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Investigating Causes of Magmatic Episodicity in the Southern Coast Mountains Batholith, British Columbia: Insights from Hafnium and Oxygen Isotopes in Magmatic Zircon

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By

Emily Christine Homan

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The thesis of Emily Christine Homan is approved:

Dr. Margaret Rusmore Date

Dr. Joshua Schwartz Date

Dr. Robinson Cecil, Chair Date

California State University, Northridge

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ABSTRACT

INVESTIGATING CAUSES OF MAGMATIC EPISODICITY IN THE SOUTHERN COAST MOUNTAINS BATHOLITH, BRITISH COLUMBIA: INSIGHTS FROM HAFNIUM AND OXYGEN ISOTOPES IN MAGMATIC ZIRCON

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Continental arc magmatism is characterized by episodes of high-flux events, known as “flare-ups”, which alternate with periods of relatively low magmatic activity, referred to as “lulls”. The processes that control the tempos of arc magmatism remain unclear. In this study, new U-Pb ages, together with zircon hafnium and oxygen isotope analyses, are used to evaluate the timing and relative crustal incorporation of plutons of the southern Coast Mountains batholith (CMB), British Columbia. Interpretation of these data are used to evaluate the mechanisms that drive high-flux magmatism in continental arcs.

Seventeen new U-Pb ages and hafnium isotope signatures were determined for plutons located along Knight inlet. This new data was compiled with 34 previously determined pluton ages and εHf(t) signatures from adjacent regions of the batholith. This newly compiled data set reveals apparent high flux events at ca. 160-140 Ma, 120-90 Ma, and 80-70 Ma. The Hf isotope signatures from all dated samples of the southern batholith are juvenile, with pluton averages ranging from +7.7 to +14.4. There is some variability of Hf isotope values in time and space, though that variability does not correlate strongly with apparent high flux events or structural trends. Oxygen isotope analysis was performed on zircons from a subset of the compiled southern CMB sample set, yielding

uniformly mantle-like signatures (mean $\delta^{18}O$ of 23 batholith samples = +5.41 ± 0.19‰). The primitive oxygen and Hf isotopic signatures suggests that intermediate plutons of the southern CMB were likely generated from a mantle source. Variability and slight enrichments in the εHf(t) data are attributed to either: 1) limited incorporation of young (Paleozoic) crustal material, and/or 2) an isotopically enriched and heterogeneous mantle source. Time periods where εHf(t) values become more restricted and more primitive ("pull-ups") may have resulted from the cyclic delamination of an arc root, and melting promoted by the upwelling of isotopically depleted asthenosphere mantle.

These findings suggest that the input of melt-fertile crustal material is not a likely driving mechanism for flare-ups events in the southern CMB. Significant along-strike differences in the timing and isotopic character of the CMB indicate that the mechanisms that control episodic arc growth operate on a relatively short spatial scale (< 150 km). Finally, the large volumes of intermediate continental crust being generated in the CMB from a likely mantle source supports models of incremental growth of continental crust globally.

INTRODUCTION

Continental arcs are the primary settings where continental crust is generated and modified. Therefore, study of these arcs is broadly important to the growth of crust worldwide (Hawkesworth & Kemp, 2006). While continental arcs are important in this context, the rate and timescales of magmatic growth, and the degree to which preexisting crust is recycled at arcs is still a service of debate. Recently, it has been well documented that the tempo of magmatism within Cordilleran arc systems (i.e. Sierra Nevada, Peninsular Ranges, and Coast Mountains, Andes) is not steady state, and is instead marked by relatively short periods of high magmatic volume generation (flare-ups) alternating with periods of low magmatic activity (lulls) (e.g. Armstrong, 1988; Ducea and Barton, 2007; DeCelles et al., 2009, Paterson and Ducea, 2005). It has been estimated that ~90% of total batholithic volumes is generated during flare-ups events (Ducea and Barton, 2007). Although Cordilleran batholiths develop due to the subduction of oceanic lithosphere at convergent margins, the processes that control the tempo of magmatism are still unclear. One possibility is that flare-up events are controlled by lower plate processes, such as changes in the rate, obliquity or dip angle of subduction. In most North American arcs, such changes do not correlate with magmatic events and may not be the key drivers controlling arc tempo (Ducea, 2001; Kirsch et al., 2016). Another possibility is that tectonism within the upper plate is responsible for episodic magmatism. It has been proposed that upper plate processes, specifically shortening and underthrusting of melt-fertile crust to the base of the crust may trigger flare-ups (DeCelles et al., 2009). This mechanism is supported by isotopic and geochemical evidence that magma produced during flare-ups incorporate upper crustal material.

Recent studies of the Sierra Nevada batholith suggest that a significant amount of the melt must have been derived from felsic crustal material (Ducea, 2001; Ducea & Barton, 2007; Lackey et al., 2012). Evaluating between these models is important for understanding growth of continental arcs. Due to the complex tectonic setting in which the batholith was emplaced, the Coast Mountains batholith (CMB) in British Columbia is an ideal place to test the connections between episodic magmatism and incorporation of crustal material.

Here, we present 17 new zircon U-Pb and Hafnium isotopic measurements from plutons of the southern CMB. These data are combined with 34 U-Pb and Lu-Hf measurements previously collected from adjacent areas (Yokelson et al., 2016). The combined dataset is used to investigate the geochronology of pluton emplacement and potential assimilation of crustal material in the southern CMB. In addition to these data, a subset of 23 samples spanning all age and spatial domains were selected for oxygen isotope ratios in zircon (Fig. 1 and 2). The compiled isotopic data provide insight into the processes that control the tempo of magmatism throughout the batholith. We focus on the southern batholith because it allows for comparison with previously published U-Pb and Hf isotope zircon data of the central batholith and to test whether the magmatic-tectonic links evident in the central batholith occur in the less-studied southern batholith, where the nature and timing of deformation appears to differ (Cecil et al., 2011, 2016; Gehrels, et al., 2009; Rusmore et al., 2013).

The goals of this study are to use combined zircon U-Pb, Hf, and O isotopes from the southern Coast Mountains batholith to: 1) describe the tempo of magmatism in the southern CMB, 2) evaluate magma sources and estimate crustal contamination to the melt through εHf(t) and $\delta^{18}O$ zircon analysis, 3) deduce if such partial melting of fertile crust triggered magmatic flare-ups in the arc, 4) compare our U-Pb and Hf isotopic zircon data with the previously published U-Pb and Hf isotopic zircon data of the central batholith, where deformation appears to differ (Cecil et al., 2011; Gerhrels et al., 2009). If the tempo of magmatism is similar along strike of the batholith it suggests that large scale-lower plate processes control magma production. Alternatively, if tempo of magmatism differs between the central and southern CMB, smaller scale-upper plate processes may be responsible for magmatic flare-ups. Overall, this study will provide further insight into crustal generation and the contributions that magmatic tempos of continental arcs play in the global crustal budget.

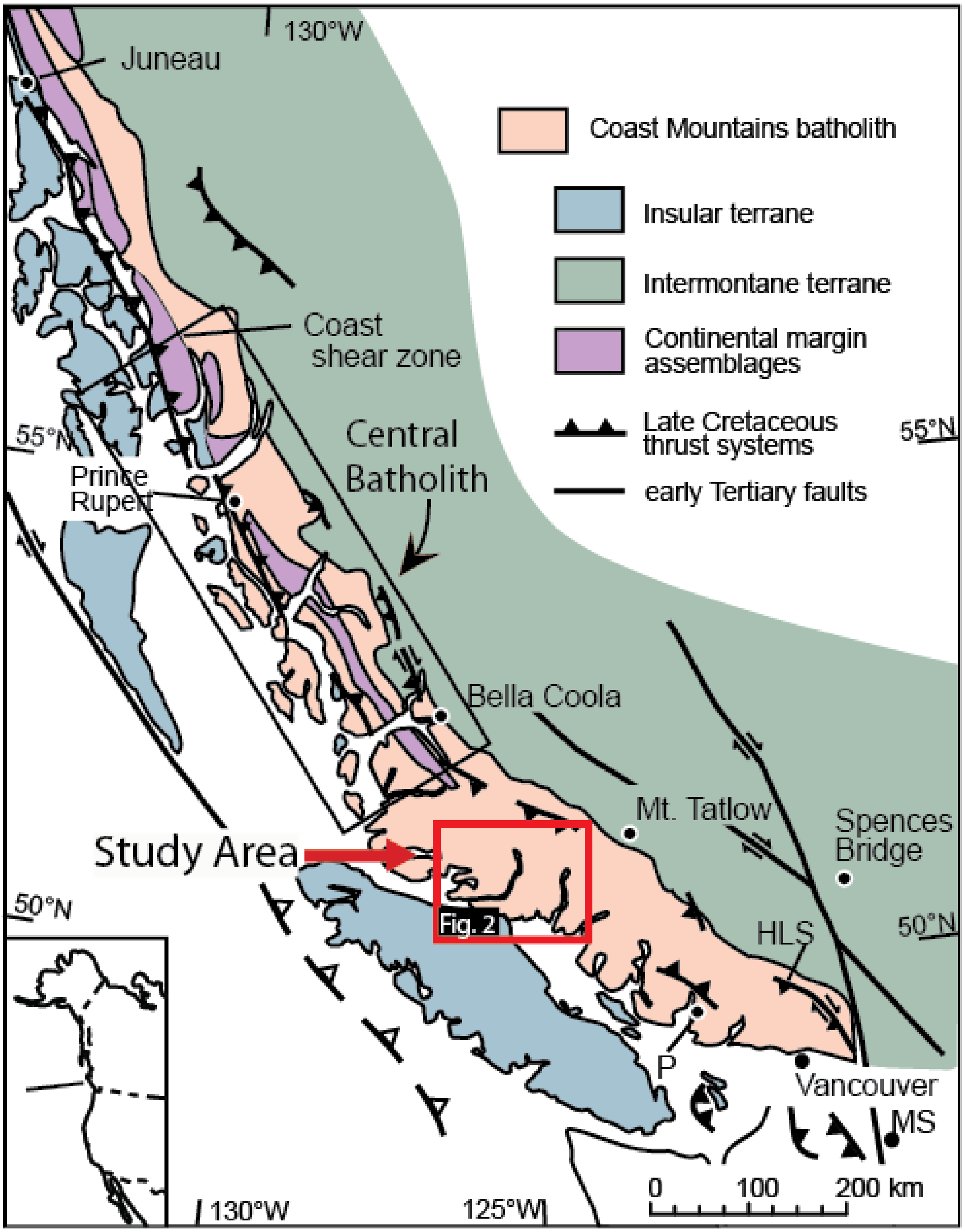

Figure 1. Generalized Geologic Map of the Coast Mountains Batholith. Black box represents the previously studied central CMB. Red box represents the study area shown in Fig. 2. Modified from Rusmore et al., 2013.

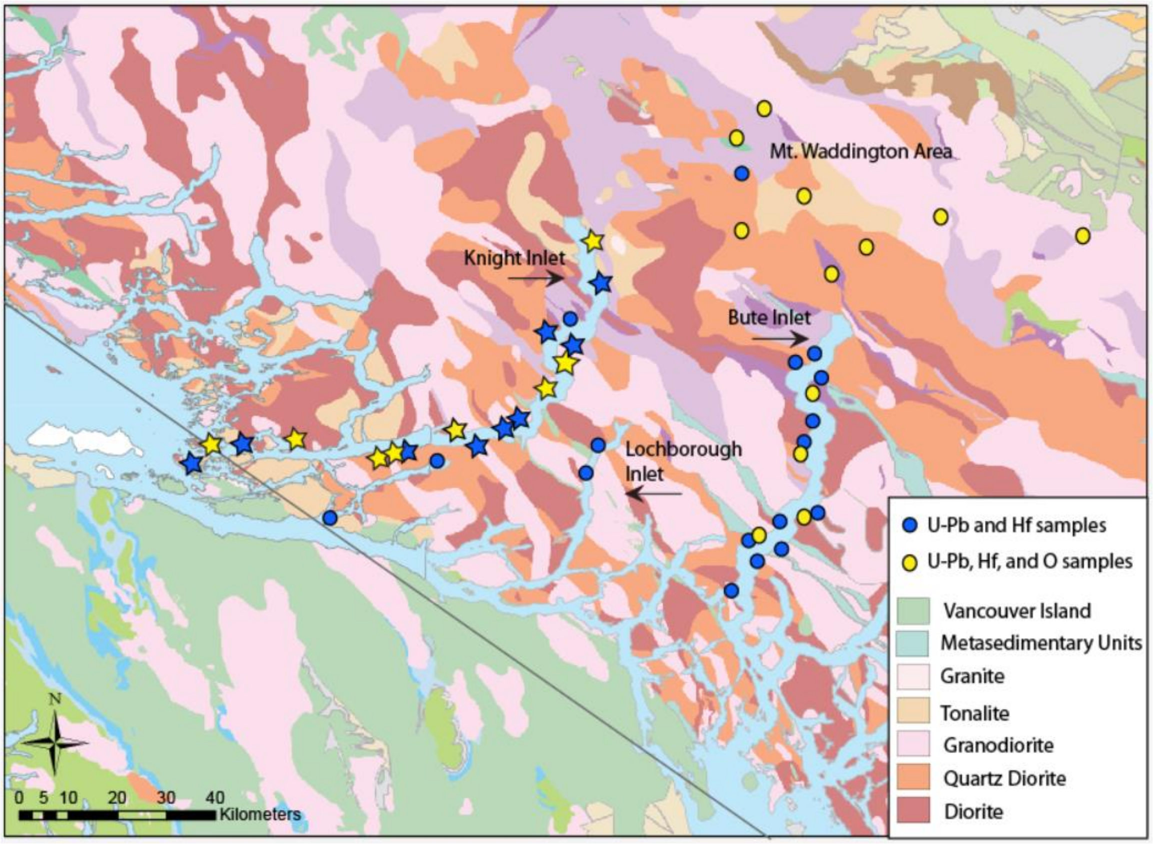

Figure 2. Sample locations from the Mt. Waddington area, Knight, Lochborough, and Bute Inlets in the southern CMB. Samples represented as stars are the 17 new samples presented in this study. Samples represented as dots were previously collected by Yokelson (2016). Blue samples were analyzed for U-Pb and Hf isotopic data only. Yellow samples were analyzed for U-Pb, Hf and O isotopic data.

GEOLOGIC BACKGROUND

The Coast Mountains batholith is a 1700 km long, northwest to southeast trending belt of Jurassic through Early Cenozoic plutonic rocks and associated pedants that extends from northern Washington through British Columbia and southeast Alaska into southwestern Yukon (Fig. 1) (Friedman and Armstrong, 1995). The arc formed as a product of the subduction of the paleopacific plate beneath the North American continent (Armstrong, 1988). The composition of the plutons range from gabbro through leucogranite, but the majority of the batholith comprises tonalite or granodiorite intrusions (Armstrong, 1988). Overall, the composition of the batholith becomes progressively more felsic to the east. Plutons in the west are dominated by quartz diorites whereas plutons to the east are dominated by tonalities and granodiorites (Friedman and Armstrong, 1995). In addition, Al-in-geobarometry of the southern batholith yields emplacement depths of ~2.4-4 Kbar (Rusmore et al., 2013).

The central and northern portion of the CMB (Fig. 1) is split into eastern and western domains by the Coast shear zone (CSZ), a 1600 km long shear zone with reverse displacement between 55-65 Ma on much of its length (e.g. Gehrels et al., 2009; Klepeis et al., 1998; Rusmore et al., 2001). Current mapping efforts in the southern CMB suggests that the CSZ may not extend into the area of study.

2.1. Country Rocks to the Batholith

The country rocks to the batholith are composed of several allochthonous terranes and discrete crustal fragments that were accreted onto the western margin from Jurassic to Eocene time (Coney et al., 1980; Gehrels et al., 2009; Monger et al., 1982; 1992). These terranes consist mainly of sedimentary and volcanic rocks and include from west to east, Wrangellia, Alexander, the Gravina belt, Yukon Tanana, and Stikine. The northwest trending batholith obscures the boundaries between these terranes and the amalgamation of the terranes onto the plate margin has complicated the early growth of the batholith. However, the arc has behaved as a stable, west-facing magmatic arc since the Mid-Cretaceous (Armstrong, 1988; Gehrels et al., 2009; Monger et al. 1982). Post ~100 Ma magmatism cuts across accretionary terranes and is considered the post-accretionary arc (Gehrels et al., 2009). The geology of the major accretionary terranes are briefly explained below.

The Wrangellia terrane consists of Upper Paleozoic metavolcanics and metasedimentary rocks and Triassic pillow basalts. Initial εNd values range from +1.0 to +7.3 and initial $^{87}Sr/^{86}Sr$ ratios range from 0.70323 to 0.70481. This isotopic signature demonstrates the unevolved juvenile nature of the terrane and further suggests that Wrangellia formed in an intra-oceanic environment until its accretion to North America (Nelson et al., 2013; Samson et al., 1990).

The Alexander terrane reveals a complicated tectonic history in that the southern portion of the terrane experienced arc-type magmatism during Neoproterozoic-Early Paleozoic time. In contrast, the northern portion of the terrane consists mainly of Paleozoic shelf-facies strata (White et al., 2015). Overall, the Hf isotope compositions of detrital zircons from Alexander are juvenile with εHf(t) values falling mostly between +15 and +5 (White et al., 2015).

The Gravina belt consists of Upper Jurassic through Lower Cretaceous marine clastic strata and mafic-intermediate volcanic rocks (Kapp and Gehrels, 1998). These strata are interpreted to depositionally overlie the Alexander terrane to the west and the

Yukon-Tanana terrane to the east (Gehrels, 2001). U-Pb and Hf isotope determinations of detrital zircons suggest that the Gravina belt formed inboard of Alexander-Wrangellia terrane and in back arc position to the Coast Mountains batholith (Kapp and Gehrels, 1998; Yokelson et al., 2015).

The Yukon-Tanana terrane is interpreted to have formed in a passive margin setting and consists of Late Paleozoic mainly quartz-rich metaclastic rocks (peltic schist), marble and mid Paleozoic metavolcanic rocks (Gehrels et al., 2009; Pecha et al., 2016). Neodymium and Hf isotopes ($\varepsilon Nd(i) > -4.5$; $\varepsilon Hf(t) = +15$ to -20) from southeast Alaska are much more evolved than Wrangellia, Alexander, and Stikine and reflects an old continental crust affinity (Gareau and Woodsworth, 2000; Pecha et al., 2016).

The Stikine terrane consists of largely widespread Triassic and Jurassic arc-type assemblages blanketed by Jurassic-cretaceous marine strata of the Bowser Basin (Monger et al., 1992). Isotopic values of Stikine are primitive with initial εNd and $^{87}Sr/^{86}Sr$ values ranging from -0.5 to+7.7 and 0.70355 to 0.70547, respectively. Thus, indicating that the terrane is juvenile and was formed in an arc setting with little continental influence (Samson et al., 1989).

METHODS

This study presents seventeen new zircon U-Pb ages and Hf isotope values from samples collected along the margins of Knight inlet in the southern Coast Mountains batholith (Fig. 2). Samples were selected from all large, mappable plutonic bodies with the goal of regionally characterizing the age and isotopic composition of the batholith in the area. The new U-Pb ages and Hf isotope data from Knight inlet were combined with previously acquired U-Pb and Hf isotope data from Bute inlet, Lochborough inlet, and higher elevations to the east (Yokelson, 2016) in order to gain a broader understanding of magma genesis in the southern CMB. More than 40 additional U-Pb ages have been determined for plutons in this portion of the southern CMB. However, for the purpose of this study we are only considering plutons with coupled U-Pb and Hf isotope data.

In addition, this study also reports new oxygen isotope ratios in zircons on a subset of twenty-three samples collected from the southern batholith. Each sample selected for oxygen analysis had been previously analyzed for U-Pb and Hf and was carefully chosen to represent the spatial and temporal distribution of plutons in the southern batholith. It is important to note, that the same grains used for U-Pb and Hf analysis were not used for oxygen analysis. This is likely not a significant issue for these analyses, however, given the apparent lack inheritance or metamorphic overgrowths in the U-Pb zircon data (Fig. 3).

3.1. Mineral Separation and Sample Preparation

Analyzed zircon were separated from the bulk rock by staff members at the University of Arizona Laserchron center using standard methods outlined by Gehrels and Pecha (2014). Samples were first crushed to gravel size and then pulverized to sand grain

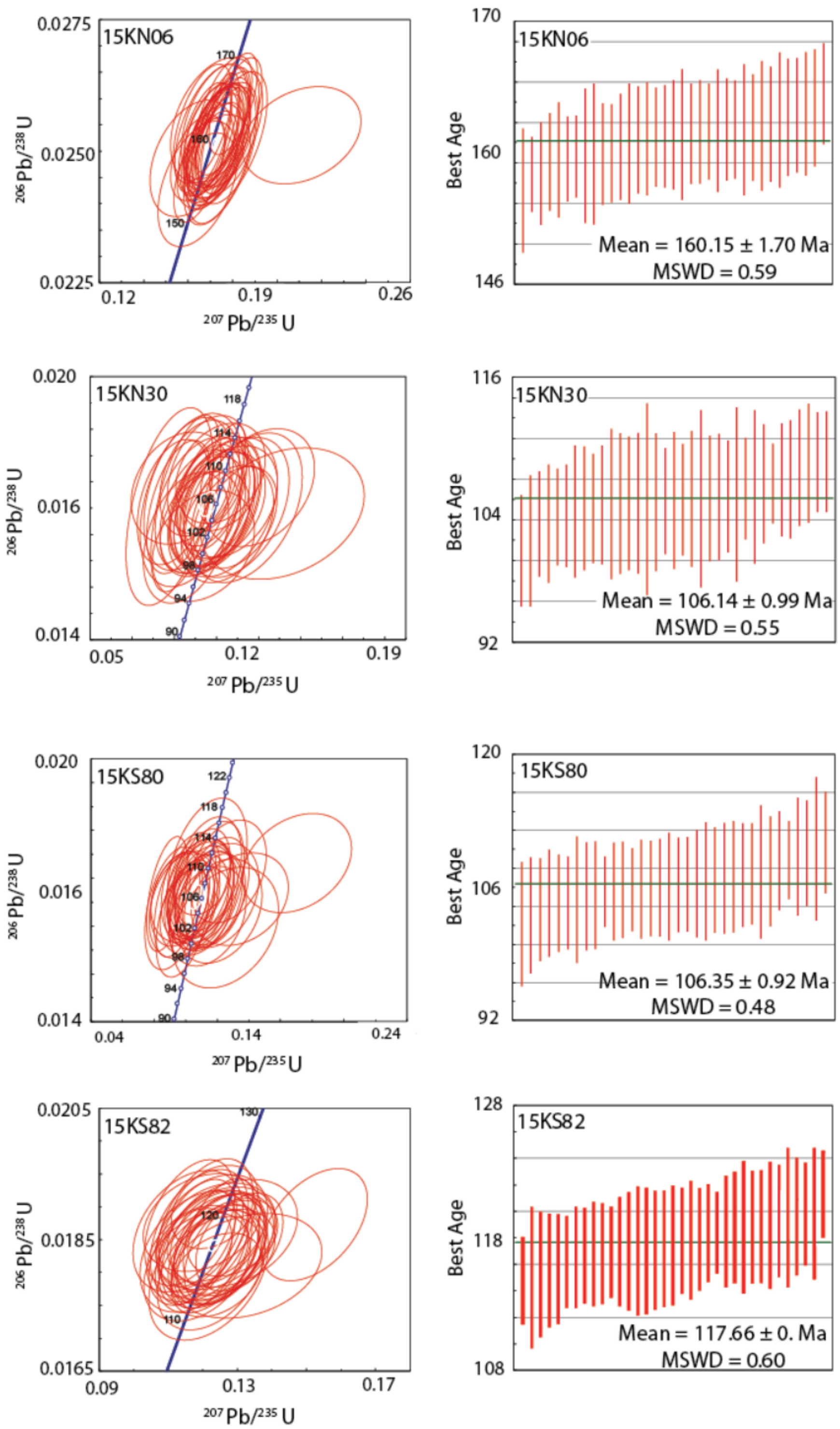

Figure 3. Weighted mean and concordia plots for 4 representative samples from the southern CMB. Error ellipses and calculated ages are reported at the 95% confidence level. These plots highlight the reproducibility and homogeneity of U-Pb ages in any given sample.

size (~ 0.063-2 mm) using a roller mill. Next, the heavy minerals were extracted using a Wilfley table. Magnetic minerals were then removed with a hand magnet prior to separation with the Frantz Magnetic Separator. Finally, after removing all magnetic minerals, the zircons were separated from the remaining non-magnetic heavy minerals via heavy liquid MI (Methylene Iodide) extraction. Once separated, the zircons were handpicked to select grains that were clear, euhedral in shape, and did not show evidence for inclusions. The grains were then transferred onto double sided tape for mounting and standards were added. Twenty to fifty zircon grains from each sample were mounted for U-Pb and Hf analysis along with the following zircon standards; Sri Lanka (SL), Duluth Gabbro (FC-1), R33, Temora (TEM), Plesovice (PLES), Mud Tank (MT), and 91500. All zircons were cast in epoxy in 1 inch plastic ring forms. Mounts were then imaged on a scanning electron microscope (SEM) using a cathodoluminesence (CL) detector in order to document chemical zonation and/or growth domains.

Following U-Pb and Hf analysis, data were compiled with U-Pb and Hf data from samples previously collected by Yokelson (2016). A subset of 23 samples were selected from the compiled dataset for oxygen analysis. Oxygen analysis of zircon requires a different zircon standard (KIM-5) and a more precise polishing process than what was required for U-Pb and Hf analysis. Therefore, two separate mounts were prepared for oxygen analysis. About twenty zircon grains from each sample were mounted, along with the zircon oxygen standard, KIM-5. Mounts were then cast in an epoxy resin mixture and polished with very fine (5, 3 and 1 micron) lapping films. Mounts were then imaged on a SEM using a CL detector, to avoid any inclusions in the zircon during analyses (Fig. 4).

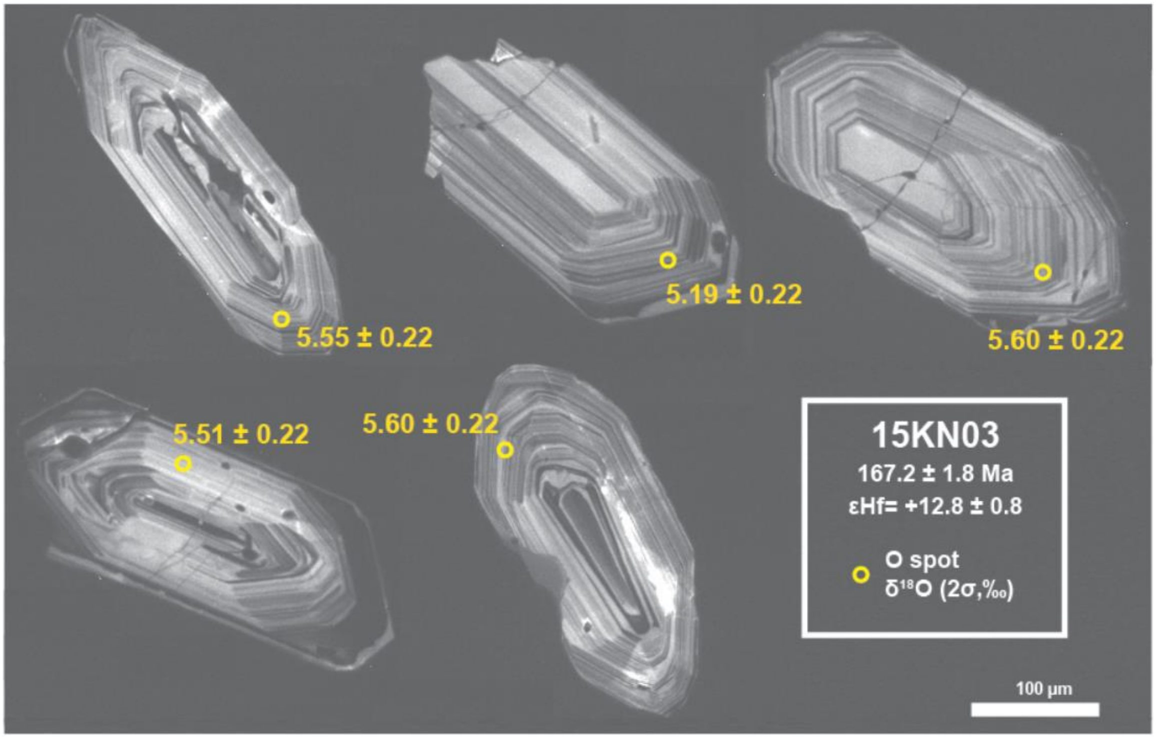

Figure 4. CL image of zircons from sample 15KN03. Zircons are euhedral in shape and exhibit oscillatory zoning. Locations for SIMS O spots are shown in yellow with the corresponding $\delta^{18}O$ value to indicate the homogeneity of O analyses.

3.2. U-Pb Geochronology

Zircon U-Pb analyses were performed at the Arizona LaserChron Center by laser ablation inductively coupled plasma mass spectrometry (LA-ICPMS) using an excimer laser coupled with a Thermo Element2 single collector ICPMS and methods described by Gehrels et al. (2008). Laser ablation was done using a 30-μm-diameter spot and a pulse rate of 7 Hz. Ablation was performed using a constant energy mode with output energy of 8 mJ/pulse, which corresponds to the energy density of ~2 J/cm^2 and an estimated excavation rate of 0.7 μm/s. The analytical routine consisted of a 15 s on-peak background measurement with the laser off, followed by 15 s of peak measurement, performed at 1 s integration times, with the laser firing, resulting in an analysis pit of ~15 μm depth.

For each sample, single pits were ablated on 20-40 individual zircons. Fractionation was corrected for using the primary SL standard. Instrumental drift was accounted for by bracketing every five measurements with analyses of zircon standards SL, FC-1, and R-33. Corrections for minor amounts of common Pb were made by measuring ^{204}Pb and assuming initial Pb composition based on the Pb evolution model of Stacey and Kramers (1975). Reported U-Pb ages were determined using the weighted mean of all individual analyses interpreted to be from magmatic domains. Reported errors include internal (analytical) uncertainties and external (systematic) uncertainties.

3.3. Lutecium-Hafnium Isotope Analysis

Lu-Hf isotopes in zircon were analyzed by multi-collector LA-ICPMS (Nu instruments) at the University of Arizona. Pre-existing U-Pb spot locations were resampled for Hf isotopes analysis in orders to target the same chemical domain. Samples were analyzed with a 40μm beam diameter and a laser pulse frequency of 7 Hz. The laser was run in constant energy mode with output energy of 8 mJ, which corresponds to an energy density of about 2 J/cm^2 and an estimated drill rate of 0.7 μm/s. Under these conditions, total Hf beams range from 2 to 4 V for standard zircons. The in situ analytical routine starts with a 40 second on-peak background measurement followed by 60 seconds of laser ablation with a 1 second data integration time. All corrections are automatically calculated during the run on a line by line basis, and a 2σ filter is applied to each 60-measurenment data block offline to remove outliers.

Accurate in situ Hf measurement can be difficult in zircons because of isobaric interferences of ^{176}Hf, ^{176}Yb, and ^{176}Lu. Therefore, corrections were made to ^{176}Yb and ^{176}Lu in order to obtain accurate Hf data. It is critical to make these corrections because ^{176}Yb/^{176}Hf is 10% to 30% of typical zircons. The ratio of stable ^{179}Hf/^{177}Hf is used for mass bias correction and an exponential mass bias function is used in all calculations. Correction for interference of ^{176}Yb was determined by monitoring interference free ^{173}Yb and ^{171}Yb during Hf analysis to calculate Yb mass bias (βYb) and the contribution of Yb to the measurement of ^{176}(Hf, Lu, Yb), following analytical procedure described in Cecil et al (2011). Interference by ^{176}Lu was corrected for by measuring ^{175}Lu and using ^{176}Lu/^{175}Lu = 0.02653 (Patchett, 1983) and βYb, assuming that Lu behaves similarly to Yb.

Several zircon hafnium standards with known hafnium compositions were analyzed before and after unknowns to ensure that corrections are done accurately. The standards used include Mud Tank, Tem, FC-1, 91500, Plesovice, R33, and SL2, which have been analyzed by solution ICPMS by Woodhead and Hergt (2005), Slama et al. (2008), Bahlburg et al. (2010), and Vervoort (2010).

3.4. Oxygen Isotope Analysis

Zircon oxygen isotope analyses were conducted in the WiscSIMS Laboratory at the University of Wisconsin- Madison using a CAMECA IMS-1280 ion microprobe following the procedures outlined in Valley and Kita (2009). Mounts were carefully cleaned, dried in a vacuum oven at ~40 C for 1 hour, and gold-coated in preparation for Secondary Ion Mass Spectrometer (SIMS) analysis. A focused, 10Kv Cs+ primary beam was used for oxygen isotope analysis at 1.9-2.2 nA and corresponding spot size of 10-12 μm. A normal incident electron gun was used for charge compensation. The secondary ion acceleration voltage was set at 10kV and the oxygen isotopes were collected in two Faraday cups simultaneously. Four analyses on zircon standard KIM-5 were performed at the beginning of each session, and subsequently after every 10-15 unknowns. The average value of the standards bracketing each block of unknowns was used to correct for instrumental bias.

RESULTS

4.1. U-Pb Geochronology

New zircon U-Pb ages from samples collected along Knight inlet are reported in Table 1. These ages, combined with the 34 samples previously reported in Yokelson (2016) are described below. The 51 pluton samples, as part of this study, from the southern CMB yielded U-Pb ages ranging from ca. 170 to 53 Ma and represent nearly the entire time span of magmatism, reported in the greater CMB (Appendix). Most samples yielded concordant or near concordant U-Pb ages and the zircons did not reveal age heterogeneities due to inheritance or metamorphism (Fig. 3).

4.2. Hafnium Isotope Geochemistry

Average εHf(t) results from the 17 samples collected along Knight inlet are reported in Table 1. The εHf(t) values from all 51 samples are described below. εHf(t) values in zircons from the southern CMB range from +7.7 to +14.4 (Appendix). The mean value of all samples is +11.6 ± 1.9 (2 SD). Although the range of εHf(t) values across the batholith is relatively small, analyses within each sample are variable. The average range of εHf(t) values within one sample is ~4 epsilon units, with the largest range within a sample being 8.2 epsilon units. Although overall very primitive, εHf(t) values vary in both time and space. Across the batholith, the highest Hf signatures are observed in plutons located ~40 to ~80 km inboard of the western most margin of the batholith (Fig. 5). In addition, although the overall Hf signature of the southern CMB is juvenile, from 165 to 145 Ma and 120 to 95 Ma, Hf data scatter down towards more evolved values ranging from +15 to +7 (Fig. 7). In contrast, from 145 to 120 Ma and 95 to 50 Ma, the εHf(t) values are more restricted and more primitive with values ranging from +15 to +10. (Fig. 7).

4.3. Oxygen Isotope Geochemistry

Average $\delta^{18}O$ values in zircon range from 4.44‰ to 6.79‰. For each sample, between 5 and 20 zircons were analyzed. The zircon $\delta^{18}O$ mean calculated from all 23 samples is 5.41 ± 0.19‰ (2SD) (Appendix). Three samples (15KS83 = 6.1‰, 14IY25 = 6.79‰, 14IY31 = 6.26‰) have slightly higher average $\delta^{18}O$ than depleted mantle values (5.3 ± 0.6‰; Valley, 2003). One sample (14MR73 = 4.44‰) has a low $\delta^{18}O$ value relative to depleted mantle. Overall, zircons yielded very homogeneous values with the range of $\delta^{18}O$ values in most zircon samples less than 1‰. The oxygen data does not show any temporal or spatial variations (Fig. 6 & 8). A summary of results for oxygen analysis are presented in Table 2.

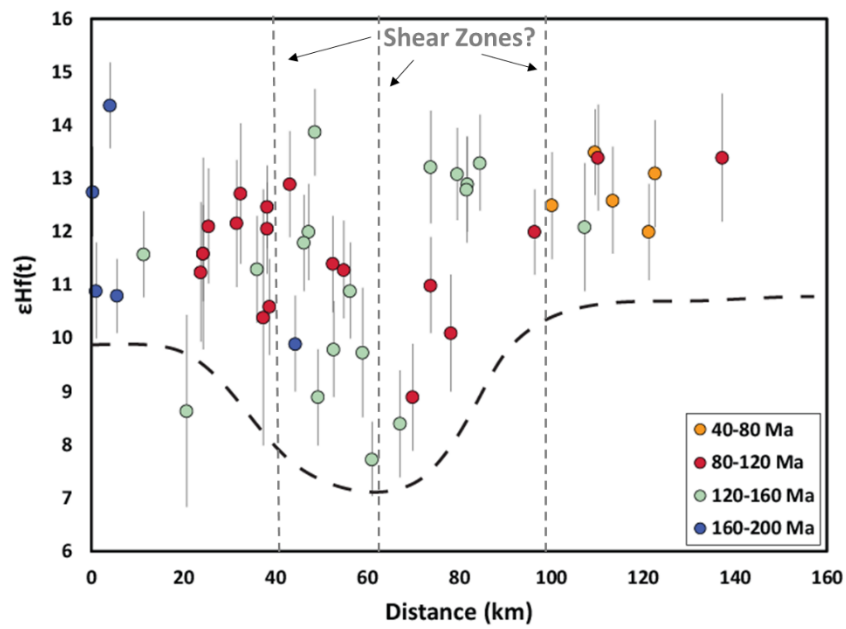

Figure 5. A plot of distance (km) vs εHf(t). The distance of each sample is measured orthogonally from the gray line in Fig. 2. Samples are categorized by age. Vertical dotted lines indicated the approximate location of shear zones. Black dotted line illustrates the spatial pattern within the Hf data with the most evolved εHf(t) values located ~40 to ~80 km inboard.

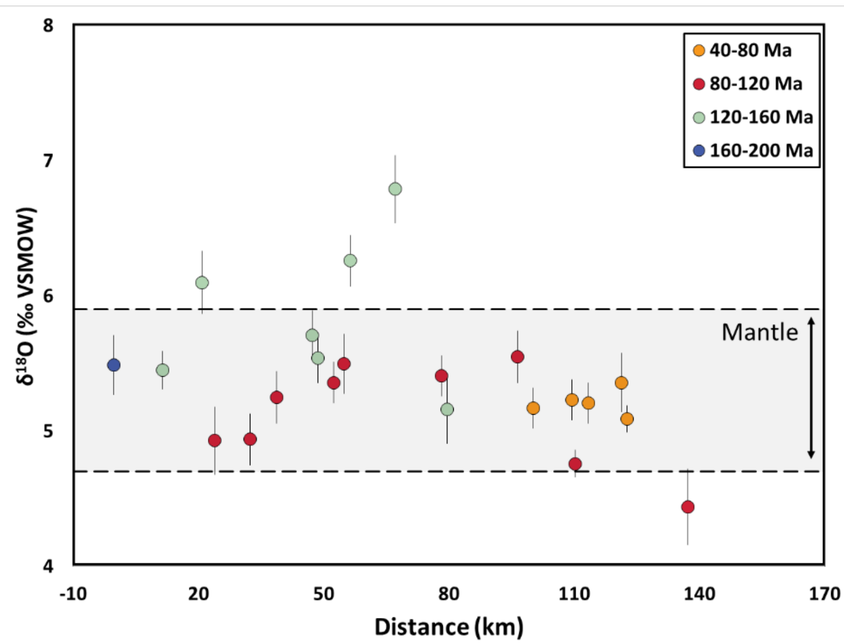

Figure 6: A plot of distance (km) vs $\delta^{18}O$. The distance of each sample is measured orthogonally from the gray line in Fig 2. Samples are categorized by age. Horizontal gray rectangle indicates isotopic domain of depleted mantle (5.3 ± 0.6‰; Valley, 2003).

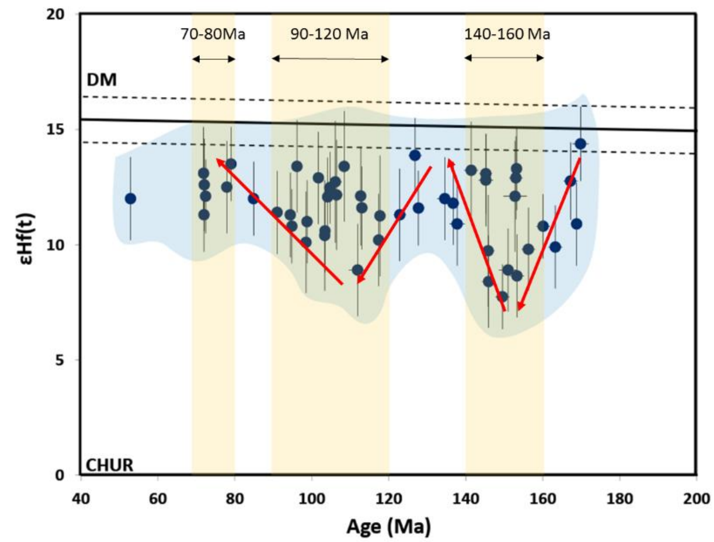

Figure 7. A plot of average U-Pb zircon ages vs. average εHf(t) for all 51 samples in the southern CMB. Shaded vertical bars represent apparent magmatic flare-up events observed from age isotope distribution. Blue shaded area illustrates the temporal variability with Hf data. DM = depleted mantle (Vervoort and Blitchert-Toft, 1999); CHUR = chondritic uniform reservoir (Bouviere et al., 2008).

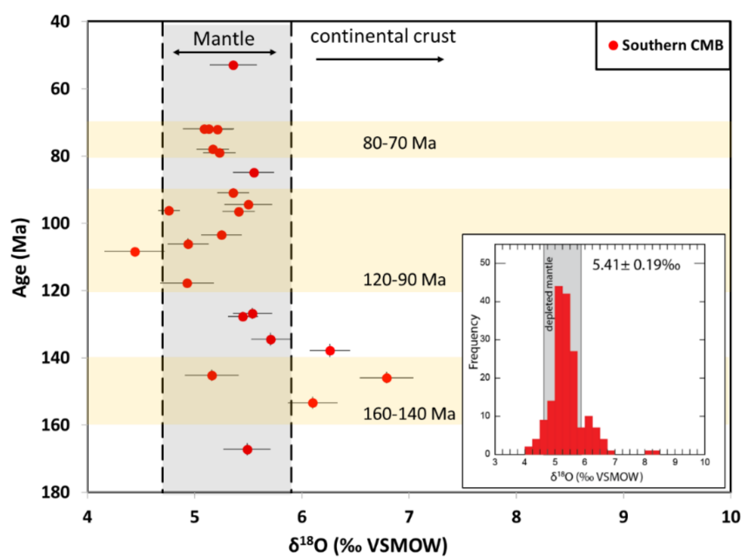

Figure 8. A plot of $\delta^{18}O$ vs. U-Pb zircon age. Southern CMB samples are shown in red and generally fall within depleted mantle range (5.3 ± 0.6‰) throughout the duration of magmatism in the arc. Vertical grey bar reflects the $\delta^{18}O$ composition of depleted mantle (Valley, 2003). Horizontal bars reflect apparent flare-up events in the southern CMB. A frequency histogram of $\delta^{18}O$ (n=173) is in the bottom right hand corner.

Table 1: Zircon U-Pb Ages and εHf Values from Knight Inlet

Sample Number	Rock Type	U-Pb Age (Ma)	Avg εHf(t)	2 SD	Latitude	Longitude
15KN03	Tonalite	167.2 ± 1.8	12.8	1.7	50.641405	-126.646528
15KN06	Quartz Diorite	160.1 ± 1.7	10.8	1.4	50.642431	-126.506
15KN13	Granite	127.7 ± 1.4	11.6	1.6	50.65463	-126.379766
15KN30	Granodiorite	106.1 ± 1.6	12.7	2.6	50.690912	-125.906239
15KN38A	Tonalite	104.1 ± 1.3	12.1	1.7	50.705151	-125.783902
15KN38B	Tonalite	104.7 ± 1.3	12.5	1.6	50.705151	-125.783902
15KN69B	Granodiorite	149.5 ± 1.8	7.7	1.4	50.889391	-125.638189
15KN90	Tonalite	126.8 ± 1.7	13.9	1.6	50.776058	-125.686258
15KS01	Granodiorite	169.8 ± 2.1	14.4	1.6	50.60928	-126.679144
15KS58	Granodiorite	141.4 ± 1.8	13.2	2.1	50.980425	-125.529871
15KS64	Tonalite	145.2 ± 1.6	13.1	1.7	51.045711	-125.539398
15KS78	Granodiorite	145.8 ± 1.6	9.7	2.4	50.86399	-125.630465
15KS79	Tonalite	94.4 ± 1.1	11.3	1.8	50.810436	-125.605659
15KS80	Granodiorite	106.4 ± 1.6	12.2	2.4	50.668069	-125.869331
15KS81	Granodiorite	112.7 ± 1.3	12.1	2.1	50.663017	-126.021872
15KS82	Diorite	117.7 ± 1.3	11.2	2.6	50.659147	-126.055841
15KS83	Granodiorite	153.3 ± 1.8	8.6	1.8	50.645814	-126.103563

Table 2: Zircon oxygen isotope data

Sample Number	Rock Type	Location	U-Pb Age (Ma)	Avg $\varepsilon Hf_{(t)}$	2 SD	Avg δ18O (‰ VSMOW)	2 SD	Latitude	Longitude
15KN03	Tonalite	Knight	167.2 ± 1.8	12.8	2.4	5.49	0.22	50.641405	-126.646528
15KN13	Granite	Knight	127.7 ± 1.4	11.6	2.2	5.45	0.14	50.654630	-126.379766
15KN30	Granodiorite	Knight	106.1 ± 1.6	12.7	1.4	4.94	0.19	50.690912	-125.906239
15KN90	Tonalite	Knight	126.8 ± 1.7	13.9	2.2	5.54	0.18	50.776058	-125.686258
15KS64	Tonalite	Knight	145.2 ± 1.6	13.1	2.6	5.16	0.25	51.045711	-125.539398
15KS79	Tonalite	Knight	94.4 ± 1.1	11.3	1.8	5.50	0.22	50.810436	-125.605659
15KS82	Diorite	Knight	117.7 ± 1.3	11.2	1.6	4.93	0.25	50.659147	-126.055841
15KS83	Granodiorite	Knight	153.3 ± 1.8	8.6	1.6	6.10	0.23	50.645814	-126.103563
14IY01	Tonalite	Lochborough	90.98 ± 1.3	11.4	1.8	5.36	0.15	50.714433	-125.4292134
14IY04	Tonalite	Lochborough	103.4 ± 1.2	10.6	1.8	5.25	0.19	50.619616	-125.555884
14IY18	Tonalite	Bute	96.5 ± 1.2	10.1	2.2	5.41	0.15	50.776868	-124.9040851
14IY25	Tonalite	Bute	145.9 ± 1.7	8.4	2	6.79	0.25	50.666465	-124.9242267
14IY31	Diorite	Bute	137.8 ± 2.0	10.9	1.8	6.26	0.19	50.554037	-124.9310567
14IY38	Quartz Diorite	Bute	134.5 ± 1.9	12	1.8	5.71	0.18	50.511802	-125.0635001
14MR44	Granite	Waddinngton Mtns.	52.9 ± 0.6	12	1.8	5.36	0.22	51.294211	-125.0482833
14MR48		Waddinngton Mtns.	72.0 ± 0.7	11.3	1.6	5.13	0.24		
14MR61	Granodiorite	Waddinngton Mtns.	72.0 ± 0.9	12.6	2	5.21	0.15	51.250243	-125.1459117
14MR68	Tonalite	Waddinngton Mtns.	84.8 ± 1.1	12	1.6	5.55	0.19	51.061118	-125.1265167
14MR69	Tonalite	Waddinngton Mtns.	96.1 ± 1.1	13.4	2	4.76	0.10	51.143917	-124.9682701
14MR70	Granodiorite	Waddinngton Mtns.	77.9 ± 1.0	12.5	2	5.17	0.15	51.001010	-124.8781351
14MR71	Tonalite	Waddinngton Mtns.	79.0 ± 1.0	13	2	5.23	0.15	51.056682	-124.7689084
14MR72	Tonalite	Waddinngton Mtns.	71.9 ± 0.9	13.1	2	5.09	0.10	51.105482	-124.5421117
14MR73	Granodiorite	Waddinngton Mtns.	108.4 ± 1.3	13.4	2.4	4.44	0.28	51.090420	-124.1257734

DISCUSSION

5.1. Timing of Magmatism and Age Patterns

The 51 U-Pb ages considered from this portion southern CMB range from 169.8 ± 2.1 Ma to 52.9 ± 0.6 Ma. Pluton ages decrease systematically from west to east, indicating an eastward migration of the trailing outboard arc at ~2.4 km/m.y (Fig. 9). Only the post 120 Ma portion of the batholith was considered in calculating arc migration because pre-120 Ma translational and accretionary tectonics may have disrupted apparent patterns (Gehrels et al., 2009). The migration rate is comparable to what has been previously reported for this portion of the CMB and also further north (Rusmore et al., 2013; Gehrels et al., 2009). It also is similar to migration rates of the Sierra Nevada batholith (Cecil et al, 2012) and the Peninsular Ranges batholith (Karlstrom et al., 2014) and indicates a highly convergent arc system (Ducea et al., 2015)

Magmatic tempo also varies through time across the batholith. Isotope age distribution reflects three apparent magmatic episodes in our dataset between 160-140 Ma, 120-90 Ma, and 80-70 Ma (Fig. 10). Isotopic age distribution is not a true measure of magmatic flux because it does not account for sample collection bias, nor is it normalized by area. However, it is still a valuable tool to interpret the tempo of magmatism and is used to interpret the isotope results presented in this study.

The duration of apparent flare-up events in the southern CMB are rather variable, lasting 10 to 30 m.y.. However, this is comparable to the 10 to 30 m.y. periodicity of other continental arcs (i.e. Sierra Nevada batholith, Cascades, Traverse Ranges, Andes) as reported by Patterson et all. (2011).

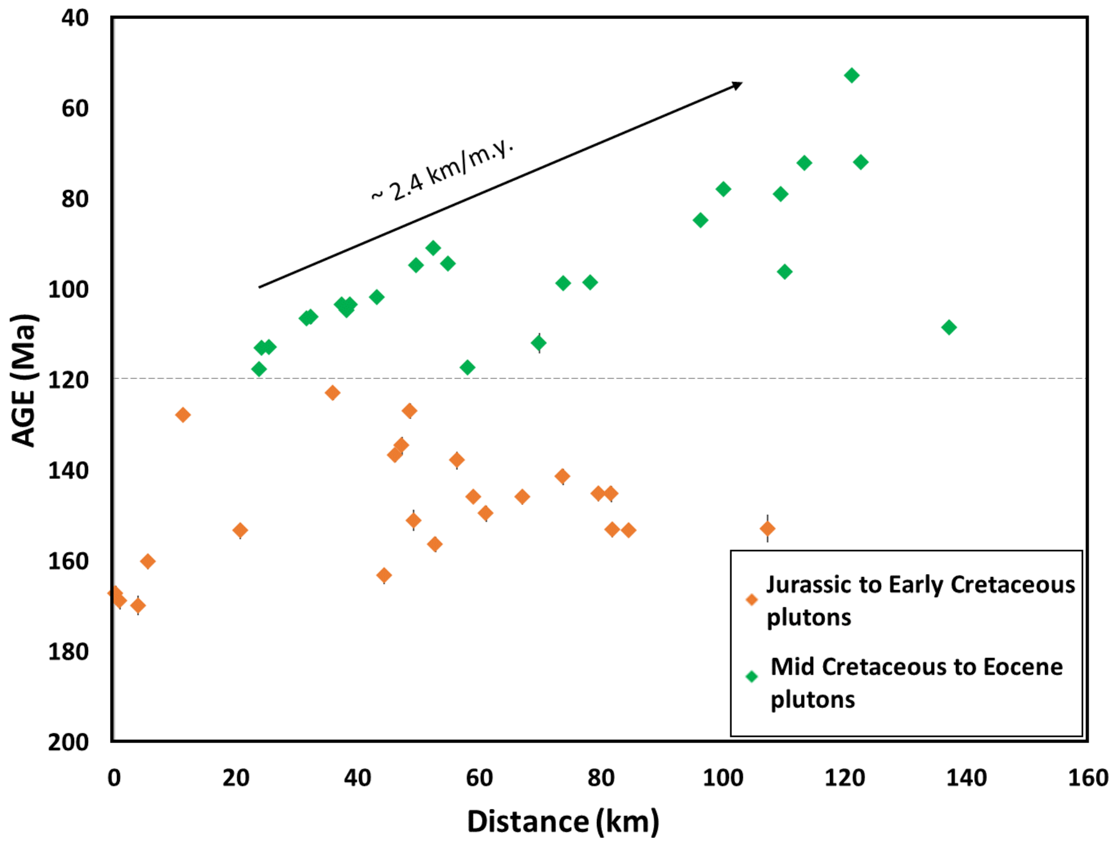

Figure 9. A plot of distance vs. U-Pb zircon ages. Distance referenced from gray line illustrated on Fig. 2. Green dots indicate post-120 Ma plutons, while orange dots indicate pre-120 Ma plutons. A migration rate of ~2.4 km/m.y. was calculated from only post 120 Ma plutons (see text).

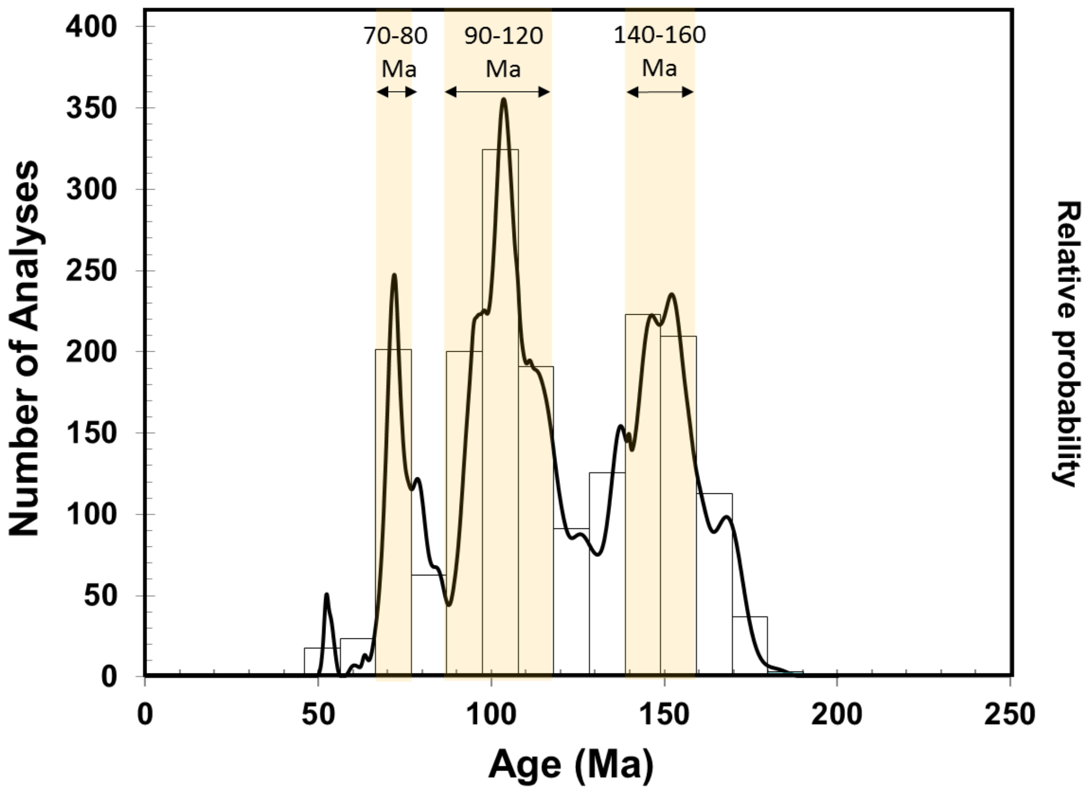

Figure 10. Relative age-distribution plot of U-Pb zircon ages. Boundaries of age bins were selected at 10 Ma intervals. Vertical bars reflect periods of apparent flare-up events.

In the following sections, we examine Hf and O isotopic data in light of these apparent flare-up events in order to determine if underthrusting of upper crustal material beneath the arc triggers magmatic flare-ups, as proposed by DeCelles et al. (2009). If this model is correct, we expect the melts generated during periods of high magmatism to reflect a crustal isotopic signature and for periods of low magmatism to reflect juvenile isotopic signatures. In contrast, if the isotopic results do not correlate with magmatic episodes it suggests that crustal input is not associated with triggering flare-up events, but instead may be correlated with large scale lower plate processes.

5.2. Hafnium and Oxygen Isotopic Constraints on Magma Sources

Hafnium isotopes in zircon are a useful tool in determining the nature of melt source in igneous rocks. ^{176}Hf is the radiogenic product of the beta decay of ^{176} Lu which has a half-life of about 35.7 Ga (Kemp & Hawksworth, 2006). Consequently, the Lu-Hf scheme can in some cases be used as a geochronometer. Lutecium is more compatible than Hf, so as a melt is extracted from the mantle, it preferentially retains Lu and therefore radiogenic ^{176}Hf becomes enriched in the mantle over time. In contrast, the extracted melt becomes depleted in Lu and ^{176}Hf over time (relative to CHUR). The result is that mantle melts have high radiogenic Hf and old continental crust has low radiogenic Hf.

In this study, ^{176}Hf/^{177}Hf ratios in zircon are expressed in terms of epsilon units, which compares the ^{176}Hf/^{177}Hf of a rock sample with ^{176}Hf/^{177}Hf of CHUR. High, positive εHf values indicate that the melt was recently extracted from the mantle, whereas low, negative εHf values may indicate assimilation of previously extracted and fractionated crustal material or a combination of mantle and crustal sources (Faure, 1986).

Hafnium isotopic values from the southern CMB have a relatively restricted range. ε_{Hf}(t) values vary from +7.7 to + 14.4. The high, positive values fall just below, or slightly overlap with depleted mantle ε_{Hf} [100 Ma] values of +14 to +16 (Vervoort and Blitchert-Toft, 1999) (Fig. 7). Therefore, due to the overall juvenile, but slightly enriched εHf(t) values, the input of young primitive crustal material may be a possible contaminant for the plutonic rocks that comprise the southern CMB. The country rocks to the CMB are dominated by young (Phanerozoic) arc terranes which have juvenile Hf signatures similar to those reported herein for plutons of the southern CMB and could therefore be possible contaminants to mantle-derived melts (Fig 11.).

The country rocks include the Gravina belt and the Wrangellia, Alexander, Yukon Tanana, and Stikine terranes. Zircon εHf(t) values reported for Mesozoic sandstones of Wrangellia are generally juvenile, ranging from about +8 to +15 (Giesler et al., 2016). The Alexander terrane and the Gravina belt are slightly more variable than Wrangellia, but similarly juvenile with εHf(t) values ranging from +15 to +5 (White et al., 2015; Yokelson et al., 2015). Meanwhile, the lack of geochronologic and Hf isotopic data from the Stikine terrane makes it difficult to evaluate the extent to which Stikine rocks may have been involved in batholithic generation. However, Nd isotopic data from Stikine suggests that it is also juvenile (Samson et al., 1989). The Yukon Tanana terrane (YTT) is distinct in that it has zircons recycled from old continental crust which have significantly more evolved ε_{Hf} (t) values ranging from +15 to -20 (Pecha et al., 2016). Though extensively mapped from the central CMB north through southeast Alaska, rocks

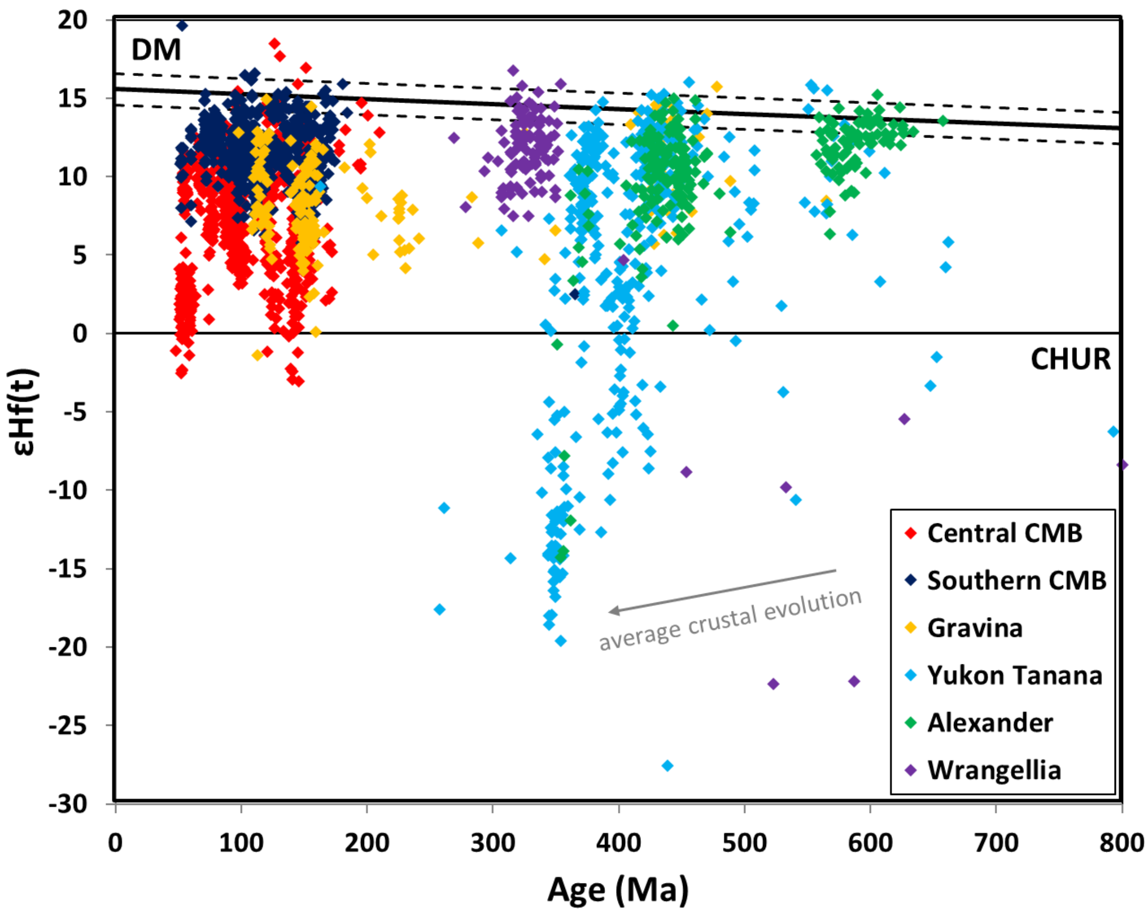

Figure 11. U-Pb zircon age vs εHf(t) plot of the southern and central CMB (Cecil et al., 2011) and country rock to the batholith including Wrangellia (Giesler et al., 2016), Alexander (White et al., 2015), Yukon Tanana (Pecha et al., 2016), and the Gravina belt (Yokelson et al., 2015). DM = depleted mantle (Vervoort and Blitchert-Toft, 1999); CHUR = chondritic uniform reservoir (Bouviere et al., 2008). Average crustal evolution assumes present-day 176Lu/177Hf =0.0115 (Vervoort and Patchett, 1996; Vervoort et al., 1999).

of the YTT have not been identified in our study area. Due to the uniformly primitive signature of plutons in the southern CMB, it is reasonable to conclude that YTT is not present, and/or has not been incorporated into melts of the southern batholith.

Due to the overall juvenile signature of the southern CMB, it is difficult to confidently discern if any of these country rocks were incorporated into the plutons from Hf isotopic data alone. Therefore, O isotope analysis was also conducted on zircons from the southern CMB.

The oxygen isotopic composition of igneous rocks can provide insight into magma genesis and crust-mantle interaction through time. The $^{18}O/^{16}O$ ratio is typically expressed as $\delta^{18}O$ relative to Vienna Standard Mean Ocean Water (VSMOW) with the following equation:

$$\delta^{18}O=\{[(^{18}O/^{16}O)_{sample} - (^{18}O/^{16}O)_{VSMOW})]/(^{18}O/^{16}O)_{VSMOW}\} \text{ x } 10^{3} \text{ ‰}$$

(Mattey et al., 1994)

Vienna Standard Mean Ocean Water is a reference standard with $^{18}O/^{16}O$ ratio of 0.020052 (Mattey et al., 1994). The measure of $\delta^{18}O$ variation between the sample and the standard is expressed in units permil (‰), or part per thousand (Bindeman et al, 2008). The O isotopic signature of zircon from the mantle is documented to have a very restricted range (5.3 ± 0.6‰; Valley, 2003). Oxygen isotopes are stable and therefore, the fractionation of ^{18}O and ^{16}O in zircon is only influenced by the interaction with meteoric water. Thus, $\delta^{18}O$ signatures of mantle derived magmas are distinctly different than crustal rocks that have interacted with meteoric water, which results in higher $\delta^{18}O$ values (Hawkesworth and Kemp, 2006). Because of this, $\delta^{18}O$ of zircons are able to fingerprint the incorporation of hydrothermally altered crustal material more efficiently than Hf isotopes alone.

$\delta^{18}O$ of zircons from plutons of the southern CMB range from 4.44‰ to 6.79‰, with a mean of 5.41 ± 0.19‰ (2SD). There is no observed spatial or temporal variability across the batholith and nineteen of the twenty-three samples from the southern CMB overlap with $\delta^{18}O$ depleted mantle values (5.3 ± 0.6‰; Valley., 2003) (Fig. 6 & 8). One sample (14MR73) has a $\delta^{18}O$ value that falls below the depleted mantle range (Ave $\delta^{18}O$ = 4.44 ± 0.28‰). This low value could possibly be the result of hydrothermal alteration at high temperatures (McCulloch et al., 1980). Three Jurassic to Late Cretaceous plutons (15KS83, 14IY25, 14IY31) have slightly elevated average $\delta^{18}O$ values. These high values could be due to the incorporation of a small amount of supracrustal material. However, the highest average $\delta^{18}O$ value from the southern batholith is only 6.79 ± 0.25‰ (14IY25).

Fig. 12 displays a binary mass mixing model between depleted mantle and potential contaminants in order to assess relative proportions of assimilate to mantle-derived melt. Unfortunately, there is no O isotope data from the country rocks to the batholith. For the purpose of this study, $\delta^{18}O$ values were inferred based on the overall composition of the terranes. The O isotope signature can vary significantly based on the rock type. $\delta^{18}O$ values of sedimentary rocks range from +10‰ to +30‰ (Valley et

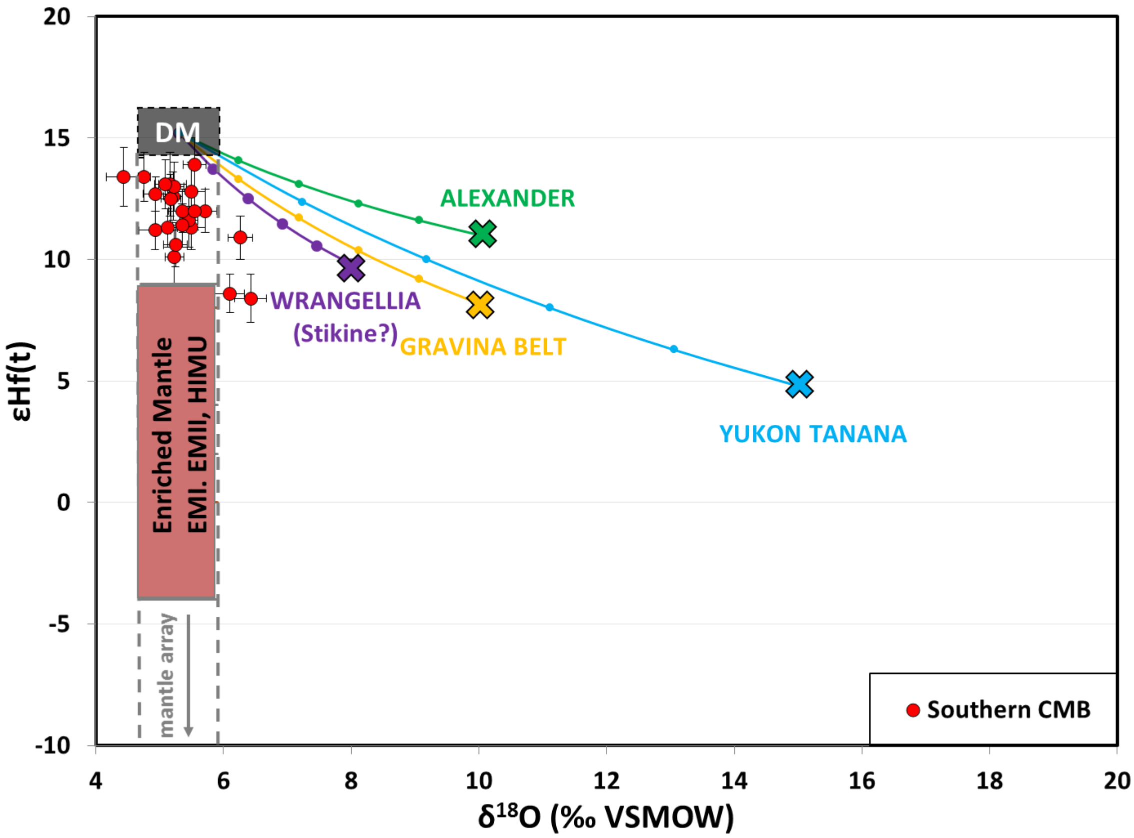

Figure 12. Hypothetical mixing model between depleted mantle and potential melt contaminants including Wrangellia, Alexander, Yukon Tanana, the Gravina belt. The isotopic domain of possible enriched mantle sources (EMI, EMII, and HIMU) are reflected in the pink rectangle. The grey box denotes the $\delta^{18}O$ and εHf(t) values of depleted mantle. εHf(t) values of possible contaminants from Giesler et al., 2016; White et al., 2015; Yokelson et al., 2015; Pecha et al., 2016. Assumed $\delta^{18}O$ values from Valley et al., 2005; Harmon and Hoefs, 1995.

al., 2005), while ocean arc basalts generally have a much lower mean $\delta^{18}O$ signature of 6.0 ± 0.3‰, as observed from the Izu-Bonin-Mariana, New Herbrides, and west Aleutian arcs (Harmon and Hoefs, 1995). Yukon Tanana is assumed to have a high $\delta^{18}O$ value of 15‰, given that YTT is comprised of sedimentary assemblages deposited in a passive margin setting. The volcanic sediments of the Gravina Belt appear to be arc derived, composed of volcanic sediments and therefore is assumed to have a lower $\delta^{18}O$ signature of 10‰. A $\delta^{18}O$ value of 10‰ is also assumed for the Alexander terrane because the terrane experienced both ocean arc-type magmatism and passive margin deposition. The Wrangellia terrane also contains significant sedimentary packages along with arc-type basalts. Therefore, a $\delta^{18}O$ signature of 8.0‰ is assumed for Wrangellia.

Overall, the isotopic signature of the southern CMB is not well explained by mixing with any of the adjacent terranes and suggest that the southern CMB intrusions were derived mainly from partial melting of the mantle (Fig. 11). Additionally, the homogeneity of $\delta^{18}O$ values, and the lack of observed temporal and spatial patterns within the O data suggest that batholitic melts were generated from a single, homogeneous, presumably mantle source. However, a depleted mantle source suggested by the O data cannot explain slightly evolved Hf signature seen in most CMB plutons, nor the temporal or spatial patterns observed with the Hf data.

In the following sections, we present two possible melt sources to explain the Hf and O isotopic data. The first is the consideration that young juvenile age crust was variably incorporated into the melt. The second is that the melt was generated from an enriched and/or heterogeneous mantle source with little crustal incorporation.

5.3. Juvenile Continental Crustal Source

The Hf data is slightly more evolved than what is expected for melts that were generated from depleted mantle. Therefore, it is possible that the melt was partially sourced from the incorporation of Paleozoic primitive country rocks that never interacted with meteoric water and therefore do not have the elevated $\delta^{18}O$ signature that we would expect to see in crustal material. This is a likely possibility because some Wrangellia materials are isotopically primitive in their own right, and thus similar in composition to depleted mantle.

Moreover, if crust is being incorporated into the melt then the “pull-up” and “pull-down” temporal pattern within the Hf data could possibly represent the alternating periods of crustal thickening and thinning that are often observed in continental arcs (DeCelles et al., 2009; Ducea et al., 2015). Kemp et al. (2009) suggests that juvenile magmatism corresponds with periods of extension and evolved magmatism corresponds with crustal thickening. Therefore, the juvenile εHf(t) values observed during “pull-up” events could represent a period of crustal extension and subsequent upwelling of asthenosphere. In contrast, the more evolved signature observed during “pull-downs” may represent crustal thickening and crustal incorporation into the melt. If the country rocks to the batholith were formed in a submarine setting and never interacted with meteoric water, input of these juvenile country rocks may be responsible for the scatter of εHf(t) values away from depleted mantle.

In the Sierra Nevada batholith, isotopic pull-downs have been associated with both crustal thickening and high flux events (Ducea, 2001; Ducea and Barton, 2007. εNd values become as low as -20 during high flux events and as high as +8 during magmatic lulls (Ducea and Barton, 2007). The isotopic pull downs in the southern CMB are not as large as the ones observed in the Sierra Nevada batholith. However, they may still be recording periods of regional crustal thickening as the apparent magmatic flare-ups between 160-140 Ma and 120-95 Ma correspond to “pull-downs” towards evolved εHf(t) values (Fig, 7). If the evolved Hf signatures are a result of crustal incorporation during crustal thickening, then this data supports the DeCelles et al. (2009) model for melt triggering in continental arcs. However, in the southern CMB the apparent magmatic episode from 80-70 Ma does not correspond with a “pull-down” event, suggesting that another factor, besides crustal input, may be driving high flux events in the southern CMB.

In addition to temporal variability, the Hf data also vary spatially as εHf(t) values become more evolved in the central portion of the batholith (Fig. 5). Deformation in this portion of the batholith is observed with the presence of large shear zones on Bute inlet (Rusmore et al., 2014). These shear zones could have possibly influenced crustal input in this portion of the batholith. Two plutons (14IY25 and 14IY31) located in this area also have an elevated average $\delta^{18}O$ signature, further suggesting crustal input. However, shear zones are generally not associated with crustal thickening and the timing of deformation in this portion of the batholith is not well constrained and therefore is difficult to correlate with magmatic tempo. Thus, it is unlikely that these shear zones are responsible for the elevated εHf(t) values and does not support the DeCelles et al. (2009) model.

Nonetheless, the lack of supracrustal $\delta^{18}O$ signature of the southern CMB indicates that very little crustal material was incorporated into the melt. Additionally, the proposed timing of crustal input (indicated by Hf pull-downs) and deformation does not correspond to apparent magmatic flare-ups in the southern CMB. Therefore, the model proposed by DeCelles et al. (2009) for triggering magmatic flare-ups via underthrusting of crustal material is only weakly supported in the southern CMB. Results instead suggest that the melt is generated from the mantle with minimal crustal incorporation.

5.4. Mantle Source

The O-isotope data support a mantle source for the southern CMB, however, the εHf signatures are not as easily explained by a depleted mantle source. Instead, the mantle wedge beneath the arc may not be depleted mantle, but is enriched relative to Hf. Three enriched mantle end members HIMU, EMI, and EMII are used to categorize the isotopic heterogeneities of the mantle and are all enriched in Hf isotopes. HIMU, the high time -integrated U-Pb mantle, has a Hf composition of +8 to +2. EMI (enriched mantle 1) has a Hf composition of -4 to +2 and EMII (enriched mantle 2) has a Hf composition of +10 to +4. (McCoy-West et al., 2010) (Fig. 12). The enriched mantle end members are thought to originate from contamination of the mantle with old isotopically evolved crustal material by means of sediment subduction, and foundering of crustal rocks into the mantle. However, it is unclear what each end member originates from and what processes they underwent during and after subduction (Zindler and Hart, 1986). The mixing model in Fig. 12 shows that all three end members fall below the Hf array of the southern CMB and therefore it appears that neither of these mantle end members are sourcing the melt. Instead, Cui and Russell (1995) observed slightly elevated Pb isotope ratios in plutonic samples in the southern CMB relative to MORB. They interpret this to mean that the mantle beneath the southern CMB may be slightly enriched due to the contamination of oceanic sediments associated with the subducted slab. This slight enrichment via ocean sediments observed by Cui and Russell (1995) may also be responsible for the slightly evolved Hf signature observed in this dataset.

Also notable, is the variation in Hf within each sample, suggesting melt source heterogeneity. While average εHf(t) values are relatively uniform over the 120 m.y. of arc activity in this portion of the batholith, variability within each sample is great (~4 epsilon units). This is surprising as U-Pb and O data are remarkably invariant. Perhaps, the high variability indicates multiple mantle sources. More isotopic data is needed to fully understand the chemical and isotopic domain of the mantle that underlies the southern CMB.

Given a mantle source, the "pull-ups" and "pull-downs" observed within the Hf data could reflect cyclic delamination events of a residual arc root. Fig. 13a illustrates the source of melt during the periods in which Hf isotope pull-downs are observed (165 to 145 Ma and 120 to 95 Ma). During these periods, direct melting of the mantle produces a large residual arc root with small amounts of crustal melting. The resulting melts are relatively evolved in εHf(t) with values as low as almost +7. Fig. 13b illustrates the periods in which Hf isotopic pull-ups are observed (145-120 Ma and 95-50 Ma). During these periods the root eventually founders back to the mantle, resulting in upwelling of depleted asthenosphere into the mantle wedge. The melt produced is therefore primitive with a εHf(t) signature ranging from +10 to +15. The formation and removal of a root in the subarc is a necessary process in the evolution of Cordilleran arcs (Kay and Kay 1993; Kay et al., 1994; Ducea and Saleeby, 1996; DeCelles et al., 2009). Bulk composition calculations indicate that in order to generate a batholith with average tonalitic composition like the CMB, an ultramafic, eclogitic counterpart must also be produced

(Ducea, 2002; Ducea and Saleeby, 1996). Girardi et al. (2008) documents high flux events in the CMB that may be linked to rapid removal of the arc root, allowing for upwelling of asthenosphere into the mantle wedge and subsequently producing juvenile melts. Currently, there is no ultramafic root observed beneath the CMB to the north (Calkins et al., 2009). This suggests that the arc root, at least in the northern batholith, previously foundered back into the mantle and supports the interpretation that cyclic delamination of the arc root could be the driving factor responsible for excursions towards depleted mantle values. In this proposed mechanism, there is little to no crustal input and the melt is sourced primarily from the mantle. It is important to note that the unique and distinct pull-up/pull-down pattern observed in the Hf data assumes that the root is returning to the mantle in large delamination events instead of slowly dripping back into the mantle over time (Manthei et al., 2010). Eclogitic root production and foundering beneath the Sierra Nevada batholith has been well documented. Constraints from xenoliths, volcanism and geodynamic modelling suggest that delamination can occur 5-10 m.y. (Gilbert et al., 2007).

5.5. Comparison to the Central CMB

The portion of the CMB studied herein represents a relatively small fraction (~1/5) of the overall batholith arc-length, and may not be representative of the batholith in other areas. It appears as though this part of the southern batholith is different from the heavily studied central batholith to the north in the timing and source of magmatism. The central CMB to the north is dominated by magmatic events at ca. 160-140 Ma, 120 – 80 Ma, and 60 - 50 Ma (Gehrels et al., 2009), whereas the southern CMB is apparently dominated by Late Cretaceous events at ca. 160-140 Ma, 120 – 90 Ma and 80 – 70 Ma.

Importantly, the 60 – 50 Ma event, which is widespread to the north, is not as prevalent in the southern batholith. Likewise, the 80 – 70 Ma event observed in the south occurs during a period of magmatic inactivity to the north (Gehrels et al., 2009).

In addition to along-strike differences in the geochronology of the batholith, the isotopic character of the intrusive rocks along-strike changes. To the north, high $\delta^{18}O$ values for quartz ($\delta^{18}O$ = 6.8-10‰) indicates that these melts were not exclusively generated from the mantle wedge. Batholithic melts are instead interpreted to assimilate at least 40% (by mass) of supracrustal material (Wetmore and Ducea, 2011). In addition, Hf and Nd isotope signatures reported for the central batholith are significantly more evolved than the southern batholith (εHf(t) = +1 to +13, Cecil et al., 2011; εNd(i) = -1 to +4.7, Patchett et al., 1998) (Fig. 11). These more evolved values are interpreted to be the result of mixing of juvenile, mantle derived material and old, recycled crustal material, such as Yukon Tanana (Fig. 11).

In contrast, Hf and O isotopes presented in this study and the Nd and Sr isotopes presented by Cui and Russel (1995) (εNd(i) = +4.2 to +8.0; $^{87}Sr/^{86}Sr$ = 0.702-0.704), indicate that intrusions in the southern CMB were mainly derived from melting of the mantle with possible, but limited, incorporation of isotopically primitive crustal material such as Wrangellia.

Given that the timing of magmatism changes in a relatively short spatial scale (~150 km), it suggests that deformation in the upper plate may be linked to magmatic tempo. However, evolved Hf signatures do not correspond to apparent flare-up events and it is reasonable to conclude that if input of crustal material is the driving factor, then we would expect to see a more evolved isotopic signature during flare-up events in the southern CMB like we see to the north.

Instead, based on the mantle-like oxygen and hafnium isotopic data presented here, I suggest that the plutons of the southern CMB are largely the product of melting an enriched, heterogeneous mantle with limited involvement from juvenile crustal sources. It is not possible to produce the felsic igneous rocks that comprise the CMB by directly melting the mantle (Wylie, 1984). In order to generate intermediate igneous products without melting felsic rocks of the crust (precluded by the isotope data), a two-stage process is required whereby partial melts of the mantle (basalts) are partially remelted and/or fractionally crystallized to produce the isotopically primitive tonalities and granodiorites observed. One possible way to do this is through dehydration melting of the subducting slab to produce basaltic melts. The dense basalt then ponds at the base of the crust where processes of melting, assimilation, storage, and homogenization occur in the MASH zone to produce melts of intermediate composition (Hildreth and Moorbath, 1988) (Fig. 13). The large residual root that is produced as a result of directly melting the mantle will eventually founder back into the mantle, resulting in the upwelling of juvenile asthenosphere mantle, and producing the “pull-up/pull-down pattern observed in the isotopic data (Fig. 13). Although assimilation of crustal material in continental arcs appears to be common (Lackey et al., 2012; Wetmore and Ducea, 2011; Ducea 2001; Samson et al., 1989; 1991; Coleman and Glazner, 1997), a two-stage melting process with little crustal assimilation has been previously observed in continental batholiths (e.g. Ratajeski et al., 2001; Coleman, 1992), including adjacent portions in the southern CMB (Cui and Russel, 1995).

5.6. Implications for Global Crustal Budget

The findings from this study indicate that the southern CMB represents the growth of new, intermediate continental crust, with limited recycling of existing crust, forcing us to evaluate the effect of crustal production in continental arcs on the overall continental crustal budget. There are a variety of existing models for the rate of crustal growth throughout Earth history, highlighting the complexity of continental growth and lack of consensus on the topic. Hurly and Rand (1968) proposed a model that supports a uniform growth rate with continental crust gradually generated throughout Earth's history. A second model suggests that there have been no new additions to the crust, but instead a steady-state of recycling since the continental crust first differentiated 3.9 Ga (Fyfe 1978; Armstrong and Harmon 1981). Finally, a third model argues for episodic growth of continental crust concluding that significant portions of continental crust were generated periodically throughout Earth's history (Taylor and McLennan, 1985). The results from the southern CMB shed new insight on the crustal budget and contradicts the steady-state recycling model as the southern CMB provides little evidence for crustal recycling. Instead, the southern CMB provides evidence for a more uniform crustal growth model, in which new crust is being continuously added to the budget at continental arc settings through time.

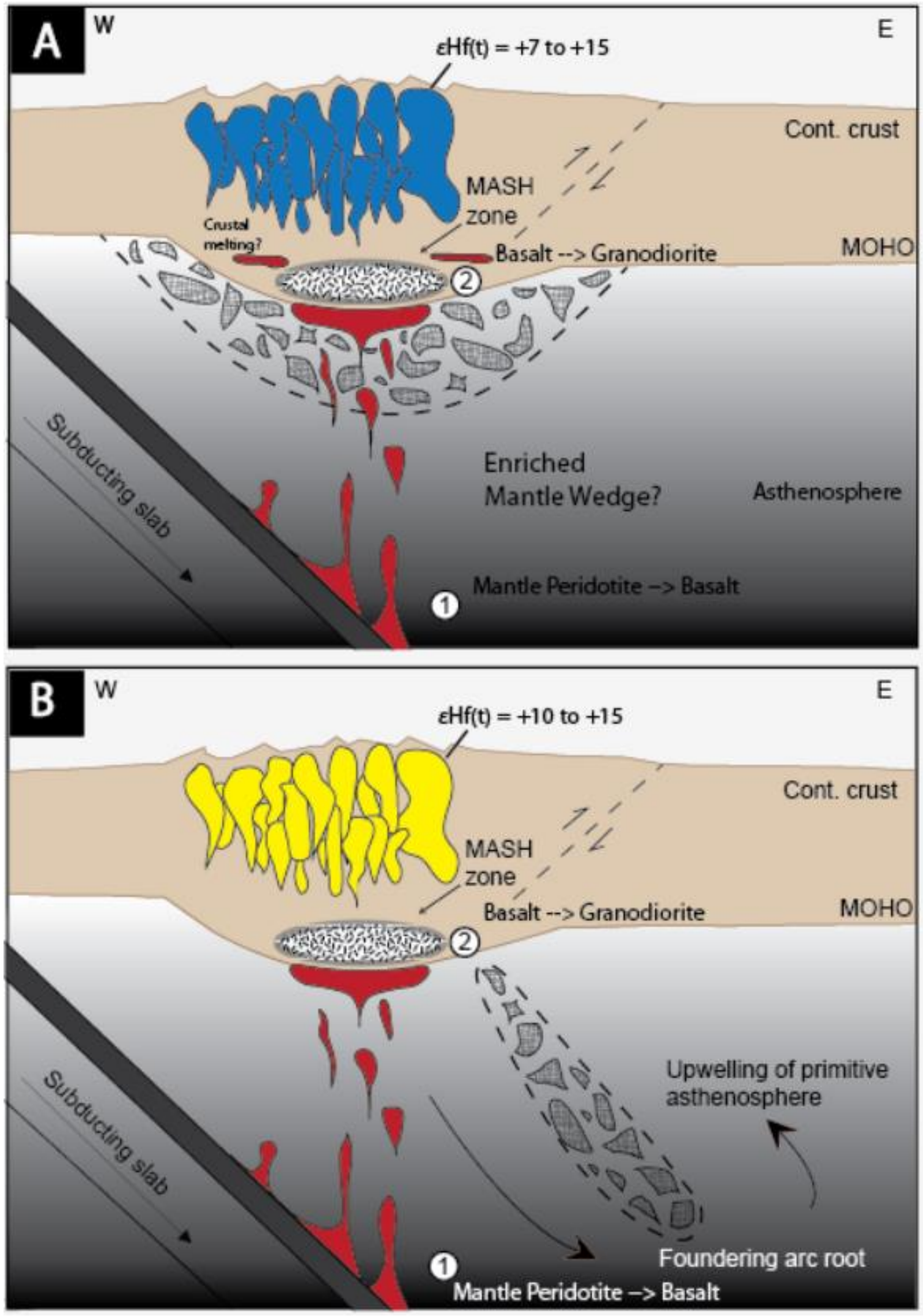

Figure 13. (a) melt generation during "pull-down" events observed in Hf data. Where direct melting of an enriched mantle produces a large arc root. Small amounts of crustal melting in the MASH zone produces melts with Hf composition from +7 to +15 (b) Melt generation during "pull-up" events in which the foundering arc root results in upwelling of primitive asthenosphere mantle. Melt produced during these periods therefore reflect a juvenile Hf signature ranging from +10 to +15.

CONCLUSION

New zircon U-Pb ages, combined with zircon oxygen and hafnium isotope data from the southern Coast Mountains batholith shed light on the processes that control magmatism in continental arcs. While other continental arcs show evidence for crustal input driving flare-up events, the southern Coast Mountains batholith indicate that flare-ups were sourced from the mantle.

Although magmatic flux has not been calculated in the southern CMB, distribution of U-Pb zircon ages indicate that high flux events occur between 160-140 Ma, 120-90 Ma, and 80-70 Ma. The mean zircon $\delta^{18}O$ signature of the southern CMB is 5.41± 0.19‰ (2SD), with no evidence of spatial or temporal variations. These results suggest a homogeneous mantle source. Hafnium isotope signatures are overall juvenile, ranging from +7.7 to + 14.4, and suggest a primitive mantle source. Temporal variability in the εHf(t) data may be a result of limited incorporation of young (Paleozoic) crustal material, and/or an isotopically enriched and heterogeneous mantle source. Time periods where εHf(t) values become more restricted and more primitive ("pull-ups") may have resulted from the cyclic delamination of an arc root, and melting promoted by the return flow of isotopically depleted asthenosphere mantle.

These findings indicate that both the timing of magmatism and the melt source is distinctly different in the southern CMB compared to the central CMB, signifying that the processes controlling melt generation varies along strike of the batholith. In addition, the distinct mantle signature of the southern CMB suggests that recycling of crustal material may not be responsible for triggering magmatic flare-ups in continental arcs. Instead magmatism generated during flare-up events are sourced from the mantle and represent entirely new additions to the crust, forcing us to reconsider the impact magmatism generated in continental arcs has on global continental growth.

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APPENDIX

Zircon U-Pb Geochronologic Analyses

						Isotope ratios					Apparent ages (Ma)							
Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
-15KS78 Spot 2	247	79686	4.9	20.0214	2.8	0.1506	4.3	0.0219	3.3	0.77	139.4	4.6	142.4	5.7	192.5	64.2	139.4	4.6
-15KS78 Spot 7	446	71158	5.4	20.4637	1.7	0.1480	2.4	0.0220	1.7	0.70	140.1	2.4	140.2	3.2	141.4	40.6	140.1	2.4
-15KS78 Spot 23	324	91741	5.1	20.2945	1.8	0.1521	2.3	0.0224	1.5	0.63	142.8	2.1	143.8	3.1	160.9	41.9	142.8	2.1
-15KS78 Spot 1	35	9115	4.6	20.5081	5.3	0.1509	6.4	0.0224	3.6	0.56	143.0	5.1	142.7	8.6	136.3	125.3	143.0	5.1
-15KS78 Spot 18	1964	180861	3.9	20.4995	0.9	0.1509	1.7	0.0224	1.5	0.86	143.1	2.1	142.7	2.3	137.4	20.9	143.1	2.1
-15KS78 Spot 25	476	57825	3.5	20.5294	1.2	0.1513	1.7	0.0225	1.1	0.69	143.6	1.6	143.1	2.2	133.9	28.4	143.6	1.6
-15KS78 Spot 6	629	32798	5.3	20.2769	1.4	0.1535	2.2	0.0226	1.7	0.78	143.9	2.4	145.0	3.0	162.9	32.4	143.9	2.4
-15KS78 Spot 12	41	4829	3.1	22.1898	4.4	0.1403	4.9	0.0226	2.2	0.46	143.9	3.2	133.3	6.2	52.1	106.8	143.9	3.2
-15KS78 Spot 10	24	4153	4.9	20.8826	7.7	0.1493	7.9	0.0226	2.0	0.26	144.2	2.9	141.3	10.5	93.7	182.0	144.2	2.9
-15KS78 Spot 16	515	70749	5.8	20.2924	1.2	0.1538	1.9	0.0226	1.5	0.77	144.3	2.1	145.3	2.6	161.1	28.7	144.3	2.1
-15KS78 Spot 3	453	57605	4.1	20.2422	1.3	0.1543	2.1	0.0226	1.6	0.76	144.4	2.2	145.7	2.8	166.9	31.5	144.4	2.2
-15KS78 Spot 29	687	49310	6.1	20.1364	1.2	0.1551	1.7	0.0227	1.1	0.68	144.4	1.6	146.4	2.3	179.2	29.0	144.4	1.6
-15KS78 Spot 21	816	48404	5.5	20.6202	1.3	0.1521	1.8	0.0227	1.3	0.69	145.0	1.8	143.7	2.5	123.5	31.2	145.0	1.8
-15KS78 Spot 5	400	65948	4.5	20.3499	2.2	0.1543	4.7	0.0228	4.1	0.88	145.2	5.9	145.7	6.4	154.5	52.1	145.2	5.9
-15KS78 Spot 17	537	87701	5.6	20.4620	1.6	0.1538	2.0	0.0228	1.2	0.59	145.4	1.7	145.2	2.7	141.7	38.4	145.4	1.7
-15KS78 Spot 22	641	77367	5.7	20.3531	1.2	0.1550	1.8	0.0229	1.3	0.74	145.8	1.9	146.3	2.4	154.1	28.0	145.8	1.9
-15KS78 Spot 14	682	91021	5.6	20.1771	1.3	0.1567	2.1	0.0229	1.7	0.80	146.2	2.4	147.8	2.9	174.4	29.6	146.2	2.4
-15KS78 Spot 8	468	227348	5.9	20.5649	1.3	0.1538	2.0	0.0229	1.5	0.74	146.2	2.1	145.3	2.7	129.9	31.2	146.2	2.1
-15KS78 Spot 34	490	161306	5.4	20.7475	1.7	0.1528	2.1	0.0230	1.3	0.62	146.6	1.9	144.4	2.9	109.0	39.1	146.6	1.9
-15KS78 Spot 15	378	26029	6.7	20.4574	2.0	0.1551	2.7	0.0230	1.8	0.68	146.7	2.7	146.4	3.7	142.2	46.9	146.7	2.7
-15KS78 Spot 30	374	68271	3.8	20.3771	1.8	0.1558	2.3	0.0230	1.5	0.65	146.7	2.2	147.0	3.2	151.4	41.7	146.7	2.2
-15KS78 Spot 4	600	30059	6.5	20.4813	1.5	0.1553	2.1	0.0231	1.4	0.66	147.1	2.0	146.6	2.8	139.4	36.3	147.1	2.0
-15KS78 Spot 28	386	96378	5.9	20.4037	1.8	0.1560	2.8	0.0231	2.1	0.76	147.2	3.1	147.2	3.8	148.4	43.0	147.2	3.1
-15KS78 Spot 24	39	14062	3.1	20.6264	3.9	0.1549	4.1	0.0232	1.3	0.31	147.7	1.8	146.2	5.5	122.8	90.9	147.7	1.8
-15KS78 Spot 27	90	36070	3.9	20.1624	4.6	0.1587	5.3	0.0232	2.6	0.49	147.9	3.8	149.6	7.3	176.1	106.6	147.9	3.8
-15KS78 Spot 13	17	28732	2.9	18.9355	7.0	0.1691	7.7	0.0232	3.1	0.40	148.0	4.5	158.6	11.2	320.7	159.3	148.0	4.5
-15KS78 Spot 26	938	75380	4.7	20.5328	1.1	0.1561	1.7	0.0232	1.3	0.76	148.1	1.9	147.3	2.3	133.5	25.8	148.1	1.9
-15KS78 Spot 32	346	46218	4.4	20.7348	1.6	0.1548	2.4	0.0233	1.7	0.72	148.3	2.5	146.1	3.2	110.5	38.4	148.3	2.5
-15KS78 Spot 20	1326	232324	18.8	20.5303	1.4	0.1567	2.2	0.0233	1.6	0.76	148.7	2.4	147.8	3.0	133.8	33.4	148.7	2.4
-15KS78 Spot 19	152	46969	3.8	20.3438	2.3	0.1606	2.8	0.0237	1.6	0.56	151.0	2.4	151.2	4.0	155.2	54.7	151.0	2.4
-15KS78 Spot 33	103	114090	3.3	19.7599	2.3	0.1666	2.9	0.0239	1.7	0.58	152.1	2.5	156.5	4.2	223.0	54.0	152.1	2.5
-15KS78 Spot 35	126	27333	4.8	20.5107	2.4	0.1614	3.6	0.0240	2.7	0.75	153.0	4.1	152.0	5.1	136.1	55.9	153.0	4.1
-15KS78 Spot 9	68	25577	2.1	20.8786	2.8	0.1603	3.3	0.0243	1.8	0.55	154.6	2.8	151.0	4.7	94.1	66.3	154.6	2.8
-15KS78 Spot 31	155	22921	3.5	20.5017	3.1	0.1660	3.4	0.0247	1.5	0.45	157.2	2.4	156.0	5.0	137.1	72.3	157.2	2.4
-15KS78 Spot 11	206	78858	3.2	20.0283	2.0	0.1738	2.5	0.0252	1.5	0.59	160.7	2.4	162.7	3.8	191.7	47.5	160.7	2.4
-15KS82 Spot 43	55	98802	1.9	19.9784	4.1	0.1240	4.4	0.0180	1.4	0.33	114.8	1.6	118.7	4.9	197.5	95.6	114.8	1.6
-15KS82 Spot 37	39	19734	2.3	20.3844	5.3	0.1217	5.8	0.0180	2.3	0.40	115.0	2.7	116.7	6.4	150.5	124.6	115.0	2.7
-15KS82 Spot 67	51	30953	1.9	20.3168	4.8	0.1224	5.2	0.0180	2.1	0.40	115.3	2.4	117.3	5.8	158.4	112.2	115.3	2.4
-15KS82 Spot 61	59	18572	1.6	21.0772	5.0	0.1183	5.3	0.0181	1.9	0.35	115.6	2.1	113.5	5.7	71.7	118.2	115.6	2.1
-15KS82 Spot 69	40	25687	2.9	18.8070	6.5	0.1327	6.7	0.0181	1.8	0.27	115.6	2.1	126.5	8.0	336.2	146.7	115.6	2.1
-15KS82 Spot 58	67	31266	2.0	20.3239	4.2	0.1234	4.5	0.0182	1.5	0.34	116.2	1.7	118.1	5.0	157.5	98.4	116.2	1.7
-15KS82 Spot 52	52	12733	1.9	21.6065	3.9	0.1164	4.2	0.0182	1.6	0.39	116.5	1.9	111.8	4.5	12.3	93.1	116.5	1.9
-15KS82 Spot 41	71	9149	2.9	20.3147	3.6	0.1240	3.9	0.0183	1.5	0.39	116.7	1.8	118.6	4.4	158.6	85.0	116.7	1.8
-15KS82 Spot 42	87	39672	2.7	20.2336	3.5	0.1246	3.9	0.0183	1.7	0.43	116.8	2.0	119.2	4.4	167.9	82.0	116.8	2.0
-15KS82 Spot 38	44	23553	1.8	21.2735	4.8	0.1185	5.1	0.0183	1.6	0.32	116.8	1.9	113.7	5.5	49.6	114.7	116.8	1.9
-15KS82 Spot 44	76	20450	1.8	20.0008	4.5	0.1262	4.7	0.0183	1.5	0.31	116.9	1.7	120.7	5.4	194.9	104.8	116.9	1.7
-15KS82 Spot 39	80	41662	2.1	19.9321	3.4	0.1267	3.9	0.0183	1.8	0.46	117.0	2.0	121.1	4.4	202.9	79.5	117.0	2.0
-15KS82 Spot 47	70	10950	1.9	20.7019	3.2	0.1220	3.7	0.0183	1.9	0.51	117.0	2.2	116.9	4.1	114.2	75.9	117.0	2.2
-15KS82 Spot 55	52	23162	1.9	20.8155	4.6	0.1213	5.1	0.0183	2.1	0.41	117.0	2.4	116.3	5.6	101.3	109.2	117.0	2.4
-15KS82 Spot 51	41	23359	2.4	21.4054	5.2	0.1180	5.6	0.0183	2.1	0.37	117.0	2.4	113.3	6.0	34.8	125.4	117.0	2.4
-15KS82 Spot 49	49	46543	1.9	20.5226	4.6	0.1231	5.0	0.0183	1.9	0.39	117.1	2.2	117.9	5.6	134.7	108.3	117.1	2.2
-15KS82 Spot 57	59	15505	1.9	20.2491	4.0	0.1249	4.5	0.0183	1.9	0.42	117.2	2.2	119.5	5.0	166.1	94.2	117.2	2.2
-15KS82 Spot 63	56	22314	2.0	21.4334	3.3	0.1183	3.8	0.0184	1.9	0.50	117.4	2.2	113.5	4.1	31.7	79.2	117.4	2.2
-15KS82 Spot 66	77	26425	2.0	20.1686	4.4	0.1261	4.7	0.0184	1.7	0.37	117.8	2.0	120.6	5.3	175.4	101.6	117.8	2.0
-15KS82 Spot 62	45	10465	1.9	20.4739	5.2	0.1242	5.6	0.0184	1.9	0.34	117.8	2.2	118.9	6.3	140.3	123.3	117.8	2.2
-15KS82 Spot 48	82	46667	3.8	19.4807	3.6	0.1306	3.9	0.0185	1.6	0.42	117.9	1.9	124.7	4.6	255.8	82.5	117.9	1.9

-15KS82 Spot 36	66	57624	2.2	20.5808	4.1	0.1242	4.4	0.0185	1.6	0.35	118.4	1.8	118.8	5.0	128.1	97.5	118.4	1.8
-15KS82 Spot 53	77	15499	2.0	19.8616	3.9	0.1287	4.1	0.0185	1.3	0.32	118.4	1.5	122.9	4.8	211.1	91.1	118.4	1.5
-15KS82 Spot 45	39	8248	2.2	20.6772	5.4	0.1237	5.7	0.0186	1.8	0.31	118.5	2.1	118.4	6.4	117.1	128.4	118.5	2.1
-15KS82 Spot 40	67	6842	1.7	21.6489	3.4	0.1185	3.9	0.0186	1.8	0.46	118.8	2.1	113.7	4.2	7.6	82.8	118.8	2.1
-15KS82 Spot 68	48	28953	2.2	21.5538	4.4	0.1190	4.9	0.0186	2.1	0.44	118.8	2.5	114.2	5.2	18.2	104.8	118.8	2.5
-15KS82 Spot 56	37	51117	2.1	19.9452	5.7	0.1286	6.0	0.0186	1.8	0.30	118.8	2.1	122.8	6.9	201.4	132.6	118.8	2.1
-15KS82 Spot 60	97	25699	2.2	20.5807	2.9	0.1247	3.4	0.0186	1.8	0.53	118.9	2.1	119.3	3.8	128.1	67.8	118.9	2.1
-15KS82 Spot 65	44	3699	2.0	22.1935	5.3	0.1157	5.6	0.0186	2.0	0.36	119.0	2.4	111.2	5.9	52.5	128.0	119.0	2.4
-15KS82 Spot 64	66	52990	1.6	20.9549	4.9	0.1229	5.3	0.0187	1.8	0.34	119.3	2.1	117.7	5.8	85.5	117.3	119.3	2.1
-15KS82 Spot 59	65	6139	2.0	21.4064	4.2	0.1206	4.7	0.0187	2.2	0.47	119.5	2.6	115.6	5.2	34.7	100.4	119.5	2.6
-15KS82 Spot 70	150	84886	2.2	16.9542	3.7	0.1523	4.1	0.0187	1.9	0.45	119.6	2.2	143.9	5.5	566.5	79.8	119.6	2.2
-15KS82 Spot 54	51	44572	2.7	21.5848	5.6	0.1198	5.8	0.0188	1.6	0.28	119.8	1.9	114.9	6.3	14.8	133.9	119.8	1.9
-15KS82 Spot 50	59	7638	2.1	22.2611	4.1	0.1162	4.6	0.0188	2.1	0.45	119.8	2.5	111.6	4.9	59.9	99.9	119.8	2.5
-15KS82 Spot 46	96	30411	2.1	21.2217	3.9	0.1234	4.1	0.0190	1.4	0.33	121.3	1.6	118.2	4.6	55.4	92.9	121.3	1.6
-15KN06 Spot 2	65	19156	4.9	20.4540	4.0	0.1643	4.5	0.0244	2.0	0.45	155.3	3.1	154.5	6.4	142.6	93.7	155.3	3.1
-15KN06 Spot 23	103	85587	5.4	20.1931	2.9	0.1682	3.2	0.0246	1.2	0.38	156.8	1.8	157.8	4.6	172.6	68.8	156.8	1.8
-15KN06 Spot 29	107	31027	4.9	20.6048	2.3	0.1649	2.8	0.0246	1.6	0.58	156.9	2.5	155.0	4.1	125.3	54.4	156.9	2.5
-15KN06 Spot 28	116	46806	3.3	20.0949	2.4	0.1704	2.9	0.0248	1.5	0.54	158.1	2.4	159.7	4.2	184.0	56.5	158.1	2.4
-15KN06 Spot 12	50	16600	3.1	21.1969	4.4	0.1617	4.8	0.0249	1.8	0.38	158.3	2.8	152.2	6.7	58.2	105.0	158.3	2.8
-15KN06 Spot 33	110	44693	3.9	20.8575	2.8	0.1644	3.1	0.0249	1.3	0.44	158.4	2.1	154.6	4.4	96.5	65.3	158.4	2.1
-15KN06 Spot 30	108	55342	4.8	19.8669	3.3	0.1729	3.6	0.0249	1.3	0.36	158.6	2.0	161.9	5.3	210.5	77.1	158.6	2.0
-15KN06 Spot 8	78	37941	4.9	19.6126	2.8	0.1752	3.5	0.0249	2.1	0.60	158.7	3.3	163.9	5.4	240.3	65.5	158.7	3.3
-15KN06 Spot 35	60	18186	4.6	19.6932	3.2	0.1747	3.9	0.0250	2.2	0.57	158.9	3.5	163.5	5.9	230.8	74.0	158.9	3.5
-15KN06 Spot 32	124	18537	5.4	19.9349	2.6	0.1726	3.1	0.0250	1.6	0.52	158.9	2.5	161.6	4.6	202.6	60.5	158.9	2.5
-15KN06 Spot 22	121	25428	6.0	20.1600	2.9	0.1707	3.3	0.0250	1.5	0.46	159.0	2.4	160.1	4.9	176.4	68.6	159.0	2.4
-15KN06 Spot 7	173	71609	2.3	19.9192	2.2	0.1735	2.7	0.0251	1.7	0.61	159.6	2.6	162.4	4.1	204.4	50.6	159.6	2.6
-15KN06 Spot 18	57	13105	4.7	20.0184	3.0	0.1730	3.6	0.0251	1.9	0.53	159.9	3.0	162.0	5.3	192.9	70.2	159.9	3.0
-15KN06 Spot 34	226	45675	2.6	20.4757	1.8	0.1695	2.5	0.0252	1.7	0.68	160.3	2.6	159.0	3.6	140.1	42.5	160.3	2.6
-15KN06 Spot 11	85	18063	2.9	20.0018	2.9	0.1736	3.4	0.0252	1.8	0.51	160.4	2.8	162.6	5.1	194.8	68.2	160.4	2.8
-15KN06 Spot 3	114	26277	4.6	20.3596	2.3	0.1708	2.8	0.0252	1.5	0.55	160.6	2.4	160.1	4.1	153.4	54.6	160.6	2.4
-15KN06 Spot 17	110	43287	2.8	20.0512	2.8	0.1735	3.3	0.0252	1.6	0.49	160.6	2.5	162.4	4.9	189.0	66.0	160.6	2.5
-15KN06 Spot 21	183	48326	2.6	20.8000	2.3	0.1674	2.9	0.0253	1.7	0.59	160.8	2.7	157.2	4.2	103.1	54.7	160.8	2.7
-15KN06 Spot 10	81	88598	7.2	19.3396	2.9	0.1801	3.5	0.0253	2.0	0.58	160.8	3.2	168.1	5.5	272.5	66.4	160.8	3.2
-15KN06 Spot 19	187	128702	5.3	20.1822	2.1	0.1726	2.6	0.0253	1.6	0.59	160.9	2.5	161.7	3.9	173.8	49.3	160.9	2.5
-15KN06 Spot 5	209	48234	2.3	19.9703	2.2	0.1747	2.7	0.0253	1.6	0.60	161.1	2.6	163.5	4.1	198.5	50.0	161.1	2.6
-15KN06 Spot 6	130	12898	3.1	16.5239	4.9	0.2112	5.2	0.0253	1.5	0.29	161.1	2.4	194.5	9.1	622.1	106.8	161.1	2.4
-15KN06 Spot 20	212	243693	3.1	20.3176	1.8	0.1718	2.6	0.0253	1.9	0.72	161.2	3.0	161.0	3.9	158.2	42.3	161.2	3.0
-15KN06 Spot 16	106	45237	2.9	20.3742	2.8	0.1715	3.2	0.0253	1.6	0.49	161.3	2.5	160.7	4.8	151.7	66.3	161.3	2.5
-15KN06 Spot 31	106	19862	3.2	20.4754	2.6	0.1706	3.0	0.0253	1.5	0.51	161.3	2.4	159.9	4.4	140.1	60.3	161.3	2.4
-15KN06 Spot 27	218	42654	2.3	19.9272	2.1	0.1753	2.9	0.0253	2.0	0.69	161.3	3.2	164.0	4.4	203.5	49.3	161.3	3.2
-15KN06 Spot 1	274	48164	3.3	19.8422	2.2	0.1763	2.8	0.0254	1.7	0.60	161.5	2.6	164.8	4.2	213.4	51.5	161.5	2.6
-15KN06 Spot 25	82	65978	4.5	20.5453	3.4	0.1704	3.9	0.0254	2.0	0.51	161.7	3.2	159.8	5.8	132.1	79.7	161.7	3.2
-15KN06 Spot 15	105	49062	4.3	19.6514	3.0	0.1783	3.5	0.0254	1.8	0.51	161.8	2.8	166.6	5.3	235.7	68.7	161.8	2.8
-15KN06 Spot 24	151	36580	6.1	19.5659	2.3	0.1796	3.1	0.0255	2.1	0.66	162.2	3.3	167.7	4.8	245.8	53.9	162.2	3.3
-15KN06 Spot 14	85	21987	3.7	21.1368	2.7	0.1665	3.2	0.0255	1.8	0.56	162.5	2.9	156.4	4.7	64.9	64.2	162.5	2.9
-15KN06 Spot 4	114	46936	4.1	20.4549	3.2	0.1723	3.6	0.0256	1.8	0.48	162.7	2.8	161.4	5.4	142.4	74.9	162.7	2.8
-15KN06 Spot 9	58	135244	4.7	20.5059	4.3	0.1720	4.7	0.0256	1.9	0.40	162.9	3.1	161.2	7.0	136.6	101.6	162.9	3.1
-15KN06 Spot 13	103	44726	4.2	20.1350	2.4	0.1758	3.0	0.0257	1.8	0.60	163.4	2.9	164.5	4.6	179.3	56.4	163.4	2.9
-15KN06 Spot 26	156	20341	4.8	19.8121	1.9	0.1802	2.5	0.0259	1.5	0.62	164.8	2.5	168.3	3.8	216.9	44.8	164.8	2.5
-15KS81 Spot 52	58	26131	2.7	20.0045	4.9	0.1170	5.2	0.0170	1.6	0.30	108.5	1.7	112.4	5.5	194.5	114.3	108.5	1.7
-15KS81 Spot 46	43	18624	3.1	20.6194	4.0	0.1159	4.3	0.0173	1.5	0.35	110.7	1.7	111.3	4.5	123.6	94.2	110.7	1.7
-15KS81 Spot 57	64	31946	2.6	21.0149	3.9	0.1138	4.3	0.0173	1.9	0.45	110.8	2.1	109.4	4.5	78.7	92.3	110.8	2.1
-15KS81 Spot 37	72	35203	2.8	20.8612	3.2	0.1146	3.6	0.0173	1.7	0.48	110.8	1.9	110.2	3.8	96.1	75.5	110.8	1.9
-15KS81 Spot 49	74	21140	2.9	20.4767	3.7	0.1169	4.1	0.0174	1.8	0.43	110.9	2.0	112.2	4.4	140.0	87.6	110.9	2.0
-15KS81 Spot 50	28	3265	3.5	21.7682	6.2	0.1099	6.6	0.0174	2.4	0.37	110.9	2.7	105.9	6.6	5.6	148.5	110.9	2.7
-15KS81 Spot 55	44	9406	3.4	20.8107	3.6	0.1150	4.2	0.0174	2.2	0.52	110.9	2.4	110.5	4.4	101.8	84.1	110.9	2.4
-15KS81 Spot 62	34	9178	2.7	20.5369	6.7	0.1166	7.2	0.0174	2.8	0.38	111.0	3.0	111.9	7.7	133.1	157.2	111.0	3.0
-15KS81 Spot 58	49	9315	2.9	20.1837	5.3	0.1186	5.6	0.0174	1.6	0.29	111.0	1.8	113.8	6.0	173.7	124.7	111.0	1.8
-15KS81 Spot 63	54	7329	3.7	20.4325	5.0	0.1172	5.3	0.0174	1.9	0.35	111.0	2.0	112.5	5.7	145.0	117.6	111.0	2.0
-15KS81 Spot 47	96	8552	1.9	21.3500	3.1	0.1122	3.8	0.0174	2.1	0.55	111.1	2.3	108.0	3.8	41.0	74.8	111.1	2.3
-15KS81 Spot 65	22	2862	3.5	21.0201	5.8	0.1141	6.2	0.0174	2.3	0.36	111.2	2.5	109.7	6.5	78.1	138.3	111.2	2.5
-15KS81 Spot 70	56	11871	3.0	20.4552	3.6	0.1175	4.1	0.0174	1.9	0.46	111.4	2.1	112.8	4.4	142.4	85.2	111.4	2.1

-15KS81 Spot 44	46	17092	3.4	19.0649	5.0	0.1262	5.4	0.0174	2.0	0.36	111.5	2.2	120.6	6.1	305.2	114.6	111.5	2.2
-15KS81 Spot 48	29	4076	3.5	20.4242	6.8	0.1179	7.0	0.0175	1.8	0.26	111.6	2.0	113.2	7.5	146.0	159.3	111.6	2.0
-15KS81 Spot 54	35	22316	2.8	20.0427	5.2	0.1208	5.7	0.0176	2.4	0.42	112.2	2.7	115.8	6.3	190.1	121.4	112.2	2.7
-15KS81 Spot 56	30	213735	3.2	20.5274	5.2	0.1180	5.8	0.0176	2.4	0.42	112.3	2.7	113.3	6.2	134.2	122.8	112.3	2.7
-15KS81 Spot 61	79	27751	3.3	20.4871	4.2	0.1186	4.5	0.0176	1.8	0.41	112.7	2.1	113.8	4.9	138.8	97.5	112.7	2.1
-15KS81 Spot 36	70	31670	2.2	21.0426	3.0	0.1157	3.6	0.0177	2.0	0.55	112.8	2.2	111.1	3.8	75.6	71.7	112.8	2.2
-15KS81 Spot 59	66	5086	4.1	20.8154	4.2	0.1170	4.7	0.0177	1.9	0.41	112.9	2.1	112.4	4.9	101.3	100.3	112.9	2.1
-15KS81 Spot 41	51	15495	3.6	19.5965	3.5	0.1246	4.1	0.0177	2.0	0.49	113.1	2.2	119.2	4.6	242.2	81.6	113.1	2.2
-15KS81 Spot 38	49	28518	3.5	20.2697	3.8	0.1205	4.4	0.0177	2.2	0.50	113.2	2.5	115.5	4.8	163.7	89.2	113.2	2.5
-15KS81 Spot 45	25	3850	3.6	21.5925	7.3	0.1134	7.8	0.0178	2.7	0.35	113.5	3.0	109.1	8.1	13.9	176.4	113.5	3.0
-15KS81 Spot 51	74	12338	2.5	21.5395	4.2	0.1140	4.7	0.0178	2.0	0.43	113.8	2.3	109.6	4.9	19.8	101.6	113.8	2.3
-15KS81 Spot 60	50	9050	3.3	20.9213	3.8	0.1174	4.3	0.0178	2.0	0.46	113.9	2.2	112.8	4.6	89.3	90.5	113.9	2.2
-15KS81 Spot 66	35	30985	3.8	18.7277	5.4	0.1313	5.8	0.0178	2.2	0.38	113.9	2.5	125.2	6.9	345.7	122.4	113.9	2.5
-15KS81 Spot 42	48	16275	3.5	21.0364	4.9	0.1170	5.3	0.0178	2.0	0.38	114.0	2.3	112.3	5.6	76.3	116.0	114.0	2.3
-15KS81 Spot 68	115	15514	4.5	20.6992	3.4	0.1193	3.9	0.0179	1.9	0.50	114.5	2.2	114.5	4.2	114.5	79.3	114.5	2.2
-15KS81 Spot 64	44	10362	3.4	19.4117	5.5	0.1277	5.8	0.0180	2.0	0.34	114.8	2.3	122.0	6.7	263.9	125.7	114.8	2.3
-15KS81 Spot 67	79	8488	2.6	21.0961	3.7	0.1176	4.1	0.0180	1.9	0.46	115.0	2.2	112.9	4.4	69.5	87.1	115.0	2.2
-15KS81 Spot 40	44	5335	2.8	22.7548	5.8	0.1092	6.0	0.0180	1.8	0.29	115.2	2.0	105.3	6.0	113.6	142.5	115.2	2.0
-15KS81 Spot 53	47	6860	3.0	16.0523	6.5	0.1553	6.8	0.0181	2.0	0.29	115.5	2.3	146.6	9.2	684.3	138.3	115.5	2.3
-15KS81 Spot 69	72	8388	4.0	20.1495	4.6	0.1240	5.0	0.0181	2.0	0.40	115.8	2.3	118.7	5.6	177.6	107.0	115.8	2.3
-15KS81 Spot 39	60	9995	2.9	20.4570	4.4	0.1233	4.6	0.0183	1.5	0.32	116.8	1.7	118.0	5.2	142.2	103.0	116.8	1.7
-15KS81 Spot 43	64	34669	3.5	20.0079	4.8	0.1272	5.1	0.0185	1.9	0.37	117.9	2.2	121.6	5.9	194.1	110.8	117.9	2.2
-15KS83 Spot 21	282	32335	2.3	20.3373	1.8	0.1560	2.7	0.0230	1.9	0.72	146.6	2.8	147.2	3.6	156.0	43.1	146.6	2.8
-15KS83 Spot 13	401	27730	2.1	20.4239	1.7	0.1561	2.5	0.0231	1.8	0.73	147.3	2.6	147.3	3.4	146.1	40.4	147.3	2.6
-15KS83 Spot 11	251	48012	1.5	20.2474	1.9	0.1590	2.5	0.0233	1.7	0.68	148.7	2.5	149.8	3.5	166.3	43.3	148.7	2.5
-15KS83 Spot 9	202	37027	1.5	20.6401	1.8	0.1572	2.4	0.0235	1.6	0.66	149.9	2.3	148.2	3.2	121.3	41.6	149.9	2.3
-15KS83 Spot 17	278	50390	1.7	20.4032	2.6	0.1591	3.1	0.0235	1.6	0.52	150.0	2.4	149.9	4.3	148.4	61.3	150.0	2.4
-15KS83 Spot 18	72	10513	2.9	21.6233	3.7	0.1503	4.1	0.0236	1.9	0.45	150.2	2.8	142.2	5.5	10.5	88.8	150.2	2.8
-15KS83 Spot 34	168	33362	1.9	20.3051	2.3	0.1601	2.7	0.0236	1.4	0.53	150.2	2.1	150.8	3.8	159.7	54.2	150.2	2.1
-15KS83 Spot 30	394	72328	1.9	20.0132	1.7	0.1634	2.4	0.0237	1.7	0.70	151.1	2.6	153.7	3.5	193.5	40.2	151.1	2.6
-15KS83 Spot 31	96	14297	3.2	20.2512	3.2	0.1617	3.4	0.0237	1.1	0.32	151.3	1.7	152.2	4.8	165.9	75.3	151.3	1.7
-15KS83 Spot 7	222	31800	2.0	20.5814	2.0	0.1592	2.7	0.0238	1.8	0.66	151.4	2.7	150.0	3.8	128.0	47.8	151.4	2.7
-15KS83 Spot 15	534	60560	0.8	20.3388	1.6	0.1615	2.4	0.0238	1.8	0.75	151.8	2.7	152.0	3.4	155.8	37.9	151.8	2.7
-15KS83 Spot 8	63	15852	1.6	21.1842	3.7	0.1554	4.2	0.0239	1.9	0.46	152.1	2.9	146.6	5.7	59.6	88.8	152.1	2.9
-15KS83 Spot 19	185	30254	1.9	20.2530	2.2	0.1627	2.7	0.0239	1.5	0.56	152.2	2.3	153.0	3.9	165.7	52.6	152.2	2.3
-15KS83 Spot 29	238	27524	2.3	20.2227	2.1	0.1631	2.7	0.0239	1.8	0.64	152.3	2.6	153.4	3.9	169.2	48.7	152.3	2.6
-15KS83 Spot 32	130	46307	3.7	20.2986	2.4	0.1626	3.4	0.0239	2.3	0.69	152.5	3.5	153.0	4.8	160.5	57.0	152.5	3.5
-15KS83 Spot 27	180	128453	4.0	20.1309	2.4	0.1640	2.8	0.0239	1.3	0.48	152.5	2.0	154.2	4.0	179.8	56.8	152.5	2.0
-15KS83 Spot 6	259	66471	1.8	20.0978	2.4	0.1649	3.1	0.0240	2.0	0.65	153.1	3.1	155.0	4.5	183.6	55.2	153.1	3.1
-15KS83 Spot 4	228	35336	1.5	20.5252	2.5	0.1615	3.0	0.0240	1.7	0.56	153.2	2.5	152.1	4.2	134.4	58.2	153.2	2.5
-15KS83 Spot 24	291	186764	1.8	20.2103	2.3	0.1641	2.9	0.0241	1.9	0.63	153.2	2.8	154.3	4.2	170.6	53.2	153.2	2.8
-15KS83 Spot 3	354	25050	2.5	20.5409	1.9	0.1619	2.4	0.0241	1.4	0.58	153.7	2.1	152.4	3.4	132.6	45.7	153.7	2.1
-15KS83 Spot 10	150	42071	1.2	20.7838	2.1	0.1603	2.6	0.0242	1.6	0.62	154.0	2.5	151.0	3.7	104.9	49.3	154.0	2.5
-15KS83 Spot 16	116	27902	4.1	20.3573	2.9	0.1638	3.3	0.0242	1.6	0.48	154.1	2.4	154.1	4.8	153.7	68.6	154.1	2.4
-15KS83 Spot 23	268	223986	1.7	19.7723	2.5	0.1695	2.9	0.0243	1.4	0.50	154.8	2.2	159.0	4.2	221.5	57.1	154.8	2.2
-15KS83 Spot 22	125	12943	3.6	20.0687	2.3	0.1672	2.8	0.0243	1.5	0.55	155.0	2.3	156.9	4.0	187.0	54.0	155.0	2.3
-15KS83 Spot 28	511	557411	2.0	20.1440	1.3	0.1674	2.0	0.0245	1.4	0.73	155.8	2.2	157.2	2.8	178.3	30.9	155.8	2.2
-15KS83 Spot 2	321	41501	1.2	20.1879	1.9	0.1674	2.5	0.0245	1.7	0.67	156.1	2.6	157.2	3.7	173.2	43.8	156.1	2.6
-15KS83 Spot 20	208	38617	1.7	20.3874	2.3	0.1660	3.0	0.0245	2.0	0.66	156.3	3.1	156.0	4.4	150.2	52.9	156.3	3.1
-15KS83 Spot 12	344	44053	1.8	20.5891	1.6	0.1654	2.3	0.0247	1.7	0.74	157.3	2.6	155.5	3.3	127.1	36.5	157.3	2.6
-15KS83 Spot 35	292	46517	1.4	20.6175	1.4	0.1664	2.1	0.0249	1.5	0.72	158.4	2.3	156.3	3.0	123.8	34.0	158.4	2.3
-15KS83 Spot 1	120	30127	5.1	20.5864	2.7	0.1675	3.3	0.0250	1.9	0.59	159.2	3.0	157.2	4.8	127.4	62.9	159.2	3.0
-15KS83 Spot 25	233	39666	0.8	20.3627	2.3	0.1695	3.0	0.0250	1.9	0.63	159.4	3.0	159.0	4.4	153.1	54.0	159.4	3.0
-15KS83 Spot 5	350	89350	1.6	20.1933	1.8	0.1717	2.5	0.0251	1.8	0.70	160.1	2.8	160.9	3.7	172.6	42.1	160.1	2.8
-15KS83 Spot 33	130	46950	2.8	20.4437	2.8	0.1697	3.3	0.0252	1.7	0.53	160.2	2.7	159.2	4.8	143.7	65.3	160.2	2.7
-15KS83 Spot 14	150	73652	1.9	19.6763	2.8	0.1786	3.3	0.0255	1.9	0.56	162.2	3.0	166.8	5.1	232.8	63.9	162.2	3.0
-15KS83 Spot 26	279	47747	1.3	20.1512	1.9	0.1751	2.4	0.0256	1.6	0.64	162.9	2.5	163.9	3.7	177.4	43.7	162.9	2.5
-15KS79 Spot 37	33	5892	2.6	21.1215	6.0	0.0916	6.4	0.0140	2.1	0.33	89.8	1.9	89.0	5.4	66.7	143.0	89.8	1.9
-15KS79 Spot 36	81	125891	3.9	19.7374	4.5	0.0997	4.8	0.0143	1.6	0.34	91.4	1.5	96.5	4.4	225.7	103.8	91.4	1.5
-15KS79 Spot 39	23	10884	3.8	18.3020	5.9	0.1080	6.4	0.0143	2.5	0.39	91.8	2.3	104.2	6.4	397.5	133.4	91.8	2.3
-15KS79 Spot 60	31	2056	2.3	22.1387	6.9	0.0899	7.4	0.0144	2.8	0.37	92.4	2.5	87.5	6.2	46.5	167.1	92.4	2.5
-15KS79 Spot 46	55	12782	3.6	19.2948	5.0	0.1034	5.5	0.0145	2.4	0.43	92.6	2.2	99.9	5.2	277.8	113.9	92.6	2.2

-15KS79 Spot 64	103	79012	1.6	20.8729	3.0	0.0956	3.5	0.0145	1.6	0.47	92.6	1.5	92.7	3.1	94.8	72.0	92.6	1.5
-15KS79 Spot 65	35	5159	2.2	23.2666	6.9	0.0862	7.3	0.0145	2.5	0.34	93.1	2.3	83.9	5.9	168.7	171.1	93.1	2.3
-15KS79 Spot 48	143	14811	1.8	21.1504	2.9	0.0948	3.5	0.0145	1.9	0.55	93.1	1.8	92.0	3.1	63.4	69.0	93.1	1.8
-15KS79 Spot 69	113	37915	4.0	21.0755	4.5	0.0955	4.8	0.0146	1.6	0.34	93.4	1.5	92.6	4.3	71.9	107.4	93.4	1.5
-15KS79 Spot 53	21	4090	3.8	24.0123	7.6	0.0840	8.2	0.0146	3.0	0.37	93.7	2.8	81.9	6.5	247.9	193.7	93.7	2.8
-15KS79 Spot 49	75	15184	3.8	20.7066	4.5	0.0977	4.9	0.0147	1.9	0.38	93.9	1.7	94.6	4.4	113.7	107.3	93.9	1.7
-15KS79 Spot 62	60	67540	2.0	21.5155	4.7	0.0940	5.0	0.0147	1.5	0.31	93.9	1.4	91.3	4.3	22.5	113.4	93.9	1.4
-15KS79 Spot 63	100	7764	1.9	22.8593	4.3	0.0887	4.7	0.0147	1.9	0.40	94.1	1.8	86.3	3.9	125.0	105.4	94.1	1.8
-15KS79 Spot 61	60	28732	2.1	20.8001	4.0	0.0975	4.6	0.0147	2.2	0.48	94.2	2.0	94.5	4.1	103.1	95.0	94.2	2.0
-15KS79 Spot 52	66	38676	3.5	21.8051	5.5	0.0931	5.8	0.0147	2.0	0.34	94.2	1.8	90.3	5.0	9.7	131.8	94.2	1.8
-15KS79 Spot 38	70	14191	3.6	22.2948	5.3	0.0911	5.6	0.0147	1.7	0.31	94.3	1.6	88.5	4.8	63.6	130.2	94.3	1.6
-15KS79 Spot 41	60	9014	3.7	20.9024	5.4	0.0972	5.6	0.0147	1.7	0.31	94.3	1.6	94.2	5.1	91.4	127.3	94.3	1.6
-15KS79 Spot 56	79	20946	2.2	18.7116	3.2	0.1086	3.7	0.0147	1.9	0.51	94.3	1.8	104.7	3.7	347.6	72.8	94.3	1.8
-15KS79 Spot 50	77	12847	4.5	20.6955	4.5	0.0982	5.0	0.0147	2.1	0.43	94.4	2.0	95.1	4.5	114.9	105.9	94.4	2.0
-15KS79 Spot 55	55	6684	2.2	21.9532	4.5	0.0926	5.1	0.0147	2.3	0.46	94.4	2.2	89.9	4.4	26.0	109.8	94.4	2.2
-15KS79 Spot 43	66	183605	1.9	21.0871	4.4	0.0966	4.9	0.0148	2.1	0.43	94.6	2.0	93.7	4.4	70.6	104.7	94.6	2.0
-15KS79 Spot 66	56	20119	2.4	21.6082	6.3	0.0944	6.6	0.0148	1.9	0.29	94.7	1.8	91.6	5.8	12.2	152.8	94.7	1.8
-15KS79 Spot 70	56	28863	2.2	20.9983	3.9	0.0972	4.5	0.0148	2.1	0.48	94.7	2.0	94.2	4.0	80.6	92.9	94.7	2.0
-15KS79 Spot 44	39	17989	3.2	21.0674	5.6	0.0969	5.8	0.0148	1.6	0.28	94.8	1.5	94.0	5.2	72.8	133.2	94.8	1.5
-15KS79 Spot 45	39	6756	2.9	18.9005	5.9	0.1083	6.4	0.0148	2.5	0.39	95.0	2.3	104.4	6.4	324.9	135.1	95.0	2.3
-15KS79 Spot 40	43	5985	2.3	23.3060	4.6	0.0879	5.0	0.0149	2.1	0.41	95.1	1.9	85.5	4.1	173.0	114.4	95.1	1.9
-15KS79 Spot 58	67	90230	2.4	21.3053	4.6	0.0963	4.9	0.0149	1.9	0.39	95.2	1.8	93.4	4.4	46.0	108.8	95.2	1.8
-15KS79 Spot 42	188	186611	4.6	20.6111	2.2	0.1006	2.8	0.0150	1.7	0.60	96.2	1.6	97.3	2.6	124.6	52.2	96.2	1.6
-15KS79 Spot 68	41	7986	2.1	22.9733	5.6	0.0905	6.1	0.0151	2.3	0.38	96.5	2.2	88.0	5.1	137.3	139.9	96.5	2.2
-15KS79 Spot 51	52	9581	2.9	20.9282	5.6	0.0997	6.1	0.0151	2.3	0.38	96.8	2.2	96.5	5.6	88.5	132.8	96.8	2.2
-15KS79 Spot 54	42	25453	3.7	20.6205	5.9	0.1014	6.2	0.0152	2.1	0.33	97.0	2.0	98.1	5.8	123.5	139.0	97.0	2.0
-15KS79 Spot 59	55	8253	2.3	20.6962	4.6	0.1021	5.2	0.0153	2.3	0.45	98.1	2.2	98.7	4.9	114.8	109.1	98.1	2.2
-15KS79 Spot 47	98	30173	4.3	20.6432	4.2	0.1028	4.7	0.0154	2.1	0.44	98.4	2.0	99.3	4.4	120.9	99.5	98.4	2.0
-15KS79 Spot 67	67	33493	2.6	14.8782	8.1	0.1438	8.6	0.0155	2.9	0.34	99.2	2.9	136.4	10.9	844.4	167.8	99.2	2.9
-15KS79 Spot 57	40	4198	3.0	16.8249	6.8	0.1277	7.2	0.0156	2.3	0.32	99.7	2.3	122.1	8.3	583.1	147.9	99.7	2.3
-15KN13 Spot 7	168	20625	2.9	21.3700	2.8	0.1252	3.4	0.0194	1.9	0.56	123.9	2.3	119.8	3.8	38.7	67.0	123.9	2.3
-15KN13 Spot 32	370	49272	3.6	20.7090	2.0	0.1293	2.8	0.0194	1.9	0.69	124.0	2.4	123.5	3.2	113.4	47.3	124.0	2.4
-15KN13 Spot 34	530	32114	3.6	20.6475	1.8	0.1304	2.5	0.0195	1.8	0.71	124.7	2.2	124.5	3.0	120.4	42.0	124.7	2.2
-15KN13 Spot 20	234	15105	3.5	20.8034	2.6	0.1296	3.1	0.0196	1.8	0.56	124.8	2.2	123.7	3.7	102.7	61.5	124.8	2.2
-15KN13 Spot 6	788	742973	4.2	20.4613	1.6	0.1318	2.5	0.0196	2.0	0.78	124.9	2.4	125.7	3.0	141.7	36.9	124.9	2.4
-15KN13 Spot 17	211	34188	2.4	20.4345	2.1	0.1321	2.8	0.0196	1.9	0.67	125.0	2.3	126.0	3.3	144.8	48.9	125.0	2.3
-15KN13 Spot 12	205	42817	3.1	20.8698	2.4	0.1299	2.9	0.0197	1.7	0.57	125.5	2.1	124.0	3.4	95.1	56.8	125.5	2.1
-15KN13 Spot 30	275	46618	3.0	20.6458	2.6	0.1315	3.1	0.0197	1.7	0.55	125.7	2.1	125.5	3.6	120.6	60.6	125.7	2.1
-15KN13 Spot 28	253	92929	2.8	20.8669	2.0	0.1302	2.7	0.0197	1.8	0.67	125.8	2.3	124.3	3.2	95.5	47.4	125.8	2.3
-15KN13 Spot 26	107	13626	3.8	20.9988	3.4	0.1299	3.9	0.0198	2.0	0.52	126.3	2.5	124.0	4.6	80.5	80.1	126.3	2.5
-15KN13 Spot 29	406	74272	2.8	21.0000	2.0	0.1300	2.6	0.0198	1.7	0.66	126.4	2.2	124.1	3.1	80.4	46.6	126.4	2.2
-15KN13 Spot 21	620	199771	4.5	20.7888	2.1	0.1314	2.7	0.0198	1.7	0.63	126.4	2.1	125.3	3.2	104.4	49.3	126.4	2.1
-15KN13 Spot 31	173	134538	2.7	20.0854	3.0	0.1362	3.9	0.0198	2.5	0.64	126.6	3.2	129.6	4.8	185.1	70.0	126.6	3.2
-15KN13 Spot 11	565	58456	3.5	20.6268	1.8	0.1327	2.7	0.0199	2.1	0.76	126.7	2.6	126.5	3.2	122.8	41.8	126.7	2.6
-15KN13 Spot 27	63	11900	3.5	19.4099	4.5	0.1415	5.0	0.0199	2.1	0.42	127.2	2.6	134.4	6.2	264.2	103.5	127.2	2.6
-15KN13 Spot 18	268	60763	2.8	20.7400	2.2	0.1325	3.2	0.0199	2.4	0.74	127.2	3.0	126.3	3.8	109.9	51.0	127.2	3.0
-15KN13 Spot 23	70	15066	2.6	20.1890	4.2	0.1369	4.7	0.0200	2.1	0.46	127.9	2.7	130.3	5.7	173.1	97.4	127.9	2.7
-15KN13 Spot 33	115	41342	3.8	20.6089	3.1	0.1342	3.6	0.0201	1.8	0.51	128.0	2.3	127.9	4.3	124.8	71.9	128.0	2.3
-15KN13 Spot 24	380	23176	2.6	18.3889	4.1	0.1505	4.6	0.0201	2.0	0.43	128.1	2.5	142.4	6.1	386.8	92.5	128.1	2.5
-15KN13 Spot 8	758	171409	3.0	20.5419	1.4	0.1349	2.4	0.0201	2.0	0.82	128.3	2.5	128.5	2.9	132.5	32.3	128.3	2.5
-15KN13 Spot 13	220	49707	3.2	20.1319	2.2	0.1379	2.7	0.0201	1.6	0.58	128.5	2.0	131.1	3.3	179.7	51.6	128.5	2.0
-15KN13 Spot 22	269	27538	3.4	21.0238	2.1	0.1321	2.8	0.0201	1.8	0.65	128.5	2.3	126.0	3.3	77.7	50.7	128.5	2.3
-15KN13 Spot 5	62	13313	3.0	19.5411	3.8	0.1428	4.2	0.0202	1.9	0.46	129.2	2.5	135.6	5.4	248.7	86.9	129.2	2.5
-15KN13 Spot 10	203	22234	2.5	20.7353	2.9	0.1350	3.7	0.0203	2.3	0.61	129.5	2.9	128.6	4.5	110.4	69.1	129.5	2.9
-15KN13 Spot 35	65	28020	3.9	18.6030	4.7	0.1505	5.0	0.0203	1.8	0.36	129.6	2.3	142.3	6.6	360.8	105.1	129.6	2.3
-15KN13 Spot 3	185	36245	4.4	20.7635	2.3	0.1349	3.0	0.0203	1.9	0.64	129.7	2.4	128.5	3.6	107.2	54.3	129.7	2.4
-15KN13 Spot 2	768	235643	3.0	20.2359	1.7	0.1386	2.6	0.0203	2.0	0.76	129.8	2.5	131.8	3.2	167.6	39.3	129.8	2.5
-15KN13 Spot 19	263	33991	4.0	20.4718	2.5	0.1376	3.5	0.0204	2.4	0.69	130.3	3.1	130.9	4.3	140.5	59.5	130.3	3.1
-15KN13 Spot 14	210	81541	4.2	20.8019	2.0	0.1356	2.5	0.0205	1.5	0.60	130.6	2.0	129.2	3.1	102.9	48.3	130.6	2.0
-15KN13 Spot 4	231	27784	2.6	21.1756	2.2	0.1333	2.8	0.0205	1.6	0.59	130.6	2.1	127.0	3.3	60.6	53.5	130.6	2.1
-15KN13 Spot 16	286	75038	3.0	20.7630	2.0	0.1377	2.5	0.0207	1.5	0.60	132.3	2.0	131.0	3.1	107.3	47.7	132.3	2.0
-15KN13 Spot 25	57	83202	3.4	12.5262	13.6	0.2292	13.8	0.0208	2.4	0.17	132.9	3.2	209.5	26.1	1192.8	268.9	132.9	3.2
-15KN13 Spot 15	96	3624	2.5	7.5445	4.5	0.3809	4.9	0.0208	2.0	0.40	133.0	2.6	327.7	13.8	2132.0	78.8	133.0	2.6

-15KN13 Spot 9	120	13516	4.0	12.8950	5.0	0.2271	5.5	0.0212	2.2	0.41	135.5	3.0	207.8	10.4	1135.3	100.5	135.5	3.0
-15KN13 Spot 1	248	36114	4.0	20.7642	2.3	0.1472	3.4	0.0222	2.5	0.73	141.3	3.5	139.4	4.4	107.2	55.4	141.3	3.5
-15KN90 Spot 55	250	48407	3.6	19.2359	2.2	0.1264	3.8	0.0176	3.1	0.82	112.7	3.5	120.8	4.3	284.8	49.4	112.7	3.5
-15KN90 Spot 48	59	18301	2.7	21.1864	4.7	0.1239	5.1	0.0190	2.0	0.40	121.6	2.5	118.6	5.7	59.4	112.4	121.6	2.5
-15KN90 Spot 49	81	142808	2.5	19.7441	2.9	0.1338	3.6	0.0192	2.2	0.60	122.4	2.6	127.5	4.3	224.8	66.7	122.4	2.6
-15KN90 Spot 56	48	8473	2.7	20.1946	5.9	0.1310	6.5	0.0192	2.7	0.41	122.5	3.2	125.0	7.6	172.4	137.5	122.5	3.2
-15KN90 Spot 65	80	52638	2.0	19.6415	3.1	0.1350	3.6	0.0192	1.7	0.48	122.8	2.1	128.6	4.3	236.9	72.5	122.8	2.1
-15KN90 Spot 70	121	32864	2.2	20.8134	3.0	0.1279	3.6	0.0193	1.9	0.52	123.3	2.3	122.2	4.1	101.6	71.9	123.3	2.3
-15KN90 Spot 58	117	229252	6.0	20.1065	2.6	0.1326	2.9	0.0193	1.3	0.46	123.5	1.6	126.5	3.5	182.6	60.8	123.5	1.6
-15KN90 Spot 66	82	23416	2.9	20.4911	3.6	0.1305	4.1	0.0194	1.9	0.46	123.8	2.3	124.6	4.8	138.3	85.1	123.8	2.3
-15KN90 Spot 51	101	106350	1.9	20.3624	4.2	0.1316	4.7	0.0194	2.1	0.44	124.1	2.5	125.6	5.5	153.1	98.3	124.1	2.5
-15KN90 Spot 37	44	4751	2.2	20.9975	5.7	0.1282	6.2	0.0195	2.3	0.38	124.6	2.9	122.5	7.2	80.6	136.5	124.6	2.9
-15KN90 Spot 41	26	8262	2.6	20.9416	5.4	0.1286	5.9	0.0195	2.4	0.40	124.7	2.9	122.8	6.9	87.0	129.0	124.7	2.9
-15KN90 Spot 63	74	49936	2.8	20.8332	4.8	0.1294	5.2	0.0195	2.2	0.41	124.8	2.7	123.5	6.1	99.3	113.1	124.8	2.7
-15KN90 Spot 60	36	6396	4.2	21.2835	5.9	0.1268	6.3	0.0196	2.2	0.35	124.9	2.7	121.2	7.2	48.5	140.4	124.9	2.7
-15KN90 Spot 62	45	3235	2.2	20.4495	5.7	0.1327	6.0	0.0197	2.0	0.33	125.7	2.5	126.6	7.1	143.1	133.1	125.7	2.5
-15KN90 Spot 57	24	4686	2.6	21.7834	6.4	0.1253	6.8	0.0198	2.4	0.36	126.3	3.1	119.8	7.7	7.3	154.0	126.3	3.1
-15KN90 Spot 42	30	6434	3.5	21.9927	6.9	0.1241	7.1	0.0198	2.0	0.28	126.3	2.5	118.8	8.0	30.4	166.4	126.3	2.5
-15KN90 Spot 69	30	17353	3.2	19.3242	6.3	0.1413	6.7	0.0198	2.3	0.34	126.4	2.9	134.2	8.4	274.3	144.5	126.4	2.9
-15KN90 Spot 46	50	25460	2.5	20.2346	5.1	0.1351	5.6	0.0198	2.2	0.40	126.6	2.8	128.7	6.8	167.8	120.0	126.6	2.8
-15KN90 Spot 68	59	6877	3.0	20.4185	3.6	0.1340	4.2	0.0198	2.1	0.50	126.6	2.6	127.6	5.0	146.7	84.8	126.6	2.6
-15KN90 Spot 67	56	184011	2.4	20.6383	3.1	0.1330	3.8	0.0199	2.3	0.59	127.1	2.8	126.8	4.6	121.5	73.2	127.1	2.8
-15KN90 Spot 40	129	32024	2.2	20.9744	3.5	0.1311	3.9	0.0199	1.8	0.45	127.3	2.2	125.1	4.6	83.3	83.4	127.3	2.2
-15KN90 Spot 53	95	70911	2.5	20.7604	3.7	0.1329	4.3	0.0200	2.2	0.51	127.7	2.8	126.7	5.1	107.6	87.0	127.7	2.8
-15KN90 Spot 39	78	22855	2.7	19.7108	4.8	0.1403	5.4	0.0201	2.4	0.45	128.0	3.1	133.3	6.8	228.7	112.0	128.0	3.1
-15KN90 Spot 64	83	10901	2.5	22.2566	4.2	0.1245	4.6	0.0201	1.9	0.41	128.2	2.4	119.1	5.1	59.4	101.9	128.2	2.4
-15KN90 Spot 44	97	38074	1.7	21.2907	4.2	0.1303	4.6	0.0201	1.9	0.42	128.4	2.5	124.4	5.4	47.6	100.1	128.4	2.5
-15KN90 Spot 38	74	8481	2.0	21.1376	5.0	0.1313	5.4	0.0201	2.1	0.40	128.5	2.7	125.3	6.4	64.9	118.1	128.5	2.7
-15KN90 Spot 52	79	8853	2.5	21.6333	4.5	0.1287	5.0	0.0202	2.1	0.43	128.9	2.7	122.9	5.8	9.4	108.9	128.9	2.7
-15KN90 Spot 45	90	13537	2.5	19.9709	3.4	0.1408	3.9	0.0204	1.9	0.49	130.1	2.5	133.7	4.9	198.4	79.9	130.1	2.5
-15KN90 Spot 59	133	53352	4.2	21.2939	2.8	0.1321	3.3	0.0204	1.6	0.48	130.2	2.0	126.0	3.9	47.3	68.0	130.2	2.0
-15KN90 Spot 61	61	8173	2.2	13.8186	9.8	0.2057	10.1	0.0206	2.4	0.24	131.5	3.2	189.9	17.4	996.2	198.7	131.5	3.2
-15KN90 Spot 47	122	48529	3.2	21.0919	2.5	0.1348	2.9	0.0206	1.5	0.52	131.5	2.0	128.4	3.5	70.0	59.5	131.5	2.0
-15KN90 Spot 36	46	22869	2.2	21.9565	5.1	0.1303	5.4	0.0208	1.8	0.34	132.4	2.4	124.4	6.3	26.4	122.7	132.4	2.4
-15KN90 Spot 54	204	37477	2.4	20.7535	2.5	0.1398	3.1	0.0210	1.9	0.60	134.2	2.5	132.8	3.9	108.3	58.4	134.2	2.5
-15KN90 Spot 50	35	13616	3.0	20.8932	5.7	0.1390	6.2	0.0211	2.5	0.41	134.4	3.4	132.1	7.7	92.5	134.8	134.4	3.4
-15KN90 Spot 43	96	35054	2.2	19.8868	4.4	0.1474	5.0	0.0213	2.4	0.49	135.7	3.3	139.6	6.5	208.2	101.0	135.7	3.3
-15KN03 Spot 11	112	14137	2.7	20.7714	3.2	0.1674	3.5	0.0252	1.4	0.41	160.6	2.3	157.2	5.1	106.3	75.3	160.6	2.3
-15KN03 Spot 28	968	57644	1.3	20.1931	1.3	0.1737	2.4	0.0254	2.0	0.83	161.9	3.2	162.6	3.6	172.6	31.0	161.9	3.2
-15KN03 Spot 19	335	34652	2.8	20.5560	1.4	0.1711	2.1	0.0255	1.5	0.74	162.4	2.4	160.4	3.0	130.9	32.5	162.4	2.4
-15KN03 Spot 24	223	235065	2.3	19.9125	2.3	0.1768	3.0	0.0255	1.9	0.64	162.5	3.1	165.3	4.6	205.2	53.6	162.5	3.1
-15KN03 Spot 30	166	23296	3.6	20.5621	2.4	0.1713	2.9	0.0255	1.7	0.58	162.6	2.7	160.5	4.3	130.2	55.6	162.6	2.7
-15KN03 Spot 2	228	144466	3.4	20.1725	2.1	0.1749	2.6	0.0256	1.5	0.59	162.9	2.5	163.6	4.0	175.0	49.4	162.9	2.5
-15KN03 Spot 10	266	45360	2.6	20.0363	1.9	0.1763	2.5	0.0256	1.6	0.64	163.1	2.5	164.9	3.8	190.8	44.7	163.1	2.5
-15KN03 Spot 29	246	48428	3.2	19.9482	2.5	0.1776	3.4	0.0257	2.3	0.68	163.5	3.7	166.0	5.2	201.0	57.8	163.5	3.7
-15KN03 Spot 13	478	66810	2.0	20.2655	1.7	0.1757	2.3	0.0258	1.6	0.70	164.3	2.6	164.3	3.5	164.2	38.7	164.3	2.6
-15KN03 Spot 21	91	92011	3.9	19.7151	3.0	0.1816	3.4	0.0260	1.6	0.47	165.3	2.6	169.5	5.3	228.2	68.7	165.3	2.6
-15KN03 Spot 8	281	78992	2.7	20.2339	2.0	0.1774	2.7	0.0260	1.8	0.67	165.7	3.0	165.8	4.2	167.9	47.3	165.7	3.0
-15KN03 Spot 22	210	32691	3.3	20.3087	2.3	0.1770	2.9	0.0261	1.7	0.59	165.9	2.8	165.5	4.4	159.2	54.6	165.9	2.8
-15KN03 Spot 35	186	68862	4.0	19.8446	2.4	0.1819	3.0	0.0262	1.7	0.58	166.6	2.8	169.7	4.7	213.1	56.4	166.6	2.8
-15KN03 Spot 1	27	13602	4.9	18.6548	4.9	0.1941	5.3	0.0263	1.9	0.36	167.1	3.2	180.1	8.7	354.5	111.0	167.1	3.2
-15KN03 Spot 31	114	34831	4.5	20.5569	2.2	0.1762	2.7	0.0263	1.6	0.59	167.2	2.6	164.8	4.1	130.8	51.7	167.2	2.6
-15KN03 Spot 15	173	63468	3.4	20.2199	2.7	0.1792	3.4	0.0263	2.1	0.61	167.2	3.4	167.4	5.3	169.5	63.5	167.2	3.4
-15KN03 Spot 33	167	21007	2.5	20.8113	2.3	0.1745	2.9	0.0263	1.7	0.60	167.6	2.9	163.3	4.4	101.8	54.7	167.6	2.9
-15KN03 Spot 12	237	48581	3.0	20.5584	2.1	0.1767	2.6	0.0263	1.6	0.61	167.6	2.7	165.2	4.0	130.6	48.7	167.6	2.7
-15KN03 Spot 3	189	74300	2.9	19.9982	2.1	0.1817	3.1	0.0264	2.2	0.73	167.7	3.7	169.5	4.8	195.2	49.1	167.7	3.7
-15KN03 Spot 32	242	28167	3.2	20.2957	1.7	0.1790	2.3	0.0264	1.5	0.67	167.7	2.5	167.2	3.5	160.7	40.1	167.7	2.5
-15KN03 Spot 25	163	32076	2.9	20.1574	2.3	0.1806	2.8	0.0264	1.5	0.54	168.0	2.5	168.5	4.3	176.7	54.5	168.0	2.5
-15KN03 Spot 7	82	28002	3.7	20.2608	3.5	0.1798	4.1	0.0264	2.2	0.52	168.1	3.6	167.9	6.4	164.8	82.0	168.1	3.6
-15KN03 Spot 18	195	29370	3.4	20.6885	2.6	0.1762	3.3	0.0264	2.0	0.62	168.2	3.4	164.8	5.0	115.8	61.1	168.2	3.4
-15KN03 Spot 23	55	24114	5.0	19.7011	4.2	0.1853	4.8	0.0265	2.3	0.49	168.5	3.9	172.6	7.6	229.9	96.3	168.5	3.9
-15KN03 Spot 6	140	87362	3.2	20.2068	3.0	0.1818	3.5	0.0266	1.9	0.54	169.5	3.2	169.6	5.5	171.0	69.4	169.5	3.2

-15KN03 Spot 16	172	26179	2.3	20.1747	2.3	0.1824	3.0	0.0267	1.8	0.62	169.8	3.1	170.1	4.7	174.7	54.5	169.8	3.1
-15KN03 Spot 4	195	87975	2.8	20.1593	2.0	0.1826	2.6	0.0267	1.6	0.62	169.9	2.7	170.3	4.0	176.5	47.0	169.9	2.7
-15KN03 Spot 26	333	110316	2.9	20.4670	1.7	0.1801	2.7	0.0267	2.1	0.79	170.0	3.6	168.1	4.2	141.1	39.5	170.0	3.6
-15KN03 Spot 5	261	80751	3.0	19.9726	1.7	0.1851	2.1	0.0268	1.3	0.60	170.6	2.1	172.5	3.3	198.2	38.9	170.6	2.1
-15KN03 Spot 9	199	46320	3.3	20.2100	2.1	0.1835	2.5	0.0269	1.4	0.56	171.1	2.4	171.0	4.0	170.6	49.0	171.1	2.4
-15KN03 Spot 14	235	42654	2.7	20.1829	2.3	0.1838	3.0	0.0269	1.9	0.64	171.2	3.2	171.3	4.7	173.8	53.4	171.2	3.2
-15KN03 Spot 34	63	29671	4.1	20.1265	4.0	0.1857	4.5	0.0271	2.2	0.48	172.4	3.7	173.0	7.2	180.3	92.2	172.4	3.7
-15KN03 Spot 27	524	127100	1.4	20.4784	1.1	0.1829	2.3	0.0272	2.0	0.87	172.8	3.3	170.5	3.5	139.8	25.8	172.8	3.3
-15KN03 Spot 20	225	56056	2.9	20.0929	2.0	0.1868	2.8	0.0272	1.9	0.69	173.1	3.3	173.9	4.5	184.2	47.1	173.1	3.3
-15KN03 Spot 17	301	49645	3.1	20.6208	2.0	0.1825	3.1	0.0273	2.4	0.77	173.6	4.1	170.2	4.9	123.5	46.3	173.6	4.1
-15KS64 Spot 36	80	36041	4.5	20.9535	3.0	0.1521	3.3	0.0231	1.5	0.44	147.3	2.2	143.8	4.5	85.7	71.0	147.3	2.2
-15KS64 Spot 37	73	12831	2.1	20.4930	3.4	0.1510	4.0	0.0224	2.1	0.52	143.1	2.9	142.8	5.3	138.1	79.8	143.1	2.9
-15KS64 Spot 38	43	7950	2.8	20.6696	4.4	0.1499	4.9	0.0225	2.1	0.42	143.2	2.9	141.8	6.5	117.9	104.6	143.2	2.9
-15KS64 Spot 40	70	28796	6.1	21.2763	3.9	0.1518	4.4	0.0234	2.0	0.45	149.3	2.9	143.5	5.8	49.2	92.9	149.3	2.9
-15KS64 Spot 41	50	23133	3.2	21.2307	5.2	0.1493	5.5	0.0230	1.8	0.33	146.5	2.7	141.3	7.3	54.4	124.0	146.5	2.7
-15KS64 Spot 42	54	33979	3.3	20.5873	4.0	0.1504	4.3	0.0224	1.5	0.34	143.1	2.1	142.2	5.7	127.3	95.2	143.1	2.1
-15KS64 Spot 43	50	45835	3.5	19.5041	3.1	0.1618	3.7	0.0229	2.1	0.56	145.9	3.0	152.3	5.3	253.1	71.6	145.9	3.0
-15KS64 Spot 44	47	6393	2.0	20.5377	4.7	0.1507	5.2	0.0224	2.4	0.46	143.1	3.4	142.5	7.0	133.0	109.6	143.1	3.4
-15KS64 Spot 45	84	41971	5.2	20.2683	2.9	0.1549	3.4	0.0228	1.8	0.53	145.2	2.6	146.3	4.6	163.9	66.9	145.2	2.6
-15KS64 Spot 46	44	6306	3.2	20.7237	4.9	0.1514	5.4	0.0228	2.2	0.41	145.1	3.2	143.1	7.2	111.7	115.4	145.1	3.2
-15KS64 Spot 47	60	30341	2.1	20.1828	3.8	0.1560	4.1	0.0228	1.6	0.38	145.5	2.3	147.2	5.6	173.8	88.9	145.5	2.3
-15KS64 Spot 48	91	44398	4.9	20.3126	2.8	0.1517	3.3	0.0224	1.9	0.56	142.5	2.6	143.4	4.5	158.8	64.9	142.5	2.6
-15KS64 Spot 49	84	57998	4.2	19.9671	2.7	0.1572	3.4	0.0228	2.0	0.60	145.1	2.9	148.2	4.6	198.8	62.4	145.1	2.9
-15KS64 Spot 50	62	86366	4.5	19.6368	3.3	0.1664	3.9	0.0237	2.1	0.54	151.0	3.1	156.3	5.6	237.4	75.9	151.0	3.1
-15KS64 Spot 51	73	16093	4.8	20.7708	3.7	0.1500	4.0	0.0226	1.7	0.42	144.0	2.4	141.9	5.4	106.4	86.7	144.0	2.4
-15KS64 Spot 52	145	25967	5.8	20.2166	2.6	0.1533	3.2	0.0225	1.8	0.57	143.3	2.6	144.8	4.3	169.9	60.7	143.3	2.6
-15KS64 Spot 53	27	3224	3.2	21.0314	6.5	0.1476	6.8	0.0225	2.0	0.30	143.6	2.9	139.8	8.9	76.8	155.4	143.6	2.9
-15KS64 Spot 54	1535	62526	682.8	20.3467	1.4	0.1530	2.2	0.0226	1.7	0.76	143.9	2.4	144.6	3.0	154.9	33.7	143.9	2.4
-15KS64 Spot 55	87	22440	4.5	19.5877	2.8	0.1587	3.4	0.0225	1.9	0.55	143.7	2.7	149.6	4.7	243.2	64.7	143.7	2.7
-15KS64 Spot 56	173	41171	16.7	20.4298	2.8	0.1603	3.3	0.0238	1.6	0.49	151.3	2.4	151.0	4.6	145.3	66.8	151.3	2.4
-15KS64 Spot 57	43	8034	2.7	21.9710	4.7	0.1406	5.1	0.0224	2.1	0.40	142.8	2.9	133.6	6.4	28.0	113.3	142.8	2.9
-15KS64 Spot 58	56	10234	3.7	19.5950	3.5	0.1591	4.1	0.0226	2.1	0.52	144.1	3.0	149.9	5.7	242.3	80.9	144.1	3.0
-15KS64 Spot 59	57	5276	3.8	20.4997	3.9	0.1551	4.5	0.0231	2.1	0.48	147.0	3.1	146.4	6.1	137.3	92.6	147.0	3.1
-15KS64 Spot 60	136	26803	5.8	19.9132	3.0	0.1597	3.6	0.0231	1.9	0.55	147.0	2.8	150.4	5.0	205.1	69.2	147.0	2.8
-15KS64 Spot 61	81	71314	4.1	20.8536	3.9	0.1497	4.2	0.0226	1.6	0.38	144.3	2.3	141.6	5.6	96.9	92.6	144.3	2.3
-15KS64 Spot 62	61	36890	4.4	19.8113	2.9	0.1587	3.3	0.0228	1.6	0.49	145.3	2.3	149.5	4.6	217.0	67.1	145.3	2.3
-15KS64 Spot 63	60	8286	3.7	20.8997	2.9	0.1507	3.4	0.0228	1.8	0.52	145.6	2.6	142.6	4.5	91.7	68.8	145.6	2.6
-15KS64 Spot 64	150	19518	9.4	20.3574	2.6	0.1552	3.3	0.0229	2.0	0.60	146.0	2.8	146.5	4.4	153.7	60.7	146.0	2.8
-15KS64 Spot 65	130	11221	1.7	21.7778	3.0	0.1441	3.4	0.0228	1.5	0.46	145.1	2.2	136.7	4.3	6.6	72.1	145.1	2.2
-15KS64 Spot 66	34	5290	3.2	20.2419	5.2	0.1558	5.7	0.0229	2.5	0.43	145.8	3.6	147.0	7.9	167.0	120.8	145.8	3.6
-15KS64 Spot 67	63	12050	3.7	21.3219	3.8	0.1469	4.3	0.0227	2.0	0.47	144.8	2.9	139.1	5.6	44.1	90.9	144.8	2.9
-15KS64 Spot 68	31	3873	2.8	23.5065	5.3	0.1304	5.7	0.0222	2.2	0.39	141.8	3.1	124.5	6.7	194.3	132.4	141.8	3.1
-15KS64 Spot 69	65	26862	1.9	20.4058	4.2	0.1511	4.8	0.0224	2.3	0.47	142.6	3.2	142.9	6.4	148.1	99.3	142.6	3.2
-15KS64 Spot 70	42	41741	4.6	20.3278	4.5	0.1551	4.9	0.0229	1.8	0.36	145.8	2.6	146.4	6.6	157.1	106.3	145.8	2.6
2-15KS01 Spot 18	8998	#######	1.6	20.2498	1.0	0.1553	1.9	0.0228	1.7	0.85	145.3	2.4	146.5	2.7	166.0	23.7	145.3	2.4
2-15KS01 Spot 29	682	33811	1.6	20.5351	1.5	0.1706	2.3	0.0254	1.7	0.74	161.7	2.7	159.9	3.4	133.3	36.1	161.7	2.7
2-15KS01 Spot 25	879	#######	1.1	20.4526	1.4	0.1738	2.4	0.0258	1.9	0.82	164.1	3.1	162.7	3.6	142.7	31.9	164.1	3.1
2-15KS01 Spot 16	744	129251	2.1	20.6598	1.2	0.1733	1.8	0.0260	1.4	0.76	165.2	2.3	162.3	2.8	119.0	28.3	165.2	2.3
2-15KS01 Spot 14	221	#######	1.8	20.5828	1.9	0.1741	2.2	0.0260	1.2	0.53	165.4	2.0	162.9	3.4	127.8	44.5	165.4	2.0
2-15KS01 Spot 20	294	291138	1.8	20.1892	1.5	0.1775	2.1	0.0260	1.4	0.70	165.4	2.4	165.9	3.2	173.0	34.4	165.4	2.4
2-15KS01 Spot 10	465	169659	1.4	20.6574	2.1	0.1742	2.7	0.0261	1.7	0.64	166.1	2.8	163.0	4.0	119.3	48.4	166.1	2.8
2-15KS01 Spot 11	2221	249198	0.7	20.3534	1.2	0.1770	2.0	0.0261	1.6	0.79	166.3	2.6	165.5	3.1	154.1	29.3	166.3	2.6
2-15KS01 Spot 27	99	15493	2.9	20.7325	3.3	0.1747	3.7	0.0263	1.7	0.45	167.2	2.7	163.5	5.5	110.8	77.3	167.2	2.7
2-15KS01 Spot 28	711	64777	1.2	20.6093	1.5	0.1759	2.7	0.0263	2.3	0.84	167.3	3.8	164.5	4.1	124.8	34.9	167.3	3.8
I2-15KS01 Spot 1	226	37425	2.2	20.5199	2.1	0.1782	2.6	0.0265	1.5	0.60	168.7	2.6	166.5	4.0	135.0	49.0	168.7	2.6
I2-15KS01 Spot 8	292	141000	1.3	19.9662	2.1	0.1832	2.6	0.0265	1.5	0.58	168.8	2.5	170.8	4.1	198.9	49.6	168.8	2.5
I2-15KS01 Spot 4	146	45821	2.2	20.3963	2.3	0.1794	2.8	0.0265	1.6	0.57	168.9	2.6	167.6	4.3	149.2	53.2	168.9	2.6
2-15KS01 Spot 22	184	34369	1.3	20.9336	2.6	0.1751	3.1	0.0266	1.6	0.51	169.1	2.6	163.8	4.6	87.9	62.5	169.1	2.6
2-15KS01 Spot 31	264	39908	2.1	20.3582	2.0	0.1800	2.4	0.0266	1.3	0.53	169.1	2.1	168.1	3.7	153.6	47.8	169.1	2.1
2-15KS01 Spot 23	272	91272	1.5	20.7015	1.9	0.1782	2.7	0.0267	2.0	0.72	170.2	3.3	166.5	4.2	114.2	45.1	170.2	3.3
I2-15KS01 Spot 7	177	26914	2.4	20.2860	2.7	0.1820	3.1	0.0268	1.6	0.51	170.4	2.7	169.8	4.9	161.9	62.6	170.4	2.7
2-15KS01 Spot 19	876	200415	2.0	20.4361	1.5	0.1809	2.2	0.0268	1.7	0.75	170.5	2.8	168.8	3.5	144.6	34.8	170.5	2.8

2-15KS01 Spot 12	91	26048	1.5	20.2239	3.7	0.1832	4.2	0.0269	2.1	0.49	170.9	3.5	170.8	6.7	169.0	86.5	170.9	3.5
I2-15KS01 Spot 3	139	53994	2.7	20.4348	2.2	0.1814	2.8	0.0269	1.7	0.62	171.0	2.9	169.3	4.3	144.7	51.2	171.0	2.9
2-15KS01 Spot 30	330	233445	1.8	20.5331	1.5	0.1809	2.2	0.0269	1.6	0.72	171.4	2.7	168.9	3.4	133.5	36.2	171.4	2.7
I2-15KS01 Spot 6	127	83115	1.8	19.9565	3.0	0.1862	3.4	0.0269	1.6	0.47	171.4	2.7	173.4	5.4	200.0	68.9	171.4	2.7
I2-15KS01 Spot 2	434	69844	1.5	20.6790	1.6	0.1797	2.3	0.0270	1.6	0.72	171.4	2.7	167.8	3.5	116.8	36.8	171.4	2.7
2-15KS01 Spot 35	303	853758	1.0	20.6263	2.0	0.1811	2.5	0.0271	1.4	0.58	172.4	2.4	169.0	3.9	122.8	47.8	172.4	2.4
2-15KS01 Spot 24	137	35943	1.6	20.5662	2.7	0.1817	3.3	0.0271	1.8	0.56	172.4	3.1	169.5	5.1	129.7	63.8	172.4	3.1
2-15KS01 Spot 26	126	176502	2.8	21.3030	2.7	0.1758	3.0	0.0272	1.3	0.45	172.7	2.3	164.4	4.5	46.2	63.8	172.7	2.3
2-15KS01 Spot 34	262	57912	2.8	20.3136	2.1	0.1851	2.7	0.0273	1.7	0.63	173.4	2.9	172.4	4.2	158.7	48.7	173.4	2.9
I2-15KS01 Spot 9	47	74937	2.2	20.0549	3.4	0.1880	3.9	0.0273	1.9	0.48	173.9	3.2	174.9	6.3	188.6	80.2	173.9	3.2
2-15KS01 Spot 15	46	11508	3.3	21.1410	3.3	0.1788	3.7	0.0274	1.7	0.46	174.3	2.9	167.0	5.7	64.5	78.9	174.3	2.9
2-15KS01 Spot 17	301	195159	1.9	20.2839	1.9	0.1867	2.5	0.0275	1.6	0.65	174.7	2.8	173.8	4.0	162.1	44.7	174.7	2.8
2-15KS01 Spot 32	316	234411	1.0	20.5549	1.8	0.1845	2.6	0.0275	1.8	0.72	174.9	3.2	171.9	4.1	131.0	41.8	174.9	3.2
I2-15KS01 Spot 5	153	53080	1.8	21.0038	2.6	0.1837	3.2	0.0280	2.0	0.60	177.9	3.4	171.2	5.1	79.9	61.4	177.9	3.4
2-15KS01 Spot 21	156	127711	2.1	20.1302	2.9	0.1953	3.4	0.0285	1.7	0.50	181.2	3.1	181.1	5.6	179.9	68.3	181.2	3.1
2-15KS01 Spot 13	53	54698	2.5	20.4665	4.5	0.1940	4.9	0.0288	1.7	0.35	183.0	3.1	180.0	8.0	141.2	106.6	183.0	3.1
2-15KS01 Spot 33	53	37974	3.3	21.0372	4.3	0.1896	4.6	0.0289	1.5	0.33	183.9	2.8	176.3	7.4	76.2	102.6	183.9	2.8
15KN38B Spot 62	876	59297	4.4	20.9666	1.5	0.1050	2.1	0.0160	1.4	0.69	102.1	1.5	101.4	2.0	84.1	36.2	102.1	1.5
15KN38B Spot 60	784	79415	1.9	20.9769	1.4	0.1051	2.3	0.0160	1.7	0.77	102.3	1.8	101.5	2.2	83.0	34.2	102.3	1.8
15KN38B Spot 65	547	239922	4.8	20.0896	1.9	0.1100	2.6	0.0160	1.8	0.69	102.5	1.8	106.0	2.6	184.6	43.3	102.5	1.8
15KN38B Spot 68	289	22602	4.3	20.5276	2.4	0.1078	2.8	0.0160	1.5	0.53	102.6	1.5	103.9	2.8	134.1	56.2	102.6	1.5
15KN38B Spot 55	941	52616	0.9	20.5188	1.6	0.1079	2.4	0.0161	1.8	0.75	102.7	1.9	104.1	2.4	135.2	37.8	102.7	1.9
15KN38B Spot 67	497	35938	1.1	20.6284	1.6	0.1076	2.4	0.0161	1.8	0.73	102.9	1.8	103.8	2.4	122.6	38.9	102.9	1.8
15KN38B Spot 53	653	60191	2.7	20.9499	2.0	0.1059	2.7	0.0161	1.8	0.66	102.9	1.8	102.2	2.6	86.1	47.9	102.9	1.8
15KN38B Spot 45	796	30097	1.3	20.4510	1.5	0.1086	1.9	0.0161	1.1	0.61	103.0	1.2	104.7	1.9	142.9	35.1	103.0	1.2
15KN38B Spot 58	598	289862	4.3	21.2457	2.5	0.1046	3.0	0.0161	1.6	0.55	103.0	1.7	101.0	2.9	52.7	60.5	103.0	1.7
15KN38B Spot 64	519	56737	4.7	20.7269	2.1	0.1075	2.7	0.0162	1.7	0.63	103.4	1.7	103.7	2.6	111.4	49.0	103.4	1.7
15KN38B Spot 44	739	42662	1.4	21.1859	1.4	0.1055	2.0	0.0162	1.5	0.72	103.7	1.5	101.9	2.0	59.4	33.3	103.7	1.5
15KN38B Spot 48	534	84058	1.2	20.3600	2.3	0.1100	2.7	0.0162	1.4	0.54	103.9	1.5	106.0	2.7	153.4	53.2	103.9	1.5
15KN38B Spot 59	577	56268	2.7	20.6442	1.8	0.1085	2.4	0.0163	1.5	0.65	103.9	1.6	104.6	2.4	120.8	42.8	103.9	1.6
15KN38B Spot 47	744	47918	3.1	21.4001	2.2	0.1049	2.8	0.0163	1.8	0.63	104.1	1.8	101.3	2.7	35.4	51.5	104.1	1.8
15KN38B Spot 41	909	509986	1.8	20.8158	1.6	0.1080	2.2	0.0163	1.5	0.68	104.3	1.5	104.2	2.2	101.3	38.2	104.3	1.5
15KN38B Spot 37	164	35686	3.2	21.0233	2.8	0.1073	3.4	0.0164	1.9	0.56	104.6	2.0	103.5	3.3	77.7	66.5	104.6	2.0
15KN38B Spot 36	315	15895	4.7	20.9172	2.7	0.1080	3.3	0.0164	1.8	0.55	104.7	1.9	104.1	3.2	89.8	64.2	104.7	1.9
15KN38B Spot 56	672	42806	1.7	19.8559	2.0	0.1138	2.6	0.0164	1.7	0.64	104.8	1.7	109.4	2.7	211.8	45.7	104.8	1.7
15KN38B Spot 52	324	138008	4.0	20.7224	2.1	0.1091	2.5	0.0164	1.4	0.56	104.9	1.5	105.2	2.5	111.9	49.7	104.9	1.5
15KN38B Spot 49	273	93208	3.7	21.0425	2.4	0.1077	2.9	0.0164	1.7	0.58	105.1	1.7	103.8	2.9	75.6	56.2	105.1	1.7
15KN38B Spot 57	435	251143	4.2	21.0882	1.8	0.1078	2.2	0.0165	1.3	0.57	105.4	1.3	103.9	2.2	70.5	43.6	105.4	1.3
15KN38B Spot 43	617	216970	1.8	17.9683	5.1	0.1265	5.3	0.0165	1.6	0.30	105.4	1.7	121.0	6.1	438.6	113.0	105.4	1.7
15KN38B Spot 70	483	268331	1.5	20.4761	2.1	0.1111	2.5	0.0165	1.4	0.56	105.5	1.5	107.0	2.6	140.0	49.2	105.5	1.5
15KN38B Spot 51	530	58347	2.6	21.2381	1.6	0.1078	2.4	0.0166	1.8	0.73	106.2	1.8	104.0	2.4	53.6	39.2	106.2	1.8
15KN38B Spot 42	298	47904	4.1	20.9591	2.1	0.1093	2.7	0.0166	1.7	0.62	106.3	1.8	105.4	2.7	85.0	50.3	106.3	1.8
15KN38B Spot 40	150	40328	3.6	20.7706	2.6	0.1116	3.0	0.0168	1.6	0.53	107.5	1.7	107.5	3.1	106.4	60.6	107.5	1.7
15KN38B Spot 39	853	86635	2.4	21.0289	1.4	0.1107	2.1	0.0169	1.5	0.74	107.9	1.6	106.6	2.1	77.1	33.6	107.9	1.6
15KN38B Spot 66	543	41893	4.4	20.5999	1.9	0.1131	2.5	0.0169	1.7	0.67	108.1	1.8	108.8	2.6	125.8	43.7	108.1	1.8
15KN38B Spot 63	353	96828	3.5	20.9489	2.0	0.1114	2.9	0.0169	2.0	0.71	108.2	2.2	107.3	2.9	86.2	47.8	108.2	2.2
15KN38B Spot 38	515	57782	1.9	19.2992	2.3	0.1210	2.9	0.0169	1.7	0.59	108.3	1.8	116.0	3.1	277.3	53.0	108.3	1.8
15KN38B Spot 50	272	33186	2.1	22.2774	2.6	0.1062	3.2	0.0172	1.8	0.56	109.6	1.9	102.4	3.1	61.7	64.5	109.6	1.9
15KN38B Spot 46	505	150554	4.6	20.5210	2.0	0.1170	2.6	0.0174	1.5	0.60	111.3	1.7	112.4	2.7	134.9	48.0	111.3	1.7
15KN38B Spot 69	441	31452	17.7	21.0170	2.1	0.1435	3.3	0.0219	2.6	0.78	139.4	3.6	136.1	4.2	78.4	50.0	139.4	3.6
15KN38B Spot 54	65	11379	2.7	22.2036	4.0	0.1425	4.4	0.0229	1.7	0.39	146.2	2.5	135.3	5.5	53.6	97.6	146.2	2.5
15KN38B Spot 61	52	7796	3.0	20.4844	4.8	0.1547	5.1	0.0230	1.8	0.35	146.5	2.6	146.1	7.0	139.1	112.5	146.5	2.6
2-15KS58 Spot 23	18	3251	4.7	20.7014	8.0	0.1403	8.2	0.0211	1.7	0.21	134.4	2.2	133.3	10.2	114.3	188.9	134.4	2.2
2-15KS58 Spot 33	73	46342	4.3	20.5655	4.5	0.1422	4.9	0.0212	2.0	0.41	135.3	2.7	135.0	6.2	129.8	105.4	135.3	2.7
I2-15KS58 Spot 3	39	13578	3.8	20.2847	5.4	0.1455	5.6	0.0214	1.7	0.31	136.6	2.3	137.9	7.3	162.1	125.4	136.6	2.3
2-15KS58 Spot 30	13	23454	4.9	18.5052	8.3	0.1601	8.8	0.0215	3.0	0.33	137.0	4.0	150.8	12.4	372.7	187.9	137.0	4.0
2-15KS58 Spot 26	52	6001	2.2	21.5001	4.8	0.1381	5.2	0.0215	2.0	0.38	137.3	2.7	131.3	6.4	24.2	114.8	137.3	2.7
2-15KS58 Spot 31	163	20159	1.1	20.7485	3.1	0.1435	3.5	0.0216	1.6	0.47	137.7	2.2	136.2	4.4	108.9	72.3	137.7	2.2
2-15KS58 Spot 34	97	53818	6.2	20.4719	2.9	0.1455	3.4	0.0216	1.7	0.51	137.7	2.4	137.9	4.4	140.5	68.0	137.7	2.4
I2-15KS58 Spot 6	43	14273	2.8	20.2780	5.1	0.1482	5.5	0.0218	2.0	0.37	139.0	2.8	140.4	7.2	162.8	119.8	139.0	2.8
2-15KS58 Spot 24	85	20583	1.9	20.3656	3.9	0.1478	4.9	0.0218	2.8	0.58	139.2	3.9	139.9	6.4	152.7	92.4	139.2	3.9
2-15KS58 Spot 20	94	14547	1.7	20.9752	4.1	0.1438	4.4	0.0219	1.8	0.40	139.5	2.4	136.5	5.6	83.2	96.3	139.5	2.4

2-15KS58 Spot 13	158	39469	7.1	20.7099	2.6	0.1467	3.2	0.0220	1.9	0.60	140.5	2.7	139.0	4.2	113.3	60.8	140.5	2.7
2-15KS58 Spot 10	97	43871	2.5	19.6016	3.7	0.1550	4.0	0.0220	1.6	0.40	140.5	2.2	146.3	5.5	241.6	84.5	140.5	2.2
2-15KS58 Spot 12	67	56843	25.4	20.4549	3.9	0.1486	4.3	0.0220	1.9	0.43	140.5	2.6	140.7	5.7	142.4	91.7	140.5	2.6
2-15KS58 Spot 28	108	17454	1.4	21.0710	3.2	0.1443	3.8	0.0220	2.0	0.53	140.6	2.8	136.8	4.9	72.4	76.5	140.6	2.8
2-15KS58 Spot 14	86	16339	2.9	20.9832	3.9	0.1452	4.3	0.0221	1.8	0.42	140.9	2.5	137.7	5.5	82.3	91.8	140.9	2.5
2-15KS58 Spot 32	138	37128	1.5	20.5413	2.5	0.1486	3.1	0.0221	1.8	0.58	141.1	2.5	140.7	4.0	132.5	58.9	141.1	2.5
2-15KS58 Spot 35	49	9572	14.0	21.3576	5.9	0.1430	6.2	0.0222	2.1	0.33	141.3	2.9	135.8	7.9	40.2	141.0	141.3	2.9
12-15KS58 Spot 1	121	35526	2.0	20.3078	3.1	0.1505	3.6	0.0222	1.7	0.48	141.3	2.4	142.3	4.7	159.4	72.7	141.3	2.4
2-15KS58 Spot 11	206	290027	6.9	20.6785	2.4	0.1481	2.9	0.0222	1.6	0.55	141.6	2.3	140.2	3.8	116.9	57.4	141.6	2.3
2-15KS58 Spot 15	45	9716	3.7	21.0802	4.6	0.1456	5.2	0.0223	2.4	0.47	141.9	3.4	138.0	6.8	71.3	110.2	141.9	3.4
12-15KS58 Spot 5	72	15987	3.0	21.5972	3.7	0.1423	4.3	0.0223	2.2	0.51	142.1	3.0	135.1	5.4	13.4	88.6	142.1	3.0
2-15KS58 Spot 19	49	8376	3.4	22.3225	5.0	0.1378	5.5	0.0223	2.3	0.42	142.2	3.3	131.1	6.8	66.6	122.5	142.2	3.3
2-15KS58 Spot 21	85	36968	1.4	19.9957	4.2	0.1539	4.4	0.0223	1.5	0.33	142.3	2.1	145.3	6.0	195.5	96.7	142.3	2.1
15KS58 Spot 18	82	13265	2.4	20.7123	3.3	0.1487	3.7	0.0223	1.7	0.46	142.4	2.4	140.8	4.9	113.1	77.4	142.4	2.4
15KS58 Spot 9	27	63698	3.9	19.3747	6.1	0.1603	6.4	0.0225	1.8	0.28	143.6	2.6	151.0	9.0	268.3	141.1	143.6	2.6
15KS58 Spot 2	74	8842	2.1	20.9717	3.8	0.1483	4.1	0.0226	1.7	0.42	143.8	2.5	140.4	5.4	83.6	89.2	143.8	2.5
15KS58 Spot 4	192	57260	1.4	20.8683	2.9	0.1495	3.4	0.0226	1.7	0.51	144.3	2.5	141.5	4.5	95.3	69.1	144.3	2.5
15KS58 Spot 22	72	8194	20.1	20.9018	4.3	0.1500	4.5	0.0227	1.3	0.29	144.9	1.9	141.9	6.0	91.5	102.9	144.9	1.9
15KS58 Spot 8	73	66110	3.5	20.8482	2.8	0.1514	3.3	0.0229	1.8	0.54	145.9	2.6	143.2	4.4	97.6	66.0	145.9	2.6
15KS58 Spot 17	339	223630	2.7	20.6815	2.1	0.1535	3.0	0.0230	2.1	0.71	146.7	3.1	145.0	4.1	116.5	50.0	146.7	3.1
15KS58 Spot 27	31	38678	3.2	20.3009	6.4	0.1572	6.7	0.0232	2.1	0.31	147.5	3.0	148.3	9.3	160.2	150.1	147.5	3.0
15KS58 Spot 29	25	17096	11.3	19.9847	7.4	0.1597	7.9	0.0232	2.7	0.34	147.5	3.9	150.5	11.0	196.8	172.3	147.5	3.9
15KS58 Spot 7	26	40133	4.5	19.2105	6.1	0.1663	6.9	0.0232	3.2	0.46	147.7	4.6	156.2	10.0	287.8	140.0	147.7	4.6
15KS58 Spot 16	172	72730	1.5	20.3807	2.4	0.1568	2.8	0.0232	1.4	0.51	147.7	2.1	147.9	3.8	151.0	55.4	147.7	2.1
15KN69B Spot 39	105	42924	2.9	20.1376	3.6	0.1555	4.0	0.0227	1.8	0.44	144.8	2.6	146.8	5.5	179.0	83.6	144.8	2.6
15KN69B Spot 52	44	10041	3.7	20.5757	4.9	0.1527	5.3	0.0228	1.9	0.36	145.3	2.7	144.3	7.1	128.7	116.4	145.3	2.7
15KN69B Spot 63	127	14679	1.4	20.4928	2.6	0.1534	3.4	0.0228	2.3	0.66	145.3	3.3	144.9	4.6	138.1	60.1	145.3	3.3
15KN69B Spot 59	44	11325	2.6	21.0541	4.9	0.1497	5.4	0.0229	2.1	0.40	145.7	3.1	141.6	7.1	74.3	116.6	145.7	3.1
15KN69B Spot 49	279	79684	1.2	20.3343	2.1	0.1559	2.5	0.0230	1.4	0.54	146.5	2.0	147.1	3.4	156.3	49.3	146.5	2.0
15KN69B Spot 41	103	25418	1.4	20.7406	3.1	0.1537	3.6	0.0231	1.7	0.48	147.3	2.5	145.1	4.8	109.8	74.2	147.3	2.5
15KN69B Spot 65	115	28109	1.4	20.8245	3.1	0.1533	3.6	0.0232	1.8	0.49	147.6	2.6	144.8	4.9	100.3	74.4	147.6	2.6
15KN69B Spot 46	62	285015	2.0	19.7003	3.4	0.1623	4.0	0.0232	1.9	0.49	147.8	2.8	152.7	5.6	230.0	79.5	147.8	2.8
15KN69B Spot 44	27	4837	3.4	21.7267	6.0	0.1473	6.6	0.0232	2.7	0.41	147.9	4.0	139.6	8.6	1.0	145.2	147.9	4.0
15KN69B Spot 55	269	258115	1.2	20.6500	2.1	0.1551	2.7	0.0232	1.8	0.65	148.1	2.6	146.4	3.7	120.1	48.8	148.1	2.6
15KN69B Spot 37	116	46240	2.1	20.6535	3.2	0.1551	3.5	0.0232	1.5	0.42	148.1	2.2	146.4	4.8	119.7	74.9	148.1	2.2
15KN69B Spot 43	48	52202	2.2	19.7065	5.1	0.1627	5.5	0.0233	2.1	0.39	148.2	3.1	153.1	7.8	229.2	116.9	148.2	3.1
15KN69B Spot 69	50	45707	2.3	20.6055	4.2	0.1557	4.6	0.0233	2.0	0.42	148.3	2.9	146.9	6.3	125.2	98.2	148.3	2.9
15KN69B Spot 48	62	9632	2.1	20.6206	4.3	0.1557	4.7	0.0233	1.8	0.39	148.4	2.7	146.9	6.4	123.5	102.3	148.4	2.7
15KN69B Spot 47	176	34531	1.1	20.2887	2.4	0.1585	3.1	0.0233	1.9	0.62	148.6	2.8	149.4	4.3	161.6	56.8	148.6	2.8
15KN69B Spot 60	58	50385	2.0	21.8455	4.4	0.1473	5.1	0.0233	2.6	0.51	148.7	3.8	139.5	6.7	14.1	106.8	148.7	3.8
15KN69B Spot 68	107	31436	3.9	20.8093	2.9	0.1548	3.5	0.0234	1.9	0.55	148.9	2.8	146.2	4.7	102.0	68.2	148.9	2.8
15KN69B Spot 67	98	53796	2.2	21.4754	2.9	0.1504	3.4	0.0234	1.9	0.54	149.2	2.7	142.2	4.6	26.9	69.2	149.2	2.7
15KN69B Spot 57	61	17608	4.6	20.8621	3.7	0.1550	4.0	0.0235	1.7	0.42	149.4	2.5	146.3	5.5	96.0	86.4	149.4	2.5
15KN69B Spot 53	97	15348	1.9	20.8393	2.8	0.1553	3.2	0.0235	1.6	0.48	149.5	2.3	146.5	4.4	98.6	66.9	149.5	2.3
15KN69B Spot 45	96	27084	1.7	19.9326	3.3	0.1634	3.7	0.0236	1.7	0.45	150.5	2.5	153.7	5.3	202.8	77.4	150.5	2.5
15KN69B Spot 40	340	132524	1.0	20.5041	1.6	0.1592	2.3	0.0237	1.6	0.71	150.9	2.4	150.0	3.2	136.8	37.3	150.9	2.4
15KN69B Spot 64	63	7466	1.7	22.1420	4.1	0.1476	4.6	0.0237	2.1	0.45	151.0	3.1	139.8	6.0	46.8	99.8	151.0	3.1
15KN69B Spot 36	155	70251	1.8	20.5669	3.1	0.1591	3.7	0.0237	1.9	0.51	151.2	2.8	150.0	5.1	129.6	74.1	151.2	2.8
15KN69B Spot 70	123	33873	1.8	20.2365	3.0	0.1622	3.5	0.0238	1.8	0.51	151.7	2.7	152.6	5.0	167.6	71.1	151.7	2.7
15KN69B Spot 62	98	34760	2.0	20.3031	2.7	0.1617	3.0	0.0238	1.4	0.46	151.7	2.1	152.2	4.3	159.9	63.1	151.7	2.1
15KN69B Spot 58	436	234849	2.3	20.5152	1.6	0.1602	2.2	0.0238	1.5	0.68	151.9	2.2	150.9	3.1	135.6	37.7	151.9	2.2
15KN69B Spot 50	236	59489	1.3	20.7012	2.7	0.1609	3.1	0.0242	1.6	0.52	153.9	2.5	151.5	4.4	114.3	63.3	153.9	2.5
15KN69B Spot 66	171	69963	1.1	14.8323	5.1	0.2277	5.4	0.0245	1.9	0.35	156.0	3.0	208.3	10.2	850.8	105.8	156.0	3.0
15KN69B Spot 56	81	42446	1.9	19.8686	3.2	0.1707	3.8	0.0246	2.2	0.57	156.7	3.4	160.1	5.7	210.3	73.3	156.7	3.4
15KN69B Spot 54	571	123066	1.4	20.2696	1.8	0.1680	2.5	0.0247	1.8	0.70	157.3	2.7	157.7	3.6	163.8	41.4	157.3	2.7
15KN69B Spot 42	70	12487	1.6	9.1604	16.3	0.3772	16.4	0.0251	1.8	0.11	159.5	2.9	324.9	45.6	1785.5	298.8	159.5	2.9
15KN69B Spot 38	153	135029	1.6	20.7155	2.3	0.1670	2.8	0.0251	1.5	0.54	159.8	2.3	156.8	4.0	112.7	55.3	159.8	2.3
-15KN38A Spot 1	350	65868	2.5	21.0328	1.7	0.1067	2.4	0.0163	1.6	0.68	104.1	1.7	102.9	2.3	76.7	41.4	104.1	1.7
-15KN38A Spot 2	313	30724	4.4	20.7755	2.2	0.1083	2.6	0.0163	1.4	0.53	104.4	1.5	104.4	2.6	105.8	52.9	104.4	1.5
-15KN38A Spot 3	219	37491	3.7	20.2395	2.1	0.1211	2.7	0.0178	1.7	0.65	113.6	2.0	116.1	3.0	167.2	48.3	113.6	2.0
-15KN38A Spot 4	205	20721	3.9	21.5217	2.6	0.1019	3.1	0.0159	1.8	0.57	101.7	1.8	98.5	2.9	21.8	61.2	101.7	1.8
-15KN38A Spot 5	366	23758	4.3	21.0218	2.8	0.1051	3.3	0.0160	1.7	0.51	102.5	1.7	101.5	3.1	77.9	66.4	102.5	1.7

-15KN38A Spot 6	256	69459	4.6	21.1492	2.2	0.1059	2.8	0.0162	1.7	0.62	103.9	1.8	102.2	2.7	63.6	52.2	103.9	1.8
-15KN38A Spot 7	328	50905	3.6	20.6176	2.3	0.1074	2.9	0.0161	1.7	0.59	102.7	1.7	103.5	2.8	123.8	54.8	102.7	1.7
-15KN38A Spot 8	298	81308	4.3	21.0696	2.3	0.1065	3.0	0.0163	1.8	0.62	104.0	1.9	102.7	2.9	72.5	55.8	104.0	1.9
-15KN38A Spot 9	290	41704	4.2	21.1176	2.3	0.1041	2.9	0.0159	1.9	0.64	101.9	1.9	100.5	2.8	67.1	54.0	101.9	1.9
15KN38A Spot 10	508	45158	2.6	20.9834	1.9	0.1087	2.4	0.0165	1.5	0.63	105.8	1.6	104.8	2.4	82.2	44.2	105.8	1.6
15KN38A Spot 11	360	156323	2.7	21.1712	2.0	0.1046	2.6	0.0161	1.7	0.65	102.7	1.7	101.0	2.5	61.1	47.0	102.7	1.7
15KN38A Spot 12	282	32801	4.0	21.1149	2.5	0.1076	3.1	0.0165	1.8	0.57	105.4	1.9	103.8	3.1	67.4	60.5	105.4	1.9
15KN38A Spot 13	233	14441	3.6	21.1576	2.7	0.1073	3.2	0.0165	1.7	0.53	105.2	1.8	103.5	3.2	62.6	65.0	105.2	1.8
15KN38A Spot 14	289	74191	2.9	21.0929	2.9	0.1103	3.5	0.0169	1.9	0.55	107.9	2.0	106.3	3.5	69.9	69.4	107.9	2.0
15KN38A Spot 15	108	15266	4.4	20.7723	3.3	0.1054	3.8	0.0159	1.9	0.49	101.5	1.9	101.7	3.7	106.2	78.5	101.5	1.9
15KN38A Spot 16	182	34129	3.8	20.8583	3.3	0.1098	3.8	0.0166	1.9	0.50	106.2	2.0	105.8	3.9	96.5	78.8	106.2	2.0
15KN38A Spot 17	239	24220	4.3	21.1247	3.5	0.1075	4.1	0.0165	2.1	0.53	105.3	2.2	103.7	4.0	66.3	82.7	105.3	2.2
15KN38A Spot 18	346	215631	3.6	21.3346	2.2	0.1047	2.8	0.0162	1.9	0.65	103.6	1.9	101.1	2.7	42.7	51.6	103.6	1.9
15KN38A Spot 19	266	64815	3.7	21.2967	2.1	0.1058	2.9	0.0163	2.1	0.71	104.5	2.2	102.1	2.9	47.0	49.2	104.5	2.2
15KN38A Spot 20	285	121368	4.1	20.7534	2.7	0.1075	3.2	0.0162	1.7	0.54	103.5	1.8	103.7	3.1	108.4	63.1	103.5	1.8
15KN38A Spot 21	328	51987	3.4	20.6506	2.3	0.1062	2.9	0.0159	1.7	0.59	101.8	1.7	102.5	2.8	120.1	55.4	101.8	1.7
15KN38A Spot 22	346	######	3.7	20.9418	2.4	0.1065	2.7	0.0162	1.3	0.50	103.4	1.4	102.8	2.7	87.0	56.0	103.4	1.4
15KN38A Spot 23	449	72009	3.0	20.9380	1.8	0.1051	2.2	0.0160	1.3	0.60	102.1	1.3	101.5	2.1	87.4	42.0	102.1	1.3
15KN38A Spot 24	241	25074	4.7	20.9692	2.4	0.1084	3.4	0.0165	2.4	0.70	105.4	2.5	104.5	3.4	83.8	58.0	105.4	2.5
15KN38A Spot 25	228	47976	4.4	20.8943	3.1	0.1097	3.6	0.0166	2.0	0.55	106.3	2.1	105.7	3.7	92.4	72.3	106.3	2.1
15KN38A Spot 26	180	14858	4.9	20.6231	2.3	0.1071	2.8	0.0160	1.5	0.55	102.5	1.6	103.3	2.7	123.2	55.0	102.5	1.6
15KN38A Spot 27	392	54679	3.0	21.2735	2.1	0.1050	2.7	0.0162	1.7	0.64	103.6	1.8	101.3	2.6	49.6	49.4	103.6	1.8
15KN38A Spot 28	248	37710	4.7	21.0735	2.4	0.1064	3.1	0.0163	1.9	0.62	103.9	2.0	102.6	3.0	72.1	58.0	103.9	2.0
15KN38A Spot 29	156	37421	4.8	20.3635	3.1	0.1108	3.7	0.0164	2.0	0.54	104.6	2.1	106.7	3.8	152.9	72.8	104.6	2.1
15KN38A Spot 30	459	290190	2.8	20.9764	2.3	0.1072	2.7	0.0163	1.5	0.54	104.3	1.5	103.4	2.6	83.0	53.5	104.3	1.5
15KN38A Spot 31	334	73658	4.0	20.8034	2.0	0.1095	2.7	0.0165	1.9	0.69	105.6	2.0	105.5	2.7	102.7	46.7	105.6	2.0
15KN38A Spot 32	268	19388	4.4	21.6636	2.2	0.1056	2.7	0.0166	1.5	0.55	106.1	1.5	101.9	2.6	6.0	53.5	106.1	1.5
15KN38A Spot 33	352	122339	3.2	20.4427	3.1	0.1081	3.6	0.0160	1.9	0.53	102.5	2.0	104.2	3.6	143.9	72.0	102.5	2.0
15KN38A Spot 34	358	81752	3.5	20.3477	2.6	0.1100	3.3	0.0162	2.0	0.62	103.8	2.1	106.0	3.3	154.8	60.0	103.8	2.1
15KN38A Spot 35	436	39073	3.2	20.6481	2.1	0.1074	2.7	0.0161	1.7	0.63	102.8	1.7	103.6	2.7	120.4	49.2	102.8	1.7
-15KS80 Spot 2	26	7285	2.8	17.5863	10.4	0.1252	10.9	0.0160	3.2	0.30	102.1	3.3	119.8	12.3	486.2	230.7	102.1	3.3
-15KS80 Spot 24	39	1861	2.2	22.6932	6.2	0.0979	6.9	0.0161	3.0	0.43	103.0	3.1	94.8	6.3	107.0	153.4	103.0	3.1
-15KS80 Spot 26	47	1892	2.4	19.6352	8.3	0.1138	8.7	0.0162	2.6	0.30	103.6	2.7	109.4	9.1	237.6	192.4	103.6	2.7
-15KS80 Spot 9	39	6851	3.9	18.5112	8.6	0.1215	9.0	0.0163	2.7	0.30	104.3	2.8	116.4	9.9	371.9	193.8	104.3	2.8
-15KS80 Spot 32	89	4322	2.1	21.6566	5.1	0.1039	5.7	0.0163	2.5	0.44	104.3	2.6	100.4	5.4	6.8	122.8	104.3	2.6
-15KS80 Spot 31	35	5509	3.2	21.1226	8.4	0.1065	8.7	0.0163	2.4	0.27	104.4	2.4	102.8	8.5	66.6	200.3	104.4	2.4
-15KS80 Spot 35	41	1647	3.4	24.4063	7.4	0.0925	8.1	0.0164	3.2	0.40	104.7	3.3	89.8	6.9	289.3	188.8	104.7	3.3
-15KS80 Spot 29	42	3281	3.4	23.0094	8.5	0.0984	9.0	0.0164	2.7	0.31	105.0	2.9	95.3	8.1	141.1	211.4	105.0	2.9
-15KS80 Spot 5	69	2642	2.1	23.9899	5.6	0.0945	6.2	0.0164	2.7	0.44	105.2	2.8	91.7	5.4	245.6	141.0	105.2	2.8
-15KS80 Spot 3	95	4717	2.4	22.4789	4.9	0.1012	5.2	0.0165	1.8	0.34	105.5	1.8	97.9	4.8	83.7	119.7	105.5	1.8
-15KS80 Spot 22	47	9880	3.5	21.0316	6.8	0.1082	7.2	0.0165	2.5	0.34	105.6	2.6	104.3	7.1	76.8	160.7	105.6	2.6
-15KS80 Spot 25	51	6270	2.0	19.2823	6.2	0.1183	6.6	0.0165	2.4	0.36	105.8	2.5	113.5	7.1	279.3	141.9	105.8	2.5
-15KS80 Spot 20	96	4197	2.3	22.0958	5.5	0.1032	5.8	0.0165	2.1	0.36	105.8	2.2	99.8	5.5	41.8	132.6	105.8	2.2
-15KS80 Spot 4	47	3170	3.3	19.8258	7.0	0.1151	7.4	0.0165	2.5	0.34	105.8	2.6	110.6	7.8	215.3	162.0	105.8	2.6
-15KS80 Spot 18	37	22834	3.2	17.0278	9.0	0.1341	9.4	0.0166	2.4	0.26	105.9	2.5	127.8	11.2	557.0	197.7	105.9	2.5
-15KS80 Spot 8	60	2401	3.4	23.6830	7.5	0.0965	7.9	0.0166	2.4	0.31	105.9	2.6	93.5	7.1	213.1	189.4	105.9	2.6
-15KS80 Spot 16	44	2076	2.4	20.7118	7.0	0.1104	7.5	0.0166	2.7	0.36	106.1	2.8	106.4	7.6	113.1	166.1	106.1	2.8
-15KS80 Spot 15	47	2758	2.0	22.9857	8.6	0.0997	8.9	0.0166	2.3	0.26	106.3	2.5	96.5	8.2	138.6	214.1	106.3	2.5
-15KS80 Spot 13	64	2778	3.8	20.3048	6.8	0.1129	7.2	0.0166	2.4	0.33	106.3	2.5	108.6	7.4	159.7	159.1	106.3	2.5
-15KS80 Spot 30	53	31195	3.1	18.9808	8.1	0.1209	8.5	0.0166	2.7	0.31	106.4	2.8	115.9	9.3	315.2	184.5	106.4	2.8
-15KS80 Spot 23	50	1305	3.3	26.0163	5.3	0.0884	6.0	0.0167	2.9	0.49	106.6	3.1	86.0	5.0	454.9	138.7	106.6	3.1
-15KS80 Spot 7	43	59092	3.0	21.0239	7.3	0.1095	7.8	0.0167	2.6	0.34	106.8	2.8	105.5	7.8	77.7	173.5	106.8	2.8
-15KS80 Spot 10	63	26117	2.3	19.4165	6.8	0.1188	7.3	0.0167	2.8	0.38	107.0	2.9	114.0	7.9	263.4	155.7	107.0	2.9
-15KS80 Spot 14	54	6329	2.1	22.4501	5.9	0.1029	6.5	0.0168	2.8	0.43	107.1	2.9	99.5	6.2	80.5	144.0	107.1	2.9
-15KS80 Spot 12	48	4372	5.7	21.2312	7.6	0.1090	8.0	0.0168	2.6	0.32	107.3	2.7	105.0	8.0	54.3	181.6	107.3	2.7
-15KS80 Spot 21	81	10526	2.0	21.0300	6.3	0.1102	6.8	0.0168	2.5	0.37	107.4	2.7	106.1	6.8	77.0	149.5	107.4	2.7
-15KS80 Spot 33	43	94885	2.1	20.1481	7.0	0.1152	7.7	0.0168	3.3	0.43	107.6	3.5	110.7	8.1	177.8	163.0	107.6	3.5
-15KS80 Spot 34	66	3124	2.4	22.5377	6.9	0.1030	7.4	0.0168	2.7	0.36	107.7	2.9	99.6	7.0	90.1	169.1	107.7	2.9
-15KS80 Spot 19	74	5364	2.3	21.1776	5.9	0.1108	6.4	0.0170	2.4	0.38	108.8	2.6	106.7	6.5	60.4	140.7	108.8	2.6
-15KS80 Spot 1	66	8057	2.1	21.3026	6.5	0.1102	6.8	0.0170	1.9	0.28	108.8	2.1	106.2	6.9	46.3	156.4	108.8	2.1
-15KS80 Spot 17	42	2858	3.1	20.7288	7.2	0.1137	7.8	0.0171	2.9	0.37	109.2	3.1	109.3	8.0	111.1	170.3	109.2	3.1
-15KS80 Spot 11	48	6102	3.0	18.6785	7.4	0.1266	7.9	0.0171	2.6	0.33	109.6	2.8	121.0	9.0	351.6	168.4	109.6	2.8
-15KS80 Spot 27	44	4361	4.3	20.8866	8.4	0.1137	9.1	0.0172	3.5	0.38	110.1	3.8	109.3	9.4	93.2	199.2	110.1	3.8

-15KS80 Spot 6	44	9087	3.1	14.0132	7.9	0.1704	8.3	0.0173	2.4	0.29	110.7	2.7	159.8	12.3	967.8	162.4	110.7	2.7
-15KN30 Spot 58	44	1175	2.6	20.9592	9.2	0.1038	9.6	0.0158	2.7	0.29	101.0	2.7	100.3	9.1	85.0	217.8	101.0	2.7
-15KN30 Spot 43	76	2200	5.0	22.9882	8.0	0.0956	8.6	0.0159	3.2	0.37	101.9	3.2	92.7	7.7	138.9	199.3	101.9	3.2
-15KN30 Spot 68	55	2393	4.4	21.8152	7.2	0.1024	7.6	0.0162	2.5	0.33	103.6	2.6	99.0	7.2	10.8	173.1	103.6	2.6
-15KN30 Spot 57	73	4460	2.9	19.3734	7.2	0.1153	7.7	0.0162	2.8	0.36	103.6	2.9	110.8	8.1	268.5	165.6	103.6	2.9
-15KN30 Spot 37	55	13334	5.0	21.1109	7.0	0.1065	7.4	0.0163	2.3	0.31	104.3	2.4	102.8	7.2	67.9	166.4	104.3	2.4
-15KN30 Spot 60	53	37962	4.6	18.9132	6.4	0.1190	6.8	0.0163	2.4	0.36	104.4	2.5	114.2	7.3	323.4	144.5	104.4	2.5
-15KN30 Spot 53	35	32893	4.0	15.9954	10.8	0.1413	11.2	0.0164	3.1	0.28	104.8	3.2	134.2	14.1	691.9	230.3	104.8	3.2
-15KN30 Spot 38	48	2544	4.1	22.1737	7.0	0.1022	7.6	0.0164	2.9	0.38	105.1	3.0	98.8	7.1	50.3	170.7	105.1	3.0
-15KN30 Spot 46	71	3544	3.1	21.2171	6.0	0.1068	6.5	0.0164	2.6	0.39	105.1	2.7	103.1	6.4	55.9	143.3	105.1	2.7
-15KN30 Spot 55	63	3202	4.7	20.9770	7.1	0.1084	7.6	0.0165	2.8	0.37	105.5	2.9	104.5	7.5	83.0	167.8	105.5	2.9
-15KN30 Spot 52	44	16163	4.5	18.3000	7.9	0.1244	8.7	0.0165	3.5	0.41	105.6	3.7	119.0	9.8	397.7	178.3	105.6	3.7
-15KN30 Spot 54	55	10415	4.9	19.0105	7.8	0.1198	8.4	0.0165	3.3	0.39	105.6	3.4	114.9	9.1	311.7	176.7	105.6	3.4
-15KN30 Spot 41	56	1880	3.0	24.6759	6.1	0.0923	6.8	0.0165	3.1	0.46	105.6	3.3	89.7	5.9	317.4	156.0	105.6	3.3
-15KN30 Spot 70	40	6297	4.0	19.9083	8.2	0.1144	8.8	0.0165	3.3	0.37	105.6	3.5	110.0	9.2	205.7	189.4	105.6	3.5
-15KN30 Spot 62	34	1586	4.6	25.9352	8.4	0.0879	9.6	0.0165	4.6	0.48	105.7	4.9	85.5	7.9	446.7	222.5	105.7	4.9
-15KN30 Spot 42	38	8788	4.1	21.1905	7.1	0.1076	7.8	0.0165	3.2	0.41	105.7	3.4	103.8	7.7	58.9	170.1	105.7	3.4
-15KN30 Spot 44	52	2618	4.3	20.2184	6.9	0.1129	7.4	0.0166	2.5	0.34	105.8	2.6	108.6	7.6	169.7	162.5	105.8	2.6
-15KN30 Spot 67	37	2024	4.3	22.0792	8.2	0.1034	8.8	0.0166	3.2	0.36	105.9	3.4	99.9	8.4	39.9	200.5	105.9	3.4
-15KN30 Spot 69	90	6654	4.1	20.5183	5.6	0.1114	6.2	0.0166	2.6	0.42	106.0	2.7	107.2	6.3	135.2	131.5	106.0	2.7
-15KN30 Spot 49	45	27354	4.6	20.8367	7.4	0.1098	8.0	0.0166	3.2	0.39	106.0	3.3	105.7	8.1	98.9	174.9	106.0	3.3
-15KN30 Spot 47	43	2908	4.2	23.9681	5.8	0.0954	7.1	0.0166	4.1	0.58	106.1	4.3	92.6	6.3	243.3	145.7	106.1	4.3
-15KN30 Spot 66	74	7851	2.5	20.4707	6.3	0.1118	6.9	0.0166	2.9	0.42	106.1	3.1	107.6	7.1	140.6	147.1	106.1	3.1
-15KN30 Spot 63	43	3818	4.4	25.5273	7.3	0.0898	7.9	0.0166	2.9	0.37	106.2	3.1	87.3	6.6	405.1	191.0	106.2	3.1
-15KN30 Spot 51	43	9358	2.8	19.6497	7.4	0.1167	7.9	0.0166	2.6	0.33	106.3	2.7	112.0	8.3	235.9	171.1	106.3	2.7
-15KN30 Spot 50	31	1766	4.0	23.3329	9.3	0.0984	10.2	0.0167	4.0	0.40	106.5	4.3	95.3	9.2	175.8	232.9	106.5	4.3
-15KN30 Spot 61	58	24937	4.6	21.7062	5.6	0.1064	6.0	0.0167	2.4	0.39	107.1	2.5	102.6	5.9	1.2	134.0	107.1	2.5
-15KN30 Spot 48	30	5918	4.1	23.9181	8.2	0.0967	8.9	0.0168	3.5	0.40	107.2	3.8	93.7	8.0	238.0	207.4	107.2	3.8
-15KN30 Spot 65	100	86911	3.5	21.4707	5.6	0.1080	6.2	0.0168	2.7	0.44	107.5	2.9	104.1	6.1	27.5	133.3	107.5	2.9
-15KN30 Spot 40	58	9247	4.3	20.7824	6.3	0.1116	6.6	0.0168	1.8	0.28	107.6	1.9	107.5	6.7	105.0	149.0	107.6	1.9
-15KN30 Spot 39	42	2362	4.0	25.0211	10.0	0.0930	10.3	0.0169	2.6	0.25	107.9	2.8	90.3	8.9	353.1	258.4	107.9	2.8
-15KN30 Spot 56	49	42809	4.1	17.8499	7.7	0.1305	8.2	0.0169	2.7	0.33	108.0	2.9	124.5	9.6	453.2	172.2	108.0	2.9
-15KN30 Spot 36	61	2962	5.0	23.0832	7.0	0.1020	7.5	0.0171	2.6	0.35	109.1	2.9	98.6	7.1	149.1	174.5	109.1	2.9
-15KN30 Spot 59	49	20210	4.3	22.3249	6.8	0.1058	7.4	0.0171	2.7	0.37	109.5	2.9	102.1	7.1	66.9	167.3	109.5	2.9
-15KN30 Spot 64	375	30778	2.9	20.9471	3.2	0.1129	3.9	0.0172	2.3	0.58	109.7	2.5	108.7	4.0	86.4	76.0	109.7	2.5
-15KN30 Spot 45	46	59713	4.0	21.1151	7.4	0.1121	7.7	0.0172	2.3	0.29	109.7	2.5	107.9	7.9	67.4	176.3	109.7	2.5
-01MR31 Spot 12	284	37069	2.9	20.7342	2.8	0.0960	3.1	0.0144	1.3	0.42	92.4	1.2	93.1	2.8	110.6	66.6	92.4	1.2
-01MR31 Spot 13	361	17915	2.4	20.5730	2.5	0.0970	2.9	0.0145	1.5	0.51	92.6	1.4	94.0	2.6	129.0	57.7	92.6	1.4
-01MR31 Spot 25	218	40763	1.9	20.7064	2.9	0.0967	3.3	0.0145	1.5	0.46	93.0	1.4	93.8	2.9	113.7	68.4	93.0	1.4
-01MR31 Spot 34	186	109214	4.1	20.2014	3.2	0.0994	3.6	0.0146	1.6	0.44	93.2	1.5	96.2	3.3	171.6	75.0	93.2	1.5
-01MR31 Spot 31	129	59264	2.0	21.0781	3.6	0.0955	4.0	0.0146	1.7	0.41	93.4	1.5	92.6	3.5	71.6	86.6	93.4	1.5
-01MR31 Spot 33	161	10236	3.8	20.6413	4.8	0.0976	5.1	0.0146	1.8	0.35	93.5	1.7	94.6	4.6	121.1	113.0	93.5	1.7
-01MR31 Spot 16	250	28855	3.9	20.4083	3.0	0.0989	3.4	0.0146	1.6	0.46	93.7	1.4	95.7	3.1	147.8	70.1	93.7	1.4
-01MR31 Spot 28	199	17542	4.2	20.8393	3.4	0.0968	3.7	0.0146	1.6	0.43	93.7	1.5	93.8	3.3	98.6	79.7	93.7	1.5
-01MR31 Spot 24	351	50750	1.6	20.8945	3.1	0.0968	3.6	0.0147	1.7	0.48	93.9	1.6	93.8	3.2	92.3	74.1	93.9	1.6
-01MR31 Spot 15	88	5130	2.2	20.0409	5.6	0.1012	5.8	0.0147	1.6	0.28	94.1	1.5	97.9	5.4	190.3	130.2	94.1	1.5
-01MR31 Spot 19	168	14699	4.4	20.3600	4.0	0.0997	4.3	0.0147	1.6	0.36	94.2	1.5	96.5	4.0	153.4	94.5	94.2	1.5
-01MR31 Spot 30	77	9824	3.1	23.3386	4.4	0.0870	4.9	0.0147	2.1	0.44	94.2	2.0	84.7	4.0	176.4	109.9	94.2	2.0
-01MR31 Spot 23	45	8900	3.8	20.5649	6.2	0.0990	6.8	0.0148	2.9	0.43	94.5	2.7	95.9	6.2	129.9	144.8	94.5	2.7
-01MR31 Spot 21	214	24031	3.6	20.5218	2.8	0.0993	3.4	0.0148	1.8	0.54	94.6	1.7	96.1	3.1	134.8	66.7	94.6	1.7
-01MR31 Spot 3	246	18291	2.1	20.7273	2.7	0.0984	3.1	0.0148	1.7	0.53	94.7	1.6	95.3	2.9	111.3	62.8	94.7	1.6
-01MR31 Spot 1	136	17033	3.2	20.0815	3.3	0.1016	3.7	0.0148	1.7	0.45	94.7	1.6	98.2	3.5	185.5	76.5	94.7	1.6
-01MR31 Spot 2	129	25369	3.3	20.6828	3.5	0.0987	4.2	0.0148	2.3	0.54	94.8	2.2	95.6	3.8	116.4	83.2	94.8	2.2
-01MR31 Spot 32	64	7471	3.1	20.7496	6.0	0.0986	6.2	0.0148	1.5	0.25	95.0	1.4	95.5	5.6	108.8	140.9	95.0	1.4
-01MR31 Spot 22	62	9696	3.0	20.8339	5.2	0.0983	5.5	0.0149	1.8	0.33	95.1	1.7	95.2	5.0	99.2	122.5	95.1	1.7
-01MR31 Spot 11	199	25567	1.8	21.5372	3.4	0.0954	3.8	0.0149	1.7	0.46	95.3	1.6	92.5	3.3	20.1	80.5	95.3	1.6
-01MR31 Spot 35	91	24601	3.4	19.7730	5.6	0.1041	6.0	0.0149	2.2	0.37	95.5	2.1	100.5	5.7	221.4	129.0	95.5	2.1
-01MR31 Spot 6	174	50078	3.9	21.3379	4.1	0.0968	4.4	0.0150	1.7	0.39	95.9	1.7	93.8	4.0	42.4	97.4	95.9	1.7
-01MR31 Spot 7	200	43412	4.2	20.8277	3.1	0.0993	3.4	0.0150	1.4	0.42	96.0	1.3	96.1	3.1	99.9	72.8	96.0	1.3
-01MR31 Spot 10	74	9815	3.1	21.3595	4.5	0.0970	4.8	0.0150	1.5	0.33	96.1	1.5	94.0	4.3	40.0	107.6	96.1	1.5
-01MR31 Spot 20	87	17464	2.2	21.5940	4.8	0.0960	5.2	0.0150	2.1	0.40	96.2	2.0	93.1	4.6	13.8	115.0	96.2	2.0
-01MR31 Spot 5	177	47962	3.9	20.3840	3.6	0.1018	3.8	0.0151	1.2	0.33	96.3	1.2	98.5	3.5	150.6	83.5	96.3	1.2

-01MR31 Spot 8	149	11206	3.5	21.0283	2.6	0.0988	3.2	0.0151	1.9	0.60	96.4	1.8	95.6	2.9	77.2	61.1	96.4	1.8
-01MR31 Spot 18	120	38888	2.0	20.7963	4.5	0.0999	5.0	0.0151	2.0	0.40	96.5	1.9	96.7	4.6	103.5	107.3	96.5	1.9
-01MR31 Spot 29	50	3167	3.4	22.2512	6.7	0.0940	7.0	0.0152	2.1	0.29	97.0	2.0	91.2	6.1	58.8	163.6	97.0	2.0
-01MR31 Spot 14	183	29670	3.5	20.5047	3.5	0.1022	3.7	0.0152	1.3	0.36	97.3	1.3	98.8	3.5	136.7	81.3	97.3	1.3
-01MR31 Spot 26	139	30856	3.1	15.3163	8.8	0.1391	8.9	0.0155	1.8	0.20	98.9	1.7	132.3	11.1	783.7	184.5	98.9	1.7
-01MR31 Spot 27	264	26270	5.2	20.5311	3.2	0.1058	3.5	0.0158	1.6	0.44	100.8	1.6	102.1	3.4	133.7	74.8	100.8	1.6
-01MR31 Spot 9	196	28375	4.0	19.9360	4.1	0.1126	4.5	0.0163	1.7	0.39	104.1	1.8	108.3	4.6	202.4	96.3	104.1	1.8
-01MR31 Spot 4	171	112148	2.5	20.0458	3.3	0.1121	3.9	0.0163	2.1	0.54	104.2	2.2	107.8	4.0	189.6	76.9	104.2	2.2
-01MR31 Spot 17	107	12217	4.4	20.5469	4.2	0.1248	4.8	0.0186	2.3	0.48	118.8	2.7	119.5	5.4	131.9	98.0	118.8	2.7
-01MR03 Spot 17	130	14526	3.2	20.7476	3.6	0.1732	3.8	0.0261	1.4	0.37	165.9	2.3	162.2	5.8	109.0	84.2	165.9	2.3
-01MR03 Spot 4	133	25079	3.3	20.1666	3.9	0.1782	4.3	0.0261	1.8	0.43	165.9	3.0	166.5	6.6	175.7	90.3	165.9	3.0
-01MR03 Spot 16	133	26926	2.4	19.5405	3.2	0.1846	3.5	0.0262	1.4	0.39	166.5	2.3	172.0	5.6	248.7	74.7	166.5	2.3
-01MR03 Spot 18	212	40337	1.7	20.2626	2.7	0.1781	3.4	0.0262	1.9	0.58	166.6	3.2	166.5	5.2	164.6	64.1	166.6	3.2
-01MR03 Spot 2	188	35618	3.1	19.9490	3.4	0.1810	3.7	0.0262	1.5	0.41	166.7	2.5	169.0	5.7	200.9	78.0	166.7	2.5
-01MR03 Spot 6	125	31845	3.8	20.2096	2.9	0.1789	3.3	0.0262	1.5	0.45	166.9	2.4	167.1	5.1	170.7	68.5	166.9	2.4
-01MR03 Spot 27	138	34039	3.5	20.0692	3.3	0.1803	3.8	0.0262	1.9	0.50	167.0	3.2	168.3	5.9	186.9	76.6	167.0	3.2
-01MR03 Spot 35	185	156001	3.1	19.5691	2.8	0.1852	3.1	0.0263	1.4	0.45	167.2	2.3	172.5	4.9	245.4	63.9	167.2	2.3
-01MR03 Spot 7	162	70779	3.1	20.2669	2.8	0.1794	3.4	0.0264	1.8	0.53	167.7	2.9	167.5	5.2	164.1	66.4	167.7	2.9
-01MR03 Spot 29	77	34985	3.1	19.2285	4.7	0.1891	5.1	0.0264	2.0	0.39	167.8	3.3	175.9	8.2	285.7	106.9	167.8	3.3
-01MR03 Spot 20	175	30772	2.9	19.8054	2.5	0.1836	3.2	0.0264	1.9	0.61	167.8	3.2	171.2	5.0	217.6	58.4	167.8	3.2
-01MR03 Spot 26	97	13109	3.0	20.6820	4.0	0.1762	4.4	0.0264	1.8	0.40	168.1	2.9	164.8	6.7	116.5	94.4	168.1	2.9
-01MR03 Spot 31	257	42331	2.4	20.0522	2.2	0.1817	2.7	0.0264	1.5	0.56	168.2	2.5	169.6	4.2	188.9	52.0	168.2	2.5
-01MR03 Spot 5	214	49929	2.5	20.1184	2.5	0.1814	3.0	0.0265	1.7	0.56	168.4	2.8	169.2	4.8	181.2	58.8	168.4	2.8
-01MR03 Spot 19	217	39809	2.3	20.6100	2.1	0.1771	2.7	0.0265	1.7	0.63	168.4	2.9	165.6	4.1	124.7	49.5	168.4	2.9
-01MR03 Spot 34	126	57424	3.1	20.1048	2.7	0.1817	3.0	0.0265	1.3	0.44	168.6	2.2	169.5	4.7	182.8	63.4	168.6	2.2
-01MR03 Spot 8	155	88427	3.1	20.2894	2.8	0.1805	3.1	0.0266	1.4	0.46	169.0	2.4	168.5	4.8	161.5	64.3	169.0	2.4
-01MR03 Spot 25	133	45739	3.2	19.5461	3.2	0.1874	3.7	0.0266	1.9	0.51	169.0	3.2	174.4	5.9	248.1	72.7	169.0	3.2
-01MR03 Spot 9	105	30125	2.8	19.8060	2.9	0.1850	3.3	0.0266	1.5	0.47	169.0	2.6	172.3	5.2	217.6	66.5	169.0	2.6
-01MR03 Spot 14	115	27573	3.3	19.4356	2.9	0.1887	3.4	0.0266	1.8	0.53	169.2	3.0	175.5	5.5	261.1	67.3	169.2	3.0
-01MR03 Spot 22	198	37987	3.0	20.4213	2.3	0.1797	2.8	0.0266	1.5	0.55	169.3	2.5	167.8	4.3	146.3	54.2	169.3	2.5
-01MR03 Spot 3	67	31194	3.0	19.6114	5.2	0.1872	5.5	0.0266	1.8	0.33	169.4	3.1	174.2	8.8	240.4	119.3	169.4	3.1
-01MR03 Spot 12	164	27017	2.7	20.4864	2.9	0.1794	3.5	0.0267	1.9	0.55	169.5	3.2	167.5	5.4	138.8	68.7	169.5	3.2
~~-01MR03 Spot 28~~	~~84~~	~~23205~~	~~3.1~~	~~12.6843~~	~~0.2~~	~~0.2899~~	~~0.3~~	~~0.0267~~	~~1.8~~	~~0.10~~	~~169.7~~	~~3.0~~	~~258.5~~	~~21.3~~	~~1169.0~~	~~181.0~~	~~169.7~~	~~3.0~~
-01MR03 Spot 1	156	28666	2.8	20.1358	2.7	0.1827	3.2	0.0267	1.8	0.57	169.7	3.1	170.4	5.1	179.2	62.1	169.7	3.1
-01MR03 Spot 33	104	20888	3.9	20.1428	3.9	0.1828	4.4	0.0267	2.0	0.45	169.9	3.3	170.4	6.9	178.4	91.6	169.9	3.3
-01MR03 Spot 24	180	53235	2.7	20.5061	3.1	0.1796	3.6	0.0267	1.7	0.48	170.0	2.9	167.7	5.5	136.6	73.8	170.0	2.9
-01MR03 Spot 11	135	139949	3.5	20.0797	2.7	0.1836	3.0	0.0267	1.3	0.43	170.1	2.2	171.1	4.8	185.7	63.7	170.1	2.2
-01MR03 Spot 10	105	63017	2.0	19.8230	3.4	0.1862	3.7	0.0268	1.5	0.41	170.3	2.5	173.4	5.9	215.6	78.2	170.3	2.5
-01MR03 Spot 30	119	40618	3.2	20.3670	2.8	0.1816	3.2	0.0268	1.6	0.51	170.7	2.8	169.5	5.0	152.6	64.4	170.7	2.8
-01MR03 Spot 32	138	48023	3.0	20.1187	3.0	0.1840	3.5	0.0268	1.8	0.51	170.8	3.0	171.5	5.6	181.2	71.0	170.8	3.0
-01MR03 Spot 15	159	15559	2.8	20.7718	3.3	0.1786	3.8	0.0269	1.8	0.49	171.2	3.1	166.9	5.8	106.2	77.2	171.2	3.1
-01MR03 Spot 23	129	37864	3.5	19.9783	3.6	0.1866	3.9	0.0270	1.4	0.37	171.9	2.4	173.7	6.2	197.5	83.8	171.9	2.4
-01MR03 Spot 13	63	18256	2.9	19.9180	5.3	0.1876	5.7	0.0271	2.1	0.37	172.3	3.6	174.5	9.1	204.6	122.8	172.3	3.6
-01MR03 Spot 21	100	15844	3.1	20.5972	3.3	0.1829	3.8	0.0273	1.9	0.50	173.8	3.3	170.6	6.0	126.2	77.1	173.8	3.3
01MR11p Spot 48	60	12060	4.2	20.3824	5.5	0.1170	6.1	0.0173	2.7	0.44	110.6	3.0	112.4	6.5	150.8	129.2	110.6	3.0
01MR11p Spot 63	52	4506	2.4	20.5169	5.3	0.1163	5.7	0.0173	2.1	0.37	110.6	2.3	111.7	6.1	135.3	125.8	110.6	2.3
01MR11p Spot 69	64	16748	3.3	19.8552	4.6	0.1207	4.9	0.0174	1.8	0.37	111.1	2.0	115.7	5.4	211.8	106.4	111.1	2.0
01MR11p Spot 45	97	27288	2.8	20.3901	4.6	0.1180	5.0	0.0175	2.0	0.40	111.5	2.2	113.3	5.3	149.9	106.8	111.5	2.2
01MR11p Spot 40	85	5990	2.4	21.5209	4.3	0.1119	4.7	0.0175	1.9	0.39	111.6	2.1	107.7	4.8	21.9	104.4	111.6	2.1
01MR11p Spot 59	68	19133	3.5	20.1911	3.4	0.1196	3.9	0.0175	1.9	0.49	112.0	2.1	114.7	4.3	172.8	79.8	112.0	2.1
01MR11p Spot 46	65	5913	3.5	21.2359	5.1	0.1139	5.5	0.0175	2.0	0.36	112.1	2.2	109.5	5.7	53.8	122.6	112.1	2.2
01MR11p Spot 67	129	8349	2.4	21.1481	3.4	0.1145	3.9	0.0176	1.8	0.48	112.3	2.1	110.1	4.0	63.7	80.7	112.3	2.1
01MR11p Spot 70	64	12537	4.1	21.1269	4.9	0.1148	5.4	0.0176	2.4	0.43	112.4	2.6	110.4	5.7	66.1	116.0	112.4	2.6
01MR11p Spot 49	37	6920	3.7	18.9871	7.6	0.1278	8.0	0.0176	2.4	0.30	112.5	2.7	122.1	9.2	314.5	174.0	112.5	2.7
01MR11p Spot 56	48	21279	2.2	19.5380	6.3	0.1242	6.6	0.0176	1.7	0.26	112.5	1.9	118.9	7.4	249.0	145.8	112.5	1.9
01MR11p Spot 50	64	6327	3.5	19.4395	4.7	0.1248	5.2	0.0176	2.2	0.43	112.5	2.5	119.4	5.9	260.7	108.0	112.5	2.5
01MR11p Spot 39	77	155660	3.4	20.6200	5.0	0.1177	5.5	0.0176	2.4	0.43	112.5	2.7	113.0	5.9	123.5	117.0	112.5	2.7
01MR11p Spot 61	100	11071	2.8	22.0924	4.2	0.1100	4.7	0.0176	2.1	0.44	112.7	2.3	106.0	4.7	41.4	101.5	112.7	2.3
01MR11p Spot 42	70	7665	3.9	21.6780	5.4	0.1122	5.8	0.0176	2.0	0.35	112.7	2.3	108.0	5.9	4.4	129.8	112.7	2.3
01MR11p Spot 58	52	5671	4.3	20.8752	5.3	0.1166	5.7	0.0177	2.3	0.40	112.8	2.6	112.0	6.1	94.5	124.4	112.8	2.6
01MR11p Spot 43	64	11112	4.2	23.1639	3.8	0.1053	4.3	0.0177	1.9	0.43	113.0	2.1	101.6	4.1	157.7	95.7	113.0	2.1
01MR11p Spot 41	72	6534	4.6	21.6983	6.4	0.1124	6.7	0.0177	2.1	0.31	113.0	2.4	108.1	6.9	2.2	154.6	113.0	2.4

01MR11p Spot 38	72	16003	2.5	20.4548	5.8	0.1195	5.9	0.0177	1.4	0.24	113.2	1.6	114.6	6.4	142.4	135.3	113.2	1.6
01MR11p Spot 52	74	68059	3.2	20.5624	4.4	0.1189	4.9	0.0177	2.1	0.43	113.3	2.3	114.1	5.3	130.2	103.9	113.3	2.3
01MR11p Spot 66	78	25053	3.0	19.8981	4.7	0.1229	5.1	0.0177	1.9	0.37	113.4	2.1	117.7	5.7	206.9	109.8	113.4	2.1
01MR11p Spot 55	68	5819	4.0	21.7452	5.5	0.1126	6.1	0.0178	2.6	0.42	113.4	2.9	108.3	6.2	3.0	133.2	113.4	2.9
01MR11p Spot 64	102	26339	2.5	21.3491	3.7	0.1146	4.1	0.0178	1.6	0.40	113.4	1.8	110.2	4.3	41.1	89.2	113.4	1.8
01MR11p Spot 51	118	23546	2.6	21.0634	3.5	0.1162	3.8	0.0178	1.6	0.42	113.4	1.8	111.6	4.0	73.2	82.2	113.4	1.8
01MR11p Spot 54	54	122470	2.4	20.1724	5.3	0.1214	5.8	0.0178	2.3	0.39	113.5	2.5	116.3	6.3	175.0	123.7	113.5	2.5
01MR11p Spot 44	109	41137	2.9	20.9483	4.8	0.1170	5.0	0.0178	1.4	0.28	113.6	1.6	112.4	5.3	86.3	114.6	113.6	1.6
01MR11p Spot 57	67	13061	3.7	20.2757	5.9	0.1212	6.2	0.0178	2.0	0.32	113.8	2.2	116.1	6.8	163.1	137.0	113.8	2.2
01MR11p Spot 37	73	45414	4.3	19.8798	5.0	0.1236	5.3	0.0178	1.6	0.31	113.9	1.8	118.3	5.9	209.0	116.0	113.9	1.8
01MR11p Spot 65	61	25017	3.8	21.3794	5.3	0.1151	5.7	0.0178	2.0	0.35	114.0	2.2	110.6	5.9	37.7	126.8	114.0	2.2
01MR11p Spot 36	69	36280	4.4	20.3894	5.0	0.1209	5.4	0.0179	1.9	0.36	114.3	2.2	115.9	5.9	150.0	117.4	114.3	2.2
01MR11p Spot 60	68	33486	4.1	20.5159	5.0	0.1206	5.4	0.0179	2.1	0.39	114.6	2.4	115.6	5.9	135.5	117.5	114.6	2.4
01MR11p Spot 62	35	9336	3.7	22.6987	6.4	0.1091	6.8	0.0180	2.3	0.34	114.8	2.6	105.1	6.8	107.6	157.2	114.8	2.6
01MR11p Spot 47	84	5206	2.2	17.0766	4.5	0.1451	5.2	0.0180	2.4	0.47	114.8	2.8	137.6	6.6	550.8	99.3	114.8	2.8
01MR11p Spot 53	29	14951	2.9	21.3484	8.0	0.1166	8.5	0.0181	2.7	0.32	115.3	3.1	112.0	9.0	41.2	192.8	115.3	3.1
01MR11p Spot 68	63	8968	2.7	21.4383	5.5	0.1167	5.9	0.0181	2.1	0.35	115.9	2.4	112.0	6.3	31.1	132.7	115.9	2.4
14IY04 Spot 132	210	15567	3.5	20.0975	3.2	0.1082	3.5	0.0158	1.4	0.41	100.9	1.4	104.3	3.5	183.7	75.1	100.9	1.4
14IY04 Spot 142	181	34471	6.3	20.2702	3.8	0.1079	4.6	0.0159	2.7	0.58	101.4	2.7	104.0	4.6	163.7	88.6	101.4	2.7
14IY04 Spot 143	127	5849	5.4	20.0426	5.1	0.1093	5.9	0.0159	2.8	0.48	101.6	2.9	105.3	5.9	190.1	119.2	101.6	2.9
14IY04 Spot 147	78	13173	6.4	20.1156	4.8	0.1092	5.4	0.0159	2.5	0.46	101.9	2.5	105.2	5.4	181.6	111.8	101.9	2.5
14IY04 Spot 107	101	4443	5.4	21.0113	5.6	0.1046	6.1	0.0159	2.5	0.40	101.9	2.5	101.0	5.9	79.1	133.5	101.9	2.5
14IY04 Spot 106	294	38306	6.0	19.9133	3.8	0.1104	4.1	0.0159	1.6	0.38	101.9	1.6	106.3	4.2	205.1	88.4	101.9	1.6
14IY04 Spot 144	232	172849	4.0	19.7502	3.6	0.1113	3.9	0.0159	1.6	0.41	101.9	1.6	107.1	4.0	224.1	82.7	101.9	1.6
14IY04 Spot 112	67	4379	5.8	23.2952	8.0	0.0944	8.6	0.0159	3.0	0.35	102.0	3.0	91.6	7.5	171.8	200.8	102.0	3.0
14IY04 Spot 121	90	10481	7.7	20.3508	7.7	0.1081	8.0	0.0160	2.3	0.29	102.1	2.4	104.3	8.0	154.4	180.2	102.1	2.4
14IY04 Spot 139	250	39587	6.2	19.8950	3.4	0.1106	3.7	0.0160	1.6	0.42	102.1	1.6	106.5	3.7	207.2	78.0	102.1	1.6
14IY04 Spot 116	93	5888	7.1	21.7195	4.4	0.1016	4.9	0.0160	2.1	0.43	102.3	2.1	98.2	4.5	0.2	105.9	102.3	2.1
14IY04 Spot 123	170	9085	4.1	18.8824	4.4	0.1168	4.7	0.0160	1.9	0.39	102.3	1.9	112.2	5.0	327.0	99.3	102.3	1.9
14IY04 Spot 105	213	76752	6.0	19.3853	5.0	0.1139	5.3	0.0160	1.9	0.35	102.4	1.9	109.5	5.5	267.1	114.0	102.4	1.9
14IY04 Spot 104	162	49736	6.8	20.0169	4.2	0.1103	4.6	0.0160	1.9	0.40	102.4	1.9	106.3	4.6	193.1	97.3	102.4	1.9
14IY04 Spot 102	193	8871	7.1	21.8347	4.4	0.1012	4.8	0.0160	1.7	0.36	102.5	1.7	97.9	4.4	13.0	107.1	102.5	1.7
14IY04 Spot 109	214	11288	6.2	22.3162	4.6	0.0992	4.7	0.0161	1.2	0.25	102.7	1.2	96.0	4.3	65.9	112.2	102.7	1.2
14IY04 Spot 135	248	68673	5.6	20.7088	3.7	0.1069	4.0	0.0161	1.6	0.40	102.7	1.7	103.1	4.0	113.4	86.9	102.7	1.7
14IY04 Spot 126	176	42078	7.0	21.0481	4.3	0.1052	4.8	0.0161	2.0	0.42	102.7	2.0	101.6	4.6	75.0	102.3	102.7	2.0
14IY04 Spot 118	59	4402	4.9	21.9706	7.3	0.1009	7.9	0.0161	3.1	0.39	102.8	3.2	97.6	7.3	28.0	176.0	102.8	3.2
14IY04 Spot 141	176	7178	5.4	17.1337	5.6	0.1295	5.9	0.0161	2.0	0.33	102.9	2.0	123.7	6.9	543.5	122.3	102.9	2.0
14IY04 Spot 138	150	12892	6.5	20.9888	4.8	0.1061	5.2	0.0162	1.9	0.37	103.3	2.0	102.4	5.0	81.6	113.8	103.3	2.0
14IY04 Spot 125	148	8239	6.4	21.0708	5.4	0.1057	5.6	0.0162	1.7	0.30	103.3	1.7	102.0	5.5	72.4	128.0	103.3	1.7
14IY04 Spot 111	175	27187	6.5	20.7778	3.9	0.1072	4.5	0.0162	2.2	0.48	103.3	2.2	103.4	4.4	105.6	93.2	103.3	2.2
14IY04 Spot 146	176	7568	6.3	21.1147	2.9	0.1056	3.4	0.0162	1.8	0.54	103.5	1.9	102.0	3.3	67.5	68.2	103.5	1.9
14IY04 Spot 114	221	8935	6.3	21.5201	4.2	0.1038	4.6	0.0162	1.9	0.42	103.6	2.0	100.3	4.4	22.0	100.1	103.6	2.0
14IY04 Spot 120	462	13898	3.5	21.3151	4.2	0.1048	4.6	0.0162	1.9	0.40	103.6	1.9	101.2	4.4	44.9	100.7	103.6	1.9
14IY04 Spot 130	176	6976	7.6	21.3697	4.2	0.1046	4.8	0.0162	2.2	0.47	103.6	2.3	101.0	4.6	38.8	101.5	103.6	2.3
14IY04 Spot 113	326	14991	5.0	20.4734	3.0	0.1092	3.3	0.0162	1.5	0.45	103.7	1.5	105.2	3.3	140.3	69.4	103.7	1.5
14IY04 Spot 115	245	43321	6.3	20.9623	4.2	0.1067	4.7	0.0162	2.0	0.43	103.7	2.1	102.9	4.6	84.6	99.9	103.7	2.1
14IY04 Spot 149	229	18481	6.4	19.5272	2.8	0.1146	3.3	0.0162	1.8	0.53	103.8	1.8	110.1	3.5	250.3	65.1	103.8	1.8
14IY04 Spot 127	223	13614	3.7	20.6236	4.1	0.1085	4.5	0.0162	1.9	0.43	103.8	2.0	104.6	4.5	123.1	95.9	103.8	2.0
14IY04 Spot 101	196	34211	6.0	19.9193	4.7	0.1124	4.9	0.0162	1.7	0.34	103.8	1.7	108.2	5.1	204.4	108.1	103.8	1.7
14IY04 Spot 108	263	16838	5.5	20.1016	3.7	0.1115	4.0	0.0162	1.4	0.36	103.9	1.5	107.3	4.1	183.2	86.7	103.9	1.5
14IY04 Spot 134	146	6257	6.8	14.2335	4.8	0.1575	5.7	0.0163	3.0	0.53	104.0	3.1	148.5	7.9	935.9	99.1	104.0	3.1
14IY04 Spot 140	184	10304	6.3	20.2274	5.2	0.1109	5.5	0.0163	1.8	0.32	104.0	1.8	106.8	5.6	168.6	121.9	104.0	1.8
14IY04 Spot 136	178	7684	6.7	16.1946	7.4	0.1385	7.7	0.0163	1.9	0.24	104.0	1.9	131.7	9.5	665.4	159.7	104.0	1.9
14IY04 Spot 103	362	18009	6.3	20.2776	3.4	0.1106	3.9	0.0163	1.9	0.49	104.0	1.9	106.5	3.9	162.8	78.9	104.0	1.9
14IY04 Spot 129	161	10675	5.0	20.8623	4.3	0.1077	4.9	0.0163	2.3	0.47	104.2	2.4	103.8	4.8	96.0	102.5	104.2	2.4
14IY04 Spot 145	155	30344	7.4	19.9915	4.8	0.1126	5.1	0.0163	2.0	0.38	104.4	2.1	108.4	5.3	196.0	110.5	104.4	2.1
14IY04 Spot 122	237	68688	6.0	20.5358	3.8	0.1098	4.3	0.0164	2.1	0.48	104.6	2.1	105.8	4.3	133.2	89.2	104.6	2.1
14IY04 Spot 124	272	20031	4.6	14.3660	7.3	0.1573	7.4	0.0164	1.6	0.22	104.8	1.7	148.4	10.3	916.9	149.5	104.8	1.7
14IY04 Spot 150	285	17592	6.4	20.2555	3.3	0.1120	3.6	0.0165	1.5	0.42	105.2	1.6	107.8	3.7	165.4	77.2	105.2	1.6
14IY04 Spot 133	240	39538	6.0	21.4668	3.3	0.1061	4.1	0.0165	2.3	0.57	105.6	2.5	102.4	4.0	27.9	80.3	105.6	2.5
14IY04 Spot 148	337	49686	6.8	21.1353	2.7	0.1078	3.3	0.0165	1.9	0.58	105.6	2.0	103.9	3.3	65.1	64.0	105.6	2.0
14IY04 Spot 119	430	28774	5.2	18.3136	2.7	0.1246	3.3	0.0165	1.9	0.57	105.8	2.0	119.2	3.7	396.0	59.8	105.8	2.0
14IY04 Spot 137	561	25323	6.5	20.6017	2.2	0.1110	3.0	0.0166	2.0	0.67	106.1	2.1	106.9	3.0	125.6	52.0	106.1	2.1

14IY04 Spot 117	283	38168	5.1	20.2003	3.7	0.1146	4.0	0.0168	1.5	0.38	107.4	1.6	110.2	4.2	171.8	87.2	107.4	1.6
14IY04 Spot 128	452	36430	4.6	20.2844	1.9	0.1207	2.5	0.0178	1.6	0.63	113.5	1.8	115.7	2.7	162.1	45.0	113.5	1.8
14IY04 Spot 110	838	131126	6.2	20.2779	1.9	0.1209	2.2	0.0178	1.2	0.56	113.7	1.4	115.9	2.5	162.8	43.6	113.7	1.4
14IY11 Spot 97	1843	90277	1.5	20.4133	1.0	0.1549	1.4	0.0229	1.1	0.73	146.2	1.5	146.2	2.0	147.2	22.8	146.2	1.5
14IY11 Spot 51	171	26908	3.1	20.3390	2.5	0.1596	2.8	0.0235	1.2	0.44	150.0	1.8	150.3	3.9	155.8	58.7	150.0	1.8
14IY11 Spot 81	306	26438	2.1	19.0160	1.9	0.1709	2.4	0.0236	1.4	0.58	150.2	2.1	160.2	3.5	311.0	44.1	150.2	2.1
14IY11 Spot 84	320	36454	2.6	19.8464	2.0	0.1638	2.4	0.0236	1.3	0.54	150.2	1.9	154.0	3.4	212.9	46.4	150.2	1.9
14IY11 Spot 65	172	29407	2.7	19.3780	3.0	0.1679	3.3	0.0236	1.4	0.41	150.3	2.1	157.6	4.9	267.9	69.8	150.3	2.1
14IY11 Spot 82	399	42070	1.9	20.1763	2.2	0.1616	2.6	0.0236	1.4	0.52	150.6	2.0	152.1	3.7	174.5	52.5	150.6	2.0
14IY11 Spot 67	359	50327	2.9	20.0608	1.8	0.1625	2.3	0.0236	1.4	0.59	150.6	2.0	152.9	3.2	187.9	42.8	150.6	2.0
14IY11 Spot 55	145	30147	2.7	19.5818	2.7	0.1667	3.1	0.0237	1.4	0.46	150.9	2.1	156.6	4.4	243.9	62.5	150.9	2.1
14IY11 Spot 91	251	40147	3.8	20.4178	3.3	0.1607	3.6	0.0238	1.5	0.41	151.6	2.3	151.3	5.1	146.7	77.5	151.6	2.3
14IY11 Spot 57	359	49324	3.3	19.6137	2.1	0.1675	2.4	0.0238	1.1	0.47	151.8	1.7	157.2	3.4	240.2	47.8	151.8	1.7
14IY11 Spot 68	489	74790	2.8	19.9840	2.1	0.1644	2.5	0.0238	1.3	0.54	151.8	2.0	154.5	3.5	196.8	48.0	151.8	2.0
14IY11 Spot 53	150	7606	3.0	20.0590	3.1	0.1639	3.3	0.0238	1.1	0.35	151.9	1.7	154.1	4.7	188.1	71.0	151.9	1.7
14IY11 Spot 71	138	15373	4.7	19.6707	3.7	0.1674	4.0	0.0239	1.4	0.35	152.2	2.1	157.2	5.8	233.5	85.7	152.2	2.1
14IY11 Spot 88	342	27792	3.4	20.1486	2.0	0.1635	2.3	0.0239	1.1	0.47	152.2	1.6	153.8	3.3	177.7	47.4	152.2	1.6
14IY11 Spot 96	305	187286	2.1	19.6827	2.4	0.1674	2.6	0.0239	1.1	0.43	152.3	1.7	157.2	3.9	232.0	55.3	152.3	1.7
14IY11 Spot 85	267	60534	2.2	20.1381	2.4	0.1638	2.7	0.0239	1.3	0.47	152.4	1.9	154.0	3.9	179.0	56.3	152.4	1.9
14IY11 Spot 70	313	44384	3.4	19.9008	1.8	0.1658	2.0	0.0239	1.0	0.48	152.4	1.5	155.7	3.0	206.6	41.6	152.4	1.5
14IY11 Spot 69	134	23311	2.9	19.7741	3.4	0.1668	3.7	0.0239	1.4	0.39	152.4	2.2	156.7	5.4	221.3	79.1	152.4	2.2
14IY11 Spot 60	305	26291	3.5	19.9132	1.8	0.1659	2.2	0.0240	1.2	0.54	152.6	1.8	155.8	3.1	205.1	42.2	152.6	1.8
14IY11 Spot 80	264	17980	2.7	19.6907	2.2	0.1678	2.6	0.0240	1.4	0.55	152.7	2.1	157.6	3.8	231.1	49.9	152.7	2.1
14IY11 Spot 54	458	338812	3.1	19.9027	1.5	0.1662	1.7	0.0240	0.9	0.54	152.8	1.4	156.1	2.5	206.3	34.1	152.8	1.4
14IY11 Spot 52	63	39022	6.4	19.1545	4.3	0.1728	4.7	0.0240	1.9	0.40	152.9	2.9	161.8	7.0	294.5	98.0	152.9	2.9
14IY11 Spot 61	366	31929	3.6	19.9428	1.9	0.1660	2.2	0.0240	1.0	0.45	152.9	1.5	155.9	3.1	201.7	44.8	152.9	1.5
14IY11 Spot 63	408	27595	2.7	19.2709	1.7	0.1718	1.9	0.0240	1.0	0.50	153.0	1.5	161.0	2.9	280.7	38.2	153.0	1.5
14IY11 Spot 62	37	2835	4.4	19.5090	5.4	0.1698	5.7	0.0240	1.8	0.32	153.0	2.8	159.2	8.4	252.5	125.1	153.0	2.8
14IY11 Spot 78	117	26513	2.2	19.0097	3.5	0.1743	3.7	0.0240	1.2	0.32	153.1	1.8	163.1	5.6	311.8	80.6	153.1	1.8
14IY11 Spot 89	119	20632	2.3	19.8908	2.9	0.1667	3.2	0.0241	1.3	0.42	153.2	2.0	156.6	4.6	207.7	66.9	153.2	2.0
14IY11 Spot 93	417	87284	2.1	19.6370	1.8	0.1690	2.2	0.0241	1.2	0.55	153.4	1.8	158.6	3.2	237.4	42.3	153.4	1.8
14IY11 Spot 92	73	195856	4.2	19.2588	4.3	0.1725	4.9	0.0241	2.4	0.49	153.4	3.6	161.5	7.3	282.1	97.3	153.4	3.6
14IY11 Spot 83	523	40169	2.9	20.0199	2.0	0.1661	2.5	0.0241	1.5	0.58	153.6	2.2	156.0	3.6	192.7	47.3	153.6	2.2
14IY11 Spot 59	143	19272	2.2	19.7788	2.8	0.1681	3.3	0.0241	1.7	0.52	153.6	2.6	157.8	4.8	220.8	65.6	153.6	2.6
14IY11 Spot 100	350	27279	3.4	19.7244	2.4	0.1687	2.7	0.0241	1.3	0.47	153.8	1.9	158.3	4.0	227.2	55.3	153.8	1.9
14IY11 Spot 56	344	16526	3.0	19.9091	2.1	0.1674	2.5	0.0242	1.4	0.55	154.0	2.1	157.2	3.7	205.6	49.3	154.0	2.1
14IY11 Spot 87	787	48524	2.3	20.1427	0.9	0.1655	1.4	0.0242	1.1	0.76	154.0	1.7	155.5	2.1	178.4	21.9	154.0	1.7
14IY11 Spot 99	117	8424	3.5	20.3663	3.7	0.1638	4.0	0.0242	1.6	0.39	154.1	2.4	154.0	5.7	152.6	85.9	154.1	2.4
14IY11 Spot 90	531	57149	2.2	20.0507	1.5	0.1664	1.8	0.0242	1.1	0.59	154.1	1.6	156.3	2.6	189.1	33.9	154.1	1.6
14IY11 Spot 75	58	36764	4.5	19.2372	5.6	0.1735	6.0	0.0242	2.0	0.33	154.2	3.0	162.5	9.0	284.6	128.9	154.2	3.0
14IY11 Spot 77	451	47308	2.9	20.0972	1.9	0.1661	2.2	0.0242	1.2	0.53	154.2	1.8	156.1	3.2	183.7	43.7	154.2	1.8
14IY11 Spot 74	376	59668	3.2	19.9376	2.0	0.1680	2.2	0.0243	0.9	0.41	154.7	1.4	157.7	3.3	202.2	47.2	154.7	1.4
14IY11 Spot 79	533	117098	2.2	16.2268	2.5	0.2065	2.8	0.0243	1.4	0.48	154.8	2.1	190.6	4.9	661.2	53.5	154.8	2.1
14IY11 Spot 58	554	54904	2.5	20.1412	1.6	0.1665	2.0	0.0243	1.2	0.61	154.9	1.8	156.4	2.8	178.6	36.2	154.9	1.8
14IY11 Spot 98	101	177699	3.4	19.8084	4.3	0.1696	4.6	0.0244	1.6	0.35	155.2	2.5	159.1	6.8	217.3	100.3	155.2	2.5
14IY11 Spot 72	367	66839	3.6	14.4254	3.6	0.2337	3.8	0.0245	1.4	0.36	155.7	2.1	213.3	7.4	908.3	73.8	155.7	2.1
14IY11 Spot 73	114	11223	3.6	19.0271	3.8	0.1774	4.1	0.0245	1.5	0.36	155.9	2.3	165.8	6.2	309.7	86.4	155.9	2.3
14IY11 Spot 95	151	11142	3.5	20.5020	3.5	0.1654	3.8	0.0246	1.4	0.37	156.6	2.2	155.4	5.4	137.1	82.3	156.6	2.2
14IY11 Spot 76	298	54834	2.5	18.8736	2.7	0.1801	2.8	0.0246	1.0	0.34	157.0	1.5	168.1	4.4	328.1	60.6	157.0	1.5
14IY11 Spot 86	433	95424	3.0	20.0310	1.9	0.1713	2.2	0.0249	1.1	0.51	158.4	1.7	160.5	3.2	191.4	43.9	158.4	1.7
14IY11 Spot 66	412	66294	3.7	19.5782	1.8	0.1779	2.1	0.0253	1.2	0.56	160.8	1.9	166.3	3.3	244.3	40.7	160.8	1.9
14IY11 Spot 94	889	68855	1.8	20.1682	1.4	0.1739	2.0	0.0254	1.5	0.75	161.9	2.4	162.8	3.1	175.5	31.6	161.9	2.4
14IY11 Spot 64	970	39898	2.6	20.0533	1.2	0.1753	1.9	0.0255	1.5	0.77	162.3	2.3	164.0	2.9	188.8	27.9	162.3	2.3
14IY14 Spot 13	381	14965	3.6	19.5435	2.9	0.1117	4.0	0.0158	2.7	0.68	101.3	2.7	107.6	4.1	248.4	67.5	101.3	2.7
14IY14 Spot 15	114	11548	4.1	17.9620	7.8	0.1650	8.1	0.0215	2.3	0.28	137.1	3.1	155.0	11.6	439.3	173.1	137.1	3.1
14IY14 Spot 22	401	13957	2.1	20.6736	3.9	0.1469	4.3	0.0220	1.8	0.43	140.4	2.5	139.2	5.6	117.5	91.5	140.4	2.5
14IY14 Spot 28	453	35373	1.5	19.5997	2.8	0.1550	3.6	0.0220	2.3	0.64	140.5	3.2	146.3	5.0	241.8	64.6	140.5	3.2
14IY14 Spot 11	211	8993	2.8	19.8947	4.6	0.1536	5.2	0.0222	2.5	0.48	141.3	3.5	145.1	7.1	207.2	106.1	141.3	3.5
14IY14 Spot 24	115	40820	2.3	17.3415	4.5	0.1777	6.0	0.0223	4.0	0.66	142.5	5.6	166.1	9.2	517.0	98.7	142.5	5.6
14IY14 Spot 7	167	13790	2.3	21.4740	5.5	0.1442	5.9	0.0225	2.2	0.37	143.1	3.1	136.7	7.6	27.1	131.8	143.1	3.1
14IY14 Spot 30	1563	103596	1.6	20.1243	1.8	0.1540	2.1	0.0225	1.2	0.54	143.3	1.7	145.5	2.9	180.5	42.0	143.3	1.7
14IY14 Spot 2	440	27888	2.3	16.8824	4.3	0.1837	5.0	0.0225	2.7	0.53	143.4	3.8	171.2	7.9	575.7	92.6	143.4	3.8

14IY14 Spot 3	565	26117	1.5	19.8474	2.3	0.1566	4.1	0.0225	3.4	0.83	143.7	4.8	147.7	5.6	212.7	53.6	143.7	4.8
14IY14 Spot 21	163	6055	3.3	20.0846	4.1	0.1549	5.0	0.0226	2.8	0.57	143.8	4.0	146.2	6.8	185.2	95.4	143.8	4.0
14IY14 Spot 5	345	39770	2.4	20.7191	3.4	0.1503	5.1	0.0226	3.8	0.75	143.9	5.4	142.1	6.7	112.3	79.8	143.9	5.4
14IY14 Spot 16	2617	179691	4.0	20.0714	1.6	0.1556	2.3	0.0226	1.7	0.73	144.4	2.5	146.8	3.2	186.7	37.1	144.4	2.5
14IY14 Spot 10	321	34312	2.1	19.5509	2.6	0.1602	3.4	0.0227	2.1	0.63	144.8	3.1	150.9	4.8	247.5	61.0	144.8	3.1
14IY14 Spot 20	176	7675	4.9	20.2266	4.5	0.1553	4.9	0.0228	2.0	0.41	145.2	2.9	146.5	6.7	168.7	104.2	145.2	2.9
14IY14 Spot 4	218	27312	3.2	21.0614	3.2	0.1496	4.1	0.0228	2.5	0.62	145.6	3.7	141.5	5.4	73.4	75.6	145.6	3.7
14IY14 Spot 19	294	45395	2.9	20.6312	4.5	0.1530	4.8	0.0229	1.7	0.35	145.9	2.4	144.5	6.5	122.3	105.8	145.9	2.4
14IY14 Spot 12	407	28031	11.4	19.5901	3.3	0.1612	3.7	0.0229	1.7	0.46	146.0	2.5	151.7	5.2	242.9	75.7	146.0	2.5
14IY14 Spot 23	324	76840	2.7	19.3309	2.6	0.1633	3.2	0.0229	1.9	0.59	146.0	2.7	153.6	4.6	273.5	59.4	146.0	2.7
14IY14 Spot 1	264	66077	3.2	18.8188	3.8	0.1680	4.2	0.0229	1.8	0.44	146.2	2.6	157.7	6.1	334.7	85.2	146.2	2.6
14IY14 Spot 6	226	11051	3.4	21.3231	3.6	0.1489	4.2	0.0230	2.3	0.54	146.8	3.3	140.9	5.6	44.0	85.2	146.8	3.3
14IY14 Spot 8	2114	63128	3.6	20.4961	1.2	0.1556	3.3	0.0231	3.0	0.93	147.4	4.4	146.8	4.5	137.8	29.0	147.4	4.4
14IY14 Spot 26	256	25430	2.8	19.7813	2.8	0.1614	4.6	0.0232	3.7	0.79	147.6	5.3	151.9	6.5	220.5	65.9	147.6	5.3
14IY14 Spot 29	641	79954	1.4	20.0632	2.9	0.1593	3.3	0.0232	1.4	0.43	147.7	2.0	150.1	4.5	187.6	68.4	147.7	2.0
14IY14 Spot 9	986	28523	1.9	20.1378	2.0	0.1589	2.7	0.0232	1.8	0.68	147.9	2.6	149.7	3.7	179.0	45.6	147.9	2.6
14IY14 Spot 25	198	24295	3.1	20.7791	4.4	0.1546	5.8	0.0233	3.8	0.66	148.5	5.6	146.0	7.9	105.4	104.1	148.5	5.6
14IY14 Spot 17	388	29256	2.3	20.5172	3.2	0.1568	3.7	0.0233	1.9	0.50	148.7	2.7	147.9	5.1	135.3	76.1	148.7	2.7
14IY14 Spot 27	624	183851	1.3	19.8259	2.3	0.1625	3.6	0.0234	2.8	0.78	148.9	4.1	152.9	5.1	215.3	52.5	148.9	4.1
14IY14 Spot 18	187	160794	3.5	19.8681	4.6	0.1635	5.5	0.0236	2.9	0.53	150.1	4.3	153.7	7.8	210.3	107.2	150.1	4.3
14IY14 Spot 14	4551	96307	2.7	20.2359	1.3	0.1655	1.9	0.0243	1.4	0.73	154.7	2.1	155.5	2.7	167.6	30.2	154.7	2.1
14IY24 20MARCH	33	1988	2.2	23.7107	7.2	0.0942	7.7	0.0162	2.5	0.33	103.6	2.6	91.4	6.7	216.0	181.9	103.6	2.6
14IY24 20MARCH	47	37303	3.0	20.0963	5.4	0.1143	6.1	0.0167	2.8	0.46	106.5	3.0	109.9	6.4	183.8	126.2	106.5	3.0
14IY24 20MARCH	239	79981	1.4	20.8344	3.0	0.1106	4.0	0.0167	2.6	0.66	106.9	2.8	106.5	4.0	99.1	70.4	106.9	2.8
14IY24 20MARCH	243	19274	2.7	20.8658	2.2	0.1127	3.1	0.0171	2.1	0.70	109.1	2.3	108.5	3.2	95.6	52.1	109.1	2.3
14IY24 20MARCH	187	16461	1.1	21.1660	2.9	0.1112	5.1	0.0171	4.2	0.83	109.1	4.6	107.0	5.2	61.6	68.9	109.1	4.6
14IY24 20MARCH	146	23919	1.4	21.4631	2.2	0.1097	5.3	0.0171	4.8	0.91	109.1	5.2	105.7	5.3	28.3	52.9	109.1	5.2
14IY24 20MARCH	102	17676	2.3	20.0978	4.0	0.1175	4.8	0.0171	2.6	0.55	109.5	2.8	112.8	5.1	183.6	93.1	109.5	2.8
14IY24 20MARCH	333	31584	1.7	21.0537	2.5	0.1124	3.5	0.0172	2.4	0.70	109.7	2.7	108.2	3.6	74.3	58.7	109.7	2.7
14IY24 20MARCH	132	9972	1.5	19.8226	4.3	0.1194	5.0	0.0172	2.6	0.51	109.8	2.8	114.6	5.5	215.7	100.4	109.8	2.8
14IY24 20MARCH	175	20989	1.3	21.2082	2.2	0.1117	6.0	0.0172	5.5	0.93	109.8	6.0	107.5	6.1	56.9	52.6	109.8	6.0
14IY24 20MARCH	165	21999	1.2	21.1261	3.3	0.1121	4.1	0.0172	2.5	0.60	109.8	2.7	107.9	4.2	66.2	78.2	109.8	2.7
14IY24 20MARCH	447	78154	1.4	20.4982	1.9	0.1156	2.9	0.0172	2.2	0.75	109.9	2.4	111.1	3.0	137.5	45.1	109.9	2.4
14IY24 20MARCH	383	30293	2.5	21.0612	1.9	0.1129	5.0	0.0172	4.6	0.92	110.2	5.0	108.6	5.1	73.4	45.9	110.2	5.0
14IY24 20MARCH	183	20451	3.3	20.7991	3.3	0.1144	4.4	0.0173	3.0	0.68	110.3	3.3	110.0	4.6	103.2	77.2	110.3	3.3
14IY24 20MARCH	65	57755	2.3	20.5877	3.1	0.1157	3.9	0.0173	2.4	0.61	110.4	2.6	111.2	4.1	127.3	72.9	110.4	2.6
14IY24 20MARCH	309	188863	3.0	20.4889	2.7	0.1167	4.0	0.0173	2.9	0.74	110.8	3.2	112.0	4.2	138.6	63.0	110.8	3.2
14IY24 20MARCH	185	28458	0.8	20.9491	3.0	0.1151	3.6	0.0175	1.9	0.54	111.8	2.1	110.6	3.8	86.2	71.9	111.8	2.1
14IY24 20MARCH	128	21600	1.7	20.8633	3.3	0.1162	4.8	0.0176	3.5	0.73	112.3	3.9	111.6	5.1	95.9	78.3	112.3	3.9
14IY24 20MARCH	486	78745	2.8	20.2976	1.5	0.1195	4.6	0.0176	4.3	0.95	112.4	4.8	114.6	5.0	160.5	35.0	112.4	4.8
14IY24 20MARCH	339	128316	2.8	19.3573	1.7	0.1257	4.6	0.0176	4.3	0.93	112.8	4.8	120.2	5.2	270.4	40.0	112.8	4.8
14IY24 20MARCH	136	33618	2.5	21.6824	2.9	0.1125	3.6	0.0177	2.1	0.59	113.0	2.4	108.2	3.7	3.9	70.8	113.0	2.4
14IY24 20MARCH	255	56056	1.0	20.6167	3.4	0.1185	5.1	0.0177	3.8	0.75	113.2	4.2	113.7	5.4	123.9	79.3	113.2	4.2
14IY24 20MARCH	149	11878	2.0	21.7483	2.3	0.1129	3.9	0.0178	3.2	0.82	113.8	3.6	108.6	4.0	3.4	54.5	113.8	3.6
14IY24 20MARCH	151	29184	2.5	20.2379	3.8	0.1219	4.2	0.0179	1.9	0.45	114.3	2.1	116.8	4.6	167.4	88.1	114.3	2.1
14IY24 20MARCH	109	25949	1.5	21.4359	2.6	0.1151	6.4	0.0179	5.8	0.91	114.4	6.6	110.6	6.7	31.4	62.6	114.4	6.6
14IY24 20MARCH	618	31673	2.3	20.6752	1.6	0.1214	2.7	0.0182	2.1	0.79	116.3	2.4	116.4	2.9	117.2	38.6	116.3	2.4
14IY24 20MARCH	156	42082	2.1	21.3092	3.1	0.1191	4.5	0.0184	3.3	0.72	117.6	3.8	114.2	4.9	45.6	74.6	117.6	3.8
14IY24 20MARCH	801	196211	2.4	21.0800	1.7	0.1228	2.9	0.0188	2.4	0.81	119.9	2.8	117.6	3.2	71.3	40.2	119.9	2.8
14IY24 20MARCH	624	33536	3.4	20.6559	2.2	0.1255	3.2	0.0188	2.3	0.72	120.0	2.8	120.0	3.6	119.5	52.7	120.0	2.8
14IY24 20MARCH	1007	61016	2.5	20.8136	1.7	0.1286	3.0	0.0194	2.5	0.82	124.0	3.0	122.9	3.5	101.5	41.1	124.0	3.0
14IY25 C Spot 14	1625	99238	33.3	20.2847	1.9	0.1450	2.8	0.0213	2.0	0.72	136.0	2.7	137.5	3.5	162.1	44.7	136.0	2.7
14IY25 R Spot 58	385	37517	28.6	19.4305	2.8	0.1554	4.8	0.0219	4.0	0.82	139.7	5.5	146.7	6.6	261.8	63.8	139.7	5.5
14IY25 R Spot 53	486	69812	4.5	20.0328	2.7	0.1536	3.5	0.0223	2.2	0.64	142.3	3.1	145.1	4.7	191.2	62.0	142.3	3.1
14IY25 R Spot 79	647	102467	7.7	20.4788	2.9	0.1508	3.4	0.0224	1.7	0.50	142.8	2.4	142.6	4.5	139.7	69.2	142.8	2.4
14IY25 C Spot 18	761	138163	15.9	19.8773	2.3	0.1554	5.4	0.0224	4.9	0.91	142.8	7.0	146.7	7.4	209.3	53.3	142.8	7.0
14IY25 C Spot 6	544	209153	7.9	19.9591	1.9	0.1551	2.8	0.0224	2.1	0.74	143.1	3.0	146.4	3.8	199.8	43.9	143.1	3.0
14IY25 C Spot 3	295	17489	9.3	19.9503	2.6	0.1552	3.1	0.0225	1.8	0.56	143.2	2.5	146.5	4.2	200.8	59.5	143.2	2.5
14IY25 C Spot 5	598	38194	6.6	20.4118	2.8	0.1517	3.2	0.0225	1.6	0.50	143.2	2.3	143.4	4.3	147.4	65.0	143.2	2.3
14IY25 R Spot 85	733	136711	8.9	20.3826	1.9	0.1520	2.6	0.0225	1.7	0.66	143.2	2.4	143.7	3.5	150.8	45.7	143.2	2.4
14IY25 R Spot 81	1084	36005	7.2	20.5021	2.0	0.1513	2.8	0.0225	1.9	0.69	143.4	2.8	143.1	3.8	137.1	47.5	143.4	2.8
14IY25 C Spot 2	595	103278	4.8	20.2831	1.8	0.1532	4.4	0.0225	4.1	0.91	143.7	5.8	144.8	6.0	162.2	42.0	143.7	5.8

14IY25 C Spot 1	479	32030	5.1	20.0805	3.1	0.1553	4.3	0.0226	3.0	0.71	144.2	4.3	146.6	5.9	185.6	71.0	144.2	4.3
14IY25 R Spot 66	804	67435	14.9	20.4693	1.8	0.1528	4.6	0.0227	4.2	0.92	144.6	6.0	144.3	6.2	140.8	43.3	144.6	6.0
14IY25 R Spot 80	713	199704	18.8	20.3280	2.4	0.1543	3.1	0.0228	1.9	0.61	145.0	2.7	145.7	4.2	157.1	56.6	145.0	2.7
14IY25 R Spot 82	782	47651	9.0	20.1457	2.1	0.1558	5.4	0.0228	4.9	0.92	145.1	7.1	147.0	7.4	178.1	50.0	145.1	7.1
14IY25 R Spot 78	837	131677	5.4	20.5153	1.6	0.1530	5.4	0.0228	5.1	0.95	145.1	7.4	144.5	7.3	135.6	38.6	145.1	7.4
14IY25 R Spot 71	800	36255	6.7	20.0553	1.8	0.1566	3.7	0.0228	3.3	0.87	145.2	4.7	147.7	5.1	188.6	42.1	145.2	4.7
14IY25 R Spot 75	319	25839	10.5	20.4805	2.3	0.1537	2.6	0.0228	1.2	0.47	145.5	1.8	145.2	3.6	139.5	54.4	145.5	1.8
14IY25 R Spot 68	570	44371	41.2	20.2427	2.5	0.1556	4.8	0.0228	4.1	0.86	145.6	5.9	146.8	6.6	166.9	57.6	145.6	5.9
14IY25 R Spot 54	382	30828	24.2	20.3835	2.7	0.1545	3.4	0.0228	2.0	0.59	145.6	2.8	145.9	4.6	150.7	63.5	145.6	2.8
14IY25 C Spot 19	468	30458	12.9	19.5246	3.4	0.1616	3.7	0.0229	1.4	0.38	145.8	2.0	152.1	5.2	250.6	78.2	145.8	2.0
14IY25 R Spot 87	617	51387	12.8	20.4608	1.9	0.1542	2.7	0.0229	1.9	0.72	145.8	2.8	145.6	3.7	141.8	44.3	145.8	2.8
14IY25 R Spot 57	894	591648	5.7	20.0009	1.8	0.1578	2.8	0.0229	2.1	0.77	145.9	3.1	148.7	3.8	194.9	41.3	145.9	3.1
14IY25 R Spot 60	443	43529	57.8	20.0348	2.3	0.1583	3.1	0.0230	2.0	0.67	146.6	3.0	149.2	4.3	191.0	53.2	146.6	3.0
14IY25 R Spot 84	498	51043	17.6	20.5774	2.0	0.1541	2.8	0.0230	1.9	0.68	146.6	2.7	145.6	3.7	128.5	47.3	146.6	2.7
14IY25 R Spot 65	391	32036	6.7	20.0053	2.8	0.1586	3.9	0.0230	2.8	0.70	146.7	4.0	149.5	5.4	194.4	64.6	146.7	4.0
14IY25 R Spot 88	561	84565	5.6	20.6904	2.4	0.1534	5.9	0.0230	5.4	0.92	146.7	7.8	144.9	7.9	115.6	55.5	146.7	7.8
14IY25 R Spot 51	349	36037	57.0	20.1516	2.1	0.1576	3.0	0.0230	2.1	0.71	146.8	3.0	148.6	4.1	177.4	48.4	146.8	3.0
14IY25 R Spot 83	594	25418	10.8	20.6872	1.8	0.1535	4.1	0.0230	3.7	0.90	146.8	5.3	145.0	5.5	115.9	42.0	146.8	5.3
14IY25 R Spot 52	377	54190	42.4	20.7502	2.0	0.1531	3.1	0.0230	2.4	0.76	146.8	3.4	144.6	4.2	108.7	47.8	146.8	3.4
14IY25 R Spot 70	651	31669	2.1	20.8962	2.3	0.1523	3.0	0.0231	1.9	0.65	147.1	2.8	143.9	4.0	92.1	53.7	147.1	2.8
14IY25 R Spot 90	361	29263	42.1	20.5007	2.4	0.1553	3.0	0.0231	1.8	0.59	147.1	2.6	146.6	4.1	137.2	57.2	147.1	2.6
14IY25 C Spot 7	450	79752	7.6	20.3803	2.3	0.1563	3.1	0.0231	2.1	0.67	147.2	3.0	147.4	4.2	151.0	53.4	147.2	3.0
14IY25 R Spot 76	897	49371	8.3	20.4819	2.4	0.1555	3.2	0.0231	2.1	0.66	147.2	3.1	146.7	4.4	139.4	57.5	147.2	3.1
14IY25 R Spot 63	692	25352	8.3	20.6067	1.7	0.1547	6.4	0.0231	6.2	0.96	147.3	9.0	146.0	8.7	125.1	40.0	147.3	9.0
14IY25 R Spot 62	946	166001	7.5	20.2571	1.5	0.1577	3.5	0.0232	3.1	0.90	147.6	4.5	148.7	4.8	165.2	35.9	147.6	4.5
14IY25 R Spot 64	698	82733	13.3	20.6043	1.7	0.1551	2.8	0.0232	2.2	0.80	147.7	3.3	146.4	3.8	125.3	40.0	147.7	3.3
14IY25 R Spot 56	617	53190	7.5	20.6378	2.4	0.1552	3.3	0.0232	2.2	0.68	148.0	3.3	146.5	4.5	121.5	57.3	148.0	3.3
14IY25 R Spot 89	447	32976	6.0	20.1554	2.3	0.1589	3.5	0.0232	2.7	0.76	148.1	3.9	149.8	4.9	177.0	53.3	148.1	3.9
14IY25 R Spot 72	1738	135214	3.0	20.5128	1.4	0.1562	2.3	0.0232	1.8	0.80	148.1	2.6	147.4	3.1	135.8	32.0	148.1	2.6
14IY25 R Spot 86	331	28951	35.5	20.7531	2.7	0.1547	3.3	0.0233	1.8	0.55	148.3	2.7	146.0	4.5	108.4	64.9	148.3	2.7
14IY25 R Spot 73	1338	181888	4.1	20.0179	1.5	0.1610	3.9	0.0234	3.6	0.92	149.0	5.3	151.6	5.5	192.9	35.8	149.0	5.3
14IY25 R Spot 59	368	22629	39.0	20.3716	1.9	0.1587	2.6	0.0234	1.8	0.70	149.4	2.7	149.5	3.6	152.0	44.1	149.4	2.7
14IY25 R Spot 61	1696	99118	9.0	20.4917	1.3	0.1586	2.5	0.0236	2.1	0.86	150.2	3.2	149.5	3.4	138.2	29.9	150.2	3.2
14IY25 R Spot 74	394	44279	18.7	20.7739	2.5	0.1566	3.9	0.0236	3.0	0.77	150.4	4.5	147.8	5.4	106.0	59.0	150.4	4.5
14IY25 R Spot 77	791	243128	7.2	20.8199	2.0	0.1573	4.3	0.0238	3.8	0.89	151.3	5.7	148.4	6.0	100.8	46.9	151.3	5.7
14IY25 R Spot 67	804	73899	4.2	20.4112	1.5	0.1609	3.3	0.0238	2.9	0.89	151.7	4.4	151.5	4.7	147.5	35.1	151.7	4.4
14IY25 R Spot 69	756	33811	6.4	20.2627	2.1	0.1629	3.1	0.0239	2.3	0.75	152.5	3.5	153.2	4.4	164.6	48.7	152.5	3.5
14IY25 C Spot 10	1552	205475	7.7	19.8999	1.6	0.1679	2.7	0.0242	2.2	0.81	154.3	3.4	157.6	4.0	206.6	37.4	154.3	3.4
14IY25 R Spot 55	400	32666	19.0	21.1978	2.5	0.1636	3.2	0.0252	2.0	0.62	160.2	3.2	153.9	4.6	58.1	60.7	160.2	3.2
14IY25 C Spot 12	1236	38496	5.3	20.2937	1.6	0.1832	2.5	0.0270	1.9	0.76	171.5	3.2	170.8	3.9	161.0	37.3	171.5	3.2
14IY25 C Spot 8	1670	134258	5.0	20.1745	1.7	0.1854	3.4	0.0271	2.9	0.86	172.5	5.0	172.7	5.4	174.7	40.5	172.5	5.0
14IY25 C Spot 9	1169	100982	3.5	20.0824	1.8	0.1941	2.8	0.0283	2.1	0.76	179.8	3.8	180.2	4.6	185.4	42.0	179.8	3.8
14IY39 Spot 58	213	17214	2.6	20.0101	3.5	0.1412	3.9	0.0205	1.8	0.45	130.8	2.3	134.1	5.0	193.8	82.0	130.8	2.3
14IY39 Spot 75	696	66799	2.7	19.6069	4.0	0.1444	4.4	0.0205	1.9	0.43	131.0	2.5	137.0	5.6	241.0	91.5	131.0	2.5
14IY39 Spot 91	126	27001	4.2	20.8610	4.8	0.1388	5.3	0.0210	2.2	0.42	134.0	2.9	132.0	6.5	96.1	113.1	134.0	2.9
14IY39 Spot 67	194	18690	4.5	20.5440	3.6	0.1412	4.0	0.0210	1.5	0.39	134.2	2.0	134.1	5.0	132.3	85.9	134.2	2.0
14IY39 Spot 55	223	29467	4.1	20.1464	3.3	0.1448	3.7	0.0212	1.8	0.48	135.0	2.4	137.4	4.8	178.0	75.9	135.0	2.4
14IY39 Spot 85	211	26710	3.6	18.8043	3.6	0.1552	4.1	0.0212	2.0	0.49	135.1	2.7	146.5	5.6	336.4	81.4	135.1	2.7
14IY39 Spot 56	184	28221	4.1	21.1806	3.7	0.1380	4.1	0.0212	1.9	0.45	135.2	2.5	131.3	5.1	60.0	87.3	135.2	2.5
14IY39 Spot 70	116	28881	4.1	20.7124	5.1	0.1412	5.4	0.0212	1.7	0.32	135.3	2.3	134.1	6.7	113.0	120.1	135.3	2.3
14IY39 Spot 64	199	33366	2.7	19.8627	2.4	0.1473	3.1	0.0212	1.9	0.63	135.4	2.6	139.5	4.0	211.0	55.0	135.4	2.6
14IY39 Spot 77	228	28468	3.8	19.9200	4.0	0.1470	4.4	0.0212	1.8	0.42	135.4	2.5	139.2	5.7	204.3	92.6	135.4	2.5
14IY39 Spot 78	134	10793	4.1	20.0609	4.0	0.1467	4.3	0.0213	1.8	0.40	136.1	2.4	139.0	5.6	187.9	92.3	136.1	2.4
14IY39 Spot 53	455	241674	2.0	20.0002	2.0	0.1471	2.3	0.0213	1.2	0.50	136.1	1.6	139.4	3.1	195.0	47.1	136.1	1.6
14IY39 Spot 84	319	26376	2.7	19.8135	2.4	0.1485	2.9	0.0213	1.6	0.55	136.1	2.1	140.6	3.8	216.7	55.6	136.1	2.1
14IY39 Spot 72	293	35916	3.3	19.7136	2.7	0.1493	3.0	0.0213	1.3	0.44	136.2	1.8	141.3	4.0	228.4	62.7	136.2	1.8
14IY39 Spot 86	236	33421	4.7	20.9796	3.5	0.1404	4.0	0.0214	1.8	0.46	136.3	2.5	133.4	5.0	82.7	84.0	136.3	2.5
14IY39 Spot 52	384	55285	3.9	19.6219	2.6	0.1503	3.1	0.0214	1.7	0.54	136.4	2.2	142.2	4.1	239.2	60.3	136.4	2.2
14IY39 Spot 71	114	21313	3.9	21.8687	4.8	0.1350	5.2	0.0214	2.0	0.38	136.5	2.7	128.6	6.3	16.7	117.0	136.5	2.7
14IY39 Spot 89	124	20463	3.9	20.0761	4.3	0.1471	4.6	0.0214	1.7	0.36	136.6	2.3	139.3	6.0	186.1	100.9	136.6	2.3
14IY39 Spot 68	139	26277	4.2	20.9701	4.4	0.1409	4.7	0.0214	1.7	0.35	136.7	2.2	133.8	5.9	83.7	105.1	136.7	2.2
14IY39 Spot 59	265	40208	2.5	20.5650	3.8	0.1437	4.1	0.0214	1.4	0.36	136.7	2.0	136.4	5.2	129.9	89.2	136.7	2.0
14IY39 Spot 92	254	21849	3.3	21.0769	2.4	0.1403	3.0	0.0215	1.8	0.60	136.8	2.5	133.4	3.8	71.7	57.3	136.8	2.5

14IY39 Spot 76	267	16182	2.5	19.2855	3.6	0.1535	4.0	0.0215	1.8	0.45	136.9	2.4	145.0	5.4	278.9	81.8	136.9	2.4
14IY39 Spot 51	306	155563	2.7	19.9011	3.1	0.1489	3.4	0.0215	1.3	0.40	137.1	1.8	140.9	4.4	206.5	72.0	137.1	1.8
14IY39 Spot 90	379	26607	10.7	20.4568	3.2	0.1449	4.2	0.0215	2.6	0.63	137.1	3.5	137.4	5.3	142.3	75.9	137.1	3.5
14IY39 Spot 57	1563	79287	2.4	20.4087	1.2	0.1452	1.9	0.0215	1.4	0.77	137.1	2.0	137.7	2.4	147.8	27.9	137.1	2.0
14IY39 Spot 80	251	16537	3.4	21.4504	3.4	0.1383	3.6	0.0215	1.3	0.37	137.2	1.8	131.5	4.5	29.8	80.4	137.2	1.8
14IY39 Spot 65	404	34466	2.1	19.8603	2.2	0.1495	2.6	0.0215	1.4	0.55	137.4	1.9	141.5	3.4	211.2	50.1	137.4	1.9
14IY39 Spot 81	109	5474	4.1	20.0634	5.0	0.1481	5.4	0.0215	2.1	0.38	137.4	2.8	140.2	7.0	187.6	115.5	137.4	2.8
14IY39 Spot 66	95	14696	3.3	20.3881	5.3	0.1457	5.8	0.0216	2.1	0.37	137.5	2.9	138.1	7.4	150.1	125.2	137.5	2.9
14IY39 Spot 79	687	80920	4.6	20.3997	1.4	0.1457	2.1	0.0216	1.5	0.74	137.5	2.1	138.1	2.7	148.8	32.5	137.5	2.1
14IY39 Spot 73	297	21704	2.7	20.6061	3.5	0.1443	3.7	0.0216	1.3	0.34	137.5	1.7	136.8	4.7	125.1	82.0	137.5	1.7
14IY39 Spot 69	306	54175	3.4	19.6964	2.3	0.1509	2.7	0.0216	1.4	0.52	137.5	1.9	142.7	3.6	230.4	53.3	137.5	1.9
14IY39 Spot 93	213	41270	2.7	20.9709	3.8	0.1418	4.2	0.0216	1.8	0.43	137.5	2.4	134.6	5.2	83.7	89.0	137.5	2.4
14IY39 Spot 88	210	161058	2.9	20.5441	3.4	0.1450	4.0	0.0216	2.1	0.54	137.8	2.9	137.5	5.1	132.2	79.1	137.8	2.9
14IY39 Spot 54	315	24927	3.3	20.3535	2.6	0.1464	3.0	0.0216	1.4	0.46	137.8	1.9	138.7	3.9	154.1	61.8	137.8	1.9
14IY39 Spot 82	245	20003	3.3	19.5283	2.8	0.1532	3.2	0.0217	1.4	0.45	138.3	2.0	144.7	4.3	250.2	65.6	138.3	2.0
14IY39 Spot 63	267	31501	3.0	20.0701	4.3	0.1504	4.7	0.0219	1.7	0.37	139.6	2.4	142.3	6.2	186.8	100.5	139.6	2.4
14IY39 Spot 83	436	757606	2.7	20.3486	2.7	0.1511	3.1	0.0223	1.6	0.50	142.2	2.2	142.9	4.2	154.7	63.5	142.2	2.2
14IY39 Spot 62	311	26511	3.3	16.4979	3.4	0.1873	3.7	0.0224	1.5	0.40	142.9	2.1	174.3	5.9	625.5	72.9	142.9	2.1
14IY39 Spot 60	572	49001	3.5	19.1108	3.4	0.1622	3.8	0.0225	1.7	0.46	143.3	2.5	152.6	5.4	299.7	77.3	143.3	2.5
14IY39 Spot 87	252	26556	3.5	16.8588	5.9	0.1839	6.3	0.0225	2.4	0.37	143.4	3.4	171.4	10.0	578.7	127.9	143.4	3.4
14IY39 Spot 74	1079	58989	4.3	17.9404	2.8	0.1731	3.7	0.0225	2.4	0.65	143.6	3.4	162.1	5.6	442.0	63.0	143.6	3.4
14IY39 Spot 61	3281	63032	9.1	18.5142	1.7	0.1983	2.7	0.0266	2.1	0.77	169.4	3.5	183.7	4.6	371.6	39.3	169.4	3.5
14IY40 Spot 37	792	100703	1.8	20.5031	3.5	0.1194	3.9	0.0178	1.8	0.46	113.4	2.0	114.5	4.2	137.0	81.5	113.4	2.0
14IY40 Spot 8	345	23296	3.8	20.2152	2.9	0.1212	3.4	0.0178	1.6	0.48	113.6	1.8	116.2	3.7	170.0	68.8	113.6	1.8
14IY40 Spot 10	443	34143	3.0	20.1786	3.5	0.1216	4.7	0.0178	3.1	0.66	113.7	3.5	116.5	5.1	174.3	81.3	113.7	3.5
14IY40 Spot 7	428	22923	3.6	20.6003	4.1	0.1192	4.6	0.0178	2.1	0.45	113.8	2.3	114.4	4.9	125.8	95.7	113.8	2.3
14IY40 Spot 45	216	16387	3.1	20.2657	4.7	0.1213	5.0	0.0178	1.7	0.35	114.0	2.0	116.3	5.5	164.2	110.0	114.0	2.0
14IY40 Spot 41	534	24930	3.5	19.9164	2.2	0.1239	3.2	0.0179	2.3	0.73	114.4	2.6	118.6	3.5	204.7	50.3	114.4	2.6
14IY40 Spot 12	565	47580	2.5	20.8708	2.6	0.1190	3.2	0.0180	1.9	0.58	115.1	2.2	114.2	3.5	95.0	62.6	115.1	2.2
14IY40 Spot 39	337	13637	2.9	21.4012	2.4	0.1162	2.9	0.0180	1.6	0.56	115.2	1.8	111.6	3.0	35.2	56.5	115.2	1.8
14IY40 Spot 19	740	117174	1.0	20.3196	2.5	0.1225	3.0	0.0180	1.5	0.52	115.3	1.8	117.3	3.3	158.0	59.0	115.3	1.8
14IY40 Spot 38	379	40941	1.6	19.8637	3.5	0.1253	3.9	0.0181	1.6	0.41	115.4	1.8	119.9	4.4	210.9	82.1	115.4	1.8
14IY40 Spot 40	742	21797	18.2	20.7929	2.7	0.1197	3.1	0.0181	1.6	0.51	115.4	1.8	114.8	3.4	103.9	63.6	115.4	1.8
14IY40 Spot 13	527	24684	2.8	20.8273	3.6	0.1198	3.9	0.0181	1.7	0.43	115.6	1.9	114.9	4.3	100.0	84.3	115.6	1.9
14IY40 Spot 32	472	36974	1.9	20.0328	3.4	0.1247	4.1	0.0181	2.3	0.56	115.7	2.6	119.3	4.6	191.2	79.0	115.7	2.6
14IY40 Spot 16	657	37267	2.6	20.3562	2.6	0.1231	3.4	0.0182	2.3	0.66	116.1	2.6	117.8	3.8	153.8	60.7	116.1	2.6
14IY40 Spot 28	339	50121	3.2	19.6148	2.9	0.1277	3.4	0.0182	1.8	0.54	116.1	2.1	122.1	3.9	240.0	65.8	116.1	2.1
14IY40 Spot 36	218	12168	2.6	20.4427	5.0	0.1226	5.4	0.0182	2.0	0.37	116.1	2.3	117.4	6.0	143.9	117.3	116.1	2.3
14IY40 Spot 50	114	10077	3.6	18.6879	6.8	0.1342	8.1	0.0182	4.5	0.55	116.2	5.1	127.9	9.7	350.5	152.8	116.2	5.1
14IY40 Spot 4	394	193109	2.9	18.9647	3.0	0.1324	3.3	0.0182	1.3	0.40	116.3	1.5	126.2	3.9	317.2	68.2	116.3	1.5
14IY40 Spot 42	481	27809	2.2	20.1378	3.4	0.1247	3.9	0.0182	1.9	0.50	116.3	2.2	119.3	4.4	179.0	78.3	116.3	2.2
14IY40 Spot 22	586	148044	1.7	19.8069	2.7	0.1268	3.1	0.0182	1.6	0.52	116.4	1.9	121.2	3.6	217.5	61.7	116.4	1.9
14IY40 Spot 49	342	37216	2.3	20.0208	2.7	0.1256	3.2	0.0182	1.7	0.54	116.5	2.0	120.2	3.6	192.6	61.8	116.5	2.0
14IY40 Spot 31	579	48372	2.3	19.9772	2.6	0.1261	2.9	0.0183	1.2	0.43	116.7	1.4	120.6	3.2	197.6	59.9	116.7	1.4
14IY40 Spot 1	634	23156	3.3	21.4790	3.4	0.1173	4.1	0.0183	2.2	0.53	116.8	2.5	112.6	4.3	26.6	82.3	116.8	2.5
14IY40 Spot 20	633	36097	3.3	20.2966	2.9	0.1246	3.3	0.0183	1.5	0.45	117.1	1.7	119.2	3.7	160.7	68.8	117.1	1.7
14IY40 Spot 23	340	34013	2.2	19.9855	2.8	0.1267	3.3	0.0184	1.7	0.52	117.3	2.0	121.1	3.8	196.7	65.5	117.3	2.0
14IY40 Spot 25	588	16573	3.0	20.5708	2.7	0.1237	3.1	0.0185	1.5	0.49	117.9	1.8	118.4	3.5	129.2	63.6	117.9	1.8
14IY40 Spot 17	521	35608	1.8	19.7592	2.2	0.1289	2.8	0.0185	1.7	0.61	118.0	2.0	123.1	3.3	223.1	51.7	118.0	2.0
14IY40 Spot 44	652	83591	3.5	20.2998	3.0	0.1263	3.4	0.0186	1.8	0.51	118.8	2.1	120.8	3.9	160.3	69.1	118.8	2.1
14IY40 Spot 35	423	20909	3.2	20.4296	3.8	0.1255	4.3	0.0186	2.0	0.47	118.8	2.3	120.1	4.8	145.3	89.0	118.8	2.3
14IY40 Spot 48	343	15339	3.0	20.4243	3.6	0.1261	4.1	0.0187	1.9	0.47	119.3	2.3	120.6	4.7	146.0	84.9	119.3	2.3
14IY40 Spot 29	708	29076	3.0	21.0351	2.0	0.1225	3.2	0.0187	2.4	0.77	119.3	2.9	117.3	3.5	76.4	48.3	119.3	2.9
14IY40 Spot 43	367	19229	2.4	16.8720	4.9	0.1529	5.1	0.0187	1.2	0.24	119.5	1.5	144.4	6.9	577.0	107.4	119.5	1.5
14IY40 Spot 9	1535	78220	2.8	20.6007	1.4	0.1253	2.1	0.0187	1.5	0.74	119.6	1.8	119.9	2.3	125.8	32.9	119.6	1.8
14IY40 Spot 33	515	25421	3.1	21.0201	3.1	0.1230	3.7	0.0187	1.9	0.53	119.7	2.3	117.8	4.1	78.1	73.6	119.7	2.3
14IY40 Spot 30	522	39464	2.8	20.2330	3.2	0.1280	3.8	0.0188	2.0	0.53	120.0	2.3	122.3	4.3	168.0	74.5	120.0	2.3
14IY40 Spot 15	708	21604	3.3	21.1257	2.7	0.1227	3.5	0.0188	2.2	0.63	120.0	2.6	117.5	3.9	66.2	64.6	120.0	2.6
14IY40 Spot 24	566	59036	2.2	20.3936	3.5	0.1271	4.2	0.0188	2.4	0.57	120.0	2.9	121.5	4.9	149.5	81.4	120.0	2.9
14IY40 Spot 21	546	31084	3.0	21.0227	2.4	0.1235	2.7	0.0188	1.2	0.45	120.2	1.4	118.2	3.0	77.8	57.4	120.2	1.4
14IY40 Spot 47	356	36937	1.7	20.9091	3.3	0.1241	4.0	0.0188	2.2	0.56	120.2	2.6	118.8	4.4	90.6	77.7	120.2	2.6
14IY40 Spot 27	456	23721	3.4	20.0201	3.8	0.1301	4.5	0.0189	2.5	0.56	120.6	3.0	124.2	5.3	192.7	87.5	120.6	3.0
14IY40 Spot 3	350	27229	2.6	20.1170	4.5	0.1308	4.9	0.0191	2.0	0.40	121.8	2.4	124.8	5.8	181.4	104.9	121.8	2.4

14IY40 Spot 18	246	21708	3.0	19.4680	3.9	0.1351	4.2	0.0191	1.6	0.38	121.8	1.9	128.7	5.1	257.3	90.0	121.8	1.9
14IY40 Spot 26	655	23480	3.1	16.4539	5.2	0.1602	5.5	0.0191	1.6	0.29	122.1	1.9	150.9	7.6	631.3	112.5	122.1	1.9
14IY40 Spot 11	3672	46528	1.2	18.8399	1.8	0.1454	2.5	0.0199	1.7	0.69	126.8	2.1	137.8	3.2	332.2	40.6	126.8	2.1
14IY40 Spot 14	3401	116138	2.1	20.4295	1.3	0.1366	1.9	0.0202	1.4	0.72	129.2	1.7	130.0	2.3	145.4	30.3	129.2	1.7
14IY40 Spot 34	4129	######	1.9	20.0338	1.2	0.1466	1.7	0.0213	1.1	0.67	135.9	1.5	138.9	2.2	191.1	28.8	135.9	1.5
14IY40 Spot 6	524	27205	4.7	19.9499	2.1	0.1477	3.1	0.0214	2.3	0.73	136.3	3.0	139.9	4.1	200.8	49.5	136.3	3.0
14IY40 Spot 5	1394	64222	2.3	20.4575	2.1	0.1453	2.5	0.0216	1.2	0.50	137.5	1.7	137.8	3.2	142.2	50.0	137.5	1.7
14IY40 Spot 46	577	56830	1.7	19.4250	2.5	0.1626	3.2	0.0229	1.9	0.60	146.0	2.8	153.0	4.5	262.4	58.4	146.0	2.8
14IY40 Spot 2	707	55955	6.4	20.4272	2.4	0.1586	3.4	0.0235	2.4	0.70	149.7	3.5	149.5	4.7	145.7	57.5	149.7	3.5
14IY42 Spot 63	53	5013	2.9	22.5139	8.5	0.0933	8.9	0.0152	2.7	0.30	97.4	2.6	90.5	7.7	87.5	209.2	97.4	2.6
14IY42 Spot 76	51	3120	3.0	19.9466	7.9	0.1055	9.3	0.0153	4.8	0.52	97.6	4.7	101.8	9.0	201.2	183.8	97.6	4.7
14IY42 Spot 89	78	2452	3.8	21.1546	4.4	0.0996	5.2	0.0153	2.7	0.52	97.8	2.6	96.4	4.7	62.9	104.8	97.8	2.6
14IY42 Spot 5	127	42444	2.6	19.9921	5.2	0.1058	5.6	0.0153	2.3	0.40	98.1	2.2	102.1	5.5	195.9	120.4	98.1	2.2
14IY42 Spot 15	34	2011	3.8	22.2352	7.5	0.0956	8.2	0.0154	3.3	0.41	98.6	3.3	92.7	7.3	57.1	182.4	98.6	3.3
14IY42 Spot 77	43	5455	3.0	23.0496	6.9	0.0924	7.7	0.0154	3.6	0.46	98.8	3.5	89.7	6.6	145.5	170.1	98.8	3.5
14IY42 Spot 53	60	34197	3.4	20.2548	6.6	0.1055	7.4	0.0155	3.5	0.47	99.2	3.4	101.9	7.2	165.5	153.6	99.2	3.4
14IY42 Spot 82	62	2382	3.2	20.4078	7.8	0.1050	8.1	0.0155	2.4	0.30	99.4	2.4	101.4	7.8	147.9	182.2	99.4	2.4
14IY42 Spot 16	50	1698	2.7	22.3966	10.5	0.0959	11.2	0.0156	3.8	0.34	99.7	3.7	93.0	9.9	74.7	257.6	99.7	3.7
14IY42 Spot 70	49	12827	3.6	17.7026	9.1	0.1214	9.8	0.0156	3.5	0.36	99.7	3.5	116.3	10.7	471.6	202.5	99.7	3.5
14IY42 Spot 7	34	1258	3.6	22.2044	10.4	0.0968	11.0	0.0156	3.7	0.34	99.8	3.7	93.9	9.9	53.7	252.7	99.8	3.7
14IY42 Spot 52	58	7827	3.3	20.4575	6.2	0.1052	8.1	0.0156	5.1	0.64	99.8	5.1	101.6	7.8	142.2	145.5	99.8	5.1
14IY42 Spot 69	57	22352	3.1	19.2812	7.7	0.1117	8.3	0.0156	3.1	0.37	99.9	3.0	107.5	8.4	279.4	176.4	99.9	3.0
14IY42 Spot 85	72	4781	3.5	20.3674	7.7	0.1061	8.2	0.0157	2.8	0.35	100.2	2.8	102.4	8.0	152.5	181.5	100.2	2.8
14IY42 Spot 73	68	6960	3.4	22.7513	6.9	0.0951	7.3	0.0157	2.5	0.34	100.3	2.5	92.2	6.5	113.3	170.3	100.3	2.5
14IY42 Spot 84	59	3788	3.2	22.7711	7.4	0.0950	9.3	0.0157	5.6	0.61	100.4	5.6	92.2	8.2	115.4	183.1	100.4	5.6
14IY42 Spot 20	80	11430	2.1	20.5250	6.8	0.1054	7.1	0.0157	2.1	0.29	100.4	2.1	101.8	6.9	134.4	160.7	100.4	2.1
14IY42 Spot 61	72	44039	2.6	19.6875	6.4	0.1099	7.0	0.0157	2.8	0.39	100.4	2.7	105.9	7.0	231.5	148.4	100.4	2.7
14IY42 Spot 86	56	8342	3.2	18.7153	6.1	0.1156	6.4	0.0157	2.1	0.32	100.4	2.1	111.1	6.8	347.2	138.2	100.4	2.1
14IY42 Spot 56	78	11202	3.1	18.6417	6.7	0.1163	7.1	0.0157	2.3	0.33	100.5	2.3	111.7	7.5	356.1	151.3	100.5	2.3
14IY42 Spot 80	43	9259	3.0	19.5117	7.7	0.1111	9.0	0.0157	4.6	0.51	100.6	4.6	107.0	9.1	252.2	177.8	100.6	4.6
14IY42 Spot 79	60	10644	3.2	21.2899	5.5	0.1020	6.0	0.0157	2.4	0.40	100.7	2.4	98.6	5.6	47.7	130.4	100.7	2.4
14IY42 Spot 72	75	11288	3.3	19.7123	4.5	0.1102	5.1	0.0158	2.3	0.45	100.8	2.3	106.2	5.1	228.6	104.9	100.8	2.3
14IY42 Spot 60	43	16198	3.6	18.8320	10.1	0.1155	10.5	0.0158	2.9	0.27	100.9	2.9	111.0	11.1	333.1	230.3	100.9	2.9
14IY42 Spot 51	83	17509	3.9	19.4259	5.3	0.1120	5.6	0.0158	1.8	0.32	100.9	1.8	107.8	5.8	262.3	122.8	100.9	1.8
14IY42 Spot 87	82	12895	3.1	21.1298	5.4	0.1030	6.0	0.0158	2.6	0.43	101.0	2.6	99.6	5.7	65.8	128.9	101.0	2.6
14IY42 Spot 71	63	14425	3.6	16.4769	7.0	0.1324	7.6	0.0158	3.0	0.39	101.2	3.0	126.2	9.0	628.3	150.1	101.2	3.0
14IY42 Spot 65	61	33566	3.5	18.9971	9.0	0.1149	9.2	0.0158	2.2	0.24	101.3	2.2	110.4	9.7	313.3	204.7	101.3	2.2
14IY42 Spot 66	101	26028	3.3	19.9005	6.7	0.1097	7.5	0.0158	3.4	0.46	101.3	3.5	105.7	7.6	206.6	155.8	101.3	3.5
14IY42 Spot 59	67	5705	3.5	21.9369	6.0	0.0999	8.0	0.0159	5.3	0.67	101.6	5.4	96.7	7.4	24.2	144.3	101.6	5.4
14IY42 Spot 6	55	5496	2.4	20.7580	8.2	0.1056	8.6	0.0159	2.6	0.30	101.7	2.6	102.0	8.4	107.9	195.1	101.7	2.6
14IY42 Spot 58	76	20112	3.5	14.8332	6.9	0.1480	7.3	0.0159	2.5	0.34	101.8	2.5	140.1	9.6	850.7	143.4	101.8	2.5
14IY42 Spot 90	36	48265	4.0	20.5599	8.7	0.1069	9.3	0.0159	3.3	0.35	102.0	3.3	103.2	9.2	130.5	206.1	102.0	3.3
14IY42 Spot 55	58	23840	2.9	20.5172	7.3	0.1072	7.6	0.0160	2.2	0.29	102.1	2.2	103.4	7.5	135.3	171.5	102.1	2.2
14IY42 Spot 67	52	12995	3.2	18.3216	7.6	0.1201	8.0	0.0160	2.5	0.31	102.1	2.5	115.2	8.7	395.0	171.4	102.1	2.5
14IY42 Spot 54	51	7911	3.5	15.8263	13.9	0.1391	14.3	0.0160	3.3	0.23	102.1	3.4	132.2	17.7	714.5	296.3	102.1	3.4
14IY42 Spot 88	65	17385	2.8	22.2293	6.8	0.0991	7.1	0.0160	2.2	0.31	102.1	2.3	95.9	6.5	56.4	165.5	102.1	2.3
14IY42 Spot 11	347	37997	2.1	20.4339	2.3	0.1081	3.0	0.0160	1.9	0.64	102.5	1.9	104.2	3.0	144.9	54.4	102.5	1.9
14IY42 Spot 14	69	6847	2.4	23.7796	6.8	0.0929	7.1	0.0160	2.2	0.31	102.5	2.3	90.2	6.2	223.3	170.8	102.5	2.3
14IY42 Spot 57	58	15643	4.0	20.6995	6.5	0.1069	7.1	0.0161	2.7	0.38	102.6	2.7	103.1	6.9	114.5	154.6	102.6	2.7
14IY42 Spot 13	52	5392	2.6	21.5077	7.6	0.1029	8.2	0.0161	2.9	0.36	102.7	3.0	99.5	7.7	23.4	183.2	102.7	3.0
14IY42 Spot 19	69	6649	2.2	17.7796	7.5	0.1246	7.7	0.0161	2.0	0.26	102.8	2.0	119.3	8.7	462.0	165.4	102.8	2.0
14IY42 Spot 75	64	11819	3.2	21.2880	6.3	0.1041	6.6	0.0161	2.1	0.32	102.8	2.2	100.6	6.3	48.0	149.4	102.8	2.2
14IY42 Spot 64	76	22216	4.0	19.9577	4.6	0.1112	5.3	0.0161	2.6	0.49	102.9	2.7	107.0	5.4	199.9	107.8	102.9	2.7
14IY42 Spot 74	37	3694	3.0	19.7602	11.5	0.1124	12.2	0.0161	4.0	0.32	103.0	4.0	108.1	12.5	222.9	267.8	103.0	4.0
14IY42 Spot 9	297	15011	2.2	21.9630	2.8	0.1011	3.4	0.0161	2.0	0.59	103.0	2.1	97.8	3.2	27.1	67.1	103.0	2.1
14IY42 Spot 78	48	57915	3.2	17.9829	6.7	0.1237	7.4	0.0161	3.2	0.43	103.2	3.3	118.4	8.3	436.7	149.1	103.2	3.3
14IY42 Spot 8	166	46101	2.0	20.2910	4.2	0.1099	4.6	0.0162	1.9	0.41	103.4	2.0	105.9	4.6	161.3	98.5	103.4	2.0
14IY42 Spot 81	77	7670	4.1	20.0197	5.9	0.1115	6.5	0.0162	2.6	0.41	103.5	2.7	107.3	6.6	192.7	137.9	103.5	2.7
14IY42 Spot 17	40	6317	3.1	20.6724	7.6	0.1085	9.2	0.0163	5.2	0.56	104.1	5.3	104.6	9.2	117.6	180.1	104.1	5.3
14IY42 Spot 4	379	30555	2.0	20.7007	3.6	0.1087	3.8	0.0163	1.2	0.33	104.4	1.3	104.8	3.8	114.4	84.5	104.4	1.3
14IY42 Spot 68	81	4347	3.2	21.4575	5.8	0.1055	6.3	0.0164	2.5	0.39	105.0	2.6	101.9	6.1	29.0	139.7	105.0	2.6
14IY42 Spot 12	45	1566	3.9	14.7123	11.6	0.1547	12.0	0.0165	3.0	0.25	105.5	3.1	146.0	16.4	867.6	242.2	105.5	3.1
14IY42 Spot 3	1099	42638	6.5	20.3508	1.9	0.1135	2.8	0.0168	2.0	0.74	107.1	2.2	109.2	2.9	154.4	43.7	107.1	2.2

14IY42 Spot 10	639	28805	2.4	8.9946	25.1	0.2663	25.3	0.0174	3.2	0.13	111.0	3.6	239.8	54.1	1818.7	463.7	111.0	3.6
14IY42 Spot 1	66	5163	2.2	6.9738	13.8	0.3526	14.0	0.0178	2.3	0.16	114.0	2.6	306.7	37.2	2268.6	240.0	114.0	2.6
14IY42 Spot 2	124	43804	3.7	19.6365	4.5	0.1269	5.2	0.0181	2.8	0.53	115.5	3.2	121.3	6.0	237.5	102.9	115.5	3.2
14IY42 Spot 18	112	21936	2.3	20.5772	5.0	0.1235	5.5	0.0184	2.4	0.44	117.8	2.8	118.3	6.2	128.5	116.9	117.8	2.8
14IY42 Spot 62	44	35547	3.9	5.4435	10.8	0.4935	12.0	0.0195	5.4	0.45	124.4	6.6	407.3	40.4	2686.6	178.3	124.4	6.6
14MR44-SAMPLE	229	67740	4.8	19.6465	3.5	0.0566	3.9	0.0081	1.8	0.45	51.8	0.9	55.9	2.1	236.3	80.4	51.8	0.9
14MR44-SAMPLE	337	55550	5.0	20.8826	3.0	0.0533	3.3	0.0081	1.3	0.40	51.8	0.7	52.7	1.7	93.7	72.2	51.8	0.7
14MR44-SAMPLE	359	16908	4.5	21.2507	3.4	0.0526	3.6	0.0081	1.3	0.35	52.1	0.7	52.1	1.8	52.1	81.4	52.1	0.7
14MR44-SAMPLE	200	38179	4.6	19.5928	3.6	0.0572	4.1	0.0081	2.0	0.48	52.2	1.0	56.5	2.3	242.6	82.8	52.2	1.0
14MR44-SAMPLE	387	31711	3.9	21.8662	2.6	0.0514	2.8	0.0081	0.9	0.32	52.3	0.5	50.9	1.4	16.4	63.9	52.3	0.5
14MR44-SAMPLE	162	13773	7.0	20.5527	5.0	0.0548	5.1	0.0082	1.3	0.26	52.4	0.7	54.1	2.7	131.2	116.5	52.4	0.7
14MR44-SAMPLE	351	128281	3.1	20.9050	2.4	0.0540	2.6	0.0082	1.0	0.40	52.5	0.5	53.4	1.3	91.1	56.4	52.5	0.5
14MR44-SAMPLE	204	24426	4.8	20.6850	3.7	0.0546	3.9	0.0082	1.1	0.28	52.6	0.6	54.0	2.0	116.2	88.1	52.6	0.6
14MR44-SAMPLE	101	19767	18.5	19.8490	5.6	0.0573	6.0	0.0082	2.2	0.36	52.9	1.1	56.6	3.3	212.6	130.9	52.9	1.1
14MR44-SAMPLE	354	11408	6.6	21.9311	3.2	0.0519	3.5	0.0083	1.5	0.42	53.0	0.8	51.4	1.8	23.6	77.6	53.0	0.8
14MR44-SAMPLE	252	40624	6.1	21.7328	3.2	0.0528	3.6	0.0083	1.6	0.45	53.4	0.9	52.3	1.8	1.7	76.8	53.4	0.9
14MR44-SAMPLE	650	104046	4.1	21.3153	2.1	0.0540	2.3	0.0083	0.9	0.41	53.6	0.5	53.4	1.2	44.9	49.1	53.6	0.5
14MR44-SAMPLE	466	33835	3.0	21.3838	2.8	0.0542	3.0	0.0084	1.1	0.35	53.9	0.6	53.6	1.6	37.2	66.9	53.9	0.6
14MR44-SAMPLE	109	26754	5.3	20.6907	4.7	0.0561	4.9	0.0084	1.5	0.31	54.1	0.8	55.5	2.7	115.5	110.6	54.1	0.8
14MR44-SAMPLE	305	38390	4.2	20.6716	3.5	0.0567	3.9	0.0085	1.6	0.42	54.6	0.9	56.0	2.1	117.7	83.5	54.6	0.9
14MR44-SAMPLE	560	42084	4.1	20.3735	2.6	0.0577	2.8	0.0085	1.1	0.39	54.7	0.6	57.0	1.6	151.8	61.2	54.7	0.6
14MR44-SAMPLE	397	35245	6.4	20.4280	3.1	0.0628	3.5	0.0093	1.6	0.46	59.7	0.9	61.8	2.1	145.5	72.8	59.7	0.9
14MR44-SAMPLE	68	7124	2.7	23.3029	5.6	0.0563	6.1	0.0095	2.2	0.37	61.1	1.4	55.6	3.3	172.6	140.4	61.1	1.4
14MR44-SAMPLE	46	15956	8.0	24.4463	5.8	0.0542	6.1	0.0096	1.9	0.32	61.6	1.2	53.6	3.2	293.4	147.2	61.6	1.2
14MR44-SAMPLE	1486	101379	20.7	21.0640	1.3	0.0645	1.5	0.0099	0.9	0.56	63.2	0.5	63.5	1.0	73.2	30.5	63.2	0.5
14MR44-SAMPLE	934	78004	19.4	20.8017	1.6	0.0661	1.9	0.0100	1.0	0.54	63.9	0.6	65.0	1.2	102.9	37.2	63.9	0.6
14MR44-SAMPLE	60	26255	2.7	18.8996	5.4	0.0749	5.7	0.0103	1.9	0.33	65.8	1.2	73.3	4.1	325.0	122.9	65.8	1.2
14MR44-SAMPLE	64	3850	2.9	21.5058	5.2	0.0658	5.5	0.0103	1.8	0.32	65.9	1.2	64.7	3.4	23.6	124.6	65.9	1.2
14MR44-SAMPLE	239	10911	4.5	21.9659	3.8	0.0650	4.0	0.0103	1.2	0.31	66.4	0.8	63.9	2.5	27.4	91.7	66.4	0.8
14MR44-SAMPLE	48	63371	4.0	21.2098	6.2	0.0685	6.7	0.0105	2.6	0.38	67.6	1.7	67.3	4.4	56.7	148.3	67.6	1.7
14MR44-SAMPLE	197	24182	2.1	21.3515	3.5	0.0682	3.7	0.0106	1.4	0.37	67.8	0.9	67.0	2.4	40.8	82.9	67.8	0.9
14MR44-SAMPLE	91	2877	3.5	21.8675	5.1	0.0669	5.4	0.0106	1.5	0.28	68.1	1.0	65.8	3.4	16.6	124.5	68.1	1.0
14MR44-SAMPLE	121	4648	2.7	21.6281	4.8	0.0677	5.1	0.0106	1.6	0.32	68.1	1.1	66.5	3.3	10.0	116.3	68.1	1.1
14MR44-SAMPLE	75	48813	3.3	20.7161	3.9	0.0720	4.4	0.0108	1.9	0.44	69.4	1.3	70.6	3.0	112.6	93.0	69.4	1.3
14MR44-SAMPLE	128	11274	2.5	21.5195	3.4	0.0696	3.6	0.0109	1.2	0.33	69.7	0.8	68.4	2.4	22.1	81.3	69.7	0.8
14MR44-SAMPLE	180	30739	1.9	20.0993	2.5	0.0746	2.7	0.0109	1.0	0.36	69.7	0.7	73.0	1.9	183.4	59.0	69.7	0.7
14MR44-SAMPLE	82	8933	3.0	21.7527	4.8	0.0694	5.0	0.0110	1.5	0.30	70.2	1.0	68.1	3.3	3.9	115.2	70.2	1.0
14MR44-SAMPLE	121	43299	1.9	21.7635	3.8	0.0701	4.1	0.0111	1.4	0.35	70.9	1.0	68.8	2.7	5.1	92.0	70.9	1.0
14MR44-SAMPLE	68	33069	3.4	20.0992	4.7	0.0812	4.9	0.0118	1.4	0.29	75.9	1.1	79.3	3.7	183.5	109.5	75.9	1.1
14MR44-SAMPLE	374	44282	2.8	21.0249	2.4	0.0915	2.6	0.0140	1.0	0.38	89.4	0.9	88.9	2.2	77.5	56.9	89.4	0.9
14MR48-SAMPLE	209	67827	6.3	19.2700	4.1	0.0764	4.8	0.0107	2.5	0.53	68.4	1.7	74.7	3.5	280.8	93.8	68.4	1.7
14MR48-SAMPLE	86	29643	5.3	22.1651	7.3	0.0680	8.5	0.0109	4.4	0.52	70.1	3.1	66.8	5.5	49.4	177.5	70.1	3.1
14MR48-SAMPLE	371	56872	15.7	20.2933	2.1	0.0750	2.4	0.0110	1.1	0.47	70.7	0.8	73.4	1.7	161.1	49.1	70.7	0.8
14MR48-SAMPLE	235	24011	9.6	20.9127	3.3	0.0730	3.7	0.0111	1.7	0.46	70.9	1.2	71.5	2.6	90.3	78.3	70.9	1.2
14MR48-SAMPLE	278	11866	3.6	20.3841	3.0	0.0749	3.1	0.0111	0.9	0.30	71.0	0.7	73.3	2.2	150.6	70.4	71.0	0.7
14MR48-SAMPLE	714	41731	6.1	21.1222	2.2	0.0723	2.4	0.0111	1.0	0.41	71.0	0.7	70.8	1.6	66.6	51.5	71.0	0.7
14MR48-SAMPLE	614	31242	12.3	20.5064	1.8	0.0746	2.2	0.0111	1.1	0.52	71.1	0.8	73.1	1.5	136.5	43.4	71.1	0.8
14MR48-SAMPLE	106	49919	7.6	18.7357	5.8	0.0817	6.1	0.0111	1.9	0.30	71.2	1.3	79.8	4.7	344.8	131.2	71.2	1.3
14MR48-SAMPLE	169	22826	4.7	19.7609	4.2	0.0775	4.3	0.0111	1.2	0.27	71.2	0.8	75.8	3.2	222.9	96.5	71.2	0.8
14MR48-SAMPLE	268	12379	5.2	20.7063	2.6	0.0742	3.0	0.0111	1.5	0.49	71.4	1.0	72.6	2.1	113.7	62.4	71.4	1.0
14MR48-SAMPLE	205	8653	5.5	20.1518	4.5	0.0763	4.9	0.0111	2.1	0.43	71.5	1.5	74.6	3.6	177.4	104.1	71.5	1.5
14MR48-SAMPLE	310	34831	3.5	20.2840	3.4	0.0758	3.6	0.0112	1.2	0.33	71.5	0.8	74.2	2.6	162.1	79.5	71.5	0.8
14MR48-SAMPLE	135	18591	15.4	17.8879	6.4	0.0861	6.8	0.0112	2.3	0.34	71.6	1.7	83.9	5.5	448.5	142.2	71.6	1.7
14MR48-SAMPLE	65	3855	4.7	19.7710	6.6	0.0780	6.8	0.0112	1.8	0.27	71.7	1.3	76.2	5.0	221.7	151.8	71.7	1.3
14MR48-SAMPLE	2460	109595	57.3	21.4630	1.1	0.0721	1.6	0.0112	1.1	0.73	71.9	0.8	70.7	1.1	28.4	25.6	71.9	0.8
14MR48-SAMPLE	117	48839	5.6	21.9495	4.6	0.0706	4.9	0.0112	1.7	0.35	72.1	1.2	69.3	3.3	25.6	111.9	72.1	1.2
14MR48-SAMPLE	959	52624	29.6	20.8446	1.6	0.0745	1.9	0.0113	1.1	0.57	72.2	0.8	72.9	1.3	98.0	37.0	72.2	0.8
14MR48-SAMPLE	270	9977	11.6	20.6474	3.0	0.0752	3.3	0.0113	1.3	0.38	72.2	0.9	73.6	2.3	120.4	71.2	72.2	0.9
14MR48-SAMPLE	1654	66959	2.4	20.7047	1.0	0.0751	1.2	0.0113	0.7	0.57	72.3	0.5	73.6	0.9	113.9	24.3	72.3	0.5
14MR48-SAMPLE	394	17603	6.2	21.0902	2.5	0.0738	2.7	0.0113	1.1	0.42	72.3	0.8	72.3	1.9	70.2	59.1	72.3	0.8
14MR48-SAMPLE	2283	41312	59.7	20.7632	1.0	0.0750	1.5	0.0113	1.0	0.71	72.4	0.8	73.4	1.0	107.3	24.6	72.4	0.8
14MR48-SAMPLE	107	4136	3.0	22.9333	6.6	0.0682	6.7	0.0113	1.4	0.20	72.7	1.0	67.0	4.4	132.9	163.3	72.7	1.0

14MR48-SAMPLE	145	9820	8.1	20.3374	4.8	0.0770	5.0	0.0114	1.6	0.31	72.8	1.1	75.3	3.7	156.0	112.4	72.8	1.1
14MR48-SAMPLE	187	74991	7.4	20.8765	2.8	0.0752	3.1	0.0114	1.3	0.41	73.0	0.9	73.6	2.2	94.4	66.7	73.0	0.9
14MR48-SAMPLE	61	1498	5.5	24.8841	6.7	0.0637	7.0	0.0115	2.2	0.32	73.7	1.6	62.7	4.3	338.9	171.7	73.7	1.6
14MR48-SAMPLE	416	19015	11.9	20.7930	3.0	0.0763	3.3	0.0115	1.5	0.44	73.8	1.1	74.7	2.4	103.8	70.4	73.8	1.1
14MR48-SAMPLE	42	2443	7.9	22.0163	7.6	0.0721	8.0	0.0115	2.3	0.29	73.8	1.7	70.7	5.5	33.0	185.7	73.8	1.7
14MR48-SAMPLE	1270	90205	5.1	20.0937	1.3	0.0794	1.8	0.0116	1.2	0.70	74.2	0.9	77.6	1.3	184.1	29.6	74.2	0.9
14MR48-SAMPLE	78	18038	4.4	20.3051	6.5	0.0789	6.7	0.0116	1.5	0.23	74.5	1.1	77.2	5.0	159.7	152.8	74.5	1.1
14MR48-SAMPLE	144	5408	2.1	22.4058	3.9	0.0723	4.1	0.0117	1.3	0.32	75.2	1.0	70.8	2.8	75.7	94.7	75.2	1.0
14MR48-SAMPLE	3359	122620	57.7	20.8473	1.0	0.0785	1.4	0.0119	0.9	0.65	76.0	0.7	76.7	1.0	97.7	24.3	76.0	0.7
14MR48-SAMPLE	411	37670	9.9	20.0360	1.9	0.1288	2.7	0.0187	2.0	0.72	119.6	2.3	123.1	3.2	190.8	44.1	119.6	2.3
14MR48-SAMPLE	797	221551	3.9	20.2006	1.6	0.1659	2.0	0.0243	1.2	0.61	154.8	1.9	155.9	3.0	171.7	38.0	154.8	1.9
14MR48-SAMPLE	525	130519	3.8	19.8734	2.0	0.1691	2.6	0.0244	1.7	0.65	155.2	2.6	158.6	3.9	209.7	46.7	155.2	2.6
14MR55 Spot 42	1448	167634	14.9	20.5925	2.3	0.0800	3.0	0.0119	1.8	0.61	76.5	1.4	78.1	2.2	126.7	55.2	76.5	1.4
14MR55 Spot 41	189	25454	3.1	18.4127	7.5	0.0924	8.5	0.0123	3.9	0.46	79.0	3.1	89.7	7.3	383.9	169.0	79.0	3.1
14MR55 Spot 39	179	5486	2.8	21.4151	6.6	0.0806	7.2	0.0125	3.0	0.42	80.2	2.4	78.7	5.5	33.7	157.9	80.2	2.4
14MR55 Spot 43	206	9209	2.6	20.2021	5.6	0.0859	6.1	0.0126	2.4	0.39	80.6	1.9	83.7	4.9	171.6	131.8	80.6	1.9
14MR55 Spot 46	933	38007	1.5	20.8941	3.0	0.0831	3.4	0.0126	1.5	0.45	80.6	1.2	81.0	2.6	92.4	71.6	80.6	1.2
14MR55 Spot 50	1195	54111	1.0	20.6893	2.8	0.0842	3.4	0.0126	1.9	0.55	80.9	1.5	82.1	2.7	115.7	66.9	80.9	1.5
14MR55 Spot 33	685	30078	1.4	20.1293	2.7	0.0875	3.2	0.0128	1.7	0.54	81.9	1.4	85.2	2.6	180.0	63.6	81.9	1.4
14MR55 Spot 47	338	31007	1.7	20.6070	5.6	0.0864	6.3	0.0129	2.9	0.46	82.7	2.4	84.2	5.1	125.0	131.9	82.7	2.4
14MR55 Spot 49	247	7166	2.3	22.5511	4.9	0.0793	6.1	0.0130	3.6	0.59	83.1	2.9	77.5	4.5	91.5	121.1	83.1	2.9
14MR55 Spot 45	179	6035	2.3	19.3718	7.7	0.0928	8.1	0.0130	2.4	0.29	83.5	2.0	90.1	7.0	268.7	177.1	83.5	2.0
14MR55 Spot 38	709	14924	1.1	21.3413	2.9	0.0846	3.4	0.0131	1.9	0.54	83.9	1.5	82.5	2.7	42.0	68.8	83.9	1.5
14MR55 Spot 48	743	86116	1.1	21.2607	3.2	0.0867	5.8	0.0134	4.9	0.84	85.6	4.2	84.4	4.7	51.0	76.0	85.6	4.2
14MR55 Spot 37	393	23209	2.4	19.9942	3.5	0.1612	4.5	0.0234	2.9	0.63	149.0	4.2	151.8	6.4	195.7	81.4	149.0	4.2
14MR55 Spot 40	149	247538	2.4	19.5591	4.3	0.1655	4.7	0.0235	2.0	0.43	149.6	3.0	155.5	6.8	246.5	98.1	149.6	3.0
14MR55 Spot 32	182	19104	3.4	19.8389	4.7	0.1642	5.2	0.0236	2.3	0.43	150.5	3.4	154.3	7.4	213.8	108.5	150.5	3.4
14MR55 Spot 44	372	136482	2.0	19.8263	3.3	0.1665	4.2	0.0239	2.6	0.62	152.5	4.0	156.4	6.1	215.2	76.3	152.5	4.0
14MR55 Spot 35	301	41608	3.1	20.3805	3.5	0.1627	4.1	0.0240	2.2	0.53	153.2	3.3	153.0	5.8	151.0	81.3	153.2	3.3
14MR55 Spot 36	420	35302	2.9	20.1387	3.1	0.1663	4.6	0.0243	3.5	0.75	154.7	5.3	156.2	6.7	178.9	71.4	154.7	5.3
14MR55 Spot 31	472	52635	1.9	20.0522	2.7	0.1693	3.4	0.0246	2.0	0.59	156.8	3.1	158.8	5.0	188.9	64.0	156.8	3.1
14MR55 Spot 34	445	49835	3.0	20.5264	3.0	0.1693	4.5	0.0252	3.3	0.73	160.5	5.2	158.8	6.5	134.3	71.0	160.5	5.2
14MR61 Spot 17	177	9474	67.0	21.1644	4.4	0.0701	4.6	0.0108	1.4	0.31	69.0	1.0	68.8	3.0	61.8	103.7	69.0	1.0
14MR61 Spot 36	60	49424	5.1	20.3642	6.9	0.0729	7.3	0.0108	2.3	0.32	69.0	1.6	71.4	5.0	152.9	161.2	69.0	1.6
14MR61 Spot 20	77	9793	4.6	18.8309	6.8	0.0792	7.2	0.0108	2.4	0.34	69.3	1.7	77.4	5.4	333.2	153.8	69.3	1.7
14MR61 Spot 44	27	959	7.9	33.5940	9.2	0.0447	9.6	0.0109	2.7	0.28	69.9	1.9	44.4	4.2	1182.9	285.1	69.9	1.9
14MR61 Spot 43	218	72269	45.1	20.4645	5.0	0.0736	5.5	0.0109	2.1	0.39	70.1	1.5	72.1	3.8	141.4	118.1	70.1	1.5
14MR61 Spot 32	38	3856	4.1	19.3144	8.5	0.0781	9.1	0.0109	3.3	0.36	70.2	2.3	76.4	6.7	275.5	195.4	70.2	2.3
14MR61 Spot 51	59	4432	5.4	19.4772	5.0	0.0776	5.8	0.0110	2.8	0.48	70.3	1.9	75.9	4.2	256.2	115.9	70.3	1.9
14MR61 Spot 22	45	3761	9.6	25.9698	6.9	0.0586	7.4	0.0110	2.8	0.38	70.8	2.0	57.8	4.2	450.2	180.7	70.8	2.0
14MR61 Spot 28	46	2799	5.1	21.5747	8.6	0.0706	8.8	0.0110	2.1	0.24	70.8	1.5	69.3	5.9	15.9	206.5	70.8	1.5
14MR61 Spot 9	49	4549	2.8	18.7413	7.0	0.0814	7.6	0.0111	2.8	0.37	71.0	2.0	79.5	5.8	344.1	159.3	71.0	2.0
14MR61 Spot 54	46	6335	4.9	16.7436	9.8	0.0912	10.3	0.0111	3.3	0.32	71.0	2.3	88.7	8.7	593.6	212.0	71.0	2.3
14MR61 Spot 19	43	2880	3.3	21.6132	8.2	0.0707	8.5	0.0111	2.5	0.29	71.1	1.8	69.4	5.7	11.6	196.4	71.1	1.8
14MR61 Spot 2	61	6787	3.2	21.1794	7.0	0.0722	7.3	0.0111	2.2	0.30	71.1	1.6	70.8	5.0	60.2	166.9	71.1	1.6
14MR61 Spot 59	27	1126	4.4	31.9545	8.6	0.0479	9.1	0.0111	2.9	0.32	71.1	2.0	47.5	4.2	1030.9	258.0	71.1	2.0
14MR61 Spot 57	46	56970	5.1	17.9987	8.2	0.0850	8.7	0.0111	2.9	0.33	71.2	2.1	82.9	6.9	434.8	182.5	71.2	2.1
14MR61 Spot 53	22	2433	4.6	18.7941	12.8	0.0814	13.5	0.0111	4.3	0.32	71.2	3.0	79.5	10.3	337.7	290.5	71.2	3.0
14MR61 Spot 26	55	7448	5.1	18.5382	7.8	0.0826	8.3	0.0111	2.8	0.34	71.2	2.0	80.6	6.4	368.6	175.5	71.2	2.0
14MR61 Spot 37	51	18819	2.9	17.4731	7.6	0.0877	7.8	0.0111	1.8	0.24	71.2	1.3	85.3	6.4	500.5	167.6	71.2	1.3
14MR61 Spot 41	82	8762	2.8	19.6367	5.5	0.0780	5.9	0.0111	2.2	0.37	71.2	1.5	76.3	4.3	237.5	126.3	71.2	1.5
14MR61 Spot 58	68	9039	2.9	20.4122	6.0	0.0751	6.5	0.0111	2.4	0.36	71.3	1.7	73.5	4.6	147.4	141.3	71.3	1.7
14MR61 Spot 30	23	1429	4.6	25.4383	11.0	0.0603	11.7	0.0111	3.9	0.33	71.3	2.8	59.5	6.8	396.0	288.3	71.3	2.8
14MR61 Spot 10	46	4594	4.9	21.5738	8.3	0.0711	8.8	0.0111	2.8	0.31	71.3	2.0	69.8	5.9	16.0	200.9	71.3	2.0
14MR61 Spot 25	23	6679	4.7	18.2846	12.0	0.0841	12.5	0.0112	3.4	0.27	71.5	2.4	82.0	9.8	399.6	269.5	71.5	2.4
14MR61 Spot 3	37	2972	4.7	23.3093	7.0	0.0661	7.5	0.0112	2.6	0.35	71.7	1.9	65.0	4.7	173.3	175.5	71.7	1.9
14MR61 Spot 5	64	6360	2.7	21.2286	5.7	0.0727	6.4	0.0112	2.9	0.46	71.8	2.1	71.3	4.4	54.6	136.1	71.8	2.1
14MR61 Spot 47	25	36552	4.6	18.9823	9.8	0.0813	10.4	0.0112	3.7	0.36	71.8	2.6	79.4	8.0	315.1	222.5	71.8	2.6
14MR61 Spot 29	23	1620	4.6	25.8274	8.5	0.0599	9.5	0.0112	4.1	0.43	72.0	2.9	59.1	5.4	435.7	224.2	72.0	2.9
14MR61 Spot 18	41	5833	2.8	20.0835	9.2	0.0773	9.5	0.0113	2.3	0.24	72.2	1.7	75.6	7.0	185.3	215.7	72.2	1.7
14MR61 Spot 6	49	5182	3.3	18.9876	8.8	0.0819	9.2	0.0113	2.6	0.28	72.3	1.9	79.9	7.1	314.4	201.6	72.3	1.9
14MR61 Spot 55	37	3970	3.7	21.1565	7.1	0.0735	7.6	0.0113	2.7	0.36	72.3	2.0	72.0	5.3	62.7	168.2	72.3	2.0

14MR61 Spot 21	208	102631	1.5	20.1881	3.7	0.0771	4.1	0.0113	1.8	0.43	72.4	1.3	75.4	3.0	173.2	86.9	72.4	1.3
14MR61 Spot 45	77	119407	2.6	18.7909	7.7	0.0829	8.1	0.0113	2.5	0.31	72.4	1.8	80.9	6.3	338.0	173.9	72.4	1.8
14MR61 Spot 52	138	16472	2.3	20.0186	4.0	0.0778	4.3	0.0113	1.7	0.39	72.4	1.2	76.1	3.2	192.9	92.7	72.4	1.2
14MR61 Spot 33	49	1827	5.2	25.1724	6.5	0.0619	7.1	0.0113	2.8	0.39	72.5	2.0	61.0	4.2	368.7	168.7	72.5	2.0
14MR61 Spot 8	22	4095	4.8	17.0775	11.0	0.0913	11.7	0.0113	3.9	0.34	72.5	2.8	88.7	9.9	550.6	240.8	72.5	2.8
14MR61 Spot 11	94	9339	2.8	20.7380	5.2	0.0752	5.7	0.0113	2.4	0.42	72.5	1.8	73.6	4.1	110.1	122.9	72.5	1.8
14MR61 Spot 38	34	1617	7.6	23.5758	8.2	0.0662	8.6	0.0113	2.6	0.31	72.5	1.9	65.1	5.5	201.7	206.7	72.5	1.9
14MR61 Spot 50	20	767	4.9	25.5074	12.0	0.0612	12.3	0.0113	3.0	0.24	72.6	2.2	60.3	7.2	403.1	313.1	72.6	2.2
14MR61 Spot 49	50	13531	5.5	19.7631	7.9	0.0790	8.3	0.0113	2.4	0.29	72.6	1.8	77.2	6.2	222.6	183.6	72.6	1.8
14MR61 Spot 39	131	13703	7.7	19.9523	5.7	0.0783	6.1	0.0113	2.0	0.33	72.7	1.5	76.6	4.5	200.6	133.0	72.7	1.5
14MR61 Spot 42	22	6534	6.7	18.1750	11.6	0.0860	12.1	0.0113	3.6	0.30	72.7	2.6	83.8	9.8	413.0	260.1	72.7	2.6
14MR61 Spot 1	167	21756	1.7	20.1668	5.5	0.0775	5.8	0.0113	1.9	0.32	72.7	1.3	75.8	4.2	175.6	127.4	72.7	1.3
14MR61 Spot 40	37	4979	4.8	20.4511	9.4	0.0766	9.8	0.0114	3.0	0.30	72.8	2.2	75.0	7.1	142.9	220.2	72.8	2.2
14MR61 Spot 35	42	3293	4.8	19.2830	7.5	0.0813	7.9	0.0114	2.4	0.31	72.9	1.7	79.4	6.0	279.2	172.5	72.9	1.7
14MR61 Spot 15	51	15188	2.8	22.9564	5.5	0.0684	6.4	0.0114	3.2	0.50	73.0	2.3	67.2	4.1	135.4	136.6	73.0	2.3
14MR61 Spot 16	55	2164	2.7	22.3096	8.5	0.0704	8.8	0.0114	2.5	0.28	73.0	1.8	69.1	5.9	65.2	207.0	73.0	1.8
14MR61 Spot 23	40	30734	2.9	18.2068	9.6	0.0863	10.0	0.0114	2.7	0.27	73.1	1.9	84.1	8.1	409.1	216.0	73.1	1.9
14MR61 Spot 56	50	5583	5.5	21.1182	7.1	0.0745	7.6	0.0114	2.7	0.35	73.1	1.9	72.9	5.3	67.0	168.7	73.1	1.9
14MR61 Spot 60	29	2166	3.9	26.4115	7.6	0.0596	8.2	0.0114	3.1	0.37	73.2	2.2	58.8	4.7	494.9	202.6	73.2	2.2
14MR61 Spot 12	70	14422	3.5	20.0312	6.9	0.0791	7.2	0.0115	2.2	0.30	73.6	1.6	77.3	5.4	191.4	160.1	73.6	1.6
14MR61 Spot 34	61	30406	2.6	21.4001	6.7	0.0741	7.1	0.0115	2.4	0.34	73.7	1.8	72.6	5.0	35.4	161.3	73.7	1.8
14MR61 Spot 7	199	28244	1.8	20.3260	4.2	0.0780	4.5	0.0115	1.4	0.31	73.7	1.0	76.3	3.3	157.3	99.0	73.7	1.0
14MR61 Spot 24	47	5651	4.6	19.0825	8.6	0.0831	9.0	0.0115	2.8	0.31	73.8	2.1	81.1	7.0	303.1	195.9	73.8	2.1
14MR61 Spot 27	20	9536	4.7	18.7225	12.0	0.0848	12.9	0.0115	4.7	0.36	73.8	3.4	82.6	10.2	346.3	272.9	73.8	3.4
14MR61 Spot 14	35	97462	4.8	18.8774	8.6	0.0842	9.0	0.0115	2.8	0.31	73.9	2.1	82.1	7.1	327.7	194.8	73.9	2.1
14MR61 Spot 13	34	2509	4.2	22.9874	7.4	0.0692	7.8	0.0115	2.4	0.31	74.0	1.8	68.0	5.1	138.8	183.3	74.0	1.8
14MR61 Spot 31	52	72597	5.4	19.3429	7.2	0.0823	7.5	0.0116	2.1	0.27	74.0	1.5	80.3	5.8	272.1	166.3	74.0	1.5
14MR61 Spot 48	116	19000	2.5	21.5589	6.1	0.0741	6.5	0.0116	2.0	0.31	74.2	1.5	72.6	4.5	17.6	147.7	74.2	1.5
14MR61 Spot 46	82	12295	2.6	19.7377	4.9	0.0825	5.2	0.0118	1.9	0.36	75.7	1.4	80.5	4.0	225.6	112.7	75.7	1.4
14MR68 Spot 28	173	20176	2.0	21.2338	5.7	0.0827	6.0	0.0127	2.1	0.35	81.6	1.7	80.7	4.7	54.0	135.1	81.6	1.7
14MR68 Spot 30	182	8639	1.7	21.5044	5.6	0.0824	6.8	0.0128	3.9	0.57	82.3	3.2	80.4	5.3	23.7	134.5	82.3	3.2
14MR68 Spot 35	155	26965	1.8	19.7862	4.2	0.0901	5.0	0.0129	2.8	0.55	82.8	2.3	87.6	4.2	219.9	97.5	82.8	2.3
14MR68 Spot 4	126	3155	1.8	23.2922	7.2	0.0766	7.6	0.0129	2.4	0.31	82.9	2.0	75.0	5.5	171.5	180.1	82.9	2.0
14MR68 Spot 8	152	16548	1.7	20.7440	5.5	0.0862	6.0	0.0130	2.2	0.36	83.0	1.8	83.9	4.8	109.4	131.1	83.0	1.8
14MR68 Spot 14	215	6524	1.6	21.1617	4.5	0.0850	5.2	0.0131	2.6	0.50	83.6	2.2	82.9	4.1	62.1	106.5	83.6	2.2
14MR68 Spot 25	220	35107	2.7	20.7382	5.0	0.0869	6.3	0.0131	3.8	0.61	83.7	3.2	84.6	5.1	110.1	118.9	83.7	3.2
14MR68 Spot 22	178	4999	2.7	22.4471	6.3	0.0803	7.0	0.0131	3.1	0.44	83.7	2.6	78.4	5.3	80.2	155.2	83.7	2.6
14MR68 Spot 26	145	214376	2.6	19.0834	5.7	0.0945	6.0	0.0131	2.1	0.34	83.7	1.7	91.7	5.3	303.0	128.9	83.7	1.7
14MR68 Spot 15	138	27660	3.3	20.2930	6.6	0.0892	7.8	0.0131	4.2	0.54	84.1	3.5	86.8	6.5	161.1	154.7	84.1	3.5
14MR68 Spot 34	82	43661	3.0	19.4038	11.2	0.0934	12.0	0.0131	4.4	0.36	84.2	3.7	90.6	10.4	264.9	256.9	84.2	3.7
14MR68 Spot 16	532	27633	3.9	19.4053	3.4	0.0936	3.7	0.0132	1.4	0.39	84.4	1.2	90.8	3.2	264.7	77.6	84.4	1.2
14MR68 Spot 19	159	11088	1.8	20.9332	4.3	0.0868	5.1	0.0132	2.7	0.54	84.4	2.3	84.5	4.1	88.0	101.3	84.4	2.3
14MR68 Spot 9	146	31170	1.7	19.9537	5.7	0.0911	6.3	0.0132	2.8	0.44	84.4	2.3	88.5	5.4	200.4	131.7	84.4	2.3
14MR68 Spot 31	170	13607	1.9	21.9431	6.3	0.0829	7.6	0.0132	4.2	0.55	84.5	3.5	80.9	5.9	24.9	152.9	84.5	3.5
14MR68 Spot 32	175	40940	1.9	21.9338	4.9	0.0829	5.2	0.0132	1.8	0.34	84.5	1.5	80.9	4.0	23.9	117.8	84.5	1.5
14MR68 Spot 7	147	5354	1.8	20.8387	5.9	0.0873	6.3	0.0132	2.2	0.35	84.5	1.9	85.0	5.1	98.7	139.4	84.5	1.9
14MR68 Spot 23	168	32471	1.8	20.0218	5.7	0.0910	6.7	0.0132	3.5	0.52	84.6	2.9	88.4	5.7	192.5	132.6	84.6	2.9
14MR68 Spot 24	124	11526	1.9	19.1819	6.5	0.0950	7.2	0.0132	3.1	0.43	84.7	2.6	92.2	6.4	291.2	149.7	84.7	2.6
14MR68 Spot 5	161	123530	2.0	20.5099	4.0	0.0889	4.4	0.0132	1.9	0.44	84.7	1.6	86.5	3.7	136.1	93.4	84.7	1.6
14MR68 Spot 33	269	27181	3.9	21.5055	4.7	0.0848	5.6	0.0132	3.1	0.55	84.7	2.6	82.7	4.5	23.6	112.7	84.7	2.6
14MR68 Spot 1	181	9384	4.3	21.9562	4.7	0.0834	5.1	0.0133	1.8	0.36	85.1	1.6	81.4	3.9	26.4	114.1	85.1	1.6
14MR68 Spot 21	432	72059	1.3	20.7868	4.6	0.0882	5.0	0.0133	1.9	0.39	85.1	1.6	85.8	4.1	104.6	109.3	85.1	1.6
14MR68 Spot 12	126	20899	1.8	21.4629	7.9	0.0854	8.4	0.0133	2.8	0.34	85.2	2.4	83.2	6.7	28.4	190.5	85.2	2.4
14MR68 Spot 3	160	9386	2.0	21.7019	6.2	0.0845	6.8	0.0133	2.9	0.43	85.2	2.5	82.4	5.4	1.8	148.3	85.2	2.5
14MR68 Spot 2	178	6671	1.9	20.3898	6.6	0.0900	8.1	0.0133	4.6	0.57	85.2	3.9	87.5	6.8	149.9	155.5	85.2	3.9
14MR68 Spot 11	377	28656	1.3	20.8941	4.9	0.0879	5.4	0.0133	2.1	0.40	85.3	1.8	85.6	4.4	92.4	117.1	85.3	1.8
14MR68 Spot 18	304	25150	3.4	20.5597	3.7	0.0897	4.6	0.0134	2.7	0.59	85.6	2.3	87.2	3.9	130.5	87.9	85.6	2.3
14MR68 Spot 13	116	6193	2.6	21.5715	6.8	0.0857	7.1	0.0134	1.9	0.27	85.9	1.6	83.5	5.7	16.3	164.6	85.9	1.6
14MR68 Spot 27	164	3487	1.8	22.1205	4.6	0.0838	5.5	0.0135	3.0	0.54	86.1	2.5	81.8	4.3	44.5	113.0	86.1	2.5
14MR68 Spot 6	155	15633	1.8	23.2920	6.1	0.0798	6.5	0.0135	2.2	0.34	86.4	1.9	78.0	4.9	171.5	153.3	86.4	1.9
14MR68 Spot 17	167	6855	1.8	20.9226	7.4	0.0889	7.5	0.0135	1.5	0.20	86.4	1.3	86.5	6.2	89.2	174.5	86.4	1.3
14MR68 Spot 20	160	8863	1.7	20.9117	6.4	0.0891	6.7	0.0135	1.8	0.27	86.5	1.5	86.6	5.5	90.4	152.3	86.5	1.5
14MR68 Spot 29	257	22701	1.9	19.8695	4.4	0.0951	4.8	0.0137	1.9	0.40	87.7	1.7	92.2	4.2	210.2	102.2	87.7	1.7

14MR68 Spot 10	121	3949	1.7	20.4150	9.1	0.0927	9.6	0.0137	2.9	0.31	87.9	2.6	90.0	8.2	147.1	214.0	87.9	2.6
14MR69-Spot 10	442	27404	3.1	20.7134	3.8	0.0953	4.6	0.0143	2.5	0.55	91.6	2.3	92.4	4.1	112.9	90.7	91.6	2.3
14MR69-Spot 26	97	5646	2.9	22.5754	6.2	0.0878	6.8	0.0144	2.8	0.41	92.0	2.5	85.4	5.6	94.2	152.4	92.0	2.5
14MR69-Spot 11	147	25884	2.1	21.6775	7.1	0.0917	7.5	0.0144	2.4	0.32	92.2	2.2	89.1	6.4	4.5	170.3	92.2	2.2
14MR69-Spot 19	114	5132	2.6	22.7601	6.5	0.0878	7.0	0.0145	2.5	0.36	92.8	2.3	85.5	5.7	114.2	160.5	92.8	2.3
14MR69-Spot 41	445	43468	2.6	21.2677	3.3	0.0941	4.2	0.0145	2.6	0.61	92.9	2.4	91.3	3.7	50.2	79.9	92.9	2.4
14MR69-Spot 30	153	4814	1.9	19.8605	5.1	0.1010	5.9	0.0145	2.9	0.50	93.1	2.7	97.7	5.5	211.2	118.3	93.1	2.7
14MR69-Spot 38	722	20599	4.1	20.8441	2.6	0.0967	3.7	0.0146	2.6	0.70	93.5	2.4	93.7	3.3	98.1	62.3	93.5	2.4
14MR69-Spot 3	583	47830	2.6	19.9165	2.5	0.1012	3.6	0.0146	2.5	0.71	93.6	2.4	97.9	3.3	204.7	58.4	93.6	2.4
14MR69-Spot 35	574	27702	3.6	20.2611	2.4	0.0996	3.4	0.0146	2.3	0.68	93.6	2.1	96.4	3.1	164.7	57.2	93.6	2.1
14MR69-Spot 46	458	18707	2.7	20.8638	4.4	0.0970	5.1	0.0147	2.6	0.51	94.0	2.4	94.0	4.5	95.8	103.0	94.0	2.4
14MR69-Spot 48	534	25251	3.9	19.9031	2.6	0.1021	3.6	0.0147	2.5	0.70	94.3	2.3	98.7	3.4	206.3	59.5	94.3	2.3
14MR69-Spot 13	283	13065	2.6	20.4520	4.9	0.0995	6.3	0.0148	4.0	0.63	94.4	3.7	96.3	5.8	142.8	114.1	94.4	3.7
14MR69-Spot 16	166	10825	4.5	21.5900	6.6	0.0943	7.0	0.0148	2.2	0.32	94.5	2.1	91.5	6.1	14.2	159.5	94.5	2.1
14MR69-Spot 20	485	232933	4.0	20.2552	2.9	0.1008	3.5	0.0148	2.0	0.57	94.7	1.9	97.5	3.3	165.4	68.0	94.7	1.9
14MR69-Spot 21	550	31273	3.3	20.5844	3.2	0.0993	3.7	0.0148	1.9	0.52	94.8	1.8	96.1	3.4	127.7	75.5	94.8	1.8
14MR69-Spot 14	239	27772	2.1	20.8036	4.5	0.0983	5.4	0.0148	3.0	0.55	94.9	2.8	95.2	4.9	102.6	106.3	94.9	2.8
14MR69-Spot 44	545	38270	3.6	21.3949	3.8	0.0957	4.1	0.0148	1.4	0.35	95.0	1.3	92.8	3.6	35.9	91.5	95.0	1.3
14MR69-Spot 7	242	6304	4.4	21.4993	5.4	0.0952	5.8	0.0148	2.0	0.34	95.0	1.9	92.4	5.1	24.3	130.1	95.0	1.9
14MR69-Spot 8	420	24605	4.0	19.7902	3.1	0.1036	3.7	0.0149	2.0	0.55	95.2	1.9	100.1	3.5	219.5	70.6	95.2	1.9
14MR69-Spot 23	646	22844	3.5	21.2693	3.3	0.0964	3.7	0.0149	1.6	0.43	95.2	1.5	93.5	3.3	50.0	80.0	95.2	1.5
14MR69-Spot 29	486	42623	3.4	20.2055	2.7	0.1019	3.7	0.0149	2.6	0.69	95.6	2.4	98.5	3.5	171.2	63.1	95.6	2.4
14MR69-Spot 28	179	28555	2.9	20.1612	6.0	0.1022	7.1	0.0149	3.7	0.52	95.7	3.5	98.8	6.7	176.3	140.6	95.7	3.5
14MR69-Spot 9	709	42535	3.9	21.0756	2.0	0.0980	3.9	0.0150	3.4	0.87	95.8	3.2	94.9	3.6	71.9	46.9	95.8	3.2
14MR69-Spot 27	1028	40724	2.8	20.7675	2.0	0.0994	2.7	0.0150	1.8	0.67	95.8	1.7	96.2	2.4	106.8	46.7	95.8	1.7
14MR69-Spot 36	392	19057	3.6	21.0738	2.7	0.0980	3.2	0.0150	1.6	0.51	95.8	1.5	94.9	2.9	72.0	65.3	95.8	1.5
14MR69-Spot 22	256	52426	3.9	20.2401	4.4	0.1021	4.8	0.0150	1.9	0.40	95.9	1.8	98.7	4.5	167.2	102.1	95.9	1.8
14MR69-Spot 40	159	5841	1.9	21.2954	4.8	0.0973	5.5	0.0150	2.6	0.48	96.2	2.5	94.3	4.9	47.1	114.4	96.2	2.5
14MR69-Spot 37	582	31110	3.4	21.0270	2.6	0.0986	3.4	0.0150	2.2	0.64	96.2	2.1	95.5	3.1	77.3	62.1	96.2	2.1
14MR69-Spot 39	413	29899	4.2	20.6107	2.9	0.1006	3.2	0.0150	1.3	0.42	96.2	1.3	97.3	2.9	124.6	67.7	96.2	1.3
14MR69-Spot 18	462	17511	4.0	20.8621	2.5	0.0994	2.9	0.0150	1.5	0.52	96.3	1.5	96.3	2.7	96.0	58.5	96.3	1.5
14MR69-Spot 31	647	44655	3.6	20.3115	2.7	0.1022	3.5	0.0150	2.2	0.63	96.3	2.1	98.8	3.2	159.0	62.6	96.3	2.1
14MR69-Spot 2	1119	567640	3.3	19.9774	2.4	0.1039	3.3	0.0151	2.3	0.69	96.3	2.2	100.4	3.1	197.6	55.3	96.3	2.2
14MR69-Spot 25	539	24709	4.1	20.8640	3.1	0.0996	3.6	0.0151	1.9	0.52	96.4	1.8	96.4	3.3	95.8	72.8	96.4	1.8
14MR69-Spot 4	382	17735	4.1	21.5176	3.1	0.0967	3.6	0.0151	1.9	0.52	96.6	1.8	93.7	3.3	22.2	74.5	96.6	1.8
14MR69-Spot 6	455	153949	2.6	20.5103	2.5	0.1016	3.3	0.0151	2.1	0.66	96.7	2.0	98.2	3.0	136.1	57.7	96.7	2.0
14MR69-Spot 47	452	17161	2.6	21.3187	2.9	0.0981	5.7	0.0152	4.9	0.86	97.1	4.7	95.0	5.2	44.5	70.1	97.1	4.7
14MR69-Spot 49	395	13918	3.6	18.5597	4.0	0.1128	5.0	0.0152	3.0	0.59	97.1	2.9	108.5	5.2	366.0	91.1	97.1	2.9
14MR69-Spot 17	569	34602	2.7	21.1649	3.2	0.0990	3.7	0.0152	1.9	0.50	97.2	1.8	95.8	3.4	61.8	77.1	97.2	1.8
14MR69-Spot 45	551	42104	3.8	20.8263	3.3	0.1006	3.6	0.0152	1.5	0.42	97.3	1.5	97.4	3.4	100.1	77.5	97.3	1.5
14MR69-Spot 12	832	25180	3.1	21.2659	1.4	0.0989	2.1	0.0153	1.6	0.75	97.6	1.5	95.7	1.9	50.4	33.4	97.6	1.5
14MR69-Spot 42	237	10918	4.3	20.7799	5.0	0.1014	5.1	0.0153	1.3	0.26	97.7	1.3	98.0	4.8	105.3	117.0	97.7	1.3
14MR69-Spot 24	560	20099	2.5	21.5466	3.7	0.0979	4.2	0.0153	2.1	0.49	97.9	2.0	94.8	3.8	19.0	89.2	97.9	2.0
14MR69-Spot 5	578	28405	3.7	20.9392	2.7	0.1008	3.2	0.0153	1.8	0.56	97.9	1.8	97.5	3.0	87.3	63.5	97.9	1.8
14MR69-Spot 50	412	40234	3.9	20.8339	3.6	0.1014	4.0	0.0153	1.9	0.46	98.1	1.8	98.1	3.8	99.2	85.1	98.1	1.8
14MR69-Spot 1	423	19289	2.5	21.2047	4.2	0.0998	4.4	0.0153	1.2	0.27	98.2	1.2	96.6	4.0	57.3	100.1	98.2	1.2
14MR69-Spot 34	461	22783	3.7	20.7585	2.9	0.1022	3.5	0.0154	1.8	0.53	98.5	1.8	98.8	3.3	107.8	69.4	98.5	1.8
14MR69-Spot 33	486	179814	3.1	20.2213	2.3	0.1055	3.1	0.0155	2.2	0.70	99.0	2.2	101.8	3.0	169.3	52.6	99.0	2.2
14MR69-Spot 32	233	35382	3.5	20.6979	3.7	0.1032	4.3	0.0155	2.1	0.50	99.1	2.1	99.8	4.0	114.7	86.7	99.1	2.1
14MR69-Spot 15	362	49528	3.5	21.1016	3.7	0.1027	4.1	0.0157	1.7	0.42	100.5	1.7	99.3	3.9	68.9	88.5	100.5	1.7
14MR69-Spot 43	598	67401	8.1	20.9877	3.4	0.1166	5.1	0.0177	3.8	0.74	113.4	4.2	112.0	5.4	81.8	81.5	113.4	4.2
14MR70 Spot 13	93	2175	4.0	19.3256	9.6	0.0828	10.5	0.0116	4.1	0.39	74.3	3.0	80.7	8.1	274.1	221.2	74.3	3.0
14MR70 Spot 23	109	4397	3.8	23.7942	6.6	0.0686	7.1	0.0118	2.7	0.38	75.8	2.0	67.3	4.6	224.9	166.0	75.8	2.0
14MR70 Spot 16	94	4307	3.8	20.2870	8.6	0.0806	9.4	0.0119	3.7	0.40	76.0	2.8	78.7	7.1	161.8	201.5	76.0	2.8
14MR70 Spot 25	74	965	4.2	23.3415	10.4	0.0701	10.8	0.0119	3.0	0.28	76.1	2.3	68.8	7.2	176.8	260.4	76.1	2.3
14MR70 Spot 14	98	6023	3.9	20.9058	8.3	0.0786	8.8	0.0119	2.7	0.31	76.4	2.0	76.9	6.5	91.1	197.7	76.4	2.0
14MR70 Spot 7	203	42738	2.2	20.7837	6.3	0.0794	6.8	0.0120	2.3	0.35	76.7	1.8	77.6	5.0	104.9	149.8	76.7	1.8
14MR70 Spot 10	97	2625	3.8	24.1673	8.9	0.0683	9.3	0.0120	2.6	0.28	76.7	2.0	67.1	6.0	264.2	226.2	76.7	2.0
14MR70 Spot 24	76	2685	4.0	20.3904	9.7	0.0811	11.4	0.0120	5.9	0.52	76.9	4.5	79.2	8.6	149.9	228.4	76.9	4.5
14MR70 Spot 12	132	232829	4.5	21.8161	6.0	0.0759	6.4	0.0120	2.2	0.34	76.9	1.7	74.2	4.6	10.9	144.5	76.9	1.7
14MR70 Spot 32	114	3817	3.9	22.1397	5.9	0.0748	6.4	0.0120	2.4	0.38	77.0	1.9	73.3	4.5	46.6	143.1	77.0	1.9
14MR70 Spot 1	124	3940	4.4	23.5629	7.0	0.0705	7.6	0.0121	2.9	0.39	77.2	2.3	69.2	5.1	200.4	175.9	77.2	2.3

14MR70 Spot 29	88	53769	3.6	18.9887	8.8	0.0877	9.2	0.0121	2.5	0.27	77.4	1.9	85.3	7.5	314.3	200.6	77.4	1.9
14MR70 Spot 5	172	3766	4.7	22.5768	6.8	0.0738	7.2	0.0121	2.3	0.32	77.5	1.8	72.3	5.0	94.3	167.2	77.5	1.8
14MR70 Spot 20	159	4366	4.2	21.3829	6.3	0.0780	6.7	0.0121	2.5	0.36	77.5	1.9	76.2	4.9	37.3	149.9	77.5	1.9
14MR70 Spot 18	92	3137	3.9	20.1631	8.3	0.0829	9.0	0.0121	3.4	0.38	77.7	2.6	80.9	7.0	176.1	194.3	77.7	2.6
14MR70 Spot 31	76	2133	3.9	20.2775	10.0	0.0824	10.7	0.0121	3.7	0.35	77.7	2.9	80.4	8.3	162.8	235.2	77.7	2.9
14MR70 Spot 28	90	30063	3.2	20.9917	8.2	0.0797	8.7	0.0121	3.1	0.36	77.7	2.4	77.8	6.5	81.3	193.8	77.7	2.4
14MR70 Spot 22	163	43365	4.3	19.0117	7.9	0.0880	8.5	0.0121	3.2	0.37	77.7	2.4	85.6	7.0	311.5	181.0	77.7	2.4
14MR70 Spot 8	110	6734	3.9	20.4214	6.5	0.0820	6.9	0.0121	2.3	0.34	77.8	1.8	80.0	5.3	146.3	151.6	77.8	1.8
14MR70 Spot 17	172	14395	4.6	20.8690	6.3	0.0803	6.9	0.0122	3.0	0.43	77.9	2.3	78.4	5.2	95.2	148.4	77.9	2.3
14MR70 Spot 11	78	4231	4.0	19.0781	8.7	0.0879	9.3	0.0122	3.3	0.36	78.0	2.6	85.6	7.6	303.6	197.8	78.0	2.6
14MR70 Spot 34	108	13407	3.9	20.5230	8.6	0.0818	8.9	0.0122	2.5	0.28	78.0	1.9	79.8	6.9	134.7	201.8	78.0	1.9
14MR70 Spot 21	108	5128	2.6	22.2143	8.4	0.0757	8.8	0.0122	2.5	0.28	78.2	1.9	74.1	6.3	54.8	205.0	78.2	1.9
14MR70 Spot 2	145	9436	4.2	22.5001	4.6	0.0749	5.2	0.0122	2.4	0.46	78.3	1.9	73.3	3.7	86.0	113.4	78.3	1.9
14MR70 Spot 4	111	4209	3.7	26.2846	7.6	0.0642	8.2	0.0122	2.9	0.36	78.4	2.3	63.1	5.0	482.1	202.4	78.4	2.3
14MR70 Spot 33	206	18286	4.2	20.9705	5.4	0.0804	6.0	0.0122	2.6	0.43	78.4	2.0	78.6	4.5	83.7	128.4	78.4	2.0
14MR70 Spot 27	111	4098	4.0	25.0511	7.4	0.0674	8.1	0.0123	3.3	0.41	78.5	2.6	66.3	5.2	356.2	191.2	78.5	2.6
14MR70 Spot 19	65	3085	4.0	18.6954	9.7	0.0906	10.7	0.0123	4.5	0.42	78.7	3.5	88.0	9.0	349.6	219.9	78.7	3.5
14MR70 Spot 30	98	2094	4.4	24.6320	9.2	0.0691	9.6	0.0123	2.8	0.29	79.1	2.2	67.8	6.3	312.8	235.0	79.1	2.2
14MR70 Spot 9	73	3657	4.3	22.3812	9.2	0.0761	9.6	0.0124	2.9	0.30	79.2	2.3	74.5	6.9	73.0	224.7	79.2	2.3
14MR70 Spot 6	170	20853	4.4	22.2025	6.2	0.0769	6.4	0.0124	1.5	0.23	79.4	1.2	75.3	4.6	53.5	151.1	79.4	1.2
14MR70 Spot 26	81	5812	4.2	22.3820	8.8	0.0768	9.4	0.0125	3.6	0.38	79.9	2.8	75.1	6.8	73.1	214.3	79.9	2.8
14MR70 Spot 15	101	216762	3.9	20.5345	6.5	0.0839	7.2	0.0125	2.9	0.41	80.0	2.3	81.8	5.6	133.4	154.1	80.0	2.3
14MR70 Spot 35	218	13659	4.7	20.5536	6.4	0.0838	7.2	0.0125	3.2	0.45	80.0	2.6	81.7	5.6	131.1	151.1	80.0	2.6
14MR70 Spot 3	182	5206	4.2	8.1409	4.9	0.2259	6.2	0.0133	3.8	0.61	85.4	3.2	206.8	11.6	1997.8	86.9	85.4	3.2
14MR71 Spot 5	145	11188	3.4	20.7159	8.0	0.0798	8.5	0.0120	2.8	0.33	76.8	2.2	78.0	6.4	112.6	188.6	76.8	2.2
14MR71 Spot 17	317	25133	2.3	20.3987	4.2	0.0811	5.0	0.0120	2.9	0.57	76.9	2.2	79.2	3.8	148.9	97.5	76.9	2.2
14MR71 Spot 34	93	3476	4.0	22.5637	7.2	0.0734	7.6	0.0120	2.5	0.33	76.9	1.9	71.9	5.3	92.9	175.8	76.9	1.9
14MR71 Spot 23	169	3029	2.3	23.3948	7.9	0.0709	8.5	0.0120	3.0	0.36	77.1	2.3	69.6	5.7	182.4	198.4	77.1	2.3
14MR71 Spot 21	209	13402	2.2	19.3779	7.1	0.0860	7.9	0.0121	3.5	0.45	77.5	2.7	83.8	6.4	267.9	162.3	77.5	2.7
14MR71 Spot 26	208	12220	2.1	20.4823	6.3	0.0814	6.8	0.0121	2.7	0.39	77.5	2.1	79.5	5.2	139.3	148.0	77.5	2.1
14MR71 Spot 25	149	6132	3.8	20.2368	5.6	0.0826	6.3	0.0121	2.7	0.44	77.7	2.1	80.6	4.9	167.5	131.5	77.7	2.1
14MR71 Spot 31	161	27154	3.5	20.9300	6.9	0.0801	7.6	0.0122	3.2	0.42	77.9	2.5	78.2	5.7	88.3	162.5	77.9	2.5
14MR71 Spot 13	187	6580	3.0	20.3089	5.5	0.0826	5.9	0.0122	2.3	0.38	78.0	1.7	80.6	4.6	159.2	128.3	78.0	1.7
14MR71 Spot 11	227	13933	3.4	20.8240	5.7	0.0806	5.9	0.0122	1.8	0.30	78.0	1.4	78.7	4.5	100.3	134.0	78.0	1.4
14MR71 Spot 9	320	25344	3.4	20.4955	4.3	0.0821	4.9	0.0122	2.4	0.49	78.2	1.9	80.2	3.8	137.8	100.1	78.2	1.9
14MR71 Spot 10	167	9446	2.8	20.8117	5.0	0.0814	5.3	0.0123	1.8	0.34	78.7	1.4	79.4	4.1	101.7	118.8	78.7	1.4
14MR71 Spot 22	157	29470	2.9	19.7803	7.0	0.0859	7.2	0.0123	1.8	0.26	78.9	1.4	83.7	5.8	220.6	161.4	78.9	1.4
14MR71 Spot 7	264	16166	2.6	21.0261	4.8	0.0810	5.2	0.0124	2.0	0.39	79.2	1.6	79.1	3.9	77.4	113.4	79.2	1.6
14MR71 Spot 2	177	44758	2.2	20.7343	4.2	0.0822	4.7	0.0124	2.1	0.45	79.2	1.7	80.2	3.7	110.5	99.8	79.2	1.7
14MR71 Spot 4	402	32867	5.8	20.2242	4.1	0.0843	4.8	0.0124	2.6	0.53	79.2	2.0	82.2	3.8	169.0	95.6	79.2	2.0
14MR71 Spot 28	298	91147	3.6	20.7002	4.7	0.0824	5.2	0.0124	2.1	0.41	79.3	1.7	80.4	4.0	114.4	112.1	79.3	1.7
14MR71 Spot 18	202	7383	2.1	21.7132	4.4	0.0786	5.0	0.0124	2.5	0.50	79.3	2.0	76.8	3.7	0.5	105.1	79.3	2.0
14MR71 Spot 19	274	23005	2.1	21.5409	4.1	0.0792	4.4	0.0124	1.6	0.36	79.3	1.3	77.4	3.3	19.7	99.1	79.3	1.3
14MR71 Spot 29	345	47757	4.2	21.1737	3.6	0.0807	4.1	0.0124	1.9	0.47	79.4	1.5	78.8	3.1	60.8	85.2	79.4	1.5
14MR71 Spot 35	269	26824	2.3	20.8472	4.8	0.0820	5.7	0.0124	3.1	0.54	79.5	2.5	80.1	4.4	97.7	114.3	79.5	2.5
14MR71 Spot 8	244	40375	2.1	20.9128	6.5	0.0818	6.9	0.0124	2.3	0.33	79.5	1.8	79.8	5.3	90.2	154.2	79.5	1.8
14MR71 Spot 1	231	23159	2.0	21.1385	4.8	0.0810	5.3	0.0124	2.2	0.42	79.6	1.7	79.1	4.0	64.7	114.4	79.6	1.7
14MR71 Spot 16	155	8016	3.0	22.2481	6.5	0.0770	7.2	0.0124	3.2	0.44	79.6	2.5	75.3	5.2	58.5	158.5	79.6	2.5
14MR71 Spot 15	210	18727	2.1	19.1054	6.3	0.0897	7.0	0.0124	3.1	0.45	79.6	2.5	87.2	5.9	300.4	143.6	79.6	2.5
14MR71 Spot 20	319	23078	3.4	20.3705	5.2	0.0841	5.5	0.0124	2.0	0.36	79.6	1.6	82.0	4.4	152.2	121.4	79.6	1.6
14MR71 Spot 12	272	99695	3.3	21.3136	4.4	0.0805	4.8	0.0124	1.8	0.38	79.7	1.4	78.6	3.6	45.1	106.2	79.7	1.4
14MR71 Spot 6	183	20732	2.3	22.9072	6.9	0.0749	7.4	0.0124	2.6	0.36	79.7	2.1	73.3	5.2	130.1	171.1	79.7	2.1
14MR71 Spot 32	226	10892	2.2	23.3163	5.7	0.0737	6.1	0.0125	2.1	0.34	79.9	1.6	72.2	4.3	174.1	143.3	79.9	1.6
14MR71 Spot 24	136	2831	2.7	24.6691	5.5	0.0698	7.0	0.0125	4.4	0.62	80.0	3.5	68.5	4.6	316.6	140.8	80.0	3.5
14MR71 Spot 3	173	5964	2.8	20.8274	4.8	0.0827	5.6	0.0125	2.8	0.50	80.0	2.3	80.7	4.4	99.9	114.7	80.0	2.3
14MR71 Spot 14	223	45912	2.1	20.6118	6.7	0.0838	7.1	0.0125	2.3	0.32	80.2	1.8	81.7	5.5	124.5	157.4	80.2	1.8
14MR71 Spot 27	263	37941	2.3	20.3788	4.5	0.0849	5.2	0.0125	2.6	0.49	80.4	2.1	82.7	4.2	151.2	106.6	80.4	2.1
14MR71 Spot 30	179	6948	3.0	21.0524	5.6	0.0823	6.0	0.0126	2.2	0.37	80.5	1.8	80.4	4.6	74.5	132.5	80.5	1.8
14MR71 Spot 33	453	30562	2.6	21.4747	3.3	0.0854	3.9	0.0133	2.1	0.54	85.2	1.8	83.2	3.1	27.0	78.4	85.2	1.8
14MR72 Spot 93	129	6905	3.8	20.3885	7.5	0.0730	8.0	0.0108	2.7	0.34	69.2	1.9	71.5	5.5	150.1	177.1	69.2	1.9
14MR72 Spot 53	110	1425	2.5	28.0543	6.4	0.0531	6.8	0.0108	2.2	0.32	69.3	1.5	52.5	3.5	658.1	177.6	69.3	1.5
14MR72 Spot 92	212	7076	4.3	20.4720	6.0	0.0730	6.6	0.0108	2.8	0.43	69.5	1.9	71.5	4.6	140.5	140.9	69.5	1.9

14MR72 Spot 89	185	16382	3.9	21.1920	5.8	0.0706	6.1	0.0108	2.1	0.34	69.6	1.5	69.2	4.1	58.8	137.8	69.6	1.5
14MR72 Spot 52	83	5011	4.0	19.3831	9.2	0.0781	9.7	0.0110	3.0	0.31	70.4	2.1	76.3	7.1	267.3	210.7	70.4	2.1
14MR72 Spot 98	147	3544	3.4	22.2066	4.9	0.0682	5.3	0.0110	2.0	0.38	70.4	1.4	67.0	3.4	53.9	119.1	70.4	1.4
14MR72 Spot 91	90	4114	3.7	20.0512	7.3	0.0756	7.9	0.0110	3.0	0.37	70.5	2.1	74.0	5.6	189.0	170.9	70.5	2.1
14MR72 Spot 90	109	2230	4.0	24.4870	6.6	0.0619	7.2	0.0110	3.0	0.41	70.5	2.1	61.0	4.3	297.7	168.4	70.5	2.1
14MR72 Spot 77	95	3407	4.0	20.8450	7.5	0.0731	8.0	0.0111	2.7	0.33	70.9	1.9	71.7	5.5	98.0	178.0	70.9	1.9
14MR72 Spot 83	156	13587	3.6	22.4479	6.7	0.0680	7.5	0.0111	3.4	0.46	71.0	2.4	66.8	4.9	80.3	164.2	71.0	2.4
14MR72 Spot 10(	104	7644	3.2	18.7983	8.8	0.0813	9.3	0.0111	3.1	0.33	71.0	2.2	79.3	7.1	337.2	200.4	71.0	2.2
14MR72 Spot 86	165	49878	4.1	19.9226	6.2	0.0767	6.9	0.0111	3.2	0.46	71.1	2.2	75.0	5.0	204.0	143.5	71.1	2.2
14MR72 Spot 73	103	2289	5.6	23.2451	8.1	0.0658	8.9	0.0111	3.5	0.40	71.1	2.5	64.7	5.5	166.4	202.5	71.1	2.5
14MR72 Spot 96	115	5786	4.5	20.3264	6.7	0.0753	7.4	0.0111	3.1	0.42	71.2	2.2	73.7	5.3	157.3	157.5	71.2	2.2
14MR72 Spot 64	97	7609	3.9	21.9911	8.2	0.0696	8.7	0.0111	2.9	0.33	71.2	2.0	68.3	5.7	30.2	198.3	71.2	2.0
14MR72 Spot 87	108	9458	4.3	18.9079	8.1	0.0809	8.7	0.0111	3.1	0.36	71.2	2.2	79.0	6.6	324.0	183.7	71.2	2.2
14MR72 Spot 94	150	4454	2.6	21.6504	6.1	0.0707	6.5	0.0111	2.3	0.35	71.2	1.6	69.4	4.4	7.5	147.3	71.2	1.6
14MR72 Spot 81	198	19608	4.5	20.1224	6.3	0.0762	6.7	0.0111	2.3	0.34	71.3	1.6	74.6	4.8	180.8	148.0	71.3	1.6
14MR72 Spot 99	154	13749	4.0	22.4991	6.5	0.0683	7.1	0.0111	2.8	0.39	71.5	2.0	67.1	4.6	85.9	159.6	71.5	2.0
14MR72 Spot 62	78	4724	5.4	26.2624	7.8	0.0585	8.3	0.0111	3.1	0.37	71.5	2.2	57.8	4.7	479.8	206.0	71.5	2.2
14MR72 Spot 76	104	6658	4.4	25.6239	6.2	0.0601	6.7	0.0112	2.7	0.40	71.5	1.9	59.2	3.9	415.0	161.1	71.5	1.9
14MR72 Spot 65	210	8256	3.9	20.7850	4.7	0.0740	5.1	0.0112	2.1	0.42	71.6	1.5	72.5	3.6	104.8	110.0	71.6	1.5
14MR72 Spot 51	208	8371	4.1	22.3132	5.8	0.0690	6.2	0.0112	2.2	0.36	71.6	1.6	67.8	4.1	65.6	141.0	71.6	1.6
14MR72 Spot 88	150	4188	8.6	22.1020	5.9	0.0697	6.6	0.0112	2.9	0.44	71.7	2.1	68.5	4.4	42.4	144.6	71.7	2.1
14MR72 Spot 61	177	3191	4.1	21.3943	6.3	0.0721	6.7	0.0112	2.3	0.34	71.7	1.7	70.7	4.6	36.0	151.7	71.7	1.7
14MR72 Spot 72	209	6230	4.2	23.8195	5.3	0.0648	6.0	0.0112	2.8	0.47	71.8	2.0	63.8	3.7	227.6	134.3	71.8	2.0
14MR72 Spot 85	99	2125	3.5	21.5618	10.5	0.0717	10.8	0.0112	2.8	0.26	71.9	2.0	70.3	7.4	17.3	252.0	71.9	2.0
14MR72 Spot 80	121	9926	4.1	20.7390	5.8	0.0747	7.4	0.0112	4.6	0.62	72.0	3.3	73.2	5.2	110.0	136.6	72.0	3.3
14MR72 Spot 71	261	5204	4.3	19.6665	6.5	0.0788	6.7	0.0112	1.8	0.26	72.1	1.3	77.0	5.0	234.0	150.0	72.1	1.3
14MR72 Spot 68	96	4255	4.3	20.5680	9.9	0.0755	10.4	0.0113	3.1	0.30	72.2	2.2	73.9	7.4	129.5	233.3	72.2	2.2
14MR72 Spot 67	183	12393	4.1	20.6906	6.7	0.0751	7.0	0.0113	2.1	0.29	72.3	1.5	73.5	5.0	115.5	158.9	72.3	1.5
14MR72 Spot 63	238	13543	4.3	19.9153	4.7	0.0783	5.0	0.0113	1.8	0.37	72.5	1.3	76.5	3.7	204.9	109.1	72.5	1.3
14MR72 Spot 78	146	4841	4.4	22.3010	8.5	0.0699	8.8	0.0113	2.2	0.26	72.5	1.6	68.6	5.8	64.3	207.9	72.5	1.6
14MR72 Spot 57	407	43881	3.3	19.5134	5.6	0.0801	6.0	0.0113	2.2	0.37	72.6	1.6	78.2	4.5	252.0	128.2	72.6	1.6
14MR72 Spot 60	429	15236	3.9	20.5432	4.2	0.0763	4.5	0.0114	1.7	0.38	72.9	1.2	74.6	3.2	132.3	97.7	72.9	1.2
14MR72 Spot 59	650	30586	2.9	20.8511	4.6	0.0752	5.0	0.0114	2.1	0.42	72.9	1.5	73.6	3.6	97.2	108.7	72.9	1.5
14MR72 Spot 75	84	9658	4.2	20.9853	8.5	0.0747	9.6	0.0114	4.5	0.47	72.9	3.2	73.1	6.8	82.0	201.8	72.9	3.2
14MR72 Spot 55	181	4498	4.3	21.5791	7.5	0.0726	7.9	0.0114	2.5	0.31	72.9	1.8	71.2	5.4	15.4	180.5	72.9	1.8
14MR72 Spot 56	93	4525	3.8	20.4781	8.7	0.0768	9.3	0.0114	3.4	0.36	73.1	2.5	75.2	6.8	139.8	204.4	73.1	2.5
14MR72 Spot 66	231	46173	4.4	21.0872	4.5	0.0747	5.7	0.0114	3.5	0.61	73.2	2.5	73.2	4.0	70.6	107.3	73.2	2.5
14MR72 Spot 84	187	31517	4.3	20.7595	4.6	0.0761	5.5	0.0115	2.9	0.53	73.5	2.1	74.5	3.9	107.7	109.5	73.5	2.1
14MR72 Spot 74	145	20937	3.3	22.1325	5.9	0.0714	7.0	0.0115	3.8	0.55	73.5	2.8	70.0	4.7	45.8	142.5	73.5	2.8
14MR72 Spot 69	205	86252	3.6	21.3275	5.2	0.0741	6.0	0.0115	3.1	0.51	73.5	2.2	72.6	4.2	43.5	123.7	73.5	2.2
14MR72 Spot 70	132	4556	3.2	23.1148	6.7	0.0684	7.1	0.0115	2.4	0.34	73.5	1.8	67.2	4.6	152.5	165.6	73.5	1.8
14MR72 Spot 82	205	75431	13.1	19.5446	9.1	0.0810	9.7	0.0115	3.2	0.33	73.6	2.4	79.1	7.4	248.3	210.5	73.6	2.4
14MR72 Spot 79	61	7278	4.5	24.9287	8.2	0.0636	8.9	0.0115	3.5	0.39	73.7	2.5	62.6	5.4	343.6	210.6	73.7	2.5
14MR72 Spot 58	92	3729	4.0	19.3240	9.3	0.0824	9.7	0.0115	2.8	0.29	74.0	2.0	80.4	7.5	274.3	214.3	74.0	2.0
14MR72 Spot 95	104	19180	6.1	22.7268	6.4	0.0712	7.6	0.0117	4.0	0.53	75.2	3.0	69.9	5.1	110.6	158.0	75.2	3.0
14MR72 Spot 54	165	35851	4.2	20.1658	6.6	0.0819	7.0	0.0120	2.3	0.33	76.8	1.7	80.0	5.4	175.7	154.6	76.8	1.7
14MR73 Spot 73	286	4665	3.3	21.7050	4.8	0.1003	5.4	0.0158	2.6	0.47	101.0	2.6	97.1	5.0	1.4	116.0	101.0	2.6
14MR73 Spot 59	192	23545	3.4	19.7160	5.5	0.1135	6.0	0.0162	2.4	0.40	103.8	2.5	109.2	6.2	228.1	126.5	103.8	2.5
14MR73 Spot 68	837	39306	1.2	20.8053	3.0	0.1089	3.4	0.0164	1.6	0.48	105.0	1.7	104.9	3.4	102.5	70.0	105.0	1.7
14MR73 Spot 58	103	3820	4.1	21.2759	6.8	0.1068	7.2	0.0165	2.3	0.32	105.4	2.4	103.1	7.1	49.3	163.7	105.4	2.4
14MR73 Spot 54	387	10784	3.6	20.9273	2.8	0.1086	3.8	0.0165	2.6	0.68	105.4	2.7	104.7	3.8	88.6	66.6	105.4	2.7
14MR73 Spot 94	569	35163	3.3	20.2154	3.9	0.1128	4.3	0.0165	1.9	0.43	105.8	2.0	108.6	4.4	170.0	90.8	105.8	2.0
14MR73 Spot 62	60	3975	5.1	20.1046	6.9	0.1135	7.8	0.0166	3.6	0.47	105.8	3.8	109.2	8.1	182.8	161.8	105.8	3.8
14MR73 Spot 79	377	16185	3.2	21.0226	3.4	0.1095	4.0	0.0167	2.1	0.53	106.7	2.3	105.5	4.0	77.8	80.0	106.7	2.3
14MR73 Spot 93	182	8590	3.0	21.4406	5.2	0.1074	5.7	0.0167	2.3	0.40	106.8	2.4	103.6	5.6	30.8	124.2	106.8	2.4
14MR73 Spot 77	381	97804	2.9	19.0020	4.5	0.1212	4.9	0.0167	1.9	0.39	106.8	2.0	116.2	5.4	312.7	102.6	106.8	2.0
14MR73 Spot 69	606	39604	1.7	20.3756	3.2	0.1131	3.9	0.0167	2.3	0.60	106.8	2.5	108.8	4.0	151.6	73.8	106.8	2.5
14MR73 Spot 99	389	28490	3.9	21.5742	3.8	0.1069	4.1	0.0167	1.7	0.42	106.9	1.8	103.1	4.1	16.0	90.5	106.9	1.8
14MR73 Spot 83	418	41891	2.1	19.9681	3.2	0.1156	3.5	0.0167	1.3	0.36	107.1	1.3	111.1	3.7	198.7	75.5	107.1	1.3
14MR73 Spot 52	367	33411	3.7	20.5084	4.4	0.1129	4.9	0.0168	2.0	0.41	107.3	2.2	108.6	5.0	136.3	104.3	107.3	2.2
14MR73 Spot 70	157	6864	5.2	20.4064	5.0	0.1135	5.7	0.0168	2.7	0.47	107.4	2.8	109.1	5.9	148.0	118.1	107.4	2.8
14MR73 Spot 55	425	33782	3.9	19.9119	4.6	0.1163	5.0	0.0168	1.9	0.38	107.4	2.0	111.7	5.3	205.2	107.1	107.4	2.0
14MR73 Spot 91	439	50881	2.2	19.7508	3.9	0.1173	4.4	0.0168	2.1	0.47	107.4	2.2	112.6	4.7	224.0	90.3	107.4	2.2

14MR73 Spot 96	1645	65707	1.5	20.5084	1.5	0.1131	3.1	0.0168	2.7	0.87	107.6	2.8	108.8	3.2	136.3	35.2	107.6	2.8
14MR73 Spot 66	136	4858	4.0	17.1387	10.5	0.1356	11.0	0.0169	3.0	0.27	107.7	3.2	129.1	13.3	542.8	230.8	107.7	3.2
14MR73 Spot 56	828	22357	2.0	20.9968	2.7	0.1107	3.4	0.0169	2.0	0.59	107.8	2.1	106.6	3.4	80.7	64.8	107.8	2.1
14MR73 Spot 90	241	11989	5.5	20.5140	3.7	0.1135	4.2	0.0169	1.9	0.45	108.0	2.0	109.2	4.3	135.7	88.1	108.0	2.0
14MR73 Spot 67	381	74148	2.9	21.3901	2.4	0.1092	2.9	0.0169	1.6	0.55	108.3	1.7	105.3	2.9	36.5	57.7	108.3	1.7
14MR73 Spot 78	474	26660	3.3	20.6871	2.6	0.1130	3.6	0.0170	2.5	0.70	108.4	2.7	108.7	3.7	115.9	60.5	108.4	2.7
14MR73 Spot 97	468	20578	3.0	17.6834	4.8	0.1324	5.3	0.0170	2.3	0.43	108.5	2.4	126.2	6.2	474.0	105.2	108.5	2.4
14MR73 Spot 72	366	168893	2.7	20.6926	4.0	0.1131	4.7	0.0170	2.4	0.51	108.5	2.6	108.8	4.8	115.3	94.8	108.5	2.6
14MR73 Spot 53	271	14433	2.6	19.5103	4.8	0.1201	6.7	0.0170	4.7	0.70	108.6	5.0	115.1	7.3	252.3	109.8	108.6	5.0
14MR73 Spot 63	395	15854	2.7	20.6937	3.3	0.1133	4.6	0.0170	3.1	0.68	108.7	3.4	109.0	4.7	115.2	79.0	108.7	3.4
14MR73 Spot 88	221	14308	3.7	20.7543	3.5	0.1130	4.9	0.0170	3.3	0.69	108.8	3.6	108.7	5.0	108.3	83.4	108.8	3.6
14MR73 Spot 92	388	21672	3.5	20.4139	3.1	0.1151	3.6	0.0170	1.8	0.50	108.9	1.9	110.6	3.7	147.2	72.5	108.9	1.9
14MR73 Spot 80	298	8949	3.8	21.0302	5.3	0.1117	6.4	0.0170	3.7	0.57	108.9	4.0	107.5	6.6	77.0	125.8	108.9	4.0
14MR73 Spot 85	406	75099	3.5	21.2011	3.5	0.1109	4.4	0.0171	2.6	0.59	109.0	2.8	106.8	4.4	57.7	84.6	109.0	2.8
14MR73 Spot 10(	476	53021	4.1	20.2038	2.6	0.1166	3.2	0.0171	2.0	0.61	109.2	2.1	112.0	3.4	171.4	59.7	109.2	2.1
14MR73 Spot 82	255	8926	6.6	20.1669	3.4	0.1170	3.9	0.0171	1.9	0.48	109.4	2.0	112.3	4.1	175.6	79.2	109.4	2.0
14MR73 Spot 98	210	13236	2.5	19.2820	4.3	0.1224	4.6	0.0171	1.7	0.36	109.4	1.8	117.3	5.1	279.3	99.1	109.4	1.8
14MR73 Spot 81	460	17296	2.9	20.7585	3.1	0.1139	3.3	0.0171	1.2	0.36	109.6	1.3	109.5	3.4	107.8	72.6	109.6	1.3
14MR73 Spot 65	658	50937	1.5	20.1180	3.6	0.1178	4.3	0.0172	2.4	0.55	109.8	2.6	113.1	4.6	181.3	82.9	109.8	2.6
14MR73 Spot 86	433	77908	3.1	20.7031	4.1	0.1147	4.6	0.0172	2.1	0.45	110.1	2.2	110.3	4.8	114.1	96.2	110.1	2.2
14MR73 Spot 89	433	29152	3.9	19.9466	4.3	0.1192	5.4	0.0173	3.2	0.60	110.3	3.5	114.4	5.8	201.2	99.5	110.3	3.5
14MR73 Spot 61	593	42885	3.0	20.3906	2.0	0.1175	3.0	0.0174	2.2	0.73	111.1	2.4	112.8	3.2	149.8	47.5	111.1	2.4
14MR73 Spot 87	251	33225	2.6	20.4552	3.9	0.1174	4.5	0.0174	2.2	0.49	111.3	2.4	112.7	4.8	142.4	91.7	111.3	2.4
14MR73 Spot 64	436	137513	3.2	21.1474	3.5	0.1139	3.7	0.0175	1.3	0.35	111.7	1.5	109.5	3.9	63.8	83.4	111.7	1.5
14MR73 Spot 95	340	15235	3.7	19.9991	4.5	0.1205	5.1	0.0175	2.4	0.47	111.7	2.7	115.5	5.6	195.1	105.7	111.7	2.7
14MR73 Spot 71	303	18450	2.5	20.4529	4.3	0.1179	5.2	0.0175	2.9	0.56	111.7	3.2	113.1	5.6	142.7	101.0	111.7	3.2
14MR73 Spot 84	359	31909	3.1	20.0449	4.4	0.1205	4.9	0.0175	2.2	0.44	112.0	2.4	115.6	5.3	189.8	101.4	112.0	2.4
14MR73 Spot 60	605	350585	2.7	19.4694	2.6	0.1244	4.0	0.0176	3.1	0.76	112.2	3.4	119.0	4.5	257.1	60.8	112.2	3.4
14MR73 Spot 51	1077	135910	2.3	17.5915	2.9	0.1377	4.5	0.0176	3.5	0.77	112.3	3.9	131.0	5.6	485.5	64.3	112.3	3.9
14MR73 Spot 76	363	65488	2.3	20.3583	3.8	0.1191	5.0	0.0176	3.2	0.65	112.4	3.6	114.3	5.4	153.6	89.1	112.4	3.6
14MR73 Spot 74	746	57344	2.0	20.4528	3.2	0.1218	3.7	0.0181	1.7	0.46	115.4	1.9	116.7	4.0	142.7	76.2	115.4	1.9
14MR73 Spot 57	146	11291	3.1	15.6128	6.5	0.1707	6.9	0.0193	2.4	0.35	123.4	3.0	160.1	10.3	743.3	137.7	123.4	3.0
14IY01-1 <>	70	2288	1.6	19.7430	2.9	0.0982	3.8	0.0141	2.5	0.64	90.0	2.2	95.1	3.5	225.0	67.5	90.0	2.2
14IY01-2 <>	112	2194	2.9	22.0471	2.8	0.0895	3.4	0.0143	1.9	0.56	91.6	1.7	87.0	2.8	-36.4	67.4	91.6	1.7
14IY01-3 <>	75	1340	1.6	22.5962	4.8	0.0856	5.1	0.0140	1.6	0.32	89.8	1.5	83.4	4.0	-96.4	117.5	89.8	1.5
14IY01-4 <>	34	3915	2.7	18.2494	5.6	0.1061	6.2	0.0140	2.8	0.45	89.9	2.5	102.4	6.0	403.9	124.5	89.9	2.5
14IY01-5 <>	58	2503	1.5	19.3872	3.9	0.1013	4.1	0.0142	1.5	0.36	91.2	1.3	98.0	3.9	266.9	88.7	91.2	1.3
14IY01-6 <>	210	6777	2.0	20.5702	1.6	0.0978	2.2	0.0146	1.6	0.70	93.4	1.4	94.8	2.0	129.3	37.1	93.4	1.4
14IY01-7 <>	212	4533	2.1	20.6789	2.1	0.0967	4.0	0.0145	3.5	0.86	92.8	3.2	93.7	3.6	116.9	48.7	92.8	3.2
14IY01-8 <>	78	1583	1.6	22.1232	3.3	0.0892	3.6	0.0143	1.5	0.41	91.6	1.3	86.7	3.0	-44.8	79.1	91.6	1.3
14IY01-9 <>	101	4567	1.9	19.1489	2.6	0.1035	2.8	0.0144	1.0	0.36	92.0	0.9	100.0	2.7	295.2	60.0	92.0	0.9
14IY01-10 <>	68	2349	1.7	20.7191	2.9	0.0954	3.2	0.0143	1.4	0.44	91.7	1.3	92.5	2.8	112.3	67.8	91.7	1.3
14IY01-11 <>	66	3248	1.6	20.1640	4.7	0.0983	5.0	0.0144	1.7	0.34	92.0	1.6	95.2	4.6	176.0	110.3	92.0	1.6
14IY01-12 <>	72	1468	1.6	21.5651	2.9	0.0910	3.2	0.0142	1.3	0.41	91.1	1.2	88.4	2.7	16.9	69.5	91.1	1.2
14IY01-13 <>	121	2444	1.9	21.3614	2.5	0.0916	2.7	0.0142	1.1	0.39	90.9	1.0	89.0	2.3	39.7	60.2	90.9	1.0
14IY01-14 <>	87	7452	1.9	19.5664	4.6	0.1016	4.7	0.0144	1.0	0.21	92.3	0.9	98.2	4.4	245.7	105.6	92.3	0.9
14IY01-15 <>	261	5163	2.4	20.5498	3.4	0.0970	5.6	0.0145	4.4	0.79	92.5	4.0	94.0	5.0	131.6	80.7	92.5	4.0
14IY01-16 <>	67	2430	1.6	20.9094	3.6	0.0915	3.8	0.0139	1.1	0.29	88.8	1.0	88.9	3.2	90.6	86.5	88.8	1.0
14IY01-17 <>	68	1890	1.6	20.5213	5.2	0.0934	5.5	0.0139	1.6	0.29	89.0	1.4	90.7	4.8	134.9	123.2	89.0	1.4
14IY01-18 <>	49	908	1.7	22.6931	4.2	0.0854	4.4	0.0141	1.2	0.28	90.0	1.1	83.2	3.5	-107.0	103.9	90.0	1.1
14IY01-19 <>	65	2897	1.7	19.6662	3.3	0.0997	4.4	0.0142	2.9	0.66	91.0	2.7	96.5	4.1	234.0	76.4	91.0	2.7
14IY01-20 <>	48	811	3.0	23.1996	7.2	0.0839	7.3	0.0141	1.1	0.15	90.4	1.0	81.8	5.7	-161.6	179.6	90.4	1.0
14IY03-7R <>	50	723	3.9	29.1107	3.2	0.0709	5.4	0.0150	4.4	0.80	95.8	4.2	69.6	3.7	-760.9	90.8	95.8	4.2
14IY03-1R <>	129	2901	1.9	21.8262	1.6	0.0961	4.4	0.0152	4.0	0.93	97.3	3.9	93.1	3.9	-12.0	39.5	97.3	3.9
14IY03-2C <>	30	1101	4.6	22.5176	3.9	0.0936	4.5	0.0153	2.3	0.51	97.8	2.2	90.9	4.0	-87.9	96.2	97.8	2.2
14IY03-29 <>	92	1731	2.6	22.6538	2.4	0.0933	3.1	0.0153	2.1	0.66	98.0	2.0	90.5	2.7	-102.7	57.9	98.0	2.0
14IY03-17 <>	64	887	3.6	26.4053	2.4	0.0806	3.8	0.0154	2.9	0.77	98.7	2.9	78.7	2.9	-494.2	63.7	98.7	2.9
14IY03-27 <>	55	944	2.4	25.9960	3.2	0.0828	4.5	0.0156	3.2	0.71	99.9	3.2	80.8	3.5	-452.9	83.7	99.9	3.2
14IY03-6R <>	78	3492	3.7	21.3692	2.1	0.1014	2.6	0.0157	1.5	0.60	100.5	1.5	98.1	2.4	38.8	49.1	100.5	1.5
14IY03-19 <>	84	1427	2.5	23.1457	2.9	0.0937	4.7	0.0157	3.7	0.78	100.6	3.7	90.9	4.1	-155.8	73.2	100.6	3.7
14IY03-30 <>	40	738	4.4	26.9672	2.6	0.0806	3.8	0.0158	2.8	0.73	100.9	2.8	78.7	2.9	-550.5	70.2	100.9	2.8
14IY03-20 <>	13	341	5.5	38.2014	9.3	0.0572	9.5	0.0158	2.0	0.21	101.3	2.0	56.5	5.2	-1599.3	317.9	101.3	2.0

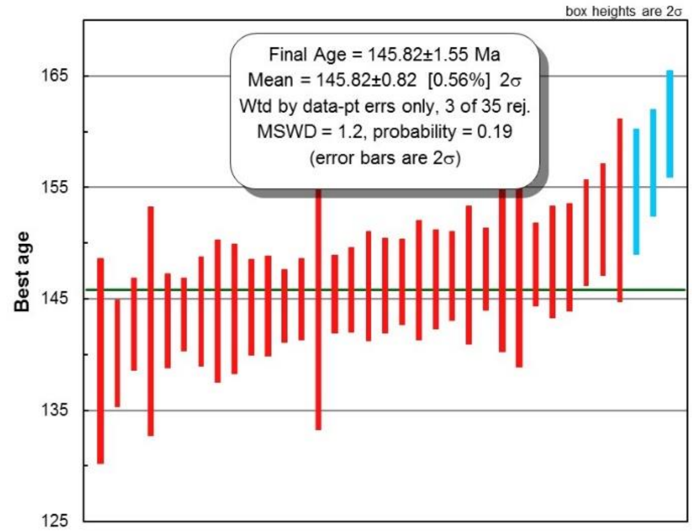
14IY03-8 <>	84	1852	3.9	23.3312	1.8	0.0938	2.7	0.0159	1.9	0.72	101.5	1.9	91.1	2.3	-175.7	45.8	101.5	1.9
14IY03-5R <>	476	11471	1.3	20.8465	0.9	0.1056	2.2	0.0160	2.0	0.91	102.2	2.0	102.0	2.1	97.8	21.4	102.2	2.0
14IY03-2R <>	331	11701	1.8	20.8411	1.2	0.1058	1.8	0.0160	1.3	0.73	102.3	1.3	102.2	1.8	98.4	29.6	102.3	1.3
14IY03-4C <>	122	3411	2.2	21.6309	2.7	0.1021	3.0	0.0160	1.4	0.45	102.4	1.4	98.7	2.8	9.7	65.1	102.4	1.4
14IY03-9 <>	63	661	2.5	29.8412	2.3	0.0740	2.5	0.0160	0.9	0.36	102.4	0.9	72.5	1.8	-831.2	67.1	102.4	0.9
14IY03-4R <>	177	2562	3.2	22.1802	0.9	0.0997	1.7	0.0160	1.5	0.86	102.6	1.5	96.5	1.6	-51.0	21.4	102.6	1.5
14IY03-23 <>	39	1039	3.9	24.5919	2.9	0.0902	3.2	0.0161	1.4	0.44	102.8	1.5	87.6	2.7	-308.6	74.5	102.8	1.5
14IY03-16 <>	95	2537	3.2	21.5546	1.6	0.1031	5.3	0.0161	5.0	0.95	103.1	5.1	99.7	5.0	18.1	38.8	103.1	5.1
14IY03-31 <>	381	4233	2.0	21.4960	0.9	0.1035	2.1	0.0161	2.0	0.92	103.2	2.0	100.0	2.0	24.7	20.5	103.2	2.0
14IY03-10 <>	77	1396	3.8	23.6809	1.7	0.0940	3.0	0.0161	2.5	0.82	103.2	2.5	91.2	2.6	-212.9	43.1	103.2	2.5
14IY03-11 <>	172	5051	2.2	21.3048	1.3	0.1049	2.2	0.0162	1.8	0.80	103.7	1.8	101.3	2.1	46.1	31.4	103.7	1.8
14IY03-26 <>	53	1851	3.9	20.7085	3.5	0.1081	4.8	0.0162	3.3	0.69	103.8	3.4	104.2	4.8	113.5	82.3	103.8	3.4
14IY03-1C <>	82	3962	3.0	20.5215	1.9	0.1093	2.4	0.0163	1.4	0.60	104.0	1.5	105.3	2.4	134.8	44.9	104.0	1.5
14IY03-22 <>	358	8332	2.2	21.0226	0.6	0.1067	1.4	0.0163	1.2	0.89	104.1	1.3	103.0	1.4	77.8	15.2	104.1	1.3
14IY03-3R <>	81	2076	3.3	21.9109	1.4	0.1028	2.1	0.0163	1.6	0.74	104.4	1.6	99.3	2.0	-21.4	34.5	104.4	1.6
14IY03-24 <>	363	7965	1.1	21.2757	0.6	0.1059	1.7	0.0163	1.6	0.93	104.4	1.6	102.2	1.6	49.3	14.8	104.4	1.6
14IY03-5C <>	95	1804	2.4	22.8633	2.1	0.0989	3.4	0.0164	2.8	0.80	104.8	2.9	95.7	3.1	-125.4	50.8	104.8	2.9
14IY03-28 <>	141	2326	1.9	21.9238	1.1	0.1033	2.6	0.0164	2.3	0.90	105.0	2.4	99.8	2.4	-22.8	27.4	105.0	2.4
14IY03-25 <>	344	15332	1.7	20.6224	0.7	0.1101	1.7	0.0165	1.6	0.92	105.3	1.7	106.1	1.7	123.3	16.4	105.3	1.7
14IY03-14 <>	71	1424	2.8	23.3754	1.4	0.0975	3.1	0.0165	2.7	0.89	105.7	2.9	94.5	2.8	-180.4	35.8	105.7	2.9
14IY03-12 <>	47	1301	2.9	23.0367	2.7	0.0992	3.2	0.0166	1.8	0.57	105.9	1.9	96.0	3.0	-144.1	66.3	105.9	1.9
14IY03-18 <>	145	2104	2.4	22.7860	1.3	0.1004	1.8	0.0166	1.3	0.71	106.1	1.3	97.2	1.7	-117.0	31.3	106.1	1.3
14IY03-3C <>	174	4155	1.7	21.5266	1.5	0.1068	2.6	0.0167	2.1	0.81	106.6	2.2	103.0	2.6	21.3	37.0	106.6	2.2
14IY03-15 <>	115	2184	2.6	22.6312	1.4	0.1017	2.1	0.0167	1.5	0.73	106.8	1.6	98.4	2.0	-100.3	35.2	106.8	1.6
14IY03-13 <>	136	3222	2.2	21.5201	1.6	0.1074	1.8	0.0168	0.9	0.49	107.1	1.0	103.5	1.8	22.0	38.3	107.1	1.0
14IY03-21 <>	1130	31207	1.7	20.6511	0.6	0.1161	0.8	0.0174	0.5	0.68	111.1	0.6	111.5	0.8	120.0	13.5	111.1	0.6
14IY13-18 <>	1884	31470	8.1	19.3237	2.2	0.1622	2.5	0.0227	1.2	0.48	144.9	1.7	152.6	3.6	274.3	51.3	144.9	1.7
14IY13-12R <>	962	22940	1.9	20.4630	0.6	0.1559	2.1	0.0231	2.0	0.95	147.5	2.9	147.1	2.8	141.5	14.4	147.5	2.9
14IY13-8 <>	701	49818	1.4	20.3586	0.8	0.1572	2.3	0.0232	2.2	0.94	148.0	3.2	148.3	3.2	153.5	18.0	148.0	3.2
14IY13-7R <>	1298	40661	1.3	20.2701	1.0	0.1580	2.6	0.0232	2.5	0.93	148.0	3.6	148.9	3.7	163.7	23.1	148.0	3.6
14IY13-28R <>	1514	76062	1.3	20.2523	1.1	0.1599	2.0	0.0235	1.7	0.85	149.6	2.5	150.6	2.8	165.7	24.8	149.6	2.5
14IY13-30C <>	660	13839	10.4	19.9694	1.9	0.1622	2.1	0.0235	0.9	0.41	149.7	1.3	152.6	3.0	198.6	44.2	149.7	1.3
14IY13-17C <>	84	2958	1.9	20.7493	1.5	0.1566	2.7	0.0236	2.2	0.82	150.2	3.3	147.7	3.7	108.8	36.3	150.2	3.3
14IY13-19 <>	1328	54857	1.1	20.1627	0.6	0.1620	1.1	0.0237	0.9	0.84	150.9	1.4	152.5	1.6	176.1	13.9	150.9	1.4
14IY13-27 <>	917	32549	2.3	20.3201	0.6	0.1608	1.8	0.0237	1.7	0.95	150.9	2.5	151.4	2.5	158.0	13.2	150.9	2.5
14IY13-7C <>	55	1649	2.2	22.6791	2.6	0.1444	3.2	0.0237	1.7	0.55	151.3	2.6	136.9	4.1	-105.4	65.2	151.3	2.6
14IY13-26 <>	1006	38575	1.7	20.2152	1.0	0.1622	3.1	0.0238	2.9	0.95	151.5	4.4	152.6	4.4	170.0	22.2	151.5	4.4
14IY13-21C <>	162	6739	1.9	20.0548	2.3	0.1635	3.8	0.0238	3.0	0.79	151.5	4.5	153.7	5.4	188.6	53.8	151.5	4.5
14IY13-9C <>	201	8423	2.5	20.3619	0.7	0.1611	4.1	0.0238	4.1	0.98	151.6	6.1	151.7	5.8	153.2	17.5	151.6	6.1
14IY13-22R <>	2584	93002	1.0	20.2079	0.9	0.1625	2.3	0.0238	2.1	0.92	151.7	3.1	152.9	3.2	170.9	20.5	151.7	3.1
14IY13-20R <>	1166	40971	1.9	20.2214	1.0	0.1629	1.9	0.0239	1.7	0.86	152.2	2.5	153.2	2.7	169.3	22.5	152.2	2.5
14IY13-4C <>	671	17821	2.8	20.1785	0.9	0.1637	2.0	0.0240	1.9	0.91	152.6	2.8	153.9	2.9	174.3	20.1	152.6	2.8
14IY13-3 <>	543	15248	0.9	20.3582	0.7	0.1625	1.7	0.0240	1.5	0.91	152.8	2.3	152.9	2.4	153.6	16.2	152.8	2.3
14IY13-10R <>	1115	46685	7.5	20.2632	0.8	0.1633	2.7	0.0240	2.6	0.96	152.9	4.0	153.6	3.9	164.5	17.5	152.9	4.0
14IY13-13 <>	433	10859	1.3	20.5609	0.8	0.1610	1.6	0.0240	1.5	0.89	152.9	2.2	151.5	2.3	130.3	17.9	152.9	2.2
14IY13-16 <>	208	7108	3.0	20.5524	0.9	0.1622	1.7	0.0242	1.4	0.86	154.0	2.2	152.6	2.4	131.3	20.4	154.0	2.2
14IY13-32 <>	2248	75183	1.2	20.1998	1.0	0.1651	2.4	0.0242	2.2	0.91	154.0	3.3	155.1	3.4	171.8	22.4	154.0	3.3
14IY13-12C <>	593	21236	1.4	20.2807	0.7	0.1647	2.3	0.0242	2.2	0.95	154.3	3.4	154.8	3.3	162.5	16.1	154.3	3.4
14IY13-5C <>	97	2097	1.5	21.4967	3.2	0.1555	3.8	0.0243	2.0	0.53	154.5	3.1	146.8	5.2	24.6	77.7	154.5	3.1
14IY13-2C <>	128	3787	2.0	21.4663	1.4	0.1558	2.3	0.0243	1.9	0.81	154.5	2.9	147.0	3.2	28.0	32.8	154.5	2.9
14IY13-4R <>	1136	42969	1.9	20.4201	0.8	0.1638	1.1	0.0243	0.8	0.68	154.6	1.2	154.1	1.6	146.5	19.6	154.6	1.2
14IY13-17R <>	469	14310	1.9	20.3738	0.6	0.1644	1.1	0.0243	0.9	0.86	154.7	1.4	154.5	1.6	151.8	13.0	154.7	1.4
14IY13-15 <>	477	11152	2.4	20.6371	0.7	0.1623	4.7	0.0243	4.6	0.99	154.7	7.1	152.7	6.6	121.6	16.6	154.7	7.1
14IY13-31 <>	334	7097	1.6	20.0302	2.6	0.1674	3.8	0.0243	2.8	0.73	154.9	4.3	157.2	5.6	191.5	60.7	154.9	4.3
14IY13-5R <>	744	17344	3.1	19.4612	1.1	0.1725	2.0	0.0244	1.7	0.84	155.1	2.6	161.6	3.0	258.1	25.1	155.1	2.6
14IY13-23 <>	178	5033	2.8	21.1459	1.3	0.1588	2.1	0.0244	1.6	0.80	155.1	2.5	149.7	2.9	63.9	29.9	155.1	2.5
14IY13-6 <>	38	1670	2.2	20.7739	3.0	0.1618	3.3	0.0244	1.4	0.42	155.3	2.1	152.3	4.7	106.0	70.9	155.3	2.1
14IY13-11 <>	462	14821	1.8	20.4292	1.0	0.1648	2.3	0.0244	2.1	0.90	155.5	3.2	154.9	3.3	145.4	23.6	155.5	3.2
14IY13-28C <>	560	22314	1.3	20.2245	0.6	0.1676	2.2	0.0246	2.1	0.96	156.6	3.2	157.4	3.1	169.0	14.6	156.6	3.2
14IY13-1 <>	285	13781	1.2	20.4057	0.7	0.1662	1.8	0.0246	1.6	0.91	156.6	2.5	156.1	2.6	148.1	17.1	156.6	2.5
14IY13-20C <>	116	2702	1.9	21.8580	1.3	0.1569	2.4	0.0249	2.0	0.83	158.4	3.1	148.0	3.3	-15.5	32.2	158.4	3.1
14IY13-25 <>	272	6548	1.0	17.4754	12.0	0.1965	12.9	0.0249	4.6	0.36	158.6	7.2	182.2	21.5	500.2	265.8	158.6	7.2
14IY13-9R <>	547	23148	2.3	20.2965	0.6	0.1702	1.8	0.0251	1.7	0.94	159.6	2.7	159.6	2.7	160.7	13.9	159.6	2.7

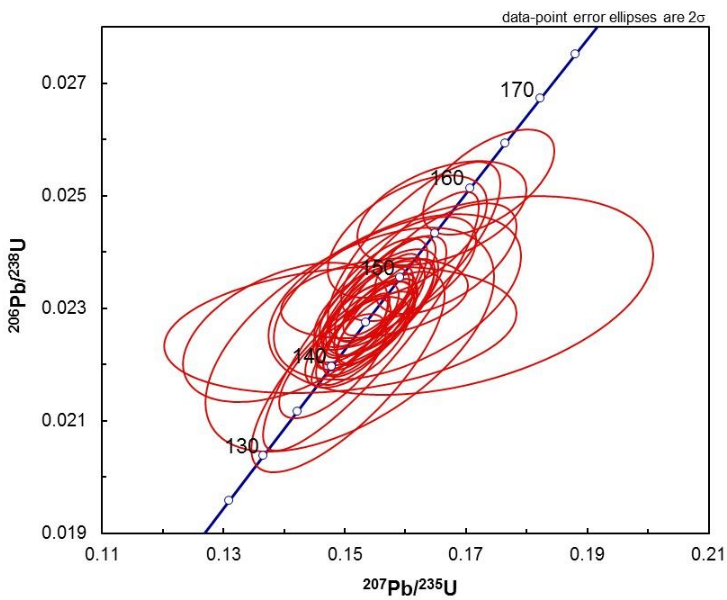
14IY13-14C <>	120	4326	2.3	20.8315	1.6	0.1675	4.2	0.0253	3.8	0.92	161.1	6.1	157.3	6.0	99.5	37.5	161.1	6.1
14IY13-10C <>	329	10470	3.0	17.4039	13.5	0.2005	13.5	0.0253	1.0	0.07	161.1	1.5	185.6	22.9	509.2	297.0	161.1	1.5
14IY13-21R <>	776	25899	1.7	20.0080	0.8	0.1763	1.8	0.0256	1.7	0.90	162.8	2.7	164.8	2.8	194.1	18.6	162.8	2.7
14IY13-14R <>	168	5493	2.1	20.9426	0.6	0.1723	1.7	0.0262	1.6	0.93	166.5	2.6	161.4	2.5	86.9	14.5	166.5	2.6
14IY13-24 <>	348	11197	1.6	20.4832	1.2	0.1763	1.6	0.0262	1.1	0.68	166.6	1.8	164.8	2.4	139.2	27.0	166.6	1.8
14IY13-2R <>	536	16088	1.2	20.5484	0.9	0.1761	1.8	0.0262	1.6	0.87	167.0	2.6	164.7	2.7	131.7	21.1	167.0	2.6
14IY13-30R <>	583	22225	4.3	20.1477	0.7	0.1798	2.7	0.0263	2.6	0.97	167.2	4.4	167.9	4.2	177.8	16.0	167.2	4.4
14IY18-2C <>	23	1238	2.9	20.6005	4.1	0.0967	8.8	0.0145	7.8	0.89	92.5	7.2	93.8	7.9	125.8	95.4	92.5	7.2
14IY18-6 <>	47	1192	2.3	24.1496	4.1	0.0845	5.2	0.0148	3.2	0.62	94.7	3.0	82.4	4.1	-262.4	104.5	94.7	3.0
14IY18-20 <>	108	3166	1.8	21.4088	1.3	0.0955	1.4	0.0148	0.5	0.34	94.9	0.5	92.6	1.3	34.4	32.0	94.9	0.5
14IY18-3R <>	28	942	2.9	23.2768	5.6	0.0886	5.8	0.0150	1.3	0.23	95.7	1.3	86.2	4.8	-169.8	139.6	95.7	1.3
14IY18-13 <>	151	4621	1.7	21.1799	1.0	0.0982	3.8	0.0151	3.7	0.97	96.5	3.5	95.1	3.5	60.1	23.3	96.5	3.5
14IY18-3C <>	40	1216	2.4	22.8286	3.5	0.0913	4.3	0.0151	2.5	0.59	96.7	2.4	88.7	3.6	-121.6	85.9	96.7	2.4
14IY18-17 <>	103	3893	1.6	21.1826	2.7	0.0985	3.3	0.0151	1.9	0.58	96.8	1.8	95.4	3.0	59.8	63.4	96.8	1.8
14IY18-8 <>	129	4382	2.5	21.1278	1.2	0.0988	1.6	0.0151	1.1	0.66	96.9	1.0	95.7	1.5	66.0	29.6	96.9	1.0
14IY18-19 <>	102	3903	2.1	21.1821	2.5	0.0992	3.0	0.0152	1.7	0.56	97.5	1.6	96.1	2.7	59.9	59.0	97.5	1.6
14IY18-2R <>	433	22590	4.0	20.7602	1.0	0.1022	2.4	0.0154	2.1	0.90	98.4	2.1	98.8	2.2	107.6	24.1	98.4	2.1
14IY18-18 <>	129	2944	1.5	21.7587	1.4	0.0977	2.4	0.0154	1.9	0.81	98.7	1.9	94.7	2.1	-4.5	33.4	98.7	1.9
14IY18-14 <>	283	7480	2.3	21.1336	0.9	0.1007	1.9	0.0154	1.6	0.87	98.8	1.6	97.5	1.7	65.3	22.4	98.8	1.6
14IY18-16 <>	130	4325	1.7	21.1418	1.2	0.1007	2.2	0.0154	1.9	0.84	98.8	1.8	97.4	2.1	64.4	28.8	98.8	1.8
14IY18-5 <>	640	36704	1.1	20.6949	0.5	0.1029	1.9	0.0154	1.8	0.96	98.8	1.8	99.5	1.8	115.0	11.9	98.8	1.8
14IY18-1R <>	762	15275	3.0	20.9195	1.0	0.1020	1.5	0.0155	1.2	0.77	99.0	1.2	98.6	1.4	89.5	23.0	99.0	1.2
14IY18-1C <>	112	7311	1.4	20.4892	2.1	0.1041	3.1	0.0155	2.2	0.72	99.0	2.2	100.6	3.0	138.5	50.2	99.0	2.2
14IY18-7 <>	211	6675	2.5	20.7714	1.3	0.1028	6.7	0.0155	6.6	0.98	99.1	6.5	99.4	6.4	106.3	31.0	99.1	6.5
14IY18-10 <>	250	6605	3.3	21.1424	1.3	0.1012	2.7	0.0155	2.3	0.87	99.3	2.3	97.9	2.5	64.3	31.2	99.3	2.3
14IY18-9 <>	42	1409	4.8	23.9674	4.0	0.0896	5.0	0.0156	3.1	0.61	99.6	3.0	87.1	4.2	-243.2	100.1	99.6	3.0
14IY18-11 <>	128	7754	2.4	20.3414	1.8	0.1067	2.1	0.0157	1.1	0.52	100.7	1.1	102.9	2.1	155.5	43.0	100.7	1.1
14IY18-4 <>	897	30025	4.6	20.8676	0.7	0.1043	1.5	0.0158	1.3	0.88	101.0	1.3	100.7	1.5	95.4	17.4	101.0	1.3
14IY18-15 <>	156	3421	2.3	21.2896	0.8	0.1025	4.1	0.0158	4.0	0.98	101.3	4.0	99.1	3.9	47.8	19.2	101.3	4.0
14IY18-12 <>	26	1309	4.1	21.8770	6.8	0.1256	6.9	0.0199	1.3	0.19	127.2	1.6	120.2	7.8	-17.6	164.5	127.2	1.6
14IY23-13 <>	1026	16807	2.2	20.0620	3.1	0.1006	4.4	0.0146	3.1	0.71	93.7	2.9	97.3	4.1	187.8	73.2	93.7	2.9
14IY23-9 <>	258	25378	0.8	20.4129	1.0	0.1001	3.0	0.0148	2.8	0.94	94.9	2.6	96.9	2.7	147.3	24.5	94.9	2.6
14IY23-28 <>	374	12492	3.3	20.8373	1.3	0.0986	2.3	0.0149	1.9	0.81	95.4	1.8	95.5	2.1	98.8	31.6	95.4	1.8
14IY23-14 <>	307	7987	2.9	20.1131	4.8	0.1023	5.6	0.0149	2.8	0.50	95.5	2.7	98.9	5.3	181.8	112.9	95.5	2.7
14IY23-23C <>	19	2100	4.7	17.2919	3.9	0.1199	4.8	0.0150	2.8	0.58	96.2	2.7	115.0	5.2	523.3	85.1	96.2	2.7
14IY23-29C <>	207	7297	4.3	21.3154	1.0	0.0974	1.9	0.0151	1.6	0.85	96.3	1.6	94.4	1.7	44.9	24.2	96.3	1.6
14IY23-30 <>	406	24120	2.6	20.9117	0.7	0.0994	2.3	0.0151	2.2	0.95	96.5	2.1	96.2	2.2	90.4	17.3	96.5	2.1
14IY23-12R <>	605	11035	2.0	20.1570	3.1	0.1033	3.9	0.0151	2.2	0.58	96.6	2.2	99.8	3.7	176.8	73.0	96.6	2.2
14IY23-23R <>	335	7112	3.5	21.2672	1.4	0.0980	3.3	0.0151	3.0	0.90	96.7	2.9	94.9	3.0	50.3	34.6	96.7	2.9
14IY23-25R <>	887	27216	2.4	20.7017	0.7	0.1007	2.8	0.0151	2.7	0.97	96.7	2.6	97.4	2.6	114.2	16.6	96.7	2.6
14IY23-16 <>	293	5635	3.2	21.1421	1.4	0.0991	2.3	0.0152	1.9	0.80	97.2	1.8	95.9	2.1	64.4	33.9	97.2	1.8
14IY23-22 <>	166	3899	2.3	21.4375	1.5	0.0978	2.7	0.0152	2.2	0.82	97.3	2.1	94.8	2.4	31.2	36.6	97.3	2.1
14IY23-10C <>	268	6409	3.9	21.0156	1.9	0.1004	3.5	0.0153	3.0	0.85	97.9	2.9	97.1	3.2	78.6	44.1	97.9	2.9
14IY23-25C <>	215	12410	4.1	20.8305	2.2	0.1013	3.4	0.0153	2.6	0.77	97.9	2.5	98.0	3.2	99.6	51.2	97.9	2.5
14IY23-24 <>	370	6453	3.6	21.3990	0.7	0.0987	1.0	0.0153	0.6	0.63	98.0	0.6	95.6	0.9	35.5	17.8	98.0	0.6
14IY23-27 <>	887	15811	1.6	20.9568	0.6	0.1010	1.4	0.0153	1.2	0.90	98.2	1.2	97.7	1.3	85.3	14.2	98.2	1.2
14IY23-15 <>	400	15315	2.6	20.7613	0.7	0.1021	2.2	0.0154	2.1	0.94	98.4	2.0	98.7	2.1	107.5	17.3	98.4	2.0
14IY23-26 <>	543	14667	2.1	20.9669	1.0	0.1014	1.9	0.0154	1.7	0.86	98.7	1.6	98.1	1.8	84.1	23.4	98.7	1.6
14IY23-11 <>	485	8582	3.3	21.0198	1.2	0.1012	1.4	0.0154	0.8	0.57	98.7	0.8	97.9	1.3	78.1	27.5	98.7	0.8
14IY23-19 <>	171	3395	3.4	21.5063	1.3	0.0991	2.5	0.0155	2.1	0.86	98.9	2.1	96.0	2.3	23.5	30.8	98.9	2.1
14IY23-21 <>	343	6908	3.0	21.2621	0.6	0.1003	1.9	0.0155	1.8	0.94	98.9	1.8	97.0	1.8	50.8	15.1	98.9	1.8
14IY23-29R <>	389	11937	4.0	20.6562	0.9	0.1032	2.9	0.0155	2.7	0.95	98.9	2.7	99.8	2.7	119.5	20.6	98.9	2.7
14IY23-7R <>	451	13694	4.0	20.7238	1.0	0.1031	1.7	0.0155	1.4	0.80	99.2	1.3	99.7	1.6	111.7	24.1	99.2	1.3
14IY23-20 <>	523	19871	2.0	20.7751	0.8	0.1029	2.3	0.0155	2.2	0.93	99.2	2.1	99.5	2.2	105.9	20.1	99.2	2.1
14IY23-6C <>	223	3691	3.1	21.8095	1.0	0.0982	2.4	0.0155	2.1	0.90	99.4	2.1	95.1	2.1	-10.2	25.1	99.4	2.1
14IY23-5 <>	634	18753	1.5	20.7827	0.5	0.1033	2.6	0.0156	2.5	0.98	99.6	2.5	99.8	2.5	105.0	12.0	99.6	2.5
14IY23-7C <>	144	3240	2.5	21.6744	1.9	0.0991	4.6	0.0156	4.2	0.91	99.7	4.1	96.0	4.2	4.8	45.3	99.7	4.1
14IY23-6R <>	427	8659	1.9	18.9615	7.3	0.1133	7.9	0.0156	2.8	0.36	99.7	2.8	109.0	8.1	317.5	166.7	99.7	2.8
14IY23-8 <>	278	5751	1.7	21.0319	1.1	0.1022	1.9	0.0156	1.5	0.79	99.7	1.5	98.8	1.8	76.8	27.2	99.7	1.5
14IY23-3C <>	166	5363	2.9	20.8399	1.3	0.1035	2.7	0.0156	2.4	0.87	100.1	2.4	100.0	2.6	98.5	31.6	100.1	2.4
14IY23-10R <>	501	15577	3.3	20.7403	0.7	0.1042	1.0	0.0157	0.7	0.72	100.2	0.7	100.6	1.0	109.9	16.7	100.2	0.7
14IY23-4 <>	271	4019	2.5	21.7117	1.5	0.0996	2.1	0.0157	1.5	0.70	100.3	1.5	96.4	2.0	0.7	36.8	100.3	1.5

14IY23-17 <>	579	8997	3.6	21.0571	0.7	0.1027	4.4	0.0157	4.4	0.99	100.3	4.3	99.3	4.2	73.9	16.8	100.3	4.3
14IY23-2C <>	254	11090	2.7	20.5319	1.4	0.1054	2.2	0.0157	1.6	0.75	100.4	1.6	101.8	2.1	133.6	33.5	100.4	1.6
14IY23-18 <>	84	2799	3.2	21.0461	2.7	0.1033	4.8	0.0158	3.9	0.82	100.9	3.9	99.9	4.6	75.2	65.1	100.9	3.9
14IY23-1R <>	546	21203	1.9	20.8888	0.7	0.1054	1.4	0.0160	1.2	0.87	102.2	1.2	101.8	1.4	93.0	16.4	102.2	1.2
14IY23-2R <>	399	7120	3.6	21.1278	0.8	0.1052	2.0	0.0161	1.9	0.93	103.1	1.9	101.5	2.0	66.0	18.1	103.1	1.9
14IY23-3R <>	462	7900	3.1	21.1493	1.0	0.1085	1.9	0.0166	1.6	0.86	106.4	1.7	104.6	1.9	63.6	23.1	106.4	1.7
14IY23-12C <>	111	3032	1.8	21.5561	2.4	0.1077	2.4	0.0168	0.4	0.16	107.6	0.4	103.8	2.4	17.9	57.4	107.6	0.4
14IY31-13 <>	180	9738	1.7	20.0198	1.5	0.1442	2.6	0.0209	2.1	0.82	133.6	2.8	136.8	3.3	192.7	34.7	133.6	2.8
14IY31-8 <>	91	3873	1.2	20.4416	1.5	0.1435	2.1	0.0213	1.5	0.71	135.7	2.0	136.2	2.7	144.0	34.8	135.7	2.0
14IY31-14 <>	143	5979	1.1	20.0277	2.0	0.1471	2.6	0.0214	1.6	0.63	136.3	2.2	139.3	3.4	191.8	46.6	136.3	2.2
14IY31-16 <>	60	2228	2.0	21.3705	2.4	0.1379	3.2	0.0214	2.1	0.66	136.3	2.9	131.2	4.0	38.7	57.9	136.3	2.9
14IY31-2 <>	105	3724	1.7	20.4313	2.8	0.1443	2.9	0.0214	0.8	0.29	136.4	1.1	136.9	3.7	145.2	65.6	136.4	1.1
14IY31-23 <>	146	10429	1.3	20.1308	0.9	0.1465	2.6	0.0214	2.4	0.94	136.4	3.3	138.8	3.3	179.8	20.6	136.4	3.3
14IY31-26 <>	105	4242	1.6	20.6411	1.4	0.1434	2.3	0.0215	1.9	0.81	137.0	2.5	136.1	2.9	121.1	32.0	137.0	2.5
14IY31-10 <>	234	5720	1.2	20.6343	1.6	0.1436	2.7	0.0215	2.2	0.82	137.0	3.0	136.2	3.5	121.9	37.0	137.0	3.0
14IY31-11 <>	340	10068	1.3	20.5956	0.8	0.1439	1.7	0.0215	1.5	0.87	137.1	2.0	136.5	2.2	126.4	19.3	137.1	2.0
14IY31-12 <>	85	5995	1.5	19.9179	1.5	0.1490	2.4	0.0215	1.8	0.78	137.3	2.5	141.0	3.1	204.6	34.5	137.3	2.5
14IY31-22 <>	121	6787	1.6	19.9959	1.8	0.1487	2.6	0.0216	1.8	0.72	137.5	2.5	140.7	3.4	195.5	41.5	137.5	2.5
14IY31-28 <>	131	6505	1.4	20.6578	0.7	0.1440	1.5	0.0216	1.3	0.86	137.6	1.7	136.6	1.9	119.3	17.3	137.6	1.7
14IY31-7 <>	82	2788	1.5	19.9804	3.1	0.1489	3.2	0.0216	0.9	0.28	137.6	1.2	140.9	4.2	197.3	71.8	137.6	1.2
14IY31-1 <>	119	2768	1.4	20.8422	2.1	0.1432	2.9	0.0216	1.9	0.67	138.0	2.6	135.9	3.7	98.2	50.7	138.0	2.6
14IY31-9 <>	138	5231	1.8	19.0300	2.9	0.1569	4.1	0.0217	2.9	0.70	138.1	3.9	148.0	5.7	309.3	67.1	138.1	3.9
14IY31-25 <>	115	2497	1.1	20.8632	1.1	0.1431	2.0	0.0217	1.7	0.85	138.1	2.3	135.8	2.6	95.9	25.4	138.1	2.3
14IY31-15 <>	88	4810	2.1	20.1554	3.8	0.1483	4.7	0.0217	2.8	0.59	138.3	3.8	140.4	6.1	176.9	87.6	138.3	3.8
14IY31-21 <>	89	2441	1.3	21.8370	2.5	0.1372	2.8	0.0217	1.3	0.46	138.6	1.8	130.5	3.5	-13.2	61.1	138.6	1.8
14IY31-19 <>	136	4878	1.5	20.6634	2.2	0.1450	3.1	0.0217	2.2	0.70	138.6	3.0	137.5	4.0	118.6	52.6	138.6	3.0
14IY31-24 <>	149	6802	1.1	20.2487	1.6	0.1482	2.0	0.0218	1.1	0.56	138.8	1.5	140.3	2.6	166.2	38.2	138.8	1.5
14IY31-6 <>	127	5863	2.1	20.3659	1.9	0.1475	2.7	0.0218	1.9	0.71	139.0	2.6	139.7	3.5	152.7	44.6	139.0	2.6
14IY31-5 <>	73	2688	1.6	20.5644	3.7	0.1462	3.9	0.0218	1.3	0.32	139.1	1.8	138.5	5.1	129.9	87.8	139.1	1.8
14IY31-3 <>	80	3838	1.6	20.4257	2.5	0.1472	2.8	0.0218	1.4	0.50	139.1	1.9	139.4	3.7	145.8	57.8	139.1	1.9
14IY31-4 <>	104	4743	1.0	20.0547	2.5	0.1502	3.0	0.0218	1.7	0.57	139.3	2.4	142.1	4.0	188.6	58.2	139.3	2.4
14IY31-20 <>	193	17173	1.1	20.1036	1.3	0.1499	2.2	0.0219	1.8	0.82	139.4	2.5	141.8	2.9	182.9	29.7	139.4	2.5
14IY31-27 <>	135	36022	1.8	19.7299	2.0	0.1531	2.5	0.0219	1.5	0.61	139.7	2.1	144.6	3.4	226.5	46.8	139.7	2.1
14IY31-18 <>	128	5893	1.1	15.3097	12.5	0.1975	12.6	0.0219	2.0	0.15	139.8	2.7	183.0	21.2	784.6	263.3	139.8	2.7
14IY31-17 <>	195	10722	1.2	19.9740	1.4	0.1517	2.7	0.0220	2.3	0.86	140.2	3.2	143.4	3.6	198.0	31.9	140.2	3.2
14IY32-30 <>	137	5659	2.2	20.3117	3.1	0.1520	3.9	0.0224	2.4	0.61	142.8	3.4	143.7	5.3	159.0	72.9	142.8	3.4
14IY32-27 <>	133	6061	2.2	20.5676	1.2	0.1506	2.5	0.0225	2.1	0.87	143.2	3.0	142.5	3.3	129.6	28.9	143.2	3.0
14IY32-16 <>	132	4852	3.1	20.6290	2.0	0.1512	2.4	0.0226	1.4	0.56	144.2	2.0	143.0	3.2	122.6	47.3	144.2	2.0
14IY32-24 <>	104	7562	2.4	20.0832	1.0	0.1556	1.9	0.0227	1.7	0.87	144.4	2.4	146.8	2.6	185.3	22.3	144.4	2.4
14IY32-15 <>	94	2776	2.5	20.9143	1.5	0.1500	3.0	0.0227	2.6	0.86	145.0	3.7	141.9	4.0	90.1	36.2	145.0	3.7
14IY32-18 <>	127	5529	2.4	20.3817	2.5	0.1542	2.9	0.0228	1.4	0.47	145.3	1.9	145.6	3.9	150.9	59.6	145.3	1.9
14IY32-14 <>	107	5290	1.5	19.4891	1.6	0.1622	3.2	0.0229	2.8	0.86	146.1	4.0	152.6	4.6	254.8	37.7	146.1	4.0
14IY32-1C <>	114	12262	1.6	19.8604	2.1	0.1593	5.6	0.0229	5.2	0.92	146.2	7.5	150.0	7.8	211.2	49.6	146.2	7.5
14IY32-34 <>	100	3989	2.6	20.4364	1.8	0.1553	2.1	0.0230	1.0	0.48	146.7	1.4	146.6	2.8	144.6	42.7	146.7	1.4
14IY32-2C <>	134	6310	1.5	20.3393	2.0	0.1565	2.9	0.0231	2.1	0.73	147.1	3.0	147.6	3.9	155.7	45.7	147.1	3.0
14IY32-19 <>	153	7252	2.4	20.3418	2.5	0.1572	3.6	0.0232	2.5	0.71	147.8	3.7	148.3	4.9	155.4	58.5	147.8	3.7
14IY32-28 <>	137	3833	2.0	20.9319	1.5	0.1529	5.3	0.0232	5.1	0.96	147.9	7.5	144.4	7.2	88.1	35.3	147.9	7.5
14IY32-35 <>	138	9088	1.6	20.2119	1.0	0.1584	1.8	0.0232	1.4	0.80	148.0	2.1	149.3	2.4	170.4	24.5	148.0	2.1
14IY32-26 <>	178	7368	2.7	20.2598	1.0	0.1582	2.3	0.0232	2.1	0.91	148.1	3.1	149.1	3.2	164.9	22.4	148.1	3.1
14IY32-1R <>	157	6201	2.7	20.1604	1.6	0.1594	2.3	0.0233	1.6	0.69	148.5	2.3	150.1	3.2	176.4	38.1	148.5	2.3
14IY32-9 <>	131	3342	2.8	21.1486	1.8	0.1523	2.9	0.0234	2.3	0.79	148.9	3.4	143.9	3.9	63.6	42.4	148.9	3.4
14IY32-11 <>	82	11987	2.7	19.0409	2.6	0.1696	2.8	0.0234	1.1	0.41	149.3	1.7	159.1	4.2	308.0	58.9	149.3	1.7
14IY32-21 <>	100	3647	2.4	13.8028	26.1	0.2347	26.5	0.0235	4.6	0.17	149.7	6.8	214.0	51.2	998.6	538.8	149.7	6.8
14IY32-23 <>	77	3143	2.3	21.0261	1.5	0.1543	2.8	0.0235	2.4	0.84	149.9	3.5	145.7	3.8	77.4	36.5	149.9	3.5
14IY32-29 <>	92	8658	2.3	19.7136	1.6	0.1648	2.4	0.0236	1.8	0.75	150.1	2.6	154.9	3.4	228.4	35.9	150.1	2.6
14IY32-32 <>	97	9381	2.8	19.6342	1.1	0.1656	2.4	0.0236	2.1	0.89	150.2	3.2	155.6	3.5	237.7	25.4	150.2	3.2
14IY32-13 <>	159	4611	2.5	20.8204	2.3	0.1563	2.7	0.0236	1.5	0.56	150.4	2.3	147.5	3.8	100.7	53.6	150.4	2.3
14IY32-2R <>	104	3829	2.4	20.3747	1.8	0.1598	2.7	0.0236	2.0	0.75	150.4	3.0	150.5	3.7	151.7	41.1	150.4	3.0
14IY32-3C <>	114	3264	1.6	21.0546	1.6	0.1551	2.1	0.0237	1.3	0.63	150.9	2.0	146.4	2.8	74.2	38.7	150.9	2.0
14IY32-8 <>	103	2309	2.2	21.1701	2.5	0.1544	3.2	0.0237	2.0	0.62	151.1	2.9	145.8	4.3	61.2	58.9	151.1	2.9
14IY32-31 <>	98	5486	2.3	20.0953	1.3	0.1627	1.7	0.0237	1.1	0.64	151.1	1.6	153.1	2.4	183.9	30.9	151.1	1.6
14IY32-25 <>	126	6905	2.6	19.9910	1.4	0.1642	1.8	0.0238	1.1	0.63	151.7	1.7	154.4	2.6	196.1	32.4	151.7	1.7

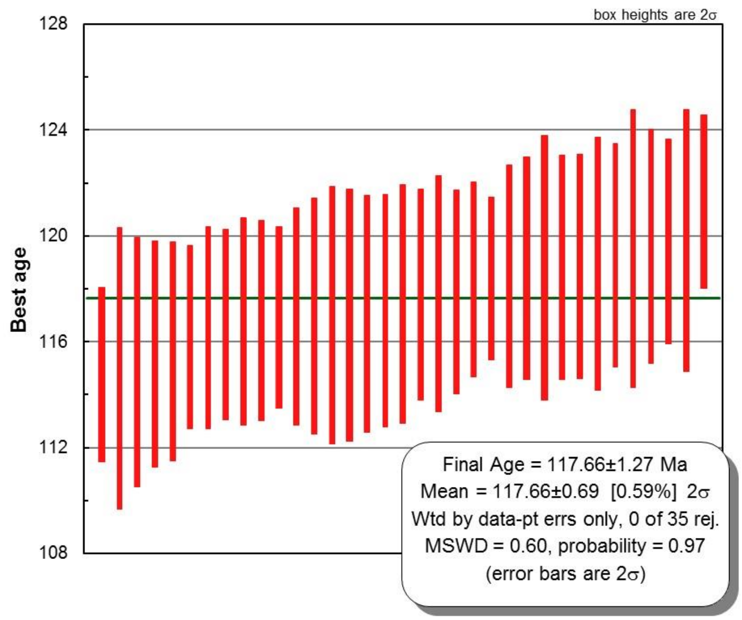
14IY32-6 <>	54	2681	2.4	20.2766	3.0	0.1619	3.6	0.0238	2.1	0.57	151.7	3.1	152.4	5.1	163.0	69.1	151.7	3.1
14IY32-10 <>	151	8730	2.6	20.2948	0.8	0.1620	1.1	0.0238	0.7	0.68	151.9	1.1	152.5	1.5	160.9	18.1	151.9	1.1
14IY32-3 <>	104	5918	2.3	20.3492	2.7	0.1620	3.3	0.0239	1.8	0.55	152.3	2.7	152.4	4.7	154.6	64.4	152.3	2.7
14IY32-17 <>	123	3829	2.5	20.8339	2.4	0.1585	2.8	0.0239	1.4	0.51	152.5	2.2	149.3	3.9	99.2	57.8	152.5	2.2
14IY32-20 <>	66	3439	2.7	19.9807	2.1	0.1665	4.1	0.0241	3.6	0.86	153.7	5.4	156.4	6.0	197.3	48.9	153.7	5.4
14IY32-22 <>	90	2917	1.0	14.7961	16.0	0.2263	16.2	0.0243	2.3	0.14	154.7	3.4	207.1	30.3	855.8	334.6	154.7	3.4
14IY32-7 <>	146	4781	2.3	20.1904	4.0	0.1660	5.2	0.0243	3.3	0.63	154.8	5.0	155.9	7.5	172.9	94.1	154.8	5.0
14IY32-36 <>	74	4740	2.4	19.6495	3.2	0.1707	3.9	0.0243	2.3	0.59	155.0	3.5	160.0	5.8	235.9	72.7	155.0	3.5
14IY32-12 <>	176	7163	2.6	20.1385	1.7	0.1684	1.8	0.0246	0.6	0.33	156.6	0.9	158.0	2.7	178.9	40.4	156.6	0.9
14IY32-37 <>	105	21772	2.3	19.7694	2.9	0.1716	3.1	0.0246	1.2	0.38	156.7	1.8	160.8	4.6	221.9	66.0	156.7	1.8
14IY32-4 <>	137	3520	2.5	20.7505	1.4	0.1643	2.6	0.0247	2.2	0.85	157.5	3.4	154.5	3.7	108.7	32.1	157.5	3.4
14IY32-5 <>	108	4887	2.3	20.1527	3.9	0.1695	4.2	0.0248	1.4	0.33	157.7	2.1	159.0	6.1	177.3	91.4	157.7	2.1
14IY32-33 <>	121	3859	1.9	13.7840	42.7	0.2488	43.2	0.0249	6.6	0.15	158.4	10.3	225.6	87.6	1001.3	908.9	158.4	10.3
14IY36-10 <>	233	10829	3.0	20.3563	0.6	0.1652	2.1	0.0244	2.0	0.96	155.3	3.1	155.2	3.1	153.8	14.1	155.3	3.1
14IY36-11 <>	59	3603	1.9	20.4871	2.4	0.1629	2.7	0.0242	1.2	0.44	154.2	1.8	153.3	3.9	138.7	57.5	154.2	1.8
14IY36-12 <>	66	3723	3.5	20.9491	2.6	0.1572	3.0	0.0239	1.5	0.51	152.2	2.3	148.2	4.1	86.2	61.1	152.2	2.3
14IY36-13 <>	40	2132	3.4	21.5019	2.9	0.1525	3.3	0.0238	1.6	0.48	151.5	2.4	144.1	4.4	24.0	68.6	151.5	2.4
14IY36-14 <>	800	43287	3.2	20.2135	0.8	0.1713	2.3	0.0251	2.2	0.95	159.8	3.5	160.5	3.5	170.2	17.6	159.8	3.5
14IY36-15 <>	81	6412	3.5	20.5811	1.5	0.1616	3.3	0.0241	3.0	0.90	153.7	4.6	152.1	4.7	128.0	34.7	153.7	4.6
14IY36-16 <>	71	5367	3.6	20.8779	1.5	0.1605	2.3	0.0243	1.7	0.75	154.8	2.7	151.1	3.2	94.2	35.9	154.8	2.7
14IY36-17 <>	543	14487	3.6	20.4681	0.9	0.1659	2.0	0.0246	1.7	0.88	156.9	2.7	155.9	2.8	141.0	21.5	156.9	2.7
14IY36-18 <>	360	9177	3.1	20.7046	0.5	0.1650	1.9	0.0248	1.8	0.96	157.8	2.8	155.1	2.7	113.9	12.2	157.8	2.8
14IY36-19 <>	87	3863	3.3	21.0678	1.6	0.1606	2.5	0.0245	1.9	0.75	156.3	2.9	151.2	3.5	72.7	39.1	156.3	2.9
14IY36-1C <>	59	5048	2.1	20.2042	1.2	0.1696	2.2	0.0248	1.8	0.84	158.2	2.9	159.0	3.2	171.3	27.6	158.2	2.9
14IY36-1R <>	116	4069	4.0	21.1755	1.2	0.1625	1.6	0.0250	1.0	0.65	158.9	1.6	152.9	2.2	60.6	28.7	158.9	1.6
14IY36-2 <>	81	2647	3.6	21.9443	1.8	0.1528	2.2	0.0243	1.2	0.55	154.9	1.8	144.4	2.9	-25.1	43.6	154.9	1.8
14IY36-20 <>	86	6625	3.4	20.4893	1.4	0.1654	1.8	0.0246	1.2	0.67	156.5	1.9	155.4	2.7	138.5	32.2	156.5	1.9
14IY36-21 <>	60	2512	3.0	21.5100	1.8	0.1565	2.3	0.0244	1.4	0.60	155.5	2.1	147.7	3.1	23.1	43.5	155.5	2.1
14IY36-22 <>	104	5994	3.8	20.4887	1.3	0.1657	2.1	0.0246	1.7	0.80	156.8	2.6	155.6	3.1	138.6	30.2	156.8	2.6
14IY36-23 <>	286	20190	3.3	20.2401	0.7	0.1716	2.4	0.0252	2.3	0.96	160.4	3.7	160.8	3.6	167.2	15.4	160.4	3.7
14IY36-24 <>	75	3829	3.2	20.4796	3.0	0.1664	3.4	0.0247	1.6	0.47	157.4	2.5	156.3	5.0	139.6	71.4	157.4	2.5
14IY36-25 <>	689	21897	2.3	20.3022	0.6	0.1634	1.2	0.0241	1.1	0.89	153.3	1.6	153.7	1.7	160.0	12.9	153.3	1.6
14IY36-26 <>	120	3829	3.7	20.9564	1.6	0.1620	2.2	0.0246	1.5	0.69	156.8	2.4	152.5	3.1	85.3	37.6	156.8	2.4
14IY36-27 <>	76	2398	3.5	21.2164	2.4	0.1611	3.1	0.0248	2.0	0.64	157.9	3.1	151.7	4.4	56.0	56.4	157.9	3.1
14IY36-28 <>	926	24841	2.4	20.3154	0.6	0.1703	2.1	0.0251	2.0	0.96	159.8	3.2	159.7	3.1	158.5	13.4	159.8	3.2
14IY36-29 <>	51	1291	3.2	23.2067	1.9	0.1463	2.6	0.0246	1.7	0.67	156.8	2.6	138.6	3.3	-162.3	47.6	156.8	2.6
14IY36-3 <>	605	19598	2.3	20.2653	0.7	0.1717	2.7	0.0252	2.6	0.97	160.6	4.2	160.9	4.0	164.3	15.4	160.6	4.2
14IY36-30 <>	64	5012	3.2	20.1040	2.2	0.1652	2.9	0.0241	1.8	0.63	153.4	2.7	155.2	4.1	182.9	52.2	153.4	2.7
14IY36-31 <>	76	3538	3.2	21.3855	1.6	0.1568	2.0	0.0243	1.2	0.59	154.9	1.8	147.9	2.7	37.0	38.1	154.9	1.8
14IY36-32 <>	189	5097	4.6	20.9792	1.2	0.1614	1.8	0.0246	1.4	0.76	156.4	2.2	151.9	2.6	82.7	28.2	156.4	2.2
14IY36-33 <>	180	6556	4.1	20.6400	0.9	0.1620	1.7	0.0243	1.5	0.86	154.5	2.3	152.5	2.5	121.3	21.3	154.5	2.3
14IY36-34 <>	227	28636	2.8	20.1047	0.7	0.1659	1.9	0.0242	1.8	0.92	154.1	2.7	155.9	2.8	182.8	17.0	154.1	2.7
14IY36-4C <>	66	3059	2.1	21.0936	2.5	0.1623	2.8	0.0248	1.3	0.45	158.1	2.0	152.7	4.0	69.8	59.7	158.1	2.0
14IY36-4R <>	55	2995	3.1	20.6548	2.7	0.1650	2.7	0.0247	0.6	0.22	157.4	0.9	155.1	4.0	119.6	63.2	157.4	0.9
14IY36-5 <>	63	2311	3.2	21.7158	1.8	0.1571	2.4	0.0247	1.6	0.67	157.6	2.6	148.2	3.4	0.2	43.6	157.6	2.6
14IY36-6 <>	65	3567	2.1	20.8762	2.3	0.1600	3.0	0.0242	1.8	0.62	154.3	2.8	150.7	4.1	94.4	54.6	154.3	2.8
14IY36-7 <>	169	7999	3.6	20.6415	1.5	0.1661	2.3	0.0249	1.8	0.77	158.4	2.8	156.1	3.3	121.1	34.6	158.4	2.8
14IY36-8 <>	60	6741	2.9	19.7322	2.7	0.1761	2.9	0.0252	1.3	0.43	160.4	2.0	164.7	4.5	226.2	61.5	160.4	2.0
14IY36-9 <>	66	2220	3.3	21.8874	1.7	0.1507	2.4	0.0239	1.7	0.71	152.4	2.6	142.5	3.2	-18.8	40.7	152.4	2.6
14IY38-17 <>	42	1858	5.4	19.2489	3.4	0.1443	4.2	0.0201	2.6	0.61	128.6	3.3	136.9	5.4	283.3	77.3	128.6	3.3
14IY38-10 <>	43	1209	2.7	21.8859	4.5	0.1282	4.9	0.0204	1.8	0.38	129.9	2.4	122.5	5.6	-18.6	109.0	129.9	2.4
14IY38-25 <>	63	2570	3.0	20.4835	3.2	0.1374	3.9	0.0204	2.2	0.56	130.3	2.8	130.8	4.8	139.2	75.3	130.3	2.8
14IY38-21 <>	61	3464	3.1	19.1689	1.2	0.1474	3.1	0.0205	2.9	0.93	130.8	3.8	139.6	4.1	292.8	26.7	130.8	3.8
14IY38-22 <>	153	4824	1.6	20.8597	1.9	0.1361	2.3	0.0206	1.4	0.60	131.3	1.8	129.5	2.8	96.3	44.2	131.3	1.8
14IY38-12 <>	30	607	2.5	25.4642	5.2	0.1127	5.5	0.0208	1.9	0.34	132.8	2.5	108.4	5.7	-398.7	135.3	132.8	2.5
14IY38-27 <>	125	5999	1.9	20.2971	2.6	0.1414	3.0	0.0208	1.6	0.53	132.8	2.1	134.3	3.8	160.6	60.0	132.8	2.1
14IY38-13 <>	76	6974	2.0	20.1544	1.5	0.1426	2.5	0.0208	2.0	0.79	133.0	2.6	135.4	3.2	177.1	35.5	133.0	2.6
14IY38-6 <>	39	1760	2.5	20.2530	4.2	0.1420	4.9	0.0209	2.5	0.52	133.0	3.3	134.8	6.2	165.7	98.1	133.0	3.3
14IY38-1 <>	96	4098	1.7	20.3513	2.3	0.1414	3.1	0.0209	2.1	0.67	133.1	2.7	134.2	3.9	154.3	54.1	133.1	2.7
14IY38-19 <>	184	7810	1.6	20.3980	0.9	0.1416	1.7	0.0209	1.5	0.85	133.7	1.9	134.5	2.2	149.0	21.4	133.7	1.9
14IY38-8 <>	39	1909	2.3	20.5305	4.5	0.1408	5.3	0.0210	2.9	0.54	133.8	3.8	133.8	6.7	133.8	104.9	133.8	3.8
14IY38-28 <>	42	3653	2.3	19.9255	3.0	0.1456	3.4	0.0210	1.5	0.45	134.2	2.0	138.0	4.4	203.6	69.8	134.2	2.0

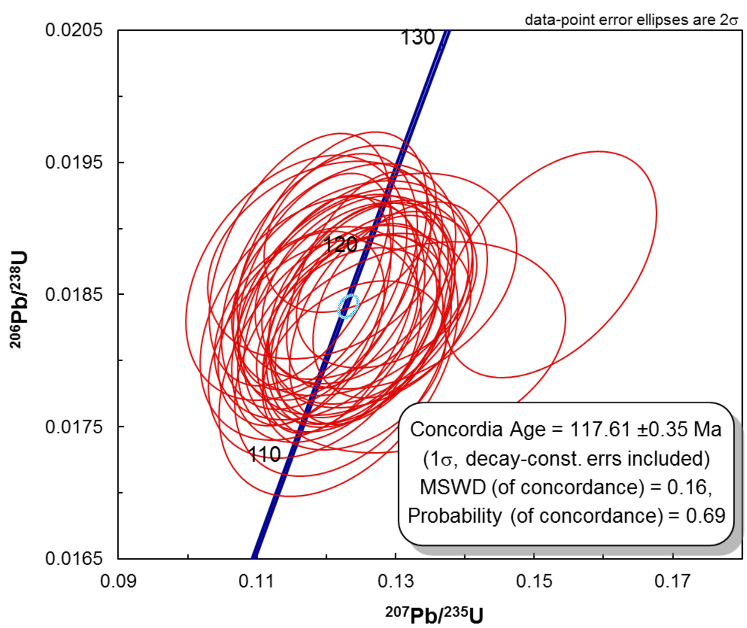
14IY38-5 <>	104	4392	1.7	20.4863	1.9	0.1416	2.4	0.0210	1.5	0.62	134.2	2.0	134.5	3.1	138.9	44.8	134.2	2.0
14IY38-24 <>	126	5534	2.6	20.6450	1.2	0.1406	2.4	0.0211	2.0	0.86	134.3	2.7	133.6	3.0	120.7	29.0	134.3	2.7
14IY38-2 <>	48	2542	2.5	19.6450	4.3	0.1478	4.5	0.0211	1.0	0.22	134.3	1.3	139.9	5.8	236.5	100.3	134.3	1.3
14IY38-18 <>	152	10107	3.5	20.1256	2.3	0.1448	2.7	0.0211	1.5	0.55	134.8	2.0	137.3	3.5	180.4	53.2	134.8	2.0
14IY38-14 <>	158	12483	1.7	20.3553	1.4	0.1432	2.3	0.0211	1.7	0.77	134.8	2.3	135.9	2.9	153.9	33.4	134.8	2.3
14IY38-9 <>	128	3932	1.9	20.8741	1.4	0.1402	3.0	0.0212	2.7	0.89	135.4	3.6	133.2	3.8	94.7	33.0	135.4	3.6
14IY38-11 <>	83	3691	1.8	20.5165	2.4	0.1427	3.1	0.0212	2.0	0.65	135.5	2.7	135.5	3.9	135.4	55.5	135.5	2.7
14IY38-16 <>	135	26726	1.9	19.6453	1.9	0.1492	2.5	0.0213	1.6	0.65	135.6	2.2	141.2	3.3	236.4	44.0	135.6	2.2
14IY38-26 <>	36	1022	2.9	24.2652	4.3	0.1208	5.0	0.0213	2.5	0.51	135.6	3.4	115.8	5.5	-274.5	109.2	135.6	3.4
14IY38-15 <>	43	1475	2.9	20.6268	6.3	0.1425	6.4	0.0213	1.1	0.18	136.0	1.5	135.3	8.1	122.8	148.6	136.0	1.5
14IY38-3 <>	62	3946	1.7	20.7652	3.2	0.1430	3.9	0.0215	2.3	0.58	137.3	3.1	135.7	5.0	107.0	75.7	137.3	3.1
14IY38-4 <>	110	5621	1.6	20.3912	2.1	0.1457	2.3	0.0215	1.1	0.46	137.4	1.5	138.1	3.0	149.8	48.9	137.4	1.5
14IY38-20 <>	181	13431	2.2	20.2206	1.3	0.1487	1.7	0.0218	1.1	0.62	139.0	1.5	140.7	2.2	169.4	31.0	139.0	1.5
14IY38-7 <>	50	5975	2.4	19.4024	5.2	0.1558	5.2	0.0219	0.3	0.05	139.8	0.3	147.0	7.1	265.1	119.3	139.8	0.3
14IY44-12 <>	139	2881	1.4	21.8688	1.4	0.1137	6.5	0.0180	6.3	0.98	115.2	7.2	109.3	6.7	-16.7	33.2	115.2	7.2
14IY44-8C <>	35	983	1.8	24.0062	2.9	0.1047	6.8	0.0182	6.1	0.90	116.5	7.0	101.1	6.5	-247.3	74.1	116.5	7.0
14IY44-16R <>	89	2580	1.7	17.9476	12.9	0.1426	15.6	0.0186	8.7	0.56	118.5	10.2	135.3	19.7	441.1	288.3	118.5	10.2
14IY44-19 <>	24	885	2.1	22.6552	2.7	0.1142	3.2	0.0188	1.8	0.57	119.8	2.2	109.8	3.4	-102.9	65.2	119.8	2.2
14IY44-7C <>	62	2185	1.4	21.2259	1.9	0.1219	2.4	0.0188	1.5	0.61	119.9	1.8	116.8	2.7	54.9	45.3	119.9	1.8
14IY44-8R <>	33	940	1.9	23.7101	3.7	0.1094	4.2	0.0188	2.1	0.49	120.1	2.5	105.4	4.2	-216.0	92.4	120.1	2.5
14IY44-1 <>	37	1026	1.7	23.8247	2.2	0.1089	4.3	0.0188	3.7	0.86	120.1	4.4	104.9	4.3	-228.1	55.1	120.1	4.4
14IY44-6 <>	36	1516	2.6	21.8860	4.7	0.1197	4.8	0.0190	1.1	0.23	121.3	1.3	114.8	5.3	-18.6	114.3	121.3	1.3
14IY44-9 <>	60	1746	1.7	20.4982	1.8	0.1279	2.6	0.0190	1.9	0.73	121.4	2.3	122.2	3.0	137.5	41.4	121.4	2.3
14IY44-20 <>	78	2618	1.2	21.3217	1.7	0.1236	2.5	0.0191	1.8	0.73	122.1	2.2	118.3	2.8	44.2	41.8	122.1	2.2
14IY44-7R <>	99	4037	1.9	20.6372	1.4	0.1284	3.5	0.0192	3.2	0.91	122.7	3.9	122.6	4.0	121.6	33.8	122.7	3.9
14IY44-15 <>	61	1974	1.5	21.8976	1.8	0.1211	2.8	0.0192	2.2	0.78	122.8	2.7	116.1	3.1	-19.9	42.5	122.8	2.7
14IY44-18 <>	41	1212	2.1	23.2266	2.2	0.1142	3.5	0.0192	2.6	0.76	122.9	3.2	109.8	3.6	-164.5	55.6	122.9	3.2
14IY44-17 <>	75	2422	1.2	22.2750	1.8	0.1194	2.4	0.0193	1.6	0.68	123.1	2.0	114.5	2.6	-61.4	43.2	123.1	2.0
14IY44-3 <>	53	1630	1.1	20.6640	5.2	0.1290	5.7	0.0193	2.3	0.40	123.5	2.8	123.2	6.6	118.6	122.6	123.5	2.8
14IY44-4 <>	50	1146	1.4	23.5910	2.1	0.1135	2.5	0.0194	1.4	0.55	124.0	1.7	109.2	2.6	-203.3	52.6	124.0	1.7
14IY44-11 <>	78	1897	1.6	22.4390	3.1	0.1200	3.5	0.0195	1.6	0.47	124.6	2.0	115.0	3.8	-79.3	76.3	124.6	2.0
14IY44-13C <>	103	3290	1.4	21.1552	1.4	0.1274	2.3	0.0195	1.8	0.79	124.8	2.2	121.7	2.6	62.9	33.1	124.8	2.2
14IY44-10 <>	270	6761	0.9	20.8044	0.7	0.1297	2.1	0.0196	2.0	0.94	124.9	2.4	123.8	2.4	102.6	16.7	124.9	2.4
14IY44-14 <>	235	7428	0.9	21.0038	0.7	0.1286	2.7	0.0196	2.6	0.97	125.0	3.3	122.8	3.1	79.9	16.1	125.0	3.3
14IY44-5 <>	74	2075	1.6	22.0660	1.5	0.1225	3.4	0.0196	3.1	0.90	125.1	3.8	117.3	3.8	-38.5	35.6	125.1	3.8
14IY44-2 <>	45	1321	1.4	22.4912	3.2	0.1209	3.5	0.0197	1.3	0.39	125.9	1.7	115.9	3.8	-85.0	78.2	125.9	1.7
14IY44-13 <>	48	1933	1.7	21.4012	2.3	0.1290	3.2	0.0200	2.2	0.69	127.8	2.8	123.2	3.7	35.2	55.1	127.8	2.8



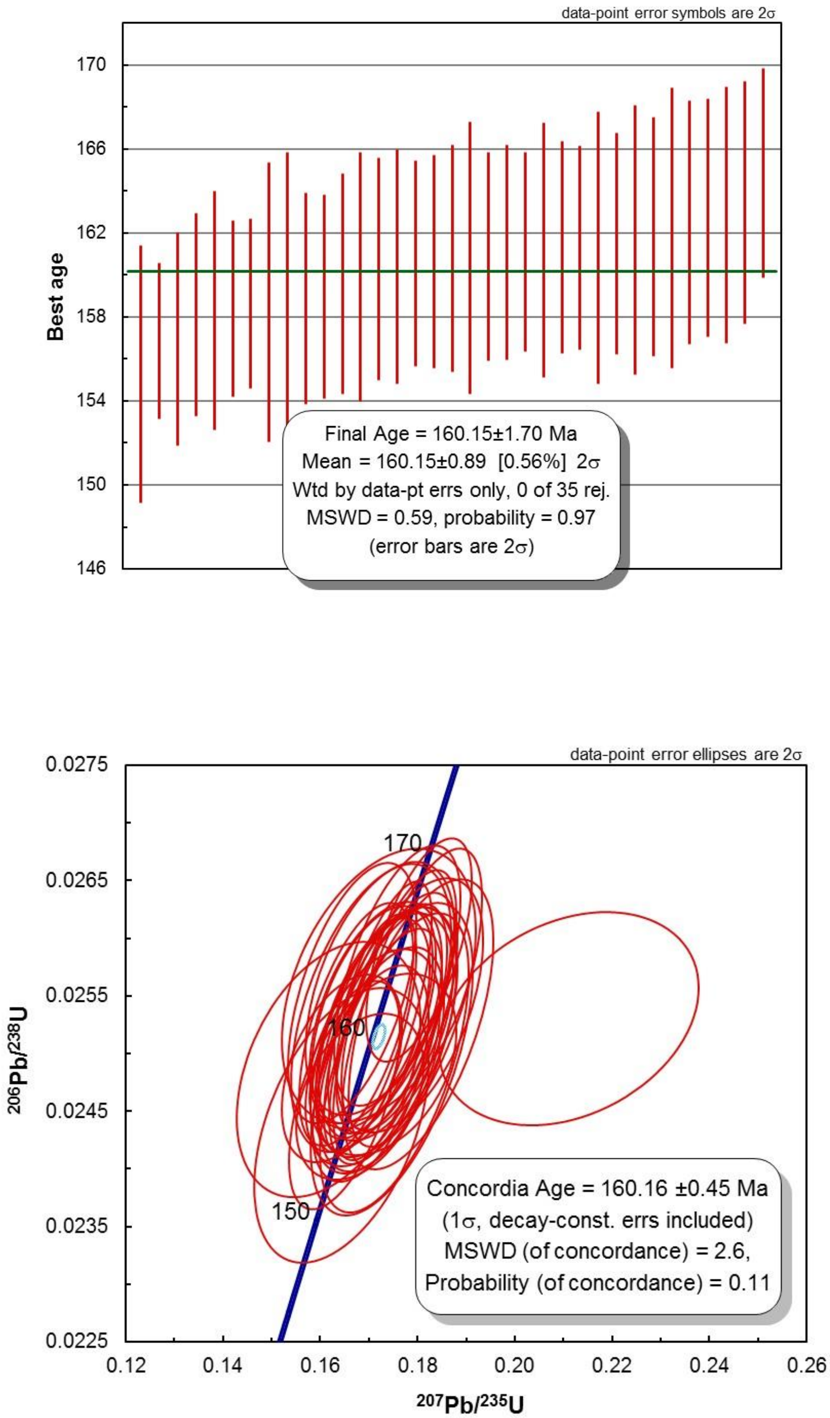


Weighted mean and Concordia plot for 15KS78

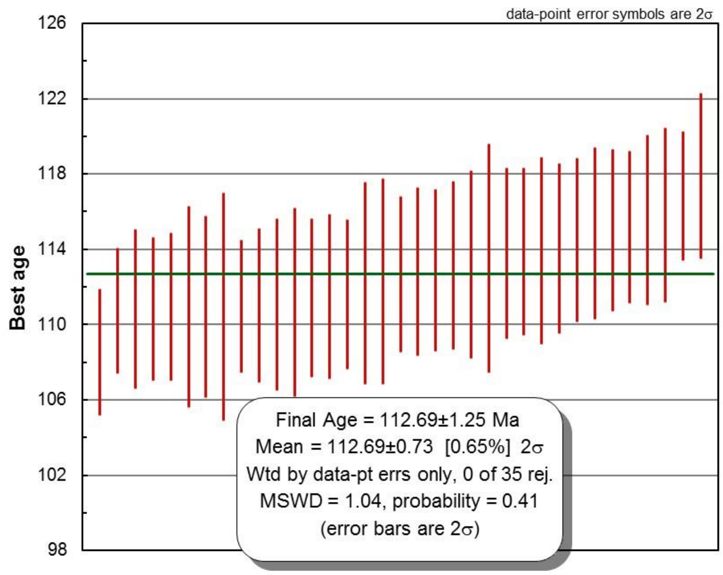


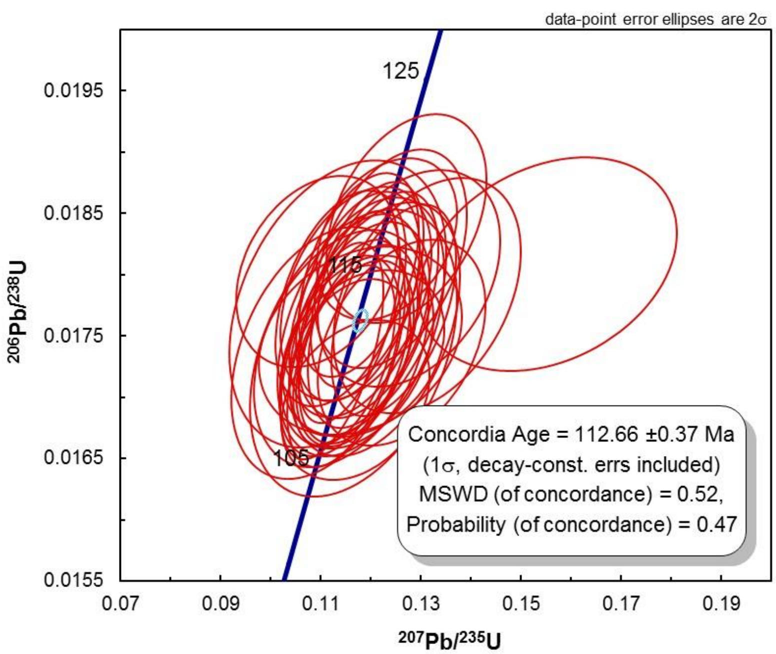


Weighted mean and Concordia plot for 15KS82

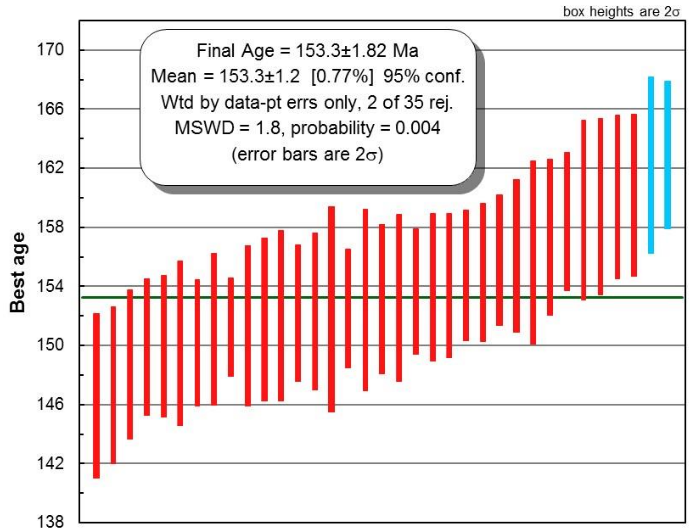


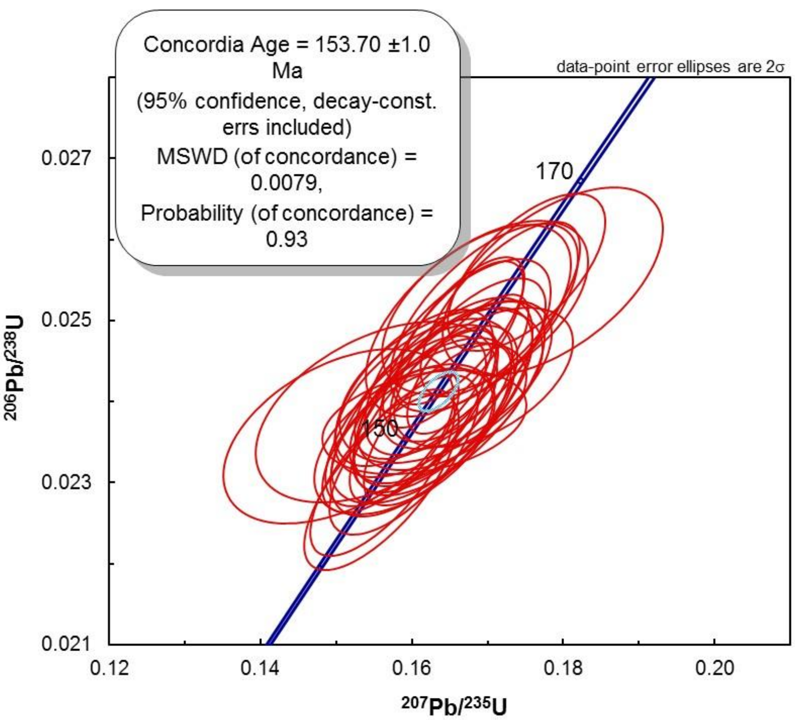
Weighted mean and Concordia plot for 15KN06



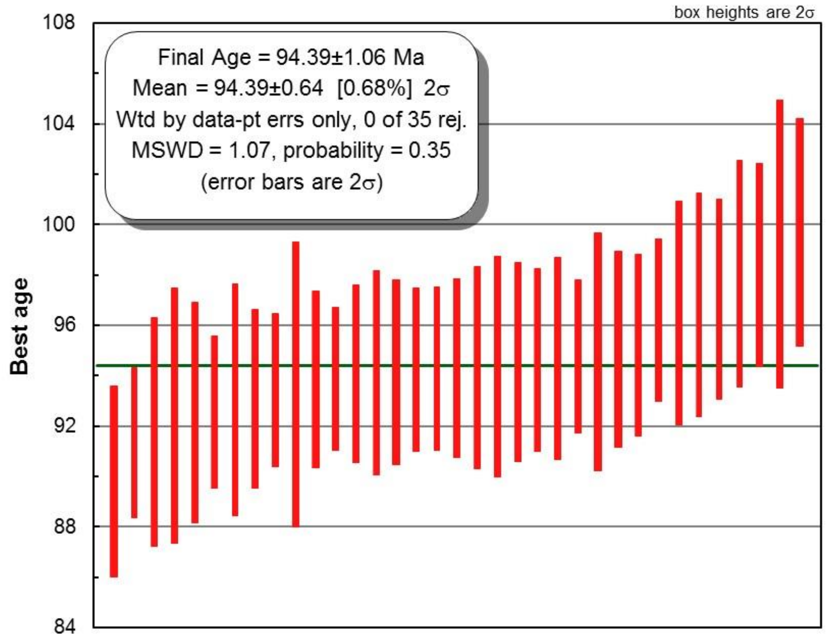


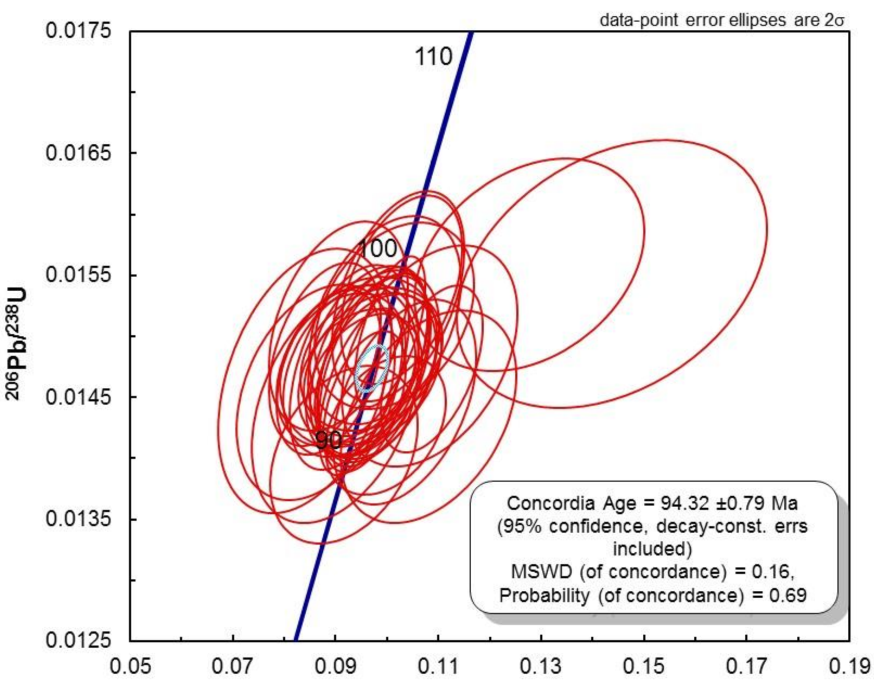
Weighted mean and Concordia plot for 15KS81



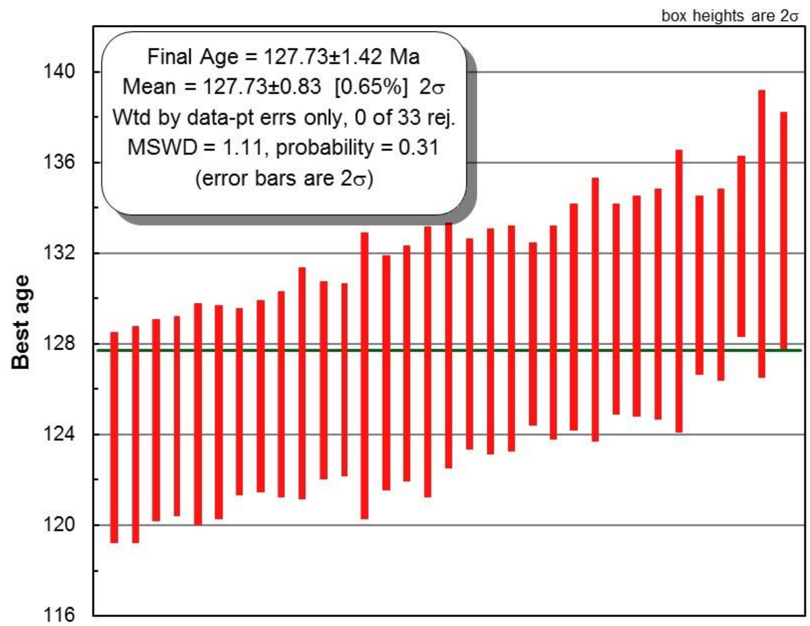


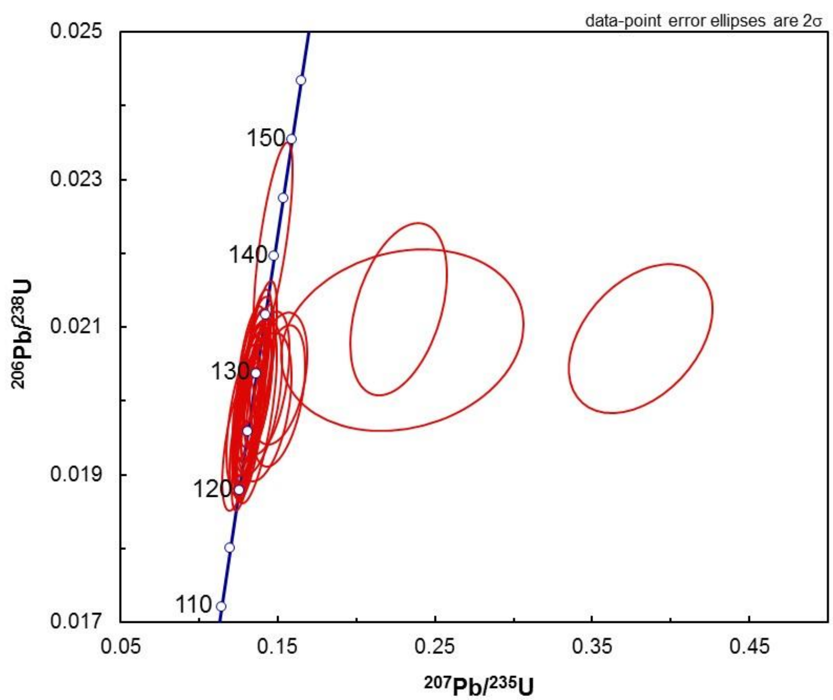
Weighted mean and Concordia plot for 15KS83



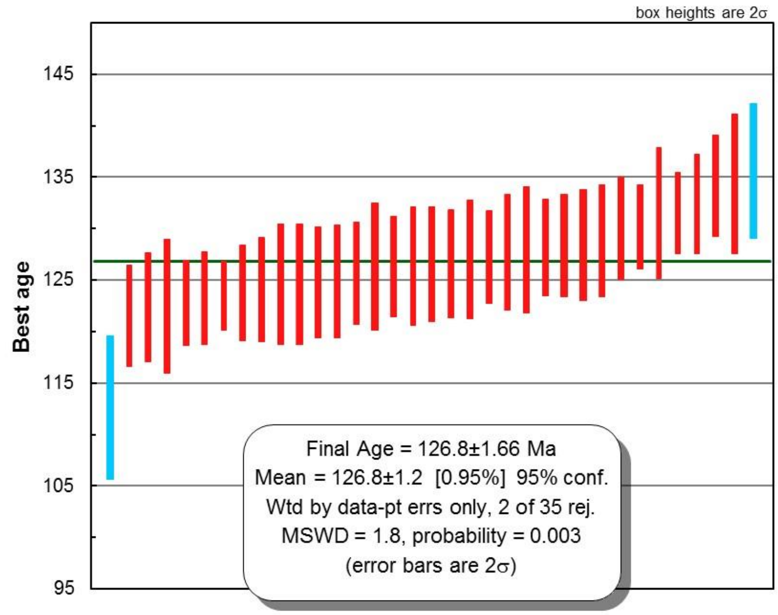


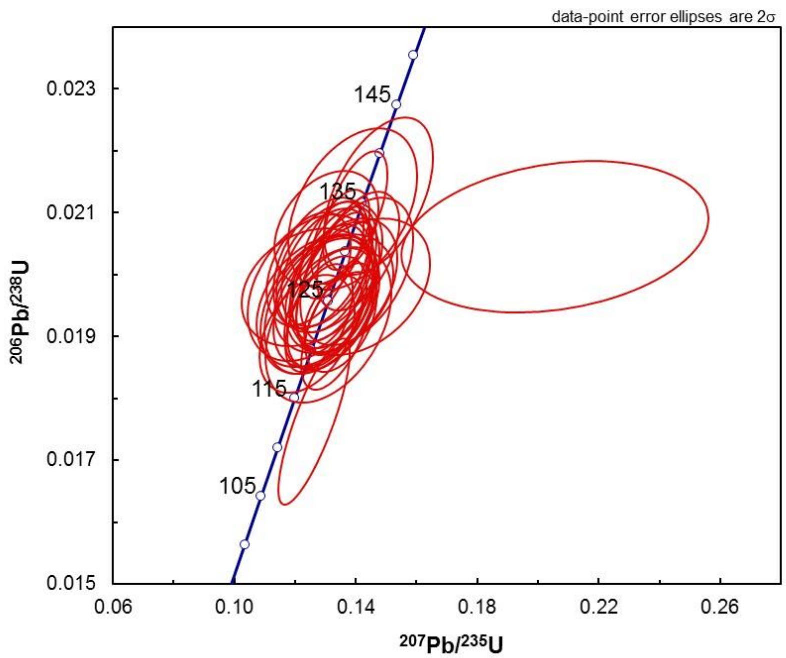
Weighted mean and Concordia plot for 15KS79



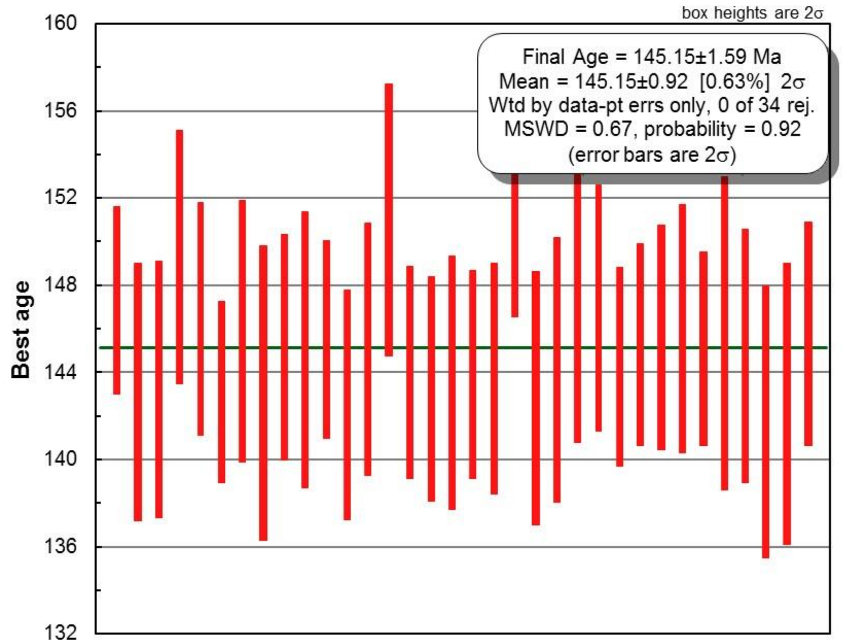


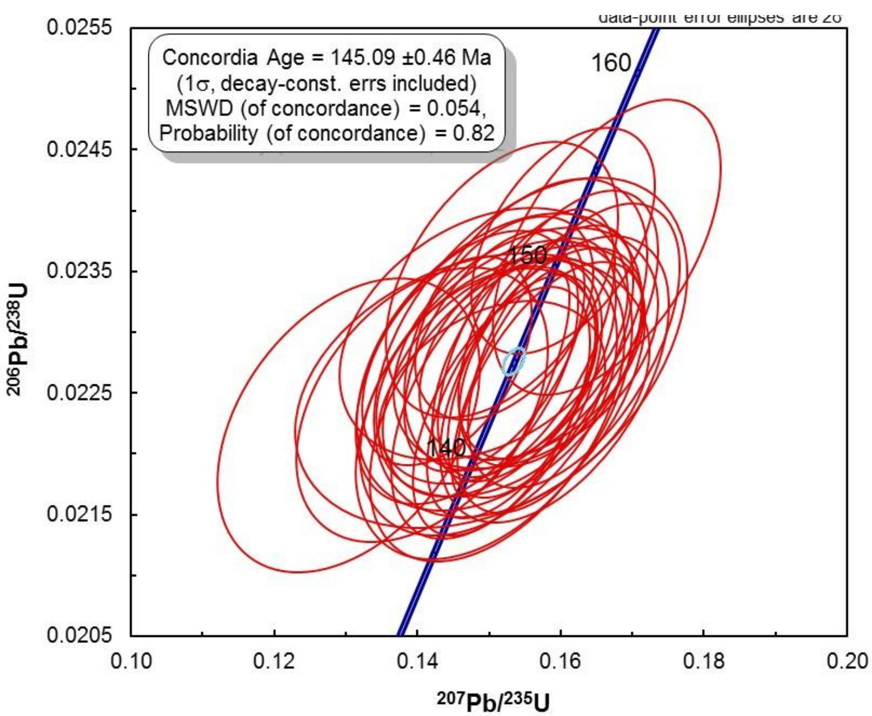
Weighted mean and Concordia plot for 15KN13



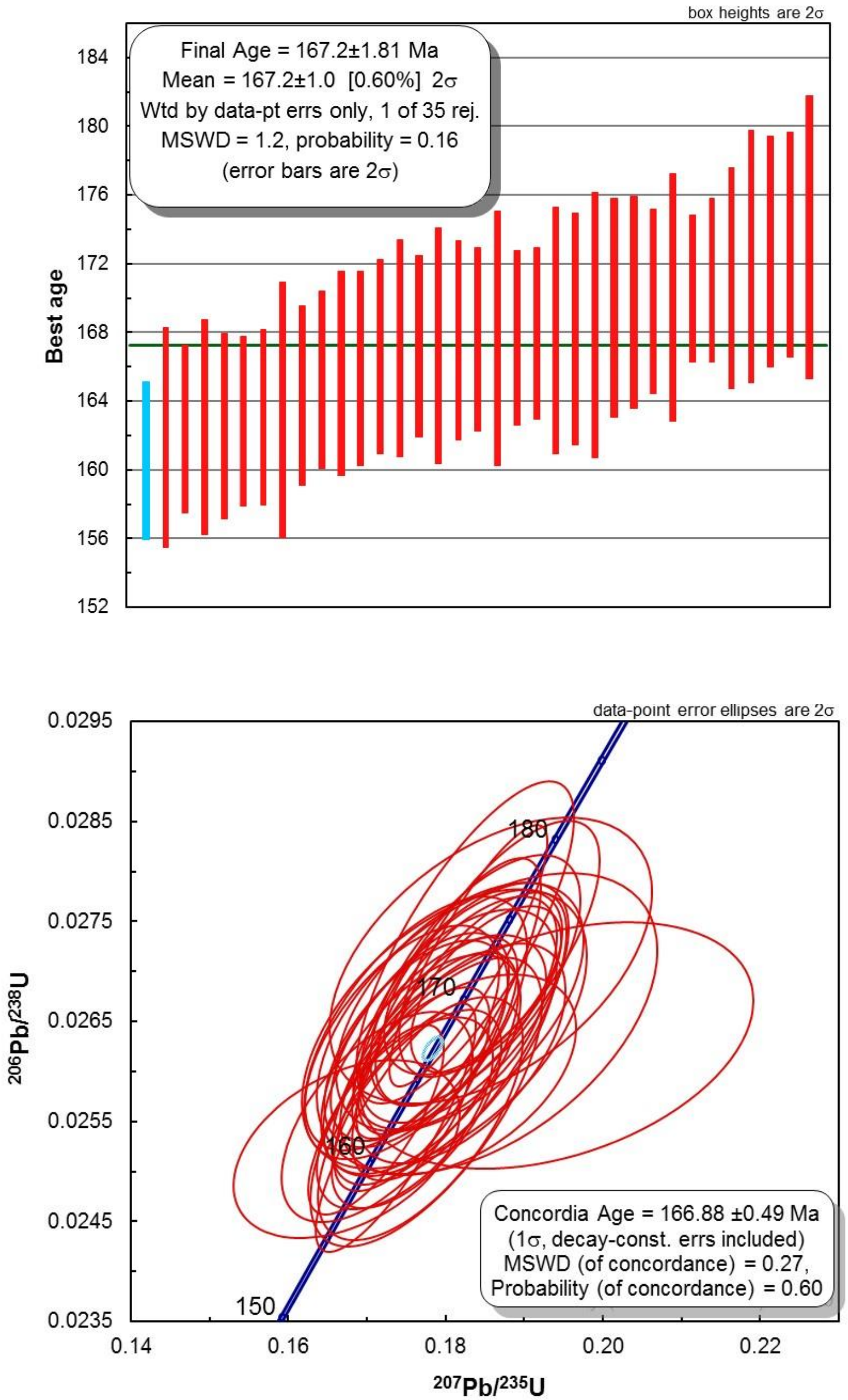


Weighted mean and Concordia plot for 15KN90

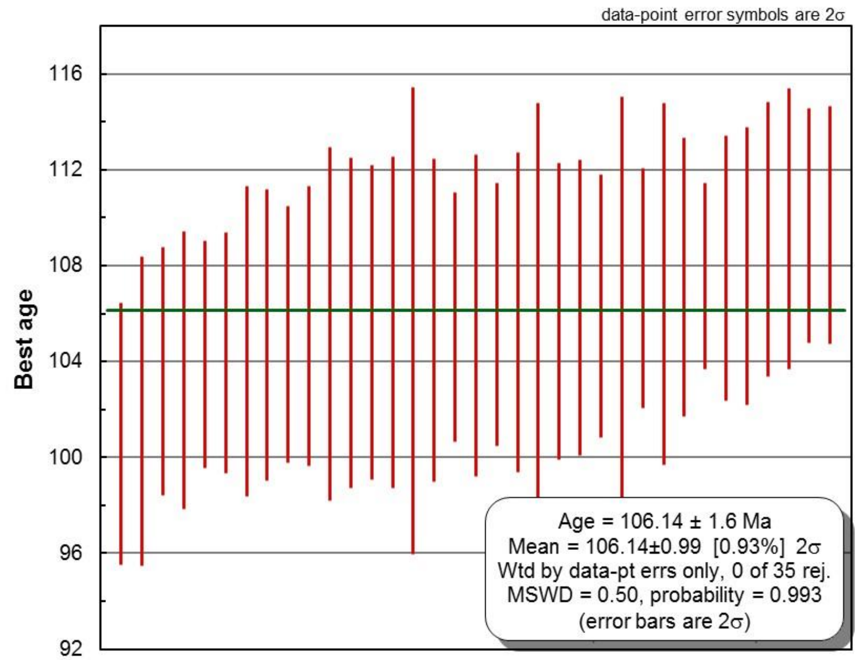


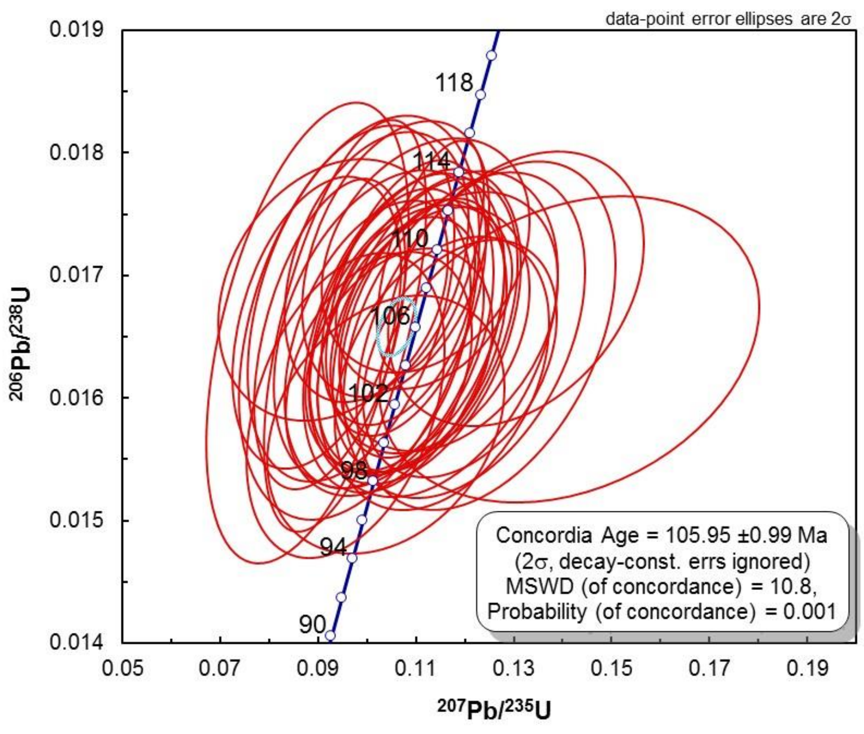


Weighted mean and Concordia plot for 15KS64

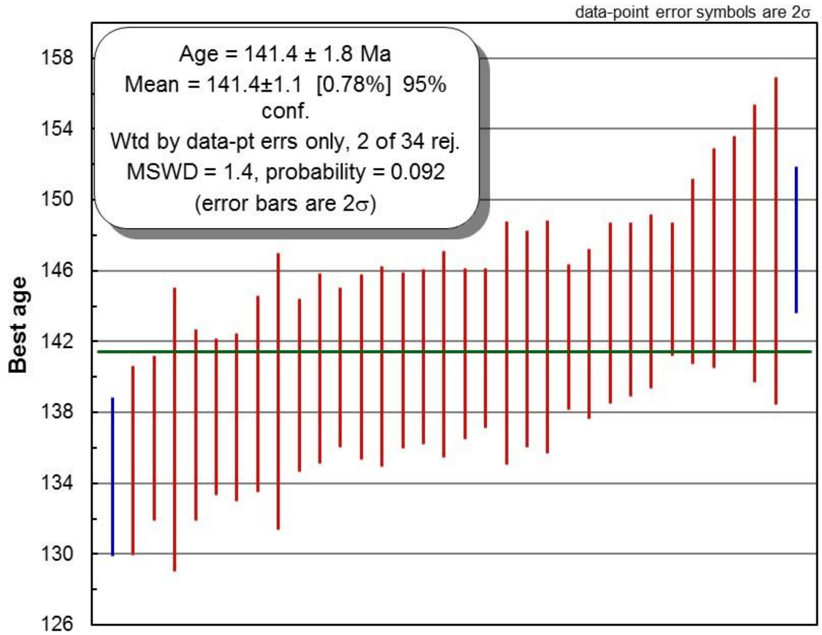


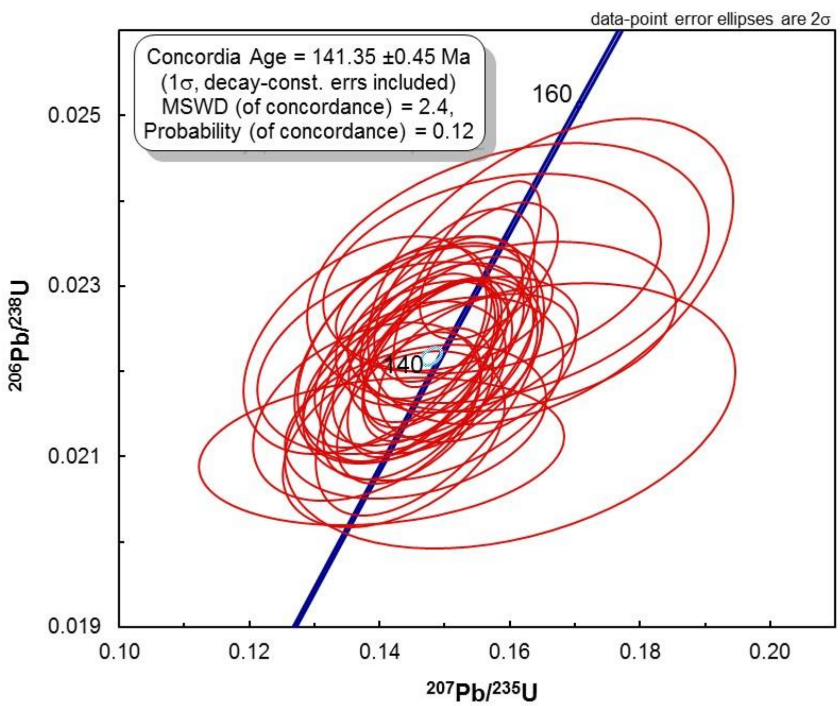
Weighted mean and Concordia plot for 15KN03



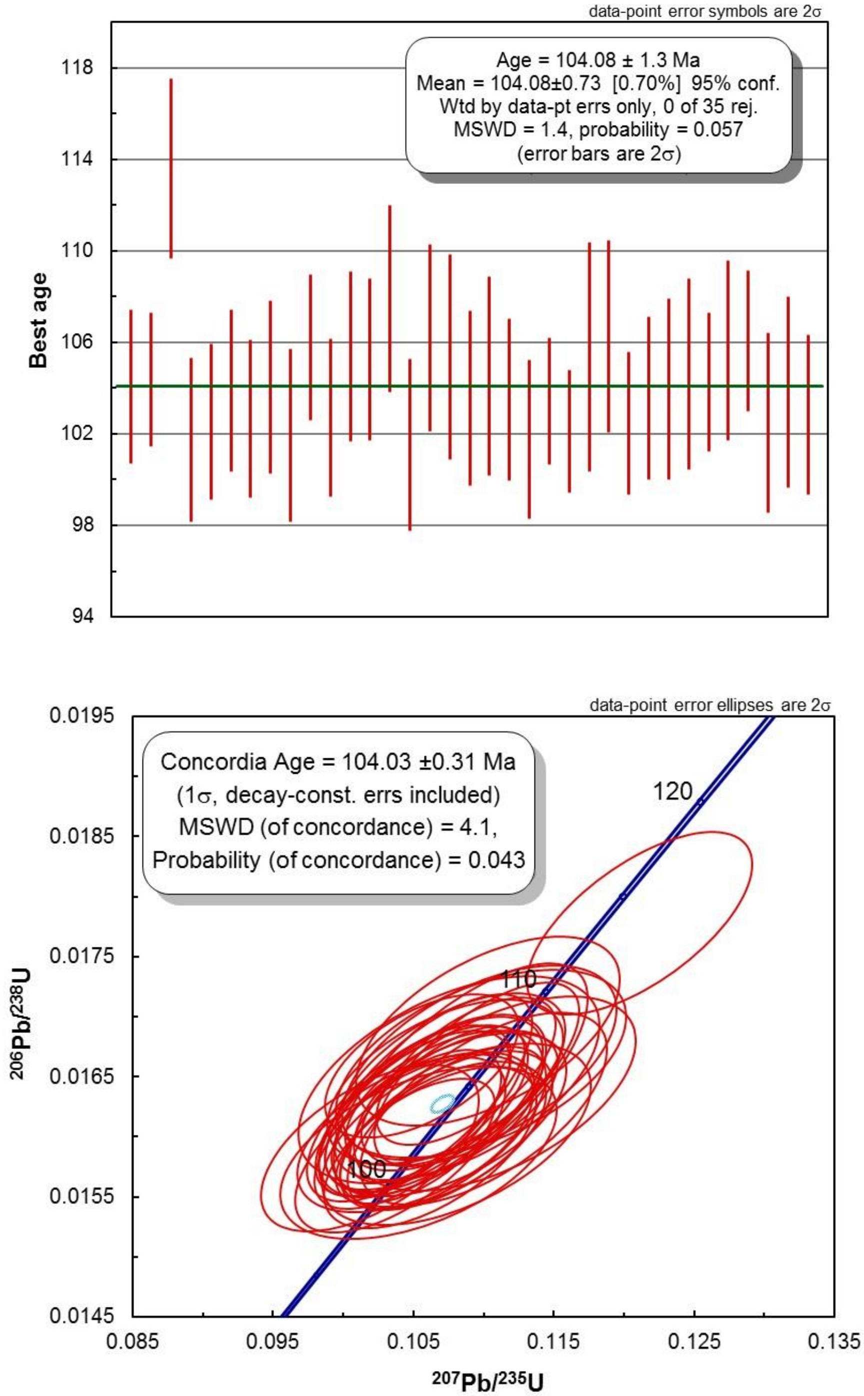


Weighted mean and Concordia plot for 15KN30

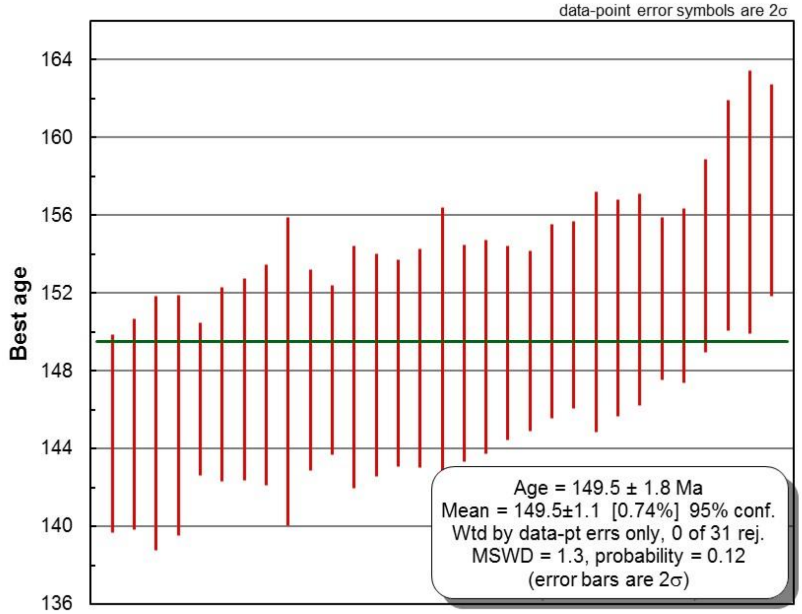


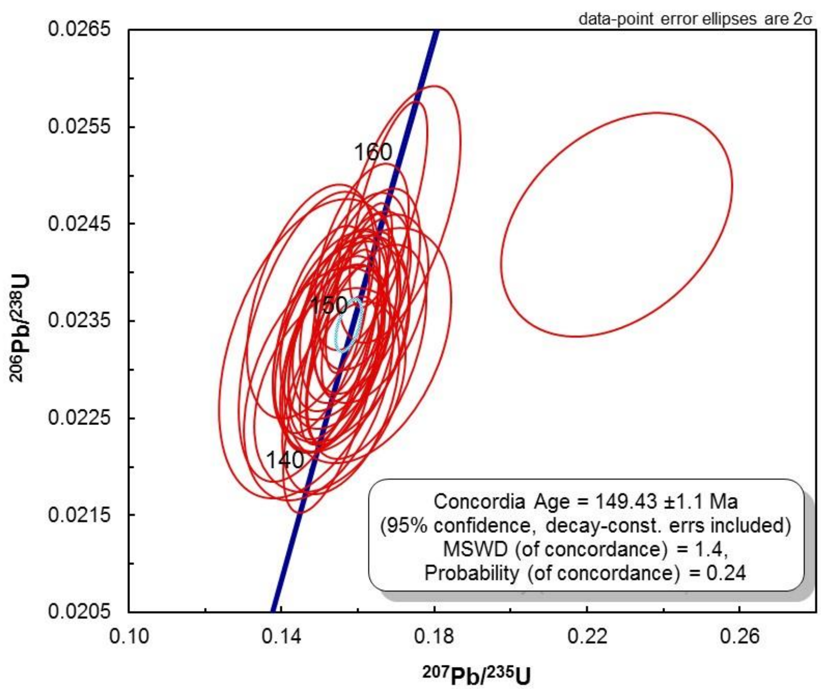


Weighted mean and Concordia plot for 15KS58

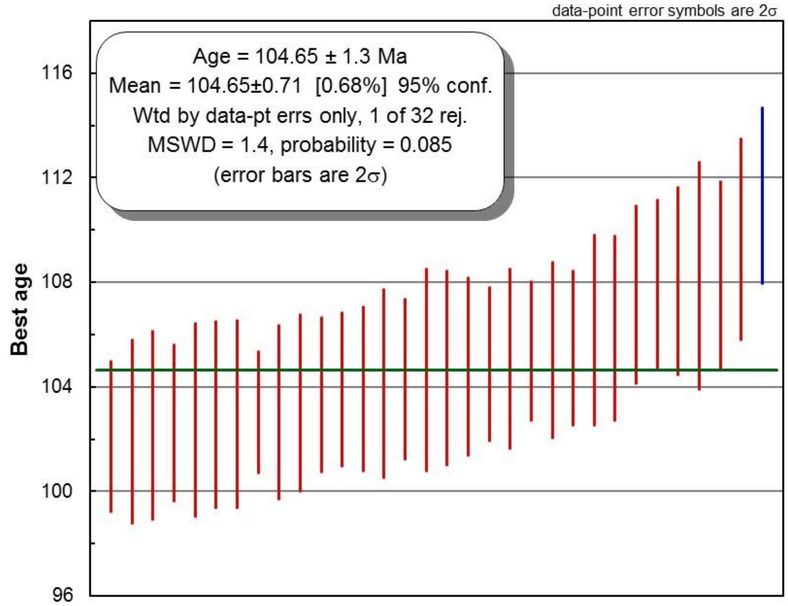


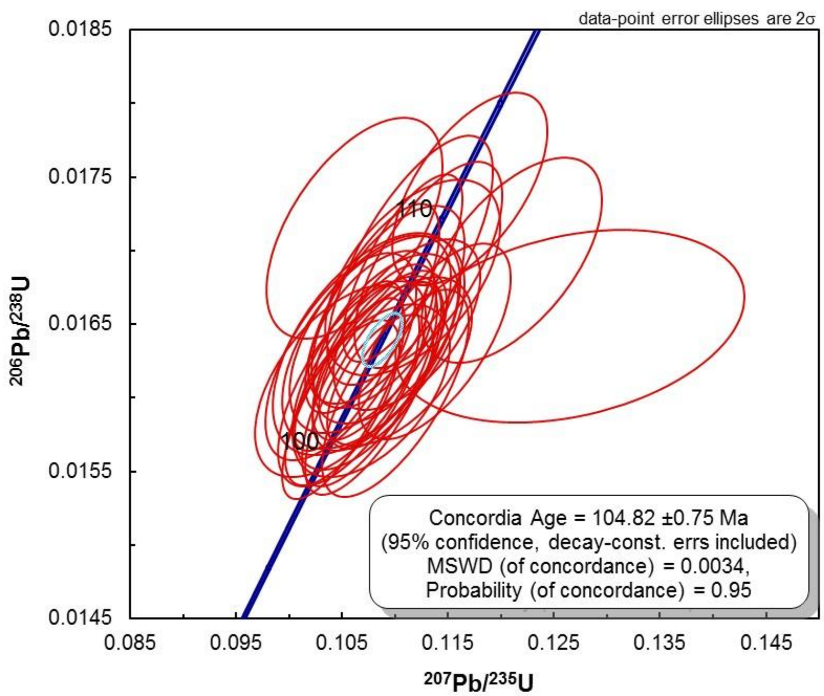
Weighted mean and Concordia plot for 15KN38A



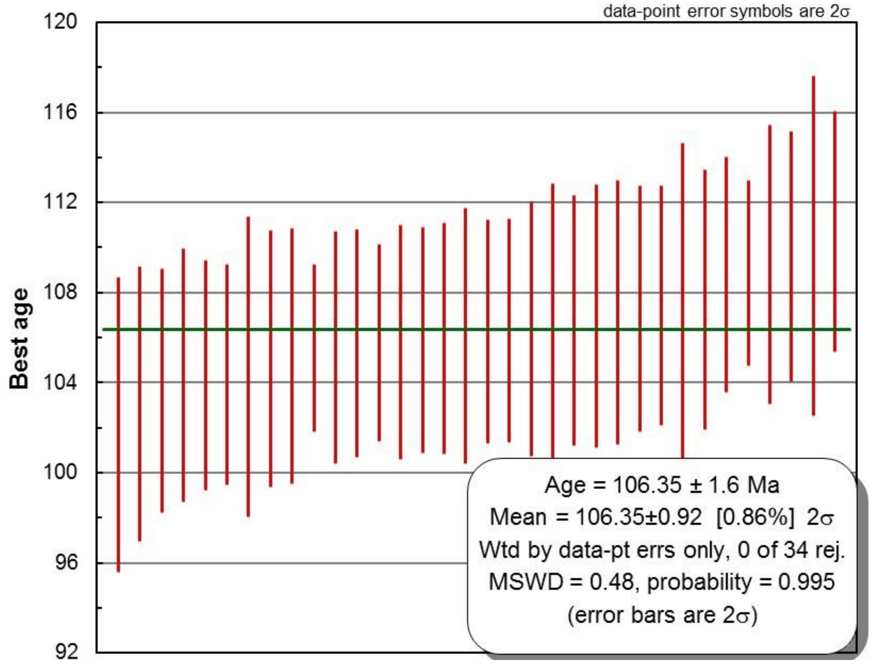


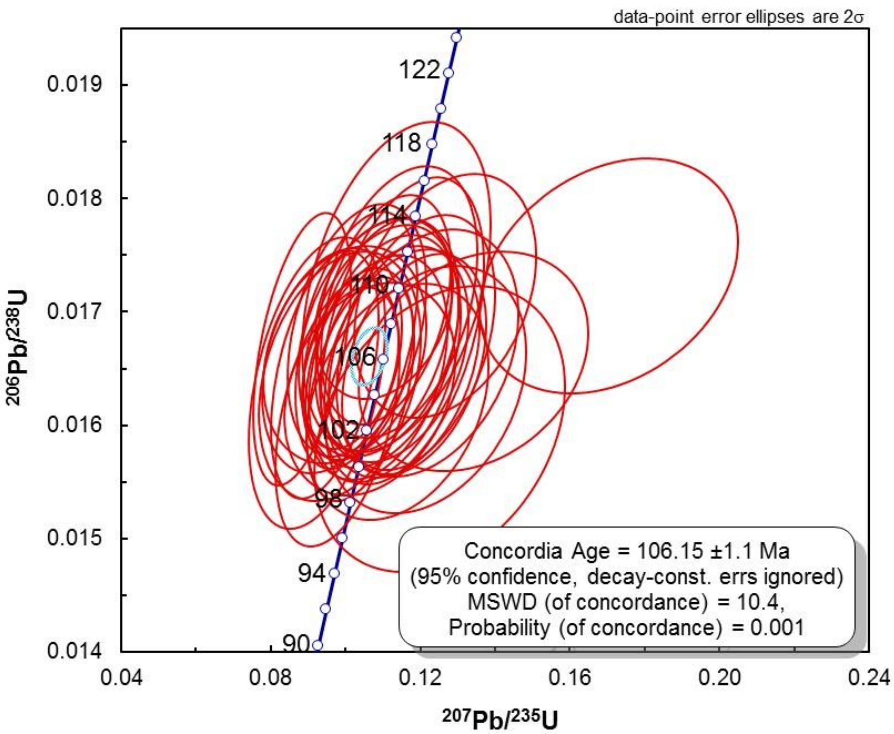
Weighted mean and Concordia plot for 15KN69B



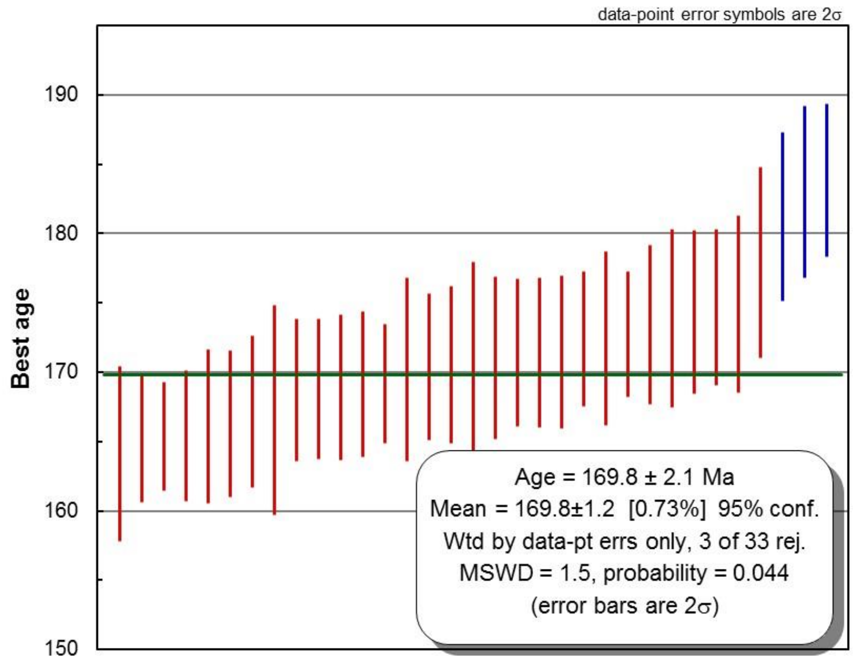


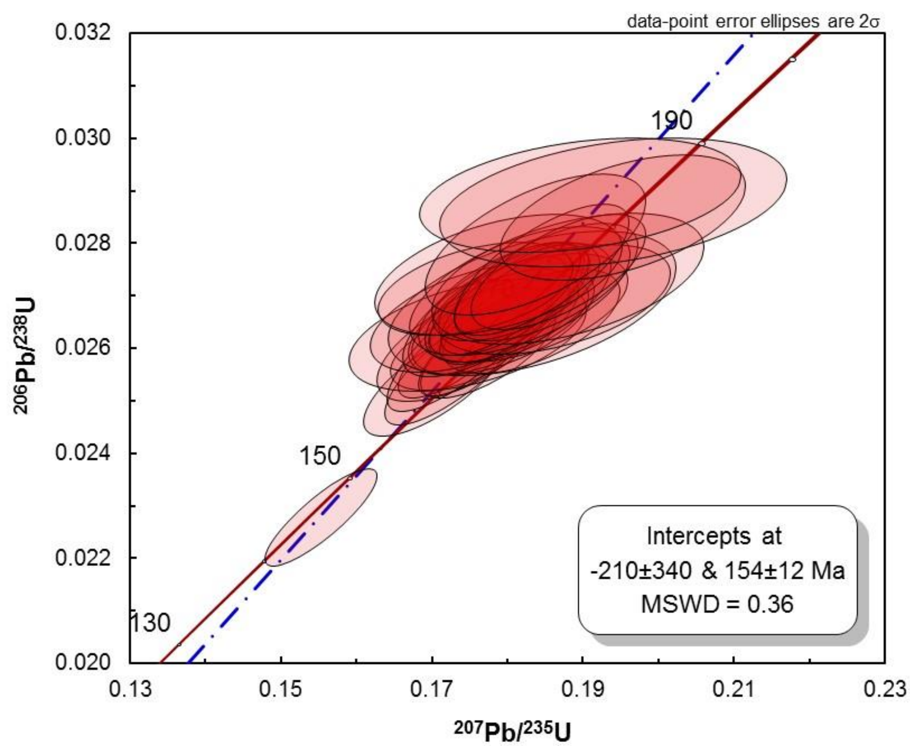
Weighted mean and Concordia plot for 15KN38B





Weighted mean and Concordia plot for 15KS80





Weighted mean and Concordia plot for 15KS01

Zircon Hafnium Isotope Analyses

Order	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1σ)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1σ)	E-Hf (T)	Age (Ma)
1	YOKELSON 14IY14-24	30.0	0.283047	0.000040	0.002539	0.283040	9.3	1.4	12.2	143
2	YOKELSON 14IY14-30	31.5	0.283078	0.000023	0.002074	0.283073	10.4	0.8	13.4	143
3	YOKELSON 14IY14-7	12.1	0.283010	0.000037	0.000977	0.283007	7.9	1.3	11.0	143
4	YOKELSON 14IY14-2	16.8	0.283106	0.000029	0.001287	0.283103	11.4	1.0	14.4	143
5	YOKELSON 14IY14-21	20.4	0.283080	0.000024	0.001549	0.283076	10.4	0.8	13.5	144
6	YOKELSON 14IY14-5	15.3	0.283032	0.000029	0.001220	0.283029	8.7	1.0	11.8	144
7	YOKELSON 14IY14-16	24.3	0.283105	0.000031	0.001713	0.283100	11.3	1.1	14.4	144
8	YOKELSON 14IY14-10	14.3	0.283046	0.000026	0.001121	0.283043	9.2	0.9	12.3	145
9	YOKELSON 14IY14-20	8.2	0.283072	0.000027	0.000666	0.283071	10.2	1.0	13.3	145
10	YOKELSON 14IY14-4	10.9	0.283036	0.000031	0.000854	0.283033	8.9	1.1	12.0	146
11	YOKELSON 14IY14-19	12.6	0.283070	0.000029	0.000975	0.283068	10.1	1.0	13.2	146
12	YOKELSON 14IY14-12	9.1	0.283077	0.000032	0.000789	0.283075	10.3	1.1	13.5	146
13	YOKELSON 14IY14-23	15.4	0.283052	0.000028	0.001112	0.283049	9.5	1.0	12.6	146
14	YOKELSON 14IY14-1	15.6	0.283009	0.000024	0.001147	0.283005	7.9	0.8	11.0	146
15	YOKELSON 14IY14-26	15.1	0.283066	0.000027	0.001227	0.283062	9.9	1.0	13.1	148
16	YOKELSON 14MR55-41	19.0	0.283089	0.000036	0.001698	0.283086	10.7	1.3	12.4	79
17	YOKELSON 14MR55-39	4.1	0.283066	0.000029	0.000380	0.283066	9.9	1.0	11.7	80
18	YOKELSON 14MR55-43	5.3	0.283096	0.000032	0.000461	0.283095	11.0	1.1	12.8	81
19	YOKELSON 14MR55-50	18.8	0.283065	0.000038	0.001314	0.283063	9.9	1.3	11.6	81
20	YOKELSON 14MR55-33	15.6	0.283001	0.000036	0.001158	0.282999	7.6	1.3	9.4	82
21	YOKELSON 14MR55-46	15.9	0.283080	0.000034	0.001158	0.283078	10.4	1.2	12.2	81
22	YOKELSON 14MR55-47	11.0	0.283094	0.000038	0.000837	0.283092	10.9	1.3	12.7	83
23	YOKELSON 14MR55-49	8.2	0.283073	0.000038	0.000665	0.283072	10.2	1.4	12.0	83
24	YOKELSON 14MR55-45	5.5	0.283086	0.000034	0.000456	0.283085	10.6	1.2	12.5	84
25	YOKELSON 14MR55-38	16.9	0.283121	0.000034	0.001233	0.283119	11.9	1.2	13.7	84
26	YOKELSON 14MR55-32	6.4	0.283046	0.000026	0.000507	0.283044	9.2	0.9	12.5	151
27	YOKELSON 14MR55-35	9.3	0.283010	0.000024	0.000736	0.283008	8.0	0.8	11.3	153

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
28	YOKELSON 14MR69-44	8.4	0.283113	0.000028	0.000656	0.283112	11.6	1.0	13.7	95
29	YOKELSON 14MR69-7	9.2	0.283156	0.000027	0.000664	0.283155	13.1	1.0	15.2	95
30	YOKELSON 14MR69-8	10.1	0.283145	0.000031	0.000808	0.283143	12.7	1.1	14.8	95
31	YOKELSON 14MR69-28	11.4	0.283109	0.000020	0.000717	0.283108	11.5	0.7	13.5	96
32	YOKELSON 14MR69-29	11.4	0.283097	0.000029	0.000864	0.283095	11.0	1.0	13.1	96
33	YOKELSON 14MR69-9	11.3	0.283124	0.000025	0.000845	0.283122	12.0	0.9	14.1	96
34	YOKELSON 14MR69-37	9.3	0.283053	0.000034	0.000711	0.283052	9.5	1.2	11.6	96
35	YOKELSON 14MR69-39	9.6	0.283090	0.000019	0.000724	0.283089	10.8	0.7	12.9	96
36	YOKELSON 14MR69-31	13.9	0.283100	0.000035	0.001117	0.283098	11.1	1.2	13.2	96
37	YOKELSON 14MR69-2	12.0	0.283127	0.000029	0.000922	0.283126	12.1	1.0	14.2	96
38	YOKELSON 14MR69-25	9.1	0.283080	0.000028	0.000662	0.283079	10.4	1.0	12.5	96
39	YOKELSON 14MR69-4	16.5	0.283084	0.000026	0.001357	0.283082	10.6	0.9	12.6	97
40	YOKELSON 14MR69-6	11.9	0.283048	0.000029	0.000805	0.283047	9.3	1.0	11.4	97
41	YOKELSON 14MR69-47	13.9	0.283147	0.000020	0.001010	0.283145	12.8	0.7	14.9	97
42	YOKELSON 14MR69-49	11.0	0.283068	0.000025	0.000874	0.283066	10.0	0.9	12.1	97
43	YOKELSON 14MR69-17	14.8	0.283129	0.000029	0.000951	0.283127	12.2	1.0	14.3	97
44	YOKELSON 14MR72-91	4.6	0.283079	0.000022	0.000372	0.283078	10.4	0.8	11.9	71
45	YOKELSON 14MR72-90	5.9	0.283096	0.000026	0.000458	0.283096	11.0	0.9	12.6	71
46	YOKELSON 14MR72-98	6.3	0.283127	0.000027	0.000535	0.283126	12.1	0.9	13.6	70
47	YOKELSON 14MR72-83	7.5	0.283160	0.000033	0.000551	0.283159	13.3	1.2	14.8	71
48	YOKELSON 14MR72-86	6.0	0.283093	0.000030	0.000483	0.283092	10.9	1.1	12.4	71
49	YOKELSON 14MR72-73	7.4	0.283118	0.000026	0.000576	0.283117	11.8	0.9	13.3	71
50	YOKELSON 14MR73-52	21.3	0.283089	0.000028	0.001495	0.283086	10.8	1.0	13.0	107
51	YOKELSON 14MR73-70	15.3	0.283115	0.000028	0.001031	0.283113	11.7	1.0	14.0	107
52	YOKELSON 14MR73-55	64.8	0.283058	0.000036	0.004548	0.283049	9.6	1.3	11.7	107
53	YOKELSON 14MR73-91	61.5	0.283049	0.000032	0.004362	0.283040	9.3	1.1	11.4	107
54	YOKELSON 14MR73-96	124.2	0.283100	0.000060	0.008794	0.283083	11.1	2.1	12.9	108
55	YOKELSON 14MR73-90	15.1	0.283179	0.000037	0.002587	0.283174	13.9	1.3	16.2	108
56	YOKELSON 14MR73-67	59.9	0.283008	0.000045	0.004782	0.282998	7.9	1.6	10.0	108

Spot	Sample	(^{176}Yb + ^{176}Lu) / ^{176}Hf (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
57	YOKELSON 14MR73-78	26.1	0.283147	0.000026	0.001819	0.283143	12.8	0.9	15.1	108
58	YOKELSON 14MR73-97	25.4	0.283151	0.000029	0.001779	0.283148	12.9	1.0	15.2	109
59	YOKELSON 14MR73-72	51.8	0.283072	0.000030	0.003705	0.283064	10.1	1.1	12.3	109
60	YOKELSON 14MR73-63	24.3	0.283179	0.000035	0.002015	0.283174	13.9	1.2	16.2	109
61	YOKELSON 14MR73-53	56.2	0.283098	0.000037	0.003744	0.283091	11.1	1.3	13.2	109
62	YOKELSON 14MR73-88	26.1	0.283122	0.000036	0.001775	0.283118	11.9	1.3	14.2	109
63	YOKELSON 14MR73-85	21.3	0.283076	0.000027	0.001461	0.283073	10.3	1.0	12.6	109
64	YOKELSON 14MR73-82	11.4	0.283086	0.000027	0.000837	0.283084	10.6	1.0	13.0	109
1	14IY25-68	6.7	0.282928	0.000046	0.000606	0.282926	5.0	1.6	8.2	146
2	14IY25-19	10.1	0.282957	0.000034	0.000873	0.282955	6.1	1.2	9.2	146
3	14IY25-87	14.5	0.282961	0.000025	0.001137	0.282958	6.2	0.9	9.4	146
4	14IY25-57	20.8	0.282887	0.000034	0.001586	0.282883	3.6	1.2	6.7	146
5	14IY25-60	5.1	0.282937	0.000027	0.000460	0.282936	5.4	1.0	8.6	147
6	14IY25-65	13.2	0.282890	0.000027	0.001062	0.282887	3.7	0.9	6.9	147
7	14IY25-88	16.4	0.282930	0.000026	0.001221	0.282927	5.1	0.9	8.3	147
8	14IY25-51	9.4	0.282970	0.000019	0.000986	0.282968	6.6	0.7	9.7	147
9	14IY25-52	9.4	0.282949	0.000024	0.000822	0.282947	5.8	0.9	9.0	147
10	14IY25-83	18.6	0.282962	0.000028	0.001271	0.282958	6.2	1.0	9.4	147
11	14IY25-70	47.6	0.282907	0.000039	0.003079	0.282899	4.3	1.4	7.3	147
12	14IY25-76	13.4	0.282924	0.000023	0.001095	0.282921	4.9	0.8	8.1	147
13	14IY25-90	5.4	0.282964	0.000029	0.000515	0.282963	6.3	1.0	9.6	147
14	14IY25-7	7.3	0.282938	0.000033	0.000670	0.282936	5.4	1.1	8.6	147
15	14IY25-63	26.1	0.282908	0.000024	0.002081	0.282902	4.3	0.8	7.4	147
16	14IY25-62	14.5	0.282913	0.000032	0.001194	0.282909	4.5	1.1	7.7	148
17	14IY40-40	6.2	0.283011	0.000039	0.000689	0.283010	8.0	1.4	10.5	115
18	14IY40-32	22.4	0.282964	0.000035	0.001497	0.282961	6.3	1.2	8.8	116
19	14IY40-28	17.0	0.282977	0.000026	0.001436	0.282974	6.8	0.9	9.3	116
20	14IY40-4	18.0	0.283056	0.000027	0.001411	0.283053	9.6	0.9	12.1	116
21	14IY40-42	19.5	0.282981	0.000028	0.001415	0.282978	6.9	1.0	9.4	116

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
22	14IY40-22	21.9	0.283017	0.000028	0.001706	0.283013	8.2	1.0	10.7	116
23	14IY40-49	23.5	0.283001	0.000040	0.002069	0.282997	7.7	1.4	10.1	117
24	14IY40-31	24.1	0.282986	0.000027	0.001743	0.282982	7.1	1.0	9.6	117
25	14IY40-20	21.7	0.282983	0.000022	0.001553	0.282980	7.0	0.8	9.5	117
26	14IY40-23	22.9	0.283024	0.000030	0.001680	0.283021	8.5	1.1	10.9	117
27	14IY40-25	21.6	0.283004	0.000021	0.001705	0.283000	7.7	0.7	10.2	118
28	14IY40-17	16.2	0.283016	0.000029	0.001143	0.283014	8.2	1.0	10.7	118
29	14IY40-35	23.0	0.283015	0.000028	0.001732	0.283011	8.1	1.0	10.6	119
30	14IY40-44	25.5	0.282977	0.000030	0.001716	0.282974	6.8	1.1	9.3	119
31	14IY40-29	22.4	0.283028	0.000029	0.001694	0.283025	8.6	1.0	11.1	119
32	14IY42-69	11.5	0.283054	0.000024	0.000782	0.283053	9.5	0.9	11.7	100
33	14IY42-85	11.9	0.283058	0.000028	0.000815	0.283056	9.7	1.0	11.8	100
34	14IY42-84	10.4	0.283092	0.000022	0.000712	0.283091	10.9	0.8	13.1	100
35	14IY42-20	21.5	0.283146	0.000030	0.001675	0.283143	12.8	1.1	14.9	100
36	14IY42-86	11.0	0.283102	0.000026	0.000765	0.283101	11.2	0.9	13.4	100
37	14IY42-80	11.6	0.283107	0.000027	0.000792	0.283106	11.4	1.0	13.6	101
38	14IY42-60	9.8	0.283075	0.000029	0.000663	0.283074	10.2	1.0	12.4	101
39	14IY42-74	8.2	0.283073	0.000035	0.000556	0.283072	10.2	1.2	12.4	103
40	14IY42-66	11.9	0.283069	0.000024	0.000803	0.283068	10.0	0.8	12.2	101
41	14IY42-6	45.7	0.283105	0.000032	0.003381	0.283099	11.3	1.1	13.4	102
42	14IY42-90	8.4	0.283113	0.000020	0.000615	0.283112	11.6	0.7	13.8	102
43	14IY42-55	11.7	0.283128	0.000028	0.000762	0.283127	12.1	1.0	14.4	102
44	14IY42-54	10.5	0.283116	0.000047	0.000697	0.283115	11.7	1.7	13.9	102
45	14IY42-88	11.1	0.283059	0.000024	0.000733	0.283057	9.7	0.9	11.9	102
46	14IY42-14	21.0	0.283039	0.000024	0.001265	0.283037	9.0	0.8	11.2	103
1	YOKELSON 14IY04-102	18.5	0.283019	0.000027	0.001310	0.283016	8.3	1.0	10.5	103
2	YOKELSON 14IY04-109	22.3	0.283018	0.000027	0.001571	0.283015	8.2	0.9	10.4	103
3	YOKELSON 14IY04-135	20.7	0.283059	0.000027	0.001465	0.283056	9.7	1.0	11.9	103
4	YOKELSON 14IY04-141	16.8	0.283067	0.000023	0.001234	0.283065	10.0	0.8	12.2	103

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
63	YOKELSON 14IY39-80	18.8	0.283036	0.000018	0.001283	0.283033	8.9	0.6	11.8	137
64	YOKELSON 14IY39-89	29.5	0.283074	0.000024	0.001797	0.283069	10.2	0.8	13.1	137
65	YOKELSON 14IY39-59	31.0	0.283026	0.000023	0.001867	0.283022	8.5	0.8	11.4	137
66	YOKELSON 14IY39-55	21.7	0.283023	0.000027	0.001544	0.283019	8.4	1.0	11.3	135
67	YOKELSON 14IY02-42	9.5	0.282952	0.000028	0.000709	0.282950	5.9	1.0	9.4	162
68	YOKELSON 14IY02-33	13.6	0.282961	0.000020	0.000961	0.282958	6.2	0.7	9.7	162
69	YOKELSON 14IY02-24	10.5	0.282987	0.000031	0.000770	0.282984	7.1	1.1	10.7	163
70	YOKELSON 14IY02-10	18.5	0.282944	0.000027	0.001298	0.282940	5.6	0.9	9.1	163
71	YOKELSON 14IY02-40	10.8	0.282935	0.000029	0.000804	0.282933	5.3	1.0	8.8	163
72	YOKELSON 14IY02-19	20.3	0.282963	0.000029	0.001406	0.282959	6.3	1.0	9.8	163
73	YOKELSON 14IY02-46	19.9	0.282989	0.000024	0.001345	0.282985	7.2	0.8	10.7	163
74	YOKELSON 14IY02-31	13.4	0.282953	0.000018	0.000959	0.282950	5.9	0.6	9.5	164
75	YOKELSON 14IY02-37	14.1	0.282966	0.000027	0.001018	0.282963	6.4	0.9	9.9	164
76	YOKELSON 14IY02-28	28.5	0.282974	0.000025	0.001952	0.282968	6.7	0.9	10.1	164
77	YOKELSON 14IY02-22	26.7	0.283023	0.000023	0.001809	0.283017	8.4	0.8	11.9	164
78	YOKELSON 14IY02-29	9.5	0.282993	0.000024	0.000710	0.282991	7.4	0.9	10.9	165
79	YOKELSON 14IY02-8	19.3	0.282947	0.000025	0.001329	0.282943	5.7	0.9	9.2	165
80	YOKELSON 14IY02-49	13.1	0.282940	0.000024	0.000986	0.282937	5.5	0.9	9.0	164
81	YOKELSON 14IY02-14	13.7	0.282966	0.000032	0.001023	0.282963	6.4	1.1	9.9	162
82	YOKELSON 14MR44-4	14.3	0.283060	0.000026	0.000785	0.283059	9.7	0.9	10.8	52
83	YOKELSON 14MR44-31	11.5	0.283068	0.000020	0.000615	0.283068	10.0	0.7	11.2	52
84	YOKELSON 14MR44-2	10.2	0.283033	0.000026	0.000576	0.283033	8.8	0.9	9.9	52
85	YOKELSON 14MR44-15	12.8	0.282979	0.000023	0.000716	0.282979	6.9	0.8	8.0	52
86	YOKELSON 14MR44-27	7.6	0.283087	0.000026	0.000424	0.283086	10.7	0.9	11.8	53
87	YOKELSON 14MR44-23	13.8	0.283061	0.000020	0.000773	0.283060	9.8	0.7	10.9	53
88	YOKELSON 14MR44-11	1.4	0.283306	0.000024	0.000084	0.283306	18.4	0.9	19.6	53
89	YOKELSON 14MR44-17	15.5	0.283064	0.000028	0.000845	0.283063	9.9	1.0	11.0	53
90	YOKELSON 14MR44-28	13.7	0.283084	0.000026	0.000759	0.283084	10.6	0.9	11.7	53
91	YOKELSON 14MR44-19	8.7	0.283086	0.000024	0.000491	0.283086	10.6	0.9	11.8	54

Spot	Sample	(^{176}Yb + ^{176}Lu) / ^{176}Hf (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
92	YOKELSON 14MR44-35	19.6	0.283039	0.000021	0.001070	0.283038	9.0	0.7	10.1	54
93	YOKELSON 14MR44-10CORE	12.4	0.283080	0.000026	0.000758	0.283080	10.4	0.9	11.9	66
94	YOKELSON 14MR44-22	9.5	0.283097	0.000026	0.000570	0.283097	11.0	0.9	12.6	69
95	YOKELSON 14MR44-24	9.6	0.283124	0.000032	0.000567	0.283123	12.0	1.1	13.5	71
96	YOKELSON 14MR44-20CORE	9.1	0.283143	0.000023	0.000546	0.283142	12.7	0.8	14.6	89
97	YOKELSON 14MR48-20	10.6	0.283114	0.000020	0.000672	0.283113	11.6	0.7	12.9	60
98	YOKELSON 14MR48-14	17.6	0.283062	0.000027	0.001082	0.283061	9.8	1.0	11.1	60
99	YOKELSON 14MR48-10	7.9	0.283117	0.000022	0.000544	0.283116	11.7	0.8	13.0	60
100	YOKELSON 14MR48-21	2.7	0.283100	0.000023	0.000162	0.283100	11.1	0.8	12.5	60
101	YOKELSON 14MR48-23	23.0	0.282951	0.000022	0.001656	0.282949	5.9	0.8	7.1	60
102	YOKELSON 14MR48-8	6.3	0.283115	0.000024	0.000385	0.283115	11.7	0.8	13.0	60
103	YOKELSON 14MR48-28	11.7	0.283071	0.000020	0.000809	0.283070	10.1	0.7	11.4	60
104	YOKELSON 14MR48-29	18.8	0.283062	0.000023	0.001183	0.283061	9.8	0.8	11.1	60
105	YOKELSON 14MR48-33	36.6	0.282981	0.000023	0.002329	0.282979	6.9	0.8	8.2	60
106	YOKELSON 14MR48-24	4.0	0.283103	0.000029	0.000231	0.283103	11.3	1.0	12.6	60
107	YOKELSON 14MR68-22	5.7	0.283069	0.000020	0.000376	0.283068	10.0	0.7	11.9	84
108	YOKELSON 14MR68-26	7.4	0.283068	0.000018	0.000496	0.283067	10.0	0.6	11.8	84
109	YOKELSON 14MR68-15	8.6	0.283062	0.000019	0.000540	0.283061	9.8	0.7	11.6	84
110	YOKELSON 14MR68-34	6.8	0.283064	0.000021	0.000433	0.283064	9.9	0.7	11.7	84
111	YOKELSON 14MR68-16	5.1	0.283098	0.000025	0.000350	0.283097	11.1	0.9	12.9	84
112	YOKELSON 14MR68-19	13.4	0.283043	0.000024	0.000824	0.283042	9.1	0.8	10.9	84
113	YOKELSON 14MR68-9	13.8	0.283103	0.000027	0.000843	0.283102	11.2	0.9	13.1	84
114	YOKELSON 14MR68-31	15.4	0.283024	0.000029	0.000937	0.283022	8.4	1.0	10.3	85
115	YOKELSON 14MR68-32	14.0	0.283073	0.000022	0.000869	0.283071	10.2	0.8	12.0	85
116	YOKELSON 14MR68-5	29.7	0.283058	0.000033	0.001783	0.283055	9.7	1.2	11.4	85
117	YOKELSON 14MR68-33	3.9	0.283085	0.000023	0.000341	0.283085	10.6	0.8	12.5	85
118	YOKELSON 14MR68-1	3.2	0.283105	0.000021	0.000238	0.283105	11.3	0.7	13.2	85
119	YOKELSON 14MR70-12	12.1	0.283095	0.000024	0.000856	0.283093	10.9	0.9	12.6	77

Spot	Sample	(^{176}Yb + ^{176}Lu) / ^{176}Hf (%)	^{176}Hf/^{177}Hf	± (1s)	^{176}Lu/^{177}Hf	^{176}Hf/^{177}Hf (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
120	YOKELSON 14MR70-32	7.9	0.283059	0.000029	0.000562	0.283059	9.7	1.0	11.4	77
121	YOKELSON 14MR70-1	6.1	0.283123	0.000026	0.000377	0.283123	12.0	0.9	13.7	77
122	YOKELSON 14MR70-29	11.6	0.283075	0.000032	0.000830	0.283074	10.3	1.1	11.9	77
123	YOKELSON 14MR70-5	6.0	0.283115	0.000023	0.000429	0.283114	11.7	0.8	13.4	78
124	YOKELSON 14MR70-20	7.5	0.283072	0.000025	0.000534	0.283072	10.2	0.9	11.9	78
125	YOKELSON 14MR70-18	12.9	0.283046	0.000024	0.000918	0.283045	9.2	0.8	10.9	78
126	YOKELSON 14MR70-31	5.8	0.283081	0.000030	0.000399	0.283080	10.5	1.1	12.2	78
127	YOKELSON 14MR70-22	8.3	0.283091	0.000025	0.000592	0.283090	10.8	0.9	12.5	78
128	YOKELSON 14MR70-8	8.8	0.283106	0.000030	0.000616	0.283105	11.3	1.1	13.0	78
129	YOKELSON 14MR70-17	7.6	0.283115	0.000027	0.000553	0.283114	11.7	0.9	13.4	78
130	YOKELSON 14MR70-11	12.2	0.283092	0.000022	0.000857	0.283091	10.9	0.8	12.5	78
131	YOKELSON 14MR70-34	7.6	0.283084	0.000028	0.000546	0.283083	10.6	1.0	12.3	78
132	YOKELSON 14MR70-2	7.2	0.283078	0.000034	0.000513	0.283077	10.4	1.2	12.1	78
133	YOKELSON 14MR70-4	4.2	0.283110	0.000035	0.000294	0.283110	11.5	1.2	13.2	78
134	YOKELSON 14MR71-31	7.4	0.283128	0.000017	0.000450	0.283128	12.1	0.6	13.9	78
135	YOKELSON 14MR71-13	7.2	0.283107	0.000022	0.000450	0.283106	11.4	0.8	13.1	78
136	YOKELSON 14MR71-11	7.2	0.283095	0.000022	0.000456	0.283094	11.0	0.8	12.7	78
137	YOKELSON 14MR71-9	6.9	0.283126	0.000019	0.000436	0.283126	12.1	0.7	13.8	78
138	YOKELSON 14MR71-10	6.7	0.283140	0.000026	0.000412	0.283139	12.5	0.9	14.3	79
139	YOKELSON 14MR71-22	14.1	0.283128	0.000024	0.000860	0.283127	12.1	0.9	13.9	79
140	YOKELSON 14MR71-2	16.4	0.283122	0.000025	0.000988	0.283121	11.9	0.9	13.6	79
141	YOKELSON 14MR71-7	12.4	0.283096	0.000026	0.000732	0.283095	11.0	0.9	12.7	79
142	YOKELSON 14MR71-4	5.8	0.283118	0.000028	0.000381	0.283117	11.8	1.0	13.5	79
143	YOKELSON 14MR71-28	7.4	0.283116	0.000021	0.000466	0.283115	11.7	0.7	13.4	79
144	YOKELSON 14MR71-19	13.4	0.283134	0.000023	0.000776	0.283133	12.3	0.8	14.1	79
145	YOKELSON 14MR71-18	12.2	0.283099	0.000026	0.000710	0.283098	11.1	0.9	12.8	79
146	YOKELSON 14MR71-25	8.0	0.283095	0.000025	0.000495	0.283095	11.0	0.9	12.7	78
147	YOKELSON 14MR71-1	12.3	0.283125	0.000023	0.000725	0.283123	12.0	0.8	13.7	80
148	YOKELSON 14MR71-8	12.5	0.283130	0.000023	0.000728	0.283128	12.2	0.8	13.9	80

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
1	14IY01-5	14.3	0.283078	0.000029	0.000860	0.283077	10.4	1.0	12.4	91
3	14IY01-8	11.4	0.283072	0.000026	0.000732	0.283070	10.1	0.9	12.1	92
4	14IY01-1	10.4	0.283017	0.000025	0.000650	0.283016	8.2	0.9	10.2	90
5	14IY01-2	5.3	0.283079	0.000024	0.000395	0.283078	10.4	0.9	12.4	92
6	14IY01-14	12.5	0.283093	0.000022	0.000828	0.283091	10.9	0.8	12.9	92
7	14IY01-9	12.0	0.283042	0.000023	0.000804	0.283041	9.1	0.8	11.1	92
8	14IY01-10	13.5	0.283056	0.000022	0.000854	0.283054	9.6	0.8	11.6	92
9	14IY01-11	13.7	0.283039	0.000025	0.000860	0.283038	9.0	0.9	11.0	92
10	14IY01-12	12.7	0.283017	0.000023	0.000809	0.283015	8.2	0.8	10.2	91
11	14IY01-13	11.8	0.283035	0.000017	0.000781	0.283034	8.9	0.6	10.8	91
12	14IY01-20	9.5	0.283043	0.000025	0.000637	0.283042	9.1	0.9	11.1	90
13	14IY01-17	14.5	0.283044	0.000030	0.000899	0.283042	9.2	1.1	11.1	89
14	14IY01-18	14.2	0.283012	0.000029	0.000894	0.283010	8.0	1.0	10.0	90
15	14IY01-19	14.2	0.283077	0.000025	0.000890	0.283076	10.3	0.9	12.3	91
16	14IY31-1	9.7	0.282984	0.000024	0.000614	0.282982	7.0	0.9	10.0	138
17	14IY31-5	8.3	0.282978	0.000024	0.000520	0.282977	6.8	0.8	9.9	139
18	14IY31-6	8.0	0.283004	0.000027	0.000511	0.283003	7.8	0.9	10.8	139
19	14IY31-7	7.7	0.283007	0.000023	0.000486	0.283006	7.8	0.8	10.9	138
20	14IY31-9	7.8	0.283057	0.000024	0.000497	0.283055	9.6	0.9	12.6	138
21	14IY31-14	14.6	0.283029	0.000025	0.000885	0.283026	8.6	0.9	11.6	136
22	14IY31-15	5.2	0.283015	0.000025	0.000340	0.283014	8.1	0.9	11.2	138
23	14IY31-24	13.7	0.283002	0.000030	0.000837	0.283000	7.7	1.0	10.7	139
24	14IY31-22	7.8	0.283029	0.000025	0.000492	0.283028	8.6	0.9	11.6	138
25	14IY31-25	12.7	0.283018	0.000027	0.000774	0.283016	8.2	0.9	11.2	138
26	14IY31-28	9.4	0.282978	0.000029	0.000589	0.282976	6.8	1.0	9.8	138
85	14IY31-18	12.4	0.283036	0.000033	0.000768	0.283034	8.9	1.1	11.9	140
86	14IY31-19	11.1	0.283004	0.000027	0.000720	0.283002	7.7	0.9	10.8	139
87	14IY31-26	7.9	0.282994	0.000021	0.000510	0.282993	7.4	0.8	10.4	137
88	14IY31-10	15.5	0.282998	0.000024	0.000959	0.282996	7.5	0.9	10.5	137

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
27	14IY03-29	24.4	0.283017	0.000029	0.001838	0.283014	8.2	1.0	10.3	98
28	14IY03-27	25.4	0.283029	0.000043	0.001792	0.283026	8.6	1.5	10.7	100
29	14IY03-6R	13.6	0.283018	0.000032	0.001024	0.283016	8.2	1.1	10.4	101
30	14IY03-31	42.7	0.282983	0.000033	0.003191	0.282977	7.0	1.2	9.1	103
31	14IY03-17	26.6	0.282996	0.000031	0.001981	0.282993	7.5	1.1	9.5	99
32	14IY03-4R	16.8	0.283060	0.000030	0.001144	0.283057	9.7	1.1	11.9	103
33	14IY03-4C	34.8	0.282936	0.000029	0.002469	0.282932	5.3	1.0	7.5	102
34	14IY03-19	12.7	0.283084	0.000028	0.000970	0.283082	10.6	1.0	12.8	101
35	14IY03-3R	20.1	0.283019	0.000034	0.001469	0.283016	8.3	1.2	10.5	104
36	14IY03-25	61.2	0.283017	0.000037	0.004041	0.283009	8.2	1.3	10.2	105
37	14IY03-24	47.0	0.282956	0.000037	0.003094	0.282950	6.0	1.3	8.1	104
38	14IY03-8	10.3	0.283069	0.000036	0.000786	0.283067	10.0	1.3	12.2	102
39	14IY03-22	23.8	0.283026	0.000042	0.001771	0.283023	8.5	1.5	10.7	104
40	14IY03-23	7.2	0.283033	0.000041	0.000565	0.283032	8.8	1.4	11.0	103
41	14IY03-11	13.5	0.282986	0.000033	0.000987	0.282984	7.1	1.2	9.3	104
42	14IY03-10	28.7	0.283076	0.000036	0.002103	0.283072	10.3	1.3	12.5	103
43	14IY18-6	41.2	0.283062	0.000031	0.002605	0.283058	9.8	1.1	11.7	95
44	14IY18-8	53.3	0.282938	0.000022	0.003197	0.282933	5.4	0.8	7.4	97
45	14IY18-4	61.6	0.283012	0.000036	0.003453	0.283005	8.0	1.3	10.0	101
46	14IY18-14	24.0	0.283037	0.000030	0.002223	0.283033	8.9	1.1	11.0	99
47	14IY18-16	50.8	0.282969	0.000028	0.003220	0.282963	6.5	1.0	8.5	99
48	14IY18-19	44.7	0.283021	0.000037	0.002914	0.283015	8.3	1.3	10.3	98
49	14IY18-13	46.0	0.283014	0.000030	0.002939	0.283009	8.1	1.1	10.1	97
50	14IY18-5	121.6	0.283040	0.000044	0.006740	0.283028	9.0	1.6	10.8	99
51	14IY18-3R	34.2	0.283030	0.000029	0.002244	0.283026	8.7	1.0	10.7	96
52	14IY18-3C	42.0	0.283017	0.000033	0.002733	0.283012	8.2	1.2	10.2	97
53	14IY18-10	15.3	0.283002	0.000028	0.000977	0.283000	7.7	1.0	9.8	99
54	14IY18-1R	46.5	0.283002	0.000029	0.002717	0.282997	7.7	1.0	9.7	99
55	14IY18-1C	49.6	0.283047	0.000025	0.003123	0.283041	9.3	0.9	11.3	99
56	14IY18-2R	56.0	0.282990	0.000027	0.003264	0.282984	7.3	0.9	9.2	98

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
57	14IY18-17	53.7	0.282985	0.000029	0.003361	0.282978	7.1	1.0	9.0	97
58	14IY18-20	34.3	0.283090	0.000033	0.002004	0.283086	10.8	1.2	12.8	95
59	14IY18-7	49.9	0.283002	0.000025	0.003491	0.282996	7.7	0.9	9.6	99
60	14IY23-5	119.2	0.283020	0.000034	0.007885	0.283006	8.3	1.2	10.0	100
61	14IY23-6C	40.4	0.283043	0.000022	0.002453	0.283039	9.1	0.8	11.2	99
62	14IY23-4	25.4	0.283105	0.000025	0.001579	0.283102	11.3	0.9	13.4	100
63	14IY23-7R	34.4	0.282983	0.000024	0.002249	0.282979	7.0	0.8	9.1	99
64	14IY23-8	70.6	0.283081	0.000040	0.004421	0.283073	10.5	1.4	12.4	100
65	14IY23-15	28.6	0.283058	0.000024	0.001767	0.283055	9.7	0.9	11.7	98
66	14IY23-3C	31.9	0.283020	0.000021	0.002024	0.283016	8.3	0.7	10.4	100
67	14IY23-17	24.9	0.283073	0.000021	0.001596	0.283070	10.2	0.7	12.3	100
68	14IY23-20	26.3	0.283016	0.000020	0.001642	0.283013	8.2	0.7	10.3	99
69	14IY23-21	27.9	0.282968	0.000023	0.001789	0.282964	6.5	0.8	8.5	99
70	14IY23-22	81.6	0.283060	0.000036	0.005516	0.283050	9.7	1.3	11.5	97
71	14IY23-30	27.4	0.283005	0.000025	0.001747	0.283002	7.8	0.9	9.8	97
72	14IY23-24	30.2	0.283065	0.000020	0.001983	0.283061	9.9	0.7	12.0	98
73	14IY23-29	26.8	0.283042	0.000024	0.001736	0.283039	9.1	0.8	11.2	99
74	14IY36-1C	10.1	0.282902	0.000019	0.000708	0.282900	4.1	0.7	7.6	158
75	14IY36-4R	8.6	0.282941	0.000025	0.000645	0.282939	5.5	0.9	8.9	157
76	14IY36-2	9.4	0.282968	0.000025	0.000705	0.282966	6.5	0.9	9.9	155
77	14IY36-5	9.2	0.282964	0.000021	0.000688	0.282962	6.3	0.8	9.8	158
78	14IY36-6	13.4	0.282954	0.000032	0.000966	0.282951	6.0	1.1	9.3	154
79	14IY36-24	9.2	0.282925	0.000027	0.000704	0.282922	4.9	1.0	8.4	157
80	14IY36-22	5.7	0.282951	0.000019	0.000421	0.282950	5.9	0.7	9.3	157
81	14IY36-20	7.3	0.282949	0.000026	0.000553	0.282947	5.8	0.9	9.2	157
82	14IY36-16	5.7	0.282989	0.000020	0.000414	0.282988	7.2	0.7	10.6	155
83	14IY36-31	7.5	0.282949	0.000026	0.000553	0.282948	5.8	0.9	9.2	155
84	14IY36-11	12.5	0.282968	0.000030	0.000853	0.282966	6.5	1.0	9.8	154
119	14IY36-7	5.7	0.282921	0.000028	0.000443	0.282920	4.8	1.0	8.3	158

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
120	14IY36-27	7.1	0.282860	0.000020	0.000535	0.282858	2.7	0.7	6.1	158
121	14IY36-10	4.6	0.282959	0.000026	0.000352	0.282958	6.2	0.9	9.6	155
122	14IY36-19	7.2	0.282997	0.000025	0.000525	0.282995	7.5	0.9	10.9	156
123	14IY36-15	5.7	0.282966	0.000025	0.000424	0.282965	6.4	0.9	9.8	154
124	14IY36-6	9.7	0.283099	0.000024	0.000707	0.283097	11.1	0.8	14.5	154
125	14IY36-5R	10.7	0.283064	0.000017	0.000747	0.283061	9.8	0.6	13.3	158
126	14IY36-1	55.7	0.283019	0.000033	0.003381	0.283009	8.3	1.2	11.5	158
89	14IY38-1	24.4	0.283024	0.000027	0.001472	0.283020	8.4	1.0	11.3	133
90	14IY38-5	22.9	0.283072	0.000026	0.001373	0.283069	10.2	0.9	13.0	134
91	14IY38-9	48.9	0.283027	0.000026	0.002928	0.283019	8.6	0.9	11.3	135
92	14IY38-11	22.9	0.283031	0.000029	0.001400	0.283028	8.7	1.0	11.6	136
93	14IY38-12	10.1	0.283000	0.000026	0.000638	0.282999	7.6	0.9	10.5	133
94	14IY38-25	22.3	0.283047	0.000025	0.001374	0.283043	9.2	0.9	12.0	130
95	14IY38-26	11.1	0.283136	0.000027	0.000690	0.283135	12.4	0.9	15.4	136
96	14IY38-27	23.8	0.283010	0.000025	0.001404	0.283007	8.0	0.9	10.8	133
97	14IY38-22	49.1	0.283014	0.000030	0.002918	0.283007	8.1	1.1	10.8	131
98	14IY38-16	26.1	0.283043	0.000025	0.001546	0.283039	9.1	0.9	12.0	136
99	14IY38-19	45.4	0.283013	0.000032	0.002766	0.283006	8.1	1.1	10.8	134
100	14IY38-18	11.0	0.283035	0.000023	0.000741	0.283033	8.8	0.8	11.8	135
101	14IY38-14	40.4	0.283081	0.000027	0.002522	0.283075	10.5	1.0	13.2	135
102	14IY38-24	16.4	0.283037	0.000024	0.001032	0.283035	8.9	0.8	11.8	134
103	14IY38-13	19.8	0.283094	0.000028	0.001226	0.283091	10.9	1.0	13.8	133
104	14IY32-11	6.0	0.282972	0.000021	0.000430	0.282971	6.6	0.7	9.9	149
105	14IY32-16	6.5	0.282913	0.000029	0.000467	0.282912	4.5	1.0	7.7	144
106	14IY32-25	7.4	0.282940	0.000030	0.000532	0.282939	5.5	1.0	8.8	152
107	14IY32-17	5.5	0.282988	0.000023	0.000394	0.282987	7.2	0.8	10.5	153
108	14IY32-32	10.7	0.282915	0.000024	0.000755	0.282913	4.6	0.8	7.9	150
109	14IY32-10	7.7	0.282960	0.000025	0.000543	0.282959	6.2	0.9	9.5	152
110	14IY32-31	7.9	0.282946	0.000023	0.000573	0.282944	5.7	0.8	9.0	151

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
111	14IY32-9	5.8	0.282917	0.000024	0.000410	0.282915	4.7	0.9	7.9	149
112	14IY32-8	8.1	0.282977	0.000028	0.000579	0.282976	6.8	1.0	10.1	151
113	14IY32-6	10.5	0.282939	0.000024	0.000751	0.282936	5.4	0.8	8.7	152
114	14IY32-23	8.9	0.282915	0.000027	0.000644	0.282913	4.6	1.0	7.9	150
115	14IY32-22	5.5	0.282952	0.000027	0.000398	0.282951	5.9	0.9	9.3	155
116	14IY32-1R	7.9	0.282932	0.000025	0.000581	0.282930	5.2	0.9	8.4	149
117	14IY32-2R	8.0	0.282943	0.000021	0.000576	0.282941	5.6	0.7	8.9	150
118	14IY32-3	8.5	0.282941	0.000025	0.000619	0.282940	5.5	0.9	8.9	152
127	14IY13-4R	17.5	0.283047	0.000018	0.001184	0.283044	9.3	0.6	12.6	155
128	14IY13-3	86.9	0.283004	0.000030	0.005044	0.282989	7.7	1.1	10.6	153
129	14IY13-9C	13.4	0.283081	0.000026	0.000806	0.283078	10.5	0.9	13.8	152
130	14IY13-22R	42.5	0.283108	0.000027	0.003196	0.283099	11.4	1.0	14.5	152
131	14IY13-23	11.1	0.283098	0.000019	0.000846	0.283096	11.1	0.7	14.4	155
132	14IY13-12C	43.5	0.283076	0.000024	0.002825	0.283068	10.3	0.9	13.4	154
133	14IY13-16	9.0	0.283092	0.000020	0.000677	0.283090	10.8	0.7	14.2	154
134	14IY13-13	92.8	0.282954	0.000041	0.006215	0.282936	6.0	1.5	8.7	153
135	14IY13-25	44.3	0.283009	0.000032	0.002834	0.283000	7.9	1.1	11.1	159
136	14IY13-20C	14.5	0.283083	0.000026	0.001036	0.283080	10.6	0.9	14.0	158
137	14IY13-31	39.2	0.283104	0.000029	0.003010	0.283095	11.3	1.0	14.4	155
138	14IY13-27	26.4	0.283062	0.000020	0.001706	0.283057	9.8	0.7	13.0	151
139	14IY44-8R	13.7	0.283063	0.000027	0.000849	0.283061	9.8	1.0	12.4	120
140	14IY44-9	24.2	0.283045	0.000027	0.001375	0.283042	9.2	0.9	11.8	121
141	14IY44-7R	29.8	0.282996	0.000030	0.001834	0.282992	7.5	1.1	10.0	123
142	14IY44-6	25.1	0.283071	0.000025	0.001422	0.283068	10.1	0.9	12.7	121
143	14IY44-5	15.9	0.283047	0.000032	0.000895	0.283045	9.3	1.1	12.0	125
144	14IY44-20	44.4	0.283041	0.000029	0.002522	0.283035	9.0	1.0	11.6	122
145	14IY44-19	20.3	0.283038	0.000032	0.001187	0.283036	9.0	1.1	11.5	120
146	14IY44-10	82.3	0.282940	0.000034	0.004388	0.282930	5.5	1.2	7.9	125
147	14IY44-17	39.2	0.283023	0.000028	0.002298	0.283018	8.4	1.0	11.0	123

Spot	Sample	(^{176}Yb + ^{176}Lu) / ^{176}Hf (%)	^{176}Hf/^{177}Hf	± (1s)	^{176}Lu/^{177}Hf	^{176}Hf/^{177}Hf (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
148	14IY44-3	26.6	0.283054	0.000026	0.001527	0.283051	9.5	0.9	12.1	124
149	14IY44-15	21.7	0.283041	0.000035	0.001361	0.283038	9.0	1.2	11.7	123
150	14IY44-4	18.7	0.283028	0.000025	0.001063	0.283025	8.6	0.9	11.3	124
151	14IY44-14	51.6	0.283057	0.000026	0.002831	0.283051	9.6	0.9	12.2	125
152	14IY44-18	15.8	0.283001	0.000037	0.000948	0.282999	7.6	1.3	10.3	123
153	14IY44-1	16.6	0.283040	0.000025	0.000949	0.283038	9.0	0.9	11.6	120
154	14IY44-11	14.6	0.282991	0.000026	0.000921	0.282989	7.3	0.9	10.0	125
1	YOKELSON 14MR61-59	4.4	0.283135	0.000026	0.000342	0.283135	12.4	0.9	14.0	71
2	YOKELSON 14MR61-53	2.5	0.283047	0.000028	0.000185	0.283047	9.3	1.0	10.9	71
3	YOKELSON 14MR61-37	6.1	0.283089	0.000027	0.000451	0.283089	10.8	0.9	12.3	71
4	YOKELSON 14MR61-41	8.9	0.283162	0.000028	0.000629	0.283161	13.3	1.0	14.9	71
5	YOKELSON 14MR61-25	3.1	0.283081	0.000028	0.000227	0.283081	10.5	1.0	12.1	72
6	YOKELSON 14MR61-3	4.1	0.283085	0.000028	0.000311	0.283085	10.6	1.0	12.2	72
7	YOKELSON 14MR61-5	7.0	0.283173	0.000026	0.000510	0.283173	13.7	0.9	15.3	72
8	YOKELSON 14MR61-29	3.4	0.283093	0.000029	0.000244	0.283093	10.9	1.0	12.5	72
9	YOKELSON 14MR61-18	5.4	0.283096	0.000033	0.000362	0.283095	11.0	1.2	12.6	72
10	YOKELSON 14MR61-6	9.4	0.283090	0.000034	0.000657	0.283089	10.8	1.2	12.4	72
11	YOKELSON 14MR61-21	18.0	0.283115	0.000028	0.001199	0.283113	11.7	1.0	13.2	72
12	YOKELSON 14MR61-52	16.7	0.283016	0.000031	0.001161	0.283015	8.2	1.1	9.7	72
13	YOKELSON 14MR61-33	4.9	0.283118	0.000029	0.000342	0.283117	11.8	1.0	13.4	73
14	YOKELSON 14MR61-8	2.8	0.283083	0.000023	0.000219	0.283083	10.5	0.8	12.1	73
15	YOKELSON 14MR61-11	12.0	0.283102	0.000030	0.000892	0.283101	11.2	1.1	12.8	73
16	YOKELSON 14MR61-50	3.5	0.283071	0.000024	0.000317	0.283070	10.1	0.8	11.7	73
17	YOKELSON 14MR61-1	18.2	0.283104	0.000032	0.001192	0.283102	11.3	1.1	12.8	73
18	YOKELSON 14MR61-40	5.6	0.283116	0.000028	0.000448	0.283115	11.7	1.0	13.3	73
19	YOKELSON 14MR61-35	4.2	0.283089	0.000026	0.000330	0.283089	10.8	0.9	12.4	73
20	YOKELSON 14MR61-15	9.1	0.283070	0.000026	0.000662	0.283070	10.1	0.9	11.7	73
	CMB#3_15KN06: SPOT_23	14.9	0.283017	0.000027	0.000931	0.283015	8.2	0.9	11.6	157
	CMB#3_15KN06: SPOT_33	11.5	0.282988	0.000023	0.000732	0.282986	7.2	0.8	10.6	158

Spot	Sample	($^{176}Yb + ^{176}Lu$) / ^{176}Hf (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
	CMB#3_15KN06: SPOT_30	12.6	0.283009	0.000032	0.000855	0.283007	7.9	1.1	11.4	159
	CMB#3_15KN06: SPOT_22	10.3	0.283013	0.000027	0.000683	0.283011	8.1	1.0	11.5	159
	CMB#3_15KN06: SPOT_34	26.3	0.282940	0.000021	0.001666	0.282935	5.5	0.7	8.9	160
	CMB#3_15KN06: SPOT_3	15.9	0.282980	0.000028	0.001010	0.282977	6.9	1.0	10.4	161
	CMB#3_15KN06: SPOT_6	19.9	0.282998	0.000020	0.001218	0.282995	7.5	0.7	11.0	161
	CMB#3_15KN06: SPOT_31	27.2	0.282963	0.000018	0.001677	0.282958	6.3	0.6	9.7	161
	CMB#3_15KN06: SPOT_1	20.4	0.282999	0.000021	0.001370	0.282995	7.6	0.7	11.0	162
	CMB#3_15KN06: SPOT_15	14.2	0.282998	0.000021	0.000957	0.282995	7.5	0.7	11.0	162
	CMB#3_15KN06: SPOT_14	14.8	0.283009	0.000023	0.000956	0.283006	7.9	0.8	11.5	163
	CMB#3_15KN06: SPOT_26	10.5	0.283008	0.000032	0.000730	0.283005	7.9	1.1	11.5	165
	CMB#3_15KS78: SPOT_7	37.6	0.283010	0.000026	0.002256	0.283004	8.0	0.9	10.9	140
	CMB#3_15KS78: SPOT_18	35.4	0.282949	0.000022	0.002033	0.282943	5.8	0.8	8.8	143
	CMB#3_15KS78: SPOT_16	24.2	0.282955	0.000024	0.001507	0.282951	6.0	0.8	9.1	144
	CMB#3_15KS78: SPOT_3	37.2	0.282956	0.000023	0.002285	0.282950	6.1	0.8	9.0	144
	CMB#3_15KS78: SPOT_30	7.5	0.282945	0.000017	0.000460	0.282944	5.7	0.6	8.9	147
	CMB#3_15KS78: SPOT_19	38.2	0.282971	0.000021	0.002303	0.282964	6.6	0.7	9.7	151
	CMB#3_15KS78: SPOT_35	14.7	0.282965	0.000026	0.000923	0.282963	6.4	0.9	9.7	153
	CMB#3_15KS78: SPOT_9	11.8	0.282984	0.000021	0.000684	0.282982	7.0	0.7	10.4	155
	CMB#3_15KS78: SPOT_31	11.7	0.282972	0.000023	0.000660	0.282970	6.6	0.8	10.0	157
	CMB#3_15KS78: SPOT_11	25.8	0.282997	0.000018	0.001610	0.282992	7.5	0.6	10.9	161
	CMB#3_15KS81: SPOT_52	28.0	0.283096	0.000024	0.001839	0.283092	11.0	0.9	13.3	109
	CMB#3_15KS81: SPOT_37	30.3	0.283057	0.000026	0.001990	0.283053	9.6	0.9	11.9	111
	CMB#3_15KS81: SPOT_49	32.9	0.283044	0.000020	0.002223	0.283040	9.2	0.7	11.5	111
	CMB#3_15KS81: SPOT_58	17.8	0.283074	0.000020	0.001219	0.283071	10.2	0.7	12.6	111
	CMB#3_15KS81: SPOT_70	28.1	0.283037	0.000023	0.001869	0.283033	8.9	0.8	11.2	111
	CMB#3_15KS81: SPOT_48	33.5	0.283029	0.000024	0.002252	0.283024	8.6	0.8	10.9	112
	CMB#3_15KS81: SPOT_61	32.5	0.283033	0.000019	0.002126	0.283028	8.8	0.7	11.1	113
	CMB#3_15KS81: SPOT_60	17.5	0.283060	0.000024	0.001187	0.283057	9.7	0.8	12.2	114

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
	CMB#3_15KS81: SPOT_68	19.7	0.283121	0.000024	0.001316	0.283118	11.9	0.8	14.3	115
	CMB#3_15KS81: SPOT_40	36.9	0.283067	0.000021	0.002422	0.283062	10.0	0.7	12.4	115
	CMB#3_15KS81: SPOT_39	30.8	0.283050	0.000028	0.001879	0.283046	9.4	1.0	11.8	117
	CMB#3_15KS82: SPOT_43	19.1	0.283024	0.000023	0.001095	0.283022	8.4	0.8	10.9	115
	CMB#3_15KS82: SPOT_58	24.1	0.283024	0.000023	0.001380	0.283021	8.5	0.8	10.9	116
	CMB#3_15KS82: SPOT_44	34.6	0.283050	0.000028	0.001935	0.283046	9.4	1.0	11.8	117
	CMB#3_15KS82: SPOT_39	42.5	0.283024	0.000024	0.002477	0.283018	8.4	0.9	10.8	117
	CMB#3_15KS82: SPOT_55	23.2	0.283071	0.000030	0.001302	0.283069	10.1	1.1	12.6	117
	CMB#3_15KS82: SPOT_57	23.4	0.283035	0.000023	0.001324	0.283032	8.8	0.8	11.3	117
	CMB#3_15KS82: SPOT_66	21.6	0.283046	0.000022	0.001309	0.283043	9.2	0.8	11.7	118
	CMB#3_15KS82: SPOT_48	33.0	0.282993	0.000021	0.002049	0.282989	7.4	0.8	9.8	118
	CMB#3_15KS82: SPOT_53	24.8	0.283044	0.000023	0.001430	0.283041	9.2	0.8	11.7	118
	CMB#3_15KS82: SPOT_40	29.9	0.283054	0.000029	0.001667	0.283050	9.5	1.0	12.0	119
	CMB#3_15KS82: SPOT_56	15.2	0.283003	0.000023	0.000889	0.283001	7.7	0.8	10.3	119
	CMB#3_15KS82: SPOT_64	27.5	0.283023	0.000018	0.001540	0.283020	8.4	0.7	10.9	119
	CMB#3_15KS82: SPOT_54	26.0	0.283013	0.000022	0.001555	0.283010	8.1	0.8	10.6	120
	CMB#3_15KS82: SPOT_46	26.3	0.283048	0.000021	0.001631	0.283045	9.3	0.7	11.9	121
	15KS83-21	51.3	0.282949	0.000043	0.003434	0.282940	5.8	1.5	8.7	147
	15KS83-9	20.2	0.282941	0.000027	0.001156	0.282938	5.5	0.9	8.7	150
	15KS83-34	10.3	0.282940	0.000021	0.000589	0.282938	5.5	0.8	8.8	150
	15KS83-31	19.5	0.282921	0.000021	0.001198	0.282918	4.8	0.7	8.1	151
	15KS83-15	26.4	0.282920	0.000023	0.001548	0.282915	4.8	0.8	8.0	152
	15KS83-19	14.3	0.282952	0.000020	0.000942	0.282949	5.9	0.7	9.2	152
	15KS83-27	18.1	0.282905	0.000019	0.001142	0.282902	4.3	0.7	7.5	153
	15KS83-3	19.7	0.282942	0.000023	0.001153	0.282938	5.5	0.8	8.8	154
	15KS83-23	22.5	0.282914	0.000021	0.001341	0.282910	4.6	0.8	7.9	155
	15KS83-28	21.4	0.282937	0.000017	0.001222	0.282934	5.4	0.6	8.7	156
	15KS83-35	16.9	0.282904	0.000022	0.001086	0.282901	4.2	0.8	7.6	158
	15KS83-33	16.1	0.282994	0.000019	0.000951	0.282991	7.4	0.7	10.9	160

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
	15KS83-26	18.3	0.282955	0.000020	0.001084	0.282951	6.0	0.7	9.5	163
	15KN38A-2	50.2	0.283061	0.000018	0.003286	0.283055	9.8	0.6	11.9	104
	15KN38A-3	36.3	0.283050	0.000028	0.002368	0.283045	9.4	1.0	11.7	114
	15KN38A-5	37.3	0.283042	0.000024	0.002474	0.283038	9.1	0.8	11.2	103
	15KN38A-6	40.2	0.283066	0.000020	0.002659	0.283061	9.9	0.7	12.1	104
	15KN38A-10	35.4	0.283060	0.000023	0.002450	0.283055	9.7	0.8	11.9	106
	15KN38A-14	45.5	0.283087	0.000018	0.003050	0.283081	10.7	0.6	12.9	108
	15KN38A-13	35.0	0.283053	0.000032	0.002309	0.283048	9.5	1.1	11.7	105
	15KN38A-20	46.1	0.283072	0.000027	0.003196	0.283066	10.2	0.9	12.2	104
	15KN38A-21	43.2	0.283109	0.000044	0.003053	0.283103	11.5	1.6	13.5	102
	15KN38A-23	40.1	0.283064	0.000031	0.002557	0.283059	9.9	1.1	12.0	102
	15KN38A-32	32.9	0.283053	0.000020	0.002116	0.283049	9.5	0.7	11.7	106
	15KN69B-39	5.3	0.282951	0.000018	0.000385	0.282950	5.9	0.6	9.1	145
	15KN69B-41	22.1	0.282978	0.000028	0.001354	0.282974	6.8	1.0	9.9	147
	15KN69B-49	22.7	0.282905	0.000016	0.001453	0.282901	4.2	0.6	7.4	147
	15KN69B-48	18.0	0.282860	0.000030	0.001062	0.282857	2.6	1.1	5.8	148
	15KN69B-37	9.5	0.282914	0.000018	0.000644	0.282913	4.6	0.6	7.8	148
	15KN69B-38	22.0	0.282931	0.000020	0.001441	0.282927	5.2	0.7	8.6	160
	15KN69B-50	17.7	0.282944	0.000019	0.001170	0.282941	5.6	0.7	8.9	154
	15KN69B-53	26.1	0.282932	0.000027	0.001436	0.282928	5.2	0.9	8.4	150
	15KN69B-61	35.7	0.282641	0.000031	0.002109	0.282626	-5.1	1.1	2.5	365
	15KN69B-62	18.5	0.282947	0.000022	0.001281	0.282944	5.7	0.8	9.0	152
	CMB #13-15KN30-58	21.8	0.283055	0.000018	0.001459	0.283053	9.6	0.6	11.7	101
	CMB #13-15KN30-37	13.0	0.283091	0.000017	0.000974	0.283089	10.8	0.6	13.1	104
	CMB #13-15KN30-46	17.0	0.283086	0.000026	0.001193	0.283083	10.6	0.9	12.9	105
	CMB #13-15KN30-55	11.3	0.283087	0.000025	0.000823	0.283085	10.7	0.9	13.0	106
	CMB #13-15KN30-41	18.7	0.283088	0.000021	0.001287	0.283086	10.7	0.7	13.0	106

Spot	Sample	(^{176}Yb + ^{176}Lu) / ^{176}Hf (%)	^{176}Hf/^{177}Hf	± (1s)	^{176}Lu/^{177}Hf	^{176}Hf/^{177}Hf (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
	CMB #13-15KN30-44	13.4	0.283055	0.000020	0.001022	0.283053	9.5	0.7	11.8	106
	CMB #13-15KN30-69	21.6	0.283095	0.000018	0.001420	0.283092	10.9	0.6	13.2	106
	CMB #13-15KN30-51	9.0	0.283073	0.000017	0.000615	0.283072	10.2	0.6	12.5	106
	CMB #13-15KN30-40	11.6	0.283073	0.000020	0.000840	0.283072	10.2	0.7	12.5	108
	CMB #13-15KN30-59	8.3	0.283093	0.000017	0.000623	0.283092	10.9	0.6	13.3	110
	CMB #13-15KN30-64	12.0	0.283084	0.000017	0.000912	0.283082	10.6	0.6	13.0	110
	CMB #13-15KS80-26	22.1	0.283050	0.000017	0.001364	0.283047	9.4	0.6	11.6	104
	CMB #13-15KS80-31	16.1	0.283063	0.000022	0.001026	0.283061	9.8	0.8	12.1	104
	CMB #13-15KS80-3	15.5	0.283057	0.000017	0.001008	0.283055	9.6	0.6	11.9	106
	CMB #13-15KS80-20	21.2	0.283070	0.000019	0.001328	0.283068	10.1	0.7	12.4	106
	CMB #13-15KS80-18	15.1	0.283054	0.000022	0.000962	0.283053	9.5	0.8	11.8	106
	CMB #13-15KS80-15	15.5	0.283076	0.000025	0.000994	0.283074	10.3	0.9	12.6	106
	CMB #13-15KS80-7	19.0	0.283092	0.000020	0.001258	0.283089	10.8	0.7	13.1	107
	CMB #13-15KS80-21	28.1	0.283013	0.000020	0.001708	0.283010	8.1	0.7	10.3	107
	CMB #13-15KS80-1	22.4	0.283092	0.000019	0.001369	0.283089	10.8	0.7	13.2	109
	CMB #13-15KS80-11	10.8	0.283072	0.000017	0.000704	0.283071	10.1	0.6	12.5	110
	CMB #13-15KS80-6	15.0	0.283065	0.000020	0.000956	0.283063	9.9	0.7	12.3	111
	CMB #6-15KN13-32	34.8	0.283068	0.000057	0.002206	0.283062	10.0	2.0	12.6	124
	CMB #6-15KN13-20	21.6	0.283019	0.000024	0.001346	0.283016	8.3	0.9	10.9	125
	CMB #6-15KN13-12	16.7	0.283020	0.000026	0.001039	0.283018	8.3	0.9	11.0	126
	CMB #6-15KN13-28	24.9	0.283038	0.000024	0.001525	0.283034	8.9	0.8	11.6	126
	CMB #6-15KN13-31	21.3	0.283033	0.000044	0.001265	0.283030	8.8	1.6	11.5	127
	CMB #6-15KN13-27	20.0	0.283050	0.000032	0.001208	0.283047	9.4	1.1	12.1	127
	CMB #6-15KN13-33	32.8	0.283039	0.000024	0.001962	0.283034	9.0	0.8	11.7	128
	CMB #6-15KN13-24	17.4	0.283008	0.000024	0.001064	0.283006	7.9	0.8	10.7	128
	CMB #6-15KN13-13	17.5	0.283018	0.000027	0.001059	0.283016	8.3	1.0	11.0	129
	CMB #6-15KN13-22	27.9	0.283045	0.000025	0.001738	0.283041	9.2	0.9	11.9	129
	CMB #6-15KN13-5	13.3	0.283048	0.000025	0.000788	0.283046	9.3	0.9	12.1	129

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
	CMB #6-15KN13-3	23.0	0.283034	0.000022	0.001455	0.283030	8.8	0.8	11.6	130
	CMB #6-15KN13-14	21.7	0.283013	0.000023	0.001359	0.283009	8.0	0.8	10.8	131
	CMB #6-15KN13-15	22.9	0.283020	0.000028	0.001371	0.283017	8.3	1.0	11.1	133
	CMB #6-15KN13-1	26.7	0.283073	0.000042	0.001884	0.283069	10.2	1.5	13.2	141
	CMB #6-15KN90-55	21.5	0.283109	0.000024	0.001504	0.283106	11.5	0.8	13.9	113
	CMB #6-15KN90-56	21.9	0.283118	0.000028	0.001477	0.283115	11.8	1.0	14.4	123
	CMB #6-15KN90-65	25.2	0.283111	0.000057	0.001745	0.283107	11.5	2.0	14.1	123
	CMB #6-15KN90-58	10.7	0.283041	0.000018	0.000783	0.283039	9.0	0.6	11.7	124
	CMB #6-15KN90-37	21.6	0.283060	0.000024	0.001430	0.283057	9.7	0.8	12.4	125
	CMB #6-15KN90-60	16.9	0.283054	0.000023	0.001190	0.283051	9.5	0.8	12.2	125
	CMB #6-15KN90-42	25.2	0.283127	0.000033	0.001663	0.283123	12.1	1.2	14.8	126
	CMB #6-15KN90-57	24.6	0.283098	0.000028	0.001769	0.283094	11.1	1.0	13.7	126
	CMB #6-15KN90-68	25.5	0.283109	0.000023	0.001939	0.283104	11.5	0.8	14.1	127
	CMB #6-15KN90-40	29.1	0.283123	0.000041	0.001917	0.283118	11.9	1.4	14.6	127
	CMB #6-15KN90-53	27.6	0.283113	0.000022	0.001901	0.283109	11.6	0.8	14.3	128
	CMB #6-15KN90-38	28.0	0.283142	0.000058	0.002099	0.283137	12.6	2.1	15.3	129
	CMB #6-15KN90-52	32.3	0.283100	0.000028	0.002233	0.283095	11.2	1.0	13.8	129
	CMB #6-15KN90-47	30.0	0.283114	0.000024	0.001932	0.283109	11.6	0.8	14.4	132
	CMB #6-15KN90-54	26.0	0.283130	0.000029	0.001866	0.283125	12.2	1.0	15.0	134
	CMB #6-15KN90-50	30.1	0.283083	0.000026	0.002221	0.283078	10.5	0.9	13.3	134
	CMB #6-15KS79-37	11.5	0.283014	0.000031	0.000690	0.283013	8.1	1.1	10.1	90
	CMB #6-15KS79-36	5.7	0.283045	0.000031	0.000415	0.283045	9.2	1.1	11.2	91
	CMB #6-15KS79-60	15.9	0.283045	0.000030	0.000917	0.283044	9.2	1.1	11.2	92
	CMB #6-15KS79-48	17.7	0.283070	0.000028	0.001158	0.283068	10.1	1.0	12.1	93
	CMB #6-15KS79-69	5.0	0.283037	0.000026	0.000364	0.283036	8.9	0.9	11.0	93
	CMB #6-15KS79-62	25.4	0.283058	0.000020	0.001642	0.283055	9.6	0.7	11.6	94
	CMB #6-15KS79-63	20.1	0.283065	0.000030	0.001231	0.283063	9.9	1.0	11.9	94
	CMB #6-15KS79-52	5.9	0.283054	0.000032	0.000406	0.283054	9.5	1.1	11.6	94
	CMB #6-15KS79-41	6.8	0.283049	0.000024	0.000462	0.283048	9.3	0.9	11.4	94

Spot	Sample	(^{176}Yb + ^{176}Lu) / ^{176}Hf (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
	CMB #6-15KS79-66	14.8	0.283043	0.000026	0.000915	0.283041	9.1	0.9	11.2	95
	CMB #6-15KS79-44	7.0	0.283057	0.000024	0.000447	0.283056	9.6	0.9	11.7	95
	CMB #6-15KS79-58	18.5	0.283009	0.000018	0.001139	0.283007	7.9	0.6	10.0	95
	CMB #6-15KS79-51	22.5	0.283066	0.000025	0.001382	0.283064	9.9	0.9	12.0	97
	CMB #6-15KS79-59	17.2	0.283048	0.000026	0.001056	0.283046	9.3	0.9	11.4	98
	CMB #6-15KS79-57	6.8	0.283034	0.000025	0.000443	0.283033	8.8	0.9	11.0	100
	CMB #7-15KN03-11	36.4	0.283054	0.000038	0.002754	0.283046	9.5	1.4	12.8	161
	CMB #7-15KN03-24	40.7	0.283057	0.000026	0.002493	0.283050	9.6	0.9	13.0	163
	CMB #7-15KN03-2	24.2	0.282987	0.000021	0.001587	0.282983	7.2	0.7	10.6	163
	CMB #7-15KN03-10	44.9	0.283011	0.000031	0.003045	0.283001	8.0	1.1	11.3	163
	CMB #7-15KN03-13	42.5	0.283055	0.000029	0.002799	0.283046	9.5	1.0	12.9	164
	CMB #7-15KN03-21	22.0	0.283031	0.000035	0.001618	0.283026	8.7	1.2	12.2	165
	CMB #7-15KN03-8	49.5	0.283019	0.000030	0.003174	0.283009	8.3	1.0	11.6	166
	CMB #7-15KN03-35	23.7	0.283057	0.000025	0.001585	0.283052	9.6	0.9	13.2	167
	CMB #7-15KN03-31	34.8	0.283104	0.000057	0.002664	0.283095	11.3	2.0	14.7	167
	CMB #7-15KN03-12	39.1	0.283057	0.000028	0.002703	0.283048	9.6	1.0	13.0	168
	CMB #7-15KN03-25	37.2	0.283021	0.000027	0.002587	0.283013	8.3	1.0	11.8	168
	CMB #7-15KN03-18	50.3	0.283114	0.000032	0.003380	0.283104	11.6	1.1	15.0	168
	CMB #7-15KN03-16	29.2	0.283060	0.000027	0.001978	0.283054	9.7	1.0	13.3	170
	CMB #7-15KN03-4	45.4	0.283056	0.000034	0.002907	0.283047	9.6	1.2	13.0	170
	CMB #7-15KN03-5	57.0	0.283040	0.000091	0.003351	0.283030	9.0	3.2	12.5	171
	CMB #7-15KN03-34	28.2	0.283050	0.000023	0.001995	0.283044	9.4	0.8	13.0	172
	CMB #7-15KN03-20	29.7	0.283050	0.000028	0.001991	0.283043	9.4	1.0	13.0	173
	CMB #7-15KS64-37	5.2	0.283027	0.000033	0.000394	0.283026	8.6	1.2	11.7	143
	CMB #7-15KS64-41	8.7	0.283087	0.000038	0.000600	0.283086	10.7	1.4	13.9	147
	CMB #7-15KS64-44	13.0	0.283065	0.000026	0.000810	0.283062	9.9	0.9	13.0	143
	CMB #7-15KS64-48	3.1	0.283052	0.000038	0.000231	0.283052	9.4	1.4	12.6	143
	CMB #7-15KS64-49	3.3	0.283035	0.000032	0.000245	0.283035	8.8	1.1	12.0	145
	CMB #7-15KS64-51	2.8	0.283063	0.000039	0.000209	0.283062	9.8	1.4	13.0	144

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
	CMB #7-15KS64-56	3.0	0.283099	0.000049	0.000247	0.283098	11.1	1.7	14.4	151
	CMB #7-15KS64-57	5.7	0.283071	0.000032	0.000414	0.283069	10.1	1.1	13.2	143
	CMB #7-15KS64-60	3.7	0.283059	0.000032	0.000291	0.283058	9.7	1.1	12.9	147
	CMB #7-15KS64-61	3.2	0.283057	0.000039	0.000243	0.283056	9.6	1.4	12.8	144
	CMB #7-15KS64-65	17.3	0.283025	0.000030	0.001076	0.283022	8.5	1.1	11.6	145
	CMB #7-15KS64-67	5.4	0.283113	0.000049	0.000385	0.283111	11.6	1.7	14.8	145
	CMB #7-15KS64-70	17.4	0.283097	0.000041	0.001156	0.283094	11.0	1.4	14.2	146
	CMB#12_15kN38B-60	17.4	0.283123	0.000027	0.001349	0.283120	11.9	1.0	14.1	102
	CMB#12_15kN38B-68	40.4	0.283034	0.000022	0.002651	0.283029	8.8	0.8	10.9	103
	CMB#12_15kN38B-45	306.5	0.283222	0.000070	0.017914	0.283187	15.4	2.5	16.5	103
	CMB#12_15kN38B-57	20.7	0.283083	0.000026	0.001556	0.283080	10.5	0.9	12.8	105
	CMB#12_15kN38B-51	39.3	0.283028	0.000027	0.002605	0.283022	8.6	1.0	10.8	106
	CMB#12_15kN38B-46	69.6	0.283197	0.000049	0.006387	0.283184	14.6	1.7	16.6	111
	CMB#12_15kN38B-69	6.4	0.282973	0.000024	0.000403	0.282972	6.6	0.8	9.7	139
	CMB#12_15kN38B-54	19.1	0.282935	0.000024	0.001341	0.282931	5.3	0.9	8.4	146
	CMB#12_15KS58-23	11.1	0.283072	0.000025	0.000752	0.283070	10.2	0.9	13.1	134
	CMB#12_15KS58-3	27.7	0.283061	0.000025	0.001722	0.283057	9.8	0.9	12.7	137
	CMB#12_15KS58-31	19.0	0.283106	0.000020	0.001165	0.283103	11.3	0.7	14.3	138
	CMB#12_15KS58-20	28.9	0.283044	0.000029	0.001825	0.283039	9.2	1.0	12.1	140
	CMB#12_15KS58-10	45.5	0.283061	0.000028	0.002914	0.283054	9.8	1.0	12.6	141
	CMB#12_15KS58-1	40.9	0.283063	0.000026	0.002460	0.283056	9.8	0.9	12.7	141
	CMB#12_15KS58-21	17.4	0.283104	0.000023	0.001075	0.283101	11.3	0.8	14.4	142
	CMB#12_15KS58-21	22.1	0.283083	0.000023	0.001493	0.283079	10.5	0.8	13.6	142
	CMB#12_15KS58-22	14.9	0.283052	0.000023	0.000920	0.283050	9.5	0.8	12.6	145
	CMB#12_15KS58-8	5.9	0.283063	0.000020	0.000391	0.283062	9.8	0.7	13.0	146
	CMB#12_15KS58-16	23.9	0.283102	0.000023	0.001438	0.283098	11.2	0.8	14.4	148
	CMB#12_15KS01: 29	55.9	0.283055	0.000049	0.004030	0.283043	9.6	1.7	12.7	162

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
	CMB#12_15KS01: 14	16.4	0.283118	0.000039	0.001427	0.283114	11.8	1.4	15.3	165
	CMB#12_15KS01: 27	13.0	0.283122	0.000041	0.001017	0.283119	11.9	1.5	15.5	167
	CMB#12_15KS01: 31	59.5	0.283079	0.000044	0.004276	0.283065	10.4	1.5	13.7	169
	CMB#12_15KS01: 30	41.4	0.283080	0.000028	0.002774	0.283071	10.4	1.0	13.9	171
	CMB#12_15KS01: 34	35.9	0.283103	0.000042	0.002830	0.283094	11.2	1.5	14.8	173
	CMB#12_15KS01: 15	13.5	0.283059	0.000023	0.000980	0.283056	9.7	0.8	13.5	174
	CMB#12_15KS01: 21	30.7	0.283128	0.000033	0.002318	0.283120	12.1	1.2	15.9	181
	CMB#12_15KS01: 33	40.1	0.283076	0.000037	0.002377	0.283068	10.3	1.3	14.1	184
	CMB#34_01MR31-Spot-1	10.3	0.283029	0.000025	0.000672	0.283028	8.6	0.9	10.7	95
	CMB#34_01MR31-Spot-10	14.0	0.283045	0.000020	0.000871	0.283043	9.2	0.7	11.3	96
	CMB#34_01MR31-Spot-13	15.7	0.283047	0.000026	0.001022	0.283045	9.3	0.9	11.3	93
	CMB#34_01MR31-Spot-14	9.2	0.283045	0.000020	0.000760	0.283044	9.2	0.7	11.3	97
	CMB#34_01MR31-Spot-15	13.0	0.283050	0.000025	0.000810	0.283048	9.4	0.9	11.4	94
	CMB#34_01MR31-Spot-16	7.4	0.283027	0.000025	0.000473	0.283026	8.6	0.9	10.6	94
	CMB#34_01MR31-Spot-17	9.5	0.282889	0.000026	0.000675	0.282888	3.7	0.9	6.3	119
	CMB#34_01MR31-Spot-26	6.4	0.283032	0.000025	0.000442	0.283031	8.7	0.9	10.9	99
	CMB#34_01MR31-Spot-32	9.7	0.283019	0.000026	0.000605	0.283018	8.3	0.9	10.4	95
	CMB#34_01MR31-Spot-34	5.1	0.283089	0.000023	0.000360	0.283088	10.8	0.8	12.8	93
	CMB#34_01MR31-Spot-4	8.5	0.283066	0.000023	0.000561	0.283065	9.9	0.8	12.2	104
	CMB#34_01MR31-Spot-5	25.8	0.283066	0.000027	0.001672	0.283063	9.9	1.0	12.0	96
	CMB#34_01MR31-Spot-7	5.3	0.283026	0.000021	0.000368	0.283026	8.5	0.7	10.6	96
	CMB#34_01MR31-Spot-9	17.2	0.283014	0.000023	0.001073	0.283012	8.1	0.8	10.3	104
	CMB#34_01MR66p-Spot-41	15.1	0.282973	0.000024	0.001020	0.282971	6.6	0.8	9.2	119
	CMB#34_01MR66p-Spot-44	30.4	0.283009	0.000024	0.001883	0.283005	7.9	0.8	10.3	115
	CMB#34_01MR66p-Spot-51	22.2	0.282970	0.000024	0.001465	0.282967	6.5	0.9	9.0	115
	CMB#34_01MR66p-Spot-52	22.3	0.283056	0.000018	0.001655	0.283053	9.6	0.6	12.0	115
	CMB#34_01MR66p-Spot-53	16.5	0.283047	0.000025	0.001212	0.283045	9.3	0.9	11.7	115
	CMB#34_01MR66p-Spot-56	27.2	0.283052	0.000027	0.001889	0.283047	9.4	1.0	11.8	115
	CMB#34_01MR66p-Spot-59	37.4	0.282961	0.000027	0.002354	0.282956	6.2	1.0	8.6	113

Spot	Sample	$(^{176}Yb + ^{176}Lu) / ^{176}Hf$ (%)	$^{176}Hf/^{177}Hf$	± (1s)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1s)	E-Hf (T)	Age (Ma)
	CMB#34_01MR66p-Spot-66	14.7	0.283029	0.000023	0.001002	0.283027	8.6	0.8	11.0	111
	CMB#34_01MR66p-Spot-67	35.6	0.283007	0.000024	0.002373	0.283002	7.9	0.8	10.2	113
	CMB#34_01MR66p-Spot-69	18.5	0.283047	0.000023	0.001336	0.283044	9.3	0.8	11.8	120
	CMB#34_01MR03-Spot-11	24.2	0.283005	0.000024	0.001729	0.283000	7.8	0.8	11.4	170
	CMB#34_01MR03-Spot-13	23.9	0.282996	0.000022	0.001694	0.282991	7.5	0.8	11.1	172
	CMB#34_01MR03-Spot-17	23.0	0.283012	0.000023	0.001677	0.283007	8.0	0.8	11.5	166
	CMB#34_01MR03-Spot-21	24.4	0.282992	0.000025	0.001719	0.282987	7.3	0.9	11.0	174
	CMB#34_01MR03-Spot-22	24.2	0.282971	0.000022	0.001742	0.282966	6.6	0.8	10.2	169
	CMB#34_01MR03-Spot-31	39.8	0.282928	0.000037	0.002808	0.282919	5.0	1.3	8.5	168
	CMB#34_01MR03-Spot-4	37.4	0.283006	0.000027	0.002556	0.282998	7.8	0.9	11.2	166
	CMB#34_01MR03-Spot-6	12.8	0.282998	0.000027	0.000960	0.282995	7.5	0.9	11.2	167
	CMB#34_01MR03-Spot-7	7.2	0.283006	0.000022	0.000523	0.283004	7.8	0.8	11.5	168
	CMB#34_01MR03-Spot-8	19.4	0.283010	0.000024	0.001403	0.283006	8.0	0.8	11.6	169
	CMB#34_01MR11p-Spot-37	26.7	0.283078	0.000025	0.001914	0.283074	10.3	0.9	12.7	114
	CMB#34_01MR11p-Spot-40	34.8	0.283058	0.000026	0.002419	0.283053	9.7	0.9	12.0	112
	CMB#34_01MR11p-Spot-43	36.0	0.283025	0.000028	0.002534	0.283019	8.5	1.0	10.8	113
	CMB#34_01MR11p-Spot-48	26.5	0.283029	0.000025	0.001941	0.283025	8.6	0.9	11.0	111
	CMB#34_01MR11p-Spot-53	22.5	0.283066	0.000026	0.001555	0.283063	10.0	0.9	12.4	115
	CMB#34_01MR11p-Spot-56	20.1	0.283068	0.000025	0.001409	0.283065	10.0	0.9	12.4	112
	CMB#34_01MR11p-Spot-63	16.2	0.283093	0.000023	0.001161	0.283090	10.9	0.8	13.3	111
	CMB#34_01MR11p-Spot-64	45.6	0.283059	0.000023	0.003138	0.283052	9.7	0.8	12.0	113
	CMB#34_01MR11p-Spot-65	25.4	0.283054	0.000032	0.001823	0.283050	9.5	1.1	11.9	114
	CMB#34_01MR11p-Spot-67	55.5	0.282961	0.000037	0.003491	0.282953	6.2	1.3	8.4	112
	CMB#34_01MR11p-Spot-68	31.3	0.283032	0.000023	0.002196	0.283028	8.7	0.8	11.2	116

Zircon Oxygen Isotope Analyses

Mount and Sample	δ18O ‰ VSMOW	2SD (ext.)	Mass Bias (‰)	$\delta^{18}O$ ‰ measured	2SE (int.)
WI-STD-74 KIM-5 g1				3.667	0.285
WI-STD-74 KIM-5 g1 Cs-Res=154				3.526	0.238
WI-STD-74 KIM-5 g1 Cs-Res=155				3.714	0.235
WI-STD-74 KIM-5 g1				3.603	0.21
average and 2SD	**5.09**		-1.4550936	3.6275	0.163075
WI-STD-74 KIM-5 g2				3.472	0.22
WI-STD-74 KIM-5 g3				3.272	0.243
WI-STD-74 KIM-5 g4				3.575	0.213
WI-STD-74 KIM-5 g1				3.638	0.235
average and 2SD				3.48925	0.320364
bracket average and 2SD				3.558375	0.277896
WI-STD-74 KIM-5 g3				3.396	0.218
WI-STD-74 KIM-5 g3				4.088	0.253
WI-STD-74 KIM-5 g3				4.349	0.264
WI-STD-74 KIM-5 g3				4.014	0.17
WI-STD-74 KIM-5 g3				4.13	0.163
WI-STD-74 KIM-5 g3				3.398	0.186
FC offset 64sec					
WI-STD-74 KIM-5 g3				3.278	0.221
Mass Calib (w/o H1-100bit offset)					
WI-STD-74 KIM-5 g3				3.479	0.162
WI-STD-74 KIM-5 g3				4.094	0.215
WI-STD-74 KIM-5 g3				3.854	0.187
WI-STD-74 KIM-5 g3				3.757	0.187
WI-STD-74 KIM-5 g3				4.042	0.221
WI-STD-74 KIM-5 g3				3.89	0.183
WI-STD-74 KIM-5 g3				4.037	0.245
WI-STD-74 KIM-5 g3				3.986	0.23
average and 2SD	**5.09**		-1.095673	3.98875	0.141057
WI-STD-74 KIM-5 g3				4.045	0.178
WI-STD-74 KIM-5 g3				3.841	0.225
WI-STD-74 KIM-5 g3				3.987	0.235
WI-STD-74 KIM-5 g3				4.075	0.193
average and 2SD	**5.09**		-1.0974142	3.987	0.207923
9/7/2016					

sample: WI-STD-74					
WI-STD-74 KIM-5 g3				3.882	0.217
WI-STD-74 KIM-5 g3				3.777	0.182
WI-STD-74 KIM-5 g3				3.887	0.215
WI-STD-74 KIM-5 g3				3.735	0.231
average and 2SD				3.82025	0.152345
Mount Name: EHL					
EHL KIM-5 g1				3.926	0.235
EHL KIM-5 g2				3.85	0.249
EHL KIM-5 g1				3.858	0.254
EHL KIM-5 g2				3.835	0.244
EHL KIM-5 g3				3.896	0.242
EHL KIM-5 g4				3.797	0.263
average and 2SD				3.8465	0.082986
EHL 14MR68-9	**5.45**	**0.19**		4.262	0.206
EHL 14MR68-8	**5.88**	**0.19**		4.697	0.207
EHL 14MR68-6	**5.57**	**0.19**		4.388	0.157
EHL 14MR68-5	**5.51**	**0.19**		4.324	0.259
EHL 14MR68-12	**5.57**	**0.19**		4.391	0.219
EHL 14MR68-12R	**5.58**	**0.19**		4.399	0.222
EHL 14MR68-11	**5.57**	**0.19**		4.385	0.274
EHL 14MR68-10	**5.51**	**0.19**		4.326	0.237
EHL 14MR68-14	**5.49**	**0.19**		4.311	0.289
EHL 14MR68-17	**5.37**	**0.19**		4.191	0.189
EHL Kim5-g2				4.049	0.232
EHL KIM5-g2				4.041	0.228
EHL KIM5-g2 Cs-Res=161				3.861	0.267
EHL KIM5-g2				3.922	0.154
average and 2SD				3.96825	0.184227
bracket average and 2SD	**5.09**		-1.1766359	3.907375	0.185574
EHL14MR61-10	**5.06**	**0.15**		3.929	0.147
EHL14MR61-9	**5.36**	**0.15**		4.227	0.201
EHL14MR61-8	**5.22**	**0.15**		4.087	0.222
EHL14MR61-7	**5.35**	**0.15**		4.223	0.289
EHL14MR61-6	**5.07**	**0.15**		3.94	0.233
EHL14MR71-14	**4.83**	**0.15**		3.702	0.222

EHL14MR71-13	**5.33**	**0.15**		4.201	0.171
EHL14MR71-12	**5.27**	**0.15**		4.14	0.281
EHL14MR71-11	**5.06**	**0.15**		3.93	0.203
EHL14MR71-10	**5.17**	**0.15**		4.036	0.261
EHL14MR71-14b	**5.52**	**0.15**		4.395	0.226
EHL14MR71-12r	**5.40**	**0.15**		4.268	0.23
EHLkim5 g2				3.962	0.253
EHLkim5 g2				3.881	0.314
EHLkim5 g2				4.034	0.273
EHLkim5 g2 Cs-Res=162				3.936	0.271
average and 2SD				3.95325	0.127094
bracket average and 2SD	**5.09**		-1.1235312	3.96075	0.147395
EHL15KN30-10	**4.95**	**0.19**		3.892	0.226
EHL15KN30-9	**4.99**	**0.19**		3.936	0.193
EHL15KN30-8	**5.05**	**0.19**		3.996	0.274
EHL15KN30-8b	**4.74**	**0.19**		3.681	0.223
EHL15KN30-7	**5.14**	**0.19**		4.079	0.218
EHL15KN30-11	**4.94**	**0.19**		3.884	0.194
EHL15KN30-11r	**4.73**	**0.19**		3.674	0.24
EHL14IY31-1	**6.24**	**0.19**		5.176	0.272
EHL14IY31-2	**6.24**	**0.19**		5.182	0.28
EHL14IY31-5	**6.19**	**0.19**		5.126	0.21
EHL14IY31-6	**6.22**	**0.19**		5.159	0.193
EHL14IY31-7	**6.44**	**0.19**		5.375	0.208
EHL KIM5 g2				4.125	0.238
EHL KIM5 g2				4.066	0.237
EHL KIM5 g2				4.103	0.227
EHL KIM5 g2				4.143	0.211
average and 2SD				4.10925	0.0663
bracket average and 2SD	**5.09**		-1.0533883	4.03125	0.191361
EHL 15KS82-1	**4.92**	**0.25**		3.844	0.186
EHL 15KS82-2	**4.93**	**0.25**		3.861	0.232
EHL 15KS82-4	**4.75**	**0.25**		3.677	0.185
EHL 15KS82-7	**5.03**	**0.25**		3.954	0.364
EHL 15KS82-8	**5.00**	**0.25**		3.929	0.247
EHL 15KS64-10	**5.29**	**0.25**		4.221	0.205
EHL 15KS64-9	**5.20**	**0.25**		4.126	0.205

EHL 15KS64-8 not zircon	**11.21**	**0.25**		10.133	1.132
EHL 15KS64-7	**5.03**	**0.25**		3.959	0.312
EHL 15KS64-8B not zircon	**10.57**	**0.25**		9.489	0.419
EHL 15KS64-5	**5.18**	**0.25**		4.104	0.237
EHL 15KS64-16	**5.12**	**0.25**		4.043	0.33
EHL KIM5 g2				3.8	0.178
EHL KIM5 g2 inclusion?			5.064		2.878
EHL KIM5 g2				3.875	0.208
EHL KIM5 g2				4.058	0.242
EHL KIM5 g2				3.964	0.27
average and 2SD				3.92425	0.223108
bracket average and 2SD	**5.09**		-1.0678148	4.01675	0.249662
EHL15KS79-8	**5.31**	**0.22**		4.193	0.166
EHL15KS79-7	**5.48**	**0.22**		4.358	0.208
EHL15KS79-6	**5.41**	**0.22**		4.29	0.205
EHL15KS79-5	**5.70**	**0.22**		4.579	0.247
EHL15KS79-4	**5.57**	**0.22**		4.449	0.268
EHL15KN03-20	**5.60**	**0.22**		4.481	0.201
EHL15KN03-19	**5.60**	**0.22**		4.481	0.276
EHL15KN03-18	**5.51**	**0.22**		4.39	0.244
EHL15KN03-17	**5.19**	**0.22**		4.065	0.203
EHL15KN03-16	**5.55**	**0.22**		4.431	0.181
EHL14MR44-20	**5.19**	**0.22**		4.067	0.181
EHL14MR44-19	**5.57**	**0.22**		4.447	0.168
EHL14MR44-18	**5.34**	**0.22**		4.215	0.186
EHL14MR44-10	**5.49**	**0.22**		4.368	0.177
EHL14MR44-9	**5.21**	**0.22**		4.092	0.285
EHLkim5 g2				4.086	0.178
EHLkim5 g2				4.126	0.283
EHLkim5 g2				3.909	0.258
EHLkim5 g2				3.935	0.251
average and 2SD				4.014	0.216006
bracket average and 2SD	**5.09**		-1.1151986	3.969125	0.224801
sample: EHS					
EHSkim5 g1				4.025	0.202
EHSkim5 g2				3.824	0.194

EHSkim5 g3				3.953	0.184
EHSkim5 g4				4.048	0.173
average and 2SD				3.9625	0.201623
EHS15KS83-1	**6.27**	**0.23**		5.119	0.213
EHS15KS83-2	**6.03**	**0.23**		4.882	0.255
EHS15KS83-3	**6.01**	**0.23**		4.862	0.172
EHS15KS83-4	**6.25**	**0.23**		5.092	0.209
EHS15KS83-5	**5.51**	**0.23**		4.359	0.198
EHS15KS83-7	**6.11**	**0.23**		4.954	0.19
EHS15KS83-8	**6.16**	**0.23**		5.004	0.242
EHS15KS83-9	**5.92**	**0.23**		4.765	0.207
EHS15KS83-10	**5.97**	**0.23**		4.82	0.222
EHS15KS83-11	**6.76**	**0.23**		5.61	0.206
EHSkim5 g1				3.788	0.238
EHSkim5 g1				3.914	0.21
EHSkim5 g1				4.106	0.207
EHSkim5 g1				3.847	0.211
average and 2SD				3.91375	0.276234
bracket average and 2SD	**5.09**		-1.1460416	3.938125	0.229871
EHS14IY25-20	**6.36**	**0.25**		5.169	0.144
EHS14IY25-19	**6.24**	**0.25**		5.052	0.212
EHS14IY25-18	**6.48**	**0.25**		5.29	0.194
EHS14IY25-17	**6.51**	**0.25**		5.317	0.253
EHS14IY25-16	**6.47**	**0.25**		5.28	0.139
EHS14IY25-15	**6.58**	**0.25**		5.384	0.192
EHS14IY25-14	**8.23**	**0.25**		7.041	0.191
EHS14IY25-14b	**8.30**	**0.25**		7.102	0.232
EHS14IY25-13	**6.38**	**0.25**		5.189	0.239
EHS14IY25-12	**6.39**	**0.25**		5.202	0.277
EHSkim5 g1				3.82	0.274
EHSkim5 g1				3.947	0.189
EHSkim5 g1				3.749	0.275
EHSkim5 g1				4.031	0.187
average and 2SD				3.88675	0.252636
bracket average and 2SD	**5.09**		-1.1837248	3.90025	0.246757
EHS14MR48-20	**5.23**	**0.24**		4.034	0.251
EHS14MR48-19	**5.31**	**0.24**		4.113	0.225
EHS14MR48-18	**5.07**	**0.24**		3.874	0.178

EHS14MR48-16	**4.99**	**0.24**		3.796	0.209
EHS14MR48-15	**4.84**	**0.24**		3.645	0.164
EHS14MR48-14	**5.49**	**0.24**		4.295	0.219
EHS14MR48-10	**5.00**	**0.24**		3.8	0.248
EHS14MR48-9	**5.08**	**0.24**		3.882	0.234
EHSkim5 g1				3.724	0.205
EHSkim5 g1				3.99	0.25
EHSkim5 g1				3.885	0.249
EHSkim5 g1				4.001	0.245
average and 2SD				3.9	0.25691
bracket average and 2SD	**5.09**		-1.190565	3.893375	0.236307
9/8/2016					
sample: WI-STD-74					
WI-STD-74 KIM-5 g3				3.343	0.166
WI-STD-74 KIM-5 g3 Cs-Res=164				3.629	0.15
WI-STD-74 KIM-5 g3				3.356	0.224
WI-STD-74 KIM-5 g3				3.599	0.203
WI-STD-74 KIM-5 g3				3.733	0.233
WI-STD-74 KIM-5 g3				3.587	0.221
average and 2SD				3.5808	0.276392
Mount Name: EHS					
EHS kim5 g1				3.645	0.222
EHS kim5 g1				3.776	0.25
EHS kim5 g1				3.619	0.229
EHS kim5 g1				3.693	0.214
average and 2SD				3.68325	0.138028
EHS 15KN13-20	**5.72**	**0.14**		4.317	0.207
EHS 15KN13-18	**5.24**	**0.14**		3.833	0.207
EHS 15KN13-16	**5.55**	**0.14**		4.143	0.215
EHS 15KN13-15	**5.56**	**0.14**		4.152	0.148
EHS 15KN13-14	**5.51**	**0.14**		4.107	0.25
EHS 15KN13-13	**5.31**	**0.14**		3.906	0.24
EHS 15KN13-7	**5.72**	**0.14**		4.317	0.187
EHS 15KN13-6	**5.30**	**0.14**		3.898	0.234
EHS 15KN13-3	**5.43**	**0.14**		4.027	0.182
EHS 15KN13-1	**5.19**	**0.14**		3.783	0.189
EHS kim5 g1				3.746	0.22

EHS kim5 g1				3.759	0.146
EHS kim5 g1				3.578	0.229
EHS kim5 g1				3.655	0.205
average and 2SD				3.6845	0.169489
bracket average and 2SD	**5.09**		-1.3990041	3.683875	0.143102
EHS14IY18-20	**5.22**	**0.15**		3.821	0.216
EHS14IY18-18	**5.32**	**0.15**		3.917	0.202
EHS14IY18-17	**5.61**	**0.15**		4.207	0.253
EHS14IY18-16	**5.14**	**0.15**		3.734	0.246
EHS14IY18-15	**5.26**	**0.15**		3.858	0.292
EHS14IY18-13 Cs-Res=165	**5.38**	**0.15**		3.976	0.176
EHS14IY18-12	**5.32**	**0.15**		3.913	0.213
EHS14IY18-11	**6.61**	**0.15**		5.203	0.288
EHS14IY18-10	**5.06**	**0.15**		3.655	0.261
EHS14IY18-11b	**6.69**	**0.15**		5.283	0.211
EHS14IY18-9	**5.32**	**0.15**		3.921	0.218
EHS14IY18-5	**5.04**	**0.15**		3.633	0.232
EHS14IY18-4	**5.06**	**0.15**		3.662	0.198
EHS14IY18-2	**5.07**	**0.15**		3.668	0.294
EHS kim5 g1				3.649	0.263
EHS kim5 g1				3.708	0.273
EHS kim5 g1 Cs-Res=166				3.792	0.224
EHS kim5 g1				3.613	0.222
average and 2SD				3.6905	0.156363
bracket average and 2SD	**5.09**		-1.3953974	3.6875	0.151099
EHS 14IY04-20	**5.05**	**0.19**		3.648	0.216
EHS 14IY04-18	**5.21**	**0.19**		3.812	0.217
EHS 14IY04-17	**5.19**	**0.19**		3.791	0.31
EHS 14IY04-16	**5.12**	**0.19**		3.717	0.258
EHS 14IY04-14	**5.41**	**0.19**		4.004	0.15
EHS 14IY04-12	**5.01**	**0.19**		3.608	0.19
EHS 14IY04-11 Cs-Res=167	**5.43**	**0.19**		4.029	0.246
EHS 14IY04-10	**5.32**	**0.19**		3.92	0.217
EHS 14IY04-9	**5.33**	**0.19**		3.927	0.254
EHS 14IY04-6	**5.39**	**0.19**		3.989	0.216
EHS kim5 g1				3.802	0.211
EHS kim5 g1				3.659	0.233
EHS kim5 g1				3.53	0.185
EHS kim5 g1				3.75	0.193

average and 2SD				3.68525	0.238369
bracket average and 2SD	**5.09**		-1.3950243	3.687875	0.186711
EHS 14IY38-20	**5.92**	**0.18**		4.554	0.238
EHS 14IY38-17	**5.68**	**0.18**		4.317	0.187
EHS 14IY38-16	**5.77**	**0.18**		4.409	0.197
EHS 14IY38-14	**5.62**	**0.18**		4.254	0.184
EHS 14IY38-13	**5.81**	**0.18**		4.442	0.184
EHS 14IY38-8	**5.75**	**0.18**		4.383	0.174
EHS 14IY38-5	**5.44**	**0.18**		4.079	0.189
EHS 15KN90-19	**5.40**	**0.18**		4.037	0.222
EHS 15KN90-18	**5.41**	**0.18**		4.051	0.219
EHS 15KN90-16	**5.43**	**0.18**		4.071	0.227
EHS 15KN90-15	**5.41**	**0.18**		4.051	0.232
EHS 15KN90-12	**5.54**	**0.18**		4.178	0.235
EHS kim5 g1				3.79	0.294
EHS kim5 g1				3.751	0.182
EHS kim5 g1				3.74	0.191
EHS kim5 g1				3.8	0.232
average and 2SD				3.77025	0.058432
bracket average and 2SD	**5.09**		-1.3553513	3.72775	0.184585
EHS 14MR69-20	**4.99**	**0.10**		3.662	0.14
EHS 14MR69-18	**4.67**	**0.10**		3.344	0.247
EHS 14MR69-17	**5.00**	**0.10**		3.672	0.184
EHS 14MR69-16	**4.55**	**0.10**		3.224	0.249
EHS 14MR69-15	**4.75**	**0.10**		3.422	0.22
EHS 14MR69-12	**4.56**	**0.10**		3.23	0.255
EHS 14MR69-11	**4.79**	**0.10**		3.462	0.178
EHS 14MR72-20	**5.15**	**0.10**		3.819	0.207
EHS 14MR72-19	**5.05**	**0.10**		3.723	0.231
EHS 14MR72-18	**4.90**	**0.10**		3.569	0.195
EHS 14MR72-16	**5.08**	**0.10**		3.75	0.191
EHS 14MR72-14	**5.18**	**0.10**		3.848	0.221
EHS 14MR72-11	**5.14**	**0.10**		3.814	0.238
EHS 14MR72-12	**5.13**	**0.10**		3.801	0.211
EHS kim5 g1				3.718	0.156
EHS kim5 g1				3.68	0.236
EHS kim5 g1				3.839	0.24

EHS kim5 g1				3.775	0.286
average and 2SD				3.753	0.138728
bracket average and 2SD	**5.09**		-1.3216478	3.761625	0.100256
EHS 14IY01-20	**5.38**	**0.15**		4.025	0.216
EHS 14IY01-18	**5.44**	**0.15**		4.083	0.245
EHS 14IY01-17	**5.24**	**0.15**		3.884	0.26
EHS 14IY01-16	**5.43**	**0.15**		4.078	0.194
EHS 14IY01-12 Cs-Res=168	**5.19**	**0.15**		3.837	0.205
EHS 14IY01-9	**5.28**	**0.15**		3.932	0.284
EHS 14IY01-8	**5.54**	**0.15**		4.189	0.219
EHS 14MR70-20	**4.83**	**0.15**		3.477	0.202
EHS 14MR70-19	**5.41**	**0.15**		4.059	0.188
EHS 14MR70-18	**5.37**	**0.15**		4.013	0.196
EHS 14MR70-17 Cs-Res=169	**4.99**	**0.15**		3.638	0.149
EHS 14MR70-15	**5.29**	**0.15**		3.942	0.201
EHS 14MR70-14	**5.15**	**0.15**		3.802	0.28
EHS 14MR70-13	**5.16**	**0.15**		3.811	0.261
EHS kim5 g1				3.829	0.18
EHS kim5 g1				3.693	0.187
EHS kim5 g1				3.631	0.246
EHS kim5 g1				3.739	0.275
average and 2SD				3.723	0.166757
bracket average and 2SD	**5.09**		-1.3451532	3.738	0.145583
EHS 14MR73-1	**4.67**	**0.28**		3.192	0.254
EHS 14MR73-4	**4.23**	**0.28**		2.755	0.221
EHS 14MR73-6	**4.62**	**0.28**		3.141	0.255
EHS 14MR73-7	**4.46**	**0.28**		2.986	0.214
EHS 14MR73-9	**4.43**	**0.28**		2.95	0.24
EHS 14MR73-10	**4.23**	**0.28**		2.755	0.329
EHS 14MR73-13	**4.48**	**0.28**		2.998	0.188
EHS 14MR73-15	**4.38**	**0.28**		2.901	0.201
EHS 14IY18-14	**5.29**	**0.28**		3.808	0.19
EHS 14IY18-7	**5.17**	**0.28**		3.69	0.174
EHS 15KN90-2	**5.92**	**0.28**		4.437	0.222
EHS 15KN90-4	**5.69**	**0.28**		4.213	0.161
EHS kim5 g1				3.506	0.242

EHS kim5 g1			3.537	0.158
EHS kim5 g1			3.401	0.266
EHS kim5 g1			3.55	0.236
average and 2SD			3.4985	0.135139
bracket average and 2SD	**5.09**	-1.4717587	3.61075	0.278109