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Jimmy Muñoz: Data acquisition, Validation, Data Curation
Carlos Quintero: Methodology, Investigation
Oscar Laurent: Formal analysis, Investigation
Albrecht von Quadt: Formal analysis, Investigation, Resources.
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Middle-Late Triassic metamorphism of the Guajira Arch-basement: Insights from zircon U-Pb and Lu-Hf systematics

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Abstract

The Guajira Arch is located in the northernmost portion of South America and holds the record of several stages of magmatism and metamorphism. We performed LA-ICP-MS U-Pb zircon geochronology coupled with Lu-Hf isotope geochemistry on 11 samples from a high-grade gneissic basement hosting interleaved complexes of younger meta-granitoids and meta-sediments to unravel its tectono-metamorphic evolution. The oldest rocks correspond to a Rodinia-type basement at ca. 1100-880 Ma, affected by mafic magmatism during the Permian at ca. 272 Ma, anatexis during the Carnian at ca. 230 Ma, updoming and the formation of an extensional detachment fault during the Norian at ca. 224 Ma concluding with Jurassic magmatism since ca. 190 Ma. Trace element geochemistry shows that Triassic zircons are depleted in HREE and yield lower Th/U ratios than Jurassic zircons enriched both in HREE, Yb, and Y. Hf systematics indicates a Triassic to Jurassic evolution towards more radiogenic compositions. The lithological associations, structural setting, U-Pb ages, and Hf isotope geochemistry of the Triassic-Jurassic rocks at the Guajira Arch characterize an active margin setting of a hot orogenic belt in NW-Gondwana, comprising the Central Cordillera of Colombia, the Santa Marta Massif, the Merida Andes, the Perijá Range, the Santander Massif and the para-autochthonous terranes south of the Ouachita-Marathon Suture (Oaxaquia, Acatlán, and Maya), and thus vindicate the existence of a conjugate margin with Laurentia until the Late Triassic, preceding the breakup of western Pangaea. The Triassic anatectites and Jurassic granitoids from the Guajira Arch yield Proterozoic Hf T_{DMi} ages which are indistinguishable from the autochthonous Proterozoic basement and thus render an allochthonous origin by terrane accretion highly improbable. Instead, these data point to melting of the continental crust by the incorporation of primitive material reflecting a two-stage process at the boundary of a large underlying mantle convection cell (i) Triassic slab steepening, subduction arrest, updoming anatexis at ca. 230-223 Ma and (ii) Early Jurassic arc-magmatism at ca. 190-165 Ma due renewed convergence. Furthermore, we propose that the structural setting, lithology, and isotope geochemistry of the Guajira Arch units, fit into the style of a cordilleran core-complex emplaced in a roll-back extensional setting preceding Pangaea break-up.

Keywords: Guajira Arch, Geochronology, Peri-Gondwana terranes, amphibolite facies metamorphism, Pangaea.

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1. INTRODUCTION

The Late Paleozoic-Early Mesozoic evolution of western Pangaea continental margin was governed by subduction geodynamics, typical of cordilleran orogenic systems (Collins and Richards, 2008; Decelles et al., 2009; Collins et al., 2011). This evolution involves a plate setting prompted by the reorganization of a far stress field, intermittent arc-magmatism, and metamorphism linked to alternating periods of extension and compression, changes in slab geometries and convergence rates, the accretion of para-autochthonous blocks, and their corresponding feedbacks (Pindell, 1985; Murphy et al., 2004; Meert and Lieberman, 2008; Pindell and Kennan, 2009; Nance et al., 2012; Spikings et al., 2015; van der Lelij et al., 2016b; Cardona et al., 2016).

A prime challenge in such a geodynamic context consists of unravelling multiple magmatic-arc building stages and associated metamorphic events (Zuluaga, 2015; Montes et al., 2019; Zuluaga and Lopez, 2019). In this work, we focus on a regional Late Paleozoic - Early Mesozoic first contractional and then extensional orogenic evolution that is widely documented along the Northern Andean continental margin (Fig. 1A; Vinasco et al., 2006a; Cardona et al., 2010b; Villagómez et al., 2011; Van Der Lelij, 2013; Cochrane et al., 2014a; Martens et al., 2014; van der Lelij et al., 2016b; Zuluaga et al., 2017; Spikings and Paul, 2019; Tazzo-Rangel et al., 2019).

During the Permian to Early-Triassic assembly of Pangaea, north-western Gondwana basement inliers (i.e., Oaxaquia block, southern Chiapas massif, Acatlán and Xolapa complexes, and the Tahamí terrane) were juxtaposed into a complex array and recorded, by their position at the active continental margin, the Panthalassian subduction (Weber et al., 2007; van der Lelij et al., 2016b; Riel et al., 2018), in addition to the far-reaching collisional events related to the Alleghanian orogeny along the Ouachita-Marathon Suture (Pindell, 1985; Sacks and Secor,

1990; Weber et al., 2007; Murphy et al., 2010; Nance et al., 2012; van der Lelij et al., 2016b; Spikings and Paul, 2019; Coombs et al., 2020). The Late Paleozoic-Triassic tectono-metamorphic events during Pangaea assembly were followed by extensive magmatic arc build-up that culminated in rifting during Jurassic Pangaea break-up (Bayona et al., 2006; Pindell and Kennan, 2009; Cochrane et al., 2014a, 2014b; Zuluaga, 2015; Spikings et al., 2015; van der Lelij et al., 2016b, 2016a; Quandt et al., 2018).

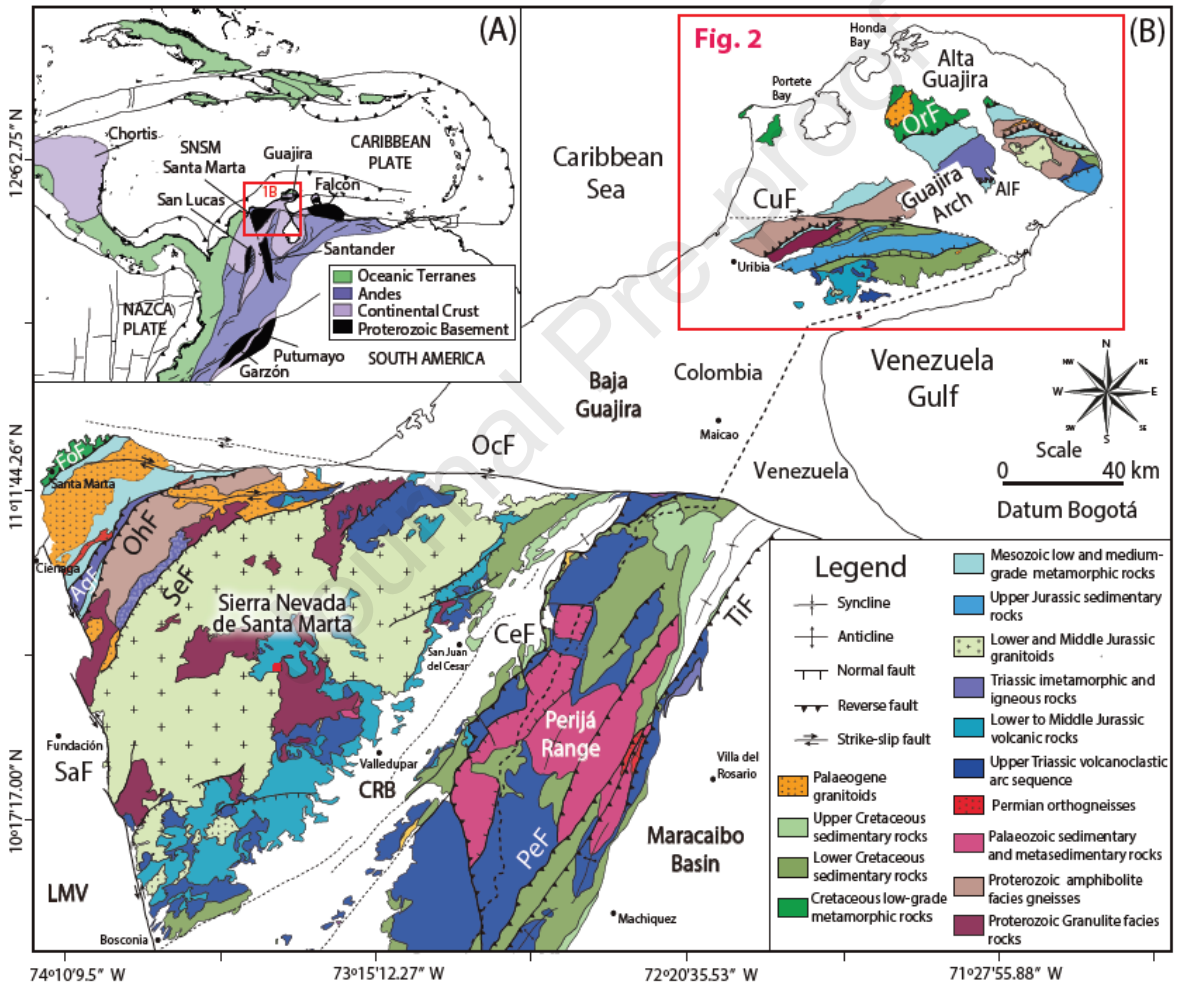


Figure 1. A) Plate tectonic overview of Northern South America, the Antilles, and Central America, showing in black the Proterozoic basement exposures of the Northern Andes and part of the Chortis block (adapted from Luzieux et al., 2006; Veloza et al., 2012; Weber et al., 2018; Vallejo et al., 2019; Tazzo-Rangel et al., 2019), black square encloses mapped area shown in B) Regional geology and new field mapping (this study) of the NW-Maracaibo block, the Guajira Peninsula, the Santa Marta Massif and the Perjá Range. LMV—Magdalena –valley, CRB—Cesar-Rancheria Basin, AgF—Aguja Fault, CeF—Cerrejón Fault, CuF—Cuisa Fault, FoF—Florín Fault, OcF—Oca Fault. OhF—Orihueca Fault, OrF—Ororio Fault, PeF—Perija Fault, SaF—Santa Marta Fault, SeF—Sevilla Fault, TiF—El Tigre Fault (compiled fromTschanz et al., 1969, 1974; Irving, 1972, 1975; Kellogg, 1984; Colmenares, 2007, and new mapping from this study).

At the northernmost Andes, the Guajira Peninsula (Fig. 1B) consists of two well-defined domains. The Baja Guajira southern lowlands expose a Cenozoic basin fill (Irving, 1975), whereas the hilly/mountainous north-eastern part is subdivided among the Macuira, Jarara, Simarua, and Cosinas ranges (Figs. 1-2). Along these four ranges, an ENE-WSW trending high-grade basement inlier named the Guajira Arch is mantled by sedimentary rocks, low-to medium-grade meta-pelites, intruded by several igneous and meta-igneous suites (Fig. 2; MacDonald, 1964; Lockwood, 1965; Alvares, 1967). The Macuira, Jarara, and Simarua ranges are separated by localized basins infilled by Oligocene-Pliocene sedimentary rocks (Fig. 2). The latter most likely originated by transtensional tectonics during Cenozoic transient stages of accretion of the Caribbean plate (Kellogg, 1984; Gómez and Burke, 2001; Quintero, 2017).

The paleogeographic setting of the Guajira Arch concerning its position along the continental margin of Gondwana has been questioned (Bayona et al., 2019), and different hypotheses heralding an autochthonous (Bartok et al., 2015), para-autochthonous (Nova et al., 2019), or allochthonous origin (Cediel et al., 2019; Colmenares et al., 2019) are discussed. These divergent interpretations were based on stratigraphy (Bartok et al., 2015), detrital zircon geochronology, and paleomagnetic data obtained from Mesozoic volcanic suites and platform sedimentary rocks (MacDonald and Opdyke, 1972; Bayona et al., 2006; Nova et al., 2019). However, isotopic data from this basement inlier to support such diverse models remains scarce, making it difficult to discern the participation of primitive/juvenile crustal sources in magma generation and its late detrital reworking. The collection of new geochemical-isotopic data is crucial for establishing which of the invoked processes, as terrane migration or sediment transferring were dominant during Early Mesozoic times. Furthermore, a unifying synthesis that integrates deformation phases and metamorphic events based on radiometric ages of crystallization and cooling events for basement and cover altogether has not been elaborated so

far (MacDonald, 1964; MacDonald and Opdyke, 1972; Cordani et al., 2005; Weber et al., 2009, 2010; Cardona et al., 2010a, 2014; López and Zuluaga, 2012).

In this contribution, we integrated field mapping with zircon U-Pb geochronology, Lu-Hf isotopic, and trace element compositions on representative key samples of the various lithologies from the Guajira Arch, in order to: 1) examine the possible distinction between a Proterozoic high-grade metamorphic basement and overlying younger meta-sediments; 2) to discuss the geochronological and isotopic affinity of the Guajira Arch basement concerning the Proterozoic Gondwanan continental realm and other para-autochthonous terranes; 3) to highlight the importance of a Late Paleozoic-Early Mesozoic tectono-metamorphic event, comprising the structural evolution of the continental margin; and finally, 4) to elucidate the geodynamic significance of the onset of Jurassic arc-magmatism.

Our results deliver new geochronological and isotopic constraints on the Proterozoic and Permo-Jurassic tectono-metamorphic events that affected this part of the western Pangaea realm and give insight into the evolution of this highly remobilized crustal section in a geodynamic context.

2. GEOLOGICAL SETTING

The Guajira Peninsula is located at about 12°N and constitutes the northernmost extension of the Andes (Figs 1-2). At the north-eastern part of the peninsula, a high-grade basement inlier named the Guajira Arch (Fig. 2) is covered at its NW-SE flanks by low-to-medium grade metasediments and sedimentary rocks of Jurassic to Late Cretaceous age (Renz, 1960; Alvares, 1967). Towards the south, the Cosinas Trough (Fig. 2) sedimentary units are juxtaposed to granodiorites, rhyodacites, and overlying volcanoclastic deposits remnants of a Jurassic magmatic arc (Rollins, 1965; Alvares, 1967; Zuluaga et al., 2015).

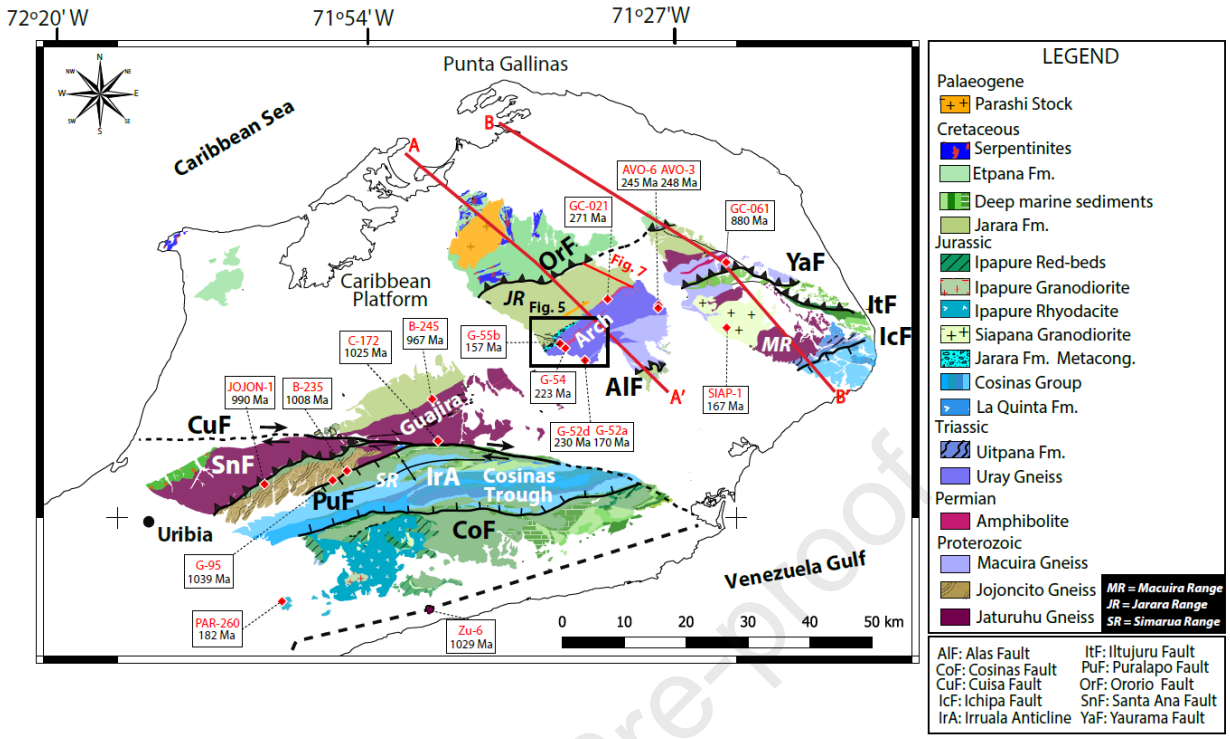


Figure 2. Detailed geological map of the Guajira Arch (SNSM) with cross-sections A-A' Jarara range and B-B' Macuira range (Fig. 3). Including sampling sites and U-Pb ages obtained in this study, modified from Irving, (1972) and new data (this study). Uray Gneiss samples (AVO-3, AVO-6), Jojoncito Gneiss sample (JOJON-1), Siapana Granodiorite (SIAP-1), Atuschón gneiss sample (Zu-6), and Ipapure Rhyodacite sample (PAR-260) compiled from Cardona et al. (2006); Zuluaga et al. (2015); Baquero et al. (2015), and Weber et al. (2010). A detailed map of the Uray gneiss and Jarara Formation contact is framed in figure 5. A stratigraphic section in figure 7 is indicated.

The Meso-Neoproterozoic basement of high-grade amphibolite to granulite facies units comprises the Macuira schists, Jaturuhu, Atuschón, and Jojoncito gneisses (Fig. 2; Radelli, 1962; MacDonald, 1964; Lockwood, 1965; Alvares, 1967; Irving, 1972; Cordani et al., 2005). The Atuschón and Jojoncito granitic gneisses yield zircon inherited core ages of 1550-1200 Ma. Metamorphism is dated at ca. 1028.7 Ma for the Atuschón Gneiss, whereas the Jojoncito Gneiss discloses a rim recrystallization age of ca. 916 Ma (Cordani et al., 2005; Baquero et al., 2015), bracketing a Late Mesoproterozoic-Early Neoproterozoic event. Currently, there are not available zircon U-Pb ages from the Macuira schists, yet an Sm/Nd model age (T_{DM}) of =1.45 Ga obtained from a muscovite schist hint to a Mesoproterozoic crustal source (Cardona et al., 2006).

In contrast, available Ar-Ar ages in amphibole may indicate a Mesozoic thermal event at ca. 200-100 Ma; however, these ages are highly discordant and should be treated carefully as they could also reflect alteration, partial resetting, slow cooling, Ar excess, recoil, or recrystallization (MacDonald, 1964; MacDonald and Opdyke, 1972; Cardona et al., 2006). The Meso-Proterozoic granulite facies basement exposures are mantled by Late Paleozoic-Triassic amphibolite facies mylonitic meta-granitoids, amphibolites, and paraschists named Uray Gneiss (Fig. 5; Lockwood, 1965; Alvares, 1967; Weber et al., 2010). Leucocratic units from the latter yield a Middle Triassic age (ca. 245 Ma; AVO-3, AVO-6 Fig. 3; Weber et al., 2010).

At the Jarara Range, the amphibolite facies mylonites from the Uray Gneiss are overlain in a tectonic contact at the NW by the greenschists facies meta-sediments of the Jarara Formation (Figs. 2-3). The Jarara Formation sets in with a basal meta-conglomerate level superseded by muddy to siliciclastic meta-sediments, with sporadic marble seams. At its middle part, bryozoans indicate an Upper Cretaceous age. These marine sedimentary rocks are superseded by mafic meta-volcanic rocks and felsic to intermediate meta-tuffs (Lockwood, 1965). At its top, the Jarara Formation is thrusted by the Etpana Complex by the N-dipping Ororio fault (Figs. 2-3). This suite contains blocks of strongly serpentinized meta-ultramafic and meta-mafic rocks, embedded in a meta-pelitic matrix containing submarine lava flows and mafic meta-tuffs, glaucophane schists, and eclogite blocks, interpreted as a subduction channel (Medina Avellaneda, 2009). Paleogene conglomerates fringing the Jarara range contain blocks of eclogites derived from the Etpana Complex (Weber et al., 2010).

The Siapana granodiorite (Figs. 2 & 3) intruded the Macuira schists at ca. 167 Ma in a continental arc setting, and magma genesis entailed significant crustal contribution considering the Sm/Nd model age (T_{DM}) of = 1.47 Ga (Cardona et al., 2006, 2014). Jurassic arc build-up led to thermal metamorphism and, ultimately, to basement exhumation before the deposition of the

Cretaceous successions as evidenced by zircon provenance and fission-track data from the Cosinas Group, indicating sourcing from Jurassic plutons and Proterozoic basement ca. 154 Ma (Radelli, 1962b; MacDonald, 1964; García-Gonzales et al., 2010; Nova et al., 2019), implying that some of the Jurassic plutons had to be exposed at the time of deposition of these units.

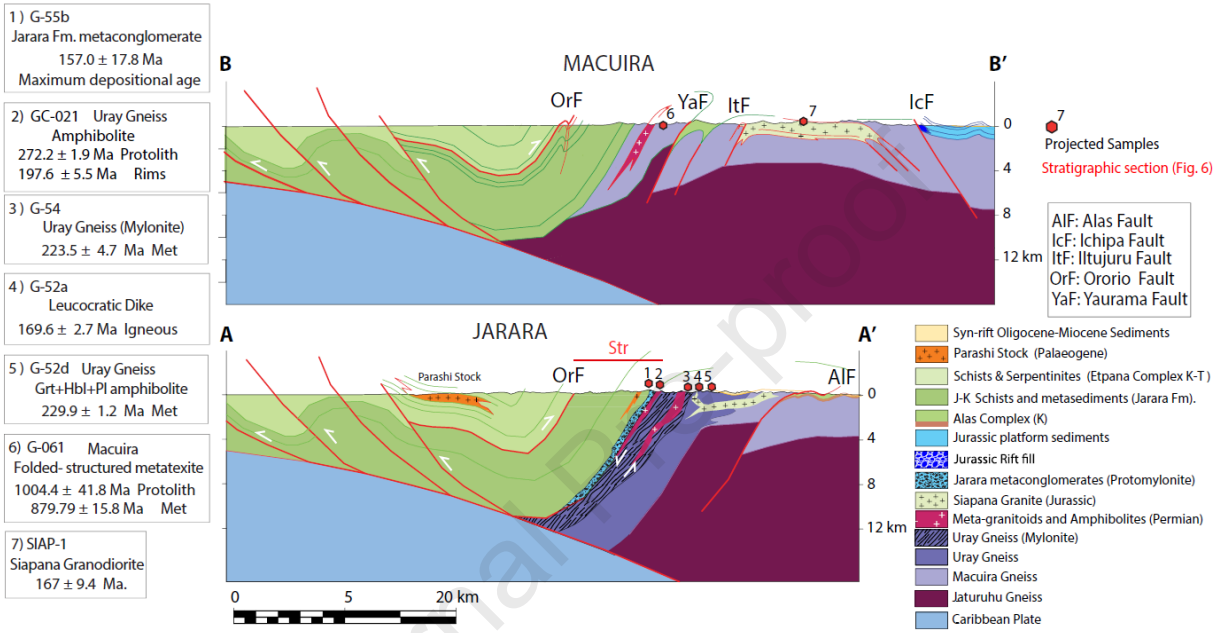


Figure 3. Cross-sections A-A' and B-B' from the Jarara and Macuira ranges, in which a Late Cretaceous accretionary prism obducts the metamorphic Proterozoic-Triassic core. Mylonites separate the high-grade Triassic anatectites from a low-grade metasedimentary cover. Sub-vertical thrusts at the metamorphic core separate metasedimentary imbrications from the Proterozoic basement and maybe equivalent to crystalline nappes that overlay the Alas Complex metasediments. See cross-section location in Figure 2. AlF: Alas fault, IcF: Ichipa fault, ItF: Itujuru fault, OrF: Ororio fault, YaF: Yaurama fault.

During the Late Cretaceous-Paleogene, associated platform sequences of the Jarara Formation and the Etpana Complex were partially obducted onto the continental margin as the convergence between the Caribbean plate and continental South America was increased (Lockwood, 1971; Weber et al., 2010, 2011). By Eocene times, the subduction gradually ceased as the convergence of the Caribbean plate against the continental margin of NW South America became oblique (Fig. 3; Lockwood, 1971; García-Casco et al., 2008; Cardona et al., 2011, 2014; Montes et al., 2019; Bustamante et al., 2021). The emplacement of the Parashi stock has

179 occurred under a transtensional regime that affected the upper plate, causing syn-kinematic
180 deformation of the Jarara Formation, Etpana complex, and Parashi stock (Bustamante et al.,
181 2021).

182 The east-trending right-lateral Cuisa fault activity (Fig. 2), which dissects the Guajira
183 Arch, is recorded at least since the Oligocene by the Siamana Formation deposits (Renz, 1960;
184 Gómez and Burke, 2001; Vence, 2008; García-Gonzales et al., 2010; Zapata et al., 2010;
185 Quintero, 2017). Dextral transtensional structures as the Cuisa and Oca faults (Figs. 1-2)
186 remained active during the Neogene, coeval to exhumation and relief building (Gómez and
187 Burke, 2001; Cardona et al., 2011; Bustamante et al., 2021 Figs. 1-2). The strain was transferred
188 from the Caribbean plate to the continental margin through clockwise block rotation (MacDonald
189 and Opdyke, 1972; Bayona et al., 2006, 2011, 2013; Montes et al., 2010; Zapata et al., 2014;
190 Cardona et al., 2018).

191 This process disrupted the otherwise continuous continental margin into Proterozoic
192 inliers separated by pull-apart basins, for instance, the Santa Marta Massif and Guajira Arch
193 separated by the Baja Guajira basin (Alvares, 1967; Irving, 1975; Macellari, 1995; Montes et al.,
194 2010, 2019; Zapata et al., 2014; Londono et al., 2015; Piraquive et al., 2018).

195

196 **3. METHODS**

197 Samples were crushed and zircons extracted following the standard procedures (e.g.,
198 Mange and Maurer 1992) at the Colombian Geological Survey (SGC) and Universidad Nacional
199 de Colombia facilities. Lithium polytungstate (2.89 g/cm^3) and Methylene iodide (d = 3.32
200 g/cm^3) were used for density separation out of the sieved 400-63 µm fraction. Zircon grains from
201 the heavy mineral concentrates were randomly selected by pipette and then hand-picked. After
202 mounting in epoxy, grains were abraded to a sub-equatorial section and polished. Zircon

cathodoluminescence (CL) imaging was carried out using a Vega ©Tescan MV2300VP SEM at the Institute of Geochemistry and Petrology of the (ETHZ) at Zurich, Switzerland, and at the Colombian Geological Survey (SGC) using the JEOL JSM-IT300LV SEM, with a MiniCL Gatan to observe the internal structures of the crystals.

U–Pb geochronology and *in-situ* trace element composition of zircons were performed through laser ablation inductively coupled mass spectrometry (LA-ICP-MS) at both the ETHZ and SGC facilities. Zircon Lu-Hf isotopic compositions were measured by laser ablation, multi-collector inductively coupled plasma mass spectrometry (LA-MC-ICP-MS) at ETHZ. Lu-Hf results were plotted using the visual and statistical approach described by Andersen et al. (2018). The detailed analytical parameters and specifications of the methods and procedures are described in Appendix 1.

4. RESULTS

Sample location and lithology are shown in Table 1 and figures 2-7. Zircons detailed CL morphology, Th/U ratio, and Y content are presented in Table 2. Cathodoluminescence imagery, Concordia plots, and trace element geochemistry are plotted in figures 8-14. The complete datasets of U-Pb geochronological results are compiled in Table A1, trace element compositions in table A2, and Lu-Hf isotopic data in table A3.

4.1 Sample description, field relationships, and petrography

This section describes our new findings regarding the geological mapping of the units that compose the Guajira Arch, emphasizing the field relations and petrography of the Uray Gneiss and Jarara Formation at the Jarara Range. Our results highlight the stratigraphic and structural relations of a gneissic dome mantled by meta-sediments. Moreover, we briefly discuss

227 the high-amphibolite to granulite-facies Proterozoic inliers of the Guajira Arch cropping out in
228 the Simarua and Macuira ranges, respectively analyzed in this study.

229 ***Proterozoic high-grade basement***

230 The Guajira Arch backbone comprises high-amphibolite-to granulite facies units that
231 form gneiss domes. Multiple lithological varieties have been recognized, and several units have
232 been named as the Jojoncito Gneiss, Jaturuhu Gneiss, Macuira Schists, showing rather complex
233 structural and stratigraphic relationships. It has recently been proposed to unify the Guajira Arch
234 metamorphic units under the Macuira Gneiss definition (Lopez et al., 2014). However, in this
235 work, we based our cartographic synthesis and followed the nomenclature originally proposed by
236 Radelli (1962b), MacDonald (1964), Lockwood (1965), Alvares (1967), and Irving (1972). As
237 will be discussed further in section 4.2, the division of the Proterozoic units of the Guajira Arch
238 is also supported by new geochronological data.

239

240 ***Jaturuhu gneiss***

241 In the Simarua range, we followed the Jaturuhu Gneiss definition posed by Alvares
242 (1967), which corresponds with the description of heterogeneous migmatites given by Radelli
243 (1962b). The Jaturuhu gneiss displays stromatic migmatitic segregations composed of feldspar
244 with mesoperthite intergrowths, microcline, and quartz neosome, whereas the melanosome is
245 composed of hornblende garnet and biotite.

246 From this unit, we collected two samples consisting of a mylonitic quartz-feldspathic
247 augen-gneiss rich in biotite, muscovite, and garnet located close to the contact with the overlying
248 Jarara Formation (sample B-245; Fig. 3, 4A) and an amphibolite melanosome in the vicinity of
249 the Cuisa fault (sample C-172).

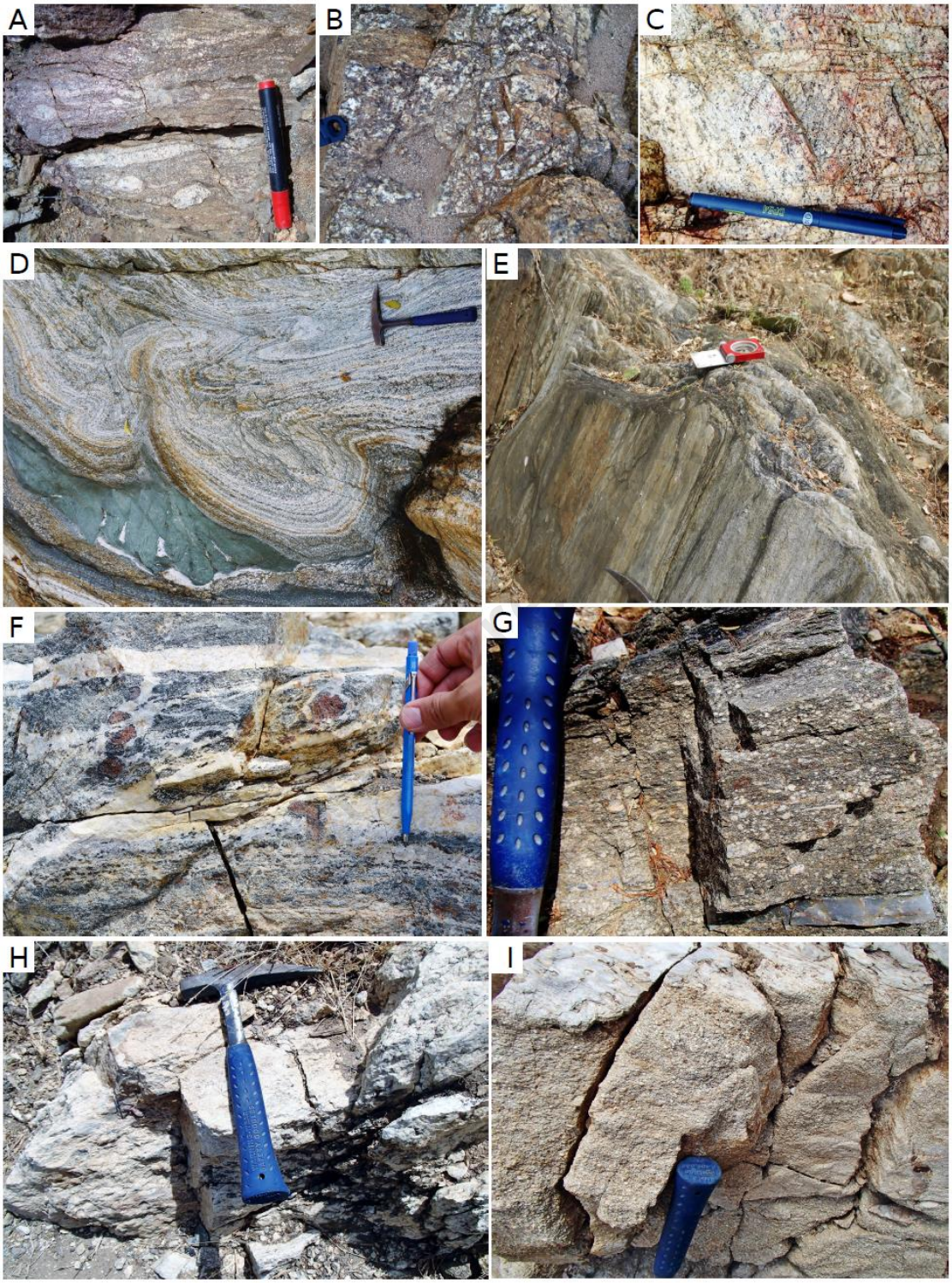


Figure 4. Field photographs of samples from the Guajira Arch metamorphic units analyzed in this study A) Quartz-feldspathic gneiss with augen texture (B-245, Jaturuhu Gneiss); B) Quartz-feldspathic gneiss with granoblastic texture (B-235, Jojoncito Gneiss); C) Felsic granulite (G-95, Jojoncito Gneiss); D) Folded structured metatexite (GC-061, Macuira Schists); E) Amphibole-epidote mylonitic schist (GC-021, Ug1; Uray Gneiss); F) Uray Garnet-amphibolite gneiss, (G-52D, Ug2; Uray Gneiss); G) Staurolite-biotite-garnet mylonite (G-54, Ug3; Uray Gneiss); H) Leucocratic dike Qtz+Pl+Ms (G-52A, Siapana Granodiorite); I) Quartz-muscovite protomylonitic meta-conglomerate (G-55B, Jf1; Jarara Formation).

Jojoncito gneiss

The Jojoncito gneiss is an elongated NE trending body in the eastern part of the Simarua range (Radelli, 1962a; Alvares, 1967; Cordani et al., 2005). Two samples were collected from; a granulite-facies quartz-feldspathic gneiss (sample B-235; Fig. 4B) and a felsic granulite (sample G-95; Fig. 4C). This body is hosted within the Jaturuhu gneiss, seemingly intrusive with the surrounding schists and gneisses from the Jaturuhu gneiss (Alvares, 1967). Its aspect is typically a massive white pinkish to cream color granitic gneiss, with textures that vary from strongly foliated to locally granoblastic, characterized by elongated and stretched, purplish-bluish, or smoky quartz within a K-feldspar and plagioclase matrix.

Macuira schists

We followed the definition of Macuira Schists by MacDonald (1964) for a suite of schists and migmatites outcropping in the Macuira and Jarara Ranges (Fig. 2-3), named by Radelli (1962b) as homogeneous migmatites or Macuira Series, characterized by folded metatexites, fine-grained biotite-muscovite, quartz-feldspathic schists, hornblende schists that mantle a core of diatexitic migmatites, defining a migmatitic dome structure around the Siapana pluton (Radelli, 1962b; MacDonald, 1964). These folded migmatites differ from the typically stromatic metatexites that characterize the Jaturuhu gneiss (Fig. 4A & D).

Folded-structured metatexites typically display granitic leucosomes of quartz-feldspathic compositions (sample GC-061; Fig. 4D), whereas hornblende composes of the melanosome. Banding ranges from cm-scale to several meters in thickness. The unit reached the upper-amphibolite facies, as determined by hornblende-almandine paragenesis (MacDonald, 1964). Towards the Macuira Range northwest, the Macuira Schists are overlain by the Jarara Formation (Figs. 2 &3).

Permian-Triassic high-to medium grade basement (Uray gneiss)

In the southern Jarara Range, the Uray Gneiss can be differentiated into three main lithotypes i.e., Ug1, Ug2, Ug3 (Fig. 4E-G). The metamorphic units of this complex were lately intruded by muscovite-rich leucocratic dikes (Fig. 4H). Detailed structural mapping (Fig. 5) reveals a high contrast between the Uray Gneiss high-amphibolite facies rocks and the greenschist-facies overlying Jarara Formation, that at its base can be differentiated between two sub-units (Jf1 and Jf2; Fig. 5), with a decreasing metamorphic grade from high-amphibolite-facies (Ug1) to greenschist facies (Jf2) towards the NW (Fig. 5).

Uray gneiss

In the Jarara Range, the Uray Gneiss is unconformably overlain by the Oligocene deposits of the Siamana Formation (Fig. 5A). Internally, the Uray Gneiss units are arranged in a high-grade core mantled by medium-to low-grade meta-pelites with a regional NW foliation dip direction (Fig. 5). Three lithotypes are differentiated within the Uray Gneiss: amphibole mylonitic schist (Ug1, sample GC-021; Figs. 4E-5) composed by hornblende+biotite+epidote+plagioclase+quartz (Fig. 6A). High-amphibolite facies anatectic gneiss displays mostly granoblastic textures, locally foliated with leucosomatic segregations (Ug2; sample G-52d; Fig. 4F-5B) bearing pyroxene+garnet+hornblende+plagioclase (Fig. 6B-C), in which garnet crystals at the cm-scale are embedded in a pyroxene+hornblende matrix (Fig 6C), alternated with plagioclase bands. A detachment fault separates the gneissic core (Ug2) from a unit composed of strongly foliated mylonitic schists (Ug3, Fig. 4G-5C) bearing staurolite+biotite+garnet (sample G-54; Fig. 6D). The Uray gneissic core is intruded by leucocratic dikes (sample G-52A; Fig. 4H) composed of quartz, K-feldspar, and muscovite (Fig. 6E). Sigma porphyroclasts and s-c shear bands from the Uray mylonites indicate sinistral top to NW shear sense (Fig. 6).

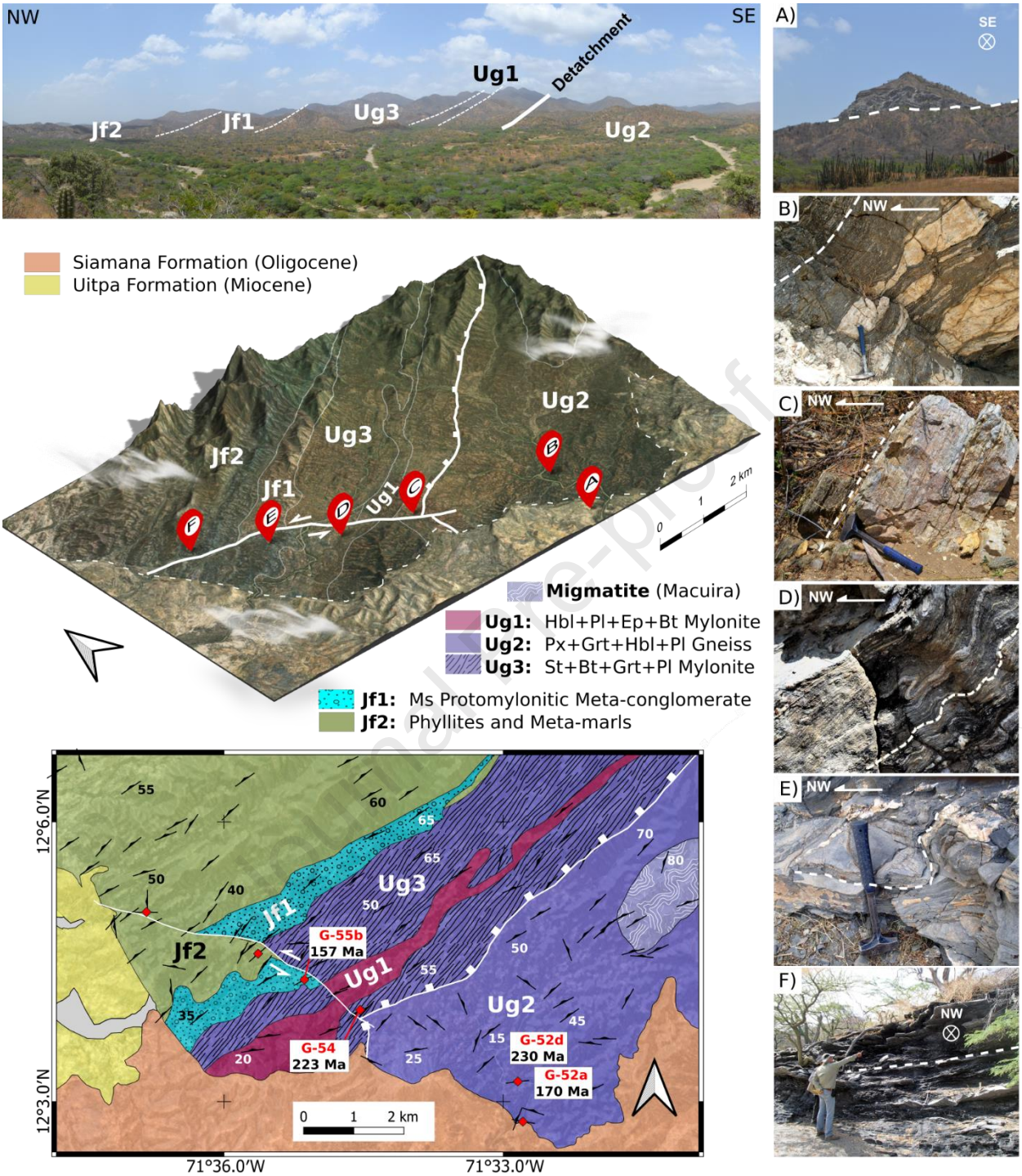


Figure 5 Composite topographic relief and geology of the south western Jarara range. Top: panoramic view of the Jarara range taken from point C. Center: relief map of the Jarara range showing main structures and sites A-F. Bottom: detailed geological map of the Jarara range dip data compiled from (Lockwood, 1965). Left Panel A) Angular unconformity of the Oligocene sediments of the Siamana Formation over the Uray gneiss anatectic core B) Uray gneiss with foliation parallel leucosome segregations in a Px+Grt+Hbl groundmass (Ug2), dashed lines indicate foliation C) Uray gneiss alternate of St+Grt+Bt mylonitic schists (Ug3) D) Jarara Formation fine banded quartz-muscovite protomylonites with recumbent cascading or spruce-tree folds (Jf1) E) Jarara Formation phyllites and meta-marls with steeply plunging cascading or spruce-tree folds (Jf2) F) Jarara Formation slates gently dipping towards the NW. Dashed lines indicate unconformity in A, and foliation B-F, photo insets are oriented as indicated.

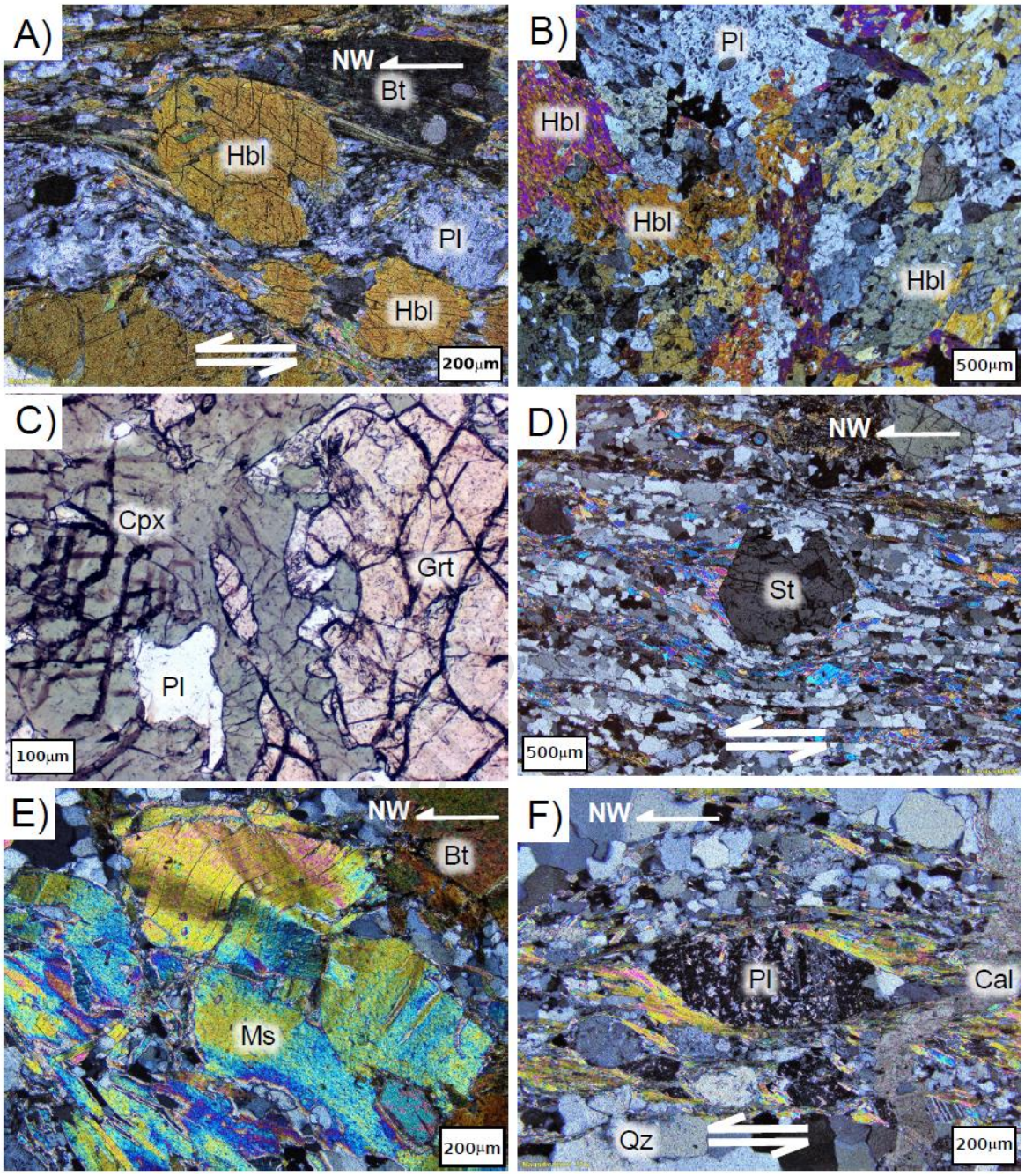


Figure 6 Optical images of low- to high-grade metamorphic rocks from the Jarara range. A) Subhedral hornblende δ porphyroblast and plagioclase porphyroblasts surrounded by biotite and quartz aggregates, biotite strain shadows indicate top to NW sinistral shear sense. Sample GC-021 (Ug1), cross-polarized light. B) Poikilitic hornblende and plagioclase crystals, showing a granoblastic texture. Sample GC-52D (Ug2), cross-polarized light. C) Anhedral clinopyroxene (augite) surrounding subhedral garnet (pyrope) crystals. Sample G-52D (Ug2), transmitted light. D) Subhedral staurolite σ-porphyroblast surrounded by alternating quartz-plagioclase and biotite-muscovite strain shadows indicate top to NW sinistral shear sense. Sample G-54 (Ug3), cross-polarized light. E) Large muscovite crystals showing kink bands. Sample G-52A, cross-polarized light F) Sericitized plagioclase σ- porphyroclast mantled by muscovite strain shadows indicate top to NW sinistral shear sense and quartz-orthoclase crystals with polygonal texture. Sample G-55B (Jf1), cross-polarized light. Abbreviations: Bt, biotite; Cal, calcite; Cpx, Clinopyroxene; Grt, garnet; Hbl, hornblende; Ms, muscovite; Pl, plagioclase; Qz, quartz; St, staurolite.

Mesozoic metasedimentary cover

Over the high-amphibolite facies Uray Gneiss, the Jarara Formation greenschist facies meta-sedimentary rocks rest unconformably. This sedimentary cover gradually decreases in metamorphic grade towards the NW. This section describes the basal part of the Jarara Formation a basal meta-conglomerate level (Jf1), which marks the contact between the two units.

Jarara Formation

The greenschist facies meta-conglomerate (Jf1; Fig. 4H; Fig. 5) is followed by alternating meta-pelites, meta-marls, and marble (Jf2). The latter frequently shows cascading folds with foliation strike parallel axes (Fig. 5 insets D, E, F).

The muscovite-rich meta-conglomerate (Jf1) displays a protomylonitic fabric (G-55b; Fig. 4I). Muscovite is the dominant index mineral that mantles feldspar, orthoclase, and quartz porphyroclasts (Fig. 6F). Along with zircon, apatite is present as an accessory, and also sporadic calcite veins cut through the foliation. The protomylonitic fabric is also defined by sinistral s-c structures (Fig. 6F) that commonly display sigmoidal plagioclase porphyroclasts with muscovite pressure shadows (Fig. 6F), indicating a top to NW sinistral displacement. The basal meta-conglomerate varies into muscovite-rich quartzites, muscovite schists, phyllites, slates, and a marble level. These are overlain by a second meta-conglomerate level in which muscovite is absent, superseded by black phyllites and slates interbedded with marbles and siliciclastic beds that are internally graded and show sporadic carbonate olistostromes. The sequence is superseded by greenschist facies mafic meta-volcanic flows and meta-tuffs, characterized by actinolite-chlorite phyllites (Fig. 7).

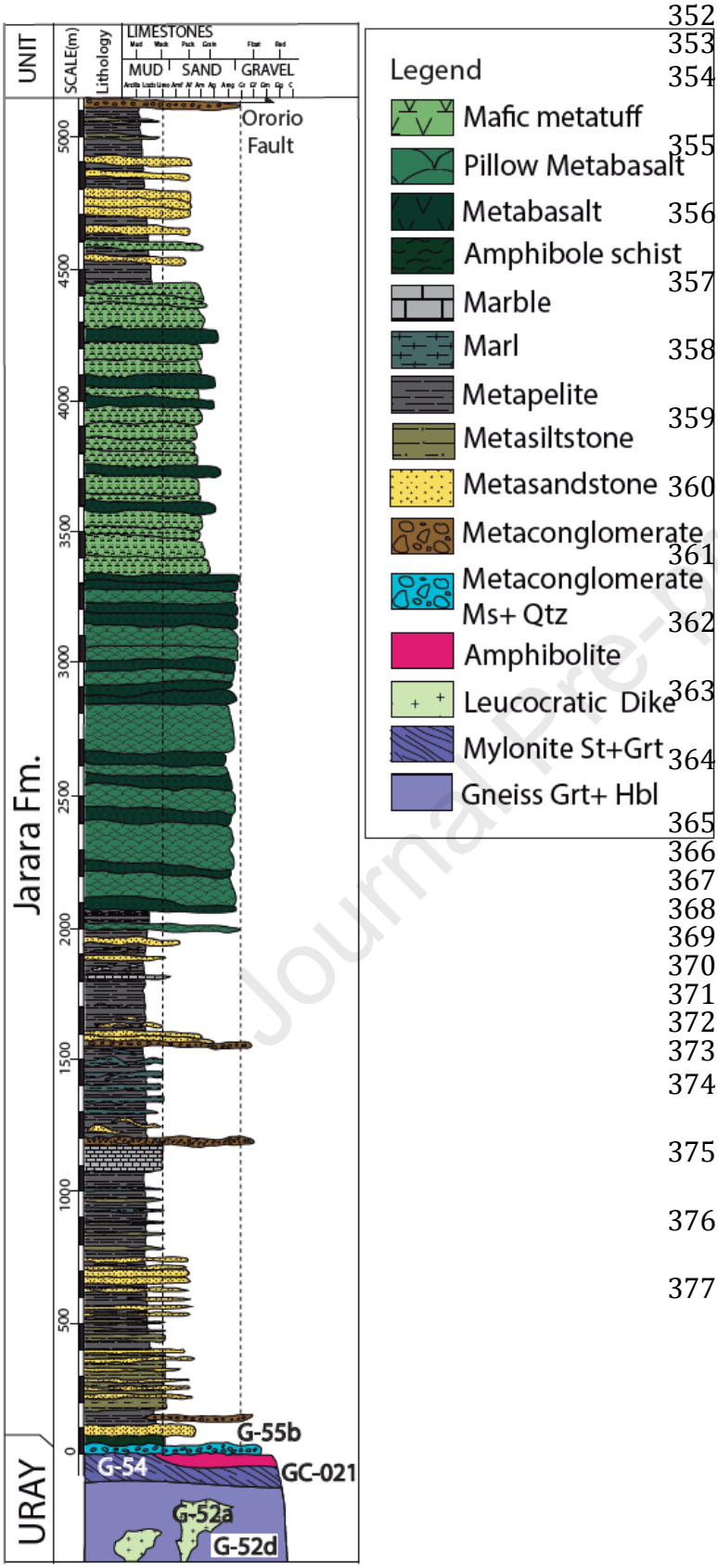


Figure 7. Semi-detailed Stratigraphic column of the Jarara Formation at the Jarara Range, Samples analyzed in this study are indicated within the Uray Gneiss and at the basal meta-conglomerate (Jf1) of the Jarara Formation. The section is located in Figs. 2-3.

TABLE 1. LOCATION, DESCRIPTION, OF SAMPLES ANALYSED BY U-Pb and Lu-Hf LA-ICP-MS

Sample Code	Coordinates		Lithology	Stratigraphic division	Unit	Intrepreted protolith	U-Pb Age	2s	MSWD	$^{176}Hf/^{177}Hf$	εHf_t^e	T_{dm}(Ga)	Type
	Lat (ºN)	Long (ºW)											
B-245	11.993	-71.774	Pl+Hbl+Grt+Qtz gneiss	Proterozoic	Jaturuhu Gneiss	volcanoclastic	**967**	**4.2**	**0.2**	-	-	-	Metamorphic rims
C-172	11.932	-71.766	Hbl lense	Proterozoic	Jaturuhu Gneiss	mafic rock	**1026**	**5.4**	**1.3**	-	-	-	Metamorphic Concordia Age
B-235	11.889	-71.902	Pl+Kfs+Qtz Gneiss	Proterozoic	Jojoncito Gneiss	pelite	**1009**	**3.8**	**0.8**	-	-	-	Metamorphic Weighted Average Age
G-95	11.876	-71.923	Kfs+Pl+Qtz	Proterozoic	Jojoncito Gneiss	granitoid	**1039**	**14.5**	**1.8**	-	-	-	Metamorphic Weighted Average Age
							238	**30**	**2.7**	-	-	-	Lower intercept
GC-061	12.194	-71.351	Pl+Hbl+Bt+Qtz	Proterozoic	Macuira Schists	mica schist	**880**	**4.2**	**0.8**	-	-	-	Metamorphic rims
GC-021	12.136	-71.513	Hbl+Ep+Pl+Qtz	Permian	Uray Gneiss	mafic rock	**272**	**1.1**	**0.6**	-	-	-	Core ages
				Jurassic			**198**	**4**	**0.1**	-	-	-	Metamorphic rims
G-52D	12.047	-71.547	Px+Grt+Hbl+Pl gneiss	Triassic	Uray Gneiss	mafic rock	**230**	**0.5**	**0.9**	**0.282165-0.282886**	**(-2.4-8.7)**	**0.7-1.3**	Metamorphic Concordia Age
G-54	12.065	-71.577	St++Bt+Grt+Pl+Qtz mylonite	Triassic	Uray Gneiss	pelite	**223**	**0.6**	**1.3**	**0.281706-0.282778**	**(-32-10)**	**1.2-3.5**	Metamorphic Concordia Age
G-52A	12.047	-71.547	Pl+Ms+Qtz leucocratic dike	Jurassic	Jurassic Intrusive suite	granitoid	**170**	**2.2**	**0.1**	**0.282638-0.282883**	**(-1.5-6.9)**	**0.9-1.2**	Magmatic Concordia age
G-55B	12.072	-71.584	Qtz+Pl+Ms meta-conglomerate	Jurassic	Jarara Formation	pelite	**157**	**3.4**	**1.5**	**0.280791-0.282903**	**(-27.8-7.8)**	**0.9-3.1**	Maximum depositional Age
JOJON-1	11.871	-72.024	Granitic Gneiss	Proterozoic	Jojoncito Gneiss	granitoid	**916**	**19**	**0.5**	-	-	-	Metamorphic rims
AVO-3	12.122	-71.438	Ms+Bt+Qtz+Pl schist	Triassic	Uray Gneiss	pelite	**248**	**4.1**	**0.4**	-	-	-	Metamorphic weighted average age
AVO-6	12.127	-71.438	Ms+Bt+Qtz+Pl schist	Triassic	Uray Gneiss	pelite	**246**	**3.9**	**0.5**	-	-	-	Metamorphic weighted average age

Mineral abbreviations used in the text, figures, and tables: **Bt**: Biotite, **Ep:** Epidote, **Grt**: Garnet, **Hbl**: Hornblende, **Ksp**: Potassium feldspar, **Ms**: Muscovite, **Pl**: Plagioclase, **Px:** Pyroxene **Qtz**: Quartz, **St:** Staurolite

Samples in italic belong to previous works (Weber et al., 2009, Cardona et al., 2006)

MSWD of equivalence, uncertainties are propagated at 2s level

4.2 Zircon U-Pb geochronology and trace element geochemistry

Proterozoic high-grade metamorphic basement

Geochronological results reveal that the Proterozoic units of the Guajira Arch outcrop in the Simarua and Macuira ranges. The units described in this section yield distinctive zircon age spectra and morphological traits presented in the following paragraphs and summarized in Tables 1 and 2 and Figures 8-10A.

Jaturuhu Gneiss

The Jaturuhu Gneiss zircon spectra (sample B-245) comprises Paleoproterozoic inherited cores in some cases with twinned grains mantled by bright rims (Fig. 8A), in arrays of complex zoning patterns, showing intragrain crystallographic misorientation, and truncating geometries (Table 2), with ages spanning between 2005-1630 Ma, mantled by Meso-Neoproterozoic rims with ages spanning 1400-950 Ma. Discordant ages yield an upper intercept ca. 1837± 89 Ma and a Neoproterozoic lower intercept ca. 1041 ± 40 Ma (Table. 1), pointing to metamorphic recrystallization (Fig. 8A). The youngest four rims cluster around a Concordia age of 967 ± 26 Ma (MSWD= 2.6; Fig. 9A). The Paleo-Neoproterozoic growth zones can be observed in several crystals (Fig. 8A). Five crystals were recovered from an amphibolite melanosome within the Jaturuhu Gneiss (sample C-172; Fig. 8B), out of which four yield a Concordia age of 1026 ± 31 Ma (MSWD = 2.4; Fig. 9B). One of the crystals exhibits an inherited core of 1151 Ma, mantled by thick bright rims (Fig. 8B).

Jojoncito gneiss

The Jojoncito Gneiss samples (B-235, G-95) yield ages between 1300-1000 Ma. Both analyzed samples lack Paleoproterozoic inherited cores (Fig. 8C-D). Quartz-feldspathic gneiss (sample B-235) attests for partial recrystallization at 1008 ± 7.2 Ma (MSWD=0.85; Fig. 9C), with cores mantled by brighter rims that display slightly misoriented cores.

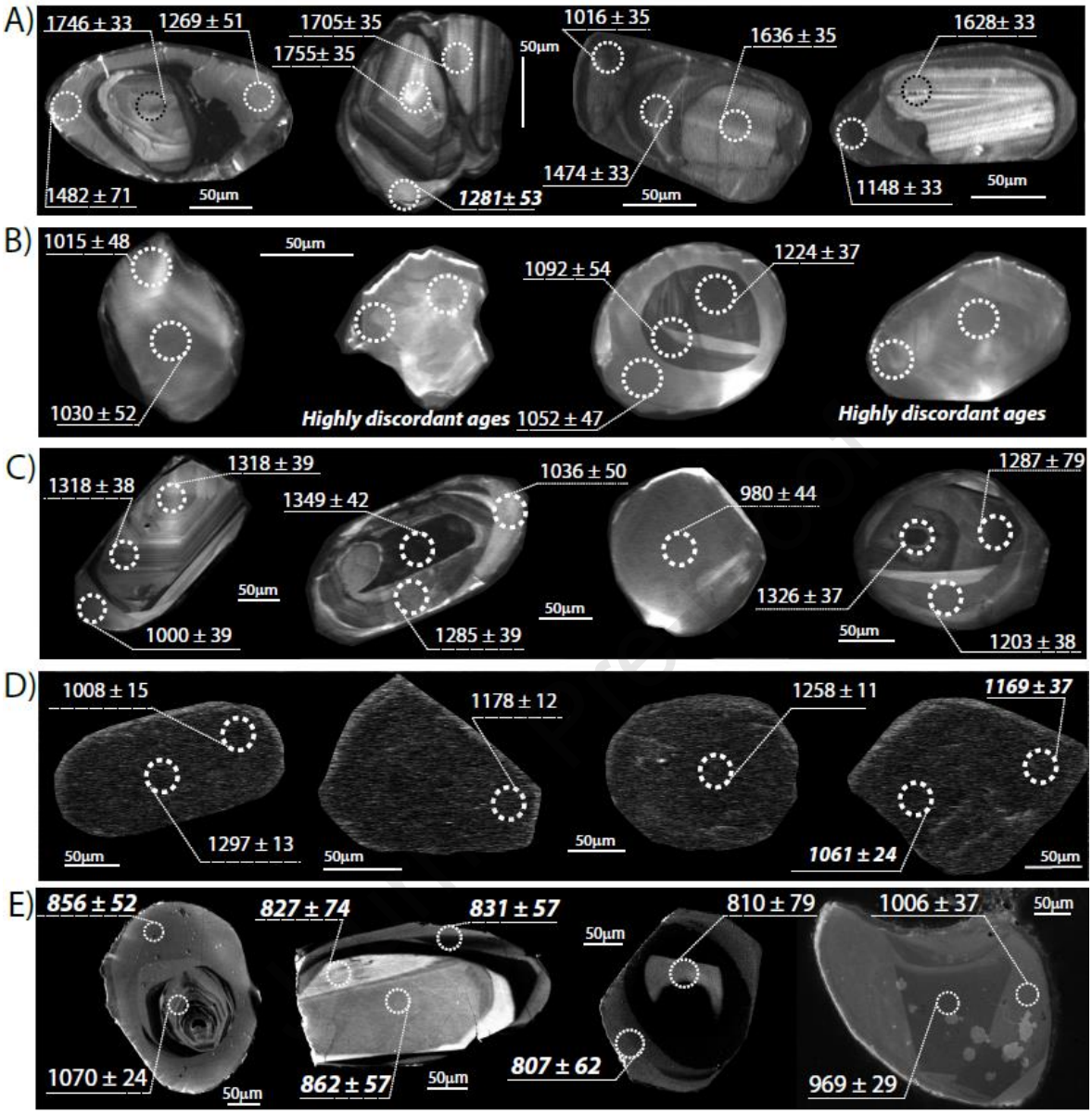


Figure 8. Panchromatic cathodoluminescence imagery of zircons from the Proterozoic units of the Guajira Arch analyzed in this study: A) Quartz-feldspathic gneiss with augen texture (B-245, Jaturuhu Gneiss); B) Amphibolite melanosome (C-172, Jaturuhu Gneiss); C) Quartz-feldspathic gneiss with granoblastic texture (B-235, Jojoncito Gneiss); D) Felsic granulite (G-95, Jojoncito Gneiss); E) Folded structured metatexite (GC-061, Macuira Schists). U-Pb ages are indicated in cores and rims, values in italics correspond to discordant data. Dashed circles ablation size diameter 25 µm except for sample G-95 that was analyzed with a spot of 30 µm.

Zircons retrieved from a granoblastic felsic gneiss (sample G-95) show a low CL response with homogenized crystals and a weighted average age of 1039 ± 28 Ma (MSWD= 1.77; Figs. 8D & 9D). The whole dataset, including discordant ages, describes a Triassic lower intercept at ca. 238 ± 61 Ma (MSWD= 2.7; Fig. 9D).

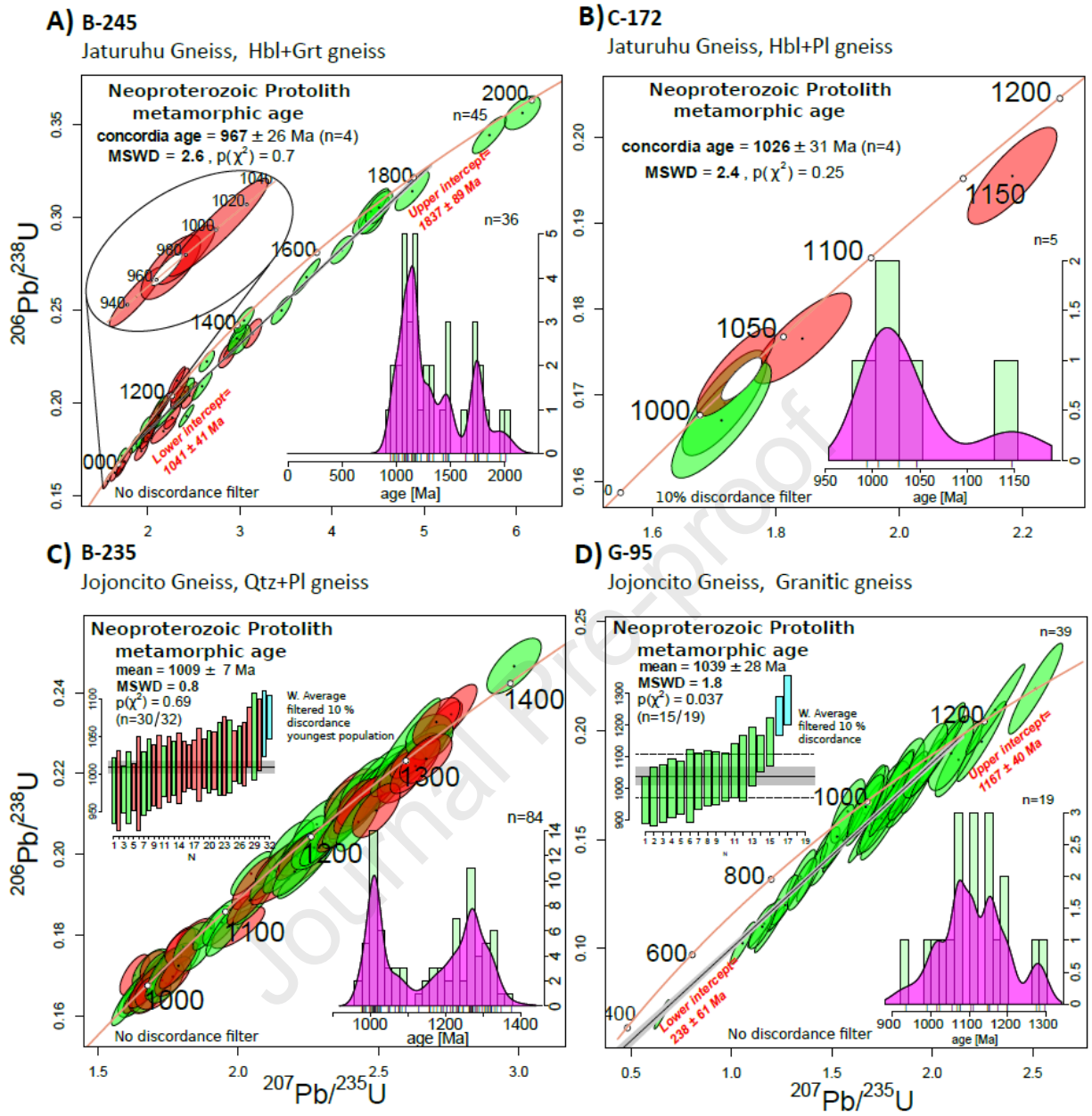
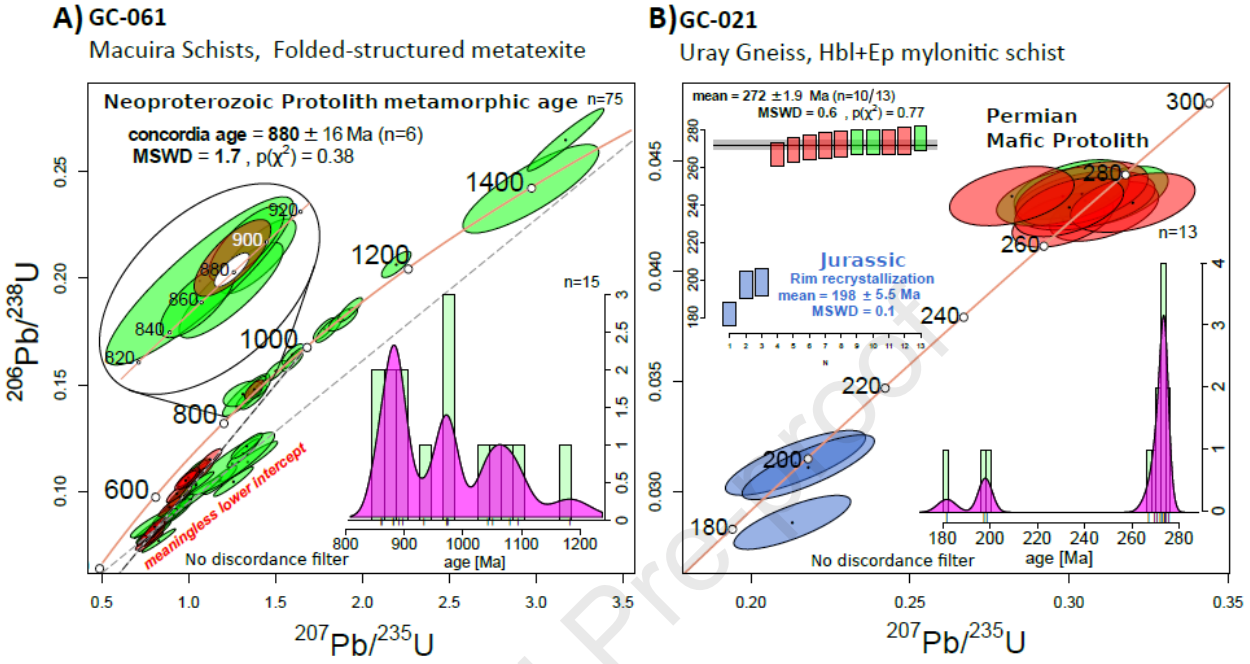


Figure 9. Composite plot of zircon U-Pb LA-ICP-MS geochronological data from the Jaturuhu (A-B) and Jojoncito gneisses (C-D) at the Simarua range. Metamorphic ages are calculated from rim recrystallization, lower intercepts, and weighted average values. Green ellipses represent cores, and red ellipses represent rims.

Macuira schists

Zircons from a folded metatexite of the Macuira Schists (sample GC-61) are subhedral and display intensely resorbed rims, with inherited cores with internal crystallographic misorientation (Fig.8E). Analyzed crystals resulted in 75 % of discordant ages that rendered meaningless lower and upper intercepts (Fig. 11A). The remaining concordant data includes

426 Mesoproterozoic grains of 1400-1000 Ma from inherited cores. A younger age cluster of 6
427 Neoproterozoic crystals yields a concordant age of 880 ± 16 Ma (MSWD= 1.7; Fig. 10A).



428
429 **Figure 10. Composite plot of zircon U-Pb LA-ICP-MS geochronological data from the A) Folded structured**
430 **metatexite from Macuira Schists (sample GC-061) and B) amphibole-epidote mylonitic schist (Ug1, sample**
431 **GC-021). Intercept ages were calculated without filtering 10% of discordance. Metamorphic ages are**
432 **calculated from Concordia age of youngest age peak. Green ellipses represent cores, and red-blue ellipses**
433 **represent rims.**
434

435 ***Permian-Triassic high-to medium-grade basement (Uray gneiss)***

436 ***<u>Amphibole+epidote mylonitic schists (Ug1)</u>***

437 Thirteen zircon crystals were recovered from a hornblende+epitode+plagioclase+quartz
438 mylonitic schist (sample GC-21). Age data indicate a Permian Concordia age at ca. 272 ± 1.9 Ma
439 (MSWD=0.64) with three Jurassic growth sectors of ca. 198 ± 5.5 Ma (MSWD=0.10; Fig. 10B)
440 in rims. Zircons display complex growth zoning, local intermediate resorption, sector to patchy
441 zoning, and subhedral shapes (Fig. 11A; Table 2).

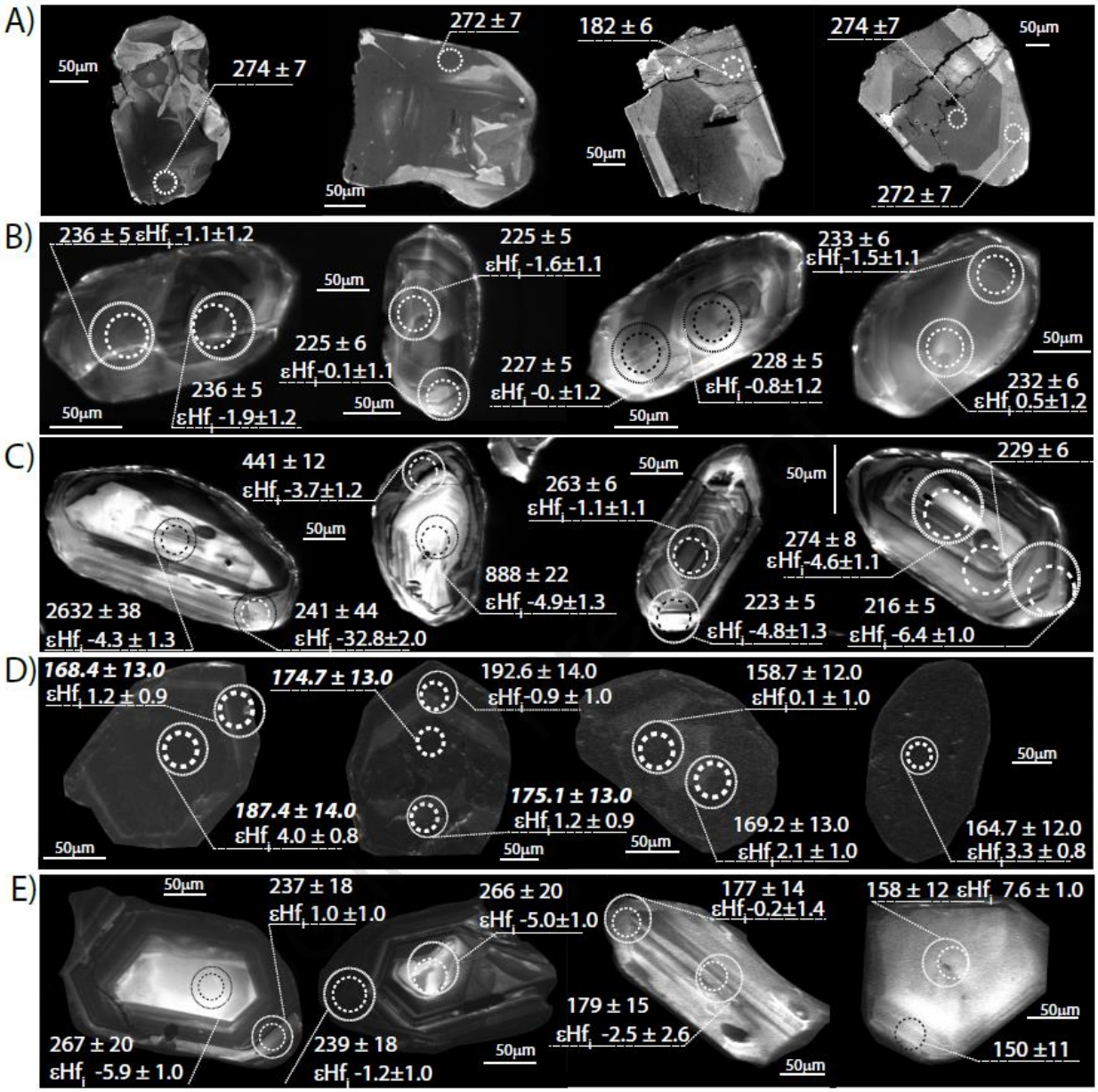


Figure 11. Panchromatic cathodoluminescence imagery of zircons from the Permian-Jurassic units of the Guajira Arch analyzed in this study, with U-Pb age and εHfi: A) Amphibole+epidote mylonitic schist (GC-021, Ug1; Uray Gneiss); B) Pyroxene+garnet+hornblende gneiss, (G-52D, Ug2; Uray Gneiss); C) Staurolite+biotite+garnet mylonite (G-54, Ug3; Uray Gneiss); D) Leucocratic dike muscovite+plagioclase (G-52A, Siapana Granodiorite suite); E) Quartz-muscovite protomylonitic meta-conglomerate (G-55B, Jf1; Jarara Formation). Dashed circles ablation size diameter for U-Pb analyses 30 µm and 50 µm for Lu-Hf analyses.

Pyroxene+ Garnet+Hornblende gneiss (Ug2)

The obtained crystals from this garnet-rich anatectic gneiss (sample G-52D) show regular polygonal, oscillatory, or sector, generally weak zoning (Fig. 11B), and define a Carnian Concordia age of 230 ± 1.2 Ma (MSWD=1.2; Fig. 12A). All analyzed spots either in cores or rims are within this age range, and there are no inherited cores preserved (Fig. 11B). All crystals are strongly depleted in HREE, with average values below 900 ppm and a high U/Yb ratio (Figs. 12A and 13).

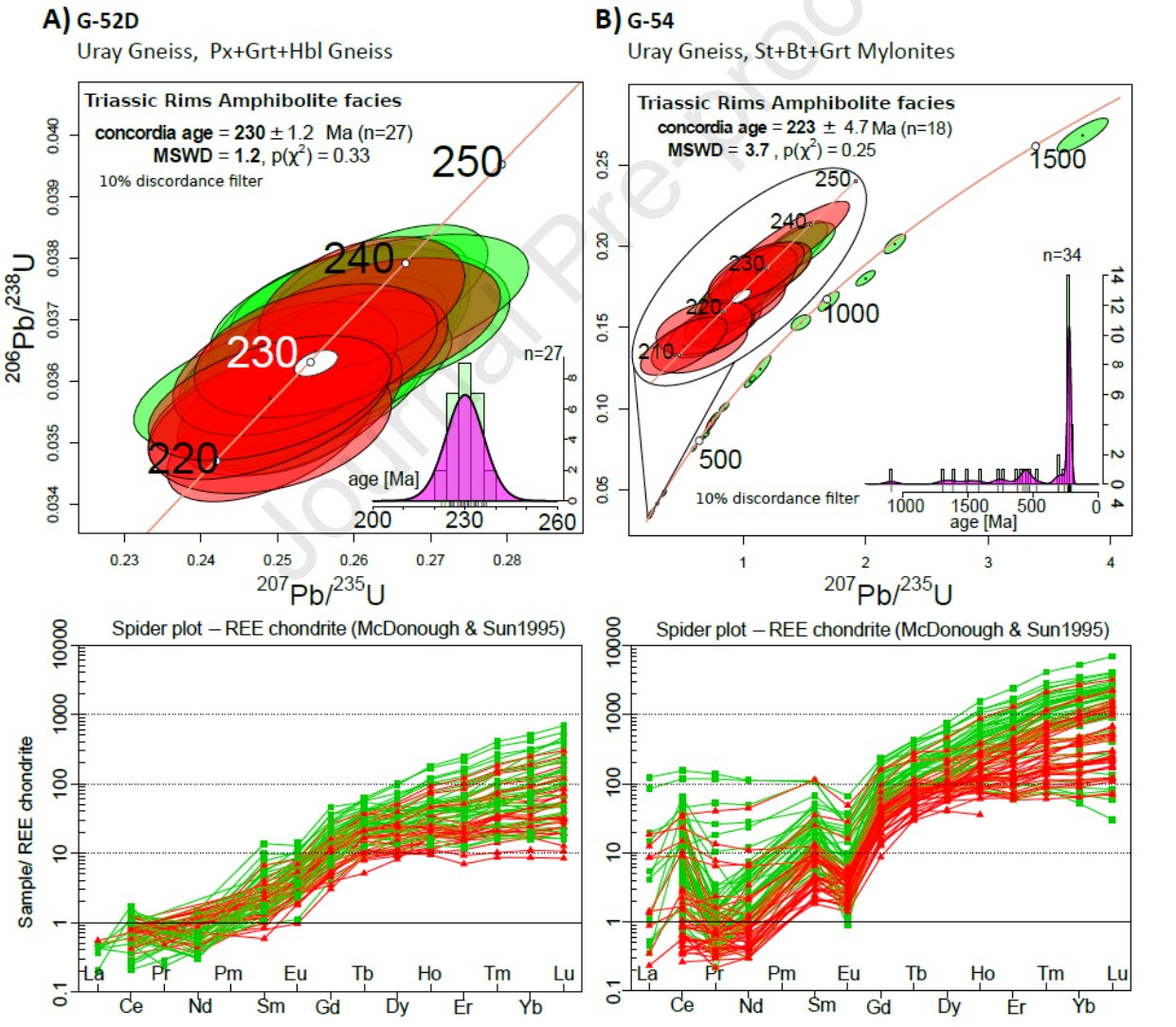


Figure 12. Composite plot of zircon U-Pb LA-ICP-MS geochronological data from the A) Uray gneiss Px+Grt+Hbl gneiss (Ug2, sample G-52D) and B) Uray gneiss St+Bt+Grt mylonite (Ug3, sample G-54). Below, Primitive chondrite-normalized REE patterns (McDonough and Sun, 1995). Green ellipses represent cores, and red ellipses represent rims.

Staurolite+ Biotite+Garnet mylonitic schists (Ug3)

Zircons recovered from these mylonites (G-54) yield inherited cores differentiated from highly resorbed rims by truncating geometries (Fig. 11C; Table 2). Age spectra are defined by inherited cores that range between 1500-500 Ma (Fig. 12B). Rims, in contrast, are restricted to the Norian, with a Concordia metamorphic age of 223 ± 4.7 Ma (MSWD= 3.7; Fig. 12B). Cores are enriched in HREE in comparison with rims, and concentrations are below 1000 ppm. Triassic rims are constantly below 500 ppm. Accordingly, Triassic crystals display low Yb and Y contents and high U/Yb ratios (Fig. 12B and 13).

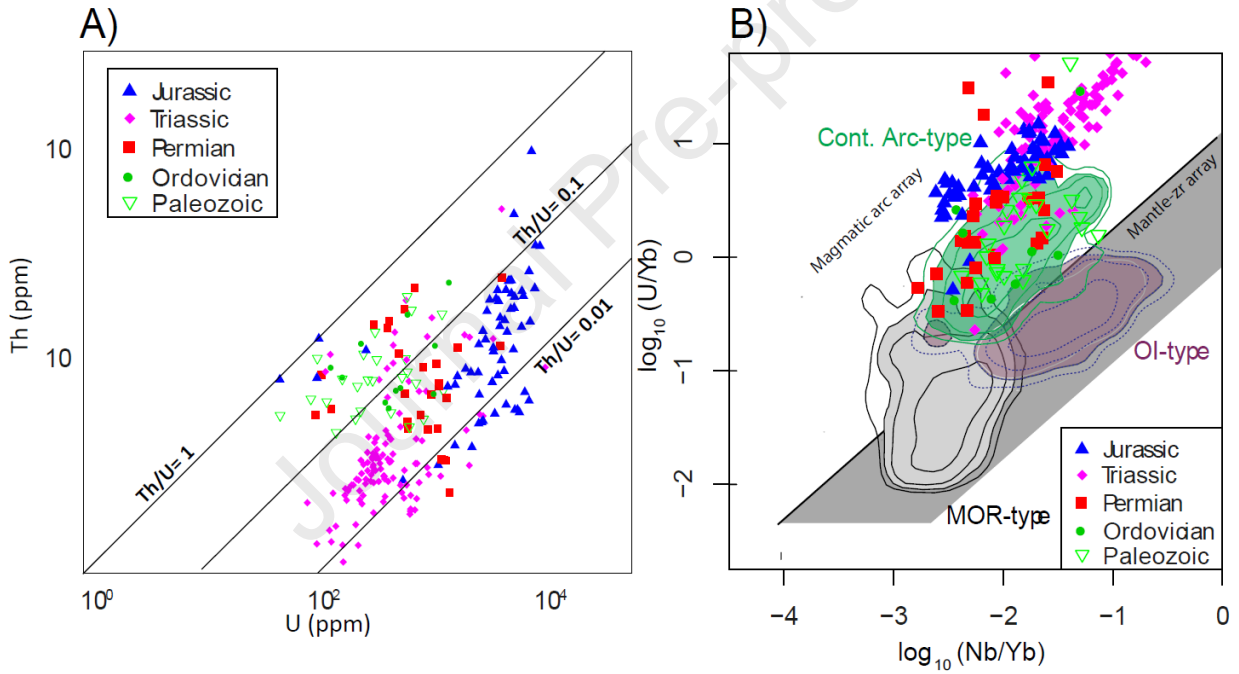


Figure 13. Uray Gneiss, Jarara meta-conglomerate and leucocratic dike zircon trace element geochemistry (including Phanerozoic inherited cores) bivariate plot. A) Th vs. U plot and B) U-Nb-Yb-based zircon discrimination plot and density distribution based on geochemical proxies or tectono-magmatic setting, after Grimes et al., (2015). The shaded fields are overlapping two-dimensional kernel density distributions for compiled datasets of the mid-ocean ridge (MOR-type), plume-influenced settings of Iceland & Hawaii (ocean-island (OI)-type), and continental arc (Cont. arc-type) zircon.

Leucocratic Dike

A plagioclase+muscovite+quartz pegmatitic dike (sample G-52A) intruding the pyroxene+garnet++hornblende Uray Gneiss (Ug1) yields zircons with a low CL response,

internal morphology is barely discernible with weak oscillatory zoning (Fig. 11D). Ages are mainly discordant, evidencing extensive common Pb incorporation. Data obtained from cores are highly discordant, and only 11 concordant ages in rims indicate a Middle Jurassic (Bajocian) age of crystallization at ca. 170 ± 2.7 Ma (MSWD=1.2; Fig. 14A). The HREE concentrations are extremely high, up to 10000 ppm with high U/Yb ratios (Fig. 13).

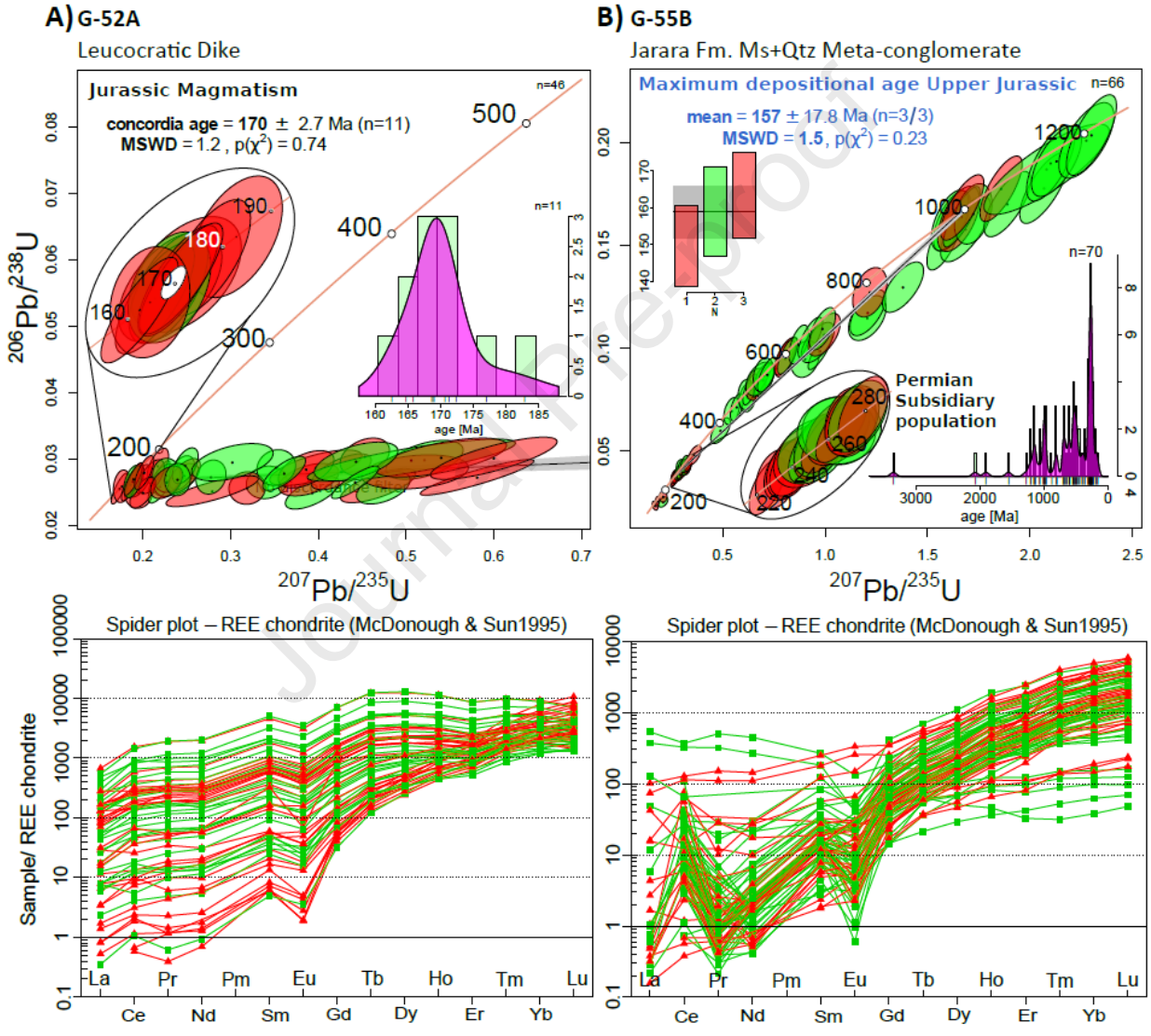


Figure 14. Composite plot of zircon U-Pb LA-ICP-MS geochronological data from the A) leucocratic dike intruding Ug2 (sample G-52A) and B) Jarara Formation basal meta-conglomerate Ms+Pl+Qtz (sample G-55B). Below, Primitive chondrite normalized REE patterns (McDonough and Sun, 1995). Green ellipses represent cores, and red ellipses represent rims.

Mesozoic metasedimentary cover

<u>Jarara Formation Protomylonitic meta-conglomerate (Jf1)</u>

Zircons retrieved from the basal meta-conglomerate of the Jarara Formation (sample G-55b) display a wide morphological and age range, commonly with inherited cores, differentiated from highly resorbed rims by truncating geometries or separated subrounded and unzoned cores. Several crystals show regular polygonal, oscillatory, or sector zoning and are mainly concordant (Fig. 11E).

This sample zircon age range includes two Paleoproterozoic crystals and a single Paleoarchean concordant crystal at 3432 ± 22 Ma. The remaining analyzed crystals from this sample comprises four coherent populations, as follows: (i) The 1200-1000 Ma inherited cores may or not be mantled by recrystallized rims; (ii) Ediacaran - Devonian (770-400 Ma); (iii) a Permian-Triassic population between 280 and 218 Ma (Fig. 14B); and (iv) the youngest population composed of four Jurassic ages corresponding to two grains containing two consistent analyses each, which constrain a maximum depositional age for the meta-conglomerate at ca. 157 ± 17.8 Ma (MSWD=1.5; Fig. 14B). Distinctively, most Triassic ages are found as rims that mantle Paleozoic or older cores (Fig. 11E). Most cores and rims are enriched in HREE with values between 900 and 7000 ppm, and variable Yb contents oscillating between 30-7000 ppm (Figs. 13-14B).

4.3 Zircon Hf isotope geochemistry

We conducted Lu-Hf isotopic analyses on three samples from the Uray Gneiss suite and one sample from the Jarara Formation (G-52D, G-54, G-55B, G-52A). These were previously analyzed by U–Pb dating with spots of different sizes but in the same growth zones (Fig. 11).

519 The results are summarized in Table 1. In Figure 15, the initial $^{176}Hf/^{177}Hf$ is calculated using
520 individual apparent $^{206}Pb/^{238}U$ ages of laser spots measured on the same zircon growth zones.
521 Samples yield a broad range of εHf_i values of +10 to −30 (Fig. 15; Table 1), evidencing
522 both crustal recycling and the addition of new crust (e.g., Collins et al., 2011). Inherited zircon
523 cores (~275 Ma to ~1.2 Ga) within the sampled meta-sediments plot on the CHUR array (Fig.
524 15) and represent the range of meta-sedimentary protoliths that underwent crustal anatexis.
525 ***Uray gneiss***
526 ***Pyroxene+Garnet+Hornblende gneiss (Uq2)***
527 Triassic crystals of sample G-52D yield $^{176}Hf/^{177}Hf$ values ranging from 0.282165 to
528 0.282886 (εHf_i from -2.4 to +8.7; Figs 11B & 15), making this sample the most juvenile in
529 composition. A single Devonian core yields εHf_i -13.7. Thus, the εHf spectrum is dominated by
530 juvenile compositions with the mixing of older crustal unradiogenic sources. The crustal $T_{DM\ (Hfi)}$
531 model ages range from ~0.7 to ~1.3 Ga for all Triassic crystals (~230 Ma; Fig. 15) and ca. 2.17
532 Ga for the Devonian core.
533 ***Staurolite+Biotite+Garnet mylonitic schists (Uq3)***
534 Triassic rims from sample G-54 yield $^{176}Hf/^{177}Hf$ ranging from 0.281706 to 0.282778
535 (εHf_i -32 to +0.86). Ordovician to Permian inherited cores yield $^{176}Hf/^{177}Hf$ of 0.281960 to
536 0.282911 and displayed dominantly negative values (εHf_i from -23.3 to +0.7; Figs. 11C and 14)
537 that hint at the reworking of older crustal unradiogenic sources.
538 $^{176}Hf/^{177}Hf$ values from Proterozoic cores fluctuate between 0.280864 to 0.282353 (εHf_i
539 from -7.5 to +7.4; Figs. 11C & 15). The crustal $T_{DM(Hfi)}$ model ages for all Triassic rims ranges
540 from ~1.2 to ~3.2 Ga (Fig. 15, Table A3), with dominant Paleo-Mesoproterozoic ages,

TABLE 2. MORPHOLOGICAL TRAITS AND TRACE ELEMENT GEOCHEMISTRY OF ZIRCONS ANALYSED BY U-Pb LA-ICP-MS

Sample Code	Lithology	Unit	Zircon Morphology	CL Zoning	Process	Th/U	Y
B-245	Qtz+Kfs+Pl and Cpx+Hbl+Bt+Grt gneiss	Jaturuhu Gneiss	Subrounded subhedral translucent	Complex zoning as intragrain crystallographic misorientation, the formation of twinned grains and subgrains. Inherited cores mantled by rims with truncating geometries separated subrounded, oscillatory zoned, chaotically zoned cores	Crystallization from a melt or precipitation from a fluid evidencing several stages of deep resorption	0.04- 1.0 cores 0.03-0.4 rims	-
C-172	Amphibolite lens	Jaturuhu Gneiss	Subrounded subhedral translucent	High CL response crystals display weak oscillatory zoning tending to homogeneous, subrounded shapes and homogeneous texture indicates high resorption	Crystallization from a melt or precipitation from a fluid evidencing several stages of deep resorption	0.05-0.3	-
B-235	Quartzfeldsphatic Gneiss	Jojoncito Gneiss	Subrounded subhedral translucent	Dark inherited cores mantled by brighter rims, complex zoning patterns intragrain crystallographic misorientation, the formation of subgrains, truncating geometries, or separated subrounded, homogeneous, or chaotically zoned cores with rutile inclusions.	Crystallization from a melt or precipitation from a fluid evidencing several stages of deep resorption	0.1-0.6 cores, 0.06-0.3 rims	-
G-95	Kfs+Pl+Qtz	Jojoncito Gneiss	Subrounded, subhedral, Translucent, fractured	Crystals appear completely dark and homogeneous, with a rugged surface of porosity and inclusions	Homogenization process, hydrothermal alteration reprecipitation	0.05-0.4	1000-5300
GC-061	Pl+Hbl+Qtz folded structured metatexite	Macuira Schists	Translucent to slightly yellowish color, and are characterized by sub-rounded sub-anhedral shapes	Highly resorbed rims subhedral and xenocrystic cores with the sub-grain formation and internal crystallographic misorientation, sometimes show patchy zoning and homogenization	Crystallization from a melt or precipitation from a fluid, migmatization, in -situ anatectic recrystallization	0.4-1.3	-
GC-021	Amphibolite	Uray Gneiss (Ug1)	Subhedral dipyramidal translucent	Complex growth zoning, local intermediate resorption, sector to patchy zoning, and subhedral shapes, rims display patchy and convoluted zoning	Metamictization, fluid alteration, initial stages of replacement	0.8-1.65	-
G-52D	Px+Grt+Hbl+Pl gneiss	Uray Gneiss /(Ug2)	Translucent, subangular, euhedral, dipyramidal prismatic	Regular polygonal, oscillatory, or sector, generally weak zoning	Anatexis	0.05	20-250
G-54	St+Bt+Grt+Pl mylonite	Uray Gneiss (Ug3)	Translucent and subangular dipyramidal prismatic.	Inherited cores, differentiated from highly resorbed rims by truncating geometries,	High strain rates and mylonitization	0.3 rims, 1.1 cores	150-2400
G-52A	Pl+Ms+Qtz leucocratic dike	Jurassic Intrusive suite	Euhedral dipyramidal prismatic with a prism-pyramid ratio of 2:1	Low CL response and crystals appear dark, internal morphology is barely discernible. Weak Oscillatory zoning. Cores appear with patchy and mosaic zoning, some inclusions	Metamictization, fluid alteration, or hydrothermal conditions	0.2-0.01	1000-15000
G-55B	Qtz+Pl+Ms meta-conglomerate	Jarara Fm. (Jf1)	Translucent and subangular euhedral, dipyramidal and elongated prismatic.	Inherited cores, differentiated from highly resorbed rims by truncating geometries or separated subrounded, and unzoned cores. Crystals show regular polygonal, oscillatory, or sector zoning	Detrital zircon derived from igneous/metamorphic sources	1.5-0.02 cores, 0.6-0.02 rims	90-3000

Th-U ratios are reported as an average of cores and rims or a single value if constant, Y content is reported in ppm, morphology described according to Murali et al., 1983; Vavra et al., 1999; Rubatto, 2017, Harley et al., 2007, Schaltegger et al., 1999

and a single Neoproterozoic $T_{DM(Hfi)}$ age ~0.9. Similar tendencies are disclosed for Permian to Ordovician inherited cores with $T_{DM(Hfi)}$ age values between ~1.2 to ~3.0 Ga. Proterozoic cores disclose exclusively Paleoproterozoic and older $T_{DM(Hfi)}$ age values ~1.5 to ~3.5 Ga. Overall dominant-negative εHf values hint at the reworking of older crustal unradiogenic sources (Fig. 15).

Leucocratic Dike

Jurassic crystals of sample G-52d yield $^{176}Hf/^{177}Hf$ ranging from 0.282638 to 0.282883 (εHf_i from -1.5 to +6.9; Figs. 11D & 15), with a narrow compositional spectrum that clusters toward the CHUR array. It indicates the input of primitive sources and slightly depleted juvenile compositions. The crustal $T_{DM(Hfi)}$ model ages range from ~0.9 to ~1.2 Ga for all Jurassic crystals (~170 Ma; Fig. 15).

Jarara Formation Protomylonitic meta-conglomerate (Jf1)

Jurassic crystals from sample G-55b yield $^{176}Hf/^{177}Hf$ ranging from 0.282583 to 0.282903 (εHf_i from -2.8 to +0.31; Figs. 11E & 15). Triassic crystals yield $^{176}Hf/^{177}Hf$ ranging from 0.282481 to 0.282740 (εHf_i from -5.1 to +3.6), whereas Permian to Ordovician crystals yields $^{176}Hf/^{177}Hf$ ranging from 0.281688 to 0.282773 (εHf -27.8 – +7.8). The latter compares to Proterozoic inherited cores that yield $^{6}Hf/^{177}Hf$ ranging from 0.280791 to 0.282489 (εHf_i from -24.2 to +7.3).

The crustal $T_{DM(Hfi)}$ model ages vary from ~0.9 to ~1.5 Ga for all Mesozoic crystals, whereas for Paleozoic crystals $T_{DM(Hfi)}$ model ages are older (~1.2 to ~3.1 Ga; Fig. 15). Younger crystals plot closer to the CHUR array and are representative of the range of meta-sedimentary protoliths that underwent crustal anatexis.

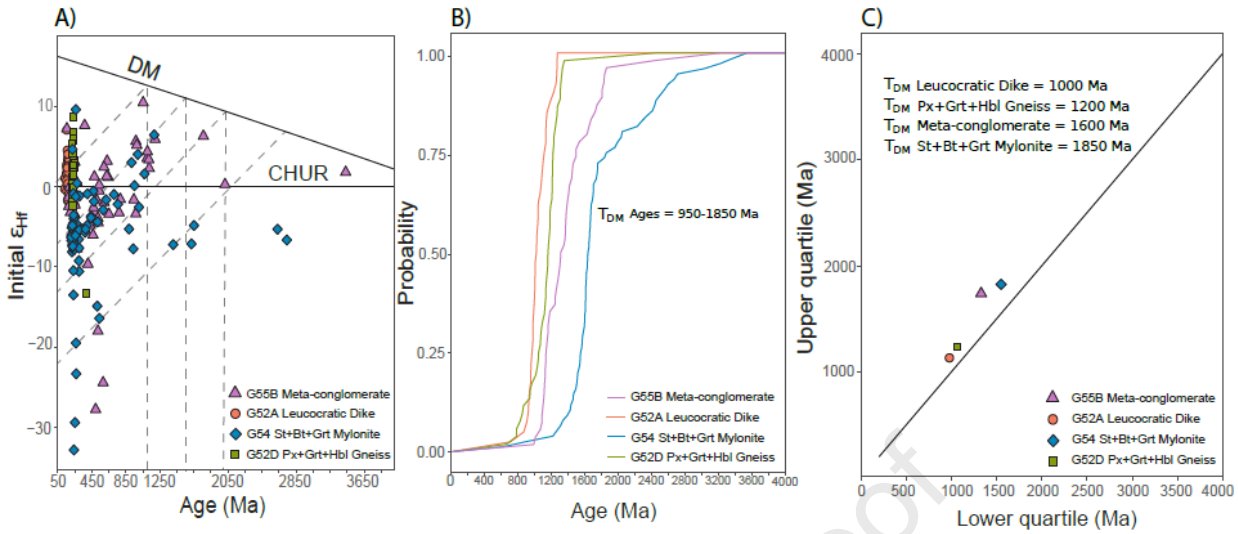


Figure 15. $^{176}Hf/^{177}Hf$t versus time diagrams for samples from the Jarara Range showing depleted mantle and chondritic uniform reservoir (CHUR) evolution trends after Bouvier et al. (2008). (A) Initial εHf_i versus $^{206}Pb/^{238}U$ apparent ages of individual zircon grains, every single analysis represented by a point. Crustal evolution models for different $T_{DM(Hf)}$ ages for zircons assume that it crystallized from a system with a time-integrated $^{176}Lu/^{177}Hf$ ratio of 0.015 (Griffin et al., 2002). (B) Empirical cumulative distribution curves for model ages of the data from samples analyzed in this study. Compiled T_{DM} ages range between 900-1750 Ma, note meta-sediments yield older components with mostly negative εHf_i crustal values, whereas anatectites and dikes indicate T_{DM} ages around 900-1200 Ma and juvenile positive εHf_i values. (C) Lower vs. upper quartile Hf model age plot for the samples of Triassic metamorphic rocks of the Uray gneiss, and late leucocratic dike. Model ages have been calculated relative to a commonly accepted depleted mantle model and plotted using the detrzrc CRAN package for R (Andersen et al., 2018).

5. DISCUSSION

The basement of the northern Andes has been investigated (Macdonald and Hurley, 1969; Cordani et al., 2005; Cardona et al., 2006, 2010a), revealing the presence of Proterozoic inliers that compose the northernmost portion of the Guajira peninsula denominated as the Guajira Arch.

Regarding an Early Mesozoic evolution of the Guajira Arch, there is an ongoing discussion if this basement inlier currently disconnected from the main Andean trunk system is autochthonous or para-autochthonous to north-western Gondwana (MacDonald and Opdyke, 1972; Bartok et al., 2015; Nova et al., 2019). In the following paragraphs, we will discuss the

586 geochronological and isotopic characteristics of the Guajira Arch Proterozoic basement and its
587 reworking during a Triassic tectono-thermal event.

588 **Meso-Neoproterozoic metamorphism**

589 The Guajira Arch Proterozoic basement holds evidence of at least two metamorphic
590 recrystallization episodes during the Late Mesoproterozoic and the Early Neoproterozoic
591 (Lockwood, 1965). The Jaturuhu Gneiss yields distinctive 2.0 – 1.7 Ga Paleoproterozoic
592 inherited cores, which underwent recrystallization by the end of the Mesoproterozoic at ca. 1041
593 ± 40 Ma, as indicated by the Discordia lower intercept (Fig. 9A). The examined amphibolite
594 melanosome discloses similar age trends ca. 1026 ± 31 Ma (Fig. 9B), suggesting an age range
595 (1050-1020 Ma) for the stromatic banding event (Radelli, 1962b), affecting a Paleoproterozoic
596 basement. Paleoproterozoic U-Pb ages are comparable to the ages of migmatites and
597 orthogneisses in Oaxaquia and the southern Chiapas Massif (Fig. 16), which underwent a
598 granulite facies metamorphism at ca. 990 Ma (Weber and Schulze, 2014; Ortega-Gutiérrez et al.,
599 2018; Solari et al., 2018). The latter is close to rim recrystallization ca. 967 ± 26 Ma ages of the
600 Jaturuhu gneiss (Figs. 9A and 16).

601 The Jojoncito Gneiss granulite facies metamorphism led to anatexis at temperatures >
602 700°C (Zuluaga et al., 2009). The ages for the Jojoncito Gneiss reveal inheritance from
603 Mesoproterozoic magmatic sources between 1.4 -1.0 Ga. The timing of this episode is
604 constrained to 1039 ± 28 M, and 1009 ± 7 Ma, which broadly correlates to the migmatization age
605 of the Jaturuhu Gneiss and closely precedes a metamorphic event at ca. 990 Ma, corresponding
606 to the climax of the Putumayo orogeny of western Amazonia (Cordani et al., 2005; Cardona et
607 al., 2006; Ibañez-Mejía, 2020). The Jojoncito gneiss ages are indistinguishable from the
608 Atuschón gneiss metamorphic ages ca.1028 ± 34 Ma, with rim ages ca. 967 ± 5.8 Ma (Baquero
609 et al., 2015).

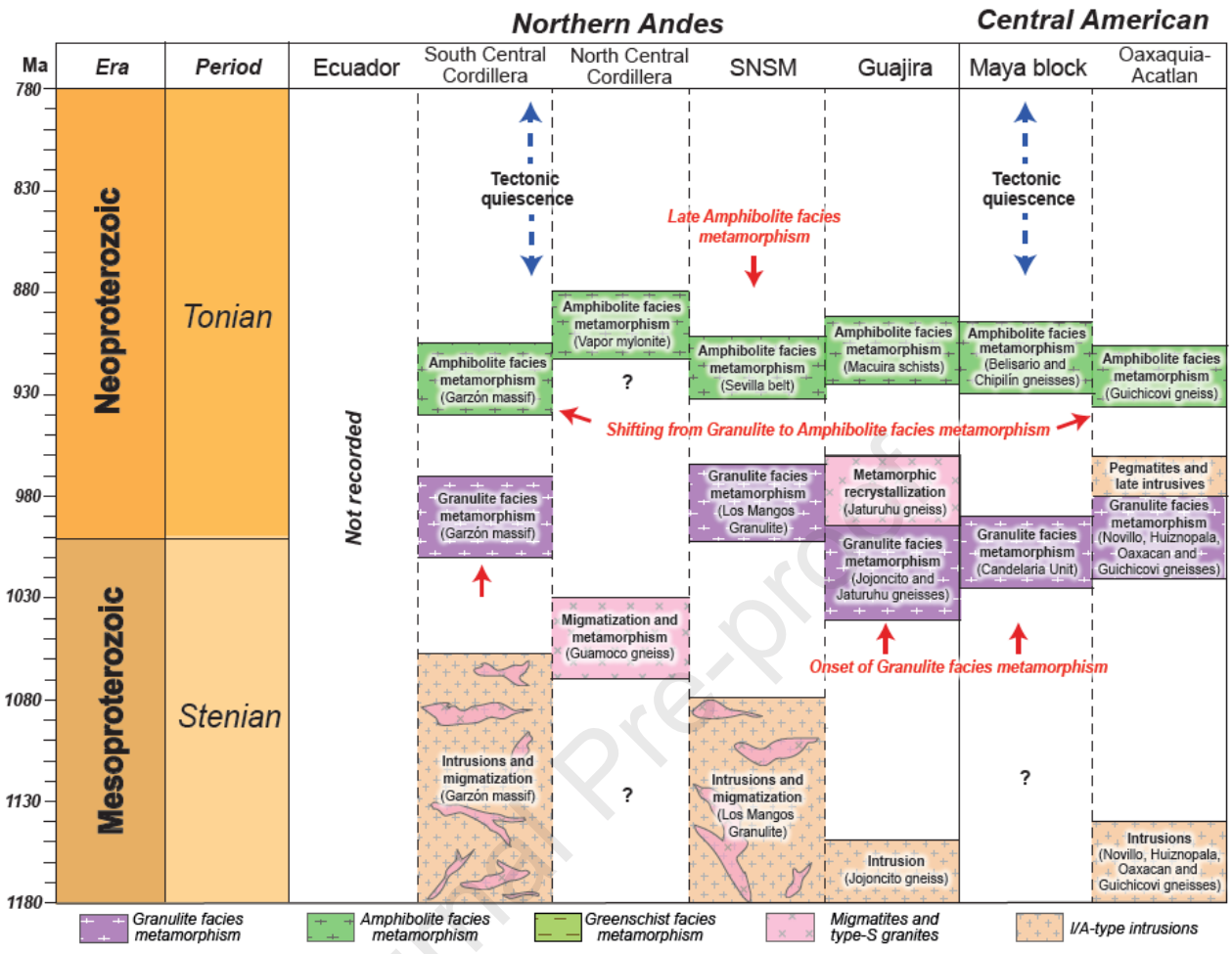


Figure 16. Stratigraphic summary sketch of the Guajira Arch, Sierra Nevada de Santa Marta massif, North Central Cordillera, South Central Cordillera, Ecuador (Northern Andes), Oaxaquia-Acatlán, and Maya block (Central American - Mexican) from the Mesoproterozoic to Neoproterozoic. Major tectono-metamorphic events are indicated, references are disclosed in the discussion.

Interestingly, although Jaturuhu and Jojoncito gneisses share similar metamorphic ages, our data reveal a missing Paleoproterozoic inheritance in the Jojoncito Gneiss (Fig. 9C-D), while the Jaturuhu Gneiss lacks a Mesoproterozoic inheritance between 1.25 -1.6 Ma (Fig. 9A-B). This indicates that the two gneissic complexes were derived from different protoliths. Besides, the zircon morphology in both complexes varies significantly with dark homogenized crystals from the Jojoncito gneiss contrasting with the typical metamorphic crystals with inherited cores of the Jaturuhu gneiss (Fig. 8).

Paleoproterozoic cores yield high Th/U ratios between 1.0-0.4, whereas rims with Mesoproterozoic U/Pb ages show Th/U values decreasing from 0.3 to 0.05, and younger rims with Neoproterozoic U/Pb ages have the lowest Th/U ratios between 0.2-0.06. This evidence a decrease in the Th/U ratio towards younger ages, thus stressing the importance of an Early-Neoproterozoic metamorphic event.

In synthesis, the Proterozoic basement of the Guajira Arch was affected by metamorphism during the Putumayo orogeny of western Amazonia at the final stages of Rodinia amalgamation (Ibañez-Mejia, 2020). Therefore, the Guajira Arch Proterozoic basement shares a common tectono-magmatic history with central-American Oaxaquia and Maya blocks, in agreement with other localities of the Northern Andes (Santa Marta Massif, Garzón Massif, Santander Massif, Central Cordillera, and the Falcon basin; Kroonenberg, 1982; Ruiz et al., 1999; Ordóñez, 1999; Cordani et al., 2005; Cardona et al., 2010a; Ibanez-Mejia et al., 2011; Baquero et al., 2015; Cediel et al., 2019; Fig. 16).

Furthermore, the geochronological age spectrum of the Jojoncito Gneiss is similar to ages documented at the southern Chiapas Massif, affected by an age-equivalent Meso-Neoproterozoic metamorphic event (Weber and Schulze, 2014; Weber et al., 2018; Fig. 16), comprising inherited cores of age ca. 1005 ± 7 Ma, with rim recrystallization by 950 ± 8 Ma. On the other hand, the Macuira Schists record a younger Neoproterozoic event at ca. 880 ± 16 Ma (Fig. 10A) through extensive zircon recrystallization, similar to the youngest metamorphic ages of the southern Chiapas Massif (Belisario Dominguéz and Chipilín gneisses; Weber et al., 2018; Fig. 16), which are strikingly younger than the widespread 990-960 Ma event.

Permian magmatism

Our data reveal that hornblende+epidote mylonitic schists (Ug1) from the Uray Gneiss suite yield a Permian age, with a crystallization age of ca. 272 ± 1.9 Ma and high Th/U ratios

between 0.8 and 1.67 lacking inherited cores (Fig. 11A). Elevated Th/U ratios in Permian amphibole schists from the Guajira Arch may indicate they are derived from an igneous protolith, most likely of mafic composition evidencing igneous activity by this period.

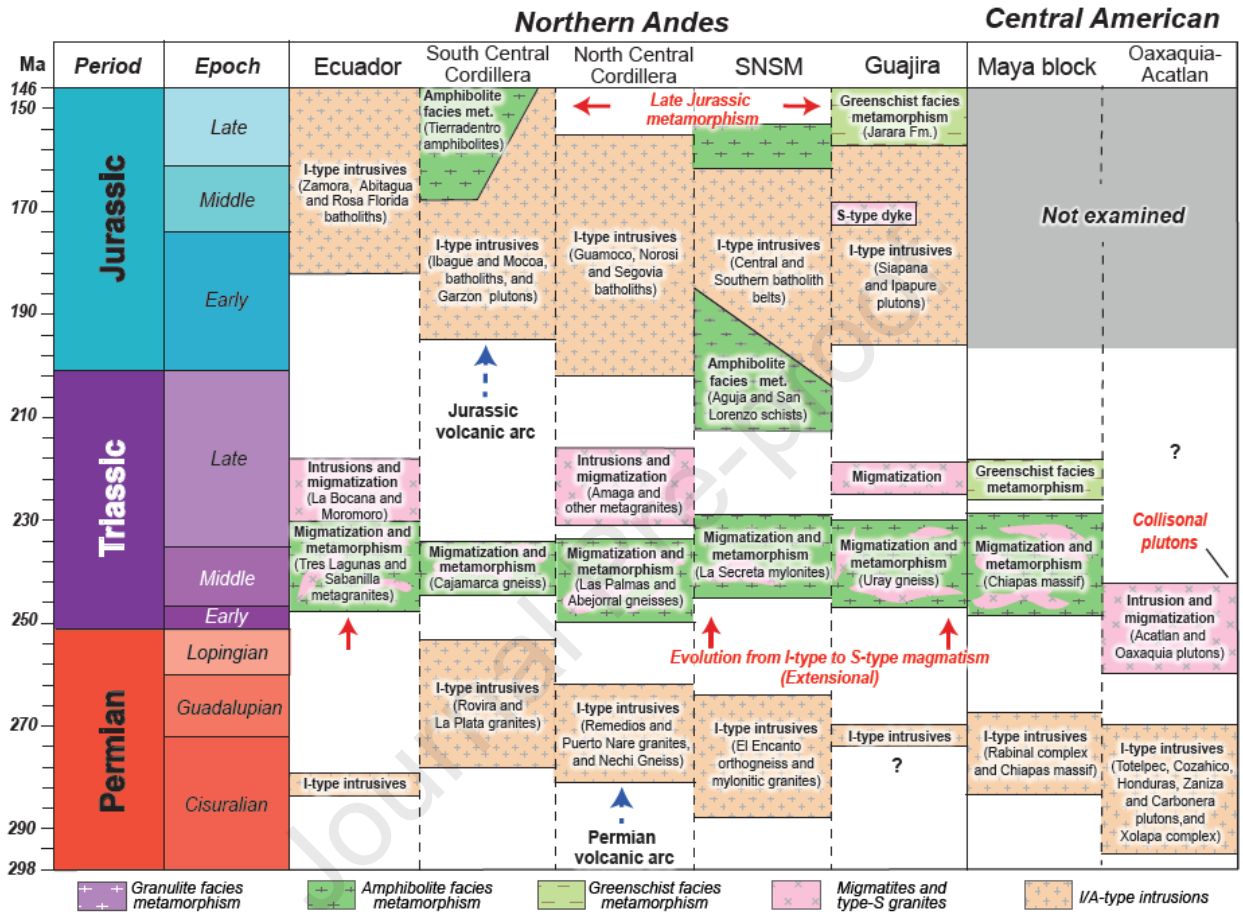
Widespread Permian continental arc-magmatism, bracketed between 288 and 255 Ma is documented in Northern Mexico (Arvizu et al., 2009), the southern Chiapas massif and Acatlán complex (Weber et al., 2007; Ortega-Obregón et al., 2014), the Maya block (Ratschbacher et al., 2009), the Paraguaná Peninsula (van der Lelij et al., 2016b) the Santa Marta Massif (Cardona et al., 2010b; Piraquive, 2017), the Central Cordillera (Vinasco et al., 2006b; Cochrane et al., 2014a; Bustamante et al., 2017; Shaw et al., 2019), and the Ecuadorian Andes (Paul et al., 2018), evidencing subduction-related diachronic magmatism along with western Gondwana (Riel et al., 2018; Spikings and Paul, 2019; Figs. 17-18B)

Triassic metamorphism

In the Guajira Arch, previous works documented Early Triassic mylonites at the Uray Gneiss, with an age ca. 246 ± 3.9 Ma (Weber et al., 2010; Fig. 2). New data at the Jarara Range evidence Triassic metamorphism spanning ca. 230-223 Ma (Fig. 12), with εHf_i (from -2.4 to 8.7) that hints at the incorporation of juvenile material (Fig. 15) with Model T_{DM} ages of ~0.8 to ~1.3 Ga (Fig. 15) may indicate *in-situ* anatexis of the Macuira Schists by incorporation of juvenile material.

Middle-Late Triassic ages of 245-223 Ma for the anatectic core emplacement and mylonitization, were rapidly followed by cooling as evidenced by $^{40}Ar/^{39}Ar$ and K-Ar ages from the Macuira Schists spanning 220-160 Ma (MacDonald, 1964; Cardona et al., 2006). Triassic metamorphism is widely recognized along the Andes and is characterized by crustal attenuation and anatexis. It has been described in La Secreta mylonites at the Santa Marta Massif (Piraquive,

672 2017), the Central Cordillera (Vinasco et al., 2006a; Cochrane et al., 2014a), and in El Oro
673 Complex at the Ecuadorian Andes (Riel et al., 2013), sharing a similar age span, lithological
674 varieties, and Hf isotopic signature (Fig. 17).



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676
677 **Figure 17. Stratigraphic summary sketch of the Guajira Arch, Sierra Nevada de Santa Marta massif, North**
678 **Central Cordillera, South Central Cordillera, Ecuador (Northern Andes), Oaxaquia-Acatlán, and Maya**
679 **block (Central American-Mexican) from the Permian to Jurassic. Major tectono-metamorphic events are**
680 **indicated, references are disclosed in the discussion.**
681

682 Late Permian magmatism and Early Triassic anatexis are documented at ca. 263-243 Ma
683 in the Marathon-Sonora section of the Pangaea collision zone in the western Gulf of Mexico
684 (Coombs et al., 2020), whereas localized exposures of igneous rocks in the Maya Block range
685 between 249–226 Ma (Spikings and Paul, 2019, and references therein; Fig. 17) Triassic

686 anatectites are also documented at Oaxaquia, southern Chiapas Massif, Acatlán and Xolapa
687 complexes (Fig. 17; Helbig et al., 2012).

688 The Triassic metamorphic record in the Central American-Mexican terranes and North
689 America indicates that orogenic metamorphism was terminated by extension and followed by
690 rifting during Pangaea break-up (Estrada-Carmona et al., 2009). The overlap between Central
691 American- Mexican terranes and South America would correspond to the Acatlán, Xolapa
692 complexes, and southern Chiapas Massif, juxtaposed against the Central Cordillera, Santa Marta
693 Massif, and Guajira Arch, in which Oaxaquia may constitute the oldest crust of the conjugate
694 margin.

695 Late Triassic metamorphism during extension is recorded at the Maya block and Chuacús
696 complex as rim recrystallization ages in detrital rocks (Spikings and Paul, 2019, and references
697 therein). At the Guajira Arch, anatexis at ca. 230 Ma was in part a delayed thermal response from
698 a back-arc extension, causing U-Pb resetting of Proterozoic zircons. In this scenario, back-arc
699 extension and increased geothermal gradients due to ascending sub-lithospheric continental
700 mantle may have given rise to a gneissic dome formation *sensu* Whitney et al. (2004; Fig. 18A).

701 The processes involved in the formation of the Guajira Arch Triassic core complex (Fig.
702 18C) can be thus related to roll-back extension and rifting at the initial stages of western Pangaea
703 break-up between 235 and 216 Ma (Cochrane et al., 2014a; Spikings and Paul, 2019), which is
704 also documented at the Santa Marta Massif, where rift sequences of Carnian age attest for
705 extension during this epoch (Gómez et al., 2021). Furthermore, extensional mechanisms driving
706 anatexis by crustal extension at the Guajira Arch are evidenced by a top-to NW sinistral shear
707 sense observed in the mylonitic units of the Uray Gneiss (Ug1, Ug3; Fig. 6), that also decrease in
708 metamorphic grade towards the NW, in contrast to an anatectic core mostly granoblastic (Ug2,
709 Fig. 6), indicating a ductile to brittle-ductile shear zone.

In synthesis, for the interval 245-220 Ma, the formation of a mylonitic lower grade detachment (Ug3) assisted the emplacement of the anatectic core (Ug2) at upper crustal levels.

Although the schematic representation of a gneissic dome (Fig. 18A) provides insight into the relationships between the metamorphic complexes described for the Guajira Arch, further detail to establish a more precise structural context is still pending task. However, so far the combined field, petrographic, structural observations, and the new geochronological and isotopic datasets presented in this work may be conceptualized as the architectural elements of a cordilleran metamorphic core complex (Fig. 18A; Whitney et al., 2004, 2013). In this scenario, upper plate extension may have been caused by decreasing convergence and slab steepening during the Late Triassic, in which rejuvenation of the lower crust in a back-arc setting was prompted by the incorporation of juvenile material from the asthenosphere (Costa and Rey, 1995; Chapman et al., 2017).

Analogous structural configurations involving anatexis, mafic underplating, and isothermal decompression are bracketed within the same timespan 230-220 Ma at the Ecuadorian Andes in El Oro Metamorphic Complex (Riel et al., 2013). Thus, it implies a large-scale thermal anomaly occurring at the western Gondwana margin during the Late Triassic.

Jurassic arc build-up

Jurassic magmatism is well documented at the northern Andes and Central-American and Mexican terranes (McHone, 2000; Pérez-Gutiérrez et al., 2009; Stanek et al., 2009; Villagómez and Spikings, 2013; Spikings et al., 2015; Bustamante et al., 2016; Centeno-García, 2017; Rodríguez et al., 2018; Shaw et al., 2019). At the Guajira Arch, Jurassic magmatism is evidenced by the two-stage evolution of a magmatic arc, comprising the Siapana Granodiorite and associated granitoids, and the syn-tectonic volcanoclastic deposits of the Cosinas through, south

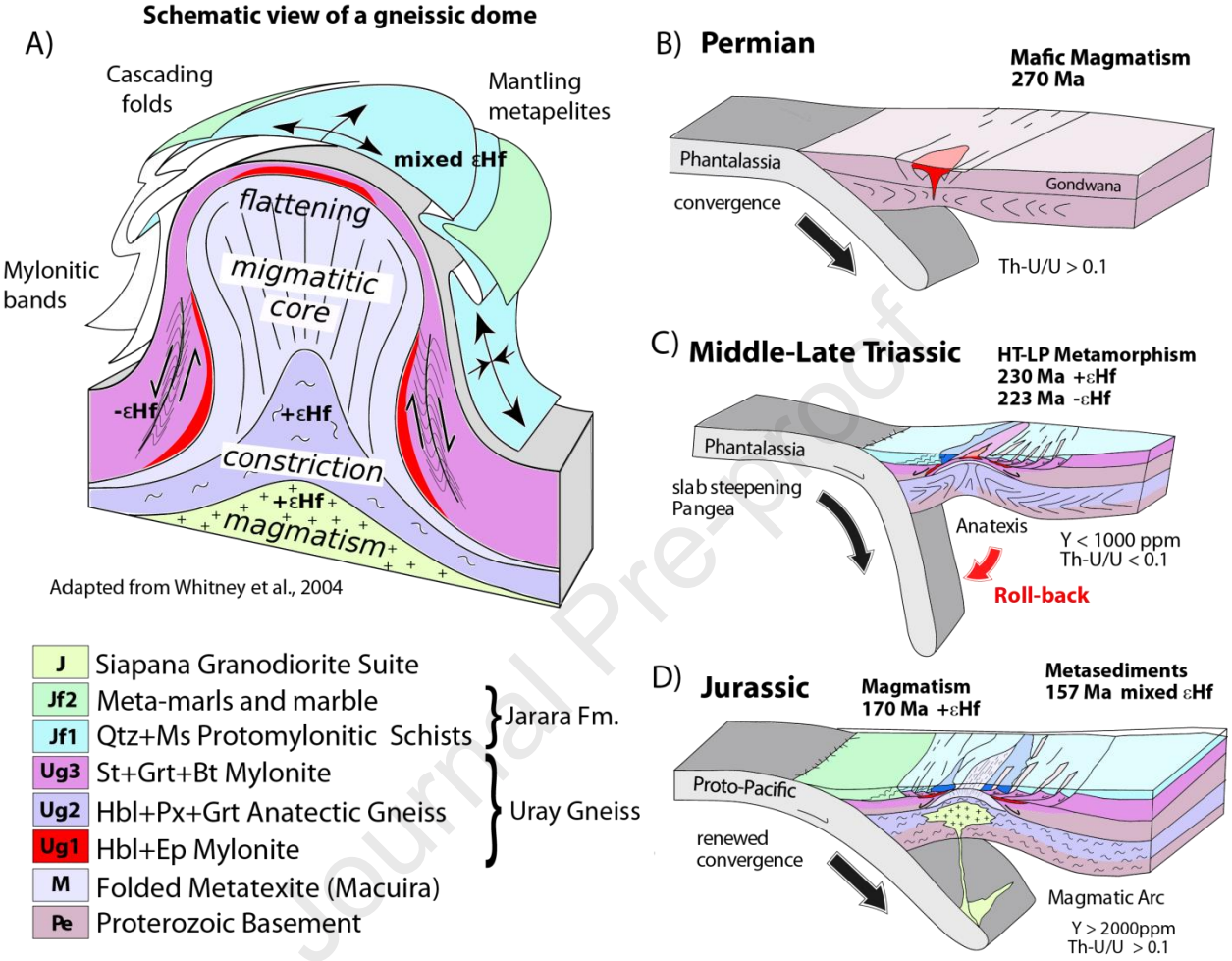
734 of the Cuisa fault (Rollins, 1965; Zuluaga et al., 2015). Protracted emplacement of the Siapana
735 granodiorite at the upper plate at ca. 195± 8 Ma, 167 ± 9.4 Ma and 158 ± 0.6 Ma (Cardona et al.,
736 2006; Rodríguez–García et al., 2020) is evidenced by zircon inheritance, negative εNd_i -5.90,
737 and a model T_{DM} age of = 1.45 Ma, highly similar to the hosting Macuira schists T_{DM} Sm-Nd
738 model age of 1.47 Ga (Cardona et al., 2006).

739 The emplacement of magmas derived from crustal sources was coeval to volcanic
740 activity. Besides, calc-alkaline signature, light rare earth element enrichment, Nb-Ta depletion,
741 and Eu negative anomaly attests for a subduction-related affinity in a converging tectonic-
742 setting (Zuluaga et al., 2015). Magmatic arc build-up was coeval to the development of a
743 continental back-arc basin built in a low-lying magmatic arc (Fig. 18D), as evidenced by the
744 silicic volcanism of the Ipapure rhyodacite by 184 ± 0.7 Ma (Zuluaga et al., 2015). In this
745 scenario, a newly formed basin at the Cosinas trough was filled by sediments mixed from
746 volcanic sources and the Guajira Arch exposed basement (Nova et al., 2019).

747 Recrystallized sectors of Jurassic age in Permian amphibole mylonitic schists evidence
748 the thermal overprint of magmatism at ca. 180 Ma. At the Jarara range, Jurassic dikes related to
749 the Siapana Granodiorite suite intruded the Uray gneiss anatectic core (Ug2) at ca. 170 ± 2.7 Ma.
750 Trends of near CHUR to positive εHf_i values of these dikes (Figs. 15 & 18) indicate mixing of
751 primitive sources and slightly depleted compositions. In the setting of a low-lying magmatic arc
752 (Zuluaga et al., 2015), crustal attenuation would lead to melts originating in the upper mantle and
753 closest to the trench, resulting in an isotopically juvenile material with asthenospheric
754 contributions (Chapman et al., 2017).

755 This may indicate that Triassic crustal attenuation, anatexis, and possibly doming, was
756 followed by slab advance during Early-Middle Jurassic (Fig. 18C-D). Jurassic magmatic activity
757 preceded the expansion of local depocenters, in which the cessation of volcanism is defined by

758 the development of a mixed siliciclastic-carbonate marine platform since the Callovian ca. 166
759 Ma (Renz, 1960; Rollins, 1965; Quintero, 2017; Nova et al., 2019).



760
761 **Figure 18. A) Schematic view of a gneissic dome adapted from Whitney et al. (2004). Schematic multi-stage**
762 **evolution proposed for the emplacement of melts at the Guajira Arch during Pangaea assembly and break-up**
763 **since B) Late Permian C) Middle-Late Triassic D) Jurassic. Late Triassic anatexis may be a response of roll-**
764 **back extension and crustal attenuation in the upper plate. Significant U-Pb ages, εHf_i, and variations in**
765 **HREE and Y contributions are indicated in ppm and discussed in the text and Table 2.**
766
767 Exhumation of the Guajira Arch since Middle Jurassic times is evidenced by fission track
768 data collected from the Cosinas group and the mixed provenance signal characterized by
769 Proterozoic, Permo-Triassic, and Jurassic zircons (García-Gonzales et al., 2010; Quintero, 2017;
770 Nova et al., 2019).

771 At the fore-arc position northwest of the Guajira Arch, the low-grade basal
772 protomylonitic meta-conglomerates of the Jarara Formation (Jf1) yield an age spectrum
773 characterized by Jurassic, Triassic (Carnian), Paleozoic (including Devonian and Ordovician),
774 and Proterozoic inheritance, with a maximum depositional age 157 ± 17.8 Ma. It is
775 indistinguishable from the Sr-isotope and U-Pb maximum depositional ages recovered from the
776 Cosinas group (at ca. 161-157 Ma, Nova, et al., 2019). Furthermore, Carnian (230-220Ma)
777 zircons in Jurassic meta-conglomerates (Jf1) are clear evidence that the anatectic core and
778 intruding granitic suites of the Guajira Arch had to be already exhumed during its protolith
779 deposition as there are not known volcanic sources of ca. 230 Ma nearby (Solari et al., 2011;
780 Spikings and Paul, 2019; López-Isaza and Zuluaga, 2020).

781 Greenschist facies metamorphism at ca. 157 Ma of the Jarara basal meta-conglomerates
782 may be interpreted as a product of continued extension (Fig. 18D) to judge from top to NW
783 sinistral shear kinematic markers, also observed at the underlying high-amphibolite facies
784 Triassic mylonites (Ug1, Ug3; Fig. 6). Similar Late Jurassic meta-sediments are documented at
785 the Cajamarca complex at the Central Cordillera, consisting of schists and amphibolites (Blanco-
786 Quintero et al., 2014; Rodríguez–García et al., 2020), although their structural relations remain
787 unknown.

788 During the Late Jurassic, a waning magmatic arc along western Gondwana is evidenced
789 by post-rift plutons. At the Guajira Arch, their ages comprise the youngest ages of the Siapana
790 Granodiorite ca. 158 ± 0.6 Ma (Rodríguez–García et al., 2020); evidencing contemporaneous
791 magmatism exhumation and sedimentation in north-western Gondwana, coeval with the drifting
792 between Gondwana to the south and Chortis-Mexico block in North and Central America
793 (Pindell and Kennan, 2009; Cochrane et al., 2014a).

794

6. CONCLUSIONS

1) The Guajira Arch Proterozoic basement shows a geochronological and isotopic affinity with Proterozoic inliers of the northern Andes and the Proterozoic basement of the southern Chiapas massif and Oaxaquia, sustaining a scenario of a conjugate margin during Rodinia assembly.

2) During Permian times, the Proterozoic basement was affected by mafic intrusions ca. 270 Ma, correlative in age to meta-granitoids and mafic intrusions documented at the Santa Marta massif, Central Cordillera of Colombia, and the southern Chiapas Massif, evidencing a continuous magmatic arc through western Pangaea.

3) Triassic metamorphism at ca. 230 Ma occurred due to anatexis under an extensional regime as evidenced by Hf_i T_{DM} ages that indicate reworking of the Proterozoic lower crust by incorporation of juvenile material sourced from the asthenospheric mantle. Depletion in LILE, HREE, and low Th/U ratios indicates that contributions from water-light and incompatible elements from a subducting lithosphere were negligible during Triassic, fitting to a diminished convergence and slab steepening during the first stages of Pangaea breakup.

4) Metamorphism at high amphibolite facies and anatexis that originated the migmatites, and afterward, the amphibolites and mylonites found at the Guajira Arch may correspond to the emplacement of a cordilleran core-complex during roll-back extension of the upper plate. Rejuvenated Triassic crust at the core is flanked by mylonitic detachments defining a dome structure.

5) Given the $T_{DM(Hfi)}$ ages of the Triassic metamorphic rocks indicating melting of a Proterozoic Gondwanan crust, assembly of allochthonous or para-autochthonous terranes is thus no longer necessary to explain the structural setting of the metamorphic complex of the Guajira Arch that is instead explained as *in-situ* anatexis of the lower crust.

6) Renewed convergence between the proto-Pacific plate and NW Gondwana during the Jurassic is evidenced by the emplacement of large volumes of magma enriched in LILE, HREE, U, and Th, along with a juvenile εHf composition. An attenuated crust in a near trench position reflects compositional variations due to mixing from subducted sediment, remelting of oceanic crust, lower arc crust, slab-derived fluids, and isotopically juvenile asthenospheric mantle during the establishment of a continental low-lying magmatic arc setting after western Pangaea break-up.

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Appendix 1. Methods

U-Pb Geochronology dating by Laser ablation inductively coupled plasma mass spectrometry on zircons (LA-ICP-MS)

We obtained U-Pb ages from 11 samples (Table 1), zircon crystals were extracted using standard mineral separation techniques, including rock crushing, sieving (430-60 μm fraction), and mineral concentration by means of magnetic and heavy liquids separation. About 50 to 200 clean, crack- and inclusion-free zircon grains per sample were mounted with epoxy, polished, and coated with graphite.

Cathodoluminescence imagery for samples (B-235, B-245, C-172, G-52a, G-52d, G-54, G-55b, G-95) was acquired using a Gatan MiniCl mounted on a JEOL JSM IT-300-LV scanning electron microscope at the Colombian Geological Survey in Bogotá.

For samples (GC-021, GC-061) Panchromatic cathodoluminescence imagery was performed at the ETHZ, using a Vega ©Tescan MV2300VP SEM in order to create a detailed set of images which served to define laser ablation spots both in grain cores and rims.

We performed zircon U-Pb geochronology and in-situ trace element analyses for 7 of the samples at the ETH Zürich (GC-021, GC-061, G-52a, G-52d, G-54, G-55b, G-95). Zircon U-Pb geochronology was performed by laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS) using an ASI RESOlution S-155 193 nm ArF excimer laser ablation system coupled to a Thermo Scientific Element XR sector-field ICP-MS (Guillong et al., 2014; Von Quadt et al., 2016).

We used a laser output energy of ca. 2 J/cm2, repetition rate of 5 Hz and spot diameter of 30 μm. The ablation was performed in the dual-volume, Laurin Technic S-155

ablation cell under a Helium flow of 0.7 L/min. Argon (ca. 1 L/min) was admixed to the aerosol within the funnel of the ablation cell to transport the ablated material to the ICP for ionization. The ICP-MS instrument was optimized for maximum sensitivity on the high mass range and minimum oxide generation (ThO^+/Th^+=<0.3%). A typical analysis consisted of 30 s baseline acquisition followed by 30 seconds of ablation. Trace element and U-Th-Pb isotopes were acquired within a single mass cycle on peak hopping mode, using short dwell times of 5 ms for most trace elements except for ^{49}Ti (20 ms), and longer dwell times for ^{206}Pb (30 ms), ^{207}Pb (30 ms), ^{235}U (20 ms), ^{232}Th (20 ms) and ^{238}U (20 ms) ensuring better counting statistics for dating.

Data were processed offline with the IGOR-based Iolite v.2.5 software (Paton et al., 2011), using the built-in data reduction scheme for trace elements and VizualAge (Petrus and Kamber, 2012) for U-Pb dating. Both data were obtained on the same signal integration intervals, ensuring that reported U-Pb dates and trace element concentrations correspond to the same zircon volume. Data from spots with anomalously elevated Al, P, Ca, Mn or Fe intensities were discarded as these values indicate the presence of mineral (e.g. apatite, feldspar) or melt inclusions. For trace elements, the stoichiometric Si concentration of 15.2 wt.% of zircon was used as an internal standard; quantification and instrumental drift correction were performed by normalization to the NIST SRM610 glass (Jochum et al., 2011) measured twice every 25 zircon analyses. For U-Pb dating, background-subtracted intensities were used to calculate isotope ratios, which were corrected for laser-induced Pb/U fractionation (Paton et al., 2010), instrumental mass discrimination, and drift by conventional standard-sample bracketing, against the primary zircon reference material GJ-1 (Jackson et al., 2004). The accuracy of the corrections was controlled by repeated measurements of secondary reference zircons 91500 (Wiedenbeck et al., 1995), Temora

(Black et al., 2003), Plešovice (Sláma et al., 2008), AusZ7.5 (Von Quadt et al., 2016) and SA2 (A. von Quadt, personal communication). All reference materials yield ages that agree within uncertainties to the reference values (see Supplementary Data, Table A1).

The remaining samples (B-235, B-245, C-172) were analyzed at the Colombian Geological Survey U-Pb geochronology laboratory selecting 60 to 80 zircons per sample. Radiometric dating was carried out following the protocols of the geochronology laboratory of the Colombian Geological Survey (Peña Urueña et al., 2018) using the Laser Ablation – Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS) method with a Thermo Scientific Element II single-collector ICP-MS coupled to a 193 nm Photon machine laser ablation system. The analytical conditions of the system were: maximum value of laser output energy 95%, the energy of 7.00 mJ, 8 Hz pulse repetition rate was used. and 126 shots per analysis, the ablation with a 25 μm spot was performed under helium flows of 0.100 L/min and 0.200 L/min, taking a total time of 1 min 5s, during which for 30 s run a target and then acquiring the masses ^{202}Hg, ^{204}Hg, ^{206}Pb, ^{207}Pb, ^{208}Pb, ^{232}Th, ^{235}U, and ^{238}U; The reference materials are NIST610 glass to maximize the signal of Th and U by optimizing ICP-MS and Laser parameters, oxide generation was optimized at ThO+/Th+=<0.5%. The Plesovice zircon as the primary standard for the correction of isotopic ratios of 337.13 ± 0.37 Ma (Sláma et al., 2008), and each one of the secondary zircon standards of 91500 CA-ID-TIMS ^{207}Pb/^{206}Pb age 1062.4 ± 0.8 Ma (Wiedenbeck et al., 1995) and Mount Dromedary 99.12 ± 0.14 Ma (Renne et al., 1998).

Data reduction was performed with the IGOR-based Iolite v2.5 (Paton et al., 2011) and Vizual Age (Petrus and Kamber, 2012). Obtained isotope ratios and dates were corrected for mass bias, instrumental drift, and downhole fractionation using primary reference material. To carry out the manual integrations, the isotopes of ^{238}U, ^{206}Pb, and

^{204}Pb were used. Finally, the Concordia diagrams and data analysis presented are made only with data that have a percentage of discordance <10% for the systems ^{206}Pb/^{238}U vs. ^{207}Pb/^{206}Pb, for crystals older than 200 Ma whereas for crystals younger than 200 Ma we used the ^{206}Pb/^{238}U vs. ^{207}Pb/^{235}U ratios.

Discordant ages arise from common Pb contamination either from inclusions or cracks, recent Pb-loss, or measuring different age domains in the grain leading to mixed ages. Isotopic ratio uncertainties reported in supplementary Table A1 have propagated uncertainties at the 95% confidence level. The total external error on pooled analyses used to calculate dates, estimated to be ~ 2 % for ^{206}Pb/^{238}U dates, is composed of the systematic uncertainties resulting from (1) uncertainty of the decay constants of ^{238}U and ^{235}U (0.05% and 0.07% respectively; Jaffey et al., 1971) (2) the uncertainty on the ^{206}Pb/^{238}U ratio of the primary standard (GJ-1 and Plesovice respectively), (3) uncertainty on the ^{238}U/^{235}U ratio (0.033%; Heiss et al., 2012) and (4) the long-term excess scatter of validation reference materials. Crystallization ages were calculated with 95% confidence and total uncertainties are given, including quadratically propagated external error as suggested in Horstwood et al. (2016). The external error-corrected ages are reported in supplementary Table A1, in which all uncertainties are reported at the 2s level. Statistical analyses of zircon data Concordia and KDE plots were performed using IsoplotR (Vermeesch, 2018). All discordant (> 10%) results of magmatic zircons were discarded.

Zircon Lu-Hf analyses by Laser ablation multi-collection inductively coupled plasma mass spectrometry (LA-MC-ICP-MS)

Zircon Lu-Hf isotopic analyses were carried out by LA-MC-ICP-MS at ETHZ using an ASI RESOlution S-155 193 nm ArF excimer laser ablation system attached to a Nu Instruments Nu Plasma 2 multi-collector sector-field mass spectrometer. We used a laser

spot diameter of 50 μm, a repetition rate of 5 Hz, and an energy density of ~4 J/cm^2. The carrier gas consisted of high-purity helium (~0.35 L/min) and argon (~1.0 L/min). The integration time was set to 0.5 s and the detector array set to collect intensities for the following isotopes: ^{171}Yb (L4), ^{173}Yb (L2), ^{175}Lu (C), ^{176}Hf (H1), ^{177}Hf (H2), ^{178}Hf (H3), ^{179}Hf (H4), ^{180}Hf (H5) and ^{181}Ta (H6). The data were processed offline with the Igor Pro-based Iolite v2.5 software using an in-house data reduction scheme. Instrumental mass bias for Yb and Hf isotopes were corrected to the natural abundance ratios ^{173}Yb/^{171}Yb and ^{179}Hf/^{177}Hf from (Chu et al., 2002). The isobaric interferences of ^{176}Yb and ^{176}Lu on ^{176}Hf were corrected using the natural abundance ratios of ^{176}Yb/^{173}Yb = 0.79502 and ^{176}Lu/^{175}Lu = 0.02656. Accuracy and external reproducibility of the method was controlled by repeated analyses of reference zircon standards GJ-1 (Morel et al., 2008), Plešovice (Sláma et al., 2008), MudTank and Temora (Woodhead and Hergt, 2005). The ^{176}Hf/^{177}Hf ratios obtained on all reference materials are within 2s uncertainties identical to the recommended values. Calculations of initial ^{176}Hf/^{177}Hf ratios, εHf_i and depleted mantle Hf model ages (T_{DM}) were performed using a ^{176}Lu decay constant of 1.867×10^{-11} (Scherer et al., 2001) with ^{176}Hf/^{177}Hf= 0.0336 and ^{176}Lu/^{177}Hf=0.282785 values for the chondritic uniform reservoir (CHUR) recommended by (Bouvier et al., 2008). Depleted mantle reservoir values were estimated according to ^{176}Hf/$^{177}Hf_{DM}$ (0) = 0.28325 (Salters and Stracke, 2004) and ^{176}Lu/$^{177}Hf_{DM}$(0) = 0.0388 (Griffin et al., 2000). The T_{DM2} was calculated from the initial Hf composition of the zircons using an average crustal ^{176}Lu/$^{177}Hf_{crust,\ today}$ = 0.015 (Griffin et al., 2002). Measured ^{176}Lu/^{177}Hf was corrected by multiplying the measured value by the ratio of the natural abundance of both isotopes.

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TABLE A1. U, Pb AND Th ISOTOPIC DATA OBTAINED USING THE LA-ICP-MS METHOD

I.D.	Target	Th (ppm)	U (ppm)	Th/U	Isotopic Ratios										Isotopic Ages						Concordance %
					$^{207}Pb/^{235}U$	$\pm2\sigma_{sys}$	$\pm2\sigma_{sys}$%	$^{206}Pb/^{238}U$	$\pm2\sigma_{sys}$	$\pm2\sigma_{sys}$%	Pb^{207}/Pb^{206}	$\pm2\sigma_{sys}$	$\pm2\sigma_{sys}$%	Rho 206/238-207/235	$^{207}Pb/^{235}U$	$\pm2\sigma_{sys}$	$^{206}Pb/^{238}U$	$\pm2\sigma_{sys}$	Pb^{207}/Pb^{206}	$\pm2\sigma_{sys}$	
G-52a - 60	*0*	*11100*	*6440*	*1.80*	*0.9200*	*0.1400*	*15.22*	*0.0252*	*0.0021*	*8.33*	*0.2610*	*0.0260*	*9.96*	*0.98*	*646*	*71*	***160.1***	***13***	*3200*	*150*	*24.78*
G-52a - 48	*1*	*681*	*3610*	*0.20*	*1.7200*	*0.1600*	*9.30*	*0.0412*	*0.0035*	*8.50*	*0.3010*	*0.0150*	*4.98*	*0.86*	*1005*	*62*	***260***	***22***	*3459*	*76*	*25.87*
G-52a - 6	*0*	*3100*	*3590*	*0.28*	*1.1100*	*0.1100*	*9.91*	*0.0342*	*0.0029*	*8.48*	*0.2390*	*0.0220*	*9.21*	*0.33*	*751*	*54*	***217***	***18***	*3070*	*160*	*28.89*
G-52a - 51	*0*	*1368*	*7600*	*0.20*	*0.6920*	*0.0690*	*9.97*	*0.0244*	*0.0019*	*7.80*	*0.2050*	*0.0190*	*9.27*	*0.19*	*530*	*40*	***155.2***	***12***	*2830*	*150*	*29.28*
G-52a - 7	*1*	*927*	*8380*	*0.13*	*0.5480*	*0.0280*	*5.11*	*0.0210*	*0.0017*	*8.11*	*0.1888*	*0.0019*	*1.01*	*0.93*	*443*	*19*	***133.6***	***10***	*2731*	*17*	*30.16*
G-52a - 41	*1*	*233*	*3470*	*0.08*	*0.9680*	*0.0790*	*8.16*	*0.0329*	*0.0026*	*7.89*	*0.2090*	*0.0100*	*4.78*	*0.92*	*684*	*42*	***208.9***	***17***	*2880*	*86*	*30.54*
G-52a - 30	*0*	*2770*	*4570*	*0.60*	*0.8660*	*0.0810*	*9.35*	*0.0303*	*0.0023*	*7.60*	*0.2020*	*0.0140*	*6.93*	*0.67*	*628*	*43*	***192.2***	***14***	*2810*	*110*	*30.61*
G-52a - 55	*0*	*33.5*	*2330*	*0.02*	*0.9900*	*0.1400*	*14.14*	*0.0344*	*0.0029*	*8.43*	*0.2050*	*0.0220*	*10.73*	*0.95*	*687*	*77*	***218.1***	***18***	*2800*	*200*	*31.75*
G-52a - 8	*0*	*506*	*5340*	*0.11*	*0.6780*	*0.0520*	*7.67*	*0.0298*	*0.0023*	*7.73*	*0.1630*	*0.0082*	*5.03*	*0.80*	*523*	*31*	***189.1***	***15***	*2467*	*89*	*36.16*
G-52a - 29	*1*	*637*	*4200*	*0.17*	*0.5810*	*0.0530*	*9.12*	*0.0272*	*0.0022*	*8.08*	*0.1503*	*0.0078*	*5.19*	*0.91*	*463*	*34*	***173.1***	***14***	*2334*	*91*	*37.39*
G-52a - 13	*0*	*134*	*3060*	*0.05*	*0.6760*	*0.0700*	*10.36*	*0.0306*	*0.0024*	*7.83*	*0.1570*	*0.0120*	*7.64*	*0.76*	*520*	*44*	***194.6***	***15***	*2390*	*150*	*37.42*
G-52a - 16	*0*	*2070*	*8580*	*0.27*	*0.4050*	*0.0260*	*6.42*	*0.0203*	*0.0016*	*7.89*	*0.1419*	*0.0062*	*4.37*	*0.28*	*344*	*19*	***129.5***	***10***	*2238*	*72*	*37.65*
G-52a - 56	*1*	*519*	*3910*	*0.15*	*0.6000*	*0.0590*	*9.83*	*0.0301*	*0.0026*	*8.64*	*0.1432*	*0.0091*	*6.35*	*0.79*	*473*	*38*	***191.3***	***16***	*2230*	*130*	*40.44*
G-52a - 23	*0*	*1386*	*6960*	*0.22*	*0.4740*	*0.0250*	*5.27*	*0.0257*	*0.0020*	*7.79*	*0.1305*	*0.0035*	*2.68*	*0.48*	*394*	*17*	***163.3***	***13***	*2099*	*47*	*41.45*
G-52a - 9	*1*	*641*	*4340*	*0.17*	*0.4680*	*0.0350*	*7.48*	*0.0260*	*0.0021*	*8.09*	*0.1301*	*0.0051*	*3.92*	*0.70*	*389*	*24*	***165.2***	***13***	*2091*	*68*	*42.47*
G-52a - 33	*1*	*230*	*5300*	*0.05*	*0.5100*	*0.0500*	*9.80*	*0.0280*	*0.0021*	*7.49*	*0.1310*	*0.0130*	*9.92*	*0.26*	*415*	*33*	***178.3***	***13***	*2030*	*160*	*42.96*
G-52a - 57	*0*	*156*	*2300*	*0.07*	*0.4600*	*0.1200*	*26.09*	*0.0278*	*0.0024*	*8.63*	*0.1350*	*0.0340*	*25.19*	*0.97*	*403*	*93*	***176.8***	***15***	*1910*	*290*	*43.87*
G-52a - 42	*1*	*266*	*3810*	*0.08*	*0.5400*	*0.0610*	*11.30*	*0.0302*	*0.0024*	*7.95*	*0.1280*	*0.0120*	*9.38*	*0.64*	*435*	*40*	***191.8***	***15***	*2020*	*170*	*44.09*
G-52a - 11	*0*	*446*	*4630*	*0.11*	*0.5210*	*0.0360*	*6.91*	*0.0299*	*0.0024*	*8.04*	*0.1235*	*0.0057*	*4.62*	*0.50*	*424*	*24*	***189.7***	***15***	*1991*	*80*	*44.74*
G-52a - 50	*0*	*454*	*5500*	*0.09*	*0.4420*	*0.0220*	*4.98*	*0.0265*	*0.0020*	*7.55*	*0.1208*	*0.0017*	*1.41*	*0.87*	*371.5*	*15*	***168.4***	***13***	*1967*	*26*	*45.33*
G-52a - 40	*0*	*349*	*4590*	*0.08*	*0.5060*	*0.0970*	*19.17*	*0.0298*	*0.0026*	*8.72*	*0.1180*	*0.0190*	*16.10*	*0.81*	*405*	*62*	***189.1***	***16***	*1800*	*260*	*46.69*
G-52a - 10	*0*	*787*	*6140*	*0.14*	*0.3930*	*0.0250*	*6.36*	*0.0249*	*0.0020*	*8.04*	*0.1127*	*0.0037*	*3.28*	*0.64*	*336*	*18*	***158.5***	***12***	*1836*	*59*	*47.17*
G-52a - 22	*1*	*631*	*4100*	*0.18*	*0.4260*	*0.0280*	*6.57*	*0.0281*	*0.0022*	*7.84*	*0.1066*	*0.0040*	*3.75*	*0.65*	*359*	*20*	***178.4***	***14***	*1732*	*67*	*49.69*
G-52a - 47	*0*	*342*	*4290*	*0.09*	*0.4430*	*0.0390*	*8.80*	*0.0296*	*0.0024*	*8.11*	*0.1082*	*0.0065*	*6.01*	*0.54*	*371*	*27*	***188***	***15***	*1750*	*100*	*50.67*
G-52a - 38	*1*	*77.2*	*1513*	*0.06*	*0.4530*	*0.0230*	*5.08*	*0.0303*	*0.0023*	*7.58*	*0.1077*	*0.0026*	*2.41*	*0.34*	*379.4*	*16*	***192.6***	***14***	*1757*	*43*	*50.76*
G-52a - 15	*1*	*481*	*4350*	*0.12*	*0.3890*	*0.0280*	*7.20*	*0.0269*	*0.0020*	*7.44*	*0.1030*	*0.0053*	*5.15*	*0.46*	*333*	*20*	***170.9***	***13***	*1654*	*95*	*51.32*
G-52a - 21	*1*	*206*	*4000*	*0.06*	*0.3970*	*0.0430*	*10.83*	*0.0287*	*0.0022*	*7.68*	*0.0977*	*0.0080*	*8.19*	*0.68*	*336*	*31*	***182.1***	***14***	*1520*	*150*	*54.20*
G-52a - 34	*1*	*428*	*3220*	*0.13*	*0.3860*	*0.0260*	*6.74*	*0.0284*	*0.0023*	*8.09*	*0.0957*	*0.0041*	*4.28*	*0.51*	*330*	*19*	***180.7***	***14***	*1539*	*83*	*54.76*
G-52a - 1	*0*	*517*	*3315*	*0.15*	*0.3410*	*0.0190*	*5.57*	*0.0265*	*0.0020*	*7.56*	*0.0948*	*0.0038*	*4.01*	*0.11*	*297.9*	*14*	***168.4***	***13***	*1511*	*72*	*56.53*
G-52a - 52	*0*	*281*	*3490*	*0.09*	*0.3610*	*0.0200*	*5.54*	*0.0278*	*0.0021*	*7.55*	*0.0937*	*0.0023*	*2.45*	*0.75*	*312*	*15*	***176.9***	***13***	*1497*	*48*	*56.70*
G-52a - 17	*1*	*540*	*6870*	*0.09*	*0.3188*	*0.0170*	*5.33*	*0.0256*	*0.0020*	*7.81*	*0.0882*	*0.0030*	*3.40*	*0.03*	*280.7*	*13*	***163***	***12***	*1377*	*62*	*58.07*
G-52a - 44	*0*	*417*	*2840*	*0.16*	*0.3520*	*0.0180*	*5.11*	*0.0287*	*0.0022*	*7.67*	*0.0879*	*0.0027*	*3.07*	*0.11*	*305.8*	*13*	***182.4***	***14***	*1372*	*57*	*59.65*
G-52a - 4	*1*	*9000*	*44300*	*0.15*	*0.1098*	*0.0110*	*10.02*	*0.0102*	*0.0012*	*11.75*	*0.0803*	*0.0024*	*2.99*	*0.91*	*105.6*	*9.7*	***65.5***	***7.6***	*1197*	*59*	*62.03*
G-52a - 18	*1*	*61.6*	*1250*	*0.06*	*0.2790*	*0.0430*	*15.41*	*0.0251*	*0.0019*	*7.56*	*0.0772*	*0.0098*	*12.69*	*0.80*	*246*	*33*	***160.1***	***12***	*1020*	*220*	*65.08*
G-52a - 39	*0*	*210*	*2490*	*0.07*	*0.2776*	*0.0140*	*5.04*	*0.0273*	*0.0021*	*7.70*	*0.0723*	*0.0023*	*3.18*	*0.17*	*248.6*	*11*	***173.3***	***13***	*981*	*62*	*69.71*
G-52a - 49	*0*	*54.4*	*5650*	*0.01*	*0.3020*	*0.0380*	*12.58*	*0.0295*	*0.0023*	*7.80*	*0.0739*	*0.0089*	*12.04*	*0.48*	*265*	*29*	***187.4***	***14***	*920*	*230*	*70.72*
G-52a - 37	*1*	*86.6*	*3770*	*0.03*	*0.2470*	*0.0150*	*6.07*	*0.0275*	*0.0021*	*7.64*	*0.0637*	*0.0023*	*3.61*	*0.62*	*224.1*	*12*	***174.7***	***13***	*719*	*76*	*77.96*
G-52a - 59	*0*	*110*	*3580*	*0.03*	*0.2395*	*0.0120*	*5.01*	*0.0269*	*0.0020*	*7.44*	*0.0642*	*0.0020*	*3.12*	*0.05*	*217.9*	*9.9*	***171***	***13***	*755*	*69*	*78.48*
G-52a - 14	*0*	*174*	*2620*	*0.06*	*0.2380*	*0.0210*	*8.82*	*0.0269*	*0.0020*	*7.45*	*0.0631*	*0.0040*	*6.34*	*0.57*	*216*	*17*	***170.9***	***13***	*670*	*130*	*79.12*
G-52a - 35	*0*	*91*	*1776*	*0.04*	*0.2441*	*0.0120*	*4.92*	*0.0279*	*0.0021*	*7.52*	*0.0623*	*0.0012*	*1.93*	*0.43*	*221.6*	*9.6*	***177.5***	***13***	*679*	*41*	*80.10*
G-52a - 58	*1*	*145*	*3050*	*0.05*	*0.2270*	*0.0150*	*6.61*	*0.0265*	*0.0020*	*7.56*	*0.0626*	*0.0025*	*3.99*	*0.47*	*207.6*	*12*	***168.4***	***13***	*678*	*87*	*81.12*
G-52a - 27	*0*	*78.8*	*3340*	*0.03*	*0.2194*	*0.0110*	*5.01*	*0.0258*	*0.0020*	*7.75*	*0.0599*	*0.0011*	*1.84*	*0.72*	*201.3*	*9*	***164.2***	***12***	*595*	*38*	*81.57*
G-52a - 28	*0*	*83.9*	*2270*	*0.04*	*0.2279*	*0.0130*	*5.70*	*0.0268*	*0.0020*	*7.47*	*0.0602*	*0.0022*	*3.65*	*0.18*	*208.3*	*11*	***170.2***	***13***	*597*	*79*	*81.71*
G-52a - 43	*0*	*407*	*3380*	*0.14*	*0.2483*	*0.0120*	*4.83*	*0.0290*	*0.0022*	*7.59*	*0.0612*	*0.0013*	*2.12*	*0.54*	*225.1*	*10*	***184.2***	***14***	*643*	*46*	*81.83*
G-52a - 36	*0*	*64*	*1446*	*0.03*	*0.2268*	*0.0130*	*5.73*	*0.0275*	*0.0021*	*7.63*	*0.0585*	*0.0024*	*4.10*	*0.00*	*207.3*	*11*	***175.1***	***13***	*530*	*94*	*84.47*
G-52a - 45	*1*	*259*	*6270*	*0.04*	*0.1998*	*0.0120*	*6.01*	*0.0249*	*0.0019*	*7.62*	*0.0576*	*0.0020*	*3.47*	*0.63*	*184.8*	*9.9*	***158.7***	***12***	*502*	*74*	*85.88*
G-52a - 3	*0*	*139.3*	*4520*	*0.03*	*0.2184*	*0.0100*	*4.58*	*0.0272*	*0.0021*	*7.73*	*0.0605*	*0.0005*	*0.88*	*0.84*	*200.5*	*8.4*	***172.7***	***13***	*621*	*19*	*86.13*
G-52a - 20	*1*	*68*	*2990*	*0.02*	*0.1950*	*0.0130*	*6.67*	*0.0249*	*0.0019*	*7.63*	*0.0543*	*0.0024*	*4.42*	*0.06*	*180.7*	*11*	***158.5***	***12***	*400*	*100*	*87.71*
G-52a - 32	1	28	2431	0.01	0.2096	0.0120	5.73	0.0273	0.0021	7.69	0.0545	0.0015	2.75	0.59	193.1	9.7	**173.7**	**13**	382	61	89.95
G-52a - 26	1	51.4	2320	0.03	0.2169	0.0100	4.61	0.0289	0.0022	7.60	0.0529	0.0010	1.80	0.59	199.3	8.5	**183.8**	**14**	321	41	92.22
G-52a - 24	1	36.8	4650	0.01	0.1962	0.0110	5.61	0.0267	0.0020	7.49	0.0517	0.0016	3.09	0.61	181.8	9.1	**169.8**	**13**	264	70	93.40
G-52a - 54	1	16.16	2008	0.01	0.2014	0.0090	4.47	0.0279	0.0021	7.52	0.0526	0.0007	1.39	0.72	186.3	7.6	**177.6**	**13**	315	35	95.33
G-52a - 31	1	34.8	5090	0.01	0.1909	0.0084	4.40	0.0266	0.0020	7.52	0.0510	0.0005	1.00	0.67	177.4	7.2	**169.2**	**13**	239	23	95.38
G-52a - 25	1	36.8	4900	0.01	0.1857	0.0084	4.52	0.0261	0.0020	7.66	0.0503	0.0005	1.01	0.79	172.9	7.2	**166.2**	**13**	208	23	96.12
G-52a - 46	0	27.2	2290	0.01	0.1885	0.0085	4.51	0.0266	0.0020	7.52	0.0509	0.0008	1.63	0.45	175.3	7.2	**169.2**	**13**	231	38	96.52
G-52a - 12	1	41.2	3920	0.01	0.1892	0.0084	4.44	0.0269	0.0020	7.44	0.0505	0.0005	0.99	0.79	175.9	7.2	**171**	**13**	216	23	97.21
G-52a - 53	1	33.9	3140	0.01	0.1892	0.0087	4.60	0.0270	0.0020	7.42	0.0511	0.0006	1.11	0.83	175.9	7.4	**171.6**	**13**	244	26	97.56
G-52a - 5	1	28.8	2500	0.01	0.1761	0.0080	4.54	0.0259	0.0020	7.73	0.0500	0.0006	1.24	0.19	164.7	6.9	**164.7**	**12**	193	29	100.00
G-52a - 2	1	45	6140	0.01	0.1734	0.0077	4.44	0.0255	0.0019	7.44	0.0497	0.0004	0.86	0.82	162.4	6.7	**162.5**	**12**	181	20	100.06
G-55b - 44	*1*	*51.3*	*906*	*0.06*	*0.4800*	*0.1200*	*25.00*	*0.0433*	*0.0037*	*8.55*	*0.0780*	*0.0160*	*20.51*	*0.86*	*388*	*69*	***273***	***23***	*1110*	*370*	*24.59*
G-55b - 58	*1*	*23.5*	*1800*	*0.01*	*0.4300*	*0.1200*	*27.91*	*0.0395*	*0.0031*	*7.85*	*0.0760*	*0.0170*	*22.37*	*0.99*	*347*	*71*	***249.7***	***19***	*970*	*360*	*25.74*
G-55b - 60	*1*	*47.8*	*1224*	*0.04*	*0.4370*	*0.0420*	*9.61*	*0.0436*	*0.0033*	*7.57*	*0.0724*	*0.0060*	*8.29*	*0.61*	*366*	*29*	***275.1***	***21***	*930*	*140*	*29.58*
G-55b - 49	*1*	*183*	*1920*	*0.11*	*0.3590*	*0.0330*	*9.19*	*0.0385*	*0.0030*	*7.79*	*0.0665*	*0.0046*	*6.92*	*0.82*	*310*	*25*	***243.5***	***18***	*780*	*150*	*31.22*
G-55b - 73	*0*	*59.6*	*496*	*0.13*	*0.8040*	*0.0390*	*4.85*	*0.0748*	*0.0057*	*7.62*	*0.0772*	*0.0014*	*1.81*	*0.52*	*599*	*22*	***465***	***34***	*1123*	*37*	*41.41*
G-55b - 63	*0*	*75.3*	*512*	*0.16*	*0.6020*	*0.0330*	*5.48*	*0.0650*	*0.0049*	*7.54*	*0.0669*	*0.0028*	*4.19*	*0.05*	*478*	*20*	***405.7***	***30***	*820*	*85*	*49.48*
G-55b - 74	*0*	*126.8*	*482*	*0.29*	*0.3590*	*0.0220*	*6.13*	*0.0449*	*0.0034*	*7.58*	*0.0579*	*0.0023*	*3.97*	*0.35*	*311*	*16*	***282.8***	***21***	*508*	*84*	*55.67*
G-55b - 64	*1*	*65.8*	*1056*	*0.07*	*0.3460*	*0.0170*	*4.91*	*0.0437*	*0.0034*	*7.78*	*0.0569*	*0.0010*	*1.72*	*0.77*	*301.5*	*13*	***275.8***	***21***	*482*	*37*	*57.22*
G-55b - 2	*1*	*151.5*	*976*	*0.17*	*0.7120*	*0.0310*	*4.35*	*0.0782*	*0.0059*	*7.54*	*0.0665*	*0.0007*	*1.07*	*0.73*	*545.8*	*19*	***485.1***	***35***	*821*	*22*	*59.09*

G-55b - 1	0	288	1228	0.27	0.9760	0.0480	4.92	0.0987	0.0074	7.50	0.0723	0.0012	1.66	0.84	691	25	606.7	44	993	34	61.10
G-55b - 52	0	44	117.2	0.42	0.4900	0.0390	7.96	0.0600	0.0051	8.50	0.0603	0.0032	5.31	0.63	404	27	376	31	600	120	62.67
G-55b - 6	0	14.56	53.1	0.31	1.2060	0.0750	6.22	0.1147	0.0089	7.76	0.0774	0.0027	3.49	0.47	806	32	700	51	1114	72	62.84
G-55b - 75	1	94.8	771	0.13	0.3240	0.0190	5.86	0.0422	0.0032	7.58	0.0556	0.0018	3.24	0.51	284.6	14	266.5	20	423	70	63.00
G-55b - 22	0	110	69.4	1.79	0.9020	0.0560	6.21	0.0948	0.0073	7.70	0.0698	0.0027	3.87	0.24	650	30	584	43	906	79	64.46
G-55b - 56	0	133.6	461	0.33	1.2080	0.0710	5.88	0.1173	0.0091	7.76	0.0758	0.0030	3.96	0.63	803	32	715	53	1081	75	66.14
G-55b - 71	1	12.07	1177	0.01	0.3288	0.0150	4.56	0.0433	0.0033	7.62	0.0550	0.0012	2.18	0.32	288.6	12	273.2	21	406	51	67.29
G-55b - 38	1	342	538	0.72	0.3285	0.0160	4.87	0.0434	0.0033	7.60	0.0548	0.0011	2.01	0.45	288.3	12	273.9	20	400	46	68.48
G-55b - 25	0	51.1	83.4	0.69	2.5200	0.1700	6.75	0.1859	0.0150	8.07	0.0987	0.0043	4.36	0.50	1273	49	1099	79	1586	80	69.29
G-55b - 36	0	146.6	1523	0.11	0.2955	0.0140	4.74	0.0398	0.0030	7.53	0.0537	0.0009	1.60	0.60	262.8	11	251.8	19	354	36	71.13
G-55b - 54	1	84	1970	0.05	0.3132	0.0160	5.11	0.0314	0.0024	7.64	0.0724	0.0022	3.04	0.19	276.5	12	199.3	15	988	60	72.08
G-55b - 55	0	73.8	137.9	0.60	1.3800	0.0820	5.94	0.1297	0.0100	7.71	0.0757	0.0021	2.77	0.66	878	34	786	59	1079	53	72.85
G-55b - 32	1	325	2696	0.13	0.2882	0.0150	5.20	0.0296	0.0023	7.78	0.0708	0.0024	3.39	0.16	256.9	12	187.8	14	937	68	73.10
G-55b - 24	1	22.3	140.8	0.18	0.6430	0.0440	6.84	0.0586	0.0046	7.85	0.0790	0.0038	4.81	0.17	502	27	367.2	28	1150	95	73.15
G-55b - 72	0	85.9	140.5	0.69	6.7100	0.3200	4.77	0.3142	0.0250	7.96	0.1524	0.0017	1.12	0.89	2073	43	1761	120	2380	23	73.99
G-55b - 5	1	20.4	70.6	0.33	0.9960	0.0640	6.43	0.1066	0.0085	7.97	0.0688	0.0027	3.92	0.57	700	32	653	49	880	82	74.20
G-55b - 48	0	16.8	74.3	0.25	0.9640	0.0660	6.85	0.1028	0.0080	7.78	0.0678	0.0032	4.72	0.62	684	34	631	47	849	93	74.32
G-55b - 68	1	177	3040	0.07	0.2600	0.0110	4.23	0.0358	0.0027	7.55	0.0522	0.0005	1.03	0.68	234.6	9.3	226.6	17	294	24	77.07
G-55b - 30	1	62	214	0.33	0.3620	0.0270	7.46	0.0481	0.0039	8.11	0.0549	0.0027	4.92	0.63	313	20	302.7	24	390	110	77.62
G-55b - 66	1	124.9	125.8	1.10	0.2900	0.0190	6.55	0.0393	0.0030	7.63	0.0533	0.0024	4.50	0.40	258	15	248.6	19	320	96	77.69
G-55b - 27	0	71.8	46.8	1.68	0.2630	0.0710	27.00	0.0282	0.0024	8.51	0.0670	0.0170	25.37	0.18	228	51	179.5	15	510	390	78.73
G-55b - 34	0	273.6	265.2	1.17	2.0680	0.0970	4.69	0.1778	0.0140	7.87	0.0846	0.0012	1.42	0.74	1137	32	1054	75	1304	27	80.83
G-55b - 80	1	64.7	214	0.34	1.2180	0.0680	5.58	0.1272	0.0098	7.70	0.0709	0.0024	3.39	0.36	808	31	772	56	948	70	81.43
G-55b - 69	0	158	229.1	0.76	0.6220	0.0330	5.31	0.0761	0.0057	7.49	0.0596	0.0017	2.85	0.22	490	21	472.5	34	578	63	81.75
G-55b - 21	0	106	350	0.34	0.9870	0.0520	5.27	0.1095	0.0084	7.67	0.0662	0.0017	2.57	0.62	697	26	670	49	806	52	83.13
G-55b - 61	0	45	152.4	0.33	1.8890	0.0930	4.92	0.1701	0.0130	7.64	0.0807	0.0016	1.98	0.72	1076	33	1012	72	1212	39	83.50
G-55b - 82	1	101.7	1001	0.11	0.2928	0.0140	4.78	0.0403	0.0031	7.69	0.0526	0.0012	2.28	0.51	260.6	11	254.7	19	304	49	83.78
G-55b - 13	0	74.4	96.8	0.88	0.2100	0.0190	9.05	0.0253	0.0020	7.90	0.0587	0.0039	6.64	0.47	192	16	161.1	12	550	160	83.91
G-55b - 76	0	24.7	64.4	0.43	1.6850	0.1000	5.93	0.1579	0.0130	8.23	0.0774	0.0025	3.23	0.70	1000	39	945	70	1121	64	84.30
G-55b - 83	0	32.8	738	0.05	0.2932	0.0150	5.12	0.0405	0.0030	7.41	0.0526	0.0014	2.66	0.42	260.9	11	255.8	19	302	59	84.70
G-55b - 15	0	85.7	1248	0.08	1.5810	0.0690	4.36	0.1527	0.0120	7.86	0.0750	0.0008	1.04	0.71	962.6	27	916	65	1068	21	85.77
G-55b - 41	1	281	918	0.34	0.2617	0.0120	4.59	0.0366	0.0028	7.65	0.0517	0.0009	1.82	0.32	235.9	9.5	231.6	17	269	41	86.10
G-55b - 65	0	85.3	114.5	0.82	0.2900	0.0200	6.90	0.0398	0.0031	7.79	0.0526	0.0028	5.32	0.37	258	16	251.7	19	290	110	86.79
G-55b - 59	0	301	569	0.60	0.5690	0.0260	4.57	0.0714	0.0054	7.56	0.0577	0.0010	1.73	0.54	457.3	17	444.5	32	512	38	86.82
G-55b - 20	0	143.3	362	0.45	0.9280	0.0490	5.28	0.1052	0.0081	7.70	0.0640	0.0014	2.19	0.73	665	26	645	47	737	44	87.52
G-55b - 42	0	114.8	97.6	1.34	0.7000	0.0390	5.57	0.0846	0.0065	7.68	0.0603	0.0022	3.65	0.49	541	26	523	39	597	79	87.60
G-55b - 84	0	126	162	0.88	5.5160	0.2500	4.53	0.3212	0.0250	7.78	0.1241	0.0016	1.29	0.83	1902	39	1795	120	2015	22	89.08
G-55b - 43	0	305	1120	0.30	0.6960	0.0380	5.46	0.0846	0.0069	8.16	0.0595	0.0008	1.28	0.93	535	23	523	41	582	28	89.86
G-55b - 62	0	67.8	15.6	4.88	2.0800	0.2500	12.02	0.1870	0.0180	9.63	0.0811	0.0097	11.96	0.83	1127	91	1104	98	1220	210	90.49
G-55b - 35	1	111	559	0.22	0.2719	0.0140	5.15	0.0381	0.0029	7.61	0.0516	0.0011	2.13	0.53	244	11	241.2	18	264	49	91.36
G-55b - 16	0	36.9	104.2	0.40	2.1290	0.1000	4.70	0.1909	0.0140	7.33	0.0815	0.0017	2.09	0.64	1157	33	1126	78	1229	42	91.62
G-55b - 45	1	25.5	202	0.14	0.8060	0.0410	5.09	0.0950	0.0073	7.68	0.0612	0.0014	2.29	0.60	599	23	585	43	638	52	91.69
G-55b - 81	0	84.6	225.3	0.42	1.7220	0.0750	4.36	0.1653	0.0120	7.26	0.0753	0.0011	1.46	0.34	1016.6	28	986	69	1074	29	91.81
G-55b - 67	0	167.9	492	0.39	0.8170	0.0400	4.90	0.0964	0.0073	7.57	0.0613	0.0011	1.79	0.72	606	22	593.3	43	646	37	91.84
G-55b - 26	1	177.2	100.4	1.99	0.2100	0.0150	7.14	0.0279	0.0022	7.88	0.0543	0.0032	5.89	0.03	193	13	177.5	14	360	130	91.97
G-55b - 57	1	5.9	1301	0.00	0.3073	0.0150	4.88	0.0424	0.0032	7.55	0.0522	0.0008	1.53	0.71	271.9	11	267.5	20	290	35	92.24
G-55b - 17	1	12.37	1111	0.01	0.3460	0.0190	5.49	0.0442	0.0034	7.70	0.0572	0.0013	2.27	0.89	301.6	14	278.5	21	492	50	92.34
G-55b - 31	0	93.3	126.8	0.81	0.5440	0.0310	5.70	0.0695	0.0054	7.77	0.0568	0.0021	3.70	0.39	440	20	433.4	33	467	85	92.81
G-55b - 29	0	155.1	317	0.55	2.1000	0.0960	4.57	0.1899	0.0150	7.90	0.0805	0.0012	1.49	0.69	1148	31	1121	79	1207	29	92.87
G-55b - 46	0	30.2	206	0.17	0.7180	0.0390	5.43	0.0872	0.0069	7.91	0.0595	0.0014	2.35	0.70	549	23	539	41	576	52	93.58
G-55b - 4	0	231	299	0.87	26.0600	1.4000	5.37	0.6490	0.0500	7.70	0.2930	0.0042	1.43	0.85	3344	52	3221	200	3432	22	93.85
G-55b - 7	1	85	151.8	0.63	1.6510	0.0840	5.09	0.1629	0.0130	7.98	0.0740	0.0017	2.30	0.58	989	32	973	70	1036	45	93.92
G-55b - 9	0	25	630	0.04	1.6660	0.0730	4.38	0.1639	0.0120	7.32	0.0741	0.0007	0.93	0.82	995.3	28	979	69	1042	19	93.95
G-55b - 23	1	61.8	1050	0.06	0.3150	0.0170	5.40	0.0414	0.0033	7.97	0.0549	0.0014	2.55	0.73	277.7	13	261.5	21	400	58	94.17
G-55b - 14	1	137	253	0.62	0.1705	0.0110	6.45	0.0236	0.0018	7.63	0.0525	0.0025	4.76	0.36	159.6	9.1	150.3	11	280	100	94.17
G-55b - 47	1	43.8	195.9	0.25	0.8090	0.0460	5.69	0.0961	0.0075	7.80	0.0609	0.0017	2.79	0.66	601	26	592	44	627	60	94.42
G-55b - 37	0	240	294	0.92	0.3160	0.0170	5.38	0.0438	0.0034	7.77	0.0524	0.0016	3.05	0.45	278.7	13	276.2	21	291	71	94.91
G-55b - 3	0	52.2	950	0.06	0.6340	0.0290	4.57	0.0800	0.0061	7.63	0.0578	0.0008	1.38	0.66	498.4	18	496	36	521	30	95.20
G-55b - 39	0	58.3	777	0.08	0.8710	0.0390	4.48	0.1019	0.0077	7.56	0.0616	0.0009	1.38	0.57	635.6	21	625.6	45	657	30	95.22
G-55b - 50	0	40.7	140.4	0.33	2.2740	0.1100	4.84	0.2010	0.0150	7.46	0.0819	0.0013	1.59	0.65	1203	33	1181	83	1240	30	95.24
G-55b - 40	0	75	159	0.54	0.6160	0.0330	5.36	0.0775	0.0060	7.74	0.0577	0.0023	3.99	0.09	487	21	481.4	36	504	89	95.52
G-55b - 10	1	12	1213	0.01	0.3342	0.0150	4.49	0.0444	0.0034	7.66	0.0550	0.0009	1.66	0.59	292.7	12	279.9	21	407	37	95.63
G-55b - 78	0	181	326	0.63	1.6180	0.0730	4.51	0.1618	0.0120	7.42	0.0728	0.0010	1.36	0.62	977	28	967	68	1007	28	96.03
G-55b - 77	1	16.77	1439	0.01	0.1819	0.0085	4.67	0.0257	0.0019	7.38	0.0509	0.0012	2.36	0.24	169.7	7.3	163.8	12	232	54	96.52
G-55b - 11	0	32.7	94.1	0.39	0.3130	0.0240	7.67	0.0422	0.0032	7.58	0.0541	0.0035	6.47	0.14	275	18	266.7	20	340	130	96.98
G-55b - 51	0	67.7	194.2	0.39	2.2990	0.1000	4.35	0.2036	0.0160	7.86	0.0815	0.0011	1.35	0.73	1211	32	1194	83	1230	27	97.07
G-55b - 28	1	80.7	462	0.20	1.8580	0.0840	4.52	0.1775	0.0130	7.32	0.0755	0.0010	1.30	0.75	1066	30	1053	74	1081	26	97.41
G-55b - 8	0	109	178	0.66	1.6090	0.0740	4.60	0.1622	0.0120	7.40	0.0724	0.0011	1.52	0.57	973	29	969	68	994	30	97.48
G-55b - 18	1	192.7	1739	0.13	0.2720	0.0130	4.78	0.0377	0.0028	7.42	0.0529	0.0010	1.89	0.38	244.2	10	238.7	18	321	43	97.75
G-55b - 12	1	185	838	0.25	0.2652	0.0130	4.90	0.0375	0.0028	7.47	0.0510	0.0012	2.35	0.43	238.7	10	237.1	18	254	60	99.33
G-55b - 70	1	72.7	159	0.51	0.6630	0.0400	6.03	0.0825	0.0064	7.76	0.0582	0.0025	4.30	0.34	515	25	510.7	38	513	93	99.55
G-55b - 19	0	37.4	128	0.34	0.3000	0.0210	7.00	0.0421	0.0032	7.60	0.0518	0.0031	5.98	0.02	266	17	265.8	20	260	120	99.92

G-55b - 79	1	95.2	275	0.39	1.6690	0.0860	5.15	0.1684	0.0130	7.72	0.0716	0.0012	1.68	0.75	996	32	**1003**	**73**	973	33	103.08
G-55b - 33	0	46.7	86	0.56	0.7000	0.0410	5.86	0.0870	0.0068	7.82	0.0580	0.0025	4.31	0.24	538	25	**538**	**40**	507	93	106.11
G-55b - 53	0	32.5	47.1	0.78	0.6820	0.0560	8.21	0.0851	0.0067	7.87	0.0577	0.0036	6.24	0.44	525	33	**526**	**40**	480	130	109.58
G-95 - 30		533	4130	0.14	0.6540	0.0310	4.74	0.0698	0.0055	7.88	0.0693	0.0005	0.78	0.94	510.4	19	**435**	**33**	908	16	47.91
G-95 - 6		1205000	56500	23.86	1.5210	0.0670	4.40	0.1210	0.0092	7.60	0.0898	0.0009	0.99	0.82	938.4	27	**737**	**53**	1421	19	51.86
G-95 - 29		846	3400	0.28	1.0560	0.0500	4.73	0.1025	0.0079	7.71	0.0767	0.0006	0.74	0.92	732	24	**629**	**46**	1113	15	56.51
G-95 - 3		694	4160	0.19	1.1900	0.0610	5.13	0.1086	0.0086	7.92	0.0783	0.0005	0.66	0.96	795	28	**664**	**50**	1154	13	57.54
G-95 - 33		398	2843	0.15	1.1540	0.0550	4.77	0.1101	0.0084	7.63	0.0766	0.0012	1.57	0.81	778	26	**673**	**49**	1109	32	60.69
G-95 - 24		284	2740	0.12	1.2680	0.0740	5.84	0.1200	0.0100	8.33	0.0780	0.0008	1.05	0.96	830	33	**730**	**58**	1146	21	63.70
G-95 - 15		307	3060	0.11	1.1630	0.0660	5.67	0.1115	0.0091	8.16	0.0747	0.0009	1.18	0.95	782	31	**681**	**53**	1061	24	64.18
G-95 - 21		292.4	2514	0.13	1.2640	0.0560	4.43	0.1223	0.0093	7.60	0.0745	0.0006	0.75	0.83	829.6	25	**743**	**53**	1054	15	70.49
G-95 - 28		674	2702	0.28	1.3520	0.0590	4.36	0.1296	0.0098	7.56	0.0764	0.0005	0.64	0.84	868.1	26	**785.4**	**56**	1105	13	71.08
G-95 - 35		150	2490	0.07	1.3440	0.0610	4.54	0.1331	0.0100	7.51	0.0744	0.0006	0.81	0.89	864	27	**805**	**59**	1052	16	76.52
G-95 - 2		571	2124	0.29	1.7510	0.0870	4.97	0.1553	0.0120	7.73	0.0803	0.0008	1.01	0.93	1026	32	**931**	**67**	1204	20	77.33
G-95 - 17		287	2590	0.12	1.4020	0.0630	4.49	0.1349	0.0110	8.15	0.0742	0.0006	0.74	0.94	890	27	**815**	**60**	1045	15	77.99
G-95 - 8		745	3325	0.25	1.6840	0.0830	4.93	0.1540	0.0120	7.79	0.0793	0.0005	0.58	0.97	1002	32	**923**	**66**	1178	12	78.35
G-95 - 9		685	2410	0.32	1.7220	0.0790	4.59	0.1577	0.0120	7.61	0.0788	0.0008	1.04	0.92	1016	30	**944**	**67**	1165	21	81.03
G-95 - 14		245	2478	0.10	1.7480	0.0900	5.15	0.1598	0.0130	8.14	0.0790	0.0015	1.90	0.89	1025	34	**955**	**72**	1169	37	81.69
G-95 - 34		148	2950	0.05	1.5550	0.0820	5.27	0.1498	0.0120	8.01	0.0759	0.0005	0.70	0.98	952	33	**900**	**69**	1092	14	82.42
G-95 - 5		1285000	56800	25.25	1.4610	0.0650	4.45	0.1423	0.0110	7.73	0.0739	0.0004	0.57	0.82	914	27	**857**	**61**	1039	11	82.48
G-95 - 39		152	1690	0.09	1.7880	0.0830	4.64	0.1672	0.0130	7.78	0.0794	0.0005	0.63	0.97	1040	30	**996**	**73**	1181	12	84.34
G-95 - 40		240	1976	0.14	1.5260	0.0700	4.59	0.1514	0.0120	7.93	0.0751	0.0007	0.87	0.84	940	28	**909**	**65**	1072	17	84.79
G-95 - 4		298	2399	0.10	1.8720	0.0820	4.38	0.1713	0.0130	7.59	0.0783	0.0005	0.64	0.88	1070.7	29	**1019**	**71**	1155	13	88.23
G-95 - 16		252	1854	0.14	2.1310	0.0950	4.46	0.1867	0.0140	7.50	0.0815	0.0006	0.75	0.88	1159	31	**1103**	**77**	1233	15	89.46
G-95 - 25		127.1	2794	0.05	1.8790	0.0800	4.26	0.1746	0.0130	7.45	0.0782	0.0005	0.59	0.89	1073.5	28	**1037**	**72**	1150	12	90.17
G-95 - 1		83.3	2091	0.04	1.8630	0.0830	4.46	0.1730	0.0130	7.51	0.0777	0.0005	0.58	0.88	1067	30	**1028**	**72**	1138	11	90.33
G-95 - 7		1321	3066	0.48	2.2460	0.1000	4.45	0.1950	0.0150	7.69	0.0826	0.0005	0.55	0.95	1195	32	**1148**	**82**	1258	11	91.26
G-95 - 12		100.7	1785	0.06	1.7900	0.0790	4.41	0.1700	0.0130	7.65	0.0764	0.0006	0.80	0.70	1041.6	29	**1012**	**71**	1106	16	91.50
G-95 - 13		51.4	2528	0.02	1.9520	0.0850	4.35	0.1790	0.0140	7.82	0.0778	0.0003	0.44	0.93	1098.7	29	**1061**	**74**	1142.1	8.8	92.90
G-95 - 37		286	1610	0.11	2.0290	0.1100	5.42	0.1881	0.0150	7.97	0.0798	0.0009	1.15	0.98	1123	35	**1110**	**81**	1190	22	93.28
G-95 - 11		304	551	0.61	2.0940	0.0920	4.39	0.1896	0.0140	7.38	0.0799	0.0007	0.86	0.71	1146.5	30	**1119**	**77**	1195	17	93.64
G-95 - 18		119.4	1042	0.13	1.6640	0.0760	4.57	0.1619	0.0120	7.41	0.0735	0.0005	0.68	0.93	995	29	**968**	**69**	1026	14	94.35
G-95 - 27		213	2296	0.09	1.8070	0.0810	4.48	0.1747	0.0130	7.44	0.0761	0.0006	0.76	0.92	1048	30	**1038**	**73**	1097	15	94.62
G-95 - 26		89	1387	0.07	1.8620	0.0810	4.35	0.1793	0.0140	7.81	0.0762	0.0006	0.79	0.77	1067.6	29	**1063**	**74**	1101	16	96.55
G-95 - 20		107.4	827	0.14	1.6690	0.0740	4.43	0.1651	0.0120	7.27	0.0728	0.0005	0.74	0.82	996.5	28	**985**	**69**	1008	15	97.72
G-95 - 32		109.4	1474	0.08	1.6750	0.0750	4.48	0.1683	0.0130	7.72	0.0734	0.0005	0.63	0.90	999	28	**1003**	**71**	1025	13	97.85
G-95 - 10		99.4	800	0.14	1.8080	0.0840	4.65	0.1742	0.0140	8.04	0.0744	0.0006	0.78	0.93	1048	30	**1035**	**75**	1056	14	98.01
G-95 - 23		63.8	1758	0.04	1.9660	0.0900	4.58	0.1862	0.0140	7.52	0.0771	0.0006	0.79	0.81	1103	31	**1101**	**77**	1123	16	98.04
G-95 - 19		183	1220	0.16	2.5150	0.1100	4.37	0.2192	0.0170	7.76	0.0842	0.0006	0.68	0.93	1276	33	**1278**	**88**	1297	13	98.54
G-95 - 36		92.6	715	0.14	1.5790	0.0700	4.43	0.1630	0.0120	7.36	0.0721	0.0006	0.85	0.78	961.7	28	**973.5**	**68**	987	17	98.63
G-95 - 22		99.7	1265	0.09	1.6920	0.0740	4.37	0.1679	0.0130	7.74	0.0730	0.0005	0.74	0.86	1005	28	**1000**	**70**	1012	15	98.81
G-95 - 38		875	2274	0.42	2.3140	0.1200	5.19	0.2096	0.0170	8.11	0.0817	0.0006	0.67	0.97	1214	36	**1226**	**89**	1237	13	99.11
G-95 - 31		78.6	1456	0.06	2.0510	0.0920	4.49	0.1944	0.0150	7.72	0.0776	0.0005	0.66	0.93	1132	31	**1145**	**81**	1137	13	100.70
G-54 - 6	*0*	*28.1*	*571*	*0.05*	*0.3470*	*0.0130*	*3.75*	*0.0421*	*0.0010*	*2.38*	*0.0598*	*0.0016*	*2.68*	*0.70*	*302.3*	*9.9*	***265.5***	***6.3***	*591*	*60*	*44.92*
G-54 - 70	*1*	*24.2*	*574*	*0.05*	*0.4000*	*0.0200*	*5.00*	*0.0477*	*0.0014*	*2.94*	*0.0608*	*0.0020*	*3.29*	*0.78*	*341*	*15*	***300.1***	***8.9***	*625*	*77*	*48.02*
G-54 - 31	*0*	*23.7*	*849*	*0.03*	*0.3435*	*0.0140*	*4.08*	*0.0424*	*0.0012*	*2.83*	*0.0587*	*0.0016*	*2.73*	*0.75*	*299.7*	*11*	***267.9***	***7.5***	*551*	*59*	*48.62*
G-54 - 5	*0*	*38.1*	*395*	*0.11*	*0.7390*	*0.0550*	*7.44*	*0.0768*	*0.0044*	*5.73*	*0.0698*	*0.0026*	*3.72*	*0.87*	*561*	*37*	***477***	***27***	*918*	*94*	*51.96*
G-54 - 18	*0*	*56.4*	*1146*	*0.05*	*0.3920*	*0.1700*	*43.37*	*0.0479*	*0.0150*	*31.32*	*0.0593*	*0.0025*	*4.22*	*0.95*	*335*	*88*	***301***	***89***	*575*	*80*	*52.35*
G-54 - 69	*1*	*25.3*	*592*	*0.05*	*0.4030*	*0.0190*	*4.71*	*0.0495*	*0.0018*	*3.64*	*0.0592*	*0.0017*	*2.87*	*0.79*	*344*	*15*	***311.3***	***11***	*566*	*58*	*55.00*
G-54 - 1	*0*	*53*	*542*	*0.11*	*0.3780*	*0.0220*	*5.82*	*0.0470*	*0.0018*	*3.83*	*0.0582*	*0.0019*	*3.26*	*0.85*	*325*	*16*	***296.2***	***11***	*526*	*74*	*56.31*
G-54 - 88	*1*	*43.1*	*369*	*0.13*	*0.6290*	*0.0270*	*4.29*	*0.0709*	*0.0021*	*2.96*	*0.0644*	*0.0018*	*2.80*	*0.76*	*495*	*17*	***441.3***	***12***	*750*	*61*	*58.84*
G-54 - 2	*0*	*79.8*	*105.3*	*0.86*	*0.3340*	*0.0210*	*6.29*	*0.0434*	*0.0013*	*3.00*	*0.0569*	*0.0035*	*6.15*	*0.28*	*296*	*16*	***274***	***8.1***	*450*	*130*	*60.89*
G-54 - 90	*1*	*12.43*	*387*	*0.04*	*0.2870*	*0.1900*	*66.20*	*0.0381*	*0.0073*	*19.16*	*0.0548*	*0.0110*	*20.07*	*0.64*	*256*	*100*	***241.2***	***44***	*388*	*250*	*62.16*
G-54 - 73	*1*	*11.83*	*412*	*0.03*	*0.2800*	*0.0130*	*4.64*	*0.0373*	*0.0010*	*2.68*	*0.0544*	*0.0022*	*4.04*	*0.50*	*250*	*11*	***235.9***	***6.5***	*370*	*91*	*63.76*
G-54 - 52	*1*	*19.3*	*407*	*0.05*	*0.2580*	*0.0120*	*4.65*	*0.0350*	*0.0009*	*2.54*	*0.0535*	*0.0021*	*3.93*	*0.54*	*233*	*9.8*	***221.7***	***5.6***	*340*	*88*	*65.21*
G-54 - 24	*1*	*113.9*	*547*	*0.23*	*0.3880*	*0.0130*	*3.35*	*0.0497*	*0.0011*	*2.21*	*0.0566*	*0.0015*	*2.65*	*0.61*	*332.7*	*9.8*	***312.6***	***6.6***	*470*	*59*	*66.51*
G-54 - 76	*1*	*8.77*	*280*	*0.03*	*0.2427*	*0.0110*	*4.53*	*0.0333*	*0.0008*	*2.46*	*0.0528*	*0.0019*	*3.60*	*0.61*	*220.4*	*9.2*	***211.4***	***5.1***	*310*	*89*	*68.19*
G-54 - 29	*1*	*10.87*	*1039*	*0.01*	*0.3600*	*0.2700*	*75.00*	*0.0312*	*0.0035*	*11.22*	*0.0770*	*0.0300*	*38.96*	*0.96*	*290*	*130*	***198***	***22***	*690*	*420*	*68.28*
G-54 - 55	*1*	*19.4*	*674*	*0.03*	*0.2893*	*0.0240*	*8.30*	*0.0393*	*0.0023*	*5.85*	*0.0535*	*0.0016*	*2.99*	*0.97*	*257.9*	*18*	***248.7***	***14***	*347*	*64*	*71.67*
G-54 - 85	*0*	*126.1*	*241*	*0.58*	*0.7360*	*0.0370*	*5.03*	*0.0837*	*0.0021*	*2.51*	*0.0639*	*0.0026*	*4.07*	*0.60*	*559*	*22*	***518***	***12***	*720*	*91*	*71.94*
G-54 - 75	*0*	*34.6*	*412*	*0.09*	*0.5120*	*0.0220*	*4.30*	*0.0633*	*0.0015*	*2.37*	*0.0587*	*0.0019*	*3.24*	*0.67*	*419*	*15*	***395.8***	***9.1***	*546*	*71*	*72.49*
G-54 - 87	*0*	*115.1*	*210.3*	*0.61*	*1.6530*	*0.0740*	*4.48*	*0.1477*	*0.0038*	*2.57*	*0.0811*	*0.0024*	*2.96*	*0.78*	*988*	*29*	***888***	***22***	*1217*	*59*	*72.97*
G-54 - 37	*1*	*6.98*	*496*	*0.02*	*0.2771*	*0.0150*	*5.41*	*0.0380*	*0.0013*	*3.42*	*0.0531*	*0.0018*	*3.39*	*0.80*	*248.2*	*11*	***240.4***	***8.3***	*325*	*72*	*73.97*
G-54 - 84	*1*	*91.6*	*382*	*0.26*	*0.2560*	*0.0110*	*4.30*	*0.0353*	*0.0008*	*2.35*	*0.0527*	*0.0020*	*3.80*	*0.47*	*230.9*	*8.8*	***223.4***	***5.2***	*298*	*82*	*74.97*
G-54 - 92	*1*	*49.7*	*687*	*0.08*	*5.9600*	*0.3800*	*6.38*	*0.3060*	*0.0170*	*5.56*	*0.1412*	*0.0028*	*1.98*	*0.95*	*1957*	*57*	***1715***	***83***	*2241*	*34*	*76.53*
G-54 - 57	*0*	*84.8*	*568*	*0.17*	*0.3610*	*0.0320*	*8.86*	*0.0480*	*0.0034*	*7.08*	*0.0547*	*0.0016*	*2.93*	*0.96*	*312.9*	*22*	***302.5***	***21***	*394*	*64*	*76.78*
G-54 - 38	*0*	*Below LOD*	*561*	*0.01*	*0.2960*	*0.2000*	*67.57*	*0.0402*	*0.0110*	*27.36*	*0.0534*	*0.0077*	*14.42*	*0.79*	*263*	*100*	***253.8***	***65***	*330*	*210*	*76.91*
G-54 - 32	*0*	*81*	*139.2*	*0.64*	*5.1000*	*0.2200*	*4.31*	*0.2859*	*0.0110*	*3.85*	*0.1293*	*0.0026*	*2.01*	*0.88*	*1835*	*42*	***1621***	***56***	*2088*	*35*	*77.63*
G-54 - 27	*0*	*167*	*206*	*0.90*	*3.6800*	*0.2600*	*7.07*	*0.2440*	*0.0150*	*6.15*	*0.1096*	*0.0026*	*2.37*	*0.94*	*1564*	*73*	***1407***	***81***	*1791*	*47*	*78.56*
G-54 - 81	*0*	*111.4*	*312*	*0.41*	*0.4680*	*0.0280*	*5.98*	*0.0604*	*0.0026*	*4.30*	*0.0570*	*0.0019*	*3.33*	*0.84*	*395*	*20*	***377.9***	***16***	*481*	*73*	*78.57*

G-54 - 28	0	80.1	543	0.16	1.9180	0.0610	3.18	0.1687	0.0039	2.31	0.0825	0.0017	2.06	0.76	1086	21	1005	22	1255	39	80.08
G-54 - 89	0	86.4	161.2	0.60	9.4800	0.3400	3.59	0.3877	0.0110	2.84	0.1779	0.0040	2.25	0.78	2384	35	2112	50	2632	38	80.24
G-54 - 20	0	35.9	228	0.18	0.4130	0.0220	5.33	0.0538	0.0016	2.97	0.0557	0.0023	4.13	0.64	350	15	337.8	9.5	420	86	80.43
G-54 - 66	1	24.2	1030	0.03	0.3260	0.0390	11.96	0.0444	0.0041	9.23	0.0535	0.0015	2.80	0.70	286	27	280.1	25	348	57	80.49
G-54 - 14	0	260	397	0.62	0.3050	0.0150	4.92	0.0417	0.0010	2.40	0.0532	0.0021	3.95	0.61	270.4	12	263.5	6.4	321	86	82.09
G-54 - 65	1	7.39	715	0.01	0.2584	0.0094	3.64	0.0361	0.0009	2.58	0.0520	0.0015	2.88	0.62	233.2	7.5	228.6	5.8	278	66	82.23
G-54 - 21	0	96.8	261	0.41	10.9700	0.3200	2.92	0.4193	0.0094	2.24	0.1899	0.0035	1.84	0.78	2520	28	2257	43	2741	30	82.34
G-54 - 62	1	69	585	0.11	0.2696	0.0100	3.71	0.0375	0.0009	2.27	0.0522	0.0017	3.26	0.49	242.2	8.4	237.4	5.3	287	74	82.72
G-54 - 46	0	103.1	430	0.27	0.2521	0.0100	3.97	0.0353	0.0008	2.27	0.0519	0.0017	3.28	0.56	228.1	8.3	223.4	5	270	73	82.74
G-54 - 67	0	66.5	673	0.11	0.4600	0.0150	3.26	0.0596	0.0013	2.18	0.0561	0.0014	2.50	0.64	384.1	11	372.9	8.1	450	55	82.87
G-54 - 13	1	153	431	0.32	0.2852	0.0120	4.21	0.0395	0.0010	2.53	0.0525	0.0018	3.43	0.58	254.6	9.2	249.4	6.3	298	75	83.69
G-54 - 74	0	58.9	185.2	0.36	1.7020	0.0620	3.64	0.1592	0.0041	2.58	0.0777	0.0020	2.57	0.71	1008	23	952	23	1133	51	84.02
G-54 - 64	0	70.3	288	0.27	0.4960	0.0210	4.23	0.0639	0.0016	2.50	0.0563	0.0019	3.37	0.60	408	14	399	9.8	473	66	84.36
G-54 - 82	1	8.52	1089	0.01	0.2464	0.0087	3.53	0.0348	0.0008	2.42	0.0515	0.0013	2.52	0.70	223.6	7	220.2	5.3	258	58	85.35
G-54 - 47	1	71.6	327	0.24	0.2461	0.0120	4.88	0.0346	0.0010	2.89	0.0517	0.0022	4.26	0.50	223.1	9.7	219.5	6.4	256	91	85.74
G-54 - 16	0	413	553	0.83	0.2806	0.0096	3.42	0.0390	0.0010	2.43	0.0522	0.0014	2.68	0.63	251	7.6	246.8	5.9	287	61	85.99
G-54 - 77	0	95.4	89	1.20	1.6320	0.1400	8.58	0.1566	0.0120	7.66	0.0757	0.0024	3.17	0.93	981	65	938	67	1080	68	86.85
G-54 - 43	1	11.62	401	0.03	0.2640	0.0110	4.17	0.0370	0.0010	2.70	0.0518	0.0017	3.28	0.62	237.4	8.9	234.1	6.5	269	72	87.03
G-54 - 11	1	7.37	294	0.03	0.2458	0.0110	4.48	0.0346	0.0010	2.89	0.0515	0.0019	3.69	0.57	222.9	9.3	219.5	6.3	252	80	87.10
G-54 - 91	0	53.5	240	0.25	7.0300	0.2900	4.13	0.3581	0.0110	3.07	0.1424	0.0028	1.97	0.89	2113	35	1972	52	2256	34	87.41
G-54 - 40	1	10.4	289	0.04	0.2530	0.0120	4.74	0.0357	0.0009	2.38	0.0516	0.0023	4.46	0.37	228.7	9.9	225.9	5.3	258	98	87.56
G-54 - 25	0	55.5	820	0.08	0.2707	0.0100	3.69	0.0379	0.0010	2.61	0.0519	0.0014	2.70	0.68	243	8.1	239.6	6.1	273	61	87.77
G-54 - 79	1	150	3500	0.04	0.2930	0.0093	3.17	0.0410	0.0011	2.68	0.0523	0.0011	2.11	0.75	260.8	7.4	258.8	7	294	46	88.03
G-54 - 60	0	56	452	0.14	0.5650	0.0260	4.60	0.0713	0.0023	3.23	0.0575	0.0015	2.61	0.83	454	16	443.8	14	504	55	88.06
G-54 - 86	1	30	780	0.04	0.4085	0.0140	3.43	0.0545	0.0012	2.20	0.0545	0.0013	2.39	0.72	347.6	9.9	342	7.4	386	55	88.60
G-54 - 71	0	158.4	361	0.49	1.9990	0.0640	3.20	0.1804	0.0038	2.11	0.0802	0.0017	2.12	0.76	1114	22	1069.3	21	1201	43	89.03
G-54 - 93	1	5.18	681	0.01	0.2420	0.0089	3.68	0.0344	0.0008	2.27	0.0513	0.0016	3.12	0.54	219.9	7.3	217.7	4.9	244	71	89.22
G-54 - 23	0	205	302	0.76	0.6810	0.0340	4.99	0.0832	0.0020	2.40	0.0594	0.0020	3.37	0.81	527	20	514.9	12	576	75	89.39
G-54 - 42	0	71.3	262	0.28	0.3540	0.0150	4.24	0.0480	0.0016	3.33	0.0534	0.0015	2.81	0.75	307	11	302.2	9.7	338	66	89.41
G-54 - 17	0	86.5	381	0.25	1.0560	0.0370	3.50	0.1168	0.0030	2.57	0.0657	0.0014	2.13	0.80	731	18	712	18	793	46	89.79
G-54 - 80	0	94	8430	0.01	0.2533	0.0073	2.88	0.0359	0.0008	2.12	0.0513	0.0010	1.87	0.76	229.2	6	227.2	4.7	252	43	90.16
G-54 - 33	0	12.18	1200	0.01	0.2627	0.0087	3.31	0.0370	0.0008	2.13	0.0515	0.0012	2.33	0.71	236.7	7	234.4	4.9	259	55	90.50
G-54 - 26	1	13.86	428	0.03	0.2354	0.0110	4.67	0.0335	0.0009	2.57	0.0511	0.0021	4.11	0.48	214.5	8.7	212.3	5.4	234	86	90.73
G-54 - 9	1	10.79	1908	0.01	0.2428	0.0078	3.21	0.0345	0.0008	2.32	0.0511	0.0011	2.15	0.74	220.6	6.4	218.8	5	240	51	91.17
G-54 - 35	1	34	486	0.08	0.2472	0.0100	4.05	0.0351	0.0009	2.42	0.0513	0.0018	3.51	0.51	224.1	8.1	222.1	5.3	242	76	91.78
G-54 - 12	0	66.6	288	0.26	1.1400	0.0700	6.14	0.1246	0.0066	5.30	0.0665	0.0019	2.86	0.89	772	38	757	39	816	59	92.77
G-54 - 36	0	151.5	149	1.13	3.7700	0.1700	4.51	0.2685	0.0085	3.17	0.1016	0.0026	2.56	0.83	1584	39	1533	44	1651	48	92.85
G-54 - 72	0	32.2	2500	0.01	0.2612	0.0082	3.14	0.0370	0.0009	2.35	0.0513	0.0011	2.14	0.73	235.6	6.7	234.1	5.4	252	48	92.90
G-54 - 8	0	610	1275	0.52	0.5977	0.0180	3.01	0.0757	0.0017	2.25	0.0573	0.0012	2.09	0.72	475.6	11	470.4	10	503	45	93.52
G-54 - 19	1	5.25	531	0.01	0.2387	0.0100	4.19	0.0340	0.0008	2.44	0.0509	0.0017	3.34	0.60	217.2	8.2	215.6	5.2	230	73	93.74
G-54 - 83	0	544	654	0.93	0.2984	0.0110	3.69	0.0416	0.0009	2.21	0.0521	0.0016	3.07	0.55	264.9	9	262.9	5.7	280	71	93.89
G-54 - 22	1	5.56	239	0.03	0.2350	0.0330	14.04	0.0321	0.0020	6.23	0.0532	0.0041	7.71	0.66	214	25	203.4	12	320	150	95.05
G-54 - 15	0	448	566	0.87	0.7110	0.0230	3.23	0.0873	0.0020	2.29	0.0591	0.0013	2.20	0.73	544.8	14	539.6	12	567	50	95.17
G-54 - 61	1	8.83	862	0.01	0.2457	0.0084	3.42	0.0352	0.0008	2.27	0.0510	0.0014	2.75	0.60	223	6.9	223.1	5	234	62	95.34
G-54 - 68	0	39.5	131	0.34	1.6990	0.0690	4.06	0.1662	0.0049	2.95	0.0738	0.0021	2.85	0.71	1006	26	991	27	1027	58	96.49
G-54 - 53	0	332	616	0.57	0.3574	0.0140	3.92	0.0489	0.0011	2.25	0.0530	0.0017	3.21	0.57	310	10	307.5	6.5	318	70	96.70
G-54 - 39	1	11.24	665	0.02	0.2553	0.0094	3.68	0.0363	0.0008	2.23	0.0511	0.0016	3.13	0.53	230.7	7.6	229.8	5	237	68	96.96
G-54 - 34	0	55.4	715	0.09	0.2543	0.0099	3.89	0.0362	0.0009	2.46	0.0511	0.0016	3.13	0.60	229.9	8	228.9	5.5	236	69	96.99
G-54 - 10	1	Below LOD	446	0.01	0.1907	0.0090	4.72	0.0270	0.0007	2.66	0.0515	0.0022	4.27	0.44	177	7.6	172	4.5	251	90	97.18
G-54 - 56	0	117.3	322	0.41	0.8440	0.0320	3.79	0.1009	0.0023	2.28	0.0610	0.0016	2.62	0.73	620	18	619.5	14	634	57	97.71
G-54 - 54	0	140.2	377	0.43	2.2370	0.0720	3.22	0.2016	0.0049	2.43	0.0804	0.0018	2.24	0.72	1192	23	1184	27	1206	43	98.18
G-54 - 41	0	11.29	332	0.04	0.2475	0.0097	3.92	0.0354	0.0009	2.52	0.0508	0.0015	2.95	0.66	224.4	7.9	224	5.5	227	68	98.68
G-54 - 51	1	131.4	248	0.58	0.7420	0.0350	4.72	0.0916	0.0037	4.04	0.0588	0.0017	2.89	0.79	563	21	565	22	568	55	99.47
G-54 - 7	1	9.69	536	0.02	0.2494	0.0110	4.41	0.0357	0.0012	3.37	0.0509	0.0018	3.54	0.62	225.8	9	225.9	7.3	227	78	99.52
G-54 - 4	1	5.05	223.5	0.02	0.2367	0.0110	4.65	0.0341	0.0008	2.40	0.0507	0.0022	4.34	0.38	215.4	9	216.3	5.1	214	92	101.07
G-54 - 30	0	44.3	97	0.50	1.4710	0.0650	4.42	0.1531	0.0038	2.48	0.0698	0.0027	3.87	0.49	916	26	918	21	907	78	101.21
G-54 - 59	1	10.3	840	0.01	0.2590	0.0150	5.79	0.0371	0.0014	3.78	0.0508	0.0015	2.95	0.89	234.1	12	234.7	8.7	226	67	103.85
G-54 - 50	0	184.1	318	0.65	0.7740	0.0300	3.88	0.0950	0.0023	2.42	0.0591	0.0016	2.71	0.72	581	17	584.9	14	562	58	104.07
G-54 - 48	0	18.62	756	0.03	0.2446	0.0086	3.52	0.0353	0.0008	2.24	0.0503	0.0013	2.58	0.68	222.1	7	223.6	4.9	206	60	108.54
G-54 - 58	1	8.18	430	0.02	0.2310	0.0099	4.29	0.0334	0.0009	2.63	0.0501	0.0016	3.19	0.67	210.8	8.2	212	5.5	195	68	108.72
G-54 - 3	1	17.4	370	0.05	0.2513	0.0110	4.38	0.0361	0.0009	2.57	0.0505	0.0017	3.37	0.64	227.4	8.9	228.9	5.8	210	76	109.00
G-54 - 63	0	225	384	0.65	0.3101	0.0130	4.19	0.0439	0.0010	2.28	0.0514	0.0018	3.50	0.55	274	9.9	276.9	6.5	250	79	110.76
G-54 - 49	1	11.27	686	0.02	0.2585	0.0087	3.37	0.0373	0.0009	2.36	0.0504	0.0014	2.78	0.58	233.3	7	235.8	5.5	209	61	112.82
G-54 - 44	0	19.3	412	0.05	0.2508	0.0091	3.63	0.0364	0.0008	2.23	0.0501	0.0015	2.99	0.57	227.1	7.4	230.2	5	199	66	115.68
G-54 - 78	1	8.49	358	0.03	0.2265	0.0100	4.42	0.0331	0.0007	2.23	0.0497	0.0022	4.43	0.25	207.1	8.6	210.1	4.6	175	91	120.06
G-54 - 45	0	13.6	351	0.04	0.2480	0.0110	4.44	0.0365	0.0009	2.36	0.0493	0.0019	3.85	0.50	224.5	9	231	5.3	161	81	143.48
G-52d - 61	1	1.86	160	0.04	0.3870	0.0270	6.98	0.0369	0.0012	3.25	0.0763	0.0045	5.90	0.54	331	20	233.4	7.7	1060	120	22.02
G-52d - 58	1	20.3	266	0.09	0.2720	0.0160	5.88	0.0347	0.0010	2.82	0.0579	0.0031	5.35	0.42	247	13	219.9	6.1	490	120	44.88
G-52d - 27	1	6.17	223	0.03	0.2930	0.0190	6.48	0.0368	0.0011	2.99	0.0581	0.0034	5.85	0.43	260	15	233	6.8	490	130	47.55
G-52d - 68	1	11	241	0.05	0.2840	0.0200	7.04	0.0359	0.0010	2.79	0.0575	0.0035	6.09	0.52	253	15	227.1	6.3	470	130	48.32
G-52d - 19	0	1.28	162	0.01	0.3130	0.0180	5.75	0.0402	0.0011	2.74	0.0566	0.0028	4.95	0.51	276	14	254.1	6.7	440	110	57.75

G-52d - 71	0	7.21	250	0.03	0.2700	0.0140	5.19	0.0357	0.0010	2.78	0.0549	0.0027	4.92	0.36	242	11	225.9	6.1	390	110	57.92
G-52d - 74	1	7.97	210	0.04	0.2820	0.0140	4.96	0.0372	0.0009	2.34	0.0550	0.0026	4.73	0.33	252	11	235.7	5.4	390	100	60.44
G-52d - 69	0	1.91	96.7	0.02	0.2660	0.0190	7.14	0.0352	0.0011	3.13	0.0550	0.0038	6.91	0.29	238	15	222.9	6.6	360	140	61.92
G-52d - 9	1	2.57	123.9	0.02	0.2650	0.0180	6.79	0.0356	0.0009	2.62	0.0542	0.0033	6.09	0.45	238	14	225.2	5.8	350	130	64.34
G-52d - 63	0	4.04	658	0.01	0.2660	0.0170	6.39	0.0357	0.0010	2.81	0.0543	0.0028	5.16	0.62	239	14	225.8	6.3	350	110	64.51
G-52d - 54	0	19.9	310	0.07	0.2560	0.0130	5.08	0.0347	0.0009	2.65	0.0537	0.0025	4.66	0.41	230.9	10	220.1	5.8	337	100	65.31
G-52d - 26	0	1.85	217.2	0.01	0.2599	0.0100	3.85	0.0356	0.0008	2.27	0.0536	0.0017	3.17	0.57	234.5	8.9	225.8	5	342	72	66.02
G-52d - 44	1	6.43	179	0.04	0.2550	0.0410	16.08	0.0345	0.0012	3.48	0.0537	0.0067	12.48	1.03	230	29	218.7	7.3	330	180	66.27
G-52d - 33	1	2.82	140	0.02	0.2490	0.0150	6.02	0.0337	0.0009	2.79	0.0536	0.0028	5.22	0.50	225	12	213.8	5.9	320	110	66.81
G-52d - 6	0	204	444	0.53	0.5110	0.0290	5.68	0.0626	0.0029	4.63	0.0593	0.0016	2.70	0.88	419	19	391.4	17	576	62	67.95
G-52d - 17	1	0.18	123.6	0.00	0.2600	0.0240	9.23	0.0353	0.0010	2.83	0.0536	0.0043	8.02	0.55	234	19	223.8	6.4	310	170	72.19
G-52d - 13	1	12.73	307	0.05	0.2690	0.0120	4.46	0.0369	0.0009	2.55	0.0531	0.0020	3.77	0.54	241.8	9.7	233.3	5.8	318	81	73.36
G-52d - 11	0	2.92	207	0.01	0.2790	0.0170	6.09	0.0380	0.0010	2.58	0.0535	0.0030	5.61	0.39	250	13	240.6	6.1	320	120	75.19
G-52d - 21	0	5.01	173	0.03	0.2700	0.0150	5.56	0.0370	0.0010	2.59	0.0532	0.0028	5.26	0.34	242	12	234.3	6	310	110	75.58
G-52d - 73	1	3.79	293	0.01	0.2670	0.0140	5.24	0.0369	0.0011	2.98	0.0528	0.0024	4.55	0.50	240.2	11	233.3	6.6	306	97	76.24
G-52d - 15	1	7.57	324	0.03	0.2560	0.0130	5.08	0.0355	0.0009	2.53	0.0524	0.0023	4.39	0.50	231.3	11	225	5.6	294	95	76.53
G-52d - 29	0	6.16	178	0.04	0.2650	0.0150	5.66	0.0366	0.0009	2.57	0.0527	0.0029	5.50	0.29	238	12	231.5	5.9	300	120	77.17
G-52d - 53	1	12.92	285	0.05	0.2590	0.0130	5.02	0.0360	0.0010	2.70	0.0524	0.0022	4.20	0.55	233.4	10	227.7	6	292	93	77.98
G-52d - 55	0	7.79	219	0.04	0.2580	0.0170	6.59	0.0358	0.0009	2.54	0.0530	0.0032	6.04	0.40	232	14	226.6	5.6	290	120	78.14
G-52d - 49	1	8	364	0.02	0.2590	0.0140	5.41	0.0358	0.0009	2.54	0.0523	0.0024	4.59	0.53	233.5	11	226.7	5.7	287	95	78.99
G-52d - 50	0	7.6	278	0.02	0.2660	0.0130	4.89	0.0368	0.0010	2.72	0.0526	0.0024	4.56	0.39	239	11	232.7	6.5	290	98	80.24
G-52d - 67	0	Below LOD	284	0.04	0.2680	0.0140	5.22	0.0373	0.0010	2.58	0.0522	0.0022	4.21	0.60	241	12	235.8	6	282	89	83.62
G-52d - 30	1	0.31	115.9	0.00	0.2650	0.0250	9.43	0.0322	0.0010	3.01	0.0598	0.0050	8.36	0.50	238	19	204.5	6	560	160	85.92
G-52d - 36	1	7.59	390	0.02	0.2543	0.0110	4.33	0.0358	0.0009	2.40	0.0516	0.0017	3.29	0.66	229.9	8.7	227	5.4	261	73	86.97
G-52d - 72	1	9.66	304	0.04	0.2550	0.0140	5.49	0.0360	0.0009	2.56	0.0518	0.0023	4.44	0.60	230.3	11	227.9	5.7	261	94	87.32
G-52d - 2	1	9.02	231.9	0.04	0.2640	0.0140	5.30	0.0369	0.0010	2.58	0.0520	0.0023	4.42	0.56	237.3	11	233.5	5.9	267	95	87.45
G-52d - 42	1	14.07	291	0.05	0.2530	0.0130	5.14	0.0355	0.0008	2.34	0.0516	0.0022	4.26	0.57	228.2	11	225	5.1	257	93	87.55
G-52d - 34	1	14.38	260	0.06	0.2620	0.0140	5.34	0.0369	0.0009	2.49	0.0517	0.0025	4.84	0.43	238.4	10	233.5	5.7	262	110	89.12
G-52d - 25	1	5.57	606	0.01	0.2490	0.0110	4.42	0.0351	0.0009	2.51	0.0515	0.0019	3.69	0.55	225.2	9	222.5	5.5	248	80	89.72
G-52d - 43	0	23.29	373	0.07	0.2514	0.0100	3.98	0.0356	0.0009	2.50	0.0515	0.0020	3.88	0.35	227.5	8.3	225.4	5.5	251	82	89.80
G-52d - 57	1	19.5	306	0.01	0.2588	0.0110	4.25	0.0365	0.0008	2.28	0.0516	0.0020	3.88	0.43	233.4	9.1	230.8	5.2	256	84	90.16
G-52d - 64	0	15.35	313	0.06	0.2580	0.0130	5.04	0.0368	0.0009	2.56	0.0511	0.0023	4.50	0.45	234.9	11	232.8	5.8	256	100	90.94
G-52d - 46	1	5.43	367	0.02	0.2516	0.0120	4.77	0.0356	0.0009	2.64	0.0515	0.0022	4.27	0.46	227.6	9.3	225.6	5.8	247	90	91.34
G-52d - 23	0	13.28	300	0.05	0.2530	0.0130	5.14	0.0357	0.0009	2.44	0.0514	0.0021	4.09	0.62	228.9	10	226.1	5.4	245	89	92.29
G-52d - 70	1	7.96	252.8	0.03	0.2490	0.0130	5.22	0.0353	0.0009	2.61	0.0514	0.0026	5.06	0.31	225.5	11	223.6	5.7	240	110	93.17
G-52d - 8	0	7.01	560	0.01	0.2501	0.0100	4.00	0.0355	0.0008	2.22	0.0512	0.0018	3.52	0.48	226.5	8.3	225.1	4.9	240	78	93.79
G-52d - 7	1	7.74	521	0.02	0.1960	0.0089	4.54	0.0269	0.0007	2.64	0.0530	0.0022	4.15	0.43	181.2	7.6	170.8	4.5	310	90	94.26
G-52d - 75	0	12.09	229	0.06	0.2550	0.0120	4.71	0.0362	0.0010	2.71	0.0513	0.0024	4.68	0.30	229.9	9.9	228.9	6.1	242	98	94.59
G-52d - 5	0	3.93	602	0.01	0.2634	0.0095	3.61	0.0373	0.0008	2.20	0.0513	0.0016	3.12	0.51	237.3	7.7	236.1	5.1	247	68	95.59
G-52d - 51	1	10	338	0.03	0.2490	0.0130	5.22	0.0355	0.0009	2.59	0.0511	0.0022	4.31	0.57	225.7	10	225.1	5.8	230	92	97.87
G-52d - 39	1	9.6	261	0.04	0.2510	0.0120	4.78	0.0362	0.0009	2.46	0.0506	0.0022	4.35	0.43	227.3	10	229.3	5.5	232	100	98.84
G-52d - 38	0	12.43	287	0.05	0.2570	0.0130	5.06	0.0366	0.0009	2.51	0.0511	0.0023	4.50	0.46	231.7	11	231.9	5.7	230	98	100.83
G-52d - 1	0	21	389	0.06	0.2584	0.0110	4.26	0.0368	0.0009	2.50	0.0510	0.0018	3.53	0.56	233.1	8.8	233.2	5.7	230	77	101.39
G-52d - 14	0	5.58	167.2	0.01	0.2580	0.0140	5.43	0.0369	0.0011	2.98	0.0510	0.0025	4.90	0.44	233	12	233.4	6.5	230	110	101.48
G-52d - 37	0	8.48	363	0.03	0.2510	0.0110	4.38	0.0359	0.0009	2.48	0.0509	0.0020	3.93	0.46	227.1	8.5	227.6	5.5	224	87	101.61
G-52d - 3	0	17.85	299	0.07	0.2530	0.0130	5.14	0.0361	0.0009	2.41	0.0509	0.0024	4.72	0.40	228.6	11	228.8	5.4	225	96	101.69
G-52d - 45	0	6.45	169	0.04	0.2620	0.0150	5.73	0.0370	0.0009	2.54	0.0512	0.0029	5.66	0.25	236	12	234.3	5.9	230	120	101.87
G-52d - 59	0	48.4	385	0.14	0.2628	0.0120	4.57	0.0374	0.0009	2.43	0.0510	0.0019	3.73	0.58	236.6	9.6	237	5.7	232	82	102.16
G-52d - 48	0	11.5	261	0.04	0.2550	0.0140	5.49	0.0365	0.0010	2.74	0.0509	0.0023	4.52	0.57	230.5	11	230.9	6.4	226	95	102.17
G-52d - 28	0	7	197	0.04	0.2620	0.0170	6.49	0.0372	0.0010	2.61	0.0505	0.0028	5.54	0.54	236	14	235.5	6	230	120	102.39
G-52d - 4	1	12.68	320	0.04	0.2610	0.0110	4.21	0.0373	0.0009	2.36	0.0510	0.0020	3.92	0.40	235.2	9	235.9	5.5	229	85	103.01
G-52d - 41	1	13.87	305.7	0.05	0.2550	0.0130	5.10	0.0365	0.0009	2.44	0.0508	0.0024	4.72	0.39	230.2	11	231.1	5.5	222	99	104.10
G-52d - 20	1	9.71	295	0.04	0.2490	0.0130	5.22	0.0357	0.0008	2.32	0.0506	0.0023	4.55	0.49	225	10	226.3	5.2	210	95	107.76
G-52d - 10	0	25.3	497	0.06	0.2522	0.0100	3.97	0.0363	0.0008	2.31	0.0505	0.0016	3.17	0.60	228.1	8.2	229.8	5.2	213	71	107.89
G-52d - 62	0	4.62	234	0.02	0.2520	0.0170	6.75	0.0360	0.0010	2.64	0.0507	0.0029	5.72	0.55	228	14	228.1	5.9	210	110	108.62
G-52d - 35	0	5.92	510	0.07	0.2526	0.0110	4.35	0.0365	0.0009	2.39	0.0504	0.0020	3.97	0.43	228.4	9.3	230.8	5.4	206	83	112.04
G-52d - 12	0	12.54	327	0.04	0.2530	0.0120	4.74	0.0367	0.0010	2.64	0.0500	0.0023	4.60	0.33	228.3	9.9	232.5	6.1	207	94	112.32
G-52d - 24	0	4.12	605	0.01	0.2571	0.0110	4.28	0.0371	0.0009	2.35	0.0504	0.0019	3.77	0.48	232	9	234.7	5.4	208	79	112.84
G-52d - 31	0	5.84	132.7	0.05	0.2510	0.0200	7.97	0.0361	0.0010	2.77	0.0506	0.0035	6.92	0.53	227	16	228.4	6.3	200	140	114.20
G-52d - 22	1	10.86	292	0.04	0.2540	0.0130	5.12	0.0363	0.0009	2.54	0.0503	0.0020	3.98	0.65	229.6	10	229.7	5.7	201	85	114.28
G-52d - 56	0	3.68	597	0.01	0.2558	0.0100	3.91	0.0370	0.0009	2.49	0.0503	0.0016	3.18	0.58	231.1	8.1	233.9	5.7	203	70	115.22
G-52d - 16	0	2	128.2	0.02	0.2700	0.0200	7.41	0.0389	0.0012	3.09	0.0505	0.0034	6.73	0.42	242	16	245.8	7.2	200	130	122.90
G-52d - 47	0	4.83	355	0.01	0.2530	0.0140	5.53	0.0367	0.0009	2.48	0.0500	0.0022	4.40	0.63	228.2	11	232.2	5.7	184	92	126.20
G-52d - 65	0	8.57	358	0.03	0.2458	0.0110	4.48	0.0359	0.0009	2.37	0.0499	0.0022	4.41	0.29	222.9	9.1	227.2	5.3	179	92	126.93
G-52d - 18	0	0.157	129.4	0.00	0.2520	0.0190	7.54	0.0366	0.0011	3.00	0.0497	0.0036	7.24	0.30	227	16	231.8	7.1	160	140	144.88
G-52d - 32	0	7.02	191	0.04	0.2500	0.0150	6.00	0.0370	0.0009	2.41	0.0493	0.0027	5.48	0.41	226	12	234.1	5.5	150	110	156.07
G-52d - 66	1	4.74	80.2	0.07	0.2300	0.0210	9.13	0.0366	0.0011	3.01	0.0458	0.0040	8.73	0.29	208	17	231.6	7.1	10	160	2316.00
																					#DIV/0!
M3_GC061_10	0	42	46	0.91	8.1600	0.5400	6.62	0.2148	0.0067	3.12	0.2730	0.0150	5.49	0.57	2225	97	1254	36	3300	160	38.00
M2_GC061_29	0	20	17	1.18	0.8280	0.0790	9.54	0.0769	0.0045	5.85	0.0747	0.0031	4.15	0.97	608	31	478	26	1046	72	45.70
M2_GC061_52	1	23	23	1.00	0.7810	0.0590	7.55	0.0764	0.0038	4.97	0.0712	0.0022	3.09	0.96	582	25	474	21	936	61	50.64
M2_GC061_41	0	18	30	0.60	1.2580	0.0930	7.39	0.1046	0.0057	5.45	0.0834	0.0017	2.04	0.95	823	27	641	30	1260	38	50.87

M2_GC061_50	*0*	*56*	*87*	*0.64*	*0.7740*	*0.0290*	*3.75*	*0.0772*	*0.0025*	*3.24*	*0.0698*	*0.0010*	*1.43*	*0.93*	*581*	*14*	***479***	***14***	*916*	*29*	*52.29*
M2_GC061_25	*1*	*19*	*19*	*1.00*	*0.7980*	*0.0520*	*6.52*	*0.0791*	*0.0039*	*4.93*	*0.0705*	*0.0020*	*2.84*	*0.91*	*594*	*22*	***491***	***22***	*902*	*60*	*54.43*
M3_GC061_6	*1*	*24*	*27*	*0.89*	*0.7550*	*0.0500*	*6.62*	*0.0769*	*0.0036*	*4.68*	*0.0682*	*0.0019*	*2.79*	*0.94*	*568*	*21*	***478***	***20***	*865*	*55*	*55.26*
M2_GC061_26	*0*	*22*	*18*	*1.22*	*0.8240*	*0.0600*	*7.28*	*0.0810*	*0.0041*	*5.06*	*0.0709*	*0.0022*	*3.10*	*0.94*	*606*	*25*	***502***	***23***	*899*	*67*	*55.84*
M2_GC061_13	*0*	*11*	*35*	*0.31*	*1.3400*	*0.1400*	*10.45*	*0.1139*	*0.0078*	*6.85*	*0.0825*	*0.0022*	*2.67*	*0.90*	*861*	*42*	***695***	***42***	*1243*	*48*	*55.91*
M2_GC061_59	*1*	*19*	*17*	*1.12*	*0.8090*	*0.0540*	*6.67*	*0.0816*	*0.0037*	*4.53*	*0.0696*	*0.0021*	*3.02*	*0.93*	*602*	*23*	***505***	***21***	*887*	*64*	*56.93*
M2_GC061_28	*0*	*18*	*16*	*1.13*	*1.1810*	*0.0780*	*6.60*	*0.1053*	*0.0055*	*5.22*	*0.0782*	*0.0022*	*2.81*	*0.91*	*787*	*26*	***645***	***30***	*1128*	*55*	*57.18*
M2_GC061_22	*1*	*22*	*22*	*1.00*	*0.7870*	*0.0480*	*6.10*	*0.0803*	*0.0037*	*4.61*	*0.0684*	*0.0017*	*2.49*	*0.93*	*586*	*20*	***498***	***21***	*858*	*51*	*58.04*
M2_GC061_60	*0*	*25*	*27*	*0.93*	*0.9390*	*0.0660*	*7.03*	*0.0911*	*0.0046*	*5.05*	*0.0719*	*0.0016*	*2.23*	*0.99*	*668*	*27*	***562***	***26***	*968*	*40*	*58.06*
M2_GC061_30	*1*	*24*	*23*	*1.04*	*0.7930*	*0.0510*	*6.43*	*0.0808*	*0.0038*	*4.70*	*0.0689*	*0.0019*	*2.76*	*0.92*	*590*	*22*	***501***	***22***	*860*	*56*	*58.26*
M2_GC061_3	*1*	*22*	*23*	*0.96*	*0.8240*	*0.0460*	*5.58*	*0.0837*	*0.0036*	*4.30*	*0.0695*	*0.0017*	*2.45*	*0.91*	*610*	*20*	***518***	***20***	*888*	*51*	*58.33*
M2_GC061_27	*0*	*15*	*14*	*1.07*	*0.9340*	*0.0640*	*6.85*	*0.0900*	*0.0043*	*4.78*	*0.0722*	*0.0022*	*3.05*	*0.92*	*664*	*26*	***555***	***24***	*951*	*66*	*58.36*
M2_GC061_40	*0*	*24*	*22*	*1.09*	*0.8860*	*0.0530*	*5.98*	*0.0878*	*0.0039*	*4.44*	*0.0704*	*0.0016*	*2.27*	*0.95*	*641*	*21*	***542***	***22***	*922*	*47*	*58.79*
M2_GC061_49	*1*	*23*	*22*	*1.05*	*0.7660*	*0.0520*	*6.79*	*0.0788*	*0.0037*	*4.70*	*0.0678*	*0.0018*	*2.65*	*0.96*	*574*	*23*	***489***	***21***	*831*	*57*	*58.84*
M2_GC061_35	*1*	*24*	*24*	*1.00*	*0.7760*	*0.0490*	*6.31*	*0.0802*	*0.0037*	*4.61*	*0.0683*	*0.0018*	*2.64*	*0.93*	*581*	*21*	***497***	***21***	*844*	*55*	*58.89*
M2_GC061_38	*1*	*18*	*17*	*1.06*	*0.8010*	*0.0510*	*6.37*	*0.0817*	*0.0037*	*4.53*	*0.0689*	*0.0020*	*2.90*	*0.91*	*596*	*23*	***506***	***21***	*850*	*62*	*59.53*
M3_GC061_7	*0*	*24*	*26*	*0.92*	*0.7980*	*0.0490*	*6.14*	*0.0815*	*0.0039*	*4.79*	*0.0680*	*0.0017*	*2.50*	*0.92*	*593*	*21*	***505***	***22***	*847*	*51*	*59.62*
M2_GC061_39	*0*	*16*	*15*	*1.07*	*0.9150*	*0.0550*	*6.01*	*0.0897*	*0.0041*	*4.57*	*0.0712*	*0.0019*	*2.67*	*0.91*	*655*	*23*	***554***	***23***	*928*	*58*	*59.70*
M2_GC061_23	*0*	*22*	*27*	*0.81*	*0.8040*	*0.0550*	*6.84*	*0.0821*	*0.0041*	*4.99*	*0.0682*	*0.0018*	*2.64*	*0.95*	*596*	*23*	***509***	***23***	*849*	*55*	*59.95*
M2_GC061_32	*1*	*22*	*21*	*1.05*	*0.7770*	*0.0520*	*6.69*	*0.0803*	*0.0037*	*4.61*	*0.0680*	*0.0020*	*2.94*	*0.93*	*583*	*22*	***498***	***21***	*823*	*60*	*60.51*
M2_GC061_21	*0*	*2*	*4*	*0.50*	*1.0100*	*0.1500*	*14.85*	*0.0962*	*0.0092*	*9.56*	*0.0753*	*0.0044*	*5.84*	*0.98*	*709*	*51*	***591***	***48***	*970*	*120*	*60.93*
M2_GC061_2	*0*	*5*	*11*	*0.45*	*1.2500*	*0.2000*	*16.00*	*0.1130*	*0.0120*	*10.62*	*0.0775*	*0.0026*	*3.35*	*0.90*	*816*	*52*	***688***	***61***	*1116*	*61*	*61.65*
M2_GC061_42	*1*	*17*	*16*	*1.06*	*0.7740*	*0.0550*	*7.11*	*0.0799*	*0.0037*	*4.63*	*0.0674*	*0.0020*	*2.97*	*0.96*	*578*	*24*	***496***	***21***	*801*	*66*	*61.92*
M2_GC061_9	*1*	*22*	*22*	*1.00*	*0.7790*	*0.0480*	*6.16*	*0.0811*	*0.0037*	*4.56*	*0.0670*	*0.0018*	*2.69*	*0.92*	*582*	*21*	***502***	***21***	*810*	*54*	*61.98*
M2_GC061_19	*0*	*21*	*19*	*1.11*	*0.9160*	*0.0540*	*5.90*	*0.0917*	*0.0039*	*4.25*	*0.0703*	*0.0018*	*2.56*	*0.92*	*659*	*21*	***566***	***22***	*911*	*53*	*62.13*
M2_GC061_31	*0*	*7*	*8*	*0.88*	*0.7930*	*0.0760*	*9.58*	*0.0807*	*0.0043*	*5.33*	*0.0692*	*0.0033*	*4.77*	*0.95*	*587*	*32*	***500***	***24***	*803*	*97*	*62.27*
M2_GC061_8	*0*	*13*	*23*	*0.57*	*0.9500*	*0.0640*	*6.74*	*0.0934*	*0.0044*	*4.71*	*0.0711*	*0.0021*	*2.95*	*0.93*	*674*	*26*	***575***	***24***	*921*	*62*	*62.43*
M2_GC061_14	*1*	*18*	*18*	*1.00*	*0.8050*	*0.0490*	*6.09*	*0.0835*	*0.0037*	*4.43*	*0.0673*	*0.0018*	*2.67*	*0.92*	*599*	*21*	***517***	***21***	*820*	*55*	*63.05*
M2_GC061_24	*0*	*7*	*10*	*0.70*	*0.7820*	*0.0680*	*8.70*	*0.0808*	*0.0042*	*5.20*	*0.0683*	*0.0029*	*4.25*	*0.94*	*583*	*29*	***501***	***24***	*791*	*92*	*63.34*
M2_GC061_58	*0*	*10*	*19*	*0.53*	*1.3130*	*0.0750*	*5.71*	*0.1179*	*0.0055*	*4.66*	*0.0783*	*0.0017*	*2.17*	*0.93*	*847*	*24*	***718***	***29***	*1130*	*44*	*63.54*
M2_GC061_18	*0*	*19*	*19*	*1.00*	*0.9100*	*0.0540*	*5.93*	*0.0928*	*0.0038*	*4.09*	*0.0691*	*0.0019*	*2.75*	*0.91*	*653*	*23*	***572***	***21***	*871*	*56*	*65.67*
M2_GC061_34	*0*	*22*	*20*	*1.10*	*0.9320*	*0.0560*	*6.01*	*0.0949*	*0.0040*	*4.21*	*0.0700*	*0.0019*	*2.71*	*0.92*	*667*	*24*	***584***	***22***	*887*	*60*	*65.84*
M2_GC061_47	*0*	*12*	*19*	*0.63*	*0.9000*	*0.0530*	*5.89*	*0.0922*	*0.0039*	*4.23*	*0.0690*	*0.0019*	*2.75*	*0.90*	*648*	*23*	***568***	***22***	*862*	*57*	*65.89*
M2_GC061_48	*0*	*11*	*11*	*1.00*	*0.8690*	*0.0620*	*7.13*	*0.0895*	*0.0040*	*4.47*	*0.0686*	*0.0023*	*3.35*	*0.94*	*632*	*27*	***552***	***22***	*827*	*74*	*66.75*
M2_GC061_55	*0*	*10*	*19*	*0.53*	*1.3350*	*0.0740*	*5.54*	*0.1213*	*0.0049*	*4.04*	*0.0775*	*0.0020*	*2.58*	*0.90*	*857*	*25*	***738***	***27***	*1103*	*51*	*66.91*
M2_GC061_20	*0*	*6*	*9*	*0.67*	*0.9020*	*0.0850*	*9.42*	*0.0895*	*0.0058*	*6.48*	*0.0689*	*0.0030*	*4.35*	*0.92*	*645*	*35*	***556***	***32***	*825*	*94*	*67.39*
M3_GC061_4	*1*	*19*	*18*	*1.06*	*0.9520*	*0.0540*	*5.67*	*0.0976*	*0.0039*	*4.00*	*0.0687*	*0.0018*	*2.62*	*0.91*	*677*	*22*	***600***	***22***	*861*	*55*	*69.69*
M2_GC061_12	*1*	*22*	*21*	*1.05*	*0.8890*	*0.0520*	*5.85*	*0.0927*	*0.0038*	*4.10*	*0.0677*	*0.0018*	*2.66*	*0.92*	*642*	*22*	***571***	***21***	*817*	*58*	*69.89*
M2_GC061_15	*0*	*14*	*13*	*1.08*	*0.9670*	*0.0670*	*6.93*	*0.0983*	*0.0047*	*4.78*	*0.0693*	*0.0022*	*3.17*	*0.92*	*685*	*27*	***604***	***27***	*857*	*69*	*70.48*
M2_GC061_37	*0*	*7*	*10*	*0.70*	*0.7770*	*0.0730*	*9.40*	*0.0833*	*0.0044*	*5.28*	*0.0654*	*0.0028*	*4.28*	*0.99*	*577*	*30*	***518***	***25***	*727*	*89*	*71.25*
M3_GC061_3	*0*	*16*	*15*	*1.07*	*0.9740*	*0.0560*	*5.75*	*0.0994*	*0.0038*	*3.82*	*0.0692*	*0.0022*	*3.18*	*0.85*	*685*	*24*	***611***	***21***	*844*	*68*	*72.39*
M3_GC061_5	*0*	*6*	*9*	*0.67*	*1.0420*	*0.0840*	*8.06*	*0.1032*	*0.0049*	*4.75*	*0.0703*	*0.0027*	*3.84*	*0.95*	*717*	*31*	***633***	***27***	*870*	*82*	*72.76*
M2_GC061_7	*0*	*21*	*20*	*1.05*	*0.9400*	*0.0510*	*5.43*	*0.0975*	*0.0039*	*4.00*	*0.0678*	*0.0018*	*2.65*	*0.88*	*669*	*22*	***600***	***22***	*824*	*58*	*72.82*
M2_GC061_44	*1*	*26*	*27*	*0.96*	*0.9320*	*0.0480*	*5.15*	*0.0990*	*0.0035*	*3.54*	*0.0672*	*0.0019*	*2.83*	*0.85*	*666*	*21*	***609***	***20***	*821*	*59*	*74.18*
M2_GC061_6	*0*	*25*	*24*	*1.04*	*1.0420*	*0.0520*	*4.99*	*0.1071*	*0.0038*	*3.55*	*0.0694*	*0.0018*	*2.59*	*0.87*	*721*	*22*	***656***	***21***	*876*	*56*	*74.89*
M3_GC061_9	*1*	*19*	*18*	*1.06*	*1.0730*	*0.0560*	*5.22*	*0.1095*	*0.0039*	*3.56*	*0.0697*	*0.0021*	*3.01*	*0.83*	*738*	*23*	***669***	***22***	*887*	*62*	*75.42*
M2_GC061_36	*0*	*1*	*4*	*0.25*	*0.8000*	*0.1100*	*13.75*	*0.0851*	*0.0056*	*6.58*	*0.0679*	*0.0049*	*7.22*	*0.90*	*591*	*47*	***526***	***32***	*690*	*150*	*76.23*
M2_GC061_65	*1*	*23*	*22*	*1.05*	*1.0490*	*0.0500*	*4.77*	*0.1097*	*0.0039*	*3.56*	*0.0682*	*0.0017*	*2.49*	*0.86*	*727*	*21*	***671***	***22***	*856*	*52*	*78.39*
M3_GC061_2	*1*	*20*	*18*	*1.11*	*1.1230*	*0.0560*	*4.99*	*0.1151*	*0.0040*	*3.48*	*0.0695*	*0.0019*	*2.73*	*0.85*	*760*	*23*	***702***	***23***	*887*	*59*	*79.14*
M2_GC061_17	*0*	*23*	*19*	*1.21*	*1.2500*	*0.0610*	*4.88*	*0.1246*	*0.0047*	*3.77*	*0.0719*	*0.0018*	*2.50*	*0.86*	*818*	*24*	***757***	***26***	*954*	*50*	*79.35*
M2_GC061_46	*1*	*20*	*18*	*1.11*	*1.0040*	*0.0520*	*5.18*	*0.1058*	*0.0037*	*3.50*	*0.0677*	*0.0021*	*3.10*	*0.81*	*701*	*22*	***648***	***21***	*808*	*65*	*80.20*
M2_GC061_57	*1*	*22*	*20*	*1.10*	*1.0000*	*0.0510*	*5.10*	*0.1057*	*0.0038*	*3.60*	*0.0676*	*0.0020*	*2.96*	*0.82*	*699*	*22*	***648***	***21***	*807*	*62*	*80.30*
M2_GC061_54	*1*	*22*	*21*	*1.05*	*0.9980*	*0.0510*	*5.11*	*0.1067*	*0.0037*	*3.47*	*0.0671*	*0.0019*	*2.83*	*0.85*	*701*	*22*	***654***	***21***	*806*	*58*	*81.14*
M2_GC061_61	*1*	*20*	*19*	*1.05*	*0.9830*	*0.0510*	*5.19*	*0.1052*	*0.0037*	*3.52*	*0.0665*	*0.0019*	*2.86*	*0.85*	*691*	*22*	***644***	***21***	*787*	*64*	*81.83*
M2_GC061_1	*0*	*16*	*20*	*0.80*	*1.0490*	*0.0560*	*5.34*	*0.1104*	*0.0040*	*3.62*	*0.0676*	*0.0020*	*2.96*	*0.85*	*726*	*24*	***675***	***22***	*822*	*63*	*82.12*
M2_GC061_62	0	0	4	0.00	2.4200	0.6100	25.21	0.1970	0.0380	19.29	0.0867	0.0041	4.73	0.80	1223	88	**1150**	**170**	1245	91	92.37
M2_GC061_45	0	51	41	1.24	1.4130	0.0450	3.18	0.1481	0.0036	2.43	0.0696	0.0014	2.01	0.78	892	19	**890**	**20**	897	41	99.22
M3_GC061_13	0	52	45	1.16	1.5990	0.0490	3.06	0.1610	0.0039	2.42	0.0718	0.0013	1.81	0.81	967	19	**962**	**22**	969	36	99.28
M2_GC061_53	0	27	25	1.08	1.3750	0.0610	4.44	0.1441	0.0046	3.19	0.0693	0.0017	2.45	0.84	874	24	**867**	**26**	873	51	99.31
M3_GC061_11	0	60	71	0.85	1.6050	0.0450	2.80	0.1625	0.0039	2.40	0.0716	0.0010	1.37	0.87	971	17	**970**	**22**	969	29	100.10
M2_GC061_4	0	21	52	0.40	1.8060	0.0610	3.38	0.1759	0.0049	2.79	0.0743	0.0014	1.88	0.83	1045	22	**1044**	**27**	1033	37	101.06
M2_GC061_64	0	14	26	0.54	1.8880	0.0680	3.60	0.1807	0.0045	2.49	0.0753	0.0018	2.39	0.75	1071	24	**1070**	**24**	1052	48	101.71
M2_GC061_43	0	28	40	0.70	1.3270	0.0440	3.32	0.1428	0.0035	2.45	0.0678	0.0015	2.21	0.74	858	19	**860**	**20**	844	45	101.90
M2_GC061_10	0	39	36	1.08	1.9280	0.0580	3.01	0.1851	0.0047	2.54	0.0753	0.0012	1.59	0.85	1088	20	**1096**	**26**	1066	34	102.81
M3_GC061_12	0	29	39	0.74	1.7830	0.0530	2.97	0.1762	0.0043	2.44	0.0733	0.0013	1.77	0.80	1036	20	**1046**	**24**	1006	37	103.98
M3_GC061_1	0	28	30	0.93	1.3970	0.0440	3.15	0.1496	0.0036	2.41	0.0682	0.0014	2.05	0.76	887	19	**898**	**20**	855	47	105.03
M3_GC061_8	0	43	34	1.26	1.5010	0.0500	3.33	0.1566	0.0039	2.49	0.0695	0.0015	2.16	0.76	927	20	**938**	**22**	891	44	105.27
M3_GC061_14	0	26	37	0.70	1.5980	0.0500	3.13	0.1643	0.0040	2.43	0.0702	0.0014	1.99	0.77	966	20	**981**	**22**	924	43	106.17
M2_GC061_5	1	25	27	0.93	1.3770	0.0450	3.27	0.1479	0.0037	2.50	0.0677	0.0015	2.22	0.74	877	20	**889**	**21**	832	48	106.85
M2_GC061_56	0	29	24	1.21	1.3300	0.1100	8.27	0.1452	0.0081	5.58	0.0673	0.0028	4.16	0.89	851	41	**873**	**44**	810	79	107.78
M2_GC061_63	0	36	31	1.16	2.1950	0.0690	3.14	0.2065	0.0050	2.42	0.0770	0.0015	1.95	0.78	1178	23	**1210**	**27**	1109	40	109.11
M2_GC061_33	*0*	*0*	*2*	*0.00*	*2.9700*	*0.3200*	*10.77*	*0.2420*	*0.0170*	*7.02*	*0.0872*	*0.0055*	*6.31*	*0.83*	*1346*	*71*	***1399***	***86***	*1210*	*140*	*115.62*

M2_GC061_11	*0*	*3*	*14*	*0.21*	*3.1700*	*0.1800*	*5.68*	*0.2650*	*0.0120*	*4.53*	*0.0851*	*0.0016*	*1.88*	*0.96*	*1445*	*39*	***1515***	***60***	*1301*	*37*	*116.45*
M2_GC061_51	*0*	*1*	*1*	*1.00*	*1.0300*	*0.3200*	*31.07*	*0.1000*	*0.0200*	*20.00*	*0.0676*	*0.0082*	*12.13*	*0.98*	*630*	*99*	***610***	***100***	*510*	*230*	*119.61*
M2_GC061_16	*0*	*10*	*9*	*1.11*	*1.3120*	*0.0920*	*7.01*	*0.1458*	*0.0049*	*3.36*	*0.0647*	*0.0038*	*5.87*	*0.55*	*826*	*38*	***877***	***27***	*660*	*120*	*132.88*
M1_GC021_12	1	43	32	1.34	0.2130	0.0150	7.04	0.0286	0.0010	3.50	0.0534	0.0026	4.87	0.77	195	12	**181.6**	**6.3**	288	97	93.13
M1_GC021_9	1	74	47	1.57	0.3200	0.0160	5.00	0.0431	0.0011	2.55	0.0547	0.0025	4.57	0.42	280	13	**271.8**	**6.9**	345	90	97.07
M1_GC021_1	0	60	42	1.43	0.3140	0.0140	4.46	0.0434	0.0011	2.53	0.0525	0.0020	3.81	0.52	275	11	**273.9**	**6.9**	280	77	97.82
M1_GC021_2	1	82	57	1.44	0.3110	0.0140	4.50	0.0427	0.0011	2.58	0.0530	0.0021	3.96	0.48	274	11	**269.8**	**6.5**	304	81	98.47
M1_GC021_10	1	26	29	0.90	0.2180	0.0170	7.80	0.0311	0.0012	3.86	0.0503	0.0026	5.17	0.81	199	13	**197.3**	**7.1**	180	100	99.15
M1_GC021_4	1	47	56	0.84	0.2980	0.0130	4.36	0.0423	0.0010	2.36	0.0513	0.0020	3.90	0.46	263	11	**267.1**	**6.4**	232	78	101.56
M1_GC021_5	1	34	35	0.97	0.3050	0.0180	5.90	0.0432	0.0011	2.55	0.0516	0.0028	5.43	0.39	268	14	**272.4**	**6.8**	230	100	101.64
M1_GC021_8	1	17	19	0.89	0.2140	0.0180	8.41	0.0313	0.0012	3.83	0.0490	0.0029	5.92	0.78	195	15	**198.8**	**7.1**	130	110	101.95
M1_GC021_11	1	29	36	0.81	0.3000	0.0140	4.67	0.0429	0.0011	2.56	0.0510	0.0021	4.12	0.48	264	11	**270.9**	**6.9**	224	85	102.61
M1_GC021_7	1	24	30	0.80	0.3040	0.0170	5.59	0.0435	0.0012	2.76	0.0506	0.0025	4.94	0.47	267	13	**274.4**	**7.1**	201	95	102.77
M1_GC021_3	0	68	44	1.55	0.3010	0.0150	4.98	0.0437	0.0011	2.52	0.0502	0.0022	4.38	0.48	265	11	**275.7**	**6.7**	185	83	104.04
M1_GC021_6	0	63	38	1.66	0.2980	0.0170	5.70	0.0434	0.0011	2.53	0.0499	0.0025	5.01	0.48	262	13	**273.6**	**6.9**	179	97	104.43
M1_GC021_13	1	47	39	1.21	0.2820	0.0160	5.67	0.0434	0.0011	2.53	0.0475	0.0025	5.26	0.38	250	13	**273.6**	**6.9**	78	97	109.44
B___235_11	*0*	*35.1*	*134*	*0.26*	*2.5400*	*0.1700*	*6.69*	*0.1903*	*0.0049*	*2.57*	*0.0968*	*0.0056*	*5.79*	*0.88*	*1276*	*47*	***1122***	***26***	*1540*	*100*	*72.86*
B___235_79	*0*	*562*	*2337*	*0.24*	*1.2960*	*0.0380*	*2.93*	*0.1294*	*0.0033*	*2.55*	*0.0735*	*0.0014*	*1.91*	*0.79*	*843*	*17*	***784***	***19***	*1030*	*37*	*76.12*
B___235_30	*1*	*9.01*	*82.9*	*0.11*	*2.1010*	*0.0990*	*4.71*	*0.1797*	*0.0034*	*1.89*	*0.0844*	*0.0037*	*4.38*	*0.73*	*1146*	*31*	***1065***	***19***	*1287*	*79*	*82.75*
B___235_75	*1*	*10.65*	*94.1*	*0.11*	*1.9320*	*0.0840*	*4.35*	*0.1721*	*0.0033*	*1.92*	*0.0817*	*0.0032*	*3.92*	*0.92*	*1090*	*28*	***1023.7***	***18***	*1228*	*73*	*83.36*
B___235_21	*1*	*94.4*	*1239*	*0.08*	*1.8490*	*0.0550*	*2.97*	*0.1692*	*0.0043*	*2.54*	*0.0789*	*0.0015*	*1.90*	*0.87*	*1062*	*20*	***1008***	***24***	*1168*	*37*	*86.30*
B___235_61	*0*	*763*	*3580*	*0.21*	*1.8850*	*0.0660*	*3.50*	*0.1749*	*0.0044*	*2.52*	*0.0783*	*0.0014*	*1.79*	*0.81*	*1078*	*24*	***1039***	***24***	*1157*	*33*	*89.80*
B___235_22	0	37.6	206.8	0.18	1.9680	0.0680	3.46	0.1823	0.0061	3.35	0.0786	0.0014	1.78	0.86	1107	24	**1079**	**34**	1162	35	92.86
B___235_16	1	8.04	58.6	0.14	1.9990	0.0780	3.90	0.1819	0.0042	2.31	0.0785	0.0019	2.42	0.77	1114	26	**1077**	**23**	1155	49	93.25
B___235_74	0	51	223	0.23	2.4280	0.0640	2.64	0.2081	0.0060	2.88	0.0847	0.0019	2.24	0.78	1254	21	**1218**	**32**	1305	42	93.33
B___235_34	1	109.6	381	0.29	2.4920	0.0700	2.81	0.2109	0.0055	2.61	0.0853	0.0019	2.23	0.65	1269	20	**1233**	**29**	1320	42	93.41
B___235_90	0	62.6	307	0.20	2.0510	0.0570	2.78	0.1877	0.0042	2.24	0.0791	0.0014	1.77	0.86	1132	19	**1109**	**23**	1179	32	94.06
B___235_32	1	12.46	100.9	0.12	1.7670	0.0530	3.00	0.1698	0.0040	2.36	0.0752	0.0017	2.26	0.66	1033	21	**1011**	**22**	1072	47	94.31
B___235_69	1	25.45	454	0.06	2.0410	0.0660	3.23	0.1887	0.0050	2.65	0.0794	0.0015	1.89	0.85	1128	22	**1114**	**27**	1181	38	94.33
B___235_4	0	32.4	128.8	0.25	2.2010	0.0640	2.91	0.1958	0.0050	2.55	0.0810	0.0016	1.98	0.79	1181	20	**1152**	**27**	1220	38	94.43
B___235_86	1	83	350	0.24	2.3650	0.0690	2.92	0.2065	0.0049	2.37	0.0836	0.0015	1.79	0.84	1231	21	**1210**	**26**	1281	35	94.46
B___235_43	0	241.3	462	0.52	2.3850	0.0700	2.94	0.2080	0.0053	2.55	0.0837	0.0016	1.91	0.81	1237	21	**1218**	**28**	1284	37	94.86
B___235_1	0	90.9	325	0.28	1.7290	0.0490	2.83	0.1689	0.0039	2.31	0.0747	0.0014	1.87	0.81	1019	18	**1006**	**21**	1060	37	94.91
B___235_7	0	10.32	98.2	0.11	1.7430	0.0520	2.98	0.1681	0.0040	2.38	0.0746	0.0017	2.28	0.64	1024	19	**1002**	**22**	1055	45	94.98
B___235_56	1	117.1	436	0.27	2.4350	0.0770	3.16	0.2123	0.0059	2.78	0.0846	0.0017	2.01	0.81	1252	23	**1241**	**31**	1304	38	95.17
B___235_77	0	55.5	218.5	0.25	2.2700	0.0660	2.91	0.2017	0.0045	2.23	0.0817	0.0018	2.20	0.64	1202	21	**1184**	**24**	1242	44	95.33
B___235_84	1	45.5	187	0.24	1.7870	0.0560	3.13	0.1725	0.0047	2.72	0.0755	0.0014	1.86	0.85	1040	20	**1030**	**26**	1080	37	95.37
B___235_35	1	26.7	90.1	0.30	2.1800	0.1100	5.05	0.1940	0.0053	2.73	0.0802	0.0025	3.12	0.91	1172	35	**1143**	**29**	1195	61	95.65
B___235_88	0	81.8	380	0.22	2.3090	0.0730	3.16	0.2040	0.0056	2.75	0.0820	0.0016	1.95	0.85	1214	22	**1197**	**30**	1249	36	95.84
B___235_15	1	14.24	113.3	0.13	1.6960	0.0520	3.07	0.1659	0.0035	2.11	0.0738	0.0019	2.57	0.35	1006	19	**989**	**20**	1031	49	95.93
B___235_52	1	148.8	600	0.25	2.3990	0.0660	2.75	0.2097	0.0048	2.29	0.0834	0.0015	1.80	0.78	1242	20	**1227**	**26**	1278	36	96.01
B___235_26	0	69.1	354	0.20	2.1750	0.0710	3.26	0.1973	0.0057	2.89	0.0804	0.0016	1.99	0.85	1172	23	**1161**	**31**	1209	37	96.03
B___235_6	0	9.27	84.6	0.11	1.6720	0.0430	2.57	0.1649	0.0033	2.00	0.0735	0.0016	2.18	0.49	997.8	16	**984**	**18**	1024	44	96.09
B___235_55	0	225	605	0.37	1.9420	0.0560	2.88	0.1832	0.0047	2.57	0.0771	0.0016	2.08	0.73	1095	20	**1084**	**25**	1128	39	96.10
B___235_38	1	20.93	152.6	0.14	1.6640	0.0440	2.64	0.1642	0.0029	1.77	0.0733	0.0015	2.05	0.35	994.6	16	**980.2**	**16**	1019	39	96.19
B___235_60	1	193.1	531	0.36	2.4320	0.0660	2.71	0.2128	0.0048	2.26	0.0836	0.0018	2.15	0.55	1252	20	**1244**	**26**	1293	41	96.21
B___235_53	0	150.7	429	0.35	2.4030	0.0640	2.66	0.2098	0.0057	2.72	0.0834	0.0017	2.04	0.82	1243	19	**1228**	**30**	1276	40	96.24
B___235_19	1	43.4	203.1	0.21	2.6690	0.0760	2.85	0.2237	0.0050	2.24	0.0866	0.0019	2.19	0.60	1322	20	**1301**	**26**	1349	42	96.44
B___235_59	1	128.4	1029	0.12	2.2100	0.0620	2.81	0.1996	0.0049	2.45	0.0808	0.0015	1.86	0.82	1184	20	**1173**	**27**	1216	37	96.46
B___235_28	0	34	245.2	0.14	2.2420	0.0830	3.70	0.1963	0.0059	3.01	0.0803	0.0015	1.87	0.92	1193	26	**1161**	**32**	1203	38	96.51
B___235_71	0	77.3	265.9	0.29	1.7370	0.0500	2.88	0.1710	0.0049	2.87	0.0742	0.0014	1.89	0.74	1022	19	**1018**	**27**	1051	41	96.86
B___235_78	1	79.5	297	0.27	2.5800	0.0690	2.67	0.2192	0.0053	2.42	0.0848	0.0017	2.00	0.60	1294	20	**1278**	**28**	1316	35	97.11
B___235_37	0	32.6	90.9	0.36	2.2290	0.0690	3.10	0.2003	0.0046	2.30	0.0804	0.0018	2.24	0.70	1189	22	**1177**	**25**	1211	42	97.19
B___235_29	1	55.8	276.6	0.20	2.6310	0.0730	2.77	0.2219	0.0056	2.52	0.0856	0.0016	1.87	0.75	1309	20	**1292**	**29**	1326	37	97.44
B___235_80	1	59.1	280	0.21	1.6790	0.0580	3.45	0.1676	0.0046	2.74	0.0730	0.0015	2.05	0.81	1003	23	**999**	**25**	1025	41	97.46
B___235_44	0	121	1011	0.12	2.1310	0.0730	3.43	0.1960	0.0060	3.06	0.0795	0.0014	1.76	0.85	1158	24	**1153**	**32**	1183	36	97.46
B___235_20	1	71.4	328	0.22	2.4400	0.0670	2.75	0.2121	0.0058	2.73	0.0832	0.0018	2.16	0.77	1257	22	**1240**	**31**	1272	41	97.48
B___235_72	1	75.7	232	0.33	2.0560	0.0640	3.11	0.1929	0.0053	2.75	0.0788	0.0015	1.90	0.78	1137	21	**1137**	**29**	1165	39	97.60
B___235_50	0	59	171.5	0.34	2.5710	0.0810	3.15	0.2204	0.0050	2.27	0.0850	0.0019	2.24	0.82	1292	23	**1284**	**27**	1313	43	97.79
B___235_63	0	23.5	124.3	0.19	1.8420	0.0600	3.26	0.1772	0.0050	2.82	0.0753	0.0019	2.52	0.54	1063	23	**1051**	**27**	1072	51	98.04
B___235_33	0	159.5	631	0.25	1.9030	0.0530	2.79	0.1818	0.0045	2.48	0.0761	0.0015	1.97	0.85	1082	19	**1077**	**25**	1095	38	98.36
B___235_27	1	14.56	170.2	0.09	1.6420	0.0430	2.62	0.1648	0.0034	2.06	0.0722	0.0014	1.94	0.80	986	17	**983**	**19**	996	36	98.69
B___235_54	1	118.7	311.4	0.38	2.5160	0.0620	2.46	0.2174	0.0047	2.16	0.0837	0.0013	1.55	0.74	1276.4	18	**1268**	**25**	1284	31	98.75
B___235_57	0	100	284.6	0.35	2.2290	0.0680	3.05	0.2027	0.0056	2.76	0.0803	0.0015	1.87	0.83	1193	20	**1189**	**30**	1203	38	98.84
B___235_24	0	52.4	190.8	0.27	1.7990	0.0530	2.95	0.1729	0.0041	2.37	0.0740	0.0014	1.89	0.77	1044	19	**1028**	**23**	1040	38	98.85
B___235_12	0	114	189	0.60	2.6270	0.1000	3.81	0.2237	0.0069	3.08	0.0849	0.0021	2.47	0.81	1306	28	**1301**	**37**	1315	49	98.94
B___235_89	1	65.3	322	0.20	2.1390	0.0640	2.99	0.1976	0.0041	2.07	0.0792	0.0019	2.40	0.81	1161	21	**1162**	**22**	1174	46	98.98
B___235_51	1	161.5	561	0.29	2.6280	0.0710	2.70	0.2244	0.0046	2.05	0.0852	0.0015	1.76	0.75	1308	20	**1305**	**24**	1318	34	99.01
B___235_42	1	17.55	110.9	0.16	1.7090	0.0500	2.93	0.1691	0.0039	2.31	0.0732	0.0017	2.32	0.68	1011	19	**1007**	**22**	1017	47	99.02
B___235_83	0	105	412	0.25	1.6120	0.0520	3.23	0.1639	0.0051	3.11	0.0721	0.0013	1.80	0.87	974	20	**978**	**28**	987	37	99.09

B___235_40	0	76	290	0.26	2.4540	0.0830	3.38	0.2139	0.0054	2.52	0.0828	0.0020	2.42	0.72	1257	24	**1249**	**29**	1260	48	99.13
B___235_17	1	17.2	116.5	0.15	1.7630	0.0590	3.35	0.1728	0.0043	2.49	0.0740	0.0019	2.57	0.77	1031	21	**1027**	**23**	1036	50	99.13
B___235_76	0	40.8	176.9	0.23	2.4910	0.0670	2.69	0.2173	0.0042	1.93	0.0833	0.0016	1.92	0.68	1269	19	**1267**	**22**	1275	38	99.37
B___235_49	0	22.89	170.6	0.13	1.6270	0.0450	2.77	0.1639	0.0034	2.07	0.0719	0.0015	2.09	0.62	980	18	**978**	**19**	980	44	99.80
B___235_5	1	22.19	101.4	0.22	2.3720	0.0640	2.70	0.2095	0.0042	2.00	0.0813	0.0015	1.85	0.79	1234	19	**1226**	**23**	1228	36	99.84
B___235_9	0	148	482	0.31	2.5000	0.0790	3.16	0.2165	0.0055	2.54	0.0826	0.0021	2.54	0.64	1271	23	**1263**	**29**	1264	51	99.92
B___235_25	1	5.15	83.4	0.06	1.6870	0.0480	2.85	0.1683	0.0036	2.14	0.0727	0.0016	2.20	0.55	1003	18	**1003**	**20**	1003	45	100.00
B___235_82	0	8.4	112.4	0.07	1.7190	0.0490	2.85	0.1713	0.0038	2.22	0.0730	0.0017	2.33	0.55	1018	19	**1019**	**21**	1019	44	100.00
B___235_58	1	16.93	140.8	0.12	1.8030	0.0520	2.88	0.1772	0.0037	2.09	0.0745	0.0018	2.42	0.55	1046	18	**1051**	**21**	1051	48	100.00
B___235_70	0	90.9	370.1	0.25	2.5260	0.0770	3.05	0.2191	0.0055	2.51	0.0834	0.0015	1.80	0.79	1279	22	**1277**	**29**	1277	35	100.00
B___235_62	0	159	530	0.30	2.3890	0.0690	2.89	0.2130	0.0057	2.68	0.0817	0.0017	2.08	0.79	1242	22	**1245**	**30**	1237	40	100.65
B___235_45	1	34.6	184.2	0.19	1.7070	0.0530	3.10	0.1696	0.0036	2.12	0.0727	0.0018	2.48	0.91	1011	20	**1010**	**20**	1003	49	100.70
B___235_68	0	87.3	277.6	0.31	2.4470	0.0690	2.82	0.2174	0.0053	2.44	0.0824	0.0016	1.94	0.75	1256	21	**1268**	**28**	1258	38	100.79
B___235_65	0	62	154.5	0.40	2.6810	0.0690	2.57	0.2290	0.0046	2.01	0.0852	0.0017	2.00	0.32	1323	19	**1329**	**24**	1318	38	100.83
B___235_2	0	20.1	184.1	0.11	1.7040	0.0420	2.46	0.1692	0.0033	1.95	0.0725	0.0013	1.79	0.69	1009.9	16	**1007**	**18**	998	37	100.90
B___235_46	1	19.5	156.3	0.12	1.7220	0.0480	2.79	0.1702	0.0039	2.29	0.0727	0.0017	2.34	0.54	1016	18	**1013**	**22**	1002	48	101.10
B___235_48	0	80.3	294	0.27	2.5190	0.0780	3.10	0.2207	0.0051	2.31	0.0829	0.0016	1.93	0.78	1277	23	**1285**	**27**	1270	34	101.18
B___235_67	1	18.7	263.2	0.07	1.6990	0.0450	2.65	0.1700	0.0043	2.53	0.0726	0.0014	1.93	0.80	1007.9	17	**1012**	**24**	1000	39	101.20
B___235_85	1	17.52	146	0.12	1.7030	0.0430	2.52	0.1718	0.0036	2.10	0.0724	0.0016	2.21	0.32	1009.3	16	**1022**	**20**	1008	43	101.39
B___235_64	1	25.5	177.9	0.14	1.7870	0.0490	2.74	0.1765	0.0045	2.55	0.0737	0.0014	1.90	0.70	1040	18	**1048**	**25**	1032	37	101.55
B___235_3	1	9.89	104.5	0.09	1.7210	0.0490	2.85	0.1705	0.0032	1.88	0.0725	0.0015	2.07	0.83	1016	18	**1014.7**	**18**	998	42	101.67
B___235_31	0	20.3	109.2	0.19	2.1880	0.0660	3.02	0.2023	0.0050	2.47	0.0788	0.0016	2.03	0.73	1176	21	**1187**	**27**	1165	40	101.89
B___235_47	0	22.15	118.2	0.19	2.2800	0.0690	3.03	0.2075	0.0052	2.51	0.0798	0.0016	2.01	0.74	1205	21	**1215**	**28**	1191	40	102.02
B___235_8	1	21.1	176.2	0.12	1.7070	0.0500	2.93	0.1696	0.0035	2.06	0.0722	0.0014	1.94	0.82	1011	19	**1010**	**19**	990	40	102.02
B___235_66	1	70.5	262.5	0.27	2.7060	0.0690	2.55	0.2328	0.0049	2.10	0.0852	0.0017	2.00	0.64	1330	19	**1349**	**26**	1318	39	102.35
B___235_18	0	56.8	580	0.10	2.6010	0.0980	3.77	0.2275	0.0091	4.00	0.0838	0.0017	2.03	0.94	1309	28	**1320**	**48**	1285	39	102.72
B___235_36	1	84.7	224.8	0.38	2.7080	0.0740	2.73	0.2301	0.0063	2.74	0.0843	0.0015	1.78	0.82	1330	20	**1335**	**33**	1298	35	102.85
B___235_13	1	82.9	195.4	0.42	2.3960	0.0720	3.01	0.2147	0.0053	2.47	0.0809	0.0016	1.98	0.73	1247	22	**1253**	**28**	1217	39	102.96
B___235_14	0	29.5	107.7	0.27	2.3850	0.0640	2.68	0.2136	0.0043	2.01	0.0805	0.0016	1.99	0.55	1238	19	**1248**	**23**	1206	39	103.48
B___235_10	1	68.4	220	0.31	1.8480	0.0550	2.98	0.1800	0.0034	1.89	0.0737	0.0018	2.44	0.66	1062	19	**1067**	**19**	1031	48	103.49
B___235_73	1	67.8	180	0.38	2.7590	0.0750	2.72	0.2347	0.0060	2.56	0.0847	0.0016	1.89	0.81	1347	21	**1359**	**31**	1312	39	103.58
B___235_39	0	25	181.4	0.14	1.6440	0.0430	2.62	0.1655	0.0042	2.54	0.0708	0.0014	1.98	0.65	987.1	16	**987**	**23**	950	42	103.89
B___235_23	0	23.1	115.8	0.20	2.9830	0.0790	2.65	0.2466	0.0056	2.27	0.0868	0.0019	2.19	0.69	1403	20	**1421**	**29**	1360	39	104.49
B___235_81	0	87.5	276	0.32	2.0460	0.0590	2.88	0.1953	0.0044	2.25	0.0761	0.0014	1.84	0.85	1130	20	**1150**	**23**	1097	37	104.83
B___235_41	0	28.5	147	0.19	1.6890	0.0540	3.20	0.1717	0.0040	2.33	0.0710	0.0015	2.11	0.62	1003	20	**1021**	**23**	962	47	106.13
B___235_87	1	10.47	154.3	0.07	1.6310	0.0430	2.64	0.1702	0.0041	2.41	0.0701	0.0015	2.14	0.67	982	17	**1013**	**22**	927	45	109.28
B___245_15	1	47.24	112.3	0.42	2.1550	0.0920	4.27	0.1674	0.0039	2.33	0.0925	0.0035	3.78	0.25	1165	30	**998**	**22**	1482	71	67.34
B___245_32	0	110.9	1148	0.10	2.4180	0.0660	2.73	0.1932	0.0049	2.54	0.0898	0.0014	1.56	0.93	1247	20	**1139**	**26**	1422	31	80.10
B___245_28	1	51.8	792	0.07	2.4500	0.0710	2.90	0.2043	0.0058	2.84	0.0892	0.0029	3.25	0.74	1257	21	**1198**	**31**	1402	54	85.45
B___245_37	1	110.6	2153	0.05	2.1690	0.1100	5.07	0.1851	0.0055	2.97	0.0837	0.0023	2.75	0.85	1168	34	**1095**	**30**	1281	53	85.48
B___245_43	1	126.2	929	0.14	2.2640	0.0710	3.14	0.1923	0.0050	2.60	0.0849	0.0017	2.00	0.80	1200	22	**1134**	**27**	1319	44	85.97
B___245_41	1	95.8	469	0.20	1.9280	0.0590	3.06	0.1744	0.0042	2.41	0.0798	0.0017	2.13	0.77	1090	21	**1036**	**23**	1197	38	86.55
B___245_29	0	39.6	598	0.07	2.5890	0.0880	3.40	0.2093	0.0062	2.96	0.0890	0.0017	1.91	0.91	1296	25	**1225**	**33**	1408	38	87.00
B___245_30	1	104	550	0.19	3.1350	0.0840	2.68	0.2376	0.0064	2.69	0.0973	0.0027	2.77	0.69	1441	21	**1374**	**33**	1568	47	87.63
B___245_14	0	122.5	168.9	0.73	3.4510	0.0910	2.64	0.2501	0.0062	2.48	0.1003	0.0018	1.79	0.82	1516	21	**1439**	**32**	1628	33	88.39
B___245_38	1	59	517	0.11	2.8660	0.0810	2.83	0.2263	0.0059	2.61	0.0926	0.0020	2.16	0.69	1375	20	**1315**	**31**	1477	40	89.03
B___245_20	1	37	228.3	0.16	2.9370	0.0930	3.17	0.2308	0.0057	2.47	0.0921	0.0017	1.85	0.89	1391	24	**1339**	**30**	1474	33	90.84
B___245_33	1	137	430	0.32	2.9950	0.1000	3.34	0.2343	0.0065	2.77	0.0925	0.0024	2.59	0.55	1405	27	**1356**	**34**	1484	43	91.37
B___245_40	1	58.2	1293	0.05	1.7050	0.0430	2.52	0.1648	0.0035	2.12	0.0749	0.0014	1.87	0.84	1010.3	16	**983**	**19**	1071	35	91.78
B___245_27	1	42.8	610	0.07	1.9970	0.0650	3.25	0.1816	0.0052	2.86	0.0787	0.0015	1.91	0.87	1113	22	**1075**	**28**	1162	38	92.51
B___245_45	1	70.6	1163	0.06	2.3470	0.0810	3.45	0.2032	0.0050	2.46	0.0837	0.0019	2.27	0.75	1225	25	**1192**	**27**	1284	44	92.83
B___245_24	1	34.6	562	0.06	2.9650	0.0830	2.80	0.2350	0.0056	2.38	0.0918	0.0015	1.63	0.88	1398	21	**1360**	**29**	1462	31	93.02
B___245_34	0	80.3	781	0.10	2.4010	0.0850	3.54	0.2063	0.0060	2.91	0.0843	0.0021	2.49	0.78	1242	25	**1209**	**32**	1296	49	93.29
B___245_7	0	26.7	686	0.04	1.9410	0.0560	2.89	0.1813	0.0042	2.32	0.0782	0.0014	1.79	0.86	1095	19	**1074**	**23**	1151	37	93.31
B___245_4	0	58.6	632	0.09	2.2800	0.1600	7.02	0.1975	0.0088	4.46	0.0821	0.0024	2.92	0.99	1200	50	**1161**	**47**	1243	56	93.40
B___245_8	1	107.1	655	0.16	2.0150	0.0500	2.48	0.1842	0.0043	2.33	0.0786	0.0014	1.78	0.78	1120.3	17	**1089**	**23**	1165	36	93.48
B___245_19	0	35.1	199.5	0.18	3.7220	0.1200	3.22	0.2680	0.0080	2.99	0.1007	0.0019	1.89	0.93	1575	27	**1530**	**41**	1636	35	93.52
B___245_36	0	748	810	0.92	4.1060	0.1000	2.44	0.2826	0.0061	2.16	0.1045	0.0020	1.91	0.72	1655	20	**1604**	**31**	1705	35	94.08
B___245_6	0	53.6	483	0.11	2.0150	0.0670	3.33	0.1850	0.0046	2.49	0.0782	0.0014	1.79	0.87	1120	23	**1094**	**25**	1152	36	94.97
B___245_23	0	32.9	695	0.05	2.0790	0.0500	2.41	0.1895	0.0038	2.01	0.0792	0.0015	1.89	0.69	1141.6	17	**1119**	**21**	1177	37	95.07
B___245_18	1	73	976	0.07	1.6410	0.0430	2.62	0.1627	0.0038	2.34	0.0731	0.0013	1.78	0.75	985.7	16	**972**	**21**	1016	35	95.67
B___245_44	1	32.8	949	0.03	1.7430	0.0730	4.19	0.1686	0.0058	3.44	0.0743	0.0014	1.89	0.94	1023	27	**1004**	**32**	1047	37	95.89
B___245_17	1	21.03	489	0.04	2.3470	0.0850	3.62	0.2096	0.0076	3.63	0.0831	0.0022	2.65	0.77	1231	28	**1226**	**41**	1269	51	96.61
B___245_16	0	352	285.9	1.23	4.4250	0.1100	2.49	0.2994	0.0066	2.20	0.1069	0.0019	1.78	0.46	1717	21	**1688**	**33**	1746	33	96.68
B___245_26	1	5.57	154	0.04	2.0280	0.0820	4.04	0.1876	0.0046	2.45	0.0782	0.0021	2.69	0.90	1123	27	**1108**	**25**	1146	54	96.68
B___245_35	0	299	279	1.07	4.4590	0.1300	2.92	0.3013	0.0083	2.75	0.1075	0.0020	1.86	0.82	1726	24	**1697**	**41**	1755	35	96.70
B___245_25	0	132.5	343	0.39	4.8700	0.1500	3.08	0.3143	0.0086	2.74	0.1108	0.0022	1.99	0.81	1796	26	**1761**	**40**	1812	36	97.19
B___245_21	0	29.7	425	0.07	1.8730	0.0600	3.20	0.1785	0.0044	2.46	0.0755	0.0015	1.99	0.80	1071	21	**1058**	**24**	1081	40	97.87
B___245_3	1	49	114	0.43	5.7080	0.1500	2.63	0.3445	0.0082	2.38	0.1195	0.0022	1.84	0.83	1932	22	**1908**	**39**	1948	32	97.95
B___245_12	0	123.4	168.7	0.73	6.0670	0.1600	2.64	0.3564	0.0074	2.08	0.1232	0.0024	1.95	0.58	1985	23	**1965**	**35**	2006	36	97.96
B___245_11	1	57.4	697	0.08	1.5580	0.0380	2.44	0.1582	0.0035	2.21	0.0713	0.0011	1.54	0.91	953.5	15	**947**	**20**	966	32	98.03

B___245_10	0	59.9	308.6	0.19	2.1090	0.0600	2.84	0.1940	0.0048	2.47	0.0787	0.0013	1.65	0.92	1151	20	**1143**	**26**	1165	34	98.11
B___245_9	0	170.7	740	0.23	2.6400	0.0670	2.54	0.2226	0.0046	2.07	0.0852	0.0015	1.76	0.77	1314	20	**1296**	**24**	1320	35	98.18
B___245_31	0	59.3	152.9	0.39	4.4200	0.1600	3.62	0.3034	0.0100	3.30	0.1056	0.0022	2.08	0.88	1715	30	**1707**	**51**	1722	39	99.13
B___245_42	0	176.7	176.4	1.00	4.5090	0.1200	2.66	0.3055	0.0073	2.39	0.1060	0.0020	1.89	0.67	1732	21	**1718**	**36**	1731	35	99.25
B___245_5	1	92.7	131	0.71	3.0440	0.0880	2.89	0.2447	0.0057	2.33	0.0893	0.0016	1.79	0.79	1418	22	**1411**	**29**	1409	34	100.14
B___245_1	1	21.64	714	0.03	2.1780	0.0620	2.85	0.2001	0.0051	2.55	0.0789	0.0013	1.65	0.89	1173	20	**1175**	**27**	1170	31	100.43
B___245_22	1	43.3	248.7	0.17	2.0850	0.0660	3.17	0.1943	0.0054	2.78	0.0775	0.0014	1.81	0.87	1143	22	**1144**	**29**	1138	37	100.53
B___245_39	0	60.9	680	0.09	1.9860	0.0540	2.72	0.1881	0.0039	2.07	0.0764	0.0015	1.96	0.70	1110	18	**1111**	**21**	1103	39	100.73
B___245_2	0	52.2	309	0.17	2.1370	0.0620	2.90	0.1988	0.0044	2.21	0.0775	0.0013	1.68	0.82	1160	20	**1169**	**24**	1134	34	103.09
B___245_46	0	28.1	551	0.05	1.7220	0.0420	2.44	0.1718	0.0033	1.92	0.0721	0.0011	1.53	0.79	1016.7	16	**1022**	**18**	989	32	103.34
B___245_13	1	61.7	270	0.23	2.3150	0.0740	3.20	0.2123	0.0060	2.83	0.0781	0.0013	1.67	0.92	1216	23	**1241**	**32**	1148	33	108.10
C___172_3	0	0.002	1.242	0.01	1.1500	0.6100	53.04	0.0335	0.0054	16.12	0.1800	0.0600	33.33	0.98	610	200	**212**	**33**	2540	610	8.35
C___172_5	0	8.51	170	0.01	2.7300	0.8000	29.30	0.0570	0.0120	21.05	0.3680	0.0880	23.91	0.71	1230	210	**357**	**71**	3750	400	9.52
C___172_4	1	0.016	0.817	0.00	2.7000	1.1000	40.74	0.0594	0.0096	16.16	0.2670	0.0570	21.35	0.97	1060	210	**370**	**58**	3180	350	11.64
C___172_6	1	53.5	287	0.02	8.6000	2.5000	29.07	0.1030	0.0160	15.53	0.5350	0.0530	9.91	0.95	2120	220	**627**	**91**	4290	160	14.62
C___172_9	1	88.5	229.6	0.39	2.1830	0.0590	2.70	0.1955	0.0046	2.35	0.0812	0.0016	1.97	0.81	1175	19	**1151**	**25**	1224	37	94.04
C___172_7	0	10.89	131.7	0.19	1.7170	0.0560	3.26	0.1691	0.0050	2.96	0.0745	0.0017	2.28	0.78	1014	21	**1007**	**28**	1052	47	95.72
C___172_8	1	20.5	75.6	0.27	1.8430	0.0650	3.53	0.1766	0.0043	2.43	0.0757	0.0022	2.91	0.81	1060	23	**1048**	**24**	1092	54	95.97
C___172_1	0	0.014	1.471	0.05	1.7120	0.0660	3.86	0.1671	0.0055	3.29	0.0737	0.0019	2.58	0.81	1012	25	**995**	**30**	1030	52	96.60
C___172_2	1	0.008	0.597	0.08	1.7350	0.0520	3.00	0.1727	0.0042	2.43	0.0729	0.0016	2.19	0.83	1021	19	**1027**	**23**	1015	48	101.18

U and Pb content and Th/U ratio were calculated according to the nominal concentrations of Plesovice and GJ-1 reference zircons for the SGC and ETH Laboratories respectivelly

Decay constants of Jaffey et al. (1971) used

Measurements in italic are not plotted in figures and used in geochronological interpretations

Corrected isotope ratios: background extracted, drift and fractionation from (the nominal ID-TIMS) value of Plesovice GJ-1 reference zircons for the SGC and ETH Laboratories respectivelly

The $^{207}Pb/^{235}U$ ratio is calculated by the corrected 7/6 and 6/8 ratios as $^{207}Pb/^{206}Pb/(^{238}U/^{206}Pb*1/137.88)$.

Rho = $^{206}Pb/^{238}U/^{207}Pb/^{235}U$ error correlation coefficient.

All Isotopic ratios are reported with propagated uncertainties at $2\sigma_{sys}$ level, as data from diferent facilities (SGC-ETH) is presented as recommended by Horstwood et al., 2016

$2\sigma_{sys}$= Reproducibility of reference material uncertainty is propagated. Ages are quoted at 2 SE absolute, propagation is by quadratic addition.

Concordance = Concordance is calculated as 100*(($^{206}Pb/^{238}U$ age)/($^{207}Pb/^{206Pb}$ age)) for grains older than 250 Ma and 100*((206Pb/238U age)/(207Pb/235U age)) for grains younger than 250 Ma

TABLE A2. Trace elements in Zircon [ppm], and Ti-in Zr Thermometry

Sample	Target	Age U^{206}/Pb^{238}	error 2s	Al	P	Ti	Y	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Pb	Th	U	Log Ti	T ° C
G-52d - 7	rim	170.8	4.5	Below LOD	Below LOD	Below LOD	459.00	1.05	0.27	Below LOD	1.69	Below LOD	0.33	0.89	0.17	6.50	3.58	44.20	16.20	60.20	10.60	88.70	18.20	13440	53.3	7.74	521	N/A	N/A
G-52d - 30	rim	204.5	6	Below LOD	Below LOD	Below LOD	36.40	0.43	Below LOD	0.18	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	0.24	2.79	1.19	5.84	1.34	17.30	3.30	12420	15.5	0.31	115.9	N/A	N/A
G-52d - 33	rim	213.8	5.9	Below LOD	Below LOD	Below LOD	26.30	0.39	0.09	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	0.37	3.10	0.78	3.47	0.69	6.30	1.16	11600	20.24	2.82	140	N/A	N/A
G-52d - 44	rim	218.7	7.3	Below LOD	Below LOD	Below LOD	54.10	0.53	0.14	Below LOD	0.68	Below LOD	0.27	0.37	0.29	1.87	0.76	6.07	1.57	5.47	1.02	7.09	1.01	9940	26.4	6.43	179	N/A	N/A
G-52d - 58	rim	219.9	6.1	290	Below LOD	Below LOD	106.70	0.34	0.27	Below LOD	0.99	0.05	0.52	0.82	0.62	4.60	1.30	11.80	3.29	11.20	1.90	14.90	2.84	9910	38.6	20.3	266	N/A	N/A
G-52d - 54	core	220.1	5.8	Below LOD	119	Below LOD	88.90	0.70	1.89	Below LOD	1.12	Below LOD	0.60	1.98	0.74	9.90	2.12	14.20	2.81	8.62	1.21	9.80	1.58	10980	43.5	19.9	310	N/A	N/A
G-52d - 25	rim	222.5	5.5	Below LOD	Below LOD	Below LOD	199.00	1.96	0.12	Below LOD	0.43	Below LOD	Below LOD	0.47	0.29	3.81	1.68	18.30	6.40	27.10	5.51	54.00	10.15	10840	85.9	5.57	606	N/A	N/A
G-52d - 69	core	222.9	6.6	Below LOD	Below LOD	Below LOD	66.80	0.44	Below LOD	Below LOD	0.21	Below LOD	Below LOD	0.42	0.19	1.95	0.58	6.40	2.08	8.10	1.57	16.00	3.46	9770	14.1	1.91	96.7	N/A	N/A
G-52d - 70	rim	223.6	5.7	Below LOD	102	Below LOD	36.60	0.53	Below LOD	Below LOD	0.78	Below LOD	Below LOD	0.12	0.14	1.48	0.47	3.96	1.22	4.74	0.94	10.00	1.58	11120	36	7.96	252.8	N/A	N/A
G-52d - 17	rim	223.8	6.4	Below LOD	Below LOD	Below LOD	73.50	0.51	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	0.14	1.40	0.58	7.32	2.06	8.33	1.55	11.90	2.24	10050	17.68	0.18	123.6	N/A	N/A
G-52d - 15	rim	225	5.6	Below LOD	Below LOD	Below LOD	106.40	0.49	1.13	Below LOD	0.63	Below LOD	Below LOD	0.38	0.20	3.00	0.98	10.60	3.62	14.20	3.17	28.10	6.12	11330	46.9	7.57	324	N/A	N/A
G-52d - 42	rim	225	5.1	Below LOD	Below LOD	Below LOD	49.00	1.28	Below LOD	Below LOD	1.05	Below LOD	0.35	0.79	0.41	5.01	1.45	8.01	1.63	5.02	0.79	4.17	0.65	10520	42.7	14.07	291	N/A	N/A
G-52d - 8	core	225.1	4.9	Below LOD	Below LOD	Below LOD	217.60	2.15	Below LOD	Below LOD	0.71	Below LOD	Below LOD	0.64	0.44	4.25	1.83	20.40	7.16	28.80	5.83	53.90	11.42	10280	81.7	7.01	560	N/A	N/A
G-52d - 51	rim	225.1	5.8	Below LOD	Below LOD	Below LOD	105.90	0.41	Below LOD	Below LOD	0.69	Below LOD	Below LOD	0.37	0.27	3.90	1.06	9.20	3.18	13.40	2.97	24.20	4.49	10960	48.2	10	338	N/A	N/A
G-52d - 9	rim	225.2	5.8	Below LOD	80	Below LOD	35.70	0.33	0.19	Below LOD	0.30	Below LOD	Below LOD	Below LOD	0.07	0.84	0.42	3.35	1.15	5.02	1.04	10.00	2.39	11860	17.56	2.57	123.9	N/A	N/A
G-52d - 43	core	225.4	5.5	Below LOD	Below LOD	Below LOD	101.70	0.93	0.16	0.12	1.49	0.06	0.95	2.77	0.98	12.70	2.55	15.80	3.21	9.20	1.43	10.50	1.75	10400	55.3	23.29	373	N/A	N/A
G-52d - 46	rim	225.6	5.8	Below LOD	Below LOD	Below LOD	40.90	0.49	Below LOD	Below LOD	0.41	Below LOD	Below LOD	0.17	0.21	1.63	0.48	4.39	0.95	3.58	0.56	3.92	0.82	10990	54	5.43	367	N/A	N/A
G-52d - 26	core	225.8	5	Below LOD	Below LOD	Below LOD	254.00	1.98	0.25	Below LOD	0.24	Below LOD	Below LOD	0.55	0.45	4.90	1.77	20.00	8.45	36.40	7.83	68.80	14.30	10650	92.4	4.04	658	N/A	N/A
G-52d - 63	core	225.8	6.3	Below LOD	Below LOD	Below LOD	82.90	Below LOD	Below LOD	Below LOD	0.36	Below LOD	Below LOD	0.30	0.25	1.90	0.86	7.68	2.73	10.00	2.44	19.50	4.35	10450	32.6	1.85	217.2	N/A	N/A
G-52d - 71	core	225.9	6.1	Below LOD	Below LOD	Below LOD	97.70	0.73	Below LOD	Below LOD	1.27	Below LOD	0.44	0.48	0.33	3.50	1.17	11.50	3.00	8.57	1.64	11.30	1.67	10100	35.4	7.21	250	N/A	N/A
G-52d - 23	core	226.1	5.4	Below LOD	Below LOD	Below LOD	91.80	0.63	Below LOD	Below LOD	0.83	Below LOD	Below LOD	0.94	0.47	5.42	1.65	12.50	3.22	10.35	1.63	15.20	3.17	10590	43.1	13.28	300	N/A	N/A
G-52d - 20	rim	226.3	5.2	Below LOD	Below LOD	Below LOD	47.30	0.81	Below LOD	Below LOD	0.57	Below LOD	Below LOD	0.34	0.22	3.13	0.92	6.00	1.44	4.16	0.73	4.91	0.65	10270	43.2	9.71	295	N/A	N/A
G-52d - 55	core	226.6	5.6	Below LOD	Below LOD	Below LOD	59.20	0.53	Below LOD	Below LOD	0.60	Below LOD	0.19	0.73	0.58	4.00	1.17	7.76	1.85	5.34	0.70	6.60	1.23	10490	31.6	7.79	219	N/A	N/A
G-52d - 49	rim	226.7	5.7	Below LOD	Below LOD	Below LOD	175.00	0.88	Below LOD	Below LOD	0.73	Below LOD	0.32	0.49	0.31	4.60	1.58	17.00	5.47	22.50	4.64	41.40	8.40	10790	54.2	8	364	N/A	N/A
G-52d - 36	rim	227	5.4	Below LOD	Below LOD	Below LOD	72.80	0.47	Below LOD	0.16	0.51	Below LOD	0.30	0.20	0.18	1.29	0.81	6.60	2.35	10.51	2.20	19.50	4.01	11070	57.3	7.59	390	N/A	N/A
G-52d - 68	rim	227.1	6.3	Below LOD	Below LOD	22	53.10	0.54	0.26	Below LOD	0.69	Below LOD	Below LOD	0.57	0.53	4.40	0.98	8.70	1.54	4.49	0.60	5.40	0.94	12550	34.5	11	241	1.3	815.2
G-52d - 65	core	227.2	5.3	Below LOD	Below LOD	Below LOD	95.90	0.78	Below LOD	0.15	0.53	Below LOD	0.19	0.56	0.41	2.72	1.29	9.30	2.72	10.50	2.30	22.10	5.85	11150	52.5	8.57	358	N/A	N/A
G-52d - 37	core	227.6	5.5	Below LOD	Below LOD	Below LOD	160.90	0.91	0.16	Below LOD	0.45	Below LOD	Below LOD	0.37	0.34	3.80	1.41	15.10	5.11	21.10	4.43	39.20	8.04	11090	52.2	8.48	363	N/A	N/A
G-52d - 53	rim	227.7	6	Below LOD	Below LOD	Below LOD	76.00	0.82	0.20	Below LOD	1.11	Below LOD	0.40	1.35	0.62	7.26	1.76	11.39	2.44	5.76	1.04	6.74	1.06	10930	41.8	12.92	285	N/A	N/A
G-52d - 72	rim	227.9	5.7	Below LOD	Below LOD	Below LOD	60.20	0.66	Below LOD	Below LOD	0.66	Below LOD	Below LOD	0.72	0.28	3.32	1.00	7.89	1.76	5.35	0.94	6.80	1.10	10680	43.5	9.66	304	N/A	N/A
G-52d - 62	core	228.1	5.9	Below LOD	Below LOD	Below LOD	102.20	0.69	2.10	Below LOD	0.67	Below LOD	Below LOD	0.29	0.21	2.61	0.98	10.80	3.49	13.50	3.13	33.90	7.65	11340	34	4.62	234	N/A	N/A
G-52d - 31	core	228.4	6.3	Below LOD	Below LOD	Below LOD	46.30	Below LOD	Below LOD	Below LOD	0.50	Below LOD	Below LOD	0.24	0.27	1.64	0.42	4.55	1.33	6.96	1.47	15.00	3.68	10330	19.2	5.84	132.7	N/A	N/A
G-52d - 3	core	228.8	5.4	Below LOD	Below LOD	Below LOD	50.50	0.62	Below LOD	Below LOD	0.80	Below LOD	0.23	0.73	0.52	3.88	0.98	6.73	1.59	4.38	0.81	5.69	1.22	11280	43.9	17.85	299	N/A	N/A
G-52d - 75	core	228.9	6.1	Below LOD	Below LOD	Below LOD	32.70	0.87	0.12	Below LOD	0.83	Below LOD	0.35	0.34	0.29	2.31	0.60	4.57	1.11	2.79	0.51	4.35	0.72	11230	33.5	12.09	229	N/A	N/A
G-52d - 39	rim	229.3	5.5	Below LOD	Below LOD	Below LOD	23.50	0.46	Below LOD	Below LOD	0.59	Below LOD	Below LOD	0.40	0.18	1.46	0.49	3.52	0.79	2.07	0.30	2.41	0.36	11340	38.2	9.6	261	N/A	N/A
G-52d - 22	rim	229.7	5.7	Below LOD	Below LOD	Below LOD	33.10	0.70	Below LOD	Below LOD	0.78	Below LOD	Below LOD	0.43	0.29	3.02	0.70	4.62	1.19	3.54	0.59	4.43	0.80	10940	42.6	10.86	292	N/A	N/A
G-52d - 10	core	229.8	5.2	Below LOD	Below LOD	Below LOD	206.00	0.70	Below LOD	0.13	0.64	Below LOD	0.45	1.56	0.79	9.80	2.64	25.00	7.04	23.90	4.50	37.50	6.78	10970	70.9	25.3	497	N/A	N/A
G-52d - 35	core	230.8	5.4	Below LOD	Below LOD	Below LOD	46.50	0.64	0.13	Below LOD	0.76	Below LOD	0.26	0.49	0.44	3.82	0.90	5.94	1.33	3.91	0.57	6.02	0.94	13050	45.3	19.5	306	N/A	N/A
G-52d - 57	rim	230.8	5.2	Below LOD	Below LOD	Below LOD	149.40	2.17	Below LOD	Below LOD	0.64	Below LOD	Below LOD	0.27	0.23	3.32	1.28	13.60	5.04	18.70	4.19	35.90	7.28	11230	75.4	5.92	510	N/A	N/A
G-52d - 48	core	230.9	6.4	Below LOD	Below LOD	Below LOD	112.80	0.81	Below LOD	Below LOD	0.74	Below LOD	0.37	0.55	0.30	3.26	1.26	11.20	3.71	13.60	3.24	26.60	5.35	10920	39	11.5	261	N/A	N/A
G-52d - 41	rim	231.1	5.5	Below LOD	Below LOD	Below LOD	18.71	0.84	Below LOD	Below LOD	0.72	Below LOD	Below LOD	0.23	0.15	1.26	0.39	3.39	0.66	1.56	0.26	1.89	0.29	11690	46	13.87	305.7	N/A	N/A
G-52d - 29	core	231.5	5.9	Below LOD	Below LOD	Below LOD	41.50	Below LOD	Below LOD	Below LOD	0.55	Below LOD	0.31	0.27	0.25	2.45	0.78	5.14	1.20	3.72	0.60	3.43	0.68	11080	26.4	6.16	178	N/A	N/A
G-52d - 66	rim	231.6	7.1	Below LOD	Below LOD	Below LOD	37.10	Below LOD	Below LOD	Below LOD	0.36	Below LOD	Below LOD	0.39	0.22	2.11	0.50	5.27	1.44	3.92	0.63	4.47	0.81	9870	11.69	4.74	80.2	N/A	N/A
G-52d - 18	core	231.8	7.1	Below LOD	Below LOD	Below LOD	61.80	0.66	Below LOD	0.14	Below LOD	Below LOD	Below LOD	Below LOD	0.09	1.12	0.40	5.75	1.93	6.80	1.17	9.20	1.89	9550	20	0.157	129.4	N/A	N/A
G-52d - 38	core	231.9	5.7	Below LOD	Below LOD	Below LOD	102.50	0.48	Below LOD	Below LOD	0.76	Below LOD	0.33	1.17	0.66	6.06	1.74	13.70	3.41	8.79	1.57	9.25	1.69	10080	42.5	12.43	287	N/A	N/A
G-52d - 47	core	232.2	5.7	Below LOD	Below LOD	Below LOD	32.50	0.67	Below LOD	Below LOD	0.42	0.03	Below LOD	0.23	0.18	1.54	0.50	3.73	0.91	2.69	0.48	3.55	0.56	11110	53	4.83	355	N/A	N/A
G-52d - 12	core	232.5	6.1	Below LOD	Below LOD	Below LOD	102.90	0.68	Below LOD	Below LOD	0.77	Below LOD	0.37	0.91	0.55	5.61	1.53	12.00	3.64	12.50	2.13	19.20	3.84	10960	49	12.54	327	N/A	N/A
G-52d - 50	core	232.7	6.5	Below LOD	Below LOD	Below LOD	125.00	0.80	Below LOD	Below LOD	0.48	Below LOD	0.20	0.42	0.32	3.88	1.45	11.70	3.89	15.50	2.98	25.90	4.93	10730	40.9	7.6	278	N/A	N/A
G-52d - 64	core	232.8	5.8	Below LOD	160	Below LOD	56.20	0.47	Below LOD	0.15	0.90	Below LOD	0.32	0.54	0.59	4.61	1.25	8.88	1.80	4.85	0.74	4.96	0.79	12060	46.6	15.35	313	N/A	N/A
G-52d - 27	rim	233	6.8	Below LOD	Below LOD	Below LOD	64.40	0.61	0.28	Below LOD	0.47	Below LOD	0.62	0.52	0.27	2.40	0.57	6.60	1.86	8.50	1.86	12.20	2.93	10540	32.1	6.17	223	N/A	N/A
G-52d - 1	core	233.2	5.7	Below LOD	Below LOD	Below LOD	102.90	0.93	Below LOD	Below LOD	1.04	Below LOD	0.59	1.35	0.65	7.70	2.03	13.60	3.36	11.14	2.01	16.90	2.98	10160	57.6	21	389	N/A	N/A
G-52d - 13	rim	233.3	5.8	Below LOD	Below LOD	Below LOD	50.10	0.77	Below LOD	Below LOD	0.91	Below LOD	Below LOD	0.62	0.27	3.80	0.96	7.29	1.69	4.52	0.73	5.01	1.04	10510	46.4	12.73	307	N/A	N/A
G-52d - 73	rim	233.3	6.6	Below LOD	Below LOD	Below LOD	102.10	0.44	Below LOD	Below LOD	0.50	Below LOD	Below LOD	0.44	0.31	2.63	1.00	9.19	3.19	11.52	2.24	20.10	4.05	11260	42.9	3.79	293	N/A	N/A
G-52d - 14	core	233.4	6.5	Below LOD	Below LOD	Below LOD	131.70	0.46	Below LOD	Below LOD	0.18	Below LOD	0.26	0.31	0.22	2.37	1.07	10.30	3.88	20.00	4.38	44.00	9.74	10730	23.5	1.86	160	N/A	N/A
G-52d - 61	rim	233.4	7.7	1600	Below LOD	Below LOD	37.30	Below LOD	1.30	Below LOD	0.59	Below LOD	Below LOD	0.26	0.19	1.50	0.51	3.68	1.13	4.57	0.96	10.10	2.42	10300	24	5.58	167.2	N/A	N/A
G-52d - 2	rim	233.5	5.9	Below LOD	Below LOD	Below LOD	28.00	0.47	Below LOD	Below LOD	0.51	Below LOD	0.23	0.23	0.18	1.78	0.49	3.33	0.85	3.20	0.68	5.77	1.35	11130	34.8	9.02	231.9	N/A	N/A
G-52d - 34	rim	233.5	5.7	Below LOD	Below LOD	Below LOD	24.70	0.46	0.06	Below LOD	0.66	Below LOD	Below LOD	0.24	0.20	0.95	0.45	3.43	0.70	2.51	0.42	3.66	0.66	12050	39.1	14.38	260	N/A	N/A
G-52d - 56	core	233.9	5.7	Below LOD	Below LOD	Below LOD	387.00	1.50	0.16	0.14	0.31	Below LOD	Below LOD	0.59	0.49	7.25	2.71	32.50	12.56	54.80	12.14	111.60	23.40	11220	90.5	3.68	597	N/A	N/A
G-52d - 32	core	234.1	5.5	Below LOD	Below LOD	Below LOD	60.60	0.47	Below LOD	Below LOD	0.72	Below LOD	Below LOD	0.35	0.37	3.11	0.95	7.12	1.98	5.38	1.10	6.95	1.30	11620	27.9	7.02	191	N/A	N/A
G-52d - 21	core	234.3	6	Below LOD	Below LOD	Below LOD	39.80	0.40	Below LOD	Below LOD	0.67	Below LOD	Below LOD	0.39	0.22	2.61	0.85	5.36	1.33	3.63	0.52	3.92	0.54	10880	25.1	5.01	173	N/A	N/A
G-52d - 45	core	234.3	5.9	Below LOD	160	Below LOD	129.60	0.46	Below LOD	Below LOD	0.71	Below LOD	Below LOD	0.66	0.37	6.60	1.98	15.30	4.07	11.68	1.83	16.20	2.23	10030	25.6	6.45	169	N/A	N/A
G-52d - 24	core	234.7	5.4	Below LOD	Below LOD	Below LOD	359.00	1.57	Below LOD	Below LOD	0.58	Below LOD	0.44	1.07	0.87	7.78	2.92	34.80	11.67	48.50	10.33	91.30	18.70	10870	90.6	4.12	605	N/A	N/A
G-52d - 28	core	235.5	6	Below LOD	Below LOD	Below LOD	77.00	0.34	Below LOD	Below LOD	0.57	Below LOD	Below LOD	0.52	0.38	3.65	1.20	9.06	2.20	7.44	1.20	8.60	1.62	10930	29.9	7	197	N/A	N/A
G-52d - 74	rim	235.7	5.4	Below LOD	Below LOD	17	39.40	0.87	Below LOD	Below LOD	0.75	Below LOD	Below LOD	0.50	0.41	2.98	0.79	6.20	1.23	3.75	1.06	7.80	1.91	10920	31.6	7.97	210	1.2	789.7
G-52d - 67	core	235.8	6	Below LOD	Below LOD	Below LOD	75.10	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	10770	41.7	Below LOD	284	N/A	N/A
G-52d - 4	rim	235.9	5.5	Below LOD	Below LOD	Below LOD	32.70	0.88	Below LOD	Below LOD	0.72	Below LOD	Below LOD	0.49	0.25	3.06	0.61	4.90	1.29	3.46	0.49	3.69	0.43	10530	48.3	12.68	320	N/A	N/A
G-52d - 5	core	236.1	5.1	Below LOD	Below LOD	Below LOD	254.00	1.92	Below LOD	Below LOD	0.38	Below LOD	Below LOD	0.30	0.46	5.25	1.91	22.60	8.04	34.40	6.76	67.60	13.60	10580	94.9	3.93	602	N/A	N/A
G-52d - 59	core	237	5.7	Below LOD	Below LOD	Below LOD	97.80	0.78	Below LOD	Below LOD	1.17	Below LOD	0.35	1.05	0.54	4.90	1.35	10.80	2.73	9.80	1.71	14.10	2.31	8820	57.9	48.4	385	N/A	N/A
G-52d - 11	core	240.6	6.1	Below LOD	Below LOD	Below LOD	76.60	0.51	0.16	0.07	1.08	0.09	0.78	0.60	0.50	3.02	0.84	8.05	2.22	7.70	1.21	9.90	1.75	11310	31.4	2.92	207	N/A	N/A
G-52d - 16	core	245.8	7.2	Below LOD	Below LOD	Below LOD	102.70	0.66	1.77	Below LOD	Below LOD	0.03	Below LOD	0.25	0.16	2.09	0.82	8.73	3.50	14.80	4.23	57.80	16.20	10140	20.2	2	128.2	N/A	N/A
G-52d - 19	core	254.1	6.7	Below LOD	Below LOD	Below LOD	82.70	Below LOD	0.46	Below LOD	0.23	Below LOD	Below LOD	0.38	0.24	2.87	0.79	7.70	2.47	9.20	2.13	21.40	5.39	9860	26.6	1.28	162	N/A	N/A
G-52d - 6	core	391.4	17	Below LOD	Below LOD	Below LOD	525.00	2.59	1.75	Below LOD	26.50	0.21	3.01	4.52	1.08	14.70	4.27	42.40	17.30	84.40	21.10	206.00	38.60	11470	106.2	204	444	N/A	N/A
G-54 - 10	rim	172	4.5	2.45E+04	370	Below LOD	535.00	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	71.50	18.00	53.70	Below LOD	84.20	15.90	12730	47.9	Below LOD	446	N/A	N/A
G-54 - 29	rim	198	22	Below LOD	179	Below LOD	368.00	1.20	7.60	Below LOD	0.29	Below LOD	0.27	0.64	0.43	5.21	3.04	38.30	12.78	51.90	9.59	77.60	14.66	12620	127.7	10.87	1039	N/A	N/A
G-54 - 22	rim	203.4	12	127	Below LOD	Below LOD	248.00	3.18	1.41	Below LOD	0.30	Below LOD	Below LOD	0.74	0.13	6.80	3.00	32.60	7.56	25.80	7.30	97.00	23.60	12650	31.6	5.56	239	N/A	N/A
G-54 - 78	rim	210.1	4.6	Below LOD	176	Below LOD	193.00	0.56	Below LOD	Below LOD	Below LOD	0.04	0.26	1.74	0.39	10.50	3.36	26.30	6.52	20.90	3.44	24.70	4.14	12340	48.3	8.49	358	N/A	N/A
G-54 - 76	rim	211.4	5.1	Below LOD	288	Below LOD	235.00	0.75	0.11	Below LOD	0.72	Below LOD	0.48	1.70	0.36	11.70	4.00	31.80	7.85	24.70	4.09	32.50	6.02	12200	38.7	8.77	280	N/A	N/A
G-54 - 58	rim	212	5.5	Below LOD	234	Below LOD	302.00	0.70	Below LOD	Below LOD	0.38	Below LOD	0.25	0.88	0.26	8.20	2.84	33.00	10.92	41.30	7.39	59.50	10.05	12170	59.5	8.18	430	N/A	N/A
G-54 - 26	rim	212.3	5.4	Below LOD	223	Below LOD	171.10	0.54	0.39	0.47	1.43	0.26	1.42	1.93	0.23	9.60	2.87	21.80	5.75	20.20	4.09	29.70	6.26	12000	58.5	13.86	428	N/A	N/A
G-54 - 19	rim	215.6	5.2	Below LOD	94	Below LOD	190.00	0.38	Below LOD	Below LOD	Below LOD	Below LOD	0.22	0.43	0.14	3.81	1.49	18.90	6.29	26.10	5.16	41.50	8.20	11920	74.4	5.25	531	N/A	N/A
G-54 - 4	rim	216.3	5.1	Below LOD	Below LOD	Below LOD	141.10	0.51	Below LOD	Below LOD	0.23	Below LOD	0.19	0.47	0.12	4.18	1.38	14.40	4.40	16.90	3.21	25.30	4.16	12080	31.3	5.05	223.5	N/A	N/A
G-54 - 93	rim	217.7	4.9	Below LOD	Below LOD	Below LOD	185.00	0.71	0.14	Below LOD	0.32	Below LOD	Below LOD	0.39	0.17	4.37	1.80	20.20	6.37	24.10	4.76	40.20	7.90	12870	95.9	5.18	681	N/A	N/A
G-54 - 9	rim	218.8	5	Below LOD	111	Below LOD	257.00	0.62	0.15	Below LOD	0.56	0.02	0.19	0.79	0.44	8.80	3.41	34.00	9.06	27.40	4.35	31.90	5.73	12680	265.9	10.79	1908	N/A	N/A
G-54 - 11	rim	219.5	6.3	Below LOD	151	10.3	158.00	0.52	Below LOD	Below LOD	0.44	Below LOD	0.37	0.62	0.17	8.32	2.67	22.50	5.18	15.40	2.90	22.70	3.99	12130	42.1	7.37	294	1.0	743.4
G-54 - 47	rim	219.5	6.4	Below LOD	181	Below LOD	561.00	0.49	Below LOD	Below LOD	2.33	0.09	2.15	7.16	2.17	44.80	10.43	78.20	19.70	66.60	12.15	92.40	18.02	10990	46.9	71.6	327	N/A	N/A
G-54 - 82	rim	220.2	5.3	Below LOD	Below LOD	Below LOD	78.40	0.51	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	0.50	0.36	5.37	1.89	13.70	2.49	Below LOD	Below LOD	Below LOD	Below LOD	12320	155.9	8.52	1089	N/A	N/A
G-54 - 52	rim	221.7	5.6	Below LOD	Below LOD	17.4	404.00	5.30	1.41	Below LOD	1.42	0.07	0.42	0.63	0.14	3.49	2.08	26.70	13.00	74.20	20.20	214.00	44.80	12630	59.2	19.3	407	1.2	792.0
G-54 - 35	rim	222.1	5.3	Below LOD	181	6	129.00	1.49	Below LOD	Below LOD	1.65	Below LOD	0.53	1.65	0.34	9.80	2.29	19.30	4.24	14.20	2.63	21.50	4.05	11230	68	34	486	0.8	697.8
G-54 - 61	rim	223.1	5	Below LOD	151	Below LOD	281.00	0.66	Below LOD	0.08	0.49	Below LOD	0.26	0.84	0.26	8.77	3.41	34.60	9.55	32.20	5.35	45.30	8.22	12510	127.1	8.83	862	N/A	N/A
G-54 - 46	core	223.4	5	Below LOD	205	Below LOD	681.00	1.28	Below LOD	Below LOD	3.23	0.15	3.25	10.50	2.81	58.70	13.59	98.20	24.21	79.40	13.23	99.50	18.63	11090	62.3	103.1	430	N/A	N/A
G-54 - 84	rim	223.4	5.2	Below LOD	460	38	420.00	1.74	1.63	2.83	12.80	0.86	4.00	1.56	0.30	6.80	2.56	30.20	12.40	63.50	16.90	188.20	46.50	12360	56.2	91.6	382	1.6	873.5
G-54 - 48	core	223.6	4.9	Below LOD	224	Below LOD	316.00	0.81	Below LOD	Below LOD	1.03	0.08	1.20	4.31	0.73	31.30	8.30	56.80	11.21	29.60	4.49	33.10	4.63	13230	107.5	18.62	756	N/A	N/A
G-54 - 41	core	224	5.5	Below LOD	151	Below LOD	185.00	0.33	Below LOD	Below LOD	0.80	0.04	0.80	3.37	0.50	22.00	5.82	35.10	6.39	15.40	2.26	15.70	2.72	11860	48	11.29	332	N/A	N/A
G-54 - 7	rim	225.9	7.3	Below LOD	141	Below LOD	247.00	0.51	Below LOD	Below LOD	0.53	0.04	0.50	1.73	0.24	11.30	3.82	32.30	8.11	27.50	4.96	40.10	7.24	12300	80.3	9.69	536	N/A	N/A
G-54 - 40	rim	225.9	5.3	Below LOD	172	Below LOD	169.00	0.37	Below LOD	Below LOD	0.72	0.07	0.74	2.72	0.48	20.80	5.58	33.30	5.44	14.00	2.17	14.30	2.35	11770	42.5	10.4	289	N/A	N/A
G-54 - 80	core	227.2	4.7	329	540	13.1	1384.00	2.10	3.06	4.80	39.00	5.90	31.00	22.50	5.10	64.00	20.20	190.00	51.20	168.50	27.00	199.00	35.20	12810	1210	94	8430	1.1	765.1
G-54 - 65	rim	228.6	5.8	740	169	35.7	274.00	3.14	6.70	Below LOD	0.39	0.04	0.41	0.59	0.20	5.50	1.98	21.90	8.46	48.70	13.70	160.00	33.50	12660	104.7	7.39	715	1.6	866.5
G-54 - 34	core	228.9	5.5	Below LOD	115	Below LOD	173.50	1.89	Below LOD	Below LOD	2.43	0.03	0.75	2.48	0.70	17.90	4.51	29.10	5.59	15.50	2.54	19.30	2.84	10230	104.6	55.4	715	N/A	N/A
G-54 - 3	rim	228.9	5.8	Below LOD	Below LOD	Below LOD	196.00	0.64	Below LOD	Below LOD	1.93	Below LOD	0.79	1.82	0.30	12.07	3.78	27.40	6.25	21.30	4.26	40.00	8.90	11840	53.9	17.4	370	N/A	N/A

G-54 - 39	rim	229.8	5	Below LOD	Below LOD	Below LOD	261.00	0.46	Below LOD	Below LOD	0.47	Below LOD	0.33	0.87	0.31	6.64	2.82	28.60	9.20	31.30	5.80	43.40	8.01	12280	99.6	11.24	665	N/A	N/A
G-54 - 44	core	230.2	5	Below LOD	115	Below LOD	204.00	1.30	Below LOD	Below LOD	1.30	0.06	0.62	2.40	0.46	15.20	4.53	32.60	6.89	19.90	3.17	24.00	4.25	11230	60.5	19.3	412	N/A	N/A
G-54 - 45	core	231	5.3	Below LOD	180	Below LOD	170.70	0.62	Below LOD	Below LOD	0.80	0.06	0.62	2.38	0.39	19.10	4.68	31.80	5.87	13.25	2.21	13.80	2.52	11880	51.8	13.6	351	N/A	N/A
G-54 - 72	core	234.1	5.4	Below LOD	158	Below LOD	336.00	1.11	Below LOD	Below LOD	1.20	Below LOD	0.78	5.07	0.64	36.90	11.31	73.40	11.79	23.70	2.45	11.40	1.03	14560	372	32.2	2500	N/A	N/A
G-54 - 43	rim	234.1	6.5	Below LOD	Below LOD	Below LOD	156.00	0.68	Below LOD	Below LOD	0.57	0.04	0.47	1.86	0.27	12.30	3.89	26.40	5.25	13.12	1.81	14.10	2.53	11990	59.8	11.62	401	N/A	N/A
G-54 - 33	core	234.4	4.9	Below LOD	145	Below LOD	240.00	0.84	Below LOD	Below LOD	0.61	Below LOD	0.19	1.03	0.26	8.80	3.25	31.10	7.51	27.50	5.03	44.60	9.63	12710	183	12.18	1200	N/A	N/A
G-54 - 59	rim	234.7	8.7	Below LOD	270	Below LOD	261.00	4.70	1.15	Below LOD	0.32	0.03	0.24	0.62	0.21	5.50	2.67	28.10	8.50	35.00	8.30	85.00	17.30	12380	122.2	10.3	840	N/A	N/A
G-54 - 49	rim	235.8	5.5	Below LOD	173	Below LOD	233.20	0.66	Below LOD	Below LOD	0.89	Below LOD	0.64	2.12	0.33	12.80	4.26	33.10	8.26	26.40	4.87	40.40	6.96	12690	104.1	11.27	686	N/A	N/A
G-54 - 73	rim	235.9	6.5	Below LOD	230	Below LOD	252.80	0.95	3.53	0.29	1.28	0.07	0.65	1.44	0.43	10.60	3.89	33.30	8.23	28.20	4.62	40.40	7.81	12590	65.2	11.83	412	N/A	N/A
G-54 - 62	rim	237.4	5.3	Below LOD	155	Below LOD	608.00	3.66	0.66	0.44	9.00	0.18	1.41	2.01	0.40	10.90	4.06	48.30	19.60	97.00	23.40	249.00	55.40	12120	87.9	69	585	N/A	N/A
G-54 - 25	core	239.6	6.1	Below LOD	254	Below LOD	533.00	2.34	1.98	1.36	10.70	2.05	14.70	13.80	2.01	38.50	10.59	79.50	18.20	50.70	7.98	57.80	9.34	11900	131	55.5	820	N/A	N/A
G-54 - 37	rim	240.4	8.3	Below LOD	Below LOD	Below LOD	244.00	8.30	0.12	Below LOD	0.56	Below LOD	0.19	0.43	0.13	3.66	1.56	19.40	7.73	44.70	15.40	192.00	40.60	12550	73.5	6.98	496	N/A	N/A
G-54 - 90	rim	241.2	44	828	Below LOD	86	197.00	1.69	19.80	Below LOD	0.77	0.07	0.45	2.68	0.38	16.50	4.96	32.40	6.56	16.10	2.69	19.60	3.70	12370	56.3	12.43	387	1.9	973.3
G-54 - 16	core	246.8	5.9	Below LOD	530	7.3	2084.00	4.25	0.61	Below LOD	16.50	0.21	3.76	9.60	0.55	53.80	18.39	209.00	74.60	308.00	62.40	520.00	95.50	9750	88.5	413	553	0.9	713.9
G-54 - 55	rim	248.7	14	Below LOD	230	11.5	422.00	1.58	0.80	Below LOD	0.78	Below LOD	0.52	1.31	0.24	10.10	3.70	31.30	12.37	69.10	19.10	214.00	51.60	12590	100.2	19.4	674	1.1	753.3
G-54 - 13	rim	249.4	6.3	Below LOD	380	Below LOD	853.00	3.57	3.70	6.10	20.00	1.50	6.90	2.50	0.28	11.80	4.95	67.00	27.30	144.00	35.40	360.00	78.70	12690	69.9	153	431	N/A	N/A
G-54 - 38	core	253.8	65	Below LOD	Below LOD	Below LOD	225.00	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	24.60	Below LOD	29.70	Below LOD	63.00	Below LOD	12910	82.2	Below LOD	561	N/A	N/A
G-54 - 79	rim	258.8	7	522	360	Below LOD	684.00	2.56	3.20	4.11	30.90	4.50	27.90	23.20	3.74	44.00	13.40	103.70	25.80	82.80	13.08	99.70	18.30	13650	595	150	3500	N/A	N/A
G-54 - 83	core	262.9	5.7	Below LOD	Below LOD	Below LOD	1135.00	1.89	0.45	Below LOD	25.50	0.16	3.16	5.71	1.64	25.00	8.24	92.60	37.60	174.30	40.90	426.00	91.10	11090	110.5	544	654	#VALUE!	#VALUE!
G-54 - 14	core	263.5	6.4	119	1290	Below LOD	3180.00	5.47	1.83	41.00	134.00	15.50	71.00	21.60	1.95	60.50	19.90	261.00	110.40	549.00	125.00	1169.00	240.00	8840	65.7	260	397	N/A	N/A
G-54 - 6	core	265.5	6.3	Below LOD	310	12.2	544.00	2.91	0.86	Below LOD	16.60	0.07	0.80	2.11	0.76	10.20	3.90	47.70	18.80	84.20	18.70	173.00	34.00	10410	99.5	28.1	571	1.1	758.6
G-54 - 31	core	267.9	7.5	268	520	12.2	628.00	7.70	7.40	0.17	1.48	0.10	0.97	1.47	0.40	6.20	3.57	42.60	19.10	108.80	30.50	325.00	60.00	12050	155.4	23.7	849	1.1	758.6
G-54 - 2	core	274	8.1	Below LOD	460	Below LOD	836.00	0.80	0.28	0.38	13.70	0.36	4.09	4.08	1.39	18.40	5.83	70.20	26.60	131.00	31.10	314.00	68.10	10490	18.1	79.8	105.3	N/A	N/A
G-54 - 63	core	276.9	6.5	Below LOD	178	Below LOD	930.00	3.04	0.08	Below LOD	23.10	0.06	0.82	2.29	0.30	13.60	5.43	69.60	31.00	156.50	36.30	365.00	75.00	13030	68.3	225	384	N/A	N/A
G-54 - 66	rim	280.1	25	Below LOD	Below LOD	Below LOD	258.00	0.38	0.13	Below LOD	0.93	Below LOD	0.24	0.84	0.16	7.40	2.48	28.90	9.20	33.30	6.41	56.90	10.30	13240	165	24.2	1030	N/A	N/A
G-54 - 1	core	296.2	11	Below LOD	370	Below LOD	965.00	8.34	0.39	Below LOD	22.80	0.05	0.68	2.01	0.54	14.10	5.55	72.90	31.50	172.00	43.80	409.00	74.10	11360	106.2	53	542	N/A	N/A
G-54 - 70	rim	300.1	8.9	Below LOD	265	Below LOD	505.00	8.70	1.08	Below LOD	0.33	Below LOD	0.28	0.37	0.11	2.39	1.41	23.20	14.40	103.60	34.20	384.00	75.10	12050	115.8	24.2	574	N/A	N/A
G-54 - 18	core	301	89	Below LOD	290	10.3	842.00	4.75	0.61	Below LOD	6.40	0.02	0.87	1.21	0.20	9.30	3.57	50.50	25.70	154.00	44.50	438.00	86.20	12370	210	56.4	1146	1.0	743.4
G-54 - 42	core	302.2	9.7	Below LOD	228	Below LOD	348.00	1.40	0.13	Below LOD	3.90	0.09	0.78	1.91	0.08	9.40	3.38	33.20	11.68	48.10	9.97	79.90	16.37	10840	52.9	71.3	262	N/A	N/A
G-54 - 57	core	302.5	21	Below LOD	430	Below LOD	1423.00	11.00	0.71	Below LOD	8.30	0.07	1.41	2.78	0.65	17.00	7.77	104.70	46.80	257.00	70.50	717.00	135.40	12220	105.1	84.8	568	N/A	N/A
G-54 - 53	core	307.5	6.5	129	470	36	1640.00	4.29	2.18	Below LOD	19.30	0.17	2.72	5.55	1.18	30.40	10.90	131.00	53.30	262.00	59.70	605.00	127.50	8030	121.3	332	616	1.6	867.5
G-54 - 69	rim	311.3	11	Below LOD	132	Below LOD	343.00	1.76	0.35	Below LOD	2.60	Below LOD	0.48	0.96	0.19	7.40	2.50	29.80	10.96	50.60	10.87	105.10	22.20	11910	113.2	25.3	592	N/A	N/A
G-54 - 24	rim	312.6	6.6	Below LOD	143	Below LOD	544.00	3.08	0.17	Below LOD	7.83	0.03	0.30	0.90	0.14	7.11	2.96	40.10	17.12	84.80	21.10	212.00	46.80	11440	113.7	113.9	547	N/A	N/A
G-54 - 20	core	337.8	9.5	690	155	60	588.00	5.49	10.50	Below LOD	3.40	0.07	0.93	1.88	0.35	9.84	3.77	44.80	18.60	109.80	32.60	362.00	76.30	10090	47.3	35.9	228	1.8	927.3
G-54 - 86	rim	342	7.4	Below LOD	240	Below LOD	408.00	2.39	0.19	0.11	2.43	Below LOD	0.29	0.95	0.21	7.50	3.08	34.70	13.30	66.30	15.70	160.70	33.20	12420	169.4	30	780	N/A	N/A
G-54 - 67	core	372.9	8.1	Below LOD	330	Below LOD	540.00	2.84	Below LOD	0.15	1.61	0.05	0.65	1.30	0.12	8.00	3.22	41.90	18.20	90.50	20.20	201.00	38.20	14020	165	66.5	673	N/A	N/A
G-54 - 81	core	377.9	16	250	330	29	1155.00	3.49	7.80	Below LOD	7.45	0.08	0.87	2.71	1.10	19.10	7.39	96.30	41.20	192.00	40.80	395.00	81.40	8610	80.5	111.4	312	1.5	843.9
G-54 - 75	core	395.8	9.1	Below LOD	204	Below LOD	547.00	19.30	0.60	Below LOD	7.12	0.06	0.60	1.41	0.19	10.00	3.19	43.90	18.20	98.60	24.10	261.00	55.90	11880	104.9	34.6	412	N/A	N/A
G-54 - 64	core	399	9.8	Below LOD	450	Below LOD	1306.00	1.75	1.07	Below LOD	2.63	0.09	1.27	2.96	0.10	20.60	8.54	109.20	44.40	206.00	45.70	418.00	82.30	11760	75.4	70.3	288	N/A	N/A
G-54 - 88	rim	441.3	12	1340	154	109	283.00	Below LOD	25.60	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	27.30	Below LOD	41.10	Below LOD	89.00	Below LOD	11680	107.7	43.1	369	2.0	1005.6
G-54 - 60	core	443.8	14	Below LOD	200	Below LOD	303.00	0.78	0.18	Below LOD	3.51	0.14	1.38	4.22	0.08	25.50	6.98	53.70	10.38	23.30	2.67	15.40	1.98	13520	138.1	56	452	N/A	N/A
G-54 - 8	core	470.4	10	Below LOD	Below LOD	Below LOD	1360.00	1.80	0.22	Below LOD	19.97	0.18	2.13	4.27	0.41	23.30	8.90	108.30	44.40	221.30	52.10	484.00	89.10	6520	395	610	1275	N/A	N/A
G-54 - 5	core	477	27	Below LOD	260	Below LOD	597.00	11.90	0.52	Below LOD	3.06	Below LOD	0.39	0.78	0.19	7.43	3.05	43.20	19.20	112.00	33.40	375.00	84.30	12580	133.1	38.1	395	N/A	N/A
G-54 - 23	core	514.9	12	170	370	Below LOD	1399.00	4.49	1.34	0.33	35.70	0.31	3.29	6.05	1.85	33.00	10.86	126.80	48.10	219.00	47.50	440.00	87.10	8780	105.6	205	302	N/A	N/A
G-54 - 85	core	518	12	742	3480	48.1	1060.00	2.85	2.52	28.00	102.00	13.20	70.00	22.50	1.78	39.40	10.10	104.00	39.00	170.00	35.80	325.00	64.20	11290	78.9	126.1	241	1.7	900.6
G-54 - 15	core	539.6	12	Below LOD	Below LOD	Below LOD	503.00	7.41	0.85	1.36	55.70	1.16	7.60	5.90	1.42	11.50	3.45	38.80	14.62	71.10	17.24	175.30	36.30	9690	200	448	566	N/A	N/A
G-54 - 51	rim	565	22	Below LOD	310	Below LOD	606.00	2.28	0.13	Below LOD	28.60	0.08	1.30	2.08	0.32	13.50	4.59	55.20	20.80	95.80	21.10	197.00	38.20	11020	97.4	131.4	248	N/A	N/A
G-54 - 50	core	584.9	14	Below LOD	167	9.9	503.00	2.21	0.13	Below LOD	30.20	Below LOD	0.94	2.41	0.30	12.00	3.71	48.30	16.91	78.10	17.50	162.10	32.00	11580	124	184.1	318	1.0	739.9
G-54 - 56	core	619.5	14	Below LOD	285	17.5	797.00	3.67	Below LOD	Below LOD	5.12	0.15	2.45	6.70	0.10	37.80	11.13	101.10	27.30	82.40	13.47	97.00	13.72	13710	132.9	117.3	322	1.2	792.5
G-54 - 17	core	712	18	Below LOD	880	Below LOD	2420.00	2.50	0.08	Below LOD	2.90	0.08	1.87	4.81	0.20	40.20	16.00	210.00	82.60	383.00	84.70	759.00	140.80	12570	174	86.5	381	N/A	N/A
G-54 - 12	core	757	39	Below LOD	140	Below LOD	496.00	1.74	Below LOD	1.80	12.50	0.39	2.40	1.65	0.29	11.60	3.59	42.20	16.90	81.00	16.13	154.90	31.20	10870	158	66.6	288	N/A	N/A
G-54 - 87	core	888	22	2260	1980	1.09E+04	959.00	233.00	23.30	6.40	26.90	2.90	17.40	8.50	0.60	23.50	7.51	85.80	33.80	158.30	34.00	327.00	63.70	10640	124.8	115.1	210.3	4.0	2302.2
G-54 - 30	core	918	21	Below LOD	230	10.9	797.00	1.90	Below LOD	Below LOD	6.19	0.17	2.79	5.33	0.53	25.70	8.34	86.40	28.50	115.90	22.70	189.70	34.60	9830	60.1	44.3	97	1.0	748.5
G-54 - 77	core	938	67	Below LOD	127	Below LOD	437.00	2.75	0.12	Below LOD	31.10	0.04	0.83	1.03	0.32	7.40	2.58	32.40	14.30	76.60	18.70	193.00	42.60	12060	59.4	95.4	89	N/A	N/A
G-54 - 74	core	952	23	Below LOD	240	Below LOD	735.00	3.39	Below LOD	Below LOD	8.09	0.05	0.74	2.53	0.15	15.10	5.66	64.40	25.00	112.80	22.24	207.10	39.80	10800	122.5	58.9	185.2	N/A	N/A
G-54 - 68	core	991	27	Below LOD	Below LOD	Below LOD	616.00	3.30	0.09	Below LOD	8.68	0.11	1.51	3.72	0.44	17.00	5.43	59.50	21.70	95.40	19.42	176.00	33.20	8740	87.1	39.5	131	N/A	N/A
G-54 - 28	core	1005	22	Below LOD	Below LOD	8.8	570.00	2.93	0.69	Below LOD	7.40	0.07	0.49	1.09	0.14	7.59	2.90	42.50	18.10	93.90	22.70	234.00	47.60	13610	371	80.1	543	0.9	729.7
G-54 - 71	core	1069.3	21	Below LOD	650	12.9	1675.00	1.61	0.27	Below LOD	4.22	0.15	3.03	6.77	0.17	39.90	13.44	155.00	59.30	266.00	53.20	465.00	89.20	11520	262	158.4	361	1.1	763.7
G-54 - 54	core	1184	27	Below LOD	850	Below LOD	2310.00	1.68	Below LOD	Below LOD	3.81	0.17	3.52	8.34	0.16	49.20	18.10	209.00	82.50	357.00	75.30	649.00	121.60	11510	298	140.2	377	N/A	N/A
G-54 - 27	core	1407	81	Below LOD	390	Below LOD	1760.00	2.56	0.30	Below LOD	49.10	0.24	4.75	9.30	2.67	43.30	14.30	164.00	62.40	273.00	57.90	522.00	105.00	8840	220	167	206	N/A	N/A
G-54 - 36	core	1533	44	Below LOD	330	Below LOD	1036.00	1.22	0.16	Below LOD	21.20	0.15	2.48	4.92	1.51	26.20	8.34	95.60	35.90	160.60	34.30	304.00	62.00	10020	167.6	151.5	149	N/A	N/A
G-54 - 32	core	1621	56	Below LOD	300	Below LOD	380.00	1.12	0.17	0.12	18.00	0.12	1.24	2.71	0.47	11.60	3.39	37.80	13.60	56.40	11.40	102.90	20.50	8280	177	81	139.2	N/A	N/A
G-54 - 92	rim	1715	83	199	1000	11.2	1940.00	3.30	1.88	2.80	7.80	0.72	4.30	5.10	1.23	26.00	12.04	160.00	62.00	293.00	64.20	597.00	109.70	13350	820	49.7	687	1.0	750.9
G-54 - 91	core	1972	52	Below LOD	700	Below LOD	1063.00	1.39	Below LOD	Below LOD	4.67	Below LOD	0.64	2.79	0.47	17.70	6.96	92.50	37.90	169.00	37.20	361.00	69.40	11730	361	53.5	240	N/A	N/A
G-54 - 89	core	2112	50	Below LOD	220	Below LOD	921.00	1.92	Below LOD	Below LOD	6.77	0.13	1.37	3.52	0.21	19.70	6.96	81.30	31.40	137.70	29.30	266.00	51.80	10050	239	86.4	161.2	N/A	N/A
G-54 - 21	core	2257	43	285	158	22.6	799.00	2.89	6.30	Below LOD	10.11	0.07	0.92	1.91	0.07	14.40	5.21	65.40	26.50	122.00	27.60	247.00	46.10	11280	433	96.8	261	1.4	817.9
G-52a - 4	rim	65.5	7.6	910	1450	7.4	1890.00	9.03	120.00	26.60	132.00	28.90	166.00	132.00	27.30	233.00	53.00	360.00	73.00	235.00	47.00	450.00	94.40	26620	1810	9.00E+03	4.43E+04	0.9	715.0
G-52a - 16	core	129.5	10	3340	7100	103.3	18800.00	25.50	191.00	179.00	1250.00	215.00	1270.00	1019.00	272.00	1930.00	586.00	4440.00	787.00	1930.00	298.00	1940.00	241.00	2.92E+04	717	2070	8580	2.0	998.2
G-52a - 7	rim	133.6	10	2890	5880	228	17800.00	24.10	115.60	222.30	1332.00	213.60	1240.00	933.00	238.80	1934.00	576.00	4250.00	794.00	1946.00	292.00	2033.00	253.00	21930	733	927	8380	2.4	1117.8
G-52a - 51	core	155.2	12	2880	4300	126	12780.00	32.80	121.20	128.00	782.00	129.00	768.00	653.00	179.00	1263.00	401.00	3070.00	551.00	1410.00	218.00	1540.00	178.00	2.54E+04	757	1368	7600	2.1	1026.2
G-52a - 10	core	158.5	12	3990	3570	101	9900.00	13.35	97.90	78.40	568.00	79.50	483.00	389.00	111.00	775.00	233.00	1900.00	369.00	978.00	151.40	1066.00	138.80	22430	631	787	6140	2.0	995.0
G-52a - 20	rim	158.5	12	134	700	10.4	1910.00	2.87	4.10	5.70	40.00	6.10	36.00	29.00	7.50	60.00	20.10	222.00	67.00	304.00	88.00	985.00	215.00	1.83E+04	300	68	2990	1.0	744.3
G-52a - 45	rim	158.7	12	196	1780	Below LOD	3940.00	16.20	7.72	5.15	31.70	5.35	41.60	66.00	5.26	250.00	75.00	606.00	130.00	428.00	88.40	835.00	152.00	2.69E+04	615	259	6270	N/A	N/A
G-52a - 18	rim	160.1	12	1880	707	16.1	1720.00	1.52	22.60	3.80	11.50	2.10	13.00	10.90	4.53	41.40	13.94	159.60	49.90	213.40	51.80	554.00	119.00	15240	128.7	61.6	1250	1.2	784.5
G-52a - 60	core	160.1	13	3550	2920	203	7550.00	23.30	71.00	160.00	712.00	111.00	633.00	435.00	119.00	912.00	245.00	1810.00	329.00	817.00	126.60	909.00	136.70	2.83E+04	678	1.11E+04	6440	2.3	1098.9
G-52a - 2	rim	162.5	12	Below LOD	1190	Below LOD	2690.00	6.49	Below LOD	Below LOD	0.58	Below LOD	Below LOD	1.19	0.15	16.90	11.83	196.00	81.40	443.00	139.50	1750.00	363.00	21080	614	45	6140	N/A	N/A
G-52a - 17	rim	163	12	1290	1610	43.9	5900.00	13.70	36.70	56.00	232.00	34.90	208.00	171.00	42.90	417.00	131.60	1066.00	212.00	558.00	89.60	621.00	82.30	24540	710	540	6870	1.6	890.0
G-52a - 23	core	163.3	13	1500	2610	89	9230.00	16.80	39.50	96.80	786.00	96.10	566.00	436.00	119.90	826.00	250.00	1950.00	374.00	974.00	158.10	1133.00	146.00	22860	727	1386	6960	1.9	977.9
G-52a - 27	core	164.2	12	1.56E+04	636	163	1715.00	8.00	283.00	2.60	14.80	1.43	8.50	10.80	1.83	46.10	18.90	187.70	46.20	148.50	29.70	269.00	46.20	22810	342	78.8	3340	2.2	1064.5
G-52a - 5	rim	164.7	12	Below LOD	520	Below LOD	982.00	2.36	0.19	0.18	0.99	0.13	0.81	1.27	0.15	11.20	6.18	83.10	30.40	141.00	36.00	371.00	70.50	20980	259	28.8	2500	N/A	N/A
G-52a - 9	rim	165.2	13	920	3290	52.7	8330.00	10.60	52.20	69.80	507.00	77.70	458.00	366.00	94.00	747.00	223.00	1780.00	340.00	938.00	160.80	1225.00	192.70	16140	474	641	4340	1.7	911.5
G-52a - 25	rim	166.2	13	52	830	Below LOD	2142.00	5.54	0.25	0.27	1.60	0.16	1.10	1.68	0.38	15.90	9.89	164.10	66.70	362.00	111.90	1390.00	300.70	2.22E+04	510	36.8	4900	N/A	N/A
G-52a - 1	core	168.4	13	826	1000	26.3	2425.00	12.24	16.50	23.20	117.60	17.51	102.70	82.90	22.40	184.20	55.70	457.00	95.70	287.00	54.60	462.00	81.00	26800	351	517	3315	1.4	833.6
G-52a - 50	core	168.4	13	812	2290	46.4	6360.00	11.10	43.50	61.20	394.00	65.90	368.00	283.00	73.50	533.00	163.10	1269.00	251.00	691.00	115.30	922.00	137.50	19950	591	454	5500	1.7	896.4
G-52a - 58	rim	168.4	13	Below LOD	1290	Below LOD	3390.00	3.22	2.50	10.40	58.00	6.10	36.60	33.10	12.10	99.00	35.90	378.00	104.00	373.00	84.00	896.00	187.00	2.15E+04	334	145	3050	N/A	N/A
G-52a - 31	rim	169.2	13	Below LOD	691	Below LOD	1855.00	3.47	0.68	Below LOD	0.50	0.04	0.44	1.24	0.22	13.00	8.16	137.60	59.60	324.90	93.60	1127.00	241.00	17670	544	34.8	5090	N/A	N/A
G-52a - 46	core	169.2	13	Below LOD	650	Below LOD	1127.00	2.15	0.22	0.12	0.91	0.07	0.59	1.00	0.27	8.83	5.66	87.70	36.10	186.50	49.80	549.00	115.00	16260	248	27.2	2290	N/A	N/A
G-52a - 24	rim	169.8	13	Below LOD	870	Below LOD	2170.00	3.03	0.13	0.27	1.81	0.13	0.88	1.47	0.33	15.20	9.60	159.00	66.90	371.00	108.30	1244.00	264.00	17560	500	36.8	4650	N/A	N/A
G-52a - 28	core	170.2	13	149	609	Below LOD	1429.00	2.05	1.08	2.12	10.20	1.40	8.60	7.37	2.54	27.10	11.20	135.40	44.40	205.10	54.70	629.00	128.70	18020	246	83.9	2270	N/A	N/A
G-52a - 14	core	170.9	13	146	660	Below LOD	1320.00	3.09	5.00	4.90	32.50	4.90	31.20	25.00	6.80	58.00	20.50	187.00	47.90	181.00	42.60	427.00	82.90	18490	292	174	2620	N/A	N/A
G-52a - 15	rim	170.9	13	2420	1810	21.7	5230.00	9.74	35.10	23.40	145.00	21.30	132.00	116.00	29.00	272.00	88.70	765.00	170.00	524.00	102.80	889.00	137.70	25130	480	481	4350	1.3	813.8
G-52a - 12	rim	171	13	Below LOD	800	Below LOD	1940.00	2.37	1.08	2.15	7.30	1.40	10.70	9.30	3.80	41.90	15.40	185.00	62.10	282.00	73.10	806.00	164.30	15960	420	41.2	3920	N/A	N/A
G-52a - 59	core	171	13	156	810	4.9	2258.00	4.94	2.13	4.14	15.70	2.87	19.10	19.10	4.99	77.40	26.90	266.00	61.30	189.30	34.00	288.00	44.10	25920	374	110	3580	0.7	681.8
G-52a - 53	rim	171.6	13	Below LOD	575	Below LOD	1326.00	2.36	0.50	0.57	2.70	0.49	3.67	3.39	1.01	15.40	7.68	112.80	41.70	211.10	58.20	687.00	143.20	21150	341.3	33.9	3140	N/A	N/A
G-52a - 3	core	172.7	13	286	1060	15.4	2080.00	6.05	8.40	5.78	43.30	7.33	43.20	36.00	9.17	90.10	32.30	295.00	69.90	221.30	42.10	349.00	53.00	22280	523	139.3	4520	1.2	780.3
G-52a - 29	rim	173.1	14	1660	1860	77.4	5690.00	12.90	36.40	50.60	353.00	47.80	280.00	215.00	60.10	463.00	144.40	1145.00	217.00	580.00	96.00	718.00	103.70	2.69E+04	474	637	4200	1.9	959.5
G-52a - 39	core	173.3	13	196	850	8.9	1970.00	4.88	6.70	8.60	55.00	7.10	42.00	34.80	9.20	84.00	28.80	279.00	71.40	277.00	62.00	633.00	120.70	18990	271	210	2490	0.9	730.7
G-52a - 32	rim	173.7	13	Below LOD	490	Below LOD	1201.00	2.95	1.12	1.14	6.40	1.12	6.20	6.10	1.39	22.90	9.60	113.00	37.50	171.40	42.20	456.00	90.20	20360	273	28	2431	N/A	N/A
G-52a - 37	rim	174.7	13	1180	778	19.3	1660.00	5.05	17.50	9.50	22.40	3.88	19.70	12.10	2.84	39.40	16.30	178.00	48.60	178.00	39.10	420.00	78.70	23470	405	86.6	3770	1.3	802.1
G-52a - 36	core	175.1	13	407	720	17	1098.00	1.53	13.60	2.62	11.70	1.71	9.00	6.20	2.00	19.00	8.60	108.00	37.50	183.20	49.40	551.00	116.30	15430	159.7	64	1446	1.2	789.7
G-52a - 57	core	176.8	15	260	920	10.8	2220.00	6.30	5.31	9.50	42.20	6.54	39.90	34.40	10.18	101.70	33.80	307.00	80.50	296.00	67.80	694.00	136.00	2.13E+04	267	156	2300	1.0	747.6
G-52a - 52	core	176.9	13	613	1150	22.8	2930.00	14.50	16.60	18.10	119.80	18.80	110.20	92.00	24.20	204.00	67.10	554.00	104.20	286.00	50.50	423.00	63.50	3.34E+04	395	281	3490	1.4	818.8
G-52a - 35	core	177.5	13	98	562	Below LOD	1060.00	2.88	2.15	1.95	10.70	1.58	10.30	9.80	2.19	31.30	12.20	119.00	32.40	128.40	30.70	314.00	62.10	21940	199.6	91	1776	N/A	N/A
G-52a - 54	rim	177.6	13	Below LOD	522	Below LOD	1084.00	2.61	1.39	0.46	2.05	0.26	1.63	2.73	0.38	13.30	6.94	94.90	33.50	158.90	43.00	481.00	95.00	16640	222.6	16.16	2008	N/A	N/A

G-52a - 33	rim	178.3	13	1100	1850	77	6040.00	18.10	31.10	43.40	282.00	37.90	232.00	191.00	52.60	442.00	141.00	1160.00	220.00	537.00	86.30	608.00	74.90	3.36E+04	585	230	5300	1.9	958.8
G-52a - 22	rim	178.4	14	3070	1330	47.6	4080.00	9.11	30.70	43.60	257.00	32.80	189.70	145.10	37.60	324.00	96.20	757.00	143.70	363.00	56.20	389.00	48.40	2.96E+04	464	631	4100	1.7	899.4
G-52a - 34	rim	180.7	14	800	1200	13.9	2650.00	6.61	19.30	43.00	123.00	21.70	110.00	74.00	16.80	173.00	51.90	414.00	88.00	250.00	49.30	433.00	72.10	2.32E+04	364	428	3220	1.1	770.6
G-52a - 21	rim	182.1	14	1070	1410	20.8	4000.00	8.13	13.00	33.80	136.00	21.30	120.00	98.30	22.60	247.00	78.70	624.00	120.30	328.00	56.60	436.00	62.10	22380	476	206	4000	1.3	809.6
G-52a - 44	core	182.4	14	483	920	10.3	2100.00	6.06	14.30	18.20	75.60	12.98	77.30	60.60	14.80	144.00	46.40	371.00	78.50	218.00	39.10	317.00	44.10	26580	331	417	2840	1.0	743.4
G-52a - 26	rim	183.8	14	490	730	11.5	1443.00	4.53	10.30	1.13	8.70	0.68	4.26	4.20	1.19	19.80	9.73	126.40	43.70	200.60	50.90	540.00	109.50	16750	271.6	51.4	2320	1.1	753.3
G-52a - 43	core	184.2	14	6390	1330	67.8	2480.00	5.63	55.30	15.70	93.00	14.50	89.20	66.50	17.00	141.00	45.30	408.00	92.10	278.00	52.40	439.00	72.80	1.92E+04	401	407	3380	1.8	942.5
G-52a - 49	core	187.4	14	65	990	Below LOD	2475.00	7.89	0.56	0.78	3.54	0.55	3.40	4.98	1.20	34.70	17.86	222.80	67.80	235.10	44.40	376.00	57.60	22500	691	54.4	5650	N/A	N/A
G-52a - 47	core	188	15	1380	1600	29.8	4160.00	8.00	33.00	50.70	195.00	31.50	173.00	136.80	31.90	292.00	95.10	776.00	157.20	464.00	82.90	679.00	106.40	21930	530	342	4290	1.5	846.8
G-52a - 8	core	189.1	15	1670	2070	52.9	5110.00	13.35	35.10	38.60	249.00	39.80	235.00	187.00	48.00	359.00	117.80	967.00	188.00	509.00	84.50	639.00	85.90	22140	656	506	5340	1.7	912.0
G-52a - 40	core	189.1	16	1350	1680	53.5	2800.00	7.58	87.00	56.40	131.00	20.20	93.00	47.80	13.07	121.40	39.50	375.00	93.70	353.00	85.10	958.00	185.50	18480	559	349	4590	1.7	913.3
G-52a - 11	core	189.7	15	10190	1800	557	4190.00	19.00	151.00	46.00	225.00	32.80	182.50	148.60	39.30	297.00	92.30	756.00	150.50	406.00	66.40	484.00	62.70	21720	548	446	4630	2.7	1283.2
G-52a - 56	rim	191.3	16	3010	1620	39.5	4330.00	18.70	40.50	54.80	216.00	32.10	180.00	142.10	35.60	329.00	101.40	804.00	169.10	488.00	86.10	741.00	126.00	3.04E+04	473	519	3910	1.6	877.9
G-52a - 42	rim	191.8	15	1480	1740	54	3950.00	13.20	18.40	31.20	171.00	26.50	157.10	121.80	34.00	290.00	92.00	747.00	143.70	386.00	55.90	391.00	53.20	3.07E+04	477	266	3810	1.7	914.4
G-52a - 30	core	192.2	14	1440	2260	87.9	6600.00	12.80	31.90	88.40	314.00	49.70	283.00	221.00	54.40	528.00	157.40	1214.00	233.00	569.00	87.90	595.00	75.20	24110	573	2770	4570	1.9	976.2
G-52a - 38	rim	192.6	14	345	820	100	1342.00	1.91	7.00	2.59	8.30	1.85	11.80	11.60	2.83	34.70	13.36	152.90	50.00	225.40	58.60	644.00	132.70	14240	191.8	77.2	1513	2.0	993.7
G-52a - 13	core	194.6	15	541	1160	15.2	2490.00	5.05	9.60	14.60	61.00	9.60	61.00	46.30	13.50	127.00	40.40	359.00	83.80	265.00	55.50	550.00	100.00	27860	395	134	3060	1.2	779.0
G-52a - 41	rim	208.9	17	1940	1720	47.1	4290.00	11.80	22.50	93.00	241.00	37.20	196.00	122.80	35.80	293.40	90.50	742.00	151.10	409.00	64.00	468.00	70.40	2.76E+04	469	233	3470	1.7	898.2
G-52a - 6	core	217	18	3630	1630	53.9	3570.00	13.90	25.90	39.90	211.00	32.20	201.00	157.00	40.00	370.00	99.00	770.00	141.00	425.00	68.20	543.00	86.40	2.77E+04	505	3.10E+03	3590	1.7	914.2
G-52a - 55	core	218.1	18	770	500	11.3	1036.00	3.88	12.90	2.55	4.69	1.10	7.30	8.40	1.57	30.30	11.32	116.90	31.10	115.50	25.60	262.00	49.70	21780	327	33.5	2330	1.1	751.7
G-52a - 48	rim	260	22	1940	1490	190	2890.00	19.50	55.00	28.30	158.00	24.80	143.00	121.00	31.00	239.00	77.50	614.00	117.00	357.00	70.30	628.00	104.00	26840	596	681	3610	2.3	1088.3
G-55b - 14	rim	150.3	11	Below LOD	124	Below LOD	672.00	1.36	Below LOD	Below LOD	11.65	Below LOD	0.38	1.51	0.29	9.82	3.75	50.80	21.30	106.90	25.70	273.00	57.00	13340	23.5	137	253	N/A	N/A
G-55b - 13	core	161.1	12	Below LOD	1.22E+04	7.5	642.00	0.65	5.00	122.00	280.00	35.70	167.00	36.80	3.14	43.70	7.73	66.90	21.60	91.00	19.33	186.70	36.20	10180	9.88	74.4	96.8	0.9	716.2
G-55b - 77	rim	163.8	12	Below LOD	260	Below LOD	595.00	0.87	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	0.38	0.17	6.26	3.85	54.10	20.61	86.50	16.22	139.80	26.80	13220	148.7	16.77	1439	N/A	N/A
G-55b - 26	rim	177.5	14	Below LOD	308	12.9	2920.00	2.92	0.39	0.17	65.90	1.13	17.40	24.70	11.39	96.50	26.90	287.00	98.20	415.00	89.50	851.00	172.30	7330	11.42	177.2	100.4	1.1	763.7
G-55b - 27	core	179.5	15	Below LOD	138	7.7	1317.00	1.32	0.27	Below LOD	26.90	0.38	6.57	9.60	4.46	40.70	11.90	132.00	46.40	201.00	43.80	422.00	84.50	7610	5.2	71.8	46.8	0.9	718.4
G-55b - 32	rim	187.8	14	960	401	59.5	1912.00	9.24	2.87	33.40	110.10	16.80	89.90	50.30	25.50	95.80	24.80	231.00	68.80	283.00	57.60	521.00	88.80	19190	322.8	325	2696	1.8	926.2
G-55b - 54	rim	199.3	15	700	1160	69	2640.00	3.54	6.40	24.30	98.00	12.30	69.00	36.20	19.70	70.00	22.20	250.00	88.50	396.00	88.50	835.00	158.00	13390	255	84	1970	1.8	944.7
G-55b - 68	rim	226.6	17	Below LOD	770	6.7	3410.00	9.86	0.60	5.25	55.60	3.14	16.90	11.40	5.10	50.30	21.60	293.00	113.60	547.00	118.20	1079.00	194.20	14810	442	177	3040	0.8	706.8
G-55b - 41	rim	231.6	17	Below LOD	142	7.1	875.00	2.57	Below LOD	Below LOD	17.57	0.06	1.12	3.63	2.11	24.90	7.79	87.80	30.80	128.40	26.40	232.40	44.20	10900	135.1	281	918	0.9	711.6
G-55b - 12	rim	237.1	18	Below LOD	246	Below LOD	2430.00	6.92	Below LOD	Below LOD	21.10	Below LOD	0.92	4.03	1.82	39.10	15.96	208.90	86.40	381.00	81.50	734.00	135.00	10640	130.8	185	838	N/A	N/A
G-55b - 18	rim	238.7	18	176	840	Below LOD	2203.00	4.12	1.56	0.35	4.19	0.18	1.14	3.33	0.79	29.50	13.44	189.00	75.40	352.00	77.70	720.00	136.80	12550	273.8	192.7	1739	N/A	N/A
G-55b - 35	rim	241.2	18	Below LOD	146	Below LOD	1223.00	2.26	Below LOD	Below LOD	13.35	0.06	1.08	3.99	2.12	26.80	9.34	113.20	41.50	177.00	38.20	349.00	67.10	10030	88.2	111	559	N/A	N/A
G-55b - 49	rim	243.5	18	600	360	18.4	2360.00	9.70	0.74	5.10	10.53	1.36	6.20	6.60	2.29	42.90	17.70	216.00	82.00	361.00	76.00	670.00	118.00	11290	290	183	1920	1.3	797.4
G-55b - 66	rim	248.6	19	Below LOD	329	18	2020.00	4.43	0.17	Below LOD	47.90	0.14	2.44	5.55	2.37	33.70	13.00	169.00	69.60	320.00	68.80	655.00	129.00	8040	20.02	124.9	125.8	1.3	795.3
G-55b - 58	rim	249.7	19	3910	263	208	690.00	3.60	57.00	13.90	11.10	3.20	10.90	3.84	1.67	13.90	5.01	55.50	21.10	117.20	33.10	364.00	72.70	11770	298	23.5	1800	2.3	1102.8
G-55b - 65	core	251.7	19	Below LOD	510	Below LOD	1528.00	2.74	Below LOD	Below LOD	34.30	0.12	2.02	4.84	1.71	30.90	10.87	135.20	53.20	251.00	53.00	497.00	97.60	9440	18.45	85.3	114.5	N/A	N/A
G-55b - 36	core	251.8	19	81	407	Below LOD	2119.00	3.50	0.54	0.33	7.18	0.19	1.53	3.73	2.08	33.20	13.65	185.50	72.50	334.00	72.80	658.00	122.40	12270	250	146.6	1523	N/A	N/A
G-55b - 82	rim	254.7	19	168	350	34	679.00	2.54	1.96	0.11	4.33	0.12	1.25	2.40	0.83	13.40	4.73	58.40	22.90	114.00	26.80	289.00	56.30	12420	163.4	101.7	1001	1.5	861.2
G-55b - 83	core	255.8	19	98	164	27	527.00	2.06	1.43	Below LOD	2.47	0.12	0.87	2.02	0.63	10.59	3.78	47.70	17.50	89.40	21.90	239.00	46.90	11320	121.1	32.8	738	1.4	836.4
G-55b - 23	rim	261.5	21	520	403	244	1280.00	3.68	5.50	Below LOD	7.30	0.15	1.53	3.13	0.92	19.60	7.37	97.10	39.80	233.00	67.50	770.00	161.00	12300	166	61.8	1050	2.4	1129.2
G-55b - 19	core	265.8	20	Below LOD	149	8.6	428.00	0.89	Below LOD	Below LOD	4.15	0.03	0.76	1.63	0.41	8.20	2.94	35.50	13.98	66.30	15.98	158.50	34.20	11150	22.1	37.4	128	0.9	727.7
G-55b - 75	rim	266.5	20	93	580	251	1089.00	3.10	3.66	Below LOD	4.08	0.05	0.35	1.56	0.58	12.60	5.32	79.90	34.30	196.60	51.40	563.00	113.70	11700	135	94.8	771	2.4	1133.9
G-55b - 11	core	266.7	20	Below LOD	113	Below LOD	333.00	0.29	Below LOD	Below LOD	3.42	Below LOD	0.29	0.68	0.24	3.85	1.67	23.10	9.72	55.40	14.72	174.00	41.30	11480	16	32.7	94.1	N/A	N/A
G-55b - 57	rim	267.5	20	Below LOD	143	Below LOD	139.40	0.20	Below LOD	0.05	0.33	Below LOD	Below LOD	0.36	0.28	4.14	1.67	15.70	4.57	18.00	4.24	41.50	7.95	12430	223.4	5.9	1301	N/A	N/A
G-55b - 44	rim	273	23	366	240	173	529.00	2.64	3.68	0.16	2.01	0.21	1.51	1.80	1.31	9.80	3.50	42.70	16.40	82.40	24.60	266.00	50.00	12370	153.6	51.3	906	2.2	1073.6
G-55b - 71	rim	273.2	21	1200	510	120	783.00	2.21	14.50	Below LOD	0.59	Below LOD	0.43	1.16	0.57	10.20	4.22	56.10	24.90	138.40	36.90	395.00	76.30	12360	213	12.07	1177	2.1	1019.2
G-55b - 38	rim	273.9	20	670	215	9.5	1462.00	4.55	1.69	Below LOD	21.50	0.12	1.69	3.55	1.04	25.00	8.82	116.10	46.80	235.00	54.80	542.00	114.70	9350	97	342	538	1.0	736.3
G-55b - 60	rim	275.1	21	632	325	45.1	947.00	3.62	8.02	1.43	5.09	0.54	3.96	3.09	1.92	11.80	4.61	60.00	28.40	193.10	67.30	876.00	197.50	11940	221	47.8	1224	1.7	893.1
G-55b - 64	rim	275.8	21	150	144	329	520.00	6.59	1.47	0.89	7.55	0.29	1.38	1.16	0.36	7.04	2.78	42.20	16.41	92.00	26.52	313.00	62.10	12860	181.7	65.8	1056	2.5	1181.3
G-55b - 37	core	276.2	21	Below LOD	168	Below LOD	1602.00	2.31	Below LOD	0.09	16.20	0.14	2.58	5.40	1.32	33.30	11.24	141.70	53.90	245.00	52.50	491.00	100.80	9390	53.2	240	294	N/A	N/A
G-55b - 17	rim	278.5	21	1.68E+04	Below LOD	1140	247.00	4.04	289.00	0.55	1.03	0.15	0.48	0.48	0.40	4.74	1.75	19.00	7.67	44.20	13.10	168.00	36.10	10710	200.8	12.37	1111	3.1	1447.1
G-55b - 10	rim	279.9	21	77	Below LOD	Below LOD	201.00	Below LOD	Below LOD	0.13	0.49	0.07	0.35	0.99	0.41	8.02	2.76	24.40	6.50	23.30	4.20	37.00	7.60	12560	221.8	12	1213	N/A	N/A
G-55b - 74	core	282.8	21	299	330	164	1549.00	1.65	3.36	Below LOD	8.02	Below LOD	1.38	3.00	0.68	22.10	8.49	119.20	50.70	266.00	63.70	671.00	140.80	10880	89.4	126.8	482	2.2	1065.4
G-55b - 30	rim	302.7	24	Below LOD	91	Below LOD	366.00	1.15	0.12	Below LOD	6.96	Below LOD	0.32	1.20	0.53	6.94	2.60	32.40	12.01	57.90	12.20	112.40	24.50	10470	42.2	62	214	N/A	N/A
G-55b - 24	rim	367.2	28	1393	104	Below LOD	366.00	0.78	0.23	0.11	2.65	0.07	1.17	2.06	0.46	10.50	3.33	36.50	13.03	54.40	11.39	106.50	20.90	9290	32.34	22.3	140.8	N/A	N/A
G-55b - 52	core	376	31	Below LOD	122	Below LOD	583.00	1.23	0.37	Below LOD	7.20	Below LOD	0.58	1.53	0.29	10.70	3.54	47.30	19.50	95.30	21.10	196.00	40.80	10310	30.3	44	117.2	N/A	N/A
G-55b - 63	core	405.7	30	1.49E+04	Below LOD	1187	612.00	14.60	197.00	0.34	6.60	0.11	1.01	0.56	Below LOD	3.90	2.63	39.90	16.80	103.50	27.60	279.00	55.70	10010	137.6	75.3	512	3.1	1457.4
G-55b - 31	core	433.4	33	Below LOD	248	10.7	967.00	2.29	0.92	Below LOD	14.81	Below LOD	1.11	2.82	0.73	20.20	7.13	87.50	35.00	155.80	32.20	295.00	57.50	9570	36.8	93.3	126.8	1.0	746.8
G-55b - 59	core	444.5	32	Below LOD	319	Below LOD	1487.00	9.19	Below LOD	Below LOD	14.30	0.04	0.81	3.05	0.28	22.50	9.81	127.40	52.90	246.40	53.80	503.00	96.80	12490	164.5	301	569	N/A	N/A
G-55b - 73	core	465	34	Below LOD	320	630	464.00	Below LOD	Below LOD	42.10	56.10	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	Below LOD	39.60	Below LOD	75.10	Below LOD	229.00	44.60	11200	147	59.6	496	2.8	1309.1
G-55b - 69	core	472.5	34	Below LOD	1780	10.3	1869.00	1.97	0.11	3.90	23.00	2.19	13.90	11.50	2.34	48.60	15.60	189.20	70.10	309.00	60.80	549.00	104.70	9090	72.3	158	229.1	1.0	743.4
G-55b - 40	core	481.4	36	Below LOD	129	Below LOD	747.00	3.53	Below LOD	Below LOD	14.96	Below LOD	0.48	1.42	0.29	10.60	4.60	57.30	24.90	123.50	27.30	273.00	55.80	11820	51.6	75	159	N/A	N/A
G-55b - 2	rim	485.1	35	1120	173	45	1071.00	2.54	13.10	0.16	7.86	0.16	2.02	4.38	1.91	20.70	6.86	82.40	33.70	187.00	52.90	593.00	129.10	11780	307	151.5	976	1.7	892.8
G-55b - 3	core	496	36	182	174	13	87.40	1.27	Below LOD	Below LOD	0.64	Below LOD	0.96	2.76	0.09	13.50	2.99	17.20	3.19	7.30	0.94	8.29	1.62	12170	307.4	52.2	950	1.1	764.4
G-55b - 70	rim	510.7	38	Below LOD	250	Below LOD	86.00	2.10	Below LOD	Below LOD	9.31	Below LOD	1.00	2.42	0.69	15.30	6.28	81.20	32.80	157.90	35.10	328.00	64.20	7280	54.5	72.7	159	N/A	N/A
G-55b - 42	core	523	39	114	150	17.5	253.90	0.67	0.20	Below LOD	9.97	0.29	4.17	7.31	0.64	22.00	4.68	35.00	8.52	27.30	4.47	33.40	5.41	11370	33.4	114.8	97.6	1.2	792.5
G-55b - 43	core	523	41	Below LOD	84	11.3	165.60	0.88	0.12	Below LOD	5.99	0.11	1.67	3.42	0.24	12.40	2.90	23.40	5.66	16.76	2.64	21.50	3.25	12020	391	305	1120	1.1	751.7
G-55b - 53	core	526	40	93	76	22.5	190.80	0.67	0.47	Below LOD	13.07	0.10	1.53	3.03	0.59	10.40	2.65	23.00	6.39	21.48	3.53	26.50	4.22	10900	16.21	32.5	47.1	1.4	817.5
G-55b - 33	core	538	40	Below LOD	85	Below LOD	85.00	0.25	Below LOD	Below LOD	2.83	0.04	0.50	0.62	0.34	4.00	1.00	10.00	2.52	9.38	1.56	13.60	2.35	11020	30.1	46.7	86	N/A	N/A
G-55b - 46	core	539	41	Below LOD	121	Below LOD	438.00	4.50	Below LOD	Below LOD	4.87	0.08	1.45	2.98	0.15	16.20	4.70	48.00	15.50	59.00	10.80	90.70	16.80	9970	71.9	30.2	206	N/A	N/A
G-55b - 22	core	584	43	Below LOD	246	13.2	473.00	1.02	0.14	Below LOD	25.70	0.24	3.15	5.68	0.95	22.20	5.63	52.30	16.72	64.00	12.35	106.30	20.04	9400	26.17	110	69.4	1.1	765.8
G-55b - 45	rim	585	43	Below LOD	89	15.9	226.60	3.25	Below LOD	Below LOD	4.51	0.09	1.50	2.41	0.28	13.16	3.43	29.90	7.82	24.70	4.10	31.60	5.88	9850	77.6	25.5	202	1.2	783.3
G-55b - 47	rim	592	44	Below LOD	207	15	558.00	4.41	Below LOD	Below LOD	5.48	0.10	1.22	3.11	0.19	16.10	5.01	58.20	19.75	78.20	15.17	130.70	24.00	9570	78.5	43.8	195.9	1.2	777.8
G-55b - 67	core	593.3	43	Below LOD	210	Below LOD	901.00	4.77	Below LOD	Below LOD	11.88	Below LOD	1.21	2.62	Below LOD	19.60	6.84	86.40	32.45	144.30	29.50	264.00	47.10	10950	196.8	167.9	492	N/A	N/A
G-55b - 1	core	606.7	44	1740	225	73.7	1320.00	3.26	29.10	16.00	25.80	3.20	13.40	5.90	1.58	22.40	8.41	105.30	42.50	209.80	50.50	494.00	102.90	10890	501	288	1228	1.9	953.2
G-55b - 39	core	625.6	45	Below LOD	224	10.1	692.00	0.83	Below LOD	0.07	0.97	0.02	0.78	3.66	Below LOD	22.60	7.78	81.30	22.70	74.90	13.30	94.80	15.61	14120	322.6	58.3	777	1.0	741.7
G-55b - 48	core	631	47	Below LOD	133	Below LOD	444.00	2.39	0.26	Below LOD	4.69	Below LOD	0.63	1.46	0.15	9.20	3.11	40.30	15.02	71.10	15.06	134.50	27.30	9710	31.9	16.8	74.3	N/A	N/A
G-55b - 20	core	645	47	189	371	15.8	1390.00	1.41	2.42	0.25	11.16	0.16	2.39	5.64	0.92	31.00	10.76	127.00	47.20	207.00	43.80	395.00	75.30	8910	156	143.3	362	1.2	782.7
G-55b - 5	rim	653	49	690	261	35.7	591.00	3.05	8.30	Below LOD	4.35	0.06	1.52	2.90	0.16	15.80	4.99	57.30	20.07	86.60	17.23	162.80	30.90	10100	31.3	20.4	70.6	1.6	866.5
G-55b - 21	core	670	49	Below LOD	251	10.2	921.00	1.53	0.72	Below LOD	9.60	0.09	1.28	3.49	0.92	19.70	6.54	81.20	30.00	138.10	30.40	287.00	57.90	10150	161	106	350	1.0	742.6
G-55b - 6	core	700	51	170	346	10.8	580.00	1.78	1.57	Below LOD	3.23	0.10	1.65	3.25	0.18	17.10	5.02	59.00	20.75	86.20	17.31	154.60	29.90	9830	23.96	14.56	53.1	1.0	747.6
G-55b - 56	core	715	53	Below LOD	670	30	2340.00	1.94	0.97	0.20	7.52	0.41	4.58	9.50	1.79	58.20	20.20	227.00	84.90	362.00	73.80	633.00	116.80	11180	231	133.6	461	1.5	847.6
G-55b - 80	rim	772	56	135	290	36.6	670.00	3.77	0.65	Below LOD	14.60	0.09	1.43	2.98	0.37	15.90	5.23	65.80	23.40	103.80	21.20	197.00	38.20	9290	117.4	64.7	214	1.6	869.3
G-55b - 55	core	786	59	157	297	27	1381.00	4.32	0.36	0.23	25.10	0.76	12.40	16.80	3.83	63.90	16.84	163.30	50.00	193.50	36.00	305.00	53.10	8450	71	73.8	137.9	1.4	836.4
G-55b - 15	core	916	65	Below LOD	128	Below LOD	446.00	3.37	Below LOD	0.10	4.09	0.04	0.26	0.88	0.07	5.15	2.48	34.10	14.56	74.30	20.28	235.00	52.80	13690	760	85.7	1248	N/A	N/A
G-55b - 76	core	945	70	Below LOD	170	Below LOD	642.00	2.87	0.11	Below LOD	4.97	0.04	1.36	2.58	0.40	15.10	4.87	58.70	21.65	99.10	20.20	188.30	35.80	10030	42.6	24.7	64.4	N/A	N/A
G-55b - 78	core	967	68	Below LOD	370	Below LOD	1691.00	2.06	0.58	Below LOD	5.26	0.16	3.74	6.81	0.56	43.40	13.76	167.20	61.30	260.00	49.60	431.00	78.70	10490	219	181	326	N/A	N/A
G-55b - 8	core	969	68	Below LOD	165	5.8	953.00	0.63	Below LOD	Below LOD	2.45	0.04	1.21	2.86	1.03	19.30	6.89	88.40	32.80	149.00	33.50	312.00	61.40	10280	118.3	109	178	0.8	695.1
G-55b - 7	rim	973	70	Below LOD	96	Below LOD	1118.00	0.54	0.07	Below LOD	2.39	0.09	2.11	4.55	1.43	24.50	8.39	103.80	39.20	176.00	37.90	360.00	73.00	9410	101.6	85	151.8	N/A	N/A
G-55b - 9	core	979	69	Below LOD	236	9.1	519.00	0.68	Below LOD	Below LOD	0.63	0.03	0.28	1.95	0.05	15.70	5.99	61.10	17.30	59.20	10.70	82.40	14.10	12480	421	25	630	1.0	732.6
G-55b - 81	core	986	69	1600	Below LOD	194	687.00	5.02	21.00	Below LOD	18.47	0.09	1.51	2.99	0.29	17.40	5.83	67.60	24.20	105.00	21.81	193.00	35.50	10080	149.2	84.6	225.3	2.3	1091.6
G-55b - 79	rim	1003	73	Below LOD	260	13.9	822.00	1.75	Below LOD	Below LOD	3.55	0.05	1.14	3.01	Below LOD	18.30	6.36	76.40	28.20	124.00	25.40	231.00	43.60	10140	192	95.2	275	1.1	770.6
G-55b - 61	core	1012	72	Below LOD	143	Below LOD	633.00	3.04	0.12	Below LOD	8.00	0.05	1.03	1.83	0.30	12.90	4.64	56.20	21.98	98.70	21.04	200.40	39.10	10170	108.9	45	152.4	N/A	N/A
G-55b - 28	rim	1053	74	Below LOD	160	Below LOD	496.00	3.15	Below LOD	Below LOD	30.80	Below LOD	Below LOD	Below LOD	Below LOD	7.30	2.73	37.30	14.77	80.70	20.71	222.40	54.10	12260	324	80.7	462	N/A	N/A
G-55b - 34	core	1054	75	Below LOD	116	Below LOD	1647.00	0.68	0.38	Below LOD	15.78	0.34	4.51	6.45	1.75	35.40	12.56	146.60	55.80	246.80	51.50	468.00	91.90	8610	195.3	273.6	265.2	N/A	N/A
G-55b - 25	core	1099	79	2200	4480	80	783.00	1.80	16.90	175.00	319.00	56.00	281.00	54.00	10.10	51.40	9.09	87.40	28.20	114.60	22.00	197.00	38.20	8010	64.7	51.1	83.4	1.9	963.8
G-55b - 62	core	1104	98	Below LOD	310	Below LOD	504.00	Below LOD	Below LOD	Below LOD	26.70	Below LOD	1.11	3.21	0.48	21.50	5.83	61.10	20.40	70.40	12.30	103.00	19.60	10740	11.2	67.8	15.6	N/A	N/A
G-55b - 29	core	1121	79	Below LOD	202	Below LOD	1262.00	11.13	0.21	Below LOD	91.90	0.10	1.26	3.49	0.36	18.00	7.33	93.80	41.00	210.00	48.00	482.00	100.60	11040	251	155.1	317	N/A	N/A
G-55b - 16	core	1126	78	Below LOD	203	14.2	672.00	1.75	Below LOD	Below LOD	8.07	0.06	0.92	1.97	0.32	12.40	4.67	61.20	23.10	106.20	23.90	227.00	45.40	10010	78.3	36.9	104.2	1.2	772.6
G-55b - 50	core	1181	83	Below LOD	91	Below LOD	864.00	3.80	Below LOD	Below LOD	9.30	0.06	1.00	2.78	0.30	17.80	6.42	81.50	30.50	132.90	27.00	228.00	38.90	9980	116.4	40.7	140.4	N/A	N/A
G-55b - 51	core	1194	83	Below LOD	86	Below LOD	1400.00	5.94	0.14	Below LOD	15.14	0.12	2.27	5.20	0.45	33.80	11.17	135.50	50.70	214.00	40.80	342.00	56.70	8730	162.2	67.7	194.2	N/A	N/A
G-55b - 72	core	1761	120	Below LOD	350	10.5	726.00	1.57	Below LOD	Below LOD	12.00	0.09	1.31	3.06	0.29	19.00	5.80	68.40	25.30	115.60	23.40	215.00	41.00	10460	172.2	85.9	140.5	1.0	745.1
G-55b - 84	core	1795	120	Below LOD	380	19.6	656.00	1.19	0.69	Below LOD	20.60	0.09	1.53	3.23	0.77	17.80	5.25	64.10	22.90	102.20	22.10	202.00	37.60	9150	204.6	126	162	1.3	803.6

G-55b - 4	core	3221	200	Below LOD	467	23.1	3630.00	9.71	0.19	1.90	37.60	1.80	19.00	24.70	3.31	114.00	32.70	372.00	130.00	538.00	108.60	958.00	178.70	8660	772	231	299	1.4	820.2
G_95_30	core	435	33	187	1940	19.8	4070.00	55.30	3.31	6.90	32.20	4.87	30.20	23.00	2.50	77.80	27.30	324.00	126.60	582.00	130.00	1226.00	235.10	11970	1201	533	4130	1.3	804.6
G_95_29	rim	629	46	426	2860	13.1	5320.00	33.90	3.10	34.00	96.00	9.70	49.00	23.30	0.97	86.20	33.10	424.00	168.50	780.00	170.50	1492.00	279.30	10160	1476	846	3400	1.1	765.1
G_95_3	core	664	50	93	1460	13.5	3950.00	43.70	5.85	7.30	32.80	4.06	26.40	20.90	2.58	77.70	27.50	328.00	122.90	550.00	122.00	1134.00	217.60	11080	1835	694	4160	1.1	767.9
G_95_33	core	673	49	1780	1.14E+04	12	4050.00	47.30	6.93	59.00	196.00	32.80	187.00	85.00	5.40	155.00	38.50	368.00	123.20	537.00	121.40	1155.00	221.10	12490	1249	398	2843	1.1	757.1
G_95_15	rim	681	53	72	1290	12.6	2760.00	57.60	3.41	1.60	21.50	1.14	6.90	5.08	0.70	30.00	14.03	204.00	82.50	392.00	86.20	782.00	145.70	12220	1393	307	3060	1.1	761.6
G_95_24	core	730	58	203	2640	49.1	3870.00	54.20	3.31	36.00	88.00	17.60	99.00	56.20	7.21	123.20	34.00	340.00	109.70	503.00	114.20	1165.00	236.50	11430	1382	284	2740	1.7	903.1
G_95_6	core	737	53	1.24E+04	1.91E+06	316	399000.00	13.60	16000.00	2010000.00	4240000.00	520000.00	2060000.00	387000.00	2970.00	276000.00	29000.00	106900.00	14000.00	23600.00	2020.00	8950.00	986.00	8.7	2.75E+04	1.21E+06	5.65E+04	2.5	1174.0
G_95_21	rim	743	53	Below LOD	1580	9.7	3590.00	45.10	2.18	12.50	17.70	7.62	49.30	30.60	4.17	86.80	25.80	287.00	102.30	466.00	105.20	1032.00	198.10	12200	1218	292.4	2514	1.0	738.2
G_95_28	rim	785.4	56	66	1830	9.4	4310.00	53.60	2.15	5.33	40.90	3.64	23.90	19.20	2.59	80.60	29.00	357.00	136.30	617.00	134.10	1222.00	221.80	11320	1420	674	2702	1.0	735.4
G_95_35	core	805	59	111	1490	11.1	2960.00	45.10	2.72	14.00	17.30	8.70	55.40	30.60	4.58	77.00	21.60	237.00	84.30	400.00	98.70	1004.00	208.80	12770	1371	150	2490	1.0	750.1
G_95_17	core	815	60	119	2500	12.3	2830.00	38.30	1.42	31.00	75.00	10.20	50.00	20.40	1.85	48.10	16.80	207.00	84.80	427.00	107.60	1110.00	228.00	13970	1362	287	2590	1.1	759.4
G_95_5	rim	857	61	360	1.92E+06	83	673000.00	15.90	14010.00	1800000.00	3860000.00	474000.00	1890000.00	364000.00	1454.00	272000.00	34200.00	154000.00	23100.00	41700.00	3570.00	13130.00	1193.00	10.6	3.22E+04	1.29E+06	5.68E+04	1.9	968.6
G_95_34	core	900	69	Below LOD	1630	13.8	4420.00	67.50	1.56	17.50	63.50	10.99	68.60	44.20	5.88	117.30	33.50	351.00	121.30	531.00	121.60	1143.00	216.00	16450	1638	148	2950	1.1	769.9
G_95_40	rim	909	65	Below LOD	1030	8.3	2120.00	38.70	0.78	3.40	14.57	2.35	15.40	9.90	1.40	36.50	13.53	174.10	67.50	338.00	82.80	845.00	171.30	13900	1259	240	1976	0.9	724.7
G_95_8	rim	923	66	Below LOD	2170	9.6	5090.00	63.20	1.74	3.60	34.60	1.97	13.30	12.90	1.28	72.40	29.60	392.00	158.20	733.00	159.50	1436.00	271.80	11310	2149	745	3325	1.0	737.2
G_95_2	rim	931	67	89	1770	11.2	2820.00	31.60	0.96	3.32	98.00	2.21	13.40	11.70	1.16	50.50	18.49	227.60	90.10	410.00	96.90	977.00	193.70	11310	1313	571	2124	1.0	750.9
G_95_9	rim	944	67	30	1790	11.4	4920.00	43.10	2.76	14.40	57.80	9.62	61.20	40.80	6.12	124.70	37.20	396.00	143.30	613.00	127.30	1139.00	213.00	11010	1555	685	2410	1.1	752.5
G_95_14	rim	955	72	37	920	13	2710.00	44.80	0.85	6.36	19.40	5.82	37.70	23.30	3.67	63.40	19.80	218.00	79.80	352.00	81.10	758.00	140.40	13730	1543	245	2478	1.1	764.4
G_95_18	rim	968	69	Below LOD	578	12.7	1392.00	18.40	0.30	1.08	22.50	0.81	6.69	9.51	0.53	48.30	16.48	154.40	43.60	154.20	27.20	215.30	34.90	13680	659	119.4	1042	1.1	762.3
G_95_36	rim	973.5	68	Below LOD	771	9.8	1436.00	20.45	Below LOD	Below LOD	18.77	0.08	1.71	6.11	0.09	41.50	15.75	164.60	46.80	157.20	26.30	193.80	30.76	14100	486	92.6	715	1.0	739.0
G_95_20	rim	985	69	Below LOD	588	11.9	1306.00	15.99	0.09	0.68	23.71	0.53	5.40	8.25	0.37	47.70	16.29	151.40	41.20	137.30	21.96	164.80	26.00	13730	541	107.4	827	1.1	756.3
G_95_39	rim	996	73	508	660	11.9	1380.00	23.10	1.73	2.37	12.60	1.74	11.30	7.83	1.01	26.90	9.11	112.00	42.90	210.00	53.20	562.00	120.80	13050	1135	152	1690	1.1	756.3
G_95_22	core	1000	70	Below LOD	481	10.1	1311.00	16.71	Below LOD	0.45	25.21	0.30	3.33	6.83	0.23	35.80	12.79	131.80	40.90	153.30	28.70	242.00	41.20	14000	850	99.7	1265	1.0	741.7
G_95_32	core	1003	71	Below LOD	1320	8.7	3330.00	24.70	1.11	14.30	32.30	8.43	56.40	37.40	5.21	112.30	29.90	280.00	85.00	319.60	60.00	468.70	74.90	13170	1030	109.4	1474	0.9	728.7
G_95_12	core	1012	71	214	1030	14.2	2360.00	37.70	1.17	1.72	11.16	1.29	8.40	7.39	0.79	31.80	13.36	177.50	68.10	309.00	67.80	628.00	118.00	13030	1272	100.7	1785	1.2	772.6
G_95_4	core	1019	71	114	1100	9.7	2530.00	46.60	1.17	4.05	20.80	2.67	18.40	13.60	1.90	49.90	17.90	215.00	78.50	354.00	80.10	738.00	141.90	13270	1664	298	2399	1.0	738.2
G_95_1	core	1028	72	104	984	12.1	2388.00	50.70	0.67	2.52	17.30	1.49	9.50	7.50	0.89	29.40	12.20	170.90	70.30	351.30	84.30	820.00	161.70	14160	1476	83.3	2091	1.1	757.9
G_95_10	core	1035	75	133	536	13.3	1312.00	17.17	0.98	0.21	20.91	0.13	2.07	6.55	0.15	43.70	15.37	148.30	41.60	139.50	23.83	180.20	29.00	13670	564	99.4	800	1.1	766.5
G_95_25	core	1037	72	43	1150	14.7	2900.00	82.20	1.13	11.10	18.92	6.72	41.90	26.80	3.75	69.90	20.80	220.60	78.50	345.00	72.20	638.00	114.40	14150	1950	127.1	2794	1.2	775.9
G_95_27	rim	1038	73	65	1230	10.1	2680.00	48.90	0.72	7.70	28.90	4.91	31.10	19.50	2.67	61.40	19.50	219.00	79.20	339.00	72.50	647.00	120.00	13660	1629	213	2296	1.0	741.7
G_95_13	rim	1061	74	Below LOD	329	11.1	957.00	39.90	0.10	0.63	4.66	0.46	3.22	2.30	0.31	11.90	5.09	69.10	26.50	119.90	27.90	276.00	54.90	14230	1813	51.4	2528	1.0	750.1
G_95_26	core	1063	74	Below LOD	920	11.9	2120.00	56.10	0.26	0.30	15.12	0.17	1.62	3.74	0.16	26.00	11.49	154.50	66.00	335.00	85.80	880.00	172.10	13420	1027	89	1387	1.1	756.3
G_95_23	rim	1101	77	Below LOD	671	10.3	1391.00	32.50	Below LOD	Below LOD	9.30	Below LOD	5.86	Below LOD	Below LOD	17.10	7.49	102.70	43.00	226.20	61.10	701.00	147.60	15370	1314	63.8	1758	1.0	743.4
G_95_16	core	1103	77	46	715	15.1	1739.00	28.10	0.62	4.40	15.60	2.55	15.20	10.60	1.39	32.90	11.40	139.90	55.30	264.60	64.30	661.00	128.50	14400	1364	252	1854	1.2	778.4
G_95_37	core	1110	81	Below LOD	851	9.3	2010.00	26.10	0.11	0.68	22.30	0.44	4.23	6.10	0.62	34.30	12.90	169.00	68.30	325.00	77.60	754.00	145.10	12610	1213	286	1610	1.0	734.5
G_95_11	core	1119	77	Below LOD	675	10.1	1895.00	8.89	0.29	Below LOD	68.20	0.30	5.54	11.10	2.82	52.80	16.83	180.60	62.70	265.60	54.10	470.00	88.30	9780	435	304	551	1.0	741.7
G_95_31	core	1145	81	Below LOD	1620	11.2	3840.00	58.00	0.21	2.63	10.74	1.47	9.30	8.44	0.86	41.40	17.97	256.20	111.70	572.00	136.60	1293.00	241.60	13290	1152	78.6	1456	1.0	750.9
G_95_7	rim	1148	82	Below LOD	1600	18.2	5210.00	53.90	0.75	2.66	66.20	1.88	13.70	15.70	1.52	92.10	35.00	427.00	160.50	713.00	147.20	1298.00	233.20	10710	2496	1321	3066	1.3	796.3
G_95_38	core	1226	89	Below LOD	1940	11.8	4410.00	32.60	0.28	1.32	57.20	0.82	7.20	13.29	1.25	77.90	29.50	361.00	141.00	637.00	139.50	1244.00	229.80	12380	1916	875	2274	1.1	755.6
G_95_19	core	1278	88	Below LOD	930	9.7	1880.00	29.70	0.22	2.50	21.90	1.99	14.10	8.40	1.43	34.40	12.40	149.00	58.10	288.00	63.90	617.00	121.90	12030	1131	183	1220	1.0	738.2

TABLE A3. Lu, Hf AND Yb ISOTOPIC DATA OBTAINED USING THE LA-ICP-MS METHOD

Spot	Session #	Duration (s)	N ratios	Total Hf beam (V)	Age (Ma) 206/238	2 σe	Conc (%)	^{176}Hf/^{177}Hf	2 σe	^{176}Lu/^{177}Hf	2 σe	^{176}Yb/^{177}Hf	2 σe	^{178}Hf/^{177}Hf	2 σe	Hf Fract (β_{Hf})	2 σe	Yb Fract (β_{Yb})	2 σe	^{176}Lu/^{177}Hf CORR	εHf $_{(0)}$	^{176}Hf/^{177}Hf $_{(t)}$	2σe	^{176}Hf/^{177}Hf (CHUR T=t)	εHf $_{(t)}$	2σe	^{176}Hf/^{177}Hf $_{(CC\ T=0)}$	$T_{DM1\ (y)}$ ^{176}Hf/^{177}Hf	$T_{DM1\ (y)}$ ^{176}Hf/^{177}Hf $_{(CC\ T=0)}$	(Ma)	$T_{DM2\ (y)}$ ^{176}Hf/^{177}Hf (CC T=0)	(Ma)	T_{DM2} (Griffin et al.2000)	(Ma)	U-S (Ga)	$f_{(sample)}$
G52a - 1	2	36.072	72	32.4	168.4	13	56.5	0.282759861	0.000026	0.001071	0.000024	0.053	0.0015	1.46721	0.000027	-1.5318	0.0025	-1.261	0.01	0.000149134	-0.888968651	**0.282759392**	**0.000032**	0.282679194	**2.8**	**1.1**	0.282806626	674957150.3	610924074	610.9240738	988631453.4	988.6	992132020.5	**992.1**	3.5005671	-0.995561492
G52a - 2	2	36.254	73	37.9	172.7	13	86.1	0.282770861	0.000014	0.0002881	0.0000098	0.01291	0.00039	1.467193	0.000031	-1.5405	0.0021	-1.208	0.018	4.01172E-05	-0.5	**0.282770731**	**0.000023**	0.282676488	**3.3**	**0.8**	0.282819174	658058319	592069525	592.0695248	960902433.9	960.9	964224488.9	**964.2**	3.322055001	-0.998806037
G52a - 3	2	14.501	29	46.8	65.5	7.6	62.0	0.282735863	0.000033	0.0004532	0.0000079	0.01706	0.00067	1.46723	0.000052	-1.5465	0.0041	-1.282	0.021	6.31069E-05	-1.737627526	**0.282735785**	**0.000038**	0.282743886	**-0.3**	**1.3**	0.28275414	706226309.6	681279373	681.2793734	1104466739	1104.5	1108850643	**1108.9**	4.38390378	-0.998121819
G52a - 4	2	36.072	72	38.7	164.7	12	100.0	0.282774861	0.000014	0.000332	0.00001	0.01272	0.00047	1.467199	0.000024	-1.5358	0.0023	-1.257	0.022	4.62301E-05	-0.358556854	**0.282774718**	**0.000023**	0.282681523	**3.3**	**0.8**	0.282820913	652700567.8	589784584	589.784584	957057120	957.1	960351831.6	**960.4**	3.294711655	-0.998624104
G52a - 5	2	36.072	72	42.9	217	18	7.1	0.282762861	0.000016	0.0004078	0.0000064	0.01763	0.00023	1.467217	0.000025	-1.5384	0.0025	-1.271	0.015	5.67851E-05	-0.782886292	**0.282762631**	**0.000024**	0.282648597	**4.0**	**0.9**	0.282823525	669262795.2	586373662	586.373662	951284054.8	951.3	954537713.5	**954.5**	3.253658745	-0.998309969
G52a - 6	2	36.216	72	32.3	133.6	10	30.2	0.282734863	0.000022	0.00158	0.000019	0.07911	0.00073	1.467184	0.000027	-1.5317	0.0032	-1.2567	0.0071	0.000220011	-1.772988313	**0.282734313**	**0.000029**	0.282701087	**1.2**	**1.0**	0.282771774	710449574.7	659854901	659.8549011	1065575748	1065.6	1069629959	**1069.6**	4.054210256	-0.993452061
G52a - 7	2	36.19	72	37.7	189.1	15	36.2	0.282814859	0.000018	0.000744	0.000054	0.0385	0.0028	1.467208	0.000026	-1.541	0.0022	-1.216	0.0094	0.0001036	1.055874604	**0.282814492**	**0.000026**	0.282666166	**5.2**	**0.9**	0.282867543	598942476.8	526781022	526.7810218	853875966.8	853.9	856492702.3	**856.5**	2.616735535	-0.996916667
G52a - 8	2	36.151	72	38.1	189.7	15	44.7	0.28278086	0.000018	0.0004355	0.000009	0.0228	0.00067	1.467183	0.000022	-1.5401	0.0023	-1.2	0.011	6.06422E-05	-0.146392135	**0.282780645**	**0.000026**	0.282665788	**4.1**	**0.9**	0.282833865	644746485.3	572289197	572.2891973	928418613.2	928.4	931517358.9	**931.5**	3.098745672	-0.998195172
G52a - 10	2	36.084	72	37.4	171	13	97.2	0.282701864	0.000016	0.000814	0.000002	0.0298	0.00011	1.467174	0.000024	-1.5475	0.0021	-1.272	0.012	0.000113347	-2.939894266	**0.282701502**	**0.000024**	0.282677558	**0.8**	**0.9**	0.282749467	753570749.9	688545971	688.5459707	1114767578	1114.8	1119224214	**1119.2**	4.456635875	-0.996626568
G52a - 11	2	36.175	72	37.1	170.9	13	79.1	0.282759861	0.000016	0.000658	0.000011	0.02579	0.00041	1.467196	0.000023	-1.5482	0.0022	-1.259	0.012	9.16247E-05	-0.888968651	**0.282759568**	**0.000024**	0.282677621	**2.9**	**0.9**	0.282807505	673960647.2	608818828	608.8188285	986689074.9	986.7	990184249.4	**990.2**	3.495174493	-0.997273073
G52a - 12	2	36.174	72	45.3	129.5	10	37.6	0.282697864	0.000018	0.000759	0.000056	0.0434	0.0034	1.467188	0.000023	-1.5434	0.0024	-1.2488	0.0099	0.000105689	-3.081337412	**0.282697609**	**0.000026**	0.282703665	**-0.2**	**0.9**	0.282733919	758881676.2	709653411	709.6534112	1149026456	1149.0	1153762524	**1153.8**	4.736067926	-0.996854503
G52a - 13	2	36.17	72	29.81	160.1	12	65.1	0.282673866	0.000018	0.0007242	0.0000096	0.0244	0.00027	1.467207	0.000029	-1.5286	0.0023	-1.26	0.015	0.000100843	-3.929996287	**0.282673564**	**0.000026**	0.282684417	**-0.4**	**0.9**	0.282718467	791525800.9	730666136	730.6661364	1183052535	1183.1	1188074001	**1188.1**	5.021465112	-0.996998723
G52a - 14	2	36.17	72	26.3	158.5	12	87.7	0.282754862	0.000027	0.001758	0.000017	0.07043	0.00089	1.467225	0.000025	-1.5356	0.0025	-1.257	0.01	0.000244797	-1.065772583	**0.282754136**	**0.000033**	0.282685424	**2.4**	**1.2**	0.28279859	683479465.2	623467806	623.4678057	1006384038	1006.4	1009996875	**1010.0**	3.612836448	-0.992714382
G52a - 16	2	36.206	72	45.2	178.4	14	49.7	0.282747862	0.000018	0.0002422	0.0000039	0.0123	0.00034	1.467218	0.000025	-1.5504	0.002	-1.198	0.02	3.37257E-05	-1.313298089	**0.282747749**	**0.000026**	0.282672901	**2.6**	**0.9**	0.282797794	689329962.4	621180109	621.1801089	1008142381	1008.1	1011799825	**1011.8**	3.657443637	-0.998996259
G52a - 17	2	36.172	72	26.5	169.8	13	93.4	0.282637867	0.000021	0.001644	0.000044	0.0549	0.0018	1.467223	0.000026	-1.5468	0.0022	-1.2925	0.0092	0.000228923	-5.2029846	**0.282637141**	**0.000028**	0.282678313	**-1.5**	**1.0**	0.282684768	843365466.1	779215199	779.2151986	1257182546	1257.2	1262822153	**1262.8**	5.639607412	-0.993186828
G52a - 18	2	36.152	72	30.9	164.2	12	81.6	0.282739862	0.000012	0.0003112	0.0000066	0.01172	0.00024	1.467185	0.000024	-1.5521	0.0021	-1.212	0.019	4.33338E-05	-1.59618438	**0.282739729**	**0.000022**	0.282681837	**2.0**	**0.8**	0.282785784	700412719.1	637736566	637.7365659	1034659399	1034.7	1038510117	**1038.5**	3.850717481	-0.998710305
G52a - 19	2	26.465	53	19.1	170.2	13	81.7	0.282645867	0.000023	0.00101	0.000033	0.0325	0.0013	1.467259	0.000043	-1.5708	0.0056	-1.29	0.023	0.00014064	-4.920098308	**0.282645419**	**0.000029**	0.282678062	**-1.2**	**1.1**	0.28269316	830542940.7	765989022	765.9890218	1238732988	1238.7	1244228697	**1244.2**	5.495708703	-0.995814292
G52a - 20	2	36.058	72	39.5	173.1	14	37.4	0.282736862	0.000016	0.0004879	0.0000046	0.02195	0.00023	1.467176	0.000024	-1.5517	0.0024	-1.251	0.015	6.79388E-05	-1.70226674	**0.282736643**	**0.000024**	0.282676237	**2.1**	**0.9**	0.282785198	704949119.2	638940623	638.9406232	1035953859	1036.0	1039810284	**1039.8**	3.856424593	-0.997978013
G52a - 21	2	34.985	70	35.7	192.2	14	30.6	0.282754862	0.000017	0.000462	0.000012	0.02365	0.00086	1.4672	0.000027	-1.5463	0.0021	-1.233	0.011	6.43323E-05	-1.065772583	**0.28275463**	**0.000025**	0.282664214	**3.2**	**0.9**	0.282808553	680315358.6	606960719	606.9607189	984375497.7	984.4	987858229.7	**987.9**	3.482732044	-0.998085349
G52a - 22	2	36.797	74	37.7	173.7	13	90.0	0.282733863	0.000017	0.000539	0.00001	0.02136	0.00036	1.467183	0.000029	-1.5391	0.0026	-1.255	0.013	7.50543E-05	-1.808349099	**0.282733619**	**0.000025**	0.282675859	**2.0**	**0.9**	0.282782342	709172584.2	642959412	642.9594118	1042255920	1042.3	1046158223	**1046.2**	3.902303531	-0.997766241
G52a - 23	2	36.072	72	32.04	177.5	13	80.1	0.282716863	0.000018	0.000589	0.000026	0.02019	0.00088	1.46719	0.000028	-1.5399	0.0022	-1.288	0.018	8.20167E-05	-2.409482469	**0.282716591**	**0.000026**	0.282673467	**1.5**	**0.9**	0.282766383	732501240.6	664885108	664.8851079	1077469950	1077.5	1081638987	**1081.6**	4.169036868	-0.997559028
G52a - 24	2	36.17	72	24.42	175.1	13	84.5	0.282709864	0.000016	0.000907	0.000011	0.03051	0.00045	1.467173	0.00003	-1.5409	0.0024	-1.267	0.014	0.000126297	-2.657007974	**0.28270945**	**0.000024**	0.282674978	**1.2**	**0.9**	0.282758567	742895843.5	676330866	676.3308658	1094705207	1094.7	1099000681	**1099.0**	4.295474955	-0.996241151
G52a - 25	2	36.152	72	24.73	192.6	14	50.8	0.282637867	0.000019	0.001335	0.000022	0.0445	0.00094	1.467176	0.000029	-1.5372	0.0025	-1.291	0.011	0.000185895	-5.2029846	**0.282637198**	**0.000026**	0.282663962	**-0.9**	**1.0**	0.282691232	842433061.7	769515575	769.5155754	1242970911	1243.0	1248493792	**1248.5**	5.522880515	-0.994467406
G52a - 26	2	36.164	72	38.7	173.3	13	69.7	0.282760861	0.000013	0.0003643	0.0000067	0.01546	0.00014	1.467172	0.000023	-1.5434	0.0021	-1.213	0.018	5.07278E-05	-0.853607865	**0.282760697**	**0.000022**	0.282676111	**3.0**	**0.8**	0.282809308	671888833.5	605716231	605.7162305	982706112.5	982.7	986179012.8	**986.2**	3.472900278	-0.998490244
G52a - 27	2	31.722	63	28.4	189.1	16	46.7	0.282750862	0.00004	0.00182	0.000033	0.0679	0.0017	1.467164	0.000037	-1.5479	0.0026	-1.266	0.013	0.00025343	-1.207215729	**0.282749965**	**0.000044**	0.282666166	**3.0**	**1.6**	0.282803016	689118672.6	617526373	617.5263727	996606209.5	996.6	1000147928	**1000.1**	3.5417189	-0.992457437
G52a - 28	2	26.828	54	39.1	208.9	17	30.5	0.282688865	0.000017	0.000741	0.000028	0.029	0.001	1.467199	0.000023	-1.5509	0.0025	-1.294	0.011	0.000103182	-3.39958449	**0.282688462**	**0.000025**	0.282653699	**1.2**	**0.9**	0.282747078	771112875.7	691629981	691.6299812	1120031945	1120.0	1124532614	**1124.5**	4.500669272	-0.996929099
G52a - 29	2	36.065	72	43.23	191.8	15	44.1	0.28277886	0.000013	0.000401	0.000024	0.01679	0.00084	1.467166	0.00003	-1.5491	0.0019	-1.278	0.014	5.58382E-05	-0.217113708	**0.28277866**	**0.000022**	0.282664466	**4.0**	**0.8**	0.28283247	647398634.9	574126399	574.126399	931503687.5	931.5	934623665.7	**934.6**	3.119978205	-0.99833815
G52a - 30	2	36.205	72	31.9	184.2	14	59.6	0.282799859	0.000017	0.0006549	0.0000089	0.03044	0.00038	1.467207	0.000033	-1.5474	0.002	-1.254	0.012	9.11931E-05	0.525462807	**0.282799545**	**0.000025**	0.28266925	**4.6**	**0.9**	0.282851219	619271575.1	548975116	548.9751157	890019965.4	890.0	892864244.6	**892.9**	2.844279209	-0.997285921
G52a - 31	2	36.072	72	27.07	158.7	12	85.9	0.282689865	0.00002	0.000997	0.000012	0.03414	0.00034	1.467186	0.000023	-1.5417	0.0024	-1.277	0.012	0.00013883	-3.364223704	**0.282689453**	**0.000027**	0.282685298	**0.1**	**1.0**	0.282733963	770453231.6	710197869	710.1978687	1148930026	1148.9	1153658760	**1153.7**	4.728733736	-0.995868168
G52a - 32	2	36.152	72	28.13	169.2	13	96.5	0.282738862	0.000021	0.000872	0.000023	0.03063	0.00081	1.467148	0.000033	-1.5442	0.0026	-1.265	0.013	0.000121424	-1.631545167	**0.282738478**	**0.000028**	0.282678691	**2.1**	**1.0**	0.282785938	703184271.1	638806379	638.8063788	1034320481	1034.3	1038156251	**1038.2**	3.835769967	-0.996386201
G52a - 33	2	36.166	72	33.4	188	15	50.7	0.282768861	0.000021	0.0007615	0.0000093	0.03309	0.00037	1.467187	0.000028	-1.5434	0.0028	-1.238	0.01	0.000106037	-0.570721573	**0.282768488**	**0.000028**	0.282666858	**3.6**	**1.0**	0.28282123	661906945.9	590257831	590.257831	956357404.2	956.4	959639158.6	**959.6**	3.281754434	-0.996844142
G52a - 34	2	36.152	72	35.9	187.4	14	70.7	0.28278186	0.000015	0.0004369	0.0000047	0.02041	0.0003	1.467162	0.000022	-1.546	0.0022	-1.208	0.015	6.08372E-05	-0.111031349	**0.282781647**	**0.000024**	0.282667236	**4.0**	**0.8**	0.28283422	643383676.5	571805768	571.805768	927632317.8	927.6	930725796.8	**930.7**	3.093478976	-0.998189371
G52a - 35	2	36.174	72	28.5	168.4	13	45.3	0.282712864	0.000019	0.0012476	0.0000087	0.04952	0.00031	1.467159	0.000026	-1.5429	0.0025	-1.2831	0.0088	0.000173725	-2.550925615	**0.282712317**	**0.000026**	0.282679194	**1.2**	**0.9**	0.282759551	739699121.2	675808735	675.8087346	1092535496	1092.5	1096805528	**1096.8**	4.270032092	-0.994829615
G52a - 36	2	14.32	29	46.9	155.2	12	29.3	0.282882855	0.000034	0.0008	0.0001	0.0449	0.0059	1.46723	0.000042	-1.5533	0.0045	-1.186	0.019	0.000111398	3.460408084	**0.282882532**	**0.000039**	0.2826875	**6.9**	**1.4**	0.282926059	505891654.1	446608628	446.6086277	724112594.6	724.1	725994168.1	**726.0**	1.881573552	-0.996684588
G52a - 37	2	36.208	72	53.3	176.9	13	56.7	0.282727863	0.000011	0.000256	0.000013	0.01234	0.00045	1.467215	0.000019	-1.5595	0.0017	-1.201	0.016	3.56473E-05	-2.020513818	**0.282727745**	**0.000021**	0.282673845	**1.9**	**0.8**	0.282777368	716636813.3	649101070	649.1010696	1053234680	1053.2	1057226057	**1057.2**	3.991376558	-0.998939068
G52a - 38	2	36.16	72	27.41	177.6	13	95.3	0.282651867	0.000016	0.001022	0.000018	0.03467	0.00064	1.467127	0.000024	-1.542	0.0028	-1.302	0.011	0.000142311	-4.707933589	**0.282651394**	**0.000024**	0.282673404	**-0.8**	**0.9**	0.282701213	822393012.2	755020386	755.0203864	1221019441	1221.0	1226358859	**1226.4**	5.339417903	-0.995764561
G52a - 39	2	36.156	72	38.6	218.1	18	7.8	0.282754862	0.000014	0.0002478	0.0000052	0.01145	0.00032	1.467153	0.000024	-1.5506	0.0021	-1.153	0.023	3.45055E-05	-1.065772583	**0.282754721**	**0.000023**	0.282647904	**3.8**	**0.8**	0.282815924	679795221.1	596424818	596.4248183	968085348.4	968.1	971457973.1	**971.5**	3.372624741	-0.998973051
G52a - 40	2	36.089	72	46.28	191.3	16	40.4	0.282797859	0.000013	0.000609	0.000012	0.02412	0.00053	1.467149	0.000022	-1.5436	0.0015	-1.269	0.011	8.48016E-05	0.454741235	**0.282797556**	**0.000022**	0.282664781	**4.7**	**0.8**	0.282851225	621904888.9	548876493	548.8764934	890006298.4	890.0	892851238.6	**892.9**	2.844940203	-0.997476142
G52a - 41	2	36.152	72	31.3	168.4	13	81.1	0.282639867	0.00002	0.001738	0.000024	0.0592	0.001	1.467199	0.000032	-1.5259	0.0026	-1.2846	0.0081	0.000242012	-5.132263027	**0.282639105**	**0.000027**	0.282679194	**-1.4**	**1.0**	0.28268634	840914753.9	777326460	777.3264597	1253728095	1253.7	1259333696	**1259.3**	5.605600401	-0.992797267
G52a - 42	2	36.152	72	33.9	171	13	78.5	0.282697864	0.000019	0.000632	0.000068	0.0224	0.0019	1.467279	0.000031	-1.5414	0.0027	-1.232	0.016	8.80043E-05	-3.081337412	**0.282697583**	**0.000026**	0.282677558	**0.7**	**0.9**	0.282745548	758537447.2	693450609	693.4506092	1123404394	1123.4	1127935061	**1127.9**	4.53066699	-0.997380824
G52a - 43	2	15.952	32	45.7	160.1	13	24.8	0.282752862	0.000021	0.000648	0.000011	0.02968	0.00067	1.467242	0.000041	-1.5454	0.0029	-1.288	0.011	9.02323E-05	-1.136494156	**0.282752592**	**0.000028**	0.282684417	**2.4**	**1.0**	0.282797495	683499864.6	622490545	622.4905447	1008802685	1008.8	1012456387	**1012.5**	3.653702145	-0.997314516
																														0				**1042.7**		
G55b - 1	2	36.152	72	14.94	595.9	40	88.9	0.282362881	0.000024	0.001012	0.000025	0.03402	0.00071	1.467171	0.000035	-1.5259	0.0031	-1.274	0.023	0.000140918	-14.92720088	**0.282361305**	**0.000030**	0.282409098	**-1.7**	**1.1**	0.282529118	1215206337	989578282	989.5782824	1598258863	1598.3	1607402472	**1607.4**	9.143609294	-0.995806004
G55b - 2	2	36.152	72	17.66	478	36	87.8	0.282403879	0.00002	0.000888	0.000024	0.02907	0.0008	1.467165	0.000036	-1.5228	0.0026	-1.249	0.019	0.000123652	-13.47740863	**0.282402771**	**0.000027**	0.282483803	**-2.9**	**1.0**	0.282537234	1159137251	978106145	978.1061448	1580528988	1580.5	1589477601	**1589.5**	8.948612557	-0.996319892
G55b - 3	2	33.353	67	19.85	496	36	99.5	0.281687915	0.000019	0.00001887	0.00000023	0.000623	0.000012	1.467184	0.000031	-1.5333	0.0029	-0.28	0.77	2.6276E-06	-38.79573174	**0.28168789**	**0.000026**	0.282472408	**-27.8**	**0.9**	0.28182744	2114259838	1928771883	1928.771883	3109439515	3109.4	3144171159	**3144.2**	34.73164362	-0.999921798
G55b - 4	2	36.254	73	13.49	3432	22	96.3	0.28079096	0.000033	0.002699	0.000018	0.09769	0.00087	1.467269	0.000038	-1.524	0.0035	-1.279	0.01	0.000375828	-70.5143572	**0.28076609**	**0.000038**	0.280561593	**7.3**	**2.2**	0.281758683	3322591345	2039513418	2039.513418	3255252975	3255.3	3292712739	**3292.7**	37.45976395	-0.988814628
G55b - 5	2	36.154	72	15.84	653	49	86.8	0.282281885	0.00002	0.0004722	0.0000025	0.01725	0.00018	1.467126	0.000038	-1.5281	0.003	-1.305	0.031	6.57526E-05	-17.79142458	**0.282281079**	**0.000027**	0.282372858	**-3.3**	**1.0**	0.282465071	1322256708	1074552114	1074.552114	1737977936	1738.0	1748821752	**1748.8**	10.84381665	-0.998043078
G55b - 6	2	36.166	72	15.51	969	68	99.6	0.282350882	0.00002	0.00105	0.000028	0.0364	0.00087	1.467196	0.00003	-1.5247	0.0026	-1.299	0.016	0.00014621	-15.35153031	**0.282348213**	**0.000027**	0.282171603	**6.3**	**1.1**	0.282622051	1231622661	863145968	863.1459681	1394877563	1394.9	1401842390	**1401.8**	6.964826455	-0.995648522
G55b - 7	2	36.158	72	20.25	979	69	98.4	0.282314884	0.000017	0.000621	0.000063	0.0239	0.0023	1.467134	0.000029	-1.5359	0.0026	-1.277	0.022	8.64726E-05	-16.62451863	**0.282313288**	**0.000025**	0.282165215	**5.2**	**0.9**	0.282589978	1278396373	905471982	905.4719819	1465154436	1465.2	1472857134	**1472.9**	7.702698112	-0.997426411
G55b - 8	2	36.16	72	16.38	266.7	20	97.0	0.282449877	0.000026	0.000662	0.000023	0.02114	0.00092	1.467198	0.000034	-1.5268	0.003	-1.235	0.024	9.21817E-05	-11.85081245	**0.282449417**	**0.000032**	0.282617279	**-5.9**	**1.1**	0.282524292	1095881063	994899121	994.8991206	1608799286	1608.8	1618082790	**1618.1**	9.283503417	-0.997256496
G55b - 9	2	36.156	72	18.65	237.1	18	99.3	0.282665866	0.000022	0.0015199	0.0000081	0.05435	0.0004	1.467168	0.00003	-1.5256	0.0025	-1.284	0.01	0.000211642	-4.212882579	**0.282664927**	**0.000029**	0.282635935	**1.0**	**1.0**	0.282731474	804720996.6	714937639	714.9376388	1154411472	1154.4	1159170843	**1159.2**	4.759370738	-0.993701131
G55b - 10	2	36.156	72	15.48	158.3	12	83.9	0.282901854	0.00002	0.0005494	0.000003	0.0187	0.00016	1.467151	0.000034	-1.5278	0.0035	-1.225	0.028	7.65025E-05	4.132263027	**0.282901628**	**0.000027**	0.28268555	**7.6**	**1.0**	0.282946025	479399156.7	418812444	418.8124443	679762901.4	679.8	681423541.6	**681.4**	1.660640109	-0.997723141
G55b - 11	2	36.189	72	15.26	1126	78	97.3	0.282138892	0.000018	0.0007113	0.0000059	0.02498	0.00031	1.467167	0.000038	-1.5232	0.0033	-1.273	0.021	9.90466E-05	-22.84801704	**0.282136788**	**0.000026**	0.28207117	**2.3**	**1.0**	0.282455462	1516104577	1088499197	1088.499197	1758906902	1758.9	1769997474	**1770.0**	11.09057227	-0.997052184
G55b - 12	2	33.353	67	19.04	278.5	21	92.3	0.28239288	0.000019	0.0004301	0.0000098	0.01441	0.00027	1.467181	0.000035	-1.527	0.0026	-1.297	0.035	5.98903E-05	-13.86637728	**0.282392567**	**0.000026**	0.282609839	**-7.7**	**0.9**	0.282470764	1172130578	1066674599	1066.674599	1725571575	1725.6	1736264153	**1736.3**	10.69257784	-0.998217552
G55b - 13	2	36.168	72	20.42	238.7	18	97.7	0.282602869	0.000019	0.001574	0.000026	0.0582	0.001	1.4672	0.000027	-1.532	0.0024	-1.3	0.01	0.000219175	-6.440612126	**0.28260189**	**0.000026**	0.282634926	**-1.2**	**1.0**	0.282668887	890962013.2	800744844	800.7448441	1292082558	1292.1	1298041721	**1298.0**	5.959163214	-0.993476927
G55b - 14	2	36.152	72	16.46	265.8	20	99.9	0.282477875	0.000022	0.0005257	0.0000045	0.01773	0.00024	1.46712	0.000036	-1.5295	0.0029	-1.323	0.033	7.32023E-05	-10.86071043	**0.282477511**	**0.000029**	0.282617846	**-5.0**	**1.0**	0.282552134	1057395852	956604570	956.60457	1547961995	1548.0	1556564188	**1556.6**	8.602193521	-0.99782136
G55b - 15	2	36.153	72	15.7	645	47	97.0	0.282417878	0.000026	0.000962	0.00002	0.0351	0.001	1.467188	0.000035	-1.5269	0.0026	-1.292	0.023	0.000133956	-12.98235762	**0.282416256**	**0.000032**	0.282377938	**1.4**	**1.2**	0.28259798	1140462315	895675642	895.6756422	1447630382	1447.6	1455135474	**1455.1**	7.505092246	-0.996013217
G55b - 16	2	36.093	72	14.43	584	43	89.8	0.281732913	0.000026	0.0003629	0.0000062	0.01357	0.00018	1.467157	0.000039	-1.5293	0.0034	-1.321	0.043	5.05328E-05	-37.20449635	**0.281732359**	**0.000032**	0.282416645	**-24.2**	**1.1**	0.281896803	2057000884	1838552327	1838.552327	2961940875	2961.9	2993399760	**2993.4**	31.45888506	-0.998496046
G55b - 17	2	36.152	72	18.397	367.2	28	73.1	0.282772861	0.000021	0.000819	0.000012	0.02796	0.0004	1.467113	0.000033	-1.5079	0.0037	-1.26	0.023	0.000114044	-0.429278427	**0.282772076**	**0.000028**	0.28255386	**7.7**	**1.0**	0.282875264	656573001.9	516336734	516.3367341	836772844.2	836.8	839284661.5	**839.3**	2.511817246	-0.996605847
G55b - 18	2	33.897	68	12.85	1099	79	86.3	0.28219089	0.000023	0.0008169	0.0000092	0.0296	0.00023	1.46713	0.000041	-1.5328	0.0029	-1.277	0.026	0.000113751	-21.00925615	**0.282188532**	**0.000029**	0.282088463	**3.5**	**1.1**	0.282499486	1446645530	1029150661	1029.150661	1662946824	1662.9	1672855557	**1672.9**	9.908733201	-0.99661455
G55b - 19	2	27.009	54	14.89	177.5	14	92.0	0.282679865	0.000033	0.002042	0.000061	0.0715	0.0023	1.467163	0.000047	-1.5279	0.004	-1.301	0.013	0.000284343	-3.717831568	**0.282678921**	**0.000038**	0.282673467	**0.2**	**1.4**	0.282728713	787047850.9	720067035	720.0670355	1160492961	1160.5	1165287913	**1165.3**	4.794952125	-0.99153741
G55b - 20	2	20.846	42	12.26	179.5	15	78.7	0.282617868	0.000054	0.00187	0.00014	0.065	0.0053	1.46717	0.000046	-1.5209	0.0052	-1.305	0.022	0.000260392	-5.910200329	**0.282616994**	**0.000057**	0.282672209	**-2.0**	**2.0**	0.282667348	871401539.7	803702911	803.7029111	1295465014	1295.5	1301445047	**1301.4**	5.980032395	-0.992250224
G55b - 21	2	36.155	72	18.04	1121	79	97.6	0.282172891	0.000019	0.0008915	0.0000062	0.02961	0.00016	1.467115	0.000038	-1.5392	0.0029	-1.32	0.019	0.000124139	-21.64575031	**0.282170265**	**0.000026**	0.282074373	**3.4**	**1.0**	0.282487509	1471285775	1045692234	1045.692234	1689069339	1689.1	1699287010	**1699.3**	10.21767087	-0.996305388
G55b - 22	2	36.154	72	15.91	433.4	33	98.5	0.28238488	0.000026	0.00089	0.000024	0.03123	0.00076	1.467205	0.000036	-1.535	0.0029	-1.293	0.021	0.00012393	-14.14926357	**0.282383873**	**0.000032**	0.28251202	**-4.5**	**1.2**	0.282505739	1184887502	1020922863	1020.922863	1649302013	1649.3	1659045275	**1659.0**	9.74326193	-0.996311604
G55b - 23	2	36.152	72	51	187.8	14	73.1	0.282675866	0.000017	0.0005121	0.0000021	0.02126	0.00016	1.467226	0.000025	-1.5503	0.0019	-1.278	0.011	7.13085E-05	-3.859274714	**0.282675615**	**0.000025**	0.282666984	**0.3**	**0.9**	0.282728301	788201228.1	716694813	716.6948129	1161400374	1161.4	1166245776	**1166.2**	4.845402233	-0.997877722
G55b - 24	2	36.221	72	18.57	538	40	100.0	0.282432878	0.000018	0.000472	0.000021	0.01679	0.00085	1.467166	0.000031	-1.5318	0.0027	-1.282	0.028	6.57247E-05	-12.45194582	**0.282432214**	**0.000026**	0.282445805	**-0.5**	**0.9**	0.28258364	1118165918	913607862	913.6078616	1479031644	1479.0	1486887830	**1486.9**	7.856186629	-0.998043907
G55b - 25	2	25.74	51	15.52	1054	75	92.7	0.282420878	0.000031	0.001394	0.000021	0.0503	0.0007	1.467163	0.000046	-1.5328	0.0039	-1.305	0.018	0.000194111	-12.87627526	**0.282417021**	**0.000036**	0.282117265	**10.6**	**1.4**	0.282715117	1138146209	737003888	737.0038882	1190426624	1190.4	1195490541	**1195.5**	5.063917329	-0.994222894
G55b - 26	2	32.447	65	16.51	241.2	18	98.9	0.282727863	0.000024	0.0006896	0.000002	0.0251	0.00011	1.467166	0.000032	-1.5329	0.0034	-1.307	0.027	9.60249E-05	-2.020513818	**0.28272743**	**0.000030**	0.282633351	**3.3**	**1.1**	0.28279513	717747299.2	625817773	625.8177734	1014024962	1014.0	1017715626	**1017.7**	3.690664319	-0.997142115
G55b - 27	2	36.254	73	22.82	251.8	19	95.8	0.282728863	0.000023	0.0016993	0.0000072	0.06542	0.00012	1.467197	0.000029	-1.5342	0.0024	-1.2843	0.0091	0.000236623	-1.985153031	**0.282727748**	**0.000029**	0.282626671	**3.6**	**1.1**	0.28279843	718976286.6	623555115	623.5551151	1006735862	1006.7	1010352407	**1010.4**	3.616545172	-0.99295765
G55b - 28	2	36.19	72	14.65	276.2	21	99.1	0.282631868	0.00002	0.001335	0.000019	0.04575	0.00047	1.467129	0.000038	-1.5341	0.0028	-1.292	0.014	0.000185895	-5.415149318	**0.282630907**	**0.000027**	0.282611289	**0.7**	**1.0**	0.282708456	850624786.5	745960021	745.9600209	1205084669	1205.1	1210276234	**1210.3**	5.191564389	-0.994467406
G55b - 29	2	36.07	72	22.46	625.6	45	98.4	0.282428878	0.000019	0.00016634	0.00000011	0.007261	0.000038	1.467167	0.000031	-1.5394	0.0027	-1.278	0.04	2.31624E-05	-12.59338897	**0.282428606**	**0.000026**	0.282390253	**1.4**	**0.9**	0.282604832	1122361873	883828319	883.8283194	1432618170	1432.6	1440002430	**1440.0**	7.384260187	-0.999310643
G55b - 30	2	18.671	37	20.19	481.4	36	98.9	0.282524873	0.000039	0.000829	0.000034	0.02538	0.00066	1.467151	0.00004	-1.533	0.0027	-1.274	0.029	0.000115436	-9.19875347	**0.282523831**	**0.000043**	0.282481651	**1.5**	**1.6**	0.282659255	994702295	811751713	811.7517135	1313240107	1313.2	1319422434	**1319.4**	6.182326916	-0.996564404
G55b - 31	2	25.015	50	17.12	231.6	17	98.2	0.282739862	0.000019	0.0007883	0.0000054	0.02859	0.00017	1.467139	0.000044	-1.5198	0.0034	-1.287	0.024	0.000109769	-1.59618438	**0.282739387**	**0.000026**	0.2826394	**3.5**	**0.9**	0.282804387	701607553.2	613371354	613.3713537	993579422.8	993.6	997120845.6	**997.1**	3.541422781	-0.996733076
G55b - 32	2	36.169	72	17.13	523	39	96.7	0.281946902	0.00002	0.0000606	0.0000011	0.002488	0.000066	1.467176	0.00003	-1.5305	0.0026	-1.17	0.18	8.43839E-06	-29.63728805	**0.281946819**	**0.000027**	0.282455309	**-18.0**	**1.0**	0.282094003	1769706009	1572834908	1572.834908	2540363413	2540.4	2563559428	**2563.6**	23.19601524	-0.999748858
G55b - 33	2	36.213	72	20.03	523	41	97.8	0.282344882	0.000018	0.0000641	0.0000034	0.00277	0.00011	1.467116	0.000033	-1.5318	0.0027	-1.41	0.16	8.92575E-06	-15.56369503	**0.282344794**	**0.000026**	0.282455309	**-3.9**	**0.9**	0.282491978	1235409409	1036564935	1036.564935	1679324087	1679.3	1689473088	**1689.5**	10.1490012	-0.999734353
G55b - 34	2	36.154	72	15.33	539	41	98.2	0.282459876	0.000019	0.000397	0.000018	0.01502	0.00059	1.467198	0.000041	-1.5244	0.0031	-1.286	0.037	5.52812E-05	-11.49720459	**0.282459317**	**0.000026**	0.282445172	**0.5**	**1.0**	0.282611026	1081302315	876131757	876.1317574	1419044696	1419.0	1426280274	**1426.3**	7.235578299	-0.998354727
G55b - 35	2	36.167	72	16.3	631	47	92.3	0.282479875	0.000014	0.000265	0.000015	0.00951	0.00064	1.467143	0.000032	-1.5293	0.003	-1.346	0.045	3.69005E-05	-10.78998886	**0.282479438**	**0.000023**	0.282386825	**3.3**	**0.8**	0.282657195	1053705789	812923155	812.9231554	1317763743	1317.8	1324008894	**1324.0**	6.245151658	-0.99890177
G55b - 36	2	23.927	48	23.44	243.5	18	78.5	0.282622868	0.000035	0.001619	0.000046	0.0612	0.0012	1.467095	0.000045	-1.5294	0.0028	-1.289	0.011	0.000225441	-5.733396397	**0.282621841**	**0.000039**	0.282631902	**-0.4**	**1.4**	0.282690188	863787576.4	771727907	771.7279068	1245266763	1245.3	1250800831	**1250.8**	5.534067627	-0.993290435
G55b - 37	2	26.284	53	16.42	1194	83	98.6	0.282203889	0.000026	0.0006231	0.0000017	0.02583	0.00021	1.467208	0.000037	-1.5364	0.004	-1.274	0.026	0.000086765	-20.54956592	**0.282201933**	**0.000032**	0.282027579	**6.2**	**1.2**	0.282540068	1428141361	973332261	973.3322607	1574335957	1574.3	1583227846	**1583.2**	8.891889001	-0.997417708
G55b - 38	2	36.154	72	18.47	526	41	100.2	0.282330883	0.00002	0.00021	0.000011	0.00757	0.00034	1.467169	0.000038	-1.5313	0.0025	-1.336	0.069	2.92419E-05	-16.05874604	**0.282330594**	**0.000027**	0.282453408	**-4.3**	**1.0**	0.282478626	1254944882	1055191749	1055.191749	1708437077	1708.4	1718931771	**1718.9**	10.49469465	-0.999129704
G55b - 39	2	36.164	72	21.46	199.3	15	72.1	0.28258287	0.000024	0.00179	0.000032	0.06	0.0011	1.467151	0.00003	-1.5175	0.0034	-1.286	0.01	0.000249253	-7.147827855	**0.282581941**	**0.000030**	0.282659744	**-2.8**	**1.1**	0.282637859	918972016.2	843818357	843.8183574	1360204272	1360.2	1366799384	**1366.8**	6.595111624	-0.992581765
G55b - 40	2	16.677	33	14.06	786	59	89.5	0.282248887	0.000036	0.001039	0.000042	0.0408	0.0015	1.467138	0.000064	-1.5255	0.0057	-1.317	0.025	0.000144678	-18.95833053	**0.282246748**	**0.000040**	0.282288297	**-1.5**	**1.5**	0.28246849	1369511029	1072079732	1072.079732	1730526876	1730.5	1741242673	**1741.2**	10.71579723	-0.995694108
G55b - 41	2	25.921	52	16.83	1104	98	98.0	0.282213889	0.000022	0.000456	0.00001	0.01623	0.00034	1.46721	0.00003	-1.5273	0.0035	-1.234	0.043	6.34968E-05	-20.19595806	**0.282212566**	**0.000029**	0.282085261	**4.5**	**1.1**	0.28252495	1413830180	993276737	993.2767374	1607363329	1607.4	1616640801	**1616.6**	9.277472054	-0.998110215
G55b - 42	2	17.84	36	15.12	405.7	30	84.9	0.282261886	0.000027	0.0005585	0.000009	0.01973	0.00034	1.467159	0.000051	-1.5383	0.004	-1.295	0.042	7.77696E-05	-18.49864031	**0.282261295**	**0.000033**	0.282529533	**-9.5**	**1.2**	0.282375343	1349643755	1196393202	1196.393202	1933107736	1933.1	1946512905	**1946.5**	13.40516901	-0.997685428
G55b - 43	2	35.019	70	15.02	251.7	19	97.6	0.28259487	0.00003	0.001977	0.000039	0.0701	0.0011	1.467163	0.000032	-1.5282	0.0032	-1.291	0.012	0.000275292	-6.723498418	**0.282593573**	**0.000035**	0.282626734	**-1.2**	**1.3**	0.282664227	903186262.4	808284827	808.2848272	1302318967	1302.3	1308358542	**1308.4**	6.039574422	-0.991806788
G55b - 44	2	36.16	72	18.4	593.3	43	97.9	0.282488875	0.00002	0.0005112	0.0000053	0.01879	0.00028	1.467151	0.000035	-1.5383	0.0023	-1.287	0.023	7.11832E-05	-10.47174178	**0.282488082**	**0.000027**	0.282410747	**2.7**	**1.0**	0.282655159	1042424329	816409593	816.4095932	1322232631	1322.2	1328511290	**1328.5**	6.278658521	-0.997881452
G55b - 45	2	25.438	51	15.21	578	63	96.4	0.282440877	0.000035	0.001511	0.000015	0.05471	0.00066	1.467204	0.000037	-1.5301	0.0042	-1.287	0.017	0.000210403	-12.16905953	**0.282438594**	**0.000039**	0.28242045	**0.6**	**1.5**	0.28260134	1111440256	892848704	892.8487042	1440269573	1440.3	1447674933	**1447.7**	7.405359652	-0.993738015
G55b - 46	2	36.22	72	15.95	513	93	96.4	0.282439877	0.000025	0.00174	0.000012	0.05444	0.00055	1.467175	0.000035	-1.5255	0.0026	-1.275	0.014	0.00024229	-12.20442032	**0.282437546**	**0.000031**	0.282461643	**-0.9**	**1.2**	0.282581901	1113710448	920130298	920.1302982	1482838244	1482.8	1490676863	**1490.7**	7.838619066	-0.992788978
G55b - 47	2	14.866	30	18.6	1761	120	89.3	0.281842907	0.000034	0.0006366	0.0000046	0.02214	0.00018	1.467129	0.000037	-1.5135	0.0041	-1.252	0.029	8.86448E-05	-33.31480984	**0.281839944**	**0.000039**	0.281661943	**6.3**	**1.5**	0.282341309	1912335654	1242754855	1242.754855	2006934198	2006.9	2021373879	**2021.4**	14.43968063	-0.997361761
G55b - 48	2	21.309	43	17.35	465	34	77.6	0.282323883	0.000029	0.0004633	0.0000072	0.01708	0.00028	1.467135	0.00004	-1.5301	0.0042	-1.287	0.04	6.45133E-05	-16.30627155	**0.282323321**	**0.000034**	0.28249203	**-6.0**	**1.2**	0.282454111	1265527964	1089369881	1089.369881	1761850285	1761.9	1772994353	**1773.0**	11.14406847	-0.998079962
G55b - 49	2	29.237	58	16.12	945	70	94.5	0.282161891	0.000022	0.0005403	0.0000059	0.01937	0.00014	1.467143	0.000034	-1.5311	0.0028	-1.327	0.033	7.52353E-05	-22.03471896	**0.282160552**	**0.000029**	0.28218693	**-0.9**	**1.1**	0.282427548	1484253062	1125656965	1125.656965	1819664808	1819.7	1831545672	**1831.5**	11.88086338	-0.997760853
G55b - 50	2	26.099	52	18.09	967	68	99.0	0.282117893	0.00002	0.001053	0.000013	0.0404	0.00035	1.467137	0.000042	-1.5328	0.002	-1.307	0.014	0.000146627	-23.59059356	**0.282115222**	**0.000027**	0.28217288	**-2.0**	**1.1**	0.28238849	1546222296	1180682797	1180.682797	1904560978	1904.6	1917536038	**1917.5**	12.97505986	-0.995636089
G55b - 51	2	22.63	45	14.68	772	56	95.5	0.282231888	0.000027	0.000685	0.000015	0.02543	0.00069	1.467091	0.000043	-1.5301	0.0034	-1.308	0.034	9.53844E-05	-19.5594639	**0.282230503**	**0.000033**	0.282297208	**-2.4**	**1.2**	0.282448267	1390715372	1098153237	1098.153237	1774574293	1774.6	1785865017	**1785.9**	11.29072326	-0.997161178

G55b - 52	2	36.193	72	22.29	254.7	19	97.7	0.28258987	0.000017	0.000761	0.000024	0.0265	0.0011	1.467165	0.000036	-1.5326	0.0023	-1.29	0.016	0.000105967	-6.90030235	0.282589365	0.000025	0.282624843	-1.3	0.9	0.282660863	906072120.6	809361184	809.3611839	1309707306	1309.7	1315859008	1315.9	6.151702209	-0.996846214
G55b - 53	2	34.523	69	16.69	255.8	19	98.0	0.282480875	0.000025	0.00083	0.000014	0.02968	0.00064	1.46717	0.00004	-1.5272	0.0036	-1.282	0.021	0.000115575	-10.75462807	0.282480322	0.000031	0.28262415	-5.1	1.1	0.28255213	1054470280	957647745	957.6477449	1547969503	1548.0	1556556651	1556.6	8.587148562	-0.99656026
G55b - 54	2	36.175	72	14.37	2015	22	94.4	0.281533923	0.000025	0.0007588	0.0000086	0.02772	0.00025	1.467208	0.000038	-1.5276	0.0033	-1.303	0.024	0.000105661	-44.24129285	0.281529872	0.000031	0.281496889	1.2	1.2	0.282104922	2324278147	1562051425	1562.051425	2516923712	2516.9	2539601578	2539.6	22.67786632	-0.996855332
																							0.000018							0				1597.2		
G52d - 1	2	36.183	72	16.01	233.2	5.7	100.0	0.28259187	0.00002	0.0000528	0.0000011	0.001954	0.00003	1.467189	0.000039	-1.5246	0.0036	-1.29	0.21	7.35226E-06	-6.829580777	0.282591838	0.000027	0.282638392	-1.6	1.0	0.282657288	901072942.7	812182022	812.1820219	1317559325	1317.6	1323810403	1323.8	6.251078012	-0.999781183
G52d - 2	2	33.047	66	18.12	228.8	5.4	100.1	0.282619868	0.000016	0.0000116	0.00000029	0.00046	0.00001	1.467185	0.000033	-1.5317	0.0028	-1.46	0.95	1.61527E-06	-5.839478756	0.282619861	0.000024	0.282641164	-0.8	0.9	0.282684074	862919479.2	775628004	775.6280037	1258709445	1258.7	1264416398	1264.4	5.706953117	-0.999951927
G52d - 3	2	30.152	60	16.02	235.9	5.5	100.3	0.28258187	0.000027	0.00001723	0.00000043	0.000665	0.000017	1.467188	0.000044	-1.533	0.0031	-1.38	0.82	2.39923E-06	-7.183188642	0.28258186	0.000033	0.282636691	-1.9	1.2	0.282648069	914531652	824612791	824.6127908	1337797737	1337.8	1344243458	1344.2	6.445721063	-0.999928594
G52d - 4	2	19.298	39	17.69	236.1	5.1	99.5	0.282604869	0.00003	0.0001208	0.0000059	0.0043	0.00022	1.467172	0.000043	-1.5268	0.004	-1.44	0.13	1.68211E-05	-6.369890553	0.282604795	0.000035	0.282636565	-1.1	1.2	0.28267106	883634883.2	793640766	793.6407656	1287308207	1287.3	1293273457	1293.3	5.965249938	-0.999499373
G52d - 5	2	11.541	23	18.22	391.4	17	93.4	0.282164891	0.000032	0.000717	0.000025	0.0264	0.00097	1.467191	0.000058	-1.5291	0.0044	-1.271	0.037	9.98403E-05	-21.9286366	0.282164159	0.000037	0.282538571	-13.3	1.3	0.282274172	1481145299	1333821014	1333.821014	2152272432	2152.3	2168868924	2168.9	16.59649166	-0.997028562
G52d - 6	2	15.778	32	19.29	170.8	4.5	94.3	0.282454877	0.000024	0.0001776	0.0000029	0.00607	0.00012	1.467186	0.000045	-1.5213	0.0052	-1.237	0.08	2.47303E-05	-11.67400852	0.282454798	0.000030	0.282677684	-7.9	1.1	0.282502706	1087226908	1022445946	1022.445946	1655919933	1655.9	1665782132	1665.8	9.862198931	-0.999263978
G52d - 1	3	36.161	72	14.11	225.1	4.9	99.4	0.282597652	0.000026	0.00013177	0.00000059	0.004683	0.000038	1.467216	0.000046	-1.4998	0.0032	-1.23	0.16	1.83486E-05	-6.625109536	0.282597575	0.000032	0.282643495	-1.6	1.1	0.282660746	893473191.2	807705261	807.705261	1309963870	1310.0	1316140356	1316.1	6.176485982	-0.99945391
G52d - 2	3	36.179	72	13.2	225.2	5.8	94.6	0.282639653	0.000026	0.0000787	0.0000023	0.002367	0.000052	1.467239	0.000037	-1.4799	0.0039	-1.41	0.34	1.09588E-05	-5.139852538	0.282639607	0.000032	0.282643432	-0.1	1.1	0.282702807	836236365.1	750312388	750.3123878	1217514947	1217.5	1222852722	1222.9	5.337774194	-0.999673846
G52d - 3	3	36.192	73	14.18	229.8	5.2	100.7	0.282648653	0.000026	0.0000811	0.0000021	0.002874	0.000075	1.467239	0.000037	-1.4942	0.0037	-1.26	0.26	1.1293E-05	-4.821583182	0.282648604	0.000032	0.282640534	0.3	1.1	0.282713098	824006634.3	736303502	736.3035021	1194869666	1194.9	1200010815	1200.0	5.141149358	-0.9996639
G52d - 4	3	36.056	72	13.48	240.6	6.1	96.2	0.282717654	0.000028	0.0000299	0.0000036	0.000914	0.000082	1.467226	0.000039	-1.4978	0.0035	-1.5	1.1	4.16349E-06	-2.381518114	0.282717635	0.000033	0.282633729	3.0	1.2	0.282785167	729964304.1	637938151	637.9381505	1036021221	1036.0	1039888260	1039.9	3.867039012	-0.999876086
G52d - 5	3	36.058	72	14.05	232.5	6.1	101.8	0.282651653	0.000028	0.0000944	0.0000061	0.00312	0.00016	1.467228	0.000044	-1.5022	0.0034	-1.23	0.31	1.31449E-05	-4.715493396	0.282651596	0.000033	0.282638833	0.5	1.2	0.282716849	819965904.7	731229258	731.2292576	1186614001	1186.6	1191684023	1191.7	5.070021913	-0.999608781
G52d - 6	3	36.054	72	14.33	233.3	5.8	96.5	0.282594652	0.000025	0.00001164	0.00000044	0.000443	0.000017	1.467227	0.000045	-1.4973	0.0037	-0.1	1.5	1.62084E-06	-6.731199321	0.282594645	0.000031	0.282638329	-1.5	1.1	0.282660123	897164164.3	808207642	808.2076425	1311333363	1311.3	1317527019	1317.5	6.193655792	-0.999951761
G52d - 7	3	36.182	72	13.11	233.4	6.5	100.2	0.282885658	0.000028	0.000148	0.000002	0.004195	0.000056	1.467204	0.000044	-1.5029	0.0036	-1.08	0.19	2.06086E-05	3.559509875	0.282885568	0.000033	0.282638266	8.7	1.2	0.282951074	500878275.2	411291790	411.2917904	668543065.1	668.5	670153017.7	670.2	1.609952593	-0.999386649
G52d - 8	3	36.186	73	16	225	5.6	97.3	0.282675653	0.000022	0.0000577	0.0000018	0.002007	0.000063	1.467188	0.000038	-1.4902	0.0033	-1.33	0.3	8.03457E-06	-3.866775112	0.28267562	0.000029	0.282643558	1.1	1.0	0.282738763	787213567.4	701277156	701.2771564	1138354362	1138.4	1143021674	1143.0	4.667311973	-0.999760876
G52d - 9	3	36.159	71	14.12	245.8	7.2	101.6	0.282724654	0.000028	0.00012141	0.00000089	0.003746	0.000025	1.467248	0.000039	-1.4992	0.0035	-1.3	0.2	1.6906E-05	-2.133975282	0.282724577	0.000033	0.282630452	3.3	1.2	0.282793571	720664938.4	626676279	626.6762793	1017467109	1017.5	1021195015	1021.2	3.727906186	-0.999496845
G52d - 10	3	36.155	72	12.48	231.8	7.1	102.1	0.282800656	0.000022	0.0000323	0.0000041	0.001009	0.00008	1.467203	0.000048	-1.4987	0.0041	-1.3	0.84	4.49769E-06	0.553632618	0.282800636	0.000029	0.282639274	5.7	1.0	0.282865693	616808456.7	527971840	527.9718399	857974578.3	858.0	860627279.9	860.6	2.652701532	-0.99986614
G52d - 11	3	36.158	72	12.93	254.1	6.7	92.1	0.282691654	0.000025	0.0000282	0.0000011	0.001109	0.00004	1.46722	0.00004	-1.4988	0.0041	-1.85	0.78	3.92677E-06	-3.300962922	0.282691635	0.000031	0.282625221	2.3	1.1	0.282762965	765358612.6	668215270	668.2152698	1085007812	1085.0	1089248938	1089.2	4.241126205	-0.999883132
G52d - 12	3	36.192	72	13.22	234.3	6	96.8	0.282650653	0.000024	0.00001349	0.00000039	0.000601	0.000019	1.467253	0.000043	-1.5028	0.0037	-2.1	1.3	1.87845E-06	-4.750856658	0.282650645	0.000030	0.282637699	0.5	1.1	0.282716404	821089179.4	731624065	731.6240646	1187593038	1187.6	1192673776	1192.7	5.080738728	-0.999944094
G52d - 13	3	36.151	72	14.02	229.7	5.7	100.0	0.282611652	0.000019	0.00002532	0.00000075	0.000942	0.000031	1.467214	0.000042	-1.5018	0.0037	-1.61	0.67	3.52574E-06	-6.13002387	0.282611637	0.000026	0.282640597	-1.0	0.9	0.282676103	874122320.4	786511654	786.5116545	1276229297	1276.2	1282095618	1282.1	5.866321461	-0.999895067
G52d - 14	3	36.174	72	14.56	226.1	5.4	98.8	0.282657653	0.000024	0.0001038	0.0000074	0.0032	0.00017	1.467244	0.00004	-1.5073	0.0035	-1.26	0.22	1.44539E-05	-4.503313825	0.282657592	0.000030	0.282642865	0.5	1.1	0.282721045	811832616.3	725537259	725.5372589	1177376683	1177.4	1182367876	1182.4	4.991192337	-0.999569825
G52d - 15	3	36.068	73	13.84	234.7	5.4	101.2	0.282671653	0.000028	0.0002199	0.0000037	0.00706	0.00011	1.467224	0.00004	-1.5006	0.0038	-1.317	0.088	3.06205E-05	-4.008228159	0.282671519	0.000033	0.282637447	1.2	1.2	0.282737391	793114182	703554583	703.5545834	1141378262	1141.4	1146066014	1146.1	4.687752238	-0.999088676
G52d - 16	3	36.062	72	13.91	233	6.8	89.6	0.282663653	0.000025	0.00002176	0.00000073	0.000817	0.000035	1.467193	0.000038	-1.4979	0.0033	-2.3	1.1	3.03002E-06	-4.291134254	0.28266364	0.000031	0.282638518	0.9	1.1	0.282729034	803435746.5	714443361	714.443361	1159786129	1159.8	1164631686	1164.6	4.845557082	-0.999909821
G52d - 17	3	36.196	73	13.88	235.5	6	99.8	0.282666653	0.000028	0.0000311	0.0000019	0.001168	0.000038	1.467225	0.000044	-1.4992	0.0034	-1.43	0.66	4.33059E-06	-4.185044468	0.282666634	0.000033	0.282636943	1.1	1.2	0.282732731	799382065.6	709429898	709.4298978	1151642799	1151.6	1156420347	1156.4	4.777547629	-0.999871113
G52d - 18	3	36.227	72	14.39	231.5	5.9	97.3	0.282748655	0.000025	0.0000391	0.000002	0.001241	0.000036	1.467237	0.000039	-1.4976	0.004	-1.8	0.53	5.44457E-06	-1.285256997	0.282748631	0.000031	0.282639463	3.9	1.1	0.282813603	687749835.3	599149500	599.1495005	973215014.4	973.2	976627522.6	976.6	3.412508136	-0.999837959
G52d - 19	3	36.067	72	14.43	228.4	6.3	100.6	0.282832657	0.000025	0.00004608	0.00000096	0.001512	0.000024	1.467207	0.000039	-1.4921	0.0036	-1.53	0.44	6.41652E-06	1.685256997	0.282832629	0.000031	0.282641416	6.8	1.1	0.282896729	573143958	485549668	485.5496677	789192863.9	789.2	791437317	791.4	2.244453091	-0.999809032
G52d - 20	3	36.188	73	14.23	234.1	5.5	103.6	0.282638653	0.000023	0.00002065	0.00000043	0.000874	0.00002	1.467203	0.000045	-1.5053	0.0039	-0.99	0.68	2.87546E-06	-5.1752158	0.28263864	0.000029	0.282637825	0.0	1.0	0.282704343	837422679.9	748065088	748.0650885	1214134197	1214.1	1219444155	1219.4	5.309957707	-0.999914421
G52d - 21	3	33.039	66	17.14	213.8	5.9	95.0	0.282719654	0.000021	0.0000159	0.00000037	0.000568	0.000017	1.467244	0.000044	-1.4965	0.0031	-1.4	0.89	2.21403E-06	-2.310791591	0.282719645	0.000028	0.282650613	2.4	1.0	0.28277964	727204044.5	645446090	645.4460903	1048220751	1048.2	1052179666	1052.2	3.958915031	-0.999934106
G52d - 22	3	36.152	72	16.9	230.8	5.4	101.1	0.282691654	0.000018	0.00000907	0.00000039	0.000383	0.000019	1.467257	0.000042	-1.5031	0.0032	-2.8	1.4	1.26297E-06	-3.300962922	0.282691648	0.000026	0.282639904	1.8	0.9	0.282756423	765306439	677087623	677.0876235	1099432397	1099.4	1103787445	1103.8	4.35504812	-0.999962412
G52d - 23	3	36.176	73	14.11	227	5.4	98.7	0.282640653	0.000027	0.00005028	0.0000004	0.001769	0.000025	1.467204	0.000041	-1.5	0.0041	-1.52	0.44	7.00135E-06	-5.104489276	0.282640623	0.000033	0.282642298	-0.1	1.2	0.282704329	834792353	748163203	748.163203	1214165069	1214.2	1219474400	1219.5	5.309330491	-0.999791626
G52d - 24	3	36.056	72	14.24	227.6	5.5	100.2	0.282619652	0.000028	0.0001648	0.0000044	0.00582	0.00012	1.467244	0.000049	-1.5006	0.0038	-1.34	0.12	2.2948E-05	-5.847117775	0.282619555	0.000033	0.28264192	-0.8	1.2	0.28268343	863684008.9	776928805	776.9288047	1260125789	1260.1	1265840558	1265.8	5.714769689	-0.999317025
G52d - 25	3	36.156	73	12.53	231.9	5.7	100.1	0.282651653	0.000029	0.0000707	0.0000084	0.00221	0.00023	1.467191	0.000046	-1.4975	0.0041	-1.3	0.57	9.84478E-06	-4.715493396	0.28265161	0.000034	0.282639211	0.4	1.2	0.282716695	819896675.4	731377630	731.3776296	1186953628	1187.0	1192027239	1192.0	5.073611815	-0.999707
G52d - 26	3	36.152	72	11.09	231.1	5.5	100.4	0.282634653	0.00003	0.0000391	0.0000036	0.001342	0.000066	1.467233	0.000047	-1.5062	0.0037	-1.67	0.65	5.44457E-06	-5.316668847	0.282634629	0.000035	0.282639715	-0.2	1.2	0.282699488	842914476.7	754723752	754.7237519	1224814049	1224.8	1230217183	1230.2	5.403134111	-0.999837959
G52d - 27	3	36.16	72	14.05	225.4	5.5	99.1	0.282589652	0.000028	0.0000242	0.00000053	0.001037	0.000021	1.46724	0.000044	-1.5033	0.0034	-1.06	0.75	3.36978E-06	-6.90801563	0.282589637	0.000033	0.282643306	-1.9	1.2	0.282652894	903992212.6	818073815	818.0738146	1327206670	1327.2	1333550584	1333.6	6.343914227	-0.999899709
G52d - 28	3	36.155	72	12.61	234.3	5.9	99.3	0.282673653	0.000028	0.00003361	0.00000065	0.001441	0.000027	1.467228	0.000048	-1.4916	0.0029	-1.32	0.61	4.6801E-06	-3.937501636	0.282673633	0.000033	0.282637699	1.3	1.2	0.282739392	789866954.5	700359897	700.3598971	1136968723	1137.0	1141625325	1141.6	4.656602193	-0.999860711
G52d - 29	3	36.168	73	14.19	232.2	5.7	101.8	0.282661653	0.000023	0.0000221	0.0000015	0.000835	0.000029	1.467264	0.000043	-1.499	0.0039	-1.01	0.81	3.07737E-06	-4.361860778	0.28266164	0.000029	0.282639022	0.8	1.0	0.282726809	806156736.3	717475501	717.4755013	1164686478	1164.7	1169573027	1169.6	4.886548337	-0.999908412
G52d - 30	3	36.216	73	13.75	230.9	6.4	100.2	0.282659653	0.000024	0.0001103	0.0000029	0.003811	0.000071	1.467212	0.000046	-1.4946	0.0037	-1.3	0.21	1.5359E-05	-4.432587301	0.282659587	0.000030	0.282639841	0.7	1.1	0.28272439	809130830.2	720996819	720.9968187	1170012335	1170.0	1174941148	1174.9	4.92881297	-0.999542888
G52d - 31	3	36.156	73	13.69	232.7	6.5	97.4	0.282701654	0.000027	0.0001002	0.0000093	0.00325	0.00025	1.46723	0.000041	-1.4963	0.003	-1.14	0.23	1.39526E-05	-2.947330304	0.282701593	0.000033	0.282638707	2.2	1.2	0.282766903	751939445.4	663016216	663.0162164	1076322900	1076.3	1080494745	1080.5	4.171844181	-0.999584745
G52d - 32	3	36.183	73	14.88	225.1	5.8	97.9	0.282801656	0.000024	0.0000609	0.0000011	0.002295	0.000053	1.467246	0.000045	-1.5005	0.0033	-1.38	0.33	8.48016E-06	0.58899588	0.28280162	0.000030	0.282643495	5.6	1.1	0.282864792	615506421.3	529256999	529.2569994	859969004.2	860.0	862633614.2	862.6	2.664609918	-0.999747614
G52d - 33	3	36.152	72	13.92	227.7	6	97.6	0.282574651	0.000025	0.0000137	0.0000003	0.000606	0.000016	1.467214	0.000043	-1.4986	0.0033	-1.2	1.3	1.90769E-06	-7.438464558	0.282574643	0.000031	0.282641857	-2.4	1.1	0.282638546	924316340.9	837546410	837.5464101	1358695899	1358.7	1365344518	1365.3	6.648618527	-0.999943224
G52d - 34	3	36.162	73	14.14	220.1	5.8	95.3	0.282639653	0.000026	0.0001155	0.000006	0.00348	0.00012	1.467183	0.000043	-1.4985	0.0033	-1.39	0.19	1.60831E-05	-5.139852538	0.282639586	0.000032	0.282646645	-0.2	1.1	0.282701352	836345994.2	752391230	752.3912298	1220714100	1220.7	1226078809	1226.1	5.36470907	-0.999521337
G52d - 35	3	36.164	73	13.81	233.9	5.7	101.2	0.282640653	0.000026	0.0003336	0.0000068	0.01086	0.00014	1.467199	0.000037	-1.4988	0.0035	-1.329	0.07	4.64529E-05	-5.104489276	0.282640449	0.000032	0.282637951	0.1	1.1	0.282706096	835635586.1	746511046	746.5110462	1210277179	1210.3	1215544012	1215.5	5.266832837	-0.998617473
G52d - 36	3	36.152	73	11.83	237	5.7	100.2	0.282813656	0.000028	0.00003548	0.00000033	0.00143	0.00002	1.467212	0.000044	-1.493	0.0034	-1.47	0.56	4.94049E-06	1.013355022	0.282813634	0.000033	0.282635998	6.3	1.2	0.282880153	599069397.2	508205323	508.2053233	825938794.8	825.9	828397151.4	828.4	2.458356559	-0.999852961
G52d - 37	3	36.09	72	14.54	233.4	7.7	70.5	0.282629652	0.000025	0.00003786	0.00000073	0.001252	0.000019	1.467231	0.000045	-1.4911	0.0036	-1.41	0.62	5.2719E-06	-5.493485157	0.282629629	0.000031	0.282638266	-0.3	1.1	0.282695136	849705912.4	760645505	760.6455054	1234387405	1234.4	1239875297	1239.9	5.48789175	-0.999843098
G52d - 38	3	36.152	72	14.35	228.1	5.9	100.0	0.282633653	0.000027	0.0001886	0.0000086	0.00589	0.00022	1.467216	0.000034	-1.4972	0.0039	-1.3	0.14	2.6262E-05	-5.352032109	0.28263354	0.000033	0.282641605	-0.3	1.2	0.282697556	844723314.8	757757977	757.7579765	1229064240	1229.1	1234500244	1234.5	5.436003465	-0.999218392
G52d - 39	3	36.153	73	14.01	225.8	6.3	94.5	0.282756655	0.000026	0.0000515	0.0000023	0.001737	0.000041	1.46722	0.000041	-1.4934	0.0036	-1.48	0.4	7.17124E-06	-1.002350903	0.282756625	0.000032	0.282643054	4.0	1.1	0.282819993	676874127.9	590450228	590.4502282	959090666.4	959.1	962404672.7	962.4	3.314006393	-0.99978657
G52d - 40	3	36.168	73	14.41	232.8	5.8	99.1	0.282640653	0.000024	0.00000872	0.00000043	0.000374	0.000017	1.467226	0.000045	-1.4955	0.003	-2.1	1.6	1.21424E-06	-5.104489276	0.282640647	0.000030	0.282638644	0.1	1.1	0.282705985	834668802.8	745798306	745.7983064	1210522260	1210.5	1215801060	1215.8	5.278799646	-0.999963862
G52d - 41	3	36.184	73	12.97	227.2	5.3	101.9	0.282758655	0.000023	0.00001332	0.00000056	0.000564	0.000028	1.467268	0.000043	-1.4909	0.0035	0.6	1.3	1.85477E-06	-0.931624379	0.282758647	0.000029	0.282642172	4.1	1.0	0.28282241	674055451.3	587070622	587.0706221	953749285.3	953.7	957027220.4	957.0	3.277935191	-0.999944798
G52d - 42	3	36.184	72	13.35	231.6	7.1	111.3	0.282835657	0.000027	0.00002005	0.00000024	0.000785	0.000014	1.467207	0.000044	-1.4782	0.003	-0.99	0.93	2.79191E-06	1.791346783	0.282835645	0.000033	0.2826394	6.9	1.2	0.282900645	568992857.9	480147577	480.1475771	780509442.9	780.5	782705125.6	782.7	2.195682702	-0.999916907
G52d - 43	3	36.162	72	13.8	227.1	6.3	89.8	0.282615652	0.000028	0.000019	0.0000013	0.000771	0.000042	1.46722	0.000041	-1.4925	0.0036	-1.02	0.97	2.6457E-06	-5.988570822	0.282615641	0.000033	0.282642235	-0.9	1.2	0.282679375	868669439.5	782041410	782.0414099	1269036916	1269.0	1274837574	1274.8	5.800657132	-0.999921259
G52d - 44	3	36.056	72	13.28	222.9	6.6	93.7	0.282795656	0.000023	0.0000944	0.0000041	0.00274	0.000063	1.467254	0.000046	-1.4894	0.0039	-1.17	0.23	1.31449E-05	0.376816309	0.282795601	0.000029	0.282644881	5.3	1.0	0.282858154	623770449.9	538395913	538.3959133	874667672.2	874.7	877423567.6	877.4	2.755895466	-0.999608781
G52d - 45	3	36.151	73	12.62	225.9	6.1	93.3	0.282663653	0.000028	0.0000212	0.0000013	0.000799	0.000033	1.467215	0.000038	-1.4977	0.004	-1.6	1.1	2.95204E-06	-4.291134254	0.282663641	0.000033	0.282642991	0.7	1.2	0.282727038	803434143.7	717161178	717.1611776	1164182071	1164.2	1169064421	1169.1	4.882349247	-0.999912142
G52d - 46	3	36.16	72	12.84	227.9	5.7	99.0	0.282675653	0.000025	0.00001559	0.00000021	0.000694	0.000017	1.467181	0.000043	-1.4979	0.0043	-1.9	1.1	2.17087E-06	-3.866775112	0.282675644	0.000031	0.282641731	1.2	1.1	0.282739604	787095461.9	700027071	700.0270712	1136503330	1136.5	1141156608	1141.2	4.653278061	-0.999935391
G52d - 47	3	36.08	72	14.6	233.3	6.6	97.1	0.282680654	0.00002	0.0000698	0.0000075	0.00204	0.00014	1.467223	0.00004	-1.4969	0.0034	-1.45	0.33	9.71946E-06	-3.689958803	0.282680611	0.000027	0.282638329	1.5	1.0	0.282746089	780443643.7	691322458	691.3224575	1122211757	1122.2	1126747419	1126.7	4.535661477	-0.99971073
G52d - 48	3	36.178	73	13.7	235.7	5.4	93.5	0.282711654	0.000026	0.0000227	0.0000033	0.000731	0.000082	1.467248	0.000043	-1.493	0.0038	-0.8	1.3	3.16091E-06	-2.593697686	0.28271164	0.000032	0.282636817	2.6	1.1	0.282777793	738116424.3	647980192	647.9801917	1052295300	1052.3	1056284861	1056.3	3.989560866	-0.999905925
																																		1161.9		
G54 - 1	3	26.004	52	16.37	296.2	11	91.1	0.282417648	0.000031	0.00085	0.00016	0.0313	0.0062	1.467224	0.000055	-1.4929	0.0036	-1.222	0.041	0.00011836	-12.99049667	0.282416992	0.000036	0.282598675	-6.4	1.3	0.282500172	1140319347	1028339407	1028.339407	1661448728	1661.4	1671338240	1671.3	9.889511841	-0.996477375
G54 - 2	3	27.525	55	14.4	274	8.1	92.6	0.28248465	0.000026	0.000867	0.000022	0.0278	0.00055	1.467205	0.000048	-1.4955	0.004	-1.345	0.028	0.000120727	-10.62115812	0.28248403	0.000032	0.282612676	-4.6	1.1	0.282560961	1049484445	945761174	945.7611743	1528658855	1528.7	1537031520	1537.0	8.372665066	-0.996406922
G54 - 3	3	36.168	73	16.06	216.3	5.1	100.4	0.282467649	0.000023	0.0000988	0.0000021	0.003464	0.000063	1.467237	0.000049	-1.4923	0.0035	-1.27	0.19	1.37576E-05	-11.22233357	0.282467594	0.000029	0.282649038	-6.4	1.0	0.282528291	1069635520	987485273	987.4852727	1600065982	1600.1	1609278987	1609.3	9.213004928	-0.999590547
G54 - 4	3	36.155	72	15.92	477	27	85.0	0.282439649	0.00003	0.000794	0.000035	0.0275	0.0012	1.467259	0.000037	-1.4958	0.0039	-1.299	0.025	0.000110562	-12.21250491	0.28243866	0.000035	0.282484436	-1.6	1.3	0.28257284	1110267570	929354310	929.3543098	1502670222	1502.7	1510764223	1510.8	8.094000669	-0.996709453
G54 - 5	3	30.015	60	11.8	265.5	6.3	87.8	0.282069641	0.000037	0.000701	0.000018	0.02526	0.00067	1.467297	0.00005	-1.4934	0.0042	-1.299	0.04	9.76124E-05	-25.29691179	0.282069156	0.000041	0.282618035	-19.4	1.5	0.282143694	1609133051	1509588923	1509.588923	2433606872	2433.6	2454818980	2454.8	21.21210782	-0.99709487
G54 - 6	3	36.162	73	17.38	225.9	7.3	100.0	0.282439649	0.000024	0.0000788	0.0000016	0.003144	0.000072	1.467216	0.000038	-1.4912	0.003	-1.32	0.18	1.09727E-05	-12.21250491	0.282439602	0.000030	0.282642991	-7.2	1.1	0.282502999	1107446258	1021690146	1021.690146	1655281162	1655.3	1665141327	1665.1	9.860165071	-0.999673432
G54 - 7	3	36.078	73	9.62	470.4	10	98.9	0.28248765	0.000036	0.001652	0.000017	0.06325	0.00043	1.467294	0.000055	-1.4959	0.0047	-1.321	0.021	0.000230037	-10.51506834	0.28248562	0.000040	0.282488613	-0.1	1.5	0.282617936	1048344445	870628668	870.6286676	1403898254	1403.9	1410928947	1410.9	7.030693092	-0.993153674
G54 - 8	3	36.154	72	16.57	218.8	5	99.2	0.282417648	0.000023	0.0000491	0.0000031	0.00196	0.00014	1.467225	0.000036	-1.4918	0.0036	-1.38	0.31	6.83704E-06	-12.99049667	0.28241762	0.000029	0.282647463	-8.1	1.0	0.282479021	1137075692	1054054388	1054.054388	1707577398	1707.6	1718071444	1718.1	10.49404672	-0.999796517
G54 - 9	3	36.198	73	16.97	172	4.5	97.2	0.282452649	0.000022	0.000171	0.000013	0.00623	0.00048	1.467206	0.000038	-1.4991	0.0027	-1.29	0.097	2.38113E-05	-11.7527825	0.282452572	0.000029	0.282676929	-7.9	1.0	0.282500818	1090216502	1024980581	1024.980581	1660039524	1660.0	1669951171	1670.0	9.91164671	-0.999291331
G54 - 10	3	30.527	61	14.65	757	39	98.1	0.282250645	0.000026	0.000395	0.000011	0.01428	0.00045	1.467263	0.000044	-1.5009	0.0046	-1.303	0.053	5.50027E-05	-18.89616139	0.282249862	0.000032	0.282306753	-2.0	1.2	0.282463365	1364012184	1076567877	1076.567877	1741693615	1741.7	1752588580	1752.6	10.89496511	-0.998363015
G54 - 11	3	30.637	61	12.31	263.5	6.4	97.4	0.282910658	0.000054	0.00384	0.00011	0.1296	0.0044	1.467277	0.000054	-1.4837	0.0036	-1.297	0.012	0.00053471	4.443591421	0.282908021	0.000057	0.282619296	10.2	2.1	0.282981996	472900248.9	373831053	373.8310533	599771806.9	599.8	601039914.9	601.0	1.26810795	-0.984086022
G54 - 12	3	36.153	72	12.31	539.6	12	99.0	0.28199064	0.00003	0.001017	0.000054	0.038	0.002	1.46722	0.000045	-1.4858	0.0034	-1.303	0.025	0.000141615	-28.09060947	0.281989206	0.000035	0.282444792	-16.1	1.3	0.282141085	1717047163	1514798019	1514.798019	2439218470	2439.2	2460488980	2460.5	21.27050918	-0.995785282
G54 - 13	3	36.155	73	12.77	246.8	5.9	98.3	0.28252465	0.000032	0.0008693	0.0000077	0.03311	0.00015	1.467241	0.000043	-1.4904	0.0036	-1.318	0.03	0.000121048	-9.20662765	0.282524091	0.000037	0.282629822	-3.7	1.3	0.282593367	995147951.6	901660403	901.6604032	1457733286	1457.7	1465347734	1465.3	7.614447959	-0.99639739
G54 - 14	3	36.067	72	14.65	712	18	97.4	0.282320646	0.000027	0.000948	0.00004	0.0347	0.0016	1.46722	0.000041	-1.4949	0.0037	-1.307	0.027	0.000132006	-16.42073307	0.28231888	0.000033	0.282335372	-0.6	1.2	0.282519607	1272089426	1002284810	1002.28481	1619031339	1619.0	1628417309	1628.4	9.385970378	-0.996071237
G54 - 15	3	36.156	72	14.38	301	89	89.9	0.282300646	0.000034	0.000681	0.000024	0.02323	0.00067	1.467257	0.000032	-1.4944	0.0034	-1.291	0.038	9.48274E-05	-17.1279983	0.282300112	0.000039	0.282595648	-10.5	1.4	0.282384644	1297903482	1184326068	1184.326068	1912913410	1912.9	1926031107	1926.0	13.11769687	-0.997177755
G54 - 16	3	36.186	73	16.23	215.6	5.2	99.3	0.28250565	0.000029	0.0002851	0.0000042	0.008753	0.000069	1.467136	0.000044	-1.4795	0.004	-1.291	0.076	3.96994E-05	-9.878529625	0.28250549	0.000034	0.282649479	-5.1	1.2	0.28256599	1018846239	936972032	936.9720323	1517657034	1517.7	1525937580	1525.9	8.280546028	-0.99881847
G54 - 17	3	36.06	72	13.95	337.8	9.5	96.5	0.282428648	0.000027	0.000898	0.000022	0.03036	0.00074	1.467257	0.000043	-1.4998	0.0038	-1.288	0.028	0.000125044	-12.60150079	0.282427857	0.000033	0.282572424	-5.1	1.2	0.282522757	1125598758	997823443	997.8234426	1612151635	1612.2	1621461035	1621.5	9.309400063	-0.99627845
G54 - 18	3	31.79	63	13.93	2741	30	89.6	0.280863617	0.000024	0.0005688	0.0000012	0.020629	0.000092	1.467268	0.000041	-1.4985	0.0031	-1.289	0.045	7.92039E-05	-67.94500557	0.280859458	0.000030	0.281020781	-5.7	1.2	0.281647056	3203318353	2172659650	2172.65965	3491134959	3491.1	3534750860	3534.8	43.61590126	-0.997642742
G54 - 19a	3	10.888	22	18.32	203.4	12	95.0	0.282458649	0.000041	0.000709	0.000011	0.02365	0.00031	1.467178	0.000091	-1.4894	0.0093	-1.264	0.054	9.87263E-05	-11.54060293	0.282458273	0.000045	0.282657162	-7.0	1.6	0.282515344	1084168446	1007220836	1007.220836	1628338087	1628.3	1637845638	1637.8	9.507550956	-0.997061716
G54 - 19b	3	18.487	37	14.72	203.4	12	95.0	0.282095642	0.000031	0.00032	0.000027	0.01082	0.00088	1.467265	0.000066	-1.503	0.005	-1.258	0.097	4.45591E-05	-24.37746698	0.282095472	0.000036	0.282657162	-19.9	1.3	0.282152543	1572079753	1495660062	1495.660062	2414574180	2414.6	2435502606	2435.5	20.92842607	-0.998673835
G54 - 20	3	27.429	55	11.96	514.9	12	97.7	0.282174643	0.000026	0.001314	0.000019	0.04593	0.00057	1.467271	0.000056	-1.5015	0.0038	-1.32	0.021	0.000182971	-21.58376929	0.282172876	0.000032	0.28246044	-10.2	1.2	0.282317769	1471131564	1277645293	1277.645293	2057938385	2057.9	2073061250	2073.1	15.1228654	-0.994554435
G54 - 21	3	36.109	72	15.68	312.6	6.6	94.0	0.282436649	0.000027	0.0005575	0.0000068	0.01863	0.00021	1.467221	0.000042	-1.4881	0.0039	-1.261	0.04	7.76304E-05	-12.31859469	0.282436194	0.000033	0.282588329	-5.4	1.2	0.282523994	1113397588	994933907	994.9339065	1609451033	1609.5	1618747639	1618.7	9.296605986	-0.997689572
G54 - 22	3	36.226	72	16	239.6	6.1	98.6	0.28252165	0.000025	0.000147	0.000014	0.00719	0.00076	1.467198	0.000036	-1.4923	0.0031	-1.214	0.087	2.04694E-05	-9.312717436	0.282521559	0.000031	0.282634359	-4.0	1.1	0.282588809	996658124.5	905532103	905.5321031	1467715424	1467.7	1475466654	1475.5	7.751229478	-0.999390793
G54 - 23	3	32.479	65	11.93	1407	81	90.0	0.281717634	0.000033	0.001154	0.000033	0.0388	0.0011	1.467245	0.00005	-1.4917	0.0041	-1.29	0.028	0.000160691	-37.74477996	0.281713357	0.000038	0.281890677	-6.3	1.5	0.282112608	2083128738	1553894034	1553.894034	2500415907	2500.4	2522746648	2522.7	22.33074184	-0.995217518
G54 - 24	3	36.162	72	15.34	1005	22	92.5	0.282087642	0.000025	0.000579	0.000014	0.02066	0.00057	1.467227	0.000043	-1.5007	0.0039	-1.291	0.036	8.06242E-05	-24.66037307	0.282086115	0.000031	0.2821486	-2.2	1.1	0.282370222	1584268194	1203407100	1203.4071	1944222143	1944.2	1957779696	1957.8	13.55755355	-0.99760047
G54 - 25	3	36.189	72	16.81	198	22	68.3	0.282468649	0.000021	0.0003461	0.0000081	0.0126	0.00024	1.46724	0.000048	-1.4855	0.0026	-1.359	0.05	4.81935E-05	-11.18697031	0.282468471	0.000028	0.282660562	-6.8	1.0	0.282524023	1069221720	994145109	994.145109	1609386663	1609.4	1618693947	1618.7	9.307284207	-0.99856567
G54 - 26	3	36.152	72	13.85	918	21	100.2	0.282298646	0.000031	0.000545	0.000015	0.0188	0.00026	1.467285	0.000047	-1.4922	0.004	-1.302	0.042	7.58898E-05	-17.19872483	0.282297334	0.000036	0.282204164	3.3	1.3	0.282556636	1299976502	950553117	950.5531171	1538117767	1538.1	1546609663	1546.6	8.49189534	-0.997741375
G54 - 27a	3	18.806	37	17.41	267.9	7.5	89.4	0.282139643	0.000035	0.000502	0.00002	0.01816	0.00058	1.46726	0.000037	-1.4934	0.0036	-1.314	0.057	6.99022E-05	-22.82148346	0.282139292	0.000039	0.282616522	-16.9	1.4	0.282214506	1513970949	1413230012	1413.230012	2281107589	2281.1	2299770279	2299.8	18.66268981	-0.997919579
G54 - 27b	3	11.092	22	14.1	267.9	7.5	89.4	0.281959639	0.000052	0.0007064	0.0000073	0.02434	0.00023	1.467234	0.000097	-1.489	0.0064	-1.329	0.067	9.83643E-05	-29.18687059	0.281959146	0.000055	0.282616522	-23.3	2.0	0.282034359	1756694392	1656527049	1656.527049	2668220716	2668.2	2693710185	2693.7	25.4894681	-0.997072491
G54 - 28	3	34.437	69	12.17	1621	56	88.3	0.281564631	0.000038	0.0004285	0.0000082	0.01605	0.00026	1.467234	0.000044	-1.497	0.0032	-1.316	0.048	5.96675E-05	-43.15535902	0.281562798	0.000042	0.281752583	-6.7	1.6	0.282023698	2280905900	1669187308	1669.187308	2691042853	2691.0	2717010384	2717.0	25.96753027	-0.998224182
G54 - 29	3	36.17	72	16.69	234.4	4.9	99.0	0.282476649	0.000023	0.0000913	0.0000025	0.003012	0.00006	1.467238	0.000038	-1.4957	0.0034	-1.28	0.2	1.27133E-05	-10.90406422	0.282476594	0.000029	0.282637636	-5.7	1.0	0.282542381	1057422884	968353381	968.353381	1569280065	1569.3	1578142719	1578.1	8.862654112	-0.999621629
G54 - 30	3	36.154	73	13.18	228.9	5.5	99.6	0.282474649	0.000025	0.0000623	0.0000025	0.002492	0.000075	1.467232	0.000047	-1.493	0.004	-1.29	0.24	8.67511E-06	-10.97479074	0.282474612	0.000031	0.282641101	-5.9	1.1	0.282538853	1060021432	973037874	973.0378741	1576990863	1577.0	1585942222	1585.9	8.951358141	-0.999741812
G54 - 31	3	26.351	53	12.32	1651	48	96.8	0.281625632	0.000035	0.0009199	0.0000042	0.03229	0.00015	1.46725	0.000052	-1.4964	0.0044	-1.302	0.034	0.000128094	-40.99820005	0.281621623	0.000039	0.28173318	-4.0	1.5	0.282091185	2203835271	1581419888	1581.419888	2546410925	2546.4	2569600729	2569.6	23.1898034	-0.99618769
G54 - 32	3	31.125	63	17.08	240.4	8.3	96.9	0.282411648	0.000023	0.000203	0.0000062	0.00705	0.0002	1.467224	0.000046	-1.4848	0.0038	-1.272	0.089	2.82672E-05	-13.20267624	0.282411521	0.000029	0.282633855	-7.9	1.0	0.282478996	1145811700	1054664106	1054.664106	1707630202	1707.6	1718115600	1718.1	10.48539814	-0.999158714
G54 - 33a	3	20.289	40	17.45	253.8	65	96.5	0.282083642	0.000056	0.000551	0.00003	0.01896	0.00074	1.467236	0.000061	-1.4992	0.0038	-1.273	0.048	7.67253E-05	-24.80182612	0.282083277	0.000059	0.28262541	-19.2	2.1	0.282154522	1589482398	1494222262	1494.222262	2410314951	2410.3	2431141822	2431.1	20.82687128	-0.99771651
G54 - 33b	3	14.366	29	14.02	253.8	65	96.5	0.281798636	0.000044	0.001206	0.00006	0.0385	0.0019	1.467217	0.000068	-1.4977	0.0064	-1.269	0.034	0.000167932	-34.88035575	0.281797838	0.000048	0.28262541	-29.3	1.7	0.281869084	1975381726	1881162466	1881.162466	3020934214	3020.9	3053495464	3053.5	32.56125037	-0.995002016
G54 - 34	3	36.167	73	16.67	229.8	5	99.6	0.282427648	0.000024	0.0001249	0.0000041	0.00492	0.00015	1.467191	0.000038	-1.4887	0.0029	-1.38	0.15	1.7392E-05	-12.63686405	0.282427574	0.000030	0.282640534	-7.5	1.1	0.282492067	1123859299	1036667974	1036.667974	1679129158	1679.1	1689272446	1689.3	10.1432878	-0.999482381
G54 - 35	3	36.186	73	15.77	224	5.5	99.8	0.282454649	0.000025	0.0000266	0.0000013	0.001187	0.000056	1.467219	0.00004	-1.4963	0.0029	-1.33	0.53	3.70398E-06	-11.68205598	0.282454633	0.000031	0.282644188	-6.7	1.1	0.282517496	1086951473	1001860827	1001.860827	1623639577	1623.6	1633129658	1633.1	9.49008083	-0.999889763
G54 - 36	3	36.055	72	14.78	302.2	9.7	98.4	0.282442649	0.000025	0.0002295	0.0000022	0.008483	0.000091	1.467259	0.000049	-1.4994	0.0038	-1.325	0.086	3.19573E-05	-12.10641512	0.282442468	0.000031	0.282594891	-5.4	1.1	0.282527338	1103979377	989236677	989.2366772	1602146731	1602.1	1611376692	1611.4	9.229960944	-0.999048891
G54 - 37	3	36.154	72	14.84	230.2	5	101.4	0.28251065	0.000025	0.0000674	0.0000035	0.0028	0.00013	1.467196	0.000041	-1.4958	0.0032	-1.43	0.26	9.38527E-06	-9.701713316	0.28251061	0.000031	0.282640282	-4.6	1.1	0.282575216	1011282998	923726809	923.7268093	1497471109	1497.5	1505543165	1505.5	8.072056095	-0.999720677
G54 - 38	3	36.054	72	15.58	231	5.3	102.9	0.282455649	0.000026	0.000183	0.000017	0.00604	0.00055	1.467237	0.000041	-1.494	0.0035	-1.28	0.15	2.54823E-05	-11.64669272	0.282455539	0.000032	0.282639778	-6.5	1.1	0.28252037	1086202173	998521585	998.5215848	1617364181	1617.4	1626772666	1626.8	9.408485203	-0.999241599
G54 - 39	3	36.152	72	14.31	223.4	5	97.9	0.282777655	0.000024	0.0002645	0.0000038	0.01021	0.00011	1.467251	0.000037	-1.4895	0.0035	-1.375	0.076	3.68309E-05	-0.259722404	0.282777502	0.000030	0.282644566	4.7	1.1	0.282840195	648727990	563284344	563.2843437	914414691.2	914.4	917423652	917.4	3.008960773	-0.998903842

G54 - 40	3	36.166	72	16.86	223.6	4.9	100.7	0.282437649	0.000021	0.0000699	0.00000074	0.003004	0.000061	1.467241	0.000038	-1.4915	0.0035	-1.4	0.21	9.73339E-06	-12.28323143	**0.282437608**	**0.000028**	0.28264444	**-7.3**	**1.0**	0.282500358	1110116328	1025235784	1025.235784	1661043996	1661.0	1670973363	**1671.0**	9.929367328	-0.999710316
G54 - 41	3	36.153	73	17.41	235.8	5.5	101.1	0.282445649	0.000022	0.0000729	0.0000019	0.003022	0.000092	1.467231	0.000037	-1.4907	0.0033	-1.23	0.18	1.01511E-05	-12.00032534	**0.282445604**	**0.000029**	0.282636754	**-6.8**	**1.0**	0.282511785	1099306873	1009764466	1009.764466	1636106179	1636.1	1645739810	**1645.7**	9.633631617	-0.999697883
G54 - 42	3	36.152	72	15.42	584.9	14	100.7	0.282339647	0.000026	0.0004877	0.0000042	0.01716	0.00011	1.46724	0.000044	-1.491	0.0033	-1.276	0.043	6.79109E-05	-15.74883109	**0.282338901**	**0.000032**	0.282416075	**-2.7**	**1.1**	0.2825036	1244343355	1022362846	1022.362846	1653970413	1654.0	1663791601	**1663.8**	9.821188136	-0.997978842
G54 - 43	3	36.154	72	12.35	307.5	6.5	99.2	0.282565651	0.000033	0.001178	0.00005	0.0408	0.002	1.467194	0.000044	-1.4876	0.0037	-1.305	0.029	0.000164033	-7.756733914	**0.282564707**	**0.000038**	0.282591547	**-0.9**	**1.4**	0.28265107	940422964.2	823939743	823.9397427	1331210805	1331.2	1337550583	**1337.6**	6.339777431	-0.995118056
G54 - 44	3	36.171	73	14.93	1184	27	99.3	0.282246645	0.00003	0.001347	0.000033	0.0498	0.001	1.467221	0.000041	-1.4937	0.0033	-1.279	0.018	0.000187566	-19.03761444	**0.282242452**	**0.000035**	0.282033993	**7.4**	**1.4**	0.282577724	1374044274	924533751	924.533751	1491982826	1492.0	1499936167	**1499.9**	7.953341611	-0.994417675
G54 - 45	3	36.151	72	16.97	248.7	14	96.4	0.282423648	0.000026	0.000351	0.000019	0.01092	0.00054	1.46717	0.00004	-1.4841	0.0034	-1.245	0.056	4.88758E-05	-12.7783171	**0.282423421**	**0.000032**	0.282628625	**-7.3**	**1.1**	0.282493231	1130176622	1035924258	1035.924258	1676590651	1676.6	1686690162	**1686.7**	10.09951079	-0.998545363
G54 - 46	3	36.154	72	17.13	619.5	14	99.9	0.282352647	0.000027	0.000423	0.000067	0.0161	0.0023	1.467229	0.00004	-1.4928	0.003	-1.344	0.064	5.89016E-05	-15.28910869	**0.282351962**	**0.000033**	0.282394124	**-1.5**	**1.2**	0.28252646	1226493461	991110489	991.110489	1604065167	1604.1	1613306711	**1613.3**	9.241543651	-0.998246976
G54 - 47	3	36.193	72	14.18	302.5	21	96.7	0.282384648	0.000031	0.001116	0.000027	0.0414	0.0011	1.46725	0.000038	-1.4892	0.0037	-1.301	0.019	0.0001554	-14.15748431	**0.282383767**	**0.000036**	0.282594701	**-7.5**	**1.3**	0.282468722	1186156952	1072059272	1072.059272	1730021724	1730.0	1740726776	**1740.7**	10.70505181	-0.995375
G54 - 48	3	36.154	72	16.64	212	5.5	100.6	0.28248165	0.000026	0.0002324	0.0000038	0.00818	0.00012	1.467228	0.000037	-1.4784	0.0037	-1.263	0.087	3.23611E-05	-10.72724791	**0.282481521**	**0.000032**	0.282651746	**-6.0**	**1.1**	0.282541009	1051180020	970701026	970.7010256	1572278071	1572.3	1581167382	**1581.2**	8.889311357	-0.999036873
G54 - 49	3	32.974	66	12.04	234.7	8.7	100.3	0.282346647	0.000035	0.00122	0.000015	0.04588	0.00047	1.467302	0.000052	-1.5002	0.0039	-1.315	0.026	0.000169882	-15.50128826	**0.282345901**	**0.000039**	0.282637447	**-10.3**	**1.4**	0.282411773	1238106764	1149798250	1149.79825	1853969457	1854.0	1866253737	**1866.3**	12.28428017	-0.994943996
G54 - 50	3	36.192	72	17.57	443.8	14	97.8	0.282402648	0.000022	0.000098	0.000019	0.00384	0.00073	1.467259	0.000039	-1.4934	0.0028	-1.28	0.24	1.36462E-05	-13.52094559	**0.282402534**	**0.000029**	0.282505442	**-3.6**	**1.0**	0.282527337	1157548782	988775725	988.7757251	1602149601	1602.1	1611386488	**1611.4**	9.236886587	-0.999593862
G54 - 51	3	36.153	72	16.75	237.4	5.3	98.0	0.282537651	0.000021	0.000607	0.00004	0.0194	0.0011	1.467257	0.000036	-1.4901	0.0031	-1.31	0.037	8.45231E-05	-8.746905246	**0.282537275**	**0.000028**	0.282635746	**-3.5**	**1.0**	0.282603907	976560112.6	886477082	886.4770817	1434646124	1434.6	1442032749	**1442.0**	7.386625098	-0.997484431
G54 - 52	3	36.074	73	16.56	276.9	6.5	101.1	0.282629652	0.00003	0.001284	0.000074	0.0416	0.0022	1.467218	0.000034	-1.496	0.0034	-1.302	0.018	0.000178794	-5.493485157	**0.282628726**	**0.000035**	0.282610848	**0.6**	**1.3**	0.282706472	853493309.4	748536933	748.536933	1209449713	1209.4	1214680476	**1214.7**	5.23076284	-0.994678763
G54 - 53	3	36.151	72	16.11	399	9.8	97.8	0.28251765	0.000028	0.001237	0.000028	0.0442	0.0011	1.467232	0.000039	-1.4948	0.0036	-1.273	0.019	0.000172249	-9.454170483	**0.282516362**	**0.000033**	0.282533768	**-0.6**	**1.2**	0.282628519	1005981581	854896020	854.8960195	1380691653	1380.7	1387508602	**1387.5**	6.816949261	-0.994873544
G54 - 54	3	36.17	72	18.89	372.9	8.1	97.1	0.282392648	0.000025	0.00049	0.000014	0.0177	0.00045	1.467248	0.000038	-1.4942	0.0033	-1.334	0.032	6.82312E-05	-13.87457821	**0.282392171**	**0.000031**	0.282550259	**-5.6**	**1.1**	0.282496966	1172694017	1031370882	1031.370882	1668443900	1668.4	1678437520	**1678.4**	9.993620046	-0.99796931
G54 - 55	3	36.155	73	12.56	991	27	98.5	0.282282646	0.000029	0.0006	0.000021	0.02234	0.00069	1.467215	0.000047	-1.4925	0.0038	-1.328	0.049	8.35484E-05	-17.76453702	**0.282281085**	**0.000034**	0.282157547	**4.4**	**1.3**	0.282561198	1321830799	944538097	944.5380965	1528139376	1528.1	1536518854	**1536.5**	8.37947808	-0.997513441
G54 - 56	3	36.155	72	15.78	300.1	8.9	88.0	0.282339647	0.000026	0.00085	0.000017	0.03081	0.00046	1.467227	0.000042	-1.4881	0.0029	-1.276	0.025	0.00011836	-15.74883109	**0.282338982**	**0.000032**	0.282596215	**-9.1**	**1.1**	0.282423261	1245947520	1132711231	1132.711231	1828989904	1829.0	1840971569	**1841.0**	11.98166494	-0.996477375
G54 - 57	3	36.152	72	14.82	1069.3	21	96.0	0.282175643	0.000025	0.001143	0.000046	0.0428	0.0016	1.467276	0.000038	-1.4931	0.0039	-1.283	0.021	0.00015916	-21.54840603	**0.282172434**	**0.000031**	0.282107475	**2.3**	**1.2**	0.282474901	1468888692	1063767442	1063.767442	1716557477	1716.6	1727094621	**1727.1**	10.53714421	-0.995263105
G54 - 58	3	36.151	72	18.44	234.1	5.4	99.4	0.282613652	0.000019	0.00001213	0.0000002	0.000841	0.000017	1.467247	0.000037	-1.4919	0.003	-1.11	0.58	1.68907E-06	-6.059297346	**0.282613645**	**0.000026**	0.282637825	**-0.9**	**0.9**	0.282679348	871364803.9	782059531	782.0595305	1269097112	1269.1	1274898543	**1274.9**	5.801430911	-0.99994973
G54 - 59a	3	14.583	29	17.65	235.9	6.5	94.4	0.282419648	0.000038	0.000362	0.000016	0.01372	0.00051	1.46721	0.000087	-1.4924	0.0046	-1.28	0.065	5.04075E-05	-12.91977014	**0.282419426**	**0.000042**	0.282636691	**-7.7**	**1.5**	0.282485635	1135634241	1046262315	1046.262315	1693156065	1693.2	1703455244	**1703.5**	10.29917921	-0.998499776
G54 - 59b	3	20.952	42	15.65	235.9	6.5	94.4	0.282256645	0.000025	0.0004628	0.0000077	0.01677	0.00025	1.46719	0.000053	-1.4989	0.0044	-1.341	0.05	6.44437E-05	-18.68398182	**0.282256361**	**0.000031**	0.282636691	**-13.5**	**1.1**	0.28232257	1356251783	1267298909	1267.298909	2047539945	2047.5	2062585075	**2062.6**	15.04513047	-0.998082034
G54 - 60	3	36.154	72	13.53	952	23	94.4	0.282196644	0.000028	0.000578	0.000016	0.02144	0.00066	1.467252	0.000042	-1.4921	0.0039	-1.298	0.034	8.04849E-05	-20.80577753	**0.282195201**	**0.000033**	0.28218246	**0.5**	**1.2**	0.282464192	1437670846	1076148785	1076.148785	1739893119	1739.9	1750753986	**1750.8**	10.86086711	-0.997604615
G54 - 61	3	36.159	72	13.02	395.8	9.1	94.5	0.282405648	0.000035	0.000859	0.00001	0.03145	0.00029	1.467235	0.000043	-1.489	0.0038	-1.294	0.029	0.000119613	-13.41485581	**0.282404761**	**0.000039**	0.28253579	**-4.6**	**1.4**	0.282516015	1156620471	1006847421	1006.847421	1626872592	1626.9	1636354688	**1636.4**	9.482096464	-0.996440076
G54 - 62	3	36.152	72	16.74	211.4	5.1	95.9	0.282462649	0.000022	0.000182	0.000011	0.00618	0.00029	1.467218	0.00004	-1.4925	0.0033	-1.286	0.097	2.5343E-05	-11.39914988	**0.282462549**	**0.000029**	0.282652124	**-6.7**	**1.0**	0.282521868	1076721862	996486445	996.4864448	1614092328	1614.1	1623462896	**1623.5**	9.370568226	-0.999245744
G54 - 63	3	25.074	50	15.52	938	67	95.6	0.28198064	0.000033	0.000474	0.000013	0.01545	0.00051	1.46722	0.000044	-1.4975	0.0042	-1.268	0.06	6.60032E-05	-28.44424209	**0.281979473**	**0.000038**	0.282191399	**-7.5**	**1.4**	0.282244474	1727139712	1372712640	1372.71264	2216436600	2216.4	2234060208	**2234.1**	17.6236088	-0.998035618
G54 - 64	3	36.162	72	14.54	210.1	4.6	101.4	0.282474649	0.000025	0.0001624	0.0000035	0.005482	0.000087	1.467168	0.000046	-1.4693	0.0043	-1.22	0.12	2.26138E-05	-10.97479074	**0.282474561**	**0.000031**	0.282652943	**-6.3**	**1.1**	0.282533515	1060398713	980624786	980.6247862	1588654838	1588.7	1597733737	**1597.7**	9.07889898	-0.999326971
G54 - 65	3	36.154	72	17.3	258.8	7	99.2	0.282450649	0.000024	0.0001697	0.0000049	0.00707	0.00013	1.467217	0.000037	-1.4827	0.0033	-1.344	0.078	2.36303E-05	-11.82350903	**0.282450534**	**0.000030**	0.282622259	**-6.1**	**1.1**	0.282523187	1092918391	994655410	994.6554097	1611213505	1611.2	1620551347	**1620.6**	9.33784164	-0.999296718
G54 - 66	3	36.058	72	17.04	227.2	4.7	99.1	0.282433649	0.000027	0.0004454	0.0000086	0.01719	0.00032	1.467264	0.000044	-1.495	0.0032	-1.374	0.033	6.20208E-05	-12.42468448	**0.282433385**	**0.000033**	0.282642172	**-7.4**	**1.2**	0.282497147	1117016206	1030961149	1030.961149	1668048289	1668.0	1678039840	**1678.0**	9.991551343	-0.998154144
G54 - 67	3	36.197	72	12.77	377.9	16	95.7	0.282403648	0.000027	0.000916	0.000038	0.0315	0.0012	1.467254	0.000045	-1.4848	0.0038	-1.313	0.029	0.000127551	-13.48558233	**0.282402745**	**0.000033**	0.282547101	**-5.1**	**1.2**	0.28250895	1159566135	1016654416	1016.654416	1642294917	1642.3	1651954240	**1652.0**	9.659323108	-0.996203853
G54 - 68	3	24.447	48	13.5	262.9	5.7	99.2	0.282589652	0.000026	0.001019	0.00001	0.03149	0.00045	1.467196	0.000061	-1.4951	0.004	-1.306	0.026	0.000141893	-6.90801563	**0.282588954**	**0.000032**	0.282619674	**-1.1**	**1.1**	0.28266276	907204200.7	807519626	807.5196258	1305542520	1305.5	1311646058	**1311.6**	6.103537762	-0.995776994
G54 - 69	3	30.015	60	13.79	223.4	5.2	96.8	0.28250965	0.000032	0.000554	0.000011	0.01429	0.00036	1.46719	0.000048	-1.469	0.0044	-1.289	0.066	7.7143E-05	-9.737076578	**0.282509328**	**0.000037**	0.282644566	**-4.8**	**1.3**	0.282572021	1014393230	929672009	929.6720087	1504461536	1504.5	1512586257	**1512.6**	8.124720762	-0.997704077
G54 - 70	3	36.16	73	15.09	518	12	92.7	0.282342647	0.000025	0.00087	0.000012	0.03121	0.00025	1.46722	0.000035	-1.4935	0.0032	-1.29	0.027	0.000121145	-15.64274131	**0.282341469**	**0.000031**	0.282458476	**-4.1**	**1.1**	0.282487239	1241977137	1045979218	1045.979218	1689658871	1689.7	1699885321	**1699.9**	10.22644952	-0.996394489
G54 - 71	3	36.168	73	12.78	888	22	89.9	0.282087642	0.000031	0.000806	0.000012	0.02933	0.00065	1.467243	0.000043	-1.4972	0.0036	-1.302	0.035	0.000112233	-24.66037307	**0.282085765**	**0.000036**	0.282223304	**-4.9**	**1.3**	0.282336523	1585543621	1249977892	1249.977892	2017308673	2017.3	2031884026	**2031.9**	14.57535256	-0.996659722
G54 - 72	3	36.159	72	17.32	441.3	12	89.2	0.282401648	0.000027	0.0004773	0.0000056	0.01721	0.00022	1.467237	0.000039	-1.4902	0.0031	-1.328	0.041	6.64627E-05	-13.55630886	**0.282401098**	**0.000033**	0.282507024	**-3.7**	**1.2**	0.282525195	1160463478	993019674	993.0196741	1606828492	1606.8	1616099074	**1616.1**	9.27058184	-0.998021942
G54 - 73	3	33.533	67	11.84	2632	38	88.6	0.280975619	0.000028	0.000641	0.000014	0.02325	0.00069	1.467239	0.000049	-1.4966	0.0037	-1.295	0.033	8.92575E-05	-63.98432024	**0.280971124**	**0.000033**	0.281092675	**-4.3**	**1.3**	0.281726626	3057954161	2067389577	2067.389577	3323099541	3323.1	3362611187	**3362.6**	39.51164623	-0.997343526
G54 - 74a	3	15.827	32	16.01	241.2	44	94.2	0.282042641	0.000051	0.0002293	0.0000089	0.00816	0.00026	1.467216	0.000056	-1.4879	0.0042	-1.34	0.12	3.19294E-05	-26.25171986	**0.282042497**	**0.000054**	0.282633351	**-20.9**	**1.9**	0.282110197	1642636675	1552043510	1552.04351	2505595080	2505.6	2528139863	**2528.1**	22.54478309	-0.99904972
G54 - 74b	3	16.638	33	12.79	241.2	44	94.2	0.281705634	0.000053	0.0003409	0.0000086	0.01158	0.00028	1.4673	0.000069	-1.4946	0.0048	-1.365	0.099	4.74694E-05	-38.1691391	**0.28170542**	**0.000056**	0.282633351	**-32.8**	**2.0**	0.28177312	2093111895	2003335421	2003.335421	3224668344	3224.7	3261945949	**3261.9**	37.27760502	-0.99858722
																																		1812.5		
GJ-1 - 1	1	24.67	49	14.81	602	3	100	0.282011	0.000026	0.00029498	0.00000019	0.01005	0.000056	1.467166	0.000043	-1.511	0.0038	-1.354	0.061	4.10752E-05	-27.37061725	**0.282010536**	**0.000032**	0.282405228	**-14.0**	**1.1**	0.282180077	1685405787	1458512409	1458.512409	2355307356	2355.3	2375225370	**2375.2**	19.91801411	-0.998777525
GJ-1 - 2	1	29.741	59	14.22	602	3	100	0.282022	0.000021	0.00029507	0.00000016	0.01001	0.000045	1.467149	0.00004	-1.5185	0.0033	-1.243	0.063	4.10877E-05	-26.98162915	**0.282021536**	**0.000028**	0.282405228	**-13.6**	**1.0**	0.282191077	1670674016	1443718209	1443.718209	2331611937	2331.6	2351131867	**2351.1**	19.51992966	-0.998777152
GJ-1 - 3	1	25.268	51	14.1	602	3	100	0.282009	0.000027	0.00027595	0.00000021	0.009411	0.000051	1.467209	0.000032	-1.5062	0.0041	-1.309	0.068	3.84253E-05	-27.44134236	**0.282008566**	**0.000033**	0.282405228	**-14.0**	**1.2**	0.282178107	1687970349	1461063127	1461.063127	2359550044	2359.6	2379541955	**2379.5**	19.99191107	-0.99885639
GJ-1 - 4	1	19.668	39	15.55	602	3	100	0.282029	0.000024	0.00029238	0.00000022	0.010076	0.000063	1.467205	0.000044	-1.5104	0.0035	-1.26	0.077	4.07131E-05	-26.73409127	**0.28202854**	**0.000030**	0.282405228	**-13.3**	**1.1**	0.282198081	1661280993	1434281799	1434.281799	2316518256	2316.5	2335787004	**2335.8**	19.2687486	-0.9987883
GJ-1 - 5	1	36.886	74	13.62	602	3	100	0.282007	0.000021	0.00027766	0.00000039	0.009519	0.000037	1.467175	0.000046	-1.5016	0.0028	-1.301	0.06	3.86634E-05	-27.51206747	**0.282006563**	**0.000028**	0.282405228	**-14.1**	**1.0**	0.282176104	1690658426	1463764838	1463.764838	2363862686	2363.9	2383927419	**2383.9**	20.06473276	-0.998849303
GJ-1 - 6	1	32.012	64	13.49	602	3	100	0.282027	0.000025	0.00029103	0.00000023	0.009809	0.000034	1.467185	0.000033	-1.5063	0.0032	-1.342	0.07	4.05251E-05	-26.80481638	**0.282026542**	**0.000031**	0.282405228	**-13.4**	**1.1**	0.282196083	1663952393	1436962790	1436.96279	2320823984	2320.8	2340164458	**2340.2**	19.34047409	-0.998793894
GJ-1 - 7	1	36.246	72	14.12	602	3	100	0.282008	0.000025	0.00027755	0.00000019	0.00936	0.000058	1.467209	0.000044	-1.5047	0.0035	-1.3	0.067	3.86481E-05	-27.47670492	**0.282007563**	**0.000031**	0.282405228	**-14.1**	**1.1**	0.282177104	1689318851	1462419433	1462.419433	2361708933	2361.7	2381737196	**2381.7**	20.02826277	-0.998849759
GJ-1 - 8	1	30.518	61	14.47	602	3	100	0.282015	0.000019	0.00029153	0.0000002	0.009877	0.000062	1.467183	0.000042	-1.5009	0.0029	-1.351	0.065	4.05948E-05	-27.22916704	**0.282014541**	**0.000026**	0.282405228	**-13.8**	**0.9**	0.282184082	1680028555	1453107864	1453.107864	2346680246	2346.7	2366453259	**2366.5**	19.77301264	-0.998791822
GJ-1 - 9	1	30.936	62	14.25	602	3	100	0.282001	0.000024	0.00029432	0.00000017	0.009832	0.000043	1.467198	0.00004	-1.4985	0.0029	-1.238	0.061	4.09833E-05	-27.7242428	**0.282000537**	**0.000030**	0.282405228	**-14.3**	**1.1**	0.282170078	1698791309	1471953889	1471.953889	2376837594	2376.8	2397120858	**2397.1**	20.28326311	-0.99878026
GJ-1 - 10	1	31.585	63	13.98	602	3	100	0.282024	0.000022	0.00028478	0.00000026	0.009613	0.000029	1.467176	0.000033	-1.4937	0.0037	-1.31	0.054	3.96548E-05	-26.91090404	**0.282023552**	**0.000029**	0.282405228	**-13.5**	**1.0**	0.282193093	1667934269	1440953450	1440.95345	2327267600	2327.3	2346716137	**2346.7**	19.44853729	-0.998819796
GJ-1 - 14	2	36.154	72	12.34	602	3	100	0.282027898	0.000022	0.00029176	0.00000023	0.010237	0.00005	1.46713	0.000038	-1.5314	0.0036	-1.278	0.055	4.06268E-05	-26.77306434	**0.282027439**	**0.000029**	0.282405228	**-13.4**	**1.0**	0.28219698	1662753817	1435760072	1435.760072	2318891391	2318.9	2338199641	**2338.2**	19.30825031	-0.998790869
GJ-1 - 15	2	36.056	72	12.32	602	3	100	0.282011899	0.000027	0.00029252	0.00000017	0.01016	0.000055	1.467062	0.00004	-1.5446	0.0032	-1.297	0.066	4.07326E-05	-27.33883693	**0.282011438**	**0.000033**	0.282405228	**-13.9**	**1.2**	0.282180979	1684187657	1457285910	1457.28591	2353363470	2353.4	2373248960	**2373.2**	19.88548954	-0.99878772
GJ-1 - 16	2	19.284	39	12.34	602	3	100	0.282023898	0.000026	0.00029226	0.00000019	0.010008	0.000036	1.467156	0.000065	-1.5364	0.0043	-1.237	0.092	4.06964E-05	-26.91450749	**0.282023438**	**0.000032**	0.282405228	**-13.5**	**1.1**	0.282192979	1668114899	1441144572	1441.144572	2327512542	2327.5	2346964325	**2347.0**	19.45178353	-0.998788797
GJ-1 - 17	2	36.062	72	12.64	602	3	100	0.282005899	0.00002	0.00029288	0.00000022	0.010011	0.000059	1.467196	0.000039	-1.5456	0.0037	-1.302	0.068	4.07828E-05	-27.55100164	**0.282005438**	**0.000027**	0.282405228	**-14.2**	**1.0**	0.282174979	1692223615	1465356448	1465.356448	2366285036	2366.3	2386389072	**2386.4**	20.10403619	-0.998786228
GJ-1 - 18	2	33.707	67	12.06	602	3	100	0.282014899	0.000029	0.00030065	0.00000021	0.010331	0.000052	1.467131	0.000039	-1.5374	0.0033	-1.248	0.071	4.18647E-05	-27.23275457	**0.282014425**	**0.000034**	0.282405228	**-13.8**	**1.2**	0.282183966	1680218617	1453310588	1453.310588	2346929690	2346.9	2366705857	**2366.7**	19.7761667	-0.998754027
GJ-1 - 6	3	36.152	72	10.65	602	3	100	0.28201964	0.00003	0.00025204	0.00000034	0.008675	0.00005	1.46725	0.000046	-1.5098	0.004	-1.23	0.12	3.50959E-05	-27.06507488	**0.282019244**	**0.000035**	0.282405228	**-13.7**	**1.3**	0.282188785	1673580011	1446580614	1446.580614	2336550121	2336.6	2356157554	**2356.2**	19.60743354	-0.998955479
GJ-1 - 7	3	35.021	70	10.74	602	3	100	0.28199264	0.00003	0.00025328	0.0000003	0.008672	0.000054	1.46721	0.00005	-1.5085	0.0044	-1.38	0.11	3.52686E-05	-28.01988295	**0.281992241**	**0.000035**	0.282405228	**-14.6**	**1.3**	0.282161782	1709734569	1482890282	1482.890282	2394693655	2394.7	2415287165	**2415.3**	20.59351005	-0.998950341
GJ-1 - 8	3	36.226	73	10.56	602	3	100	0.28201164	0.00003	0.00025152	0.00000032	0.008628	0.000054	1.467218	0.000052	-1.5073	0.0041	-1.29	0.12	3.50235E-05	-27.34798097	**0.282011244**	**0.000035**	0.282405228	**-14.0**	**1.3**	0.282180785	1684289698	1457335106	1457.335106	2353781408	2353.8	2373678662	**2373.7**	19.89725451	-0.998957634
GJ-1 - 9	3	36.161	72	10.59	602	3	100	0.28201764	0.000024	0.0002549	0.0000003	0.0087	0.000049	1.467201	0.000055	-1.5035	0.0042	-1.306	0.097	3.54941E-05	-27.1358014	**0.282017239**	**0.000030**	0.282405228	**-13.7**	**1.1**	0.28218678	1676275363	1449291129	1449.291129	2340868600	2340.9	2360548129	**2360.5**	19.67952904	-0.998943627
GJ-1 - 10	3	32.017	64	10.52	602	3	100	0.28201364	0.000031	0.00025143	0.00000029	0.008658	0.000054	1.467206	0.000047	-1.505	0.0041	-1.34	0.11	3.5011E-05	-27.27725445	**0.282013244**	**0.000036**	0.282405228	**-13.9**	**1.3**	0.282182786	1681611173	1454645090	1454.64509	2349473360	2349.5	2369297982	**2369.3**	19.82462194	-0.998958007
MT - 1	1	36.34	73	18.7	570	2	100	0.282515	0.00002	0.000035	0.00000011	0.001412	0.000013	1.467214	0.000032	-1.5109	0.0029	-1.4	0.26	4.87366E-06	-9.54788974	**0.282514948**	**0.000027**	0.282425523	**3.2**	**1.0**	0.282675429	1005272866	787455524	787.4555243	1277710023	1277.7	1283589412	**1283.6**	5.879389118	-0.999854951
MT - 2	1	35.213	70	19.49	570	2	100	0.282521	0.000018	0.00003437	0.0000001	0.001378	0.000013	1.467178	0.000035	-1.5215	0.0035	-1.51	0.34	4.78593E-06	-9.335714412	**0.282520949**	**0.000026**	0.282425523	**3.4**	**0.9**	0.28268143	997140236.3	779288969	779.2889686	1264521646	1264.5	1270280412	**1270.3**	-3.113457658	-0.999857562
MT - 3	1	37.185	74	18.79	570	2	100	0.282525	0.000019	0.00003443	0.00000011	0.001369	0.000012	1.46715	0.000033	-1.5135	0.0032	-1.26	0.33	4.79428E-06	-9.194264194	**0.282524949**	**0.000026**	0.282425523	**3.5**	**0.9**	0.28268543	991719510.3	773846224	773.8462236	1255729163	1255.7	1261408189	**1261.4**	-7.629756373	-0.999857313
MT - 4	1	16.424	33	19.44	570	2	100	0.282531	0.000027	0.0000349	0.00000017	0.00139	0.000015	1.467166	0.000054	-1.5196	0.0046	-1.16	0.47	4.85973E-06	-8.982088866	**0.282530948**	**0.000033**	0.282425523	**3.7**	**1.2**	0.282691429	983588717.5	765682872	765.6828719	1242538975	1242.5	1248099406	**1248.1**	7.782035254	-0.999855365
MT - 5	1	11.985	24	17.58	570	2	100	0.28253	0.000036	0.00003584	0.00000021	0.001388	0.000023	1.467164	0.000051	-1.5181	0.0046	-1.18	0.71	4.99062E-06	-9.017451421	**0.282529947**	**0.000040**	0.282425523	**3.7**	**1.4**	0.282690428	984947504.4	767048367	767.0483673	1244740901	1244.7	1250321011	**1250.3**	-23.26802776	-0.99985147
MT - 6	1	25.609	51	19.01	570	2	100	0.282543	0.000018	0.00003496	0.00000012	0.001429	0.000011	1.467215	0.000035	-1.5142	0.0039	-1.4	0.29	4.86809E-06	-8.557738211	**0.282542948**	**0.000026**	0.282425523	**4.2**	**0.9**	0.282703429	967320317.8	749348217	749.3482172	1216145968	1216.1	1221472874	**1221.5**	60.79176547	-0.999855116
MT - 7	1	23.689	47	19	570	2	100	0.282518	0.00002	0.00003547	0.00000013	0.001415	0.000011	1.467164	0.000037	-1.5092	0.0032	-1.46	0.3	4.9391E-06	-9.441802076	**0.282517947**	**0.000027**	0.282425523	**3.3**	**1.0**	0.282678428	1001209496	783376180	783.3761798	1271118811	1271.1	1276937733	**1276.9**	23.55954108	-0.999853003
MT - 8	1	22.878	46	17.21	570	2	100	0.28251	0.000022	0.00003542	0.00000017	0.0014	0.000014	1.467181	0.000041	-1.5038	0.0033	-1.22	0.43	4.93214E-06	-9.724702513	**0.282509947**	**0.000029**	0.282425523	**3.0**	**1.0**	0.282670428	1012048765	794259555	794.2595546	1288697513	1288.7	1294678352	**1294.7**	-51.69185245	-0.99985321
MT - 9	1	21.683	43	19.45	570	2	100	0.282536	0.000021	0.00003482	0.00000012	0.00139	0.000015	1.467189	0.000043	-1.5094	0.0044	-1.55	0.38	4.84859E-06	-8.805276093	**0.282535948**	**0.000028**	0.282425523	**3.9**	**1.0**	0.282696429	976810454.1	758876875	758.8768751	1231543125	1231.5	1237005661	**1237.0**	23.20884746	-0.999855697
MT - 10	1	14.725	29	20.12	570	2	100	0.282528	0.000027	0.00003403	0.00000015	0.001367	0.000015	1.467144	0.000054	-1.5103	0.0044	-1.02	0.39	4.73859E-06	-9.08817653	**0.282527949**	**0.000033**	0.282425523	**3.6**	**1.2**	0.28268843	987652041.2	769761677	769.7616774	1249132395	1249.1	1254751973	**1254.8**	-21.00273302	-0.999858971
MT - 11	1	24.329	49	18.9	570	2	100	0.28254	0.000018	0.00003476	0.00000012	0.001358	0.000015	1.467183	0.000044	-1.5182	0.0034	-1.19	0.39	4.84024E-06	-8.663825875	**0.282539948**	**0.000026**	0.282425523	**4.1**	**0.9**	0.282700429	971387242.4	753431477	753.4314766	1222744833	1222.7	1228129662	**1228.1**	23.13147211	-0.999855945
MT - 12	1	23.048	46	19.55	570	2	100	0.282532	0.000026	0.00003352	0.00000012	0.001346	0.000011	1.467157	0.000038	-1.507	0.0025	-1.39	0.38	4.66757E-06	-8.946726312	**0.28253195**	**0.000032**	0.282425523	**3.8**	**1.1**	0.282692431	982228368.1	764315260	764.3152603	1240335518	1240.3	1245876305	**1245.9**	16.63805372	-0.999861084
MT - 13	1	29.664	59	19.19	570	2	100	0.282527	0.000019	0.00003502	0.00000014	0.001386	0.000011	1.46716	0.000033	-1.5088	0.0031	-1.27	0.26	4.87644E-06	-9.123539084	**0.282526948**	**0.000026**	0.282425523	**3.6**	**0.9**	0.282687429	989010910.4	771127317	771.127317	1251334214	1251.3	1256973571	**1257.0**	21.16857854	-0.999854868
MT - 14	1	23.902	48	17.92	570	2	100	0.28252	0.000025	0.00003572	0.00000015	0.001438	0.000014	1.467208	0.00004	-1.5046	0.0031	-1.68	0.44	4.97391E-06	-9.371076967	**0.282519947**	**0.000031**	0.282425523	**3.3**	**1.1**	0.282680428	998500178.4	780656132	780.656132	1266724011	1266.7	1272502792	**1272.5**	-14.186755	-0.999851967
MT - 15	1	24.858	50	17.63	570	2	100	0.282529	0.000024	0.00003516	0.0000001	0.001366	0.000012	1.467192	0.000042	-1.5056	0.0028	-0.94	0.37	4.89594E-06	-9.052813975	**0.282528948**	**0.000030**	0.282425523	**3.7**	**1.1**	0.282689429	986300583.5	768406116	768.4061162	1246937430	1246.9	1252537256	**1252.5**	-3.276295815	-0.999854288
MT - 16	1	21.597	43	17.74	570	2	100	0.282533	0.000021	0.00003458	0.00000016	0.001374	0.000015	1.467204	0.000046	-1.4992	0.0038	-1	0.36	4.81517E-06	-8.911363757	**0.282532948**	**0.000028**	0.282425523	**3.8**	**1.0**	0.282693429	980876509.9	762959209	762.9592095	1238139963	1238.1	1243661134	**1243.7**	29.92507895	-0.999856691
MT - 17	1	13.146	26	16.64	570	2	100	0.282522	0.000036	0.00003518	0.0000002	0.001382	0.000017	1.467143	0.000055	-1.4995	0.0046	-1.21	0.43	4.89872E-06	-9.300351857	**0.282521948**	**0.000040**	0.282425523	**3.4**	**1.4**	0.282682428	995787921.6	777932150	777.9321498	1262326264	1262.3	1268065042	**1268.1**	14.60453548	-0.999854205
MT - 18	1	36.007	72	18.48	570	2	100	0.282518	0.000021	0.00003335	0.00000014	0.001312	0.000012	1.467212	0.000037	-1.4946	0.0028	-1.22	0.31	4.6439E-06	-9.441802076	**0.28251795**	**0.000028**	0.282425523	**3.3**	**1.0**	0.282678431	1001201948	783365965	783.3659651	1271111870	1271.1	1276930799	**1276.9**	-0.831751765	-0.999861789
MT - 19	1	36.007	72	18.42	570	2	100	0.282521	0.000017	0.00003428	0.00000011	0.001354	0.000011	1.4672	0.000036	-1.4929	0.0034	-1.44	0.28	4.7734E-06	-9.335714412	**0.282520949**	**0.000025**	0.282425523	**3.4**	**0.9**	0.28268143	997139917.1	779288536	779.2885362	1264521352	1264.5	1270280118	**1270.3**	-9.767087846	-0.999857935
MT - 20	1	36.007	72	18.66	570	2	100	0.282528	0.000018	0.00003473	0.00000011	0.001351	0.000012	1.467185	0.000034	-1.4963	0.003	-1.18	0.25	4.83606E-06	-9.08817653	**0.282527948**	**0.000026**	0.282425523	**3.6**	**0.9**	0.282688429	987654499.9	769765017	769.7650168	1249134688	1249.1	1254754264	**1254.8**	23.64741541	-0.99985607
MT - 28	2	27.957	56	15.97	570	2	100	0.282519873	0.000019	0.0000352	0.00000015	0.001408	0.000012	1.467192	0.000036	-1.5436	0.0035	-1.53	0.38	4.90151E-06	-9.375557402	**0.282519821**	**0.000026**	0.282425523	**3.3**	**0.9**	0.282680302	998670027.4	780826027	780.8260266	1267000782	1267.0	1272782103	**1272.8**	30.17345166	-0.999854122
MT - 29	2	34.689	69	16.8	570	2	100	0.282508874	0.000022	0.00003506	0.00000011	0.00142	0.000012	1.467135	0.000035	-1.5437	0.003	-2	0.31	4.88201E-06	-9.764526053	**0.282508822**	**0.000029**	0.282425523	**2.9**	**1.0**	0.282669303	1013573147	795789700	795.7896998	1291170427	1291.2	1297174233	**1297.2**	-51.66042313	-0.999854702
MT - 30	2	23.492	47	16.14	570	2	100	0.282534873	0.000028	0.00003566	0.00000016	0.001433	0.000016	1.46716	0.000041	-1.5489	0.0041	-1.45	0.42	4.96556E-06	-8.845145605	**0.282534819**	**0.000033**	0.282425523	**3.9**	**1.2**	0.2826953	978341819.5	760415529	760.4155289	1234025470	1234.0	1239510004	**1239.5**	47.61545209	-0.999852216
MT - 31	2	23.317	47	16.23	570	2	100	0.282515874	0.000025	0.00003153	0.00000019	0.001255	0.000013	1.467187	0.000043	-1.5531	0.0034	-1.66	0.36	4.39047E-06	-9.517000548	**0.282515827**	**0.000031**	0.282425523	**3.2**	**1.1**	0.282676307	1004076904	786250374	786.2503736	1275779157	1275.8	1281640922	**1281.6**	-14.08743582	-0.999869331
MT - 32	2	19.997	40	15.31	570	2	100	0.282524873	0.000032	0.00003502	0.00000018	0.001375	0.000015	1.467139	0.000039	-1.5533	0.0038	-1.17	0.51	4.87644E-06	-9.19875347	**0.282524821**	**0.000037**	0.282425523	**3.5**	**1.3**	0.282685302	991893646.9	774021804	774.0218038	1256010175	1256.0	1261691721	**1261.7**	-9.845974306	-0.999854868
MT - 33	2	32.03	64	16.17	570	2	100	0.282531873	0.000019	0.00003519	0.00000015	0.001409	0.000011	1.46716	0.000035	-1.5512	0.0034	-1.28	0.3	4.90011E-06	-8.951227965	**0.28253182**	**0.000026**	0.282425523	**3.8**	**0.9**	0.282692301	982406762.9	764496460	764.4964598	1240620918	1240.6	1246164201	**1246.2**	29.9416056	-0.999854163
MT - 34	2	21.68	43	15.76	570	2	100	0.282520873	0.000027	0.00003467	0.00000014	0.001377	0.000016	1.467113	0.00005	-1.5478	0.0044	-1.05	0.45	4.8277E-06	-9.340196616	**0.282520822**	**0.000033**	0.282425523	**3.4**	**1.2**	0.282681302	997313067.2	779462877	779.462877	1264801223	1264.8	1270562524	**1270.6**	3.543725432	-0.999856318
MT - 35	2	24.544	49	15.54	570	2	100	0.282521873	0.000021	0.00003477	0.00000016	0.001375	0.000014	1.467164	0.000039	-1.5519	0.004	-1.46	0.41	4.84163E-06	-9.304835829	**0.282521821**	**0.000028**	0.282425523	**3.4**	**1.0**	0.282682302	995958309.1	778102722	778.1027218	1262603637	1262.6	1268344948	**1268.3**	-9.787448424	-0.999855904
MT - 36	2	34.712	69	16.18	570	2	100	0.282528873	0.000019	0.0000342	0.00000012	0.00137	0.000012	1.467118	0.000037	-1.5441	0.0032	-0.93	0.4	4.76226E-06	-9.057310324	**0.282528822**	**0.000026**	0.282425523	**3.7**	**0.9**	0.282689303	986469559.9	768574587	768.5745874	1247213851	1247.2	1252816189	**1252.8**	41.08786901	-0.999858266
MT - 37	2	36.062	72	16.06	570	2	100	0.282512874	0.000023	0.00003406	0.00000012	0.001361	0.000013	1.467131	0.000032	-1.5498	0.0038	-1.49	0.36	4.74276E-06	-9.623082908	**0.282512823**	**0.000029**	0.282425523	**3.1**	**1.0**	0.282673304	1008150545	790343760	790.3437603	1282379287	1282.4	1288301720	**1288.3**	-9.150888018	-0.999858846
MT - 15	3	36.153	72	15.82	570	2	100	0.28251965	0.000021	0.00002042	0.00000016	0.000865	0.000012	1.467246	0.000038	-1.5116	0.0037	-1.44	0.67	2.84343E-06	-9.383443959	**0.28251962**	**0.000028**	0.282425523	**3.3**	**1.0**	0.282680101	998919746.5	781058385	781.0583846	1267442558	1267.4	1273228399	**1273.2**	36.80062907	-0.999915374
MT - 16	3	37.036	74	16.3	570	2	100	0.28250565	0.000023	0.00001088	0.00000017	0.000459	0.000012	1.467198	0.000038	-1.5092	0.0032	-1.5	1.2	1.51501E-06	-9.878529625	**0.282505634**	**0.000029**	0.282425523	**2.8**	**1.0**	0.282666115	1017852986	800056920	800.0569199	1298173295	1298.2	1304243187	**1304.2**	-24.89609273	-0.99995491
MT - 17	3	25.194	50	15.26	570	2	100	0.28251965	0.000031	0.00003534	0.00000024	0.001529	0.000018	1.467197	0.000043	-1.5102	0.0037	-1.01	0.52	0.000004921	-9.383443959	**0.282519598**	**0.000036**	0.282425523	**3.3**	**1.3**	0.282680079	998972745.2	781130152	781.1301522	1267491411	1267.5	1273277202	**1273.3**	50.07881647	-0.999853542
MT - 18	3	29.146	58	15.96	570	2	100	0.28249965	0.00002	0.00001853	0.00000018	0.000786	0.000015	1.467228	0.000046	-1.5073	0.0043	-1.65	0.9	2.58025E-06	-10.0907092	**0.282499622**	**0.000027**	0.282425523	**2.6**	**1.0**	0.282660103	1026007600	808254264	808.2542643	1311376620	1311.4	1317570227	**1317.6**	-22.64677789	-0.999923207
MT - 19	3	36.102	72	15.45	570	2	100	0.28251265	0.000023	0.00001341	0.00000018	0.000561	0.000013	1.46723	0.00004	-1.5049	0.003	-1.3	1.1	1.86731E-06	-9.630986792	**0.28251263**	**0.000029**	0.282425523	**3.1**	**1.0**	0.282673111	1008379334	790547809	790.5478089	1282802798	1282.8	1288729842	**1288.7**	-2.947874716	-0.999944425
MT - 20	3	36.152	72	16.01	570	2	100	0.28251665	0.000021	0.00001213	0.0000002	0.000511	0.000012	1.467177	0.00004	-1.5095	0.0034	-1.4	1.2	1.68907E-06	-9.489533745	**0.282516632**	**0.000028**	0.282425523	**3.2**	**1.0**	0.282677113	1002955268	785100047	785.1000468	1274008752	1274.0	1279854923	**1279.9**	-7.442349336	-0.99994973
MT - 21	3	36.06	72	15.6	570	2	100	0.28252265	0.000022	0.00001802	0.0000002	0.000753	0.000013	1.467206	0.000043	-1.5059	0.0036	-1.4	0.86	2.50924E-06	-9.277354174	**0.282522623**	**0.000029**	0.282425523	**3.4**	**1.0**	0.282683104	994845861.7	776964911	776.9649106	1260840552	1260.8	1266566403	**1266.6**	30.11013484	-0.99992532
MT - 22	3	36.185	72	15.58	570	2	100	0.28251165	0.00002	0.00001442	0.00000017	0.000602	0.000011	1.467215	0.000043	-1.5038	0.0032	-1.43	0.85	2.00795E-06	-9.666350054	**0.282511629**	**0.000027**	0.282425523	**3.0**	**1.0**	0.28267211	1009737749	791913016	791.9130156	1285003342	1285.0	1290950686	**1291.0**	-0.701265661	-0.99994024
MT - 23	3	36.171	72	15.54	570	2	100	0.28251465	0.000026	0.0000157	0.00000017	0.000652	0.000013	1.467214	0.000037	-1.5076	0.0033	-1.21	0.94	2.18618E-06	-9.560260268	**0.282514627**	**0.000032**	0.282425523	**3.2**	**1.1**	0.282675108	1005677840	787838153	787.838153	1278415548	1278.4	1284302077	**1284.3**	3.666496614	-0.999934935
MT - 24	3	36.186	73	15.18	570	2	100	0.28251565	0.000019	0.00001499	0.0000002	0.000631	0.000012	1.46721	0.000044	-1.5033	0.0037	-1.7	1	2.08732E-06	-9.524897007	**0.282515628**	**0.000026**	0.282425523	**3.2**	**0.9**	0.282676109	1004320402	786474299	786.4742995	1276215715	1276.2	1282082044	**1282.1**	10.3282135	-0.999937877
MT - 25	3	36.218	72	15.44	570	2	100	0.28251365	0.000025	0.0000231	0.00000018	0.000984	0.000017	1.467273	0.000038	-1.5034	0.0035	-1.29	0.74	3.21661E-06	-9.59562353	**0.282513616**	**0.000031**	0.282425523	**3.1**	**1.1**	0.282674097	1007059206	789234348	789.2343479	1280637190	1280.6	1286543928	**1286.5**	-2.995282862	-0.999904267
MT - 26	3	32.121	64	15.29	570	2	100	0.28251765	0.000022	0.0000136	0.00000017	0.000563	0.000011	1.467247	0.000048	-1.5059	0.0033	-1.8	1.1	1.89376E-06	-9.454170483	**0.28251763**	**0.000029**	0.282425523	**3.3**	**1.0**	0.282678111	1001605549	783746654	783.7466538	1271815876	1271.8	1277641907	**1277.6**	19.20611681	-0.999943638

MT - 27	3	36.085	72	15.17	570	2	100	0.28251165	0.000023	0.00003623	0.00000017	0.001593	0.000015	1.467215	0.000044	-1.5037	0.0037	-1.68	0.4	5.04493E-06
MT - 28	3	36.152	72	15.54	570	2	100	0.28251765	0.000024	0.00001798	0.00000021	0.000752	0.000015	1.467226	0.000038	-1.5045	0.0039	-1.14	0.96	2.50367E-06
MT - 29	3	36.184	72	15.29	570	2	100	0.28250365	0.000025	0.00001564	0.00000018	0.000651	0.000014	1.467226	0.000043	-1.5023	0.0038	-1.1	1.1	2.17783E-06
MT - 30	3	36.151	73	15.37	570	2	100	0.28250265	0.000025	0.00001105	0.00000019	0.000474	0.000014	1.467244	0.000045	-1.501	0.0037	-1.9	1.4	1.53868E-06
Plesovice - 1	1	36.135	72	22.06	338	1	100	0.282484	0.000015	0.00013581	0.00000033	0.006869	0.000063	1.46714	0.00003	-1.5183	0.0029	-1.253	0.046	1.89112E-05
Plesovice - 2	1	22.109	44	21.5	338	1	100	0.282482	0.000023	0.00010276	0.00000017	0.005186	0.000018	1.467213	0.000041	-1.5164	0.0035	-1.2	0.084	1.43091E-05
Plesovice - 3	1	36.177	72	22.29	338	1	100	0.282486	0.000018	0.000186	0.0000027	0.009362	0.000095	1.467193	0.000028	-1.5124	0.0021	-1.279	0.043	0.0000259
Plesovice - 4	1	27.59	55	23.07	338	1	100	0.282479	0.000016	0.0001279	0.0000046	0.00632	0.00026	1.467186	0.000032	-1.5169	0.0032	-1.212	0.08	1.78097E-05
Plesovice - 5	1	23.1	46	19.9	338	1	100	0.282474	0.00002	0.00017139	0.00000024	0.00894	0.000023	1.467185	0.000046	-1.5162	0.0032	-1.246	0.053	2.38656E-05
Plesovice - 6	1	26.224	52	21.42	338	1	100	0.282483	0.000021	0.00010512	0.00000017	0.005255	0.000018	1.467188	0.000038	-1.5133	0.0033	-1.2	0.081	1.46377E-05
Plesovice - 7	1	31.269	63	21.81	338	1	100	0.282479	0.000019	0.00010734	0.00000041	0.005416	0.000011	1.467173	0.000031	-1.5014	0.0031	-1.19	0.07	1.49468E-05
Plesovice - 8	1	23.083	46	20.51	338	1	100	0.282487	0.000021	0.00012917	0.00000023	0.006635	0.000029	1.467187	0.000034	-1.4977	0.0032	-1.279	0.081	1.79866E-05
Plesovice - 9	1	27.274	55	21.73	338	1	100	0.282478	0.000016	0.00020141	0.00000016	0.010468	0.000043	1.467188	0.000042	-1.5018	0.0032	-1.254	0.04	2.80458E-05
Plesovice - 10	1	36.212	72	21.74	338	1	100	0.282485	0.000018	0.00007153	0.00000035	0.00363	0.000035	1.467222	0.000031	-1.4922	0.0022	-1.15	0.11	9.96036E-06
Plesovice - 16	2	36.153	72	18.85	338	1	100	0.282482875	0.000016	0.00012797	0.00000028	0.006348	0.000047	1.467165	0.000028	-1.5448	0.0026	-1.361	0.057	1.78195E-05
Plesovice - 17	2	18.811	38	20.19	338	1	100	0.282473876	0.000026	0.0000892	0.0000021	0.004823	0.000083	1.467116	0.000045	-1.5412	0.0036	-1.358	0.084	1.24209E-05
Plesovice - 18	2	36.161	72	19.49	338	1	100	0.282478875	0.000015	0.00010085	0.00000033	0.005174	0.000018	1.46718	0.000036	-1.5381	0.003	-1.298	0.064	1.40431E-05
Plesovice - 19	2	31.241	62	20.14	338	1	100	0.282481875	0.000019	0.00008841	0.00000012	0.004568	0.00003	1.467147	0.00003	-1.5456	0.0023	-1.323	0.089	1.23109E-05
Plesovice - 20	2	35.25	71	18.72	338	1	100	0.282481875	0.000017	0.00013039	0.00000022	0.006904	0.000039	1.467148	0.000037	-1.544	0.0026	-1.199	0.073	1.81565E-05
Plesovice - 6	3	36.056	72	15.89	338	1	100	0.282479649	0.000024	0.00009563	0.00000027	0.004984	0.000047	1.46724	0.000036	-1.5066	0.0034	-1.2	0.14	1.33162E-05
Plesovice - 7	3	29.499	59	15.92	338	1	100	0.282474649	0.000028	0.00012436	0.00000021	0.006617	0.000062	1.467241	0.000045	-1.5074	0.0038	-1.26	0.11	1.73168E-05
Plesovice - 8	3	36.154	72	15.51	338	1	100	0.28248565	0.000023	0.00012971	0.00000059	0.006579	0.000027	1.467196	0.000037	-1.507	0.0036	-1.29	0.1	1.80618E-05
Plesovice - 9	3	35.194	71	15.81	338	1	100	0.28249065	0.000027	0.00017185	0.00000032	0.009004	0.00005	1.467226	0.000033	-1.5136	0.0052	-1.263	0.078	2.39297E-05
Plesovice - 10	3	36.19	73	15.51	338	1	100	0.28248965	0.000021	0.00012445	0.00000044	0.006635	0.000068	1.467223	0.000041	-1.508	0.0033	-1.37	0.1	1.73293E-05
Temora - 1	1	33.804	68	15.03	417	2	100	0.282699	0.000026	0.0017054	0.0000093	0.062057	0.000097	1.46722	0.00004	-1.5117	0.0034	-1.275	0.015	0.000237472
Temora - 2	1	33.992	68	18.96	417	2	100	0.282688	0.000021	0.000654	0.000013	0.02196	0.00055	1.467192	0.000028	-1.5042	0.003	-1.291	0.021	9.10677E-05
Temora - 3	1	36.126	72	15.44	417	2	100	0.282684	0.000025	0.001243	0.000014	0.04117	0.00019	1.467192	0.00004	-1.5135	0.0027	-1.305	0.014	0.000173084
Temora - 4	1	36.126	72	18.77	417	2	100	0.2827	0.000026	0.001165	0.000028	0.04108	0.00077	1.467194	0.000037	-1.5108	0.0028	-1.281	0.015	0.000162223
Temora - 5	1	26.429	53	18.71	417	2	100	0.282722	0.000025	0.0017904	0.0000032	0.06305	0.00042	1.467164	0.000042	-1.5136	0.0033	-1.28	0.01	0.000249308
Temora - 6	1	36.058	72	16.01	417	2	100	0.282686	0.000024	0.0011668	0.0000085	0.04112	0.00045	1.467171	0.00004	-1.5104	0.0025	-1.289	0.017	0.000162474
Temora - 7	1	33.702	67	16.19	417	2	100	0.282659	0.000023	0.0011458	0.0000023	0.04166	0.00023	1.467181	0.000032	-1.4961	0.0032	-1.292	0.011	0.00015955
Temora - 8	1	22.408	45	19.12	417	2	100	0.282687	0.000025	0.00154047	0.00000054	0.0569	0.00034	1.467143	0.000051	-1.5025	0.0039	-1.293	0.014	0.000214506
Temora - 9	1	36.126	72	17.38	417	2	100	0.282682	0.000019	0.0008318	0.000004	0.02807	0.00031	1.467244	0.000031	-1.5021	0.0026	-1.3	0.022	0.000115826
Temora - 10	1	28.862	58	15.74	417	2	100	0.282676	0.00003	0.0014272	0.000003	0.05068	0.00012	1.467145	0.000037	-1.506	0.0027	-1.285	0.016	0.000198734
Temora - 11	1	23.561	47	15.88	417	2	100	0.282694	0.000031	0.00111091	0.00000048	0.04013	0.00018	1.467135	0.000037	-1.507	0.0039	-1.287	0.019	0.000154691
Temora - 12	1	36.126	72	19.36	417	2	100	0.282687	0.00002	0.000874	0.000013	0.02635	0.00034	1.467173	0.000037	-1.5016	0.0027	-1.268	0.017	0.000121702
Temora - 13	1	30.048	60	20.09	417	2	100	0.282678	0.000021	0.0012343	0.0000035	0.0403	0.00022	1.467204	0.000036	-1.5004	0.0029	-1.294	0.015	0.000171873
Temora - 14	1	31.175	62	15.8	417	2	100	0.282684	0.000031	0.001331	0.000012	0.04863	0.00064	1.46716	0.00004	-1.4949	0.0035	-1.285	0.019	0.000185338
Temora - 15	1	25.251	51	22.86	417	2	100	0.28268	0.000025	0.000718	0.000015	0.02493	0.00058	1.467154	0.000045	-1.4985	0.0034	-1.271	0.023	9.99796E-05
Temora - 16	1	13.931	28	20.04	417	2	100	0.28268	0.000033	0.0007658	0.0000012	0.027446	0.000086	1.467241	0.000059	-1.4866	0.0046	-1.306	0.034	0.000106636
Temora - 17	1	33.958	68	18.69	417	2	100	0.282676	0.000018	0.000554	0.000021	0.0183	0.0008	1.46719	0.000037	-1.4959	0.0027	-1.262	0.028	7.7143E-05
Temora - 18	1	22.912	46	18.44	417	2	100	0.282684	0.000036	0.0014022	0.000002	0.05161	0.00025	1.467155	0.000044	-1.4945	0.0022	-1.282	0.014	0.000195253
Temora - 19	1	32.865	66	17.79	417	2	100	0.282663	0.000019	0.000689	0.000013	0.0231	0.00023	1.467201	0.000032	-1.4893	0.0029	-1.293	0.021	9.59414E-05
Temora - 20	1	34.598	69	17.93	417	2	100	0.282674	0.000021	0.00048842	0.00000086	0.01683	0.00012	1.4672	0.000029	-1.4885	0.0026	-1.271	0.035	6.80112E-05
Temora - 21	2	36.179	72	15.24	417	2	100	0.282696864	0.000022	0.0014452	0.0000027	0.05175	0.00031	1.467182	0.000034	-1.5368	0.0029	-1.332	0.012	0.00020124
Temora - 22	2	13.896	28	17.44	417	2	100	0.282671866	0.00003	0.0007081	0.0000043	0.02487	0.00031	1.467127	0.000059	-1.5318	0.0049	-1.348	0.031	9.8601E-05
Temora - 23	2	27.016	54	14.09	417	2	100	0.282681865	0.000032	0.0012617	0.0000081	0.04622	0.00017	1.467143	0.000044	-1.5449	0.0044	-1.3	0.019	0.000175688
Temora - 24	2	22.849	46	14.19	417	2	100	0.282670866	0.000039	0.0009764	0.0000023	0.03197	0.00017	1.467135	0.000035	-1.5407	0.0035	-1.314	0.028	0.000135961
Temora - 25	2	35.857	72	14.15	417	2	100	0.282690865	0.000024	0.0009323	0.0000028	0.03299	0.00027	1.467121	0.000036	-1.5374	0.0032	-1.299	0.019	0.00012982
Temora - 26	2	20.208	40	11.88	417	2	100	0.282680865	0.000033	0.0011877	0.0000049	0.043409	0.000053	1.467167	0.000055	-1.5378	0.0047	-1.271	0.025	0.000165384
Temora - 27	2	33.099	66	15.68	417	2	100	0.282669866	0.000022	0.0006814	0.000003	0.02344	0.00013	1.467117	0.000043	-1.5327	0.0034	-1.335	0.024	9.48831E-05
Temora - 28	2	37.961	76	17.04	417	2	100	0.282678865	0.000027	0.0010583	0.0000076	0.03372	0.00022	1.467143	0.000044	-1.534	0.003	-1.286	0.021	0.000147365
Temora - 29	2	25.87	52	16.84	417	2	100	0.282683865	0.000029	0.0010227	0.0000054	0.03706	0.00029	1.467173	0.00004	-1.5303	0.004	-1.291	0.018	0.000142408
Temora - 30	2	36.085	72	13.26	417	2	100	0.282687865	0.000026	0.0013814	0.0000034	0.0508	0.00016	1.467143	0.000038	-1.5382	0.0027	-1.283	0.016	0.000192356
Temora - 11	3	36.658	74	12.91	417	2	100	0.282682654	0.000032	0.0009205	0.0000036	0.03465	0.00035	1.46724	0.000045	-1.5045	0.0036	-1.304	0.024	0.000128177
Temora - 12	3	32.881	66	13.36	417	2	100	0.282701654	0.000032	0.001626	0.000027	0.04988	0.00057	1.467215	0.000048	-1.503	0.004	-1.303	0.019	0.000226416
Temora - 13	3	34.388	69	11.59	417	2	100	0.282658653	0.00003	0.001367	0.000011	0.05068	0.00019	1.467211	0.000044	-1.5109	0.0043	-1.325	0.022	0.000190351
Temora - 14	3	24.826	49	13.25	417	2	100	0.282674653	0.000032	0.0005271	0.0000019	0.01715	0.00024	1.467241	0.000057	-1.4976	0.0047	-1.325	0.068	7.33973E-05
Temora - 15	3	36.152	73	14.54	417	2	100	0.282701654	0.000029	0.00136675	0.00000079	0.04876	0.00034	1.467216	0.000044	-1.5007	0.004	-1.309	0.017	0.000190316
Temora - 16	3	26.327	53	12.8	417	2	100	0.282693654	0.000034	0.001245	0.000011	0.04754	0.00072	1.467206	0.000069	-1.496	0.0044	-1.315	0.024	0.000173363
Temora - 17	3	18.895	37	11.8	417	2	100	0.282676653	0.000047	0.002508	0.00002	0.09882	0.00037	1.467219	0.000056	-1.4939	0.0051	-1.334	0.014	0.000349232
Temora - 18	3	30.862	61	12.68	417	2	100	0.282676653	0.000029	0.0012064	0.000005	0.04384	0.00012	1.467218	0.000045	-1.4987	0.0039	-1.317	0.021	0.000167988
Temora - 19	3	31.997	64	9.32	417	2	100	0.282715654	0.000042	0.001046	0.00002	0.03658	0.00056	1.467206	0.000053	-1.5136	0.0047	-1.285	0.037	0.000145653
Temora - 20	3	18.469	37	13.78	417	2	100	0.282676653	0.000039	0.0004578	0.0000037	0.016784	0.000035	1.46721	0.000063	-1.4978	0.005	-1.332	0.073	6.37474E-05

MT - 27	-9.666350054	**0.282511596**	**0.000029**	0.282425523	**3.0**	**1.0**	0.282672077	1009816054	792018754	792.0187539	1285074732	1285.1	1291021993	**1291.0**	-7.418499479	-0.999849853
MT - 28	-9.454170483	**0.282517623**	**0.000030**	0.282425523	**3.3**	**1.1**	0.282678104	1001621148	783767762	783.7677622	1271830216	1271.8	1277656232	**1277.7**	36.86276661	-0.999925486
MT - 29	-9.949256149	**0.282503627**	**0.000031**	0.282425523	**2.8**	**1.1**	0.282664108	1020579297	802800255	802.8002552	1302581997	1302.6	1308692983	**1308.7**	8.313023028	-0.999935184
MT - 30	-9.984619411	**0.282502633**	**0.000031**	0.282425523	**2.7**	**1.1**	0.282663114	1021917114	804137818	804.1378177	1304763405	1304.8	1310895020	**1310.9**	-1304.763405	-0.999954206
Plesovice - 1	-10.64412893	**0.28248388**	**0.000024**	0.282572298	**-3.1**	**0.8**	0.282578836	1047635654	919036582	919.0365819	1489547111	1489.5	1497530851	**1497.5**	7.983739744	-0.999437167
Plesovice - 2	-10.71485404	**0.282481909**	**0.000029**	0.282572298	**-3.2**	**1.0**	0.282576866	1050220934	921603807	921.6038075	1493860721	1493.9	1501892243	**1501.9**	8.031522597	-0.999574135
Plesovice - 3	-10.57340382	**0.282485836**	**0.000026**	0.282572298	**-3.1**	**0.9**	0.282580792	1045113338	916545073	916.5450732	1485266227	1485.3	1493201902	**1493.2**	7.935674974	-0.999229167
Plesovice - 4	-10.8209417	**0.282478887**	**0.000024**	0.282572298	**-3.3**	**0.9**	0.282573843	1054377482	925788807	925.7888071	1500474608	1500.5	1508576160	**1508.6**	8.101551271	-0.999469948
Plesovice - 5	-10.99775448	**0.282473849**	**0.000027**	0.282572298	**-3.5**	**1.0**	0.282568805	1061312013	932771941	932.7719412	1511499007	1511.5	1519717861	**1519.7**	8.218854246	-0.999289714
Plesovice - 6	-10.67949149	**0.282482907**	**0.000028**	0.282572298	**-3.2**	**1.0**	0.282577864	1048875562	920256933	920.2569333	1491676631	1491.7	1499684602	**1499.7**	8.007971163	-0.999564355
Plesovice - 7	-10.8209417	**0.282478905**	**0.000026**	0.282572298	**-3.3**	**0.9**	0.282573862	1054300414	925696457	925.6964575	1500434948	1500.4	1508537029	**1508.5**	8.102080208	-0.999555155
Plesovice - 8	-10.53804127	**0.282486886**	**0.000028**	0.282572298	**-3.0**	**1.0**	0.282581842	1043547715	914933939	914.9339388	1482967572	1483.0	1490881312	**1490.9**	7.913740618	-0.999464685
Plesovice - 9	-10.85630426	**0.282477822**	**0.000024**	0.282572298	**-3.3**	**0.9**	0.282572779	1056007629	927476864	927.4768641	1502804687	1502.8	1510927959	**1510.9**	8.123272875	-0.999165304
Plesovice - 10	-10.60876638	**0.282484937**	**0.000026**	0.282572298	**-3.1**	**0.9**	0.282579893	1046042167	917392064	917.392064	1487234265	1487.2	1495196196	**1495.2**	7.961930547	-0.999703561
Plesovice - 16	-10.6839065	**0.282482762**	**0.000024**	0.282572298	**-3.2**	**0.9**	0.282577719	1049129863	920528625	920.5286249	1491993972	1492.0	1500004296	**1500.0**	8.010323827	-0.999469658
Plesovice - 17	-11.00215358	**0.282473797**	**0.000032**	0.282572298	**-3.5**	**1.1**	0.282568753	1061170356	932569598	932.5695975	1511612667	1511.6	1519836639	**1519.8**	8.223971406	-0.999630332
Plesovice - 18	-10.82534965	**0.282478786**	**0.000024**	0.282572298	**-3.3**	**0.8**	0.282573743	1054444870	925836496	925.8364961	1500695204	1500.7	1508800394	**1508.8**	8.10519021	-0.999582051
Plesovice - 19	-10.71926729	**0.282481797**	**0.000026**	0.282572298	**-3.2**	**0.9**	0.282576753	1050336347	921708963	921.7089625	1494106173	1494.1	1502140994	**1502.1**	8.034821323	-0.999633606
Plesovice - 20	-10.71926729	**0.28248176**	**0.000025**	0.282572298	**-3.2**	**0.9**	0.282576716	1050493123	921896939	921.8969392	1494187161	1494.2	1502220916	**1502.2**	8.033754352	-0.999459629
Plesovice - 6	-10.79797443	**0.282479565**	**0.000030**	0.282572298	**-3.3**	**1.1**	0.282574521	1053377109	924762336	924.7623357	1498991064	1499.0	1507078118	**1507.1**	8.087054651	-0.999603684
Plesovice - 7	-10.97479074	**0.28247454**	**0.000033**	0.282572298	**-3.5**	**1.2**	0.282569496	1060255307	931678160	931.67816	1509987520	1510.0	1518192179	**1518.2**	8.204659536	-0.999484619
Plesovice - 8	-10.58579486	**0.282485535**	**0.000029**	0.282572298	**-3.1**	**1.0**	0.282580491	1045378744	916769767	916.7697667	1485924617	1485.9	1493869891	**1493.9**	7.945274197	-0.999462447
Plesovice - 9	-10.40897855	**0.282490498**	**0.000033**	0.282572298	**-2.9**	**1.2**	0.282585454	1038761789	910167861	910.1678613	1475059992	1475.1	1482887729	**1482.9**	7.82773726	-0.999287808
Plesovice - 10	-10.44434181	**0.28248954**	**0.000028**	0.282572298	**-2.9**	**1.0**	0.282584496	1039941273	911315360	911.3153599	1477157884	1477.2	1485010018	**1485.0**	7.852133733	-0.999484246
Temora - 1	-3.041179695	**0.282697144**	**0.000032**	0.28252239	**6.2**	**1.2**	0.282814381	759901670.1	601666574	601.6665745	971496873.6	971.5	974864611.3	**974.9**	3.367737675	-0.99293237
Temora - 2	-3.430167795	**0.282687288**	**0.000028**	0.28252239	**5.8**	**1.0**	0.282804525	772052860.4	612887640	612.8876396	993274084.6	993.3	996815962.4	**996.8**	3.541877738	-0.997289651
Temora - 3	-3.571618014	**0.282682647**	**0.000031**	0.28252239	**5.7**	**1.1**	0.282799884	779147143.4	620543261	620.5432609	1003525816	1003.5	1007128823	**1007.1**	3.60300659	-0.994848678
Temora - 4	-3.00581714	**0.282698732**	**0.000032**	0.28252239	**6.2**	**1.2**	0.282815969	757065364.7	598324282	598.3242825	967986913.7	968.0	971340921.9	**971.3**	3.354008208	-0.995171931
Temora - 5	-2.227840939	**0.282720051**	**0.000031**	0.28252239	**7.0**	**1.2**	0.282837288	728618445.8	570369253	570.3692533	920846292.1	920.8	923870715.8	**923.9**	3.024423747	-0.992580108
Temora - 6	-3.500892905	**0.28268473**	**0.000030**	0.28252239	**5.7**	**1.1**	0.282801967	776202150.1	617519511	617.5195111	998924995.7	998.9	1002496644	**1002.5**	3.571648213	-0.995164471
Temora - 7	-4.455681878	**0.282657753**	**0.000029**	0.28252239	**4.8**	**1.1**	0.28277499	813019048.8	654426330	654.4263302	1058482114	1058.5	1062492520	**1062.5**	4.010406152	-0.995251501
Temora - 8	-3.46553035	**0.282685323**	**0.000031**	0.28252239	**5.8**	**1.2**	0.28280256	775873146.6	617533280	617.5332798	997614373.9	997.6	1001168921	**1001.2**	3.554546653	-0.993615884
Temora - 9	-3.642343123	**0.282681095**	**0.000026**	0.28252239	**5.6**	**1.0**	0.282798331	780731407	621754843	621.7548431	1006954710	1007.0	1010591024	**1010.6**	3.636314104	-0.9965528
Temora - 10	-3.85451845	**0.282674447**	**0.000035**	0.28252239	**5.4**	**1.3**	0.282791683	790600123.9	632199583	632.1995827	1021635345	1021.6	1025365472	**1025.4**	3.730126795	-0.994085305
Temora - 11	-3.217992468	**0.282692791**	**0.000036**	0.28252239	**6.0**	**1.3**	0.282810028	765117450.1	606350574	606.3505739	981116348.3	981.1	984562981.5	**984.6**	3.4466332	-0.995396094
Temora - 12	-3.46553035	**0.282686049**	**0.000027**	0.28252239	**5.8**	**1.0**	0.282803285	774024914.2	615067097	615.0670966	996012103.7	996.0	999568998.2	**999.6**	3.556894526	-0.996377912
Temora - 13	-3.783793341	**0.282676657**	**0.000028**	0.28252239	**5.5**	**1.0**	0.282793893	787321730.1	628734093	628.7340927	1016755625	1016.8	1020454379	**1020.5**	3.698753957	-0.994884733
Temora - 14	-3.571618014	**0.282682551**	**0.000036**	0.28252239	**5.7**	**1.3**	0.282799788	779392603.4	620870358	620.8703581	1003737351	1003.7	1007340031	**1007.3**	3.602679924	-0.994483983
Temora - 15	-3.713068232	**0.282679219**	**0.000031**	0.28252239	**5.6**	**1.1**	0.282796455	783141986.7	624068349	624.0683494	1011098183	1011.1	1014766876	**1014.8**	3.668693412	-0.997024418
Temora - 16	-3.713068232	**0.282679167**	**0.000038**	0.28252239	**5.5**	**1.4**	0.282796403	783275722.3	624246256	624.2462562	1011213069	1011.2	1014881582	**1014.9**	3.668513509	-0.996826322
Temora - 17	-3.85451845	**0.282675397**	**0.000026**	0.28252239	**5.4**	**0.9**	0.282792634	788135794.5	628926953	628.9269526	1019537004	1019.5	1023270681	**1023.3**	3.733677512	-0.997704077
Temora - 18	-3.571618014	**0.282682474**	**0.000040**	0.28252239	**5.7**	**1.5**	0.282799711	779591316.1	621135160	621.13516	1003908502	1003.9	1007510916	**1007.5**	3.602413861	-0.994188911
Temora - 19	-4.31423166	**0.28266225**	**0.000026**	0.28252239	**5.0**	**1.0**	0.282779487	806240413.9	647208926	647.2089255	1048558415	1048.6	1052504452	**1052.5**	3.946037354	-0.997144601
Temora - 20	-3.92524356	**0.282673468**	**0.000028**	0.28252239	**5.3**	**1.0**	0.282790705	790676645.8	631415415	631.4154152	1023795372	1023.8	1027561705	**1027.6**	3.766333495	-0.997975858
Temora - 21	-3.116698198	**0.282695292**	**0.000029**	0.28252239	**6.1**	**1.1**	0.282812528	762115016.9	603646661	603.6466611	975590537.3	975.6	978991861.2	**979.0**	3.401323956	-0.994010708
Temora - 22	-4.00071786	**0.282671095**	**0.000035**	0.28252239	**5.3**	**1.3**	0.282788332	794207434.7	635157644	635.1576439	1029035286	1029.0	1032835428	**1032.8**	3.800142058	-0.997065446
Temora - 23	-3.647109995	**0.282680492**	**0.000037**	0.28252239	**5.6**	**1.4**	0.282797729	782116867.7	623538980	623.5389798	1008285744	1008.3	1011922593	**1011.9**	3.63684874	-0.994771181
Temora - 24	-4.036078646	**0.282669803**	**0.000043**	0.28252239	**5.2**	**1.6**	0.28278704	796334009.7	637536359	637.5363588	1031887410	1031.9	1035702706	**1035.7**	3.815296019	-0.995953539
Temora - 25	-3.328862917	**0.28268985**	**0.000030**	0.28252239	**5.9**	**1.1**	0.282807087	768909750.1	609990194	609.9901939	987614235.7	987.6	991110261.9	**991.1**	3.496026176	-0.996136302
Temora - 26	-3.682470782	**0.282679573**	**0.000038**	0.28252239	**5.6**	**1.4**	0.282796809	783275975.8	624633523	624.6335228	1010316259	1010.3	1013969331	**1014.0**	3.653072626	-0.995077856
Temora - 27	-4.071439433	**0.282669124**	**0.000029**	0.28252239	**5.2**	**1.0**	0.282786361	796858459.2	637792116	637.7921157	1033386086	1033.4	1037218999	**1037.2**	3.83291301	-0.997176098
Temora - 28	-3.753192355	**0.282677714**	**0.000033**	0.28252239	**5.5**	**1.2**	0.28279495	785644518.8	626890272	626.8902721	1014421759	1014.4	1018107328	**1018.1**	3.685569503	-0.995614124
Temora - 29	-3.576388422	**0.282682752**	**0.000034**	0.28252239	**5.7**	**1.3**	0.282799989	778717546.6	619910063	619.9100631	1003294213	1003.3	1006900166	**1006.9**	3.60595389	-0.99576166
Temora - 30	-3.434945276	**0.282686361**	**0.000032**	0.28252239	**5.8**	**1.2**	0.282803598	774248541.9	615757415	615.7574153	995321370	995.3	998862889	**998.9**	3.541519049	-0.994275112
Temora - 11	-3.619232279	**0.282681652**	**0.000037**	0.28252239	**5.6**	**1.3**	0.282798888	780086871.3	621189703	621.1897027	1005724502	1005.7	1009350081	**1009.4**	3.625579	-0.996185204
Temora - 12	-2.947330304	**0.282699884**	**0.000037**	0.28252239	**6.3**	**1.4**	0.282817121	756052038.4	597732319	597.7323193	965440265.7	965.4	968767713.8	**968.8**	3.327448118	-0.993261425
Temora - 13	-4.467950563	**0.282657165**	**0.000035**	0.28252239	**4.8**	**1.3**	0.282774402	814136786.8	655750582	655.750582	1059778786	1059.8	1063793848	**1063.8**	4.015061626	-0.994334789
Temora - 14	-3.902138374	**0.28267408**	**0.000037**	0.28252239	**5.4**	**1.3**	0.282791316	789895366.9	630667167	630.6671675	1022445707	1022.4	1026201287	**1026.2**	3.75557968	-0.997815558
Temora - 15	-2.947330304	**0.282700166**	**0.000034**	0.28252239	**6.3**	**1.3**	0.282817403	755350094.6	596789470	596.7894702	964816630.2	964.8	968144812	**968.1**	3.328181762	-0.994335825
Temora - 16	-3.230236399	**0.282692299**	**0.000039**	0.28252239	**6.0**	**1.4**	0.282809535	765957969.7	607316808	607.3168083	982203868.8	982.2	985655452.8	**985.7**	3.451583985	-0.99484039
Temora - 17	-3.83141185	**0.282673924**	**0.000050**	0.28252239	**5.4**	**1.9**	0.282791161	792774931.2	635379180	635.3791802	1022789758	1022.8	1026504671	**1026.5**	3.714913375	-0.989606183
Temora - 18	-3.83141185	**0.28267534**	**0.000034**	0.28252239	**5.4**	**1.3**	0.282792577	789082844.8	630474794	630.4747944	1019661988	1019.7	1023382507	**1023.4**	3.720518617	-0.995000358
Temora - 19	-2.452244638	**0.282714516**	**0.000046**	0.28252239	**6.8**	**1.7**	0.282831752	735351713.8	576436812	576.4368116	933090515.9	933.1	936209349.7	**936.2**	3.118833791	-0.995665099
Temora - 20	-3.83141185	**0.282676155**	**0.000043**	0.28252239	**5.4**	**1.5**	0.282793392	786974920.3	627674681	627.6746815	1017863006	1017.9	1021586503	**1021.6**	3.723497378	-0.998102755

f_{CC}	f_{DM}	^{176}Lu λ	$^{176}Lu/^{177}Hf$ CHUR	$^{176}Hf/^{177}Hf$ CHUR	$^{176}Lu/^{177}Hf$ DM	$^{176}Hf/^{177}Hf$ DM	$^{176}Lu/^{177}Hf$ Continental Crust	Av. 2SD
-0.55357	0.1547619	1.87E-11	0.0336	0.282785	0.0388	0.28325	0.015	1.8167E-05

Mafic magmatism during Middle Permian at ca. 272 Ma possibly related to a continuous Permian arc.

230 Ma anatexis and metamorphism of the Guajira Arch, during back-arc extension, updoming and migmatization of the lower crust.

223 Ma crustal attenuation and development of a mylonitic detatchment during core-complex emplacement.

Triassic εHf_i spectrum is dominated by juvenile compositions with the mixing of older crustal unradiogenic sources, whose T_{DM} model ages are indistinguishable from the Proterozoic Gondwanan basement.

190-150 Ma Early-Middle Jurassic Rifting, granitoid emplacement, and collateral arc volcanoclastic deposits and marine sediments.

Jurassic Trends of near CHUR to positive εHf_i values indicate mixing of primitive sources and slightly depleted compositions in the setting of a low-lying magmatic arc.

Declaration of interests

☒ The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

☐The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: