MT-76	713.0	52.0	724.0	14.0	727.0	16.0
74.8	99.1	MT-77	714.0	56.0	720.0	14.0	722.0	16.0

Pb208/Th2	+/- 2 s	NORMAL CONCORDIA PLOT DATA Pb207/U23	1s	Pb206/U23	1s	RHO	INVERSE CONCORDI U238/Pb20	RSD
2036.0	48.0	6.74373	0.08731	0.37308	0.00442	0.91507	2.68039	1.18473
2077.0	62.0	6.95388	0.08543	0.37929	0.00447	0.95930	2.63651	1.17852
2112.0	80.0	6.82686	0.09017	0.37616	0.00458	0.92183	2.65844	1.21757
2108.0	100.0	6.86973	0.10288	0.37905	0.00510	0.89843	2.63817	1.34547
2174.0	104.0	6.76041	0.08897	0.37391	0.00425	0.86368	2.67444	1.13664
2194.0	74.0	6.81559	0.08954	0.37595	0.00471	0.95362	2.65993	1.25283
2221.0	72.0	6.94696	0.08950	0.38278	0.00476	0.96523	2.61247	1.24353
1976.0	48.0	6.49517	0.08663	0.36130	0.00444	0.92138	2.76778	1.22890
1770.0	56.0	6.54523	0.07977	0.36025	0.00422	0.96116	2.77585	1.17141
2344.0	156.0	7.13497	0.12853	0.39051	0.00579	0.82306	2.56075	1.48268
1719.0	40.0	5.54248	0.07076	0.31198	0.00366	0.91891	3.20533	1.17315
1086.0	26.0	2.96930	0.03695	0.19140	0.00215	0.90268	5.22466	1.12330
1849.0	52.0	6.00707	0.10411	0.33670	0.00475	0.81399	2.97000	1.41075
1861.0	56.0	5.90535	0.11651	0.33836	0.00506	0.75797	2.95543	1.49545
950.0	42.0	2.70014	0.06852	0.16750	0.00258	0.60698	5.97015	1.54030
1830.0	44.0	5.91513	0.08102	0.33289	0.00376	0.82463	3.00400	1.12950
1341.0	40.0	4.28180	0.07496	0.24096	0.00339	0.80362	4.15007	1.40687
1895.0	48.0	6.19372	0.12306	0.34560	0.00400	0.58253	2.89352	1.15741
1839.0	46.0	6.00523	0.09352	0.33505	0.00414	0.79344	2.98463	1.23564
1943.0	50.0	7.06906	0.10617	0.35830	0.00425	0.78977	2.79096	1.18616
988.0	36.0							
1008.0	34.0							
608.0	30.0							
617.0	30.0							
614.0	30.0							
615.0	32.0							
613.0	24.0							
617.0	26.0							
619.0	32.0							
605.0	16.0							
697.0	20.0							
725.0	22.0							
2039.0	54.0	7.01025	0.10122	0.37477	0.00488	0.90182	2.66830	1.30213
2314.0	84.0	7.22301	0.09549	0.39462	0.00494	0.94691	2.53408	1.25184
2237.0	78.0	7.06286	0.09331	0.38720	0.00488	0.95397	2.58264	1.26033
2183.0	94.0	7.14550	0.10567	0.38977	0.00532	0.92296	2.56562	1.36491
2302.0	84.0	7.35827	0.09610	0.39925	0.00494	0.94740	2.50470	1.23732
2091.0	130.0	6.88446	0.12003	0.37534	0.00549	0.83893	2.66425	1.46267
2110.0	62.0	7.36925	0.14963	0.38907	0.00578	0.73165	2.57023	1.48559
2027.0	122.0	7.10035	0.12068	0.38979	0.00560	0.84528	2.56548	1.43667
1994.0	136.0	7.17079	0.13095	0.39449	0.00584	0.81066	2.53492	1.48039
2214.0	166.0	7.24716	0.13741	0.39319	0.00586	0.78604	2.54330	1.49037
2034.0	160.0	7.09851	0.14461	0.38749	0.00624	0.79048	2.58071	1.61036
2183.0	100.0	7.29540	0.11016	0.39573	0.00552	0.92377	2.52698	1.39489
2176.0	144.0	7.27523	0.13180	0.39373	0.00597	0.83696	2.53981	1.51627
2366.0	106.0	7.31214	0.10360	0.39845	0.00513	0.90872	2.50973	1.28749

2026.0	56.0	6.96029	0.11707	0.37230	0.00515	0.82242	2.68601	1.38329
2015.0	48.0	6.98801	0.10319	0.37051	0.00416	0.76034	2.69898	1.12278
2214.0	170.0	7.12403	0.13199	0.39008	0.00571	0.79007	2.56358	1.46380
2035.0	50.0	6.66625	0.09482	0.37241	0.00447	0.84386	2.68521	1.20029
2093.0	56.0	7.34769	0.11364	0.38606	0.00515	0.86253	2.59027	1.33399
2077.0	52.0	7.26164	0.09957	0.38267	0.00463	0.88239	2.61322	1.20992
2179.0	132.0	6.92475	0.12071	0.37576	0.00556	0.84884	2.66127	1.47967
2353.0	88.0	7.40166	0.09857	0.39757	0.00503	0.95003	2.51528	1.26519
2020.0	60.0	6.66479	0.13220	0.36989	0.00555	0.75644	2.70351	1.50045
2353.0	170.0	7.14743	0.11478	0.38438	0.00457	0.74035	2.60159	1.18893
2098.0	144.0	7.00247	0.12746	0.38313	0.00568	0.81448	2.61008	1.48253
2053.0	50.0	6.90457	0.10759	0.37684	0.00461	0.78507	2.65365	1.22333
2071.0	66.0	7.31869	0.15451	0.38191	0.00569	0.70571	2.61842	1.48988
2087.0	68.0	7.49689	0.17064	0.38565	0.00599	0.68239	2.59302	1.55322
1944.0	60.0	6.91712	0.14633	0.35769	0.00542	0.71628	2.79572	1.51528
1976.0	68.0	7.59729	0.16457	0.36637	0.00549	0.69177	2.72948	1.49849
1010.0	34.0							
1035.0	36.0							
1042.0	42.0							
619.0	26.0							
603.0	26.0							
629.0	32.0							
601.0	32.0							
628.0	26.0							
600.0	26.0							
614.0	34.0							
617.0	32.0							
615.0	28.0							
617.0	26.0							
602.0	30.0							
622.0	16.0							
733.0	22.0							
741.0	26.0							
2082.0	78.0	6.96758	0.08419	0.37445	0.00420	0.92828	2.67058	1.12165
1983.0	80.0	6.53936	0.08750	0.36037	0.00450	0.93324	2.77493	1.24872
2042.0	52.0	6.83399	0.10012	0.37445	0.00489	0.89139	2.67058	1.30592
1986.0	44.0	6.54499	0.09024	0.36333	0.00394	0.78651	2.75232	1.08441
2183.0	88.0	6.79891	0.08579	0.37472	0.00429	0.90730	2.66866	1.14485
2021.0	76.0	6.63454	0.09154	0.36346	0.00477	0.95118	2.75133	1.31239
2067.0	70.0	8.15814	0.16403	0.38499	0.00571	0.73766	2.59747	1.48316
1944.0	54.0	6.99334	0.11200	0.35808	0.00488	0.85095	2.79267	1.36282
1829.0	44.0	5.95562	0.08669	0.33304	0.00402	0.82925	3.00264	1.20706
1673.0	40.0	6.02026	0.08103	0.30634	0.00360	0.87311	3.26435	1.17516
1458.0	42.0	4.68499	0.07781	0.26284	0.00371	0.84988	3.80460	1.41151
1815.0	52.0	5.90829	0.09616	0.33036	0.00453	0.84252	3.02700	1.37123
1902.0	78.0	6.29425	0.08019	0.34429	0.00401	0.91421	2.90453	1.16472
1846.0	50.0	6.70633	0.11459	0.33962	0.00449	0.77373	2.94447	1.32207
1952.0	54.0	7.25129	0.11574	0.36064	0.00492	0.85472	2.77285	1.36424

1959.0	60.0	7.34634	0.15354	0.36225	0.00556	0.73437	2.76052	1.53485
2531.0	86.0	14.67510	0.32752	0.49267	0.00800	0.72757	2.02976	1.62380
1951.0	60.0	11.44223	0.18761	0.37517	0.00505	0.82095	2.66546	1.34606
1672.0	120.0	4.43788	0.08330	0.30186	0.00458	0.80833	3.31279	1.51726
9478.0	380.0	70.19086	1.01535	1.13165	0.01490	0.91020	0.88367	1.31666
1022.0	30.0							
1009.0	32.0							
610.0	22.0							
617.0	22.0							
615.0	30.0							
608.0	30.0							
612.0	24.0							
609.0	26.0							
604.0	32.0							
620.0	17.0							
704.0	22.0							
715.0	24.0							
1894.0	122.0	6.63059	0.12051	0.35864	0.00550	0.84379	2.78831	1.53357
1904.0	64.0	6.25369	0.14768	0.34753	0.00573	0.69820	2.87745	1.64878
2035.0	60.0	6.77120	0.12677	0.37296	0.00553	0.79198	2.68125	1.48273
2046.0	168.0	6.33834	0.13050	0.35003	0.00556	0.77150	2.85690	1.58844
1594.0	40.0	5.05750	0.08099	0.28802	0.00338	0.73282	3.47198	1.17353
1875.0	56.0	6.07596	0.11074	0.34153	0.00505	0.81128	2.92800	1.47864
1460.0	50.0	4.84824	0.11701	0.26401	0.00438	0.68741	3.78774	1.65903
1699.0	54.0	5.46723	0.11623	0.30815	0.00467	0.71286	3.24517	1.51550
406.0	16.0	1.36919	0.02376	0.07172	0.00104	0.83562	13.94311	1.45008
595.0	22.0	1.92908	0.03823	0.10530	0.00161	0.77151	9.49668	1.52896
1064.0	60.0	2.38423	0.10486	0.18391	0.00308	0.38079	5.43744	1.67473
1524.0	54.0	5.35453	0.13970	0.27740	0.00465	0.64250	3.60490	1.67628
1218.0	54.0	4.15625	0.13999	0.21966	0.00391	0.52848	4.55249	1.78002
1011.0	54.0	2.68213	0.11318	0.17736	0.00316	0.42222	5.63825	1.78169
1734.0	96.0	5.66925	0.09639	0.30868	0.00464	0.88410	3.23960	1.50317
1405.0	48.0	4.76178	0.09564	0.25419	0.00376	0.73648	3.93407	1.47921
1725.0	52.0	5.69043	0.10625	0.31368	0.00457	0.78027	3.18796	1.45690
1732.0	40.0	5.79725	0.08768	0.31548	0.00357	0.74820	3.16977	1.13161
1650.0	56.0	5.27547	0.12866	0.29863	0.00486	0.66730	3.34863	1.62743
1092.0	32.0	4.44855	0.06785	0.19944	0.00268	0.88103	5.01404	1.34376
1150.0	56.0	3.31856	0.09573	0.20395	0.00332	0.56431	4.90316	1.62785
1700.0	52.0	5.74770	0.10390	0.30973	0.00461	0.82337	3.22862	1.48839
1471.0	50.0	4.83509	0.11633	0.26588	0.00439	0.68626	3.76110	1.65112
1537.0	48.0	5.22797	0.08730	0.27907	0.00393	0.84333	3.58333	1.40825
3173.0	280.0	1.75055	0.03907	0.08535	0.00142	0.74545	11.71646	1.66374
2344.0	118.0	7.14753	0.11345	0.38788	0.00553	0.89821	2.57812	1.42570
2288.0	82.0	7.40246	0.09838	0.40086	0.00506	0.94979	2.49464	1.26229
2193.0	76.0	7.18030	0.09388	0.39067	0.00491	0.96126	2.55971	1.25682
2274.0	80.0	7.25280	0.09454	0.39748	0.00495	0.95539	2.51585	1.24535
1667.0	96.0	7.04486	0.11309	0.38452	0.00532	0.86187	2.60064	1.38354
1942.0	56.0	6.39217	0.10452	0.35475	0.00509	0.87749	2.81889	1.43481

2231.0	66.0	7.30674	0.09155	0.39661	0.00487	0.98001	2.52137	1.22791
2249.0	98.0	7.05215	0.10613	0.38654	0.00541	0.93001	2.58705	1.39960
2195.0	110.0	7.22619	0.11452	0.39675	0.00564	0.89700	2.52048	1.42155
2141.0	86.0	7.04597	0.09899	0.38706	0.00513	0.94338	2.58358	1.32538
2124.0	80.0	7.09311	0.09694	0.38831	0.00503	0.94781	2.57526	1.29536
2278.0	94.0	7.41076	0.10480	0.40803	0.00543	0.94104	2.45080	1.33078
2196.0	194.0	7.25968	0.15187	0.39531	0.00629	0.76060	2.52966	1.59116
2162.0	102.0	7.19621	0.10429	0.39459	0.00514	0.89883	2.53428	1.30262
2261.0	296.0	7.04463	0.20563	0.37544	0.00702	0.64057	2.66354	1.86981
2135.0	88.0	7.29962	0.10380	0.39786	0.00524	0.92620	2.51345	1.31705
2114.0	90.0	7.22141	0.10250	0.39205	0.00512	0.92008	2.55070	1.30596
2148.0	94.0	7.28257	0.10316	0.39731	0.00508	0.90263	2.51693	1.27860
2078.0	122.0	7.16433	0.11747	0.38967	0.00541	0.84674	2.56627	1.38835
1886.0	48.0	6.20534	0.09316	0.34419	0.00441	0.85345	2.90537	1.28127
1919.0	58.0	6.51383	0.12152	0.35136	0.00537	0.81924	2.84608	1.52835
1047.0	38.0							
1024.0	32.0							
1066.0	32.0							
1053.0	34.0							
1032.0	36.0							
616.0	24.0							
613.0	38.0							
617.0	40.0							
606.0	28.0							
616.0	32.0							
606.0	22.0							
614.0	28.0							
616.0	32.0							
614.0	24.0							
615.0	26.0							
614.0	28.0							
614.0	30.0							
615.0	24.0							
614.0	24.0							
604.0	28.0							
624.0	30.0							
604.0	24.0							
627.0	24.0							
610.0	16.0							
715.0	34.0							
738.0	28.0							
718.0	24.0							
726.0	22.0							
2050.0	68.0	7.21948	0.08479	0.38546	0.00421	0.92996	2.59430	1.09220
2210.0	70.0	7.30579	0.08719	0.39339	0.00450	0.95849	2.54201	1.14390
2128.0	70.0	7.16156	0.08417	0.37965	0.00426	0.95472	2.63401	1.12209
2219.0	76.0	7.46001	0.09051	0.39592	0.00451	0.93888	2.52576	1.13912
2256.0	82.0	7.52752	0.09155	0.39861	0.00446	0.91998	2.50872	1.11889
2117.0	86.0	7.06437	0.08498	0.37771	0.00400	0.88036	2.64753	1.05901

2152.0	82.0	7.18483	0.09049	0.38682	0.00448	0.91957	2.58518	1.15816
1989.0	74.0	6.91744	0.08360	0.37183	0.00414	0.92129	2.68940	1.11341
2202.0	98.0	7.41501	0.10054	0.39385	0.00472	0.88386	2.53904	1.19843
2188.0	74.0	7.22920	0.08265	0.38909	0.00410	0.92168	2.57010	1.05374
2145.0	72.0	7.26360	0.08906	0.38858	0.00450	0.94450	2.57347	1.15806
2148.0	64.0	7.25933	0.08577	0.38355	0.00439	0.96873	2.60722	1.14457
2054.0	44.0	7.11831	0.08353	0.37799	0.00414	0.93337	2.64557	1.09527
2179.0	68.0	7.33813	0.08869	0.39262	0.00457	0.96306	2.54699	1.16398
1728.0	70.0	6.89067	0.09660	0.36565	0.00473	0.92274	2.73486	1.29359
2135.0	70.0	7.27666	0.08945	0.38810	0.00457	0.95791	2.57666	1.17753
2193.0	80.0	7.39262	0.09603	0.39345	0.00481	0.94112	2.54162	1.22252
2180.0	80.0	7.42969	0.09562	0.39453	0.00476	0.93745	2.53466	1.20650
2195.0	98.0	7.40451	0.10276	0.39631	0.00493	0.89636	2.52328	1.24398
1947.0	42.0	6.67581	0.07944	0.35709	0.00387	0.91075	2.80041	1.08376
1055.0	32.0							
1060.0	32.0							
622.0	22.0							
602.0	22.0							
612.0	28.0							
618.0	28.0							
611.0	22.0							
619.0	22.0							
615.0	26.0							
605.0	19.0							
744.0	22.0							
722.0	22.0							
1997.0	48.0	6.74921	0.09287	0.36625	0.00453	0.89887	2.73038	1.23686
1981.0	50.0	6.56031	0.09539	0.36254	0.00443	0.84037	2.75832	1.22193
2362.0	104.0	7.17971	0.09177	0.39697	0.00438	0.86322	2.51908	1.10336
1847.0	42.0	6.11759	0.10196	0.33692	0.00366	0.65179	2.96806	1.08631
2006.0	72.0	6.54744	0.08372	0.35365	0.00430	0.95090	2.82765	1.21589
2072.0	52.0	6.97242	0.09885	0.38053	0.00441	0.81744	2.62791	1.15891
662.0	18.0	2.00281	0.02874	0.11652	0.00142	0.84926	8.58222	1.21867
1134.0	34.0	3.31569	0.05656	0.20131	0.00284	0.82702	4.96746	1.41076
842.0	30.0	2.23417	0.04031	0.14711	0.00193	0.72714	6.79763	1.31194
1127.0	36.0	3.40708	0.05603	0.20065	0.00261	0.79098	4.98380	1.30077
1088.0	30.0	3.13435	0.05228	0.19265	0.00232	0.72199	5.19076	1.20426
837.0	38.0	1.58032	0.03916	0.14151	0.00157	0.44773	7.06664	1.10946
651.0	26.0	1.50606	0.02502	0.11189	0.00125	0.67247	8.93735	1.11717
857.0	44.0	2.00734	0.05414	0.14810	0.00164	0.41057	6.75219	1.10736
663.0	18.0	1.41321	0.02058	0.11302	0.00133	0.80809	8.84799	1.17678
1171.0	48.0	3.04046	0.07069	0.20566	0.00232	0.48520	4.86239	1.12808
1116.0	34.0	3.41638	0.05160	0.19887	0.00209	0.69581	5.02841	1.05094
809.0	26.0	2.00672	0.03253	0.14033	0.00195	0.85721	7.12606	1.38958
891.0	32.0	2.31819	0.04451	0.15564	0.00232	0.77635	6.42508	1.49062
1559.0	46.0	4.73978	0.08261	0.28038	0.00350	0.71622	3.56659	1.24831
1069.0	34.0							

1071.0	32.0							
1058.0	32.0							
1050.0	32.0							
614.0	26.0							
610.0	24.0							
601.0	30.0							
623.0	30.0							
615.0	22.0							
612.0	22.0							
622.0	28.0							
604.0	28.0							
619.0	22.0							
604.0	22.0							
628.0	30.0							
600.0	15.0							
710.0	22.0							
698.0	20.0							
715.0	22.0							
2460.0	108.0	8.18355	0.10482	0.41248	0.00486	0.91988	2.42436	1.17824
2139.0	86.0	8.18767	0.10864	0.41154	0.00508	0.93030	2.42990	1.23439
2121.0	52.0	7.75991	0.11047	0.39289	0.00481	0.85998	2.54524	1.22426
2245.0	194.0	8.01890	0.14218	0.40113	0.00457	0.64255	2.49296	1.13928
2179.0	56.0	7.92615	0.11461	0.40385	0.00530	0.90760	2.47617	1.31237
2429.0	158.0	7.90162	0.11835	0.40340	0.00452	0.74808	2.47893	1.12048
2465.0	86.0	8.71997	0.10676	0.44158	0.00510	0.94334	2.26460	1.15494
2318.0	120.0	8.26810	0.11573	0.41949	0.00513	0.87369	2.38385	1.22291
2037.0	58.0	7.01742	0.12179	0.37460	0.00530	0.81522	2.66951	1.41484
1913.0	46.0	6.72440	0.08942	0.35131	0.00422	0.90332	2.84649	1.20122
1713.0	72.0	6.62873	0.09720	0.34096	0.00466	0.93207	2.93290	1.36673
1804.0	52.0	6.52862	0.10480	0.33137	0.00461	0.86666	3.01777	1.39119
1988.0	54.0	7.15616	0.11010	0.36664	0.00498	0.88284	2.72747	1.35828
1626.0	46.0	5.87744	0.10107	0.29741	0.00409	0.79971	3.36236	1.37521
1748.0	42.0	5.84069	0.08133	0.31847	0.00380	0.85690	3.14001	1.19321
477.0	30.0	0.99438	0.03434	0.08086	0.00094	0.33662	12.36705	1.16250
992.0	26.0	3.00506	0.04222	0.17608	0.00207	0.83675	5.67924	1.17560
1993.0	86.0	7.39540	0.09658	0.37166	0.00442	0.91065	2.69063	1.18926
1420.0	72.0	7.40165	0.09737	0.37382	0.00440	0.89473	2.67508	1.17704
1696.0	92.0	7.07317	0.11024	0.36762	0.00508	0.88662	2.72020	1.38186
1069.0	36.0							
1051.0	36.0							
602.0	24.0							
623.0	24.0							
618.0	30.0							
609.0	30.0							
617.0	24.0							
611.0	24.0							
613.0	30.0							
611.0	16.0							
722.0	20.0							

694.0	22.0							
2197.0	78.0	7.12269	0.09012	0.39103	0.00453	0.91561	2.55735	1.15848
2202.0	84.0	7.10990	0.09418	0.38941	0.00479	0.92861	2.56799	1.23007
2211.0	82.0	7.14208	0.08622	0.39033	0.00430	0.91254	2.56193	1.10163
2307.0	54.0	9.76818	0.13650	0.43474	0.00506	0.83292	2.30023	1.16391
2574.0	102.0	10.67593	0.12995	0.46873	0.00516	0.90439	2.13342	1.10085
1304.0	28.0	5.30520	0.06887	0.23935	0.00245	0.78850	4.17798	1.02361
620.0	28.0	2.05668	0.03092	0.10995	0.00120	0.72596	9.09504	1.09141
857.0	42.0	3.75507	0.05690	0.18864	0.00260	0.90959	5.30110	1.37829
2324.0	192.0	4.29740	0.08497	0.06003	0.00098	0.82565	16.65834	1.63252
1189.0	52.0	5.37238	0.10553	0.21972	0.00279	0.64644	4.55125	1.26980
1040.0	32.0							
609.0	22.0							
615.0	22.0							
615.0	28.0							
609.0	14.0							
704.0	20.0							
2176.0	102.0	7.32496	0.10309	0.39440	0.00498	0.89718	2.53550	1.26268
2126.0	68.0	7.17105	0.08766	0.38725	0.00456	0.96328	2.58231	1.17753
924.0	34.0	5.59099	0.13313	0.17407	0.00285	0.68760	5.74482	1.63727
1574.0	44.0	5.18659	0.08331	0.28522	0.00380	0.82945	3.50607	1.33230
1759.0	42.0	5.49744	0.07513	0.31860	0.00371	0.85207	3.13873	1.16447
1694.0	48.0	5.11967	0.09043	0.30536	0.00427	0.79167	3.27482	1.39835
1713.0	42.0	5.59380	0.08544	0.31121	0.00370	0.77838	3.21326	1.18891
1530.0	38.0	4.76050	0.06352	0.27552	0.00341	0.92756	3.62950	1.23766
963.0	36.0	3.38406	0.05914	0.17307	0.00244	0.80672	5.77801	1.40983
1462.0	60.0	5.82600	0.07149	0.32023	0.00346	0.88052	3.12276	1.08047
1661.0	48.0	4.80439	0.08221	0.29805	0.00425	0.83332	3.35514	1.42594
1820.0	60.0	5.51767	0.13390	0.32914	0.00517	0.64727	3.03822	1.57076
1088.0	36.0	3.47813	0.07210	0.19446	0.00295	0.73182	5.14245	1.51702
1542.0	36.0	4.52704	0.05573	0.27627	0.00319	0.93796	3.61965	1.15467
1499.0	54.0	4.79377	0.13327	0.27036	0.00452	0.60137	3.69877	1.67184
1378.0	34.0	4.41619	0.06601	0.24802	0.00278	0.74989	4.03193	1.12088
1056.0	96.0	5.55933	0.11689	0.28972	0.00456	0.74857	3.45161	1.57393
1130.0	46.0	4.51354	0.05545	0.24945	0.00280	0.91367	4.00882	1.12247
1268.0	42.0	4.06290	0.08842	0.22768	0.00354	0.71444	4.39213	1.55481
1696.0	78.0	5.01677	0.07553	0.31990	0.00435	0.90319	3.12598	1.35980
1808.0	48.0	5.30174	0.08012	0.32589	0.00434	0.88124	3.06852	1.33174
1655.0	38.0	4.52868	0.05986	0.29538	0.00330	0.84522	3.38547	1.11720
1799.0	108.0	5.09814	0.08196	0.32801	0.00444	0.84199	3.04869	1.35362
1786.0	76.0	4.96360	0.06372	0.31838	0.00367	0.89793	3.14090	1.15271
1698.0	44.0	4.96775	0.07522	0.30524	0.00391	0.84598	3.27611	1.28096
2113.0	92.0	7.13257	0.09527	0.38402	0.00460	0.89680	2.60403	1.19785
1657.0	58.0	5.39987	0.14400	0.30055	0.00498	0.62135	3.32723	1.65696
2001.0	50.0	6.77209	0.09637	0.36708	0.00469	0.89783	2.72420	1.27765

1940.0	42.0	6.41975	0.08381	0.35465	0.00382	0.82506	2.81968	1.07712
1060.0	40.0							
1036.0	34.0							
1050.0	36.0							
611.0	24.0							
620.0	26.0							
613.0	32.0							
615.0	34.0							
607.0	22.0							
619.0	22.0							
613.0	28.0							
617.0	30.0							
614.0	24.0							
618.0	24.0							
610.0	28.0							
615.0	15.0							
713.0	22.0							
707.0	20.0							
720.0	24.0							
2343.0	150.0	7.38481	0.13029	0.39664	0.00599	0.85597	2.52118	1.51019
1992.0	46.0	6.85246	0.10370	0.36582	0.00415	0.74963	2.73358	1.13444
2189.0	96.0	7.71434	0.11539	0.39099	0.00547	0.93530	2.55761	1.39901
1730.0	86.0	7.36606	0.09471	0.36889	0.00394	0.83069	2.71084	1.06807
2156.0	56.0	7.77757	0.11893	0.39917	0.00528	0.86502	2.50520	1.32274
1848.0	68.0	6.40961	0.08234	0.34010	0.00416	0.95215	2.94031	1.22317
1798.0	54.0	6.33216	0.11236	0.32939	0.00480	0.82124	3.03591	1.45724
1492.0	42.0	4.94526	0.08008	0.27005	0.00379	0.86668	3.70302	1.40344
1575.0	44.0	5.27520	0.08503	0.28584	0.00388	0.84212	3.49846	1.35740
1711.0	130.0	5.35819	0.09968	0.28751	0.00433	0.80955	3.47814	1.50603
1078.0	36.0							
613.0	24.0							
610.0	26.0							
611.0	30.0							
615.0	16.0							
736.0	24.0							
		NORMAL CONCORDIA PLOT DATA					INVERSE CONCORDI	
Pb208/Th2	2 s	Pb207/U23	1s	Pb206/U23	1s	RHO	U238/Pb20	RSD
2178.0	29.0	6.92412	0.07813	0.38221	0.00421	0.97617	2.61636	1.10149
2124.0	38.0	6.77173	0.09061	0.37566	0.00446	0.88729	2.66198	1.18724
2193.0	39.0	6.94880	0.09427	0.38726	0.00469	0.89270	2.58224	1.21107
2086.0	22.0	7.09392	0.10459	0.38352	0.00418	0.73924	2.60743	1.08990
2172.0	37.0	7.03800	0.09237	0.38968	0.00463	0.90530	2.56621	1.18815
2138.0	41.0	6.78510	0.08461	0.37596	0.00418	0.89160	2.65986	1.11182
2131.0	38.0	6.95737	0.08738	0.38765	0.00455	0.93455	2.57965	1.17374
2151.0	35.0	6.80855	0.08508	0.37651	0.00426	0.90544	2.65597	1.13144
2054.0	38.0	6.69691	0.08627	0.37222	0.00431	0.89886	2.68658	1.15792

2101.0	47.0	6.75889	0.09341	0.37757	0.00429	0.82213	2.64852	1.13621
2216.0	57.0	7.25122	0.11324	0.39804	0.00521	0.83815	2.51231	1.30891
2176.0	61.0	6.89289	0.10973	0.38444	0.00476	0.77778	2.60119	1.23816
2131.0	34.0	7.10549	0.08389	0.39142	0.00436	0.94347	2.55480	1.11389
1118.0	20.0	2.27318	0.11288	0.19166	0.00259	0.27214	5.21757	1.35135
2061.0	30.0	6.58488	0.07894	0.36460	0.00415	0.94947	2.74273	1.13823
1728.0	20.0	5.13115	0.09440	0.31119	0.00343	0.59912	3.21347	1.10222
779.0	38.0	1.16422	0.10518	0.12853	0.00189	0.16276	7.78028	1.47047
885.0	33.0	2.37663	0.04878	0.15493	0.00225	0.70757	6.45453	1.45227
1991.0	24.0	6.24064	0.19109	0.36266	0.00488	0.43945	2.75740	1.34561
1751.0	20.0	5.26991	0.12578	0.31591	0.00377	0.50000	3.16546	1.19338
2488.0	74.0	4.07190	0.06461	0.21500	0.00251	0.73575	4.65116	1.16744
2223.0	75.0	2.49536	0.04823	0.12882	0.00199	0.79926	7.76277	1.54479
2140.0	48.0	6.96460	0.11207	0.37516	0.00516	0.85475	2.66553	1.37541
1982.0	28.0	6.59619	0.08040	0.36453	0.00422	0.94977	2.74326	1.15766
2074.0	35.0	6.98525	0.09271	0.37149	0.00464	0.94108	2.69186	1.24902
1428.0	22.0	4.71039	0.09032	0.25797	0.00336	0.67927	3.87642	1.30248
2024.0	38.0	6.69310	0.09035	0.36732	0.00449	0.90553	2.72242	1.22237
1642.0	20.0	4.88789	0.15147	0.29532	0.00377	0.41195	3.38616	1.27658
1380.0	20.0	4.56680	0.10810	0.24905	0.00357	0.60558	4.01526	1.43345
1253.0	22.0	2.72825	0.14779	0.21686	0.00302	0.25708	4.61127	1.39260
988.0	29.0	2.89198	0.07430	0.17476	0.00235	0.52340	5.72213	1.34470
2427.0	79.0	4.75206	0.08418	0.25046	0.00358	0.80690	3.99265	1.42937
2029.0	43.0	6.61177	0.10110	0.36432	0.00494	0.88677	2.74484	1.35595
2029.0	35.0	6.61504	0.08923	0.36241	0.00456	0.93280	2.75931	1.25824
2040.0	29.0	6.18139	0.22591	0.37078	0.00588	0.43392	2.69702	1.58585
726.0	18.0	2.01018	0.05653	0.12704	0.00168	0.47025	7.87154	1.32242
1040.0	15.0							
1038.0	16.0							
1006.0	15.0							
1023.0	16.0							
1040.0	15.0							
1038.0	16.0							
1006.0	15.0							
1023.0	16.0							
702.0	10.0							
706.0	10.0							
708.0	10.0							
720.0	10.0							
750.0	12.0							
2273.0	34.0	3.43210	0.05610	0.20914	0.00254	0.74301	4.78149	1.21450
1945.0	23.0	6.86813	0.08307	0.37834	0.00446	0.97465	2.64313	1.17883
1318.0	14.0	1.45052	0.04021	0.10445	0.00128	0.44207	9.57396	1.22547
1286.0	17.0	2.14735	0.03261	0.14864	0.00168	0.74426	6.72766	1.13025
1232.0	14.0	2.39647	0.03029	0.11618	0.00130	0.88529	8.60733	1.11895
1340.0	16.0	2.73303	0.04213	0.17787	0.00220	0.80237	5.62208	1.23686
1321.0	17.0	2.92181	0.03705	0.15164	0.00170	0.88409	6.59457	1.12108
1675.0	18.0	3.02142	0.05198	0.19491	0.00219	0.65311	5.13057	1.12360

1369.0	18.0	3.09820	0.03919	0.17189	0.00192	0.88305	5.81767	1.11699
1757.0	19.0	3.20421	0.07803	0.17381	0.00222	0.52449	5.75341	1.27726
1420.0	17.0	3.33634	0.04540	0.21157	0.00240	0.83363	4.72657	1.13438
1196.0	14.0	3.89057	0.06391	0.23344	0.00294	0.76668	4.28376	1.25942
1769.0	20.0	3.95244	0.05905	0.23596	0.00292	0.82830	4.23801	1.23750
1308.0	17.0	4.25233	0.05724	0.25427	0.00294	0.85897	3.93283	1.15625
1178.0	15.0	4.80931	0.07587	0.28536	0.00308	0.68418	3.50435	1.07934
1614.0	19.0	5.59708	0.07689	0.32082	0.00364	0.82591	3.11701	1.13459
1134.0	13.0	6.01756	0.09364	0.35338	0.00416	0.75650	2.82981	1.17720
825.0	18.0	2.18940	0.03524	0.14849	0.00168	0.70291	6.73446	1.13139
870.0	10.0	2.68556	0.05358	0.15422	0.00169	0.54926	6.48424	1.09584
1586.0	19.0	3.26019	0.05416	0.20092	0.00222	0.66511	4.97711	1.10492
852.0	10.0	3.46736	0.05574	0.21837	0.00226	0.64379	4.57938	1.03494
817.0	18.0	3.64051	0.06154	0.22840	0.00277	0.71744	4.37828	1.21278
566.0	13.0	3.92225	0.05127	0.23532	0.00247	0.80299	4.24953	1.04963
1532.0	20.0	3.95928	0.05961	0.23908	0.00284	0.78899	4.18270	1.18789
607.0	8.0	4.00112	0.07139	0.24430	0.00285	0.65383	4.09333	1.16660
855.0	10.0	4.42355	0.07640	0.27407	0.00315	0.66547	3.64870	1.14934
1012.0	13.0	4.45921	0.08840	0.30951	0.00353	0.57531	3.23091	1.14051
972.0	12.0	4.95763	0.07036	0.29080	0.00328	0.79474	3.43879	1.12792
1106.0	15.0	5.24327	0.07020	0.30274	0.00329	0.81169	3.30316	1.08674
1741.0	25.0	5.49666	0.07753	0.31822	0.00346	0.77086	3.14248	1.08730
1080.0	17.0							
1065.0	16.0							
1079.0	17.0							
725.0	11.0							
724.0	11.0							
726.0	11.0							
2155.0	76.0	0.85618	0.01145	0.05554	0.00069	0.92897	18.00504	1.24235
2102.0	78.0	1.29735	0.01851	0.08882	0.00105	0.82857	11.25873	1.18217
2155.0	76.0	1.39785	0.02749	0.10626	0.00121	0.57903	9.41088	1.13872
1982.0	48.0	2.17017	0.02958	0.14881	0.00172	0.84799	6.71998	1.15584
2127.0	92.0	2.57962	0.03021	0.16830	0.00180	0.91326	5.94177	1.06952
1897.0	66.0	1.38827	0.01819	0.07727	0.00091	0.89882	12.94163	1.17769
2937.0	98.0	3.30976	0.04790	0.20949	0.00229	0.75532	4.77350	1.09313
745.0	40.0	0.23310	0.01467	0.03099	0.00046	0.23586	32.26847	1.48435
951.0	38.0	1.06997	0.01344	0.07895	0.00085	0.85712	12.66624	1.07663
855.0	26.0	1.81412	0.02687	0.12892	0.00152	0.79602	7.75675	1.17903
2153.0	100.0	2.27438	0.03619	0.16579	0.00196	0.74297	6.03173	1.18222
4522.0	184.0	3.46513	0.04556	0.21317	0.00245	0.87413	4.69109	1.14932
195.0	10.0	4.91011	0.07881	0.31092	0.00350	0.70134	3.21626	1.12569
1733.0	64.0	6.58897	0.10621	0.36288	0.00447	0.76418	2.75573	1.23181
3599.0	188.0	6.59444	0.08134	0.35778	0.00421	0.95398	2.79501	1.17670
956.0	26.0	6.71123	0.08789	0.37293	0.00454	0.92959	2.68147	1.21739
1184.0	36.0	6.72986	0.08201	0.37917	0.00438	0.94794	2.63734	1.15515
5193.0	196.0	6.74990	0.08392	0.37998	0.00431	0.91232	2.63172	1.13427
1201.0	32.0	6.91747	0.09447	0.38520	0.00472	0.89724	2.59605	1.22534
621.0	32.0	7.27902	0.09672	0.39213	0.00493	0.94618	2.55017	1.25724

1071.0	34.0
1077.0	34.0
729.0	22.0
719.0	24.0

IA PLOT DATA

Pb207/Pb2	RSD
0.13110	1.75439
0.13298	1.09791
0.13164	1.18505
0.13145	1.27045
0.13114	1.26582
0.13150	1.12548
0.13164	1.09389
0.13038	1.81009
0.13178	1.09273
0.13252	1.58467
0.12885	1.73846
0.11252	1.67970
0.12939	2.23356
0.12658	2.47274
0.11691	2.96810
0.12887	1.77698
0.12888	2.25016
0.12998	2.30035
0.12999	1.99246
0.14309	1.91488
0.13567	1.94590
0.13276	1.13739
0.13230	1.12623
0.13297	1.22584
0.13368	1.12956
0.13305	1.51823
0.13737	2.51874
0.13214	1.47571
0.13185	1.61547
0.13370	1.70531
0.13289	1.83611
0.13372	1.24140
0.13404	1.57416
0.13311	1.23958

0.13559	2.17568
0.13679	1.85686
0.13247	1.66830
0.12983	1.86398
0.13804	2.04289
0.13763	1.83100
0.13366	1.51130
0.13504	1.13300
0.13068	2.48699
0.13487	1.60896
0.13256	1.60682
0.13289	1.97908

0.13899	2.58292
0.14099	2.75906
0.14025	2.60250
0.15039	2.63315

0.13496	1.14108
0.13162	1.16244
0.13237	1.96419
0.13065	1.75277
0.13160	1.19301
0.13240	1.14804

0.15369	2.49854
0.14165	2.10378
0.12970	1.88897
0.14253	1.78910
0.12927	2.18148
0.12971	2.12782
0.13260	1.16893
0.14322	2.15752
0.14583	2.09833

0.14708	2.59043
0.21603	2.75888
0.22120	2.12025
0.10665	1.65026
0.44989	1.24919

0.13410	1.54362
0.13051	2.88101
0.13167	2.38475
0.13136	1.83465

0.12736	1.98649
0.12903	2.34829
0.13318	2.92837
0.12868	2.61113
0.13846	2.26058
0.13286	2.49887
0.09402	4.71176
0.14000	3.10000
0.13723	3.81112
0.10968	4.57695
0.13322	1.39619
0.13586	2.49522
0.13157	2.37136
0.13327	1.89090
0.12812	2.93475
0.16177	2.03375
0.11801	3.31328
0.13459	2.34044
0.13189	2.91910
0.13587	2.18591
0.14878	2.04329

0.13366	1.32426
0.13394	1.14230
0.13331	1.11019
0.13235	1.11825
0.13289	1.40718
0.13068	2.17325

0.13363	1.07012
0.13233	1.24688
0.13210	1.34746
0.13204	1.18146
0.13249	1.15480
0.13174	1.18415
0.13320	1.89940
0.13228	1.27759
0.13614	2.85001
0.13307	1.20989
0.13360	1.22006
0.13295	1.24859
0.13335	1.43982
0.13076	1.97308
0.13446	2.40964

0.13585	1.14096
0.13471	1.09866
0.13682	1.09633
0.13667	1.13412
0.13697	1.16814
0.13567	1.21619

0.13472	1.18023
0.13494	1.15607
0.13656	1.26684
0.13476	1.15019
0.13559	1.12840
0.13728	1.07809
0.13658	1.60346
0.13557	1.09169
0.13669	1.21443
0.13600	1.10294
0.13629	1.14462
0.13660	1.14934
0.13552	1.25443
0.13559	1.60779

0.13365	1.84811
0.13124	1.89729
0.13119	1.25772
0.13169	1.98952
0.13429	1.11699
0.13289	1.82858
0.12466	1.88513
0.11946	2.20994
0.11014	2.23352
0.12315	2.09501
0.11800	2.05932
0.08099	2.71638
0.09762	1.99754
0.09830	2.91963
0.09069	1.87452
0.10722	2.58347
0.12459	1.83803
0.10371	2.13094
0.10803	2.43451
0.12261	2.14501

0.14390	1.17443
0.14431	1.16416
0.14325	1.87784
0.14498	1.84163
0.14235	1.95293
0.14210	1.52006
0.14323	1.12407
0.14296	1.29407
0.13586	2.23760
0.13882	1.79369
0.14102	1.19132
0.14289	2.12751
0.14156	2.05567
0.14333	2.20470
0.13301	1.83445
0.08919	3.64391
0.12377	1.83405
0.14433	1.19864
0.14362	1.22546
0.13956	1.32559

0.13211	1.18840
0.13243	1.17798
0.13271	1.16042
0.16296	1.81640
0.16519	1.17441
0.16076	1.65464
0.13567	1.85745
0.14439	1.26048
0.51911	2.27505
0.17734	2.34014
0.13471	1.26197
0.13431	1.08704
0.23295	2.88903
0.13188	2.08523
0.12515	1.79784
0.12160	2.25329
0.13036	1.93311
0.12531	1.81949
0.14181	2.24949
0.13196	1.22007
0.11691	2.22393
0.12158	2.89521
0.12972	2.56707
0.11884	1.69135
0.12860	3.24261
0.12914	1.86619
0.13917	1.93289
0.13123	1.15827
0.12942	2.67347
0.11375	1.28352
0.11799	2.01712
0.11120	1.72662
0.11273	1.43706
0.11307	1.21164
0.11804	1.98238
0.13475	1.24675
0.13031	3.13867
0.13380	1.91330

0.13129	1.69091

0.13506	1.47342
0.13585	1.89179
0.14311	1.20886
0.14483	1.29807
0.14131	2.02392
0.13669	1.12664
0.13942	2.29522
0.13281	2.13839
0.13385	2.10684
0.13518	1.63486

IA PLOT DATA

Pb207/Pb2	RSD
0.13140	1.05784
0.13074	1.27734
0.13014	1.27555
0.13415	1.83377
0.13100	1.22901
0.13090	1.21467
0.13018	1.14457
0.13116	1.21988
0.13050	1.22605

0.12984	1.40173
0.13215	1.45289
0.13004	1.59182
0.13167	1.10883
0.08602	5.14997
0.13100	1.12214
0.11959	2.14065
0.06570	9.14764
0.11126	2.51663
0.12481	3.34108
0.12099	2.66964
0.13738	1.66691
0.14051	1.75788
0.13463	1.45584
0.13125	1.12000
0.13638	1.15120
0.13243	2.31821
0.13215	1.22588
0.12004	3.34888
0.13299	2.76713
0.09124	5.58965
0.12002	2.89952
0.13761	1.60599
0.13163	1.35987
0.13239	1.18589
0.12091	3.98644
0.11476	3.10213

0.11902	2.03327
0.13167	1.06326
0.10072	3.02820
0.10478	1.88967
0.14962	1.20973
0.11144	1.97416
0.13977	1.21628
0.11243	2.05461

0.13073	1.21625
0.13371	2.75222
0.11437	1.77494
0.12087	2.06834
0.12148	1.94271
0.12129	1.77261
0.12223	1.91442
0.12653	1.77823
0.12350	1.95142
0.10694	1.96372
0.12629	2.28047
0.11768	1.99694
0.11516	1.91039
0.11560	2.07612
0.12089	1.67921
0.12011	1.91491
0.11878	2.12999
0.11706	2.07586
0.10449	2.28730
0.12364	1.81171
0.12561	1.72757
0.12528	1.78001

0.11181	1.18057
0.10595	1.36857
0.09541	2.27439
0.10577	1.78690
0.11118	1.15129
0.13033	1.20463
0.11459	1.81517
0.05456	6.46994
0.09830	1.25127
0.10205	1.89123
0.09949	1.98010
0.11789	1.74739
0.11454	1.96438
0.13169	2.02749
0.13369	1.10704
0.13054	1.17972
0.12874	1.11853
0.12885	1.20295
0.13026	1.24367
0.13464	1.15122